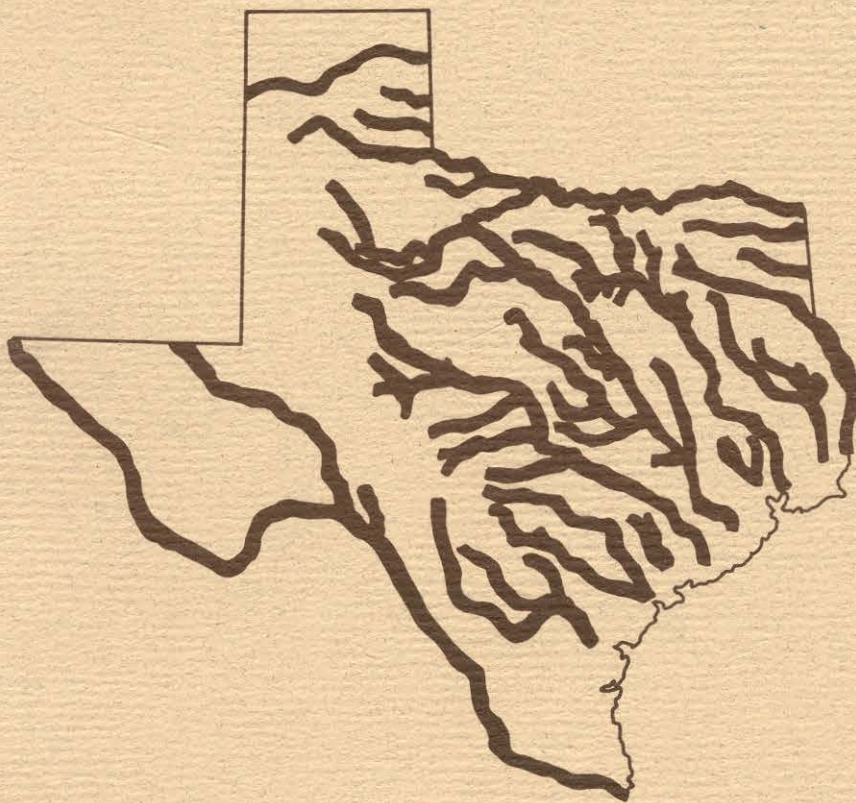


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THE QUALITY OF SURFACE WATERS IN TEXAS

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations 7-74



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THE QUALITY OF SURFACE WATERS IN TEXAS

By

Jack Rawson

ABSTRACT

This report summarizes the records of dissolved solids, chloride, and sulfate for the principal streams in Texas and the records of dissolved oxygen, biochemical oxygen demand, minor elements, and pesticides for sites on nontidal reaches of streams.

The discharge-weighted average concentrations of dissolved solids, chloride, and sulfate for many of the principal streams are less than 500 mg/l (milligrams per liter), 250 mg/l, and 250 mg/l, respectively. Exceptions to this generalization are reaches of the Canadian and Red Rivers in north Texas, reaches of the Brazos and Colorado Rivers in north-central Texas, and the Pecos River and Rio Grande in west Texas, where the inflow of brine or saline water has degraded the quality of the water.

The biochemical oxygen demand (BOD) of 3,524 samples collected from 143 sites on nontidal reaches of streams during the 1968-72 water years ranged from 0.0 mg/l to 102 mg/l. At 65 of 131 sites that were sampled at least 10 times, the BOD of at least half the samples exceeded 3.0 mg/l. Many of these sites are on streams in the urban areas of Houston and San Antonio and on the Trinity River and tributaries.

The dissolved-oxygen concentration in 3,465 samples collected from 141 sites on nontidal reaches of streams during the 1968-72 water years ranged from 0.1 mg/l to 20.0 mg/l. At 20 of the 123 sites that were sampled at least 10 times, the dissolved-oxygen content of at least half the samples was less than 5.0 mg/l. Most of these 20 sites are on streams in the urban area of Houston and on the Trinity River and tributaries.

Minor elements considered in this report are aluminum, arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, and zinc. Analyses of samples collected periodically from 77 sites on nontidal reaches of streams during the 1970-72 water years show that many of the minor elements studied are widely distributed in low concentrations in surface waters in Texas. With the exception of iron and manganese, the higher concentrations of these elements were detected in waters from urban areas, indicating that the concentration levels in many instances are related to man's activities.

Pesticides considered in this report include the chlorinated-hydrocarbon insecticides (aldrin, chlordane, DDD, DDE, DDT, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, toxaphene), the phosphorothioate insecticides (diazinon, malathion, methyl parathion, parathion), and the chlorinated-hydrocarbon herbicides (2,4-D, 2,4,5-T, and Silvex). Analysis of water samples collected periodically from 108 sites on nontidal reaches of streams during the 1968-72 water years show that small amounts of some of the pesticides studied are widely distributed in surface waters in Texas. Some of the more widely distributed pesticides were 2,4,5-T at 96 sites, diazinon at 80 sites, 2,4-D at 78 sites, dieldrin at 77 sites, Silvex at 47 sites, DDT at 67 sites, lindane at 59 sites, DDD at 51 sites, DDE at 50 sites, and chlordane at 38 sites. Although the occurrence of these pesticides are widespread, only chlordane in two samples from one site exceeded the permissible criteria for water to be used as a public supply, as recommended by the National Technical Advisory Committee.

INTRODUCTION

Purpose of This Report

A network of daily chemical-quality stations on principal streams in Texas has been operated for many years by the U.S. Geological Survey in cooperation with the Texas Water Development Board and other State, Federal, and local agencies. To supplement the information being obtained by the network, a cooperative Statewide reconnaissance by the Geological Survey and Texas Water Development Board was begun in September 1961. During this study, samples for chemical analyses were collected periodically at numerous sites on streams throughout Texas so that some water-quality information would be available where water-development projects are likely to be built. Each major river basin in the State was studied, and reports presenting the results of the study for each basin have been prepared. (See list of references.)

Before 1968, analyses of water samples from the network of daily and periodic stations usually included only the principal inorganic constituents and related properties. To supplement this information, the cooperative water-quality program of the Geological Survey and Texas Water Development Board was expanded in January 1968 to include the periodic determination of biochemical oxygen demand, dissolved oxygen, nutrients, and pesticides at selected sites on streams throughout Texas. These and other parameters or constituents may profoundly influence the quality of the water resources and the ecological balance in streams and reservoirs.

Most of the sites originally included in the special periodic network were on principal streams. However, because of an increase in interest in the quality of water in smaller streams and streams draining urban areas, many sites on some of these streams, especially in the urban areas of Houston and San Antonio, have been included in the special periodic network. Many of the sites in the daily, periodic, and special periodic networks are at stream-gaging stations. At other sites, the water discharge was usually measured when samples were collected so that the water quality could be considered in relation to discharge. Water-quality and discharge records for sites in the special periodic network are published annually by the Texas Water Development Board and the U.S. Geological Survey. (See list of references.)

The purpose of this report is to summarize the records of dissolved solids, chloride, and sulfate for the principal streams in the State and the records of dissolved oxygen, biochemical oxygen demand, minor elements, and pesticides for sites on nontidal reaches of streams in the special periodic network.

International System of Units and Conversion Factors

Most units of measurements in publications of the Geological Survey formerly were those of the English system. A dual system of metric, "the International System of Units (SI)," and English units will be used in reports of the Geological Survey published after July 1, 1973. English units of measurement used in the text of this report are followed by the SI equivalents. Conversion factors are listed below.

<u>To convert</u> <u>from English unit</u>	<u>To SI unit</u>	<u>Multiply by</u>
mile (mi)	kilometer (km)	1.609

Water-Quality Standards and Criteria

Water-quality standards for streams and coastal waters in Texas have been published by the Texas Water Quality Board (1973a). These standards consist of three parts:

1. General criteria applicable to all surface waters of the State at all times to the maximum extent feasible.
2. Numerical criteria applicable to specific surface waters designated in the standards.
3. Water uses.

The water-use classifications for which standards have been established include contact recreation waters, noncontact recreation waters, domestic raw water supplies, irrigation waters, and shellfish waters.

According to the Texas Water Quality Board (1973a, p. 4), "It is the goal that the chemical quality of all surface waters used for domestic raw water supply conform to the U.S. Public Health Service Drinking Water Standards, revised 1962, or latest revision. However, it must be realized that some surface waters are being used that cannot meet these standards. Since in these cases it is the only source available, these surface waters may be deemed suitable for use as a domestic raw water supply, where the chemical constituents do not pose a potential health hazard."

The Texas Water Quality Board (1973a, p. 7) states, "With specific reference to public water supplies, toxic materials not removable by ordinary water treatment techniques shall not exceed those enumerated in U.S. Public Health Service Drinking Water Standards, 1962 edition, or later revision."

The latest revision of drinking water standards published by the U.S. Public Health Service (1962) as Public Health Regulations in the Federal Register became effective April 5, 1962. These standards, which are used for regulating public water supplies and water-supply systems used by public carriers and by other systems subject to Federal regulations, have been widely used to evaluate potential supplies in terms of acceptability for drinking water. These standards are not applicable to water from many of the small streams in the State because the water is not being used for domestic purposes. However, the standards for some of the properties or constituents are quoted here and in other sections of this report as a basis of comparison.

According to the U.S. Public Health Service (1962, p. 7-8), "The following chemical substances should not be present in a water supply system in excess of the listed concentration where, in the judgment of the reporting agency and the certifying authority, other more suitable supplies are or can be made available":

Substance	Concentration
Arsenic (As)	10 micrograms per liter
Chloride (Cl)	250 milligrams per liter
Copper (Cu)	1,000 micrograms per liter
Iron (Fe)	300 micrograms per liter
Manganese (Mn)	50 micrograms per liter
Sulfate (SO ₄)	250 milligrams per liter
Dissolved solids	500 milligrams per liter
Zinc (Zn)	5,000 micrograms per liter

"The presence of the following substances in excess of the concentrations listed shall constitute grounds for the rejection of the supply":

Substance	Concentration
Arsenic (As)	50 micrograms per liter
Cadmium (Cd)	10 micrograms per liter
Chromium (Hexavalent) (Cr ⁺⁶)	50 micrograms per liter
Lead (Pb)	50 micrograms per liter

Substances in the first list are often referred to as the "recommended limits" and are either objectional to an appreciable number of people or exceed the levels required by good water-quality control practices. Substances in the second list are often referred to as "mandatory limits" and may have adverse effects on health when present in concentrations greater than those shown (U.S. Public Health Service, 1962, p. V).

Limits for dissolved solids, chloride, and sulfate have been included in the U.S. Public Health Service (1962) standards because excessive concentrations may have a laxative effect and produce an undesirable taste.

Minor elements, as used in this report, include those constituents whose concentrations usually do not exceed 1 mg/l (milligram per liter), although in exceptional waters one or more of them may be present in comparatively large amounts. Minor elements considered in this report are aluminum (Al), arsenic (As), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), and zinc (Zn).

The toxicity to man of aluminum, cobalt, and nickel is believed to be very low; consequently, limits for these substances in drinking water have not been established by the U.S. Public Health Service (1962).

In concentrations not causing unpleasant tastes, manganese and iron are regarded to be of little toxicological significance in drinking water. Iron and manganese are undesirable in domestic water supplies because they cause unpleasant tastes, stain and discolor laundry and plumbing fixtures, and foster the growth of some microorganisms. Copper and zinc in drinking water are not known to have serious effects on health, but do produce undesirable esthetic effects.

Although no limit for mercury was published in the 1962 edition of the U.S. Public Health Service drinking water standards, the Technical Review Committee on revision of the U.S. Public Health Service drinking water standards, U.S. Environmental Protection Agency (1971, p. 7) has recommended a maximum allowable limit of 5 μ g/l (micrograms per liter).

Other properties or constituents considered in this report are dissolved oxygen, biochemical oxygen demand, and pesticides. Each of these affect the ecological balance of the streams.

Dissolved oxygen (DO) in surface waters is necessary for the support of aquatic life and the aerobic decomposition of organic matter. According to the National Technical Advisory Committee to the Secretary of the Interior (Federal Water Pollution Control Administration, 1968, p. 33): "For a diversified warm-water biota, including game fish, DO concentration should be above 5 mg/l, assuming normal seasonal and daily variations are above this consideration."

The Texas Water Quality Board (1973a) has established minimum values of dissolved oxygen for Texas streams. The minimum value for most non-tidal reaches of streams is not less than 5.0 mg/l and "shall apply at all times that the daily flow exceeds the 7-day minimum average flow for the existing hydrologic condition with a recurrence interval of 2 years, except where this flow is zero. When the flow is zero, the dissolved oxygen standards shall not apply."

The biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions. The BOD data presented in this report are based on the standard 5-day, 20°C test. The BOD test does not reveal the concentration of a specific substance, but provides an indication of the quantity of organic matter in the water and the amount of oxygen required for its stabilization. BOD standards have not been established for streams in Texas, but criteria for effluents for domestic wastewater treatment plants are set by the Texas Water Quality Board (1973b) to protect the quality of water in the streams. The BOD criteria established depends on the stream's assimilative capacity and the treatment process.

Pesticides are broad classes of toxicants used to control animal or plant pests. Pesticides used to control insects are insecticides; those used to control plants are herbicides. Analysis of water for pesticides by the Geological Survey in Texas usually includes the following:

Chlorinated-Hydrocarbon Insecticides

Aldrin.--Not less than 95 percent of 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene.

Chlordane.--1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-4,7-methanoindane.

DDD.--1,1-dichloro-2,2-bis(p-chlorophenyl) ethane.

DDE.--1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene.

DDT.--1,1,1-trichloro-2,2-bis(p-chlorophenyl) ethane.

Dieldrin.--Not less than 85 percent of 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-exo-5,8-dimethanonaphthalene.

Endrin.--1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-endo-5,8-dimethanonaphthalene.

Heptachlor.--1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene.

Heptachlor epoxide.--1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro-4,7-methanoindan.

Lindane.--1,2,3,4,5,6-hexachlorocyclohexane, 99 percent or more of gamma isomer.

Toxaphene.--Chlorinated camphene containing 67 to 69 percent chlorine.

Phosphorothioate Insecticides

Diazinon.--0,0-diethyl 0-(2-isopropyl-6-methyl-4-pyrimidyl) phosphorothioate.

Malathion.--S-[1,2-bis(ethoxycarbonyl) ethyl] 0,0-dimethyl phosphorodithioate.

Methyl parathion.--0,0-dimethyl 0-p-nitrophenyl phosphorothioate.

Parathion.--0,0-diethyl 0-p-nitrophenyl phosphorothioate.

Chlorinated-Hydrocarbon Herbicides

2,4-D.--2,4-dichlorophenoxyacetic acid.

2,4,5-T.--2,4,5-trichlorophenoxyacetic acid.

Silvex.--2-(2,4,5-trichlorophenoxy) propionic acid.

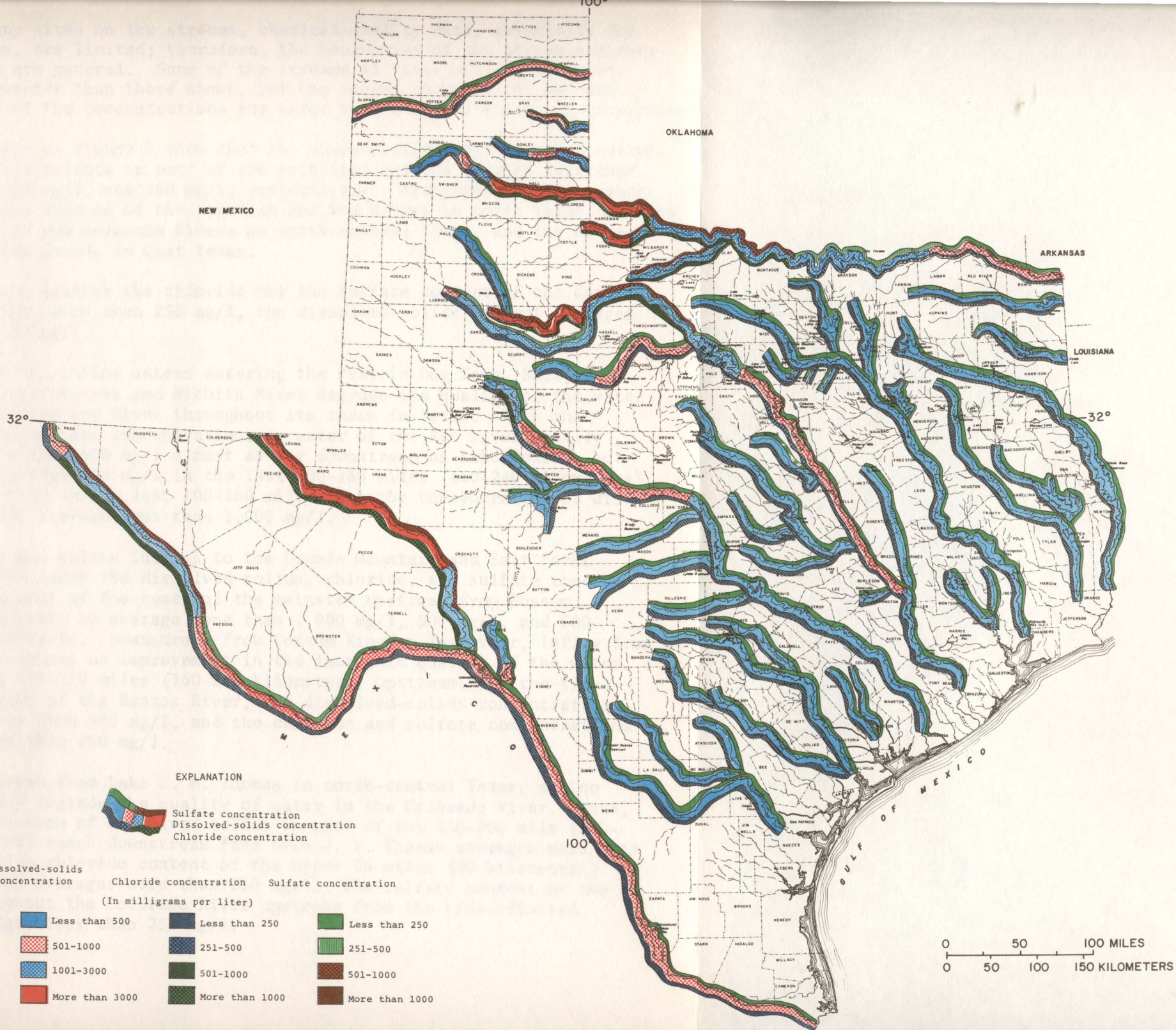
According to the National Technical Advisory Committee to the Secretary of the Interior (Federal Water Pollution Control Administration, 1968, p. 63), the use of any persistent chlorinated-hydrocarbon pesticide around fresh water should be avoided. The use of other kinds of chemical pesticides in or around fresh water may produce a variety of acute and chronic effects on aquatic life. The safe limits for these pesticides in fresh water depend upon the types of organism present and thus may vary from stream to stream.

The National Technical Advisory Committee (1968, p. 37) has recommended a maximum environmental level of 0.05 $\mu\text{g/l}$ each for aldrin, chlordane, DDD, DDT, dieldrin, endrin, heptachlor, lindane, parathion, and toxaphene in marine waters and a maximum environmental level of 10 $\mu\text{g/l}$ each for 2,4-D and 2,4,5-T. Although these limits are not directly applicable to fresh water, they are quoted here and in some of the sections that follow as a basis for comparison.

According to the National Technical Advisory Committee (1968, p. 20), permissible criteria for water to be used for public supply are 17 $\mu\text{g/l}$ aldrin, 3 $\mu\text{g/l}$ chlordane, 42 $\mu\text{g/l}$ DDT, 17 $\mu\text{g/l}$ dieldrin, 1 $\mu\text{g/l}$ endrin, 18 $\mu\text{g/l}$ heptachlor, 18 $\mu\text{g/l}$ heptachlor epoxide, 56 $\mu\text{g/l}$ lindane, 100 $\mu\text{g/l}$ organic-phosphate plus carbamate insecticides, and 100 $\mu\text{g/l}$ 2,4-D plus 2,4,5-T plus Silvex.

DISSOLVED-SOLIDS, CHLORIDE, AND SULFATE CONCENTRATIONS IN PRINCIPAL STREAMS

The dissolved-solids, chloride, and sulfate ranges shown on figure 1 are indicative of the long-term discharge-weighted average concentrations in the principal streams in Texas. The discharge-weighted average represents approximately the concentration of a constituent in the water if all the water passing a point in the stream during a period were impounded in a reservoir and mixed, with no adjustment for evaporation, rainfall, or chemical changes that might occur during storage or mixing.



At many sites on the streams, chemical-quality data, especially for flood flows, are limited; therefore, the boundaries of the stream segments on the map are general. Some of the streams at times will have concentrations greater than those shown, but the ranges shown on the map are indicative of the concentrations for water that would be stored in reservoirs.

The data on figure 1 show that the concentrations of dissolved solids, chloride, and sulfate in many of the principal streams average less than 500 mg/l, 250 mg/l, and 250 mg/l, respectively. Exceptions to this generalization are reaches of the Canadian and Red Rivers in north Texas, reaches of the Brazos and Colorado Rivers in north-central Texas, and the Pecos River and Rio Grande in west Texas.

Although neither the chloride nor the sulfate content of the Canadian River averages more than 250 mg/l, the dissolved-solids content averages more than 500 mg/l.

Brines and saline waters entering the Prairie Dog Town, Salt, and North Forks Red Rivers and Wichita River degrade the quality of the water in the main-stem Red River throughout its reach in Texas. Both the chloride and sulfate concentrations in water of the Red River usually average more than 500 mg/l almost as far downstream as Lake Texoma, but average less than 250 mg/l in the last 100-150 miles (160-240 kilometers) in Texas. Only in the last 100-150 miles does the concentration of dissolved solids average less than 1,000 mg/l.

Brines and saline inflows to the Double Mountain and Salt Forks Brazos Rivers cause the dissolved-solids, chloride, and sulfate concentrations in most of the reach of the mainstem upstream from Possum Kingdom Reservoir to average more than 1,000 mg/l, 500 mg/l, and 500 mg/l, respectively. Downstream from Possum Kingdom Reservoir, inflow from tributaries causes an improvement in the inorganic quality of the water. In the last 100-150 miles (160-240 kilometers) upstream from the tide-affected reach of the Brazos River, the dissolved-solids concentration averages less than 500 mg/l, and the chloride and sulfate concentrations average less than 250 mg/l.

Downstream from Lake J. B. Thomas in north-central Texas, saline inflows badly degrade the quality of water in the Colorado River. Thus, the concentration of dissolved solids in most of the 150-200 mile (240-320 kilometer) reach downstream from Lake J. B. Thomas averages more than 500 mg/l. The chloride content of the upper 50 miles (80 kilometers) of this reach averages more than 250 mg/l. The sulfate content of the water throughout the Colorado River upstream from the tide-affected reach averages less than 250 mg/l.

Although the concentration of chloride in water of the Rio Grande as it enters Texas averages less than 250 mg/l, the concentrations of dissolved solids and sulfate average more than 500 mg/l and 250 mg/l, respectively. Evaporation and return flows of water diverted for irrigation degrade the quality of water downstream from El Paso. Water in the 150-mile (240-kilometer) reach of the river downstream from El Paso usually contains more than 1,000 mg/l dissolved solids, 500 mg/l chloride, and 500 mg/l sulfate. Farther downstream, inflow of good-quality water from many of the tributaries causes an improvement in the quality of water in the Rio Grande. Thus, the chloride and sulfate concentrations in the lower reach of the river average less than 250 mg/l; and the dissolved-solids concentrations average less than 1,000 mg/l but more than 500 mg/l.

