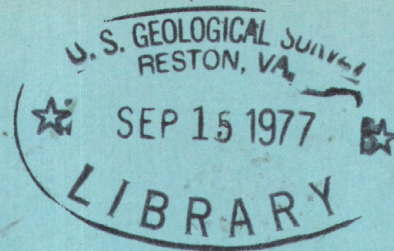


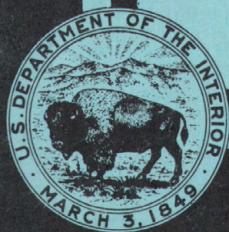
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Water Resources Data for Texas

Water Year 1976

Volume 2. San Jacinto River Basin,
Brazos River Basin,
San Bernard River Basin and
Intervening Coastal Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-76-2

Prepared in cooperation with the State of Texas
and with other agencies

CALENDAR FOR WATER YEAR 1976

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Water Resources Data for Texas

Water Year 1976

Volume 2. San Jacinto River Basin,
Brazos River Basin,
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Intervening Costal Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-76-2

**Prepared in cooperation with the State of Texas
and with other agencies**

UNITED STATES DEPARTMENT OF THE INTERIOR
CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY
V. E. McKelvey, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
300 East 8th Street
Austin, Texas 78701

Preface

This report was prepared by the U.S. Geological Survey in cooperation with the State of Texas and with other agencies by personnel of the Texas district of the Water Resources Division under the supervision of I. D. Yost, District Chief, and Alfred Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Texas are in three volumes as follows:

- Volume 1. Arkansas River basin, Red River basin, Sabine River basin, Neches River basin, Trinity River basin, and intervening Coastal basins
- Volume 2. San Jacinto River basin, Brazos River basin, San Bernardo River basin, and intervening Coastal basins
- Volume 3. Colorado River basin, Lavaca River basin, Guadalupe River basin, Neches River basin, Rio Grande basin, and intervening Coastal basins

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WATER RESOURCES DATA FOR TEXAS, 1976

VOLUME 2

SAN JACINTO, BRAZOS, SAN BERNARD RIVERS, AND INTERVENING COASTAL BASINS

INTRODUCTION

Surface-water data for Texas for the 1976 water year are presented in three volumes, appropriately identified by river basins. Data in each volume consist of records of stage, discharge, and water quality of streams and canals; and stage, contents, and water quality of lakes and reservoirs. Records for a few pertinent stations in bordering states are also included. These data represent that part of the National Water Data System operated by the U.S. Geological Survey in cooperation with State and Federal agencies in Texas.

Records of discharge (or stage) of streams and contents (or stage) of lakes and reservoirs were first published in a series of Geological Survey Water-Supply Papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperature, and suspended sediment were published from 1941 to 1971 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States."

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow and water quality are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report TX-76-2." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

COOPERATION

Organizations that assisted in the collection of data in this report through cooperative agreements with the Geological Survey in 1976 are:

City of Austin, Charles B. Graves, Jr., Director, Engineering Department.

City of Dallas, Monroe McCorkle, Director, Public Works Department.

City of Fort Worth, J. M. Graham, Director of Public Works.

City of Houston, E. B. Cape, Director, Department of Public Works.

County of Dallas, Judson Shook, Director of Public Works.

Pecos River Commission, Horace Babcock, Federal Representative and Chairman; R. B. McGowen, Jr., Commissioner for Texas, and John B. Walker, Commissioner for New Mexico.

Sabine River Compact Administration, William H. Robinson, Federal Representative and Chairman; Raymond J. Palmer and H. B. Meyers for Louisiana; and J. M. Syler and George M. Smith for Texas.

Texas Department of Highways and Public Transportation, B. L. DeBerry, Engineer-Director.

Texas Water Development Board, James M. Rose, Executive Director; A. L. Black, Chairman; Robert B. Gilmore, Vice-Chairman; Milton T. Potts, W. E. Tinsley, John H. Garrett, and George W. McCleskey, Members.

Assistance in the form of funds or services was given by the following Federal agencies:

Corps of Engineers, U.S. Army.

International Boundary and Water Commission, Department of State.

Soil Conservation Service, Department of Agriculture.

Assistance in the form of funds or services was rendered by the following organizations through the Texas Water Development Board:

The cities of Abilene, Alice, Arlington, Austin, Brady, Cleburne, Clyde, Corpus Christi, Dallas, El Paso, Gainesville, Graham, Houston, Lampasas, San Angelo, and Wichita Falls; Athens Municipal Water Authority; Bexar, Medina, and Atascosa Counties Water Control and Improvement District No. 1; Bistone Municipal Water Supply District; Brazos River Authority; Chocolate Bayou Land and Water Company; Colorado River Municipal Water District; Dallas County; Dallas Power and Light Company; Dow Chemical Company; Edwards Underground Water District; Franklin County Water District; GMA Development Corporation; Greenbelt Municipal and Industrial Water Authority; Guadalupe-Blanco River Authority; Harris County Flood Control District; Houston Lighting and Power Company; Lone Star Steel Company; Lower Colorado River Authority; Lower Neches Valley Authority; Palo Pinto County Municipal Water District; Red Bluff Water Power Control District; Reeves County Water Improvement District No. 1; Richmond Rice Association; Sabine River Authority of Texas; San Antonio City Public Service Board; San Antonio City Water Board; San Antonio River Authority; San Jacinto River Authority; Tarrant County Water Control and Improvement District No. 1; Texas Electric Service Company; Texas Utilities Services, Inc.; Tom Green County Water Control and Improvement District No. 1; Trinity River Authority; Upper Guadalupe River Authority; Upper Neches River Municipal Water Authority; West Central Texas Municipal Water District; White River Municipal Water District; Wichita County Water Improvement District No. 2; and Wood County.

HYDROLOGIC CONDITIONS

Large variations in rainfall and runoff characterize the usual hydrologic conditions in Texas. In the east, streams are usually deep with wide alluvial flood plains, and streamflow is generally perennial. Normal annual rainfall exceeds 50 inches in the extreme east and annual runoff may average as much as 15 inches. In the west, streams are generally of the arroyo type and streamflow is highly ephemeral. Normal annual rainfall is less than 8 inches in the extreme west and annual runoff averages less than 0.1 inch in many areas.

During the 1976 water year, annual runoff over the State was generally deficient in the west and central parts and near normal in all other parts. Conservation storage in a selected group of 63 reservoirs, with a combined conservation capacity of 30,000,000 acre-ft, decreased from 88 percent of capacity in September 1975, to 87 percent at the end of September 1976.

At the beginning of the 1976 water year, streamflow was in the median range except for deficient flows (in the lower 25 percent of record) in the Panhandle and in a small area near San Angelo. During November the area of deficient streamflow spread to a wide band across the northern part of the State with other areas remaining about the same. In December the area of deficient streamflow spread into central Texas, but a small area near San Angelo showed excessive flow (in the upper 25 percent of record).

The trend established in December continued into February 1976 with the area of deficient streamflow covering north, central, and most of east Texas. Streamflow in the remainder of the State remained near normal.

Streamflow in east Texas increased to near normal in March. Thunderstorms during April relieved drought conditions in west Texas and produced locally heavy runoff in the central and northeastern parts of the State.

Streamflow in the panhandle remained deficient for May, but was near normal in the remainder of the State. Locally intense rainfall in mid-June caused flash flooding in the Houston area and in the South Concho River in the west. Locally heavy showers in July in the lower half of the State caused excessive streamflow while the Panhandle remained deficient in streamflow.

This trend was reversed in August with a return to median and deficient streamflow in the southern half of the State; an exception being continued excessive streamflow in the upper Guadalupe River basin.

September ended the water year with near normal streamflow over the State except in the Panhandle where streamflow was deficient and in the lower Pecos, Devils, and Nueces River basins streamflow was excessive.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, about 326,000 gallons, or 1,233 cubic meters.

Algae are mostly aquatic, single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C + 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C + 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C + 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in g/m³ (grams per cubic meter), and periphyton and benthic organisms in g/m² (grams per square meter).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is the ratio of organic mass in mg/m^2 (milligrams per square meter) to the mass of chlorophyll a, in mg/m^2 .

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually ml (milliliters) or l (liters).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-ft, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of water. The number of coliform colonies per 100 ml of sample was determined by the immediate-incubation membrane-filter method.

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

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

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

Cubic foot per second (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second. This rate is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mass of individual daily mean discharges during a specified period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to the amount of substance present in true chemical solution. In practice, however, the term includes all forms of substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are made.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic-detergent compounds.

Micrograms per gram ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, $\mu\text{g/l}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/l , and is based on the mass of sediment per liter of water-sediment mixture.

ND is used in some of the tables of pesticide data as an abbreviation for "Not Detected." Analyses in which this term is reported were made by the U.S. Environmental Protection Agency laboratory in Bay Saint Louis, Mississippi.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square metres (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organisms count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (ml) or liters (l). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Do.
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, the assemblage may include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/ml of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats of floating "moss" in lakes. Their concentrations are expressed as number of cells/ml of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

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

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

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigation.

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

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

Stage-discharge relation is the relation between gage height (stage) and the volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

Total (as used in tables of chemical analyses) refers to the amount of substance present both in solution and suspension.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/l of the constituent, times the factor 0.0027, times the number of days.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom.....Animal
Phylum.....Arthropoda
Class.....Insecta
Order.....Ephemeroptera
Family.....Ephemeridae
Genus.....Hexagenia
Species.....Hexagenia limbata

Weighted average is used in this report to indicate discharge--weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports published before 1975.

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

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream

station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The station numbering system is not used at miscellaneous sites where only random water-quality samples or discharge measurements are taken. The complete number for each station consists of eight digits, such as 08123800. The first two digits, 08 or 07, identify the river basin as previously published in the series of water-supply papers on the Surface Water Supply of the United States. The digits 07 indicate the Lower Mississippi River basin, and the digits 08 indicate the Western Gulf of Mexico basins. The remaining six digits of the station number are sequential in downstream order.

All records for a drainage basin that extends across State boundaries can be arranged in downstream order by assembling the pages from the appropriate State reports by station number.

SPECIAL NETWORKS AND PROGRAMS

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

National stream-quality accounting network (NASQAN) is a data collection designed by the Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting in con-

sultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled gaging stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The basic data collected at gaging stations consist of (1) records of stage; (2) measurements of discharge of streams and canals; and (3) stage, surface area, and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement basic data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a non-recording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is often determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area measurements, contracted-opening measurements, or computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables; monthly and yearly mean discharges

are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors (based on individual discharge measurements and notes by the hydrologists or observers) are used in applying the gage heights to the rating tables.

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

For a lake- or reservoir-gaging station, a capacity table giving the contents for any stage is prepared from a stage-area relation curve defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes in contents are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

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

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

The description of the gaging stations, except those partial-record stations published in tabular form in the back of the report, gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging stations and the drainage areas are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies (U.S. Water Resources Council, 1968). Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of gages used previously during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record.

For stations where changes in upstream water-resources development occurred during the period of record, "AVERAGE DISCHARGE" is given for both before and after development. The maximum discharge or contents, maximum gage height or elevation, minimum discharge or contents (if there is little or no regulation), and minimum gage height or elevation (if it is significant) are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low).

Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge or contents correspond to the crest stage obtained by use of a water-stage recorder (graphic or digital), crest-stage gage, or nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records and to conditions that affect the natural flow at the gaging station is given under "REMARKS;" for a reservoir station information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is also given under "REMARKS."

Previously published records for some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description for all stations for which revised rec-

ords have been published, each followed by the water years for which values are revised in that report. In listing the water years, one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual values of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum discharge was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised value was first published is given. It should be noted that for all stations for which runoff in cubic feet per second per square mile and in inches are published, a revision of the drainage area necessitates corresponding revision of all measurements based on the drainage area. Revised values of runoff in cubic feet per second per square mile and in inches, resulting from a revision of the drainage area only, are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the values following "MAX" are the maximum daily discharges for the calendar and water years; those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of the lack of a gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual conditions at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

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

For gaging stations on lakes and reservoirs, the data presented comprise a description of the station, a skeleton table of capacity at given stages, a table of daily contents, and a monthly summary of stage, contents, and known diversions.

Streamflow data collected at partial-record stations and miscellaneous sites where water-quality data are not collected are given in three tables at the end of this volume. The first is a table of low-flow discharge at low-flow partial-record stations; the second is a table of annual maximum stage and (or) discharge at crest-stage and (or) flood-hydrograph partial-record stations; and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of field data and computed results

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

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

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such station, figures of cubic

feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the Texas District Office in Austin. Most gaging-station records are available in computer-usable form, and many statistical analyses have been made.

Records of discharge collected by agencies other than the Geological Survey

The International Boundary and Water Commission, United States and Mexico, operates all streamflow stations on the Rio Grande and near the mouth of its principal tributaries at and below El Paso, Texas. Records collected at these stations are published in annual bulletins by the Commission and may be obtained from the International Boundary and Water Commission, United States Section, P. O. Box 20003, El Paso, Texas 79998.

EXPLANATION OF SURFACE-WATER QUALITY RECORDS

Collection and examination of data

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

Water-quality information is presented for chemical, biological, and microbiological quality; water temperature; and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. The biological information includes qualitative analyses of plankton and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water temperature was measured

at the time of collection of most samples. At some sites, a continuous temperature recorder (thermograph) furnished information from which daily minimums and maximums were obtained; at other sites, once-daily temperatures were obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Water analysis

Most methods for collecting and analyzing water samples are described in U.S. Geological Survey Techniques of Water Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed determination of for an accurate mean concentration and for use in calculating loads.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is probably the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

At stream-gaging stations where daily samples are obtained, tables are included to show monthly and annual means of specific conductance; concentrations of dissolved solids, chloride, sulfate, hardness; and loads of dissolved solids, chloride, and sulfate. The means have been computed by using the daily records of specific conductance and developing regression relationships between each water-quality parameter and specific conductance.

Water temperature

Water temperatures are measured at most of the water-quality stations. Water temperatures are also taken at time of discharge measurements at gaging stations. At sites at which daily samples are taken, the water temperature is taken about the same time each day. Large streams

have a small diurnal temperature change; but small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records published consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected twice daily or, in some instances, hourly. The published values of sediment discharges for days of rapidly changing flow or concentrations were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days in which the published value of sediment discharge differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water-sediment discharge relations, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in estimating long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Publications

The annual series of water-supply papers that give information on quality of surface waters in Texas are listed in the following table. Data for the Lower Mississippi River basin are given in Part 7 and for the Western Gulf of Mexico Basin in Part 8.

Table 1.--Water-supply paper numbers and parts containing water-quality data for Texas, water years 1941-71

<u>Year</u>	<u>Parts 1-14</u>	<u>Year</u>	<u>Parts 7-8</u>	<u>Year</u>	<u>Parts 7-8</u>
1941	942	1950	1188	1963	1950
1942	950	1951	1199	1964	1957
1943	970	1952	1252	1965	1964
1944	1022	1953	1292	1966	1994
1945	1030	1954	1352	1967	2014
1946	1050	1955	1402	1968	C2096
1947	1102	1956	1452		D2097
1948	A1133	1957	1522	1969	C2146
1949	A1163	1958	1573		D2147
----	-----	1959	1644	1970	C2156
----	-----	1960	1744		D2157
----	-----	1961	1884	1971	BC2166
----	-----	1962	1944		BD2167

A Parts 7-14. B In Press. C Part 7. D Part 8.

PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Most methods used by the U.S. Geological Survey have been published in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Picket Street, Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

- 1-D1. *Water temperature-influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p. \$1.60.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 p. \$0.25.
- 3-A2. *Measurement of peak discharge by the slope-area methods*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 p. \$0.20.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968, 60 p. \$0.40.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 p. \$1.00.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 p. \$0.30.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6, 1968. 13 p. \$0.20.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 p. \$0.45.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 p. \$1.25.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 p. \$0.40.
- 3-A12. *Fluorometric procedures for dye tracing*, by J. F. Wilson Jr.: USGS--TWRI Book 3, Chapter A12. 1968. 31 p. \$0.35. Not currently available.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 p. \$0.65.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 p. \$0.70.

- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 p. \$1.15.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 p. \$0.30.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 p. \$0.20.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 p. \$0.65.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 p. \$0.75.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 p. \$0.75.
- 5-A1. *Methods for collection and analysis of water samples for dissolved minerals and gases*, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 p. \$2.40.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 p. \$0.80.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 p. \$0.90.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by K. V. Slack, R. C. Averett, P. E. Greenson, and R. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 p. \$1.95.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 p. \$0.65.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 p. \$0.40.

08067580 Lake Conroe near Montgomery, Tex.

LOCATION.--Lat 30°26'13", Long 95°36'36", Montgomery County, at bridge on Farm Road 1097, 6.4 miles (10.3 km) upstream from dam, 8.1 miles (13.0 km) east of Montgomery, and 8.2 miles (13.2 km) west of Willis.

DRAINAGE AREA.--445 mi² (1,153 km²), see station 08067600.

PERIOD OF RECORD.--April 1973 to August 1976 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Maximum elevation during period October 1975 to August 1976, 202.59 ft (61.749 m) June 2, 3; minimum not determined probably occurred Oct. 22, 23.

Period of record: Maximum elevation, 202.59 ft (61.749 m) June 2, 3, 1976; minimum since lake reached conservation storage level, 199.02 ft (60.661 m) Jan. 14, 1974.

REMARKS.--No large diversions above station.

ELEVATION, IN FEET, AT 2400, OCTOBER 1975 TO AUGUST 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SFP
1			---	200.94	200.94	201.02	201.05	201.15	202.33	201.00	200.93	
2			---	200.95	200.97	201.03	201.04	201.15	202.54	200.98	200.91	
3			200.71	200.92	200.96	201.04	201.03	201.14	202.52	201.00	200.88	
4			200.71	200.89	200.96	201.04	201.05	201.13	202.34	201.01	200.86	
5			200.71	200.89	200.97	201.02	201.13	201.12	202.16	201.00	200.84	
6			200.71	200.89	200.96	201.03	201.10	201.12	201.95	200.99	200.83	
7			200.71	200.89	200.96	201.08	201.10	201.18	201.76	200.97	200.80	
8			200.71	200.88	200.95	201.07	201.10	201.20	201.57	201.01	200.79	
9			200.71	200.88	200.94	201.06	201.07	201.30	201.37	201.03	200.78	
10			200.71	200.87	200.95	201.06	201.06	201.41	201.19	201.08	200.76	
11			200.70	200.87	200.95	201.07	201.06	201.36	201.10	201.10	200.73	
12			200.70	200.88	200.96	201.06	201.05	201.28	201.08	201.10	200.72	
13			200.70	200.88	200.96	201.05	201.05	201.42	201.06	201.14	200.69	
14			200.69	200.88	200.96	201.05	201.05	201.44	201.05	201.16	200.67	
15			200.70	200.87	200.96	201.02	201.05	201.42	201.07	201.24	200.66	
16			200.71	200.86	200.97	201.00	201.06	201.35	201.13	201.26	200.65	
17			200.71	200.86	201.02	201.00	201.06	201.26	201.11	201.18	200.64	
18			200.71	200.86	200.99	200.99	201.06	201.18	201.02	201.11	200.62	
19			200.70	200.86	200.97	201.00	201.06	201.13	201.13	201.10	200.60	
20			200.70	200.89	200.97	201.00	201.13	201.11	201.13	201.06	200.58	
21			200.69	200.90	201.04	201.00	201.14	201.10	201.11	201.04	200.56	
22			200.69	200.90	201.02	201.03	201.14	201.10	201.09	201.04	200.54	
23			200.69	200.91	201.00	201.03	201.15	201.09	201.09	201.03	200.52	
24			200.89	200.91	200.94	201.03	201.18	201.08	201.07	201.05	200.54	
25			200.97	200.96	200.98	201.04	201.18	201.08	201.05	201.03	200.52	
26			200.97	201.00	200.98	201.05	201.17	201.09	201.05	201.03	200.50	
27			200.94	201.03	201.02	201.04	201.16	201.07	201.05	201.01	200.47	
28			201.02	201.04	201.02	201.03	201.15	201.08	201.04	200.99	200.49	
29			200.99	201.03	201.02	201.07	201.21	201.07	201.03	200.97	200.48	
30			200.94	201.02	---	201.05	201.18	201.06	201.01	200.94	200.46	
31			200.94	201.00	---	201.06	---	201.47	---	200.94	200.47	
MEAN			---	200.92	200.98	201.04	201.10	201.20	201.37	201.05	200.66	
MAX			---	201.04	201.04	201.08	201.21	201.47	202.59	201.26	200.93	
MIN			---	200.86	200.94	200.99	201.03	201.06	201.01	200.94	200.46	

08067600 Lake Conroe near Conroe, Tex.

LOCATION.--Lat 30°21'30", long 95°33'39", Montgomery County, at service outlet tower at Conroe Dam on West Fork San Jacinto River, 140 ft (43 m) upstream from centerline of dam, and 7.4 miles (11.9 km) west of Conroe.

DRAINAGE AREA.--445 mi² (1,153 km²).

PERIOD OF RECORD.--Contents: January 1973 to current year.

Water quality: Chemical analyses: September 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 465,700 acre-ft (574 hm³) June 2 (elevation, 202.64 ft or 61.765 m); minimum, 417,300 acre-ft (515 hm³) Oct. 22, 23 (elevation, 200.37 ft or 61.073 m).
Period of record: Maximum contents, 465,700 acre-ft (574 hm³) June 2, 1976 (elevation, 202.64 ft or 61.765 m); minimum since operating level was reached, 390,500 acre-ft (481 hm³) Dec. 2, 1973 (elevation, 199.04 ft or 60.667 m).

REMARKS.--The lake is formed by an earthfill dam 11,300 ft (3,440 m) long, including a controlled spillway. The dam was completed Sept. 1, 1972, and deliberate impoundment began Jan. 9, 1973. The spillway is a concrete gravity structure 240 ft (73 m) long with a net opening of 200 ft (61 m). The spillway has five 40- by 30-foot (12- by 9-meter) tainter gates and is located near center of dam. The outlet works for low-flow releases are located in a vertical concrete multi-gated inlet tower. There are three gated openings and one uncontrolled opening in the inlet tower. The capacity table was based on Geological Survey topographic maps dated 1958 and 1959. During the current year, Gulf States Utilities diverted 2,525 acre-ft (3.11 hm³) to Lewis Creek Reservoir. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	212.0	-
Design flood.....	205.5	532,000
Top of tainter gates.....	202.5	462,600
Top of conservation pool (uncontrolled tower outlet).....	201.0	430,300
Crest of spillway (sill of tainter gates).....	173.0	64,960
Lowest gated outlet (invert).....	144.5	300

COOPERATION.--Capacity tables were prepared by Freese, Nichols, and Endress, Consulting Engineers, and furnished by the San Jacinto River Authority.

Capacity table (elevation, in feet, and contents, in acre-feet)

200.0	409,600
202.0	451,600
203.0	473,700

CONTENTS, IN ACHE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424500	428600	424100	428800	430300	429800	431100	433900	459800	430500	429600	423200
2	423500	430700	423900	430300	430100	430500	430900	433700	465300	429600	429400	424300
3	422800	431300	423900	429000	429800	429800	430900	433500	463300	430700	429000	424700
4	422400	430900	423900	428600	430100	430300	431800	433000	459800	431100	428400	425100
5	422000	430100	424100	428200	431300	431300	433500	433000	455600	430900	427600	425100
6	421400	429800	424500	428600	430700	430900	432800	433300	451200	431100	427400	424900
7	421000	429600	424100	428600	429600	431100	432600	434700	446900	430700	427600	424500
8	420600	429600	423900	428000	429400	431800	432400	435200	442900	431800	427800	424100
9	420800	429600	423700	427400	429200	431300	432000	437700	438400	432000	427000	424900
10	420800	429600	423500	427600	429600	431100	431500	439200	434500	433300	426300	423500
11	420600	429200	423200	428000	429800	430900	431500	438200	432400	433300	425700	422600
12	420400	429200	423200	427800	429800	432400	431300	436500	432000	433500	425500	421800
13	420000	428000	423000	428800	430100	431500	431300	439700	431500	434100	424900	421400
14	419700	427200	423200	428600	430100	430900	431300	440100	431300	434300	424300	421600
15	420400	426800	424700	428200	430100	430700	431300	439400	432200	436200	424100	421600
16	420200	426800	424900	428200	430300	430300	431100	438400	433500	436700	424100	421600
17	419700	426800	424900	427800	430700	429600	431300	436500	432800	434700	424100	421200
18	418900	426800	424500	427800	430300	429400	431500	434500	433300	433500	423700	420800
19	418500	427000	423900	428200	429800	429200	431500	433300	434300	433300	423200	421600
20	417900	427000	424100	429200	429600	430700	433900	433000	433700	432600	422800	427400
21	417700	426500	423900	429000	433000	429800	433500	433000	432800	432400	422200	427600
22	417300	426100	423700	428800	431300	429600	433500	433000	432600	432200	422000	427400
23	418700	425500	423500	428800	430700	429600	433500	432600	432000	432000	421800	427200
24	418700	425300	428800	428800	430300	430100	434700	432600	432000	432600	421800	427000
25	428600	424500	429400	432000	430500	429800	434700	432200	431800	432400	421400	426500
26	430100	424100	429400	432400	430500	430700	434100	432400	431800	432200	421200	428800
27	429800	423500	430100	432400	430100	429800	433900	432800	432000	431500	421000	429600
28	430300	423200	431100	432200	429800	429800	433500	432400	431500	431100	421000	434500
29	430500	423200	429400	432000	429800	431100	435600	431800	431300	430700	420600	434100
30	429600	424700	428600	431100	---	431300	434700	431800	430900	430300	420400	433000
31	428600	---	428400	430700	---	430900	---	439200	---	429800	420400	---
(†)	201.92	200.73	200.91	201.02	200.98	201.03	201.21	201.42	201.03	200.98	200.52	201.13
(*)	+4500	-3900	+2700	+2300	-900	+1100	+3800	+4500	-8300	-1100	-9400	+12600
MAX	430500	431300	431100	432400	433000	432400	435600	440100	465300	436700	429600	434500
MIN	417300	423200	423000	427400	429200	429200	430900	431800	430900	429600	420400	420800

CAL YR 1975..... * +3500 MAX 451000 MIN 417300
WTR YR 1976..... * +8900 MAX 465300 MIN 417300

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.

08067600 Lake Conroe near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC (O- DUCT- ANCE (MICRO- MOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
JAN 16...	0945	224	7.8	10.5	16.8	96	83	7
FEB 28...	1715	239	8.1	21.5	6.8	99	84	5
MAR 19...	1040	242	8.1	30.0	6.5	87	82	4

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	SOLU- M SODIUM RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
JUN 16...	30	1.4	10	.5	2.9	92	0	3.3	18
AUG 20...	30	2.3	11	.5	3.0	97	0	6.0	20
NOV 19...	30	1.8	12	.5	3.1	96	0	4.0	22

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIOP) (MG/L)	DIS- SOLVED (SUM OF CONSTIT- UENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JAN 16...	.2	4.4	117	.14	.01	.03	10	0
FEB 28...	.3	3.9	124	.14	.02	.01	0	30
MAR 19...	.2	5.5	125	.01	.00	.03	80	10

08067610 Lake Conroe at outflow weir near Conroe, Tex.

LOCATION.--Lat 30°21'23", long 95°33'37", Montgomery County, on left side of stilling basin of outflow weir, 620 ft (189 m) downstream from centerline of dam on West Fork San Jacinto River, 770 ft (235 m) downstream from service outlet tower, 3.0 miles (4.8 km) upstream from State Highway 105, and 7.4 miles (11.9 km) west of Conroe.

DRAINAGE AREA.--445 mi² (1,153 km²).

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 138.48 ft (42.209 m) above mean sea level (levels by San Jacinto River Authority).

EXTREMES.--No controlled releases were made during the year.

Period of record: Maximum daily discharge, 339 ft³/s (9.60 m³/s) Feb. 19-25, 1974; many days with no controlled releases.

REMARKS.--Discharge represents controlled outflow from service tower and does not constitute the total outflow from Lake Conroe. Uncontrolled low flows through weir published at West Fork San Jacinto River below Lake Conroe (station 08067650).

08067650 West Fork San Jacinto River below Lake Conroe near Conroe, Tex.

LOCATION.--Lat 30°20'31", long 95°32'34", Montgomery County, on right bank at downstream side of bridge on State Highway 105, 3.0 miles (4.8 km) downstream from Lake Conroe Dam, and 5.9 miles (9.5 km) west of Conroe.

DRAINAGE AREA.--451 mi² (1,168 km²).

PERIOD OF RECORD.--Discharge: August 1972 to current year (discharge for periods of outflow from Lake Conroe only).

Water quality: Chemical, biochemical, and pesticide analyses: October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 116.06 ft (35.375 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,650 ft³/s (75.0 m³/s) June 3 (gage height, 29.32 ft or 8.937 m); no flow for many days.

Period of record: Maximum discharge, 2,750 ft³/s (77.9 m³/s) Jan. 28, 1974 (gage height, 29.00 ft or 8.839 m); maximum gage height, 30.87 ft (9.409 m) June 13, 1973 (backwater from local runoff); no flow for many days.

Flood in November 1940 reached a stage of 41.94 ft (12.783 m), from information provided by the Texas Highway Department.

REMARKS.--Discharge records fair. Discharge is outflow from Lake Conroe. Floodflows may include local runoff. Discharge estimate during periods of backwater.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	7.7	4.3	15	184	8.9	11	339	1600	.92	.92	0
2	3.3	7.7	3.8	8.4	15	8.9	11	44	2600	.60	.60	0
3	2.9	200	4.3	8.6	11	8.9	11	15	2640	.60	.60	0
4	2.5	270	3.8	8.0	7.7	8.3	11	14	2540	1.3	0	0
5	2.5	85	3.8	7.5	9.5	9.5	353	13	2150	1.3	0	0
6	2.5	8.9	4.3	7.5	10	10	706	13	2070	1.3	0	0
7	2.5	8.9	4.3	7.8	8.9	75	500	185	2040	1.3	0	0
8	2.1	8.9	4.3	7.5	7.7	551	339	711	2030	1.3	0	0
9	2.1	8.9	4.3	7.0	7.7	182	180	731	2010	1.6	0	0
10	1.6	9.5	4.3	6.9	7.7	12	14	1180	1850	3.3	0	0
11	1.6	8.9	3.9	7.2	8.3	11	9.9	1220	1070	3.3	0	0
12	1.3	9.5	3.8	7.1	8.3	11	9.9	1110	61	3.3	0	0
13	1.3	7.1	3.9	6.5	8.3	11	9.8	1020	28	3.3	0	0
14	1.3	6.5	4.6	6.5	7.7	43	9.8	1000	12	3.3	0	0
15	1.3	5.9	4.6	6.5	8.3	216	9.8	992	12	4.3	0	0
16	1.3	5.4	5.1	7.7	8.9	43	9.6	992	312	512	0	0
17	1.3	5.4	5.2	7.7	26	10	9.8	993	512	913	0	0
18	.90	5.4	4.6	7.1	296	8.9	9.9	832	28	866	0	0
19	.60	5.4	4.5	7.1	151	8.9	10	368	17	324	0	0
20	.30	6.5	4.4	7.7	13	8.9	12	179	14	301	0	0
21	.30	5.9	4.5	8.3	247	11	11	20	13	157	0	0
22	0	5.4	4.2	7.7	460	10	11	14	12	9.8	0	0
23	0	4.3	4.0	7.7	340	10	11	13	11	2.0	0	0
24	.30	4.3	5.1	7.1	180	8.9	12	13	12	2.5	0	0
25	210	3.8	230	8.9	15	8.9	12	12	7.7	2.5	0	0
26	530	4.3	717	11	10	10	12	12	2.5	2.5	0	0
27	530	3.3	22	227	10	11	12	14	2.5	2.5	0	.60
28	350	3.3	631	316	8.9	11	11	13	2.5	2.0	0	540
29	270	2.9	1320	313	8.9	12	187	12	2.5	1.6	0	720
30	270	4.8	447	288	---	12	342	11	1.6	1.3	0	720
31	85	---	30	86	---	11	---	329	---	.92	0	---
TOTAL	2241.90	723.8	3500.9	1436.0	2084.8	1362.0	2857.5	12414	23663.3	3132.14	2.12	1980.60
MEAN	73.6	24.1	113	46.3	71.9	43.9	95.3	400	789	101	.068	66.0
MAX	530	270	1320	316	460	551	706	1220	2640	913	.92	720
MIN	0	2.9	3.8	6.5	7.7	8.3	9.6	11	1.6	.60	0	0
AC-FT	4530	1440	6940	2850	4140	2700	5670	24620	46940	6210	4.2	3930
CAL YR 1975 TOTAL	112368.00			MEAN 308	MAX 2470	MIN 0	AC-FT 222900					
WTR YR 1976 TOTAL	55439.06			MEAN 151	MAX 2640	MIN 0	AC-FT 110000					

08067650 West Fork San Jacinto River below Lake Conroe near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 01...	0930	4.0	311	7.1	20.5	15	10	6.5	71	.7	120
DEC. 09...	1000	5.1	317	6.9	12.0	40	9	8.5	79	1.1	110
FEB. 19...	0945	225	236	6.7	14.0	30	15	9.8	94	1.1	86
APR. 07...	0945	720	249	6.9	18.5	20	10	9.2	98	1.5	86
JUNE 09...	1015	2090	249	6.6	24.5	20	6	7.7	92	1.1	94
AUG. 23...	1115	.9A	493	6.8	24.5	20	8	6.3	77	1.0	170

DATE	NON- CAR- BONATE HEP- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 01...	12	41	3.1	14	.6	2.7	126	0	4.7	26	--
DEC. 09...	13	41	2.5	15	.6	2.7	122	0	4.9	28	.2
FEB. 19...	10	30	2.7	11	.5	2.9	93	0	4.8	19	.2
APR. 07...	14	31	2.0	11	.5	3.1	87	0	6.4	20	.5
JUNE 09...	14	34	2.2	11	.5	3.0	98	0	4.9	20	.3
AUG. 23...	22	61	5.0	26	.9	3.1	184	0	5.6	56	.2

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 01...	9.5	163	17	3	.03	.00	.01	.38	.04	5.8
DEC. 09...	9.9	165	20	1	.03	.01	.00	.41	.03	5.2
FEB. 19...	3.4	120	27	5	.18	.00	.04	.58	.01	10
APR. 07...	3.8	121	20	1	.11	.00	.04	.58	.04	13
JUNE 09...	4.9	129	23	14	.07	.01	.02	.45	.02	7.8
AUG. 23...	20	268	10	5	.01	.00	.01	.26	.03	7.0

08067650 West Fork San Jacinto River below Lake Conroe near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DEC. 09...	1000	10	0	50	0	0	0	0
APR. 07...	0945	0	0	30	0	0	0	1
JUNE 09...	1015	20	1	80	0	0	0	0
AUG. 23...	1115	30	1	10	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DEC. 09...	10	0	0	20	.0	0	160	20
APR. 07...	0	0	0	0	.0	0	130	10
JUNE 09...	10	0	0	0	.1	0	80	30
AUG. 23...	40	0	10	10	.1	0	240	20

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
DEC. 09...	1000	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
APR. 07...	0945	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
JUNE 09...	1015	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
AUG. 23...	1115	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
DEC. 09...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
APR. 07...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
JUNE 09...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
AUG. 23...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

08067900 Lake Creek near Conroe, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 30°15'12", Long 95°34'43", Montgomery County, at bridge on county road and 8.3 miles (13.4 km) southwest of Conroe.

DRAINAGE AREA.--291 mi² (754 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
OCT. 15...	0915	8.2	304	7.0	22.5	90	28	28	2.5	24
NOV. 26...	1410	20	452	6.9	11.5	130	38	44	4.0	30
JAN. 13...	1200	33	537	6.9	10.5	150	52	51	4.5	35
MAR. 01...	1100	35	461	7.3	19.0	130	47	45	3.6	32
APR. 08...	0930	540	--	--	18.5	--	--	--	--	--
MAY 27...	1300	23	495	6.7	23.5	120	31	42	3.6	26
JULY 06...	1445	23	366	7.3	26.0	99	34	34	3.5	27
AUG. 19...	1325	5.5	287	6.9	26.0	70	19	24	2.5	22

DATE	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE-SILICUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 15...	1.2	2.7	64	0	4.3	53	.4	21	167
NOV. 26...	1.2	2.8	108	0	6.9	71	.2	21	233
JAN. 13...	1.3	3.1	115	0	9.7	84	.3	18	262
MAR. 01...	1.2	3.5	98	0	9.5	78	.2	18	238
APR. 08...	--	--	--	--	--	--	--	--	--
MAY 27...	1.0	2.8	108	0	6.7	62	.1	22	218
JULY 06...	1.2	2.5	80	0	6.0	66	.1	18	197
AUG. 19...	1.1	2.5	63	0	3.7	49	.1	23	158

CAL YR 1975	TOTAL	223412	MEAN	612	MAX	5060	MIN	31	AC-FT	443100
WTR YR 1976	TOTAL	118693	MEAN	324	MAX	7100	MIN	20	AC-FT	235400

SAN JACINTO RIVER BASIN

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.										
01...	0815	36	282	6.9	19.5	20	9	7.8	84	.9
NOV.										
05...	0845	494	224	6.9	19.5	40	20	8.5	91	1.8
DEC.										
09...	0830	60	355	6.8	12.0	40	7	9.3	86	1.3
JAN.										
06...	0815	132	362	6.6	8.5	30	15	11.0	93	.8
FEB.										
19...	0830	380	253	6.5	14.0	30	25	9.8	94	1.5
MAR.										
09...	0830	570	266	6.4	14.5	60	25	9.0	87	1.8
APR.										
07...	0830	890	286	6.8	17.0	30	20	8.8	91	1.3
MAY										
11...	0915	2200	250	6.5	21.5	60	30	8.1	91	1.9
JUNE										
09...	1100	2100	248	6.6	24.5	20	20	7.6	94	1.4
JULY										
06...	0900	66	279	6.4	25.0	100	60	6.6	81	1.9
AUG.										
23...	0945	24	294	6.4	25.0	20	20	7.1	88	1.4
SEPT.										
21...	0915	650	128	6.6	23.0	140	70	6.6	79	2.2
DATE	100 ML	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT.										
01...	27000	4700	240	76	11	25	1.3	23	1.2	2.7
NOV.										
05...	13000	1000	310	84	15	29	2.7	13	.6	3.0
DEC.										
09...	13000	370	84	100	32	36	3.3	28	1.2	2.7
JAN.										
06...	27000	370	170	90	32	31	3.0	27	1.2	2.9
FEB.										
19...	500	94	130	84	9	30	2.2	14	.7	2.9
MAR.										
09...	5200	350	1300	77	13	28	1.8	16	.8	2.7
APR.										
07...	6200	250	70	91	19	33	2.2	16	.7	3.1
MAY										
11...	2700	180	190	82	16	29	2.3	13	.6	3.1
JUNE										
09...	94000	1500	110	85	6	30	2.5	11	.5	2.9
JULY										
06...	4200	190	140	69	14	24	2.3	21	1.1	2.4
AUG.										
23...	2100	34	56	69	10	23	2.8	26	1.4	2.9
SEPT.										
21...	88000	6100	5200	30	6	9.9	1.3	10	.8	2.2
DATE	HICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILTY- RABLE RESIDUE (MG/L)	VOL. NON- FILTY- RABLE RESIDUE (MG/L)
OCT.										
01...	72	0	7.7	41	--	19	184	156	15	1
NOV.										
05...	83	0	5.2	27	.1	8.9	161	130	43	3
DEC.										
09...	88	0	6.9	54	.2	18	205	193	8	1
JAN.										
06...	70	0	9.2	58	.3	17	232	183	24	10
FEB.										
19...	92	0	5.2	25	.2	5.4	146	130	51	12
MAR.										
09...	79	0	6.7	33	.2	6.8	178	134	59	22
APR.										
07...	88	0	6.2	31	.5	5.7	140	141	46	7
MAY										
11...	80	0	5.2	28	.2	7.6	174	128	63	15
JUNE										
09...	97	0	5.7	22	.3	5.4	152	128	44	14
JULY										
06...	67	0	7.1	40	.0	16	164	146	104	19
AUG.										
23...	72	0	6.7	43	.1	23	184	163	76	56
SEPT.										
21...	29	0	6.3	18	.2	8.1	78	70	54	32

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY)
OCT. 01...	.12	.01	.01	.32	.35	11	54	5.2	21
NOV. 05...	.03	.00	.03	.63	.08	9.6	20	27	93
DEC. 09...	.18	.01	.00	.39	.18	4.0	29	4.7	35
JAN. 06...	.29	.01	.00	.41	.13	7.4	37	13	54
FEB. 19...	.17	.00	.03	.77	.03	6.6	27	28	94
MAR. 09...	.16	.02	.06	.57	.31	11	43	66	89
APR. 07...	.11	.01	.05	.86	.18	13	39	94	94
MAY 11...	.04	.01	.04	1.3	.10	9.0	107	636	38
JUNE 09...	.07	.01	.02	.44	.03	8.1	37	210	76
JULY 06...	.22	.03	--	--	.33	4.8	75	13	98
AUG. 23...	.47	.08	.14	.44	.46	7.3	30	1.9	97
SEP. 21...	.09	.01	.04	.96	.21	10	117	205	99

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
DEC. 09...	0830	10	1	1	50	0	0	<10	0	0
FEB. 19...	0830	10	1	1	40	0	0	<10	0	0
MAY 11...	0915	20	0	0	50	0	0	<10	0	0
AUG. 23...	0945	40	2	1	40	0	0	20	0	0

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
DEC. 09...	0	2	0	490	30	6	3	0	60
FEB. 19...	0	1	1	820	20	0	0	0	100
MAY 11...	0	2	2	1200	50	4	0	0	110
AUG. 23...	0	2	0	1100	10	6	0	10	200

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 09...	20	.0	.0	0	0	0	180	50	0
FEB. 19...	0	.0	.0	0	0	0	110	20	20
MAY 11...	0	.0	.0	0	0	0	130	70	0
AUG. 23...	0	.1	.1	0	0	0	140	60	10

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPH-THA-LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)
NOV 05...	0845	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 09...	0830	--	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 11...	0915	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 23...	0945	--	--	ND	--	ND	--	ND	--	ND	--	ND
SEP 21...	0915	.0	.00	.00	--	.0	--	.00	--	.00	--	.00

DATE	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	DI-AZINON IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 09...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 11...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 23...	--	ND	--	ND	--	ND	--	ND	--	ND	--
SEP 21...	--	.00	--	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL MALA-THION (UG/L)	MALA-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL METH-OXY-CHLOR (UG/L)	METHOX-YCHLOR IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL PARA-THION (UG/L)	METHYL PARA-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL METHYL TRI-THION (UG/L)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 09...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 11...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 23...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
SEP 21...	.00	--	.00	--	.00	--	--	--	.00	--	.00

DATE	METHYL TRI-THION IN BOT-TOM MA-TERIAL (UG/KG)	TOTAL PARA-THION (UG/L)	PARA-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ATRA-ZINE (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV 05...	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
MAR 09...	--	ND	--	ND	--	ND	--	ND	ND	ND	ND
MAY 11...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 23...	--	ND	--	ND	--	ND	--	ND	ND	ND	ND
SEP 21...	--	.00	--	0	--	.00	--	--	.00	.00	.00

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
NOV. 05	35	3.5	2.5	0.3	0.0	3500	Polyethylene strip
AUG. 23	48	67.2	28.0	4.17	1.06	9400	Polyethylene strip
SEP. 21	29	58.4	52.4	9.20	2.09	650	Polyethylene strip

OCT. 1, 1975	0815 HOURS			DEC. 9, 1975	0830 HOURS		
PHYTOPLANKTON 970 CELLS/ML				PHYTOPLANKTON 7,600 CELLS/ML			
_ORGANISM_NAME_		CELLS/ML	PER_CENT	_ORGANISM_NAME_		CELLS/ML	PER_CENT
CHLOROPHYTA				CHLOROPHYTA			
..CHLOROPHYCEAE				..CHLOROPHYCEAE			
...CHLOROCOCCALES				...CHLOROCOCCALES			
...OCCYSTACEAE				...SCENEDESMACEAE			
...SELENASTRUM		67	7	...CRUCIGENTIA			0
...SCENEDESMACEAE				...SCENEDESMUS		690	9
...SCENEDESMUS		130	14	CHRYSOPHYTA			
CHRYSOPHYTA				..BACILLARIOPHYCEAE			
..BACILLARIOPHYCEAE				..CENTRALES			
..CENTRALES				...COSCINODISCACEAE			
...COSCINODISCACEAE				...CYCLOTELLA		520	7
...CYCLOTELLA		100	10	...MELOSIRA		1,900	25
...MELOSIRA			0	..PENNALES			
..PENNALES				...CYMBELLACEAE			
...FRAGILARIACEAE				...AMPHORA			0
...SYNEDRA		33	3	...EUNOTIACEAE			
...NAVICULACEAE				...EUNOTIA		170	2
...NAVICULA		330	34	...FRAGILARIACEAE			
...NITZSCHACEAE				...SYNEDRA			0
...NITZSCHIA		300	31	...GOMPHONEMACEAE			
PYRRHOPHYTA				...GOMPHONEMA		170	2
..DINOPHYCEAE				...NAVICULACEAE			
...PERIDINIALES				...DIPLONEIS		170	2
...PERIDINIAEAE				...NAVICULA		1,500	20
...PERIDINIUM			0	...PINNULARIA		170	2
				...STAURONEIS		170	2
				...NITZSCHACEAE			
				...NITZSCHIA		1,700	23
				...SURIRELLACEAE			
				...SURIRELLA		170	2
				EUGLENOPHYTA			
				..EUGLENOPHYCEAE			
				...EUGLENALES			
				...EUGLENACEAE			
				...PHACUS			0
				PYRRHOPHYTA			
				..DINOPHYCEAE			
				...PERIDINIALES			
				...GLENODINIACEAE			
				...GLENODINIUM		170	2

NOV. 5, 1975	0845 HOURS			JAN. 6, 1976	0815 HOURS		
PHYTOPLANKTON 110,000 CELLS/ML				PHYTOPLANKTON 280 CELLS/ML			
_ORGANISM_NAME_		CELLS/ML	PER_CENT	_ORGANISM_NAME_		CELLS/ML	PER_CENT
CHLOROPHYTA				CHLOROPHYTA			
..CHLOROPHYCEAE				..CHLOROPHYCEAE			
...CHLOROCOCCALES				...CHLOROCOCCALES			
...OCCYSTACEAE				...SCENEDESMACEAE			
...ANKISTRODESMUS			0	...ACTINASTRUM			
...OCCYSTIS		1,600	1	...SCENEDESMUS		31	11
CHRYSOPHYTA				CHRYSOPHYTA			
..BACILLARIOPHYCEAE				..BACILLARIOPHYCEAE			
..CENTRALES				..CENTRALES			
...COSCINODISCACEAE				...COSCINODISCACEAE			
...CYCLOTELLA			0	...CYCLOTELLA		46	17
...MELOSIRA			0	...MELOSIRA		62	22
..PENNALES				..PENNALES			
...FRAGILARIACEAE				...NAVICULACEAE			
...FRAGILARIA			0	...NAVICULA			0
CYANOPHYTA				...NITZSCHACEAE			
..MYXOPHYCEAE				...HANTZSCHIA			0
...OSCILLATORIALES				...NITZSCHIA		140	50
...OSCILLATORIAEAE				CYANOPHYTA			
...OSCILLATORIA		110,000	98	..MYXOPHYCEAE			
				...CHROOCOCCALES			
				...CHROOCOCCACEAE			
				...GOMPHOSPHAERIA			0
				EUGLENOPHYTA			
				..EUGLENOPHYCEAE			
				...EUGLENALES			
				...EUGLENACEAE			
				...TRACHELOMONAS			0

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

FEB. 19, 1976 0830 HOURS

PHYTOPLANKTON 4,100 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	210	5
....SCENEDESMACEAE		
....CRUCIGENIA		0
....SCENEDESMUS	570	14
....TETRASTRUM	71	2
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....MELOSIRA	2,300	55
..PENNALES		
...ACHNANTHACEAE		
....COCCONEIS	71	2
...CYMBELLACEAE		
....CYMBELLA	210	5
...EUNOTIACEAE		
....EUNOTIA		0
...FRAGILARIACEAE		
....SYNEDRA	210	5
...NAVICULACEAE		
....NAVICULA	210	5
...NITZSCHACEAE		
....NITZSCHIA	280	7

MAR. 9, 1976 0830 HOURS

PHYTOPLANKTON 4,600 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	120	3
....SCENEDESMACEAE		
....SCENEDESMUS		0
...ZYGNEMATALES		
....DESMIDIACEAE		0
....STAUSTRUM		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....MELOSIRA	360	8
..PENNALES		
...ACHNANTHACEAE		
....COCCONEIS		0
...CYMBELLACEAE		
....CYMBELLA	40	1
...FRAGILARIACEAE		
....FRAGILARIA		0
....SYNEDRA	40	1
...NAVICULACEAE		
....NAVICULA	40	1
....PINNULARIA	40	1
...NITZSCHACEAE		
....HANTZSCHIA		0
....NITZSCHIA	160	4
...SURIPELLACEAE		
....SURIPELLA	40	1
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
....NOSTOCACEAE		
....APHANIZOMENON		
...PYRRHOPHYTA		
..DINOPHYCEAE		
...PERIDINIALES		
....CERATACEAE		
....CERATIUM		0

APR. 7, 1976 0830 HOURS

PHYTOPLANKTON 5,800 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...COELASTRACEAE		
....COELASTRUM		0
...HYDRODICTYACEAE		
....PEDIASTRUM	320	6
...OCCYSTACEAE		
....ANKISTRODESMUS		0
....DICTYOSPHAERIUM		0
....KIRCHNERIELLA	360	6
...OCCYSTIS		0
....TETRAEDRON	40	1
...SCENEDESMACEAE		
....CRUCIGENIA		0
....SCENEDESMUS	280	5
....TETRASTRUM	160	3
...ULOTRICHACEAE		
....ULOTRICHACEAE		
....BINUCLEARIA		0
...VOLVOCALES		
..CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	40	1
...VOLVOCAEAE		
....PANDORINA		0
...ZYGNEMATALES		
....DESMIDIACEAE		
....COSMARIUM		0
....STAUSTRUM	40	1
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...BIDDULPHACEAE		
....BIDDULPHIA	40	1
...COSCINODISCACEAE		
....CYCLOTELLA	40	1
....MELOSIRA	360	6
..PENNALES		
...ACHNANTHACEAE		
....ACHNANTHES		0
....COCCONEIS	81	1
...CYMBELLACEAE		
....AMPHOR		0
....CYMBELLA	81	1
...EUNOTIACEAE		
....EUNOTIA	40	1
...FRAGILARIACEAE		
....ASTERIONELLA		0
....SYNEDRA	40	1
...GOMPHONEMACEAE		
....GOMPHONEMA		0
...NAVICULACEAE		
....GYROSIGMA		0
....NAVICULA	280	5
....NEIDIUM	40	1
....PINNULARIA	40	1
...NITZSCHACEAE		
....HANTZSCHIA		0
....NITZSCHIA	530	9
...SURIPELLACEAE		
....CYMATOPLEURA		0
....SURIPELLA		0
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
....NOSTOCACEAE		
....ANABAENA	1,100	18
....APHANIZOMENON	1,100	19
...OSCILLATORIAEAE		
....OSCILLATORIA	690	12
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDAE		
....CRYPTOMONODACEAE		
....CRYPTOMONAS	40	1
...EUGLENOPHYCEAE		
....EUGLENACEAE		
....EUGLENA		0
....PHACUS		0
....TRACHELOMONAS	40	1
PYRRHOPHYTA		
..DINOPHYCEAE		
...PERIDINIALES		
....GLENODINIACEAE		
....GLENODINIUM	40	1

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

MAY 11, 1976 0915 HOURS

JUNE 9, 1976 1100 HOURS

PHYTOPLANKTON 3,300 CELLS/ML

PHYTOPLANKTON 8,600 CELLS/ML

ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	420	12
....DICTYOSPHAERIUM	74	2
....TETRAEDRON	49	1
...SCENEDESMACEAE		
....CRUCIGENIA	98	3
....SCENEDESMUS	440	13
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	25	1
...ZYGEMATALES		
...DESMIDIACEAE		
....COSMARIUM	25	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTELLA	98	3
....MELOSIRA		0
...PENNALES		
...ACHNANTHACEAE		
....ACHNANTHES	25	1
...FRAGILARIACEAE		
....FRAGILARIA	49	1
...NAVICULACEAE		
....DIPLOEIS	25	1
....NAVICULA	120	4
...NITZSCHACEAE		
....HANTZSCHIA		0
....NITZSCHIA	250	7
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	340	10
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	1,100	34
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDALES		
...CRYPTOMONODACEAE		
....CRYPTOMONAS	49	1
...EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
....TRACHELOMONAS	98	3
PYRRHOPHYTA		
..DINOPHYCEAE		
...PERIDINIALES		
...PERIDINIAEAE		
....PERIDINIUM	25	1

ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....CHODATELLA		0
....KIRCHNERIELLA		0
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS		0
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNALES		
...NITZSCHACEAE		
....NITZSCHIA	250	3
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	1,300	15
...OSCILLATORIAEAE		
....OSCILLATORIA	7,000	81

JULY 6, 1976 0900 HOURS

PHYTOPLANKTON 1,800 CELLS/ML

ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	84	5
...SCENEDESMACEAE		
....CRUCIGENIA	170	10
....SCENEDESMUS	170	10
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNALES		
...NAVICULACEAE		
....NAVICULA	550	31
...PINNULARIA	42	2
...NITZSCHACEAE		
....NITZSCHIA	420	24
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	340	19

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

AUG. 23, 1976 0945 HOURS

PHYTOPLANKTON 6,400 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES	380	6
...SCENESMACEAE		
...CRUCIGENIA		
...TETRASPOALES		
...PALMELLACEAE		
...GLOEOPYSTIS	220	3
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNIALES		
...CYMBELLACEAE		
...AMPHORA		0
...FRAGILARIACEAE		
...ASTERIONELLA	64	1
...SYNEDRA	64	1
...GOMPHONEMACEAE		
...GOMPHONEMA	64	1
...NAVICULACEAE		
...DIPLOPIS		0
...NAVICULA	900	14
...PINNULARIA	190	3
...NITZSCHIA		
...Hantzschia	96	1
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
...NOSTOCACEAE		
...ANABAENA	2,600	40
...OSCILLATORIA		
...OSCILLATORIA	1,800	27
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDAE		
...CRYPTOMONODACEAE		
...CRYPTOMONAS	96	1

SEP. 21, 1976 0915 HOURS

PHYTOPLANKTON 24,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESMUS	230	1
...KIRCHNERIELLA	460	2
...TETRAEDRON	230	1
...SCENESMACEAE		
...SCENESMUS	910	4
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS	230	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	230	1
...MELOSIRA	460	2
..PENNIALES		
...GOMPHONEMACEAE		
...GOMPHONEMA	230	1
...NITZSCHIA		
...NITZSCHIA	690	3
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
...ANACYSTIS	460	2
...OSCILLATORIALES		
...OSCILLATORIA		
...OSCILLATORIA	19,000	83

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	8962	214	110	2770	25	613	5	129	66
NOV. 1975.....	3593	266	140	1370	33	310	7	68	82
DEC. 1975.....	9738	312	170	4390	39	1030	8	214	95
JAN. 1976.....	5030	346	180	2500	44	594	9	120	110
FEB. 1976.....	5450	339	180	2650	43	631	9	129	100
MAR. 1976.....	3805	373	200	2030	48	489	9	98	110
APR. 1976.....	7690	315	170	3430	40	821	8	167	96
MAY 1976.....	22445	252	130	8070	31	1850	6	386	77
JUNE 1976.....	38678	222	120	12200	26	2740	6	583	68
JULY 1976.....	6597	272	150	2600	33	595	7	122	83
AUG. 1976.....	970	279	150	384	34	89	7	18	85
SEPT 1976.....	5656	170	90	1370	19	290	4	67	52
TOTAL	118614	**	**	43800	**	10100	**	2100	**
WTD. AVG.	324.97	258	140	**	31	**	6.6	**	79

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	235	342	357	314	353	451	300	179	342	306	210
2	277	240	317	354	320	357	455	393	217	351	307	121
3	279	184	319	350	327	361	457	410	205	355	306	164
4	265	218	304	349	336	353	400	421	192	358	308	191
5	262	228	345	349	325	349	325	406	210	322	306	189
6	274	260	352	351	249	348	269	412	235	282	307	190
7	262	307	361	350	225	325	273	360	251	289	307	228
8	266	333	358	350	290	240	285	242	250	230	307	340
9	261	335	349	326	362	266	270	256	251	220	304	268
10	264	337	345	324	522	385	290	254	253	240	301	252
11	261	324	341	239	526	655	325	240	254	210	300	257
12	259	326	343	342	456	656	349	234	269	225	294	262
13	275	296	340	344	358	567	355	220	278	239	293	260
14	259	303	338	351	360	450	346	230	287	290	294	263
15	248	308	334	354	345	283	345	250	300	339	293	188
16	259	313	310	358	357	386	347	253	290	300	288	240
17	265	315	323	360	355	392	339	250	255	240	283	253
18	272	309	352	365	260	398	340	249	260	275	282	260
19	260	307	355	373	245	400	340	261	270	294	288	250
20	283	308	370	344	357	396	364	275	280	275	287	110
21	269	302	385	345	325	397	359	284	285	266	289	125
22	262	296	395	379	256	395	385	295	296	275	290	153
23	267	290	416	412	350	391	421	303	327	281	292	170
24	271	306	375	414	536	385	330	305	335	290	299	181
25	209	356	295	443	380	375	350	309	341	295	250	199
26	200	365	260	435	377	366	409	312	344	307	193	197
27	206	330	358	422	357	385	415	316	343	294	215	190
28	202	345	320	314	370	395	420	314	342	288	260	175
29	212	348	295	342	357	400	390	320	338	297	220	160
30	224	346	320	314	---	430	259	330	334	303	254	180
31	233	---	356	313	---	484	---	170	---	307	250	---
MONTH	254	302	341	356	352	398	355	296	276	288	283	208

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.0	---	15.0	10.0	14.0	22.0	21.0	23.0	23.0	29.0	31.0	26.0
2	26.0	---	15.0	---	15.0	24.0	22.0	24.0	24.0	27.0	32.0	24.0
3	23.0	---	16.0	---	16.0	23.0	19.0	25.0	24.0	---	---	25.0
4	23.0	---	18.0	9.0	18.0	23.0	20.0	25.0	25.0	---	32.0	28.0
5	24.0	21.0	18.0	8.0	16.0	20.0	21.0	27.0	25.0	27.0	30.0	27.0
6	23.0	22.0	19.0	8.0	13.0	16.0	20.0	26.0	25.0	28.0	31.0	25.0
7	24.0	22.0	16.0	8.0	11.0	16.0	20.0	23.0	25.0	27.0	31.0	25.0
8	25.0	23.0	16.0	9.0	14.0	17.0	21.0	21.0	26.0	27.0	30.0	26.0
9	26.0	24.0	16.0	9.0	17.0	18.0	21.0	20.0	26.0	27.0	31.0	26.0
10	25.0	22.0	16.0	12.0	18.0	19.0	22.0	22.0	26.0	27.0	31.0	28.0
11	26.0	21.0	17.0	16.0	19.0	19.0	22.0	23.0	26.0	28.0	32.0	---
12	27.0	19.0	19.0	15.0	18.0	19.0	23.0	23.0	27.0	27.0	32.0	27.0
13	26.0	16.0	17.0	18.0	18.0	15.0	23.0	---	27.0	28.0	31.0	23.0
14	28.0	10.0	17.0	16.0	20.0	16.0	22.0	23.0	28.0	27.0	30.0	24.0
15	25.0	15.0	16.0	16.0	21.0	17.0	22.0	24.0	28.0	27.0	28.0	24.0
16	26.0	18.0	14.0	18.0	20.0	19.0	21.0	22.0	29.0	---	26.0	25.0
17	27.0	19.0	14.0	16.0	18.0	18.0	21.0	23.0	---	---	27.0	25.0
18	22.0	19.0	13.0	16.0	17.0	19.0	22.0	24.0	---	27.0	28.0	26.0
19	23.0	21.0	13.0	15.0	17.0	20.0	24.0	24.0	---	28.0	28.0	---
20	22.0	18.0	11.0	14.0	18.0	20.0	24.0	25.0	---	28.0	28.0	24.0
21	24.0	15.0	12.0	13.0	16.0	21.0	25.0	25.0	28.0	29.0	28.0	24.0
22	23.0	12.0	10.0	14.0	15.0	22.0	24.0	25.0	28.0	28.0	28.0	22.0
23	25.0	12.0	10.0	14.0	16.0	22.0	23.0	26.0	29.0	28.0	28.0	23.0
24	23.0	14.0	10.0	15.0	16.0	19.0	23.0	26.0	30.0	---	27.0	---
25	21.0	15.0	10.0	18.0	17.0	22.0	25.0	27.0	30.0	---	24.0	27.0
26	---	---	11.0	15.0	19.0	25.0	25.0	27.0	30.0	30.0	25.0	26.0
27	20.0	---	10.0	12.0	19.0	26.0	25.0	25.0	31.0	31.0	---	24.0
28	20.0	18.0	10.0	12.0	19.0	25.0	23.0	---	31.0	31.0	---	25.0
29	21.0	18.0	10.0	12.0	19.0	24.0	21.0	---	31.0	30.0	---	23.0
30	23.0	16.0	10.0	12.0	---	22.0	20.0	24.0	31.0	31.0	28.0	23.0
31	---	---	11.0	13.0	---	21.0	---	23.0	---	30.0	27.0	---
MONTH	24.0	18.0	14.0	13.0	17.0	20.5	22.0	24.0	27.5	28.5	29.0	25.0

08068400 Panther Branch near Conroe, Tex.

LOCATION.--Lat 30°11'34", long 95°29'09", Montgomery County, on left bank 100 ft (30 m) downstream from pipeline right-of-way, 400 ft (122 m) downstream from mouth of Bear Branch, 5.6 miles (9.0 km) upstream from Panther Branch near Spring (station 08068450), and 8 miles (13 km) southwest of Conroe.

DRAINAGE AREA.--25.9 mi² (67.1 km²).

PERIOD OF RECORD.--Discharge: July 1974 to September 1976 (discontinued).

Water quality: Chemical and biochemical analyses: March to September 1975. Pesticide analyses: August to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 125.52 ft (38.258 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 364 ft³/s (10.3 m³/s) June 1 (gage height, 8.74 ft or 2.664 m); no flow for many days.

Period of record: Maximum discharge, 1,350 ft³/s (38.2 m³/s) Oct. 31, 1974 (gage height, 10.01 ft or 3.051 m); no flow for many days each year.

REMARKS.--Discharge records good. There is no known diversion or regulation above station. Rain gages located in or near basin were discontinued on various dates in 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.09	.27	4.4	.27	.13	.20	1.9	306	.07		10
2	.05	.58	.12	2.8	.22	.11	.15	.71	156	.03		7.5
3	.02	35	.09	1.7	.19	.11	.11	.33	32	.01		1.3
4	.01	9.8	.09	1.1	.19	.10	.11	.18	11	.03		.14
5	0	2.2	.09	.75	.19	.09	.23	.13	4.5	.11		.94
6	0	.80	.09	.61	.17	.11	2.1	.10	2.3	.16		.06
7	0	.40	.09	.81	.14	1.2	1.1	78	1.3	.19		.01
8	0	.25	.09	.69	.13	14	.63	62	.76	.13		0
9	0	.17	.09	.59	.13	13	.35	8.7	.44	.06		0
10	0	.10	.09	.47	.13	3.6	.20	3.4	.28	.54		0
11	0	.07	.07	.48	.13	1.5	.15	2.1	.16	4.5		0
12	0	.05	.07	.54	.13	1.1	.11	1.5	.11	2.1		0
13	0	.04	.07	.54	.13	.66	.11	7.7	.08	.88		0
14	0	.04	.07	.46	.13	.54	.10	8.5	.06	.78		0
15	0	.04	.07	.33	.13	.54	.09	2.9	.05	.78		0
16	0	.04	.19	.30	.13	.58	.14	1.2	1.9	9.3		0
17	0	.04	.51	.23	.13	.47	.19	.48	.59	49		0
18	0	.04	.21	.19	.14	.35	.19	.31	.19	12		0
19	0	.06	.13	.19	.11	.32	.19	.20	.25	4.3		.50
20	0	.16	.11	.29	.11	.31	8.5	.14	1.0	1.6		.40
21	0	.08	.11	.48	1.1	.23	17	.11	.30	.73		50
22	0	.05	.09	.48	1.8	.17	3.4	.11	.19	.39		25
23	0	.05	.09	.48	.67	.16	1.1	.10	1.0	.20		15
24	0	.05	25	.48	.33	.20	.52	.07	.08	.13		7.0
25	5.2	.05	76	1.1	.23	.52	.45	.06	.23	.10		4.0
26	18	.09	14	1.9	.22	.42	.45	.10	.62	.06		2.5
27	5.5	.11	4.5	1.1	.16	.27	.26	.12	1.0	.03		7.0
28	2.0	.11	4.6	.55	.16	.20	.15	.06	1.7	.01		6.0
29	.72	.11	38	.39	.15	.40	2.7	.04	.61	.01		3.0
30	.31	.33	28	.33	---	.48	4.1	.03	.32	0		1.5
31	.17	---	8.6	.30	---	.33	---	49	---	0		---
TOTAL	32.10	51.00	201.60	25.06	7.85	42.20	45.08	230.28	525.02	88.23	0	181.45
MEAN	1.04	1.70	6.50	.81	.27	1.36	1.50	7.43	17.5	2.85	0	6.05
MAX	18	35	76	4.4	1.8	14	17	78	306	49	0	50
MIN	0	.04	.07	.19	.11	.09	.09	.03	.05	0	0	0
CFSM	.04	.07	.25	.03	.01	.05	.06	.29	.68	.11	0	.23
IN.	.05	.07	.29	.04	.01	.06	.06	.33	.75	.13	0	.26
AC-FT	64	101	400	50	16	84	89	457	1040	175	0	360
(††)	3.62	2.54	3.74	.91	.70	2.02	-	-	-	-	-	-

CAL YR 1975 TOTAL 6137.91 MEAN 16.8 MAX 731 MIN 0 CFSM .65 IN 8.82 AC-FT 12170 †† 43.46
WTR YR 1976 TOTAL 1429.87 MEAN 3.91 MAX 306 MIN 0 CFSM .15 IN 2.05 AC-FT 2840 †† -

†† Weighted-mean rainfall, in inches, based on three rain gages.

08068440 Lake Harrison at drop inlet at Woodlands, Tex.

LOCATION.--Lat 30°08'24", long 95°28'33", Montgomery County, at end of walkway to drop-inlet structure on dam of Lake A at Woodlands.

DRAINAGE AREA.--0.71 mi² (1.84 km²).

PERIOD OF RECORD.--October 1974 to September 1976 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) above mean sea level (sea level datum by Mitchell Development Co. of the Southwest).

EXTREMES.--Current year: Maximum discharge, 31 ft³/s (0.88 m³/s) May 7 (gage height, 22.82 ft or 6.956 m); no flow for many days.
Period of record: Maximum discharge, 114 ft³/s (3.23 m³/s) Apr. 8, 1975 (gage height, 23.66 ft or 7.212 m); no flow for many days each year.

REMARKS.--Records fair except those for period of missing record, which are poor. Sewage effluent is discharged into Lake A from nearby treatment plant. Water from lake is used to irrigate an adjacent golf course. Rice University operated a rain gage in the basin for period March 1975 to April 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.10	0	0	0	.15	12	0	0	1.5
2	0	.61	0	.08	0	0	0	.05	3.6	0	0	1.0
3	0	6.7	0	.03	0	0	0	.02	.72	0	0	.50
4	0	1.0	0	.02	0	0	1.4	0	.18	0	0	.32
5	0	.15	0	0	0	0	3.9	0	.02	4.5	0	1.5
6	0	.08	0	0	0	0	.90	0	0	3.2	0	.25
7	0	.04	0	0	0	0	.20	7.6	0	.72	0	.11
8	0	.03	0	0	0	.98	.05	5.1	0	.29	0	0
9	0	.03	0	0	0	1.3	.02	1.1	0	.24	0	0
10	0	.02	0	0	0	.28	0	.26	0	1.9	0	0
11	0	0	0	0	0	.07	0	.13	0	1.1	0	0
12	0	0	0	0	0	.07	0	.06	0	.38	0	0
13	0	0	0	0	0	.09	0	.17	0	1.7	0	0
14	0	0	0	0	.01	.09	0	.17	0	4.5	0	0
15	0	0	0	0	.06	.09	0	.07	0	1.6	0	0
16	0	0	0	0	.03	.06	0	0	0	5.1	.01	0
17	0	0	.03	0	.02	.03	0	0	0	5.1	.02	0
18	0	0	.02	0	0	.01	0	0	0	1.6	.01	0
19	0	0	.02	0	0	.01	0	0	0	.58	0	.10
20	0	0	0	0	0	0	.10	0	0	.22	0	1.5
21	0	0	0	0	0	0	1.0	0	0	.01	0	2.0
22	0	0	0	0	0	0	.30	0	0	0	0	1.0
23	0	0	0	0	0	0	.10	0	0	0	0	.50
24	0	0	5.7	0	0	0	.05	0	0	0	0	.20
25	5.4	0	4.2	0	0	0	.02	0	0	0	0	.10
26	2.7	0	1.0	0	0	0	.01	0	0	0	0	.05
27	.28	0	.34	0	0	0	0	0	0	0	0	.20
28	.10	0	.61	0	0	0	0	0	0	0	0	.15
29	.07	0	1.5	0	0	0	.10	0	0	0	0	.10
30	.03	0	.53	0	---	0	.20	0	0	0	0	.05
31	.02	---	.17	0	---	0	---	.04	---	0	0	---
TOTAL	8.60	8.66	14.12	.23	.12	3.08	8.35	14.92	16.52	32.74	.04	11.13
MEAN	.28	.29	.46	.007	.004	.099	.28	.48	.55	1.06	.001	.37
MAX	5.4	6.7	5.7	.10	.06	1.3	3.9	7.6	12	5.1	.02	2.0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	17	17	28	.5	.2	6.1	17	30	33	65	.08	22
(††)	4.34	3.68	3.62	.77	.45	3.22	3.86	-	-	-	-	-

CAL YR 1975 TOTAL 279.15 MEAN .76 MAX 37 MIN 0 AC-FT 554 †† -
WTR YR 1976 TOTAL 118.51 MEAN .32 MAX 12 MIN 0 AC-FT 235 †† -

†† Rainfall, in inches, at rain gage 0.25 mile northeast of gaging station.

08068450 Panther Branch near Spring, Tex.

LOCATION.--Lat 30°08'04", long 95°28'38", Montgomery County, on left bank 300 ft (91 m) upstream from Sawdust Road, 3.0 miles (4.8 km) upstream from Spring Creek, and 5.1 miles (8.2 km) northwest of Spring.

DRAINAGE AREA.--34.5 mi² (89.4 km²).

PERIOD OF RECORD.--Discharge: April 1972 to September 1976 (discontinued).

Water quality: Chemical, biochemical, and pesticide analyses: May 1972 to September 1975. Sediment records: October 1973 to August 1976 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 98.69 ft (30.081 m) above mean sea level.

EXTREMES.--Discharge: Current year: Maximum discharge, 468 ft³/s (13.3 m³/s) May 7 (gage height, 10.24 ft or 3.121 m); no flow for many days.

Period of record: Maximum discharge, 5,550 ft³/s (157 m³/s) June 13, 1973 (gage height, 15.94 ft or 4.859 m); no flow for many days.

Water quality: Current year: Maximum daily sediment concentrations, 230 mg/l July 5; no flow on many days. Maximum daily sediment loads, 222 tons May 7; minimum daily, 0 tons on many days.

Period of record: Maximum daily sediment concentrations, 448 mg/l Apr. 8, 1975; no flow for several days. Maximum daily sediment loads, 485 tons Apr. 8, 1975; minimum daily, 0 tons on many days.

REMARKS.--Discharge records good. Rain gage located 500 ft (150 m) east of gage was discontinued in April 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.34	.71	8.5	.47	.25	.33	3.7	259	.36	.07	56
2	0	3.1	.43	5.1	.43	.20	.33	2.1	315	.42	.05	60
3	0	49	.37	3.0	.37	.20	.30	1.0	111	.31	.03	10
4	0	32	.30	2.1	.33	.18	10	.60	24	9.7	.01	3.2
5	0	3.0	.29	1.5	.91	.14	14	.40	9.6	46	.01	9.2
6	0	3.1	1.4	1.1	.37	1.2	2.9	.27	4.9	16	.01	2.8
7	0	1.5	.79	1.1	.29	4.8	2.2	148	2.8	3.3	.01	.79
8	0	1.0	.37	.84	.29	17	2.3	217	1.8	1.4	.01	.37
9	0	.71	.23	.79	.29	22	1.3	39	1.1	1.1	.01	.25
10	0	.46	.13	.79	.29	10	.73	9.8	.76	8.3	.01	.20
11	0	.34	.12	.79	.29	4.2	.53	5.2	.50	7.5	.01	.15
12	0	.19	.12	.75	.29	2.5	.38	3.2	.38	5.1	.01	.12
13	0	.12	.12	.70	.29	1.8	.32	7.3	.30	9.0	.01	.10
14	0	.08	.12	.69	.29	1.3	.29	9.0	.22	29	0	.09
15	0	.07	.12	.57	.29	1.2	.25	7.2	.20	8.5	0	.08
16	0	.07	1.4	.43	.29	1.1	.20	3.3	3.7	25	0	.07
17	0	.07	1.5	.39	.29	.81	.20	1.7	3.9	65	0	.06
18	0	.07	.76	.37	.29	.70	.20	.93	1.2	41	.01	.06
19	0	.08	.62	.37	.23	.70	.20	.63	1.3	12	.36	1.0
20	0	.12	.43	.34	.20	.78	4.7	.47	1.7	5.2	.82	60
21	0	.06	.59	.33	1.5	.45	12	.42	.72	2.6	.62	70
22	0	.04	.79	.37	.54	.41	11	.35	.61	1.5	.24	40
23	0	.03	.30	.47	1.3	.34	3.6	.33	2.7	.92	.04	20
24	0	.03	34	.47	.94	.34	1.6	.29	1.1	.83	.01	10
25	22	.03	74	2.6	.63	.47	1.6	.25	.40	.73	.01	5.0
26	24	.08	49	1.8	.45	.50	.76	.54	.68	.38	0	3.0
27	14	.05	12	1.6	.39	.54	.56	.36	4.0	.29	0	10
28	5.5	.06	8.9	1.4	.34	.43	.46	.21	1.4	.29	0	8.0
29	2.2	.08	24	.93	.31	.42	4.4	.20	.96	.25	0	4.0
30	.89	2.1	42	.71	---	.37	3.3	.18	.69	.24	0	2.0
31	.57	---	20	.57	---	.31	---	11	---	.15	2.9	---
TOTAL	69.16	102.98	275.91	41.47	13.19	75.64	80.94	474.93	756.62	302.37	5.26	376.54
MEAN	2.23	3.43	8.90	1.34	.45	2.44	2.70	15.3	25.2	9.75	.17	12.6
MAX	24	49	74	8.5	1.5	22	14	217	315	65	2.9	70
MIN	0	.03	.12	.33	.20	.14	.20	.18	.20	.15	0	.06
CFSM	.06	.10	.26	.04	.01	.07	.08	.44	.73	.28	.004	.37
IN.	.07	.11	.30	.04	.01	.08	.09	.51	.82	.33	.006	.41
AC-FT	137	204	547	82	26	150	161	942	1500	600	10	747
(††)	3.58	2.64	3.58	.89	.59	2.17	-	-	-	-	-	-

CAL YR 1975 TOTAL 9042.37 MEAN 24.8 MAX 801 MIN 0 CFSM .72 IN 9.75 AC-FT 17940 †† 43.40
WTR YR 1976 TOTAL 2575.01 MEAN 7.04 MAX 315 MIN 0 CFSM .20 IN 2.78 AC-FT 5110 †† -

PEAK DISCHARGE (BASE, 800 FT³/S).--No peak above base.

†† Weighted-mean rainfall, in inches, based on four rain gages.