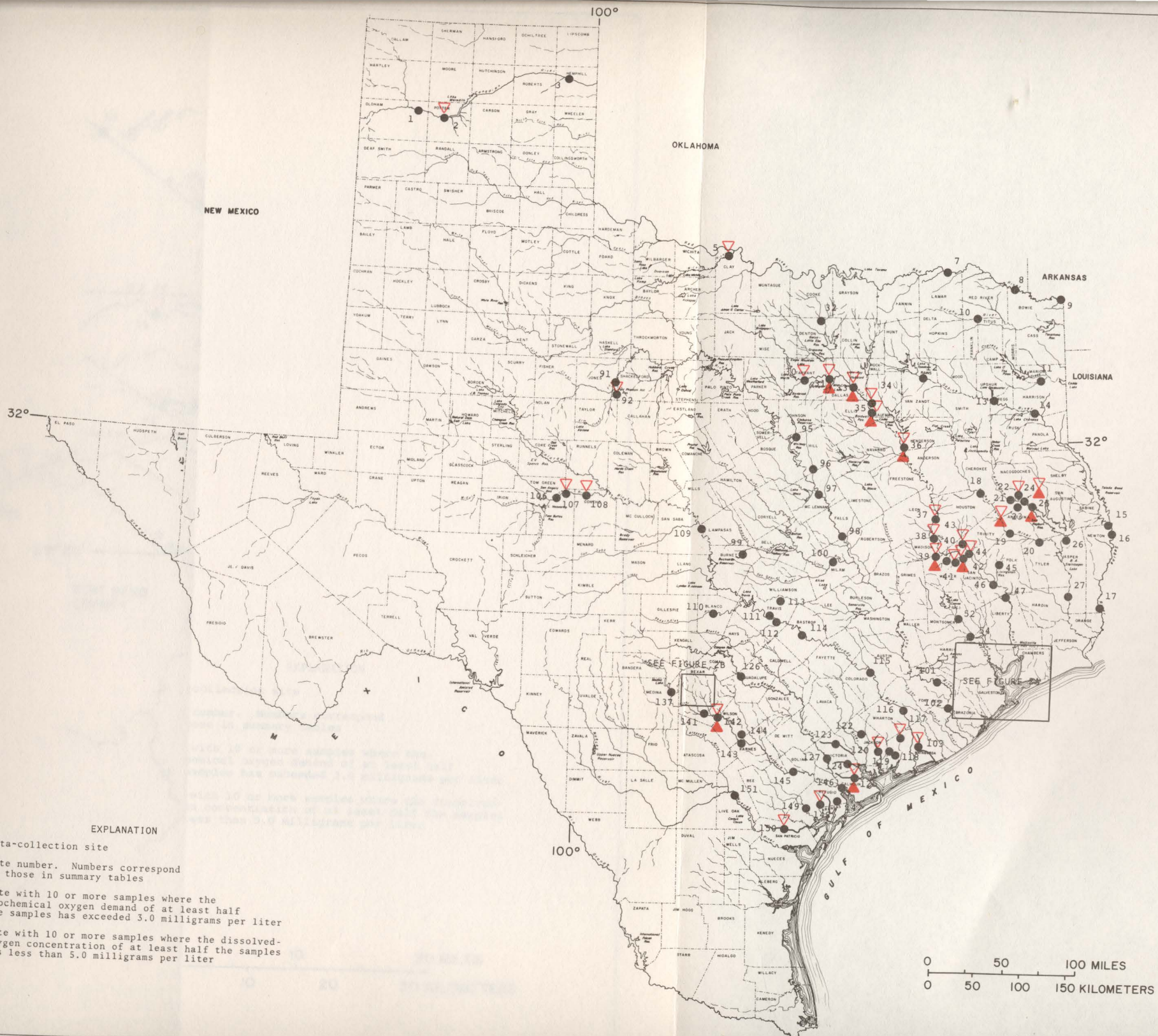
Water in the Pecos River is much more saline than water in the Rio Grande. The water is very saline as it enters Texas, and the inflow of brine and saline water causes a progressive increase in the concentrations of dissolved solids, chloride, and sulfate in the upper reach in Texas. Downstream from Girvin, better-quality inflow reduces the salinity of the Pecos River. Nevertheless, water contributed to the Rio Grande by the Pecos River usually contains more than 1,000 mg/l dissolved solids, 500 mg/l chloride, and 250 mg/l sulfate.

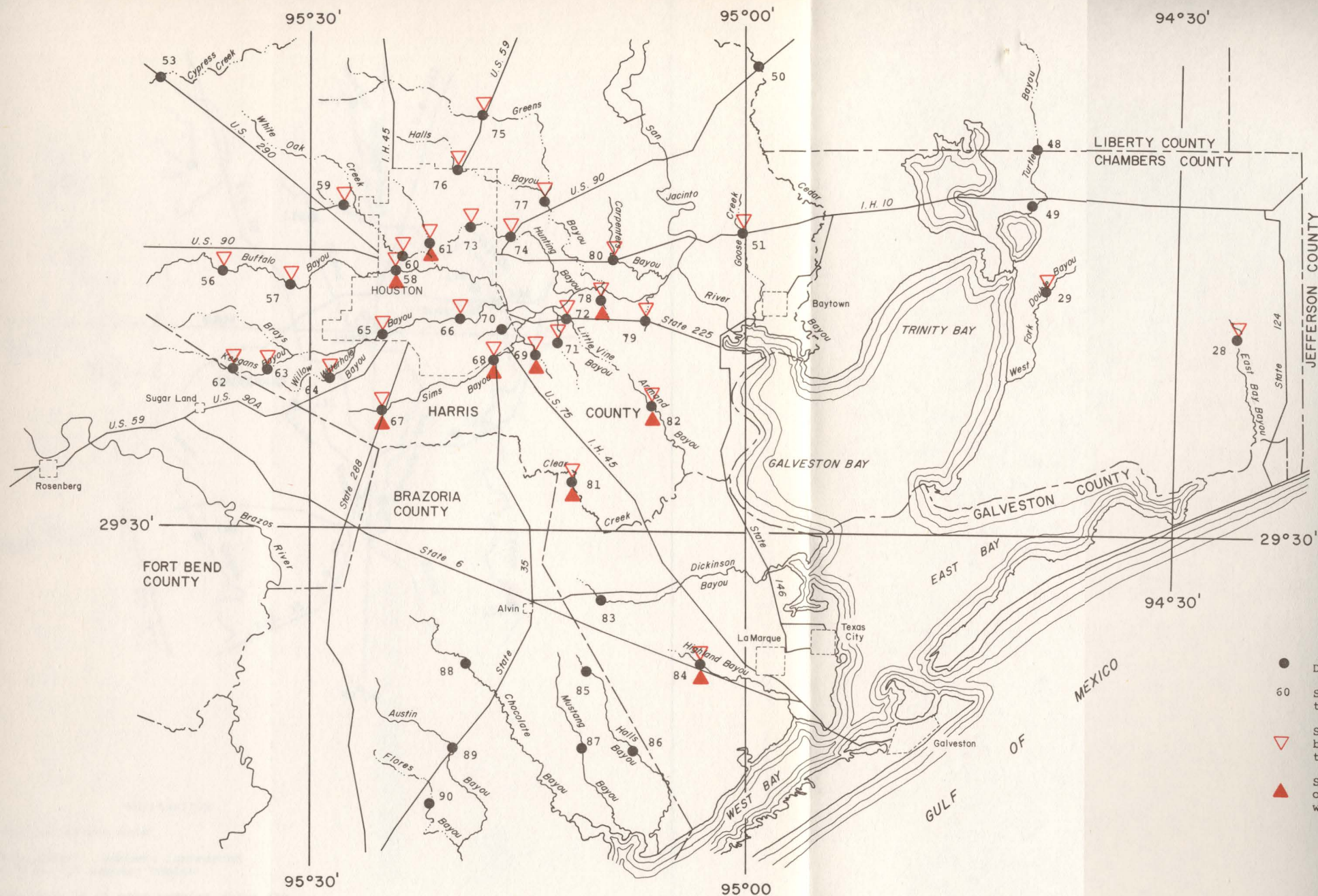
THE BIOCHEMICAL-OXYGEN-DEMAND AND DISSOLVED-OXYGEN CONCENTRATIONS IN WATERS OF NONTIDAL REACHES OF STREAMS

The dissolved-oxygen data included in this report are for depth-integrated samples collected with a BOD sampler. Such a sampler provides for a threefold displacement of water in a BOD bottle without aeration. All measurements of dissolved oxygen in these samples were made at stream-side with a portable temperature-compensated instrument.

The locations of sites on nontidal reaches of streams in Texas where samples for the determination of BOD and dissolved oxygen were collected at about 1- to 2-month intervals for 1 or more years during the 1968-72 water years are shown on figure 2. The BOD and dissolved-oxygen data for these sites on most of the principal streams and on many small streams are summarized in table 1 and on figures 2 and 3.

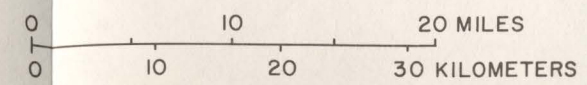
The BOD of 3,524 samples from 143 sites ranged from 0.0 mg/l in 1 or more samples from several sites to 102 mg/l in a sample from Hunting Bayou at U.S. Highway 90-A in Houston (site 74). The BOD of 1,795 samples from 139 sites exceeded 3.0 mg/l. At 65 of the 131 sites, which were sampled at least 10 times, the BOD of at least half the samples exceeded 3.0 mg/l. Many of these 65 sites are on streams in the urban areas of Houston and San Antonio and on the Trinity River and tributaries.



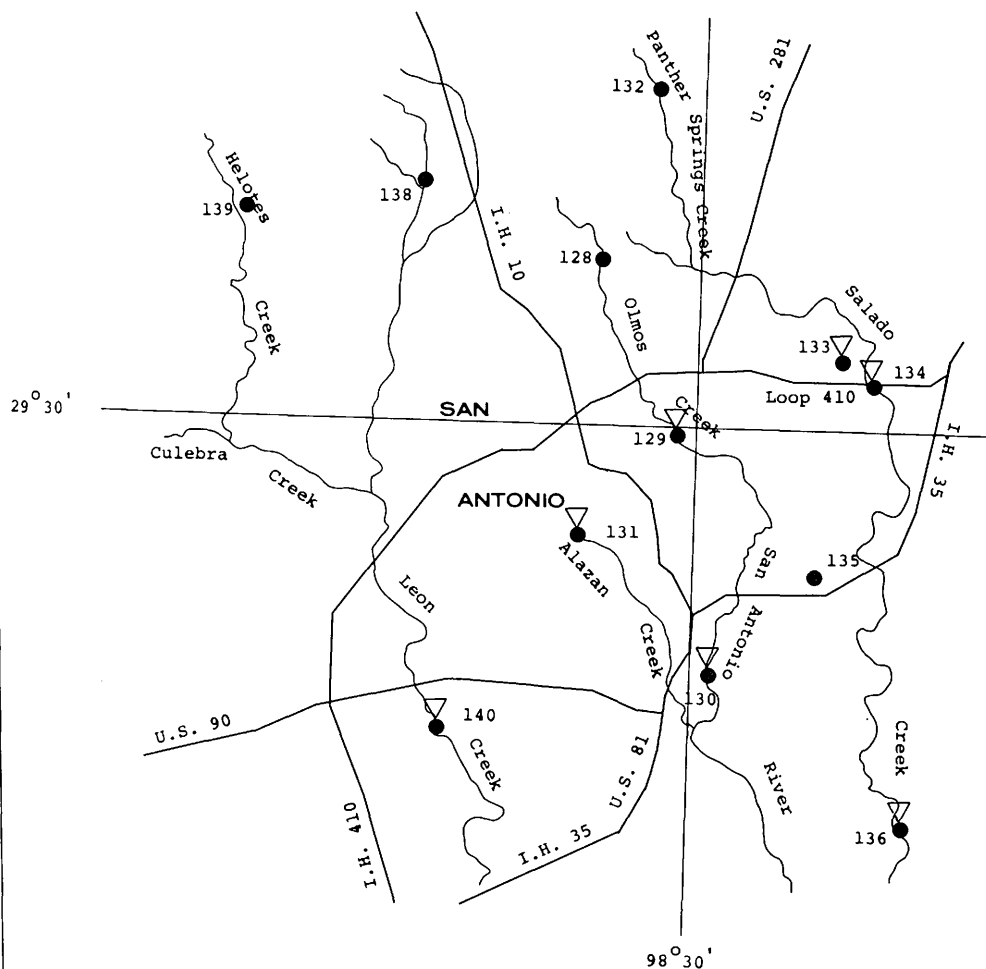


EXPLANATION

- Data collection site
- 60 Site number. Numbers correspond to those in summary tables
- ▽ Site with 10 or more samples where the biochemical oxygen demand of at least half the samples has exceeded 3.0 milligrams per liter
- ▲ Site with 10 or more samples where the dissolved-oxygen concentration of at least half the samples was less than 5.0 milligrams per liter



sites in the Houston area



EXPLANATION

- Data-collection site
- 140 Site number. Numbers correspond to those in summary tables
- ▽ Site with 10 or more samples where the biochemical oxygen demand of at least half the samples has exceeded 3.0 milligrams per liter

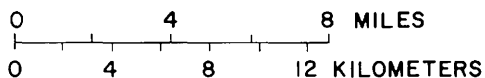


FIGURE 2b.-Locations of dissolved-oxygen and biochemical-oxygen-demand data-collection sites in the San Antonio area

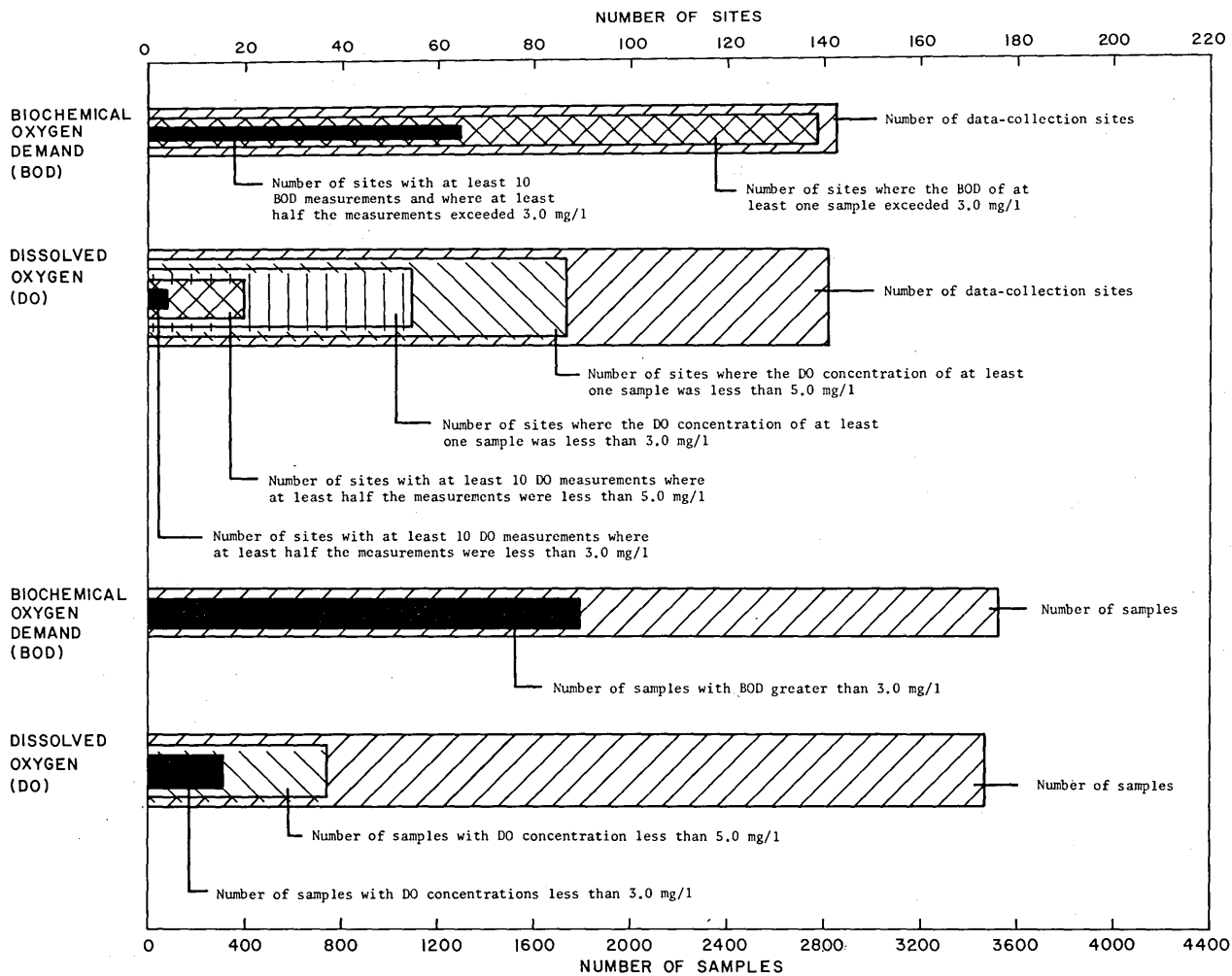


FIGURE 3.-Summary of dissolved-oxygen and biochemical-demand analyses of samples from nontidal reaches of streams, water years 1968-72

The dissolved-oxygen concentration in 3,465 samples from 141 of the sites where samples for BOD were collected ranged from 0.1 mg/l in 1 or more samples from several sites to 20.0 mg/l in 1 or more samples from several sites. The dissolved-oxygen content of 740 samples (1 or more samples from 87 sites) was less than 5.0 mg/l. At 20 of the 123 sites which were sampled at least 10 times, the dissolved-oxygen content of at least half the samples was less than 5.0 mg/l. Most of these 20 sites are on streams in the urban area of Houston and on the Trinity River and tributaries. The dissolved-oxygen content of 308 samples (1 or more samples from 55 sites) was less than 3.0 mg/l. The dissolved-oxygen content of at least half the samples from 4 of 123 sites, which were sampled at least 10 times, was less than 3.0 mg/l. These sites include the Trinity River below Dallas (site 33), Sims Bayou at Hiram Clarke Street in Houston (site 67), Sims Bayou at Houston (site 68), and Highland Bayou near Alta Loma (site 84).

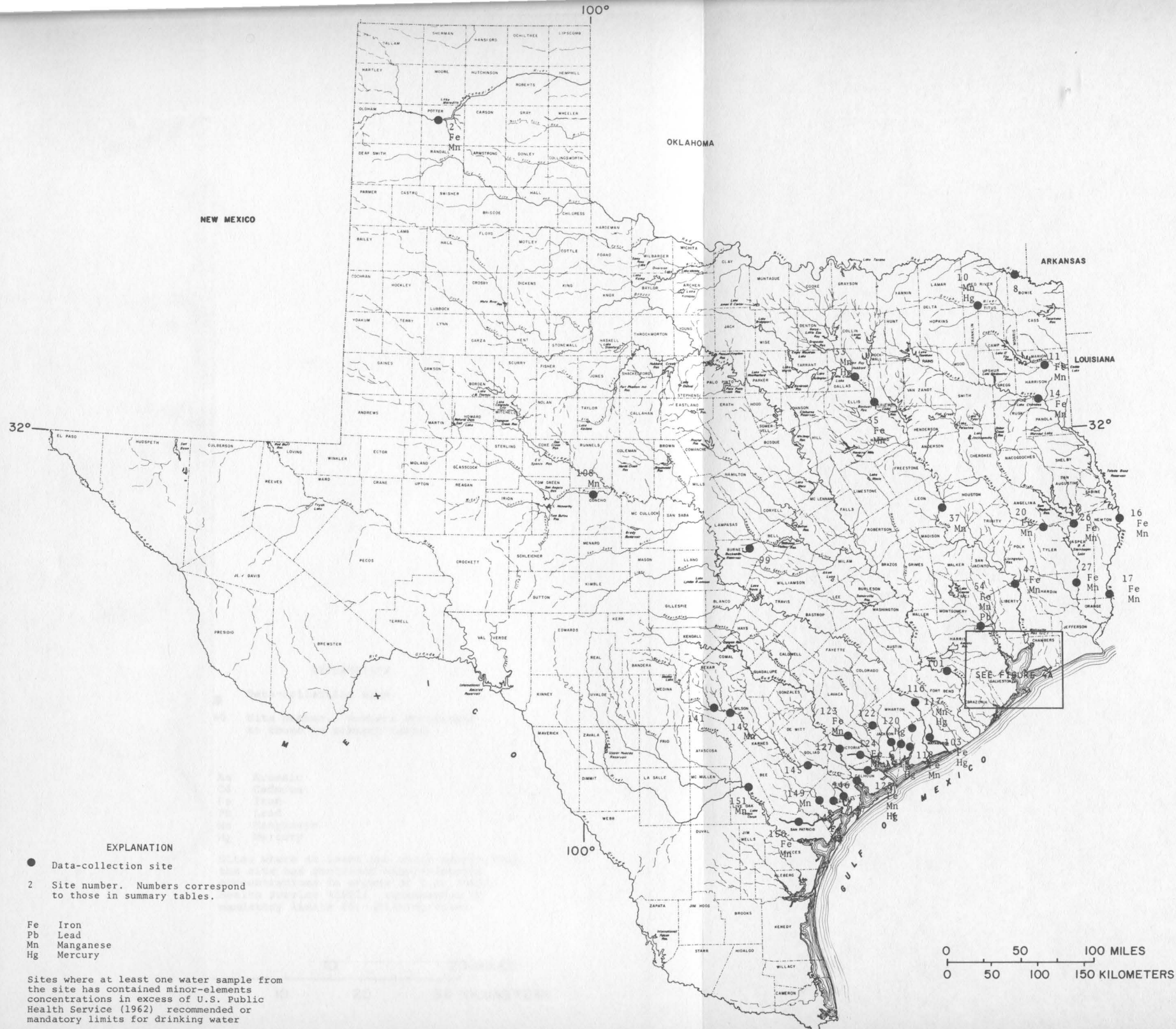
SELECTED MINOR ELEMENTS IN WATERS OF NONTIDAL REACHES OF STREAMS

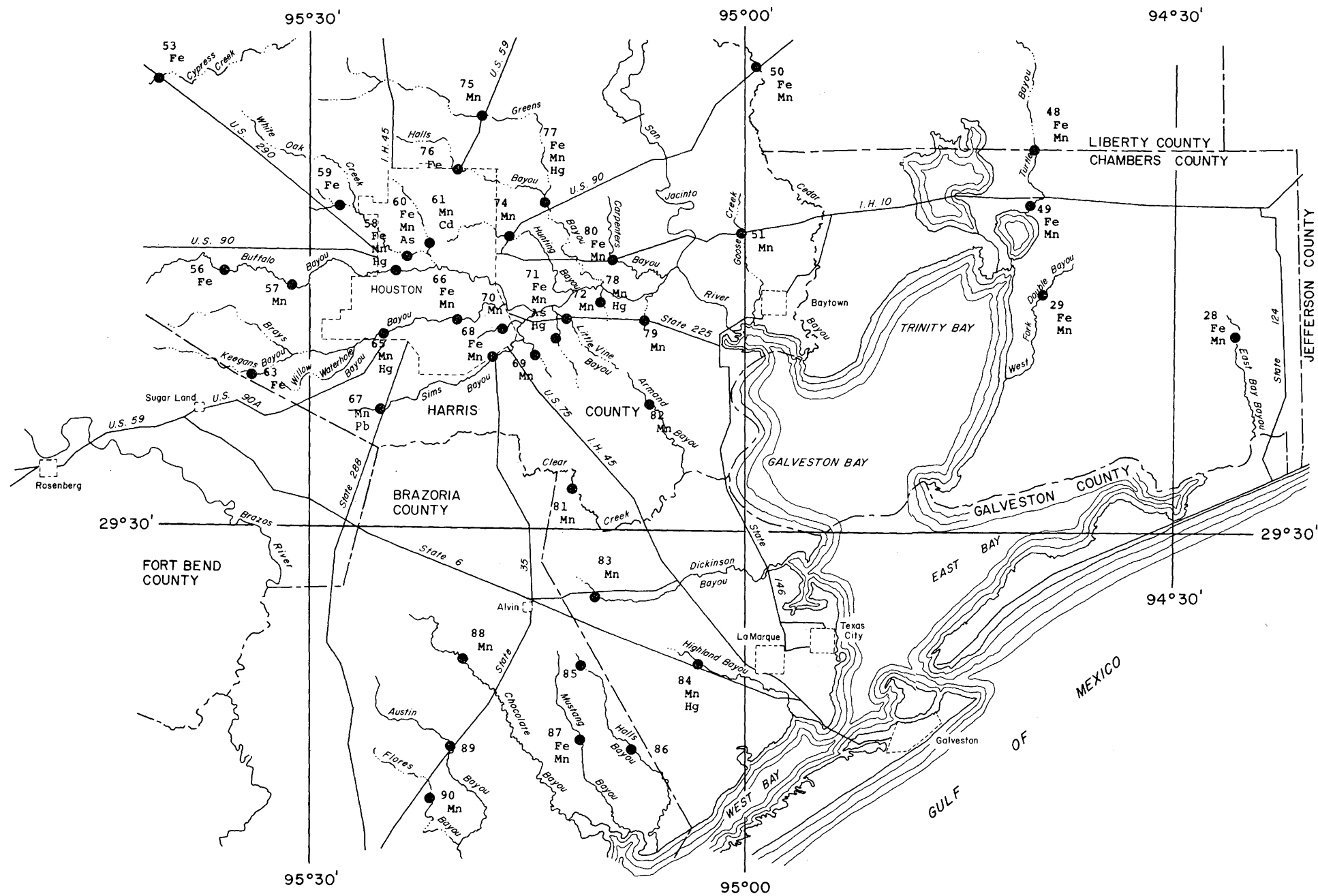
Samples for the determination of minor elements were collected seasonally from 77 sites on nontidal reaches of most of the principal streams and many small streams during the 1970-72 water years. Each of these samples were filtered (0.45-micrometer openings) and were acidified (1.5 milliliters double distilled nitric acid per 1-liter sample) when collected to prevent separation of minor elements before analysis. Although the concentrations of all 12 of the minor elements mentioned below were determined in some analyses, selected determinations were omitted in many.

Locations of data-collection sites for minor elements are shown on figure 4. The analytical results are summarized in table 2 and on figures 5 and 6. A brief summary for each element follows:

Aluminum.--The concentration of aluminum ranged from 0 $\mu\text{g/l}$ in at least 1 sample from 30 sites to 830 $\mu\text{g/l}$ in a sample from Chocolate Bayou at Port Lavaca (site 125). Aluminum was detected in 243 of 303 samples. At least 1 sample from each of the 39 sites sampled contained aluminum.

Arsenic.--The arsenic concentration in 607 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in samples from many sites to 280 $\mu\text{g/l}$ in a sample from Vince Bayou at Pasadena (site 71). Arsenic was detected in 124 samples (in at least 1 sample from 40 sites). About half the sites where arsenic was detected are in the urban area of Houston and vicinity; most other sites are on the Trinity River or small coastal streams. Two samples from streams in the urban area of Houston and vicinity, Whiteoak Bayou at Houston (site 60) and Vince Bayou at Pasadena (site 71), contained arsenic greater than 50 $\mu\text{g/l}$.





EXPLANATION

● Data-collection site

60 Site number. Numbers correspond to those in summary tables

As	Arsenic
Cd	Cadmium
Fe	Iron
Pb	Lead
Mn	Manganese
Hg	Mercury

Sites where at least one water sample from the site has contained minor-elements concentrations in excess of U.S. Public Health Service (1962) recommended or mandatory limits for drinking water

0 10 20 MILES

0 10 20 30 KILOMETERS

FIGURE 4a. Locations of mineral element data collection sites.

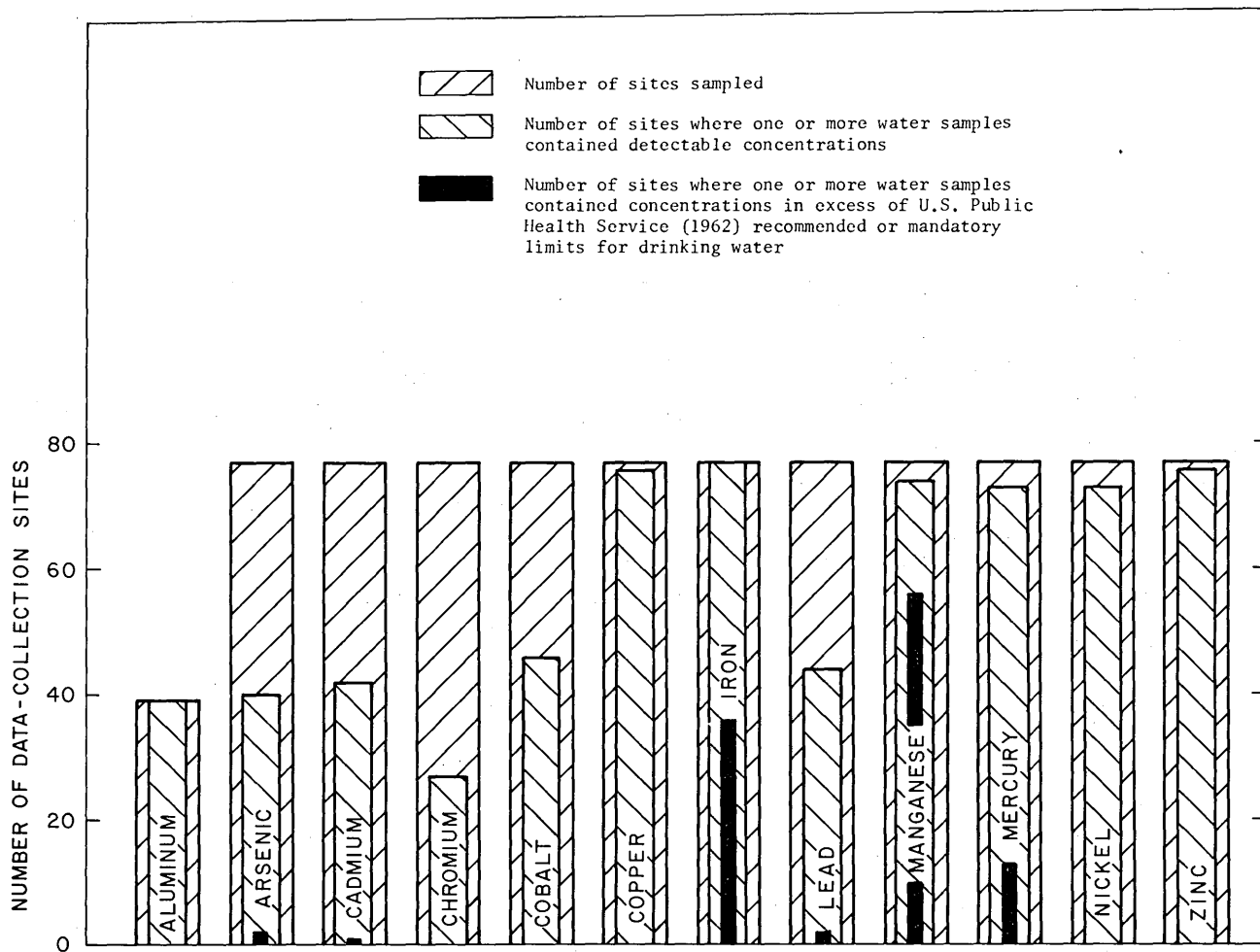


FIGURE 5.-Summary of the occurrence of minor elements at sites on nontidal reaches of streams, water years 1970-72

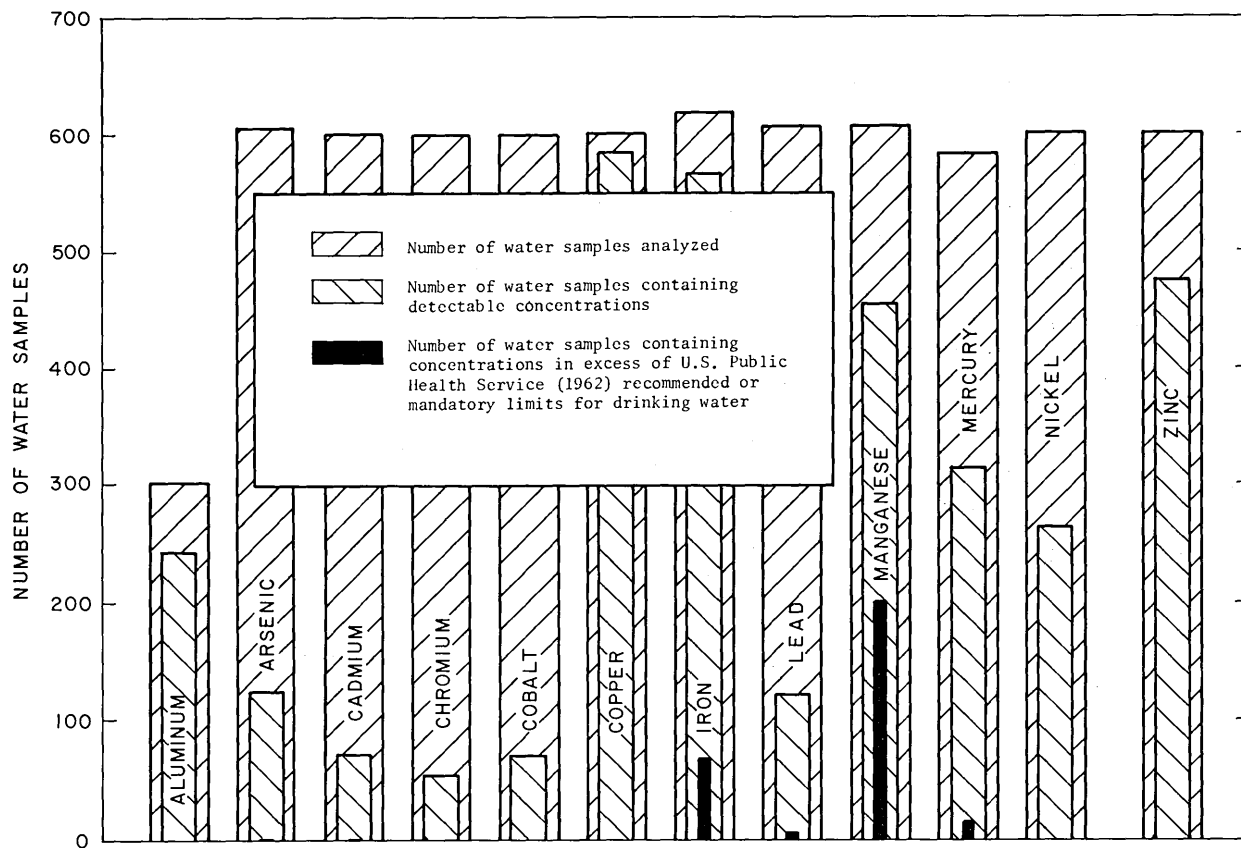


FIGURE 6.-Summary of analyses for minor elements in water from nontidal reaches of streams, water years 1970-72

Cadmium.--The cadmium content of 601 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 30 $\mu\text{g/l}$ in a sample from Little Whiteoak Bayou at Houston (site 61). Although no sample other than the 1 from Little Whiteoak Bayou contained cadmium in excess of 10 $\mu\text{g/l}$, 71 samples (at least 1 sample from 42 sites) contained detectable concentrations.

Chromium.--The chromium (tervalent plus hexavalent) concentration was measured in 600 samples from 77 sites, and ranged from 0 $\mu\text{g/l}$ in many samples to 230 $\mu\text{g/l}$ in a sample from Little Whiteoak Bayou near Houston (site 61). Chromium was detected in 53 samples from 27 sites, most of which are in the urban area of Houston and vicinity. In addition to the sample from Little Whiteoak Bayou, a sample from Chocolate Bayou near Alvin (site 88) contained more than 50 $\mu\text{g/l}$ tervalent plus hexavalent chromium; but none of the samples contained more than 50 $\mu\text{g/l}$ hexavalent chromium.

Cobalt.--The cobalt concentration in 600 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 18 $\mu\text{g/l}$ in a sample from Hunting Bayou at U.S. Highway 90-A in Houston (site 74). One or more samples from 45 sites, most of which are on streams in the Houston urban area or on small coastal streams, contained from 1 to 3 $\mu\text{g/l}$ cobalt.

Copper.--The concentration of copper in 602 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 230 $\mu\text{g/l}$ in a sample from Cypress Creek near Humble (site 54). Copper was detected in 586 samples from 76 sites.

Iron.--The iron content of 619 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 3,800 $\mu\text{g/l}$ in a sample from the Angelina River below Sam Rayburn Reservoir (site 26) in east Texas. Iron was detected in 567 samples (at least 1 sample from each of the 77 sites). The iron in 67 samples from 36 sites exceeded 300 $\mu\text{g/l}$; most of these sites are located on streams in east or southeast Texas, including many streams in the urban areas of Houston and vicinity.

Lead.--The concentration of lead in 607 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 90 $\mu\text{g/l}$ in a sample from Cypress Creek near Humble (site 54). Only one other sample, from Sims Bayou at Hiram Clarke Street in Houston (site 67), contained more than 50 $\mu\text{g/l}$. However, 122 samples from 44 sites, most of which are in the Houston urban area, contained detectable concentrations of lead.

Manganese.--The concentration of manganese in 608 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 3,600 $\mu\text{g/l}$ in a sample from the Angelina River below Sam Rayburn Reservoir (site 26). Manganese was found in 456 samples from 74 sites. At least 1 sample from 56 sites contained more than 50 $\mu\text{g/l}$.

Mercury.--The mercury concentration of 583 samples from 77 sites ranged from less than 0.2 $\mu\text{g/l}$ (the lower limit of detection) in many samples to 160 $\mu\text{g/l}$ in a sample from Greens Bayou at Ley Road at Houston (site 77). Mercury was detected in 315 samples from 73 sites; but the concentration in only 13 samples (1 from each of 13 sites) exceeded 5 $\mu\text{g/l}$. Most of these samples were from sites on streams in the urban area of Houston or on small coastal streams.

Nickel.--The concentration of nickel in 601 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 130 $\mu\text{g/l}$ in a sample from Little Whiteoak at Houston (site 61). Nickel was detected in 265 samples from 73 sites. One or more samples from nine of these sites, most of which are on the Trinity River or on streams in the Houston urban area, contained more than 10 $\mu\text{g/l}$ nickel.

Zinc.--The concentration of zinc in 601 samples from 77 sites ranged from 0 $\mu\text{g/l}$ in many samples to 2,800 $\mu\text{g/l}$ in a sample from Chiltipin Creek at Sinton (site 150). At least 1 sample from 20 sites, many of which are on streams in the Houston urban area and vicinity, contained more than 100 $\mu\text{g/l}$.

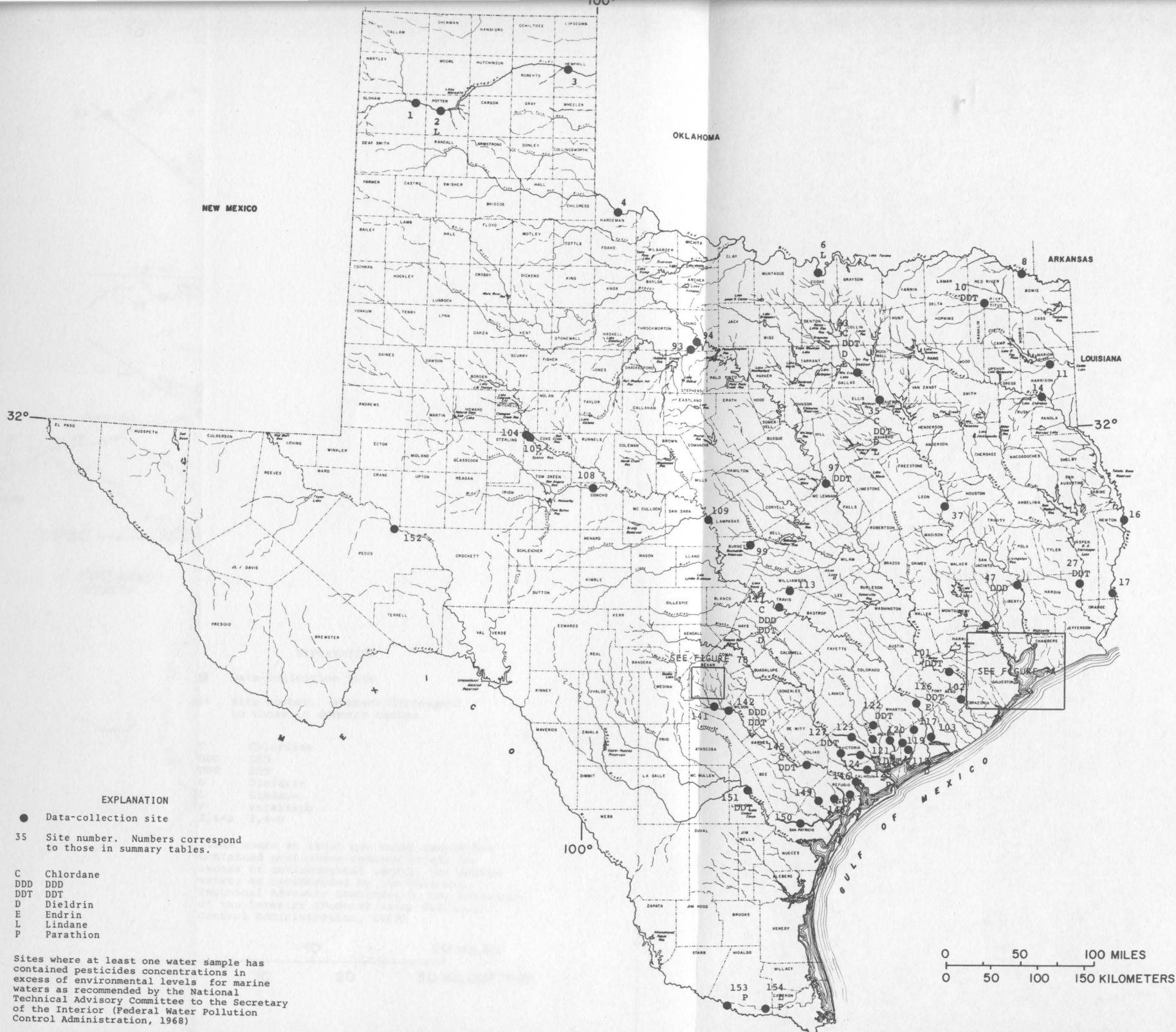
These data show that many of the minor elements studied are widely distributed in low concentrations in surface waters in Texas. With the exceptions of iron and manganese, most of the higher concentrations of these elements were found in waters from urban areas, indicating that the concentrations in many instances are related to man's activities.

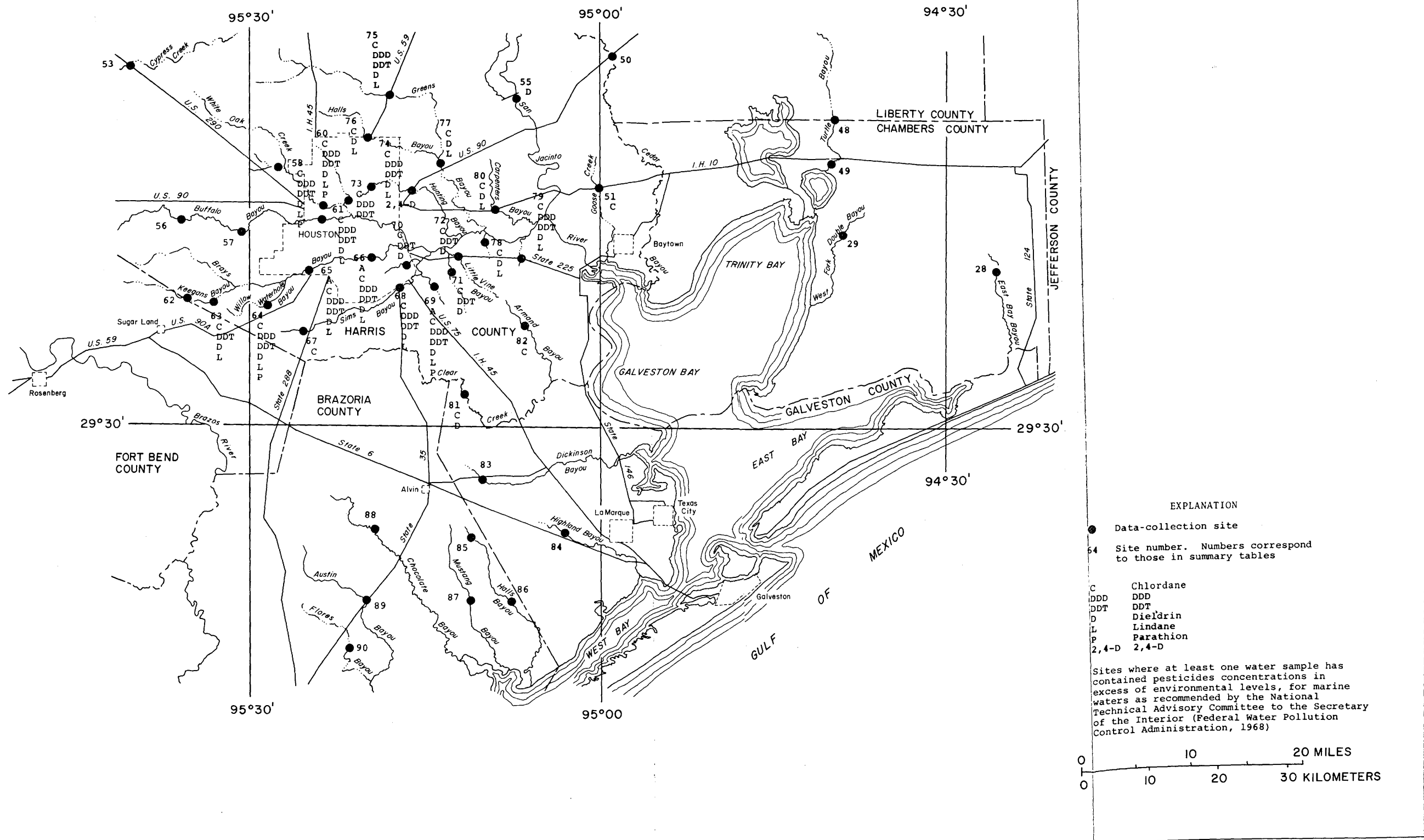
PESTICIDES IN WATERS OF NONTIDAL REACHES OF STREAMS

Water samples for the determination of selected pesticides were collected seasonally from 108 sites on nontidal reaches of most of the principal streams and on many small streams during the 1968-72 water years.

Upon receipt in the laboratory, the samples for herbicides analysis were acidified to a pH of 2 or less with high-purity sulfuric acid and were refrigerated at about 5°C to inhibit biological degradation. The samples for insecticides analysis were stored in the laboratory at room temperature until analyzed (usually within 4 to 7 days). The samples were not filtered; thus, the concentrations reported include insecticides and herbicides in both the water and suspended-sediment fractions. Although the concentrations of all 18 of the pesticides discussed below were determined in some analyses, selected determinations were omitted in many.

Locations of data-collection sites for pesticides are shown on figure 7. The analytical results are summarized in table 3 and on figures 7, 8, and 9. A brief summary for each pesticide follows.