08068450 Panther Branch near Spring, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	---	---	.34	20	.02	.71	45	.09
2	0	---	---	3.1	50	.42	.43	43	.05
3	0	---	---	49	220	.29	.37	20	.02
4	0	---	---	32	61	5.3	.30	20	.02
5	0	---	---	8.0	57	1.2	.29	20	.02
6	0	---	---	3.1	35	.29	1.4	40	.15
7	0	---	---	1.5	30	.12	.79	30	.06
8	0	---	---	1.0	30	.08	.37	20	.02
9	0	---	---	.71	30	.06	.23	20	.01
10	0	---	---	.46	30	.04	.13	20	.01
11	0	---	---	.34	30	.03	.12	15	0
12	0	---	---	.19	30	.02	.12	10	0
13	0	---	---	.12	25	.01	.12	10	0
14	0	---	---	.08	25	.01	.12	10	0
15	0	---	---	.07	20	0	.12	10	0
16	0	---	---	.07	15	0	1.4	50	.19
17	0	---	---	.07	15	0	1.5	25	.10
18	0	---	---	.07	15	0	.76	35	.07
19	0	---	---	.08	12	0	.62	30	.05
20	0	---	---	.12	12	0	.43	25	.03
21	0	---	---	.06	10	0	.59	35	.06
22	0	---	---	.04	10	0	.79	30	.06
23	0	---	---	.03	10	0	.30	20	.02
24	0	---	---	.03	10	0	34	145	13
25	22	135	8.0	.03	10	0	74	70	14
26	24	110	7.1	.08	15	0	49	50	6.6
27	14	70	2.6	.05	15	0	12	25	.81
28	5.5	50	.74	.06	12	0	8.9	40	.96
29	2.2	45	.27	.08	12	0	24	60	3.9
30	.89	35	.08	2.1	50	.28	42	58	6.6
31	.57	25	.04	---	---	---	20	32	1.7
TOTAL	69.16	---	18.83	102.98	---	36.88	275.91	---	48.60
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.5	40	.92	.47	20	.03	.25	18	.01
2	5.1	35	.48	.43	20	.02	.20	20	.01
3	3.0	30	.24	.37	18	.02	.20	15	.01
4	2.1	20	.11	.33	20	.02	.18	20	.01
5	1.5	20	.08	.91	25	.06	.14	20	.01
6	1.1	20	.06	.37	20	.02	1.2	50	.16
7	1.1	20	.06	.29	20	.02	4.8	50	.65
8	.84	20	.05	.29	20	.02	17	121	7.8
9	.79	20	.04	.29	20	.02	22	170	9.8
10	.79	20	.04	.29	20	.02	10	60	1.6
11	.79	20	.04	.29	20	.02	4.2	40	.45
12	.75	20	.04	.29	20	.02	2.5	35	.24
13	.70	20	.04	.29	20	.02	1.8	30	.15
14	.69	20	.04	.29	20	.02	1.3	25	.09
15	.57	20	.03	.29	20	.02	1.2	25	.08
16	.43	20	.02	.29	20	.02	1.1	25	.07
17	.39	25	.03	.29	20	.02	.81	20	.04
18	.37	25	.02	.29	20	.02	.70	20	.04
19	.37	20	.02	.23	20	.01	.70	20	.04
20	.34	20	.02	.20	20	.01	.78	20	.04
21	.33	20	.02	1.5	50	.20	.45	20	.02
22	.37	20	.02	.54	25	.04	.41	20	.02
23	.47	20	.03	1.3	40	.14	.34	20	.02
24	.47	20	.03	.94	35	.09	.34	20	.02
25	2.6	50	.35	.63	30	.05	.47	20	.03
26	1.8	40	.19	.45	25	.03	.50	20	.03
27	1.6	35	.15	.39	20	.02	.54	20	.03
28	1.4	30	.11	.34	20	.02	.43	20	.02
29	.93	25	.06	.31	20	.02	.42	20	.02
30	.71	20	.04	---	---	---	.37	20	.02
31	.57	20	.03	---	---	---	.31	20	.02
TOTAL	41.47	---	3.41	13.19	---	1.04	75.64	---	21.55

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.33	20	.02	3.7	30	.30	259	137	79
2	.33	20	.02	2.1	25	.14	315	32	27
3	.30	20	.02	1.0	25	.07	111	30	9.0
4	10	50	1.4	.60	20	.03	24	26	1.7
5	14	100	3.8	.40	15	.02	9.6	28	.73
6	2.9	40	.31	.27	15	.01	4.9	30	.40
7	2.2	40	.24	148	228	222	2.8	26	.20
8	2.3	35	.22	217	120	70	1.8	20	.10
9	1.3	30	.11	39	74	7.8	1.1	20	.06
10	.73	25	.05	9.8	51	1.3	.76	20	.04
11	.53	20	.03	5.2	45	.63	.50	20	.03
12	.38	20	.02	3.2	40	.35	.38	15	.02
13	.32	20	.02	7.3	50	.99	.30	15	.01
14	.29	20	.02	9.0	60	1.5	.22	15	.01
15	.25	27	.02	7.2	60	1.2	.20	15	.01
16	.20	20	.01	3.3	40	.36	3.7	50	.50
17	.20	20	.01	1.7	35	.16	3.9	35	.37
18	.20	20	.01	.93	30	.08	1.2	30	.10
19	.20	20	.01	.63	30	.05	1.3	25	.09
20	4.7	50	.63	.47	44	.06	1.7	20	.09
21	12	70	2.3	.42	30	.03	.72	15	.03
22	11	50	1.5	.35	20	.02	.61	15	.02
23	3.6	30	.29	.33	20	.02	2.7	15	.11
24	1.6	34	.15	.29	25	.02	1.1	15	.04
25	1.6	20	.09	.25	53	.04	.40	15	.02
26	.76	20	.04	.54	30	.04	.68	40	.07
27	.56	57	.09	.36	25	.02	4.0	50	.54
28	.46	20	.02	.21	20	.01	1.4	40	.15
29	4.4	70	.83	.20	20	.01	.96	30	.08
30	3.3	30	.27	.18	15	.01	.69	25	.05
31	---	---	---	11	78	4.2	---	---	---
TOTAL	80.94	---	12.55	474.93	---	311.47	756.62	---	120.57
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.36	20	.02	.07	15	0	56	122	60
2	.42	20	.02	.05	15	0	60	80	13
3	.31	20	.02	.03	15	0	10	40	1.1
4	9.7	46	4.2	.01	15	0	3.2	20	.17
5	46	230	36	.01	10	0	9.2	60	1.5
6	16	70	3.0	.01	10	0	2.8	40	.30
7	3.3	50	.45	.01	10	0	.79	30	.06
8	1.4	35	.13	.01	10	0	.37	20	.02
9	1.1	30	.09	.01	10	0	.25	20	.01
10	8.3	70	1.6	.01	10	0	.20	20	.01
11	7.5	40	.81	.01	10	0	.15	20	.01
12	5.1	30	.41	.01	10	0	.12	20	.01
13	9.0	50	1.2	.01	10	0	.10	15	0
14	29	70	5.5	0	---	---	.09	10	0
15	8.5	60	1.4	0	---	---	.08	10	0
16	25	100	6.8	0	---	---	.07	10	0
17	65	60	11	0	---	---	.06	10	0
18	41	50	5.5	.01	10	0	.06	10	0
19	12	40	1.3	.36	15	.01	1.0	20	.05
20	5.2	46	.65	.82	20	.04	60	80	13
21	2.6	40	.28	.62	15	.03	70	70	13
22	1.5	35	.14	.24	10	.01	40	74	8.0
23	.92	30	.07	.04	10	0	20	40	2.2
24	.83	25	.06	.01	10	0	10	20	.54
25	.73	20	.04	.01	10	0	5.0	25	.34
26	.38	20	.02	0	---	---	3.0	20	.16
27	.29	20	.02	0	---	---	10	20	.54
28	.29	20	.02	0	---	---	8.0	15	.32
29	.25	15	.01	0	---	---	4.0	15	.16
30	.24	15	.01	0	---	---	2.0	15	.08
31	.15	15	.01	2.9	25	.20	---	---	---
TOTAL	302.37	---	80.78	5.26	---	.29	376.54	---	114.58
YEAR	2575.01		770.55						

08068520 Spring Creek at Spring, Tex.
(Formerly published as 08068500 Spring Creek near Spring)

LOCATION.--Lat 30°05'31", long 95°24'21", Harris-Montgomery County line, near right bank at downstream side of bridge on Riley-Fussell Road, 1.1 miles (1.8 km) northeast of Spring, 2.7 miles (4.3 km) downstream from Missouri Pacific Railroad bridge, 3.6 miles (5.8 km) downstream from former station 08068500 at Interstate Highway 45, 6.9 miles (11.1 km) upstream from Cypress Creek, and 9.9 miles (15.9 km) upstream from mouth.

DRAINAGE AREA.--419 mi² (1,085 km²).

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

Water quality: Chemical analyses: September 1961 to April 1964. Sediment records: December 1965 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 62.17 ft (18.949 m) above mean sea level. Prior to Jan. 5, 1946, nonrecording gage, and Jan. 6, 1946, to Oct. 1, 1965, water-stage recorder at site 3.6 miles (5.8 km) upstream at datum 15.93 ft (4.855 m) higher; unadjusted for land-surface subsidence. Oct. 2, 1965, to Feb. 19, 1976, water-stage recorder at former site at datum 10.93 ft (3.331 m) higher; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--37 years, 205 ft³/s (5.806 m³/s), 6.81 in/yr (173 mm/yr), 148,500 acre-ft/yr (183 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,400 ft³/s (68.0 m³/s) June 2 (gage height, 13.76 ft or 4.194 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 3.

Period of record: Maximum discharge, 42,700 ft³/s (1,210 m³/s) Nov. 25, 1940 (gage height, 33.60 ft or 10.241 m, former site and datum, from graph based on gage readings); minimum, 1.1 ft³/s (0.031 m³/s) Oct. 23, 24, 1956.

Maximum stage since at least 1879, 34.3 ft (10.45 m), former site and datum, May 30, 1929 (discharge, 48,300 ft³/s or 1,370 m³/s), from floodmarks identified by local residents.

REMARKS.--Discharge records fair. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	70	43	113	35	29	37	122	1270	27	24	65
2	11	200	40	84	35	28	39	118	2180	22	23	409
3	10	400	44	73	35	27	38	75	2310	20	22	119
4	12	500	43	64	36	27	39	54	1810	24	21	45
5	17	300	40	57	36	26	125	42	797	65	20	41
6	22	150	53	53	36	32	108	36	212	137	20	41
7	23	80	57	52	35	40	121	231	124	90	19	29
8	23	60	58	51	34	188	100	421	91	54	18	29
9	23	50	66	50	34	236	70	343	71	54	18	26
10	24	45	51	47	34	268	51	354	57	102	18	21
11	23	40	42	45	35	163	41	198	47	249	20	18
12	23	38	38	44	35	96	34	134	40	443	20	16
13	22	36	35	43	35	80	31	160	35	248	19	15
14	21	35	34	42	35	69	29	171	31	152	18	14
15	24	34	33	41	35	58	28	204	29	120	17	14
16	28	33	36	40	34	51	27	138	30	171	18	14
17	30	32	41	39	34	47	27	86	43	341	19	13
18	29	31	42	37	33	43	32	62	44	506	23	13
19	26	29	42	36	33	41	29	50	48	306	21	17
20	24	28	40	36	32	40	58	44	64	129	19	378
21	23	28	37	36	37	38	100	40	35	87	19	425
22	23	27	35	38	38	37	144	35	36	68	18	272
23	24	27	34	41	38	37	127	33	139	91	17	166
24	24	26	91	41	40	36	76	31	52	70	17	82
25	87	26	568	44	37	36	58	30	33	83	16	52
26	206	29	756	47	33	36	49	29	29	49	16	41
27	416	29	674	47	31	36	41	30	47	41	16	118
28	571	31	241	44	30	35	36	29	38	35	16	99
29	550	34	377	40	29	35	46	30	28	31	16	55
30	300	40	583	38	---	35	63	28	27	28	16	42
31	150	---	267	36	---	34	---	99	---	26	17	---
TOTAL	2800	2488	4541	1499	1004	1984	1804	3657	9797	3869	581	2689
MEAN	90.3	82.9	146	48.4	34.6	64.0	60.1	118	327	125	18.7	89.6
MAX	571	500	756	113	40	268	144	621	2310	506	24	425
MIN	10	26	33	36	29	26	27	28	27	20	16	13
AC-FT	5550	4930	9010	2970	1990	3940	3580	7250	19430	7670	1150	5330

CAL YR 1975 TOTAL 101128 MEAN 277 MAX 6280 MIN 10 AC-FT 200600
WTR YR 1976 TOTAL 36713 MEAN 100 MAX 2310 MIN 10 AC-FT 72820

PEAK DISCHARGE (BASE, 2,200 FT³/S).--June 2 (2300) 2,400 ft³/s (13.76 ft).

08068700 Cypress Creek at Sharp Road near Hockley, Tex.

LOCATION.--Lat 29°55'15", long 95°50'24", Harris County, on right bank at bridge on Sharp Road, 3.3 miles (5.3 km) upstream from gage Cypress Creek at Katy-Hockley Road near Hockley (08068720), and 7.4 miles (11.9 km) south of Hockley.

DRAINAGE AREA.--80.7 mi² (209.0 km²).

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) above mean sea level, adjustment of 1973.

EXTREMES.--Maximum discharge during period June to September 1975, about 800 ft³/s (22.7 m³/s) June 11 or 12 (gage height, about 65.5 ft or 19.96 m); minimum daily, 0.69 ft³/s (0.020 m³/s) Sept. 29.

Water year 1976: Maximum discharge, 604 ft³/s (17.1 m³/s) June 2 (gage height, 63.01 ft or 19.205 m); no flow Mar. 4-6, Apr. 13.

Maximum stage since at least 1949, about 67.3 ft or 20.51 m (date unknown), from information by local resident (also reported flow leaving basin and entering tributaries of Buffalo Bayou basin).

REMARKS.--Records fair. Diversions and return flow for irrigation occurs upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1975

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									600	54	28	11
2									350	67	34	8.0
3									200	51	49	5.3
4									100	33	72	4.4
5									60	24	47	4.9
6									35	17	22	6.1
7									25	11	15	5.0
8									20	8.1	13	4.0
9									40	6.7	17	3.0
10									220	7.1	17	2.4
11									730	10	14	2.5
12									780	10	11	2.7
13									550	9.0	9.0	7.7
14									171	12	9.1	9.4
15									79	58	9.3	8.6
16									48	37	8.0	9.8
17									30	21	7.6	12
18									21	15	7.6	6.8
19									15	19	7.5	3.8
20									12	27	6.9	2.3
21									8.7	30	8.4	1.8
22									7.3	27	8.5	1.5
23									5.9	25	7.6	1.2
24									5.0	26	8.0	1.1
25									5.4	27	11	1.8
26									31	25	9.5	3.5
27									75	17	16	2.0
28									118	11	19	1.2
29									92	9.1	25	6.9
30									43	25	21	1.2
31									---	45	15	---
TOTAL									4477.3	764.0	553.0	135.69
MEAN									149	24.6	17.8	4.52
MAX									780	67	72	12
MIN									5.0	6.7	6.9	6.9
AC-FT									8880	1520	1100	269

WTR YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 400 FT³/S).--June 11 or 12 (unknown) about 800 ft³/s (about 65.5 ft).

08068700 Cypress Creek at Sharp Road near Hockley, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	19	.33	4.0	.11	.03	.01	16	231	1.7	1.1	4.8
2	3.7	16	.35	2.6	.08	.02	.01	6.9	551	1.1	.70	26
3	1.1	27	.78	1.6	.05	.02	0	2.7	441	.88	.44	21
4	.42	25	.45	.45	.04	0	.02	1.3	142	.86	.30	13
5	.32	17	.27	.71	.04	0	.24	.81	70	15	.21	20
6	.45	13	.19	.55	.05	0	32	.50	34	23	.16	25
7	1.1	9.5	.16	.34	.04	.06	20	5.2	19	19	.15	21
8	.99	7.9	.26	.20	.04	10	8.4	28	16	16	.13	16
9	1.4	8.1	.37	.15	.04	25	4.1	24	9.8	18	.19	14
10	3.2	6.9	.22	.16	.04	9.4	2.1	12	6.5	39	.47	13
11	6.5	4.9	.15	.17	.09	3.7	1.1	3.4	4.4	70	1.6	9.7
12	5.4	3.5	.10	.18	.09	1.9	.65	5.4	2.7	58	1.1	6.5
13	3.3	2.4	.08	.18	.08	.88	.45	45	2.5	45	.72	4.7
14	2.4	1.7	.05	.14	.08	.51	.32	85	2.1	36	.80	3.4
15	1.9	1.1	.03	.11	.07	.34	.24	33	1.1	46	.35	2.3
16	1.7	1.8	.08	.11	.19	.42	.20	17	1.5	68	.25	1.7
17	2.0	2.2	.26	.08	.11	.26	.19	11	1.3	92	.15	1.3
18	2.5	1.4	.31	.07	.07	.18	.21	6.7	1.6	75	.09	.94
19	3.1	.91	.32	.07	.04	.16	.33	3.0	2.8	45	.05	1.2
20	3.5	.74	.33	.14	.04	.13	2.5	1.6	1.8	28	.35	2.1
21	3.7	.78	.35	.15	.12	.12	2.4	1.9	1.4	18	.70	2.2
22	3.5	.62	.29	.16	.05	.09	3.5	1.2	2.0	21	1.0	3.2
23	4.7	.45	.16	.51	.05	.07	4.0	.80	1.3	21	1.2	5.5
24	4.2	.34	19	.23	.34	.05	2.0	1.2	.80	18	1.4	3.3
25	21	.33	104	.65	.20	.66	2.8	.99	.66	13	1.1	3.0
26	42	.58	78	.24	.14	.05	.93	.95	.62	8.3	1.1	3.0
27	71	.58	39	.23	.11	.05	1.2	.85	1.2	6.0	.83	5.6
28	38	.49	21	.20	.07	.05	1.2	1.7	1.4	5.0	.79	16
29	21	.45	15	.12	.05	.05	13	1.4	.94	5.4	.58	48
30	17	.58	10	.12	---	.03	30	1.0	.93	3.1	.44	47
31	25	---	6.2	.13	---	.02	---	15	---	1.9	.64	---
TOTAL	339.08	175.25	297.91	15.25	2.44	53.65	134.20	340.50	1553.35	818.24	19.00	344.44
MEAN	10.9	5.84	9.61	.49	.084	1.73	4.47	11.0	51.4	26.4	.61	11.5
MAX	62	27	104	4.0	.34	25	32	85	551	92	1.6	48
MIN	.32	.33	.03	.07	.04	0	0	.50	.62	.66	.05	.94
AC-FT	573	348	591	30	4.2	106	266	675	3090	1620	38	683

CAL YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -
 WTR YR 1976 TOTAL 4093.31 MEAN 11.2 MAX 551 MIN 0 AC-FT 8120

PEAK DISCHARGE (BASE, 400 FT³/S).--June 2 (1800) 604 ft³/s (63.01 ft).

08068720 Cypress Creek at Katy-Hockley Road near Hockley, Tex.

LOCATION.--Lat 29°57'00", long 95°48'29", Harris County, on left bank at bridge on Katy-Hockley Road, 3.3 miles (5.3 km) downstream from gage Cypress Creek at Sharp Road near Hockley (08068700), 5.6 miles (9.0 km) southeast of Hockley, and 6.3 miles (10.1 km) upstream from gage Cypress Creek at House and Hahl Road near Cypress (08068740).

DRAINAGE AREA.--110 mi² (285 km²).

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Concrete weir located 0.9 mile (1.4 km) downstream from gage. Datum of gage is 100.00 ft (30.480 m) above mean sea level, adjustment of 1973.

EXTREMES.--Maximum discharge during period June to September 1975, about 900 ft³/s (25.5 m³/s) June 11 or 12 (gage height, about 56.5 ft or 17.22 m); no flow for many days.

Water year 1976: Maximum discharge, 766 ft³/s (21.7 m³/s) June 2 (gage height, 56.09 ft or 17.096 m); no flow for many days.

A flood in June 1960 reached a stage of 62.0 ft (18.90 m), from information by local resident.

REMARKS.--Records fair. Diversions and return flow for irrigation occurs upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									650	62	18	11
2									400	90	28	8.5
3									250	68	58	7.7
4									120	40	86	6.1
5									70	27	67	6.8
6									40	18	24	5.0
7									25	12	13	1.5
8									20	8.4	13	2.6
9									50	6.3	18	0
10									380	8.3	19	4.5
11									850	14	15	4.9
12									870	20	13	1.6
13									680	15	11	0
14									265	14	10	0
15									119	63	9.5	0
16									71	44	7.7	0
17									37	24	6.8	2.9
18									23	17	7.7	7.2
19									15	19	8.1	7.0
20									12	24	7.2	9.0
21									9.1	30	9.0	10
22									7.8	38	10	9.5
23									7.3	38	15	8.1
24									4.8	30	13	6.4
25									7.1	46	15	5.7
26									36	37	14	6.4
27									103	22	17	6.1
28									127	15	17	4.4
29									127	8.8	13	3.6
30									55	15	13	3.4
31									---	39	12	---
TOTAL									5431.1	912.8	588.0	143.51
MEAN									181	29.4	19.0	4.78
MAX									870	90	86	11
MIN									4.8	6.3	6.8	0
AC-FT									10770	1810	1170	285

WTR YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 500 FT³/S).--June 11 or 12 (unknown) about 900 ft³/s (about 56.5 ft).

08068720 Cypress Creek at Katy-Hockley Road near Hockley, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	20	.06	4.3		0	.10	5.4	365	5.2	1.7	3.8
2	0	19	.03	3.2		0	.07	2.0	713	4.5	1.3	29
3	0	49	.07	2.2		0	.47	1.3	620	4.3	1.1	27
4	0	49	.04	1.4		0	.83	0	223	4.6	.90	21
5	0	29	.03	1.1		0	1.6	0	98	27	.77	19
6	0	15	.02	.97		0	23	0	45	59	.70	22
7	.59	8.4	.01	1.2		0	24	1.2	26	43	.61	20
8	3.4	5.8	.03	.98		6.6	5.9	16	20	32	.58	16
9	4.1	5.3	.03	.72		37	1.5	15	13	43	.52	14
10	3.4	4.6	.03	.60		3.9	0	4.3	8.0	89	.81	12
11	4.0	3.0	.02	.60		.13	.25	1.3	6.6	95	1.7	10
12	3.3	.95	.01	.65		0	.49	.43	5.7	73	1.5	7.0
13	2.4	0	.02	.78		.60	.52	32	4.6	59	1.5	5.5
14	3.1	0	.01	.85		.97	.46	.91	4.9	53	1.5	4.8
15	1.6	.27	0	.85		.89	.33	27	4.6	68	11	3.7
16	2.2	.71	0	.75		.79	.30	12	5.6	98	18	3.4
17	3.3	1.2	0	.60		.69	.32	3.3	7.0	143	3.2	2.8
18	1.8	.88	.02	.51		.43	.53	1.3	6.2	102	.27	2.3
19	2.7	.62	.03	.95		.37	1.5	.55	5.1	63	.05	2.3
20	4.8	.34	.03	1.2		.35	1.2	0	4.3	52	.40	4.2
21	5.9	.21	.05	1.1		.29	0	.01	4.1	32	.86	6.5
22	3.2	.15	.07	.95		.24	1.3	.75	4.1	48	0	7.1
23	.06	.09	.05	1.1		.21	1.2	1.0	4.3	48	0	8.7
24	0	.64	.43	1.7		.21	1.1	1.4	4.2	32	0	8.1
25	28	.02	223	2.3		.21	2.4	1.6	3.4	21	0	7.4
26	135	.15	158	1.2		.21	2.4	1.3	3.9	12	0	7.1
27	130	.14	69	.98		.16	1.4	2.0	6.5	8.0	1.2	11
28	59	.13	34	.72		.13	1.6	2.0	6.7	6.4	2.2	30
29	37	.07	21	.61		.16	8.5	3.8	4.8	5.2	2.3	45
30	31	.14	13	.42	---	.17	18	5.0	4.8	4.0	1.9	57
31	25	---	6.1	0	---	.16	---	29	---	2.5	1.9	---
TOTAL	496.25	214.21	567.80	35.49	0	59.87	101.27	261.94	2232.4	1336.7	58.47	417.7
MEAN	16.0	7.14	18.3	1.14	0	1.93	3.38	8.45	74.4	43.1	1.89	13.9
MAX	135	49	223	4.3	0	37	24	91	713	143	18	57
MIN	0	0	0	0	0	0	0	0	3.4	2.5	0	2.3
AC-FT	984	425	1130	70	0	119	201	520	4430	2650	116	829

CAL YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1976 TOTAL 5782.10 MEAN 15.8 MAX 713 MIN 0 AC-FT 11470

PEAK DISCHARGE (BASE, 500 FT³/S).--June 2 (1700) 766 ft³/s (56.09 ft).

08068740 Cypress Creek at House and Hahl Road near Cypress, Tex.

LOCATION.--Lat 29°57'32", long 95°43'03", Harris County, on right bank at bridge on House and Hahl Road, 1.4 miles (2.3 m) southwest of Cypress, and 6.3 miles (10.1 km) downstream from gage Cypress Creek at Katy-Hockley Road near Hockley (08068720).

DRAINAGE AREA.--131 mi² (339 km²).

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) above mean sea level, adjustment of 1973.

EXTREMES.--Maximum discharge during period June to September 1975, about 1,000 ft³/s (28.3 m³/s) June 12 (gage height, about 41.5 ft or 12.65 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 10.

Water year 1976: Maximum discharge, 910 ft³/s (25.8 m³/s) June 2 (gage height, 41.20 ft or 12.558 m); no flow for many days (result of pumping for irrigation).

Maximum stage since about 1908, about 49 ft (14.9 m) in 1937, from information by local resident.

REMARKS.--Records fair. Diversions and irrigation return flow occurs upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1975

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									750	54	22	19
2									500	112	28	17
3									300	99	45	14
4									150	61	77	9.0
5									20	40	103	8.3
6									60	28	61	6.8
7									35	20	38	2.9
8									30	14	31	1.9
9									40	11	30	1.5
10									450	12	30	1.0
11									940	16	25	4.6
12									980	24	20	2.9
13									800	21	17	1.3
14									384	17	14	7.8
15									163	58	13	7.9
16									105	61	11	14
17									60	33	9.5	16
18									36	25	9.1	12
19									30	23	9.3	7.6
20									27	25	8.5	7.5
21									25	30	9.2	10
22									24	33	10	10
23									21	40	17	9.2
24									18	35	13	7.6
25									17	52	13	6.6
26									41	44	13	6.9
27									122	30	17	6.0
28									141	21	18	4.4
29									170	20	26	3.2
30									70	17	25	3.1
31									---	17	24	---
TOTAL									6615	1093	786.6	230.0
MEAN									221	35.3	25.4	7.67
MAX									980	112	103	19
MIN									17	11	8.5	1.0
AC-FT									13120	2170	1560	456

WTR YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 600 FT³/S).---June 12 (unknown) about 1,000 ft³/s (about 41.5 ft).

08068740 Cypress Creek at House and Hahl Road near Cypress, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	26	1.3	8.0	.20	.02	.18	8.3	601	6.8	4.4	6.3
2	4.1	22	.79	5.0	.16	.01	.01	1.7	893	7.8	3.2	45
3	5.9	50	.63	3.5	.12	0	.01	2.4	829	6.7	2.4	40
4	6.1	54	.78	2.5	.10	0	.79	.04	410	6.4	2.2	28
5	5.2	38	.70	2.0	.08	.01	2.8	0	163	27	1.9	52
6	3.1	26	.50	1.8	.06	0	14	0	81	70	1.7	34
7	2.0	17	.44	2.5	.05	.02	27	4.5	47	51	1.6	26
8	8.7	13	.44	2.0	.04	2.6	7.7	16	38	38	1.4	18
9	9.7	11	.55	1.5	.04	25	4.5	18	24	43	1.3	14
10	7.6	10	.50	1.2	.04	15	.88	6.9	17	147	1.1	13
11	7.9	7.9	.40	1.1	.04	2.7	.02	2.3	13	156	3.0	10
12	7.3	5.2	.30	1.2	.04	.88	.96	.64	12	106	2.7	8.0
13	5.7	.84	.30	1.3	.04	.56	1.2	17	11	88	2.6	6.3
14	7.0	.62	.30	1.4	.04	2.7	.96	90	11	79	2.6	5.6
15	4.5	.89	5.6	1.4	.04	2.4	.71	35	9.9	94	11	4.6
16	4.4	3.0	5.5	1.2	.04	1.9	.56	16	11	114	41	3.9
17	7.8	4.3	1.2	1.0	.04	1.8	.50	5.9	13	205	16	3.3
18	4.6	3.6	.63	1.0	.04	1.4	.56	1.6	11	155	7.5	2.8
19	6.1	3.0	.65	1.5	.04	1.0	1.7	1.2	9.4	88	4.5	3.4
20	6.6	2.9	.71	2.0	.03	.88	2.7	.27	8.0	78	3.1	10
21	10	2.9	.71	1.5	.11	.88	.96	0	7.5	53	3.3	20
22	7.2	2.6	.71	1.2	.08	.79	.30	.02	7.3	62	1.9	18
23	1.1	2.1	.71	1.5	.04	.64	2.8	1.0	7.3	61	1.3	14
24	.02	.89	20	2.5	.19	.50	1.2	1.1	7.1	43	.84	12
25	18	.64	200	3.0	.08	.50	2.9	1.7	5.9	32	.74	10
26	135	.96	200	2.0	.04	.44	2.9	1.6	6.5	21	.78	8.2
27	164	1.3	100	1.5	.03	.39	1.9	1.7	9.8	15	.78	14
28	67	1.2	50	1.2	.02	.30	1.7	1.6	9.7	12	2.7	64
29	44	.88	30	1.0	.02	.30	9.1	3.5	7.4	11	2.6	103
30	34	1.5	20	.80	---	.30	16	4.4	6.7	9.6	2.1	101
31	32	---	12	.40	---	.26	---	100	---	6.5	2.3	---
TOTAL	631.82	314.22	656.35	59.70	1.89	64.18	107.50	344.37	3287.5	1892.8	134.54	698.4
MEAN	20.4	10.5	21.2	1.93	.065	2.07	3.58	11.1	110	61.1	4.34	23.3
MAX	164	54	200	8.0	.20	25	27	100	893	205	41	103
MIN	.02	.62	.30	.40	.02	0	.01	0	5.9	6.4	.74	2.8
AC-FT	1250	623	1300	118	3.7	127	213	683	6520	3750	267	1390

CAL YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1976 TOTAL 8193.27 MEAN 22.4 MAX 893 MIN 0 AC-FT 16250

PEAK DISCHARGE (BASE, 600 FT³/S).--June 2 (1900) 910 ft³/s (41.20 ft).

08068750 Cypress Creek near Cypress, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 29°57'23", long 95°40'41", Harris County, at bridge on U.S. Highway 290 and 1.5 miles (2.4 km) southeast of Cypress.

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1970 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA, MG) (MG/L)
DATE	TIME										
JAN. 22...	1120	.93	835	7.9	11.0	350	150	11.0	99	2.8	65
APR. 21...	1230	.60	689	8.2	26.5	400	170	8.8	107	3.5	47
SEP. 01...	1100	2.3	392	6.7	27.0	160	100	6.5	82	5.4	87
DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
JAN. 22...	0	20	3.6	140	7.6	10	122	0	40	160	.5
APR. 21...	0	14	2.9	120	7.6	7.0	113	0	13	150	.6
SEP. 01...	0	28	4.0	38	1.8	8.0	109	0	16	51	.3
DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	
JAN. 22...	7.8	443	176	66	.00	.01	.07	1.8	.25	11	
APR. 21...	6.8	371	214	98	.00	.02	.09	1.3	.23	10	
SEP. 01...	20	220	324	68	.01	.01	.22	1.9	.38	8.4	

08068750 Cypress Creek near Cypress, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
JAN 22...	1120	100	1	290	0	0	0	6				
APR 21...	1230	20	1	310	0	0	0	3				
SEP 01...	1100	160	3	80	0	0	0	3				
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
DATE	TIME											
JAN 22...	260	0	30	0	.1	0	210	20				
APR 21...	40	0	30	0	.2	0	130	10				
SEP 01...	110	0	20	10	.4	3	160	30				
DATE	TIME	TOTAL PCB (UG/L)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
JAN. 22...	1120	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
APR. 21...	1230	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 01...	1100	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
DATE	TIME	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 22...		.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
APR. 21...		.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
SEP. 01...		.00	.00	.00	.00	.00	.00	0	.00	.05	.01	.00

08069000 Cypress Creek near Westfield, Tex.

LOCATION.--Lat 30°02'08", long 95°25'43", Harris County, near left bank at downstream side of bridge on Interstate Highway 45 and U.S. Highway 75, 0.9 mile (1.4 km) upstream from Senger Gully, 1.8 miles (2.9 km) northwest of Westfield, 2.0 miles (3.2 km) upstream from Missouri Pacific Railroad Co. bridge, and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--285 mi² (738 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 63.89 ft (19.474 m) above mean sea level, datum of 1929, adjustment of 1943; unadjusted for land-surface subsidence. Prior to Mar. 17, 1951, water-stage recorder at upstream side of bridge at datum 12.00 ft (3.658 m) higher.

AVERAGE DISCHARGE.--32 years, 150 ft³/s (4.248 m³/s), 7.15 in/yr (182 mm/yr), 108,700 acre-ft/yr (134 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,060 ft³/s (115 m³/s) Sept. 2 (gage height, 22.13 ft or 6.745 m); minimum daily, 4.5 ft³/s (0.13 m³/s) Mar. 3-5.

Period of record: Maximum discharge, 22,100 ft³/s (626 m³/s) Oct. 8, 1949 (gage height, 33.44 ft or 10.193 m, present datum), from rating curve extended above 11,000 ft³/s (312 m³/s); no flow at times.

Maximum stage since at least 1875, 34 ft (10.4 m), present datum, in May 1929 (discharge, 26,000 ft³/s or 736 m³/s), from information by local resident. Flood in November 1940 reached a stage of about 32 ft (9.8 m), present datum (discharge, 15,000 ft³/s or 425 m³/s), from information by State Highway Department.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No large diversion above station. Low flow is maintained by sewage effluent. Channel below gage was rectified in 1950-51 and in 1975.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	36	9.1	47	8.0	8.0	6.6	37	1960	17	15	552
2	15	122	6.2	34	9.0	4.7	6.4	23	1960	16	12	3080
3	17	675	5.7	26	12	4.5	6.2	12	1640	24	11	399
4	16	192	6.0	19	10	4.5	6.8	9.9	1000	161	9.3	121
5	14	91	5.6	16	8.5	4.5	9.8	8.1	368	131	8.3	276
6	13	50	30	13	8.0	9.5	10	6.5	146	86	7.6	145
7	12	33	11	14	7.5	19	30	429	75	67	7.4	66
8	9.4	24	23	11	7.2	154	36	315	49	94	7.1	45
9	11	19	12	11	7.0	74	18	80	39	132	6.9	37
10	16	16	8.0	9.3	6.7	67	12	47	29	468	6.9	34
11	14	15	6.3	11	6.4	37	8.7	28	23	420	6.6	27
12	14	12	5.6	9.8	6.2	19	6.9	18	19	209	9.5	23
13	14	9.9	5.1	8.0	6.0	15	6.6	45	16	117	13	20
14	13	7.0	4.8	7.5	5.8	12	5.6	43	14	247	7.9	17
15	129	5.9	4.9	7.3	5.7	11	5.6	79	16	193	7.3	17
16	65	5.6	18	7.0	5.6	10	6.4	38	21	376	29	14
17	14	5.6	18	6.6	5.5	9.3	6.4	24	15	471	74	13
18	16	7.4	7.4	6.6	5.4	8.5	45	16	15	262	27	12
19	13	9.1	5.2	6.8	5.3	8.5	19	10	15	216	15	16
20	11	15	5.2	7.7	5.2	8.2	123	8.2	15	189	11	969
21	11	7.3	4.9	8.0	12	8.0	25	8.1	11	94	9.4	1050
22	14	6.3	4.9	7.5	9.0	8.0	19	7.5	306	70	9.2	249
23	17	6.1	4.7	7.3	7.5	7.3	14	6.6	522	70	11	88
24	12	6.1	411	7.5	6.5	7.7	11	6.6	60	74	20	57
25	673	5.7	877	72	6.0	8.7	26	7.0	34	63	47	39
26	682	8.8	617	24	5.5	8.0	12	16	68	42	12	32
27	298	7.1	292	14	5.2	7.4	9.1	12	63	31	8.7	110
28	193	5.3	170	10	5.2	6.8	8.7	7.9	27	40	7.8	454
29	93	5.4	212	9.0	7.0	11	106	7.4	24	24	7.4	358
30	57	15	139	8.5	---	9.5	43	7.3	20	20	8.3	196
31	44	---	77	8.0	---	8.4	---	132	---	19	7.8	---
TOTAL	2529.9	1423.6	3006.6	454.4	204.9	579.0	648.8	1495.1	8570	4443	440.4	8516
MEAN	81.6	47.5	97.0	14.7	7.07	18.7	21.6	48.2	286	143	14.2	284
MAX	682	675	877	72	12	154	123	429	1960	471	74	3080
MIN	9.4	5.3	4.7	6.6	5.2	4.5	5.6	6.5	11	16	6.6	12
AC-FT	5020	2820	5960	901	406	1150	1290	2970	17000	8810	874	16890

CAL YR 1975 TOTAL 73551.0 MEAN 202 MAX 3460 MIN 4.7 AC-FT 145900
WTR YR 1976 TOTAL 32311.7 MEAN 88.3 MAX 3080 MIN 4.5 AC-FT 64090

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
6- 1	1800	17.36	2,290
9- 2	0500	22.13	4,060
9-20	2000	15.97	1,850

NOTE.--No gage-height record Jan. 28 to Mar. 1.

08069200 Cypress Creek near Humble, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 30°01'49", long 95°19'47", Harris County, 500 ft (150 m) north of end of dirt extension of Tettar Road, about 2 miles (3 km) upstream from mouth, and 4.7 miles (7.6 km) northwest of Humble.

DRAINAGE AREA.--319 mi² (826 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1970 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	HARDNESS (CA+MG) (MG/L)
JAN 22...	1450	8.0	769	7.5	11.0	30	10	10.2	92	5.5	120
APR 21...	1000	40	167	6.8	20.5	160	110	6.7	74	4.9	41
SEP 01...	0945	--	61	6.8	24.0	240	200	6.8	83	3.9	11

DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
JAN 22...	0	39	6.1	110	4.3	16	214	0	48	94	.8
APR 21...	0	13	2.1	14	1.0	2.4	52	0	8.6	13	.4
SEP 01...	0	3.5	.5	3.7	.5	2.7	15	0	4.3	6.6	.1

DATE	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN 22...	19	439	15	1	.60	.08	3.3	3.9	5.3	6.8
APR 21...	6.6	86	214	28	.30	.08	.37	1.3	.68	11
SEP 01...	1.9	31	820	152	.35	.02	.14	1.2	.35	8.1

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
JAN. 22...	1450	10	4	380	0	0	0	4					
APR. 21...	1000	10	2	110	1	0	0	3					
SEP. 01...	0945	90	4	60	0	0	0	3					
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
DATE	TIME												
JAN. 22...	40	0	20	0	.2	0	280	40					
APR. 21...	100	0	0	10	.3	0	60	10					
SEP. 01...	60	2	0	20	.3	3	50	30					
DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	
JAN. 22...	1450	.0	--	.00	.0	.00	.00	.00	.29	.00	.00	.00	
APR. 21...	1000	.0	.00	.00	.0	.00	.00	.00	.11	.01	.00	.00	
SEP. 01...	0945	.0	.00	.00	.1	.00	.00	.00	.10	.01	.00	.00	
DATE	TIME	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 22...	.00	.00	.05	.00	.00	.00	.00	0	.00	.00	.00	.00	.00
APR. 21...	.00	.01	.10	.04	.00	.00	.00	0	.00	.00	.00	.00	.00
SEP. 01...	.00	.02	.29	.07	.00	.00	.00	0	.00	.00	.07	.07	.00

08069500 West Fork San Jacinto River near Humble, Tex.

LOCATION.--Lat 30°01'37", long 95°15'28", Harris County, on right bank at bridge on U.S. Highway 59, 970 ft (296 m) upstream from Texas and New Orleans Railroad Co. bridge, 0.5 mile (0.8 km) downstream from Spring Creek, and 2.5 miles (4.0 km) north of Humble.

DRAINAGE AREA.--1,741 mi² (4,509 km²).

PERIOD OF RECORD.--October 1928 to September 1954, October 1954 to current year (gage heights only). Annual maximum and minimum gage heights only for October 1954 to September 1966 published with station 08072000 Lake Houston near Sheldon. Published as San Jacinto River near Humble prior to 1938.

GAUGE.--Water-stage recorder. Datum of gage is 30.53 ft (9.306 m) above mean sea level. Prior to July 17, 1933, nonrecording gage at site 1,800 ft (549 m) downstream at same datum. July 17, 1933, to Mar. 5, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--26 years (1928-54), 1,097 ft³/s (31.1 m³/s), 794,800 acre-ft/yr (980 hm³/yr).

EXTREMES.--Current year: Maximum gage height, 16.92 ft (5.157 m) June 4; minimum, about 11.4 ft (3.47 m) probably occurred Aug. 28.

1928-54: Maximum discharge, 187,000 ft³/s (5,300 m³/s) May 31, 1929, Nov. 25, 26, 1940; maximum gage height, 32.7 ft (9.97 m) May 31, 1929, Nov. 26, 1940, present site and datum, both affected by backwater from East Fork San Jacinto River; minimum discharge, 11 ft³/s (0.31 m³/s) Aug. 31, Sept. 1, 2, 1951.

1954-76: Maximum gage height since first appreciable storage at Lake Houston, 23.09 ft (7.038 m) June 15, 1973; minimum since first appreciable storage at Lake Houston, 5.5 ft (1.68 m) Dec. 12, 1956.

Maximum stage since at least 1865, occurred in September 1900, May 31, 1929, and Nov. 25, 26, 1940, and all reached about the same stage, from information by local resident.

REMARKS.--Station discontinued as a streamflow station Sept. 30, 1954, due to backwater from Lake Houston. No large diversion above station.

REVISIONS.--WSP 1732: Drainage area.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.03	12.96	12.19	13.12	12.65	12.82	12.63	12.92	16.33	---	---	---
2	11.99	12.95	12.20	12.98	12.70	12.80	12.67	12.96	16.55	---	---	---
3	11.93	13.28	12.22	12.91	12.70	12.82	12.68	12.93	16.71	---	---	---
4	11.90	13.24	12.21	12.92	12.75	12.77	12.67	12.90	16.80	---	---	---
5	11.87	13.13	12.21	12.92	12.68	12.70	12.75	12.89	15.47	---	---	---
6	11.83	13.03	12.44	12.90	12.55	12.66	12.89	12.87	---	---	---	---
7	11.78	12.94	12.53	12.59	12.58	12.71	13.03	13.80	---	---	---	---
8	11.75	12.90	12.55	12.60	12.60	12.98	13.03	13.88	---	---	---	---
9	11.74	12.86	12.57	12.64	12.63	13.11	13.09	13.71	---	---	---	---
10	11.70	12.75	12.58	12.68	12.64	13.08	13.03	13.81	---	---	---	---
11	11.66	12.75	12.59	12.68	12.65	13.06	12.94	13.85	---	---	---	---
12	11.65	12.50	12.58	12.74	12.66	12.94	12.90	13.80	---	---	---	---
13	11.61	12.44	12.60	12.75	12.67	12.82	12.87	13.91	---	---	12.00	---
14	11.56	12.44	12.58	12.70	12.68	12.83	12.86	13.73	---	---	---	---
15	11.62	12.42	12.50	12.70	12.68	12.82	13.00	13.60	---	---	---	---
16	11.61	12.40	12.50	12.58	12.68	12.69	12.89	13.57	---	---	---	12.15
17	11.59	12.39	12.48	12.61	12.70	12.72	12.83	13.52	---	---	---	---
18	11.57	12.39	12.42	12.62	12.64	12.73	16.30	13.37	---	13.60	---	---
19	11.55	12.37	12.43	12.62	12.69	12.77	13.67	13.17	---	---	---	---
20	11.52	12.30	12.41	12.59	12.75	12.72	13.52	13.06	---	---	---	---
21	11.48	12.25	12.41	12.60	12.52	12.69	13.29	12.95	---	---	---	---
22	11.45	12.22	12.42	12.63	---	12.69	13.18	12.89	---	---	---	---
23	11.56	12.21	12.41	12.65	---	12.69	13.11	12.84	---	---	---	---
24	11.54	12.19	13.08	12.72	12.55	12.70	13.02	12.80	---	---	---	---
25	12.78	12.19	13.62	12.78	---	12.75	12.95	12.78	---	---	---	---
26	13.30	12.18	13.79	12.70	---	12.71	12.92	12.76	---	---	11.50	---
27	13.53	12.19	13.49	12.73	12.85	12.69	12.88	12.63	---	---	---	---
28	13.57	12.23	13.34	12.80	12.84	12.74	12.85	12.63	---	---	---	---
29	13.36	12.23	13.94	12.88	12.82	12.77	12.90	12.67	---	---	---	---
30	13.17	12.17	13.59	12.90	---	12.71	12.91	12.68	---	---	---	---
31	13.06	---	13.28	12.68	---	12.64	---	13.15	---	---	---	---
MEAN	12.04	12.55	12.71	12.74	---	12.78	13.08	13.19	---	---	---	---
MAX	13.57	13.28	13.94	13.12	---	13.11	16.30	13.91	---	---	---	---
MIN	11.45	12.17	12.19	12.58	---	12.64	12.63	12.63	---	---	---	---

08070000 East Fork San Jacinto River near Cleveland, Tex.

LOCATION.--Lat 30°20'11", long 95°06'14", Liberty County, near left bank at downstream side of bridge on State Highway 105, 1,880 ft (570 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) west of Cleveland, and 4.3 miles (6.9 km) downstream from Winter Creek.

DRAINAGE AREA.--325 mi² (842 km²).

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

Water quality: Chemical analyses: January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 107.98 ft (32.912 m) above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 13, 1955, at site 1,800 ft (549 m) upstream at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--37 years, 222 ft³/s (6.287 m³/s), 9.28 in/yr (236 mm/yr), 160,800 acre-ft/yr (198 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,440 ft³/s (239 m³/s) June 2 (gage height, 18.29 ft or 5.575 m); minimum daily, 18 ft³/s (0.51 m³/s) Aug. 14, 15, 22-24.

Period of record: Maximum discharge, 59,000 ft³/s (1,670 m³/s) Nov. 24, 1940 (gage height, 24.1 ft or 7.35 m, present site and datum), from rating curve extended above 27,000 ft³/s (765 m³/s); minimum daily, 3.0 ft³/s (0.085 m³/s) Aug. 23, 24, Sept. 27, 28, 1956.

Maximum stage since at least 1900, that of Nov. 24, 1940. Flood of May 5, 1935, reached a stage of 23.6 ft (7.19 m), present site and datum (discharge, 53,500 ft³/s or 1,520 m³/s), from information by local residents.

REMARKS.--Discharge records good. No large diversion above station.

REVISIONS (WATER YEARS).--WSP 1512: 1941(M), 1945(M). WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	78	85	217	84	71	201	277	1400	47	24	39
2	32	78	75	173	79	69	165	184	5930	42	24	53
3	31	346	65	141	75	67	102	91	5500	42	27	44
4	30	551	59	116	73	65	77	65	3260	51	25	34
5	29	511	57	104	72	65	78	51	1680	57	21	51
6	29	250	91	100	72	66	90	44	310	52	20	34
7	29	121	77	108	71	66	145	486	185	58	20	26
8	28	93	66	113	91	132	235	1250	139	51	19	30
9	29	76	59	94	111	231	131	1420	119	87	19	30
10	29	72	57	88	91	279	90	1600	102	89	20	24
11	30	67	57	88	84	197	74	1070	89	113	19	21
12	29	62	57	88	79	120	68	707	80	106	19	19
13	28	58	55	87	75	94	57	863	72	142	19	19
14	27	54	55	86	73	85	54	998	65	93	18	19
15	31	52	54	80	71	79	51	996	61	90	18	19
16	33	53	67	80	69	75	48	794	122	97	20	20
17	35	53	97	79	69	72	48	252	148	127	19	21
18	33	53	81	75	69	72	49	141	483	327	19	21
19	28	53	74	75	68	72	53	107	410	409	20	21
20	27	55	68	85	73	65	69	90	242	187	19	26
21	28	56	64	123	154	65	82	79	365	91	19	44
22	28	53	60	102	241	63	71	72	206	67	18	58
23	34	50	58	95	277	59	67	65	107	55	18	66
24	35	50	131	89	200	60	53	60	166	43	18	43
25	103	51	728	123	108	77	56	56	120	39	20	30
26	433	52	960	163	94	368	57	59	79	37	22	25
27	532	53	828	155	86	333	61	240	93	33	20	34
28	662	54	394	155	80	122	56	312	79	31	19	86
29	426	54	783	107	75	90	59	192	61	29	19	316
30	184	68	874	91	---	116	145	96	53	27	24	612
31	96	---	426	89	---	171	---	123	---	25	22	---
TOTAL	3161	3277	6662	3369	2864	3566	2592	12840	21726	2744	628	1885
MEAN	102	109	215	109	98.8	115	86.4	414	724	88.5	20.3	62.8
MAX	662	551	960	217	277	368	235	1600	5930	409	27	612
MIN	27	50	54	75	68	59	48	44	53	25	18	19
CFSM	.31	.34	.66	.34	.30	.35	.27	1.27	2.23	.27	.06	.19
IN.	.36	.38	.76	.39	.33	.41	.30	1.47	2.49	.31	.07	.22
AC-FT	6270	6500	13210	6680	5680	7070	5140	25470	43090	5440	1250	3740

CAL YR 1975 TOTAL 126335 MEAN 346 MAX 4700 MIN 27 CFSM 1.06 IN 14.46 AC-FT 250600
WTR YR 1976 TOTAL 65314 MEAN 178 MAX 5930 MIN 18 CFSM .55 IN 7.48 AC-FT 129600

PEAK DISCHARGE (BASE, 2,500 FT³/S).--June 2 (1600) 8,440 ft³/s (18.29 ft).

08070000 East Fork San Jacinto River near Cleveland, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)
DEC. 05...	1040	58	298	6.9	13.5	62	25	21	2.4	27
JAN. 13...	1400	88	324	6.8	10.5	70	32	23	3.0	27
FEB. 25...	1055	109	291	6.7	13.5	71	33	24	2.7	23
APR. 07...	1430	146	273	7.3	18.0	62	24	21	2.3	23
MAY 18...	1125	140	223	6.9	19.5	61	16	21	2.0	17
JULY 01...	1110	50	265	7.2	27.5	57	18	19	2.4	22

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC. 05...	1.5	1.7	45	0	5.0	58	.3	15	153
JAN. 13...	1.4	1.5	46	0	7.5	58	.2	15	158
FEB. 25...	1.2	3.0	47	0	7.9	52	.2	11	147
APR. 07...	1.3	1.6	46	0	5.7	49	.1	14	139
MAY 18...	1.0	1.9	54	0	6.0	35	.1	13	123
JULY 01...	1.3	1.5	48	0	3.9	48	.1	14	135

08070500 Caney Creek near Splendora, Tex.

LOCATION.--Lat 30°15'34", long 95°18'08", Montgomery County, on left bank at downstream side of bridge on Farm Road 2090, 4 miles (6 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 8 miles (13 km) west of Splendora.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--Discharge: October 1943 to current year. Monthly discharge only for some periods, published in WSP 1312.
Water quality: Sediment records: December 1965 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 118.44 ft (36.101 m) above mean sea level, datum of 1929, adjustment of 1943. Prior to June 17, 1965, at site 170 ft (52 m) upstream at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--33 years, 72.7 ft³/s (2,059 m³/s), 9.40 in/yr (239 mm/yr), 52,670 acre-ft/yr (64.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,760 ft³/s (106 m³/s) June 2 (gage height, 17.51 ft or 5.337 m); minimum daily, 16 ft³/s (0.45 m³/s) Aug. 28.

Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) June 14, 1973 (gage height, 26.30 ft or 8.016 m); minimum, 4.1 ft³/s (0.116 m³/s) Oct. 26, 1956, caused by construction upstream.

Maximum stage since at least 1885, 27.0 ft (8.23 m) in November 1940, present site and datum, from information by local resident.
Flood in May 1935 reached a stage of 24.3 ft (7.41 m), present site and datum, from information by local resident.

REMARKS.--Discharge records good. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	43	54	96	43	35	47	64	1160	29	24	19
2	25	50	42	85	42	36	37	44	3130	26	25	91
3	24	164	36	73	42	35	32	36	997	28	24	78
4	23	277	36	63	41	33	34	43	148	30	23	37
5	23	85	36	58	41	33	60	44	103	35	23	61
6	22	59	39	56	42	32	246	30	71	32	23	42
7	23	50	45	62	42	34	88	106	65	35	22	28
8	23	46	40	61	40	74	58	740	61	33	21	25
9	24	44	37	54	40	173	51	373	55	65	21	22
10	24	42	36	52	40	80	42	355	55	68	21	21
11	24	39	35	54	41	50	37	346	51	73	19	20
12	24	37	35	54	41	43	35	124	44	47	18	20
13	24	36	35	53	41	40	34	198	41	37	18	19
14	25	35	34	51	41	37	34	690	39	110	17	19
15	56	35	34	48	41	37	33	121	38	61	17	18
16	49	36	39	47	41	38	32	72	48	71	17	18
17	33	36	57	45	41	35	35	56	54	216	18	18
18	28	36	46	43	42	32	36	47	43	76	18	18
19	26	36	38	43	44	32	36	41	60	120	18	19
20	22	39	36	48	41	32	52	37	50	62	17	84
21	21	39	36	68	77	32	100	36	45	41	17	179
22	21	36	35	56	187	31	52	36	36	34	17	78
23	21	34	35	50	63	29	40	35	106	30	17	36
24	34	33	80	48	46	29	36	34	66	31	25	27
25	129	33	554	63	42	35	40	33	41	37	19	24
26	514	34	497	113	40	51	44	33	42	34	17	24
27	512	37	104	64	39	42	36	38	39	28	17	70
28	94	36	84	49	38	33	33	34	37	26	16	105
29	64	36	787	45	36	33	36	31	36	24	17	411
30	52	41	321	44	---	62	109	30	31	24	19	91
31	45	---	122	44	---	59	---	68	---	25	18	---
TOTAL	2054	1584	3445	1790	1395	1377	1585	3975	6792	1588	603	1722
MEAN	66.3	52.8	111	57.7	48.1	44.4	52.8	128	226	51.2	19.5	57.4
MAX	514	277	787	113	187	173	246	740	3130	216	25	411
MIN	21	33	34	43	36	29	32	30	31	24	16	18
CFSM	.63	.50	1.06	.55	.46	.42	.50	1.22	2.15	.49	.19	.55
IN.	.73	.56	1.22	.63	.49	.49	.56	1.41	2.41	.56	.21	.61
AC-FT	4070	3140	6830	3550	2770	2730	3140	7880	13470	3150	1200	3420

CAL YR 1975 TOTAL 46464 MEAN 127 MAX 2690 MIN 21 CFSM 1.21 IN 16.46 AC-FT 92160
WTR YR 1976 TOTAL 27910 MEAN 76.3 MAX 3130 MIN 16 CFSM .73 IN 9.89 AC-FT 55360

PEAK DISCHARGE (BASE, 1,500 FT³/S).--June 2 (1300) 3,760 ft³/s (17.51 ft).

08071000 Peach Creek at Splendora, Tex.

LOCATION.--Lat 30°13'57", long 95°10'05", Montgomery County, on left bank at downstream side of bridge on Farm Road 2090, about 1,500 ft (457 m) west of depot at Splendora, 2.5 miles (4.0 km) upstream from Texas and New Orleans Railroad Co. bridge, 2.5 miles (4.0 km) upstream from bridge on U.S. Highway 59, and 9.7 miles (15.6 km) upstream from Caney Creek.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 81.61 ft (24.875 m) above mean sea level, datum of 1929, adjustment of 1936. Prior to Oct. 1, 1965, at same site and 5.00 ft (1.524 m) higher datum.

AVERAGE DISCHARGE.--33 years, 73.0 ft³/s (2.067 m³/s), 8.47 in/yr (215 mm/yr), 52,890 acre-ft/yr (65.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,560 ft³/s (72.5 m³/s) June 2 (gage height, 15.43 ft or 4.703 m); minimum, 16 ft³/s (0.45 m³/s) Aug. 28-30.

Period of record: Maximum discharge, 28,500 ft³/s (807 m³/s) Oct. 8, 1949 (gage height, 22.73 ft or 6.928 m); minimum, 1.1 ft³/s (0.031 m³/s) Sept. 28-30, 1956.

Maximum stage since at least 1895, that of Oct. 8, 1949. Flood of June 14, 1973, reached a stage of 22.57 ft or 6.879 m (discharge, 25,800 ft³/s or 731 m³/s). Flood in November 1940 reached a stage of 22.3 ft or 6.80 m (discharge, 24,700 ft³/s or 700 m³/s), from information by local residents.

REMARKS.--Records good. No large diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	40	66	125	47	40	37	53	516	26	22	20
2	24	40	61	102	44	39	32	33	2020	25	23	106
3	24	183	44	93	43	39	30	26	760	30	40	137
4	23	328	40	78	42	38	44	21	276	43	25	48
5	23	172	38	66	42	37	79	19	128	60	21	48
6	23	77	69	64	42	41	84	18	90	53	20	96
7	23	58	78	69	44	45	83	95	71	49	20	40
8	24	51	61	83	41	86	48	533	62	47	19	26
9	24	47	46	70	39	157	49	407	54	99	18	23
10	24	45	43	61	40	99	34	185	48	185	20	21
11	25	41	41	62	40	57	27	127	43	149	19	19
12	23	38	39	63	40	48	25	111	40	98	19	18
13	23	35	39	62	39	50	24	128	37	59	20	17
14	22	32	39	60	38	46	23	283	34	64	19	17
15	23	32	38	55	38	50	23	234	32	57	18	17
16	97	33	42	50	37	52	22	94	355	54	18	18
17	57	34	66	49	38	46	21	61	225	125	18	18
18	35	34	72	47	38	38	34	48	138	134	19	18
19	28	34	49	46	39	36	51	39	109	128	19	17
20	25	36	42	49	36	37	109	36	207	83	18	25
21	24	41	40	68	66	38	99	33	101	53	17	75
22	24	37	40	76	139	36	58	32	57	42	17	110
23	28	33	39	57	81	32	31	29	48	37	17	54
24	30	32	72	53	48	32	26	27	55	34	17	29
25	95	33	424	60	43	40	31	26	49	52	20	24
26	294	35	397	109	41	58	39	26	36	52	17	23
27	272	36	204	79	41	107	29	30	38	35	18	45
28	137	39	134	54	41	59	22	33	41	29	16	121
29	65	37	298	49	40	42	30	25	40	26	16	166
30	51	41	373	48	---	45	48	23	34	25	18	137
31	43	---	244	47	---	47	---	32	---	23	20	---
TOTAL	1658	1754	3278	2054	1347	1617	1292	2867	5744	1976	608	1533
MEAN	53.5	58.5	106	66.3	46.4	52.2	43.1	92.5	191	63.7	19.6	51.1
MAX	294	328	424	125	139	157	109	533	2020	185	40	166
MIN	22	32	38	46	36	32	21	18	32	23	16	17
CFSM	.466	.50	.91	.57	.40	.45	.37	.79	1.63	.54	.17	.44
IN.	.53	.56	1.04	.65	.43	.51	.41	.91	1.83	.63	.19	.49
AC-FT	3290	3480	6500	4070	2670	3210	2560	5690	11390	3920	1210	3040

CAL YR 1975	TOTAL	49658	MEAN	136	MAX	1640	MIN	22	CFSM	1.16	IN	15.79	AC-FT	98500
WTR YR 1976	TOTAL	25728	MEAN	70.3	MAX	2020	MIN	16	CFSM	.60	IN	8.18	AC-FT	51030

PEAK DISCHARGE (BASE, 1,000 FT³/S).--June 2 (1100) 2,560 ft³/s (15.43 ft).

08072000 Lake Houston near Sheldon, Tex.

LOCATION.--Lat 29°54'58", long 95°08'28", Harris County, at intake structure on San Jacinto River near right bank 100 ft (30 m) upstream from Lake Houston Dam, 4.0 miles (6.4 km) north of Sheldon, 4.6 miles (7.4 km) upstream from bridge on U.S. Highway 90, and 18 miles (29.0 km) northeast of Houston.

DRAINAGE AREA.--2,828 mi² (7,325 km²) at dam.

PERIOD OF RECORD.--Contents: April 1954 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage at dam is 0.70 ft (0.213 m) below mean sea level, adjustment of 1959; unadjusted for land-surface subsidence. Prior to Aug. 3, 1954, nonrecording gage read once daily.

EXTREMES.--Current year: Maximum contents, 173,400 acre-ft (214 hm³) June 3, 4 (gage height, 46.55 ft or 14.188 m); minimum, 135,400 acre-ft (167 hm³) Aug. 28 (gage height, 43.55 ft or 13.274 m).

Period of record: Maximum contents, 210,000 acre-ft (260 hm³) June 15, 1973 (gage height, 49.08 ft or 14.960 m); minimum since first filling of lake in August 1954, 53,380 acre-ft (65.8 hm³) Dec. 1, 1971 (gage height, 34.08 ft or 10.388 m).

REMARKS.--The lake is formed by two earthfill embankment sections and a 3,160-foot-long (963-meter) concrete spillway midway between the embankment sections. The total length of dam, including spillway, is 12,097 ft (3,687 m). The dam was completed and storage began Apr. 9, 1954. The spillway is a slab-and-buttress (Ambursen type) structure and includes two tainter gates, 18.0 by 20.5 ft (5.5 by 6.2 m), that can be used for control of releases below 44.5 ft (13.56 m) gage height and above 28.0 ft (8.53 m) gage height. In addition, there is a 36-inch-diameter (914-millimeter) sluice gate that is used for low-flow releases. The capacity table is based on a 1965 sedimentation study. Water is used for municipal supply by Houston for irrigation and industrial use in the ship-channel area. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	63.0	-
Design flood.....	57.0	-
Spillway crest.....	44.5	146,700
Crest of tainter gates (sill).....	28.0	22,800
Lowest gated outlet (invert).....	22.0	6,180

COOPERATION.--The capacity table was furnished by the city of Houston. Records of diversions were furnished by the San Jacinto River Authority and the city of Houston.

REVISIONS.--WSP 1732: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

43.5	134,800
45.0	152,900
46.6	174,000

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142900	154000	144900	155800	150600	151500	149900	152700	166800	151000	150100	137200
2	142200	153500	145100	154900	151100	151400	150100	153500	171300	150600	149900	143500
3	141400	156200	145200	154000	151100	150700	149900	152900	173400	150400	149100	146300
4	140800	157100	145200	153700	150900	151100	150200	152600	171100	150200	148400	147400
5	140500	156400	145200	153500	151400	150900	151100	152200	167200	151000	147700	147700
6	140100	155300	148300	153500	150000	150100	152300	152000	162300	151500	147200	148000
7	139800	154200	148900	151600	149600	150500	153800	156600	158800	151500	146700	148700
8	139300	153500	149100	149800	150000	152700	154200	160700	157700	152500	146200	148500
9	138700	153100	149300	150100	149600	154900	154600	160200	156800	157200	145500	148300
10	138500	152100	149400	150500	150200	155000	154400	160500	157100	158100	144600	147800
11	138200	151800	149400	151000	150500	154400	153600	161000	156700	157700	144000	147100
12	137900	149800	149400	151000	150700	154000	152900	159900	155700	156800	143200	146300
13	137500	148200	149300	151600	150500	152500	152300	159700	154000	155900	142700	145700
14	137200	147900	149300	151000	150500	152300	151700	159700	153200	155400	142100	145600
15	137700	147700	149000	150700	150500	152300	151200	159000	154600	154600	142700	144900
16	137800	147600	148800	149800	150500	151100	150700	158800	155100	154500	142700	144400
17	137800	147400	148500	149500	150200	150900	150500	158400	157200	158400	142700	143800
18	137400	147300	147900	149500	150200	151000	167700	157200	157200	158100	142200	143000
19	137000	147100	147700	149800	150700	150700	161200	155800	157100	157600	141400	142800
20	136600	146600	147700	149800	150700	151100	159800	154600	156400	156600	140700	159500
21	136200	146100	147700	149800	149600	150500	157100	153700	155300	155500	140100	159400
22	135900	145600	147700	150000	149300	150500	155700	152600	154900	154500	139300	156300
23	136500	145400	147400	150000	150600	150200	154200	152000	155400	154000	138400	154600
24	136500	145200	151400	150000	151700	150500	154200	151600	154500	153500	137700	153600
25	144000	145000	158000	153200	152800	150500	153600	151400	153800	153100	137200	152300
26	153300	145000	159900	152000	152700	151100	153200	151100	153200	152800	136600	152300
27	158100	144900	159300	151600	152300	150500	152700	150200	152800	152300	135900	153300
28	158200	144600	158000	152300	152000	150700	152200	149900	152300	152200	138800	154600
29	157500	144600	159300	153100	151700	151400	153200	149900	152100	151700	138500	156200
30	156200	145200	159700	153300	---	150600	152900	149600	151500	151200	137900	156400
31	154900	---	157700	151400	---	149900	---	151700	---	150700	137400	---
(†)	45.15	44.37	45.37	44.87	44.90	44.75	45.00	44.90	44.88	44.82	43.72	45.27
(*)	+13200	-9700	+12500	-6300	+300	-1800	+3000	-1200	-200	-800	-13300	+19000
(††)	19020	17070	17400	18060	17180	21170	20600	20980	20230	22950	22570	20800
MAX	158200	157100	159900	155800	152800	155000	167700	161000	173400	158400	150100	159500
MIN	135900	144600	144900	149500	149300	149900	149900	149600	151500	150200	135900	137200

CAL YR 1975..... * +1100

WTR YR 1976..... * +14700

†† 208130

†† 238010

MAX 171500

MAX 173400

MIN 135900

MIN 135900

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by San Jacinto River Authority and city of Houston.

08072000 Lake Houston near Sheldon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
NOV 12...	0930	205	6.4	21.0	41	6	14	1.4	18
DEC 22...	1345	197	6.8	10.5	45	11	15	1.9	17
DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV 12...	1.2	2.2	42	0	5.6	31	.2	10	103
DEC 22...	1.1	2.5	42	0	5.7	31	.1	9.8	104

08072020 Lake Houston Plant Intake at Galena Park, Tex.

LOCATION.--Lat 29°44'01", long 95°12'58", Harris County, at city of Houston municipal water plant intake from Lake Houston West Canal and 1 mile (2 km) east of Galena Park.

DRAINAGE AREA.--2,828 mi² (7,325 km²).

PERIOD OF RECORD.--Periodic chemical analyses: May 1972 to current year. Pesticide analyses: May 1968 to current year.

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)					
DATE	TIME												
JAN. 19...	1050	40	1	0	0	0	5	60					
JULY 13...	1405	100	2	0	0	0	75	170					
		DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)					
DATE													
JAN. 19...		0	10	30	.2	0	130	30					
JULY 13...		0	0	20	.2	2	150	10					
DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	
JAN. 19...	1050	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00	
JULY 13...	1405	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	
DATE		TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 19...	.00	.00	.00	.00	.00	.00	.00		0	.00	.02	.00	.00
JULY 13...	.00	.00	.00	.00	.00	.00	.00		0	.00	.04	.01	.00

08072050 San Jacinto River near Sheldon, Tex.

LOCATION.--Lat 29°52'34", long 95°05'37", Harris County, on left bank at U.S. Highway 90 bridge, 0.3 mile (0.5 km) downstream from Southern Pacific Railway Co. bridge, 1.5 miles (2.4 km) east of Sheldon, 4.6 miles (7.4 km) downstream from Lake Houston, and 21 miles (34 km) northeast of Houston.

DRAINAGE AREA.--2,879 mi² (7,457 km²).

PERIOD OF RECORD.--February 1970 to current year (elevations only prior to 1973, beginning 1973 gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 0.69 ft (0.210 m) below mean sea level, adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 6.93 ft (2.112 m) June 4; minimum, -2.34 ft (-0.713 m) Feb. 22.

Period of record: Maximum gage height, 20.12 ft (6.133 m) June 15, 1973; minimum elevation, -2.36 ft (-0.719 m) Feb. 13, 1971.

Maximum elevation since at least 1875, 31.5 ft (9.60 m) Nov. 26, 1940, at site 0.3 mile (0.5 km) upstream at Southern Pacific Railway Co. bridge.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	2.20	0.79	3.29	1.77	-	-	2.71	1.27	-0.10	-1.72	2.22	1.10	1.78	0.04	1.54	0.04	3.86	2.18	-	-	-	-	-	-
2	2.37	.31	4.28	2.33	-	-	3.04	1.14	1.52	-.38	2.19	1.07	1.83	.43	1.94	-.27	5.71	3.86	-	-	-	-	-	-
3	2.54	1.17	3.85	1.58	2.57	0.80	1.54	-	1.52	.16	2.40	1.31	2.12	.27	1.88	.33	6.80	5.71	-	-	1.78	-	-	-
4	2.30	.82	3.15	1.18	2.68	1.01	-	-	1.64	.63	2.99	2.13	1.89	.44	1.99	.07	6.93	6.29	-	-	1.87	0.41	-	-
5	2.41	.68	2.65	.80	2.76	1.22	-	-	1.57	.49	2.47	1.07	2.17	.27	3.51	1.28	6.29	4.49	-	-	2.00	.40	-	-
6	2.55	.83	2.62	1.23	2.74	.75	-	-	1.37	-.64	1.54	.14	2.23	.66	3.12	1.53	4.49	3.10	-	-	-	.14	-	-
7	2.55	.78	2.90	1.40	1.64	.25	-	-	.81	-.13	2.40	.55	1.97	.60	2.68	.83	3.50	2.73	-	-	1.51	.06	-	-
8	2.56	1.05	2.87	1.39	2.09	.69	-	-	1.10	-.37	2.85	1.36	2.06	.63	2.49	1.47	3.14	1.93	-	-	1.88	-.36	-	-
9	2.48	.95	2.92	1.84	1.76	.86	-	-	1.43	-.27	1.78	-.32	2.09	.51	2.85	1.89	2.81	1.31	-	-	.33	-	-	-
10	2.44	1.12	3.10	1.24	1.83	.86	-	-	1.62	.22	1.90	-	2.30	-	2.74	1.87	2.65	.94	-	-	-	-	-	-
11	2.43	.88	2.65	1.65	2.17	1.25	-	-	1.43	-.18	2.42	.78	-	-	2.83	1.78	2.75	.90	-	-	-	-	-	-
12	2.44	1.00	3.00	-.38	2.52	1.42	-	-	1.52	.01	2.52	1.14	-	-	2.71	1.33	2.85	.88	-	-	-	-	-	-
13	2.49	1.35	.77	-.83	2.97	1.50	-	-	1.67	.32	-	-	-	-	2.87	1.60	2.85	1.08	2.47	-	-	-	-	-
14	2.86	1.55	2.15	.77	3.03	1.65	-	-	1.69	.23	-	-	2.75	-	2.23	.80	3.02	.99	2.63	1.02	-	-	-	-
15	2.98	1.80	2.23	1.03	2.07	1.19	-	-	2.02	.61	-	-	4.03	-	2.13	.47	3.76	1.72	2.57	1.02	-	-	-	-
16	2.43	1.41	2.45	1.27	2.22	.23	-	-	2.38	.83	-	-	4.18	-	2.25	.64	3.28	1.76	2.15	.90	-	-	-	-
17	1.95	.78	2.95	1.37	2.40	.65	-	-	2.38	1.08	2.10	-.54	-	-	1.77	.38	2.87	1.22	1.92	.78	-	-	-	-
18	1.98	.40	3.08	-	1.72	-.67	-	-	2.38	.32	2.63	.72	-	-	2.10	.22	2.80	1.75	2.09	1.12	-	-	-	-
19	2.40	.90	-	-	2.06	.36	2.05	.88	1.79	.17	2.93	.76	-	-	2.57	1.02	1.96	1.13	2.22	1.02	-	-	-	-
20	2.40	.73	-	-	2.06	.02	2.05	-.07	2.44	.43	2.64	1.20	-	-	2.78	1.35	1.80	-	2.10	.90	-	-	-	-
21	2.42	.95	-	-	1.73	-.32	1.30	.10	2.64	-.20	1.91	.22	2.38	1.21	2.33	1.38	-	-	2.21	.73	-	-	-	-
22	2.76	1.60	-	-	2.04	.58	1.31	-.18	-.20	-.34	2.37	.38	2.43	.95	2.25	1.24	-	-	2.12	.73	-	-	-	-
23	3.80	2.12	-	-	2.13	1.09	1.76	.30	-	-	2.46	.88	2.78	1.70	2.65	1.42	-	-	-	-	-	-	-	-
24	3.21	1.58	-	-	3.47	1.67	2.31	.53	-	-	2.64	1.50	2.51	1.42	1.95	.97	-	-	-	-	-	-	-	-
25	3.05	.75	-	-	3.47	.22	2.42	.75	1.82	.37	2.94	.87	1.76	.99	2.32	.54	-	-	-	-	-	-	-	-
26	2.07	.84	-	-	1.34	-.18	1.55	-.64	1.73	.16	2.99	1.87	2.70	.64	3.36	1.02	-	-	-	-	-	-	-	-
27	2.48	1.32	-	-	2.36	1.03	1.12	-.72	1.48	.10	2.04	.34	2.83	1.47	2.70	.45	-	-	-	-	-	-	-	-
28	2.85	1.34	-	-	3.22	1.44	1.48	-.20	1.72	.41	2.57	1.50	2.99	1.52	1.67	-.43	-	-	-	-	-	-	-	-
29	2.59	1.27	-	-	3.05	1.01	1.60	-.08	2.17	1.34	3.02	1.93	2.97	1.03	2.32	-.12	-	-	2.12	-	-	-	-	-
30	2.21	1.17	-	-	2.26	.68	1.28	-.31	-----	-----	2.42	.90	1.99	.47	2.98	.93	-	-	2.08	.73	-	-	-	-
31	2.95	1.60	-----	-----	2.46	1.06	1.57	-.88	-----	-----	1.22	-.10	-----	-----	3.37	.98	-----	-----	-	-	-	-	-----	-----

08072500 Barker Reservoir near Addicks, Tex.

LOCATION.--Lat 29°46'11", long 95°38'49", Harris County, at dam on Buffalo Bayou, 45 ft (14 m) upstream from reservoir outlet works, 1,160 ft (354 m) upstream from Addicks-Howell county road, 1.1 miles (1.8 km) south of Addicks, and 1.2 miles (1.9 km) upstream from South Mayde Creek.

DRAINAGE AREA.--134 mi² (347 km²). During extreme floods when the capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 150 mi² (388 km²).

PERIOD OF RECORD.--August 1945 to current year. On October 1973, the upper gage was converted to a flood-hydrograph partial-record station.

GAGE.--Water-stage recorders. Datum of gage is 0.33 ft (0.101 m) below mean sea level; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum contents, 7,020 acre-ft (8.66 hm³) July 18, 19 (gage height, 88.99 ft or 27.124 m); minimum daily, 2.4 acre-ft (0.003 hm³) Dec. 10-15.

Period of record: Maximum contents, 39,200 acre-ft (48.3 hm³) May 15, 1968 (gage height, 94.60 ft or 28.834 m); minimum, reservoir was dry at times.

REMARKS.--The reservoir is formed by a rolled earthfill dam 72,900 ft (22,200 m) long. The dam was completed Feb. 3, 1946, but was used as early as the spring of 1945 for flood control. The reservoir is operated for flood protection for the city of Houston. The controlled outlet works consist of five concrete conduits, 9 by 7 ft (2.7 by 2.1 m) wide, each controlled by a vertical slide gate. The capacity curve is based on a survey in 1940. Runoff in excess of the design flood will be discharged around both ends of the dam. Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	114.0	-
Ground gage height at ends of dam.....	107.0	207,000
Design flood.....	101.9	127,900
Crest of spillway (invert).....	75.0	0

COOPERATION.--Capacity curve furnished by the Corps of Engineers.

REVISIONS.--WSP 1922: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

75.00	1.7	80.00	55	84.20	582
76.00	6.3	81.00	79	85.00	999
76.50	9.5	82.00	129	86.00	1,830
77.50	19.0	82.60	190	87.50	3,850
78.50	31.0	83.40	344	89.00	7,040

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	765	4.3	1910	4.0	3.3	3.2	56	1120	896	4.8	5.6
2	8.2	632	3.4	1570	3.8	3.2	3.2	7.2	4160	931	4.7	192
3	7.1	891	3.0	1240	3.9	3.2	3.2	3.1	5660	959	5.1	230
4	8.0	982	2.8	874	3.4	3.3	3.5	4.6	5790	1030	5.1	51
5	7.3	604	2.5	559	3.3	3.3	3.7	4.2	5340	1200	5.3	22
6	6.3	159	6.2	276	3.4	3.3	3.7	3.9	4710	1370	4.4	23
7	7.1	28	3.4	68	3.3	3.5	3.4	24	4110	1400	4.5	10
8	7.7	10	2.9	4.8	3.2	5.1	3.5	204	3470	1570	4.5	7.5
9	7.0	8.9	2.5	4.4	3.5	3.7	3.4	377	2790	2310	4.9	5.9
10	7.2	4.9	2.4	4.7	3.4	4.0	3.4	309	2080	3380	5.7	5.1
11	7.1	4.3	2.4	4.7	3.3	3.5	3.4	95	1360	4400	4.7	5.0
12	6.3	4.0	2.4	4.4	3.3	3.5	3.4	9.3	673	4920	4.3	4.5
13	5.7	3.9	2.4	4.4	3.2	3.4	3.4	31	117	5170	4.0	4.3
14	5.8	3.7	2.4	4.2	3.2	3.6	3.6	47	6.3	5750	4.6	4.2
15	6.2	3.6	2.4	4.2	3.2	3.6	3.4	10	118	6220	7.3	4.5
16	8.3	3.5	4.6	4.2	3.2	3.4	4.4	6.7	788	6480	7.1	4.2
17	8.7	3.4	4.1	3.9	3.3	3.4	3.9	5.6	1130	6800	6.0	4.1
18	8.3	3.3	3.4	4.3	3.2	3.4	53	5.2	1190	7020	5.2	4.1
19	6.1	3.2	3.3	4.7	3.2	3.3	462	4.9	1350	6850	5.2	4.1
20	4.8	3.0	3.2	5.6	3.3	3.3	1160	4.5	1450	6460	5.8	6.8
21	4.2	3.0	3.1	5.8	4.2	3.3	1270	4.2	1360	6290	5.3	5.6
22	4.3	2.9	3.0	5.0	3.6	3.3	771	4.3	1180	5530	5.8	5.2
23	4.2	2.8	3.0	5.0	3.3	3.3	391	4.4	936	5000	5.5	4.6
24	5.3	2.6	76	4.7	3.3	3.3	171	4.4	742	4550	5.3	4.3
25	4.4	2.5	1170	40	3.3	3.3	62	4.0	649	4600	5.4	4.1
26	353	4.1	2550	80	3.3	3.3	6.8	5.5	698	4370	5.7	4.4
27	885	3.2	2890	22	3.3	3.3	4.9	5.4	737	3690	4.8	5.8
28	1240	3.0	2890	6.2	3.3	3.3	4.5	5.2	782	2860	4.5	14
29	1280	2.8	2750	5.2	3.3	3.3	48	4.6	828	1710	4.2	34
30	1150	5.8	2500	4.7	---	3.3	105	4.6	874	748	3.8	20
31	948	---	2210	4.3	---	3.3	---	61	---	196	4.7	---
MAX	1280	982	2890	1910	4.2	5.1	1270	377	5790	7020	7.3	230
MIN	4.2	2.5	2.4	3.9	3.2	3.2	3.2	3.1	6.3	196	3.8	4.1

CAL YR 1975 MAX 15000 MIN 2.4
WTR YR 1976 MAX 7020 MIN 2.4

08073000 Addicks Reservoir near Addicks, Tex.

LOCATION.--Lat 29°47'28", long 95°37'24", Harris County, at dam on South Mayde Creek, 65 ft (20 m) upstream from reservoir outlet works, 2,700 ft (823 m) upstream from U.S. Highway 90, 1.2 miles (1.9 km) east of Addicks, and 1.4 miles (2.3 km) upstream from mouth.

DRAINAGE AREA.--133 mi² (344 km²). During extreme floods when the capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 129 mi² (334 km²).

PERIOD OF RECORD.--June 1948 to current year. In October 1973, the upper gages were converted to flood-hydrograph partial-record stations.

GAGE.--Water-stage recorders. Datum of gage is at mean sea level; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum contents, 5,800 acre-ft (7.15 hm³) June 4 (elevation, 92.90 ft or 28.316 m); minimum, reservoir was dry for many days.

Period of record: Maximum contents, 37,460 acre-ft (46.2 hm³) May 15, 1968 (elevation, 100.02 ft or 30.486 m); minimum, reservoir was dry at times.

Flood in December 1935 reached a stage of 89.9 ft (27.40 m) at bridge on U.S. Highway 90, 2,700 ft (823 m) downstream from gage, from information by Corps of Engineers.