EXPLANATION

- Data-collection site
- 64 Site number. Numbers correspond to those in summary tables

C Chlordane
 DDD DDD
 DDT DDT
 D Dieldrin
 L Lindane
 P Parathion
 2,4-D 2,4-D

Sites where at least one water sample has contained pesticides concentrations in excess of environmental levels, for marine waters as recommended by the National Technical Advisory Committee to the Secretary of the Interior (Federal Water Pollution Control Administration, 1968)

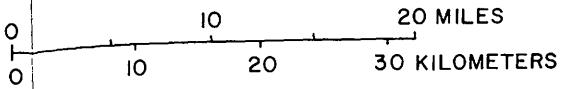


FIGURE 7a.-Locations of pesticides data-collection sites in the Houston area



- Sites where at least one water sample has contained pesticides concentrations in excess of environmental levels, for marine waters as recommended by the National Technical Advisory Committee to the Secretary of the Interior (Federal Water Pollution Control Administration, 1968)



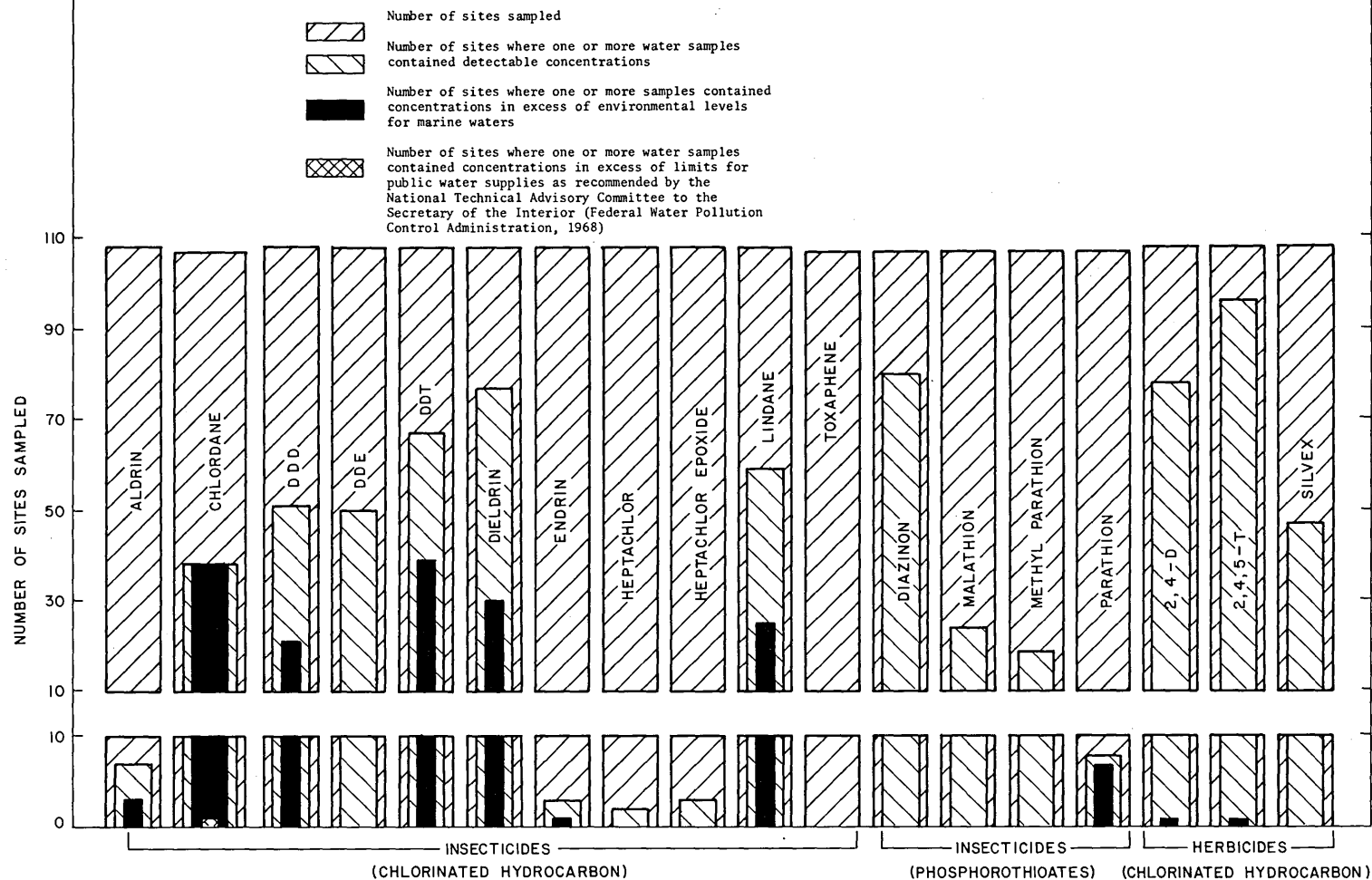


FIGURE 8.--Summary of the occurrence of pesticides in nontidal reaches of streams, water years 1968-72

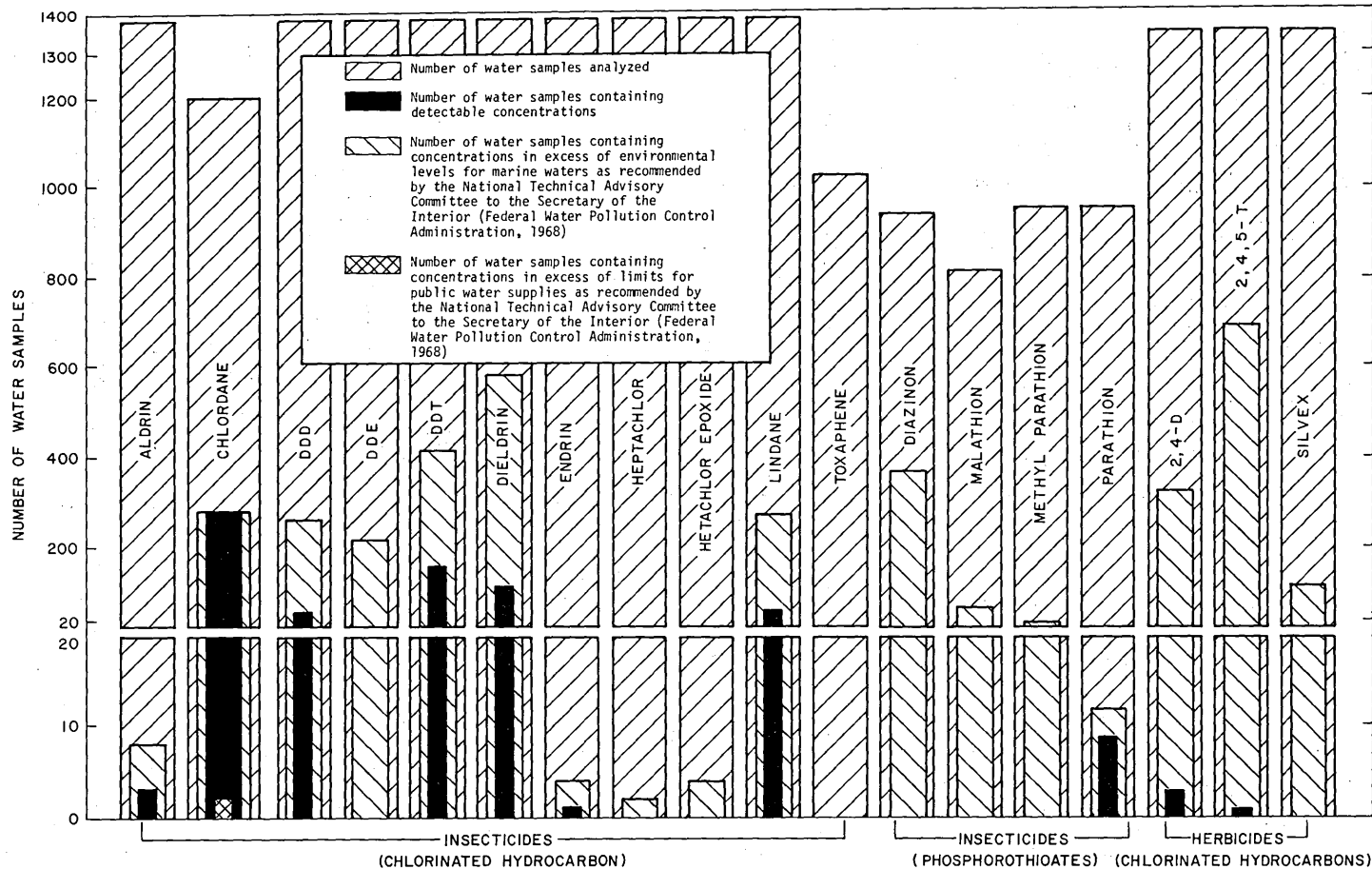


FIGURE 9.-Summary of analyses for pesticides in nontidal reaches of streams, water years 1968-72

Chlorinated-Hydrocarbon Insecticides

Aldrin.--The concentration of aldrin in 1,385 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in most samples to 0.57 $\mu\text{g/l}$ in a sample from Brays Bayou at Houston (site 65). Aldrin was detected in only eight samples from seven sites. Only three samples (one each from three sites on streams in the urban area of Houston) contained more than 0.05 $\mu\text{g/l}$, the maximum environmental level for marine waters, as recommended by the National Technical Advisory Committee (1968). No samples contained more than the recommended 17 $\mu\text{g/l}$ limit for water to be used as a public supply.

Chlordane.--The concentration of chlordane in 1,205 samples from 107 sites ranged from 0.0 $\mu\text{g/l}$ in many samples to 15 $\mu\text{g/l}$ in a sample from Brays Bayou at Houston (site 65). Chlordane was detected in 280 samples from 38 sites, most of which are on streams in the urban areas of Houston and San Antonio. The chlordane content of each of these 280 samples exceeded 0.05 $\mu\text{g/l}$, the maximum recommended environmental level for marine waters. Two samples from Brays Bayou at Houston (site 65) contained more than the 3 $\mu\text{g/l}$ limit recommended for water to be used as a public supply.

DDD.--The DDD content of 1,385 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 1.0 $\mu\text{g/l}$ in a sample from Alazan Creek at St. Cloud Street in San Antonio (site 131). DDD was found in 263 samples from 51 sites. The 0.05 $\mu\text{g/l}$ limit recommended for marine waters was exceeded in 57 samples from 21 sites. Most of these sites are on streams in the urban areas of Houston and San Antonio.

DDE.--The concentration of DDE in 1,383 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 1.1 $\mu\text{g/l}$ in a sample from Alazan Creek at St. Cloud Street in San Antonio (site 131). At least 1 sample from 17 sites, most of which are in the urban areas of Houston and San Antonio, contained more than 0.05 $\mu\text{g/l}$ DDE.

DDT.--The DDT concentration in 1,385 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 6.6 $\mu\text{g/l}$ in a sample from Alazan Creek at St. Cloud Street in San Antonio (site 131). Although no samples contained concentrations in excess of the 42 $\mu\text{g/l}$ limit recommended for public water supplies, 159 samples from 39 sites contained more than the recommended 0.05 $\mu\text{g/l}$ environmental limit for marine waters. Many of these sites are on streams in the urban areas of Houston and San Antonio, but several sites are on major streams.

Diieldrin.--The diieldrin content of 1,385 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 0.60 $\mu\text{g/l}$ in a sample from Greens Bayou near Houston (site 75). No samples contained more than the recommended 17 $\mu\text{g/l}$ limit for public water supplies, but 111 samples from 30 sites contained more than 0.05 $\mu\text{g/l}$, the maximum recommended environmental level for marine waters. Most of these sites are in the urban areas of Houston and San Antonio.

Endrin.--The concentration of endrin in 1,385 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in most samples to 0.07 $\mu\text{g/l}$ in a sample from the Colorado River at Wharton (site 116). Endrin was detected in only four samples (in at least one sample from three sites). The endrin content of none of the samples exceeded the recommended 1 $\mu\text{g/l}$ limit for water to be used for public supply; one sample from the Colorado River at Wharton (site 116) contained more than the recommended 0.05 $\mu\text{g/l}$ environmental limit for marine waters.

Heptachlor.--The heptachlor content of 1,384 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in 1,382 samples to 0.03 $\mu\text{g/l}$ in a sample from the San Antonio River at San Antonio (site 130). One other sample, from Alazan Creek at St. Cloud Street in San Antonio (site 131), contained 0.01 $\mu\text{g/l}$. The concentration of heptachlor in neither of these samples exceeded the recommended limit for public-water supply (18 $\mu\text{g/l}$) or the recommended environmental level for marine waters (0.05 $\mu\text{g/l}$).

Heptachlor epoxide.--The concentration of heptachlor epoxide ranged from 0.00 $\mu\text{g/l}$ in 1,382 samples from 105 sites to 0.04 $\mu\text{g/l}$ in a sample from Salado Creek tributary at Bitters Road in San Antonio (site 133). Three other samples (one from Salado Creek tributary at Bitters Road and one each from two other sites in the urban area of San Antonio) contained heptachlor epoxide. The concentration in none of these samples exceeded the 18 $\mu\text{g/l}$ limit recommended for water to be used for public supply.

Lindane.--Lindane was detected in 274 of 1,385 samples. At least 1 sample from 59 of 108 sites contained detectable concentrations. The maximum concentration was 0.72 $\mu\text{g/l}$ in a sample from Buffalo Bayou at Houston (site 58). Although no sample contained more than the 56 $\mu\text{g/l}$ limit recommended for water to be used for public supply, 59 samples from 25 sites contained more than 0.05 $\mu\text{g/l}$, the environmental limit recommended for marine waters

Toxaphene.--None of the 1,029 samples from 107 sites contained detectable concentrations of toxaphene (more than 0.5 $\mu\text{g/l}$).

Phosphorothioate Insecticides

Diazinon.--The concentration of diazinon in 943 samples from 107 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 2.2 $\mu\text{g/l}$ in a sample from Brays Bayou at Houston (site 65). At least 1 sample from 80 sites contained detectable concentrations; and at least 1 sample from 43 sites, most of which are in urban areas, contained more than 0.05 $\mu\text{g/l}$.

Malathion.--Malathion was detected in 67 of 815 samples. At least 1 sample from 24 of 107 sites contained detectable concentrations. The maximum concentration was 3.8 $\mu\text{g/l}$ in a sample from Little Whiteoak Bayou at Houston (site 61). At least 1 sample from 23 sites contained more than 0.05 $\mu\text{g/l}$. Most of these sites are on streams in urban areas.

Methyl Parathion.--The concentration of methyl parathion in 956 samples from 107 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 1.5 $\mu\text{g/l}$ in a sample from Chocolate Bayou at Port Lavaca (site 125). Methyl parathion was detected in at least 1 sample from 19 sites. At least 1 sample from 16 sites, most of which are on streams in urban areas, contained more than 0.05 $\mu\text{g/l}$.

Parathion.--Parathion was detected in 12 of 955 samples. At least 1 sample from 8 of 107 sites contained detectable concentrations. The maximum concentration was 1.0 $\mu\text{g/l}$ in a sample from the Rio Grande at Anzalduas Dam (site 153); eight other samples from seven sites contained more than 0.05 $\mu\text{g/l}$, the maximum environmental level recommended for marine waters.

The sum of the concentrations of diazinon, malathion, methyl parathion, and parathion in none of the samples exceeded 100 $\mu\text{g/l}$, which is the recommended limit of organic-phosphate plus carbamate insecticides in water to be used for public supply.

Chlorinated-Hydrocarbon Herbicides

2,4-D.--The concentration of 2,4-D in 1,352 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 26 $\mu\text{g/l}$ in a sample from Hunting Bayou at U.S. 90-A in Houston (site 74). At least 1 sample from 78 sites contained detectable concentrations. The concentration in three samples, all from Hunting Bayou at U.S. 90-A in Houston (site 74), exceeded 10 $\mu\text{g/l}$, the maximum recommended environmental level for marine waters.

2,4,5-T.--The 2,4,5-T content of 1,352 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 13 $\mu\text{g/l}$ in a sample from Salado Creek (upper station) at San Antonio (site 134). At least 1 sample from 96 sites contained detectable concentrations, but only the 1 sample from Salado Creek contained more than 10 $\mu\text{g/l}$, the maximum recommended level for marine waters.

Silvex.--The concentration of Silvex in 1,352 samples from 108 sites ranged from 0.00 $\mu\text{g/l}$ in many samples to 0.60 $\mu\text{g/l}$ in a sample from Sims Bayou at Houston (site 68). At least 1 sample from 11 sites contained more than 0.10 $\mu\text{g/l}$ Silvex. Most of these sites are on streams in urban areas.

The sum of the concentrations of 2,4-D, 2,4,5-T, and Silvex in none of the samples exceeded 100 $\mu\text{g/l}$, the maximum limit recommended for water to be used as a public supply.

Data for the 108 sites show that small amounts of some of the pesticides studied are widely distributed in surface waters in Texas. The most widely distributed chlorinated-hydrocarbon insecticides at the sites studied were dieldrin at 77 sites, DDT at 67 sites, lindane at 59 sites, DDD at 51 sites, DDE at 50 sites, and chlordane at 38 sites. No other chlorinated-hydrocarbon insecticide was detected at more than seven sites. The most widely distributed phosphorothioate insecticide was diazinon, which was detected at 80 sites. No other phosphorothioate insecticide was detected at more than 24 sites. Small amounts of each of the chlorinated-hydrocarbon herbicides were widely distributed (2,4,5-T at 96 sites, 2,4-D at 78 sites, and Silvex at 47 sites).

Although the occurrence of these pesticides are widespread, only chlordane in two samples from one site exceeded the maximum limit recommended for water to be used for public supply. However, the concentration of 1 or more pesticides in at least 1 sample from 57 sites exceeded the maximum environmental level for marine waters recommended by the National Technical Advisory Committee. Although many of these sites are on streams in urban areas, some of the sites are on principal streams.

SUMMARY OF CONCLUSIONS

The concentrations of dissolved solids, chloride, and sulfate in many of the principal streams in Texas average less than 500 mg/l, 250 mg/l, and 250 mg/l, respectively. Exceptions to this generalization are reaches of the Canadian, Red, Brazos, Colorado, and Pecos Rivers and the Rio Grande, where brine or saline inflows have degraded the inorganic quality of the water.

Samples for the determination of BOD and dissolved oxygen were collected periodically at sites on nontidal reaches of most of the principal streams and on many small streams during the 1968-72 water years. The BOD of 1,795 samples from 139 sites exceeded 3.0 mg/l. The BOD of at least half the samples from 65 of 131 sites, which were sampled at least 10 times, exceeded 3.0 mg/l. Many of these 65 sites are on streams in the urban areas of Houston and San Antonio and on the Trinity River and tributaries.

The dissolved-oxygen concentration, which was determined in 3,465 samples from 141 sites, was less than 5.0 mg/l in 740 samples (1 or more samples from 87 sites) and less than 3.0 mg/l in 308 samples (1 or more samples from 55 sites). The dissolved-oxygen content of at least half the samples from 20 of 123 sites that were sampled at least 10 times was less than 5.0 mg/l. Most of these 20 sites are on streams in the urban area of Houston and on the Trinity River and tributaries.

Analyses of samples collected periodically from 77 sites on nontidal reaches of most of the principal streams and on many small streams during the 1970-72 water years show that many of the minor elements are widely distributed in low concentrations in surface waters in Texas. However, with the exceptions of iron and manganese, most of the higher concentrations of the minor elements were found in waters from urban areas, indicating that the concentration levels in many instances are related to man's activities.

Analyses of water samples collected periodically from 108 sites on nontidal reaches of most of the principal streams and many small streams show that small amounts of some of the pesticides studied are widely distributed in surface waters in Texas. The most widely distributed chlorinated-hydrocarbon insecticides at the sites studied were dieldrin at 77 sites, DDT at 67 sites, lindane at 59 sites, and chlordane at 38 sites. The most widely distributed phosphorothioate insecticide was diazinon, which was detected at 80 sites. Small amounts of each of the chlorinated-hydrocarbon herbicides were widely distributed (2,4,5-T at 96 sites, 2,4-D at 78 sites, and Silvex at 47 sites). Although only chlordane, in 2 samples from 1 site exceeded the maximum limit recommended for water to be used for public supply, 1 or more pesticides in at least 1 sample from 57 sites exceeded the maximum environmental level for marine waters recommended by the National Technical Advisory Committee.

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Table 1.--Summary of dissolved-oxygen and biochemical-oxygen-demand records for selected streams in Texas, water years 1968-72

Reference number	Station number	Stream and location	Biochemical oxygen demand (5-day 20°C BOD)					Dissolved oxygen (DO)					
			Water years	No. of analyses	Range (mg/l)	Mean (mg/l)	No. of samples with BOD greater than 3.0 mg/l	Water years	No. of analyses	Range (mg/l)	Mean (mg/l)	No. of samples with DO concentrations less than 3.0 mg/l	No. of samples with DO concentrations less than 5.0 mg/l
1	07227470	Canadian River at Tascosa, Tex.	1969-72	36	0.2-16	2.5	9	1969-72	31	6.6-12.2	8.7	0	0
2	07227500	Canadian River near Amarillo, Tex.	1968-72	26	1.4-46	10	24	1968-72	21	6.2-13.2	9.3	0	0
3	07228000	Canadian River near Canadian, Tex.	1968-72	23	0.5-15	3.6	8	1968-72	18	6.5-12.8	9.3	0	0
5	07312700	Wichita River near Charlie, Tex.	1968-72	24	1.4-18	5.2	19	1968-72	24	4.6-15.0	9.3	0	1
7	07335500	Red River at Arthur City, Tex.	1968-70	21	0.7- 4.3	1.8	1	1968-70	21	5.8-13.0	9.1	0	0
8	07336820	Red River near DeKalb, Tex.	1968-72	33	0.8- 4.1	2.0	4	1968-70	33	6.1-13.0	9.1	0	0
9	07337000	Red River at Index, Ark.	1968-70	21	0.9- 4.1	2.1	3	1968-70	21	6.3-12.1	8.9	0	0
10	07343200	Sulphur River near Talco, Tex.	1968-72	33	0.9- 5.4	2.2	4	1968-72	33	3.4-12.0	7.8	0	3
11	07346070	Little Cypress Creek near Jefferson, Tex.	1968-72	32	0.3- 7.7	1.7	5	1968-72	32	2.9-11.1	7.3	1	5
12	08017500	Sabine River near Emory, Tex.	1968-72	31	0.8- 7.7	2.3	5	1968-72	31	3.8-12.0	8.3	0	2
13	08020000	Sabine River near Gladewater, Tex.	1968-72	33	0.9- 5.8	1.7	1	1968-72	33	2.4-11.2	7.3	1	4
14	08022000	Sabine River near Tatum, Tex.	1968-72	31	1.5-18	4.3	14	1968-72	31	0.9-12.9	7.0	1	8
15	08025360	Sabine River at Toledo Bend Dam, Tex.	1968-72	27	0.6- 4.2	1.5	1	1968-72	27	2.0-10.5	5.9	6	12
16	08026000	Sabine River near Burkeville, Tex.	1968-72	27	0.7- 4.4	1.6	3	1968-72	27	3.8-11.0	8.2	0	2
17	08030500	Sabine River near Ruliff, Tex.	1968-72	31	0.0- 3.9	1.6	1	1968-72	30	5.8-10.2	7.7	0	0
18	08032500	Neches River near Alto, Tex.	1968-72	30	0.4- 6.2	1.5	1	1968-72	31	5.0-10.0	7.8	0	0
19	08033000	Neches River near Diboll, Tex.	1970-72	17	0.4-22	5.5	7	1970-72	18	4.2-10.6	7.1	0	3
20	08033500	Neches River near Rockland, Tex.	1968-72	30	0.5- 5.4	2.0	6	1968-72	30	4.7-11.4	7.4	0	1
21	08037000	Angelina River near Lufkin, Tex.	1968-72	33	0.7- 6.5	1.5	1	1968-72	45	5.2-12.6	7.9	0	0
22	08037080	Bayou LaNana near Nacogdoches, Tex.	1968-72	33	1.3-36	9.7	30	1968-72	45	0.2-10.4	5.2	9	20
23	08037200	Paper Mill Creek near Herty, Tex.	1968-72	33	7.2-34	19	33	1968-72	45	1.0- 7.0	4.2	5	31
24	08037250	Angelina River below Paper Mill Creek nr Herty, Tex.	1968-72	10	1.6- 5.6	4.4	8	1968-72	14	1.4- 8.5	5.1	4	7
25	08037330	Angelina River near Etoile, Tex.	1968-72	33	0.7- 8.3	2.0	2	1968-72	44	1.0-10.1	4.6	12	22
26	08039400	Angelina River blw Sam Rayburn Res. nr Jasper, Tex.	1968-72	32	0.3- 6.1	1.2	1	1968-72	43	1.4-11.6	7.3	5	12
27	08041000	Neches River at Evadale, Tex.	1968-72	30	0.0- 4.1	1.7	1	1968-72	29	5.9-10.5	8.0	0	0
28	08042540	East Bay Bayou near Stowell, Tex.	1971-72	18	1.2-14	4.0	9	1971-72	18	4.8-13.9	8.2	0	1
29	08042550	West Fork Double Bayou near Anahuac, Tex.	1971-72	18	1.2-56	6.4	9	1971-72	18	4.0-10.4	7.6	0	1
30	08048000	West Fork Trinity River at Fort Worth, Tex.	1968-72	58	1.2-11	4.4	46	1971-72	58	0.3-14.2	6.8	4	14
31	08049500	West Fork Trinity River at Grand Prairie, Tex.	1968-72	58	4.2-73	15	58	1971-72	58	0.3- 9.4	3.7	21	45
32	08050500	Elm Fork Trinity River near Sanger, Tex.	1970-72	17	0.7- 8.3	3.1	5	1970-72	17	4.5-12.9	8.8	0	1
33	08057410	Trinity River below Dallas, Tex.	1968-72	58	2.8-53	15	57	1968-72	58	0.1- 9.5	3.4	30	42
34	08062000	East Fork Trinity River near Crandall, Tex.	1968-72	58	1.8-43	13	50	1968-72	58	0.1-12.4	5.2	19	26
35	08062500	Trinity River near Rosser, Tex.	1968-72	58	2.8-37	11	57	1968-72	58	0.2- 9.1	3.7	26	37
36	08062700	Trinity River at Trinidad, Tex.	1968-72	58	2.0-42	15	49	1968-72	58	0.9- 9.7	4.8	16	30
37	08065350	Trinity River near Crockett, Tex.	1968-72	31	1.3-33	8.3	18	1968-72	32	1.1- 9.1	6.2	3	5
38	08065500	Trinity River near Midway, Tex.	1971-72	16	0.1-18	6.6	8	1971-72	17	1.0- 9.5	6.0	2	5
39	08065800	Bedias Creek near Madisonville, Tex.	1971-72	14	0.1-12	4.3	8	1971-72	14	1.6- 8.2	4.7	5	10
40	08065950	Nelson Creek near Riverside, Tex.	1971-72	15	0.7- 3.9	2.2	5	1971-72	16	6.5- 9.8	8.4	0	0
41	08065980	Harmon Creek near Riverside, Tex.	1971-72	16	3.4-13	6.8	16	1971-72	17	1.5-10.0	6.0	2	7
42	08066000	Trinity River at Riverside, Tex.	1971-72	16	2.0- 9.0	5.0	13	1971-72	17	1.4-13.0	5.9	5	9
43	08066130	White Rock Creek near Trinity, Tex.	1971-72	13	1.6- 9.0	3.8	7	1971-72	14	4.8-10.2	8.6	0	1
44	08066147	White Rock Creek at Farm Road 356, nr Trinity, Tex.	1971-72	16	1.2- 8.8	4.4	10	1971-72	17	2.2-14.4	6.7	2	6
45	08066170	Kickapoo Creek near Onalaska, Tex.	1971-72	15	1.0- 5.0	2.6	4	1971-72	16	6.0-12.6	9.5	0	0
46	08066191	Livingston Reservoir Outflow, nr Goodrich, Tex.	1970-72	17	0.6- 9.0	2.8	4	1970-72	18	6.0-11.2	9.2	0	0
47	08066500	Trinity River at Romayor, Tex.	1968-72	31	0.0-20	3.0	8	1968-72	31	5.6-15.0	8.8	0	0
48	08067120	Turtle Bayou near Hankamer, Tex.	1971-72	13	0.3- 6.0	2.3	3	1971-72	13	4.7-11.0	7.1	0	1
49	08067250	Turtle Bayou near Anahuac, Tex.	1972	4	2.4- 4.4	3.4	3	1971-72	4	5.3-10.4	7.0	0	0
50	08067500	Cedar Bayou near Crosby, Tex.	1971-72	21	0.6- 5.9	3.0	8	1971-72	21	4.9-12.1	7.5	0	1
51	08067520	Goose Creek near McNair, Tex.	1971-72	19	0.4- 7.5	3.3	13	1971-72	19	3.8-11.2	6.9	0	4
52	08068000	West Fork San Jacinto near Conroe, Tex.	1968-72	31	0.4- 3.7	1.9	2	1968-72	29	4.2-12.4	8.3	0	1

Table 1.--Summary of dissolved-oxygen and biochemical-oxygen-demand records for selected streams in Texas, water years 1968-72--Continued

Reference number	Station number	Stream and location	Biochemical oxygen demand (5-day 20°C BOD)					Dissolved oxygen (DO)					
			Water years	No. of analyses	Range (mg/l)	Mean (mg/l)	No. of samples with BOD greater than 3.0 mg/l	Water years	No. of analyses	Range (mg/l)	Mean (mg/l)	No. of samples with DO concentrations less than 3.0 mg/l	No. of samples with DO concentrations less than 5.0 mg/l
53	08068750	Cypress Creek near Cypress, Tex.	1971-72	8	0.8- 8.1	3.7	5	1971-72	7	4.4- 9.8	7.0	0	2
54	08069200	Cypress Creek near Humble, Tex.	1971-72	7	1.8- 8.3	4.4	6	1971-72	6	3.6-11.0	6.9	0	2
56	08073500	Buffalo Bayou near Addicks, Tex.	1970-72	11	2.1- 6.9	3.8	9	1970-72	11	5.5-12.0	8.2	0	0
57	08073700	Buffalo Bayou at Piney Point, Tex.	1970-72	11	2.6-16	7.6	9	1970-72	11	1.7-10.6	5.8	2	5
58	08074000	Buffalo Bayou at Houston, Tex.	1968-72	37	1.2-13	5.8	31	1968-72	37	2.2- 9.4	5.6	3	20
59	08074250	Brickhouse Gulley at Costa Rica St., Houston, Tex.	1970-72	12	2.0-23	6.8	10	1970-72	12	7.1-20.0	11.1	0	0
60	08074500	Whiteoak Bayou at Houston, Tex.	1969-72	43	3.0-60	11	39	1969-72	43	3.7-18.8	9.0	0	3
61	08074550	Little Whiteoak Bayou at Houston, Tex.	1971-72	23	2.4-53	14	21	1971-72	23	0.1-11.5	4.5	9	14
62	08074780	Keegans Bayou at Keegan Road, Houston, Tex.	1970-72	10	0.7- 7.2	3.8	7	1970-72	10	1.9- 8.0	5.4	1	4
63	08074800	Keegans Bayou at Roark Road, near Houston, Tex.	1969-72	30	0.6-12	4.4	20	1969-72	30	1.9-12.8	7.4	2	5
64	08074900	Willow Waterhole Bayou at Landsdowne St., Houston	1969-72	12	1.6-19	9.8	11	1969-72	12	2.8-20.0	6.4	2	5
65	08075000	Brays Bayou at Houston, Tex.	1969-72	54	2.0-31	12	49	1969-72	54	2.5-13.0	8.0	1	1
66	08075100	Brays Bayou at Scott St., Houston, Tex.	1971-72	24	1.4-20	11	22	1971-72	24	4.2-14.6	7.8	0	2
67	08075400	Sims Bayou at Hiram Clark St., Houston, Tex.	1970-72	11	2.3-19	8.1	10	1970-72	11	1.4-10.6	4.3	6	7
68	08075500	Sims Bayou at Houston, Tex.	1969-72	40	4.1-23	9.8	40	1969-72	40	0.1-10.6	3.6	20	29
69	08075650	Berry Bayou at Forest Oaks St., Houston, Tex.	1969-72	27	0.7-41	17	26	1969-72	28	0.8-11.5	5.2	5	14
70	08075720	Plum Creek at Houston, Tex.	1971-72	22	0.8-29	5.3	10	1971-72	21	2.8-11.3	6.6	1	5
71	08075730	Vince Bayou at Pasadena, Tex.	1971-72	22	2.1-22	7.3	18	1971-72	21	3.7-20.0	10.3	0	2
72	08075740	Little Vince Bayou at Pasadena, Tex.	1971-72	21	2.0-13	6.4	18	1971-72	21	1.3-10.0	5.1	4	9
73	08075760	Hunting Bayou at Falls St., Houston, Tex.	1970-72	11	2.7-54	18	10	1971-72	11	1.1- 8.0	4.9	4	5
74	08075770	Hunting Bayou at U.S. Highway 90-A, Houston, Tex.	1969-72	43	1.0-102	11	39	1969-72	43	0.4-20.0	5.8	10	20
75	08076000	Greens Bayou near Houston, Tex.	1969-72	23	1.2-22	6.6	21	1969-72	23	2.8-14.8	6.7	4	9
76	08076500	Halls Bayou at Houston, Tex.	1969-72	23	2.2-38	18	21	1969-72	23	0.4-20.0	6.3	5	10
77	08076700	Greens Bayou at Ley Road, at Houston, Tex.	1971-72	25	0.6-20	8.3	22	1971-72	25	1.1-10.2	5.4	3	10
78	08076800	Buffalo Bayou Tributary at Pasadena, Tex.	1971-72	20	4.5-30	13	20	1971-72	20	1.6- 7.9	4.6	5	12
79	08076850	Patrick Bayou at Deer Park, Tex.	1971-72	21	0.3-29	12	18	1971-72	21	2.2- 9.7	6.3	1	4
80	08076900	Carpenters Bayou at Cloverleaf, Tex.	1971-72	21	0.8-17	6.1	18	1971-72	21	3.2-11.0	6.4	0	5
81	08077540	Clear Creek at Farm Road 2351, at Friendswood, Tex.	1971-72	19	1.6- 9.3	4.8	15	1971-72	19	3.0- 9.0	4.5	0	12
82	08077620	Armand Bayou near Genoa, Tex.	1971-72	20	1.9-11	6.7	17	1971-72	20	1.6- 9.8	3.9	8	15
83	08077640	Dickinson Bayou near Alvin, Tex.	1971-72	18	0.6- 7.5	2.6	6	1971-72	18	1.8- 9.6	6.3	1	2
84	08077680	Highland Bayou near Alta Loma, Tex.	1971-72	18	1.5-17	6.5	16	1971-72	18	2.0-13.2	4.4	9	12
85	08077800	Halls Bayou near Algoa, Tex.	1971-72	11	0.6- 3.1	1.5	1	1971-72	11	6.4-12.7	8.5	0	0
86	08077850	Halls Bayou near Alta Loma, Tex.	1972	3	3.3-10	5.6	3	1972	3	5.2- 9.6	6.9	0	0
87	08077900	Mustang Bayou near Liverpool, Tex.	1971-72	17	0.1- 6.9	2.8	5	1971-72	17	3.8- 9.0	6.1	0	4
88	08078000	Chocolate Bayou near Alvin, Tex.	1971-72	19	0.3- 9.3	3.1	8	1971-72	19	4.5-10.0	7.4	0	1
89	08078400	Austin Bayou near Liverpool, Tex.	1971-72	17	0.1- 5.1	1.9	4	1971-72	17	2.0- 7.8	6.0	1	3
90	08078700	Flores Bayou near Danbury, Tex.	1971-72	15	1.2- 7.8	3.5	6	1971-72	15	1.7-15.2	6.5	1	4
91	08084000	Clear Fork Brazos River at Nugent, Tex.	1968-72	24	0.7-11	2.8	6	1968-72	23	0.6-17.8	9.5	1	1
92	08084100	Deadman Creek near Nugent, Tex.	1968-72	24	3.2-40	12	24	1968-72	23	2.7-15.4	8.0	1	6
95	08092000	Noland River at Blum, Tex.	1968-72	34	0.5- 8.4	3.6	16	1968-72	34	6.1-16.6	11.3	0	0
96	08093500	Aquilla Creek near Aquilla, Tex.	1968-72	33	0.6-21	3.7	14	1968-72	33	5.1-12.5	9.0	0	0
97	08096500	Brazos River at Waco, Tex.	1968-72	32	0.4- 3.4	1.5	1	1968-72	32	5.0-13.5	8.5	0	0
98	08098290	Brazos River near Highbank, Tex.	1968-72	31	0.9-18	3.1	10	1968-72	32	6.0-12.2	9.4	0	0
99	08103900	South Fork Rocky Creek near Briggs, Tex.	1968-72	23	0.0- 35.	.7	1	1968-72	23	5.4-10.2	8.7	0	0
100	08106500	Little River at Cameron, Tex.	1968-72	31	0.0- 5.8	2.1	9	1968-72	32	5.7-11.8	8.4	0	0
101	08114000	Brazos River at Richmond, Tex.	1968-72	32	0.1- 7.2	2.7	10	1968-72	32	5.2-14.8	8.4	0	0
102	08116650	Brazos River near Rosharon, Tex.	1968-72	35	0.9- 5.5	2.6	9	1968-72	35	5.7-12.4	8.9	0	0
103	08117900	Big Boggy Creek near Wadsworth, Tex.	1970-72	22	1.2-14	4.5	14	1970-72	22	2.5-18.6	8.6	1	2
106	08136100	Concho River at Sixmile Crossing, nr San Angelo	1968	2	1.7- 2.4	2.0	0	1968	2	10.0-11.0	10.5	0	0
107	08136150	Concho River near Veribest, Tex.	1969-72	21	2.1-47	8.6	18	1969-72	20	3.1-16.4	11.0	0	1

Table 1.--Summary of dissolved-oxygen and biochemical-oxygen-demand records for selected streams in Texas, water years 1968-72-- Continued