REMARKS.--The reservoir is formed by a rolled earthfill dam 61,166 ft (18,643 m) long. The dam was completed in December 1948. The reservoir is operated for flood protection for the city of Houston. The outlet works consist of five concrete conduits 8 by 6 ft (2.4 by 1.8 m) wide, each controlled by a vertical slide gate. Runoff in excess of maximum design capacity will be discharged around both ends of dam. The capacity curve is based on a survey made in 1940. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	123.5	-
Ground elevation at ends of dam.....	114.0	204,500
Design flood.....	113.0	188,030
Crest of spillway (invert).....	73.0	0

COOPERATION.--Capacity curve furnished by the Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

73.7	0	82.0	82	88.5	1,020
76.0	7	84.0	135	90.0	2,020
78.0	22	85.0	189	91.5	3,570
80.0	46	86.5	385	93.0	6,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.1	694	.6	649			0	10	1230	157	29	0
2	.2	625	.2	460			0	0	4080	161	.4	14
3	.3	1030	0	314			0	0	5490	167	0	3.5
4	.3	1080	0	196			1.8	0	5760	172	0	1.2
5	.3	742	0	130			.2	0	5270	190	0	14
6	.0	419	0	85			0	0	4610	231	0	37
7	1.0	225	0	38			0	20	4470	253	0	43
8	1.6	155	0	0			0	116	4180	358	0	1.7
9	1.2	113	0	0			0	169	3530	971	.4	.6
10	.5	70	0	0			0	170	2850	1650	0	.0
11	.6	25	0	0			0	139	2210	2260	0	0
12	.4	0	0	0			0	112	1600	2610	0	0
13	0	0	0	0			0	106	1040	2770	0	0
14	0	0	0	0			0	97	556	3160	0	0
15	10	0	0	0			0	75	453	3510	16	0
16	.6	0	0	0			0	48	569	3520	56	0
17	.7	0	0	0			0	20	609	3380	31	0
18	.4	0	0	0			42	0	632	3210	12	0
19	.1	0	0	0			82	0	642	2830	1.5	0
20	0	0	0	.1			171	0	642	2440	.9	16
21	0	0	0	0			181	0	577	2060	.5	1.8
22	0	0	0	.1			131	0	389	1670	.1	.4
23	0	0	0	.0			90	0	249	1380	0	0
24	0	0	67	0			45	0	156	1220	.3	0
25	82	0	492	77			4.8	0	139	1620	.2	0
26	475	0	1140	113			0	1.1	141	1450	.5	0
27	1050	0	1300	102			0	1.3	144	926	0	0
28	1260	0	1240	79			0	.4	148	402	0	9.0
29	1240	0	1180	55			31	1.0	153	169	0	14
30	1100	3.5	1030	29	---		37	.5	155	107	0	4.7
31	886	---	842	.2	---		---	64	---	70	0	---
MAX	1260	1080	1300	649	0	0	181	170	5760	3520	56	43
MIN	0	0	0	0	0	0	0	0	139	70	0	0

CAL YR 1975 MAX 7800 MIN 0
WTR YR 1976 MAX 5760 MIN 0

08073500 Buffalo Bayou near Addicks, Tex.

LOCATION.--Lat 29°45'42", long 95°36'20", Harris County, near right bank at bridge on Dairy-Ashford Road over rectified channel, 1.8 miles (2.9 km) downstream from South Mayde Creek, and 2.6 miles (4.2 km) southeast of Addicks.

DRAINAGE AREA.--293 mi² (759 km²). During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 310 mi² (803 km²).

PERIOD OF RECORD.--Discharge: August 1945 to current year.

Water quality: Chemical, biochemical, and pesticides analyses: August 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.40 ft (0.427 m) below mean sea level, adjustment of 1973; records unadjusted to land-surface subsidence. Prior to Feb. 2, 1948, water-stage recorder at bridge on natural channel 1,200 ft (366 m) to right at same datum. Feb. 2 to May 21, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--31 years, 202 ft³/s (5.721 m³/s), 146,300 acre-ft/yr (180 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,470 ft³/s (41.6 m³/s) July 23 (gage height, 61.37 ft or 18.706 m); minimum daily, 6.9 ft³/s (0.20 m³/s) Apr. 2.

Period of record: Maximum discharge, 11,200 ft³/s (317 m³/s) Aug. 29, 1945 (gage height, 81.23 ft or 24.759 m, former site); no flow at times.

Maximum stage since at least 1896, 85.6 ft (26.09 m) in December 1935, adjusted to former site from floodmark 0.5 mile (0.8 km) downstream, on basis of slope of flood of Aug. 29, 1945, from information by local resident.

REMARKS.--Discharge records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 3.2 and 3.0 miles (5.1 and 4.8 km) upstream, respectively (total capacity, 315,900 acre-ft or 390 hm³). Extreme low flow is sustained by drainage from irrigated lands.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	297	32	327	16	8.5	7.6	187	925	25	315	42
2	65	317	18	319	13	7.5	6.9	89	538	24	93	156
3	58	501	14	309	12	7.5	7.9	28	637	25	51	369
4	56	509	12	299	11	7.4	7.3	18	752	26	42	399
5	57	671	11	285	10	8.8	23	12	945	29	37	334
6	52	617	14	273	10	9.4	24	8.9	876	34	34	396
7	48	444	25	243	10	18	16	23	665	94	33	351
8	63	184	14	129	9.5	28	13	10	516	252	32	211
9	70	143	11	19	9.1	23	11	7.1	801	180	35	106
10	54	127	9.8	18	9.6	18	10	100	782	123	40	66
11	51	107	9.7	19	9.1	13	8.0	217	755	99	38	51
12	52	55	10	14	8.9	11	7.7	198	724	93	34	45
13	44	20	10	14	9.9	9.5	7.5	179	683	243	32	40
14	37	17	9.5	15	9.4	10	7.6	198	513	287	30	38
15	38	15	9.6	13	8.8	12	9.2	176	501	321	44	36
16	63	13	15	14	8.5	11	8.2	113	345	576	237	39
17	56	12	23	12	8.3	8.9	12	80	266	813	333	34
18	56	12	20	11	8.1	8.1	120	44	228	810	214	32
19	47	12	16	14	8.0	8.0	364	23	80	772	109	34
20	35	12	12	22	8.0	8.0	375	20	60	731	77	108
21	30	13	10	29	17	8.1	361	17	129	710	64	198
22	26	11	10	25	14	9.2	506	15	271	701	56	102
23	30	9.9	10	25	10	8.7	418	16	262	889	51	69
24	28	9.1	239	23	8.1	8.0	236	15	251	758	49	50
25	209	9.3	499	91	7.4	8.1	205	16	160	750	49	44
26	395	18	427	207	7.5	9.7	88	22	48	745	54	41
27	333	14	389	188	7.7	8.4	23	35	40	882	48	80
28	323	11	375	111	7.5	7.6	15	27	35	962	37	124
29	317	10	361	80	8.7	7.0	159	23	31	936	35	289
30	307	20	346	70	---	8.2	214	22	27	743	35	306
31	301	---	334	48	---	10	---	210	---	414	38	---
TOTAL	3366	4210.3	3295.6	3266	285.1	328.6	3270.9	2149.0	12846	14047	2376	4190
MEAN	109	140	106	105	9.83	10.6	109	69.3	428	453	76.6	140
MAX	395	671	499	327	17	28	506	217	945	962	333	399
MIN	26	9.1	9.5	11	7.4	7.0	6.9	7.1	27	24	30	32
AC-FT	6680	8350	6540	6480	565	652	6490	4260	25480	27860	4710	8310
CAL YR 1975 TOTAL	84620.9			232		2420	MIN 9.1	AC-FT 167800				
WTR YR 1976 TOTAL	53630.5			147		962	MIN 6.9	AC-FT 106400				

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL
06...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	122
19...	6.5	229	0	25	83	.9	16	379	61						
01...	--	--	--	--	--	--	--	--	780						
07...	--	--	--	--	--	--	--	--	214						
23...	6.4	243	0	38	150	.7	8.8	513	32						
08...	--	--	--	--	--	--	--	--	384						
12...	--	--	--	--	--	--	--	--	120						
17...	4.4	91	0	15	45	.5	9.8	182	352						
28...	--	--	--	--	--	--	--	--	140						
28...	--	--	--	--	--	--	--	--	50						
24...	--	--	--	--	--	--	--	--	202						

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	VOL. NON-FILT-RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT. 06...	28	.28	.09	.31	1.1	.62	12	--	.1
NOV. 19...	6	.35	.07	.27	1.5	1.1	7.0	0	.2
DEC. 01...	124	.23	.05	1.7	1.9	1.8	17	--	.4
JAN. 07...	52	.36	.03	.08	1.4	.38	16	--	.0
FEB. 23...	12	1.2	.14	1.1	1.7	1.1	13	11	.3
MAR. 08...	106	1.3	.15	.79	2.9	1.3	9.4	--	.3
APR. 12...	32	.78	.32	2.0	1.5	2.5	24	--	.3
MAY 17...	62	.38	.08	.26	1.7	.59	11	0	.1
JUNE 28...	26	.40	.13	.56	.94	.75	2.8	--	.2
JULY 28...	11	.02	.01	.04	.68	.19	1.6	--	.1
AUG. 24...	52	.51	.24	.40	1.4	1.0	11	--	.1

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 19...	1115	0	3	180	0	0	0	2
FEB. 23...	1200	--	--	230	--	--	--	--
MAY 17...	1100	90	7	100	0	0	0	3

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 19...	80	0	140	130	.0	0	350	20	
FEB. 23...	--	--	--	--	--	--	--	--	
MAY 17...	40	0	10	10	.4	0	210	10	

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA-TERIAL (UG/KG)	POLY-CHLO-RINATED NAPH-THA-LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)
NOV. 19...	1115	.0	0	--	.00	.0	.0	14	.00	.2	.00	.1
FEB. 23...	1200	.0	0	.00	.00	.0	.0	9	.00	.0	.00	.8

DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)
NOV. 19...	.00	.0	.05	.00	.6	.00	.0	.00	.00	1.0	.00	.00	.1
FEB. 23...	.00	.0	.05	.00	.3	.00	.0	.00	.00	.0	.00	.00	.0

DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL MALA-THION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL TRI-THION 2,4-D (UG/L)	TOTAL TRI-THION 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.01	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
FEB. 23...	.01	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.01	.00

08073600 Buffalo Bayou at West Belt Drive, Houston, Tex.

LOCATION.--Lat 29°45'43", Long 95°33'27", Harris County, at downstream side of bridge on West Belt Drive in west Houston, 100 ft (30 m) downstream from Rummel Creek, 3.5 miles (5.6 km) downstream from the gage Buffalo Bayou near Addicks, and 3.7 miles (6.0 km) upstream from the gage Buffalo Bayou at Piney Point.

DRAINAGE AREA.--307 mi² (795 km²).

PERIOD OF RECORD.--September 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.67 ft (0.204 m) below mean sea level.

AVERAGE DISCHARGE.--5 years, 346 ft³/s (9.799 m³/s), 250,700 acre-ft/yr (309 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,330 ft³/s (66.0 m³/s) June 1 (gage height, 54.89 ft or 16.730 m); minimum daily, 32 ft³/s (0.91 m³/s) Feb. 25, 26, 28, Mar. 2.

Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Mar. 20, 1972 (gage height, 61.48 ft or 18.739 m); minimum daily, 25 ft³/s (0.71 m³/s) Nov. 21, 1971.

REMARKS.--Records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 10.1 and 10.3 miles (16.3 and 16.6 km) upstream, respectively. Low flow is sustained by sewage effluent from Houston suburbs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	340	61	360	42	33	34	257	1680	34	354	68
2	81	404	45	352	39	32	33	139	646	34	117	173
3	73	722	40	339	37	33	34	63	683	47	62	424
4	71	538	39	330	37	33	34	48	728	35	54	479
5	72	731	38	316	37	34	60	43	900	39	53	382
6	68	680	43	305	36	34	54	39	880	43	54	452
7	63	550	50	274	37	64	46	94	770	159	51	425
8	79	250	38	170	35	77	41	47	490	512	48	277
9	86	200	35	47	34	54	37	38	799	461	49	143
10	72	170	34	44	35	46	36	164	789	275	54	97
11	68	145	34	46	34	40	33	283	763	130	53	75
12	70	79	35	41	34	48	33	254	734	94	46	68
13	62	43	35	40	36	38	33	288	695	261	46	61
14	56	41	35	42	35	49	33	255	543	403	44	60
15	57	38	35	40	34	42	34	219	750	363	59	75
16	87	36	52	42	35	39	34	140	586	600	289	60
17	77	37	48	40	34	36	36	111	282	852	416	59
18	76	38	45	39	33	35	315	72	258	858	240	54
19	67	38	40	44	33	35	452	48	80	821	146	68
20	55	39	39	54	33	35	537	45	59	783	99	164
21	47	40	37	55	69	34	398	42	116	759	78	256
22	45	38	37	51	40	38	564	40	302	752	71	134
23	56	37	36	50	35	35	489	40	293	1100	69	97
24	48	38	445	52	33	35	308	40	281	979	72	75
25	500	37	608	159	32	36	311	41	186	833	71	67
26	544	69	468	241	32	38	149	58	43	816	79	66
27	383	44	425	220	33	35	62	72	39	924	76	192
28	372	38	422	148	32	34	50	53	38	1040	65	178
29	366	37	402	112	34	35	278	47	37	1010	74	328
30	356	57	380	101	---	35	285	44	36	818	61	363
31	346	---	370	81	---	37	---	441	---	487	63	---
TOTAL	4481	5554	4451	4235	1050	1229	4843	3565	14486	16322	3113	5420
MEAN	145	185	144	137	36.2	39.6	161	115	483	527	100	181
MAX	544	731	608	360	69	77	564	441	1680	1100	416	479
MIN	45	36	34	39	32	32	33	38	36	34	44	54
AC-FT	8890	11020	8830	8400	2080	2440	9610	7070	28730	32370	6170	10750
CAL YR 1975	TOTAL	102092	MEAN 280	MAX 2380	MIN 34	AC-FT 202500						
WTR YR 1976	TOTAL	68749	MEAN 188	MAX 1680	MIN 32	AC-FT 136400						

08073700 Buffalo Bayou at Piney Point, Tex.

LOCATION.--Lat 29°44'48", long 95°31'24", Harris County, on downstream side of bridge on Piney Point Road, village of Piney Point, 3.7 miles (6.0 km) downstream from Rummel Creek, 7.2 miles (11.6 km), downstream from gage Buffalo Bayou near Addicks, and 12.5 miles (20.1 km) upstream from gage Buffalo Bayou at Houston.

DRAINAGE AREA.--317 mi² (821 km²).

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

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAUGE.--Water-stage recorder. Datum of gage is 1.35 ft (0.412 m) below mean sea level, adjustment of 1973.

AVERAGE DISCHARGE.--13 years, 265 ft³/s (7.505 m³/s), 192,000 acre-ft/yr (237 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,350 ft³/s (66.6 m³/s) June 1 (gage height, 47.82 ft or 14.576 m); minimum daily, 32 ft³/s (0.91 m³/s) Feb. 19, Apr. 2, 3.

Period of record: Maximum discharge, 4,470 ft³/s (127 m³/s) June 13, 1973 (gage height, 54.98 ft or 16.758 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Dec. 6, 7, 1964.

REMARKS.--Discharge records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 14.0 miles (22.5 km) and 13.8 miles (22.2 km) upstream, respectively. Low flow is partly sustained by sewage effluent from Houston suburbs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	398	74	404	52	37	34	276	1950	42	426	66
2	99	464	55	397	43	35	32	180	832	40	165	156
3	89	829	45	383	39	34	32	88	736	60	76	419
4	85	572	45	374	38	34	34	63	719	46	63	510
5	86	756	45	362	38	36	68	54	929	45	60	406
6	82	724	50	350	36	37	63	48	888	54	60	451
7	74	605	60	333	36	68	53	122	777	163	55	445
8	90	292	46	238	36	113	49	70	499	500	52	334
9	104	234	41	60	36	66	42	46	793	670	52	162
10	87	216	39	49	35	50	39	232	799	380	59	141
11	80	191	38	52	35	44	37	323	778	188	58	98
12	82	117	38	44	34	60	37	267	753	122	51	87
13	75	50	38	44	37	40	36	312	719	275	50	78
14	64	47	38	45	36	72	36	260	599	446	49	76
15	65	44	38	40	36	94	37	237	834	356	57	85
16	101	42	61	46	36	41	37	168	902	564	279	81
17	92	42	53	41	34	46	39	136	307	830	486	72
18	93	42	49	38	33	36	362	99	303	852	301	66
19	81	42	46	43	32	36	502	60	117	825	184	113
20	67	44	42	55	33	34	564	55	85	790	139	196
21	59	43	39	60	98	34	383	51	112	769	86	318
22	54	40	40	57	46	39	550	48	325	758	76	174
23	70	39	38	54	41	35	494	47	317	1020	73	122
24	70	40	440	54	36	34	323	47	304	1050	75	96
25	609	39	727	204	35	36	336	48	237	916	76	81
26	665	99	520	274	35	37	182	79	58	798	81	93
27	439	50	474	259	34	36	82	96	51	887	80	326
28	423	42	467	204	35	33	59	65	48	986	102	202
29	414	44	452	139	38	35	339	56	47	968	107	353
30	410	72	425	125	---	34	296	53	45	905	72	400
31	401	---	416	99	---	37	---	478	---	535	66	---
TOTAL	5393	6259	4979	4927	1133	1403	5177	4164	15863	16840	3616	6207
MEAN	171	209	161	159	39.1	45.3	173	134	529	543	117	207
MAX	665	829	727	404	98	113	564	478	1950	1050	486	510
MIN	54	39	38	38	32	33	32	46	45	40	49	66
AC-FT	10520	12410	9880	9770	2250	2780	10270	8260	31460	33400	7170	12310
CAL YR 1975 TOTAL	113112		MEAN 310	MAX 2340	MIN 38	AC-FT 224400						
WTR YR 1976 TOTAL	75871		MEAN 207	MAX 1950	MIN 32	AC-FT 150500						

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

08073700 Buffalo Bayou at Piney Point, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

VOL. NON-FILT-RABLE RESIDUE										METHY-LENE BLUE ACTIVE SUB-STANCE			
DATE	(MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	(MG/L)				
OCT. 06...	6	.32	.67	2.4	2.2	3.6	12	--	.4				
NOV. 12...	8	.17	.21	1.0	1.4	1.7	9.8	3	.2				
DEC. 01...	35	1.2	.36	3.5	3.4	3.2	20	--	.4				
JAN. 07...	50	.38	.02	.13	1.6	.64	16	--	.0				
FEB. 23...	18	.39	.71	8.8	3.2	5.6	18	9	1.0				
MAR. 08...	21	.49	.48	2.7	6.2	4.8	14	--	.9				
APR. 13...	15	.23	.48	12	2.0	5.7	24	--	.8				
MAY 18...	46	.42	.46	1.5	1.9	1.9	15	7	.3				
JUNE 28...	7	.10	.25	5.9	2.9	6.3	2.4	--	.5				
JULY 28...	10	.04	.03	.15	.69	.25	6.3	--	.1				
AUG. 24...	21	.39	.61	3.2	1.4	4.3	8.8	--	.1				
DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
NOV. 12...	0910	30	3	160	0	0	0	2					
FEB. 23...	1245	--	--	390	--	--	--	--					
MAY 18...	0945	70	8	130	0	0	0	2					
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
NOV. 12...	60	0	1	70	.0	0	200	40					
FEB. 23...	--	--	--	--	--	--	--	--					
MAY 18...	50	0	10	0	.6	0	240	0					
DATE	TIME	TOTAL PCB (UG/L)	PCR IN BOTTOM MA-TERIAL (UG/KG)	POLY-CHLO-RINATED NAPH-THA-LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDD IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA-TERIAL (UG/KG)	
NOV. 12...	0910	.0	3	--	.00	.0	.0	12	.00	1.9	.00	.8	
FEB. 23...	1245	.0	0	.00	.00	.5	.0	5	.00	.0	.00	.0	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MA-TERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA-TERIAL (UG/KG)	TOTAL ETHION (UG/L)	HEPTA-CHLOR IN BOTTOM MA-TERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOT-TOM MA-TERIAL (UG/KG)	
NOV. 12...	.00	1.9	.08	.00	2.1	.00	.0	.00	.00	.0	.00	.4	
FEB. 23...	.00	.0	.34	.01	.3	.00	.0	.00	.00	.0	.00	.0	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL MALA-THION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MA-TERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 12...	.01	.0	.01	.00	.00	.00	.00	0	0	.00	.03	.00	.01
FEB. 23...	.07	.2	.17	.00	.00	.00	.00	0	0	.00	.00	.00	.00

08074000 Buffalo Bayou at Houston, Tex.

LOCATION.--Lat 29°45'36", long 95°24'30", Harris County, at bridge on Shepherd Drive in Houston and 0.8 mile (1.3 km) upstream from Waugh Drive.

DRAINAGE AREA.--358 mi² (927 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Discharge: May 1936 to September 1957, October 1957 to December 1961 (high-water records and discharge measurements), January 1962 to September 1975, October 1975 to current year (high-water records and discharge measurements).

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.36 ft (0.414 m) below mean sea level, adjustment of 1973; records unadjusted for land-surface subsidence. Prior to June 19, 1936, nonrecording gage, and June 19, 1936, to Jan. 16, 1962, water-stage recorder at site 0.8 mile (1.3 km) downstream at 4.08 ft (1.244 m) lower datum. Jan. 17, 1962, to Sept. 30, 1973, auxiliary water-stage recorder 0.8 mile (1.3 km) downstream. Water-stage recorder at Main Street (station 08074600) used as auxiliary gage after Sept. 30, 1973.

AVERAGE DISCHARGE.--8 years (1936-44) unregulated, 272 ft³/s (7.703 m³/s), 197,100 acre-ft/yr (243 hm³/yr); 26 years (1944-57, 1962-75) regulated, 274 ft³/s (7.760 m³/s), 198,500 acre-ft/yr (245 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,650 ft³/s (160 m³/s) June 15 (gage height, 19.32 ft or 5.889 m); minimum discharge not determined (affected by tides).

Period of record: Maximum discharge, 10,900 ft³/s (309 m³/s) Aug. 30, 1945 (gage height, 28.82 ft or 8.784 m), at site 0.8 mile (1.3 km) downstream at present datum; minimum daily, 1.3 ft³/s (0.037 m³/s) May 24, 1939, Nov. 5, 1950.

All flood data at site 0.8 mile (1.3 km) downstream at present datum. Maximum gage height since at least 1835, 49.0 ft (14.94 m) Dec. 9, 1935 (discharge, 40,000 ft³/s or 1,130 m³/s; furnished by engineer for Harris County). Flood of May 31, 1929, reached a gage height of 43.5 ft or 13.26 m (discharge, 19,000 ft³/s or 538 m³/s at bridge on Capitol Avenue 2.8 miles or 4.5 km downstream, from rating curve extended above 15,300 ft³/s or 433 m³/s, stage-discharge relation materially affected by bridge; furnished by city of Houston).

REMARKS.--Discharge records fair. Although floodflows are regulated by Barker and Addicks Reservoirs (station 08072500 and 08073000) 26.3 and 26.8 miles (42.3 and 42.6 km) upstream, respectively, flood peaks from the urbanized areas below these reservoirs are often independent of the regulation. Discharge is computed for all storms which produce peak discharges above 1,500 ft³/s (42.5 m³/s). Discharges below 1,000 ft³/s (28.3 m³/s) are computed or estimated following designated storm periods only. Discharges for most quality water samples are also estimated. Low flow is mostly sustained by sewage effluent from Houston suburbs. Gage heights are affected by tides, backwater from Whiteoak Bayou, and other streams.

REVISIONS.--WSP 1732: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	3650	---	---	---
2	---	---	---	---	---	---	---	---	1650	---	---	---
3	---	---	---	---	---	---	---	---	782	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	614	---	---
9	---	---	---	---	---	---	---	---	---	1580	---	---
10	---	---	---	---	---	---	---	574	---	1080	---	---
11	---	---	---	---	---	---	---	719	---	330	---	---
12	---	---	---	---	---	---	---	320	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	1740	---	---	---
16	---	---	---	---	---	---	---	---	2590	---	---	---
17	---	---	---	---	---	---	---	---	390	---	---	---
18	---	---	---	---	---	---	---	637	---	---	---	---
19	---	---	---	---	---	---	---	1060	---	---	---	---
20	---	---	---	---	---	---	---	1070	---	---	---	---
21	---	---	---	---	---	---	478	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	604	---	---	---	---	---	---	---	---	---
25	1360	---	1150	---	---	---	---	---	---	1380	---	---
26	---	---	---	---	---	---	---	---	---	1190	---	---
27	1270	---	521	---	---	---	---	---	---	796	---	110
28	521	---	---	---	---	---	---	---	---	---	---	864
29	---	---	---	---	---	---	---	---	---	---	---	230
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	754	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

CAL YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1976 TOTAL - MEAN - MAX - MIN - AC-FT -

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 06...	1145	90	712	7.2	20.0	40	30	5.1	55	11
NOV. 12...	0745	181	401	6.8	18.0	120	50	6.0	63	3.9
DEC. 02...	1200	76	762	7.5	15.0	30	20	5.1	50	8.1
JAN. 06...	1200	340	302	--	11.5	160	120	9.8	89	5.1
FEB. 23...	1400	52	671	7.4	16.0	20	25	6.1	61	14
MAR. 08...	1145	60	821	7.4	20.0	30	55	3.5	38	22
APR. 13...	1045	18	958	7.3	23.5	30	15	2.6	30	16
MAY 17...	1300	150	471	8.2	23.0	100	95	4.8	55	26
JUNE 07...	1245	850	210	7.2	25.5	120	70	--	--	7.8
JULY 12...	1200	160	382	--	27.0	100	40	4.2	53	9.6
AUG. 23...	1130	75	682	6.5	27.0	50	30	4.8	61	17

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 06...	96000	3000	1300	--	--	--	--	--	--
NOV. 12...	170000	7700	440	98	0	31	5.0	37	1.6
DEC. 02...	1300000	50000	2500	--	--	--	--	--	--
JAN. 06...	31000	420	380	--	--	--	--	--	--
FEB. 23...	620000	8300	4700	140	0	42	7.3	76	2.8
MAR. 08...	1500000	56000	12000	--	--	--	--	--	--
APR. 13...	1300000	8700	15000	--	--	--	--	--	--
MAY 17...	880000	2200	10000	95	0	30	4.9	52	2.3
JUNE 07...	310000	38000	980	--	--	--	--	--	--
JULY 12...	1100000	160000	11000	--	--	--	--	--	--
AUG. 23...	1200000	240000	16000	150	0	46	7.8	79	2.8

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FIL- TABLE RESIDUE (MG/L)
OCT. 06...	--	--	--	--	--	--	--	--	44
NOV. 12...	7.0	132	0	12	47	.4	16	220	82
DEC. 02...	--	--	--	--	--	--	--	--	28
JAN. 06...	--	--	--	--	--	--	--	--	194
FEB. 23...	5.5	214	0	25	76	.6	14	352	40
MAR. 08...	--	--	--	--	--	--	--	--	110
APR. 13...	--	--	--	--	--	--	--	--	22
MAY 17...	4.7	133	0	18	55	.7	14	245	170
JUNE 07...	--	--	--	--	--	--	--	--	187
JULY 12...	--	--	--	--	--	--	--	--	92
AUG. 23...	7.8	214	0	24	72	.8	25	369	71

08074000 Buffalo Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 06...	3	.92	.68	2.7	1.2	2.6	11	--	.3
NOV. 12...	18	.28	.12	.36	1.2	.98	8.8	5	.1
DEC. 02...	4	1.3	.40	5.4	1.8	3.9	17	--	.5
JAN. 06...	46	.45	.14	.42	2.2	.92	18	--	.1
FEB. 23...	12	.41	.22	2.5	2.3	2.6	15	3	.7
MAR. 08...	36	.69	.41	2.0	7.2	3.7	11	--	.8
APR. 13...	13	.41	.28	8.5	1.2	3.7	20	--	.4
MAY 17...	34	.60	.33	.91	2.2	.99	8.8	5	.2
JUNE 07...	23	.19	.12	.53	1.1	.85	7.1	--	.2
JULY 12...	19	.27	.16	.76	1.4	1.1	13	--	.3
AUG. 23...	25	1.0	.59	2.4	1.7	2.5	8.2	8	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 12...	0945	30	3	130	0	0	0	4
FEB. 23...	1400	--	--	220	--	--	--	--
MAY 17...	1300	60	8	130	1	4	0	3
AUG. 23...	1130	60	7	170	0	8	0	6

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 12...	130	0	7	60	1.0	0	200	30
FEB. 23...	--	--	--	--	--	--	--	--
MAY 17...	50	0	10	0	.5	0	270	20
AUG. 23...	110	0	20	10	.0	0	380	30

08074000 Buffalo Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)
NOV. 12...	0745	.0	4	--	.00	.0	.0	7	.00	4.9	.00	.7
FEB. 23...	1400	.0	8	.00	.00	2.6	.0	31	.01	4.2	.00	.0
AUG. 23...	1130	.0	--	.00	.00	--	.1	--	.00	--	.00	--
DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
NOV. 12...	.00	12	.05	.00	1.1	.00	.0	.00	.00	.0	.00	.1
FEB. 23...	.01	5.3	.00	.01	3.5	.00	.0	.00	.00	.0	.00	.4
AUG. 23...	.00	--	.32	.02	--	.00	--	.00	.00	--	.00	--
DATE	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 12...	.01	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00
FEB. 23...	.10	.4	14	.00	.00	.00	0	0	.00	.28	.12	.01
AUG. 23...	.27	--	.06	.00	.00	.00	0	--	.00	.13	.05	.01

08074150 Cole Creek at Deihl Road, Houston, Tex.

LOCATION.--Lat 29°51'04", long 95°29'16", Harris County, on downstream side of bridge at Deihl Road in northwest Houston and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--8.05 mi² (20.85 km²). Drainage area changes due to relocations and changes in storm sewers.

PERIOD OF RECORD.--April 1964 to current year. Gage at temporary location 1.0 mile (1.6 km) downstream at Antoine Drive May 18, 1965, to Sept. 1, 1966, due to bridge construction and channel rectification.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--12 years, 7.53 ft³/s (0.213 m³/s), 5,460 acre-ft/yr (6.73 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft³/s (28.3 m³/s) June 1 (elevation, 77.27 ft or 23.552 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Oct. 20, 21.

Period of record: Maximum discharge, 2,020 ft³/s (57.2 m³/s) Mar. 20, 1972 (elevation, 78.60 ft or 23.957 m); no flow at times.

REMARKS.--Records fair. No diversion above station. Low flow is partly sustained by sewage effluent from Houston suburbs. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.36	1.2	1.5	1.1	.42	.39	3.9	450	.37	.56	.33
2	.11	21	.58	1.2	.97	.44	.39	1.8	50	.45	.34	1.4
3	.19	139	.39	1.0	1.0	.78	.39	1.0	6.0	2.6	.26	.43
4	.18	21	.39	.95	.96	.72	.39	.85	2.0	1.7	.36	1.2
5	.17	4.6	.44	.90	.93	.51	.78	.80	1.0	7.3	.27	11
6	.16	2.3	3.6	.87	.84	.47	1.9	.93	.60	.46	.24	1.5
7	.16	1.2	.73	1.5	.76	1.7	.68	13	1.8	.33	.21	.54
8	.29	.72	.52	1.0	.66	4.1	.53	13	6.0	.83	.24	.21
9	.08	.58	.49	.93	.67	1.2	.41	3.5	.94	.92	.24	.14
10	.09	.40	.40	.88	.70	.65	.31	2.0	.71	160	.24	.12
11	.11	.36	.35	1.1	.72	.62	.22	1.3	.58	32	.24	.11
12	.12	.24	.27	1.1	.68	.60	.36	1.1	.47	7.3	1.4	.09
13	.11	.24	.24	.98	.63	.57	.40	20	.38	3.5	5.4	.06
14	.10	.30	.22	.98	.64	.61	.43	7.5	.32	18	.93	2.3
15	.10	.39	.20	.91	.65	.77	.48	2.6	51	10	2.3	.25
16	.22	.30	5.0	.87	.65	.52	.57	1.4	87	8.5	6.6	5.1
17	.44	.30	2.0	.87	.65	.49	.59	1.2	7.6	5.4	6.5	1.9
18	.17	.30	1.0	.91	.68	.42	133	1.0	1.9	3.1	1.4	.13
19	.13	.54	.60	.98	.64	.40	51	.80	.97	1.9	.58	2.1
20	.12	6.1	.40	2.3	.62	.42	46	.70	.68	1.4	.33	61
21	.12	1.2	.30	1.4	3.1	.59	17	.64	.54	1.1	.27	14
22	.13	.25	.25	.99	.68	.41	7.1	.60	.51	.92	.21	2.7
23	.30	.23	.50	.93	.47	.33	3.3	.60	.54	1.1	.24	.79
24	4.4	.24	150	.93	.54	.46	4.4	.60	.45	18	.24	.48
25	1.0	.24	40	125	.50	.50	7.8	.60	.39	17	.24	.42
26	113	3.1	10	22	.43	.42	2.3	8.0	.46	2.2	1.2	3.1
27	8.7	.52	5.0	7.3	.58	.45	1.4	3.0	.50	1.2	2.8	8.6
28	3.1	.31	12	3.5	.60	.44	1.2	1.0	.40	1.0	4.4	6.1
29	1.5	.28	6.0	2.1	.65	.45	21	.71	.21	.74	9.5	2.4
30	.77	3.8	3.0	1.6	---	.51	8.9	.58	.22	.67	.68	.86
31	.50	---	2.0	1.2	---	.42	---	50	---	.67	.36	---
TOTAL	318.49	210.51	248.07	188.68	228.01	21.39	315.62	144.71	674.17	483.91	48.82	129.36
MEAN	10.3	7.02	8.00	6.09	7.4	.69	10.5	4.67	22.5	15.6	1.57	4.31
MAX	140	139	150	125	3.1	4.1	133	50	450	160	9.5	61
MIN	.02	.23	.20	.87	.43	.33	.22	.58	.21	.33	.21	.06
AC-FT	633	418	492	374	45	42	626	287	1340	960	97	257
(+)	4.50	3.04	2.96	1.77	.39	.98	5.20	3.52	6.22	7.56	3.54	5.64

CAL YR 1975 TOTAL 3496.39 MEAN 9.54 MAX 351 MIN .02 AC-FT 5940 ++ 43.62
WTR YR 1976 TOTAL 2806.93 MEAN 7.87 MAX 450 MIN .02 AC-FT 5570 ++ 45.32

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-25	0430	74.38	506	6-1	unknown	77.27	1,000
12-24	unknown	unknown	300	6-16	0100	73.89	250
1-25	0830	73.06	304	7-10	1300	76.48	592
4-18	1700	75.40	510				

++ Weighted-mean rainfall, in inches, based on four rain gages.

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.

LOCATION.--Lat 29°49'40", Long 95°28'09", Harris County, at downstream side of bridge at Costa Rica Street in northwest Houston and 1.0 mile (1.6 km) upstream from Whiteoak Bayou.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

PERIOD OF RECORD.--Discharge: August 1964 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--12 years, 13.0 ft³/s (0.368 m³/s), 9,420 acre-ft/yr (11.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,830 ft³/s (80.1 m³/s) June 1 (elevation, 64.40 ft or 19.629 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Oct. 19.

Period of record: Maximum discharge, 5,800 ft³/s (164 m³/s) Mar. 20, 1972 (elevation, 69.20 ft or 21.092 m); no flow at times.

REMARKS.--Discharge records good. Low flow is partially sustained by sewage effluent. No known diversion above station. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	1.8	2.4	2.7	1.8	1.1	1.1	2.6	556	.97	2.0	2.4
2	.74	30	1.1	2.1	1.3	1.2	1.5	1.8	47	1.0	1.7	3.0
3	.92	90	.69	1.8	1.1	1.0	2.4	1.4	20	7.9	1.8	3.6
4	.63	12	1.2	1.4	.92	.84	6.4	1.2	9.5	2.9	1.3	7.1
5	2.7	4.6	1.3	1.6	.92	.94	5.1	.92	5.1	12	1.2	12
6	1.5	3.9	3.5	2.5	1.1	2.3	2.1	1.2	3.4	2.5	.95	2.2
7	1.5	3.1	2.3	3.0	.92	14	2.1	29	3.4	6.4	.70	1.7
8	1.5	2.6	1.6	1.9	1.4	17	1.1	9.5	3.9	201	.51	1.5
9	3.3	2.3	1.3	1.2	1.8	3.3	.84	1.6	2.0	110	.87	1.6
10	2.8	2.1	1.1	1.5	1.8	1.5	.51	4.6	1.4	206	.88	1.6
11	2.6	2.1	1.4	2.7	1.8	1.2	.43	1.9	1.1	22	.95	1.8
12	2.6	2.4	1.3	2.5	1.8	5.4	.40	1.5	.94	9.1	4.9	1.6
13	2.5	1.6	1.3	2.6	1.8	1.4	1.2	39	.66	5.1	1.5	2.1
14	2.9	1.6	1.3	3.2	1.9	3.4	.59	3.1	.71	43	1.4	2.3
15	2.9	1.6	1.5	2.7	1.8	1.4	.56	1.2	232	12	3.9	1.6
16	2.7	1.6	12	1.8	1.8	1.0	1.2	1.0	60	16	19	19
17	.45	1.5	3.1	1.9	2.3	1.3	.39	.80	15	7.5	10	12
18	.27	1.6	1.6	2.3	1.6	1.1	319	.95	6.3	4.2	2.8	2.0
19	.14	3.4	1.3	2.1	1.4	1.2	33	.64	3.8	3.4	2.3	10
20	.84	2.8	.97	6.5	1.1	2.0	50	.69	3.0	2.5	3.0	172
21	.87	1.9	.92	2.3	14	1.2	9.5	.76	2.1	1.9	1.5	19
22	.91	1.7	.71	1.7	2.3	.93	2.9	.76	2.0	2.1	1.1	3.8
23	6.4	1.6	1.3	1.4	2.1	.54	1.7	.76	1.5	24	1.1	1.9
24	32	1.5	145	1.4	3.2	1.8	7.7	.79	1.4	112	1.5	1.5
25	1.2	1.5	43	54	3.3	.91	18	.54	1.3	50	.76	1.6
26	61	21	12	11	3.9	.57	1.6	14	3.7	13	58	26
27	5.6	2.2	6.1	4.4	3.4	1.0	1.1	6.6	1.4	6.9	28	167
28	3.2	1.8	17	3.7	2.9	.77	.90	1.2	1.1	6.2	23	47
29	3.3	1.5	13	3.4	2.1	1.5	58	.64	1.2	3.7	30	8.4
30	2.4	14	4.4	2.3	---	1.7	6.7	.51	.88	3.1	5.1	2.2
31	2.1	---	3.4	3.9	---	1.2	---	97	---	2.4	3.7	---
TOTAL	314.25	221.2	294.39	137.5	67.56	74.80	538.02	228.06	992.19	900.77	215.42	534.5
MEAN	10.1	7.37	9.50	4.44	2.33	2.41	17.9	7.36	33.1	29.1	6.95	18.0
MAX	1.52	9.0	145	54	14	17	319	97	556	206	58	172
MIN	.14	1.5	.71	1.2	.92	.54	.39	.51	.66	.97	.51	1.5
AC-FT	623	439	584	273	134	148	1070	452	1970	1740	427	1070
(††)	4.29	2.69	5.63	1.52	.40	1.18	5.88	3.83	6.52	7.43	3.20	5.99
CAL YR 1975 TOTAL	5492.43											
WTR YR 1976 TOTAL	4523.66											
MEAN	15.0											
MAX	641											
MIN	.14											
AC-FT	10700											
(††)	49.05											
WTR YR 1976 TOTAL	8975											
(††)	48.56											

PEAK DISCHARGE ABOVE BASE (850 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-25	0445	59.10	856	7-8	1730	60.37	1,220
4-18	1445	61.56	1,630	7-10	0945	60.56	1,280
6-1	0145	64.40	2,830	9-20	1415	60.60	1,290
6-15	1945	61.79	1,710	9-27	2100	61.28	1,530

†† Weighted-mean rainfall, in inches, based on five rain gages.

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 08...	1200	1.5	892	8.2	26.0	10	4	12.2	149	1.9
NOV. 24...	1130	1.5	850	7.5	14.0	30	4	18.3	176	8.7
DEC. 01...	1100	2.5	522	7.9	11.0	30	20	13.4	121	3.1
JAN. 05...	1030	2.6	733	7.9	6.5	30	30	12.8	103	31
FEB. 18...	0915	2.1	844	8.1	17.0	30	5	11.8	122	4.3
MAR. 03...	1000	.90	721	9.0	23.5	30	15	20.0	233	6.8
APR. 06...	1130	2.0	518	8.9	24.5	30	15	16.8	200	16
MAY 18...	1145	.70	785	8.8	27.0	30	2	11.4	141	11
JUNE 07...	1145	2.0	436	9.2	28.0	100	10	19.8	103	6.6
JULY 27...	1200	6.2	255	8.1	32.0	200	60	11.1	152	4.7
AUG. 13...	1400	.92	650	8.5	31.5	60	20	10.4	141	9.9
13...	1520	3.7	386	7.3	31.0	60	220	6.5	88	26
SEP. 29...	0900	1.0	537	6.6	22.5	140	20	2.9	34	13

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 08...	6700	400	4800	--	--	--	--	--	--
NOV. 24...	1600000	1100000	15000	250	0	72	16	84	2.3
DEC. 01...	1300000	200000	7600	--	--	--	--	--	--
JAN. 05...	1600000	1200000	71000	--	--	--	--	--	--
FEB. 18...	740000	13000	240	260	0	78	17	77	2.1
MAR. 03...	960000	64000	680	--	--	--	--	--	--
APR. 06...	220000	6700	520	--	--	--	--	--	--
MAY 18...	460000	200000	250	210	0	60	15	90	2.7
JUNE 07...	80000	2500	250	--	--	--	--	--	--
JULY 27...	600000	25000	2900	--	--	--	--	--	--
AUG. 13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
SEP. 29...	3000000	780000	16000	150	0	44	8.7	50	1.8

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	--	--	--	--	--	--	--	--	10
NOV. 24...	--	370	0	19	76	.7	19	470	25
DEC. 01...	--	--	--	--	--	--	--	--	27
JAN. 05...	--	--	--	--	--	--	--	--	61
FEB. 18...	2.1	383	0	17	72	.5	21	474	14
MAR. 03...	--	--	--	--	--	--	--	--	26
APR. 06...	--	--	--	--	--	--	--	--	29
MAY 18...	2.1	362	0	18	60	.6	12	439	12
JUNE 07...	--	--	--	--	--	--	--	--	23
JULY 27...	--	--	--	--	--	--	--	--	119
AUG. 13...	--	--	--	--	--	--	--	--	21
SEP. 13...	--	--	--	--	--	--	--	--	578
SEP. 29...	4.2	252	0	18	35	.6	18	303	57

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	6	.00	.01	.01	.31	.08	3.2	--	.2
NOV. 24...	10	.03	.01	.67	1.1	.54	6.0	5	.3
DEC. 01...	7	.08	.01	.34	.53	.40	7.6	--	.4
JAN. 05...	16	.02	.01	2.6	1.4	2.0	26	--	1.3
FEB. 18...	8	.07	.04	.25	.73	.54	10	5	.3
MAR. 03...	23	.00	.01	.03	1.1	.70	8.2	--	.4
APR. 06...	15	.07	.03	.41	1.3	.53	18	--	.3
MAY 18...	9	.00	.00	.02	1.1	1.4	9.7	8	.7
JUNE 07...	1	.03	.00	.02	1.2	.38	5.6	--	.3
JULY 27...	24	.03	.01	.08	1.0	.30	2.8	--	.1
AUG. 13...	12	.02	.01	.11	1.3	.73	12	--	.7
SEP. 13...	126	.83	.15	.19	1.9	.91	10	--	.8
SEP. 29...	33	.04	.01	3.2	.90	1.8	--	3	.8

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 24...	1130	20	--	220	0	0	0	2					
FEB. 18...	0915	--	--	210	--	--	--	--					
MAY 18...	1145	10	--	280	0	0	0	2					
SEP. 29...	0900	--	--	250	--	--	--	--					
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
NOV. 24...	--	0	--	--	--	.1	2	470	20				
FEB. 18...	--	--	--	--	--	--	--	--	--				
MAY 18...	50	0	20	0	--	.6	0	500	0				
SEP. 29...	--	--	--	--	--	--	--	--	--				
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 24...	1130	.0	270	--	.00	.0	.0	460	.00	170	.00	93	
FEB. 18...	0915	.0	12	.00	.00	.0	.0	72	.00	12	.00	1.8	
SEP. 29...	0900	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 24...	.00	.0	.02	.00	30	.00	.0	.00	.00	.0	.00	6.0	
FEB. 18...	.00	1.7	.04	.00	11	.00	.0	.00	.00	.0	.00	1.0	
SEP. 29...	.00	--	.17	.00	--	.00	--	.00	.00	--	.01	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TRIETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	2,4-D IN BOTTOM MATERIAL (UG/KG)	TOTAL SILVEX (UG/L)
NOV. 24...	.02	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00	.00
FEB. 18...	.02	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00	.00
SEP. 29...	.02	--	.09	.00	.00	.00	0	--	.00	.00	.08	.00	.00

08074500 Whiteoak Bayou at Houston, Tex.

LOCATION.--Lat 29°46'30", long 95°23'49", Harris County, at downstream side of downstream bridge on Heights Boulevard in Houston, 560 ft (171 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.4 miles (3.9 km) upstream from Little Whiteoak Bayou, and 4.0 miles (6.4 km) upstream from mouth.

DRAINAGE AREA.--84.7 mi² (219.4 km²); unadjusted for basin boundary changes. During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridges and is 92.0 mi² (238.3 km²).

PERIOD OF RECORD.--Discharge: May 1936 to current year (October 1965 to September 1966, monthly discharge only).

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.35 ft (2.240 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence. Prior to June 17, 1936, nonrecording gage, and June 17, 1936, to Apr. 28, 1965, water-stage recorder at site 480 ft (146 m) upstream at same datum.

AVERAGE DISCHARGE.--40 years, 75.7 ft³/s (2.144 m³/s), 54,840 acre-ft/yr (67.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,480 ft³/s (240 m³/s) June 1 (gage height, 32.49 ft or 9.903 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 11.

Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) Mar. 20, 1972 (gage height, 43.50 ft or 13.259 m); maximum gage height, 43.60 ft (13.289 m) Nov. 13, 1961; no flow for many days during 1965 water year (result of construction dams).

Maximum stage since at least 1919, 51.5 ft (15.70 m) Dec. 9, 1935, prior to channel rectification, present site and datum (discharge, 14,750 ft³/s or 418 m³/s, furnished by engineer for Harris County). Flood of May 31, 1929, reached a stage of 47.0 ± 0.5 ft (14.33 ± 0.15 m), prior to channel rectification, present site and datum (discharge, 9,360 ft³/s or 265 m³/s), computed on basis of current-meter measurement at stage 1.0 ft (0.30 m) below crest, furnished by city of Houston.

REMARKS.--Discharge records fair. Low flow is partly sustained by industrial waste. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	33	32	44	26	21	23	68	318.0	16	16	20
2	17	121	23	60	24	19	19	36	627	15	19	117
3	17	774	20	30	22	20	20	24	239	55	16	110
4	17	311	20	27	23	21	25	24	157	33	16	38
5	30	161	19	25	23	19	52	22	91	147	18	331
6	20	87	91	48	22	20	37	22	54	75	18	85
7	18	60	27	38	21	84	34	275	47	37	18	34
8	18	45	21	26	21	140	26	194	52	584	18	47
9	40	36	19	25	23	49	23	77	28	754	19	21
10	25	29	18	24	21	30	22	288	23	1130	17	17
11	20	26	22	26	22	26	21	63	21	433	14	16
12	18	23	25	25	22	78	22	41	20	140	56	14
13	18	19	23	27	21	26	26	337	19	75	80	14
14	18	19	18	24	20	121	24	85	18	293	42	18
15	65	18	18	21	19	32	26	38	737	182	43	16
16	40	18	77	20	25	21	25	25	344	121	340	85
17	25	18	36	19	25	19	21	23	81	101	210	74
18	20	19	22	20	20	18	1610	20	36	46	55	22
19	18	43	21	20	19	19	538	20	56	26	27	81
20	18	36	20	56	18	28	609	19	27	29	21	1300
21	18	24	19	29	93	28	202	19	16	30	20	478
22	18	21	19	24	24	24	78	17	19	22	16	155
23	40	22	20	21	23	19	42	18	25	44	15	68
24	90	22	773	23	22	29	40	18	16	142	17	39
25	1500	21	613	585	20	25	115	20	16	165	54	30
26	700	159	202	199	21	21	37	95	54	52	111	79
27	250	40	118	90	21	23	25	57	18	30	88	500
28	155	23	118	54	20	23	20	23	16	27	51	232
29	90	21	156	43	20	21	372	19	18	20	145	128
30	60	136	89	30	---	25	168	18	19	19	26	53
31	40	---	62	31	---	24	---	630	---	19	25	---
TOTAL	3442	2385	2761	1734	701	1073	4302	2639	6074	4867	1631	4222
MEAN	111	79.5	89.1	55.9	24.2	34.6	143	85.1	202	157	52.6	141
MAX	1500	774	773	585	93	140	1610	630	3180	1130	340	1300
MIN	17	18	18	19	18	18	19	17	16	15	14	14
AC-FT	6830	4730	5480	3440	1390	2130	8530	5230	12050	9650	3240	8370
(††)	5.00	2.85	2.99	1.62	.35	1.55	4.89	3.55	6.42	6.73	2.88	6.84

CAL YR 1975 TOTAL 42636 MEAN 117 MAX 2050 MIN 15 AC-FT 84570 †† 47.66
WTR YR 1976 TOTAL 35831 MEAN 97.9 MAX 3180 MIN 14 AC-FT 71070 †† 45.67

PEAK DISCHARGE ABOVE BASE (2,500 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-25	unknown	26.50	4,130	6-15	2000	25.06	3,240
11-19	1030	17.48	161	7-10	1100	24.79	3,090
4-18	1730	29.48	6,180	9-20	1500	27.60	4,870
6-1	0300	32.49	8,480				

†† Weighted-mean rainfall, in inches, based on six rain gages.

08074500 Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT 06...	1230	18	1270	7.8	23.5	25	4	19.5	215	3.6
NOV 19...	0915	32	1200	8.1	21.0	50	125	9.5	106	29
19...	1035	147	365	7.2	23.0	--	--	8.6	99	53
19...	1315	65	794	7.7	24.0	40	40	8.8	104	11
DEC 02...	1130	21	895	7.7	17.0	40	20	9.3	96	6.5
JAN 12...	1145	22	1140	7.7	17.5	20	15	10.1	105	>8.4
FEB 18...	1245	19	1200	8.2	22.0	20	5	16.0	182	11
MAR 03...	1000	21	1130	7.9	22.0	30	10	12.9	147	18
APR 05...	1140	47	828	7.5	21.0	50	20	9.6	107	>58
19...	1000	450	243	6.7	22.5	120	95	6.8	77	12
MAY 17...	1345	24	1030	9.2	26.0	30	20	15.8	200	22
JUN 07...	1315	59	786	8.0	27.0	70	20	11.2	138	10
JUL 12...	1245	160	345	7.0	28.5	120	60	7.3	95	6.0
AUG 24...	1120	11	954	7.5	29.0	30	4	7.0	92	13
SEP 29...	0945	134	409	6.6	22.5	240	100	7.3	86	9.3

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOC- CI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT 06...	4500	120	12	--	--	--	--	--	--
NOV 19...	600000	75000	23000	--	--	--	--	--	--
19...	300000	16000	9900	93	5	30	4.4	40	1.8
19...	750	1	310	--	--	--	--	--	--
DEC 02...	62	1	18	--	--	--	--	--	--
JAN 12...	14	1	8	--	--	--	--	--	--
FEB 18...	49000	550	32	260	0	78	17	150	4.0
MAR 03...	2500	74	31	--	--	--	--	--	--
APR 05...	1500000	52000	8400	--	--	--	--	--	--
19...	860000	7000	7400	64	0	20	3.4	21	1.1
MAY 17...	3500	44	54	--	--	--	--	--	--
JUN 07...	6500	160	54	--	--	--	--	--	--
JUL 12...	7000	260	1400	--	--	--	--	--	--
AUG 24...	77000	720	1400	--	--	--	--	--	--
SEP 29...	1200000	28000	1800	120	0	36	6.4	38	1.5

SAN JACINTO RIVER BASIN

08074500 Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT 06...	--	--	--	--	--	--	--	--	10
NOV 19...	--	--	--	--	--	--	--	--	364
19...	3.7	108	0	20	44	.6	6.2	203	--
19...	--	--	--	--	--	--	--	--	91
DEC 02...	--	--	--	--	--	--	--	--	34
JAN 12...	--	--	--	--	--	--	--	--	24
FEB 18...	4.8	372	0	28	180	.7	21	663	15
MAR 03...	--	--	--	--	--	--	--	--	25
APR 05...	--	--	--	--	--	--	--	--	38
19...	4.1	80	0	14	23	.4	6.4	132	214
MAY 17...	--	--	--	--	--	--	--	--	20
JUN 07...	--	--	--	--	--	--	--	--	47
JUL 12...	--	--	--	--	--	--	--	--	116
AUG 24...	--	--	--	--	--	--	--	--	15
SEP 29...	4.2	152	0	16	40	.5	14	230	192

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 06...	3	.45	.53	1.9	2.0	2.8	8.4	--	.3
NOV 19...	104	1.1	.24	1.5	4.7	4.1	25	--	.8
19...	--	.57	.08	.50	2.6	1.5	24	0	1.0
19...	17	.46	.10	.50	2.3	1.2	13	--	.8
DEC 02...	13	.60	.12	3.3	1.4	3.3	7.8	--	.5
JAN 12...	14	.60	.23	4.4	1.0	3.2	13	--	1.4
FEB 18...	0	.25	.18	2.4	3.8	2.8	8.6	0	.7
MAR 03...	23	.52	.58	1.6	3.8	4.7	8.4	--	.8
APR 05...	24	.64	.29	2.6	2.5	2.6	32	10	.1
19...	66	.33	.06	.84	2.0	.90	21	1	.2
MAY 17...	7	.53	.26	1.7	2.9	2.5	12	--	.5
JUN 07...	8	.46	.51	2.1	1.2	1.2	6.8	--	.2
JUL 12...	26	.14	.14	.62	1.5	.77	16	--	.2
AUG 24...	16	.71	.49	1.6	1.4	2.7	9.0	--	.4
SEP 29...	58	.54	.56	.40	1.6	1.1	13	2	.2

08074500 Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 19...	1035	20	6	250	0	0	0	4
FEB. 18...	1245	--	--	410	--	--	--	--
APR. 19...	1000	20	4	140	0	0	0	4
SEP. 29...	0945	--	--	190	--	--	--	--

	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 19...	20	36	10	50	.1	3	190	140
FEB. 18...	--	--	--	--	--	--	--	--
APR. 19...	80	0	0	20	.4	0	130	40
SEP. 29...	--	--	--	--	--	--	--	--

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
NOV. 19...	1035	5.6	--	.00	.4	.01	.00	.05	.15	.02	.00	.00
FEB. 18...	1245	.0	.00	.00	.0	.04	.00	.00	.21	.01	.00	.00
APR. 19...	1000	.0	.00	.00	.0	.00	.00	.00	.12	.00	.00	.00
SEP. 29...	0945	.0	.00	.00	.0	.00	.00	.00	.14	.00	.00	.00

DATE	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.05	.01	.01	.00	.00	.00	.00	0	.00	.00	.27	.00
FEB. 18...	.00	.00	.05	.00	.00	.00	.00	0	.00	.12	.00	.00
APR. 19...	.00	.01	.02	.04	.00	.00	.00	0	.00	.02	.04	.00
SEP. 29...	.00	.00	.01	.06	.00	.00	.00	0	.00	.02	.12	.00

SAN JACINTO RIVER BASIN

08074550 Little Whiteoak Bayou at Houston, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 29°47'05", long 95°21'56", Harris County, at bridge on North Main Street, 0.8 mile (1.3 km) upstream from mouth, and 1.7 miles (2.7 km) north of Harris County courthouse.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: May 1971 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPF-CIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT 28...	0930	45	584	7.1	22.0	50	8	3.7	42	3.4
NOV 19...	1005	4.8	367	7.4	22.5	60	70	8.3	94	41
DEC 03...	1310	3.4	569	7.4	16.0	30	4	4.8	48	4.1
JAN 12...	1315	5.2	892	7.5	18.0	20	4	4.1	43	8.6
FEB 24...	1145	4.2	680	7.5	16.5	30	4	4.6	47	9.0
MAR 03...	1030	5.0	967	7.3	22.0	50	15	.5	6	40
APR 13...	1115	--	941	7.3	23.5	30	4	1.0	12	14
19...	0905	210	252	6.7	21.0	120	150	5.8	64	8.1
JUN 07...	1400	7.5	886	8.1	27.5	30	7	12.3	154	9.6
30...	1330	4.0	869	7.5	30.0	120	10	4.6	61	11
JUL 12...	1345	8.1	654	7.1	28.5	60	10	6.0	78	4.5
AUG 24...	1035	5.2	941	6.8	27.5	60	2	.4	5	37

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO
OCT 28...	280000	18000	550	--	--	--	--	--	--
NOV 19...	720000	120000	33000	92	0	29	4.8	36	1.6
DEC 03...	260000	11000	520	--	--	--	--	--	--
JAN 12...	2300000	120000	1800	--	--	--	--	--	--
FEB 24...	640000	18000	250	170	0	50	11	70	2.3
MAR 03...	2600000	11000	34000	--	--	--	--	--	--
APR 13...	3000000	11000	3000	--	--	--	--	--	--
19...	7800000	160000	81000	79	4	25	4.0	13	.6
JUN 07...	110000	2700	100	--	--	--	--	--	--
30...	3300000	260000	1200	--	--	--	--	--	--
JUL 12...	440000	13000	550	--	--	--	--	--	--
AUG 24...	7500000	1100000	76000	150	0	43	9.9	130	4.6

08074550 Little Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT 28...	--	--	--	--	--	--	--	--	17
NOV 19...	4.5	118	0	23	34	.6	6.7	198	356
DEC 03...	--	--	--	--	--	--	--	--	9
JAN 12...	--	--	--	--	--	--	--	--	14
FEB 24...	4.6	248	0	34	65	.6	12	370	24
MAR 03...	--	--	--	--	--	--	--	--	37
APR 13...	--	--	--	--	--	--	--	--	13
19...	4.2	92	0	17	13	.4	5.6	128	334
JUN 07...	--	--	--	--	--	--	--	--	13
30...	--	--	--	--	--	--	--	--	22
JUL 12...	--	--	--	--	--	--	--	--	26
AUG 24...	8.5	388	0	26	83	.8	20	514	40

DATE	DIS- SOLVED FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUF ACTIVE SUB- STANCE (MG/L)
OCT 28...	1	.21	.05	1.5	1.0	1.3	6.4	--	.7
NOV 19...	100	.37	.04	.48	3.9	2.0	34	5	1.0
DEC 03...	0	.12	.05	.73	2.0	1.1	4.3	--	.6
JAN 12...	10	.06	.04	2.7	1.2	1.8	9.4	--	1.1
FEB 24...	15	.08	.10	2.6	1.8	1.7	9.6	0	.9
MAR 03...	34	.00	.00	6.5	4.5	4.4	20	--	1.5
APR 13...	10	.02	.03	2.9	2.0	2.2	23	--	.5
19...	82	.49	.08	.52	1.3	.75	4.6	1	.1
JUN 07...	1	.12	.05	1.6	.90	.89	4.9	--	.3
30...	14	.07	.05	.45	1.9	1.2	6.7	--	.5
JUL 12...	9	.11	.03	.92	1.7	1.2	13	--	.2
AUG 24...	34	.01	.01	8.0	5.0	4.8	21	39	2.3

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 19...	1005	0	7	190	0	0	0	19					
FEB. 24...	1145	--	--	150	--	--	--	--					
APR. 19...	0905	20	7	110	0	0	0	4					
AUG. 24...	1035	100	2	270	6	10	0	4					
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
NOV. 19...	90	56		9	120	.2	8	210	80				
FEB. 24...	--	--	--	--	--	--	--	--	--				
APR. 19...	70	0	0	60	.4	0	130	20					
AUG. 24...	310	0	30	200	.1	18	460	100					
DATE	TIME	TOTAL PCB (UG/L)	PCR IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 19...	1005	.0	220	--	.00	.0	.3	100	.01	16	.02	7.1	
FEB. 24...	1145	.0	33	.00	.00	.0	.0	45	.00	4.1	.00	.0	
APR. 19...	0905	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
AUG. 24...	1035	.0	--	.00	.00	--	.4	--	.00	--	.00	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)
NOV. 19...	.03	7.2	.01	.03	4.4	.00	.0	.00	.01	.0	.00	.4	
FEB. 24...	.00	1.5	.00	.01	.0	.00	.0	.00	.00	.0	.00	.0	
APR. 19...	.00	--	.15	.00	--	.00	--	.00	.00	--	.01	--	
AUG. 24...	.00	--	.80	.04	--	.00	--	.00	.00	--	.00	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARAETHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.01	.0	.55	.00	.00	.00	0	0	.00	1.9	.12	.03	
FEB. 24...	.05	.0	.03	.00	.00	.00	0	0	.00	--	--	--	
APR. 19...	.05	--	.07	.00	.00	.00	0	--	.00	.09	.34	.00	
AUG. 24...	.08	--	.00	.00	.00	.00	0	--	.00	.00	.02	.28	

08074600 Buffalo Bayou at Main Street, Houston, Tex.

LOCATION.--Lat 29°45'54", long 95°21'32", Harris County, on left bank at mouth of Whiteoak Bayou at upstream side of Main Street viaduct in Houston and 3.2 miles (5.1 km) downstream from the gage Buffalo Bayou at Houston.

DRAINAGE AREA.--469 mi² (1,215 km²).

PERIOD OF RECORD.--January 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.47 ft (0.448 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers); unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 14.5 ft (4.42 m) June 1; minimum, -1.7 ft (-0.52 m) Feb. 22.

Period of record: Maximum gage height, 23.6 ft (7.19 m) June 13, 1973; minimum, -3.5 ft (-1.07 m) Jan. 13, 1964.

Maximum gage height since at least 1835, 38.5 ft (11.73 m) Dec. 9, 1935, present site and datum, unadjusted for land-surface subsidence.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	3.0	1.7	4.2	2.6	3.2	1.1	-	-	0.8	-1.0	3.1	1.8	2.6	0.9	2.6	1.0	14.5	4.1	3.2	1.3	2.4	1.1	3.3	1.8
2	3.2	1.2	5.2	3.1	3.6	1.7	3.9	1.8	2.3	.5	3.0	1.9	2.6	1.3	2.9	.8	5.8	2.9	3.5	1.7	2.8	1.1	-	1.8
3	3.4	2.0	4.7	3.4	3.5	1.7	2.2	.1	2.2	.9	3.2	2.2	2.9	1.1	2.8	1.2	3.6	2.0	3.6	2.2	2.8	1.4	3.0	-
4	2.2	1.8	4.2	2.0	3.5	1.8	2.7	.9	2.4	1.4	3.9	3.0	2.7	1.2	2.9	.9	3.7	2.3	3.0	1.8	2.8	1.3	2.9	1.4
5	3.3	1.6	3.6	1.8	3.7	2.0	3.2	1.7	2.4	1.3	3.2	2.0	3.4	1.1	4.3	2.0	3.6	2.4	3.0	1.6	2.8	1.1	3.0	1.5
6	3.5	1.7	3.6	2.2	3.9	1.5	3.3	2.4	2.2	-	2.5	1.1	3.2	1.5	4.2	2.2	3.9	2.5	3.6	1.5	2.8	.9	-	-
7	3.3	1.6	3.9	2.3	2.4	1.2	3.3	-3	1.7	-3	3.5	1.4	3.0	1.5	4.3	1.6	4.3	2.7	3.3	1.5	2.3	.8	3.3	-
8	3.5	1.9	3.8	2.3	2.9	1.5	1.0	-1.0	2.0	.3	4.8	2.3	2.9	1.5	3.1	1.9	3.9	2.1	6.8	1.2	2.8	.4	3.6	-
9	3.4	1.7	3.8	2.6	2.5	1.6	2.8	1.0	2.3	.5	2.5	.5	2.9	1.3	3.5	2.0	3.7	2.0	5.6	3.0	3.2	1.2	3.2	1.9
10	3.3	1.9	3.9	2.1	2.8	1.6	3.0	1.7	2.5	.9	2.7	.8	3.1	1.8	4.5	2.2	3.6	1.8	7.6	2.2	3.0	1.6	3.2	1.6
11	3.3	1.7	3.6	2.7	3.0	2.0	3.0	1.5	2.3	.6	3.3	1.6	3.1	1.8	3.4	2.0	3.6	1.8	3.5	2.2	3.1	1.6	3.3	2.0
12	3.4	2.1	3.7	.2	3.3	2.2	2.5	.8	2.3	.8	3.4	2.1	2.7	1.7	3.3	1.5	3.7	1.7	3.6	1.5	3.0	1.7	3.3	2.5
13	3.4	2.4	1.7	-2	3.7	2.2	3.0	1.4	2.5	1.1	2.5	.9	3.2	1.6	4.2	1.8	3.6	2.0	3.3	1.6	3.1	1.6	3.4	2.4
14	3.7	2.5	3.0	1.5	4.0	2.4	2.6	.7	2.5	1.1	3.0	1.8	3.5	1.7	3.0	1.0	3.9	2.0	4.0	1.9	2.9	2.2	4.5	2.2
15	3.9	2.8	3.1	1.8	3.4	1.9	3.0	1.3	2.9	1.4	3.1	1.7	5.3	2.3	2.9	.7	13.8	2.6	3.3	1.9	3.2	1.8	3.6	2.1
16	3.3	2.2	3.4	2.1	3.1	1.1	2.9	.6	3.1	1.6	2.4	.5	5.5	3.3	2.8	1.1	9.3	2.8	3.3	1.8	3.5	2.3	4.5	2.1
17	2.9	1.7	3.8	2.2	3.2	1.4	1.8	-2	3.2	1.9	3.0	.3	5.5	4.0	2.6	1.7	3.5	1.9	2.8	1.8	3.0	1.6	-	1.9
18	3.0	1.2	3.9	2.3	2.4	.2	2.6	1.2	3.2	1.2	3.4	1.6	11.7	3.1	3.0	.7	3.6	2.5	3.0	1.9	2.8	1.5	3.2	1.9
19	3.3	1.8	4.1	2.7	2.9	1.2	3.0	1.7	2.7	1.0	3.8	1.6	6.6	3.8	3.5	1.7	3.4	1.9	3.1	1.8	3.9	1.6	-	2.2
20	3.2	1.7	3.9	.9	2.8	.8	2.8	.7	3.3	1.4	3.4	2.1	6.9	3.4	3.7	2.2	2.7	1.6	3.0	1.7	3.7	2.0	9.7	-
21	3.4	1.9	2.4	.3	2.5	.5	2.1	1.0	3.5	-	2.8	1.1	3.3	1.9	3.3	2.2	3.4	1.6	3.5	1.6	3.3	1.5	3.4	2.2
22	3.8	2.4	2.2	.7	2.8	1.4	2.1	.6	-	-1.7	3.3	1.2	3.4	1.9	3.1	2.1	3.5	2.1	3.1	1.7	3.0	1.4	3.7	1.7
23	4.8	3.0	2.3	.8	3.0	1.9	2.6	1.1	2.0	-2	3.4	1.7	3.8	2.6	3.6	2.0	3.9	2.2	3.0	1.6	2.8	1.0	3.7	2.3
24	4.2	2.5	2.7	1.1	7.2	2.5	3.2	1.3	2.5	.7	3.5	2.3	3.6	2.4	2.9	1.6	3.9	2.5	3.2	1.7	3.0	-	3.1	1.6
25	8.5	3.8	3.1	1.7	5.7	1.0	3.4	2.2	2.7	1.1	4.0	1.7	3.1	1.9	3.2	1.4	3.8	2.0	3.1	1.8	-	1.4	3.4	1.6
26	5.7	2.3	4.4	1.3	1.9	.5	2.2	.2	2.6	1.0	3.8	2.4	3.7	1.6	5.2	1.8	3.8	2.2	2.9	1.2	2.8	-	5.4	1.7
27	3.5	2.4	3.1	1.3	3.0	1.3	2.0	.1	2.4	1.0	2.9	1.1	3.9	2.4	3.4	1.0	3.5	1.8	3.0	1.2	2.9	1.4	6.0	1.6
28	3.7	2.0	3.9	2.6	4.1	2.1	2.3	.7	2.6	1.3	3.7	2.2	3.9	2.4	2.6	.4	3.3	1.5	3.1	1.7	3.2	1.4	3.3	1.2
29	3.4	1.8	4.1	2.4	3.7	1.6	2.5	.7	3.1	2.1	3.9	2.6	4.6	2.2	3.2	.6	3.1	1.5	3.1	1.7	3.5	1.6	2.8	1.3
30	3.1	1.8	3.7	1.3	2.9	.8	2.0	.5	---	---	3.3	1.3	3.0	1.5	3.9	1.7	2.8	1.2	2.9	1.8	3.6	1.8	2.8	1.4
31	3.8	2.4	---	---	3.4	1.5	2.4	-3	---	---	2.2	.7	---	---	7.3	1.7	---	---	2.7	1.6	3.2	1.6	---	---

08074700 Buffalo Bayou at 69th Street, Houston, Tex.

LOCATION.--Lat 29°45'15", long 95°17'51", Harris County, at downstream side of bridge on 69th Street in Houston, 1.1 miles (1.8 km) upstream from Turning Basin, 2.8 miles (4.5 km) upstream from Brays Bayou, and 4.8 miles (7.7 km) downstream from Whiteoak Bayou.

DRAINAGE AREA.--476 mi² (1,233 km²).

PERIOD OF RECORD.--April 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.73 ft (0.527 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers); unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 5.9 ft (1.80 m) Apr. 17; minimum, about -1.2 ft (-0.37 m) Feb. 22.

Period of record: Maximum gage height, 15.1 ft (4.60 m) Sept. 11, 12, 1961, result of Hurricane Carla; minimum, -3.5 ft (-1.07 m) Jan. 13, 1964.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	3.4	1.7	4.7	3.1	3.5	1.4	-	-	1.1	-0.5	3.3	2.2	2.9	1.3	2.8	1.3	4.5	2.6	3.5	1.7	2.8	1.5	3.7	2.7
2	-	1.7	5.6	3.7	3.9	2.1	-	-	2.6	.9	3.3	2.2	3.0	1.7	2.2	1.0	3.8	2.2	3.8	2.1	3.0	1.5	3.6	2.2
3	-	-	5.0	2.8	3.8	2.0	-	-	2.6	1.3	3.5	2.5	3.2	1.5	3.1	1.5	3.8	2.0	3.9	2.6	3.1	1.7	3.3	1.8
4	-	-	3.1	2.2	3.8	2.2	-	-	2.8	1.8	4.2	3.3	3.1	1.7	3.2	1.2	3.9	2.3	3.4	2.1	3.1	1.7	3.1	1.8
5	-	-	3.8	2.0	4.0	2.3	-	-	2.8	1.7	3.4	2.4	3.6	1.5	4.6	2.4	3.7	2.4	3.3	1.8	3.2	1.5	3.2	1.7
6	-	-	4.2	2.5	3.9	1.9	-	-	2.5	.5	2.8	1.5	3.5	1.8	4.4	2.6	4.1	2.7	3.6	1.9	3.2	1.4	3.3	1.9
7	-	2.0	4.2	2.6	3.0	1.6	-	-	2.0	.1	3.8	1.8	3.2	2.8	3.9	2.0	4.5	3.1	3.6	1.8	2.6	1.3	3.7	2.1
8	3.8	2.3	4.2	2.7	3.3	2.0	-	-	2.3	.8	4.4	2.6	4.2	1.8	3.3	2.2	4.2	2.4	3.8	1.6	3.1	.9	3.6	2.3
9	3.8	2.2	4.3	3.1	2.9	2.0	-	-	2.6	.9	2.7	.8	3.2	1.7	3.8	2.4	4.0	2.2	4.3	1.7	3.6	1.6	3.5	2.3
10	3.7	2.3	4.3	2.6	3.1	2.1	-	-	2.8	1.2	3.1	1.2	3.4	2.2	3.7	2.5	3.8	1.9	4.6	2.1	3.4	2.0	3.5	2.0
11	3.7	2.2	4.1	3.3	3.4	2.5	-	-	2.6	1.0	3.7	2.0	3.4	2.2	3.6	2.2	3.8	2.0	3.7	2.1	3.5	2.1	3.8	2.5
12	3.7	2.6	4.2	.7	3.8	2.7	-	-	2.7	1.2	3.8	2.3	3.1	2.0	3.5	1.7	3.9	1.9	3.9	1.8	3.3	2.2	3.8	3.0
13	3.8	2.9	2.0	.3	4.4	2.8	-	-	2.9	1.5	2.8	1.3	3.5	2.0	4.0	2.0	3.9	2.2	3.6	1.9	3.3	2.1	3.8	2.8
14	4.2	3.0	3.4	1.9	4.4	2.9	-	-	2.9	1.5	3.2	2.0	3.9	2.1	3.2	1.2	4.2	2.2	3.9	2.1	3.3	2.7	4.8	2.8
15	4.3	3.1	3.4	2.1	3.8	-	-	-	3.2	1.9	3.4	2.1	5.6	2.7	3.2	.9	5.8	2.9	3.7	2.2	3.6	2.3	4.0	2.5
16	3.8	2.8	3.7	2.4	-	-	-	-	3.4	2.4	2.6	.9	5.7	4.8	3.2	1.4	4.4	2.7	3.5	2.1	3.4	2.3	3.8	2.2
17	3.3	2.2	4.2	2.6	-	-	-	-	3.5	2.3	3.3	.7	5.9	4.4	2.8	1.0	3.8	2.2	2.9	1.9	3.3	1.8	3.7	2.3
18	3.4	1.8	4.1	2.6	-	-	-	-	-	-	3.7	2.0	5.4	3.5	3.2	1.0	3.9	2.7	3.2	2.1	3.1	1.9	3.7	2.4
19	3.8	2.4	4.2	3.0	-	-	3.0	1.8	-	-	4.2	2.0	5.0	3.5	3.8	2.0	3.2	2.1	3.3	2.0	4.2	2.0	4.0	2.4
20	3.6	2.2	4.1	1.2	-	-	3.0	2.1	-	-	3.7	2.4	4.9	2.8	4.1	2.5	3.0	1.9	3.3	1.9	4.0	2.4	4.4	2.5
21	3.8	2.4	2.9	.4	-	-	2.4	1.3	-	-	3.2	1.5	3.4	2.1	3.6	2.5	3.7	2.0	3.5	1.9	3.7	1.9	3.6	2.3
22	4.4	2.9	2.6	.8	-	-	2.6	1.0	-	-	3.7	1.6	3.6	2.1	3.5	2.5	3.8	2.5	3.4	1.8	3.3	1.8	4.1	2.1
23	5.2	3.5	2.8	1.3	-	-	2.9	1.5	-	-	3.8	2.0	4.0	2.8	3.9	2.4	4.2	2.6	3.3	1.7	3.2	1.5	4.0	2.8
24	4.5	2.8	3.1	1.6	-	-	3.5	1.7	-	-	3.9	2.7	3.8	2.5	3.2	1.9	4.2	2.7	3.0	1.6	3.3	1.7	3.5	2.0
25	5.0	2.2	3.5	2.3	-	-	3.5	1.7	-	-	4.3	2.1	3.1	2.1	3.5	1.7	4.0	2.3	3.2	1.5	3.0	1.8	3.7	2.0
26	3.5	2.2	4.3	1.6	-	-	2.5	.5	2.7	-	4.1	3.0	3.9	1.9	5.3	2.2	4.2	2.5	3.2	1.4	3.1	1.7	3.9	2.2
27	3.9	2.7	3.6	1.7	-	-	2.4	.4	2.7	1.3	3.2	1.5	4.1	2.7	3.6	1.3	3.9	2.2	3.3	1.4	3.3	1.8	4.1	2.1
28	4.2	2.5	4.2	3.0	-	-	2.7	1.1	2.9	1.6	3.9	1.7	4.1	2.8	2.9	.8	3.7	2.0	3.3	1.9	3.2	1.8	3.6	1.6
29	3.9	2.3	4.4	2.8	-	-	2.8	1.1	3.4	2.4	4.2	2.8	4.4	1.9	3.5	.9	3.3	1.9	3.3	1.9	3.5	2.0	3.2	1.6
30	3.6	2.4	4.1	1.7	-	-	2.4	.8	---	---	3.7	1.5	3.2	1.7	4.1	2.1	3.2	1.7	3.2	2.0	3.8	2.3	3.2	1.7
31	4.3	3.0	---	---	-	-	2.7	.2	---	---	2.4	1.1	---	---	4.9	2.1	---	---	3.0	1.9	3.6	2.1	---	---

08074800 Keegans Bayou at Roark Road near Houston, Tex.

LOCATION.--Lat 29°39'23", long 95°33'43", Harris County, on left bank at downstream side of bridge on Roark Road and about 2 miles (3 km) southwest of city limits of Houston.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

PERIOD OF RECORD.--Discharge: August 1964 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year. Sediment analyses: October 1970 to September 1971.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--12 years, 10.5 ft³/s (0.297 m³/s), 7,610 acre-ft/yr (9.38 hm³/yr).EXTREMES.--Current year: Maximum discharge, 785 ft³/s (22.2 m³/s) June 1 (elevation, 71.64 ft or 21.836 m); minimum daily, 2.2 ft³/s (0.062 m³/s) for many days.Period of record: Maximum discharge, 1,570 ft³/s (44.5 m³/s) June 13, 1973 (elevation, 73.37 ft or 22.363 m); no flow for many days.REMARKS.--Discharge records fair except those below 100 ft³/s (2.83 m³/s), which are poor. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	2.3	3.5	2.8	2.5	3.0	2.3	7.8	496	3.1	2.7	2.8
2	2.9	4.9	3.7	4.2	2.7	3.9	2.5	3.9	300	3.2	2.7	4.1
3	2.5	6.8	3.8	3.4	3.5	2.8	2.4	3.0	162	11	2.9	18
4	2.5	10	2.6	2.5	2.4	2.8	2.4	2.9	71	4.3	2.9	2.8
5	2.5	5.5	2.6	2.6	2.9	3.0	4.0	2.8	27	7.3	2.6	63
6	2.6	4.5	2.7	4.3	2.9	3.3	2.8	2.7	14	9.2	3.0	5.6
7	4.1	3.1	2.5	3.5	2.6	5.7	3.5	21	27	4.2	2.5	4.0
8	2.3	2.6	2.6	2.7	2.5	16	2.7	7.0	18	19	4.3	3.8
9	2.5	2.7	3.7	2.7	2.8	4.7	2.5	3.3	9.2	39	3.6	2.4
10	2.4	2.9	2.4	3.2	2.9	3.5	2.4	91	6.2	13	2.7	2.3
11	2.4	3.1	2.6	2.4	2.8	2.9	2.3	164	5.4	6.3	2.3	2.6
12	2.4	2.8	2.7	2.8	2.8	10	2.3	100	5.0	6.2	2.8	2.3
13	2.7	2.3	2.6	3.0	2.6	4.1	2.6	108	4.0	4.9	2.9	2.2
14	4.2	2.3	2.5	2.7	2.4	20	2.6	43	4.0	47	2.4	2.5
15	14	2.7	2.6	2.6	2.3	4.7	2.8	17	168	12	2.4	3.8
16	4.4	2.5	5.4	2.6	2.4	3.2	2.9	6.7	190	14	2.5	43
17	2.4	2.4	2.8	2.4	2.5	3.7	2.5	4.2	91	8.2	3.8	43
18	2.2	2.3	3.6	2.2	3.5	2.8	93	3.5	49	6.2	4.4	5.7
19	2.4	3.5	4.1	2.5	2.6	2.6	26	3.0	22	5.4	3.5	4.2
20	2.5	4.0	3.8	4.9	2.4	2.7	29	2.5	8.8	4.9	2.9	5.4
21	4.2	3.0	2.7	2.4	9.8	2.4	12	2.7	5.3	4.2	2.6	3.6
22	4.2	2.5	2.6	2.4	3.0	4.0	4.7	2.5	4.4	4.2	2.3	3.3
23	6.3	2.6	2.7	2.4	3.3	2.8	3.2	2.2	3.9	4.1	2.4	3.0
24	14	2.5	111	2.4	4.0	2.7	7.5	2.4	3.3	16	2.7	2.8
25	99	2.4	62	27	3.3	2.7	13	2.6	2.9	8.3	2.8	2.6
26	46	10	14	4.7	3.9	2.8	3.5	7.7	2.8	3.3	2.8	12
27	5.8	4.9	5.6	4.0	2.8	2.5	2.7	2.9	2.5	3.2	2.5	48
28	4.9	3.0	20	3.5	2.7	2.3	2.4	3.5	2.7	3.1	8.9	15
29	5.5	3.0	11	2.4	2.7	2.4	71	3.0	5.7	2.9	22	8.8
30	3.5	4.0	4.2	2.5	---	3.7	22	2.6	3.3	2.9	5.0	4.6
31	2.5	---	3.2	2.4	---	2.5	---	53	---	2.8	4.1	---
TOTAL	264.5	200.7	302.2	116.1	89.7	136.2	335.5	688.4	1714.3	283.4	117.9	352.4
MEAN	8.53	6.69	9.75	3.75	3.09	4.39	11.2	22.2	57.1	9.14	3.80	11.7
MAX	99	88	111	27	9.8	20	93	164	496	47	22	63
MIN	2.2	2.3	2.5	2.2	2.3	2.3	2.3	2.2	2.5	2.8	2.3	2.2
AC-FT	525	398	599	230	178	270	665	1370	3400	562	234	699
(††)	3.93	1.72	2.76	1.03	.21	1.76	3.99	5.20	7.91	4.04	1.52	5.00

CAL YR 1975 TOTAL 4247.0 MEAN 11.6 MAX 403 MIN 2.0 AC-FT 8420 †† 29.97

WTR YR 1976 TOTAL 4601.3 MEAN 12.6 MAX 496 MIN 2.2 AC-FT 9130 †† 39.07

PEAK DISCHARGE ABOVE BASE (250 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12-24	1830	68.49	371	6-1	0400	71.64	785
4-18	1700	68.04	340	6-15	1930	71.56	768
5-10	2100	68.54	378	9-16	2200	68.10	264

†† Weighted-mean rainfall, in inches, based on two rain gages.