Reference number	Station number	Stream and location	Biochemical oxygen demand (5-day 20°C BOD)					Dissolved oxygen (DO)					
			Water years	No. of analyses	Range (mg/l)	Mean (mg/l)	No. of samples with BOD greater than 3.0 mg/l	Water years	No. of analyses	Range (mg/l)	Mean (mg/l)	No. of samples with DO concentrations less than 3.0 mg/l	No. of samples with DO concentrations less than 5.0 mg/l
108	08136500	Concho River near Paint Rock, Tex.	1968-72	22	1.0- 5.9	3.3	12	1968-72	20	4.0-14.6	9.5	0	1
109	08147000	Colorado River near San Saba, Tex.	1968-72	31	0.7- 4.7	2.0	3	1968-72	31	5.7-11.0	8.2	0	0
110	08153500	Pedernales River near Johnson City, Tex.	1969	3	0.8- 1.1	.9	0	1969	3	8.5-10.9	9.4	0	0
111	08157500	Waller Creek at 23rd St., Austin, Tex.	1971	6	0.9-23	9.4	4	1971	6	6.7- 8.0	7.6	0	0
112	08158650	Colorado River at Farm Road 973, below Austin, Tex.	1968-72	30	0.5- 9.0	2.5	6	1968-72	30	4.8-12.0	8.2	0	1
113	08159150	Wilbarger Creek near Pflugerville, Tex.	1970	1	4.6-	--	1	1970	1	7.5-	--	0	0
114	08159200	Colorado River at Bastrop, Tex.	1968-72	30	0.4- 7.7	1.7	4	1968-72	30	6.3-16.2	8.8	0	0
115	08161000	Colorado River at Columbus, Tex.	1968-72	31	0.1- 8.2	2.7	9	1968-72	29	7.3-12.8	9.0	0	0
116	08162000	Colorado River at Wharton, Tex.	1968-72	32	0.6- 6.4	2.6	12	1968-72	31	6.0-12.8	8.9	0	0
117	08162600	Tres Palacios Creek near Midfield, Tex.	1970-72	27	0.8-11	3.5	14	1970-72	25	3.2-14.0	7.9	0	2
118	08162650	Cashes Creek near Blessing, Tex.	1970-72	24	1.0-17	4.1	11	1970-72	24	2.0-11.3	6.3	1	6
119	08162700	East Carancahua Creek near Blessing, Tex.	1970-72	26	1.0- 7.5	2.9	11	1970-72	24	4.3-14.0	8.1	0	2
120	08162800	West Carancahua Creek near LaWard, Tex.	1970-72	21	1.1- 9.6	3.6	21	1970-72	21	4.2-14.4	8.2	0	2
122	08164500	Navidad River near Ganado, Tex.	1968-72	32	0.2- 4.3	2.2	4	1968-72	30	5.2-10.6	8.2	0	0
123	08164600	Garcitas Creek near Inez, Tex.	1970-72	24	0.3- 3.4	2.0	3	1970-72	23	4.5-11.8	7.8	0	1
124	08164800	Placedo Creek near Placedo, Tex.	1970-72	26	0.4- 6.0	2.7	8	1970-72	24	1.8-10.2	5.7	1	9
125	08164850	Chocolate Bayou at Port Lavaca, Tex.	1970-72	25	1.4- 9.0	4.8	15	1970-72	23	1.2-11.6	4.3	8	14
126	08169580	Guadalupe River below New Braunfels, Tex.	1968-72	31	0.4- 7.5	1.6	2	1968-72	31	6.1-18.8	9.0	0	0
127	08176520	Guadalupe River below Victoria, Tex.	1968-72	31	0.5- 2.7	1.4	0	1968-72	31	5.7-10.4	8.1	0	0
128	08177600	Olmos Creek Trib. at Farm Road 1535, at Shavano Park, Tex.	1970, 1972	2	4.1- 4.2	4.2	2	1972	1	8.0-	--	0	0
129	08177700	Olmos Creek at Dresden Drive, San Antonio, Tex.	1969-72	30	2.5-22	8.1	29	1969-72	12	6.8-10.2	8.0	0	0
130	08178000	San Antonio River at San Antonio, Tex.	1969-72	15	2.2-13	7.5	13	1969-72	8	5.8-10.0	8.0	0	0
131	08178300	Alazan Creek at St. Cloud St., San Antonio, Tex.	1969-72	15	3.1-19	6.8	15	1969,1972	4	8.3-10.0	9.1	0	0
132	08178600	Panther Springs Creek at Farm Road 2696, San Antonio	1969-72	6	2.6- 4.6	3.4	3	1969,1972	3	8.0- 9.1	8.7	0	0
133	08178690	Salado Creek Trib. at Bitters Rd., San Antonio, Tex.	1969-72	11	1.9-76	12	10	1969-71	5	7.4-10.2	8.9	0	0
134	08178700	Salado Creek (upper station) at San Antonio, Tex.	1969-72	14	2.4- 7.6	4.4	11	1969,1972	7	7.0-11.8	8.5	0	0
135	08178736	Salado Creek Trib. at Bee St., San Antonio, Tex.	1970,1972	3	5.2-19	9.9	3	--	--	--	--	--	--
136	08178800	Salado Creek (lower station) at San Antonio, Tex.	1969-72	15	1.7-14	5.2	11	1969-72	9	5.4- 8.8	7.2	0	0
137	08180500	Medina River near Riomedina, Tex.	1968-72	52	0.0- 1.8	.6	0	1968-72	52	5.7-11.1	7.7	0	0
138	08181000	Leon Creek Trib. at Farm Road 1604, San Antonio	1970,1972	4	0.4- 3.3	2.0	1	1972	1	7.9-	--	0	0
139	08181400	Helotes Creek at Helotes, Tex.	1969-72	13	0.5-13	2.7	3	1969-70, 1972	4	7.9- 9.3	8.4	0	0
140	08181450	Leon Creek Trib at Kelly AFB, Tex.	1970-72	10	2.1- 9.6	4.9	8	--	--	--	--	--	--
141	08181500	Medina River at San Antonio, Tex.	1971-72	21	0.6-14	3.2	4	1971-72	20	4.4- 8.8	7.1	0	1
142	08181800	San Antonio River near Elmendorf, Tex.	1968-72	58	1.0-31	9.5	53	1968-72	57	2.8- 9.0	5.1	1	29
143	08183500	San Antonio River near Falls City, Tex.	1968-72	58	1.0-14	3.2	19	1968-72	57	2.2- 9.4	5.5	5	16
144	08186000	Cibolo Creek near Falls City, Tex.	1970-72	34	0.2- 5.6	1.8	6	1970-72	34	5.0-14.4	8.3	0	0
145	08188500	San Antonio River at Goliad, Tex.	1968-72	59	0.6- 8.7	2.6	16	1968-72	57	5.0-11.0	7.5	0	0
146	08188800	Guadalupe River near Tivoli, Tex.	1968-72	31	0.8- 3.5	1.8	1	1968-72	31	4.3- 9.7	6.9	0	2
147	08189100	Salt Creek near Refugio, Tex.	1970-72	10	1.7- 5.2	2.8	3	1970-72	9	5.0-10.1	6.6	0	0
148	08189200	Copano Creek near Refugio, Tex.	1970-72	14	1.4- 4.9	3.2	7	1970-72	13	2.6-10.5	6.2	1	4
149	08189500	Mission River at Refugio, Tex.	1968-72	30	0.8- 8.0	2.5	6	1968-72	30	4.5-11.7	7.5	0	1
150	08189800	Chiltipin Creek at Sinton, Tex.	1970-72	23	2.1- 7.9	4.4	16	1970-72	21	1.1-16.9	10.4	1	3
151	08210000	Nueces River near Three Rivers, Tex.	1968-72	31	0.8- 7.8	2.8	10	1968-72	31	5.1-11.8	7.9	0	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
2. 07227500 CANADIAN RIVER NEAR AMARILLO, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	8	3	0	1	1	8	8	3	7	5	3	8
Range (µg/l)	10-460	0-10	0-0	0-2	0-1	4-25	10-720	0-11	0-210	<0.2-0.9	0-7	20-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	4	0	--	0
8. 07336820 RED RIVER NEAR DEKALB, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	7	0	0	0	0	7	7	0	5	5	1	7
Range (µg/l)	0-200	0-0	0-0	0-0	0-0	0-4	0-140	0-0	2-11	<0.2-1.3	0-9	0-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
10. 07343200 SULPHUR RIVER NEAR TALCO, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	6	2	1	1	0	7	6	2	7	5	4	7
Range (µg/l)	0-100	0-10	0-3	0-28	0-0	0-7	0-48	0-6	0-190	<0.2-7.7	0-9	0-120
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	5	1	--	0
11. 07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	8	0	1	0	0	7	8	2	8	5	3	8
Range (µg/l)	70-420	0-0	0-1	0-0	0-0	0-14	910-2000	0-9	24-1500	<0.2-2.5	0-8	14-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	8	0	7	0	--	0
14. 08022000 SABINE RIVER NEAR TATUM, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	7	0	1	0	0	7	8	0	8	6	5	7
Range (µg/l)	0-200	0-0	0-1	0-0	0-0	0-5	110-540	0-0	15-680	<0.2-2.1	0-8	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	5	0	7	0	--	0
16. 08026000 SABINE RIVER NEAR BURKEVILLE, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	6	0	0	0	0	8	8	0	7	2	1	4
Range (µg/l)	0-30	0-0	0-0	0-0	0-0	1-9	10-650	0-0	0-1300	<0.2-0.2	0-5	0-40
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	4	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
17. 08030500 SABINE RIVER NEAR RULIFF, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	8	0	1	0	0	8	8	0	5	6	3	7
Range (ug/l)	10-100	0-0	0-1	0-0	0-0	2-10	15-440	0-0	0-70	<0.2-2.7	0-4	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	1	0	--	0
20. 08033500 NECHES RIVER NEAR ROCKLAND, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	6	0	0	1	0	7	8	0	7	1	5	5
Range (ug/l)	0-90	0-0	0-0	0-2	0-0	0-7	35-730	0-0	0-160	<0.2-0.2	0-4	0-40
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	4	0	--	0
26. 08039400 ANGELINA RIVER BELOW SAM RAYBURN RESERVOIR, NEAR JASPER, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	22	8	11	7	8	8
Number of occurrences	6	0	1	0	0	7	18	0	9	3	3	5
Range (ug/l)	0-30	0-0	0-1	0-0	0-0	0-4	0-3800	0-0	0-3600	<0.2-0.8	0-3	0-30
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	5	0	6	0	--	0
27. 08041000 NECHES RIVER AT EVADALE, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	7	0	0	0	0	8	8	1	6	5	3	5
Range (ug/l)	0-160	0-0	0-0	0-0	0-0	1-14	80-490	0-4	0-890	<0.2-2.8	0-5	0-240
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	1	0	--	0
28. 08042540 EAST BAY BAYOU NEAR STOWELL, TEX. (Water years 1971-72)												
Number of analyses	--	9	9	9	9	9	9	9	9	8	9	9
Number of occurrences	--	0	0	0	1	9	9	0	7	6	4	9
Range (ug/l)	--	0-0	0-0	0-0	0-1	4-28	23-920	0-0	0-100	<0.2-1.4	0-6	10-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	3	0	2	0	--	0
29. 08042550 WEST FORK DOUBLE BAYOU NEAR ANAHUAC, TEX. (Water years 1971-72)												
Number of analyses	--	10	10	10	10	10	10	10	10	9	10	10
Number of occurrences	--	0	1	0	2	10	10	0	10	6	6	10
Range (ug/l)	--	0-0	0-1	0-0	0-3	1-19	25-590	0-0	20-140	<0.2-2.2	0-8	10-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	4	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
33. 08057410 TRINITY RIVER BELOW DALLAS, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	8	2	6	4	2	8	8	4	8	7	8	8
Range (µg/l)	10-100	0-10	0-2	0-10	0-1	9-18	40-150	0-9	12-140	<0.2-22	10-37	60-130
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	6	1	--	0
35. 08062500 TRINITY RIVER NEAR ROSSER, TEX. (Water years 1971-70)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	7	3	3	1	2	8	8	5	8	6	8	8
Range (µg/l)	0-100	0-20	0-1	0-6	0-3	5-13	30-340	0-7	26-170	<0.2-1.9	9-33	30-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	7	0	--	--
37. 08065350 TRINITY RIVER NEAR CROCKETT, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	7	5	0	1	2	8	7	0	5	4	7	5
Range (µg/l)	0-110	0-11	0-0	0-10	0-2	3-15	0-90	0-0	0-350	<0.2-0.8	0-25	0-50
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	2	0	--	0
47. 08066500 TRINITY RIVER AT ROMAYOR, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	3	0	1	0	1	7	6	0	5	3	2	2
Range (µg/l)	0-300	0-0	0-1	0-0	0-1	0-100	0-490	0-0	0-120	<0.2-2.3	0-8	0-40
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	1	0	--	0
48. 08067120 TURTLE BAYOU NEAR HANKAMER, TEX. (Water year 1971)												
Number of analyses	--	5	5	5	5	5	5	5	5	5	5	5
Number of occurrences	--	0	0	0	1	5	5	0	4	1	3	5
Range (µg/l)	--	0-0	0-0	0-0	0-1	3-9	33-790	0-0	0-80	<0.2-0.6	0-10	10-120
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	1	0	--	0
49. 08067250 TURTLE BAYOU NEAR ANAHUAC, TEX. (Water year 1972)												
Number of analyses	--	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	--	0	0	0	0	3	3	0	1	3	0	3
Range (µg/l)	--	0-0	0-0	0-0	0-0	6-20	150-320	0-0	0-120	<0.2-0.5	0-0	20-50
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	1	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
50. 08067500 CEDAR BAYOU NEAR CROSBY, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	--	0	0	0	0	11	11	0	6	4	4	11
Range (µg/l)	--	0-0	0-0	0-0	0-0	3-13	14-660	0-0	0-60	<0.2-2.2	0-8	10-150
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	1	0	--	0
51. 08067520 GOOSE CREEK NEAR McNAIR, TEX. (Water years 1971-72)												
Number of analyses	--	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	--	1	1	0	0	8	7	1	6	4	2	8
Range (µg/l)	--	0-10	0-1	0-0	0-0	5-19	0-150	0-9	0-90	<0.2-1.0	0-4	10-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	0	--	0
53. 08068750 CYPRESS CREEK NEAR CYPRESS, TEX. (Water years 1971-72)												
Number of analyses	7	7	7	7	7	7	7	7	7	7	7	7
Number of occurrences	7	0	2	1	0	7	7	2	4	4	2	7
Range (µg/l)	10-390	0-0	0-1	0-1	0-0	4-21	47-1300	0-5	0-20	<0.2-2.2	0-4	10-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	0	0	--	0
54. 08069200 CYPRESS CREEK NEAR HUMBLE, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	7	0	1	0	2	8	8	1	6	5	2	7
Range (µg/l)	0-340	0-0	0-2	0-0	0-2	4-230	8-490	0-90	0-60	<0.2-4.5	0-13	0-730
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	3	1	1	0	--	0
56. 08073500 BUFFALO BAYOU NEAR ADDICKS, TEX. (Water year 1972)												
Number of analyses	--	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	--	0	0	0	1	2	2	1	0	1	1	2
Range (µg/l)	--	0-0	0-0	0-0	0-3	5-7	80-330	0-3	0-0	<0.2-0.2	0-10	20-40
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	0	0	--	0
57. 08073700 BUFFALO BAYOU AT PINEY POINT, TEX. (Water year 1972)												
Number of analyses	--	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	--	1	0	0	1	2	2	1	1	1	1	2
Range (µg/l)	--	0-10	0-0	0-0	0-1	5-11	80-190	0-2	0-90	<0.2-0.2	0-8	30-30
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
58. 08074000 BUFFALO BAYOU AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	14	14	14	14	14	14	14	14	14	14	14
Number of occurrences	--	2	2	3	1	14	14	7	9	10	6	13
Range (µg/l)	--	0-10	0-2	0-20	0-2	3-20	20-410	0-13	0-150	<0.2-7.2	0-10	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	4	1	--	0
59. 08074250 BRICKHOUSE GULLEY AT COSTA RICA STREET, HOUSTON, TEX. (Water year 1972)												
Number of analyses	--	1	1	1	1	1	1	1	1	1	1	1
Number of occurrences	--	0	0	0	0	0	1	0	1	0	0	1
Range (µg/l)	--	0-	0-	0-	0-	0-	840-	0-	40-	<0.2-	0-	60-
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	0	0	--	0
60. 08074500 WHITEOAK BAYOU AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	14	14	14	14	14	14	14	14	14	14	14
Number of occurrences	--	11	1	1	1	14	13	3	12	7	9	12
Range (µg/l)	--	0-70	0-1	0-9	0-1	3-17	0-380	0-18	0-170	<0.2-3.2	0-30	0-430
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	1	0	0	--	0	2	0	6	0	--	0
61. 08074550 LITTLE WHITEOAK BAYOU AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	--	8	5	4	1	11	11	5	10	5	8	10
Range (µg/l)	--	0-10	0-30	0-230	0-3	5-20	20-240	0-15	0-490	<0.2-2.2	0-130	0-160
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	1	0	--	0	0	0	7	0	--	0
63. 08074800 KEEGANS BAYOU AT ROARK ROAD, NEAR HOUSTON, TEX. (Water year 1972)												
Number of analyses	--	1	1	1	1	1	1	1	1	1	1	1
Number of occurrences	--	0	0	0	0	1	1	0	0	0	0	0
Range (µg/l)	--	0-	0-	0-	0-	5-	350-	0-	0-	<0.2-	0-	0-
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	0	0	--	0
65. 08075000 BRAYS BAYOU AT HOUSTON, TEX. (Water years 1972-73)												
Number of analyses	--	5	5	5	5	5	5	5	5	5	5	5
Number of occurrences	--	2	2	1	0	5	5	2	4	4	2	5
Range (µg/l)	--	0-10	0-1	0-10	0-0	7-25	20-240	0-8	0-60	<0.2-7.6	0-5	46-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	1	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
66. 08075100 BRAYS BAYOU AT SCOTT STREET, HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	13	13	13	13	13	13	13	13	13	13	13
Number of occurrences	--	7	2	9	2	13	12	9	10	7	6	13
Range (µg/l)	--	0-30	0-1	0-50	0-1	7-16	0-370	0-20	0-80	<0.2-2.4	0-8	20-110
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	5	0	--	0
67. 08075400 SIMS BAYOU AT HIRAM CLARKE STREET, HOUSTON, TEX. (Water year 1972)												
Number of analyses	--	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	--	0	0	0	0	2	2	1	1	0	0	2
Range (µg/l)	--	0-0	0-0	0-0	0-0	3-34	80-190	0-60	0-170	<0.2-<0.2	0-0	80-940
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	1	1	0	--	0
68. 08075500 SIMS BAYOU AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	--	3	0	0	2	10	10	3	9	6	7	10
Range (µg/l)	--	0-10	0-0	0-0	0-1	2-19	40-450	0-15	0-260	<0.2-2.8	0-10	30-230
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	7	0	--	0
69. 08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	--	4	1	1	0	10	10	5	8	8	8	10
Range (µg/l)	--	0-20	0-1	0-4	0-0	5-26	50-100	0-6	0-170	<0.2-3.9	0-10	20-160
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	6	0	--	0
70. 08075720 PLUM CREEK AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	9	9	9	9	9	9	9	9	9	9	9
Number of occurrences	--	3	0	7	0	9	8	6	8	5	3	7
Range (µg/l)	--	0-10	0-0	0-23	0-0	3-14	0-73	0-33	0-150	<0.2-1.3	0-10	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	3	0	--	0
71. 08075730 VINCE BAYOU AT PASADENA, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	--	4	2	1	1	11	11	6	4	9	4	8
Range (µg/l)	--	0-280	0-1	0-10	0-1	2-22	10-320	0-24	0-60	<0.2-5.8	0-7	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	1	0	0	--	0	1	0	1	1	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
72. 08075740 LITTLE VINCE BAYOU AT PASADENA, TEX. (Water years 1971-72)												
Number of analyses	--	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	--	5	1	2	3	10	10	7	7	5	6	8
Range (ug/l)	--	0-10	0-1	0-30	0-2	4-21	24-200	0-13	0-150	<0.2-4.7	0-7	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	2	0	--	0
74. 08075770 HUNTING BAYOU AT U.S. HIGHWAY 90A, HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	12	12	12	12	12	12	12	12	12	12	12
Number of occurrences	--	6	3	0	3	12	11	3	12	5	9	12
Range (ug/l)	--	0-30	0-1	0-0	0-18	4-24	0-270	0-5	16-800	<0.2-3.0	0-80	20-1200
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	10	0	--	0
75. 08076000 GREENS BAYOU NEAR HOUSTON, TEX. (Water year 1972)												
Number of analyses	--	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	--	1	0	0	1	2	2	0	1	2	1	1
Range (ug/l)	--	0-10	0-0	0-0	0-2	7-26	230-300	0-0	0-190	<0.2-0.4	0-6	0-110
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	0	--	0
76. 08076500 HALLS BAYOU AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	--	1	0	0	0	3	3	1	2	2	1	3
Range (ug/l)	--	0-10	0-0	0-0	0-0	5-16	30-400	0-6	0-30	<0.2-1.2	0-7	40-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	0	0	--	0
77. 08076700 GREENS BAYOU AT LEY ROAD, AT HOUSTON, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	--	6	2	2	1	11	10	2	11	8	5	9
Range (ug/l)	--	0-10	0-2	0-30	0-2	4-28	0-310	0-2	3-380	<0.2-160	0-7	0-160
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	9	1	--	0
78. 08076800 BUFFALO BAYOU TRIBUTARY AT PASADENA, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	10	11	11
Number of occurrences	--	0	2	0	2	11	10	5	5	7	5	11
Range (ug/l)	--	0-0	0-1	0-0	0-3	4-17	0-140	0-7	0-90	<0.2-5.2	0-20	10-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	1	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
79. 08076850 PATRICK BAYOU AT DEER PARK, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	--	3	1	0	2	11	10	6	7	8	6	11
Range (µg/l)	--	0-40	0-1	0-0	0-2	6-22	0-160	0-10	0-110	<0.2-4.4	0-8	20-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	4	0	--	0
80. 08076900 CARPENTERS BAYOU AT CLOVERLEAF, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	10	11	11
Number of occurrences	--	0	1	1	1	11	11	2	8	7	4	9
Range (µg/l)	--	0-0	0-1	0-2	0-2	5-18	16-1100	0-6	0-200	<0.2-1.7	0-8	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	3	0	4	0	--	0
81. 08077540 CLEAR CREEK AT FARM ROAD 2351, AT FRIENDSWOOD, TEX. (Water years 1971-72)												
Number of analyses	--	9	9	9	9	10	9	9	9	9	9	9
Number of occurrences	--	0	1	0	0	9	9	2	6	3	2	7
Range (µg/l)	--	0-0	0-1	0-0	0-0	0-26	20-180	0-3	0-130	<0.2-1.0	0-2	0-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	4	0	--	0
82. 08077620 ARMAND BAYOU NEAR GENOA, TEX. (Water years 1971-72)												
Number of analyses	--	9	9	9	9	9	9	9	9	9	9	9
Number of occurrences	--	3	1	0	2	9	9	4	7	2	3	8
Range (µg/l)	--	0-10	0-1	0-0	0-2	5-22	70-200	0-4	0-300	<0.2-0.8	0-6	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	6	0	--	0
83. 08077640 DICKINSON BAYOU NEAR ALVIN, TEX. (Water years 1971-72)												
Number of analyses	--	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	--	0	0	0	1	8	8	1	5	2	1	5
Range (µg/l)	--	0-0	0-0	0-0	0-1	3-24	10-200	0-2	0-80	<0.2-0.6	0-1	0-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	2	0	--	0
84. 08077680 HIGHLAND BAYOU NEAR ALTA LOMA, TEX. (Water years 1971-72)												
Number of analyses	--	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	--	1	0	0	1	8	7	1	7	4	2	6
Range (µg/l)	--	0-10	0-0	0-0	0-1	3-13	0-190	0-2	0-330	<0.2-6.4	0-3	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	6	1	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
85. 08077800 HALLS BAYOU NEAR ALGOA, TEX. (Water year 1971)												
Number of analyses	--	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	--	0	0	0	0	3	2	0	2	0	1	1
Range (µg/l)	--	0-0	0-0	0-0	0-0	3-5	0-110	0-0	0-14	<0.2-<0.2	0-2	0-20
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
86. 08077850 HALLS BAYOU NEAR ALTA LOMA, TEX. (Water year 1972)												
Number of analyses	--	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	--	0	1	0	1	2	2	0	0	1	1	1
Range (µg/l)	--	0-0	0-1	0-0	0-2	4-10	30-140	0-0	0-0	<0.2-0.5	0-6	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
87. 08077900 MUSTANG BAYOU NEAR LIVERPOOL, TEX. (Water years 1971-72)												
Number of analyses	--	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	--	1	1	2	1	10	7	2	8	6	5	10
Range (µg/l)	--	0-10	0-1	0-16	0-1	3-17	0-480	0-3	0-140	<0.2-2.1	0-8	10-120
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	7	0	--	0
88. 08078000 CHOCOLATE BAYOU NEAR ALVIN, TEX. (Water years 1971-72)												
Number of analyses	--	11	11	11	11	11	11	11	11	10	11	11
Number of occurrences	--	0	1	2	4	11	9	2	6	8	5	10
Range (µg/l)	--	0-0	0-1	0-190	0-3	3-27	0-240	0-3	0-80	<0.2-0.8	0-9	0-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	0	--	0
89. 08078400 AUSTIN BAYOU NEAR LIVERPOOL, TEX. (Water years 1971-72)												
Number of analyses	--	9	9	8	8	9	9	9	9	9	9	9
Number of occurrences	--	0	2	0	2	9	9	1	3	3	1	7
Range (µg/l)	--	0-0	0-1	0-0	0-3	2-12	10-170	0-4	0-50	<0.2-0.8	0-10	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
90. 08078700 FLORES BAYOU NEAR DANBURY, TEX. (Water years 1971-72)												
Number of analyses	--	7	7	7	7	7	7	7	7	7	7	7
Number of occurrences	--	0	0	1	2	7	7	3	6	2	4	2
Range (µg/l)	--	0-0	0-0	0-3	0-2	3-32	10-210	0-5	0-300	<0.2-1.0	0-9	0-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	2	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
99. 08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TEX. (Water years 1971-72)												
Number of analyses	3	3	3	3	3	3	1	3	1	3	3	3
Number of occurrences	3	1	0	0	0	3	1	0	1	2	1	2
Range (µg/l)	10-40	0-10	0-0	0-0	0-0	3-8	40-	0-0	2-	<0.2-0.6	0-4	0-90
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
101. 08114000 BRAZOS RIVER AT RICHMOND, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	7	0	1	0	1	7	6	1	4	4	4	7
Range (µg/l)	0-200	0-0	0-1	0-0	0-2	0-10	0-100	0-9	0-11	<0.2-3.0	0-6	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
103. 08117900 BIG BOGGY CREEK NEAR WADSWORTH, TEX. (Water years 1970-72)												
Number of analyses	9	9	9	9	9	9	9	9	9	9	9	9
Number of occurrences	8	1	0	0	2	9	8	2	7	7	3	5
Range (µg/l)	0-110	0-10	0-0	0-0	0-1	2-25	0-760	0-2	0-50	<0.2-5.1	0-5	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	2	0	0	1	--	0
108. 08136500 CONCHO RIVER NEAR PAINT ROCK, TEX. (Water years 1971-72)												
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	6
Number of occurrences	4	1	2	0	1	6	5	1	5	3	2	4
Range (µg/l)	0-210	0-10	0-1	0-0	0-1	2-4	0-120	0-22	0-90	<0.2-0.2	0-5	0-140
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	0	--	0
116. 08162000 COLORADO RIVER AT WHARTON, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	8	0	2	0	1	7	3	2	4	3	3	8
Range (µg/l)	10-150	0-0	0-2	0-0	0-2	0-8	0-100	0-12	0-20	<0.2-2.7	0-7	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
117. 08162600 TRES PALACIOS CREEK NEAR MIDFIELD, TEX. (Water years 1970-72)												
Number of analyses	9	10	9	9	9	9	10	10	10	9	9	9
Number of occurrences	7	2	1	1	1	9	9	0	8	6	3	5
Range (µg/l)	0-60	0-10	0-1	0-1	0-1	1-7	0-190	0-0	0-150	<0.2-8.7	0-6	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	1	--	0

Table 2--Summary of minor-element records for selected streams in Texas, water years 1970-72 --Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
118. 08162650 CASHS CREEK NEAR BLESSING, TEX. (Water years 1970-72)												
Number of analyses	10	10	10	10	10	10	10	10	10	9	10	10
Number of occurrences	8	1	0	0	1	10	9	0	10	5	4	6
Range (µg/l)	0-100	0-10	0-0	0-0	0-2	2-8	0-570	0-0	11-2700	<0.2-1.7	0-4	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	2	0	--	0
119. 08162700 EAST CARANCAHUA CREEK NEAR BLESSING, TEX. (Water years 1970-72)												
Number of analyses	9	10	9	9	9	9	10	10	10	9	9	9
Number of occurrences	8	2	0	0	0	9	9	0	6	6	3	5
Range (µg/l)	0-100	0-10	0-0	0-0	0-0	2-8	0-130	0-0	0-40	<0.2-9.0	0-4	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	1	--	0
120. 08162800 WEST CARANCAHUA CREEK NEAR LAWARD, TEX. (Water years 1970-72)												
Number of analyses	9	9	9	9	9	9	9	9	9	8	9	9
Number of occurrences	7	3	0	0	1	9	8	1	6	6	3	5
Range (µg/l)	0-100	0-10	0-0	0-0	0-1	2-7	0-150	0-1	5-10	<0.2-12	0-6	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	1	--	0
122. 08164500 NAVIDAD RIVER NEAR CANADO, TEX. (Water years 1971-72)												
Number of analyses	8	9	8	8	8	8	9	9	9	9	8	8
Number of occurrences	4	2	4	0	0	7	8	1	7	3	3	6
Range (µg/l)	0-30	0-10	0-2	0-0	0-0	0-5	0-190	0-1	0-30	<0.2-0.7	0-5	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
123. 08164600 GARCITAS CREEK NEAR INEZ, TEX. (Water years 1970-73)												
Number of analyses	8	9	8	8	8	8	9	9	9	8	8	8
Number of occurrences	6	0	0	1	1	7	8	0	7	6	5	5
Range (µg/l)	0-120	0-0	0-0	0-1	0-2	0-10	0-310	0-0	0-480	<0.2-3.0	0-6	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	1	0	--	0
124. 08164800 PLACEDO CREEK NEAR PLACEDO, TEX. (Water years 1970-72)												
Number of analyses	9	10	9	9	9	9	10	10	10	9	9	9
Number of occurrences	8	4	0	1	3	8	9	0	7	8	5	6
Range (µg/l)	0-190	0-10	0-0	0-7	0-3	0-6	0-310	0-0	0-500	<0.2-2.4	0-4	0-170
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	5	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
125. 08164850 CHOCOLATE BAYOU AT PORT LAVACA, TEX. (Water years 1970-72)												
Number of analyses	8	9	8	8	8	8	9	9	9	8	8	8
Number of occurrences	7	6	1	1	1	7	9	0	8	7	4	4
Range (µg/l)	0-830	0-10	0-1	0-2	0-1	0-5	50-310	0-0	0-1200	<0.2-7.3	0-4	0-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	5	1	--	0
127. 08176520 GUADALUPE RIVER BELOW VICTORIA, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	4	0	0	0	0	8	6	0	6	1	2	4
Range (µg/l)	0-100	0-0	0-0	0-0	0-0	2-4	0-140	0-0	0-20	<0.2-0.2	0-4	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
141. 08181500 MEDINA RIVER AT SAN ANTONIO, TEX. (Water years 1971-72)												
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	6
Number of occurrences	3	0	1	0	0	6	4	1	3	1	3	4
Range (µg/l)	0-20	0-0	0-2	0-0	0-0	1-31	0-50	0-34	0-9	<0.2-0.6	0-2	0-130
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
142. 08181800 SAN ANTONIO RIVER NEAR ELMENDORF, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	4	0	2	0	2	8	7	1	7	2	3	6
Range (µg/l)	0-200	0-0	0-1	0-0	0-1	2-8	0-100	0-2	0-60	<0.2-0.3	0-7	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	1	0	--	0
145. 08188500 SAN ANTONIO RIVER AT GOLIAID, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	6	1	0	0	0	8	7	0	5	2	3	4
Range (µg/l)	0-100	0-6	0-0	0-0	0-0	2-5	0-60	0-0	0-4	<0.2-0.5	0-6	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
146. 08188800 GUADALUPE RIVER NEAR TIVOLI, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	6	0	0	0	0	8	7	0	4	1	2	4
Range (µg/l)	0-200	0-0	0-0	0-0	0-0	2-4	0-130	0-0	0-19	<0.2-0.2	0-4	0-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0

Table 2.--Summary of minor-element records for selected streams in Texas, water years 1970-72--Continued

	DISSOLVED CONSTITUENTS											
	Aluminum (Al)	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Iron (Fe)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)	Zinc (Zn)
147. 08189100 SALT CREEK NEAR REFUGIO, TEX. (Water years 1971-72)												
Number of analyses	3	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	3	1	0	0	0	3	3	0	1	2	2	3
Range (µg/l)	30-70	0-10	0-0	0-0	0-0	3-4	60-100	0-0	0-3	<0.2-1.4	0-12	20-60
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	0	0	--	0
148. 08189200 COPANO CREEK NEAR REFUGIO, TEX. (Water years 1970-72)												
Number of analyses	6	6	6	6	6	6	6	6	6	5	6	6
Number of occurrences	6	2	1	1	1	6	6	0	6	2	4	4
Range (µg/l)	50-200	0-10	0-1	0-1	0-1	2-11	29-340	0-0	1-80	<0.2-1.4	0-3	0-100
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	1	0	--	0
149. 08189500 MISSION RIVER AT REFUGIO, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	6	5	0	0	1	8	6	0	8	1	2	6
Range (µg/l)	0-30	0-10	0-0	0-0	0-1	1-4	0-100	0-0	100-650	<0.2-0.3	0-5	0-70
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	8	0	--	0
150. 08189800 CHILTIPIN CREEK AT SINTON, TEX. (Water years 1970-72)												
Number of analyses	9	9	9	9	9	9	9	9	9	8	9	9
Number of occurrences	7	4	2	1	1	8	8	0	9	1	3	6
Range (µg/l)	0-240	0-12	0-2	0-2	0-3	0-4	0-330	0-0	4-1700	<0.2-1.4	0-9	0-2800
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	1	0	7	0	--	0
151. 08210000 NUECES RIVER NEAR THREE RIVERS, TEX. (Water years 1971-72)												
Number of analyses	8	8	8	8	8	8	8	8	8	7	8	8
Number of occurrences	5	0	2	0	0	8	7	0	8	2	2	5
Range (µg/l)	0-150	0-0	0-1	0-0	0-0	2-5	0-260	0-0	1-220	<0.2-0.3	0-7	0-80
Number of samples with concentrations in excess of U.S. Public Health Service limits	--	0	0	0	--	0	0	0	3	0	--	0

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72

[Recommended environmental levels of pesticides for marine waters and limits for public water supplies are those proposed by the National Technical Advisory Committee to the Secretary of the Interior (Federal Water Pollution Control Administration, 1968). Results are for whole water samples.]

	INSECTICIDES														HERBICIDES (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons										Phosphorothioates				2,4-D	2,4,5-T	Silvex	
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion				Para-thion
1. 07227470 CANADIAN RIVER AT TASCOSA, TEX. (Water years 1970-72)																		
Number of analyses	15	15	15	15	15	15	15	15	15	15	15	13	10	13	13	15	15	15
Number of occurrences	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	3	1
Range (µg/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.07	.00-.05	.00-.03
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
2. 07227500 CANADIAN RIVER NEAR AMARILLO, TEX. (Water years 1968-72)																		
Number of analyses	21	16	21	21	21	21	21	21	21	21	13	12	9	12	12	21	21	21
Number of occurrences	0	0	2	0	5	8	0	0	0	14	0	7	0	0	0	14	12	8
Range (µg/l) .....	.00-.00	.0-0	.00-.01	.00-.00	.00-.02	.00-.02	.00-.00	.00-.00	.00-.00	.00-.08	0-0	.00-.25	.00-.00	.00-.00	.00-.00	.00-.66	.00-.08	.00-.16
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	4	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
3. 07228000 CANADIAN RIVER NEAR CANADIAN, TEX. (Water years 1971-72)																		
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of occurrences	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0
Range (µg/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
4. 07299570 RED RIVER NEAR QUANAH, TEX. (Water years 1968-72)																		
Number of analyses	15	10	15	15	15	15	15	15	15	15	8	7	6	7	7	15	15	15
Number of occurrences	0	0	2	2	3	0	0	0	0	1	0	0	0	0	0	1	6	2
Range (µg/l) .....	.00-.00	.0-0	.00-.01	.00-.01	.00-.05	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.11	.00-.04	.00-.04
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
6. 07316000 RED RIVER NEAR GAINESVILLE, TEX. (Water years 1968-72)																		
Number of analyses	22	17	22	22	22	22	22	22	22	22	13	12	9	12	12	22	22	22
Number of occurrences	0	0	1	3	5	2	0	0	0	3	0	4	0	0	0	5	15	3
Range (µg/l) .....	.00-.00	.0-0	.00-.01	.00-.02	.00-.03	.00-.01	.00-.00	.00-.00	.00-.00	.00-.21	0-0	.00-.03	.00-.00	.00-.00	.00-.00	.00-.18	.00-.23	.00-.03
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES												HERBICIDES (Chlorinated hydrocarbons)				
	Chlorinated hydrocarbons										Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Malathion	Methyl para-thion			
8. 07336820 RED RIVER NEAR DeKALB, TEX. (Water years 1971-72)																	
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	1	2
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.01	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.06	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/
10. 07343200 SULPHUR RIVER NEAR TALCO, TEX. (Water years 1968-72)																	
Number of analyses	23	17	23	23	23	23	23	23	23	23	13	12	8	12	12	22	22
Number of occurrences	0	0	4	9	10	0	0	0	0	1	0	2	0	0	0	7	8
Range (µg/l)	.00-.00	.0-.0	.00-.02	.00-.06	.00-.07	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.30	.00-.20
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	2	0	0	0	--	0	--	--	--	--	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/
11. 07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TEX. (Water years 1968-72)																	
Number of analyses	23	17	23	23	23	23	23	23	23	23	13	12	8	12	12	23	23
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	6
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.02	.00-.04
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/
14. 08022000 SABINE RIVER NEAR TATUM, TEX. (Water years 1968-72)																	
Number of analyses	22	16	22	22	22	22	22	22	22	22	12	11	7	11	11	22	22
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	15
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.03	.00-.00	.00-.00	.00-.00	.00-.07	.00-.15
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/
16. 08026000 SABINE RIVER NEAR BURKEVILLE, TEX. (Water years 1971-72)																	
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72 --Continued

	INSECTICIDES												HERBICIDES (Chlorinated hydrocarbons)					
	Chlorinated hydrocarbons										Phosphorothioates				2,4-D	2,4,5-T	Silvex	
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion				Para-thion
17. 08030500 SABINE RIVER NEAR RULIFF, TEX. (Water years 1968-72)																		
Number of analyses	22	16	22	22	22	22	22	22	22	22	12	10	9	10	10	20	20	20
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.07	.00-.03	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
27. 08041000 NECHES RIVER AT EVADALE, TEX. (Water years 1968-72)																		
Number of analyses	24	18	24	24	24	24	24	24	24	24	14	10	10	12	12	23	23	23
Number of occurrences	0	0	0	0	3	0	0	0	0	0	0	2	0	0	0	1	6	4
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.06	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.10	.00-.04	.00-.05
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
28. 08042540 EAST BAY BAYOU NEAR STOWELL, TEX. (Water years 1971-72)																		
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	1	0	0	0	0	8	0	0	0	0	0	1	0	0	0	0	0	0
Range (ug/l) .....	.00-.01	.0-.0	.00-.00	.00-.00	.00-.00	.01-.05	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
29. 08042550 WEST FORK DOUBLE BAYOU NEAR ANAHUAC, TEX. (Water years 1971-72)																		
Number of analyses	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8
Number of occurrences	1	0	0	0	0	9	0	0	0	0	0	0	0	0	0	1	2	2
Range (ug/l) .....	.00-.01	.0-.0	.00-.00	.00-.00	.00-.00	.01-.05	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.21	.00-.02	.00-.03
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
33. 08057410 TRINITY RIVER BELOW DALLAS, TEX. (Water years 1971-72)																		
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	7	8	8	8	7	8	8
Number of occurrences	0	8	2	1	4	8	0	0	0	2	0	7	4	0	0	7	7	0
Range (ug/l) .....	.00-.00	.2-.9	.00-.05	.00-.01	.00-.20	.02-.09	.00-.00	.00-.00	.00-.00	.00-.06	0-0	.17-.86	.00-1.1	.00-.00	.00-.00	.17-.86	.00-.12	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	8	0	--	1	3	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES														HERBICIDES			
	Chlorinated hydrocarbons											Phosphorothioates			(Chlorinated hydrocarbons)			
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Malathion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
35. 08062500 TRINITY RIVER NEAR ROSSER, TEX. (Water years 1968-72)																		
Number of analyses	22	16	22	22	22	22	22	22	22	22	12	12	8	13	13	23	23	23
Number of occurrences	0	15	9	4	11	20	0	0	0	12	0	7	3	1	0	20	20	1
Range (ug/l)	.00-.00	.0-.4	.00-.04	.00-.03	.00-.14	.00-.45	.00-.00	.00-.00	.00-.00	.00-.16	0-0	.00-.44	.00-1.0	.00-.46	.00-.00	.00-1.6	.00-.69	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	15	0	--	2	5	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
37. 08065350 TRINITY RIVER NEAR CROCKETT, TEX. (Water year 1972)																		
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3
Number of occurrences	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	3	3	0
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.08-.13	.00-.00	.00-.00	.00-.00	.04-.12	.01-.02	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
47. 08066500 TRINITY RIVER AT ROMAYOR, TEX. (Water years 1968-72)																		
Number of analyses	23	17	23	23	23	23	23	23	23	23	13	12	9	12	12	22	22	22
Number of occurrences	0	0	2	4	4	5	0	0	0	2	0	4	0	0	0	11	18	0
Range (ug/l)	.00-.00	.0-.0	.00-.12	.00-.05	.00-.02	.00-.01	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.02	.00-.00	.00-.00	.00-.00	.00-.20	.00-.03	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	1	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
48. 08067120 TURTLE BAYOU NEAR HANKAMER, TEX. (Water years 1971-72)																		
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5
Number of occurrences	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	3	0
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.03	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.13	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
49. 08067250 TURTLE BAYOU NEAR ANAHUAC, TEX. (Water year 1972)																		
Number of analyses	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	2	0
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.10	.00-.12	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES														HERBICIDES (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silver
	Aldrin	Chlor- dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta- chlor	Hepta- chlor epoxide	Lindane	Toxa- phene	Diazi- non	Mala- thion	Methyl para- thion	Para- thion			
50. 08067500 CEDAR BAYOU NEAR CROSBY, TEX. (Water years 1971-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
Number of occurrences	0	0	0	0	0	11	0	0	0	0	2	0	0	0	1	6	0	
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.05	.00-.00	.00-.00	.00-.00	.00-.00	.00-.03	.00-.00	.00-.00	.00-.00	.00-1.1	.00-.06	.00-.00	
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
51. 08067520 GOOSE CREEK NEAR McNAIR, TEX. (Water years 1971-72)																		
Number of analyses	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Number of occurrences	0	1	0	0	1	6	0	0	0	0	2	1	0	0	0	0	0	
Range (µg/l)	.00-.00	.0-.1	.00-.00	.00-.00	.00-.01	.00-.05	.00-.00	.00-.00	.00-.00	.00-.00	.00-.04	.00-.03	.00-.00	.00-.00	.00-.00	.00-.50	.00-.00	
Number of samples with concentrations in excess of recommended environmental levels	0	1	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
53. 08068750 CYPRESS CREEK NEAR CYPRESS, TEX. (Water years 1971-72)																		
Number of analyses	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	
Number of occurrences	0	0	0	0	1	5	0	0	0	0	0	0	0	0	1	1	1	
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.01	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.11	.00-.02	.00-.01	
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
54. 08069200 CYPRESS CREEK NEAR HUMBLE, TEX. (Water years 1971-72)																		
Number of analyses	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	
Number of occurrences	0	0	0	0	0	6	0	0	0	0	3	0	0	0	2	5	0	
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00	.00-.00	.00-.00	.00-.43	.00-.16	.00-.00	.00-.00	.00-.00	.00-.17	.00-.05	.00-.00	
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	1	--	--	--	--	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
55. 08072000 LAKE HOUSTON NEAR SHELTON, TEX. (Water years 1968-72)																		
Number of analyses	25	19	25	25	25	25	25	25	25	13	12	8	12	12	25	25	25	
Number of occurrences	0	0	1	0	2	3	0	0	0	2	0	0	0	0	9	11	3	
Range (µg/l)	.00-.00	.0-.0	.00-.01	.00-.00	.00-.03	.00-.06	.00-.00	.00-.00	.00-.00	.00-.05	.00-.00	.00-.00	.00-.00	.00-.00	.00-.12	.00-.09	.00-.08	
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	1	0	0	--	0	--	--	--	--	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES														HERBICIDES (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons											Phosphorothioates						
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor-epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
56. 08073500 BUFFALO BAYOU NEAR ADDICKS, TEX. (Water years 1971-72)																		
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1	1
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.04	.00-.00	.00-.00	.00-.00	.00-.00	.00-.05	.00-.02
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
57. 08073700 BUFFALO BAYOU AT PINEY POINT, TEX. (Water years 1971-72)																		
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Number of occurrences	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	1	1
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.02-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.02-.12	.00-.00	.00-.00	.00-.00	.00-.00	.00-.07	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
58. 08074000 BUFFALO BAYOU AT HOUSTON, TEX. (Water years 1968-72)																		
Number of analyses	19	19	19	19	19	19	19	19	19	19	17	17	15	17	17	17	17	17
Number of occurrences	0	16	12	5	15	17	0	0	0	11	0	14	3	3	1	8	16	16
Range (ug/l)	.00-.00	.0-2.4	.00-.33	.00-.33	.00-2.1	.00-.54	.00-.00	.00-.00	.00-.00	.00-.72	0-0	.00-1.7	.00-2.9	.00-.17	.00-.17	.00-.37	.00-.63	.00-.19
Number of samples with concentrations in excess of recommended environmental levels	0	16	5	--	11	8	0	0	--	7	--	--	--	--	1	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
59. 08074250 BRICKHOUSE GULLEY AT COSTA RICA STREET, HOUSTON, TEX. (Water years 1971-72)																		
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1
Number of occurrences	0	2	1	0	2	2	0	0	0	1	0	1	0	0	0	0	1	0
Range (ug/l)	.00-.00	.1-2	.00-.02	.00-.00	.09-.13	.04-.06	.00-.00	.00-.00	.00-.00	.00-.04	0-0	.00-.12	.00-.00	.00-.00	.00-.00	.00-	.50-	.00-
Number of samples with concentrations in excess of recommended environmental levels	0	2	0	--	2	1	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
60. 08074500 WHITEOAK BAYOU AT HOUSTON, TEX. (Water years 1969-72)																		
Number of analyses	21	21	21	21	21	21	21	21	21	21	18	18	16	18	18	19	19	19
Number of occurrences	0	11	10	4	15	19	0	0	0	13	0	13	3	3	1	8	15	4
Range (ug/l)	.00-.00	.0-1.8	.00-.51	.00-.06	.00-.36	.00-.57	.00-.00	.00-.00	.00-.00	.00-.33	0-0	.00-1.7	.00-1.8	.00-.17	.00-.17	.00-.75	.00-.65	.00-.05
Number of samples with concentrations in excess of recommended environmental levels	0	11	6	--	7	7	0	0	--	8	--	--	--	--	1	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	I N S E C T I C I D E S												H E R B I C I D E S (Chlorinated hydrocarbons)					
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion			
61. 08074550 LITTLE WHITEOAK BAYOU AT HOUSTON, TEX. (Water years 1971-72)																		
Number of analyses	13	13	13	13	13	13	13	13	13	13	13	11	12	12	12	12	11	11
Number of occurrences	0	9	4	0	8	13	0	0	0	2	0	11	3	0	0	6	9	0
Range (ug/l)	.00-.00	.0-.6	.00-.07	.00-.00	.00-.12	.01-.23	.00-.00	.00-.00	.00-.00	.00-.14	0-0	.01-.46	.00-3.8	.00-.00	.00-.00	.00-.67	.00-.27	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	9	1	--	3	2	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
62. 08074780 KEEGANS BAYOU AT KEEGAN ROAD, HOUSTON, TEX. (Water years 1969, 1970, 1972)																		
Number of analyses	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3
Number of occurrences	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.13	.00-.00	.00-.00	.00-.00	.00-.00	.00-.06	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
63. 08074800 KEEGANS BAYOU AT ROARK ROAD, NEAR HOUSTON, TEX. (Water years 1968-72)																		
Number of analyses	13	12	13	13	13	13	13	13	13	13	10	11	7	11	12	13	13	13
Number of occurrences	0	9	2	3	8	10	0	0	0	6	0	7	1	0	0	6	9	4
Range (ug/l)	.00-.00	.0-.5	.00-.04	.00-.02	.00-.36	.00-.12	.00-.00	.00-.00	.00-.00	.00-.06	0-0	.00-.32	.00-.10	.00-.00	.00-.00	.00-.29	.00-.35	.00-.07
Number of samples with concentrations in excess of recommended environmental levels	0	9	0	--	3	3	0	0	--	2	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
64. 08074900 WILLOW WATERHOLE BAYOU AT LANDSDOWNE STREET, HOUSTON, TEX. (Water years 1969-72)																		
Number of analyses	7	7	7	7	7	7	7	7	7	7	6	6	4	6	6	7	7	7
Number of occurrences	0	7	4	3	6	7	0	0	0	6	0	6	1	0	1	7	7	5
Range (ug/l)	.00-.00	.1-.3	.00-.09	.00-.12	.00-.37	.04-.12	.00-.00	.00-.00	.00-.00	.00-.20	0-0	.04-1.7	.00-.07	.00-.00	.00-.06	.07-.38	.08-2.1	.00-.15
Number of samples with concentrations in excess of recommended environmental levels	0	7	2	--	5	5	0	0	--	2	--	--	--	--	1	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
65. 08075000 BRAYS BAYOU AT HOUSTON, TEX. (Water years 1969-72)																		
Number of analyses	23	22	23	22	23	23	23	23	23	16	16	17	12	17	17	22	22	22
Number of occurrences	2	18	14	8	21	21	0	0	0	16	0	11	5	1	0	15	21	9
Range (ug/l)	.00-.57	.0-15	.00-.32	.00-.10	.00-1.0	.00-.43	.00-.00	.00-.00	.00-.00	.00-.21	0-0	.00-2.2	.00-1.3	.00-.19	.00-.00	.00-1.1	.00-.53	.00-.20
Number of samples with concentrations in excess of recommended environmental levels	1	18	3	--	15	14	0	0	--	11	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	2	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES														HERBICIDES (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons											Phosphorothioates						
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phen	Diazi-non	Mala-thion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
66. 08075100 BRAYS BAYOU AT SCOTT STREET, HOUSTON, TEX. (Water years 1971-72)																		
Number of analyses	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13
Number of occurrences	1	13	1	1	9	13	0	0	0	2	0	13	4	0	0	2	9	2
Range (ug/l) .....	.00-.20	.0-1.1	.00-.11	.00-.01	.00-.33	.00-.20	.00-.00	.00-.00	.00-.00	.00-.12	0-0	.00-.83	.00-2.9	.00-.00	.00-.00	.00-.86	.00-.34	.00-.06
Number of samples with concentrations in excess of recommended environmental levels	1	13	1	--	4	8	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
67. 08075400 SIMS BAYOU AT HIRAM CLARKE STREET, HOUSTON, TEX. (Water years 1971-72)																		
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Number of occurrences	0	2	0	0	1	2	0	0	0	1	0	3	0	0	0	1	2	2
Range (ug/l) .....	.00-.00	.1-1	.00-.00	.00-.00	.00-.03	.02-.04	.00-.00	.00-.00	.00-.00	.00-.02	0-0	.23-.38	.00-.00	.00-.00	.00-.00	.00-.09	.00-.30	.00-.13
Number of samples with concentrations in excess of recommended environmental levels	0	2	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
68. 08075500 SIMS BAYOU AT HOUSTON, TEX. (Water years 1969-72)																		
Number of analyses	15	15	15	15	15	15	15	15	15	14	14	13	11	13	13	15	15	15
Number of occurrences	0	12	4	1	7	14	0	0	0	4	0	11	1	0	0	6	12	4
Range (ug/l) .....	.00-.00	.0-.9	.00-.14	.00-.03	.00-.07	.00-.17	.00-.00	.00-.00	.00-.00	.00-.08	0-0	.00-.48	.00-.08	.00-.00	.00-.00	.00-.26	.00-.78	.00-.60
Number of samples with concentrations in excess of recommended environmental levels	0	12	1	--	1	5	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
69. 08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TEX. (Water years 1969, 1971, 1972)																		
Number of analyses	13	13	13	13	13	13	13	13	13	13	12	10	10	10	10	13	13	13
Number of occurrences	1	10	13	0	3	12	0	0	0	8	0	10	3	1	1	4	8	0
Range (ug/l) .....	.00-.07	.0-1.8	.00-.06	.00-.00	.00-.06	.00-.33	.00-.00	.00-.00	.00-.00	.00-.21	0-0	.06-.74	.00-.40	.00-.09	.00-.55	.00-.76	.00-.24	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	1	10	1	--	1	5	0	0	--	2	--	--	--	--	1	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
70. 08075720 PLUM CREEK AT HOUSTON, TEX. (Water years 1971-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	0	4	0	1	5	10	0	0	0	4	0	10	2	0	0	6	7	0
Range (ug/l) .....	.00-.00	.0-.6	.00-.00	.00-.01	.00-.09	.01-.07	.00-.00	.00-.00	.00-.00	.00-.05	0-0	.01-.35	.00-.13	.00-.00	.00-.00	.00-.40	.00-.19	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	4	0	--	3	1	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	I N S E C T I C I D E S															H E R B I C I D E S (Chlorinated hydrocarbons)		
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion			
71. 08075730 VINCE BAYOU AT PASADENA, TEX. (Water years 1971-73)																		
Number of analyses	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Number of occurrences	0	7	1	1	7	11	0	0	0	3	0	11	0	0	0	12	8	1
Range (ug/l) .....	.00-.00	.0-.8	.00-.01	.00-.02	.00-.19	.00-.10	.00-.00	.00-.00	.00-.00	.00-.02	0-0	.00-.17	.00-.00	.00-.00	.00-.00	.00-.62	.00-.72	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	7	0	--	4	4	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
72. 08075740 LITTLE VINCE BAYOU AT PASADENA, TEX. (Water years 1971-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	0	6	2	1	5	11	0	0	0	5	0	10	0	0	0	2	9	0
Range (ug/l) .....	.00-.00	.0-.5	.00-.04	.00-.02	.00-.68	.01-.07	.00-.00	.00-.00	.00-.00	.00-.05	0-0	.00-.53	.00-.00	.00-.00	.00-.00	.00-.66	.00-.83	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	6	0	--	2	1	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
73. 08075760 HUNTING BAYOU AT FALLS STREET, HOUSTON, TEX. (Water year 1971)																		
Number of analyses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of occurrences	0	1	1	1	1	0	0	0	0	0	0	1	1	0	0	1	1	0
Range (ug/l) .....	.00-	.5-	.15-	.04-	.19-	.00-	.00-	.00-	.00-	.00-	0-	1.4-	.30-	.00-	.00-	1.0-	.17-	.00-
Number of samples with concentrations in excess of recommended environmental levels	0	1	1	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
74. 08075770 HUNTING BAYOU AT U.S. HIGHWAY 90-A, HOUSTON, TEX. (Water years 1969-72)																		
Number of analyses	17	17	17	17	17	17	17	17	17	17	14	13	12	14	14	18	18	18
Number of occurrences	0	8	10	2	9	14	0	0	0	5	0	12	4	1	0	15	15	1
Range (ug/l) .....	.00-.00	.0-.2	.00-.10	.00-.02	.00-.09	.00-.06	.00-.00	.00-.00	.00-.00	.00-.08	0-0	.00-.18	.00-1.4	.00-.04	.00-.00	.00-26	.00-2.5	.00-.08
Number of samples with concentrations in excess of recommended environmental levels	0	8	5	--	6	1	0	0	--	1	--	--	--	--	0	3	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
75. 08076000 GREENS BAYOU NEAR HOUSTON, TEX. (Water years 1969-72)																		
Number of analyses	9	9	9	9	9	9	9	9	9	9	6	6	6	6	6	9	9	9
Number of occurrences	0	2	2	0	2	5	0	0	0	6	0	4	2	2	0	1	5	1
Range (ug/l) .....	.00-.00	.0-.5	.00-.40	.00-.00	.00-.30	.00-.60	.00-.00	.00-.00	.00-.00	.00-.20	0-0	.00-.31	.00-.27	.00-.24	.00-.00	.00-.20	.00-.26	.00-.03
Number of samples with concentrations in excess of recommended environmental levels	0	2	1	--	1	1	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	I N S E C T I C I D E S														H E R B I C I D E S (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons										Phosphorothioates							
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
76. 08076500 HALLS BAYOU AT HOUSTON, TEX. (Water years 1969, 1971, 1972)																		
Number of analyses	6	6	6	6	6	6	6	6	6	6	3	3	3	3	3	7	7	7
Number of occurrences	0	3	3	0	2	5	0	0	0	2	0	2	0	0	0	1	6	1
Range (ug/l) .....	.00-.00	.0-.3	.00-.03	.00-.00	.00-.05	.00-.07	.00-.00	.00-.00	.00-.00	.00-.10	0-0	.00-.58	.00-.00	.00-.00	.00-.00	.00-.13	.00-.54	.00-.04
Number of samples with concentrations in excess of recommended environmental levels	0	3	0	--	0	2	0	0	--	2	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
77. 08076700 GREENS BAYOU AT LEY ROAD, AT HOUSTON, TEX. (Water years 1971-72)																		
Number of analyses	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Number of occurrences	0	7	1	0	4	12	0	0	0	5	0	12	12	2	0	2	10	2
Range (ug/l) .....	.00-.00	.0-.4	.00-.01	.00-.00	.00-.02	.02-.07	.00-.00	.00-.00	.00-.00	.00-.09	0-0	.02-.39	.00-1.4	.00-1.4	.00-.00	.00-.50	.00-1.5	.00-.20
Number of samples with concentrations in excess of recommended environmental levels	0	7	0	--	0	2	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
78. 08076800 BUFFALO BAYOU TRIBUTARY AT PASADENA, TEX. (Water years 1971-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	11	11	11
Number of occurrences	0	10	2	1	3	11	0	0	0	2	0	8	0	0	0	3	8	1
Range (ug/l) .....	.00-.00	.0-2.4	.00-.03	.00-.03	.00-.05	.03-.17	.00-.00	.00-.00	.00-.00	.00-.10	0-0	.00-.35	.00-.00	.00-.00	.00-.00	.00-.64	.00-.33	.00-.07
Number of samples with concentrations in excess of recommended environmental levels	0	10	0	--	0	6	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
79. 08076850 PATRICK BAYOU AT DEER PARK, TEX. (Water years 1971-72)																		
Number of analyses	12	12	12	12	12	12	12	12	12	12	12	11	10	10	10	12	12	12
Number of occurrences	0	10	5	1	5	12	0	0	0	5	0	11	2	0	0	2	9	0
Range (ug/l) .....	.00-.00	.0-2.5	.00-.26	.00-.01	.00-.12	.02-.17	.00-.00	.00-.00	.00-.00	.00-.07	0-0	.01-.71	.00-.53	.00-.00	.00-.00	.00-.09	.00-.58	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	10	2	--	1	6	0	0	--	2	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
80. 08076900 CARPENTERS BAYOU AT CLOVERLEAF, TEX. (Water years 1971-72)																		
Number of analyses	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11
Number of occurrences	0	7	2	0	6	12	0	0	0	6	0	10	0	0	0	3	8	1
Range (ug/l) .....	.00-.00	.0-.4	.00-.02	.00-.00	.00-.05	.01-.09	.00-.00	.00-.00	.00-.00	.00-.13	0-0	.00-.29	.00-.00	.00-.00	.00-.00	.00-.15	.00-.40	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	7	0	--	0	3	0	0	--	2	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES															HERBICIDES (Chlorinated hydrocarbons)		
	Chlorinated hydrocarbons										Phosphorothioates					2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor- dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta- chlor	Hepta- chlor epoxide	Lindane	Toxa- phene	Diazi- non	Mala- thion	Methyl para- thion	Para- thion			
81. 08077540 CLEAR CREEK AT FARM ROAD 2351, AT FRIENDSWOOD, TEX. (Water years 1971-72)																		
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	0	3	0	0	0	8	0	0	0	5	0	8	0	0	0	3	8	1
Range (ug/l) .....	.00-.00	.0-3	.00-.00	.00-.00	.00-.00	.01-.11	.00-.00	.00-.00	.00-.00	.00-.02	0-0	.01-.48	.00-.00	.00-.00	.00-.00	.00-.07	.01-.37	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	3	0	--	0	1	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
82. 08077620 ARMAND BAYOU NEAR GENOA, TEX. (Water years 1971-72)																		
Number of analyses	7	7	7	7	7	7	7	7	7	7	7	8	8	8	7	7	7	7
Number of occurrences	0	3	0	0	1	7	0	0	0	4	0	8	0	1	0	1	6	0
Range (ug/l) .....	.00-.00	.0-1	.00-.00	.00-.00	.00-.01	.01-.03	.00-.00	.00-.00	.00-.00	.00-.02	0-0	.01-.24	.00-.00	.00-.24	.00-.00	.00-.03	.00-.23	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	3	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
83. 08077640 DICKINSON BAYOU NEAR ALVIN, TEX. (Water years 1971-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	0	0	0	0	2	9	0	0	0	0	0	1	0	0	0	0	5	0
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.02	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.29	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
84. 08077680 HIGHLAND BAYOU NEAR ALTA LOMA, TEX. (Water years 1971-72)																		
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of occurrences	0	0	0	0	0	4	0	0	0	0	0	3	0	0	0	1	2	1
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.05	.00-.00	.00-.00	.00-.00	.00-.09	.00-.18	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
85. 08077800 HALLS BAYOU NEAR ALGOA, TEX. (Water years 1971-72)																		
Number of analyses	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of occurrences	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.04	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES												HERBICIDES (Chlorinated hydrocarbons)						
	Chlorinated hydrocarbons											Phosphorothioates					2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion				
86. 08077850 HALLS BAYOU NEAR ALTA LOMA, TEX. (Water year 1972)																			
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
87. 08077900 MUSTANG BAYOU NEAR LIVERPOOL, TEX. (Water years 1971-72)																			
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
Number of occurrences	0	0	0	0	0	9	0	0	0	2	0	6	0	0	0	1	9	0	
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.08	.00-.00	.00-.00	.00-.00	.00-.11	.00-.07	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
88. 08078000 CHOCOLATE BAYOU NEAR ALVIN, TEX. (Water years 1971-72)																			
Number of analyses	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
Number of occurrences	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	2	1	
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.03	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.03	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
89. 08078400 AUSTIN BAYOU NEAR LIVERPOOL, TEX. (Water years 1971-72)																			
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
Number of occurrences	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	6	0	
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.06	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	
90. 08078700 FLORES BAYOU NEAR DANBURY, TEX. (Water years 1971-72)																			
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	
Number of occurrences	0	0	0	0	0	6	0	0	0	0	0	1	0	0	0	1	4	0	
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.01-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.11	.00-.00	.00-.00	.00-.00	.00-.03	.00-.25	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--	
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/	