08074800 Keegans Bayou at Roark Road near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COHALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT 07...	0900	4.0	840	7.2	20.5	20	20	6.3	69	5.0
NOV 19...	1015	3.4	725	6.9	23.0	30	30	6.3	72	5.1
DEC 10...	0930	2.5	819	7.5	14.5	40	15	8.0	78	1.6
JAN 12...	1100	2.5	824	7.6	16.5	20	15	7.6	78	8.1
FEB 23...	1045	2.3	813	7.7	14.0	10	15	10.3	99	3.0
MAR 02...	0900	3.9	838	7.6	22.0	20	25	6.1	69	16
APR 12...	1210	2.3	820	7.7	26.5	20	15	9.5	116	19
MAY 24...	1315	2.4	801	7.8	26.5	20	15	7.5	91	8.4
JUN 02...	1400	290	105	7.5	25.5	160	40	5.3	64	3.3
JUL 28...	1140	3.0	791	7.3	29.0	40	20	5.9	78	6.9
AUG 03...	0930	2.9	810	6.4	26.5	40	20	4.8	61	9.0
SEP 14...	0930	2.5	826	7.1	28.0	30	20	5.2	67	11

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT 07...	2200	74	98	--	--	--	--	--	--
NOV 19...	1700	110	94	180	0	52	11	72	2.4
DEC 10...	400	14	12	--	--	--	--	--	--
JAN 12...	18	1	10	--	--	--	--	--	--
FEB 23...	30	1	1	200	0	59	13	80	2.5
MAR 02...	2200	1	92	--	--	--	--	--	--
APR 12...	9700	16	36	--	--	--	--	--	--
MAY 24...	--	56	94	200	1	59	13	80	2.5
JUN 02...	71000	1200	2100	--	--	--	--	--	--
JUL 28...	16000	140	980	--	--	--	--	--	--
AUG 03...	7200	130	1300	190	0	57	12	80	2.5
SEP 14...	10000	270	190	220	24	64	14	79	2.3

08074800 Keegans Bayou at Roark Road near Houston, Tex.--Continued

WATER QUALITY DATA WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT 07...	--	--	--	--	--	--	--	--	28
NOV 19...	7.2	220	0	33	75	1.1	24	385	46
DEC 13...	--	--	--	--	--	--	--	--	27
JAN 12...	--	--	--	--	--	--	--	--	29
FEB 23...	9.0	250	0	35	88	1.8	28	437	20
MAR 02...	--	--	--	--	--	--	--	--	53
APR 12...	--	--	--	--	--	--	--	--	19
MAY 24...	9.0	245	0	36	86	.8	25	431	35
JUN 02...	--	--	--	--	--	--	--	--	79
JUL 28...	--	--	--	--	--	--	--	--	26
AUG 03...	8.4	242	0	34	86	1.8	29	428	31
SEP 14...	9.2	237	0	39	84	2.5	29	439	37

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 07...	7	7.0	.47	1.3	1.2	6.0	9.2	--	.2
NOV 19...	2	2.7	.21	.59	1.3	6.1	7.6	0	.2
DEC 13...	2	2.9	.12	.86	1.2	5.3	7.0	--	.2
JAN 12...	18	6.9	.16	2.9	.90	9.1	6.8	--	.3
FEB 23...	4	5.7	.22	2.4	1.1	6.5	7.6	6	.3
MAR 02...	2	3.8	.44	1.8	1.0	6.4	7.0	--	.3
APR 12...	8	3.9	1.3	3.6	1.0	7.0	17	--	.3
MAY 24...	3	4.8	1.0	1.4	1.3	6.4	17	--	.3
JUN 02...	5	.08	.01	.06	.82	.22	4.8	--	.1
JUL 28...	1	3.5	.45	.91	1.3	5.0	3.4	--	.3
AUG 03...	8	7.0	.52	2.3	.70	6.4	3.6	--	.4
SEP 14...	14	7.9	.76	3.0	1.5	8.9	3.8	0	.7

08074800 Keegans Bayou at Roark Road near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 19...	1015	0	5	390	0	0	0	3					
FEB. 23...	1045	--	--	380	--	--	--	--					
MAY 24...	1315	50	4	440	0	0	0	3					
SEP. 14...	0930	50	8	420	0	0	1	0					
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)				
NOV. 19...	40	0	140	60	.3	0	340	30					
FEB. 23...	--	--	--	--	--	--	--	--					
MAY 24...	0	0	20	30	.2	0	530	30					
SEP. 14...	20	0	20	0	.4	0	530	30					
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	
NOV. 19...	1015	.0	3	--	.00	.0	.0	33	.00	.0	.00	.0	
FEB. 23...	1045	.0	0	.00	.00	.0	.0	23	.00	.2	.00	.0	
SEP. 14...	0930	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	
NOV. 19...	.00	.0	.42	.00	2.6	.00	.0	.00	.00	.0	.00	.7	
FEB. 23...	.00	.0	.00	.01	1.2	.00	.0	.00	.00	.0	.00	.5	
SEP. 14...	.00	--	.64	.01	--	.00	--	.00	.00	--	.01	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.02	.0	.10	.00	.00	.00	0	0	.00	.00	.06	.00	.00
FEB. 23...	.00	.1	.00	.00	.00	.00	0	0	.00	.00	.03	.00	.00
SEP. 14...	.04	--	.16	.00	.00	.00	0	--	.00	.00	.05	.00	.00

08075000 Brays Bayou at Houston, Tex.

LOCATION.--Lat 29°41'49", long 95°24'43", Harris County, near right bank at downstream side of pile bent of Main Street Bridge in south-west Houston, 1.6 miles (2.6 km) upstream from Harris Gully, and 11.6 miles (18.7 km) upstream from Buffalo Bayou.

DRAINAGE AREA.--88.4 mi² (229.0 km²).

PERIOD OF RECORD.--Discharge: May 1936 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.16 ft (2.182 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence. Prior to June 20, 1936, nonrecording gage, and June 20, 1936, to Nov. 25, 1959, water-stage recorder at site 0.8 mile (1.3 km) downstream at same datum.

AVERAGE DISCHARGE.--40 years, 107 ft³/s (3.030 m³/s), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 29,000 ft³/s (821 m³/s) June 15 (gage height, 52.13 ft or 15.889 m); minimum daily, 50 ft³/s (1.42 m³/s) Apr. 17.

Period of record: Maximum discharge, 29,000 ft³/s (821 m³/s) June 15, 1976 (gage height, 52.13 ft or 15.889 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Oct. 11, 12, 1937, Mar. 14, Apr. 1, 1958.

Maximum stage since at least 1911, 56.0 ft (17.07 m) in June 1919 before channel rectification, former site, from information by engineer for Houston; maximum discharge, that of June 15, 1976.

REMARKS.--Discharge records good. No diversion above station. Low flow is mostly sewage effluent from Houston suburbs.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	72	95	75	61	63	56	122	467	61	54	76
2	55	99	7	125	62	64	57	71	122	61	62	75
3	54	532	64	81	65	67	54	62	482	99	62	161
4	53	173	63	64	64	61	55	56	256	74	64	443
5	54	112	70	67	64	61	116	54	144	141	63	568
6	58	89	121	105	61	59	82	53	341	152	136	44
7	54	73	66	118	60	106	69	237	341	138	75	75
8	55	69	69	81	61	371	65	155	164	216	63	70
9	61	67	65	76	63	125	54	66	110	1040	64	65
10	64	71	72	67	63	64	56	766	80	500	61	67
11	67	71	68	68	65	66	51	667	65	147	60	72
12	65	64	63	67	61	161	53	245	56	131	61	63
13	71	65	72	66	61	124	53	614	54	95	66	67
14	75	66	70	65	61	274	53	240	57	448	78	100
15	146	70	67	63	54	132	53	136	718	215	87	61
16	125	67	122	60	62	67	54	87	268	162	89	82
17	74	67	88	59	61	54	50	77	463	140	206	276
18	68	68	63	62	64	57	414	67	252	103	133	92
19	63	89	62	61	63	55	260	64	177	88	84	200
20	67	83	62	91	63	57	800	63	114	77	98	267
21	64	64	61	69	164	55	199	63	91	69	77	126
22	74	63	62	60	73	97	89	61	81	66	63	76
23	114	64	66	60	72	61	63	58	74	67	64	66
24	117	66	139	63	71	63	74	64	64	122	63	67
25	1110	65	608	410	70	62	224	63	71	167	65	68
26	449	261	176	115	65	54	75	142	85	77	63	121
27	154	80	104	82	61	57	64	162	66	66	66	710
28	100	66	154	72	61	58	60	72	64	64	171	305
29	83	62	156	64	61	62	786	61	83	63	364	141
30	84	184	98	63	---	62	256	57	72	62	130	87
31	74	---	86	60	---	57	---	1160	---	64	160	---
TOTAL	3842	3032	4467	2644	1943	2793	4405	5665	19676	4985	2962	4741
MEAN	124	111	144	85.3	67.0	90.1	147	189	656	161	95.5	158
MAX	1100	532	1390	410	164	371	800	1160	7180	1040	364	710
MIN	53	62	61	54	54	55	50	53	54	61	59	61
AC-FT	7620	6010	8966	5240	3850	5540	8740	11630	39030	9490	5840	9400
(††)	3.15	1.80	2.80	.92	.29	1.91	4.09	4.44	9.52	4.32	1.87	4.61

CAL Y= 1975 TOTAL 66274 MEAN 102 MAX 6790 MIN 43 AC-FT 131500 †† 36.79
WTR Y= 1976 TOTAL 61355 MEAN 168 MAX 7180 MIN 50 AC-FT 121700 †† 39.72

PEAK DISCHARGE ABOVE BASE (4,500 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-24	1830	34.15	5,050	about			
5-10	2030	32.34	3,360	6-15	2030	52.13	29,000
6-1	0400	39.69	10,200	7-14	1130	28.05	930

†† Weighted-mean rainfall, in inches, based on nine rain gages.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.										
28...	1215	105	719	7.6	27.0	30	15	9.5	117	9
NOV.										
19...	0830	60	811	7.1	23.0	20	25	7.5	86	4.2
DEC.										
02...	1330	82	782	7.8	20.0	30	7	9.9	108	5.1
JAN.										
13...	0900	50	833	7.7	20.5	10	10	8.2	90	8.6
FEB.										
24...	1315	84	811	7.8	23.3	20	10	11.6	133	6.2
MAR.										
16...	1015	71	786	7.6	18.5	40	20	9.7	103	5.8
APR.										
05...	1040	70	865	7.6	22.5	20	30	8.6	98	16
MAY										
11...	1100	580	279	7.1	24.5	200	100	6.6	79	19
JUNE										
02...	0815	1360	183	7.6	21.5	120	65	7.2	81	4.5
JULY										
14...	1000	910	273	6.9	25.0	50	90	6.3	78	9.3
AUG.										
04...	1155	73	827	7.7	28.5	30	7	14.4	187	9.6
16...	1115	65	750	6.9	27.0	30	20	7.4	94	5.1

DATE	TIME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCHI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.									
28...	240000	13000	680	--	--	--	--	--	--
NOV.									
19...	400	1	16	170	0	50	10	110	3.7
DEC.									
02...	1200	2	160	--	--	--	--	--	--
JAN.									
13...	44	14	20	--	--	--	--	--	--
FEB.									
24...	32	1	22	150	0	44	9.4	110	3.9
MAR.									
16...	52	1	94	--	--	--	--	--	--
APR.									
05...	150	10	80	--	--	--	--	--	--
MAY									
11...	88000	2700	1000	84	3	26	4.6	22	1.0
JUNE									
02...	320000	12000	1500	--	--	--	--	--	--
JULY									
14...	270000	26000	7700	77	0	24	4.0	24	1.2
AUG.									
04...	3800	120	42	150	0	45	9.7	110	3.9
16...	9000	700	260	--	--	--	--	--	--

08075000 Brays Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 28...	--	--	--	--	--	--	--	--	29
NOV. 19...	5.8	292	0	38	75	1.5	22	457	46
DEC. 02...	--	--	--	--	--	--	--	--	12
JAN. 13...	--	--	--	--	--	--	--	--	22
FEB. 24...	7.5	280	0	40	79	1.1	25	454	25
MAR. 16...	--	--	--	--	--	--	--	--	30
APR. 05...	--	--	--	--	--	--	--	--	54
MAY 11...	3.9	99	0	17	17	.4	9.8	150	218
JUNE 02...	--	--	--	--	--	--	--	--	140
JULY 14...	3.0	105	0	13	19	.4	8.7	148	266
AUG. 04...	7.0	291	0	41	83	.9	25	465	15
16...	--	--	--	--	--	--	--	--	32

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 28...	1	1.9	.26	3.0	1.2	3.1	6.2	--	.3
NOV. 19...	6	.58	.12	1.1	2.7	4.6	6.4	0	.4
DEC. 02...	0	2.7	.13	1.6	3.0	3.8	7.6	--	.5
JAN. 13...	11	1.4	.27	3.7	.10	4.3	7.8	--	.4
FEB. 24...	11	2.5	.17	3.2	1.2	4.6	7.6	6	.4
MAR. 16...	2	1.0	.19	4.8	.90	4.7	13	--	.5
APR. 05...	14	.57	.21	2.2	3.8	5.4	18	--	.7
MAY 11...	42	.67	.06	.62	1.5	1.0	14	5	.1
JUNE 02...	15	.26	.02	.21	1.2	.53	6.9	--	.2
JULY 14...	50	.46	.11	.72	1.2	.79	12	7	.2
AUG. 04...	4	2.4	.30	2.5	1.7	3.6	3.8	--	.3
16...	14	1.8	.32	2.6	1.4	3.7	3.8	--	.3

08075000 Brays Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 19...	0830	20	9	310	0	0	0	6					
FEB. 24...	1315	--	--	380	--	--	--	--					
MAY 11...	1100	--	--	120	--	--	--	--					
JULY 14...	1000	80	18	130	0	0	0	8					
AUG. 04...	1155	--	--	410	--	--	--	--					
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
DATE	TIME												
NOV. 19...	40	0	160	40	.1	0	310	20					
FEB. 24...	--	--	--	--	--	--	--	--					
MAY 11...	--	--	--	--	--	--	--	--					
JULY 14...	60	4	0	10	.3	2	200	20					
AUG. 04...	--	--	--	--	--	--	--	--					
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 19...	0830	.0	140	--	.00	.0	.0	520	.00	27	.00	11	
FEB. 24...	1315	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 19...	.00	9.9	.21	.02	54	.00	.0	.00	.00	.0	.01	12	
FEB. 24...	.00	--	.27	.01	--	.00	--	.00	.00	--	.00	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.04	.0	.03	.00	.00	.00	0	0	.00	.00	.00	.00	.00
FEB. 24...	.02	--	.00	.00	.00	.00	0	--	.00	.00	.00	.00	.00

08075100 Brays Bayou at Scott Street, Houston, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 29°42'35", long 95°21'23", Harris County, at bridge on Scott Street in Houston.

DRAINAGE AREA.--106 mi² (275 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: May 1971 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.										
29...	1300	130	764	7.6	27.0	30	30	8.7	107	23
DEC.										
03...	1015	93	779	7.4	19.0	30	30	8.1	86	21
17...	0850	100	710	7.4	15.5	40	20	7.5	74	1.4
JAN.										
14...	1115	86	888	7.9	17.0	20	30	10.1	104	>8.1
FEB.										
25...	1330	76	848	8.1	23.0	30	20	10.6	122	11
MAR.										
24...	1015	64	887	7.8	21.0	30	60	6.8	76	12
APR.										
20...	1300	1900	268	7.1	22.0	120	120	5.1	58	23
JUNE										
02...	1030	1400	218	8.0	23.0	120	65	6.6	76	8.4
30...	1115	--	793	7.9	29.5	50	20	9.6	126	38
AUG.										
04...	1225	90	1230	7.5	29.5	50	20	7.5	99	46
24...	1015	--	954	6.9	29.0	30	5	6.5	86	11

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO
OCT.									
29...	3100000	120000	7200	--	--	--	--	--	--
DEC.									
03...	1400000	8000	13000	160	0	44	11	94	3.3
17...	520	1	12	--	--	--	--	--	--
JAN.									
14...	61000	2300	4500	--	--	--	--	--	--
FEB.									
25...	1700	20	250	140	0	40	9.3	120	4.4
MAR.									
24...	59000	2400	60	--	--	--	--	--	--
APR.									
20...	1000000	4000	16000	--	--	--	--	--	--
JUNE									
02...	1200000	160000	12000	62	0	19	3.5	16	.9
30...	120000	2200	400	--	--	--	--	--	--
AUG.									
04...	8200000	1000000	72000	200	0	54	16	160	4.9
24...	100000	1800	500	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08075100 Brays Bayou at Scott Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.									
29...	--	--	--	--	--	--	--	--	42
DEC.									
03...	6.0	283	0	30	76	.9	22	424	67
17...	--	--	--	--	--	--	--	--	25
JAN.									
14...	--	--	--	--	--	--	--	--	68
FEB.									
25...	6.8	300	0	36	84	1.2	25	470	67
MAR.									
24...	--	--	--	--	--	--	--	--	122
APR.									
20...	--	--	--	--	--	--	--	--	314
JUNE									
02...	3.3	80	0	9.3	15	.4	10	117	142
30...	--	--	--	--	--	--	--	--	40
AUG.									
04...	7.0	295	0	42	210	1.8	23	660	50
24...	--	--	--	--	--	--	--	--	22

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.									
29...	10	2.4	.37	2.2	2.3	3.0	7.8	--	.5
DEC.									
03...	25	1.0	.36	1.3	8.6	3.8	--	140	.5
17...	1	.29	.09	1.4	2.2	3.3	7.0	--	.3
JAN.									
14...	31	1.1	.38	4.2	2.6	3.9	17	--	.4
FEB.									
25...	34	1.2	.32	4.2	2.8	4.5	11	0	.7
MAR.									
24...	12	.80	.50	3.3	.60	3.7	9.4	--	.5
APR.									
20...	74	.85	.10	1.2	2.3	1.2	29	--	.5
JUNE									
02...	16	.26	.03	.36	1.2	.58	--	3	.2
30...	15	.70	.40	1.9	1.6	3.2	8.1	--	.4
AUG.									
04...	29	1.0	.27	3.9	3.7	4.2	4.2	--	.5
24...	18	.84	.46	3.1	.70	4.8	4.4	--	.3

08075100 Brays Bayou at Scott Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DEC. 03...	1015	40	5	220	0	10	0	10
FEB. 25...	1330	--	--	250	--	--	--	--
JUNE 02...	1030	90	32	90	0	1	0	5
AUG. 04...	1225	--	--	330	--	--	--	--

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DEC. 03...	30	0	20	20	.0	0	440	40
FEB. 25...	--	--	--	--	--	--	--	--
JUNE 02...	110	0	0	0	.0	0	360	20
AUG. 04...	--	--	--	--	--	--	--	--

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
DEC. 03...	1015	.0	--	.00	.2	.00	.00	.00	.24	.03	.00	.00
FEB. 25...	1330	.0	.00	.00	.1	.00	.00	.01	.28	.03	.00	.00

DATE	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
DEC. 03...	.02	.01	.03	.00	.00	.00	.00	0	.00	.01	.00	.00
FEB. 25...	.00	.01	.03	.04	.00	.00	.00	0	.00	.00	.00	.00

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.

LOCATION.--Lat 29°37'07", long 95°26'45", Harris County, on right bank at downstream side of bridge on Hiram Clarke Street in southwest Houston, 12.7 miles (20.4 km) upstream from gage Sims Bayou at Houston, and 19.7 miles (31.7 km) upstream from mouth.

DRAINAGE AREA.--20.2 mi² (52.3 km²).

PERIOD OF RECORD.--Discharge: August 1964 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1959; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--12 years, 27.0 ft³/s (0.765 m³/s), 19,560 acre-ft/yr (24.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 4,500 ft³/s (127 m³/s) June 15 (elevation, 57.12 ft or 17.410 m); minimum daily, 4.9 ft³/s (0.14 m³/s) Feb. 24.

Period of record: Maximum discharge, about 4,500 ft³/s (127 m³/s) June 15, 1976 (elevation, 57.12 ft or 17.410 m); minimum daily, 1.5 ft³/s (0.042 m³/s) July 26, 1965.

REMARKS.--Discharge records poor. No known diversion above station. Low flow is partly sustained by sewage effluent from Houston suburbs. Records furnished by Houston Lighting and Power Co. show that during the current year, 488 acre-ft (0.602 hm³) of ground water was used for cooling purposes and released to bayou about 300 ft (91 m) above gage. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	8.8	6.6	7.2	6.3	6.6	6.7	22	1430	5.3	8.8	8.9
2	6.0	9.3	6.5	13	6.6	7.6	6.8	15	350	5.5	7.9	8.9
3	8.0	19	6.9	9.6	6.8	7.6	7.1	10	119	9.8	8.2	11
4	12	15	6.7	7.9	6.6	7.7	6.7	6.9	37	8.0	7.8	18
5	10	8.8	6.8	7.4	6.4	8.0	8.5	8.8	19	20	7.9	34
6	8.0	7.5	7.4	12	6.5	8.4	7.4	9.6	51	9.1	8.4	12
7	7.0	7.2	7.4	14	6.5	7.6	6.5	10	45	9.5	8.6	9.0
8	6.6	7.6	7.3	9.9	7.3	13	7.9	21	13	77	8.7	11
9	6.2	7.8	6.7	9.5	7.6	8.7	7.1	11	9.3	329	8.6	14
10	5.0	6.9	6.5	8.1	6.8	6.0	6.2	145	8.4	146	9.4	10
11	6.1	6.7	6.6	7.9	7.0	6.2	6.3	126	9.6	65	8.1	9.6
12	6.3	6.7	6.7	7.7	7.9	12	6.7	24	8.4	27	8.0	9.3
13	5.6	7.9	6.9	7.5	7.9	11	7.4	61	7.6	17	17	9.1
14	6.0	6.9	8.7	7.4	7.5	14	6.6	33	7.5	99	12	12
15	6.9	7.1	7.5	7.6	7.2	13	7.0	14	1050	48	10	11
16	8.9	7.3	9.3	7.5	7.5	8.3	6.2	9.4	1900	22	14	10
17	5.8	7.1	7.8	7.3	7.8	6.6	6.9	7.3	234	15	12	10
18	5.1	7.3	7.1	8.7	7.6	7.2	6.5	6.6	77	11	8.8	11
19	5.0	8.0	7.5	7.6	6.8	6.8	6.9	5.7	26	9.6	8.7	13
20	5.2	7.9	7.9	7.5	7.5	6.6	57	6.6	14	9.8	8.8	16
21	5.2	6.8	7.0	7.8	14	6.9	23	6.8	8.6	11	8.6	12
22	5.7	6.9	7.3	7.2	5.9	11	12	6.5	6.6	9.2	8.4	8.6
23	7.0	6.4	7.5	7.0	5.1	7.4	9.0	6.3	6.5	9.3	8.0	9.7
24	12	6.9	152	7.2	4.9	6.9	9.2	6.5	6.2	14	8.4	9.0
25	154	7.9	148	24	6.8	7.5	15	8.1	6.3	20	8.3	9.0
26	87	25	33	8.2	7.3	7.2	11	11	6.7	11	8.6	8.9
27	18	7.9	16	6.8	6.9	6.8	9.9	9.2	6.1	8.8	8.7	37
28	11	6.5	12	6.4	6.2	7.4	9.0	6.7	5.4	10	12	27
29	8.8	6.4	11	5.6	6.6	8.1	105	6.1	5.0	9.8	45	13
30	10	7.0	8.1	5.7	---	10	56	6.1	5.4	9.8	10	8.9
31	8.4	---	7.5	5.7	---	7.1	---	192	---	9.3	9.4	---
TOTAL	463.3	258.5	554.2	266.9	205.8	259.2	447.5	826.2	5478.6	1064.8	327.1	390.9
MEAN	14.9	8.62	17.9	8.61	7.10	8.36	14.9	26.7	183	34.3	10.6	13.0
MAX	154	25	152	24	14	14	105	192	1900	329	45	37
MIN	5.0	6.4	6.5	5.6	4.9	6.0	6.2	5.7	5.0	5.3	7.8	8.6
AC-FT	919	513	1100	529	408	514	888	1640	10870	2110	649	775
(††)	2.89	2.19	2.67	1.06	.42	1.40	3.23	5.45	11.77	4.94	2.50	3.56

CAL YR 1975 TOTAL 10328.7 MEAN 28.3 MAX 1840 MIN 5.0 AC-FT 20490 †† 40.37

WTR YR 1976 TOTAL 10543.0 MEAN 28.8 MAX 1900 MIN 4.9 AC-FT 20910 †† 42.08

PEAK DISCHARGE ABOVE BASE (500 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
5-10	1900	47.80	625				about
6-1	0500	53.84	2,520	6-15	2300	57.12	4,500
6-2	1030	46.76	365	7-9	1515	48.44	747

†† Weighted-mean rainfall, in inches, based on two rain gages.

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 07...	1030	8.0	672	7.4	23.0	20	10	5.9	68	4.2
NOV. 19...	0925	5.0	941	7.1	22.5	30	20	6.2	70	14
DEC. 10...	1030	6.5	953	7.6	16.0	30	10	8.3	83	1.6
JAN. 13...	1000	7.5	926	7.8	20.5	20	15	7.6	84	>8.4
FEB. 09...	1345	7.4	895	8.2	21.0	20	15	11.4	127	4.4
MAR. 02...	1045	6.6	1040	7.9	25.5	30	15	8.5	99	5.7
APR. 12...	1315	6.7	1390	8.1	26.5	30	10	10.8	132	9.6
JUNE 02...	1145	310	186	7.8	23.0	160	80	5.0	57	4.5
16...	1200	1690	122	7.1	26.0	160	80	4.5	56	4.1
JULY 28...	1215	10	940	7.9	29.0	40	20	10.5	138	6.6
AUG. 03...	1030	8.2	1070	6.6	27.0	30	10	7.4	94	4.1
SEP. 14...	1215	18	1050	7.2	28.0	40	40	7.4	95	2.8

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 07...	580	170	42	--	--	--	--	--	--
NOV. 19...	18000	620	1100	160	0	46	9.7	130	4.5
DEC. 10...	4500	300	250	--	--	--	--	--	--
JAN. 13...	550	82	52	--	--	--	--	--	--
FEB. 09...	550	46	98	140	0	40	9.4	130	4.8
MAR. 02...	440	2	8	--	--	--	--	--	--
APR. 12...	7300	6	24	--	--	--	--	--	--
JUNE 02...	100000	9000	2300	48	0	15	2.5	15	.9
16...	740000	28000	13000	30	0	9.9	1.2	9.5	.8
JULY 28...	16000	2100	720	--	--	--	--	--	--
AUG. 03...	3200	1500	270	180	0	53	12	150	4.8
SEP. 14...	1700	150	230	130	0	40	8.2	160	6.0

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.									
07...	--	--	--	--	--	--	--	--	18
NOV.									
19...	10	269	0	50	99	1.6	24	504	42
DEC.									
10...	--	--	--	--	--	--	--	--	19
JAN.									
13...	--	--	--	--	--	--	--	--	33
FEB.									
09...	1.5	238	0	45	98	2.4	22	466	25
MAR.									
02...	--	--	--	--	--	--	--	--	40
APR.									
12...	--	--	--	--	--	--	--	--	24
JUNE									
02...	3.8	64	0	7.1	15	.3	9.1	100	146
16...	2.7	46	0	4.2	11	.2	4.8	67	160
JULY									
28...	--	--	--	--	--	--	--	--	34
AUG.									
03...	7.8	329	0	41	130	1.4	29	587	22
SEP.									
14...	16	194	0	45	180	.6	20	566	74

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.									
07...	5	6.2	.58	5.7	1.3	6.0	7.2	--	.3
NOV.									
19...	5	4.1	.21	1.4	4.7	7.7	8.2	0	.5
DEC.									
10...	1	8.3	.19	4.2	1.2	7.3	11	--	.4
JAN.									
13...	17	3.7	.04	2.5	1.4	6.4	5.6	--	.3
FEB.									
09...	13	9.7	.14	1.9	.00	7.5	7.4	2	.6
MAR.									
02...	27	8.4	.09	2.2	2.9	7.9	8.0	--	.7
APR.									
12...	16	3.9	.23	4.5	2.3	8.2	22	--	.9
JUNE									
02...	13	.22	.01	.10	1.0	.33	7.0	4	.1
16...	23	.04	.01	.02	.73	.13	9.0	0	.0
JULY									
28...	11	1.6	.27	2.5	1.5	4.6	5.2	--	.3
AUG.									
03...	8	1.3	.14	1.5	1.5	5.7	5.8	--	.5
SEP.									
14...	14	7.1	.21	.70	1.1	4.3	4.2	2	.2

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 19...	0925	0	6	450	0	0	0	4					
FEB. 09...	1345	--	--	390	--	--	--	--					
JUNE 02...	1145	110	4	100	0	3	0	4					
16...	1200	250	2	30	0	0	0	3					
AUG. 03...	1030	--	--	390	--	--	--	--					
SEP. 14...	1215	60	8	210	0	0	2	0					
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
NOV. 19...	50	0	90	80	.1	0	240	20					
FEB. 09...	--	--	--	--	--	--	--	--					
JUNE 02...	140	0	0	0	.0	0	250	20					
16...	190	0	0	20	.3	0	150	20					
AUG. 03...	--	--	--	--	--	--	--	--					
SEP. 14...	20	0	20	20	.4	4	330	20					
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 19...	0925	.0	28	--	.00	.0	.1	82	.00	1.3	.00	.0	
FEB. 09...	1345	.0	0	.00	.00	.0	.1	24	.00	.3	.00	.0	
JUNE 16...	1200	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
SEP. 14...	1215	.0	--	.00	.01	--	.1	--	.00	--	.00	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 19...	.00	.0	.16	.02	9.9	.00	.0	.00	.00	.0	.02	1.7	
FEB. 09...	.00	.0	.10	.01	3.8	.00	.0	.00	.00	.3	.01	.8	
JUNE 16...	.00	--	.08	.00	--	.00	--	.00	.00	--	.00	--	
SEP. 14...	.00	--	.11	.02	--	.00	--	.00	.01	--	.00	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	METHYL TRIETHION (UG/L)	TOTAL PARAETHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.02	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
FEB. 09...	.00	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
JUNE 16...	.00	--	.02	.02	.00	.00	.00	0	--	.00	.00	.06	.00
SEP. 14...	.02	--	.00	.00	.00	.00	.00	0	--	.00	.04	.21	.00

08075500 Sims Bayou at Houston, Tex.

LOCATION.--Lat 29°40'27", long 95°17'21", Harris County, on left bank at downstream side of bridge on State Highway 35 in southeast Houston and 7.0 miles (11.3 km) upstream from mouth.

DRAINAGE AREA.--64.0 mi² (165.8 km²).

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.09 ft (0.942 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--24 years, 73.1 ft³/s (2,070 m³/s), 52,960 acre-ft/yr (65.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) June 16 (gage height, 33.14 ft or 10.101 m); minimum daily, 17 ft³/s (0.48 m³/s) for many days.

Period of record: Maximum discharge, 11,200 ft³/s (317 m³/s) June 9, 1975, and June 16, 1976; maximum gage height, 33.17 ft (10.110 m) June 9, 1975; minimum daily, 0.9 ft³/s (0.025 m³/s) Aug. 7, 1955.

REVISIONS.--The maximum discharge for water year 1975 has been revised to 11,200 ft³/s (317 m³/s) June 9, 1975 (gage height, 33.17 ft or 10.110 m), superseding figures previously published in WRD TX-75-1.

REMARKS.--Discharge records fair. Low flow is largely sustained by sewage effluent from Houston suburbs and industrial wastes.

REVISIONS (WATER YEARS).--WSP 1922: 1960.

DISCHARGE* IN CUBIC FEET PER SECOND* WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	19	27	23	30	22	42	3210	30	26	30
2	20	37	18	64	23	32	23	28	1020	31	27	26
3	22	36	18	46	24	31	20	24	261	88	29	26
4	24	39	19	29	24	25	20	19	93	54	24	61
5	24	28	17	30	24	25	29	22	52	41	24	91
6	21	24	20	27	24	29	26	24	250	48	32	36
7	20	30	18	43	21	40	22	143	694	41	27	28
8	19	24	18	29	23	55	23	93	115	156	24	50
9	20	24	18	30	23	44	21	31	52	621	23	48
10	18	21	18	27	22	28	22	60	36	562	23	31
11	21	21	17	28	21	24	21	379	32	162	22	24
12	20	21	17	26	22	37	19	71	29	71	24	24
13	19	22	18	26	21	37	21	137	27	49	35	23
14	19	21	20	29	20	78	19	77	26	313	48	29
15	41	23	19	24	23	45	21	38	2690	143	29	27
16	40	23	27	26	22	29	23	29	8290	65	50	34
17	22	23	24	24	22	25	19	25	930	49	57	48
18	19	22	17	25	22	23	24	23	217	37	29	27
19	19	37	17	24	22	24	19	22	165	31	23	85
20	18	26	19	27	24	23	102	27	229	31	24	242
21	18	22	19	25	59	23	58	24	66	33	23	66
22	17	22	20	25	28	35	23	19	45	31	22	29
23	27	22	20	25	24	26	24	21	39	30	22	28
24	24	22	415	23	23	25	25	20	35	110	21	27
25	600	23	668	87	25	36	50	22	35	117	21	25
26	300	107	99	34	35	24	24	31	46	41	21	25
27	150	30	50	28	32	22	23	30	41	31	23	188
28	55	20	42	24	30	22	21	23	32	29	35	252
29	30	18	45	24	30	24	206	21	86	28	120	63
30	26	20	32	23	---	38	126	20	38	27	35	29
31	26	---	29	24	---	26	---	272	---	27	30	---
TOTAL	1722	833	1817	953	736	985	1096	1817	18881	3127	973	1722
MEAN	55.5	27.8	58.6	30.7	25.4	31.8	36.5	58.6	629	101	31.4	57.4
MAX	600	107	668	87	59	78	206	379	8290	621	120	252
MIN	17	18	17	23	20	22	19	19	26	27	21	23
AC-FT	3420	1650	3600	1890	1460	1950	2170	3600	37450	6200	1930	3420
(††)	3.73	1.77	2.63	1.22	.39	1.74	2.81	4.70	14.79	4.97	1.99	4.62

CAL YR 1975 TOTAL 36447 MEAN 99.9 MAX 7170 MIN 17 AC-FT 72290 †† 42.87
WTR YR 1976 TOTAL 34662 MEAN 94.7 MAX 8290 MIN 17 AC-FT 68750 †† 45.36

PEAK DISCHARGE ABOVE BASE (1,600 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
5-11	0215	14.47	676	7-14	0915	13.67	491
6-1	0815	25.69	4,730	9-28	1100	13.91	525
6-16	0230	33.14	11,200				

†† Weighted-mean rainfall, in inches, based on six rain gages.

08075500 Sims Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.										
07...	1300	20	681	6.7	22.5	25	20	4.0	45	9.9
NOV.										
20...	1145	24	1450	7.2	18.0	30	20	2.4	25	8.4
DEC.										
10...	1300	20	1050	7.3	16.5	50	25	2.3	23	7.2
JAN.										
13...	1215	26	1050	7.3	19.5	30	4	1.0	11	>8.4
FEB.										
09...	1055	22	990	7.3	16.0	30	10	2.7	27	16
MAR.										
02...	1315	29	1470	7.5	24.0	30	25	2.4	28	16
APR.										
07...	1000	21	1390	7.3	21.0	30	20	.8	9	50
MAY										
11...	1000	430	378	6.8	24.0	140	320	4.0	47	25
JUNE										
02...	0900	1150	262	7.9	21.5	240	250	4.6	52	9.6
16...	1100	10700	127	7.5	25.5	240	150	5.1	64	4.0
JULY										
14...	0900	500	294	7.3	24.0	50	150	6.3	77	11
AUG.										
04...	1100	23	1140	6.8	27.5	60	10	4.0	51	17
SEP.										
28...	0820	310	607	6.7	24.0	200	200	4.7	57	11
28...	0915	470	258	6.7	23.0	200	220	7.6	90	10
28...	1115	580	337	6.6	24.0	60	100	6.5	79	12
29...	0745	71	754	6.5	23.5	200	60	1.8	21	9.0

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.									
07...	800000	17000	1100	--	--	--	--	--	--
NOV.									
20...	2800000	51000	2500	190	0	51	14	220	7.0
DEC.									
10...	200000	9700	210	--	--	--	--	--	--
JAN.									
13...	260000	29000	440	--	--	--	--	--	--
FEB.									
09...	1100000	5300	1000	180	0	49	13	130	4.3
MAR.									
02...	1100000	6700	1100	--	--	--	--	--	--
APR.									
07...	5800000	31000	850	--	--	--	--	--	--
MAY									
11...	870000	25000	6200	86	4	26	5.0	40	1.9
JUNE									
02...	1500000	46000	13000	69	0	21	4.0	21	1.1
16...	32000	2400	5800	40	1	13	1.7	7.0	.5
JULY									
14...	3100000	60000	96000	65	0	20	3.5	29	1.6
AUG.									
04...	200000	11000	3800	190	0	53	14	150	4.7
SEP.									
28...	900000	35000	32000	--	--	--	--	--	--
28...	940000	49000	55000	61	0	20	2.8	26	1.4
28...	1200000	50000	61000	--	--	--	--	--	--
29...	1100000	42000	3400	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.									
07...	--	--	--	--	--	--	--	--	20
NOV.									
20...	6.5	294	0	250	130	.6	18	836	22
DEC.									
10...	--	--	--	--	--	--	--	--	11
JAN.									
13...	--	--	--	--	--	--	--	--	14
FEB.									
09...	6.5	316	0	50	120	1.2	17	543	16
MAR.									
02...	--	--	--	--	--	--	--	--	66
APR.									
07...	--	--	--	--	--	--	--	--	33
MAY									
11...	4.1	100	0	31	38	.4	7.6	202	952
JUNE									
02...	3.3	84	0	11	26	.4	8.8	138	640
16...	1.9	47	0	10	6.7	.2	3.8	68	407
JULY									
14...	3.8	82	0	15	36	.3	7.6	156	464
AUG.									
04...	5.8	310	0	41	180	.8	18	616	29
SEP.									
28...	--	--	--	--	--	--	--	--	304
28...	2.9	88	0	13	28	.3	5.9	142	644
28...	--	--	--	--	--	--	--	--	317
29...	--	--	--	--	--	--	--	--	89

DATE	VOL. NON- FILT- PABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.									
07...	9	.02	.04	6.9	2.0	4.8	13	--	1.1
NOV.									
20...	0	.02	.01	3.5	5.3	4.1	10	0	1.5
DEC.									
10...	5	.06	.06	9.4	1.6	6.9	13	--	1.0
JAN.									
13...	7	.55	.27	7.4	6.6	4.4	14	--	1.3
FEB.									
09...	8	2.5	.40	8.6	2.4	5.7	13	13	2.9
MAR.									
02...	31	.81	.39	4.4	5.5	5.8	9.8	--	1.0
APR.									
07...	16	.26	.18	5.0	3.5	5.2	22	--	1.9
MAY									
11...	188	.49	.07	.74	2.1	1.2	11	6	.1
JUNE									
02...	68	.14	.03	.19	1.3	.58	7.1	11	.1
16...	57	.05	.01	.03	.61	.26	8.0	0	.0
JULY									
14...	90	.20	.04	.57	1.5	.61	11	5	.2
AUG.									
04...	17	.04	.05	5.6	6.4	4.4	6.8	--	.7
SEP.									
28...	80	.33	.10	1.7	1.6	1.7	11	3	.5
28...	130	.30	.05	.76	1.4	1.1	11	--	.2
28...	64	.37	.07	.76	2.1	1.2	13	--	.2
29...	1	.45	.11	1.4	1.5	1.8	13	--	.6

08075500 Sims Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)						
DATE	TIME													
NOV. 20...	1145	10	5	270	0	0	0	4						
FEB. 09...	1055	--	--	270	--	--	--	--						
MAY 11...	1000	50	7	90	0	0	0	11						
JUNE 02...	0900	90	5	90	0	3	0	18						
16...	1100	150	5	40	0	1	0	95						
JULY 14...	0900	80	5	100	0	0	0	9						
AUG. 04...	1100	--	--	320	--	--	--	--						
SEP. 28...	0915	--	--	90	--	--	--	--						
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)					
NOV. 20...	60	0	10	0	.7	0	420	110						
FEB. 09...	--	--	--	--	--	--	--	--						
MAY 11...	60	0	0	40	.2	0	150	10						
JUNE 02...	120	0	0	0	.0	0	360	20						
16...	90	0	0	20	.3	0	100	20						
JULY 14...	80	0	0	0	.4	2	210	40						
AUG. 04...	--	--	--	--	--	--	--	--						
SEP. 28...	--	--	--	--	--	--	--	--						
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)		
NOV. 20...	1145	.0	300	--	.00	.0	.1	240	.00	6.7	.00	4.2		
FEB. 09...	1055	.0	32	.00	.00	.0	.2	140	.00	2.8	.00	3.8		
JUNE 16...	1100	.0	--	.00	.00	--	.0	--	.00	--	.00	--		
SEP. 28...	0820	.0	--	.00	.00	--	.3	--	.00	--	.00	--		
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
NOV. 20...	.00	.0	.81	.01	18	.00	.0	.00	.00	.0	.02	.02	2.6	
FEB. 09...	.00	1.5	.41	.00	22	.00	.2	.00	.00	.0	.00	.00	2.3	
JUNE 16...	.00	--	.15	.01	--	.00	--	.00	.00	--	.01	--	--	
SEP. 28...	.00	--	.11	.01	--	.00	--	.00	.00	--	.01	--	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)	
NOV. 20...	--	.0	.03	.00	.00	.00	0	0	.00	.00	.02	.00	.00	
FEB. 09...	.70	20	.05	.00	.00	.00	0	0	.09	.00	.00	.00	.00	
JUNE 16...	.01	--	.01	.00	.00	.00	0	--	.00	.06	.11	.00	.00	
SEP. 28...	.02	--	.04	.00	.00	.00	0	--	.00	.00	.02	.00	.00	

08075650 Berry Bayou at Forest Oaks Street, Houston, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°40'35", long 95°14'37", Harris County, at gaging station at Forest Oaks Street Bridge in southeast Houston, 0.8 mile (1.3 km) upstream from auxiliary gage at mouth of Berry Creek, and 1.7 miles (2.7 km) upstream from Sims Bayou.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--Discharge (storm hydrographs): October 1967 to current year. April 1964 to September 1966 operated as a daily discharge station.

Periodic water-quality data: Chemical, biochemical, and pesticide analyses: October 1968 to current year. Water temperatures: April 1964 (revised) to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.72 ft (0.829 m) below mean sea level, adjustment of 1973; prior record unadjusted for land-surface subsidence. Auxiliary water-stage recorder 0.8 mile (1.3 km) downstream at same datum. June 25, 1964, to Jan. 11, 1965, auxiliary nonrecording gage 0.8 mile (1.3 km) downstream at same datum.

PEAK DISCHARGE.--Current year: Maximum discharge, 1,570 ft³/s (44.5 m³/s) June 16; maximum gage height, 20.59 ft (6.276 m) June 16. Period of record: Maximum discharge, 5,080 ft³/s (144 m³/s) June 9, 1975; maximum gage height, 21.69 ft (6.611 m) June 9, 1975.

REMARKS.--Additional storm rainfall-runoff data for this site can be obtained from the report "Hydrologic Data for Urban Studies in the Houston, Texas Metropolitan Area, 1976."

PEAK DISCHARGE ABOVE BASE (800 FT³/S)
OR FOR WATER QUALITY ANALYSIS

DATE	TIME	G.H.T.	DISCHARGE
6-1	unknown	unknown	about 1,000
7-10	unknown	at 13.10	about 900
7-14	0930	6.67	304
8-16	1250	4.75	40

a Not at same time as peak discharge.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV.										
10...	1100	7.0	1070	7.6	24.5	30	8	7.0	83	6.4
20...	1230	6.4	747	7.2	19.0	40	10	6.8	72	9.9
DEC.										
17...	1300	6.4	812	7.6	18.5	50	10	8.0	85	5.7
JAN.										
19...	1230	7.1	1120	7.7	18.0	20	10	9.0	95	7.5
FEB.										
25...	1100	5.4	1230	7.5	18.5	30	8	7.9	84	6.9
MAR.										
24...	1300	9.5	929	7.5	20.5	40	30	7.6	84	4.8
APR.										
14...	1110	7.9	1460	7.6	26.0	30	85	6.8	83	15
JUNE										
09...	1345	--	902	7.6	28.0	50	20	7.2	91	7.2
29...	1330	--	904	7.2	31.0	40	20	9.0	122	5.0
JULY										
14...	0800	180	654	7.5	24.0	50	120	6.2	76	16
AUG.										
16...	1230	35	981	7.4	28.0	30	20	6.1	78	7.8
16...	1305	39	1000	7.7	29.0	30	20	6.4	84	5.0
16...	1345	32	1020	7.6	29.0	30	20	6.2	82	4.1

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO
NOV.									
10...	6100	130	66	--	--	--	--	--	--
20...	42000	2900	190	--	--	--	--	--	--
DEC.									
17...	9000	150	140	--	--	--	--	--	--
JAN.									
19...	5500	2	16	--	--	--	--	--	--
FEB.									
25...	2000	1	10	130	0	35	11	210	7.9
MAR.									
24...	1800	16	82	--	--	--	--	--	--
APR.									
14...	8700	110	110	130	0	33	11	260	10
JUNE									
09...	59000	820	490	--	--	--	--	--	--
29...	210	1	6	--	--	--	--	--	--
JULY									
14...	600000	71000	15000	110	0	31	7.2	80	3.4
AUG.									
16...	19000	1600	1200	95	0	27	6.7	170	7.6
16...	21000	2400	920	--	--	--	--	--	--
16...	8300	580	20	--	--	--	--	--	--

08075650 Berry Bayou at Forest Oaks Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
NOV.									
10...	--	--	--	--	--	--	--	--	20
20...	--	215	0	32	74	1.3	12	--	23
DEC.									
17...	--	--	--	--	--	--	--	--	15
JAN.									
19...	--	--	--	--	--	--	--	--	17
FEB.									
25...	10	301	0	47	190	2.2	15	669	13
MAR.									
24...	--	--	--	--	--	--	--	--	49
APR.									
14...	8.0	357	0	41	260	2.1	13	805	224
JUNE									
09...	--	--	--	--	--	--	--	--	43
29...	--	--	--	--	--	--	--	--	31
JULY									
14...	3.8	143	0	18	110	.6	9.1	331	476
AUG.									
16...	6.8	280	0	31	130	1.6	15	526	45
16...	--	--	--	--	--	--	--	--	38
16...	--	--	--	--	--	--	--	--	40

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV.									
10...	3	2.6	.29	4.0	2.3	5.6	11	--	.7
20...	4	3.7	.32	1.5	2.9	5.0	15	0	1.7
DEC.									
17...	0	.89	.21	1.4	3.3	3.2	13	--	.7
JAN.									
19...	5	.59	.21	5.3	.10	5.6	9.4	--	1.2
FEB.									
25...	7	7.8	.45	1.4	.10	6.0	15	0	.6
MAR.									
24...	2	2.9	.29	.91	.99	3.1	7.0	--	.4
APR.									
14...	120	7.8	.36	4.0	8.0	10	25	12	.4
JUNE									
09...	13	2.8	.38	.95	2.0	3.2	8.7	--	.4
29...	15	4.0	.41	.84	1.8	5.2	2.3	--	.2
JULY									
14...	108	.67	.09	.56	1.7	1.2	9.4	17	.3
AUG.									
16...	14	3.4	.20	--	--	5.1	5.7	2	.3
16...	15	4.2	.45	1.1	1.5	5.2	5.2	0	.3
16...	10	4.7	.40	1.0	1.4	5.0	4.8	--	.3

08075650 Berry Bayou at Forest Oaks Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 20...	1230	--	--	310	--	--	--	--					
FEB. 25...	1100	--	--	400	--	--	--	--					
APR. 14...	1110	10	2	640	0	0	0	8					
JULY 14...	0800	40	9	370	0	0	0	13					
AUG. 16...	1230	--	--	270	--	--	--	--					
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
NOV. 20...	--	--	--	--	--	--	--	--	--				
FEB. 25...	--	--	--	--	--	--	--	--	--				
APR. 14...	10	0	30	0	.1	26	460	30					
JULY 14...	60	0	10	10	.5	2	340	20					
AUG. 16...	--	--	--	--	--	--	--	--	--				
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 20...	1230	.0	77	--	.00	.0	.1	300	.00	19	.00	15	
FEB. 25...	1100	.0	7	.00	.00	.0	.1	27	.00	8.2	.00	.4	
APR. 14...	1110	.0	--	.00	.00	--	.8	--	.00	--	.02	--	
JULY 14...	0800	.0	--	.00	.00	--	.1	--	.00	--	.00	--	
AUG. 16...	1230	.0	--	.00	.00	--	.1	--	.00	--	.01	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 20...	.00	28	.26	.00	20	.00	.0	.00	.00	.0	.01	1.6	
FEB. 25...	.00	.0	.12	.01	2.4	.00	.0	.00	.00	.0	.00	.0	
APR. 14...	.00	--	.15	.09	--	.00	--	.00	.00	--	.00	--	
JULY 14...	.00	--	.09	.20	--	.00	--	.00	.00	--	.00	--	
AUG. 16...	.00	--	.17	.02	--	.00	--	.00	.00	--	.00	--	
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 20...	--	.0	.06	.00	.00	.00	.00	0	0	.00	.00	.13	.00
FEB. 25...	.03	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
APR. 14...	.06	--	.00	.00	.00	.00	.00	0	--	.00	.00	.00	.00
JULY 14...	.00	--	.00	.00	.00	.00	.00	0	--	.00	.00	.00	.00
AUG. 16...	.02	--	.00	.00	.00	.00	.00	0	--	.00	.01	.00	.00

08075730 Vince Bayou at Pasadena, Tex.

LOCATION.--Lat 29°41'40", long 95°12'58", Harris County, on right bank of concrete lined channel at end of West Ellaine Avenue in Pasadena and 2.4 miles (3.9 km) upstream from mouth.

DRAINAGE AREA.--8.21 mi² (21.26 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.54 ft (0.774 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers).

AVERAGE DISCHARGE.--5 years, 18.2 ft³/s (0.515 m³/s), 13,190 acre-ft/yr (16.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) June 16 (gage height, 12.99 ft or 3.959 m); minimum daily, 0.17 ft³/s (0.005 m³/s) Oct. 20-22.

Period of record: Maximum discharge, 3,360 ft³/s (95.2 m³/s) June 11, 1973 (gage height, 16.20 ft or 4.938 m); no flow Aug. 5, 6, 18, 1972.

REMARKS.--Records fair. Low flow is sustained by sewage effluent.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	2.0	1.9	3.2	1.7	1.2	3.3	2.9	312	8.0	3.9	4.5
2	2.9	4.5	1.3	16	1.5	1.3	2.7	1.8	18	8.1	6.4	10
3	2.9	3.6	2.5	2.8	1.4	2.4	2.6	1.7	5.1	21	4.1	10
4	.9 ^a	3.4	3.1	1.9	1.4	1.5	2.5	1.7	4.6	4.5	2.4	85
5	1.1	3.9	1.7	1.8	3.0	1.4	24	2.0	3.4	15	2.4	6.2
6	1.1	4.1	40	2.0	3.3	2.7	3.1	3.0	131	5.7	3.7	1.9
7	1.9	2.7	2.4	3.6	2.5	51	4.0	38	26	7.0	2.7	1.3
8	.81	2.0	1.9	3.4	2.3	11	4.1	5.2	6.8	86	3.2	1.3
9	2.3	2.3	3.6	3.4	2.3	5.0	2.4	3.0	6.1	95	2.6	2.6
10	2.2	2.2	3.8	2.9	2.8	3.6	3.1	3.4	5.1	215	2.7	1.8
11	.91	2.0	3.7	2.4	2.9	2.1	2.3	3.4	4.5	22	3.7	2.0
12	.45	4.7	3.3	2.6	3.0	17	1.8	4.5	4.2	8.7	9.4	1.7
13	.36	5.1	1.8	2.6	3.0	3.3	1.8	27	3.6	5.5	5.1	1.7
14	1.7	3.3	1.7	3.6	2.9	148	1.8	4.9	3.4	85	4.1	1.7
15	8.9	2.2	1.9	3.9	2.9	11	2.6	4.3	103	9.5	2.8	8.6
16	.93	2.0	5.6	3.1	2.3	6.1	2.2	3.2	370	19	11	63
17	.79	1.9	2.7	2.2	4.4	2.9	4.0	2.9	28	11	4.3	5.1
18	.79	1.8	3.7	2.2	4.8	3.8	3.6	3.3	8.8	8.3	3.9	1.8
19	.25	7.8	3.5	2.0	3.1	3.1	2.3	3.8	43	7.0	5.2	14
20	.17	8.8	2.2	2.4	2.9	2.7	27	4.8	13	6.2	4.7	70
21	.17	4.9	1.7	3.1	14	2.1	2.9	6.4	5.0	7.2	4.7	4.8
22	.17	2.5	1.7	3.4	.94	6.7	1.8	4.6	5.0	7.7	4.0	2.0
23	4.8	1.9	1.6	2.4	.87	2.3	2.8	3.2	5.0	15	3.6	2.2
24	.88	1.8	166	1.8	1.7	3.7	4.1	2.5	5.0	18	4.5	2.0
25	1.8	2.3	23	41	1.2	4.2	5.4	2.1	5.3	9.9	5.8	1.8
26	30	43	5.7	2.6	1.6	2.6	1.9	5.7	16	4.5	4.1	3.8
27	5.3	3.1	4.2	2.6	2.7	2.6	1.7	3.5	3.6	4.8	3.8	94
28	4.2	5.9	5.3	2.9	1.4	2.2	1.8	3.7	3.4	4.0	24	21
29	2.2	1.4	2.9	2.9	.88	3.8	48	2.6	6.0	4.0	9.5	4.5
30	1.7	13	2.0	2.0	---	5.0	5.0	2.2	7.2	2.7	4.2	3.4
31	3.0	---	1.7	2.4	---	5.1	---	76	---	3.4	13	---
TOTAL	284.96	150.1	308.1	135.1	79.69	321.4	176.6	237.3	1161.1	728.7	169.5	433.7
MEAN	9.19	5.00	9.94	4.36	2.75	10.4	5.89	7.65	38.7	23.5	5.47	14.5
MAX	198	43	166	41	14	148	48	76	370	215	24	94
MIN	.17	1.4	1.3	1.8	.87	1.2	1.7	1.7	3.4	2.7	2.4	1.3
AC-FT	565	298	611	268	158	637	350	471	2300	1450	336	860
(††)	3.80	1.67	2.49	1.44	.48	2.98	2.82	3.45	9.25	5.52	2.24	6.02

CAL YR 1975 TOTAL 6654.16 MEAN 18.2 MAX 684 MIN .17 AC-FT 13200 †† 52.10
WTR YR 1976 TOTAL 4186.25 MEAN 11.4 MAX 370 MIN .17 AC-FT 8300 †† 42.16

†† Weighted-mean rainfall, in inches, based on two rain gages.

08075760 Hunting Bayou at Falls Street, Houston, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°48'22", long 95°19'50", Harris County, at downstream side of bridge on Falls Street in northeast Houston.

DRAINAGE AREA.--3.92 mi² (10.15 km²). Prior to Oct. 1, 1973, 3.50 mi² (9.07 km²). Prior to June 1, 1970, 3.42 mi² (8.86 km²).

PERIOD OF RECORD.--Discharge (storm hydrographs): April 1964 to current year.

Periodic water-quality data: Chemical, biochemical, and pesticide analyses: October 1970 to current year. Water temperatures: April 1964 to current year.

GAGE.--Flood-hydrograph and rainfall recorder and crest-stage gage. Datum of gage is at mean sea level, unadjusted for land-surface subsidence.

PEAK DISCHARGE.--Current year: Maximum discharge, 553 ft³/s (15.7 m³/s) Sept. 20 (elevation, 45.11 ft or 13.750 m); maximum elevation, 46.05 ft (14.036 m) June 15.

Period of record: Maximum discharge, 778 ft³/s (22.0 m³/s) June 13, 1973 (elevation, 46.70 ft or 14.234 m).

REMARKS.--Additional storm rainfall-runoff data for this site can be obtained from the report "Hydrologic Data for Urban Studies in the Houston, Texas Metropolitan Area, 1976."

PEAK DISCHARGE ABOVE BASE (250 FT³/S)
OR FOR WATER QUALITY ANALYSIS

DATE	TIME	ELEV.	DISCHARGE
4-20	0800	39.99	139
6-1	0300	43.2	218
6-15	2000	46.05	370

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV.										
10...	1230	.47	770	7.8	22.0	20	8	10.8	123	3.3
19...	1400	1.4	735	7.8	23.0	20	20	9.7	111	11
DEC.										
02...	1045	.46	638	7.3	12.5	40	10	5.6	52	6.5
JAN.										
20...	1130	3.7	901	7.4	12.0	20	20	5.6	52	14
FEB.										
24...	1030	1.1	802	7.7	15.0	20	8	6.6	65	6.2
MAR.										
22...	1200	1.7	975	7.5	18.5	40	20	6.4	68	9.0
APR.										
20...	0930	70	259	7.9	19.5	100	120	6.9	74	19
20...	1200	52	367	7.4	20.5	80	95	5.6	62	14
MAY										
04...	1245	1.7	891	8.1	27.0	20	20	9.1	112	4.4
JUNE										
01...	0950	91	250	7.4	21.5	60	40	5.0	56	6.0
AUG.										
16...	1330	20	240	7.2	27.0	40	120	8.0	101	12
25...	1100	1.5	668	7.0	27.5	30	8	4.2	54	7.2
SEP.										
20...	1430	520	119	6.8	24.0	20	20	6.4	78	4.8

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO
NOV.									
10...	46000	5000	110	--	--	--	--	--	--
19...	81000	2600	1100	170	0	50	10	80	2.7
DEC.									
02...	1100000	30000	900	--	--	--	--	--	--
JAN.									
20...	240000	7700	3400	210	0	61	14	100	3.0
FEB.									
24...	55000	460	900	190	0	56	12	81	2.6
MAR.									
22...	540000	9700	6200	--	--	--	--	--	--
APR.									
20...	2000000	17000	65000	54	2	18	2.2	23	1.4
20...	1000000	15000	64000	--	--	--	--	--	--
MAY									
04...	40000	420	500	--	--	--	--	--	--
JUNE									
01...	1200000	78000	79000	--	--	--	--	--	--
AUG.									
16...	920000	45000	49000	63	0	22	1.9	17	.9
25...	580000	11000	1400	--	--	--	--	--	--
SEP.									
20...	720000	140000	65000	35	0	12	1.1	6.7	.5

08075760 Hunting Bayou at Falls Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
NOV.									
10...	--	--	--	--	--	--	--	--	21
19...	3.1	229	0	45	80	.7	15	397	90
DEC.									
02...	--	--	--	--	--	--	--	--	13
JAN.									
20...	3.4	282	0	48	110	.5	15	492	40
FEB.									
24...	6.0	236	0	44	93	.6	13	422	15
MAR.									
22...	--	--	--	--	--	--	--	--	40
APR.									
20...	5.8	64	0	18	32	.4	4.1	135	294
20...	--	--	--	--	--	--	--	--	190
MAY									
04...	--	--	--	--	--	--	--	--	27
JUNE									
01...	--	--	--	--	--	--	--	--	68
AUG.									
16...	2.4	82	0	9.8	17	.3	4.5	116	348
25...	--	--	--	--	--	--	--	--	25
SEP.									
20...	2.3	64	0	7.7	6.9	.2	3.1	72	536

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV.									
10...	0	.13	.11	1.4	.90	1.1	6.8	--	.4
19...	61	.15	.21	1.5	1.9	1.7	6.6	0	1.3
DEC.									
02...	0	.18	.09	3.6	.50	1.4	9.0	--	.8
JAN.									
20...	7	.17	.05	1.7	2.6	1.1	10	13	.8
FEB.									
24...	9	.21	.08	4.0	.90	2.4	11	0	.7
MAR.									
22...	0	.76	.11	4.9	.10	1.7	12	--	.6
APR.									
20...	82	.82	.08	1.9	1.6	1.1	21	60	.3
20...	58	1.0	.09	1.5	1.6	.85	24	--	.4
MAY									
04...	8	.02	.01	.54	.76	1.1	7.9	--	--
JUNE									
01...	5	.86	.06	.56	1.9	.67	5.1	--	.5
AUG.									
16...	90	.64	.04	.57	1.3	.86	8.4	15	.3
25...	14	.11	.08	1.3	1.5	1.5	5.3	--	.3
SEP.									
20...	102	.36	.02	.63	3.3	.74	11	10	.1

08075760 Hunting Bayou at Falls Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 19...	1400	10	4	100	0	0	0	0
JAN. 20...	1130	20	3	130	0	0	0	3
FEB. 24...	1030	--	--	80	--	--	--	--
APR. 20...	0930	30	4	80	0	0	0	5
AUG. 16...	1330	40	3	40	0	0	0	4
SEP. 20...	1430	--	--	30	--	--	--	--

	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 19...	30	0	10	50	.1	0	220	0
JAN. 20...	10	0	20	90	.0	0	440	20
FEB. 24...	--	--	--	--	--	--	--	--
APR. 20...	50	0	10	0	.3	0	100	20
AUG. 16...	40	0	100	0	.3	3	120	60
SEP. 20...	--	--	--	--	--	--	--	--

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)
NOV. 19...	1400	.0	380	--	.00	.0	.0	140	.00	31	.00	28
FEB. 24...	1030	.0	95	.00	.00	.0	.0	150	.00	28	.00	16
APR. 20...	0930	.0	--	.00	.00	--	.2	--	.07	--	.05	--
AUG. 16...	1330	.0	--	.00	.00	--	.2	--	.04	--	.04	--
SEP. 20...	1430	.3	--	.00	.00	--	.1	--	.00	--	.00	--

DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)
NOV. 19...	.00	19	.02	.00	8.7	.00	.0	.00	.00	.0	.00	.00	1.1
FEB. 24...	.00	6.2	.02	.00	8.9	.00	.0	.00	.00	.0	.00	.00	.0
APR. 20...	.16	--	.10	.04	--	.00	--	.00	.02	--	.00	--	--
AUG. 16...	.19	--	.08	.00	--	.00	--	.00	.00	--	.00	--	--
SEP. 20...	.00	--	.07	.00	--	.00	--	.00	.00	--	.00	--	--

DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 19...	.00	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
FEB. 24...	.00	.0	.00	.00	.00	.00	.00	0	0	.00	.05	.00	.00
APR. 20...	--	--	.06	.00	.00	.00	.00	0	--	.00	.02	.00	.00
AUG. 16...	.00	--	.14	.00	.00	.00	.00	0	--	.00	--	--	--
SEP. 20...	.01	--	.05	.00	.00	.00	.00	0	--	.00	.01	.05	.00

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.

LOCATION.--Lat 29°47'35", long 95°16'04", Harris County, on left bank at downstream side of downstream service road bridge of Interstate Highway 610 in northeast Houston and 8.8 miles (14.2 km), revised, upstream from mouth.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

PERIOD OF RECORD.--Discharge: April 1964 to current year. Prior to October 1973, published as "at U.S. Highway 90-A, Houston".
Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1959; unadjusted for land-surface subsidence. Prior to Oct. 1, 1972, water-stage recorder, 1,800 ft (549 m) upstream at same datum.

AVERAGE DISCHARGE.--12 years, 21.0 ft³/s (0.595 m³/s), 15,210 acre-ft/yr (18.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,520 ft³/s (71.4 m³/s) June 15 (elevation, 39.28 ft or 11.972 m); minimum daily, 1.0 ft³/s (0.028 m³/s) July 29, Aug. 2, 3 (result of construction dams upstream).

Period of record: Maximum discharge, 3,380 ft³/s (95.7 m³/s) June 13, 1973 (elevation, 38.11 ft or 11.616 m); maximum gage height, 39.28 ft (11.973 m) June 15, 1976; minimum daily, 0.88 ft³/s (0.025 m³/s) Aug. 24, 1971.

REMARKS.--Discharge records fair except those for March and April, which are poor. Low flow is largely maintained by sewage and industrial effluent. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.8	4.3	3.6	4.6	3.9	4.0	15	637	3.3	1.2	5.5
2	3.6	5.7	3.2	33	3.4	3.8	3.5	7.0	130	5.1	1.0	4.3
3	3.5	50	3.1	15	3.3	3.8	3.0	5.9	31	19	1.0	4.0
4	4.1	14	3.1	9.9	3.2	4.0	2.8	5.0	13	9.5	10	4.3
5	3.6	5.2	3.1	8.5	3.2	3.8	7.2	12	9.4	19	6.0	4.2
6	2.4	4.2	62	5.3	3.2	3.8	5.9	10	7.3	16	4.1	3.5
7	1.9	4.0	10	13	2.8	6.1	3.8	64	6.6	9.1	4.0	3.3
8	1.7	3.9	5.2	4.4	3.0	39	7.0	29	6.2	55	3.7	3.6
9	1.7	3.8	4.1	4.5	3.1	14	5.0	9.7	5.8	266	3.6	4.4
10	1.8	3.6	4.0	4.2	3.1	5.9	4.0	31	5.2	347	3.0	5.0
11	1.6	3.6	3.9	14	2.5	5.0	3.0	37	5.4	103	2.5	3.7
12	1.5	3.6	3.9	6.3	3.1	11	2.8	10	4.9	21	9.3	4.1
13	1.5	3.5	3.8	4.2	3.0	9.7	2.6	56	4.2	12	31	4.6
14	1.6	3.2	3.6	4.1	8.6	39	2.5	15	4.0	46	13	4.4
15	12	3.4	3.6	4.1	12	16	2.5	9.0	711	16	5.9	4.5
16	3.9	3.4	3.9	4.2	4.5	8.5	2.5	7.5	966	16	14	27
17	2.3	3.4	5.7	4.0	3.0	6.5	2.5	6.8	64	12	7.8	65
18	2.6	3.7	3.6	3.8	2.8	4.3	20	8.2	20	8.0	3.5	5.9
19	2.3	3.6	3.0	2.6	2.7	3.5	10	8.3	54	7.1	3.7	16
20	2.4	20	3.5	22	3.0	3.0	80	6.3	95	6.2	4.2	543
21	2.3	3.7	3.6	3.9	7.5	2.8	16	6.6	24	5.7	3.9	236
22	2.2	3.0	3.7	2.4	5.2	2.6	7.6	6.3	11	5.7	3.4	18
23	2.4	3.0	3.6	2.5	8.8	19	5.0	5.8	10	5.7	3.3	8.3
24	2.7	3.1	125	2.6	5.7	6.0	6.0	5.5	8.7	15	3.2	9.4
25	227	3.0	100	91	10	15	7.0	5.4	8.3	15	3.5	7.8
26	114	24	19	12	11	7.0	5.0	14	15	6.2	3.3	10
27	9.4	7.1	8.7	4.2	7.0	4.0	4.5	7.8	8.7	4.5	3.3	247
28	6.0	5.6	13	3.8	4.5	3.5	4.0	5.3	3.3	1.7	7.3	29
29	5.2	3.9	18	3.6	4.1	3.0	150	4.8	7.9	1.0	26	12
30	5.0	8.3	5.4	3.6	---	8.0	40	4.7	14	10	7.9	7.4
31	3.6	---	4.3	22	---	5.0	---	76	---	3.0	7.2	---
TOTAL	439.5	214.3	444.9	322.3	141.9	270.5	419.7	494.9	2890.9	1069.8	204.8	1305.2
MEAN	14.2	7.14	14.4	10.4	4.89	8.73	14.0	16.0	96.4	34.5	6.61	43.5
MAX	227	50	125	91	12	39	150	76	966	347	31	543
MIN	1.5	3.0	3.0	2.4	2.5	2.6	2.5	4.7	3.3	1.0	1.0	3.3
AC-FT	872	425	882	639	281	537	832	982	5730	2120	406	2590
(††)	4.10	1.58	3.43	1.48	.31	2.62	3.68	4.64	11.20	5.99	2.05	8.57

CAL YR 1975 TOTAL 7939.9 MEAN 21.8 MAX 529 MIN 1.5 AC-FT 15750 †† 43.94
WTR YR 1976 TOTAL 8218.7 MEAN 22.5 MAX 966 MIN 1.0 AC-FT 16300 †† 49.65

†† Weighted-mean rainfall, in inches, based on three rain gages.

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 08...	0930	1.7	916	6.9	21.5	20	150	4.0	45	6.4
NOV. 24...	1010	3.1	895	7.2	12.5	30	4	8.0	75	2.0
DEC. 02...	0930	3.2	810	7.2	11.0	30	20	7.9	71	.8
JAN. 20...	0930	4.2	830	7.4	11.5	20	50	7.0	64	11
FEB. 18...	1145	2.8	975	7.5	19.5	20	20	5.6	60	14
MAR. 22...	1000	2.5	985	7.3	17.5	30	25	5.4	56	18
APR. 06...	0915	5.7	814	7.2	18.5	40	25	5.2	55	16
MAY 03...	1015	5.6	934	7.2	22.0	20	25	5.3	60	16
JUNE 01...	1150	880	168	7.5	20.5	60	60	5.4	59	5.5
JULY 27...	1045	5.2	949	7.5	28.0	40	10	6.4	82	7.5
AUG. 25...	1145	3.5	857	7.2	28.0	40	8	6.4	82	8.4

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO
OCT. 08...	100000	2200	270	--	--	--	--	--	--
NOV. 24...	1700	24	56	220	27	64	15	90	2.6
DEC. 02...	720	6	1	--	--	--	--	--	--
JAN. 20...	180000	11000	14000	190	0	56	12	96	3.0
FEB. 18...	8700	150	32	230	0	66	15	110	3.2
MAR. 22...	250000	12000	1000	--	--	--	--	--	--
APR. 06...	7700	720	52	--	--	--	--	--	--
MAY 03...	2600	24	160	--	--	--	--	--	--
JUNE 01...	940000	120000	81000	58	15	20	1.8	8.0	.5
JULY 27...	24000	420	520	--	--	--	--	--	--
AUG. 25...	260000	3800	500	--	--	--	--	--	--

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	--	--	--	--	--	--	--	--	269
NOV. 24...	5.4	238	0	64	94	.6	16	467	9
DEC. 02...	--	--	--	--	--	--	--	--	36
JAN. 20...	4.6	274	0	--	--	--	--	--	72
FEB. 18...	5.0	314	0	60	100	.7	16	528	30
MAR. 22...	--	--	--	--	--	--	--	--	37
APR. 06...	--	--	--	--	--	--	--	--	36
MAY 03...	--	--	--	--	--	--	--	--	14
JUNE 01...	3.0	52	0	15	8.3	.3	4.3	87	130
JULY 27...	--	--	--	--	--	--	--	--	16
AUG. 25...	--	--	--	--	--	--	--	--	28

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	30	.39	.10	1.8	1.3	2.5	--	--	.3
NOV. 24...	5	3.7	.12	1.3	1.1	3.1	8.2	0	.4
DEC. 02...	17	3.5	.27	2.3	1.1	2.1	8.2	--	.5
JAN. 20...	17	.25	.05	2.2	2.1	1.2	15	15	.8
FEB. 18...	10	.41	.24	4.4	3.4	2.8	13	2	.9
MAR. 22...	1	1.4	.50	.87	1.0	2.0	16	--	.5
APR. 06...	12	1.2	.27	1.3	2.5	1.6	23	--	.7
MAY 03...	7	.71	.03	.36	1.1	2.0	12	11	.6
JUNE 01...	14	.71	.03	.36	1.1	.50	7.3	11	.6
JULY 27...	6	.26	.07	1.9	2.0	1.3	6.3	--	.4
AUG. 25...	13	2.5	.28	.56	1.8	3.4	6.5	--	.3

SAN JACINTO RIVER BASIN

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 24...	1010	20	6	280	0	0	0	10
JAN. 20...	0930	10	19	--	0	0	0	7
FEB. 18...	1145	--	--	330	--	--	--	--
JUNE 01...	1150	40	9	60	0	3	0	5

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 24...	10	0	10	160	.5	0	390	160
JAN. 20...	0	2	10	120	.0	12	380	50
FEB. 18...	--	--	--	--	--	--	--	--
JUNE 01...	70	3	0	10	.1	6	140	30

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL	POLY- CHLO- RINATED NAPH- THA- LENES	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL
			(UG/KG)	(UG/L)		(UG/KG)		(UG/KG)		(UG/KG)		(UG/KG)
NOV. 24...	1010	.0	400	--	.00	.0	.0	65	.00	66	.00	34
FEB. 18...	1145	.0	91	.00	.00	.0	.0	26	.00	14	.00	4.7

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
NOV. 24...	.00	9.6	.07	.01	4.9	.00	.0	.00	.00	.0	.00	.5
FEB. 18...	.00	3.3	.19	.00	2.8	.00	.0	.00	.00	.0	.00	.5

DATE	LINDANE IN BOTTOM				TOX-APHENE IN BOTTOM				TOTAL			
	TOTAL LINDANE (UG/L)	MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVERX (UG/L)
NOV. 24...	.04	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00
FEB. 18...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00

08075900 Greens Bayou at U.S. Highway 75 near Houston, Tex.

LOCATION.--Lat 29°57'24", Long 95°25'04", Harris County, on left bank at downstream side of U.S. Highway 75 bridge, 9.0 miles (14.5 km) upstream from station 08076000, and 21 miles (34 km) upstream from Harris Bayou.

DRAINAGE AREA.--34.8 mi² (90.1 km²).

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1959; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--11 years, 28.1 ft³/s (0.796 m³/s), 20,360 acre-ft/yr (25.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft³/s (49.6 m³/s) Sept. 20 (elevation, 89.89 ft or 27.398 m); minimum daily, 3.2 ft³/s (0.091 m³/s) Nov. 17.

Period of record: Maximum discharge, 2,940 ft³/s (83.3 m³/s) Mar. 20, 1972 (elevation, 89.75 ft or 27.356 m); maximum elevation, 91.09 ft (27.764 m) Feb. 21, 1969; minimum daily discharge, 0.16 ft³/s (0.004 m³/s) Oct. 21, 22, 1969.

REMARKS.--Records fair. Records furnished by Houston Lighting and Power Co. show that 1,590 acre-ft (1.96 hm³) of ground water used for cooling purposes was released to bayou about 8 miles (13 km) upstream from gage during the current year. No known diversion above station. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.4	9.2	15	7.7	6.6	6.2	17	634	9.7	8.9	85
2	5.5	15	6.4	13	9.2	6.4	6.9	9.8	264	9.8	7.6	458
3	4.0	228	5.2	11	12	6.7	6.8	7.4	80	16	6.7	169
4	4.3	103	7.1	9.0	9.5	7.6	6.3	8.5	32	20	5.8	65
5	4.5	35	5.1	9.3	8.3	7.6	8.5	8.0	18	35	7.1	126
6	5.7	18	6.9	9.2	7.2	7.0	10	7.7	12	45	8.7	50
7	5.1	12	6.8	11	7.8	8.9	6.9	83	9.0	15	9.0	19
8	5.7	8.2	6.9	9.0	7.4	25	6.3	150	7.9	36	9.4	10
9	5.0	6.9	6.5	9.1	8.4	20	5.4	43	6.8	111	9.6	9.0
10	4.4	6.6	6.2	9.2	8.6	12	6.2	22	6.1	277	8.8	13
11	4.1	5.7	5.4	7.2	8.5	8.7	5.4	16	6.1	229	8.0	9.2
12	4.7	5.2	6.3	6.2	9.9	7.6	5.4	12	8.0	73	12	8.8
13	4.7	4.7	5.4	7.3	8.4	8.1	5.7	43	6.8	33	18	8.3
14	5.1	5.2	5.3	7.1	8.4	8.5	5.2	34	6.0	65	10	7.7
15	8.2	6.4	5.4	6.2	7.8	8.7	4.8	19	8.7	68	9.8	9.0
16	25	4.9	10	6.6	9.1	8.1	6.8	13	18	51	37	8.1
17	9.4	3.2	12	6.5	9.9	8.5	6.8	9.8	9.7	110	99	7.0
18	6.0	3.8	7.6	7.0	8.2	9.1	466	9.5	9.1	45	16	6.5
19	6.3	5.2	5.5	7.4	7.0	7.7	275	9.1	8.8	32	11	8.6
20	6.2	6.6	7.5	7.3	6.9	6.6	146	7.6	10	33	9.9	846
21	5.5	3.6	4.5	6.5	12	7.0	75	7.3	6.9	19	7.4	554
22	5.0	5.3	5.5	6.4	10	7.5	28	7.6	12	14	8.7	211
23	9.3	7.5	5.8	6.5	9.1	7.5	16	7.8	31	12	8.2	75
24	7.8	5.5	136	5.9	9.7	7.2	12	7.4	12	10	19	34
25	314	4.8	344	125	10	8.6	19	8.0	7.1	12	199	21
26	393	10	78	56	9.5	6.9	14	11	17	11	42	14
27	72	8.1	35	21	7.1	5.7	10	11	28	9.9	13	31
28	23	7.0	24	15	7.2	6.8	10	7.4	6.7	9.0	9.2	68
29	14	6.2	44	12	6.3	7.4	51	7.6	6.8	9.7	10	78
30	11	13	27	12	---	7.0	41	7.3	8.1	12	7.7	34
31	8.4	---	19	9.7	---	7.5	---	40	---	10	6.0	---
TOTAL	993.3	561.0	859.5	449.6	251.1	268.5	1272.6	651.8	1296.6	1442.1	642.5	3043.2
MEAN	32.0	18.7	27.7	14.5	8.66	8.66	42.4	21.0	43.2	46.5	20.7	101
MAX	393	228	344	125	12	25	466	150	634	277	199	846
MIN	4.0	3.2	4.5	5.9	6.3	5.7	4.8	7.3	6.0	9.0	5.8	6.5
AC-FT	1970	1110	1700	892	498	533	2520	1290	2570	2860	1270	6040
(††)	4.96	2.47	3.26	1.31	.29	1.35	5.14	3.69	4.92	5.59	2.50	10.40
CAL YR 1975 TOTAL	10228.1											
WTR YR 1976 TOTAL	11731.8											
MEAN	28.0											
MAX	683											
MIN	2.4											
AC-FT	20290											
††	40.68											
AC-FT	23270											
††	45.88											

†† Weighted-mean rainfall, in inches, based on four rain gages.

08076000 Greens Bayou near Houston, Tex.

LOCATION.--Lat 29°55'05", long 95°18'24", Harris County, on left bank at downstream side of bridge on U.S. Highway 59, 10.5 miles (16.9 km) northeast of Houston, 12.0 miles (19.3 km) upstream from Halls Bayou, and 23.4 miles (37.7 km) upstream from mouth.

DRAINAGE AREA.--72.7 mi² (188.3 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft (0.201 m) below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--24 years, 51.6 ft³/s (1.461 m³/s), 37,380 acre-ft/yr (46.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,730 ft³/s (219 m³/s) Apr. 18 (gage height, 61.92 ft or 18.873 m); minimum daily, 7.7 ft³/s (0.22 m³/s) Oct. 1.

Period of record: Maximum discharge, 7,730 ft³/s (219 m³/s) Apr. 18, 1976 (gage height, 61.92 ft or 18.873 m); maximum gage height, 65.75 ft (20.041 m) Sept. 12, 1961 (prior to channel rectification); no flow at times.

REMARKS.--Discharge records fair except those below 30 ft³/s (0.85 m³/s), which are poor. Channel was rectified during the 1974-75 water years. No known diversion above station. Low flow is sustained by Houston Light and Power Co. effluent, which is obtained from ground-water sources. Recording rain gage located at station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	18	27	33	17	13	15	48	1710	11	13	12
2	9.4	12	14	29	13	13	15	30	571	13	12	570
3	7.9	204	13	24	18	13	14	21	212	18	10	325
4	7.8	247	13	20	17	13	14	17	56	38	8.8	92
5	8.2	71	13	18	16	15	15	16	31	34	8.8	158
6	8.3	25	31	19	14	15	19	16	24	76	11	84
7	8.9	22	19	29	13	15	18	154	18	38	12	31
8	8.6	18	14	22	12	30	20	264	15	21	12	15
9	9.2	15	14	21	12	45	17	76	14	199	13	14
10	9.2	14	14	19	13	34	15	41	11	290	13	21
11	9.2	13	12	19	14	21	15	31	11	376	12	16
12	9.0	11	12	17	14	17	15	22	11	124	11	12
13	9.2	10	13	17	14	16	17	96	11	55	24	11
14	9.5	9.6	12	17	14	16	17	69	11	74	17	14
15	11	10	12	14	14	16	16	37	25	102	14	11
16	24	11	16	14	12	16	16	26	54	54	16	11
17	23	12	26	15	15	14	18	21	20	128	113	9.8
18	11	10	17	15	15	15	2060	20	14	83	41	8.4
19	9.2	11	13	14	13	16	2520	18	19	32	16	13
20	9.5	15	12	16	12	16	865	17	20	40	13	2250
21	9.6	13	12	18	22	15	353	15	12	27	12	1670
22	9.5	11	11	17	26	14	126	15	11	22	12	441
23	23	12	12	16	17	13	68	15	30	20	12	181
24	27	12	168	16	15	12	34	16	22	19	11	82
25	466	14	554	289	15	16	71	16	12	15	143	50
26	742	31	190	177	15	16	39	25	14	15	79	36
27	211	21	75	45	15	14	24	25	35	15	26	121
28	47	13	52	34	13	12	18	16	19	13	22	77
29	25	12	127	25	13	15	127	13	11	11	55	139
30	25	30	80	23	---	15	108	12	11	15	15	66
31	20	---	43	21	---	15	---	120	---	19	13	---
TOTAL	1814.9	927.6	1641	1073	433	526	6689	1328	3035	1997	790.6	6541.2
MEAN	58.5	30.9	52.9	34.6	14.9	17.0	223	42.8	101	64.4	25.5	218
MAX	742	247	554	289	26	45	2520	264	1710	376	143	2250
MIN	7.7	9.6	11	14	12	12	14	12	11	11	8.8	8.4
AC-FT	3600	1840	3250	2130	859	1040	13270	2630	6020	3960	1570	12970
(††)	4.96	2.04	3.16	1.25	.28	1.29	6.60	3.45	4.57	5.05	1.90	11.35

CAL YR 1975 TOTAL 25530.3 MEAN 69.9 MAX 1470 MIN 6.6 AC-FT 50640 †† 40.02
WTR YR 1976 TOTAL 26796.3 MEAN 73.2 MAX 2520 MIN 7.7 AC-FT 53150 †† 45.96

†† Weighted-mean rainfall, in inches, based on four rain gages.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 08...	1000	9.0	920	7.1	22.5	25	20	6.8	77	5.2
NOV. 24...	1000	12	810	7.5	12.0	30	20	12.8	119	5.6
DEC. 09...	1145	14	807	7.8	15.5	50	35	8.9	88	10
JAN. 05...	1210	18	1020	7.3	8.0	30	15	6.8	57	19
FEB. 18...	1015	15	809	7.7	20.5	20	45	8.1	89	11
MAR. 08...	1405	45	340	7.7	19.0	100	450	7.5	80	14
08...	1435	45	582	7.6	18.5	50	400	6.8	72	11
08...	1500	42	582	7.5	19.0	30	650	6.4	68	12
APR. 06...	1015	21	916	7.6	20.0	40	55	8.0	87	43
19...	1000	2090	118	6.4	23.0	120	150	5.4	62	4.6
MAY 04...	1000	11	691	7.3	22.5	50	60	6.0	68	12
JUNE 07...	1030	48	592	7.6	26.5	50	150	5.6	68	10
JULY 27...	1245	7.1	758	8.2	32.0	40	40	11.8	162	13
AUG. 17...	0930	170	292	6.3	28.5	100	400	8.6	112	11

DATE	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO
OCT. 08...	28000	780	400	--	--	--	--	--	--
NOV. 24...	21000	550	40	240	16	80	9.9	71	2.0
DEC. 09...	800000	74000	4500	--	--	--	--	--	--
JAN. 05...	5500	20	1200	--	--	--	--	--	--
FEB. 18...	60000	750	20	220	0	71	11	79	2.3
MAR. 08...	9900000	12000	21000	88	0	27	5.0	28	1.3
08...	780000	160000	41000	--	--	--	--	--	--
08...	740000	25000	13000	--	--	--	--	--	--
APR. 06...	72000	980	230	--	--	--	--	--	--
19...	310000	110000	42000	38	4	12	2.0	7.1	.5
MAY 04...	9700	440	190	--	--	--	--	--	--
JUNE 07...	50000	980	150	--	--	--	--	--	--
JULY 27...	320	140	150	--	--	--	--	--	--
AUG. 17...	--	--	--	83	2	28	3.1	22	1.1

SAN JACINTO RIVER BASIN

08076000 Greens Bayou near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	--	--	--	--	--	--	--	--	84
NOV. 24...	4.9	274	0	30	87	.6	34	453	31
DEC. 09...	--	--	--	--	--	--	--	--	70
JAN. 05...	--	--	--	--	--	--	--	--	22
FEB. 18...	5.1	286	0	24	86	.5	27	445	89
MAR. 08...	2.2	112	0	17	33	.4	9.8	178	1750
08...	--	--	--	--	--	--	--	--	740
08...	--	--	--	--	--	--	--	--	2790
APR. 06...	--	--	--	--	--	--	--	--	114
19...	3.5	42	0	6.6	7.3	.3	3.9	64	504
MAY 04...	--	--	--	--	--	--	--	--	120
JUNE 07...	--	--	--	--	--	--	--	--	434
JULY 27...	--	--	--	--	--	--	--	--	76
AUG. 17...	3.6	98	0	15	26	.4	11	158	1290

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	57	2.5	.36	.57	1.0	3.5	2.6	--	.2
NOV. 24...	9	.75	.07	.90	.90	2.2	4.8	1	.4
DEC. 09...	2	.54	.14	1.9	1.4	3.0	5.6	--	.3
JAN. 05...	12	.45	.14	4.8	.90	4.5	12	--	.9
FEB. 18...	49	1.2	.40	1.3	1.3	3.0	11	4	.2
MAR. 08...	400	.49	.09	.33	1.4	.99	20	4	1.2
08...	146	1.0	.18	.57	2.8	1.8	8.4	--	.4
08...	440	1.1	.19	.41	2.6	1.5	10	--	.5
APR. 06...	87	1.2	.25	1.0	2.1	2.8	17	--	.4
19...	72	.18	.02	.11	.74	.35	20	6	.1
MAY 04...	20	1.2	.47	.93	1.3	2.0	10	--	.3
JUNE 07...	58	1.3	.27	.27	1.2	1.5	6.1	--	.2
JULY 27...	11	.80	.07	.00	1.3	1.9	4.6	--	.2
AUG. 17...	0	.76	.12	.49	1.3	1.0	8.8	0	.0

08076000 Greens Bayou near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 24...	1000	20	5	140	0	0	0	11
FEB. 18...	1015	--	--	200	--	--	--	--
MAR. 08...	1405	30	5	80	0	0	0	8
APR. 19...	1000	30	1	70	0	0	0	2
AUG. 17...	0930	100	5	50	0	0	0	6

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 24...	10	0	10	70	.1	8	450	20
FEB. 18...	--	--	--	--	--	--	--	--
MAR. 08...	0	0	0	10	.0	0	160	20
APR. 19...	100	0	0	10	.3	0	60	10
AUG. 17...	70	0	0	0	.0	2	140	10

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)
NOV. 24...	1000	.0	0	--	.00	.0	.0	15	.00	.0	.00	.0
FEB. 18...	1015	.0	0	.00	.00	.0	.0	2	.00	.0	.00	.0
MAR. 08...	1405	.0	--	.00	.00	--	.0	--	.00	--	.00	--
APR. 19...	1000	.0	--	.00	.00	--	.0	--	.00	--	.00	--
AUG. 17...	0930	.0	--	.00	.00	--	.0	--	.00	--	.00	--

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)
NOV. 24...	.00	.0	.05	.00	.8	.00	.0	.00	.00	.0	.00	.0
FEB. 18...	.03	.0	.10	.00	.2	.00	.0	.00	.00	.0	.00	.0
MAR. 08...	.00	--	.00	.03	--	.00	--	.00	.00	--	.00	--
APR. 19...	.00	--	.07	.00	--	.00	--	.00	.00	--	.00	--
AUG. 17...	.00	--	.35	.00	--	.00	--	.00	.00	--	.00	--

DATE	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 24...	.02	.0	.00	.00	.00	.00	0	0	.00	.00	.01	.00
FEB. 18...	.01	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00
MAR. 08...	.00	--	.00	.00	.00	.00	0	--	.00	.00	.00	.00
APR. 19...	.04	--	.00	.00	.00	.00	0	--	.00	.00	.00	.00
AUG. 17...	.12	--	.00	.00	.00	.00	0	--	.00	.04	.08	.00

08076500 Halls Bayou at Houston, Tex.

LOCATION.--Lat 29°51'42", long 95°20'05", Harris County, on right bank at downstream side of bridge on Jensen Drive in northeast section of Houston and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--24.7 mi² (64.0 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft (0.201 m) below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--24 years, 25.6 ft³/s (0.725 m³/s), 18,550 acre-ft/yr (22.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,460 ft³/s (69.7 m³/s) Apr. 19 (gage height, 59.90 ft or 18.258 m); minimum daily, 5.2 ft³/s (0.15 m³/s) Oct. 18.

Period of record: Maximum discharge, 3,780 ft³/s (107 m³/s) Mar. 21, 1972 (gage height, 60.70 ft or 18.501 m); maximum gage height, 60.75 ft (18.517 m) June 13, 1973; no flow at times prior to 1956.

REMARKS.--Discharge records fair. No known diversion above station. Low flow is sustained by sewage effluent from Houston suburbs.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	10	14	17	12	9.3	7.8	23	1300	7.8	7.8	12
2	6.0	12	8.5	19	11	8.6	8.5	16	200	8.4	8.4	83
3	5.8	96	8.0	16	11	8.4	7.5	14	56	13	9.8	69
4	5.6	38	8.2	14	11	8.2	8.1	12	25	15	7.5	21
5	6.0	20	8.9	13	11	8.6	13	11	16	37	7.6	121
6	6.2	14	38	13	11	8.4	13	11	12	33	7.6	38
7	5.9	12	15	22	8.9	14	9.1	100	11	15	7.1	18
8	5.8	10	12	14	9.1	32	11	87	10	41	7.9	14
9	6.0	9.4	9.8	14	9.6	17	8.3	21	9.5	185	7.8	11
10	5.9	9.1	9.3	13	9.8	9.0	7.3	18	8.7	204	7.5	14
11	5.6	8.5	8.7	13	9.7	8.3	7.8	16	8.4	110	7.6	12
12	6.0	8.5	8.5	13	9.7	13	8.0	12	8.0	33	14	10
13	6.0	7.7	8.3	12	9.5	11	7.5	100	7.6	23	41	12
14	6.0	8.0	8.4	11	9.6	11	8.8	35	7.4	123	23	11
15	8.6	7.7	8.8	9.7	9.5	12	9.6	18	61	53	19	11
16	8.5	8.0	14	9.8	9.8	9.8	9.9	13	54	27	68	10
17	6.1	8.6	15	8.8	9.9	8.3	9.9	11	16	50	329	10
18	5.2	8.3	9.1	9.3	9.8	8.2	735	10	9.9	25	34	10
19	5.6	11	8.4	9.5	8.9	8.5	1670	9.4	38	19	17	12
20	5.9	11	8.1	13	9.0	8.8	470	9.0	43	20	14	1110
21	5.8	8.8	8.5	13	26	10	114	8.9	11	16	12	760
22	5.7	8.3	8.6	10	11	9.7	40	8.5	8.9	13	11	82
23	14	9.1	8.6	9.3	10	8.2	26	8.5	21	11	11	38
24	8.1	9.9	171	9.7	8.8	8.9	21	8.3	10	11	16	20
25	458	9.7	203	223	8.5	10	34	8.1	8.1	16	69	13
26	304	34	41	51	8.6	9.1	20	15	9.5	10	15	13
27	48	12	27	25	8.4	7.6	15	12	20	9.2	12	131
28	25	9.1	25	18	8.0	7.9	13	8.6	9.2	9.2	13	70
29	19	8.5	57	15	8.1	9.4	103	7.8	7.8	8.6	67	31
30	15	27	27	14	---	8.6	45	7.3	7.4	8.5	16	17
31	12	---	20	12	---	7.7	---	117	---	10	14	---
TOTAL	1037.6	454.2	825.7	664.1	297.2	319.5	3461.1	756.4	2014.4	1164.7	901.6	2784
MEAN	33.5	15.1	26.6	21.4	10.2	10.3	115	24.4	67.1	37.6	29.1	92.8
MAX	458	96	203	223	26	32	1670	117	1300	204	329	1110
MIN	5.2	7.7	8.0	8.8	8.0	7.6	7.3	7.3	7.4	7.8	7.1	10
AC-FT	2060	901	1640	1320	589	634	6870	1500	4000	2310	1790	5520
(††)	4.52	1.70	3.24	1.52	.39	1.66	6.66	3.63	6.85	5.69	4.55	8.06

CAL YR 1975 TOTAL 14078.5 MEAN 38.6 MAX 766 MIN 5.2 AC-FT 27920 †† 47.70

WTR YR 1976 TOTAL 14680.5 MEAN 40.1 MAX 1670 MIN 5.2 AC-FT 29120 †† 48.47

PEAK DISCHARGE ABOVE BASE (950 FT³/S), OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-19	0100	59.90	2,460	8-17	0330	53.81	680
6-1	0800	59.14	2,140	9-20	1830	59.01	2,080

†† Weighted-mean rainfall, in inches, based on four rain gages.

08076500 Halls Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 08...	1030	5.8	1100	7.4	22.0	30	20	3.9	44	5.8
NOV. 24...	0925	9.5	887	7.1	12.0	30	10	7.4	69	11
DEC. 09...	1225	11	785	7.3	15.5	60	30	4.6	46	9.9
JAN. 05...	1200	11	746	7.5	7.0	30	30	8.7	71	12
FEB. 18...	1100	13	1020	7.6	20.0	40	15	6.2	67	13
MAR. 09...	1000	18	677	7.3	15.5	60	45	4.5	45	13
APR. 06...	1045	13	887	7.4	20.0	30	15	5.9	64	49
19...	0900	2260	141	6.5	21.0	100	80	4.0	44	4.4
MAY 04...	1100	11	879	7.3	23.5	40	20	3.6	42	12
JUNE 07...	1100	11	883	7.5	26.0	50	20	3.5	43	7.8
JULY 27...	1330	14	882	7.5	30.5	50	20	7.5	100	9.6
AUG. 16...	1240	8.5	656	6.9	27.0	50	20	2.5	32	8.4
17...	1030	370	178	6.2	26.0	80	120	6.9	86	6.2

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 08...	58000	2500	190	--	--	--	--	--	--
NOV. 24...	7300	720	110	210	0	64	11	82	2.5
DEC. 09...	2200000	140000	2400	--	--	--	--	--	--
JAN. 05...	52000	1600	140	--	--	--	--	--	--
FEB. 18...	170000	10000	410	240	0	71	14	120	3.4
MAR. 09...	150000	1600	1300	--	--	--	--	--	--
APR. 06...	34000	2100	470	--	--	--	--	--	--
19...	370000	1700	64000	47	6	15	2.2	8.1	.5
MAY 04...	720000	16000	1100	--	--	--	--	--	--
JUNE 07...	20000	720	240	--	--	--	--	--	--
JULY 27...	22000	750	650	--	--	--	--	--	--
AUG. 16...	100000	6700	1600	--	--	--	--	--	--
17...	--	--	--	52	4	18	1.8	12	.7

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	--	--	--	--	--	--	--	--	20
NOV. 24...	7.5	305	0	30	91	1.7	24	463	16
DEC. 09...	--	--	--	--	--	--	--	--	56
JAN. 05...	--	--	--	--	--	--	--	--	54
FEB. 18...	8.5	311	0	28	140	1.5	22	559	35
MAR. 09...	--	--	--	--	--	--	--	--	92
APR. 06...	--	--	--	--	--	--	--	--	24
19...	3.0	49	0	8.2	9.3	.3	3.5	74	194
MAY 04...	--	--	--	--	--	--	--	--	33
JUNE 07...	--	--	--	--	--	--	--	--	33
JULY 27...	--	--	--	--	--	--	--	--	33
AUG. 16...	--	--	--	--	--	--	--	--	40
17...	2.6	59	0	9.7	11	.2	5.1	90	274

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	0	.20	.09	4.4	5.2	6.8	1.6	--	.8
NOV. 24...	0	1.4	.46	5.4	3.7	6.4	5.8	4	.9
DEC. 09...	4	.28	.09	5.0	1.8	4.6	11	--	8.0
JAN. 05...	19	.76	.10	1.8	1.0	2.0	10	--	.3
FEB. 18...	12	.33	.31	6.3	1.6	6.3	16	7	.9
MAR. 09...	46	.49	.19	3.7	1.3	2.9	17	--	.5
APR. 06...	7	.08	.09	6.9	.00	3.3	20	--	1.0
19...	70	.24	.03	.16	.82	.58	17	5	.1
MAY 04...	8	.21	.16	2.9	3.1	4.4	9.2	--	.5
JUNE 07...	1	.31	.29	5.7	1.0	4.7	6.7	--	.5
JULY 27...	7	.26	.33	6.0	1.5	4.8	7.0	--	.6
AUG. 16...	16	.04	.03	8.4	4.6	9.1	8.2	--	.7
17...	50	.45	.05	.48	1.0	.71	6.0	50	.2

08076500 Halls Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 24...	0925	40	4	320	0	0	0	7					
FEB. 18...	1100	--	--	330	--	--	--	--					
APR. 19...	0900	20	1	90	0	0	0	3					
AUG. 17...	1030	90	8	40	0	0	0	4					
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
DATE	TIME												
NOV. 24...		40	0	10	200	.1	0	470	40				
FEB. 18...		--	--	--	--	--	--	--	--				
APR. 19...		70	0	0	10	.3	0	60	10				
AUG. 17...		90	0	0	0	.2	0	100	20				
		TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 24...	0925	.0	20	--	.00	.0	.2	60	.00	1.2	.00	6.6	
FEB. 18...	1100	.0	5	.00	.00	.0	.0	28	.00	.3	.00	2.3	
APR. 19...	0900	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
AUG. 17...	1030	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
		TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 24...	.00	.8	.43	.02	3.3	.00	.0	.00	.00	.0	.01	.8	
FEB. 18...	.00	.0	.28	.01	2.8	.00	.0	.00	.00	.0	.00	.1	
APR. 19...	.00	--	.10	.00	--	.00	--	.00	.00	--	.01	--	
AUG. 17...	.00	--	.34	.00	--	.00	--	.00	.00	--	.01	--	
		TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 24...	.03	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00	.00
FEB. 18...	.01	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00	.00
APR. 19...	.01	--	.00	.00	.00	.00	0	--	.00	.00	.00	.00	.00
AUG. 17...	.04	--	.00	.00	.00	.00	0	--	.00	.00	.41	.00	.00

08076700 Greens Bayou at Ley Road, Houston, Tex.

LOCATION.--Lat 29°50'13", long 95°13'59", Harris County, on right bank at downstream side of Ley Road Bridge, 300 ft (91 m) downstream from mouth of Halls Bayou, and in northeast Houston.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--Discharge: November 1962 to December 1964, May to September 1971 (discharge measurements only), October 1971 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.13 ft (0.649 m) below mean sea level, adjustment of 1973.

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) Apr. 19 (gage height, 27.17 ft or 8.281 m); minimum not determined (affected by tides).

Period of record: Maximum discharge, 16,700 ft³/s (473 m³/s) June 13, 1973 (gage height, 34.27 ft or 10.445 m); minimum not determined (affected by tides).

REMARKS.--Discharge records good except those below 700 ft³/s (19.8 m³/s), which are poor. Discharge is computed for all storms which produce peak discharges over 700 ft³/s (19.8 m³/s). Tidal influences on the stage-discharge relationship affect discharge below about 500 ft³/s (14.2 m³/s). Discharge below 500 ft³/s (14.2 m³/s) is estimated following designated storm periods only.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	4420	---	---	---
2	---	---	---	---	---	---	---	---	2620	---	---	487
3	---	---	---	---	---	---	---	---	567	---	---	485
4	---	---	---	---	---	---	---	---	170	---	---	150
5	---	---	---	---	---	---	---	---	90	---	---	---
6	---	---	357	---	---	---	---	---	---	---	---	---
7	---	---	100	---	---	---	---	289	---	---	---	---
8	---	---	---	---	---	---	---	302	---	---	---	---
9	---	---	---	---	---	---	---	140	---	589	---	---
10	---	---	---	---	---	---	---	---	---	1140	---	---
11	---	---	---	---	---	---	---	---	---	881	---	---
12	---	---	---	---	---	---	---	---	---	200	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	1180	---	---	---
16	---	---	---	---	---	---	---	---	1730	---	---	---
17	---	---	---	---	---	---	---	---	170	---	---	---
18	---	---	---	---	---	---	702	---	---	---	---	---
19	---	---	---	---	---	---	8640	---	392	---	---	---
20	---	---	---	---	---	---	3150	---	872	---	---	2880
21	---	---	---	---	---	---	1130	---	60	---	---	6340
22	---	---	---	---	---	---	260	---	---	---	---	1110
23	---	---	---	---	---	---	100	---	---	---	---	250
24	---	---	423	---	---	---	---	---	---	---	---	100
25	1200	---	1410	804	---	---	---	---	---	---	---	---
26	1780	---	310	472	---	---	---	---	---	---	---	40
27	430	---	100	100	---	---	---	---	---	---	---	660
28	120	---	---	---	---	---	---	---	---	---	---	100
29	---	---	---	---	---	---	426	---	---	---	---	---
30	---	---	---	---	---	---	280	---	---	---	---	---
31	---	---	---	---	---	---	---	252	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

CAL YR 1975 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1976 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-26	0500	13.78	2,330	6-15	2200	18.83	4,380
4-19	1000	27.17	10,400	9-21	0500	25.27	7,890
6-1	1600	21.68	6,040				

08076700 Greens Bayou at Ley Road, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV.										
11...	1315	28	986	7.5	22.0	30	25	4.6	52	6.8
24...	1345	24	995	7.5	13.5	40	10	9.4	90	10
DEC.										
16...	1030	37	985	7.4	14.5	40	20	5.6	54	11
JAN.										
21...	1415	55	1320	7.6	13.0	20	15	10.8	102	16
MAR.										
01...	1445	.33	1040	7.6	23.0	20	25	7.3	84	17
23...	1400	--	1030	7.5	20.0	50	35	6.3	68	17
APR.										
19...	1130	10400	126	6.9	20.5	140	150	5.3	58	6.5
JUNE										
08...	1145	40	882	7.6	27.0	50	20	5.6	69	13
30...	1030	40	888	7.2	29.0	70	30	5.1	67	12
JULY										
14...	1230	200	584	7.0	26.5	60	100	4.9	62	12
AUG.										
25...	1030	35	418	6.7	26.5	60	200	3.6	46	17
SEP.										
20...	1130	2200	306	6.6	24.0	200	320	6.3	77	23
20...	1330	3100	241	6.8	23.5	320	400	6.3	76	9.0
21...	0800	7800	142	6.1	23.5	200	120	4.9	59	3.2
21...	1400	6300	132	6.7	24.5	200	100	4.9	60	3.3
22...	0930	1200	211	6.3	24.0	200	200	5.8	71	5.1

DATE	THME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
NOV.									
11...	21000	7000	520	--	--	--	--	--	--
24...	1600000	4100	24	220	7	70	12	110	3.2
DEC.									
16...	23000	460	150	--	--	--	--	--	--
JAN.									
21...	210000	720	370	--	--	--	--	--	--
MAR.									
01...	18000	800	110	220	0	70	12	120	3.5
23...	9300	96	108	--	--	--	--	--	--
APR.									
19...	230000	2900	24000	40	4	13	1.9	7.4	.5
JUNE									
08...	390000	9300	430	--	--	--	--	--	--
30...	21000	1400	230	--	--	--	--	--	--
JULY									
14...	1600000	61000	10000	150	0	46	7.7	55	2.0
AUG.									
25...	1000000	130000	20000	--	--	--	--	--	--
SEP.									
20...	2500000	100000	44000	100	49	36	2.8	16	.7
20...	2800000	100000	61000	--	--	--	--	--	--
21...	1200000	44000	17000	--	--	--	--	--	--
21...	830000	17000	5800	--	--	--	--	--	--
22...	670000	13000	3200	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
NOV.									
11...	--	--	--	--	--	--	--	--	40
24...	6.2	266	0	38	140	1.2	20	530	12
DEC.									
16...	--	--	--	--	--	--	--	--	36
JAN.									
21...	--	--	--	--	--	--	--	--	25
MAR.									
01...	5.8	283	0	33	150	.7	19	550	54
23...	--	--	--	--	--	--	--	--	56
APR.									
19...	2.4	44	0	6.6	8.6	.3	2.7	65	356
JUNE									
08...	--	--	--	--	--	--	--	--	76
30...	--	--	--	--	--	--	--	--	57
JULY									
14...	3.8	183	0	19	72	.5	16	311	329
AUG.									
25...	--	--	--	--	--	--	--	--	588
SEP.									
20...	2.9	64	0	55	19	.4	5.1	169	1900
20...	--	--	--	--	--	--	--	--	2600
21...	--	--	--	--	--	--	--	--	256
21...	--	--	--	--	--	--	--	--	206
22...	--	--	--	--	--	--	--	--	580

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV.									
11...	3	1.2	.51	1.4	1.2	2.1	10	--	.4
24...	0	1.7	.67	1.5	1.5	3.6	8.2	4	.6
DEC.									
16...	5	.49	.32	1.7	2.2	4.1	8.8	--	.4
JAN.									
21...	2	.37	.15	2.9	3.3	2.9	7.6	--	.7
MAR.									
01...	26	1.8	.92	1.9	1.6	4.3	6.8	--	.4
23...	4	1.6	.81	4.2	1.8	4.3	8.4	--	.4
APR.									
19...	64	.23	.02	.15	.63	.30	23	8	.1
JUNE									
08...	11	1.2	.20	1.4	1.5	2.8	8.6	--	.3
30...	16	.42	.10	.95	2.5	2.6	3.6	--	.5
JULY									
14...	54	.45	.18	1.5	1.6	1.3	11	1	.2
AUG.									
25...	132	1.1	.26	1.4	1.7	1.9	5.7	--	.1
SEP.									
20...	612	.42	.05	.50	2.0	1.4	13	--	.2
20...	920	.26	.03	.30	1.6	.72	13	--	.0
21...	47	.11	.02	.04	.80	.34	10	--	.1
21...	43	.09	.01	.05	.89	.31	11	--	.1
22...	86	.10	.03	.19	1.2	.44	15	--	.1

08076700 Greens Bayou at Ley Road, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 24...	1345	20	5	230	0	0	0	5					
MAR. 01...	1445	--	--	190	--	--	--	--					
APR. 19...	1130	20	1	50	0	0	0	2					
JULY 14...	1230	40	5	160	0	0	0	5					
SEP. 20...	1130	--	--	90	--	--	--	--					
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)				
NOV. 24...	10	0	10	140	.1	6	500	30					
MAR. 01...	--	--	--	--	--	--	--	--					
APR. 19...	60	0	0	0	.2	0	60	20					
JULY 14...	80	0	0	30	.4	4	250	10					
SEP. 20...	--	--	--	--	--	--	--	--					
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	
NOV. 24...	1345	.0	16	--	.00	.0	.1	60	.00	.9	.00	14	
MAR. 01...	1445	.0	2	.00	.00	.0	.0	21	.00	.4	.00	.0	
APR. 15...	1130	.0	--	.00	.00	--	.0	--	.00	--	.00	--	
SEP. 20...	1130	.0	--	.00	.00	--	.1	--	.00	--	.00	--	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
NOV. 24...	.00	.6	.34	.01	30	.00	.0	.00	.00	.0	.00	.00	.6
MAR. 01...	.00	.0	.24	.00	1.0	.00	.0	.00	.00	.0	.00	.00	.1
APR. 15...	.00	--	.05	.00	--	.00	--	.00	.00	--	.00	--	--
SEP. 20...	.00	--	.12	.00	--	.00	--	.00	.01	--	.02	--	--
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 24...	.03	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.03	.00
MAR. 01...	.03	.0	.03	.00	.00	.00	.00	0	0	.00	.28	.03	.04
APR. 15...	.01	--	.00	.00	.00	.00	.00	0	--	.00	.02	.10	.00
SEP. 20...	.03	--	.05	.00	.00	.00	.00	0	--	.00	.00	.07	.14

08077000 Clear Creek near Pearland, Tex.

LOCATION.--Lat 29°35'50", long 95°17'11". Harris-Brazoria County line, at downstream side of pier of bridge on State Highway 35, 0.7 mile (1.1 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) upstream from Hickory Slough, 2.3 miles (3.7 km) north of Pearland, and about 30 miles (48 km) upstream from head of Clear Lake.

DRAINAGE AREA.--38.8 mi² (100.5 km²).

PERIOD OF RECORD.--July to October 1944, March to October 1946, April 1947 to December 1959, March 1963 to current year. Discharge for some high-water periods in 1944 and 1946 published in WSP 1392.

GAGE.--Water-stage recorder. Datum of gage is 26.58 ft (8.102 m) above mean sea level, adjustment of 1973; prior records unadjusted for land-surface subsidence. Prior to June 9, 1948, nonrecording gage, and June 9, 1948, to Apr. 22, 1952, water-stage recorder at same site and datum 5.80 ft (1.768 m) higher.

AVERAGE DISCHARGE.--25 years (1947-59, 1963-76), 35.6 ft³/s (1.008 m³/s), 25,790 acre-ft/yr (31.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft³/s (36.8 m³/s) June 16 (gage height, 17.28 ft or 5.267 m); minimum daily, 0.32 ft³/s (0.009 m³/s) Oct. 24.

Period of record: Maximum discharge, 2,170 ft³/s (61.5 m³/s) Mar. 18, 1957 (gage height, 16.80 ft or 5.121 m); no flow at times. Flood of June 26, 1960 (stage and discharge unknown), probably exceeded that of Mar. 18, 1957, from records of rainfall and nearby stations. Because of channel rectification in 1933, 1952, and 1968, there is no relation between historic floods and recent floods.

REMARKS.--Records good. Large area of riceland above station is irrigated with water from the Brazos River. Low flow from April to October is largely drainage from irrigated lands. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1392: 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	8.0	2.0	9.9	5.3	1.3	3.0	19	635	35	9.3	1.2
2	.95	6.8	1.6	19	4.7	1.3	3.1	12	786	23	8.1	1.5
3	1.1	6.5	1.9	27	3.7	1.5	3.8	7.8	406	63	7.2	2.2
4	1.1	4.9	2.6	16	3.1	1.4	5.8	4.6	163	64	8.0	2.6
5	1.0	3.7	2.1	10	2.8	1.1	7.9	3.1	71	23	9.4	3.7
6	.49	3.1	1.8	8.1	3.4	1.9	9.0	2.3	51	20	8.9	2.3
7	.80	2.6	1.7	9.6	3.7	2.4	5.2	11	241	17	8.1	1.6
8	.75	2.6	1.4	10	2.8	3.7	4.0	26	148	29	6.8	1.4
9	.66	3.0	1.2	8.0	2.4	2.5	4.3	24	65	267	6.0	2.1
10	.57	2.4	1.2	6.8	2.3	1.5	4.4	17	35	505	6.8	2.9
11	.53	1.9	1.1	5.7	2.5	.98	4.2	69	23	284	5.1	1.4
12	.49	1.6	1.2	5.1	2.4	.94	4.5	33	20	156	3.8	.98
13	.41	1.4	1.3	4.6	2.8	1.4	4.6	49	17	83	3.5	.86
14	.36	1.3	1.3	4.3	2.9	.76	4.9	37	14	132	3.3	.80
15	.79	1.2	1.3	3.7	2.3	.74	6.0	14	144	148	3.1	1.0
16	1.2	1.3	1.9	3.3	1.9	.30	4.9	7.4	1180	81	3.6	2.4
17	.79	1.7	3.2	2.8	1.8	.15	6.7	4.6	1250	49	5.2	4.3
18	.71	2.2	2.9	2.6	1.9	9.2	11	3.2	1070	35	5.4	2.8
19	.62	3.9	2.1	2.7	1.7	7.2	8.0	2.6	700	25	6.9	4.0
20	.56	3.5	1.6	2.7	1.8	6.2	10	3.9	401	21	7.7	1.6
21	.45	2.1	1.4	2.6	3.4	5.2	14	5.8	176	18	6.6	4.2
22	.41	1.5	1.2	2.4	3.0	5.0	21	7.5	84	16	4.1	2.6
23	.36	1.2	1.2	2.4	2.6	4.8	9.8	10	47	14	2.7	1.7
24	.32	1.1	.64	2.5	2.3	4.3	7.0	14	29	28	2.2	1.2
25	1.48	1.0	2.86	30	1.7	4.6	13	17	26	62	2.1	1.1
26	313	12	134	20	2.2	5.0	10	16	21	36	1.6	1.1
27	152	6.4	54	10	2.1	4.4	5.9	20	20	28	1.5	2.8
28	63	3.1	30	6.7	1.7	3.6	4.9	14	22	25	1.6	8.6
29	33	2.2	24	5.4	1.4	3.4	27	11	25	26	2.8	10
30	19	2.5	17	4.6	---	3.4	33	8.1	48	24	1.6	4.1
31	12	---	12	5.3	---	3.1	---	9.6	---	13	1.4	---
TOTAL	757.02	96.7	660.2	253.8	76.6	286.32	260.9	486.5	7918	2350	154.4	118.64
MEAN	24.4	3.22	21.3	8.19	2.64	9.24	8.70	15.7	264	75.8	4.98	3.95
MAX	313	12	286	30	5.3	76	33	69	1250	505	9.4	28
MIN	.32	1.0	1.1	2.4	1.4	.94	3.0	2.3	14	13	1.4	.80
AC-FT	1500	192	1310	503	152	568	517	965	15710	4660	306	235

CAL YR 1975 TOTAL 15195.22 MEAN 41.6 MAX 832 MIN .32 AC-FT 30140
WTR YR 1976 TOTAL 13419.08 MEAN 36.7 MAX 1250 MIN .32 AC-FT 26620

PEAK DISCHARGE (BASE, 600 FT³/S).--June 1 (2100) 936 ft³/s (14.70 ft); June 16 (2200) 1,300 ft³/s (17.28 ft).

08077650 Moses Lake-Galveston Bay near Texas City, Tex.

LOCATION.--Lat 29°26'50", Long 94°55'12", Galveston County, on right side of gate abutment of Texas City Flood Control Dike, one orifice located upstream and one downstream, at mouth of Moses Lake, and 4.5 miles (7.2 km) north of Texas City.

PERIOD OF RECORD.--May 1967 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is 0.49 ft (0.149 m) below mean sea level (levels by Corps of Engineers), adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height (Moses Lake), 2.7 ft (0.82 m) Nov. 2; minimum, -1.4 ft (-0.43 m) Feb. 22. Maximum gage height (Galveston Bay), 3.4 ft (1.04 m) Apr. 17; minimum, -2.1 ft (-0.64 m) Feb. 22.
 Period of record: Maximum gage height (Moses Lake), 3.8 ft (1.16 m) Sept. 9, 1971, and Mar. 23, 1973; minimum, -2.6 ft (-0.79 m) Mar. 12, 13, 1968. Maximum gage height (Galveston Bay), 4.7 ft (1.43 m) Feb. 14, 1969; minimum not recorded but probably occurred Mar. 12 or 13, 1968.

REMARKS.--The purpose of this station is to record gage heights of high tides in Galveston Bay and the corresponding gage heights of the water surface in Moses Lake. Moses Lake is connected to Galveston Bay by gated opening through levee. No gage heights are shown for Moses Lake until gage heights in Galveston Bay exceed 3.0 ft (0.91 m).

MAXIMUM DAILY GAGE HEIGHT, IN FEET, GALVESTON BAY AND MOSES LAKE
 WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.	Galv. Bay Max.	Moses Lake Max.
1	1.6	-	2.4	-	1.8	-	2.0	-	-	-	1.3	-	1.1	-	1.0	-	-	-	-	-	0.9	-	2.0	-
2	1.7	-	3.2	2.7	2.1	-	2.3	-	0.6	-	1.2	-	1.0	-	1.1	-	-	-	-	-	1.1	-	1.9	-
3	1.8	-	3.0	2.5	2.2	-	1.0	-	.6	-	1.3	-	1.3	-	1.0	-	-	-	-	-	1.5	-	1.6	-
4	1.5	-	2.3	-	2.0	-	1.1	-	.6	-	-	-	1.2	-	1.1	-	-	-	-	-	1.5	-	1.6	-
5	1.6	-	1.9	-	2.1	-	1.5	-	.6	-	-	-	1.5	-	2.3	-	-	-	-	-	1.6	-	1.3	-
6	1.8	-	2.1	-	2.0	-	1.7	-	.6	-	-	-	1.8	-	2.0	-	-	-	-	-	1.3	-	1.5	-
7	2.0	-	2.3	-	1.2	-	1.7	-	.2	-	-	-	1.5	-	1.8	-	-	-	-	-	1.0	-	1.5	-
8	2.0	-	2.3	-	1.6	-	1.1	-	.4	-	-	-	1.4	-	1.5	-	-	-	-	-	1.1	-	1.5	-
9	2.0	-	2.5	-	1.1	-	1.3	-	.8	-	-	-	1.4	-	1.5	-	-	-	-	-	1.6	-	1.4	-
10	1.9	-	2.4	-	1.3	-	1.5	-	.8	-	-	-	1.4	-	1.7	-	-	-	-	-	1.4	-	1.6	-
11	1.9	-	2.2	-	1.4	-	1.5	-	.8	-	-	-	1.2	-	1.6	-	-	-	1.9	-	1.5	-	1.8	-
12	1.9	-	2.3	-	1.8	-	1.3	-	.9	-	-	-	.9	-	1.4	-	-	-	1.9	-	1.3	-	1.9	-
13	2.0	-	.6	-	2.2	-	1.4	-	1.0	-	-	-	1.3	-	1.8	-	-	-	1.6	-	1.2	-	2.1	-
14	2.2	-	1.4	-	2.3	-	1.4	-	1.0	-	-	-	1.7	-	1.3	-	-	-	1.8	-	1.4	-	2.7	-
15	2.4	-	1.5	-	2.1	-	1.6	-	1.2	-	-	-	2.3	-	1.1	-	-	-	1.5	-	1.5	-	2.3	-
16	2.1	-	1.9	-	1.8	-	1.6	-	1.3	-	-	-	3.1	2.3	-	-	-	-	1.3	-	1.6	-	1.9	-
17	1.4	-	2.3	-	1.9	-	.4	-	1.2	-	-	-	3.4	2.2	-	-	-	-	1.2	-	1.6	-	1.8	-
18	1.4	-	2.5	-	1.2	-	.9	-	1.3	-	-	-	2.9	-	-	-	-	-	1.4	-	1.4	-	1.8	-
19	1.6	-	2.6	-	1.3	-	-	-	.9	-	-	-	2.6	-	-	-	-	-	1.4	-	2.2	-	2.0	-
20	1.6	-	3.0	.8	1.4	-	-	-	1.5	-	-	-	2.3	-	-	-	-	-	1.5	-	2.4	-	2.2	-
21	1.6	-	1.2	-	1.1	-	-	-	1.3	-	-	-	1.5	-	-	-	1.4	-	1.6	-	1.8	-	1.8	-
22	2.1	-	1.1	-	1.3	-	-	-	.4	-	-	-	1.4	-	-	-	1.9	-	1.6	-	1.5	-	2.2	-
23	2.9	-	1.0	-	1.5	-	-	-	.5	-	1.9	-	1.6	-	-	-	2.2	-	1.6	-	1.4	-	2.0	-
24	2.4	-	1.3	-	2.7	-	-	-	.9	-	1.9	-	1.7	-	-	-	2.3	-	1.3	-	1.3	-	1.7	-
25	2.3	-	1.8	-	2.6	-	-	-	1.0	-	1.9	-	1.2	-	-	-	2.2	-	1.4	-	1.1	-	1.7	-
26	1.9	-	2.3	-	.6	-	-	-	1.1	-	1.9	-	1.6	-	-	-	2.2	-	1.3	-	1.1	-	1.8	-
27	1.8	-	1.9	-	1.6	-	-	-	.7	-	1.7	-	2.1	-	-	-	2.1	-	1.3	-	1.2	-	2.1	-
28	2.0	-	2.3	-	2.4	-	-	-	.9	-	1.7	-	2.1	-	-	-	2.0	-	1.4	-	2.0	-	1.9	-
29	1.6	-	2.5	-	2.4	-	-	-	1.4	-	2.0	-	2.0	-	-	-	1.6	-	1.3	-	1.5	-	1.6	-
30	1.4	-	2.5	-	1.3	-	-	-	---	---	1.9	-	1.3	-	-	-	1.4	-	1.2	-	1.9	-	1.5	-
31	2.0	-	---	---	1.7	-	-	-	---	---	.7	-	---	---	-	-	---	---	1.0	-	1.9	-	---	---

08077700 Highland Bayou at Hitchcock, Tex.

LOCATION.--Lat 29°21'12", long 95°01'49", Galveston County, at downstream side of bridge on Farm Road 2004, 0.6 mile (1.0 km) west of Hitchcock, and 7 miles (11 km) from mouth and Jones Bay.

DRAINAGE AREA.--15.6 mi² (40.4 km²).

PERIOD OF RECORD.--August 1963 to current year (elevations only prior to 1973, beginning 1973 gage heights only).

GAUGE.--Water-stage recorder. Datum of gage is 0.80 ft (0.244 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 7.55 ft (2.301 m) Oct. 25; minimum, -1.07 ft (-0.326 m) Feb. 1.

Period of record: Maximum gage height, 10.51 ft (3.203 m) Mar. 23, 1973; minimum unknown.

Maximum elevation since at least 1930, 14.6 ft (4.45 m) July 25, 1959, from information by local residents.

GAUGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	2.10	1.38	2.87	2.05	2.22	0.81	2.54	1.42	-0.16	-1.07	1.83	1.20	1.58	0.54	1.56	0.64	2.83	1.80	1.86	0.56	1.75	1.13	2.35	1.22
2	2.30	1.18	3.72	2.85	2.51	1.41	2.84	1.56	1.04	-.51	1.68	1.14	1.49	.71	1.69	.30	2.45	1.72	2.04	1.11	1.94	1.23	2.22	1.05
3	2.33	1.71	3.42	2.23	2.53	1.36	1.60	.01	1.01	.33	1.87	1.25	1.75	.56	1.62	.61	2.35	1.49	2.22	1.54	2.28	1.46	1.92	.82
4	2.33	1.43	2.72	1.55	2.43	1.43	1.61	.58	1.29	.67	2.35	1.68	1.66	.67	1.57	.31	2.27	1.44	1.79	1.10	2.41	1.27	1.90	.80
5	2.08	1.33	2.33	1.14	2.60	1.60	2.04	1.47	1.21	.68	1.94	1.45	1.93	.62	2.76	1.21	2.10	1.40	1.91	.96	2.38	1.27	1.72	.88
6	2.24	1.35	2.60	1.63	4.20	2.15	2.26	1.78	1.00	-.02	1.52	.78	2.16	1.09	2.62	1.64	2.42	1.80	2.14	.92	2.13	.74	1.94	.78
7	2.50	1.37	2.77	1.68	2.85	1.15	2.24	-.23	.77	-.32	2.27	.95	1.84	.95	2.10	1.14	2.92	1.88	2.17	1.07	1.45	.55	2.01	1.27
8	2.32	1.46	2.70	1.71	2.21	1.25	.42	-.80	.89	.02	2.39	1.67	1.86	.98	1.92	1.42	2.79	1.70	2.19	.96	1.62	.30	1.92	1.40
9	2.34	1.34	2.89	2.17	1.67	1.09	1.72	.35	1.28	.05	1.68	.35	1.81	.72	2.09	1.44	2.42	1.42	2.55	1.07	2.03	.70	1.78	1.22
10	2.30	1.35	2.85	1.74	1.67	1.10	1.96	1.04	1.22	.32	1.62	.26	1.98	1.27	2.17	1.42	2.34	1.24	2.43	1.30	1.80	1.16	2.32	1.10
11	2.31	1.23	2.67	2.18	1.98	1.45	1.98	1.05	1.26	.11	2.30	.82	1.86	1.22	2.00	1.12	2.30	1.16	2.26	1.26	1.98	1.12	2.11	1.54
12	2.37	1.48	2.73	1.03	2.16	1.61	1.72	.34	1.34	.26	2.38	1.41	1.61	.96	1.99	.93	2.32	1.12	2.32	1.10	1.77	1.28	2.24	1.70
13	2.36	1.75	1.22	.33	2.76	1.73	1.87	.92	1.48	.51	1.67	.54	1.98	.94	2.13	1.02	2.27	1.20	2.11	1.20	1.65	1.02	2.35	1.66
14	2.59	1.93	1.77	1.10	2.85	2.05	1.68	.55	1.46	.56	1.95	1.17	2.32	1.15	1.66	.62	2.62	1.28	2.61	1.19	1.87	1.39	2.90	1.87
15	2.71	2.10	1.91	1.29	2.61	1.64	1.94	.92	1.75	.73	2.00	1.30	3.25	1.52	1.66	.27	2.77	1.82	2.52	1.84	2.00	1.39	2.05	1.53
16	2.58	1.97	2.31	1.45	2.20	.87	2.04	.28	1.85	.93	1.73	.33	3.68	2.73	1.65	.47	2.59	1.63	2.24	1.74	2.07	1.20	2.20	1.23
17	2.07	1.43	2.77	1.69	2.36	1.25	.88	-.35	1.88	1.24	1.60	.13	3.96	2.68	1.58	.41	2.08	1.36	2.00	1.53	1.92	.97	2.06	1.20
18	1.87	1.00	2.93	1.96	1.76	.32	1.35	.62	1.65	.75	2.07	1.02	3.48	2.57	1.89	.38	1.69	1.57	2.12	1.45	1.66	.91	2.06	1.31
19	2.07	1.39	3.05	2.21	1.87	.88	1.78	1.12	1.40	.47	2.47	1.07	3.06	2.33	2.12	1.05	2.04	1.23	2.33	1.49	2.61	1.16	2.38	1.40
20	2.05	1.19	3.20	1.13	1.85	.54	1.77	.36	2.14	.65	2.14	1.46	2.80	2.00	2.25	1.50	1.69	1.11	2.37	1.38	2.76	1.59	2.58	1.35
21	2.02	1.19	1.82	.24	1.57	.18	1.06	.52	2.01	.40	1.90	.64	2.25	1.22	2.20	1.62	2.13	1.20	2.33	1.43	2.13	1.10	2.02	1.28
22	2.52	1.65	1.63	.57	1.78	1.00	1.16	.22	.40	-.99	2.21	.78	1.90	1.03	2.03	1.57	2.27	1.44	2.48	1.46	1.87	.98	2.52	1.23
23	3.46	2.34	1.61	.52	1.92	1.24	1.62	.48	.90	-.68	2.34	1.19	2.20	1.62	2.30	1.45	2.62	1.50	2.42	1.41	1.92	.75	2.34	1.85
24	2.87	1.80	1.65	.76	6.05	1.79	1.88	.70	1.30	.05	2.44	1.70	2.30	1.52	1.73	1.00	2.63	1.65	2.12	1.29	1.85	.90	2.05	1.13
25	7.55	2.45	2.10	1.27	6.03	1.83	1.88	.94	1.43	.45	2.28	1.17	1.79	1.17	1.98	.88	2.63	1.44	2.31	1.07	1.67	.83	2.08	1.09
26	5.32	2.34	2.62	1.07	1.83	.53	1.68	.22	1.51	.44	2.51	1.77	2.26	1.02	3.11	1.87	2.60	1.61	2.29	1.23	1.61	.82	2.27	1.55
27	2.58	1.68	2.18	1.08	1.94	.74	1.15	-.04	1.19	.40	1.81	.98	2.65	1.75	2.21	.67	2.42	1.24	2.36	1.23	1.70	.85	2.56	1.21
28	2.44	1.66	2.70	2.02	2.87	1.37	1.25	.20	1.38	.54	2.16	1.67	2.66	1.82	1.57	.30	2.33	1.25	2.37	1.46	1.86	1.13	2.05	.87
29	2.19	1.42	2.88	2.10	2.87	1.44	1.46	.20	1.84	1.31	2.54	1.82	2.57	1.49	1.84	.47	2.00	1.17	2.26	1.53	1.90	1.07	1.94	.88
30	2.00	1.50	2.93	1.43	1.85	.56	.97	-.06	-----	-----	2.31	1.05	1.90	1.04	2.27	1.05	1.74	.92	2.10	1.49	2.37	1.40	1.90	.96
31	2.59	1.72	-----	-----	2.12	.95	1.32	-.16	-----	-----	1.49	.63	-----	-----	2.87	1.40	-----	-----	1.85	1.38	2.27	1.19	-----	-----

08078000 Chocolate Bayou near Alvin, Tex.

LOCATION.--Lat 29°22'09", long 95°19'14", Brazoria County, on right bank 800 ft (240 m) downstream from bridge on Farm Road 1462, 5.9 miles (9.5 km) southwest of Alvin, and 6.9 miles (11.1 km) upstream from State Highway 35.

DRAINAGE AREA.--87.7 mi² (227.1 km²).

PERIOD OF RECORD.--Discharge: August to October 1944 and March to December 1946 (low-water records during irrigation season), January 1947 to February 1958, March 1958 to February 1959 (discharge measurements only), March 1959 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: May 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.31 ft (3.142 m) above mean sea level. Prior to May 3, 1959, nonrecording gage or water-stage recorders located at various sites from 900 to 1,400 ft (270 to 427 m) upstream and at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--27 years (1947-57, 1959-76), 105 ft³/s (2.974 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,870 ft³/s (53.0 m³/s) June 17 (gage height, 16.71 ft or 5.093 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Dec. 17.

Period of record: Maximum discharge, 7,400 ft³/s (210 m³/s) Oct. 8, 1949 (gage height, 21.80 ft or 6.645 m, present datum, from floodmark before channel rectification), from rating curve extended above 3,800 ft³/s (108 m³/s); no flow at times.

Maximum stage in recent years, 22.9 ft (6.98 m) July 14, 1939, former site and present datum (adjusted from floodmark 1,700 ft or 518 m to right and 550 ft or 168 m upstream from present gage, on basis of slope of flood of Oct. 8, 1949), from information by local residents.

REMARKS.--Discharge records fair. Large area of riceland above station is irrigated with water from Brazos River. Low flow from April to October is largely drainage from irrigated lands. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	23	4.0	33	2.8	1.6	3.6	83	434	50	74	13
2	3.2	17	4.1	26	3.7	1.6	4.0	29	1210	40	62	15
3	2.2	16	3.8	47	3.7	1.5	5.5	16	680	100	63	21
4	1.2	14	3.6	32	3.7	1.2	9.6	13	256	150	63	33
5	1.1	10	3.2	19	3.5	1.1	9.6	9.8	128	50	57	33
6	.90	7.9	2.8	17	3.5	1.1	11	7.7	74	40	48	24
7	.80	7.5	3.8	19	3.3	3.1	11	72	132	30	51	17
8	.88	5.7	3.4	22	3.0	12	9.7	224	118	140	47	9.4
9	.52	4.6	2.7	15	2.7	34	12	75	67	500	38	11
10	.43	3.7	2.4	12	2.6	16	33	6.0	48	1100	35	15
11	.40	2.8	2.8	10	2.6	10	27	450	37	500	43	16
12	.43	2.5	2.9	8.8	2.6	9.8	19	180	35	300	43	16
13	.50	2.1	2.7	8.0	2.4	16	21	300	42	150	36	16
14	.42	1.9	2.6	7.7	1.8	14	32	200	36	250	32	16
15	1.0	1.9	1.1	7.7	2.0	40	29	100	75	400	27	16
16	27	1.9	.04	7.4	2.0	34	37	45	1320	290	24	16
17	18	1.9	.03	6.7	2.0	20	36	25	1830	224	25	14
18	6.3	2.0	.15	5.6	2.0	13	31	14	1500	179	26	12
19	2.4	2.1	4.8	4.6	2.2	10	25	10	617	154	23	25
20	1.4	3.2	5.8	4.6	2.3	8.8	34	12	293	139	14	50
21	1.3	3.3	2.2	5.7	3.0	7.4	36	16	150	126	10	40
22	.98	2.6	1.5	5.6	1.5	6.3	22	20	80	114	7.9	25
23	2.0	2.2	1.4	5.0	1.3	5.9	21	27	70	100	6.1	19
24	2.4	1.9	32	4.8	1.4	5.0	27	35	60	98	5.6	15
25	104	1.8	887	7.7	1.4	6.2	60	45	50	92	8.9	9.7
26	561	3.1	412	8.0	1.4	7.5	39	49	40	86	11	8.0
27	366	4.5	142	6.8	1.5	5.6	18	57	35	87	11	19
28	170	3.5	77	7.0	1.5	4.5	31	55	35	80	8.4	34
29	116	2.8	124	3.6	1.6	4.5	108	50	40	78	10	43
30	61	2.5	75	2.3	---	4.6	178	45	75	78	12	19
31	35	---	47	3.6	---	4.8	---	46	---	78	13	---
TOTAL	1493.86	159.9	1857.82	373.2	69.0	311.1	940.0	2370.5	9567	5803	934.9	620.1
MEAN	48.2	5.33	59.9	12.0	2.38	10.0	31.3	76.5	319	187	30.2	20.7
MAX	561	23	887	47	3.7	40	178	450	1830	1100	74	50
MIN	.40	1.8	.03	2.3	1.3	1.1	3.6	7.7	35	30	5.6	8.0
AC-FT	2960	317	3680	740	137	617	1860	4700	18980	11510	1850	1230
CAL YR 1975	TOTAL	34487.68	MEAN 94.5	MAX 2990	MIN .03	AC-FT 68410						
WTR YR 1976	TOTAL	24500.38	MEAN 66.9	MAX 1830	MIN .03	AC-FT 48600						

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
12-25	1200	11.72	1,020				
6-2	1300	14.01	1,270	7-10	unknown	unknown	about 1,200
6-17	1400	16.71	1,870				

08078000 Chocolate Bayou near Alvin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 07...	1145	.80	683	7.2	20.0	30	40	6.5	71	2.7
NOV. 20...	1020	3.2	1240	7.3	16.0	30	30	6.5	65	1.1
DEC. 10...	1145	2.6	1150	7.7	15.0	50	20	7.4	73	1.7
JAN. 13...	1100	7.7	1050	7.7	17.5	20	40	8.0	83	8.1
FEB. 09...	1215	2.7	1400	8.0	17.0	10	25	9.4	97	1.7
MAR. 02...	1215	1.6	1350	7.9	23.0	30	35	6.8	78	2.3
APR. 07...	1130	11	1250	7.8	20.0	30	50	8.2	89	5.5
JUNE 09...	1145	70	502	7.5	26.5	70	60	5.4	66	5.6
29...	1045	65	609	6.8	29.0	80	40	5.6	74	3.7
AUG. 03...	1210	62	560	6.4	28.5	50	40	6.4	83	2.6
SEP. 15...	1145	16	1130	6.8	27.5	60	40	5.3	68	1.5

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 07...	80000	140	300	--	--	--	--	--	--
NOV. 20...	4200	120	250	320	37	82	27	140	3.4
DEC. 10...	3100	32	40	--	--	--	--	--	--
JAN. 13...	2600	190	150	--	--	--	--	--	--
FEB. 09...	150	14	6	330	69	84	30	160	3.8
MAR. 02...	5300	1	120	--	--	--	--	--	--
APR. 07...	7700	190	280	--	--	--	--	--	--
JUNE 09...	60000	390	250	150	36	43	10	38	1.4
29...	9700	90	180	--	--	--	--	--	--
AUG. 03...	3100	150	260	160	13	47	11	46	1.6
SEP. 15...	6700	210	160	260	94	72	20	120	3.2

08078000 Chocolate Bayou near Alvin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 07...	--	--	--	--	--	--	--	--	64
NOV. 20...	3.1	341	0	44	190	.6	9.9	666	53
DEC. 10...	--	--	--	--	--	--	--	--	11
JAN. 13...	--	--	--	--	--	--	--	--	80
FEB. 09...	2.5	322	0	47	260	.6	3.9	747	42
MAR. 02...	--	--	--	--	--	--	--	--	83
APR. 07...	--	--	--	--	--	--	--	--	107
JUNE 09...	3.0	138	0	45	49	.6	15	272	159
29...	--	--	--	--	--	--	--	--	106
AUG. 03...	2.4	182	0	23	66	.6	16	302	84
SEP. 15...	6.8	205	0	89	200	.5	32	642	83

DATE	VOL- NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 07...	13	.00	.01	.02	.75	.10	10	--	.0
NOV. 20...	20	.00	.00	.04	.35	.04	4.6	0	.1
DEC. 10...	3	.01	.00	.05	.28	.07	6.2	--	.1
JAN. 13...	29	.01	.01	.06	.32	.08	6.8	--	.1
FEB. 09...	11	.01	.01	.00	.34	.03	3.0	4	.1
MAR. 02...	30	.01	.01	.01	.17	.03	3.8	--	.1
APR. 07...	30	1.1	.05	.14	1.3	.09	21	--	.2
JUNE 09...	49	.42	.12	.09	1.5	.11	9.5	20	.1
29...	18	.30	.05	.08	1.5	.08	2.5	--	.4
AUG. 03...	15	.00	.01	.01	.66	.05	3.1	--	.1
SEP. 15...	18	.03	.01	.04	.93	.09	6.8	2	.1

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)						
DATE	TIME													
NOV. 20...	1020	20	1	130	0	0	0	1						
FEB. 09...	1215	--	--	160	--	--	--	--						
JUNE 09...	1145	20	2	440	0	0	0	2						
AUG. 03...	1210	--	--	110	--	--	--	--						
SEP. 15...	1145	--	--	150	--	--	--	--						
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)					
DATE	TIME													
NOV. 20...		0	0	10	10	.8	0	620	40					
FEB. 09...		--	--	--	--	--	--	--	--					
JUNE 09...	50	0	0	0	0	.2	0	300	30					
AUG. 03...		--	--	--	--	--	--	--	--					
SEP. 15...		--	--	--	--	--	--	--	--					
		PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)			
NOV. 20...	1020	.0	4	--	.00	.0	.0	2	.00	.5	.00	1.1		
FEB. 09...	1215	.0	0	.00	.00	.0	.0	2	.00	.2	.00	1.8		
SEP. 15...	1145	.0	--	.00	.00	--	.0	--	.00	--	.00	--		
		DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)			
NOV. 20...	.00	.0	.00	.00	1.1	.00	.0	.00	.00	.0	.00	.0		
FEB. 09...	.00	.0	.00	.00	.3	.00	.0	.00	.00	.0	.00	.0		
SEP. 15...	.00	--	.00	.00	--	.00	--	.00	.00	--	.00	--		
		LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	METHYL PARATHION IN BOTTOM MATERIAL (UG/KG)	TOTAL PARA-THION (UG/L)	PARA-THION IN BOTTOM MATERIAL (UG/KG)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TRI-THION IN BOTTOM MATERIAL (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 20...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00	.00	.00
FEB. 09...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00	.00	.00
SEP. 15...	.00	--	.00	.00	.00	.00	0	--	.00	.00	.00	.00	.00	.00

08079000 Oyster Creek near Angleton, Tex.

LOCATION.--Lat 29°09'30", long 95°28'32", Brazoria County, near center of low-water channel at downstream side of bridge on State Highway 35, 2.7 miles (4.3 km) west of Angleton, 4.1 miles (6.6 km) upstream from Missouri Pacific Railroad Co. bridge, 4.5 miles (7.2 km) downstream from Styles Bayou, and about 45 miles (72 km) upstream from Gulf of Mexico.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--October 1944 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 1.31 ft (0.399 m) below mean sea level. Prior to Apr. 30, 1958, at site 500 ft (150 m) downstream at same datum.

AVERAGE DISCHARGE.--32 years, 180 ft³/s (5.098 m³/s), 130,400 acre-ft/yr (161 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 632 ft³/s (17.9 m³/s) Dec. 25 (gage height, 15.83 ft or 4.825 m); minimum daily, 81 ft³/s (2.29 m³/s) May 12.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) May 10, 1957 (gage height, 31.45 ft or 9.586 m, present site, overflow from Brazos River); minimum daily, 0.3 ft³/s (0.008 m³/s) at times in 1955-56.

Maximum stage since about 1900, 32.2 ft (9.81 m) in December 1913; flood of Dec. 5, 1940, reached a stage of 30.9 ft (9.42 m), from information by State Highway Department. At extreme high stages the Brazos River overflows into Oyster Creek above this station.

REMARKS.--Records good. Diversions above station for irrigation. A large part of flow is water released from Harris Reservoir (capacity, 12,000 acre-ft or 14.8 hm³) for industrial use below station. Harris Reservoir is supplied with water diverted from Brazos River during periods of floodflow.

COOPERATION.--Records of water released from Harris Reservoir into Oyster Creek above station furnished by Dow Chemical Co.

REVISIONS (WATER YEARS).--WSP 1392: 1947. WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	99	105	106	89	84	90	106	140	116	151	99
2	87	98	105	103	88	84	84	92	341	113	153	100
3	90	95	104	99	87	84	88	95	235	120	164	111
4	90	94	103	96	87	83	90	89	130	117	167	118
5	91	93	105	92	86	84	90	87	126	116	162	118
6	91	100	105	91	86	85	91	96	123	121	151	117
7	91	102	104	91	86	88	92	105	124	118	148	117
8	91	102	104	91	85	88	98	160	109	116	147	116
9	91	101	104	89	85	87	100	126	108	132	147	115
10	91	100	104	91	85	87	99	109	116	132	152	112
11	92	96	104	91	85	91	98	91	137	130	154	110
12	93	94	104	90	86	92	97	81	137	132	154	112
13	93	95	104	88	86	92	94	94	135	123	153	117
14	93	101	105	90	88	90	93	101	133	225	153	116
15	93	102	106	93	87	91	93	98	132	295	152	118
16	109	102	105	90	86	90	94	99	162	190	152	113
17	112	101	106	90	86	91	100	96	299	148	155	111
18	99	102	105	89	85	90	100	97	267	130	156	110
19	95	102	105	88	84	88	101	91	212	122	149	112
20	93	102	105	87	82	88	105	91	185	141	113	114
21	91	99	104	87	83	85	107	98	170	162	104	112
22	90	98	104	87	82	84	98	99	158	164	98	111
23	90	98	104	87	82	84	103	98	151	162	87	111
24	90	98	155	89	82	83	99	102	147	162	87	115
25	94	99	557	171	82	88	95	100	151	159	87	116
26	142	113	535	198	84	88	92	98	149	156	87	115
27	175	111	318	124	84	86	91	100	140	154	93	124
28	138	105	190	103	84	90	96	100	134	163	115	129
29	125	104	150	97	84	91	113	100	130	160	122	120
30	113	106	109	93	---	91	119	99	122	155	121	117
31	104	---	91	91	---	89	---	97	---	153	102	---
TOTAL	3123	3012	4509	3072	2466	2716	2910	3095	4803	4587	4136	3426
MEAN	101	100	145	99.1	85.0	87.6	97.0	99.8	160	148	133	114
MAX	175	113	557	198	89	92	119	160	341	295	167	129
MIN	86	93	91	87	82	83	84	81	108	113	87	99
AC-FT	6190	5970	8940	6090	4890	5390	5770	6140	9530	9100	8200	6800
(†)	4910	4620	4520	4200	4450	4850	4900	4750	3660	4890	7880	6410

CAL YR 1975 TOTAL 51477 MEAN 141 MAX 1190 MIN 76 AC-FT 102100 † 62050
WTR YR 1976 TOTAL 41855 MEAN 114 MAX 557 MIN 81 AC-FT 83020 † 60040

PEAK DISCHARGE (BASE, 800 FT³/S).--No peak above base.

† Discharge, in acre-feet, released from Harris Reservoir into Oyster Creek above gage (included in total flow past gage).

08079100 East Levee Ditch-Gulf of Mexico near Freeport, Tex.

LOCATION.--Lat 28°57'38", long 95°18'34", Brazoria County, on County Road 690, in room at left end of East Union Bayou drainage structure of East Levee, one orifice located upstream and one downstream from levee, 0.9 mile (1.4 km) upstream from Intracoastal Waterway, and 2.4 miles (3.9 km) east of Freeport.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation (East Levee Ditch), 2.1 ft (0.64 m) Sept. 20; minimum, -1.0 ft (-0.30 m) Feb. 22. Maximum elevation (Gulf of Mexico), 3.5 ft (1.07 m) Nov. 2; minimum, -1.2 ft (-0.37 m) Feb. 22.

Period of record: Maximum elevation (East Levee Ditch), 4.4 ft (1.34 m) Oct. 13, 14, 1973; minimum not determined. Maximum elevation (Gulf of Mexico), 5.5 ft (1.68 m) Sept. 10, 1971; minimum, -2.2 ft (-0.67 m) Feb. 3, 1970.

REMARKS.--The purpose of this station is to record elevations of high tides in the Gulf of Mexico and the corresponding elevations of the water surface behind the levee. No elevations are shown for East Levee Ditch until elevations in the Gulf of Mexico exceed 3.0 ft (0.91 m). The levee is an earthen structure about 43 miles (69 km) long with a maximum height of 22 ft (6.7 m) above mean sea level. Gravity drainage structures with flapper gates and pumps to remove floodwaters from behind levee are located at various points along the levee.

MAXIMUM DAILY GAGE HEIGHT, IN FEET, GULF OF MEXICO AND EAST LEVEE DITCH
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch	Gulf of Mex.	East of Levee Ditch
1	2.2	-	2.8	-	2.4	-	2.5	-	0.1	-	1.5	-	1.6	-	1.8	-	2.8	-	1.8	-	1.2	-	2.2	-
2	2.5	-	3.5	1.5	2.8	-	2.4	-	1.2	-	1.5	-	1.4	-	1.6	-	2.5	-	1.7	-	1.9	-	-	-
3	2.4	-	3.0	1.6	2.7	-	1.4	-	.8	-	1.6	-	1.5	-	1.5	-	2.4	-	2.0	-	1.9	-	-	-
4	2.2	-	2.5	-	2.5	-	1.0	-	1.1	-	2.0	-	1.5	-	1.4	-	2.1	-	1.6	-	1.9	-	-	-
5	2.3	-	2.5	-	2.4	-	1.0	-	1.1	-	1.7	-	1.8	-	2.1	-	2.1	-	1.6	-	1.9	-	-	-
6	2.7	-	2.8	-	2.1	-	1.0	-	.7	-	1.4	-	2.2	-	2.2	-	2.2	-	1.9	-	1.7	-	-	-
7	2.4	-	2.7	-	1.8	-	1.9	-	.7	-	2.1	-	1.9	-	2.1	-	2.7	-	2.0	-	1.6	-	-	-
8	2.3	-	2.7	-	1.8	-	.6	-	.9	-	2.3	-	2.0	-	-	-	2.8	-	1.9	-	1.4	-	-	-
9	2.3	-	2.8	-	1.4	-	1.5	-	1.1	-	.9	-	1.9	-	-	-	2.5	-	2.4	-	1.7	-	-	-
10	2.3	-	2.6	-	1.5	-	1.6	-	1.0	-	1.6	-	1.8	-	-	-	2.4	-	2.6	-	1.8	-	-	-
11	2.3	-	2.6	-	1.6	-	1.5	-	1.2	-	2.0	-	1.7	-	-	-	2.5	-	2.3	-	1.8	-	-	-
12	2.2	-	2.6	-	1.6	-	1.7	-	1.3	-	1.9	-	1.5	-	1.8	-	2.6	-	2.2	-	1.7	-	-	-
13	2.3	-	1.2	-	2.3	-	1.8	-	1.5	-	2.3	-	1.8	-	2.1	-	2.4	-	2.1	-	1.4	-	-	-
14	2.5	-	1.7	-	2.3	-	1.8	-	1.5	-	2.0	-	2.0	-	2.1	-	2.4	-	1.8	-	1.6	-	-	-
15	2.6	-	1.7	-	2.2	-	2.2	-	1.5	-	2.0	-	2.5	-	1.7	-	2.7	-	1.8	-	1.7	-	-	-
16	2.6	-	2.6	-	2.3	-	1.7	-	1.5	-	2.1	-	3.3	1.4	2.0	-	2.3	-	1.6	-	1.7	-	-	-
17	1.9	-	2.6	-	2.1	-	1.2	-	1.6	-	1.5	-	3.4	1.4	1.9	-	1.8	-	1.5	-	1.7	-	-	-
18	1.9	-	2.6	-	2.1	-	1.4	-	1.4	-	2.1	-	3.2	1.4	2.1	-	1.8	-	1.4	-	1.7	-	-	-
19	2.2	-	2.9	-	1.7	-	1.8	-	1.2	-	2.1	-	2.9	-	2.1	-	1.6	-	1.5	-	2.2	-	-	-
20	2.0	-	2.4	-	1.9	-	1.3	-	1.7	-	2.0	-	2.6	-	2.1	-	1.7	-	1.5	-	2.6	-	-	-
21	2.1	-	1.7	-	1.6	-	1.1	-	1.8	-	2.0	-	2.0	-	2.0	-	1.7	-	1.6	-	2.2	-	-	-
22	2.5	-	1.7	-	1.9	-	1.1	-	.2	-	2.3	-	1.8	-	2.0	-	2.0	-	1.9	-	1.9	-	-	-
23	2.6	-	1.7	-	2.0	-	1.3	-	1.0	-	2.1	-	2.0	-	2.2	-	2.3	-	2.0	-	1.8	-	-	-
24	2.6	-	1.5	-	3.1	0.2	1.6	-	1.3	-	2.4	-	2.0	-	1.7	-	2.5	-	1.7	-	1.7	-	-	-
25	2.5	-	2.4	-	2.7	-	1.9	-	1.2	-	2.2	-	2.0	-	1.8	-	2.6	-	1.9	-	1.5	-	-	-
26	2.4	-	2.4	-	.9	-	.7	-	1.2	-	2.2	-	2.0	-	2.8	-	2.6	-	1.9	-	1.6	-	-	-
27	2.3	-	2.4	-	1.7	-	2.5	-	1.2	-	1.9	-	2.5	-	2.5	-	2.4	-	1.9	-	1.7	-	-	-
28	2.3	-	2.5	-	2.6	-	1.6	-	1.3	-	2.1	-	2.6	-	1.6	-	2.4	-	1.8	-	1.7	-	-	-
29	2.1	-	2.8	-	2.4	-	1.2	-	1.6	-	2.1	-	2.4	-	1.8	-	1.9	-	1.7	-	2.0	-	-	-
30	1.9	-	2.4	-	2.1	-	1.2	-	---	---	2.2	-	2.1	-	2.1	-	1.8	-	1.4	-	2.0	-	-	-
31	2.4	-	---	---	2.1	-	1.2	-	---	---	1.8	-	---	---	2.5	-	---	---	1.2	-	2.1	-	---	---

08079150 South Levee Ditch-Gulf of Mexico near Freeport, Tex.

LOCATION.--Lat 28°55'28", long 95°21'23", Brazoria County, on southern arm of levee, in room at right end of South Levee drainage structure, one orifice located upstream and one downstream from levee, 0.6 mile (1.0 km) upstream from Intracoastal Waterway, 0.7 mile (1.1 km) west of State Highway 1495, and 1.7 miles (2.7 km) southwest of Freeport.

PERIOD OF RECORD.--May 1970 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation (South Levee Ditch), 1.6 ft (0.49 m) Sept. 21; minimum not determined. Maximum elevation (Gulf of Mexico), about 3.5 ft (1.07 m) Nov. 2; minimum not determined.

Period of record: Maximum elevation (South Levee Ditch), 3.3 ft (1.01 m) Oct. 13, 1973, Nov. 2, 1974; minimum not determined. Maximum elevation (Gulf of Mexico), 5.8 ft (1.77 m) Sept. 10, 1971; minimum not determined.

REMARKS.--The purpose of this station is to record elevations of high tides in the Gulf of Mexico and the corresponding elevation of the water surface behind the levee. No elevations are shown for South Levee Ditch until those in the Gulf of Mexico exceed 3.0 ft (0.91 m). The levee is an earthen structure with a maximum elevation of 22 ft (6.7 m) above mean sea level. Gravity drainage structures with flapper gates and pumps to remove floodwaters from behind levee are located along the levee.