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES												HERBICIDES (Chlorinated hydrocarbons)					
	Chlorinated hydrocarbons										Phosphorothioates							
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Malathion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
93. 08087300 CLEAR FORK BRAZOS RIVER AT ELIASVILLE, TEX. (Water years 1968-72)																		
Number of analyses	19	15	19	19	19	19	19	19	19	19	11	10	7	10	10	19	19	19
Number of occurrences	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	4	16	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.02	.00-.00	.00-.00	.00-.00	.00-.44	.00-.19	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
94. 08088000 BRAZOS RIVER NEAR SOUTH BEND, TEX. (Water years 1968-72)																		
Number of analyses	21	17	21	21	21	21	21	21	21	21	21	11	8	11	11	21	21	21
Number of occurrences	0	0	1	3	6	0	0	0	0	1	0	1	0	0	0	2	12	1
Range (ug/l) .....	.00-.00	.0-.0	.00-.01	.00-.01	.00-.04	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.03	.00-.00	.00-.00	.00-.00	.00-.04	.00-.15	.00-.04
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
97. 08096500 BRAZOS RIVER AT WACO, TEX. (Water years 1968-72)																		
Number of analyses	25	19	25	25	25	25	25	25	25	25	13	12	8	12	12	24	24	24
Number of occurrences	0	0	3	5	5	1	0	0	0	2	0	2	0	0	0	5	12	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.01	.00-.03	.00-.09	.00-.02	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.22	.00-.05	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
99. 08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TEX. (Water years 1971-72)																		
Number of analyses	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
101. 0811400 BRAZOS RIVER AT RICHMOND, TEX. (Water years 1968-71)																		
Number of analyses	37	26	37	36	37	37	37	37	37	37	17	10	5	10	10	33	33	33
Number of occurrences	0	0	10	17	15	2	1	0	0	2	0	0	0	0	0	9	14	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.03	.00-.05	.00-.08	.00-.01	.00-.02	.00-.00	.00-.00	.00-.01	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.18	.00-.04	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	2	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES															HERBICIDES		
	Chlorinated hydrocarbons										Phosphorothioates					(Chlorinated hydrocarbons)		
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Malathion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
102. 08116650 BRAZOS RIVER NEAR ROSHARON, TEX. (Water years 1968-72)																		
Number of analyses	23	17	23	23	23	23	23	23	23	23	13	10	10	11	11	23	23	23
Number of occurrences	0	0	3	10	13	2	0	0	0	1	0	1	0	0	0	5	11	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.01	.00-.03	.00-.04	.00-.01	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.20	.00-.10	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
103. 08117900 BIG BOGGY CREEK NEAR WADSWORTH, TEX. (Water years 1970-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	10	8	10	10	10	10	10
Number of occurrences	0	0	0	0	0	7	0	0	0	0	0	1	0	0	0	2	0	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.26	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
104. 08123850 COLORADO RIVER ABOVE SILVER, TEX. (Water years 1970-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	9	8	9	9	8	8	8
Number of occurrences	0	0	1	3	2	0	0	0	0	0	0	2	0	0	0	0	5	2
Range (ug/l) .....	.00-.00	.0-.0	.00-.01	.00-.09	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.03	.00-.00	.00-.00	.00-.00	.00-.00	.00-.29	.00-.03
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
105. 08123900 COLORADO RIVER NEAR SILVER, TEX. (Water year 1968)																		
Number of analyses	2	0	2	2	2	2	2	2	2	2	0	0	0	0	0	2	2	2
Number of occurrences	0	--	0	0	0	0	0	0	0	0	--	--	--	--	--	2	2	0
Range (ug/l) .....	.00-.00	--	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	--	--	--	--	--	.12-.24	.02-.26	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	--	0	--	0	0	0	0	--	0	--	--	--	--	--	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	--	--	--	0	0	0	0	0	0	--	--	--	--	--	b/	b/	b/
108. 08136500 CONCHO RIVER NEAR PAINT ROCK, TEX. (Water years 1968-72)																		
Number of analyses	19	12	19	19	19	19	19	19	19	19	11	10	9	10	10	18	18	18
Number of occurrences	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	5	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.02	.00-.00	.00-.00	.00-.00	.00-.07	.00-.23	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES															HERBICIDES (Chlorinated hydrocarbons)		
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor- dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta- chlor	Hepta- chlor epoxide	Lindane	Toxa- phene	Diazi- non	Mala- thion	Methyl para- thion	Para- thion			
109. 08147000 COLORADO RIVER NEAR SAN SABA, TEX. (Water years 1968-72)																		
Number of analyses	27	18	27	27	27	27	27	27	27	27	15	13	8	13	13	26	26	26
Number of occurrences	0	0	0	2	3	0	0	0	0	0	0	1	0	0	0	3	10	0
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.02	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.08	.00-.13	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
111. 08157500 WALLER CREEK AT 23RD STREET, AUSTIN, TEX. (Water year 1971)																		
Number of analyses	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of occurrences	0	5	4	5	5	3	0	0	0	1	0	3	1	0	0	0	5	0
Range (µg/l) .....	.00-.00	.1-.8	.04-.96	.05-.30	.30-1.7	.00-.24	.00-.00	.00-.00	.00-.00	.00-.03	0-0	.00-.28	.00-.59	.00-.00	.00-.00	.00-.00	.02-.14	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	5	3	--	5	2	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
113. 08159150 WILBARGER CREEK NEAR PFLUGERVILLE, TEX. (Water year 1970)																		
Number of analyses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of occurrences	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Range (µg/l) .....	.00-	.0-	.00-	.07-	.05-	.00-	.00-	.00-	.00-	.00-	0-	.00-	.00-	.00-	.00-	.00-	.00-	.00-
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
116. 08162000 COLORADO RIVER AT WHARTON, TEX. (Water years 1968-72)																		
Number of analyses	41	30	41	41	41	41	41	41	41	41	22	15	10	15	15	39	39	39
Number of occurrences	1	0	10	8	16	2	1	0	0	1	0	2	0	0	0	3	8	1
Range (µg/l) .....	.00-.01	.0-.0	.00-.04	.00-.02	.00-.09	.00-.01	.00-.07	.00-.00	.00-.00	.00-.01	0-0	.00-.02	.00-.00	.00-.00	.00-.00	.00-.40	.00-.06	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	3	0	1	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
117. 08162600 TRES PALACIOS CREEK NEAR MIDFIELD, TEX. (Water years 1970-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Number of occurrences	0	0	0	0	0	7	0	0	0	0	0	3	0	0	0	2	4	1
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.04	.00-.00	.00-.00	.00-.00	.00-.12	.00-.95	.00-.11
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES															HERBICIDES (Chlorinated hydrocarbons)		
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion			
118. 08162650 CASHS CREEK NEAR BLESSING, TEX. (Water years 1970-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Number of occurrences	0	0	0	0	0	8	0	0	0	0	0	1	0	0	0	1	3	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.02	.00-.00	.00-.11	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.20	.00-.22	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	1	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
119. 08162700 EAST CARANCAHUA CREEK NEAR BLESSING, TEX. (Water years 1970-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	10	9	9	10	10	10	10	10
Number of occurrences	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.09	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
120. 08162800 WEST CARANCAHUA CREEK NEAR LAWARD, TEX. (Water years 1970-72)																		
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	9	8	9	8	10	10	10
Number of occurrences	0	0	0	0	0	2	0	0	0	0	0	1	0	2	2	2	1	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.22	.00-.05	.00-2.3	.00-.06	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
121. 08164000 LAVACA RIVER NEAR EDNA, TEX. (Water years 1968-72)																		
Number of analyses	26	20	26	26	26	26	26	26	26	26	16	13	12	14	14	25	25	25
Number of occurrences	0	0	0	1	3	0	0	0	0	1	0	3	0	0	0	8	7	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.01	.00-1.6	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-1.7	.00-.06	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
122. 08164500 NAVIDAD RIVER NEAR GANADO, TEX. (Water years 1968-72)																		
Number of analyses	25	19	25	25	25	25	25	25	25	25	19	14	11	14	14	25	25	25
Number of occurrences	0	0	0	1	4	3	0	0	0	0	0	0	0	0	0	3	1	1
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.02	.00-2.3	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-1.4	.00-.01	.00-.03
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	I N S E C T I C I D E S												H E R B I C I D E S (Chlorinated hydrocarbons)					
	Chlorinated hydrocarbons										Phosphorothioates				2,4-D	2,4,5-T	Silvex	
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion				Para-thion
123. 08164600 GARCITAS CREEK NEAR INEZ, TEX. (Water years 1970-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	10	10	11	11	11	11	11
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
124. 08164800 PLACEDO CREEK NEAR PLACEDO, TEX. (Water years 1970-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	11	10	11	11	11	11	11
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5	0
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.04	.00-.42	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
125. 08164850 CHOCOLATE BAYOU AT PORT LAVACA, TEX. (Water years 1970-72)																		
Number of analyses	9	9	9	9	9	9	9	9	9	9	9	8	8	9	9	9	9	9
Number of occurrences	0	0	1	0	0	2	0	0	0	2	0	3	0	1	1	0	2	0
Range (ug/l) .....	.00-.00	.0-0	.00-.01	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.10	.00-.00	.00-1.5	.00-.36	.00-.00	.00-.02	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	1	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
127. 08176520 GUADALUPE RIVER BELOW VICTORIA, TEX. (Water years 1968-72)																		
Number of analyses	23	17	23	23	23	23	23	23	23	23	13	11	9	11	11	23	23	23
Number of occurrences	0	0	1	1	5	2	0	0	0	1	0	0	0	0	0	5	5	2
Range (ug/l) .....	.00-.00	.0-0	.00-.01	.00-.02	.00-2.7	.00-.01	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.09	.00-.02	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
128. 08177600 OLMOS CREEK TRIBUTARY AT FARM ROAD 1535, AT SHAVANO PARK, TEX. (Water years 1970, 1972)																		
Number of analyses	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
Number of occurrences	0	0	0	0	0	2	0	0	0	1	0	1	0	0	0	0	1	0
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.00	.02-.02	.00-.00	.00-.00	.00-.00	.00-.02	0-0	.00-.01	.00-	.00-.00	.00-.00	.00-.00	.00-.26	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	I N S E C T I C I D E S														H E R B I C I D E S (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion			
129. 08177700 OLMOS CREEK AT DRESDEN DRIVE, SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	30	30	30	30	30	30	30	30	30	30	24	24	20	24	24	29	29	29
Number of occurrences	0	24	10	9	26	26	0	0	1	14	0	17	3	3	0	4	28	4
Range (ug/l) .....	.00-.00	.0-1.9	.00-.13	.00-.08	.00-.86	.00-.10	.00-.00	.00-.00	.00-.01	.00-.05	0-0	.00-1.2	.00-.14	.00-.14	.00-.00	.00-.29	.00-1.4	.00-.02
Number of samples with concentrations in excess of recommended environmental levels	0	24	2	--	11	3	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
130. 08178000 SAN ANTONIO RIVER AT SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	14	14	14	14	14	14	14	14	14	14	9	10	6	10	10	14	14	14
Number of occurrences	0	14	13	12	14	14	0	1	0	10	0	5	3	1	0	5	13	2
Range (ug/l) .....	.00-.00	.1-.7	.00-.21	.00-.13	.06-.49	.01-.14	.00-.00	.00-.03	.00-.00	.00-.12	0-0	.00-.22	.00-.39	.00-.08	.00-.00	.00-.50	.00-.33	.00-.45
Number of samples with concentrations in excess of recommended environmental levels	0	14	6	--	14	5	0	0	--	2	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
131. 08178300 ALAZAN CREEK AT ST. CLOUD STREET, SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	15	15	15	15	15	15	15	15	15	15	9	9	9	9	9	15	15	15
Number of occurrences	0	11	11	11	14	13	0	1	1	8	0	6	2	2	0	4	14	0
Range (ug/l) .....	.00-.00	.0-1.1	.00-1.0	.00-1.1	.00-6.6	.00-.14	.00-.00	.00-.01	.00-.01	.00-.04	0-0	.00-.46	.00-.08	.00-.06	.00-.00	.00-.34	.00-.90	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	11	6	--	13	3	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
132. 08178600 PANTHER SPRINGS CREEK AT FARM ROAD 2696, SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	6	6	6	6	6	6	6	6	6	6	3	3	2	3	3	3	3	3
Number of occurrences	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Range (ug/l) .....	.00-.00	.0-0	.00-.00	.00-.00	.00-.04	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
133. 08178690 SALADO CREEK TRIBUTARY AT BITTERS ROAD, SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	5	4	4	4	4	10	10	10
Number of occurrences	0	9	7	5	10	10	0	0	2	9	0	4	2	1	0	4	9	3
Range (ug/l) .....	.00-.00	.0-.7	.00-.13	.00-.11	.04-.62	.02-.13	.00-.00	.00-.00	.00-.04	.00-.14	0-0	.03-.06	.00-.11	.00-.05	.00-.00	.00-.27	.00-.62	.00-.11
Number of samples with concentrations in excess of recommended environmental levels	0	9	1	--	8	2	0	0	--	2	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES														HERBICIDES (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons										Phosphorothioates				2,4-D	2,4,5-T	Silvex	
	Aldrin	Chlor- dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta- chlor	Hepta- chlor epoxide	Lindane	Toxa- phene	Diazi- non	Mala- thion	Methyl para- thion				Para- thion
134. 08178700 SALADO CREEK (UPPER STATION) AT SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	14	14	14	14	14	14	14	14	14	14	5	5	2	5	5	14	14	14
Number of occurrences	0	1	1	3	4	5	0	0	0	4	0	0	0	0	0	11	13	6
Range (µg/l) .....	.00-.00	.0-.1	.00-.01	.00-.01	.00-.08	.00-.01	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-8.1	.00-13	.00-.21
Number of samples with concentrations in excess of recommended environmental levels	0	1	0	--	1	0	0	0	0	--	0	--	--	--	0	0	1	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
135. 08178736 SALADO CREEK TRIBUTARY AT BEE STREET, SAN ANTONIO, TEX. (Water years 1970, 1972)																		
Number of analyses	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	0	1	3	3	3	2	0	0	0	0	0	2	1	0	0	0	3	0
Range (µg/l) .....	.00-.00	.0-.2	.01-.02	.01-.03	.08-.21	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.12	.00-.00	.00-.00	.00-.00	.01-.65	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	1	0	--	3	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
136. 08178800 SALADO CREEK (LOWER STATION) AT SAN ANTONIO, TEX. (Water years 1969-72)																		
Number of analyses	15	15	15	15	15	15	15	15	15	15	9	9	6	9	9	13	13	13
Number of occurrences	0	4	10	11	14	11	0	0	0	7	0	4	0	0	0	5	10	6
Range (µg/l) .....	.00-.00	.0-.2	.00-.07	.00-.07	.00-.09	.00-.04	.00-.00	.00-.00	.00-.00	.00-.03	0-0	.00-.13	.00-.00	.00-.00	.00-.00	.00-1.4	.00-.63	.00-.08
Number of samples with concentrations in excess of recommended environmental levels	0	4	2	--	4	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
138. 08181000 LEON CREEK TRIBUTARY AT FARM ROAD 1604, SAN ANTONIO, TEX. (Water years 1970, 1972)																		
Number of analyses	4	4	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4	4
Number of occurrences	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Range (µg/l) .....	.00-.00	.0-.0	.00-.00	.00-.01	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
139. 08181400 HELOTES CREEK AT HELOTES, TEX. (Water years 1969-72)																		
Number of analyses	10	10	10	10	10	10	10	10	10	10	7	7	4	7	7	10	10	10
Number of occurrences	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0
Range (µg/l) .....	.00-.00	.0-.2	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.32	.00-.11	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	1	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES														HERBICIDES (Chlorinated hydrocarbons)			
	Chlorinated hydrocarbons											Phosphorothioates				2,4-D	2,4,5-T	Silvex
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion			
140. 08181450 LEON CREEK TRIBUTARY AT KELLY AIR FORCE BASE, TEX. (Water years 1970-72)																		
Number of analyses	11	11	11	11	11	11	11	11	11	11	11	11	7	11	11	10	10	10
Number of occurrences	0	4	11	11	11	3	0	0	0	4	0	6	0	0	0	2	9	1
Range (ug/l)	.00-.00	.0-.5	.03-.29	.01-.15	.04-1.4	.00-.01	.00-.00	.00-.00	.00-.00	.00-.02	0-0	.00-.09	.00-.00	.00-.00	.00-.00	.00-.04	.00-.07	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	4	6	--	10	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
141. 08181500 MEDINA RIVER NEAR SAN ANTONIO, TEX. (Water years 1971-72)																		
Number of analyses	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of occurrences	0	0	1	0	2	1	0	0	0	0	0	2	0	0	0	0	1	0
Range (ug/l)	.00-.00	.0-.0	.00-.01	.00-.00	.00-.01	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.02	.00-.00	.00-.00	.00-.00	.00-.00	.00-.05	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
142. 08181800 SAN ANTONIO RIVER NEAR ELMENDORF, TEX. (Water years 1968-72)																		
Number of analyses	23	17	23	23	23	23	23	23	23	23	18	11	8	11	11	23	23	23
Number of occurrences	0	0	16	1	9	18	0	0	0	8	0	6	0	1	0	3	15	3
Range (ug/l)	.00-.00	.0-.0	.00-.09	.00-.06	.00-.18	.00-.04	.00-.00	.00-.00	.00-.00	.00-.10	0-0	.00-.20	.00-.00	.00-.02	.00-.00	.00-.25	.00-.30	.00-.09
Number of samples with concentrations in excess of recommended environmental levels	0	0	1	--	1	0	0	0	--	1	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
143. 08188500 SAN ANTONIO RIVER AT GOLIAD, TEX. (Water years 1968-72)																		
Number of analyses	24	18	24	24	24	24	24	24	24	24	14	12	12	12	12	22	22	22
Number of occurrences	1	2	11	2	13	15	0	0	0	12	0	6	0	1	0	5	13	1
Range (ug/l)	.00-.01	.0-.1	.00-.02	.00-.10	.00-.06	.00-.03	.00-.00	.00-.00	.00-.00	.00-.03	0-0	.00-.14	.00-.00	.00-.13	.00-.00	.00-.09	.00-.08	.00-.01
Number of samples with concentrations in excess of recommended environmental levels	0	2	0	--	3	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
144. 08188800 GUADALUPE RIVER NEAR TIVOLI, TEX. (Water years 1971-72)																		
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7
Number of occurrences	0	0	0	0	0	1	0	0	0	1	0	3	0	0	0	1	5	0
Range (ug/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.01	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.03	.00-.00	.00-.00	.00-.00	.00-.09	.00-.02	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.

b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72--Continued

	INSECTICIDES												HERBICIDES (Chlorinated hydrocarbons)					
	Chlorinated hydrocarbons										Phosphorothioates				2,4-D	2,4,5-T	Silvex	
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion				Para-thion
147. 08189100 SALT CREEK NEAR REFUGIO, TEX. (Water years 1971-72)																		
Number of analyses	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.03	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
148. 08189200 COPANO CREEK NEAR REFUGIO, TEX. (Water years 1970-72)																		
Number of analyses	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
149. 08189500 MISSION RIVER AT REFUGIO, TEX. (Water years 1971-72)																		
Number of analyses	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
150. 08189800 CHILTIPI CREEK AT SINTON, TEX. (Water years 1970-72)																		
Number of analyses	10	10	10	10	10	10	10	9	10	10	10	10	9	10	10	10	10	10
Number of occurrences	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0
Range (µg/l)	.00-.00	.0-.0	.00-.00	.00-.01	.00-.01	.00-.01	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.10	.00-.03	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/
151. 08210000 NUECES RIVER NEAR THREE RIVERS, TEX. (Water years 1968-72)																		
Number of analyses	23	17	23	23	23	23	23	23	23	23	13	10	8	11	11	23	23	23
Number of occurrences	0	0	1	3	4	0	0	0	0	2	0	1	0	0	0	4	9	0
Range (µg/l)	.00-.00	.0-.0	.00-.03	.00-.02	.00-3.3	.00-.00	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.00	.00-.00	.00-.64	.00-.38	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	1	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	a/	a/	a/	a/	b/	b/	b/

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.

Table 3.--Summary of pesticides records for selected streams in Texas, water years 1968-72-- Continued

	I N S E C T I C I D E S												H E R B I C I D E S					
	Chlorinated hydrocarbons												Phosphorothioates					
	Aldrin	Chlor-dane	DDD	DDE	DDT	Dieldrin	Endrin	Hepta-chlor	Hepta-chlor epoxide	Lindane	Toxa-phene	Diazi-non	Mala-thion	Methyl para-thion	Para-thion	2,4-D	2,4,5-T	Silvex
152. 08446500 PECOS RIVER NEAR GIRVIN, TEX. (Water years 1968-72)																		
Number of analyses	14	12	14	14	14	14	14	14	14	14	9	8	5	8	8	14	14	14
Number of occurrences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	0-0	.00-.00	.00-.00	.00-.00	.00-.00	.00-.00	.00-.02	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	0	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
153. 08469200 RIO GRANDE AT ANZALDUAS DAM, TEX. (Water years 1968-72)																		
Number of analyses	40	27	40	40	40	40	40	40	40	40	16	10	7	10	10	40	40	40
Number of occurrences	0	0	3	11	6	6	0	0	0	1	0	1	0	1	1	0	1	1
Range (ug/l) .....	.00-.00	.00-.00	.00-.02	.00-.02	.00-.02	.00-.02	.00-.00	.00-.00	.00-.00	.00-.01	0-0	.00-.01	.00-.00	.00-.23	.00-1.0	.00-.00	.00-.01	.00-.02
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	0	--	--	--	--	1	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>
154. 08470300 ARROYO COLORADO FLOODWAY AT EL FUSTE SIPHON, SOUTH OF MERCEDES, TEX. (Water years 1968-72)																		
Number of analyses	19	15	19	19	19	19	19	19	19	19	10	9	7	10	10	18	18	18
Number of occurrences	0	0	14	19	5	11	2	0	0	13	0	3	0	6	4	2	10	0
Range (ug/l) .....	.00-.00	.0-.0	.00-.04	.01-.09	.00-.05	.00-.03	.00-.01	.00-.00	.00-.00	.00-.11	0-0	.00-.02	.00-.00	.00-.70	.00-.72	.00-.35	.00-.06	.00-.00
Number of samples with concentrations in excess of recommended environmental levels	0	0	0	--	0	0	0	0	--	1	--	--	--	--	3	0	0	--
Number of samples with concentrations in excess of recommended limits for public water supplies	0	0	--	--	0	0	0	0	0	0	0	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>a/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>

a/ The sum of these phosphorothioates in none of the samples from this site exceeded the recommended limit for public water supplies.b/ The sum of these herbicides in none of the samples from this site exceeded the recommended limit for public water supplies.