MAXIMUM DAILY GAGE HEIGHT, IN FEET, GULF OF MEXICO AND SOUTH LEEVE DITCH
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch
1	2.2	-	-	-	2.4	-	2.5	-	0.1	-	-	-	1.6	-	1.8	-	-	-	1.7	-	-	-	2.1	-
2	2.3	-	-	-	2.7	-	2.3	-	1.2	-	1.2	-	1.4	-	1.7	-	-	-	1.7	-	-	-	2.2	-
3	2.3	-	-	-	2.5	-	1.4	-	.8	-	1.5	-	1.5	-	1.7	-	-	-	1.9	-	-	-	1.9	-
4	2.2	-	-	-	2.5	-	1.9	-	1.9	-	2.0	-	1.5	-	1.6	-	-	-	1.5	-	-	-	1.8	-
5	2.2	-	2.5	-	2.4	-	2.0	-	1.0	-	1.6	-	1.7	-	2.1	-	-	-	1.6	-	1.9	-	1.8	-
6	2.5	-	2.8	-	2.3	-	2.1	-	.7	-	1.3	-	2.1	-	2.2	-	-	-	1.8	-	1.8	-	1.6	-
7	2.4	-	2.7	-	2.1	-	1.9	-	.7	-	1.9	-	1.8	-	2.0	-	-	-	2.0	-	1.7	-	1.8	-
8	2.3	-	2.7	-	2.1	-	.6	-	.8	-	2.1	-	2.0	-	1.8	-	-	-	2.1	-	1.4	-	1.7	-
9	2.3	-	2.8	-	1.6	-	1.4	-	1.1	-	.8	-	1.9	-	1.9	-	2.1	-	2.2	-	1.8	-	1.6	-
10	2.3	-	2.8	-	1.7	-	1.6	-	1.0	-	1.5	-	1.7	-	1.9	-	2.3	-	2.4	-	1.8	-	1.8	-
11	2.3	-	2.6	-	1.7	-	1.5	-	1.2	-	1.9	-	1.7	-	1.9	-	2.4	-	2.2	-	1.7	-	2.0	-
12	2.2	-	2.6	-	1.9	-	1.6	-	1.3	-	1.8	-	1.4	-	1.9	-	2.4	-	2.2	-	1.6	-	2.1	-
13	-	-	1.3	-	2.3	-	1.8	-	1.5	-	2.0	-	1.8	-	2.1	-	2.3	-	2.0	-	1.4	-	2.2	-
14	-	-	1.8	-	2.4	-	1.8	-	1.5	-	1.8	-	2.0	-	2.0	-	2.2	-	-	-	1.6	-	2.4	-
15	-	-	1.8	-	2.2	-	2.1	-	1.3	-	1.8	-	2.3	-	1.8	-	2.5	-	-	-	1.7	-	2.3	-
16	-	-	2.1	-	2.4	-	1.7	-	1.4	-	1.9	-	3.0	0.4	2.0	-	2.2	-	-	-	1.6	-	2.0	-
17	-	-	2.6	-	2.2	-	1.3	-	1.6	-	1.5	-	3.4	.4	1.9	-	1.8	-	-	-	1.7	-	2.0	-
18	-	-	2.6	-	2.1	-	1.4	-	1.4	-	1.9	-	3.0	.4	2.0	-	1.8	-	-	-	1.6	-	2.0	-
19	-	-	2.9	-	2.1	-	1.7	-	1.1	-	2.0	-	2.6	-	2.0	-	1.5	-	-	-	2.1	-	-	-
20	-	-	2.7	-	2.0	-	1.1	-	1.7	-	2.0	-	2.4	-	-	-	1.6	-	-	-	2.4	-	-	-
21	-	-	1.9	-	1.7	-	1.0	-	1.7	-	1.9	-	2.0	-	1.9	-	1.6	-	-	-	2.1	-	-	-
22	-	-	1.8	-	2.0	-	1.0	-	.2	-	2.2	-	1.9	-	-	-	2.0	-	-	-	1.9	-	-	-
23	-	-	1.8	-	2.0	-	1.3	-	1.0	-	1.9	-	1.9	-	-	-	2.3	-	-	-	1.8	-	-	-
24	-	-	1.7	-	3.0	1.2	1.6	-	1.3	-	2.2	-	1.9	-	-	-	2.4	-	-	-	1.7	-	-	-
25	-	-	2.4	-	2.7	-	1.8	-	1.2	-	1.9	-	1.8	-	-	-	2.4	-	-	-	1.5	-	-	-
26	-	-	2.5	-	1.0	-	1.5	-	-	-	1.9	-	1.8	-	-	-	2.5	-	-	-	1.5	-	-	-
27	-	-	2.2	-	1.7	-	1.5	-	-	-	1.8	-	2.3	-	-	-	2.3	-	-	-	1.6	-	-	-
28	-	-	2.5	-	2.6	-	1.6	-	-	-	1.9	-	2.5	-	-	-	2.3	-	-	-	1.7	-	-	-
29	-	-	2.8	-	2.2	-	1.1	-	-	-	2.1	-	2.3	-	-	-	1.9	-	-	-	1.9	-	-	-
30	-	-	2.4	-	2.1	-	1.2	-	---	---	2.1	-	2.0	-	-	-	1.8	-	-	-	1.9	-	-	-
31	-	-	---	---	2.2	-	1.1	-	---	---	1.7	-	---	---	-	-	---	---	-	-	2.0	-	---	---

08079550 Buffalo Springs Lake near Lubbock, Tex.

LOCATION (revised).--Lat 33°31'58", long 101°41'34", Lubbock County, on left bank of spillway channel of dam on North Fork Double Mountain Fork Brazos River, 175 ft (53 m) upstream from spillway crest, 9 miles (14 km) southeast of Lubbock, and at mile 74.1 (119.2 km).

DRAINAGE AREA (revised).--5,588 mi² (14,473 km²), of which 5,352 mi² (13,862 km²) is probably noncontributing.

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 5,460 acre-ft (6.73 hm³) July 17 (elevation, 3,015.40 ft or 919.094 m); minimum, 5,360 acre-ft (6.61 hm³) May 13 (elevation, 3,015.00 ft or 918.972 m).

Period of record: Maximum contents, 6,120 acre-ft (7.55 hm³) June 2, 1967 (elevation, 3,018.05 ft or 919.902 m); minimum, 5,310 acre-ft (6.55 hm³) Apr. 3, 1974 (elevation, 3,014.78 ft or 918.905 m).

REMARKS.--The lake is formed by a rolled earthfill dam 1,600 ft (488 m) long. The dam was completed and storage began Sept. 15, 1959. The lake first filled to spillway elevation on July 6, 1960. The dam and lake are the property of the Lubbock County Water Improvement District No. 1. The lake is used for recreational purposes, but water may be sold to the cities of Lubbock and Slaton for municipal use. The uncontrolled service spillway is a concrete chute, 138 ft (42 m) wide at crest, and is designed to discharge 26,200 ft³/s (742 m³/s) at an elevation of 3,028.7 ft (923.15 m). The capacity table is based on topographic surveys made in 1954. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	3,032.0	-
Crest of spillway.....	3,015.0	5,360
Lowest gated outlet (invert).....	2,980.0	510

COOPERATION.--Capacity table furnished by Lubbock County Water Improvement District No. 1.

Capacity table (elevation, in feet, and contents, in acre-feet).

3,015.0 5,360
3,016.0 5,600

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5390	5380	5390	5390	5390	5400	5380	5370	5370	5370	5410	5390
2	5390	5380	5390	5390	5390	5400	5380	5370	5370	5380	5410	5390
3	5380	5380	5390	5390	5390	5400	5380	5370	5370	5400	5410	5390
4	5380	5380	5390	5390	5390	5410	5380	5370	5370	5420	5400	5390
5	5380	5380	5390	5390	5390	5410	5380	5380	5370	5390	5400	5390
6	5380	5380	5390	5380	5390	5400	5380	5370	5390	5390	5400	5390
7	5380	5380	5390	5380	5390	5400	5380	5370	5390	5390	5400	5390
8	5380	5380	5390	5380	5400	5390	5380	5370	5390	5380	5400	5400
9	5380	5380	5390	5380	5390	5390	5380	5370	5390	5380	5400	5400
10	5380	5380	5390	5380	5390	5380	5380	5360	5380	5380	5400	5400
11	5380	5380	5390	5380	5390	5370	5380	5370	5380	5390	5400	5390
12	5380	5390	5390	5380	5390	5370	5390	5360	5380	5410	5390	5390
13	5380	5390	5390	5380	5390	5380	5390	5360	5380	5440	5390	5390
14	5380	5390	5390	5380	5390	5380	5410	5360	5380	5420	5390	5390
15	5380	5390	5390	5380	5390	5380	5400	5370	5380	5410	5390	5390
16	5380	5390	5390	5380	5390	5380	5410	5360	5380	5420	5390	5390
17	5380	5390	5380	5380	5420	5380	5400	5370	5380	5440	5380	5390
18	5380	5390	5390	5380	5420	5380	5390	5370	5380	5410	5380	5390
19	5380	5390	5380	5380	5400	5380	5390	5370	5380	5410	5380	5390
20	5380	5390	5380	5380	5430	5370	5370	5370	5380	5400	5380	5390
21	5380	5390	5380	5390	5440	5380	5380	5380	5380	5400	5380	5390
22	5380	5390	5390	5390	5430	5380	5380	5380	5380	5400	5380	5390
23	5380	5390	5390	5390	5410	5380	5380	5370	5380	5400	5380	5390
24	5380	5390	5390	5390	5400	5380	5370	5370	5370	5410	5380	5390
25	5380	5390	5390	5390	5400	5380	5370	5370	5370	5410	5380	5390
26	5380	5390	5390	5390	5390	5360	5370	5360	5370	5410	5380	5380
27	5380	5390	5390	5390	5390	5370	5370	5360	5370	5410	5380	5400
28	5380	5390	5390	5390	5390	5370	5380	5370	5380	5410	5380	5390
29	5380	5390	5390	5390	5400	5360	5380	5360	5370	5410	5400	5400
30	5380	5390	5390	5390	---	5370	5380	5360	5370	5410	5390	5390
31	5380	---	5390	5400	---	5370	---	5360	---	5410	5390	---
(†)	3015.10	3015.12	3015.13	3015.16	3015.15	3015.05	3015.08	3015.02	3015.06	3015.19	3015.13	3015.13
(*)	0	+10	0	+10	0	-30	+10	-20	+10	+40	-20	0
MAX	5390	5390	5390	5400	5430	5410	5410	5380	5390	5440	5410	5400
MIN	5380	5380	5380	5380	5390	5360	5370	5360	5370	5370	5380	5380
CAL YR 1975.....	* +10			MAX 5480			MIN 5350					
WTR YR 1976.....	* +10			MAX 5440			MIN 5360					

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

08079600 Double Mountain Fork Brazos River at Justiceburg, Tex.

LOCATION.--Lat 33°02'18", long 101°11'50", Garza County, on right bank at downstream side of bridge on U.S. Highway 84 at Justiceburg, 250 ft (76 m) downstream from Panhandle and Santa Fe Railroad, and at mile 143.4 (230.7 km) measured from confluence with Salt Fork Brazos River at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA (revised).--1,466 mi² (3,797 km²), of which 1,222 mi² (3,165 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: November 1961 to current year. Prior to October 1963, published as Sand Creek or South Fork Double Mountain Fork Brazos River at Justiceburg.

Water quality: Chemical analyses: October 1975 to September 1976. Water temperatures: October 1975 to September 1976.

GAGE.--Water-stage recorder. Datum of gage is 2,222.47 ft (677.409 m) above mean sea level.

AVERAGE DISCHARGE.--14 years (1962-76), 28.7 ft³/s (0.813 m³/s), 1.60 in/yr (41 mm/yr), 20,790 acre-ft/yr (25.6 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 3,450 ft³/s (97.7 m³/s) July 3 (gage height, 8.67 ft or 2.643 m); no flow at times.

Period of record: Maximum discharge, 49,600 ft³/s (1,400 m³/s) May 6, 1969 (gage height, 19.8 ft or 6.04 m, from floodmarks); no flow at times most years.

Historic: Maximum stages since at least 1895, 25.8 ft (7.86 m) in 1914 and 22.2 ft (6.77 m) in September 1955, from information by local resident. Flood of July 1961 reached a stage of 18.2 ft (5.55 m), from floodmark.

Water quality: Current year: Maximum daily specific conductance, 20,600 micromhos Oct. 22; minimum, 566 micromhos Aug. 29. Minimum water temperatures, 4.0°C Jan. 7-9.

REMARKS.--Discharge records poor. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	7.8	.03	.37	.10	0	0	.01	0	0	0	26
2	.18	56	.03	.37	.10	0	0	.01	0	0	0	7.9
3	.18	3.2	.03	.30	.07	0	0	0	0	752	0	.86
4	.18	.37	.03	.30	.07	0	0	0	0	33	0	.18
5	.14	.14	.03	.24	.07	0	0	62	36	66	0	.05
6	.10	.10	.03	.18	.07	0	0	7.0	21	9.9	0	38
7	.10	.05	.03	.18	.07	0	0	.99	.54	3.2	0	124
8	.10	.03	.03	.18	.07	.41	0	.30	0	.10	0	24
9	.07	.03	.03	.18	.05	0	0	.05	0	.07	0	4.4
10	.07	.02	.03	.18	.05	0	0	.05	0	.05	0	1.4
11	.07	.01	.03	.18	.05	0	0	.03	0	87	0	.37
12	.07	.01	.03	.18	.03	0	.45	.03	0	346	0	.85
13	.07	.01	.03	.18	.03	0	.10	.01	0	59	0	1.8
14	.07	.01	.03	.18	.03	0	.03	.01	0	23	0	.94
15	.07	.01	.02	.18	.02	0	334	0	0	13	0	1.3
16	.07	.01	.02	.18	.02	0	216	0	0	477	0	.18
17	.07	.01	.03	.18	.02	0	402	0	0	151	0	.18
18	.07	.01	.03	.18	.01	0	3.2	0	0	30	0	.18
19	.05	.01	.03	.18	.01	0	.63	0	0	1.4	0	162
20	.05	.01	.03	.18	.01	0	.18	0	0	1.0	0	38
21	.18	.01	.03	.18	.01	0	.14	0	0	1.1	0	1.0
22	.30	.01	.07	.18	.01	0	.07	9.2	0	2.7	0	.37
23	.14	.01	.10	.18	.01	0	.03	.52	0	424	0	.18
24	.05	.01	.18	.14	.01	0	.02	0	0	208	0	.14
25	.05	.01	.37	.14	0	0	.02	0	0	11	0	.10
26	.05	110	.37	.14	0	0	.01	0	0	7.0	0	.07
27	.05	.07	.37	.14	0	0	.01	0	0	.86	0	.03
28	.05	.05	.37	.14	0	0	.25	0	0	.44	121	.02
29	.05	.03	.37	.14	0	0	.07	0	0	148	22	.01
30	.05	.03	.37	.14	---	0	.05	0	0	6.0	68	.01
31	.05	---	.37	.10	---	0	---	0	---	.44	6.8	---
TOTAL	3.04	178.07	3.55	5.90	.99	.41	957.26	80.21	57.54	2862.26	217.8	434.52
MEAN	.098	5.94	.11	.19	.034	.013	31.9	2.59	1.92	92.3	7.03	14.5
MAX	.30	110	.37	.37	.10	.41	402	62	36	752	121	162
MIN	.05	.01	.02	.10	0	0	0	0	0	0	0	.01
CFSM	0	.004	0	0	0	0	.02	.001	.001	.06	.004	.009
IN.	.00007	.005	.00009	.0001	.00002	.00001	.02	.002	.001	.07	.006	.01
AC-FT	6.0	353	7.0	12	2.0	.8	1900	159	114	5680	432	862
CAL YR 1975 TOTAL	7049.06											
WTR YR 1976 TOTAL	4801.55											
MEAN 19.3												
MAX 1200												
MIN 0												
CFSM .01												
IN .18												
AC-FT 13980												
IN .12												
AC-FT 9520												

PEAK DISCHARGE (BASE, 2,100 FT³/S).--July 3 (0800) 3,450 ft³/s (8.67 ft).

08079600 Double Mountain Fork Brazos River at Justiceburg, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT 01...	0830	1.5	7290	8.2	21.0	450	260	110	43	1400
NOV 01...	1330	24	1620	8.5	22.0	82	0	23	5.9	300
DEC 17...	0800	.16	13600	7.8	.0	650	650	200	86	2700
JAN 01...	1100	.95	16400	7.9	13.0	1100	870	260	100	3400
FEB 01...	1100	.60	14800	7.8	11.0	980	770	230	98	3100
APR 15...	1030	604	2400	8.0	18.0	230	0	52	25	430
16...	1115	115	944	7.9	14.0	110	0	28	9.6	160
MAY 10...	1100	31	14300	8.0	20.0	820	690	190	84	2900
JUN 06...	1100	110	930	8.3	25.0	71	0	21	4.4	160
JUL 13...	1630	19	1330	8.0	23.5	100	0	27	8.6	230
26...	1115	45	645	8.3	22.0	43	0	12	3.1	120
AUG 31...	1600	35	572	8.4	23.0	42	0	13	2.3	110
SEP 07...	1400	100	1300	8.3	25.0	120	0	31	9.5	230

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 01...	29	9.5	230	0	290	2100	1.3	13	4080
NOV 01...	14	3.9	188	8	130	310	.9	8.9	883
DEC 17...	40	9.5	243	0	530	4400	1.3	11	8060
JAN 01...	45	10	237	0	570	5600	--	9.4	10100
FEB 01...	43	11	251	0	560	5000	1.4	10	9130
APR 15...	12	10	298	0	300	460	2.6	19	1450
16...	6.7	7.0	182	0	97	140	1.6	13	546
MAY 10...	44	12	162	0	510	4700	--	12	8490
JUN 06...	8.3	3.0	180	0	41	170	1.1	11	500
JUL 13...	9.9	5.8	150	0	110	270	1.2	10	737
26...	8.0	3.0	164	0	53	81	1.1	11	365
AUG 31...	7.4	2.0	160	4	42	62	1.7	11	327
SEP 07...	9.3	8.7	204	0	150	200	2.0	13	745

08079600 Double Mountain Fork Brazos River at Justiceburg, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	3.04	12000	6950	57	3880	32	470	3.8	****
NOV. 1975.....	178.07	2250	1300	625	420	202	230	110	200
DEC. 1975.....	3.55	15800	9160	87	5250	51	540	5.1	****
JAN. 1976.....	5.9	15700	9110	145	5220	83	530	8.7	****
FEB. 1976.....	0.99	15200	8810	24	5030	13	520	1.3	****
MAR. 1976.....	0.41	16000	9280	10	5330	5.9	540	0.6	****
APR. 1976.....	957.26	1370	800	2060	250	654	140	353	120
MAY 1976.....	80.21	2550	1480	320	710	154	150	33	230
JUNE 1976.....	57.54	832	480	74	150	23	85	13	75
JULY 1976.....	2862.26	865	500	3890	170	1300	84	650	78
AUG. 1976.....	217.8	601	350	206	110	63	62	36	54
SEPT 1976.....	434.52	1250	720	849	240	283	120	144	110
TOTAL	4801.54	**	**	8350	**	2860	**	1360	**
WTD.AVG.	13.15	1110	640	**	220	**	110	**	100

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7230	3000	13500	16500	14600	---	---	16100	---	---	---	1220
2	8610	1610	14300	16400	14600	---	---	16100	---	---	---	4000
3	8800	3260	13500	16200	14900	---	---	---	---	---	---	6000
4	9670	8000	13700	16400	14800	---	---	---	---	1460	---	12600
5	9760	13200	13700	16500	14800	---	---	900	800	4280	---	14100
6	10500	13100	13700	15900	15400	---	---	1240	885	6120	---	2000
7	10500	13400	13500	14800	15800	---	---	15200	949	8000	---	1310
8	10800	13500	13500	13700	15900	16000	---	15200	---	11000	---	1000
9	10800	13700	13500	13400	16000	---	---	14600	---	11500	---	2970
10	11400	13800	13400	14000	16200	---	---	14300	---	12000	---	3040
11	11400	13700	13500	14600	15000	---	---	14300	---	700	---	3030
12	10600	13600	14300	16200	14900	---	16800	14400	---	682	---	4200
13	10600	13900	14300	16400	14900	---	16800	15200	---	987	---	4000
14	10600	14100	14300	16700	14700	---	16600	15400	---	1100	---	4600
15	11600	14000	14000	16900	15000	---	1770	---	---	1750	---	4200
16	11600	13900	13900	16900	14700	---	944	---	---	600	---	6950
17	11300	14100	13600	16300	15100	---	1200	---	---	720	---	8000
18	11300	13900	13200	16500	15400	---	1800	---	---	930	---	8200
19	11000	13700	13100	16500	15600	---	8000	---	---	6190	---	779
20	11000	13800	13000	15600	16000	---	14100	---	---	8200	---	801
21	18000	13800	13000	15800	16200	---	15300	---	---	8000	---	3000
22	20600	13600	13800	14900	16100	---	15900	12000	---	6200	---	4100
23	15000	13400	14200	15000	16100	---	16000	14100	---	580	---	6200
24	11600	13000	14800	15300	16100	---	16100	---	---	640	---	8000
25	11600	13000	15300	15500	---	---	16200	---	---	820	---	9200
26	11900	2400	16000	15900	---	---	16200	---	---	900	---	10000
27	12100	8300	16400	15000	---	---	16400	---	---	6190	---	10900
28	12000	13000	16300	14400	---	---	15200	---	---	8050	620	12000
29	12000	13600	17000	14600	---	---	16000	---	---	656	566	12000
30	13000	14200	17300	15000	---	---	16000	---	---	1100	569	12000
31	13000	---	17100	14600	---	---	---	---	---	8080	700	---
MONTH	11600	11800	14300	15600	15400	---	---	---	---	4080	---	6010

BRAZOS RIVER BASIN

08079600 Double Mountain Fork Brazos River at Justiceburg, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	22.0	10.0	13.0	11.0		---	---	---	---	---	24.0
2	20.0	19.0	10.0	12.0	11.0		---	---	---	---	---	25.0
3	20.0	19.0	10.0	7.0	11.0		---	---	---	15.0	---	27.0
4	20.5	20.0	12.0	7.0	11.0		---	---	---	24.0	---	26.0
5	20.5	21.0	13.0	7.0	11.0		---	---	---	24.0	---	25.0
6	20.0	21.0	9.0	5.0	13.0		---	17.0	25.0	---	---	27.0
7	20.0	20.0	9.0	4.0	13.0		---	20.0	25.0	---	---	25.0
8	20.0	19.0	10.0	4.0	13.0		---	15.0	---	---	---	25.0
9	20.0	19.0	11.0	4.0	13.0		---	20.0	---	---	---	26.0
10	20.5	16.0	11.0	7.0	17.0		---	20.0	---	---	---	26.0
11	20.5	14.0	11.0	7.0	17.0		---	20.0	---	---	---	27.0
12	22.0	14.0	14.0	8.0	17.0		25.0	---	---	21.0	---	---
13	22.0	16.0	16.0	8.0	17.0		25.0	---	---	21.0	---	---
14	24.0	18.0	16.0	9.0	17.0		22.0	---	---	21.0	---	---
15	24.0	17.0	11.0	9.0	18.0		22.0	---	---	21.0	---	---
16	24.0	16.0	10.0	9.0	18.0		20.0	---	---	23.0	---	---
17	21.0	16.0	9.0	11.0	18.0		18.0	---	---	21.0	---	---
18	19.0	17.0	9.0	13.0	18.0		25.0	---	---	21.0	---	---
19	24.0	15.0	9.0	13.0	18.0		25.0	---	---	21.0	---	31.0
20	24.0	15.0	8.0	13.0	18.0		26.0	---	---	---	---	22.0
21	20.0	16.0	7.0	12.0	10.0		28.0	---	---	---	---	---
22	19.0	16.0	8.0	10.0	10.0		24.0	---	---	---	---	---
23	19.0	16.0	9.0	9.0	10.0		24.0	---	---	---	---	---
24	19.0	15.0	9.0	10.0	10.0		24.0	---	---	21.0	---	---
25	14.0	16.0	9.0	10.0	---		---	---	---	22.0	---	---
26	22.0	16.0	11.0	9.0	---		---	---	---	22.0	---	---
27	23.0	10.0	11.0	10.0	---		---	---	---	21.0	---	---
28	23.0	11.0	12.0	10.0	---		---	---	---	22.0	---	---
29	23.0	10.0	12.0	10.0	---		---	---	---	20.0	23.0	---
30	23.0	10.0	12.0	10.0	---		---	---	---	22.0	22.0	---
31	23.0	---	12.0	10.0	---		---	---	---	22.0	23.0	---
MONTH	21.6	16.5	10.5	9.0	14.0		---	---	---	---	---	---

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.

LOCATION.--Lat 33°00'29", long 100°10'49", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 83, 0.3 mile (0.5 km) downstream from Hitson Creek, 10 miles (16 km) south of Aspermont, and at mile 34.5 (55.5 km) measured from confluence with Salt Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA (revised).--8,796 mi² (22,782 km²), approximately, of which 6,932 mi² (17,954 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: December 1923 to September 1934, June 1939 to current year.

Water quality: Chemical analyses: October 1948 to November 1951, October 1956 to current year. Water temperatures: November 1949 to November 1951, October 1956 to current year. Sediment records: November 1949 to September 1951.

GAGE.--Water-stage recorder. Datum of gage is 1,624.79 ft (495.236 m) above mean sea level. Dec. 3, 1923, to Sept. 30, 1934, nonrecording gage at site 90 ft (27 m) downstream at datum 2.0 ft (0.61 m) higher, and June 8, 1939, to Aug. 12, 1972, recording gage at present site and at datum 2.0 ft (0.61 m) higher.

AVERAGE DISCHARGE.--47 years (1924-34, 1939-76), 168 ft³/s (4,758 m³/s), 1.22 in/yr (31 mm/yr), 121,700 acre-ft/yr (150 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 3,010 ft³/s (85.2 m³/s) Apr. 28 (gage height, 6.53 ft or 1.990 m); no flow at times.

Period of record: Maximum discharge, 91,400 ft³/s (2,590 m³/s) Sept. 26, 1955 (gage height, 29.5 ft or 8.99 m, present datum); no flow at times most years.

Historic: Maximum stage since at least 1899, that of Sept. 26, 1955.

Water quality: Current year: Maximum daily specific conductance, 11,400 micromhos Mar. 21, 27, 28, 30; minimum daily, 1,160 micromhos July 29. Maximum water temperatures, 25.0°C on several days during July and August; minimum, freezing point Dec. 18.

Period of record: Maximum daily specific conductance, 12,800 micromhos May 30, 1973; minimum daily, 735 micromhos Oct. 24, 1957.

Maximum water temperatures (1949-51, 1956-67, 1969-76), 38.0°C July 18, 1966; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. Small diversions above station for oilfield operations.

REVISIONS (WATER YEARS).--WSP 733: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	8.0	5.3	11	1.8	.40	.04	122	5.4	14	80	4.4
2	37	567	5.0	11	1.8	.35	.04	68	4.0	1.8	45	1.5
3	31	491	5.0	8.9	1.7	.35	.05	64	2.8	.49	26	.78
4	30	432	5.0	8.5	1.4	.30	0	51	2.1	6.0	16	.66
5	27	200	4.7	8.6	1.2	.30	.06	85	2.3	105	11	15
6	25	119	4.1	8.0	1.2	.25	.07	81	3.0	73	7.7	5.7
7	23	69	4.1	7.0	1.2	.33	.11	51	10	45	5.5	4.4
8	22	50	4.1	6.0	1.4	1.7	.11	41	1.3	29	3.8	604
9	20	40	4.0	5.0	1.5	1.5	.05	36	1.2	22	2.6	627
10	18	33	3.8	5.5	1.2	1.4	.04	48	4.7	22	1.6	242
11	17	30	3.8	7.6	1.1	1.4	.01	37	2.5	286	1.1	446
12	16	26	3.8	7.6	1.0	.90	.58	29	.88	829	.89	192
13	15	23	3.6	5.3	.90	.44	18	22	.23	375	.67	226
14	14	21	3.0	4.4	.90	.44	8.0	17	.03	520	.44	1090
15	16	19	2.8	4.4	.90	.44	4.3	14	0	187	.32	228
16	16	17	2.4	4.4	.90	.33	247	13	0	291	.20	83
17	16	14	2.0	3.6	.80	.24	733	10	0	692	.14	34
18	13	13	1.5	3.6	.72	.15	877	8.8	0	448	.09	24
19	13	16	1.5	3.0	.64	.12	336	8.0	0	269	.08	114
20	12	27	2.4	2.0	.64	.02	146	7.0	0	140	.05	213
21	11	14	2.4	2.2	.56	.06	81	6.3	0	72	.05	573
22	11	13	2.4	2.4	.50	.08	49	5.6	0	44	.03	220
23	14	11	2.4	2.8	.44	.09	31	2.3	.02	34	0	109
24	12	10	19	2.4	.44	.08	24	93	0	26	0	67
25	11	10	26	2.2	.44	.08	18	200	0	19	0	49
26	9.6	9.6	14	2.0	.44	.03	14	114	0	112	0	54
27	9.6	9.2	12	2.0	.44	.03	11	75	0	94	0	32
28	8.8	8.4	10	2.2	.44	.07	228	50	0	59	0	24
29	8.4	8.0	10	2.0	.40	.06	415	35	0	555	.27	22
30	8.0	6.9	9.0	2.0	---	.01	212	24	0	73	13	21
31	8.0	---	11	2.0	---	.06	---	13	---	45	27	---
TOTAL	535.4	2315.1	190.1	150.2	27.00	12.01	3853.46	1476.7	40.46	5488.29	243.53	5326.44
MEAN	17.3	77.2	6.13	4.85	.93	.39	128	47.6	1.35	177	7.86	178
MAX	43	567	26	11	1.8	1.7	877	200	10	829	80	1090
MIN	8.0	6.9	1.5	2.0	.40	.01	0	5.6	0	.49	0	.66
CFSM	.001	.008	0	0	0	0	.01	.005	0	.02	0	.02
IN.	.002	.010	.0008	.0006	.0001	.00005	.02	.006	.0002	.02	.001	.02
AC-FT	1060	4590	377	298	54	24	7640	2930	80	10890	483	10560

CAL YR 1975 TOTAL 38951.27 MEAN 107 MAX 5980 MIN .14 CFSM .01 IN .16 AC-FT 77260
WTR YR 1976 TOTAL 19658.69 MEAN 53.7 MAX 1090 MIN 0 CFSM .006 IN .08 AC-FT 38990

PEAK DISCHARGE (BASE, 8,800 FT³/S).--No peak above base.

BRAZOS RIVER BASIN

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT. 31...	0820	1.8	7750	7.9	15.0	2000	1900	590	120	1100
NOV. 10...	1145	30	4210	7.8	18.0	950	430	280	61	570
DEC. 15...	1215	2.7	8550	7.8	7.0	2200	2100	650	140	1200
JAN. 27...	0915	2.1	9530	7.6	.0	2400	2300	730	150	1400
FEB. 29...	0800	.55	10100	7.7	12.0	3000	2800	890	180	1400
MAR. 31...	0745	.16	11500	7.8	4.0	3300	3200	1000	200	1400
APR. 19...	1535	260	1630	7.6	23.0	340	190	96	25	220
MAY 31...	0755	6.4	4930	7.7	19.0	1200	1100	350	79	690
JULY 13...	0730	381	1450	7.6	23.5	650	570	220	24	80
AUG. 12...	0750	20	6740	8.0	22.0	1800	1700	530	110	930
SEP. 30...	0800	30	4640	7.9	16.0	1200	1100	360	72	660

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 31...	11	14	81	0	1700	1800	.5	10	5370
NOV. 10...	8.0	8.6	143	0	880	820	.9	9.5	2700
DEC. 15...	11	14	124	0	1900	2100	.7	8.7	6070
JAN. 27...	12	13	142	0	1900	2400	--	7.8	6670
FEB. 29...	11	14	150	0	2000	2700	.7	10	7270
MAR. 31...	11	16	155	0	1900	3100	--	12	7700
APR. 19...	5.2	7.5	190	0	310	240	1.1	14	1010
MAY 31...	8.7	15	124	0	1100	1100	1.6	11	3410
JULY 13...	1.4	5.8	94	0	560	110	.5	10	1060
AUG. 12...	9.6	15	124	0	1500	1600	--	15	4760
SEP. 30...	8.3	11	140	0	1000	990	.9	11	3170

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	535.4	6210	4300	6210	1420	2050	1400	2020	1660
NOV. 1975.....	2315.1	3270	2230	13900	640	4010	740	4600	870
DEC. 1975.....	190.1	7990	5550	2850	1940	996	1760	902	2140
JAN. 1976.....	150.2	8650	6010	2440	2140	868	1860	753	2310
FEB. 1976.....	26.6	9390	6530	469	2390	172	1920	137	2510
MAR. 1976.....	12	9540	6630	215	2440	79	1920	62	2550
APR. 1976.....	3853.46	2310	1550	16200	390	4010	520	5410	620
MAY 1976.....	1476.7	4130	2830	11300	870	3470	930	3690	1100
JUNE 1976.....	40.46	6640	4600	502	1560	171	1430	157	1770
JULY 1976.....	5488.29	1820	1210	17900	260	3850	410	6080	490
AUG. 1976.....	243.53	3110	2120	1390	600	394	700	460	830
SEPT. 1976.....	5326.44	1730	1150	16500	250	3570	390	5630	460
TOTAL	19658.27	**	**	89900	**	23600	**	29900	**
WTD.AVG.	53.86	2510	1700	**	450	**	560	**	670

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C); WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4350	7760	8350	8530	9410	10600	11200	2590	6000	3000	3460	3120
2	4500	2900	8360	7850	9360	10500	11200	3100	6730	2070	2360	3480
3	4750	3850	8290	7910	9280	10500	11200	3590	7290	4500	2270	4670
4	4980	1970	8290	7910	9280	10000	---	3390	7760	3240	2790	5580
5	5390	1690	8160	7850	9360	10700	11000	3920	7850	3060	3360	4000
6	5670	2250	8360	7450	9160	10300	11000	3010	7670	2570	3960	2100
7	5850	2590	8300	9190	9040	9900	10700	5730	5000	2480	4560	2900
8	6090	3120	8230	9270	9120	8320	10400	6340	4670	2070	5200	1560
9	6240	3620	8360	9030	9120	8390	11200	6400	6000	1700	5730	1190
10	6440	4210	8360	9060	9280	9140	11200	5000	11200	2610	6150	2240
11	6580	4610	8360	7900	9320	9310	11300	5200	3850	1580	6500	1940
12	6670	4930	8370	8760	9280	9670	11200	5430	4830	1830	6710	1670
13	6870	5480	8370	9030	9120	10200	6000	5920	6100	1450	6890	1510
14	7030	5790	8370	9110	9080	9810	2350	6770	7070	1980	7030	1190
15	6440	6100	8550	9110	9080	10200	6220	7550	---	1710	7170	2050
16	6870	6370	8470	9110	9040	10500	2900	7400	---	1590	7700	1670
17	7140	6610	8470	9110	9280	10300	2400	8060	---	1480	8000	2050
18	7490	6800	9270	9270	9670	10800	2150	8250	---	2040	8250	2650
19	7550	7020	8870	9440	9760	10700	1630	8500	---	2190	8560	2600
20	7690	4690	8230	9360	9630	11200	1620	8640	---	1840	8820	2620
21	7490	6520	8470	9440	10100	11400	1730	8710	---	1880	9210	1970
22	7440	6770	8230	9360	10100	11000	2030	8930	---	2220	9090	1710
23	7300	7480	8370	9360	10000	11000	2480	9140	7710	2390	---	1890
24	7360	7540	7020	9360	10200	11000	3060	6100	---	2970	---	1920
25	7690	7320	6000	9270	10700	11200	3820	3100	---	3510	---	2250
26	7690	7790	6800	9270	10100	11200	4440	2400	---	3000	---	2720
27	7800	7790	8570	9530	10100	11400	4960	2290	---	2260	---	3270
28	7800	8040	9400	9190	10100	11400	3000	2570	---	1890	---	3750
29	7740	7950	8870	9270	10000	11000	2150	3190	---	1160	9500	4190
30	7740	8540	9270	9360	---	11400	2800	4040	---	2030	3700	4630
31	7740	---	9490	9360	---	11300	---	4930	---	2790	2050	---
MONTH	6720	5600	8350	8940	9550	10500	6120	5520	---	2290	5960	2640

TEMPERATURE (DEG. C) OF WATER; WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	17.0	3.0	5.0	5.0	10.0	6.0	12.0	20.0	23.0	25.0	21.0
2	---	---	5.0	4.0	5.0	13.0	8.0	23.0	19.0	21.0	25.0	21.0
3	12.0	14.0	6.0	1.0	4.0	15.0	15.0	13.0	19.0	23.0	23.0	21.0
4	13.0	15.0	9.0	1.0	6.0	9.0	---	15.0	20.0	22.0	24.0	22.0
5	13.0	15.0	12.0	1.0	4.0	3.0	12.0	17.0	21.0	22.0	24.0	24.0
6	14.0	15.0	5.0	4.0	1.0	5.0	15.0	16.0	20.0	23.0	23.0	22.0
7	15.0	15.0	---	1.0	2.0	7.0	15.0	14.0	20.0	22.0	24.0	22.0
8	14.0	15.0	5.0	1.0	4.0	7.0	11.0	14.0	20.0	22.0	23.0	22.0
9	17.0	16.0	6.0	1.0	6.0	4.0	10.0	---	20.0	22.0	22.0	20.0
10	17.0	12.0	6.0	---	10.0	9.0	13.0	---	21.0	24.0	22.0	17.0
11	18.0	11.0	8.0	---	10.0	12.0	15.0	---	22.0	21.0	23.0	20.0
12	---	9.0	7.0	3.0	8.0	7.0	16.0	20.0	23.0	25.0	22.0	22.0
13	19.0	6.0	8.0	5.0	11.0	4.0	16.0	15.0	23.0	24.0	22.0	22.0
14	20.0	7.0	14.0	3.0	12.0	2.0	19.0	13.0	22.0	23.0	22.0	20.0
15	19.0	8.0	5.0	3.0	12.0	8.0	19.0	14.0	---	23.0	22.0	23.0
16	15.0	9.0	3.0	4.0	10.0	4.0	12.0	16.0	---	25.0	22.0	23.0
17	13.0	11.0	2.0	4.0	8.0	7.0	16.0	15.0	---	23.0	23.0	23.0
18	11.0	---	0.0	5.0	6.0	9.0	13.0	15.0	---	25.0	23.0	23.0
19	12.0	15.0	1.0	7.0	6.0	11.0	17.0	17.0	---	25.0	24.0	---
20	14.0	7.0	2.0	2.0	11.0	9.0	15.0	1.0	---	24.0	23.0	21.0
21	15.0	4.0	2.0	1.0	3.0	3.0	13.0	16.0	---	22.0	21.0	19.0
22	18.0	5.0	2.0	2.0	1.0	6.0	17.0	13.0	---	23.0	22.0	19.0
23	14.0	4.0	6.0	8.0	2.0	7.0	19.0	20.0	22.0	22.0	---	19.0
24	14.0	4.0	5.0	7.0	5.0	13.0	17.0	20.0	---	24.0	---	21.0
25	10.0	5.0	---	5.0	6.0	12.0	14.0	22.0	---	25.0	---	22.0
26	12.0	1.0	4.0	3.0	5.0	15.0	15.0	1.0	---	23.0	---	21.0
27	15.0	3.0	5.0	2.0	6.0	7.0	17.0	17.0	---	24.0	---	20.0
28	14.0	6.0	6.0	2.0	10.0	11.0	19.0	15.0	---	24.0	---	15.0
29	12.0	16.0	5.0	4.0	12.0	12.0	14.0	1.0	---	22.0	---	14.0
30	12.0	4.0	3.0	5.0	---	7.0	14.0	20.0	---	24.0	22.0	16.0
31	15.0	---	4.0	4.0	---	4.0	---	1.0	---	25.0	22.0	---
MONTH	14.5	9.5	5.0	3.5	6.5	8.0	14.5	17.0	---	23.0	---	20.5

08080540 McDonald Creek near Post, Tex.

LOCATION.--Lat 33°21'03", long 101°13'36", Garza County, on right bank at downstream side of bridge on Farm Road 65i, 2.6 miles (4.2 km) downstream from Lake Creek, 4.1 miles (6.6 km) upstream from mouth, and 14.4 miles (23.2 km) northeast of Post.

DRAINAGE AREA (revised).--103 mi² (267 km²), of which 23.8 mi² (61.6 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: 1959-61, occasional low-flow measurements at road crossing 4 miles (6 km) downstream, September 1965 to current year.

Water quality: Chemical analyses: October 1965 to current year. Water temperatures: October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,301.6 ft (701.53 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--11 years, 1.85 ft³/s (0.0524 m³/s), 0.32 in/yr (8 mm/yr), 1,340 acre-ft/yr (1.65 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Apr. 14 (gage height, 6.90 ft or 2.103 m); no flow for many days.

Period of record: Maximum discharge, 15,300 ft³/s (433 m³/s) June 9, 1968 (gage height, 14.98 ft or 4.566 m), from rating curve extended above 740 ft³/s (21.0 m³/s) on basis of slope-area measurements of 3,020 and 15,300 ft³/s (85.5 and 433 m³/s); no flow for many days.

Water quality: Current year: Maximum daily specific conductance, 57,700 micromhos Jan. 19; minimum daily, 1,900 micromhos Apr. 15.

Period of record: Maximum daily specific conductance (1965-66, 1973-76), 76,400 micromhos Dec. 9, 1974; minimum daily, 975 micromhos Aug. 29, 1966. Maximum water temperatures (1965-66), 29.0°C Sept. 1, 1966; minimum, 10.0°C Apr. 30, 1966.

REMARKS.--Discharge records poor. No diversions above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.82	0	0		0	0	.02	0	0	.05	2.3
2	0	7.9	0	0		0	0	.01	0	1.4	.02	.01
3	0	.02	0	0		0	0	.01	.03	4.4	.38	0
4	0	0	0	0		0	0	0	0	3.1	.11	0
5	0	0	0	.01		0	0	0	5.5	.16	.04	0
6	0	0	0	.01		0	0	0	1.3	0	.01	8.3
7	0	0	0	.01		0	0	0	0	0	0	3.3
8	0	0	.01	0		.02	0	0	0	0	0	13
9	0	0	0	0		.01	0	0	0	0	0	13
10	0	0	0	0		0	0	0	0	3.6	0	1.2
11	0	0	0	0		0	2.9	0	0	1.0	0	.12
12	0	0	0	0		0	3.7	0	0	.58	0	.05
13	0	0	0	0		0	.02	0	0	3.1	0	.01
14	0	0	0	0		0	127	0	0	1.5	0	0
15	0	0	0	0		0	437	0	0	3.6	0	0
16	0	0	0	0		0	48	0	0	30	0	0
17	0	0	0	0		0	9.8	0	0	5.2	0	0
18	0	0	0	0		0	.95	0	0	1.5	0	0
19	0	.43	0	.01		0	.35	0	0	.08	0	9.6
20	0	0	0	0		0	.11	0	0	.05	0	.54
21	.52	0	0	0		0	.05	0	0	.04	0	.02
22	0	0	0	0		0	.02	0	.76	.02	0	0
23	0	0	0	0		0	.01	0	.16	.84	0	0
24	0	0	0	.01		0	0	0	0	.10	0	0
25	0	0	0	.01		0	0	0	0	.05	0	0
26	0	0	0	.01		0	0	0	0	.04	0	0
27	0	0	0	.01		0	0	0	0	.03	0	.25
28	0	0	.20	0		0	39	0	0	.02	2.5	0
29	0	.01	0	0		0	5.4	0	0	.20	0	0
30	0	0	0	0	---	0	.03	0	0	.13	0	0
31	0	---	0	0	---	0	---	0	---	.08	1.9	---
TOTAL	.52	9.18	.21	.08	0	.03	674.34	.04	7.75	60.82	5.01	51.70
MEAN	.017	.31	.007	.003	0	.001	22.5	.001	.26	1.96	.16	1.72
MAX	.52	7.9	.20	.01	0	.02	437	.02	5.5	30	2.5	13
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	0	.003	0	0	0	0	.22	0	.002	.02	.001	.02
IN.	.0002	.003	.00007	.00002	0	.00001	.24	.00001	.003	.02	.002	.02
AC-FT	1.0	18	.4	.2	0	.06	1340	.08	15	121	9.9	103

CAL YR 1975 TOTAL 296.43 MEAN .80 MAX 91 MIN 0 CFSM .007 IN .10 AC-FT 576
WTR YR 1976 TOTAL 809.68 MEAN 2.21 MAX 437 MIN 0 CFSM .02 IN .29 AC-FT 1610

PEAK DISCHARGE (BASE, 500 FT³/S).--Apr. 14 (2300) 1,200 ft³/s (6.90 ft).

08060540 McDonald Creek near Post, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
NOV 02...	1430	5.0	8220	8.3	20.0	520	380	140	42	1600
DEC 08...	0700	.01	56000	8.2	--	2100	2000	440	250	14000
JAN 27...	1445	.01	49700	7.7	10.0	1900	1700	400	220	12000
MAR 09...	1230	.01	69900	7.5	14.0	3500	3300	830	350	18000
APR 15...	0230	1030	2070	8.0	14.5	170	20	47	13	360
JUN 05...	1830	47	29300	7.7	25.0	1400	1300	390	100	6500
JUL 13...	1230	2.2	25100	7.5	23.0	880	800	260	55	5700
AUG 03...	1830	.42	14800	7.6	27.0	620	530	160	53	3100
SEP 01...	0730	1.6	47500	7.5	17.0	2500	2400	670	200	11000

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV 02...	30	9.0	173	0	330	2400	1.1	11	4620
DEC 18...	132	27	150	0	2300	22000	--	1.4	39100
JAN 27...	120	25	211	0	2200	18000	--	3.2	33000
MAR 19...	132	32	245	0	3400	27000	--	3.7	49700
APR 15...	12	5.0	184	0	91	520	1.1	14	1140
JUN 05...	76	16	144	0	1400	10000	--	8.3	18500
JUL 13...	84	18	88	0	1100	8600	--	3.7	15800
AUG 03...	54	11	112	0	720	4700	--	4.4	8800
SEP 01...	96	32	86	0	2500	17000	--	4.1	31400

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	0.52	54000	36400	51	19600	28	2580	3.6	****
NOV. 1975.....	9.18	12000	7270	180	3850	95	520	13	****
DEC. 1975.....	0.21	52800	35600	20	19200	11	2520	1.5	****
JAN. 1976.....	0.08	52500	35300	7.7	19000	4.1	2500	0.5	****
FEB. 1976.....	0	*****	*****	0	*****	0	*****	0	****
MAR. 1976.....	0.03	53800	36300	3	19500	1.6	2570	0.2	****
APR. 1976.....	674.34	2470	1350	2460	640	1170	100	188	180
MAY 1976.....	0.04	24700	15300	1.7	8360	0.9	1050	0.1	****
JUNE 1976.....	7.75	9760	5680	119	2990	63	400	8.4	500
JULY 1976.....	60.82	12900	7700	1260	4090	672	540	88	****
AUG. 1976.....	5	20400	12200	166	6710	91	850	11	****
SEPT 1976.....	51.7	16200	10400	1450	5560	775	740	103	****
TOTAL	809.68	**	**	5720	**	2910	**	417	**
WTD.AVG.	2.22	4470	2600	**	1300	**	190	**	260

Brazos River Basin

08080540 McDonald Creek near Post, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---		---		---	---		---	---	---	17.0
2		20.0		---		---	---		---	---	---	16.0
3		17.0		---		---	---		---	20.0	27.0	---
4				---		---	---		---	23.0	---	---
5		---		---		---	---		25.0	---	---	---
6		---		9.0		---	---		27.0	---	---	---
7		---		0.0		---	---		---	---	---	18.0
8		---		---		5.0	---		---	---	---	21.0
9		---		---		---	---		---	---	---	16.0
10		---		---		---	---		---	23.0	---	---
11		---		---		---	---		---	---	---	---
12		---		---		---	14.0		---	25.0	---	---
13		---		---		---	15.0		---	21.0	---	19.0
14		---		---		---	13.0		---	---	---	---
15		---		---		---	9.0		---	27.0	---	---
16		---		---		---	16.0		---	---	---	---
17		---		---		---	12.0		---	31.0	---	---
18		---		---		---	20.0		---	30.0	---	---
19		---		4.0		---	---		---	---	---	16.0
20		---		---		---	---		---	---	---	18.0
21		---		---		---	---		---	---	---	15.0
22		---		---		---	---		---	---	---	---
23		---		---		---	---		---	25.0	---	---
24		---		9.0		---	---		---	---	---	---
25		---		7.0		---	---		---	---	---	---
26		---		---		---	---		---	---	---	---
27		---		---		---	---		---	---	---	16.0
28		---		---		---	14.0		---	---	---	---
29		---		---		---	---		---	---	---	---
30		---		---		---	15.0		---	---	---	---
31		---		---		---	---		---	28.0	---	---
MONTH		---		---		---	---		---	---	---	---

08080700 Running Water Draw at Plainview, Tex.

LOCATION.--Lat 34°10'44", long 101°42'08", Hale County, on downstream side of bridge on Broadway Street in Plainview, 0.5 mile (0.8 km) upstream from Atchison, Topeka, and Santa Fe Railway Co. bridge, and 28.1 miles (45.2 km) above mouth.

DRAINAGE AREA (revised).--1,291 mi² (3,344 km²), of which 909 mi² (2,354 km²) is noncontributing.

PERIOD OF RECORD.--June 1939 to September 1949, October 1949 to September 1953, and October 1956 to April 1960 (monthly figures only), February 1961 to current year. Prior to October 1963, published as White River at Plainview.

GAGE.--Water-stage recorder. Datum of gage is 3,341.11 ft (1,018.370 m) above mean sea level.

AVERAGE DISCHARGE.--32 years (1939-53, 1956-59, 1961-76), 3.20 ft³/s (0.0906 m³/s), 0.03 in/yr (1 mm/yr), 2,320 acre-ft/yr (2.86 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24 ft³/s (0.96 m³/s) July 10 (gage height, 2.06 ft or 0.638 m); no flow most of year.

Period of record: Maximum discharge, 12,000 ft³/s (340 m³/s) June 6, 1941 (gage height, 8.75 ft or 2.667 m), from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of slope-area measurement of 12,000 ft³/s (340 m³/s); no flow most of time.

Maximum discharge since at least 1880, that of June 6, 1941; maximum stage, 9.38 ft (2.859 m) July 8, 1960 (discharge, 9,130 ft³/s or 259 m³/s, by contracted-opening measurement). A flood in 1890, stage not determined, was probably the second highest, from information by local residents.

REMARKS.--Records fair. No diversion above station. At end of year, flow from 29.2 mi² (75.6 km²) above this station was partly controlled by one floodwater-retarding structure with a detention capacity of 3,560 acre-ft (4.39 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	3.5	0			0	0	0	0	0	0	0
2	0	2.4	0			0	0	0	0	0	0	0
3	0	.05	0			0	0	0	0	0	.85	0
4	0	0	0			0	0	0	0	0	.03	0
5	0	0	0			0	0	0	.06	0	0	0
6	0	0	0			0	0	0	0	0	0	0
7	0	0	0			0	0	0	0	0	0	0
8	0	0	0			.22	0	0	.01	0	0	0
9	0	0	0			0	0	0	0	0	0	0
10	0	0	0			0	0	0	0	5.7	0	0
11	0	0	0			0	.08	0	0	.47	0	0
12	0	0	0			0	0	0	0	2.2	0	0
13	0	0	0			0	0	0	0	11	0	0
14	.12	0	0			0	1.1	0	0	6.7	0	0
15	0	0	0			0	5.1	0	0	.77	0	0
16	0	0	0			0	1.0	0	0	2.2	0	.04
17	0	0	0			0	.36	0	0	0	0	0
18	0	0	0			0	0	0	0	0	0	0
19	0	.35	0			0	0	0	0	0	0	0
20	0	0	0			0	0	0	0	0	0	0
21	0	0	0			0	0	0	0	0	0	0
22	0	0	0			0	0	0	0	0	0	0
23	0	0	0			0	0	.10	0	0	0	0
24	0	0	.36			0	0	0	0	0	0	0
25	0	0	0			0	0	0	0	0	0	0
26	0	0	0			0	0	0	0	0	0	0
27	0	0	0			0	0	0	0	0	0	5.4
28	0	0	0			0	0	0	0	.32	0	.44
29	0	0	0			0	0	0	0	.06	.01	0
30	0	0	0		---	0	0	0	0	0	0	0
31	0	---	0		---	0	---	0	---	0	0	---
TOTAL	.12	6.30	.36	0	0	.22	7.64	.10	.07	29.42	.89	5.88
MEAN	.004	.21	.012	0	0	.007	.25	.003	.002	.95	.029	.20
MAX	.12	3.5	.36	0	0	.22	5.1	.10	.06	11	.85	5.4
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	0	0	0	0	0	0	0	0	0	0	0	0
IN.	0	.0002	.00001	0	0	0	.0002	0	0	.0008	.00002	.0002
AC-FT	.2	12	.7	0	0	.4	15	.2	.1	58	1.8	12

CAL YR 1975 TOTAL 138.31 MEAN .38 MAX 17 MIN 0 CFSM 0 IN .004 AC-FT 274
WTR YR 1976 TOTAL 51.00 MEAN .14 MAX 11 MIN 0 CFSM 0 IN .002 AC-FT 101

PEAK DISCHARGE (BASE, 100 FT³/S).--No peak above base.

08080910 White River Reservoir near Spur, Tex.

LOCATION.--Lat 33°27'28", long 101°05'22", Crosby County, on right bank at intake structure at White River Dam on White River, 0.5 mile (0.8 km) downstream from Sand Creek, 1.7 miles (2.7 km) upstream from Home Creek, 13 miles (21 km) west of Spur, and 22.8 miles (36.7 km) upstream from Salt Fork Brazos River.

DRAINAGE AREA (revised).--3,069 mi² (7,946 km²), of which 2,380 mi² (6,164 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: April 1964 to September 1976 (discontinued).

Water quality: Chemical analyses: October 1969 to July 1975.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 42,600 acre-ft (52.5 hm³) Oct. 1 (elevation, 2,371.33 ft or 722.781 m); minimum, 37,640 acre-ft (46.4 hm³) Apr. 11 (elevation 2,368.67 ft or 721.971 m).
Period of record: Maximum contents, 45,580 acre-ft (56.2 hm³) Oct. 25, 1974 (elevation, 2,372.84 ft or 723.242 m); minimum since reaching normal operating level in June 1969, 25,990 acre-ft (32.0 hm³) June 1, 1974 (elevation, 2,361.39 ft or 719.752 m).

REMARKS.--The reservoir is formed by a rolled earthfill dam 3,300 ft (1,010 m) long. The dam was completed and storage began in October 1963. The emergency spillway is an open cut channel through rock, 1,100 ft (335 m) wide, located at the right end of dam. The spillway is designed to discharge 69,000 ft³/s (1,950 m³/s) with a 7.5-foot (2.3-meter) head. The uncontrolled service spillway is a 5.0-foot (1.5-meter) square drop-inlet structure that discharges through a 5.0-foot (1.5-meter) square concrete conduit. The service outlet is a controlled 18-inch-diameter (457-millimeter) concrete pipe that is connected to the 5.0-foot (1.5-meter) conduit. There is a pump station about 1,400 ft (427 m) upstream from the dam on the right bank. The pump station is connected to the lake by a 58-inch-diameter (1,473-millimeter) concrete pipe. The water in the reservoir is used for municipal and industrial supplies for the cities of Crosbyton, Post, Ralls, and Spur. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station No. 08080700. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	2,395.0	
Crest of spillway.....	2,384.0	71,590
Crest of spillway (top of conservation pool).....	2,372.5	44,900
Lowest gated outlet (invert).....	2,331.2	2,270

COOPERATION.--Records of diversion and capacity table (dated July 1960) furnished by the White River Municipal Water District.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,368.0	36,450
2,370.0	40,070
2,372.0	43,900

CONTENTS. IN ACRE-FEET. WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42500	41510	40620	40130	39540	38870	37910	41240	40150	38780	39150	38230
2	42440	41600	40600	40110	39520	38840	37870	41220	40110	38780	39150	38230
3	42410	41580	40580	40090	39500	38800	37860	41170	40070	38780	39150	38230
4	42350	41560	40560	40070	39480	38750	37820	41130	40070	38780	39150	38230
5	42330	41530	40540	40030	39460	38710	37800	41220	40070	38970	39150	38230
6	42290	41490	40500	40030	39430	38690	37960	41200	40070	38970	39150	38250
7	42250	41470	40490	39960	39430	38690	37750	41150	39890	38970	39150	38600
8	42210	41430	40470	39960	39430	38730	37730	41110	39890	38970	38970	38780
9	42190	41390	40450	39940	39410	38710	37700	41090	39890	38970	38970	38780
10	42150	41360	40430	39920	39390	38690	37660	41090	39890	38970	38970	38970
11	42120	41320	40410	39920	39370	38670	37700	41050	39890	38970	38970	38970
12	42100	41260	40390	39900	39370	38620	37750	41020	39890	38970	38970	38970
13	42060	41220	40370	39890	39370	38580	37750	40940	39700	38970	38970	38970
14	42060	41200	40370	39870	39350	38560	37930	40880	39700	38970	38970	38970
15	42000	41170	40330	39850	39350	38520	39890	40860	39520	38970	38970	38970
16	41960	41150	40320	39850	39320	38490	40110	40810	39520	38970	38970	38970
17	41900	41130	40260	39830	39280	38450	40390	40770	39330	38970	38970	38970
18	41870	41110	40220	39830	39240	38430	40390	40710	39330	39150	38970	38970
19	41810	41110	40200	39790	39210	38400	40370	40670	39330	39150	38970	40070
20	41790	41050	40180	39780	39210	38350	40330	40640	39330	39150	38970	40070
21	41770	41020	40160	39760	39080	38320	40320	40620	39150	39150	38780	40070
22	41750	40960	40160	39740	39060	38290	40300	40620	39150	39150	38780	40070
23	41710	40940	40160	39740	39020	38230	40370	40580	39150	39150	38600	39890
24	41680	40900	40240	39720	38980	38230	40330	40540	39150	39150	38600	39890
25	41600	40860	40220	39700	38970	38190	40280	40500	39150	39150	38410	39890
26	41560	40790	40220	39670	38950	38140	40260	40430	38970	39150	38320	39700
27	41530	40770	40220	39650	38930	38110	40240	40370	38970	39150	38230	39700
28	41510	40750	40220	39650	38910	38070	41130	40330	38970	39150	38230	39520
29	41470	40730	40200	39650	38890	38050	41200	40280	38780	39150	38230	39520
30	41410	40640	40180	39630	---	37960	41260	40240	38780	39150	38230	39330
31	41390	---	40160	39570	---	37950	---	40180	---	39150	38230	---
(†)	2370.70	2370.30	2370.05	2369.73	2369.36	2368.84	2370.63	2370.06	2369.30	2369.50	2369.00	2369.60
(*)	-1210	-750	-480	-590	-680	-940	+3310	-1080	-1400	+370	-920	+1100
(††)	230	198	206	221	226	251	213	252	335	243	319	217
MAX	42500	41600	40620	40130	39540	38870	41260	41240	40150	39150	39150	40070
MIN	41390	40640	40160	39570	38890	37950	37660	40180	38780	38780	38230	38230

CAL YR 1975.....

WTR YR 1976.....

* -4200

* -3270

†† 2700

†† 2910

MAX 44480

MAX 42500

MIN 40160

MIN 37660

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal and industrial uses.

08080916 Salt Fork Brazos River at Farm Road 1081 near Clairemont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°14'33", long 100°55'40", Kent County, at bridge on Farm Road 1081 and 11.7 miles (18.8 km) northwest of Clairemont.

PERIOD OF RECORD.--Periodic discharge measurements: April 1965, March 1967 to current year. Periodic water-quality data: December 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS (MG/L)
OCT. 01...	0735	.22	5230	--	15.0	910	--
NOV. 11...	--	.00	--	--	--	--	--
DEC. 16...	--	.00	--	--	--	--	--
JAN. 27...	--	.00	--	--	--	--	--
MAR. 09...	--	.00	--	--	--	--	--
APR. 20...	1125	2.3	6880	--	17.5	620	--
JUNE 02...	--	.00	--	--	--	--	--
JULY 13...	1045	4.6	4230	7.8	23.0	220	60
AUG. 24...	--	.00	--	--	--	--	--

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT. 01...	230	82	--	--	980	1100
NOV. 11...	--	--	--	--	--	--
DEC. 16...	--	--	--	--	--	--
JAN. 27...	--	--	--	--	--	--
MAR. 09...	--	--	--	--	--	--
APR. 20...	160	53	--	--	590	1900
JUNE 02...	--	--	--	--	--	--
JULY 13...	57	18	191	0	230	1100
AUG. 24...	--	--	--	--	--	--

08080940 Salt Fork Brazos River at State Highway 208 near Clairemont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°12'22", long 100°44'50", Kent County, at bridge on State Highway 208 and 2.8 miles (4.5 km) north of Clairemont.

PERIOD OF RECORD.--Periodic discharge measurements: March to August 1964, October 1966 to current year. Periodic water-quality data: December 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV. 11...	--	.00	--	--	--	--	--	--	--
DEC. 16...	--	.00	--	--	--	--	--	--	--
JAN. 27...	--	.00	--	--	--	--	--	--	--
MAR. 09...	--	.00	--	--	--	--	--	--	--
APR. 20...	1035	3.5	5310	17.0	440	120	33	420	1300
JUNE 02...	--	.00	--	--	--	--	--	--	--
JULY 12...	1620	.42	17100	27.0	1900	510	140	1500	5500
AUG. 24...	--	.00	--	--	--	--	--	--	--

LOCATION.--Lat 33°21'22", long 100°42'17", Kent County, near right bank on downstream side of bridge on Farm Road 643, 2.5 miles (4.0 km) west of Girard, and 10.7 miles (17.2 km), revised, upstream from Salt Fork Brazos River.

PERIOD OF RECORD.--September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,006.08 ft (611.453 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 5.96 ft³/s (0.169 m³/s), 4,320 acre-ft/yr (5.33 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 ft³/s (28.9 m³/s) Aug. 31 (gage height, 12.78 ft or 3.895 m); minimum, 0.04 ft³/s (0.001 m³/s) July 1, 2.

Period of record: Maximum discharge, 5,000 ft³/s (142 m³/s) June 4, 1974 (gage height, 15.22 ft or 4.639 m); no flow July 19 to Aug. 6, Aug. 18-21, 1966, Aug. 19, 1969, July 20, 1971, and Aug. 17-22, 1974.

Maximum stage since at least 1902 occurred in March or April 1918 (stage and discharge unknown); the second highest stage, 19.8 ft (6.04 m) September 1955, from information by local residents.

REMARKS.--Records good. Several small diversions upstream from gage. At end of year, flow from 108 mi² (280 km²) above this station was partly controlled by 12 floodwater-retarding structures with a combined capacity of 28,800 acre-ft (35.5 hm³) below the flood-spillway crests, of which 4,090 acre-ft (5.04 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WRD Texas 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.9	2.7	3.3	3.0	5.0	3.2	12	1.1	.09	.67	7.1
2	3.7	9.3	2.8	3.1	3.1	4.9	3.5	7.5	1.2	6.4	.28	22
3	3.1	3.0	2.8	3.0	3.1	4.9	3.5	5.7	.96	34	335	13
4	3.1	2.5	2.9	3.0	3.1	5.0	3.6	4.5	1.1	9.2	430	7.8
5	3.1	2.4	3.0	3.1	3.1	4.8	3.7	5.2	1.3	15	166	4.4
6	2.9	2.5	2.8	3.2	3.1	4.8	3.9	4.8	2.2	2.5	120	3.1
7	2.3	2.5	2.9	2.9	3.2	5.2	4.1	4.3	1.9	1.4	95	2.6
8	2.7	2.5	3.0	2.8	3.2	5.9	4.0	4.1	1.8	1.1	62	22
9	2.4	2.4	3.1	2.9	3.2	5.7	4.0	4.3	1.8	1.1	46	31
10	2.6	2.3	3.2	3.1	3.3	5.6	4.1	4.5	1.5	1.3	37	12
11	2.5	2.4	3.2	2.9	3.2	5.8	4.1	4.3	1.5	1.9	30	4.9
12	2.4	2.3	3.1	2.8	3.3	5.5	5.3	3.7	1.5	2.6	23	3.1
13	2.3	2.4	3.2	2.8	3.4	5.2	6.5	3.6	1.4	3.1	18	2.4
14	2.2	2.5	3.3	2.7	3.4	5.5	4.3	3.4	1.4	9.0	13	2.4
15	3.6	2.7	3.1	2.7	3.5	5.7	9.5	3.4	1.0	7.5	9.2	2.2
16	2.6	2.6	3.1	2.7	3.6	5.6	41	3.4	.93	6.0	6.2	1.9
17	2.4	2.6	3.0	2.8	3.6	5.7	61	3.4	.87	8.0	4.1	1.8
18	2.3	2.7	3.0	2.8	3.5	5.7	24	3.1	1.0	6.6	3.0	1.8
19	2.4	2.9	3.1	2.8	3.6	5.9	5.9	3.1	1.2	2.5	2.5	6.9
20	2.2	2.8	3.1	2.7	3.7	5.4	3.4	3.0	1.0	1.5	2.1	9.7
21	2.3	2.6	3.1	2.8	3.6	4.9	3.0	3.1	.97	1.2	1.8	3.7
22	2.6	2.6	3.2	2.9	3.6	4.5	3.0	3.0	.58	1.1	1.6	2.2
23	2.8	2.7	3.3	3.0	3.8	4.1	3.0	2.8	.54	1.6	1.4	1.8
24	2.3	2.7	3.7	3.1	4.0	3.8	3.1	2.2	.36	1.5	1.4	1.7
25	2.2	2.7	3.9	3.1	4.2	3.7	3.0	2.0	.34	3.1	1.6	1.6
26	2.4	2.7	3.5	3.0	4.3	3.2	3.1	2.3	.24	20	1.6	1.6
27	2.4	2.7	3.4	2.8	4.4	3.0	3.3	1.9	.22	8.9	1.4	1.7
28	2.4	2.8	3.6	2.9	4.9	3.1	17	1.6	.16	2.2	1.8	2.1
29	2.4	2.9	3.6	3.0	5.0	3.2	63	1.5	.13	24	1.7	2.0
30	2.5	2.7	3.4	3.0	---	2.9	16	1.2	.03	2.0	1.6	1.9
31	2.7	---	3.5	3.0	---	3.0	---	1.0	---	1.3	1.8	---
TOTAL	80.7	85.3	98.6	90.7	104.0	147.0	320.1	113.9	30.32	187.69	1420.75	182.4
MEAN	2.60	2.84	3.18	2.93	3.59	4.74	10.7	3.67	1.01	6.05	45.8	6.08
MAX	3.6	9.3	3.9	3.3	5.0	5.9	63	12	2.2	34	430	31
MIN	2.2	2.3	2.7	2.7	3.0	2.9	3.0	1.0	.08	.09	.28	1.6
AC-FT	160	169	196	180	206	292	635	226	60	372	2820	362
CAL YR 1975	TOTAL	2124.82	MEAN	5.82	MAX	455	MIN	.75	AC-FT	4210		
WTR YR 1976	TOTAL	2861.46	MEAN	7.82	MAX	430	MIN	.08	AC-FT	5680		

BRAZOS RIVER BASIN

08080959 Salt Fork Brazos River at U.S. Highway 380 near Jayton, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°10'06", long 100°37'50", Kent County, at bridge on U.S. Highway 380 and 6.5 miles (10.5 km) southwest of Jayton.

PERIOD OF RECORD.--Periodic discharge measurements: February 1965 to current year. Periodic water-quality data: October 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV.									
11...	1400	5.2	12100	21.0	2000	530	160	1800	3200
DEC.									
16...	1200	3.6	16600	10.0	2300	610	190	1900	5000
JAN.									
27...	1240	2.9	9950	6.0	1900	500	170	1800	2400
MAR.									
09...	1030	4.5	15300	9.5	2300	620	190	1900	4600
APR.									
20...	1050	7.8	4480	15.0	560	160	40	580	1200
JUNE									
02...	0900	.83	19900	22.0	2600	680	210	2300	6300
JULY									
12...	1710	.45	15400	26.0	2200	600	180	1800	4600
AUG.									
24...	1030	.94	15300	25.0	1900	510	150	1700	4600

08081000 Salt Fork Brazos River near Peacock, Tex.

LOCATION.--Lat 33°12'43", long 100°25'53", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 380, 2.9 miles (4.7 km) northwest of Peacock, 6.2 miles (10.0 km) upstream from Croton Creek, 13.0 miles (20.9 km) northwest of Aspermont, and at mile 54.3 (87.4 km) measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA (revised).--4,619 mi² (11,963 km²), of which 2,634 mi² (6,822 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: December 1949 to September 1951, September 1964 to current year.

Water quality: Chemical analyses: December 1949 to September 1951, October 1964 to current year. Water temperatures: December 1949 to September 1951, October 1964 to current year.

GAGE.--Water-stage and specific-conductance recorders. Datum of gage is 1,724.32 ft (525.573 m) above mean sea level. Prior to Sept. 19, 1964, nonrecording gage at site 2.9 miles (4.7 km) upstream at datum 19.39 ft (5.910 m) higher.

AVERAGE DISCHARGE.--13 years (1950-51, 1964-76), 40.7 ft³/s (1.153 m³/s), 29,490 acre-ft/yr (36.4 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 4,810 ft³/s (136 m³/s) Apr. 28 (gage height, 8.76 ft or 2.670 m); minimum, 0.17 ft³/s (0.005 m³/s) June 30, July 1, 2.

Period of record: Maximum discharge, 19,000 ft³/s (538 m³/s) Aug. 13, 1972 (gage height, 13.75 ft or 4.191 m); no flow at times most years.

Historic: Maximum stage since at least 1939, that of Aug. 13, 1972.

Water quality: Current year: Maximum daily specific conductance, 47,500 micromhos June 7; minimum daily, 1,920 micromhos Aug. 6. Maximum water temperatures, 34.0°C May 23, Aug. 6; minimum, freezing point on several days during winter months.

Period of record: Maximum daily specific conductance, 61,100 micromhos July 31, 1966; minimum daily, 900 micromhos Aug. 31, 1966. Maximum water temperatures (1949-50, 1964-69, 1971-76), 39.0°C June 25, 1968; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. Some regulation by White River Reservoir (station 08080910). Several small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	4.0	5.1	4.3	4.6	4.6	3.7	114	1.6	.17	7.4	.64
2	11	79	5.6	4.6	4.6	4.3	3.7	71	1.3	16	3.2	.64
3	11	36	5.9	4.6	4.6	4.3	3.5	40	1.2	1.4	2.5	.64
4	10	17	5.8	4.6	4.3	5.2	3.5	32	1.2	40	234	.64
5	9.6	13	5.7	5.5	4.6	5.2	3.5	35	4.3	27	297	.64
6	9.2	12	4.9	5.9	5.2	4.6	3.5	30	4.9	22	136	.64
7	8.7	11	4.9	7.8	5.5	5.7	3.5	23	3.0	8.7	84	3.3
8	7.8	9.2	5.2	5.5	5.9	8.9	3.5	18	1.9	4.3	58	47
9	7.4	9.2	5.2	5.4	5.9	9.2	3.2	16	1.3	1.5	43	15
10	7.0	8.7	5.1	5.3	5.9	6.6	3.1	13	1.1	2.1	28	262
11	6.6	8.2	5.0	6.4	4.9	5.2	2.7	9.2	.80	12	18	191
12	5.9	8.7	4.9	5.9	4.6	4.9	3.3	7.4	.72	12	15	71
13	5.2	9.2	5.0	5.4	4.9	4.6	10	9.2	.57	4.0	10	142
14	4.9	9.6	5.2	5.2	5.2	4.6	7.3	7.0	.50	8.8	7.0	135
15	6.4	9.2	5.4	5.2	5.2	4.3	7.6	9.6	.44	13	4.6	18
16	5.2	9.2	5.0	5.2	4.6	4.3	1050	8.2	.39	54	3.0	15
17	4.9	9.2	4.6	5.2	4.6	4.3	428	6.6	.35	43	2.1	9.2
18	4.3	8.7	4.9	5.4	4.6	4.2	307	5.9	.30	89	1.8	6.6
19	4.0	10	4.3	5.0	4.6	4.0	119	5.5	.26	42	2.1	8.1
20	4.0	10	4.5	4.9	4.6	4.0	52	5.5	.23	25	1.1	63
21	3.7	7.9	4.6	4.9	4.3	4.0	26	5.2	.20	18	.72	266
22	5.0	7.3	4.8	5.2	4.3	4.0	16	7.8	.39	10	.44	81
23	5.9	6.5	4.9	5.1	4.3	4.0	12	5.9	.50	9.2	.30	42
24	5.2	6.2	4.6	5.2	4.3	4.0	13	5.2	.39	5.9	.20	18
25	4.6	6.1	4.6	5.2	4.3	4.0	8.6	4.6	.26	5.2	.23	12
26	3.5	5.5	4.6	5.2	4.3	3.7	6.3	3.7	.23	4.6	.23	11
27	3.0	5.3	4.9	5.4	4.3	3.7	5.2	3.7	.23	4.2	.17	9.2
28	2.5	5.5	4.9	5.2	4.5	3.7	419	3.5	.20	8.3	31	7.8
29	2.5	7.2	4.9	5.2	4.8	3.7	120	3.0	.20	.30	5.3	7.0
30	3.2	5.4	4.9	5.2	---	3.7	101	2.1	.17	9.0	1.1	5.9
31	4.6	---	4.6	4.9	---	3.7	---	1.8	---	17	.98	---
TOTAL	188.8	354.0	154.5	164.0	138.3	145.2	2748.7	512.6	29.13	547.37	998.47	1449.94
MEAN	6.09	11.8	4.98	5.29	4.77	4.68	91.6	16.5	.97	17.7	32.2	48.3
MAX	12	79	5.9	7.8	5.9	9.2	1050	114	4.9	89	297	266
MIN	2.5	4.0	4.3	4.3	4.3	3.7	2.7	1.8	.17	.17	.17	.64
AC-FT	374	702	306	325	274	288	5450	1020	58	1090	1980	2880

CAL YR 1975 TOTAL 9022.77 MEAN 24.7 MAX 1700 MIN 0 AC-FT 17900

WTR YR 1976 TOTAL 7431.01 MEAN 20.3 MAX 1050 MIN .17 AC-FT 14740

PEAK DISCHARGE (BASE, 5,000 FT³/S).--No peak above base.

08081000 Salt Fork Brazos River near Peacock, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 23...	1150	5.8	38000	7.6	19.0	2800	2700	710	260	8400
NOV 19...	1030	10	33100	7.7	13.5	2500	2400	640	220	7400
JAN 28...	1330	5.3	31900	7.7	11.5	2700	2600	700	240	7100
FEB 19...	1605	125	35400	7.7	20.0	3300	3200	850	280	7900
APR 29...	0935	102	7870	7.5	13.5	910	840	270	58	1400
MAY 03...	1430	36	16900	7.6	22.0	1300	1200	340	120	3500
JUN 09...	1430	4.3	43400	7.6	33.0	3400	3200	850	300	9500
AUG 06...	1025	144	1370	7.8	29.0	220	120	65	15	190
SEP 09...	1405	39	3190	7.7	31.0	450	340	120	37	500
SEP 14...	1505	67	6480	7.5	29.5	740	640	220	46	1100

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 23...	69	25	164	0	2200	13000	.9	9.8	24700
NOV 19...	64	21	158	0	2100	12000	--	7.7	22500
JAN 28...	59	21	166	0	2400	11000	--	8.3	21600
FEB 19...	60	22	138	0	2400	13000	--	2.9	24500
APR 29...	20	7.5	90	0	790	2200	.4	6.3	4780
MAY 03...	42	15	172	0	1100	5500	--	11	10700
JUN 09...	71	29	134	0	2700	15000	--	7.7	28500
AUG 06...	5.5	7.0	132	0	170	260	.5	9.7	782
SEP 09...	10	11	140	0	340	760	.5	12	1850
SEP 14...	18	11	120	0	520	1800	--	8.8	3770

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	188.8	37400	24900	12700	12900	6590	2500	1270	****
NOV. 1975.....	353	26800	17700	16900	9060	8660	1880	1800	****
DEC. 1975.....	154.5	34300	22700	9490	11600	4910	2340	974	****
JAN. 1976.....	163	33200	22000	9760	11400	5050	2270	1000	****
FEB. 1976.....	133.5	33400	22100	7970	11400	4120	2280	821	****
MAR. 1976.....	145.2	35000	23200	9110	12000	4720	2370	929	****
APR. 1976.....	2748.7	6210	3830	28400	1690	12500	630	4690	750
MAY 1976.....	512.6	24600	16200	22400	8270	11400	1740	2420	****
JUNE 1976.....	29.13	40500	26900	2120	14000	1100	2690	211	****
JULY 1976.....	547.37	13300	8510	12600	4170	6160	1060	1560	****
AUG. 1976.....	998.47	4170	2550	6870	1080	2900	440	1190	610
SEPT 1976.....	1449.94	5530	3400	13300	1540	6020	470	1850	700
TOTAL	7426.19	**	**	152000	**	74100	**	18700	**
WTD.AVG.	20.35	11700	7600	**	3700	**	930	**	*****

08081000 Salt Fork Brazos River near Peacock, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) • WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30600	38800	35400	36000	32700	34400	38300	11600	43400	32600	13900	30900
2	37900	10300	37100	35100	32800	34300	38400	12600	43900	30300	22500	31900
3	34300	12700	36400	34800	32900	34900	38200	16200	43800	38500	30800	32200
4	39100	15800	33800	35800	33400	34200	38400	20800	43700	10700	5120	34300
5	39200	26800	33000	37700	33300	34500	38300	25200	35900	7850	2490	34200
6	38900	29900	34700	31900	31600	34900	38200	28600	36200	7790	1920	33900
7	36400	33800	35300	31500	31500	34500	37800	30800	47500	10400	2250	20700
8	39600	36100	34500	33900	31000	30300	37200	34200	45900	17000	2930	10500
9	36400	38900	34700	34100	32300	28300	37400	35500	44500	25300	3190	10900
10	38000	39200	33900	35700	31900	33700	37500	36900	43300	26500	4280	5000
11	40000	38900	34200	29300	32500	34700	37800	38200	42600	24500	6300	3510
12	38700	40200	34200	31400	33100	34400	38000	30200	39000	26200	8040	3430
13	41000	39400	33900	32500	32800	35300	30500	40600	39300	36900	10000	4020
14	39300	39200	33700	32900	32700	34800	28700	42600	39000	32800	12600	4070
15	33100	39100	33900	32300	32600	35000	28500	41500	38900	24400	13500	5330
16	39700	36100	33800	32500	33000	35100	5090	43100	38800	6350	14900	11300
17	32100	37900	33700	32600	32100	35300	5270	43400	41000	9190	18000	16000
18	39300	37100	40900	33000	32800	35900	3040	42300	39500	6390	21500	17200
19	38700	33900	33600	33200	35100	35100	3020	43800	38400	6590	21400	19400
20	38900	33500	33600	33500	34800	36500	5520	43400	37700	10500	24000	11500
21	35800	35200	31900	33000	35000	37400	8780	42300	36600	13400	25800	3750
22	39100	33800	31400	32900	36100	37800	13600	41900	37300	20900	27500	2530
23	37800	35900	31200	32500	35200	38100	18500	38800	38100	25900	27400	4050
24	38200	35900	33700	32400	35000	37700	21200	43800	35900	33700	26000	9770
25	39200	36000	33700	32400	35300	36900	27900	43600	35000	34800	25900	9810
26	39100	35900	33900	32600	35600	37900	28100	43000	36100	36900	27500	12500
27	37000	36200	33700	41900	35200	37700	32700	44300	35000	44100	28000	17500
28	38900	33400	33900	30700	35000	38100	5160	43600	33700	20900	7500	19400
29	36800	36900	34000	31900	34000	38700	6390	43800	34200	15400	12700	20600
30	39200	37300	35100	31700	---	38900	11500	32200	32700	18800	28000	25200
31	38400	---	35400	31600	---	38100	---	45100	---	14200	31200	---
MONTH	37800	33800	34300	33300	33500	35600	24600	36300	39200	21600	16400	15500

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	19.0	2.0	4.0	6.0	10.0	5.0	12.0	17.0	21.0	31.0	20.0
2	10.0	17.0	2.0	0.0	5.0	10.0	5.0	20.0	19.0	19.0	33.0	20.0
3	8.0	21.0	2.0	0.0	5.0	10.0	14.0	12.0	19.0	23.0	32.0	21.0
4	9.0	14.0	7.0	7.0	4.0	8.0	12.0	15.0	21.0	23.0	23.0	23.0
5	26.0	22.0	10.0	0.0	0.0	10.0	12.0	21.0	19.0	23.0	25.0	22.0
6	13.0	12.0	3.0	1.0	0.0	11.0	14.0	15.0	32.0	26.0	34.0	22.0
7	16.0	12.0	2.0	---	0.0	6.0	14.0	12.0	21.0	22.0	24.0	22.0
8	13.0	12.0	2.0	---	19.0	6.0	11.0	14.0	31.0	22.0	23.0	22.0
9	17.0	21.0	2.0	2.0	19.0	6.0	11.0	14.0	20.0	22.0	24.0	18.0
10	14.0	9.0	4.0	5.0	19.0	9.0	13.0	28.0	21.0	22.0	22.0	16.0
11	16.0	9.0	4.0	11.0	9.0	9.0	15.0	18.0	20.0	---	22.0	19.0
12	27.0	6.0	2.0	12.0	8.0	7.0	15.0	18.0	21.0	---	23.0	26.0
13	17.0	3.0	7.0	2.0	12.0	3.0	17.0	14.0	21.0	---	21.0	21.0
14	25.0	15.0	19.0	1.0	12.0	5.0	18.0	11.0	21.0	---	22.0	21.0
15	19.0	6.0	2.0	2.0	15.0	8.0	---	13.0	19.0	---	21.0	22.0
16	20.0	13.0	1.0	2.0	14.0	10.0	14.0	14.0	28.0	28.0	21.0	21.0
17	16.0	10.0	0.0	4.0	12.0	5.0	15.0	14.0	22.0	24.0	33.0	21.0
18	8.0	11.0	0.0	4.0	5.0	8.0	15.0	14.0	23.0	30.0	23.0	21.0
19	11.0	15.0	7.0	5.0	6.0	8.0	15.0	15.0	18.0	24.0	25.0	21.0
20	11.0	---	0.0	10.0	10.0	8.0	13.0	17.0	31.0	23.0	23.0	20.0
21	22.0	---	2.0	0.0	3.0	13.0	13.0	17.0	19.0	20.0	21.0	18.0
22	17.0	---	14.0	0.0	9.0	21.0	18.0	18.0	22.0	21.0	21.0	18.0
23	14.0	2.0	2.0	14.0	3.0	21.0	18.0	34.0	22.0	21.0	21.0	23.0
24	12.0	2.0	---	6.0	3.0	13.0	15.0	18.0	30.0	23.0	21.0	22.0
25	12.0	4.0	---	0.0	5.0	12.0	15.0	24.0	21.0	21.0	21.0	22.0
26	22.0	0.0	12.0	0.0	5.0	14.0	14.0	19.0	21.0	21.0	20.0	22.0
27	12.0	3.0	4.0	0.0	6.0	8.0	17.0	15.0	28.0	22.0	20.0	25.0
28	12.0	3.0	4.0	5.0	6.0	8.0	18.0	15.0	23.0	23.0	20.0	13.0
29	13.0	4.0	3.0	1.0	6.0	11.0	15.0	15.0	23.0	23.0	21.0	13.0
30	24.0	11.0	2.0	2.0	---	10.0	12.0	17.0	23.0	23.0	22.0	22.0
31	13.0	---	2.0	2.0	---	6.0	---	17.0	---	23.0	30.0	---
MONTH	15.5	10.0	4.0	3.5	8.0	9.5	14.0	17.0	22.5	23.0	24.0	20.5

08081100 Croton Creek below Short Croton Creek near Jayton, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°18'23", long 100°31'55", Kent County, at county road crossing and 4.7 miles (7.6 km) northeast of Jayton.

PERIOD OF RECORD.--Periodic discharge measurements: August 1959 to current year. Periodic water-quality data: October 1960 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
DEC. 16...	0915	.09	30300	6.5	3700	990	300	3800	10000
JAN. 28...	0940	.05	33400	7.0	3800	990	330	3900	11000
APR. 07...	1330	.01	50200	28.0	5200	1300	480	5200	18000
MAY 20...	1440	.02	39300	26.5	4800	1300	370	4500	13000
JUNE 09...	0925	.60	20100	22.0	3200	1000	180	2600	5800
JULY 07...	1300	.50	9100	31.0	2400	840	71	2100	2200
AUG. 02...	1500	3.2	11200	34.0	2600	890	86	2300	2800
24...	0730	.05	30500	24.0	4200	1300	230	3600	9600

08081200 Croton Creek near Jayton, Tex.

LOCATION.--Lat 33°17'21", long 100°26'00", Stonewall County, on left bank 460 ft (140 m) upstream from county road, 1.1 miles (1.8 km) upstream from mouth, and 8.6 miles (13.8 km) northeast of Jayton.

DRAINAGE AREA (revised).--290 mi² (751 km²).

PERIOD OF RECORD.--Discharge: August 1959 to current year.

Water quality: Chemical analyses: May 1959 to current year. Water temperatures: October 1961 to September 1973.

GAGE.--Water-stage and specific-conductance recorders. Datum of gage is 1,694.45 ft (516.468 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 14.7 ft³/s (0.416 m³/s), 0.69 in/yr (18 mm/yr), 10,650 acre-ft/yr (13.1 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 4,040 ft³/s (114 m³/s) Aug. 3 (gage height, 10.00 ft or 3.048 m); no flow for many days.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) Oct. 18, 1960 (gage height, 12.40 ft or 3.780 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s); no flow for many days.

Historic: Maximum stage since at least 1935, 13.5 ft (4.11 m) in 1941 or 1942, present datum, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 41,300 micromhos Jan. 10; minimum daily, 1,570 micromhos Aug. 3.

Period of record: Maximum daily specific conductance (1961-64, 1972-76), 50,900 micromhos Apr. 18, 1964; minimum daily, 1,570 micromhos Aug. 3, 1976.

REMARKS.--Discharge records poor. No diversion above station. Specific conductance is recorded continuously at this station.

REVISIONS.--WSP 2122: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	0	.26	0	0	16	0	0	9.8	17	
2	0	16	0	.18	0	0	9.8	0	0	4.1	1.7	
3	0	12	0	.12	0	0	4.7	0	7.2	636	1.2	
4	0	4.8	0	.09	0	0	3.2	0	2.5	181	1.0	
5	0	2.2	0	.08	0	0	8.7	0	119	48	2.4	
6	0	.86	0	.06	0	0	3.8	2.6	7.2	27	9.5	
7	0	.38	0	.04	0	.05	1.6	16	.92	5.0	4.7	
8	0	.14	0	.02	.19	.02	.92	3.9	.27	2.0	106	
9	0	.08	0	.01	.92	0	.49	.92	.07	1.0	49	
10	0	.02	0	.01	.14	0	.23	.20	0	.50	17	
11	0	.01	0	0	.02	0	.16	0	0	.30	6.9	
12	0	0	0	0	0	0	.11	3.6	0	.20	2.9	
13	0	0	0	0	0	1.8	.07	1.6	0	.10	2.2	
14	0	0	0	0	0	.06	.03	0	0	.02	1.5	
15	.83	0	0	0	0	.96	.01	0	0	0	.98	
16	.03	0	0	0	0	0	214	0	0	0	.60	
17	.01	0	0	0	0	0	265	0	0	0	.34	
18	.01	0	0	0	0	0	103	0	0	4.1	.23	
19	0	7.6	0	0	0	0	16	0	0	1.4	.18	
20	0	1.4	0	0	0	0	5.4	0	0	.56	3.2	
21	0	.21	0	0	0	0	2.6	0	0	.23	2.9	
22	0	.08	0	0	0	0	1.6	0	0	.27	1.2	
23	0	.01	0	0	0	0	1.3	0	0	.19	.96	
24	0	0	1.5	0	0	0	5.4	0	0	.16	.68	
25	0	0	5.3	0	0	0	1.8	0	0	.16	.47	
26	0	0	1.4	0	0	0	.80	0	0	29	.32	
27	0	0	.56	0	0	0	.45	0	0	26	.59	
28	0	0	.81	0	0	0	1.9	0	0	4.7	.74	
29	0	0	2.4	0	0	0	93	0	0	320	.06	.85
30	0	0	.86	0	---	0	36	0	0	162	.01	1.2
31	0	---	.55	0	---	0	---	0	---	26	0	---
TOTAL	.88	45.81	13.38	.87	0	1.27	751.14	49.82	28.82	711.93	915.83	238.90
MEAN	.028	1.53	.43	.028	0	.041	25.0	1.61	.96	23.0	29.5	7.96
MAX	.83	16	5.3	.26	0	.92	265	16	16	320	636	106
MIN	0	0	0	0	0	0	0	0	0	0	0	.18
CFSM	0	.005	.001	0	0	0	.09	.005	.003	.08	.10	.03
IN.	.0001	.006	.002	.0001	0	.0002	.10	.006	.004	.09	.12	.03
AC-FT	1.7	91	27	1.7	0	2.5	1490	99	57	1410	1820	474

CAL YR 1975 TOTAL 2925.75 MEAN 8.02 MAX 996 MIN 0 CFSM .03 IN .38 AC-FT 5800

WTR YR 1976 TOTAL 2758.65 MEAN 7.54 MAX 636 MIN 0 CFSM .03 IN .35 AC-FT 5470

PEAK DISCHARGE (BASE, 1,600 FT³/S).--Aug. 3 (1730) 4,040 ft³/s (10.00 ft).

08081200 Croton Creek near Jayton, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
JAN. 07...	1135	.04	38800	7.6	1.5	4300	4100	1200	310	8600
APR. 29...	1115	139	18500	7.6	13.0	2600	2500	830	120	3600
MAY 03...	1345	4.2	16800	7.9	24.0	3000	2900	950	160	3200
JULY 07...	1510	.92	12300	7.4	35.0	2500	2500	870	87	2100
AUG. 04...	1400	110	3100	7.5	31.0	1600	1500	600	22	180
SEP. 14...	1105	1.4	19500	7.6	21.0	3100	3000	1000	150	3500

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
JAN. 07...	57	24	184	0	4100	13000	--	7.8	27300
APR. 29...	31	14	99	0	2200	5800	--	6.7	12600
MAY 03...	25	13	102	0	2500	5200	--	6.9	12100
JULY 07...	18	14	63	0	2300	3300	.3	6.7	8710
AUG. 04...	2.0	4.7	72	0	1500	270	.3	9.2	2620
SEP. 14...	27	15	91	0	2600	5800	--	5.6	13100

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	0.88	20500	14100	33	6430	15	2420	5.7	****
NOV. 1975.....	45.81	16800	11600	1440	5070	627	2300	284	****
DEC. 1975.....	13.38	25500	17500	632	8280	299	2700	98	****
JAN. 1976.....	0.87	31800	21800	51	10600	25	3070	7.2	****
FEB. 1976.....	0	*****	*****	0	*****	0	*****	0	****
MAR. 1976.....	1.27	23600	16200	56	7580	26	2600	9	****
APR. 1976.....	751.14	7860	5680	11500	1860	3780	1880	3810	1770
MAY 1976.....	49.82	20900	14400	1940	6610	888	2520	339	****
JUNE 1976.....	28.82	15800	11000	853	4730	367	2220	173	****
JULY 1976.....	711.93	4430	3400	6540	750	1440	1530	2930	1390
AUG. 1976.....	915.83	2370	1940	4790	260	651	1040	2560	1240
SEPT 1976.....	238.9	9960	7080	4560	2620	1690	2010	1300	2000
TOTAL	2758.65	**	**	32400	**	9810	**	11500	**
WTD.AVG.	7.56	5910	4400	**	1300	**	1500	**	1600

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

[illegible]

BRAZOS RIVER BASIN

08081400 Salt Croton Creek at Weir D near Aspermont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°24'00", long 100°24'39", King County, 500 ft (150 m) upstream from Haystack Creek, 1,000 ft (305 m) upstream from streamflow station Salt Croton Creek near Aspermont, and 20 miles (32 km) northwest of Aspermont.

PERIOD OF RECORD.--Periodic measurements of discharge and water-quality data: October 1956 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 23...	1420	.68	238000	28.0	11000	2200	1300	4400	160000
JAN. 06...	1320	.91	233000	9.5	9500	2000	1100	4100	150000
FEB. 24...	0930	.47	243000	7.0	10000	1800	1400	3700	210000
APR. 07...	1000	.64	242000	18.0	11000	1900	1400	3300	200000
MAY 20...	1145	.84	244000	27.0	11000	2000	1500	4000	210000
JULY 13...	0840	.59	207000	23.0	8500	1900	900	3400	120000
AUG. 26...	1105	.46	229000	--	9100	2100	930	4000	160000
SEP. 15...	1005	.50	228000	28.0	11000	2300	1200	3300	150000

08081450 Haystack Creek at Weir E near Aspermont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°24'04", long 100°24'41", King County, about 400 ft (120 m) upstream from Salt Croton Creek and 20 miles (32 km) north-west of Aspermont.

PERIOD OF RECORD.--Periodic measurements of discharge and water-quality data: October 1956 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT 23...	1345	.11	120000	28.0	6600	1800	520	4800	48000
JUN 06...	1300	.19	98100	9.5	5300	1400	440	4400	46000
FEB 24...	0920	.12	119000	7.0	6700	1800	540	4900	64000
APR 07...	--	.15	--	19.0	--	--	--	--	--
MAY 20...	1145	.08	140000	27.0	7200	1900	600	5300	66000
JUL 13...	0830	.09	137000	23.0	7000	1800	600	5400	64000
AUG 26...	1105	.05	146000	--	7500	1900	670	5000	70000
SEP 15...	1000	.10	135000	28.0	7200	1900	600	4800	62000

08081500 Salt Croton Creek near Aspermont, Tex.

LOCATION.--Lat 33°24'03", long 100°24'29", King County, on left bank 0.1 mile (0.2 km) downstream from Haystack Creek, 2.4 miles (3.9 km) downstream from Salt Flat Creek, 9.1 miles (14.6 km), revised, upstream from Salt Fork Brazos River, and 21 miles (34 km) northwest of Aspermont.

DRAINAGE AREA.--64.3 mi² (166.5 km²).

PERIOD OF RECORD.--Discharge: October 1956 to current year. Prior to October 1958, published as Dove Creek near Aspermont.
Water quality: Chemical analyses: October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,670 ft (509 m), from topographic map.

AVERAGE DISCHARGE.--20 years, 5.71 ft³/s (0.162 m³/s), 4,140 acre-ft/yr (5.10 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 996 ft³/s (28.2 m³/s) July 25 (gage height, 3.16 ft or 0.963 m), from rating extended as explained below; minimum daily, 0.31 ft³/s (0.009 m³/s) May 4.
Period of record: Maximum discharge, 29,900 ft³/s (847 m³/s) Aug. 30, 1966 (gage height, 8.75 ft or 2.667 m), from rating curve extended above 240 ft³/s (6.80 m³/s) on basis of slope-area measurements of 6,910, 11,400, and 29,500 ft³/s (196, 323, and 835 m³/s); minimum daily, 0.01 ft³/s (0.0003 m³/s) July 22, 1974.

Historic: Flood in 1941 reached a stage of about 9 ft (2.7 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 239,000 micromhos Aug. 11, 12; minimum daily, 15,000 micromhos Apr. 17.

Period of record: Maximum daily specific conductance (1972-76), 248,000 micromhos June 26, 27, 1974; minimum daily, 3,450 micromhos May 23, 1975. Maximum water temperatures (1972-73), 39.0°C Sept. 4, 1973; minimum, freezing point on several days during winter months.

REMARKS.--Discharge records poor. Stage-discharge relation frequently affected by winds. Base flow is maintained by springs. No diversion upstream from station. Recording rain gage located at station. Specific conductance is recorded continuously at this station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	.55	.78	.92	.70	.48	.78	.45	.45	.45	.45	2.2
2	.45	18	.92	.92	.71	.48	.78	.36	.36	.45	.45	.89
3	.45	1.4	.92	.92	.63	.48	.78	.34	.36	1.2	26	.74
4	.45	1.1	.92	.92	.65	.48	.79	.31	.36	.45	2.1	.69
5	.45	.92	.78	.92	.65	.48	.78	2.5	1.5	31	.66	.72
6	.45	.92	.78	.92	.65	.48	.78	.78	3.1	1.4	.55	.76
7	.45	.92	.78	.92	.65	1.6	11	.78	.66	.55	.55	1.2
8	.45	.92	.78	.92	.60	1.8	2.6	.78	.66	.45	.45	36
9	.45	.92	.78	.87	.60	.78	.78	.78	.55	.45	.45	15
10	.45	.92	.78	.92	.60	.78	.78	.78	.45	.45	.45	.93
11	.45	.92	.78	.92	.60	.78	.78	.78	.45	.45	.45	.69
12	.45	.92	.78	.92	.60	.78	1.4	.66	.36	.45	.45	.66
13	.45	.92	.78	.78	.60	.78	5.7	.66	.36	.45	.45	.66
14	.45	.92	.66	.78	.60	.73	.92	.66	.36	1.9	.45	.66
15	3.4	.92	.66	.78	.60	.78	17	.66	.36	.45	.45	.66
16	.92	.92	.66	.78	.55	.78	7.9	.66	.36	12	.45	.66
17	.78	.92	.66	.78	.55	.73	64	.66	.36	2.2	.45	.66
18	.78	.78	.66	.78	.55	.78	.78	.66	.36	.55	.92	.66
19	.78	.78	.72	.78	.55	.78	.55	.66	.36	.45	.78	7.3
20	.78	.78	.63	.78	.55	.78	.45	.55	.36	.45	.55	3.3
21	.78	.78	.71	.78	.50	.78	.45	.55	.36	.45	.45	.60
22	.78	.92	.66	.78	.50	.78	.45	.45	.61	.45	.45	.57
23	.78	.92	.66	.78	.50	.78	6.8	.45	4.3	1.7	.45	.52
24	.66	.92	3.0	.78	.48	.78	1.8	.45	.55	.55	2.8	.55
25	.66	.92	1.3	.78	.48	.78	.55	.45	.45	95	.84	.54
26	.66	.78	.78	.78	.48	.78	.36	.45	.45	16	.55	.52
27	.66	.78	.70	.78	.48	.78	.36	.45	20	2.1	.45	1.1
28	.66	.78	1.4	.78	.48	.78	7.0	.45	2.7	.66	1.1	.59
29	.66	.78	1.1	.85	.48	.78	2.1	.45	.66	14	.89	.49
30	.66	.78	.92	.79	---	.78	1.2	.45	.45	1.1	2.2	.49
31	.55	---	.92	.75	---	.78	---	.45	---	.55	2.1	---
TOTAL	21.35	43.71	27.36	25.86	16.57	24.12	140.40	19.52	42.67	188.76	49.79	81.01
MEAN	.69	1.46	.88	.83	.57	.78	4.68	.63	1.42	6.09	1.61	2.70
MAX	3.4	18	3.0	.92	.71	1.8	64	2.5	20	.95	.26	.36
MIN	.45	.55	.63	.75	.48	.48	.36	.31	.36	.45	.45	.49
AC-FT	42	87	54	51	33	48	278	39	85	374	99	161

CAL YR 1975 TOTAL 3543.40 MEAN 9.71 MAX 1900 MIN .29 AC-FT 7030
WTR YR 1976 TOTAL 681.12 MEAN 1.86 MAX 95 MIN .31 AC-FT 1350

PEAK DISCHARGE (BASE, 1,000 FT³/S).--No peak above base.

08081500 Salt Croton Creek near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT. 02...	--	.44	231000	7.1	28.0	11000	11000	2100	1300	100000
NOV. 20...	1325	.83	141000	6.8	10.0	5800	5800	1500	510	42000
DEC. 18...	1600	1.8	213000	7.0	8.5	9000	8900	2000	970	81000
FEB. 23...	1610	2.1	240000	6.9	20.5	11000	11000	1800	1500	110000
MAR. 18...	1300	3.0	224000	7.1	9.5	9300	9200	1900	1100	98000
APR. 21...	1600	3.6	167000	7.4	22.0	7000	7000	1700	670	54000
MAY 04...	1045	.31	181000	7.5	21.0	8100	8100	1900	820	57000
JULY 13...	0815	.46	198000	7.3	23.0	8400	8400	1900	890	70000
AUG. 03...	1045	82	18900	7.2	25.0	1400	1300	450	64	4000
03...	1700	15	29400	6.6	36.0	1900	1900	610	99	6400

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT. 02...	423	280	44	0	3900	160000	1.1	5.3	268000
NOV. 20...	239	110	50	0	3500	66000	--	3.9	114000
DEC. 18...	372	220	50	0	4600	130000	1.3	4.3	219000
FEB. 23...	463	320	38	0	4600	170000	--	4.0	288000
MAR. 18...	443	250	46	0	4100	150000	--	4.0	255000
APR. 21...	281	180	48	0	4200	85000	.6	3.5	146000
MAY 04...	275	180	54	0	3600	90000	--	2.4	154000
JULY 13...	332	250	38	0	3700	110000	--	4.6	187000
AUG. 03...	47	17	70	0	1000	6300	--	4.8	11900
03...	63	27	32	0	1300	10000	--	4.1	18500

08081500 Salt Croton Creek near Aspermont, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	21.35	199000	182000	10500	108000	6230	3900	225	--
NOV. 1975.....	43.71	164000	133000	15700	79000	9320	3400	401	--
DEC. 1975.....	27.36	189000	166000	12300	99000	7310	3800	281	--
JAN. 1976.....	25.86	215000	210000	14700	125000	8730	4000	279	--
FEB. 1976.....	16.57	224000	228000	10200	136000	6080	4200	188	--
MAR. 1976.....	24.12	218000	216000	14100	129000	8400	4100	267	--
APR. 1976.....	140.40	72000	50000	19000	29000	11000	2400	910	--
MAY 1976.....	19.52	209000	198000	10400	118000	6220	4000	211	--
JUNE 1976.....	42.67	146000	112000	12900	66000	7600	3500	403	--
JULY 1976.....	188.76	51000	32000	16300	18000	9170	2100	1070	--
AUG. 1976.....	49.79	135000	102000	13700	60000	8070	3400	457	--
SEPT 1976.....	81.01	90000	65000	14200	38000	8310	2700	591	--
TOTAL.....	681.12	--	--	164000	--	96400	--	5280	--
WTD.AVG.	1.86	110000	89000	--	52000	--	2900	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211000	230000	209000	204000	220000	224000	234000	100000	142000	157000	125000	160000
2	211000	105000	209000	208000	223000	224000	233000	63700	160000	175000	177000	166000
3	226000	115000	208000	206000	223000	228000	234000	149000	180000	223000	40000	200000
4	225000	120000	208000	186000	225000	232000	233000	131000	200000	175000	60000	208000
5	226000	140000	212000	200000	220000	228000	233000	103000	175000	38900	80000	218000
6	228000	170000	215000	212000	220000	224000	234000	170000	152000	50000	125000	227000
7	229000	197000	218000	208000	225000	200000	125000	174000	175000	106000	175000	200000
8	229000	205000	217000	203000	227000	180000	96000	150000	190000	140000	193000	45000
9	229000	210000	216000	212000	230000	170000	147000	136000	200000	162000	200000	40000
10	211000	216000	200000	219000	234000	161000	175000	175000	221000	162000	225000	78000
11	212000	214000	200000	216000	225000	140000	182000	215000	225000	162000	239000	90000
12	211000	214000	199000	214000	215000	190000	160000	225000	229000	180000	239000	131000
13	212000	215000	197000	215000	215000	200000	150000	234000	230000	198000	238000	175000
14	212000	210000	195000	216000	218000	220000	180000	233000	231000	180000	235000	200000
15	125000	197000	196000	218000	217000	231000	100000	232000	230000	134000	232000	216000
16	140000	200000	197000	219000	214000	225000	40000	233000	231000	70000	235000	220000
17	120000	205000	198000	220000	212000	221000	15000	232000	232000	50000	237000	220000
18	138000	200000	205000	217000	211000	224000	75000	231000	233000	100000	230000	220000
19	155000	160000	210000	21000	218000	227000	100000	230000	232000	130000	231000	80000
20	155000	141000	217000	217000	220000	228000	135000	231000	231000	160000	234000	70000
21	140000	170000	215000	210000	235000	230000	167000	233000	230000	180000	236000	141000
22	143000	191000	214000	210000	235000	231000	200000	232000	200000	180000	237000	175000
23	220000	197000	215000	215000	235000	230000	70000	231000	190000	216000	238000	202000
24	221000	226000	130000	212000	234000	231000	80000	232000	200000	200000	200000	215000
25	221000	212000	125000	219000	233000	232000	88500	233000	221000	25000	210000	225000
26	212000	210000	144000	210000	230000	232000	100000	234000	230000	40000	214000	225000
27	216000	204000	150000	218000	225000	231000	141000	234000	75000	61900	220000	200000
28	218000	237000	140000	214000	225000	232000	40000	233000	100000	70000	210000	205000
29	223000	208000	135000	224000	224000	233000	80000	230000	128000	56400	215000	216000
30	227000	209000	185000	230000	---	233000	125000	228000	150000	60000	20000	220000
31	230000	---	195000	235000	---	234000	---	229000	---	70000	180000	---
MONTH	205800	189900	192700	214500	223600	218300	138400	203500	194100	126200	197100	172900

08082000 Salt Fork Brazos River near Aspermont, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 33°20'02", long 100°14'24", revised, Stonewall County, on left bank at downstream side of bridge on U.S. Highway 83, 5.5 miles (8.8 km) downstream from Salt Croton Creek, 13.2 miles (21.2 km) north of Aspermont, and at mile 27.3 (43.9 km) measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA (revised).--5,130 mi² (13,287 km²), approximately, of which 2,634 mi² (6,822 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: December 1923 to August 1925, June 1939 to current year.

Water quality: Chemical analyses: October 1948 to September 1951, October 1956 to current year. Water temperatures: October 1948 to September 1951, October 1956 to current year.

GAGE.--Water-stage and specific-conductance recorders. Datum of gage is 1,588.70 ft (484.236 m) above mean sea level. Dec. 5, 1923, to Aug. 29, 1925, nonrecording gage at site 6.7 miles (10.8 km) downstream at different datum. June 15, 1939, to July 13, 1972, water-stage recorder at present site. July 14, 1972, to July 14, 1975, at site 0.1 mile (0.2 km) upstream at same datum.

AVERAGE DISCHARGE.--37 years (1939-76), 119 ft³/s (3,370 m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 2,320 ft³/s (65.7 m³/s) Aug. 3 (gage height, 5.38 ft or 1.640 m); minimum, 0.07 ft³/s (0.002 m³/s) June 22, 23.

Period of record: Maximum discharge, 52,200 ft³/s (1,480 m³/s) Sept. 25, 1955 (gage height, 14.92 ft or 4.548 m), from rating curve extended above 29,000 ft³/s (821 m³/s); no flow at times most years.

Historic: Maximum stage since at least 1900, that of Sept. 25, 1955. Flood in December 1913 reached a stage of 14.4 ft (4.39 m), and flood in November 1934 reached a stage of 13.7 ft (4.18 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 98,500 micromhos July 2; minimum daily, 2,830 micromhos Aug. 6. Maximum water temperatures, 34.0°C June 25, 29; minimum, freezing point Jan. 7-9.

Period of record: Maximum daily specific conductance, 173,000 micromhos Apr. 12, 1974; minimum daily, 1,690 micromhos July 8, 1960. Maximum water temperatures, 38.0°C Aug. 2, 1973; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. No large diversion above station. Some regulation by White River Reservoir (station 08080910).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	7.1	7.0	18	8.3	6.6	3.2	182	2.9	.56	65	23
2	15	213	6.8	14	8.0	6.7	3.4	125	2.6	.56	37	46
3	14	121	6.8	13	6.9	6.3	3.2	74	2.6	20	265	17
4	14	65	6.8	13	6.9	6.9	3.2	44	2.3	22	544	12
5	13	42	6.8	13	7.4	6.5	3.2	42	2.9	67	547	9.5
6	12	30	6.2	12	8.1	5.9	3.5	45	2.9	78	354	11
7	10	24	5.9	12	8.6	7.1	5.0	34	3.2	27	189	42
8	10	19	5.9	12	8.5	10	30	25	22	9.5	125	452
9	8.5	17	5.9	11	9.1	14	12	21	8.9	3.0	88	460
10	7.4	14	5.9	12	8.6	15	5.9	14	2.9	2.4	61	200
11	7.8	12	5.9	12	8.5	12	4.4	17	1.1	3.8	40	424
12	6.5	10	5.9	12	9.0	9.2	7.0	13	.41	3.2	25	134
13	5.9	9.4	5.9	12	9.4	7.8	55	10	.23	6.4	17	77
14	5.4	9.8	5.9	11	9.4	6.5	24	8.3	1.1	12	11	228
15	98	9.8	5.9	9.8	9.9	5.9	27	8.3	.84	7.9	7.9	76
16	38	9.4	5.9	10	10	5.4	740	7.8	.17	12	4.8	35
17	17	9.4	5.9	9.5	8.0	5.4	744	7.1	.17	128	3.1	21
18	12	9.8	5.4	10	7.6	4.9	627	7.1	.16	66	2.1	19
19	8.5	15	5.4	9.2	7.5	4.4	311	6.5	.16	95	1.5	20
20	7.1	18	5.4	9.0	7.3	3.9	152	5.4	.15	52	.97	35
21	7.1	13	5.9	9.3	6.0	3.2	85	4.9	.14	25	.87	121
22	7.8	11	7.8	9.2	6.3	3.2	45	5.4	.13	16	.69	162
23	8.5	9.3	7.8	9.5	5.6	3.2	27	5.4	.13	14	.65	93
24	7.1	9.4	22	10	5.6	3.2	77	5.9	.33	13	76	64
25	5.4	9.4	44	9.0	5.6	3.4	26	4.4	.15	39	75	42
26	5.4	8.4	42	8.2	6.0	3.2	8.7	4.0	.16	206	11	38
27	5.4	8.7	24	8.2	6.0	3.1	4.7	3.2	.27	56	4.0	34
28	5.4	9.2	20	7.7	6.5	3.6	27	3.2	18	19	133	31
29	5.4	8.5	22	8.4	6.9	3.6	488	3.2	1.7	496	66	24
30	5.4	7.0	23	8.3	---	3.2	254	2.9	.58	312	41	19
31	5.9	---	19	8.8	---	3.2	---	2.9	---	107	27	---
TOTAL	395.3	759.8	359.0	331.1	221.5	186.5	3806.4	745.9	79.28	1919.32	2823.58	2969.5
MEAN	12.8	25.3	11.6	10.7	7.64	6.02	127	24.1	2.64	61.9	91.1	99.0
MAX	98	213	44	18	10	15	744	182	22	496	547	460
MIN	5.4	7.0	5.4	7.7	5.6	3.1	3.2	2.9	.13	.56	.65	9.5
AC-FT	784	1510	712	657	439	370	7550	1480	157	3810	5600	5890

CAL YR 1975 TOTAL 19251.08 MEAN 52.7 MAX 2960 MIN .35 AC-FT 38180
WTR YR 1976 TOTAL 14597.18 MEAN 39.9 MAX 744 MIN .13 AC-FT 28950

PEAK DISCHARGE (BASE, 12,000 FT³/S).--No peak above base.

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT 16...	1445	88	62600	7.8	24.5	90	6.5	100	3.6	1500	840	890
NOV 07...	0830	71	27800	7.8	14.0	7	9.0	96	.8	120	52	64
DEC 02...	1015	38	43400	7.9	7.5	1	10.8	104	.9	22	8	120
JAN 06...	1330	29	43400	7.9	8.5	1	10.0	100	.6	3	1	40
FEB 17...	1130	42	58500	7.9	15.5	2	9.4	119	.5	3	3	38
MAR 16...	1330	38	45100	8.1	17.0	3	11.7	144	1.0	2	1	22
APR 20...	1015	159	5100	7.8	16.0	2100	9.5	96	.6	11000	7200	17000
MAY 25...	1400	7.8	43400	8.1	23.5	0	9.1	123	.8	150	22	150
JUN 25...	0945	.21	86000	7.5	25.0	6	5.1	94	.8	37	8	160
JUL 20...	1400	52	9950	8.0	29.5	5000	7.3	99	1.1	10000	2700	4000
AUG 05...	0730	532	8050	7.6	26.0	7000	6.4	82	6.2	210000	8600	21000
SEP 14...	1230	296	3540	7.6	27.5	3500	6.3	82	2.3	480000	20000	34000
DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT 16...	3600	3500	1000	260	15000	109	45	103	0	1800	24000	--
NOV 07...	2600	2500	740	190	5300	45	23	164	0	2000	8500	.6
DEC 02...	3500	3300	930	280	9500	70	31	209	0	2500	15000	1.0
JAN 06...	3400	3200	900	270	9700	73	30	210	0	2300	15000	.2
FEB 17...	3700	3600	950	310	14000	101	38	142	0	2700	22000	.9
MAR 16...	3500	3400	920	300	10000	73	32	156	0	2700	16000	.9
APR 20...	710	630	220	39	840	14	6.8	102	0	620	1300	.7
MAY 25...	3600	3500	940	300	9600	70	30	127	0	2900	15000	.7
JUN 25...	4800	4600	1300	370	22000	139	70	172	0	4100	35000	1.2
JUL 20...	890	790	260	59	1900	28	13	124	0	750	3000	.9
AUG 05...	940	860	310	40	1500	21	8.5	98	0	910	2200	.6
SEP 14...	750	690	250	30	510	8.1	6.8	68	0	700	790	.5
DATE	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT 16...	6.8	43500	42200	.42	.03	.44	.13	.14	5.0	173	41	98
NOV 07...	8.5	18400	16800	.24	.01	.22	--	.03	--	48	9.2	74
DEC 02...	10	28900	28400	1.2	.02	.25	--	.01	--	31	3.2	97
JAN 06...	8.9	27800	28300	1.2	.02	.27	.03	.02	--	29	2.3	72
FEB 17...	1.8	40500	40100	.51	.02	.18	--	.02	3.6	4	.45	75
MAR 16...	2.2	30500	30000	.34	.01	.16	.30	.03	--	3	.31	37
APR 20...	7.8	3170	3090	.36	.01	.13	1.8	.66	--	4230	1820	98
MAY 25...	4.8	29100	28800	.05	.01	.15	.24	.03	--	14	.29	81
JUN 25...	11	63400	62900	.11	.03	.45	--	.13	4.7	41	.02	98
JUL 20...	8.1	6120	6050	.53	.05	.20	3.5	1.8	--	10600	1490	100
AUG 05...	8.1	4960	5030	.16	.02	.08	4.9	1.4	1.8	14500	20800	94
SEP 14...	6.3	2500	2330	.08	.01	.05	2.9	1.8	--	8560	6840	95

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 16...	1445	0	3	2	1300	0	0	30	0	2
FEB. 17...	1130	10	1	1	1500	0	0	20	2	0
JUNE 25...	0945	20	3	2	--	0	0	70	0	0
AUG. 05...	0730	20	--	2	--	0	0	160	0	35

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT. 16...	0	5	0	5300	110	2	2	140	260
FEB. 17...	0	7	0	350	130	0	0	200	180
JUNE 25...	0	6	2	590	130	17	0	240	550
AUG. 05...	0	160	2	120000	20	25	0	40	700

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 16...	140	.0	.0	0	5	5	13000	60	50
FEB. 17...	120	.0	.0	0	4	2	16000	40	20
JUNE 25...	480	.4	.3	0	1	1	9800	50	80
AUG. 05...	20	--	.0	0	--	1	3500	460	20

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
NOV. 07	22	Dry weight	Ash weight				Polyethylene strip
JAN. 06	35	2.2	1.5	0.5	0.0	1500	Polyethylene strip
MAR. 16	28	8.2	6.8	.6	.0	2500	Polyethylene strip
JULY 20	25	100	94	8.7	.0	1200	Polyethylene strip
		3.62	3.31	.525	.000	590	Polyethylene strip

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

OCT. 16, 1975 1445 HOURS

PHYTOPLANKTON 4,500 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...CYMBELLACEAE		
....AMPHORA	160	3
....CYMBELLA	160	3
...NAVICULACEAE		
....NAVICULA	940	21
...NITZSCHIACEAE		
....NITZSCHIA	3,300	72

NOV. 7, 1975 0830 HOURS

PHYTOPLANKTON 1,700 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCONODISCACEAE		
....CYCLOTILLA	53	3
..PENNALES		
...NAVICULACEAE		
....NAVICULA	480	28
...NITZSCHIACEAE		
....NITZSCHIA	1,200	69

DEC. 2, 1975 1015 HOURS

PHYTOPLANKTON 380 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	25	7
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...CYMBELLACEAE		
....AMPHORA	25	7
...NAVICULACEAE		
....AMPHIPRORA		0
....NAVICULA	25	7
...PINNULARIA		0
...NITZSCHIACEAE		
....NITZSCHIA	300	80

JAN. 6, 1976 1330 HOURS

PHYTOPLANKTON 1,100 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCONODISCACEAE		
....CYCLOTILLA	150	14
....MELOSIRA	25	2
..PENNALES		
...CYMBELLACEAE		
....AMPHORA	75	7
...DIATOMACEAE		
....DIATOMA		0
...NAVICULACEAE		
....NAVICULA	150	14
...NITZSCHIACEAE		
....NITZSCHIA	680	63

FEB. 17, 1976 1130 HOURS

PHYTOPLANKTON 10,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CARTERIA		0
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCONODISCACEAE		
....CYCLOTILLA	75	1
..PENNALES		
...CYMBELLACEAE		
....AMPHORA	450	4
...FRAGILIACEAE		
....SYNEDRA	1,600	15
...NAVICULACEAE		
....AMPHIPRORA	150	1
....NAVICULA	600	6
...NITZSCHIACEAE		
....NITZSCHIA	75	1
...NITZSCHIA	1,500	14
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
....OSCILLATORIA	6,000	58

MAR. 16, 1976 1330 HOURS

PHYTOPLANKTON 1,300 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	220	17
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCONODISCACEAE		
....CYCLOTILLA	180	14
..PENNALES		
...NAVICULACEAE		
....NAVICULA	360	28
...NITZSCHIACEAE		
....NITZSCHIA	510	39
PYRRHOPHYTA		
..DINOPHYCEAE		
...GYMNODINIALES		
....GYMNODINIACEAE		
....GYMNODINIUM	36	3

APR. 20, 1976 1015 HOURS

PHYTOPLANKTON 5,200 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...CYMBELLACEAE		
....CYMBELLA	580	11
....EPITHEMIA	580	11
...NAVICULACEAE		
....GYROSIGMA	1,200	22
....NAVICULA	2,300	44
...NITZSCHIACEAE		
....NITZSCHIA	580	11

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

MAY 25, 1976 1400 HOURS

PHYTOPLANKTON 3,100 CELLS/ML

ORGANISM NAME	CELLS/ML	PER CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..VOLVOCELES		
...CHLAMYDOMONADACEAE		
....CARTERIA	130	4
..ZYGNEATALES		
...DESMIDIACEAE		
....CLOSTERIUM	260	8
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEAE		
....CYCLOTELLA	65	2
..PENNIALES		
...CYMBELLACEAE		
....CYMBELLA	65	2
...NAVICULACEAE		
....NAVICULA	190	6
...NITZSCHIA		
....NITZSCHIA	2,400	77

JUNE 25, 1976 0945 HOURS

PHYTOPLANKTON 3,500 CELLS/ML

ORGANISM NAME	CELLS/ML	PER CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..VOLVOCELES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	55	2
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNIALES		
...CYMBELLACEAE		
....AMPHORA	55	2
...EUNOTIACEAE		
....EUNOTIA	55	2
...NAVICULACEAE		
....NAVICULA	1,300	38
...NITZSCHIA		
....NITZSCHIA	1,300	38
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
....OSCILLATORIA	660	19

JULY 20, 1976 1400 HOURS

PHYTOPLANKTON 12,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNIALES		
...NAVICULACEAE		
....GYROSIGMA	1,700	14
...NAVICULA	8,400	71
...NITZSCHIA		
....NITZSCHIA	1,700	14

AUG. 5, 1976 0730 HOURS

PHYTOPLANKTON 19,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNIALES		
...CYMBELLACEAE		
....AMPHORA	940	5
...NAVICULACEAE		
....NAVICULA	940	5
...NITZSCHIA		
....NITZSCHIA	1,900	10
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
....OSCILLATORIA	940	5
...OSCILLATORIA	14,000	75

SEP. 14, 1976 1230 HOURS

PHYTOPLANKTON 0 CELLS/ML

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	395.3	30600	19200	20500	10200	10800	1790	1910	****
NOV. 1975.....	759.8	32300	20500	42200	10900	22500	1850	3790	****
DEC. 1975.....	358	49100	32700	31700	17900	17300	2500	2420	****
JAN. 1976.....	331.1	47400	31400	28100	17100	15300	2430	2170	****
FEB. 1976.....	214.6	52800	35400	20500	19400	11200	2660	1540	****
MAR. 1976.....	186.5	55300	37400	18800	20500	10300	2750	1390	****
APR. 1976.....	3806.4	13500	8320	85500	4100	42100	1080	11100	****
MAY 1976.....	745.9	23000	14300	28700	7370	14800	1520	3060	****
JUNE 1976.....	79.28	42400	28000	6010	15200	3250	2270	487	****
JULY 1976.....	1919.32	14800	9070	47000	4460	23100	1200	6210	****
AUG. 1976.....	2823.58	9210	5600	42700	2620	20000	870	6660	960
SEPT 1976.....	2969.5	10700	6600	52900	3170	25400	940	7530	****
TOTAL	14590.25	**	**	425000	**	216000	**	48300	**
WTD.AVG.	39.97	17100	11000	**	5500	**	1200	**	*****

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31500	38400	50700	46700	56100	55600	46100	14700	43700	96700	10300	37400
2	31700	35000	44800	47900	51000	58800	45500	17100	46100	98500	12000	35500
3	31900	19000	40500	47400	46300	52600	42800	13300	46500	55500	15500	41000
4	31600	19700	44500	44500	49500	49000	40400	17100	46200	35100	6550	45300
5	31900	21800	47200	43500	49000	58800	38500	19100	48000	22400	7030	45800
6	32800	22900	44600	44100	51800	59500	47400	29000	40600	12400	2830	46600
7	33200	24000	49800	44900	58200	47400	45100	28600	42400	15300	3360	23900
8	34200	29300	47000	50800	51800	50500	22800	33400	48300	19000	4490	5040
9	34300	33700	45700	47200	57400	85000	75000	31000	41700	21700	6620	8170
10	34300	34200	48800	44500	52900	64500	84100	32400	51700	22000	7260	15300
11	34900	35000	51500	43100	56400	57600	69400	34900	57100	21700	8600	6150
12	35500	36100	51000	47200	54400	59100	58800	36200	60600	37400	12000	5890
13	35700	37100	51500	47000	53100	54600	49300	37100	71800	44500	13900	6900
14	35800	37000	52900	46500	53400	49500	70000	38800	59100	37900	16600	4590
15	20000	36900	55200	45100	55100	47400	49800	40000	49000	53700	19300	4800
16	30000	37500	53500	45900	56400	46100	21300	42300	60400	54600	21600	9950
17	40100	38700	51000	47900	58500	53300	8000	50800	69800	24000	25100	13400
18	36500	40200	51300	47600	58000	44700	5920	37800	67000	11300	27300	17200
19	35500	38700	48400	49100	53100	47000	4700	37800	73400	8130	30800	19000
20	34400	75500	47000	50200	47900	53300	5260	37500	77300	10200	34300	57500
21	34600	59100	51500	46500	54000	47900	7980	36400	80000	13200	37000	21400
22	34300	43900	50000	46300	55200	52600	11300	38300	76100	17100	41800	11500
23	33600	43600	53600	50000	51700	43900	14500	41600	77300	18300	45000	5460
24	37700	45300	46500	51400	43800	45000	30000	43600	94800	20000	19200	7920
25	38900	46600	60000	51800	46800	45700	25900	43300	85200	35600	26200	7520
26	36900	45500	46800	49800	42800	50500	26300	42100	77500	11100	40000	10800
27	37000	46900	41400	49100	50000	48200	28000	42800	61800	13000	50000	13600
28	36700	44100	40400	47400	50800	52600	24500	45500	17500	18300	20000	15500
29	36600	43000	46500	48600	51700	46100	10500	49800	97600	12900	13000	26000
30	38500	47500	52900	51800	---	47000	12900	48300	96600	9490	9500	26400
31	39200	---	47300	51900	---	43100	---	47000	---	8400	20700	---
MONTH	34500	38700	49000	47600	52300	52200	34100	35700	62200	28400	19600	19800

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	---	8.0	10.0	14.0	16.0	17.0	11.0	33.0	29.0	32.0	25.0
2	14.0	14.0	4.0	5.0	10.0	16.0	19.0	16.0	31.0	28.0	26.0	25.0
3	12.0	16.0	6.0	1.0	10.0	12.0	25.0	14.0	26.0	24.0	29.0	32.0
4	18.0	16.0	16.0	5.0	6.0	13.0	18.0	16.0	27.0	28.0	31.0	30.0
5	16.0	14.0	11.0	4.0	4.0	9.0	14.0	16.0	24.0	27.0	26.0	27.0
6	15.0	21.0	6.0	4.0	1.0	7.0	18.0	21.0	25.0	26.0	33.0	25.0
7	17.0	21.0	11.0	0.0	4.0	8.0	15.0	15.0	27.0	28.0	31.0	27.0
8	21.0	26.0	7.0	0.0	16.0	7.0	13.0	21.0	26.0	27.0	31.0	25.0
9	19.0	17.0	5.0	0.0	8.0	11.0	20.0	20.0	31.0	26.0	28.0	18.0
10	21.0	12.0	9.0	7.0	11.0	13.0	24.0	19.0	28.0	28.0	29.0	26.0
11	23.0	16.0	10.0	10.0	10.0	14.0	23.0	28.0	28.0	24.0	28.0	26.0
12	17.0	12.0	8.0	6.0	12.0	12.0	18.0	21.0	32.0	27.0	31.0	26.0
13	25.0	12.0	13.0	10.0	15.0	6.0	21.0	20.0	27.0	25.0	33.0	24.0
14	21.0	9.0	18.0	6.0	11.0	19.0	18.0	22.0	30.0	27.0	29.0	26.0
15	16.0	13.0	7.0	5.0	---	14.0	17.0	21.0	25.0	28.0	26.0	30.0
16	20.0	17.0	---	9.0	18.0	12.0	14.0	21.0	27.0	29.0	32.0	31.0
17	13.0	14.0	3.0	10.0	12.0	9.0	16.0	25.0	24.0	27.0	30.0	28.0
18	17.0	14.0	1.0	13.0	15.0	14.0	15.0	24.0	22.0	26.0	27.0	23.0
19	14.0	14.0	5.0	6.0	15.0	14.0	22.0	23.0	26.0	29.0	31.0	25.0
20	15.0	10.0	2.0	6.0	15.0	19.0	16.0	22.0	28.0	27.0	28.0	23.0
21	16.0	5.0	7.0	3.0	7.0	17.0	15.0	27.0	28.0	27.0	28.0	25.0
22	17.0	9.0	9.0	6.0	13.0	12.0	25.0	28.0	29.0	25.0	---	25.0
23	15.0	10.0	6.0	8.0	10.0	17.0	21.0	30.0	28.0	30.0	31.0	27.0
24	15.0	6.0	4.0	11.0	9.0	16.0	22.0	25.0	29.0	---	31.0	27.0
25	15.0	5.0	7.0	10.0	17.0	20.0	24.0	23.0	34.0	25.0	27.0	27.0
26	18.0	2.0	10.0	5.0	12.0	18.0	23.0	23.0	---	28.0	30.0	23.0
27	19.0	6.0	10.0	4.0	16.0	17.0	17.0	22.0	28.0	29.0	30.0	19.0
28	14.0	9.0	6.0	10.0	16.0	11.0	15.0	---	32.0	29.0	28.0	19.0
29	14.0	13.0	7.0	10.0	21.0	17.0	12.0	28.0	34.0	28.0	26.0	25.0
30	13.0	---	3.0	10.0	---	16.0	15.0	---	27.0	25.0	25.0	27.0
31	13.0	---	6.0	10.0	---	11.0	---	32.0	---	23.0	27.0	---
MONTH	16.5	12.5	7.5	6.5	11.5	13.5	18.5	22.0	28.0	27.0	29.0	25.5

08082100 Stinking Creek near Aspermont, Tex.

LOCATION.--Lat 33°14'00", long 100°12'47", Stonewall County, at downstream side of bridge on Farm Road 1263, 4.9 miles (7.9 km) upstream from Salt Fork Brazos River, and 6.8 miles (10.9 km) north of Aspermont.

DRAINAGE AREA (revised).--88.8 mi² (230.0 km²).

PERIOD OF RECORD.--Discharge: September 1965 to current year.

Water quality: Chemical analyses: October 1965 to current year. Water temperatures: October 1965 to September 1969.

GAGE.--Water-stage recorder. Datum of gage is 1,601.5 ft (488.14 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--11 years, 3.65 ft³/s (0.103 m³/s), 0.56 in/yr (14 mm/yr), 2,640 acre-ft/yr (3.26 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 242 ft³/s (6.85 m³/s) July 29 (gage height, 5.62 ft or 1.713 m, from floodmark); minimum, 0.03 ft³/s (0.001 m³/s) June 30 to July 2.

Period of record: Maximum discharge, 1,620 ft³/s (45.9 m³/s) Aug. 13, 1972 (gage height, 9.85 ft or 3.002 m); no flow for many days most years.

Maximum stage since at least 1925, 31 ft (9.4 m) in September 1955, from information by local resident.

REMARKS.--Discharge records good. No known diversion above station. Recording rain gage located at station.

DISCHARGE* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.41	1.1	.67	.90	.55	.57	.65	9.3	.21	.03	2.2	.38		
2	.42	.89	.62	.79	.52	.57	.62	3.1	.21	.03	1.3	.18		
3	.45	.39	.62	.71	.52	.60	.65	1.7	.18	.07	.84	.12		
4	.47	7.1	.59	.65	.52	.64	.91	1.3	.15	.08	.62	.12		
5	.50	3.6	.57	.49	.52	.62	.75	7.2	.15	.08	.47	.10		
6	.56	2.3	.60	.41	.52	.62	.74	6.7	.29	.06	.29	.10		
7	.67	1.5	.62	.53	.52	.72	.84	2.4	.15	.06	.25	.18		
8	.59	1.0	.57	.55	.52	1.1	1.4	1.8	19	.04	.21	9.9		
9	.62	.96	.57	.53	.54	1.1	.89	1.4	8.2	.04	.18	5.9		
10	.60	.83	.57	.52	.57	.84	.81	1.4	1.8	.33	.18	2.5		
11	.60	.81	.57	.54	.53	.81	.78	1.3	.84	.57	.18	.84		
12	.58	.73	.57	.54	.52	.65	.76	1.2	.42	.47	.18	.25		
13	.57	.65	.57	.57	.52	.59	4.0	1.0	.18	.47	.15	1.7		
14	.52	.62	.57	.57	.53	.57	3.7	.90	.08	.42	.12	3.7		
15	1.3	.62	.52	.54	.57	.49	4.0	.71	.06	.42	.12	1.6		
16	.96	.62	.52	.52	.57	.52	22	.65	.08	.57	.10	.29		
17	.88	.62	.47	.52	.55	.52	7.4	.62	.10	.42	.10	.25		
18	.56	.62	.47	.52	.57	.52	4.0	.62	.10	.25	.12	.18		
19	.57	.83	.42	.52	.54	.52	1.3	.57	.10	.18	.15	1.3		
20	.54	1.2	.47	.52	.53	.52	.84	.57	.10	.12	.12	.99		
21	.54	.83	.47	.52	.54	.52	.60	.52	.10	.06	.10	.78		
22	.58	.65	.52	.52	.52	.49	.51	.47	.08	.06	.08	.18		
23	.60	.57	.52	.52	.52	.48	.75	.47	.15	.12	.08	.18		
24	.56	.57	1.0	.54	.52	.52	2.8	.42	.15	.12	.10	.18		
25	.55	.60	1.6	.59	.52	.58	1.2	.42	.21	.12	.15	.18		
26	.58	.62	1.3	.60	.52	.61	.81	.38	.18	10	.10	.18		
27	.58	.57	1.1	.55	.52	.59	.80	.33	.08	2.2	.10	.18		
28	.56	.60	1.1	.52	.52	.58	1.9	.33	.07	.38	.10	.18		
29	.57	.66	1.0	.52	.53	.63	14	.29	.05	130	.10	.18		
30	.56	.71	1.0	.52	---	.60	7.5	.25	.03	79	13	.18		
31	.56	---	.93	.58	---	.64	---	.25	---	7.2	4.3	---		
TOTAL	18.61	160.09	21.69	17.42	15.44	19.33	87.91	48.57	33.50	233.97	26.09	32.89		
MEAN	.60	5.34	.70	.56	.53	.62	2.93	1.57	1.12	7.55	.84	1.10		
MAX	1.3	.89	1.6	.90	.57	1.1	22	9.3	19	130	13	9.9		
MIN	.41	.57	.42	.41	.52	.48	.51	.25	.03	.03	.08	.10		
CFSM	.006	.06	.007	.006	.005	.006	.03	.02	.01	.08	.009	.01		
IN.	.007	.06	.009	.007	.006	.008	.04	.02	.01	.09	.01	.01		
AC-FT	37	318	43	35	31	38	174	96	66	464	52	65		
CAL YR 1975	TOTAL	763.45	MEAN	2.09	MAX	98	MIN	.04	CFSM	.02	IN	.31	AC-FT	1510
WTR YR 1976	TOTAL	715.51	MEAN	1.95	MAX	130	MIN	.03	CFSM	.02	IN	.29	AC-FT	1420

PEAK DISCHARGE (BASE, 300 FT³/S).--No peak above base.

08082100 Stinking Creek near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
NOV. 10...	1445	.82	6980	8.0	17.0	2000	1900	490	190	830
DEC. 15...	1445	.53	10200	7.8	7.0	3100	2900	680	330	1400
JAN. 26...	1320	.62	10600	7.7	4.0	3200	3000	690	350	1400
MAR. 16...	1040	.51	11300	7.9	10.5	3400	3200	720	380	1600
APR. 28...	1115	.80	8020	7.6	20.0	2200	2000	500	220	1100
JUNE 08...	1045	.31	11000	7.5	24.0	3500	3400	810	370	1400
JULY 28...	1015	.34	3590	7.5	26.0	1000	900	250	94	420
AUG. 26...	1335	.10	10300	7.7	30.0	3200	3200	740	340	1400

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 10...	8.1	17	146	0	1600	1400	--	1.8	4600
DEC. 15...	11	14	178	0	2400	2300	--	.1	7210
JAN. 26...	11	15	228	0	2500	2400	--	.4	7470
MAR. 16...	12	14	146	0	2800	2800	--	.1	8390
APR. 28...	10	13	167	0	1700	1900	--	1.4	5520
JUNE 08...	10	20	214	0	2700	2700	--	3.2	8110
JULY 28...	5.7	10	130	0	690	750	.4	4.1	2280
AUG. 26...	11	18	104	0	2500	2500	.5	5.8	7560

08082180 North Croton Creek near Knox City, Tex.

LOCATION.--Lat 33°22'59", long 100°04'51", Stonewall County, on left bank 600 ft (180 m) downstream from Wedington Creek, 9.5 miles (15.3 km) upstream from Brazos River, and 15 miles (24 km) southwest of Knox City.

DRAINAGE AREA.--251 mi² (650 km²).

PERIOD OF RECORD.--Discharge: September 1965 to current year.

Water quality: Chemical analyses: October 1965 to current year. Water temperatures: October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,462.44 ft (445.752 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 17.2 ft³/s (0.487 m³/s), 0.93 in/yr (24 mm/yr), 12,460 acre-ft/yr (15.4 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 718 ft³/s (20.3 m³/s) Nov. 2 (gage height, 11.46 ft or 3.493 m), from rating curve extended as explained below; minimum, 0.08 ft³/s (0.002 m³/s) Aug. 27, 28.

Period of record: Maximum discharge, 32,100 ft³/s (909 m³/s) Aug. 30, 1966 (gage height, 32.36 ft or 9.863 m), from rating curve extended above 240 ft³/s (6.80 m³/s) on basis of step-backwater analysis and slope-area measurements of 2,660 ft³/s (75.3 m³/s), 6,530 ft³/s (185 m³/s), and peak flow; no flow at times.

Historic: Maximum stage since at least 1921, that of Aug. 30, 1966. Flood in 1932 reached a stage of about 32 ft (9.8 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 25,800 micromhos July 24; minimum daily, 1,750 micromhos July 29. Maximum water temperatures, 34.0°C July 7; minimum, freezing point on several days during December, January, and February.

Period of record: Maximum daily specific conductance, 47,400 micromhos Oct. 23, 1969; minimum daily, 1,060 micromhos Aug. 30, 1966. Maximum water temperatures, 35.0°C June 14, 1972; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. No diversion or regulation above station. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WRD-TX-75: 1966-67(M), 1969-74(M).

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	4.8	3.1	4.4	2.3	1.1	1.1	17	4.9	.32	8.0	.62
2	4.6	285	3.3	3.7	2.2	1.1	1.1	11	1.4	.27	4.1	.37
3	4.5	45	3.4	3.4	2.1	1.1	1.1	3.2	1.1	.35	9.2	.27
4	4.0	22	3.6	3.2	2.1	2.7	.99	6.0	.89	1.4	4.4	.20
5	3.5	17	3.9	3.1	2.1	2.0	1.0	8.6	.73	.48	7.6	.16
6	3.3	14	3.4	3.3	2.1	1.5	1.1	7.0	.74	.39	3.2	.13
7	3.1	12	3.1	3.3	2.1	1.6	1.7	5.2	11	.30	1.8	.13
8	2.9	10	3.3	3.8	2.1	2.3	4.9	4.5	8.5	.25	1.2	.18
9	2.7	9.2	3.4	3.0	2.1	2.6	2.9	4.2	9.2	.25	.95	43
10	2.5	7.5	3.4	3.2	2.1	2.0	2.1	4.2	2.9	.99	.75	56
11	2.4	7.0	3.3	3.1	2.0	1.9	1.6	3.7	1.6	1.3	.57	8.4
12	2.5	5.9	3.3	3.1	2.0	2.0	1.5	3.7	1.4	.95	.44	3.5
13	2.3	5.2	3.3	3.0	2.0	1.9	11	3.7	1.6	.66	.37	22
14	2.2	5.2	3.2	2.8	2.0	1.8	5.7	3.4	1.5	.53	.30	11
15	49	5.2	3.1	2.7	2.0	1.7	3.2	3.1	1.0	.48	.24	1.5
16	19	5.2	2.9	2.7	2.0	1.5	35	3.1	.89	.48	.22	1.1
17	9.8	5.1	2.9	2.7	2.0	1.4	49	2.7	2.0	.59	.17	.93
18	6.3	4.9	2.7	2.8	1.9	1.4	32	2.5	.61	.52	.16	.83
19	4.7	6.5	2.8	2.6	1.8	1.4	11	2.3	.57	.48	.15	1.7
20	3.9	7.3	2.8	2.3	1.8	1.3	7.6	2.1	.48	1.1	.14	3.4
21	3.3	5.4	2.7	2.3	1.6	1.2	5.8	2.1	.47	.72	.14	1.4
22	3.3	4.9	3.0	2.3	1.5	1.2	4.4	2.1	.53	.51	.13	1.5
23	3.3	4.9	3.1	2.4	1.5	1.2	6.9	2.1	.63	.48	.11	1.4
24	2.8	4.7	3.1	2.5	1.5	1.2	10	2.0	.55	.42	.15	.98
25	2.4	4.5	6.4	2.4	1.5	1.2	4.9	2.0	.53	.33	.17	.81
26	2.4	4.3	7.2	2.3	1.5	1.1	3.8	1.8	.47	116	.14	.72
27	2.4	4.2	5.8	2.3	1.5	1.1	3.4	1.6	.67	15	.11	.75
28	2.2	4.2	5.2	2.1	1.4	1.2	16	1.5	.67	5.2	.12	1.2
29	2.1	4.4	5.7	2.2	1.2	1.2	32	1.2	.45	273	.97	1.1
30	2.2	3.5	5.5	2.2	---	1.1	27	1.1	.34	69	1.3	2.2
31	2.2	---	4.9	2.3	---	1.1	---	5.2	---	17	5.9	---
TOTAL	166.8	529.0	116.8	87.5	54.0	47.1	289.79	128.9	58.32	509.75	92.80	167.48
MEAN	5.38	17.6	3.77	2.82	1.86	1.52	9.66	4.16	1.94	16.4	2.99	5.58
MAX	49	285	7.2	4.4	2.3	2.7	49	17	11	273	44	56
MIN	2.1	3.5	2.7	2.1	1.2	1.1	.99	1.1	.34	.25	.11	.13
CFSM	.02	.07	.02	.01	.007	.006	.04	.02	.007	.07	.01	.02
IN.	.02	.08	.02	.01	.008	.007	.04	.02	.009	.08	.01	.02
AC-FT	331	1050	232	174	107	93	575	256	116	1010	184	332

CAL YP 1975 TOTAL 8483.45 MEAN 23.2 MAX 1880 MIN .20 CFSM .09 IN 1.26 AC-FT 16830
WTR YR 1976 TOTAL 2248.24 MEAN 6.14 MAX 285 MIN .11 CFSM .02 IN .33 AC-FT 4460

PEAK DISCHARGE (BASE, 500 FT³/S).--Nov. 2 (0730) 718 ft³/s (11.46 ft); July 29 (2000) 524 ft³/s (12.25 ft).

08082180 North Croton Creek near Knox City, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 31...	1820	2.1	16100	7.8	14.0	3000	2900	770	260	2800
NOV 11...	0755	7.4	9050	7.9	11.0	2400	2300	640	200	1300
DEC 16...	0800	3.0	14300	7.8	5.0	2900	2700	720	260	2400
JAN 31...	1445	2.2	15300	7.4	10.0	3100	2900	780	270	2600
FEB 29...	0920	1.9	15700	7.7	12.0	3200	3000	800	290	2700
MAR 31...	1000	1.6	17200	7.8	10.0	3200	3100	770	320	3100
APR 28...	1015	3.2	9540	7.9	19.5	2600	2400	680	210	1400
MAY 31...	1100	1.1	11000	7.8	23.0	3100	2900	800	260	1600
JUL 29...	1050	370	2950	7.4	22.0	1300	1300	460	40	200
AUG 31...	0945	7.0	3460	7.8	27.0	1900	1800	580	99	180
SEP 30...	1650	1.9	21300	7.8	25.0	3400	3300	940	250	3800

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 31...	22	25	97	0	2500	4400	.6	4.6	10800
NOV 11...	12	17	148	0	2100	2100	--	6.1	6440
DEC 16...	20	22	185	0	2500	3900	--	4.2	9900
JAN 31...	20	24	206	0	2400	4400	--	3.9	10600
FEB 29...	21	22	186	0	2600	4700	.7	3.2	11200
MAR 31...	24	28	184	0	2500	5200	--	3.4	12000
APR 28...	12	23	150	0	2200	2400	.6	3.1	6990
MAY 31...	13	21	164	0	2500	2800	--	4.6	8070
JUL 29...	2.4	8.5	72	0	1100	360	.3	6.5	2210
AUG 31...	1.8	11	118	0	1500	350	.5	7.7	2790
SEP 30...	28	28	120	0	2700	6200	--	3.0	14000

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	166.8	10900	7330	3300	2930	1320	2180	982	****
NOV. 1975.....	528	5690	3810	5450	1280	1830	1540	2190	1770
DEC. 1975.....	116.8	13200	8860	2800	3650	1150	2400	756	****
JAN. 1976.....	87.5	14100	9450	2230	3960	936	2410	570	****
FEB. 1976.....	52.8	16100	10800	1530	4700	669	2450	350	****
MAR. 1976.....	47.1	17500	11800	1500	5250	668	2480	315	****
APR. 1976.....	289.79	8550	5740	4490	2160	1690	1930	1510	2450
MAY 1976.....	128.9	8230	5520	1920	2040	711	1940	676	2370
JUNE 1976.....	58.32	9250	6210	977	2390	377	1980	311	2620
JULY 1976.....	509.75	3060	2050	2820	530	728	970	1340	1140
AUG. 1976.....	92.8	5890	3950	989	1340	337	1560	390	1820
SEPT 1976.....	167.48	6060	4060	1840	1430	647	1460	660	1860
TOTAL	2247.04	**	**	29800	**	11100	**	10000	**
WTD.AVG.	6.16	7330	4900	**	1800	**	1700	**	2200

08082180 North Croton Creek near Knox City, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11500	16200	12900	12400	15400	15100	17200	6240	4530	11400	7750	4070
2	11800	3450	12700	12600	15500	13500	17100	8060	7560	11600	8500	6520
3	12100	4690	12900	12600	15600	12400	17000	7440	8430	11300	9000	6590
4	12300	5470	13000	12900	15700	11900	17200	7630	10900	8730	3580	7190
5	13000	5850	13200	13100	15600	18500	17100	7000	11300	7920	4550	8270
6	14000	6250	14100	12800	15700	23800	16900	7750	11100	9630	7050	8550
7	14600	6930	13900	12900	15800	21500	16400	8390	6500	14100	8680	8840
8	14900	7700	13300	14400	15700	18600	9200	8710	5020	12900	9910	9320
9	15500	8160	13500	14300	15600	16600	12500	9050	9490	11500	11100	7400
10	15900	8930	13600	13800	16000	17700	16200	9230	11300	6660	11900	2180
11	16100	9120	13700	14000	16200	18500	18300	9350	12500	7210	12700	4690
12	16300	9770	13800	14100	16100	18800	19100	9530	13200	7200	13800	6910
13	16600	10100	13900	13800	16000	19300	11100	9490	13300	7280	14700	5200
14	17000	10300	13800	14300	16300	19100	15600	9440	14200	10000	15000	5750
15	18000	10600	14200	14600	16200	18800	17500	9760	14600	11000	14900	11300
16	18750	10800	14300	14100	16000	18500	7500	9270	15000	10700	15300	12300
17	19460	11100	14000	14600	16400	18200	5510	9190	17900	9200	15400	13000
18	19760	11400	14400	14500	16500	17700	6240	9070	16900	12300	15800	12600
19	19790	10800	14700	14400	16600	17500	8240	8950	16700	12500	15900	8440
20	9810	10500	14400	15000	16600	17200	9000	8890	16100	18200	15800	8170
21	10500	11200	14600	14900	16400	17300	9200	8790	15300	16700	15700	13600
22	11400	11800	14700	14900	16900	17400	9760	8950	14200	24800	15500	18500
23	12100	12200	14400	14700	16600	17500	9850	9360	12800	25400	15300	20700
24	13200	11900	14600	14600	16300	16900	7410	9270	12600	25800	15000	20300
25	14100	11200	12200	14900	16200	17200	8440	9230	11300	14100	14600	20000
26	14800	11400	12000	15100	16300	17300	8960	9190	11100	3150	14500	19100
27	15200	11600	13100	15300	16400	17200	9360	9270	10500	4090	14300	18700
28	15500	11800	12500	15500	16300	17100	8500	10000	11600	6820	14000	16700
29	15900	11900	11300	15300	15600	17200	7830	10200	11300	1750	13500	16600
30	16100	12700	11600	15400	---	17000	10500	10600	11500	5000	12400	21300
31	16000	---	11700	15200	---	17100	---	7500	---	5940	3430	---
MONTH	13300	9860	13500	14200	16100	17500	12100	8850	12000	11100	12200	11400

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	18.0	9.0	5.0	5.0	19.0	18.0	15.0	18.0	28.0	32.0	25.0
2	15.0	15.0	10.0	0.0	5.0	20.0	17.0	23.0	24.0	26.0	26.0	22.0
3	15.0	15.0	7.0	1.0	6.0	12.0	18.0	24.0	22.0	28.0	32.0	24.0
4	15.0	15.0	8.0	0.0	7.0	10.0	15.0	24.0	28.0	30.0	26.0	25.0
5	15.0	17.0	15.0	0.0	5.0	7.0	15.0	23.0	25.0	24.0	26.0	27.0
6	22.0	14.0	9.0	6.5	0.0	7.0	20.0	19.0	28.0	27.0	27.0	---
7	22.0	16.0	4.0	0.0	3.0	---	19.0	21.0	24.0	34.0	27.0	28.0
8	17.0	18.0	9.0	0.0	12.0	10.0	20.0	26.0	25.0	27.0	25.0	25.0
9	18.0	16.0	11.0	0.0	9.0	9.0	23.0	24.0	26.0	29.0	25.0	20.0
10	18.0	15.0	7.0	2.0	14.0	16.0	20.0	24.0	32.0	25.0	25.0	18.0
11	18.0	12.0	7.0	2.0	13.0	17.0	25.0	22.0	30.0	23.0	25.0	28.0
12	19.0	10.0	7.0	3.0	17.0	16.0	19.0	22.0	33.0	24.0	---	24.0
13	20.0	11.0	10.0	8.0	15.0	7.0	24.0	24.0	29.0	25.0	---	23.0
14	24.0	9.0	14.0	5.0	12.0	10.0	25.0	23.0	27.0	25.0	---	17.0
15	18.0	10.0	6.0	4.0	14.0	12.0	24.0	27.0	23.0	24.0	---	30.0
16	21.0	14.0	8.0	5.0	12.0	10.0	15.0	19.0	22.0	27.0	---	24.0
17	17.0	12.0	3.0	4.0	11.0	11.0	17.0	19.0	25.0	30.0	---	26.0
18	18.0	16.0	0.0	11.0	15.0	12.0	17.0	17.0	23.0	26.0	---	25.0
19	16.0	14.0	5.0	8.0	7.0	22.0	23.5	21.0	20.0	27.0	---	25.0
20	15.0	8.0	6.0	6.0	9.0	12.0	19.0	25.0	25.0	31.0	29.0	23.0
21	16.0	8.0	5.0	8.0	7.0	8.0	18.0	20.0	25.0	26.0	23.0	26.0
22	18.0	7.0	8.0	9.0	3.0	10.0	16.0	30.0	27.0	28.0	27.0	27.0
23	17.0	6.0	5.0	11.0	10.0	18.0	25.0	25.0	29.0	26.0	22.0	28.0
24	15.0	6.0	---	8.0	6.0	24.0	25.0	23.0	29.0	27.0	24.0	29.0
25	12.0	9.0	3.0	7.0	16.0	16.0	17.0	24.0	25.0	28.0	25.0	23.0
26	18.0	4.0	8.0	4.0	7.0	16.0	23.0	21.0	24.0	24.0	30.0	24.0
27	16.0	9.0	9.0	2.0	10.0	15.0	20.0	14.0	28.0	24.0	28.0	23.0
28	14.0	9.0	6.0	9.0	11.0	16.0	21.0	18.0	33.0	25.0	27.0	19.0
29	15.0	15.0	5.0	4.0	12.0	21.0	15.0	31.0	27.0	24.0	26.0	23.0
30	14.0	7.0	4.0	11.0	---	15.0	17.0	24.0	28.0	---	27.0	25.0
31	14.0	---	7.0	10.0	---	10.0	---	23.0	---	31.0	27.0	---
MONTH	17.0	12.0	7.0	5.0	9.5	13.5	19.5	23.0	26.0	27.0	---	24.5

BRAZOS RIVER BASIN

08082500 Brazos River at Seymour, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 33°34'51", long 99°16'02", Baylor County, on left bank at upstream side of bridge on U.S. Highways 277 and 283, 0.8 mile (1.3 km) upstream from Wichita Valley Railway bridge, 1.0 mile (1.6 km) southwest of courthouse in Seymour, and at mile 847.4 (1,363.5 km).

DRAINAGE AREA (revised).--15,538 mi² (40,243 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: November 1923 to current year.

Water quality: Chemical analyses: August 1959 to current year. Water temperatures: August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,238.97 ft (377.638 m) above mean sea level. Prior to Apr. 6, 1972, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--52 years (1924-76), 391 ft³/s (11.07 m³/s), 283,300 acre-ft/yr (349 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 1,880 ft³/s (53.2 m³/s) Sept. 16 (gage height, 4.08 ft or 1.244 m); minimum, 0.54 ft³/s (0.015 m³/s) July 2, 3.

Period of record: Maximum discharge, 95,400 ft³/s (2,700 m³/s) Oct. 16, 1926 (gage height, 17.16 ft or 5.230 m, from floodmarks, present datum), from rating curve extended above 48,000 ft³/s (1,360 m³/s) on basis of slope-area measurement of 95,400 ft³/s (2,700 m³/s); maximum gage height, 23.00 ft (7.010 m), present datum, Sept. 28, 1955 (discharge, 71,200 ft³/s or 2,020 m³/s); no flow at times.

Historic: Since 1906 the maximum stage was that of Sept. 28, 1955, and maximum discharge was that of Oct. 16, 1926. A flood in 1906 reached about the same stage as flood in 1955.

Water quality: Current year: Maximum daily specific conductance, 26,700 micromhos Mar. 18; minimum daily, 1,730 micromhos July 5. Maximum water temperatures, 36.0°C June 29; minimum, 2.0°C Jan. 7.

Period of record: Maximum daily specific conductance, 80,400 micromhos May 24, 1971; minimum daily, 776 micromhos July 20, 1967. Maximum water temperatures; 37.0°C Aug. 6, 1959, Sept. 3, 1963; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. Small diversions above station for irrigation and oilfield operation.

REVISIONS (WATER YEARS).--WSP 808: 1924-29. WSP 1312: 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	37	42	67	27	17	11	744	32	.78	547	54
2	115	111	39	60	26	17	12	530	27	.65	270	139
3	108	602	38	54	27	15	11	350	26	1.5	170	83
4	100	702	39	50	24	15	11	276	28	149	288	45
5	92	503	38	49	25	13	11	229	20	21	231	33
6	83	339	33	48	25	13	12	181	17	7.0	427	21
7	75	253	34	39	26	18	13	143	14	3.6	309	19
8	69	191	34	38	26	51	13	135	13	2.2	286	33
9	66	153	34	38	27	54	14	142	12	15	195	453
10	63	126	32	41	27	43	20	115	11	64	132	464
11	61	109	32	46	25	45	32	97	23	51	100	986
12	54	96	31	45	27	42	26	84	18	45	77	438
13	55	89	34	41	26	31	32	79	17	53	61	446
14	51	82	33	38	26	30	78	66	15	307	47	399
15	55	76	30	36	26	26	90	62	9.6	336	35	782
16	72	71	30	34	26	22	152	52	8.0	277	23	1420
17	200	69	28	34	24	22	269	46	21	324	18	455
18	131	65	27	34	23	21	626	41	129	241	14	334
19	107	67	27	31	22	20	898	37	23	299	9.8	244
20	81	65	28	31	23	15	948	35	8.8	373	7.8	291
21	68	61	27	31	16	15	565	32	6.8	313	6.4	294
22	62	61	28	31	18	12	356	30	11	231	5.3	211
23	56	62	28	30	19	11	254	51	6.8	179	6.0	279
24	48	62	44	29	20	11	194	26	4.2	129	6.0	400
25	44	63	75	28	19	11	181	62	4.3	103	8.9	270
26	44	55	74	27	18	11	149	31	3.4	85	12	188
27	44	53	76	28	18	11	132	22	4.8	76	6.0	148
28	41	51	75	29	17	11	125	20	3.6	109	5.6	138
29	39	54	104	29	17	11	223	63	2.4	560	7.4	119
30	38	44	85	29	---	11	417	56	1.3	648	38	93
31	39	---	74	25	---	11	---	41	---	639	54	---
TOTAL	2280	4372	1353	1170	670	656	5875	3878	521.0	5642.73	3403.2	9279
MEAN	73.5	140	43.6	37.7	23.1	21.2	196	125	17.4	182	110	309
MAX	200	702	104	67	27	54	948	744	129	648	547	1420
MIN	38	37	27	25	16	11	11	20	1.3	.65	5.3	19
AC-FT	4520	8670	2680	2320	1330	1300	11650	7690	1030	11190	6750	18400

CAL YR 1975 TOTAL 92549.00 MEAN 254 MAX 5950 MIN 12 AC-FT 183600
WTR YR 1976 TOTAL 39099.93 MEAN 107 MAX 1420 MIN .65 AC-FT 77550

PEAK DISCHARGE (BASE, 11,000 FT³/S).--No peak above base.

08082500 Brazos River at Seymour, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PEN- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT 08...	1000	90	11600	8.0	15.5	40	8.7	90	1.1	30	7	40
NOV 06...	1415	105	12400	7.7	20.5	1300	9.0	102	1.8	14000	7600	6200
DEC 17...	0915	23	17400	8.1	2.5	1	12.0	88	.5	17	5	36
JAN 09...	0930	150	23700	7.8	.0	10	14.2	107	.4	5	3	190
FEB 25...	0815	16	22000	8.0	6.0	0	10.6	92	.3	12	12	45
MAR 19...	0900	25	26600	7.8	14.0	2	9.7	102	1.2	31	30	14
APR 07...	0945	13	19900	7.9	17.0	2	8.4	92	2.0	130	31	90
MAY 28...	0800	22	17100	8.0	16.0	15	8.7	92	1.2	3000	550	790
JUN 08...	1600	11	12400	8.1	33.0	6	7.7	112	.9	460	69	26
JUL 23...	0915	200	5200	7.9	25.5	2000	8.1	103	1.5	7000	800	840
AUG 04...	1100	260	6380	8.0	25.5	750	7.9	100	1.2	5600	230	310
SEP 17...	0800	400	2610	7.7	24.0	4000	7.6	93	.7	55000	5600	5600

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RINE (F) (MG/L)
OCT 08...	1600	1500	450	110	2100	23	15	140	0	1300	3300	--
NOV 06...	1200	1100	360	71	2400	30	14	83	0	850	3800	.4
DEC 17...	2300	2100	610	180	3300	30	17	200	0	1900	5300	.8
JAN 09...	2800	2600	770	210	4600	38	20	274	0	2100	7300	.6
FEB 25...	2600	2400	670	210	4200	36	21	198	0	2000	6900	.9
MAR 19...	2700	2500	700	220	5500	46	20	188	0	2200	8600	.9
APR 07...	2500	2300	630	220	3800	33	20	172	0	2300	6000	.9
MAY 28...	2300	2200	620	180	3200	29	16	160	0	1900	5200	.6
JUN 08...	2000	1900	540	150	2200	22	17	142	0	1600	3600	1.1
JUL 23...	960	870	310	44	770	11	9.5	99	0	830	1200	.9
AUG 04...	1300	1200	440	48	960	12	12	76	0	1200	1500	.6
SEP 17...	650	600	210	31	320	5.5	8.0	66	0	550	480	.7

DATE	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT 08...	10	7620	7360	.06	.01	.02	.33	.04	4.6	1130	275	27
NOV 06...	5.8	7530	7540	.05	.01	.23	1.1	1.1	--	2010	1660	97
DEC 17...	7.5	11300	11400	.39	.01	.13	.23	.03	--	13	.81	2
JAN 09...	7.8	15600	15100	.58	.01	.16	.60	.01	--	4	1.6	9
FEB 25...	2.9	14500	14100	.04	.01	.12	.06	.01	3.6	3	.13	72
MAR 19...	1.0	17600	17300	.00	.01	.06	.23	.01	--	8	.54	34
APR 07...	1.4	13200	13100	.01	.01	.09	.41	.00	--	11	.39	84
MAY 28...	5.2	11500	11200	.00	.01	.11	.29	.04	--	28	1.7	.87
JUN 08...	5.4	8090	8190	.00	.01	.06	.30	.01	7.3	27	.80	91
JUL 23...	8.6	3360	3220	.35	.01	.07	1.4	.97	--	2960	1600	100
AUG 04...	9.2	4340	4210	.22	.00	.02	1.1	.28	6.8	1720	1210	99
SEP 17...	7.7	1700	1640	.12	.00	.01	1.2	1.0	--	7350	7940	100

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 08...	1000	3	3	3	910	0	0	<10	0	0
FEB. 25...	0815	0	1	1	1200	0	6	<10	10	0
JUNE 08...	1600	0	1	1	400	0	0	10	0	1
AUG. 04...	1100	30	10	3	--	0	0	30	2	13

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT. 08...	0	1	0	1000	20	5	0	120	20
FEB. 25...	0	7	1	170	40	4	0	170	80
JUNE 08...	0	9	2	310	30	0	0	140	80
AUG. 04...	0	32	2	16000	0	17	0	40	40

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 08...	5	.1	.0	0	2	0	7300	40	20
FEB. 25...	80	.1	.1	1	5	3	13000	80	10
JUNE 08...	40	.0	.0	0	0	0	7500	40	10
AUG. 04...	10	.1	.0	0	2	1	4800	80	20

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
NOV. 06	29	14	14	0.2	0.4	1800	Polyethylene strip
DEC. 17	41	39	34	11	.0	440	Polyethylene strip
MAY 28	51	9.46	8.62	2.63	.000	320	Polyethylene strip

08082500 Brazos River at Seymour, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

OCT. 8, 1975 1000 HOURS

PHYTOPLANKTON 74,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..CHARACIACEAE		
....SCHROEDERIA		0
....OCCYSTACEAE		
....ANKISTRODESMUS	2,400	3
....CHODATELLA		0
....SCENEDESMACEAE		
....SCENEDESMUS	970	1
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
..COSCONODISCACEAE		
....CYCLOTETRA	2,400	3
..PENNALES		
....NITZSCHIA		
....NITZSCHIA	2,400	3
....SURIPELLACEAE		
....SURIPELLA		0
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
..CHROOCOCCACEAE		
....AGMENELLUM		0
....GOMPHOSPHERIA	3,900	5
..OSCILLATORIALES		
..OSCILLATORIA		
....LYNGBYA	62,000	83

NOV. 6, 1975 1415 HOURS

PHYTOPLANKTON 8,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..SCENEDESMACEAE		
..SCENEDESMUS		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
..FRAGILARIACEAE		
....SYNEDRA	670	8
..NAVICULACEAE		
....NAVICULA	670	8
....PINNULARIA		0
..NITZSCHIA		
....NITZSCHIA	670	8
....NITZSCHIA	6,000	75

DEC. 17, 1975 0915 HOURS

PHYTOPLANKTON 170 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..OCCYSTACEAE		
....ANKISTRODESMUS	11	6
....QUADRIGULA	22	12
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
..NAVICULACEAE		
....NAVICULA	11	6
..NITZSCHIA		
....NITZSCHIA	130	75

JAN. 9, 1976 0930 HOURS

PHYTOPLANKTON 290 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..OCCYSTACEAE		
....TETRAEDRON		0
..SCENEDESMACEAE		
....SCENEDESMUS	58	20
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
..NAVICULACEAE		
....NAVICULA	44	15
..NITZSCHIA		
....NITZSCHIA	160	55
....SURIPELLACEAE		
....CYMATOPLEURA	29	10

FEB. 25, 1976 0815 HOURS

PHYTOPLANKTON 390 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
..COSCONODISCACEAE		
....CYCLOTETRA	23	6
..PENNALES		
..CYMBELLACEAE		
....AMPHORA	23	6
..NAVICULACEAE		
....AMPHIPRORA		0
....NAVICULA		0
..NITZSCHIA		
....NITZSCHIA	350	88
CYANOPHYTA		
..MYXOPHYCEAE		
..OSCILLATORIALES		
..OSCILLATORIA		0

MAR. 19, 1976 0900 HOURS

PHYTOPLANKTON 700 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
..NAVICULACEAE		
....AMPHIPRORA	120	18
....NAVICULA	83	12
..NITZSCHIA		
....NITZSCHIA	500	71

APR. 7, 1976 0945 HOURS

PHYTOPLANKTON 1,100 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
..NAVICULACEAE		
....NAVICULA	110	10
..NITZSCHIA		
....NITZSCHIA	960	86
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
..CRYPTOMONIDALES		
..CRYPTOMONODACEAE		
....CRYPTOMONAS	53	5

08082500 Brazos River at Seymour, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

MAY 28, 1976 0800 HOURS

PHYTOPLANKTON 2,700 CELLS/ML

ORGANISM__NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
...FRANCEIA	79	3
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CARTERIA	79	3
...CHLAMYDOMONAS	240	9
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...CHAETOCERACEAE		
...CHAETOCEROS	240	9
...COSCINODISCEACEAE		
...CYCLOTELLA	79	3
..PENNIALES		
...NAVICULACEAE		
...AMPHIPHORA	160	6
...NAVICULA	240	9
...NITZSCHIA		
...NITZSCHIAEAE	1,200	44
...SURIPELLACEAE		
...SURIPELLA	79	3
PYRRHOPHYTA		
..DINOPHYCEAE		
..PERIDINIALES		
...GLENODINIACEAE		
...GLENODINIUM	320	12

JUNE 8, 1976 1600 HOURS

PHYTOPLANKTON 14,000 CELLS/ML

ORGANISM__NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESMUS	240	2
...KIRCHNERIELLA	240	2
...OOCYSTIS	480	3
...SCENEDESMACEAE		
...SCENEDESMUS	480	3
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNIALES		
...NAVICULACEAE		
...NAVICULA	720	5
...NITZSCHIAEAE		
...NITZSCHIA	2,200	15
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
...AGMENELLUM		
...ANACYSTIS	10,000	70
PYRRHOPHYTA		
..DINOPHYCEAE		
..GYMNODINIALES		
...GYMNODINIACEAE		
...GYMNODINIUM		0

JULY 23, 1976 0915 HOURS

PHYTOPLANKTON 11,000 CELLS/ML

ORGANISM__NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...SCENEDESMACEAE		
...SCENEDESMUS	3,100	29
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNIALES		
...NITZSCHIAEAE		
...HANTZSCHIA		0
...NITZSCHIA	7,700	71

AUG. 4, 1976 1100 HOURS

PHYTOPLANKTON 5,300 CELLS/ML

ORGANISM__NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS	94	2
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEACEAE		
...CYCLOTELLA	94	2
..PENNIALES		
...NAVICULACEAE		
...NAVICULA	94	2
...NITZSCHIAEAE		
...NITZSCHIA	280	5
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
...OSCILLATORIAEAE		
...OSCILLATORIA	4,500	86
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENAEAE		
...EUGLENA	94	2
...TRACHELOMONAS	94	2

SEP. 17, 1976 0800 HOURS

PHYTOPLANKTON 3,900 CELLS/ML

ORGANISM__NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNIALES		
...NAVICULACEAE		
...DIPLONEIS	1,900	50
...NITZSCHIAEAE		
...NITZSCHIA	1,900	50

08082500 Brazos River at Seymour, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	2280	11800	7460	45900	3440	21200	1530	9400	****
NOV. 1975.....	4372	9050	5620	67000	2540	29900	1280	15100	1410
DEC. 1975.....	1353	15700	9970	36400	4720	17200	1820	6660	****
JAN. 1976.....	1170	19600	12500	39400	6140	19400	2020	6370	****
FEB. 1976.....	653	20300	12900	22800	6430	11300	2060	3620	****
MAR. 1976.....	656	14700	12500	22300	6220	11000	2020	3580	****
APR. 1976.....	5875	8430	5280	83700	2350	37200	1220	19300	1340
MAY 1976.....	3878	9960	6270	65700	2830	29600	1360	14300	1510
JUNE 1976.....	520	12800	8070	11400	3770	5300	1590	2240	****
JULY 1976.....	5642.73	5590	3480	53000	1430	21800	950	14500	1050
AUG. 1976.....	3403.2	7260	4550	41800	1960	18000	1120	10300	1220
SEPT 1976.....	9279	4720	2920	73200	1150	28900	850	21400	950
TOTAL	39082.91	**	**	563000	**	251000	**	127000	**
WTD.AVG.	107.08	8490	5300	**	2400	**	1200	**	1400

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12000	15500	16700	21600	19600	21100	21200	8840	9810	20000	5000	4870
2	10400	10500	16200	21600	20000	20800	21200	8540	10100	20100	6850	5220
3	10500	5300	16200	19500	20000	20400	20900	8530	10800	15000	6610	6500
4	10600	4500	16200	19400	20000	20100	20700	8410	11700	5110	6800	18000
5	11000	8500	16300	19300	19600	20100	20500	7610	12600	1730	6700	18400
6	11100	11800	16700	20900	19800	20100	20500	8610	11900	2950	8500	18800
7	11300	8300	16700	22100	19600	17200	19900	10500	11900	4460	8130	19000
8	11600	7100	16500	21600	19100	14500	20000	10100	12400	6160	8000	12300
9	11900	8200	16600	21300	19100	12700	20000	10800	14900	7070	7500	5130
10	12100	8600	16700	18900	19300	16200	20200	11000	13500	15000	5500	5840
11	12600	9000	17000	18900	19800	17500	20200	10600	16400	10800	5000	5150
12	12600	9500	16800	18900	20200	18800	22700	14200	18400	9500	6500	5120
13	12700	10200	16500	19200	20200	19700	15900	14100	17800	9000	7050	5220
14	12900	10900	17000	19200	19800	19500	12100	14200	16200	8500	7500	5870
15	12800	11500	17000	18900	19400	21300	10800	15500	17800	4920	8110	4670
16	11600	12100	17200	17600	19800	22300	8500	15500	16200	3500	8960	3220
17	5800	12400	17400	18200	20600	25600	7400	15500	19200	3000	9900	2610
18	7500	12700	17600	18500	21300	26700	10200	16000	10100	3510	10500	2840
19	10800	12200	17600	18500	21200	26400	10200	16800	7610	4510	11300	2800
20	14200	12900	17600	18600	21700	24900	8000	16900	7820	6000	11600	2480
21	11300	13400	17600	18800	21700	23700	7400	17200	11900	8080	12100	3000
22	15400	13700	17600	18900	21700	22600	5500	17600	16800	6240	12900	5430
23	21000	14000	17600	18900	21600	21700	4400	8900	18300	5200	12900	4540
24	20200	14100	14000	19000	21700	21000	4800	16700	17700	4520	13000	4650
25	17600	14900	13400	19200	22000	21100	5230	3500	18800	4520	13500	8270
26	16100	15400	12900	19200	21500	24300	5530	10100	20100	5310	14000	6500
27	15800	14900	14100	19400	21300	22800	5830	15900	20100	6240	14000	4200
28	15800	18000	12800	19200	21200	22700	5900	17200	19700	6500	12100	4390
29	15800	18000	12800	19000	21100	22700	9500	8000	19900	5940	10300	4620
30	15400	17400	15900	18900	---	21800	7810	9000	20100	4500	12600	5760
31	15500	---	18800	19400	---	21800	---	10100	---	5720	14500	---
MONTH	13000	11900	16300	19400	20500	21000	13100	12100	15000	7210	9610	6850

08082500 Brazos River at Seymour, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	17.0	9.0	14.0	15.0	23.0	22.0	20.0	33.0	33.0	31.0	28.0
2	22.0	17.0	30.0	5.0	15.0	20.0	24.0	21.0	35.0	31.0	31.0	28.0
3	22.0	18.0	16.0	8.0	15.0	10.0	26.0	---	33.0	26.0	31.0	31.0
4	17.0	18.0	16.0	---	10.0	15.0	---	21.0	27.0	27.0	31.0	31.0
5	24.0	20.0	17.0	7.0	5.0	14.0	24.0	19.0	32.0	33.0	---	31.0
6	25.0	21.0	12.0	10.0	4.0	10.0	24.0	20.0	31.0	30.0	---	33.0
7	25.0	20.0	10.0	2.0	11.0	---	21.0	19.0	30.0	32.0	31.0	---
8	27.0	21.0	12.0	3.0	9.0	9.0	23.0	19.0	33.0	35.0	---	24.0
9	27.0	33.0	15.0	5.0	18.0	17.0	25.0	21.0	31.0	28.0	33.0	21.0
10	28.0	17.0	15.0	8.0	20.0	19.0	22.0	26.0	32.0	25.0	34.0	22.0
11	26.0	18.0	17.0	10.0	15.0	18.0	23.0	30.0	32.0	25.0	35.0	27.0
12	27.0	13.0	10.0	13.0	19.0	16.0	24.0	26.0	33.0	27.0	35.0	27.0
13	28.0	13.0	17.0	11.0	23.0	11.0	24.0	22.0	29.0	30.0	35.0	24.0
14	25.0	16.0	30.0	11.0	17.0	18.0	27.0	18.0	30.0	26.0	34.0	29.0
15	---	16.0	8.0	11.0	20.0	16.0	21.0	16.0	26.0	27.0	34.0	28.0
16	22.0	18.0	13.0	12.0	21.0	17.0	20.0	---	32.0	29.0	35.0	27.0
17	19.0	19.0	6.0	16.0	18.0	19.0	19.0	26.0	29.0	---	34.0	28.0
18	21.0	19.0	9.0	14.0	16.0	20.0	25.0	29.0	29.0	28.0	34.0	25.0
19	21.0	14.0	9.0	10.0	18.0	24.0	20.0	29.0	30.0	30.0	34.0	25.0
20	24.0	10.0	14.0	---	23.0	18.0	17.0	24.0	21.0	30.0	34.0	22.0
21	25.0	9.0	9.0	12.0	9.0	20.0	---	---	24.0	31.0	34.0	24.0
22	20.0	10.0	12.0	14.0	16.0	21.0	---	31.0	30.0	27.0	34.0	25.0
23	23.0	---	8.0	15.0	17.0	22.0	---	21.0	31.0	31.0	34.0	25.0
24	20.0	10.0	---	13.0	14.0	26.0	---	31.0	28.0	33.0	---	26.0
25	14.0	10.0	8.0	8.0	19.0	25.0	21.0	20.0	32.0	31.0	---	26.0
26	19.0	7.0	10.0	9.0	19.0	19.0	---	24.0	34.0	30.0	31.0	24.0
27	23.0	11.0	11.0	11.0	20.0	20.0	18.0	20.0	31.0	31.0	32.0	24.0
28	21.0	33.0	14.0	12.0	21.0	24.0	---	31.0	35.0	31.0	31.0	20.0
29	20.0	18.0	5.0	---	23.0	20.0	15.0	---	36.0	27.0	25.0	25.0
30	23.0	10.0	7.0	14.0	---	16.0	15.0	---	33.0	30.0	26.0	28.0
31	23.0	---	14.0	11.0	---	23.0	---	31.0	---	31.0	30.0	---
MONTH	23.0	16.5	13.0	10.5	16.0	18.5	---	23.5	30.5	29.5	32.5	26.0

08082700 Millers Creek near Munday, Tex.

LOCATION.--Lat 33°19'45", long 99°27'53", Throckmorton County, near right bank on downstream side of bridge on Farm Road 1720, 12.7 miles (20.4 km) southeast of Munday, and 24.6 miles (39.6 km), revised, upstream from Brazos River.

DRAINAGE AREA (revised).--104 mi² (269 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,350 ft (411 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 4.40 ft³/s (0.125 m³/s), 0.57 in/yr (14 mm/yr), 3,190 acre-ft/yr (3.93 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22 ft³/s (0.62 m³/s) Aug. 31 (gage height, 2.45 ft or 0.747 m); no flow for many days.
Period of record: Maximum discharge, 1,040 ft³/s (29.5 m³/s) Aug. 26, 1971 (gage height, 14.75 ft or 4.496 m); no flow most of time.

Maximum stage since at least 1883 occurred June 13, 1930, and exceeded 18.0 ft (5.49 m); maximum stage since 1930, 18.0 ft (5.49 m) in October 1962, from information by local resident.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1		0					0	.04			0	7.3		
2		.06					0	0			0	2.2		
3		.02					0	0			0	.57		
4		.96					0	0			0	.18		
5		.51					0	0			0	.21		
6		.48					0	0			0	.02		
7		.14					0	0			0	.01		
8		0					0	0			0	.24		
9		0					0	0			0	.03		
10		0					0	0			0	.01		
11		0					0	0			0	0		
12		0					0	0			0	0		
13		0					0	0			0	0		
14		0					0	0			0	0		
15		0					0	0			0	0		
16		0					0	0			0	0		
17		0					0	0			0	0		
18		0					0	0			0	0		
19		0					0	0			0	1.4		
20		0					0	0			0	.10		
21		0					0	0			0	.01		
22		0					0	0			0	0		
23		0					0	0			0	0		
24		0					0	0			0	0		
25		0					0	2.8			0	0		
26		0					0	.60			0	0		
27		0					0	.02			0	0		
28		0					.21	0			0	0		
29		0					.49	0			0	0		
30		0					.06	0			.05	0		
31		---			---		---	0	---		10	---		
TOTAL	0	2.17	0	0	0	0	.76	3.46	0	0	10.05	12.28		
MEAN	0	.072	0	0	0	0	.025	.11	0	0	.32	.41		
MAX	0	.96	0	0	0	0	.49	2.8	0	0	10	7.3		
MIN	0	0	0	0	0	0	0	0	0	0	0	0		
CFSM	0	0	0	0	0	0	0	.001	0	0	.003	.003		
IN.	0	.0008	0	0	0	0	.0003	.001	0	0	.004	.004		
AC-FT	0	4.3	0	0	0	0	1.5	6.9	0	0	20	24		
CAL YR 1975	TOTAL	312.75	MEAN	.86	MAX	136	MIN	0	CFSM	.008	IN	.11	AC-FT	620
WTR YR 1976	TOTAL	28.72	MEAN	.079	MAX	10	MIN	0	CFSM	.000	IN	.01	AC-FT	57

PEAK DISCHARGE (BASE, 200 FT³/S).--No peak above base.

08082950 Elm Creek near Proffitt, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 33°11'00" (revised), long 98°53'40", Young County, at bridge on U.S. Highway 380 in Proffitt community, 1,000 ft (305 m) west of Farm Road 578 south, 5.5 miles (8.9 km) upstream from mouth, and about 9 miles (14 km) west of Newcastle.

DRAINAGE AREA.--275 mi² (712 km²).

PERIOD OF RECORD.--Occasional discharge measurements: October 1968 to current year. Occasional water-quality data: December 1968 to September 1975.

REMARKS.--No flow at time of observation.

08083000 Brazos River near Graham, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 33°04'55", long 98°43'36", Young County, at bridge on Farm Road 209 and about 8 miles (13 km) southwest of Graham.

DRAINAGE AREA.--15,730 mi² (40,740 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT. 07...	1305	104	9100	8.2	20.5	1300	1200	360	86	1600
NOV. 18...	1205	95	9490	8.1	16.0	1400	1300	420	94	1600
DEC. 29...	1545	85	--	--	5.0	--	--	--	--	--
FEB. 09...	1505	33	16100	7.8	15.5	2000	1900	550	160	3100
MAR. 22...	1510	25	16900	7.9	21.0	2100	2000	570	170	3200
MAY 03...	1800	641	8950	7.4	21.0	1300	1200	380	80	1600
JUNE 14...	1825	11	13400	7.8	30.5	1800	1400	490	150	2500
JULY 26...	2010	142	5660	7.7	30.5	1000	950	330	50	880
SEP. 07...	1835	34	6360	7.5	30.0	680	620	200	43	1100

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 07...	20	16	118	0	1000	2500	.8	11	5630
NOV. 18...	18	11	140	0	1200	2500	--	7.8	5900
DEC. 29...	--	--	--	--	--	--	--	--	--
FEB. 09...	30	15	172	0	1700	4800	--	3.1	10400
MAR. 22...	30	16	154	0	1700	5400	--	2.4	11100
MAY 03...	19	13	140	0	1100	2600	--	10	5850
JUNE 14...	25	15	112	0	1500	4000	--	5.6	8720
JULY 26...	12	12	100	0	940	1300	--	10	3570
SEP. 07...	18	9.0	72	0	560	1700	--	5.6	3650

08083100 Clear Fork Brazos River near Roby, Tex.

LOCATION.--Lat 32°47'15", long 100°23'18", Fisher County, on right bank at downstream side of pile bent of bridge on State Highway 70, 3.0 miles (4.8 km) north of Roby, 3.2 miles (5.1 km) upstream from Cottonwood Creek, and 255.7 miles (411.4 km) upstream from mouth.

DRAINAGE AREA (revised).--228 mi² (591 km²).

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,885.09 ft (574.575 m) above mean sea level.

AVERAGE DISCHARGE.--14 years (1962-76), 9.14 ft³/s (0.259 m³/s), 0.54 in/yr (14 mm/yr), 6,620 acre-ft/yr (8.16 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 169 ft³/s (4.79 m³/s) Sept. 9 (gage height, 7.32 ft or 2.231 m); minimum, 1.1 ft³/s (0.031 m³/s) Aug. 24, 25, 28-30, Sept. 2-6.

Period of record: Maximum discharge, 7,050 ft³/s (200 m³/s) Oct. 18, 1965 (gage height, 21.48 ft or 6.547 m); maximum gage height, 21.52 ft (6.559 m) Sept. 19, 1969; no flow at times in 1963-67.

Maximum stage since the 1890's, about 22 ft (6.7 m) in May and June 1935, from information by local residents.

REMARKS.--Records good. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.4	2.4	2.4	3.0	2.5	2.3	3.6	1.8	1.7	1.3	1.2
2	2.5	2.2	2.4	2.4	3.0	2.4	2.3	3.3	1.8	1.6	1.3	1.1
3	2.5	1.7	2.4	2.4	3.0	2.4	2.3	3.2	1.8	2.0	1.5	1.1
4	2.5	5.7	2.4	2.4	3.0	2.3	2.2	3.1	1.8	2.2	1.3	1.1
5	2.5	3.4	2.4	2.4	2.9	2.2	2.1	3.4	1.8	1.8	1.2	1.1
6	2.5	3.1	2.4	3.0	2.4	2.3	2.1	3.5	2.1	1.7	1.2	1.1
7	2.5	2.9	2.4	3.0	2.4	2.3	2.0	3.3	2.5	1.7	1.2	1.3
8	2.4	2.9	2.4	2.4	3.0	2.4	2.0	3.0	2.7	1.7	1.2	4.6
9	2.4	3.0	2.5	2.4	3.1	2.3	1.9	2.9	2.7	1.7	1.2	6.4
10	2.4	2.9	2.5	3.0	3.1	2.3	1.9	3.0	2.3	2.4	1.2	1.1
11	2.4	2.4	2.5	3.1	3.1	2.3	1.9	3.0	2.2	7.8	1.2	2.4
12	2.4	2.4	2.5	3.2	3.0	2.2	2.1	3.0	2.0	5.7	1.3	1.6
13	2.3	2.7	2.6	3.2	2.9	2.2	2.3	2.9	1.9	1.1	1.3	1.4
14	2.3	2.8	2.6	3.2	2.7	2.3	4.0	2.8	1.9	3.9	1.3	1.4
15	2.2	2.8	2.6	3.3	2.7	2.3	2.9	2.8	1.9	3.1	1.3	1.4
16	2.3	2.8	2.6	3.3	2.7	2.2	4.8	2.7	1.9	1.4	1.3	1.3
17	2.3	2.8	2.6	3.3	2.7	2.3	3.5	2.8	2.0	5.4	1.3	1.4
18	2.3	2.8	2.6	3.4	2.5	2.3	3.7	2.8	2.0	6.2	1.2	1.6
19	2.3	3.4	2.6	3.3	2.6	2.4	7.4	2.8	1.9	2.7	1.2	1.7
20	2.3	2.8	2.7	3.2	2.7	2.4	5.5	2.8	1.9	2.3	1.3	2.5
21	2.3	2.6	2.7	3.2	2.5	2.3	4.9	2.8	1.9	2.2	1.3	9.4
22	2.5	2.6	2.7	3.3	2.4	2.4	4.7	2.9	1.9	1.9	1.3	2.1
23	2.5	2.6	2.7	3.3	2.6	2.4	4.5	1.6	1.9	1.9	1.2	1.5
24	2.3	2.6	3.1	3.4	2.6	2.5	4.3	3.4	1.7	1.8	1.1	1.3
25	2.3	2.6	3.1	3.4	2.6	2.5	4.0	3.0	1.7	1.6	1.1	1.3
26	2.3	2.5	3.0	3.2	2.6	2.5	3.7	2.2	1.7	1.6	1.2	1.2
27	2.3	2.6	2.8	3.1	2.6	2.3	3.5	2.0	1.6	1.5	1.2	1.2
28	2.3	2.6	2.8	3.1	2.6	2.4	3.9	2.1	1.7	1.5	1.1	1.7
29	2.3	2.6	2.8	3.1	2.6	2.4	7.1	2.1	1.5	1.6	1.1	1.4
30	2.3	2.5	2.7	3.1	---	2.3	4.2	2.0	1.6	1.5	1.1	1.4
31	2.3	---	2.4	3.0	---	2.3	---	1.8	---	1.3	1.2	---
TOTAL	73.4	119.7	81.3	96.6	80.6	72.5	168.8	101.0	58.1	198.9	38.2	149.3
MEAN	2.37	3.99	2.62	3.12	2.78	2.34	5.63	3.26	1.94	6.42	1.23	4.98
MAX	2.5	2.2	3.1	3.4	3.1	2.5	3.7	1.6	2.7	5.7	1.5	6.4
MIN	2.2	2.4	2.4	2.4	2.4	2.2	1.9	1.8	1.5	1.3	1.1	1.1
CFSM	.01	.02	.01	.01	.01	.01	.03	.02	.008	.03	.005	.02
IN	.01	.02	.01	.02	.01	.01	.03	.02	.01	.03	.007	.03
AC-FT	146	237	161	172	160	144	335	200	115	395	76	296

C3L YR 1975 TOTAL 3016.1 MEAN 8.25 MAX 112.0 MIN 1.3 CFSM .04 IN .52 AC-FT 5980
WTR YR 1976 TOTAL 1238.4 MEAN 3.34 MAX 64 MIN 1.1 CFSM .02 IN .21 AC-FT 2460

PEAK DISCHARGE (BASE, 300 FT³/S).--No peak above base.

08083240 Clear Fork Brazos River at Hawley, Tex.

LOCATION.--Lat 32°35'53", long 99°48'53", Jones County, on right bank 90 ft (27 m) upstream from upstream bridge on U.S. Highways 83 and 277, 0.8 mile (1.3 km) south of Hawley, 7.4 miles (11.9 km) upstream from Mulberry Creek, and 188.6 miles (303.5 km) upstream from mouth.

DRAINAGE AREA (revised).--1,416 mi² (3,667 km²).

PERIOD OF RECORD.--Discharge: October 1967 to current year.

Water quality: Chemical analyses: October 1967 to current year. Water temperatures: October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,613.25 ft (491.719 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 51.2 ft³/s (1,450 m³/s), 37,090 acre-ft/yr (45.7 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) Aug. 4 (gage height, 12.17 ft or 3.709 m); minimum, 2.1 ft³/s (0.059 m³/s) July 8, 9.

Period of record: Maximum discharge, 6,170 ft³/s (175 m³/s) Sept. 11, 1969 (gage height, 18.51 ft or 5.642 m); minimum, 0.44 ft³/s (0.012 m³/s) May 27, 1971.

Historic: Maximum stage since at least 1915 occurred in 1932; second highest stage, 24.2 ft (7.38 m) in 1957, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 7,880 micromhos Sept. 15; minimum daily, 673 micromhos July 18. Maximum water temperatures, 28.5°C Aug. 15; minimum, 3.5°C Jan. 7.

Period of record: Maximum daily specific conductance (1967-70, 1972-76), 11,500 micromhos Oct. 5, 1969; minimum daily, 163 micromhos Sept. 11, 1969. Maximum water temperatures (1967-69, 1972-76), 30.0°C June 14, 1968, June 22, 1969; minimum, freezing point Dec. 16, 1967, Jan. 3, 4, 1974.

REMARKS.--Discharge records fair. Lake Sweetwater (capacity, 11,900 acre-ft or 14.7 hm³) is located on a tributary upstream from gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	15	21	19	21	20	24	10	6.1	8.3	15
2	13	100	15	20	20	21	22	24	8.3	5.3	9.0	14
3	13	292	15	19	20	21	35	24	7.8	8.7	48	11
4	13	130	15	18	20	21	49	23	7.4	8.8	804	10
5	12	68	16	19	20	21	28	23	7.3	6.6	110	10
6	12	33	15	20	20	21	21	24	8.6	5.3	27	10
7	12	19	15	20	20	22	21	24	8.1	2.8	23	9.9
8	13	13	15	20	20	24	18	24	11	2.3	18	10
9	13	12	15	20	20	24	18	22	14	2.1	15	10
10	13	11	15	21	20	24	15	21	8.0	3.3	13	10
11	13	11	16	21	21	24	15	19	7.6	66	12	12
12	13	9.9	16	21	21	24	29	19	7.2	345	11	27
13	13	10	16	21	21	24	49	18	6.6	160	11	20
14	13	11	16	21	21	24	24	17	6.0	92	10	15
15	14	11	16	21	20	24	25	16	5.7	52	9.9	22
16	14	11	15	21	21	23	113	16	5.8	37	9.5	12
17	16	12	15	20	21	23	134	16	5.6	110	9.1	9.6
18	14	12	15	20	20	23	110	15	5.5	249	9.1	9.2
19	15	14	15	20	20	22	92	15	5.4	125	9.2	18
20	14	16	15	20	19	22	84	15	5.6	31	9.0	20
21	14	15	16	20	19	21	29	15	5.2	21	9.3	112
22	14	15	16	19	19	20	24	15	4.9	16	9.5	48
23	17	16	16	18	20	19	23	15	4.7	14	9.5	24
24	18	15	19	18	20	19	22	20	5.1	17	9.1	23
25	16	15	26	18	21	19	20	22	5.7	15	9.2	17
26	16	15	26	18	21	19	18	40	5.6	12	9.6	13
27	15	14	26	18	20	19	18	24	5.6	10	9.4	11
28	15	15	23	18	21	19	19	16	5.5	9.8	9.3	10
29	15	16	22	19	22	21	24	13	5.3	9.1	9.7	11
30	15	16	22	19	---	20	29	9.7	5.4	8.6	9.8	10
31	15	---	21	19	---	20	---	11	---	8.4	10	---
TOTAL	436	961.9	539	608	587	669	1148	601.7	204.5	1459.2	1279.5	553.7
MEAN	14.1	32.1	17.4	19.6	20.2	21.6	38.3	19.4	6.82	47.1	41.3	18.5
MAX	18	292	26	21	22	24	134	40	14	345	804	112
MIN	12	9.9	15	18	19	19	15	9.7	4.7	2.1	8.3	9.2
AC-FT	865	1910	1070	1210	1160	1330	2280	1190	406	2890	2540	1100

CAL YR 1975 TOTAL 16424.9 MEAN 45.0 MAX 993 MIN 9.9 AC-FT 32580

WTR YR 1976 TOTAL 9047.5 MEAN 24.7 MAX 804 MIN 2.1 AC-FT 17950

PEAK DISCHARGE (BASE, 500 FT³/S).--July 18 (0600) 515 ft³/s (10.03 ft); Aug. 4 (1130) 1,170 ft³/s (12.17 ft).

08083240 Clear Fork Brazos River at Hawley, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPF-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT. 20...	1335	14	5800	7.9	16.0	1900	1700	480	170	720
NOV. 30...	1000	15	5170	7.8	10.0	1700	1500	410	160	610
DEC. 19...	1100	15	5620	7.8	4.0	1800	1600	450	170	680
JAN. 26...	1430	18	5470	7.8	9.5	1900	1600	450	180	620
FEB. 24...	0935	20	5710	7.9	8.5	1900	1600	440	190	670
MAR. 31...	1335	20	5420	8.0	14.5	1700	1500	400	170	630
APR. 30...	0950	28	3500	8.1	16.0	1200	1000	290	120	380
MAY 19...	1825	15	5110	7.8	21.5	1700	1500	400	170	600
JUNE 23...	1500	4.9	4580	7.7	26.0	1500	1300	360	150	520
JULY 31...	1515	6.8	3480	8.2	25.0	1200	1000	310	110	360
AUG. 04...	1720	861	504	7.4	26.5	170	63	47	12	27
SEP. 16...	0950	15	7760	7.3	23.5	2100	2000	530	200	1000

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (MG/L)	RICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 20...	7.2	8.9	304	0	1800	920	.5	14	4260
NOV. 30...	6.5	6.0	281	0	1600	770	.6	13	3710
DEC. 19...	6.9	5.5	285	0	1800	890	--	12	4150
JAN. 26...	6.2	5.5	292	0	1700	860	--	8.7	3970
FEB. 24...	6.7	5.5	292	0	1800	900	--	9.7	4160
MAR. 31...	6.7	6.6	240	0	1700	810	--	6.4	3840
APR. 30...	4.7	6.4	264	0	1100	510	1.0	14	2550
MAY 19...	6.3	7.0	295	0	1600	830	--	13	3770
JUNE 23...	5.8	6.5	274	0	1400	710	.6	18	3300
JULY 31...	4.5	7.0	278	0	1000	480	.6	14	2420
AUG. 04...	.9	6.5	126	0	70	42	.3	9.7	277
SEP. 16...	9.4	12	201	0	2100	1400	--	13	5350

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	436	5190	3740	4400	800	946	1620	1910	1720
NOV. 1975.....	961.9	3070	2140	5560	460	1190	900	2340	1050
DEC. 1975.....	539	5420	3920	5700	840	1230	1700	2480	1780
JAN. 1976.....	608	5460	3940	6470	850	1390	1710	2810	1790
FEB. 1976.....	565	5660	4090	6240	880	1340	1780	2720	1850
MAR. 1976.....	669	5500	3980	7190	860	1550	1730	3130	1810
APR. 1976.....	1148	4170	2960	9170	640	1970	1270	3950	1430
MAY 1976.....	601.7	4220	3000	4880	640	1040	1290	2100	1440
JUNE 1976.....	204.5	4960	3570	1970	770	423	1550	853	1650
JULY 1976.....	1459.2	1980	1320	5200	270	1080	540	2120	660
AUG. 1976.....	1279.5	1680	1110	3840	230	787	430	1470	550
SEPT 1976.....	553.7	4510	3220	4810	690	1030	1390	2080	1520
TOTAL	9025.49	**	**	65400	**	14000	**	28000	**
WTD.AVG.	24.73	3790	2700	**	570	**	1100	**	1300

08083240 Clear Fork Brazos River at Hawley, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3880	5700	5290	5390	5620	5560	5570	3550	4830	4430	3540	4230
2	3890	3990	5320	5400	5620	5610	5460	3300	4790	4390	2040	4330
3	4140	1270	5330	5470	5640	5640	4500	3570	5140	4410	2210	4440
4	4310	2050	5290	5330	5650	5610	3250	3480	5250	4670	1080	4630
5	4410	2980	5330	5390	5680	5720	4750	3440	5320	4570	1270	4690
6	4610	5260	5370	5450	5780	5770	5520	3600	5260	4310	1430	4750
7	4690	5200	5400	5290	5750	5560	6040	3790	5200	4820	1880	4930
8	4810	5150	5430	5390	5710	5400	6010	4190	5520	4730	2250	4980
9	4870	4620	5420	5390	5750	5690	5600	4020	5720	4750	2610	5340
10	4910	4670	5400	5450	5620	5520	3550	4080	5750	4690	2880	4570
11	4910	4620	5370	5390	5640	5690	4240	4190	5850	5000	3610	4750
12	5000	4590	5330	5450	5670	5640	4610	4240	5800	1910	3650	6990
13	5260	4400	5390	5420	5560	5520	3700	4190	5150	2500	3190	7070
14	5350	4290	5400	5460	5650	5580	3510	4550	4570	1910	3370	7790
15	5310	4090	5390	5460	5590	5610	4200	4590	4850	1290	3650	7880
16	5420	3960	5450	5360	5650	5430	3580	4470	4890	1720	3060	7750
17	5480	3830	5500	5420	5710	5440	3450	4730	4770	1550	3880	7710
18	5570	3780	5500	5450	5680	5430	3010	4770	4460	673	3900	7590
19	5380	3750	5590	5470	5680	5440	3380	4450	4150	1450	3920	4590
20	5840	3730	5580	5480	5710	5450	5000	4870	3830	1680	4010	4610
21	5350	3900	5550	5470	5720	5460	6440	4420	4190	2000	4020	3650
22	5570	4090	5560	5450	5710	5400	5720	4870	4350	1990	4050	3630
23	5540	4310	5560	5460	5680	5340	5350	4960	4490	2250	4080	2420
24	5800	4610	5360	5450	5620	5370	5310	5310	4500	2610	4100	2400
25	5720	4750	5300	5560	5610	5340	5150	5500	4520	3000	4140	2010
26	5750	4810	5330	5520	5590	5330	4710	4500	4510	3320	4150	2680
27	5810	4860	5560	5560	5530	5340	4520	3670	4490	3550	4160	2700
28	5120	4890	5560	5580	5560	5360	4070	3660	4500	3350	4220	3070
29	5570	5150	5500	5590	5590	5370	3630	3450	4490	3260	4200	3260
30	5630	5180	5400	5630	---	5380	3530	4100	4450	3410	4170	3280
31	5710	---	5330	5600	---	5400	---	4460	---	3460	4280	---
MONTH	5150	4280	5420	5460	5650	5500	4580	4280	4850	3150	3320	4760

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	16.0	10.0	9.0	10.0	15.0	15.0	15.0	25.0	24.5	25.5	24.0
2	15.0	16.5	10.0	5.0	11.0	14.0	15.0	17.0	26.0	25.5	24.0	23.0
3	17.0	17.0	9.5	4.0	11.0	15.5	21.0	17.0	24.5	24.0	25.5	24.5
4	19.5	15.0	11.0	4.5	10.0	16.0	15.0	17.5	27.0	24.0	25.0	25.5
5	18.0	15.0	10.0	6.0	10.5	13.0	15.0	17.0	23.0	25.0	25.5	25.5
6	18.5	18.0	8.0	5.0	6.5	13.0	18.0	19.0	27.0	24.5	26.0	25.5
7	17.0	17.0	9.0	3.5	7.0	11.0	18.0	17.0	26.0	26.0	24.0	25.0
8	19.0	17.0	9.0	5.0	9.0	11.5	16.0	20.0	26.0	26.0	25.5	24.0
9	19.0	17.0	9.0	4.0	7.0	13.0	17.0	17.0	25.5	25.5	25.0	22.0
10	19.5	14.5	10.0	6.0	10.0	14.5	18.0	20.0	25.0	23.5	26.0	22.0
11	20.5	15.0	10.0	7.0	12.0	15.0	22.0	21.5	25.0	23.5	28.0	25.0
12	20.5	12.0	12.0	8.5	11.5	15.5	20.0	21.0	27.0	23.5	26.0	28.0
13	21.0	10.0	10.0	8.0	15.0	10.5	19.0	20.0	25.0	23.5	28.0	25.0
14	21.5	10.0	12.0	7.0	13.0	11.5	21.0	19.5	27.0	24.0	28.0	26.0
15	20.5	12.0	9.0	8.0	15.0	11.5	22.0	18.0	26.0	24.0	28.5	25.0
16	18.0	15.0	10.0	8.0	14.5	12.0	18.0	18.0	21.0	25.5	28.0	25.0
17	18.0	15.0	8.0	10.0	14.0	12.0	18.0	20.0	25.0	25.0	28.0	25.0
18	15.5	15.0	4.5	11.0	14.0	14.0	18.5	19.0	21.5	25.5	26.0	22.0
19	18.0	15.0	7.0	6.0	15.5	17.0	20.0	21.0	21.0	28.0	27.0	22.0
20	16.0	10.0	6.0	8.0	15.0	14.5	18.0	19.5	24.0	25.5	27.0	21.5
21	18.5	9.5	6.0	5.5	12.0	14.5	18.0	23.0	26.0	25.5	25.0	21.0
22	18.0	9.0	6.0	8.0	13.0	15.0	22.0	24.0	24.5	24.0	25.0	20.5
23	18.0	8.0	9.0	10.5	11.0	14.5	21.0	23.0	26.5	24.0	25.5	21.0
24	16.0	8.0	6.0	10.0	11.0	15.5	19.5	24.0	26.5	26.5	25.0	21.0
25	18.5	7.0	5.0	10.0	13.0	18.0	18.0	24.0	25.0	26.0	25.0	23.0
26	16.5	6.0	8.0	8.0	13.5	19.0	19.0	21.5	27.0	26.5	26.0	22.0
27	16.0	10.0	8.0	5.5	11.0	15.0	19.0	21.0	26.5	25.0	25.0	23.0
28	16.0	9.5	8.0	8.0	14.0	15.0	17.0	19.0	26.0	24.5	26.5	19.5
29	15.0	6.5	6.0	7.0	15.5	14.5	17.0	21.5	25.0	26.5	24.5	18.5
30	17.0	10.0	7.0	11.0	---	15.0	16.0	26.5	25.0	25.0	25.0	19.0
31	17.0	---	7.0	9.5	---	14.5	---	24.5	---	25.0	24.0	---
MONTH	18.0	12.5	8.5	7.5	12.0	14.0	18.5	20.5	25.0	25.0	26.0	23.0

08083245 Mulberry Creek near Hawley, Tex.

LOCATION.--Lat 32°34'04", long 99°47'32", Jones County, on right bank at downstream side of downstream bridge on U.S. Highways 83 and 277, 3.3 miles (5.3 km) south of Hawley, and 5.8 miles (9.3 km), revised, upstream from Clear Fork Brazos River.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--Discharge: December 1967 to current year.

Water quality: Chemical analyses: December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,615.98 ft (492.551 m) above mean sea level.

AVERAGE DISCHARGE.--8 years (1968-76), 10.2 ft³/s (0.289 m³/s), 0.68 in/yr (17 mm/yr), 7,390 acre-ft/yr (9.11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 771 ft³/s (21.8 m³/s) Sept. 21 (gage height, 10.85 ft or 3.307 m); no flow for many days.
Period of record: Maximum discharge, 2,500 ft³/s (70.8 m³/s), July 21, 1975 (gage height, 15.53 ft or 4.734 m); no flow at times most years.

Maximum stage since at least 1932, about 16.0 ft (4.88 m) in 1957, from floodmarks on right bank.

REMARKS.--Discharge records good. No known diversion above station.

REVISIONS.--WRD Texas 1974: 1972(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.13	1.0	1.7	1.4	1.1	.87	4.7	.06	.12	.01	0
2	.21	.84	1.0	1.6	1.3	1.1	.87	3.4	.05	.02	.01	0
3	.21	119	.94	1.5	1.3	1.1	.91	2.2	.04	.18	11	0
4	.21	13	.88	1.3	1.3	1.2	21	1.6	.03	2.9	14	0
5	.21	3.9	1.0	1.3	1.3	1.0	8.1	4.4	.03	6.2	2.7	0
6	.18	2.1	1.0	1.5	1.3	.96	1.8	4.3	.11	.70	.43	0
7	.18	1.3	1.1	1.4	1.2	1.1	1.0	5.5	.16	.13	.20	0
8	.18	1.0	1.1	1.5	1.3	2.5	1.0	2.6	.06	.04	.07	0
9	.18	.84	1.1	1.4	1.4	5.0	.89	2.0	.03	.02	.03	0
10	.17	.62	1.1	1.5	1.4	3.4	.79	1.8	.04	1.6	.01	0
11	.15	.52	1.2	1.5	1.5	2.5	.74	1.7	.05	3.5	0	0
12	.15	.51	1.3	1.7	1.5	2.1	5.6	1.6	.12	1.7	0	0
13	.15	.44	1.3	1.6	1.5	1.8	19	1.4	.07	.79	0	0
14	.15	.41	1.3	1.5	1.5	1.6	8.4	1.5	.04	.26	0	0
15	.19	.41	1.3	1.4	1.5	1.4	4.3	1.8	.02	18	0	0
16	.31	.41	1.2	1.4	1.4	1.4	68	1.1	.01	1.3	0	0
17	.22	.60	1.2	1.0	1.4	1.4	57	.82	.01	26	0	0
18	.17	.65	1.0	1.3	1.4	1.4	59	.45	.01	70	0	0
19	.15	1.1	.98	1.3	1.1	1.3	9.3	.46	.01	3.0	0	9.4
20	.13	1.7	.96	1.1	1.1	1.3	4.1	.52	.01	1.0	0	334
21	.13	2.4	.98	1.1	.91	1.2	2.3	.52	.01	.55	0	477
22	.14	2.0	1.2	1.2	.86	1.2	1.7	.52	.01	.41	0	25
23	.15	1.3	1.3	1.2	.79	1.1	1.5	.57	0	.46	0	8.3
24	.15	1.0	2.4	1.5	.80	1.2	1.4	.44	0	.21	0	3.8
25	.15	.96	5.7	1.6	.79	1.2	1.2	.76	0	.13	0	1.5
26	.15	.96	4.5	1.5	.83	1.2	1.1	1.3	0	.11	0	.71
27	.13	.96	2.9	1.4	.92	1.2	1.1	.52	0	.06	0	.27
28	.13	1.0	2.3	1.4	.99	1.1	1.8	.29	0	.04	0	.14
29	.13	1.1	1.9	1.3	1.1	1.2	9.5	.18	0	.03	0	.11
30	.13	1.0	1.8	1.3	---	.94	8.6	.12	.16	.02	0	.06
31	.13	---	1.8	1.4	---	.87	---	.08	---	.02	0	---
TOTAL	5.23	245.32	48.74	43.4	35.09	47.07	302.87	49.15	1.14	139.50	28.46	860.29
MEAN	.17	8.18	1.57	1.40	1.21	1.52	10.1	1.59	.034	4.50	.92	28.7
MAX	.31	119	5.7	1.7	1.5	5.0	68	5.5	.16	70	14	477
MIN	.13	.13	.88	1.0	.79	.87	.74	.08	0	.02	0	0
CFSM	0	.04	.007	.006	.005	.007	.05	.007	0	.02	.004	.14
IN.	.0009	.04	.009	.008	.006	.009	.05	.009	.0002	.03	.005	.16
AC-FT	10	487	97	86	70	93	601	97	2.3	277	56	1710

CAL YR 1975 TOTAL 6070.88 MEAN 16.6 MAX 1630 MIN .01 CFSM .08 IN 1.10 AC-FT 12040
WTR YR 1976 TOTAL 1806.26 MEAN 4.94 MAX 477 MIN 0 CFSM .02 IN .33 AC-FT 3580

PEAK DISCHARGE (BASE, 300 FT³/S).--Sept. 21 (1200) 771 ft³/s (10.85 ft).

08083245 Mulberry Creek near Hawley, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT.										
20...	1150	.11	7100	8.0	15.0	2000	1800	230	350	1000
DEC.										
19...	1130	.96	5890	7.9	1.5	2000	1700	300	310	680
JAN.										
26...	1250	1.5	5570	7.9	9.0	1800	1600	260	290	620
FEB.										
23...	1630	.76	6010	8.0	13.0	2000	1700	280	310	700
APR.										
07...	1450	.96	4440	8.1	22.5	1500	1300	200	240	510
MAY										
19...	1940	.52	5810	8.0	22.5	1800	1600	240	300	690
AUG.										
04...	1533	8.5	1030	7.5	28.0	320	200	66	38	85

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
20...	9.7	5.6	244	0	2300	1100	--	3.7	5110
DEC.									
19...	6.6	5.5	340	0	1700	960	--	3.0	4130
JAN.									
26...	6.3	4.6	332	0	1600	940	--	.8	3880
FEB.									
23...	6.9	4.8	349	0	1800	1000	--	.7	4270
APR.									
07...	5.8	6.8	230	0	1300	760	.8	1.9	3130
MAY									
19...	7.0	6.5	309	0	1600	1100	.7	.5	4090
AUG.									
04...	2.1	4.5	151	0	230	120	.4	8.2	627

08083300 Elm Creek near Abilene, Tex.

LOCATION.--Lat 32°21'08", long 99°48'27", Taylor County, on right bank at upstream side of bridge on Farm Road 707, 2.8 miles (4.5 km) southeast of Caps, 7.5 miles (12.1 km) southwest of Abilene, and 35.1 miles (56.5 km) upstream from mouth.

DRAINAGE AREA (revised).--133 mi² (344 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,804.15 ft (549.90 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--13 years, 10.8 ft³/s (0.306 m³/s), 7,820 acre-ft/yr (9.64 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 351 ft³/s (9.94 m³/s) Nov. 2 (gage height, 5.09 ft or 1.551 m); no flow at times.

Period of record: Maximum discharge, 4,570 ft³/s (129 m³/s) Sept. 18, 1974 (gage height, 18.68 ft or 5.694 m); no flow at times most years.

REMARKS.--Records good. Since 1921 flow largely regulated by Lake Abilene (capacity, 7,900 acre-ft or 9.74 hm³) 12 miles (19 km) upstream. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	1.6	1.5	1.5	1.4	1.5	1.3	2.6	.44	2.0	0	.03
2	.94	1.5	1.5	1.4	1.4	1.5	1.2	2.4	.42	.24	0	0
3	.94	1.5	1.5	1.4	1.4	1.5	1.2	2.0	.37	.05	18	0
4	.93	3.1	1.7	1.4	1.4	1.6	1.2	1.3	.34	.85	.60	0
5	1.1	2.6	1.8	1.4	1.4	1.5	1.2	2.4	.38	.67	.06	0
6	1.1	2.6	1.8	1.4	1.4	1.6	1.3	7.2	.33	.30	0	0
7	1.1	2.6	1.8	1.3	1.4	1.7	1.3	5.4	.21	.16	0	.0
8	1.1	2.6	1.8	1.3	1.4	1.8	1.3	4.8	.29	.04	0	.01
9	1.1	2.7	1.8	1.3	1.4	1.9	1.3	4.0	.53	0	0	0
10	1.2	2.9	1.8	1.3	1.4	1.9	1.3	3.4	.28	6.6	0	0
11	1.1	3.1	1.8	1.3	1.6	1.9	1.3	2.7	.14	14	0	0
12	1.1	3.1	1.9	1.3	1.6	1.8	1.7	2.6	.08	11	0	0
13	1.2	3.1	2.0	1.3	1.6	1.8	12	2.4	.04	1.2	0	0
14	1.3	3.1	1.9	1.3	1.6	1.6	2.0	2.2	.07	1.4	0	0
15	1.5	3.1	1.9	1.3	1.6	1.6	11	2.0	.08	41	0	0
16	2.0	3.1	1.9	1.3	1.6	1.6	43	1.8	.09	2.4	0	0
17	2.1	3.1	2.0	1.3	1.6	1.6	17	1.6	.10	.95	0	0
18	1.9	2.9	2.1	1.3	1.6	1.6	3.8	1.4	.12	.77	0	0
19	1.9	3.4	2.1	1.3	1.5	1.6	3.1	1.3	.14	.77	0	98
20	1.9	3.2	2.1	1.3	1.6	1.5	2.6	1.1	.10	.70	0	36
21	1.9	2.9	2.1	1.3	1.7	1.5	2.4	1.0	.06	.62	0	2.5
22	2.3	2.9	2.3	1.3	1.6	1.5	2.2	.94	.02	.56	0	.58
23	3.2	2.9	2.4	1.3	1.6	1.5	2.2	4.6	.01	.56	0	.17
24	1.4	2.9	4.5	1.3	1.4	1.4	2.0	1.6	.82	.50	0	.02
25	1.2	2.9	4.0	1.3	1.4	1.4	1.9	.75	3.2	.50	0	0
26	1.1	2.4	2.2	1.3	1.4	1.4	1.8	.76	.64	.50	0	0
27	1.1	1.5	1.8	1.3	1.4	1.4	1.8	.61	.20	.44	0	0
28	1.2	1.5	1.8	1.3	1.5	1.4	2.4	.68	.06	.33	0	0
29	1.2	1.5	1.6	1.3	1.5	1.4	12	.65	0	.18	0	0
30	1.2	1.5	1.5	1.3	---	1.5	2.9	.54	1.1	.03	0	0
31	1.3	---	1.5	1.4	---	1.3	---	.49	---	0	.08	---
TOTAL	43.20	258.2	62.4	41.1	43.4	48.9	157.0	89.32	10.74	89.32	18.74	137.31
MEAN	1.39	8.61	2.01	1.33	1.50	1.58	5.23	2.88	.36	2.88	.60	4.58
MAX	3.2	175	4.5	1.5	1.7	1.9	43	24	3.2	41	18	98
MIN	.94	1.5	1.5	1.3	1.4	1.3	1.2	.49	0	0	0	0
AC-FT	96	512	124	82	86	97	311	177	21	177	37	272
CAL YR 1975 TOTAL	5293.40			MEAN 14.5	MAX 381	MIN .56	AC-FT 10500					
WTR YR 1976 TOTAL	999.63			MEAN 2.73	MAX 175	MIN 0	AC-FT 1940					

08083400 Little Elm Creek near Abilene, Tex.

LOCATION.--Lat 32°23'29", long 99°51'08", Taylor County, on right bank at downstream side of bridge on Farm Road 707, 1.2 miles (1.9 km) north of Caps, 4.6 miles (7.4 km) southwest of intersection of U.S. Highways 277 and 83 in Abilene, and 10.3 miles (16.6 km) upstream from mouth.

DRAINAGE AREA.--39.1 mi² (101.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,786.12 ft (544.409 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 2.20 ft³/s (0.0623 m³/s), 0.76 in/yr (19 mm/yr), 1,590 acre-ft/yr (1.96 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 169 ft³/s (4.79 m³/s) Nov. 2 (gage height, 3.68 ft or 1.122 m); no flow for many days.
Period of record: Maximum discharge, 2,180 ft³/s (61.7 m³/s) Sept. 18, 1974 (gage height, 11.52 ft or 3.511 m); no flow for many days each year.
Maximum stage since 1903, about 15 ft (4.6 m) in 1913, from information by local residents.

REMARKS.--Records good. No known diversion above station. Rain gage located at station.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.01			0	.02				0
2		.49	0	.01			0	.01				0
3		20	0	.01			0	.01				0
4		2.1	0	.01			0	.01				0
5		.30	0	.01			0	.04				0
6		.04	0	.01			0	.04				0
7		.01	0	.01			0	.02				0
8		.01	0	.01			0	.01				0
9		0	0	.01			0	.01				0
10		0	0	.01			0	.01				0
11		0	0	.01			0	.01				0
12		0	0	.01			0	.01				0
13		0	0	.01			0	0				0
14		0	0	.01			0	0				0
15		0	0	.01			0	0				0
16		0	0	.01			1.3	0				0
17		0	0	0			6.8	0				0
18		0	0	0			1.9	0				0
19		0	0	0			.21	0				.89
20		.01	0	0			.02	0				65
21		.01	0	0			.01	0				4.4
22		.01	0	0			.01	0				.21
23		0	0	0			0	0				0
24		0	.03	0			0	0				0
25		0	.04	0			0	0				0
26		0	.02	0			0	0				0
27		0	.02	0			0	0				0
28		0	.02	0			0	0				0
29		0	.01	0			.04	0				0
30		0	.01	0			.03	0				0
31		---	.01	0		---	---	0		---		---
TOTAL	0	91.49	.16	.16	0	0	10.32	.20	0	0	0	70.50
MEAN	0	3.05	.005	.005	0	0	.34	.007	0	0	0	2.35
MAX	0	69	.04	.01	0	0	6.8	.04	0	0	0	65
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	0	.08	0	0	0	0	.008	0	0	0	0	.06
IN.	0	.09	.0002	.0002	0	0	.010	.0002	0	0	0	.07
AC-FT	0	181	.3	.3	0	0	20	.4	0	0	0	140

CAL YR 1975 TOTAL 521.02 MEAN 1.43 MAX 115 MIN 0 CFSM .04 IN .50 AC-FT 1030

WTR YR 1976 TOTAL 172.83 MEAN .47 MAX 69 MIN 0 CFSM .01 IN .16 AC-FT 343

PEAK DISCHARGE (BASE, 100 FT³/S).--Nov. 2 (1700) 169 ft³/s (3.68 ft); Sept. 20 (1430) 164 ft³/s (3.64 ft).

08083420 Cat Claw Creek at Abilene, Tex.

LOCATION.--Lat 32°28'31", long 99°44'56", Taylor County, in Sears Park 320 ft (98 m) downstream from bridge on Ambler Street in Abilene and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--13.0 mi² (33.7 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,682.32 ft (512.77 m), Corps of Engineers bench mark.

AVERAGE DISCHARGE.--6 years, 2.66 ft³/s (0.0753 m³/s), 2.78 in/yr (71 mm/yr), 1,930 acre-ft (2.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 832 ft³/s (23.6 m³/s) July 17 (gage height, 5.68 ft or 1.731 m); no flow most of time.
Period of record: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Sept. 18, 1974 (gage height, 6.41 ft or 1.954 m); no flow for many days each year.

REMARKS.--Records good except those for periods of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0					0	.06	0	0	0	0
2	0	59					0	0	0	0	0	0
3	0	.29					0	0	0	0	.47	0
4	0	0					2.5	0	0	0	2.4	0
5	0	0					0	16	0	0	.69	0
6	0	0					0	.71	1.0	0	.02	0
7	0	0					.10	.02	20	0	0	5.7
8	0	0					.01	0	.55	0	0	2.2
9	0	0					0	0	0	0	0	1.0
10	0	0					0	0	0	3.9	0	.01
11	0	0					0	0	0	16	0	0
12	0	0					37	0	0	.99	0	0
13	0	0					2.3	0	0	.35	0	0
14	0	0					.02	0	0	.72	0	0
15	4.6	0					39	0	0	40	0	0
16	1.3	0					13	0	0	.36	0	0
17	.03	0					30	0	0	78	0	0
18	0	0					.48	0	0	2.3	0	.37
19	0	0					.01	0	0	.04	0	130
20	0	0					0	0	0	0	0	73
21	0	0					0	0	0	0	0	12
22	4.6	0					0	0	0	.75	0	1.1
23	.49	0					0	.83	0	.35	0	1.19
24	0	0					0	0	0	0	0	0
25	0	0					0	.17	0	25	0	.01
26	0	0					0	.06	0	.66	0	0
27	0	0					0	0	0	0	0	0
28	0	0					16	0	0	0	0	1.1
29	0	0					13	0	0	0	0	.03
30	0	0					.53	0	0	0	2.5	0
31	0	---			---	---	---	0	---	0	.11	---
TOTAL	11.02	59.29	0	0	0	0	153.95	17.85	21.55	169.42	52.72	226.71
MEAN	.36	1.98	0	0	0	0	5.13	.58	.72	5.47	1.70	7.56
MAX	4.6	59	0	0	0	0	39	16	20	78	47	130
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	.03	.15	0	0	0	0	.39	.04	.06	.42	.13	.58
IN.	.03	.17	0	0	0	0	.44	.05	.06	.48	.15	.65
AC-FT	.22	118	0	0	0	0	305	35	43	336	105	450

CAL YR 1975 TOTAL 705.68 MEAN 1.93 MAX 82 MIN 0 CFSM .15 IN 2.02 AC-FT 1400
WTR YR 1976 TOTAL 712.51 MEAN 1.95 MAX 130 MIN 0 CFSM .15 IN 2.04 AC-FT 1410

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 2	about	4.46	380	7-17	1700	5.68	832
	0430			8- 3	0815	4.53	401
7-15	0800	4.38	358	9-19	0815	5.55	775

NOTE.--No gage-height record Oct. 1 to Nov. 17 and Jan. 9 to Feb. 17.

08083470 Cedar Creek at Abilene, Tex.

LOCATION.--Lat 32°26'56", long 99°43'13", Taylor County, on right bank at upstream side of North Second Street Bridge and State Highway 355 at Abilene, 0.2 mile (0.3 km) downstream from Lytle Creek, 4.1 miles (6.6 km) downstream from Buttonwillow Creek, 5.9 miles (9.5 km) upstream from Rainy Creek, 7.2 miles (11.6 km) downstream from Kirby Lake, and 9.8 miles (15.8 km), revised, upstream from mouth.

DRAINAGE AREA (revised).--119 mi² (308 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,677.67 ft (511.354 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 7.02 ft³/s (0.199 m³/s), 5,090 acre-ft/yr (6.28 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 293 ft³/s (8.30 m³/s) July 17 (gage height, 4.50 ft or 1.372 m); no flow at times.

Period of record: Maximum discharge, 4,670 ft³/s (132 m³/s) Sept. 18, 1974 (gage height, 12.54 ft or 3.822 m); no flow at times each year.

REMARKS.--Records good. Flow is partly regulated by Lytle Lake (capacity, 1,200 acre-ft or 1.48 hm³) and Lake Kirby (capacity, 7,620 acre-ft or 9.40 hm³). The city of Abilene pumped 111 acre-ft (137,000 m³) during the 1976 water year from Lake Kirby.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.02	.10	.07	.02	0	.14	.03	0	.04	.31
2	.01	97	.02	.08	.07	.02	0	.10	.03	0	.02	.08
3	.01	6.4	.03	.06	.04	.05	.01	.06	.03	0	22	.06
4	.01	.67	.03	.04	.04	.04	1.5	.04	.03	0	1.4	.07
5	.01	.12	.03	.11	.08	.02	.12	15	.03	0	.51	.07
6	.01	.03	.02	.12	.07	.01	.10	.50	3.6	0	.15	.08
7	.01	.02	.03	.10	.06	.04	1.4	.17	19	0	.05	4.6
8	.01	.01	.04	.08	.07	.53	.31	.14	2.5	0	.03	.87
9	.01	.03	.03	.08	.04	.04	.10	.14	.14	0	.15	1.1
10	.01	.02	.03	.11	.08	.14	.08	.12	.04	2.6	.05	.18
11	.01	.03	.03	.11	.04	.03	.06	.10	.06	8.8	.04	.06
12	.01	.01	.03	.09	.04	.02	18	.08	.06	.67	.03	.05
13	.01	.01	.03	.10	.05	.02	1.4	.06	.03	1.8	.03	.02
14	.01	.01	.04	.04	.04	.02	.37	.06	.06	.67	.03	.01
15	4.2	.01	.02	.12	.05	.02	35	.06	.10	27	.03	.01
16	2.1	.02	.02	.10	.07	.02	12	.04	.04	4.8	.04	.01
17	.04	.01	.02	.08	.06	.02	24	.03	.02	76	.06	.01
18	.02	.01	.01	.11	.05	.02	1.1	.03	.01	33	.06	1.5
19	.02	2.5	.01	.08	.03	.02	.31	.02	.01	3.5	.06	33
20	.02	1.5	.02	.05	.05	.01	.17	.02	.01	.71	.03	59
21	.02	2.4	.02	.06	.03	.01	.12	.02	.02	.16	.03	8.2
22	4.0	.56	.03	.09	.02	.03	.12	.02	.02	1.6	.03	2.4
23	1.6	.07	.07	.09	.02	.25	.12	.73	0	.17	.02	1.0
24	.04	.03	21	.10	.03	.46	.12	.06	0	.09	.36	.25
25	.02	.03	6.1	.09	.03	.02	.10	.06	0	28	.17	.08
26	.01	.02	.24	.07	.02	.02	.08	.12	0	2.3	.07	.08
27	.02	.03	.14	.04	.02	0	.10	.14	0	.71	.10	.08
28	.02	.04	.12	.05	.02	0	12	.08	0	.42	.12	2.1
29	.01	.03	.11	.08	.03	0	9.8	.04	0	.34	.10	.16
30	.01	.02	.11	.08	---	0	.26	.12	0	.37	.08	.08
31	.02	---	.12	.09	---	0	---	.03	---	.31	.08	---
TOTAL	12.31	111.67	28.57	2.70	1.46	1.90	118.85	18.37	25.91	194.02	25.97	115.52
MEAN	.40	3.72	.92	.087	.050	.061	3.96	.59	.86	6.26	.84	3.85
MAX	4.2	97	21	.12	.04	.53	35	15	19	76	22	59
MIN	.01	.01	.01	.04	.02	0	0	.07	0	0	.02	.01
AC-FT	24	221	57	5.4	2.9	3.3	236	36	51	385	52	229
CAL YR 1975	TOTAL	2489.16	MEAN 6.82	MAX 97	MIN 0	AC-FT 4940						
WTR YR 1976	TOTAL	657.25	MEAN 1.80	MAX 97	MIN 0	AC-FT 1300						

08083500 Fort Phantom Hill Reservoir near Nugent, Tex.

LOCATION.--Lat 32°36'58", long 99°40'05", Jones County, at outlet gate tower near right bank, 120 ft (37 m) upstream from dam on Elm Creek, 4.3 miles (6.9 km) upstream from Clear Fork Brazos River, 5.4 miles (8.7 km) south of Nugent, and 4.3 miles (6.9 km) above mouth.

DRAINAGE AREA.--470 mi² (1,217 km²), revised.

PERIOD OF RECORD.--Contents: July 1940 to current year. Prior to October 1965, monthend contents only.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Nonrecording gage. Datum of gage is 1,580.78 ft (481.822 m) above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 71,120 acre-ft (87.7 hm³) Oct. 1-4 (gage height, 54.3 ft or 16.55 m); minimum, 49,120 acre-ft (60.6 hm³) Sept. 16-19 (gage height, 48.0 ft or 14.63 m).
Period of record: Maximum contents observed, 89,910 acre-ft (111 hm³) May 25, 1957 (gage height, 58.7 ft or 17.89 m); minimum observed, 19,040 acre-ft (23.5 hm³) Apr. 23-25, 1953 (gage height, 34.5 ft or 10.52 m).

REMARKS.--The reservoir is formed by a rock-faced earthfill dam 3,740 ft (1,140 m) long. The dam was completed and storage began in October 1938. The uncontrolled service spillway is a cut channel through natural ground with a concrete ogee weir located 0.7 mile (1.1 km) from right end of dam. The service outlet works consist of a concrete tower with a 4.0- by 7.0-foot (1.2- by 2.1-meter) conduit. The service tower contains five gated openings at various elevations. The dam and lake are owned by the city of Abilene and were built to impound water for municipal use. Since July 1974, the West Texas Utility Company has operated a steam generating powerplant on the reservoir. During the year, the city of Abilene diverted 2,740 acre-ft (3.38 hm³) from Clear Fork Brazos River into Fort Phantom Hill Reservoir and pumped 18,960 acre-ft (23.4 hm³) from the reservoir for municipal use. In addition, an undetermined amount of floodflow was diverted by gravity ditch from Deadman Creek into the reservoir. The capacity table was based on a survey of Oct. 2, 1953. Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	69.2	-
Crest of spillway.....	55.1	74,310
Highest gated outlet (invert).....	28.0	10,330
Lowest gated outlet (invert).....	1.6	-

COOPERATION.--Records of pumpage, gage heights, and diversions furnished by the city of Abilene. Capacity table furnished by Soil Conservation Service.

REVISIONS (WATER YEARS).--WSP 1562: 1953-57 (figures of monthend contents).

Capacity table (gage height, in feet, and contents, in acre-feet)

48.0	49,120
51.8	61,710
55.0	73,990

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71120	68390	68390	67250	65360	63150	61000	61350	58540	54180	53210	50680
2	71120	69160	68390	66860	65360	62780	60650	61000	58200	53860	53210	50680
3	71120	70320	68390	66860	65360	62780	60650	61000	58200	53860	53530	50680
4	71120	70720	68390	66860	65360	62780	60650	61000	58200	53860	53860	50370
5	70720	70720	68010	66860	65360	62780	60290	60650	57860	53530	55160	50370
6	70720	70720	68010	66860	65360	62420	60290	61000	57860	53530	55160	50370
7	70720	70320	68010	66480	64990	62420	60290	61000	57520	53210	55160	50060
8	70320	70320	68010	66480	64990	62420	60290	60650	57520	53210	54830	50060
9	70320	70320	68010	66480	64990	62420	60290	60650	57520	53210	54830	50060
10	70320	70320	68010	66480	64990	62780	60290	60650	57520	52880	54510	49750
11	70320	70320	68010	66480	64990	62780	59940	60650	57180	52880	54180	49750
12	70320	69930	68010	66480	64620	62780	59940	60290	57180	53210	53860	49750
13	69930	69930	68010	66480	64620	62780	60650	60290	56840	53210	53860	49440
14	69930	69930	67630	66480	64620	62420	60650	60290	56840	53210	53530	49440
15	69540	69930	67630	66480	64620	62420	60290	60290	56500	53210	53530	49440
16	69540	69540	67630	66480	64260	62420	60650	59940	56500	53530	53210	49120
17	69540	69540	67630	66100	64260	62420	61350	59940	56160	53530	52880	49120
18	69540	69540	67250	66100	64260	62420	61710	59940	56160	53860	52880	49120
19	69540	69540	67250	66100	64260	62060	61710	59580	56160	54180	52560	49120
20	69540	69540	67250	66100	64260	62060	61710	59580	55820	54180	52560	52558
21	69540	69540	67250	65730	64260	62060	61350	59580	55820	53860	52560	53860
22	69160	69160	67250	65730	63890	62060	61350	59230	55480	53860	52230	55820
23	69160	69160	67250	65730	63890	62060	61350	59230	55480	53860	51920	55480
24	69160	69160	67250	65730	63890	62060	61350	59230	55160	53860	51920	55160
25	68780	69160	67250	65730	63520	61710	61000	59230	54830	53860	51611	55160
26	68780	68780	67250	65360	63520	61710	61000	59230	54830	54180	51611	55160
27	68780	68780	67250	65360	63520	61710	61000	58880	54830	53860	51300	54830
28	68780	68780	67630	65360	63150	61710	60650	58880	54510	53860	51300	54830
29	68780	68780	67250	65360	63150	61350	61000	58880	54510	53860	50990	54830
30	68390	68390	67250	65360	---	61350	61350	58880	54180	53530	50990	54510
31	68390	---	67250	65360	---	61000	---	58540	---	53530	50680	---
(†)	53.6	53.6	53.3	52.8	52.2	51.6	51.7	50.9	49.6	49.4	48.5	49.7
(*)	-3130	0	-1140	-1890	-2210	-2150	+350	-2810	-4360	-650	-2850	+3830
(††)	1370	1080	1070	1100	1210	1390	1300	1730	2750	1850	2560	1550
MAX	71120	70720	68390	67250	65360	63150	61710	61350	58540	54180	55160	55820
MIN	68390	68390	67250	65360	63150	61000	59940	58540	54180	52880	50680	49120

CAL YR 1975..... * -9120

WTR YR 1976..... * -17010

†† 17380

†† 18960

MAX 78020

MAX 71120

MIN 67250

MIN 49120

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use.

08083500 Fort Phantom Hill Reservoir near Nugent, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
MAY 19...	1525	795	8.3	22.0	240	85	56	25	70
SEP 14...	1250	814	8.2	28.0	230	87	51	26	68
DATE	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SI02) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAY 19...	2.0	7.0	192	0	71	120	.4	1.3	445
SEP 14...	1.9	8.5	180	0	83	120	.4	4.1	450

BRAZOS RIVER BASIN

08084000 Clear Fork Brazos River at Nugent, Tex.

LOCATION.--Lat 32°41'24", long 99°40'09", Jones County, on right bank 33 ft (10 m) downstream from bridge on Farm Road 600 at Nugent, 2 miles (3 km) downstream from Elm Creek, 4 miles (6 km) upstream from Deadman Creek, and at mile 167.8 (270.0 km).

DRAINAGE AREA (revised).--2,199 mi² (5,695 km²).

PERIOD OF RECORD.--Discharge: February 1924 to current year.

Water quality: Chemical analyses: August 1948 to September 1953. Chemical and biochemical analyses: February 1968 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 1,531.91 ft (466.926 m) above mean sea level (levels by Brazos River Authority). Prior to Dec. 12, 1933, nonrecording gage at site 575 ft (175 m) downstream at same datum.

AVERAGE DISCHARGE.--14 years (1924-38) prior to completion of Fort Phantom Hill Reservoir, 186 ft³/s (5,268 m³/s), 134,800 acre-ft/yr (166 hm³/yr); 38 years (1938-76) partially regulated, 85.3 ft³/s (2,416 m³/s), 61,800 acre-ft/yr (76.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,240 ft³/s (35.1 m³/s) Aug. 3 (gage height, 6.19 ft or 1.887 m); minimum, 4.9 ft³/s (0.14 m³/s) June 20-22, 30.

Period of record: Maximum discharge observed, 47,000 ft³/s (1,330 m³/s) Sept. 8, 1932 (gage height, 27.05 ft or 8.245 m, site then in use), from rating curve extended above 25,000 ft³/s (708 m³/s); no flow at times.

Maximum stage, 30 ft (9.1 m) in 1876; floods in 1900 and May 1923 reached stages of 24 and 24.5 ft (7.3 and 7.47 m), respectively, from information by local residents.

REMARKS.--Discharge records good. Flow affected by four reservoirs with a capacity of 103,600 acre-ft (128 hm³). Numerous diversions above station for municipal supply and oilfield operation will materially affect low flow. Diversion records from the river into Fort Phantom Hill Reservoir were furnished by the city of Abilene.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	26	28	25	21	15	44	14	8.3	12	9.7
2	19	152	26	28	25	20	15	38	13	7.0	12	15
3	19	480	26	26	25	20	16	33	11	8.4	318	12
4	18	222	26	25	26	20	65	28	9.9	14	116	8.3
5	18	91	27	25	26	19	55	29	8.4	18	66	9.3
6	17	58	27	26	25	20	36	34	10	15	53	8.0
7	17	38	25	26	25	22	21	31	12	8.1	29	7.9
8	17	30	25	25	24	27	20	29	11	6.3	21	12
9	18	25	25	25	25	31	17	27	16	6.1	16	8.9
10	18	23	25	26	25	31	16	24	15	6.1	13	9.6
11	17	22	26	27	24	29	13	22	10	30	12	10
12	17	22	26	28	24	30	23	23	11	288	11	23
13	17	22	27	28	22	29	78	21	9.8	231	10	32
14	17	22	27	28	22	24	54	19	8.6	138	9.6	20
15	18	23	26	27	22	23	36	18	7.9	70	9.3	17
16	20	24	26	28	22	22	131	17	6.8	84	9.0	22
17	20	24	25	27	23	22	295	17	6.7	52	8.7	12
18	20	26	24	27	23	21	188	16	6.7	365	7.1	9.1
19	19	27	24	27	22	20	105	15	7.3	153	6.4	91
20	19	29	24	27	22	20	99	15	5.7	73	7.1	260
21	19	29	24	26	21	20	53	15	4.9	33	7.8	134
22	19	29	25	26	21	19	36	15	5.3	25	7.9	61
23	20	29	24	25	20	19	30	15	5.4	22	8.0	52
24	22	29	30	25	20	18	27	16	5.8	18	8.9	35
25	21	28	35	26	19	18	23	26	5.7	22	8.6	24
26	20	27	41	25	19	15	22	45	6.4	20	10	18
27	21	27	40	24	19	14	20	37	6.8	15	9.8	14
28	20	24	34	24	20	14	23	26	6.9	13	9.6	12
29	19	28	31	25	20	15	44	19	5.9	13	8.8	11
30	19	27	29	25	---	15	48	16	6.1	13	8.5	11
31	19	---	29	25	---	15	---	13	---	12	9.8	---
TOTAL	583	1661	455	810	656	653	1624	743	260.4	1787.3	843.9	968.8
MEAN	18.8	55.4	27.6	26.1	22.6	21.1	54.1	24.0	8.68	57.7	27.2	32.3
MAX	22	480	41	28	26	31	295	45	16	365	318	260
MIN	17	20	24	24	19	14	13	4.9	6.1	6.4	7.9	7.9
AC-FT	1160	3296	1700	1610	1300	1300	3220	1470	517	3550	1670	1920
(†)	0	0	0	0	0	0	0	0	0	0	841	1900

CAL YR 1975 TOTAL 31121.0 MEAN 85.3 MAX 2390 MIN 11 AC-FT 61730 † 0
WTR YR 1976 TOTAL 11445.4 MEAN 31.3 MAX 480 MIN 4.9 AC-FT 22700 † 2740

† Diversions, in acre-feet, into Fort Phantom Hill Reservoir from river above station, furnished by city of Abilene.

08084000 Clear Fork Brazos River at Nugent, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 07...	1435	15	3620	8.4	19.0	9.7	104	1.6	1300
DEC. 16...	1400	25	4920	7.9	12.0	8.5	79	1.0	1700
FFB. 24...	1400	20	5300	7.9	11.0	11.1	101	3.4	1700
APR. 06...	1500	26	2740	7.5	17.5	6.7	70	3.6	760
JUNE 08...	1230	13	4120	7.7	25.5	7.5	94	2.6	1400
AUG. 03...	1745	150	1880	7.6	26.5	5.9	75	3.2	610
DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 07...	1100	340	120	380	4.5	6.5	304	0	1100
DEC. 16...	1400	400	160	580	6.2	6.0	347	0	1400
FFB. 24...	1500	400	180	600	6.3	5.4	298	0	1600
APR. 06...	630	140	99	300	4.7	6.0	156	0	660
JUNE 08...	1200	320	140	460	5.4	7.0	262	0	1200
AUG. 03...	480	150	56	180	3.2	6.5	155	0	490
DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT. 07...	530	--	14	2640	2.6	.00	.01	.53	.05
DEC. 16...	780	.9	12	3510	3.4	.01	.02	.35	.04
FFB. 24...	870	.7	8.5	3810	3.9	.01	.11	.52	.05
APR. 06...	460	.4	5.3	1750	.82	.02	.07	.84	.04
JUNE 08...	670	.7	13	2940	.74	.02	.07	.88	.11
AUG. 03...	250	.4	7.8	1220	.35	.01	.00	.60	.10

08084100 Deadman Creek near Nugent, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 32°40'36", long 99°37'00", Jones County, at low-water crossing on county road, 3.2 miles (5.1 km) east of Nugent, and 4.4 miles (7.1 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--Periodic discharge measurements and water-quality data: October 1967 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

[illegible]

08084500 Lake Stamford near Haskell, Tex.

LOCATION.--Lat 33°04'44", long 99°34'52", Haskell County, on left bank at intake structure of West Texas Utilities Co. steam powerplant at Lake Stamford on Paint Creek, 1.0 mile (1.6 km) upstream from dam, 1.7 miles (2.7 km) upstream from California Creek, and 10 miles (16 km) southeast of Haskell.

DRAINAGE AREA.--360 mi² (932 km²).

PERIOD OF RECORD.--Contents: July 1953 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 2.77 ft (0.84 m) above mean sea level (levels by Freese, Nichols, and Endress, Consulting Engineers).

EXTREMES (at 0800).--Current year: Maximum contents, 43,470 acre-ft (53.6 hm³) Oct. 1-7, Nov. 5 (gage height, 1,411.8 ft or 430.32 m); minimum, 29,800 acre-ft (36.7 hm³) Sept. 14-19 (gage height, 1,407.9 ft or 429.13 m).
Period of record: Maximum contents, 74,100 acre-ft (91.4 hm³) Sept. 9, 10, 1962 (gage height, 1,416.6 ft or 431.78 m); minimum since first appreciable storage in June 1954, 14,060 acre-ft (17.3 hm³) Jan. 29-31, 1957 (gage height, 1,400.2 ft or 426.78 m).

REMARKS.--The lake is formed by a rolled-fill earthen dam 3,600 ft (1,097 m) long. The dam was completed in March 1953, and deliberate impoundment began in June 1953. The emergency spillway is an uncontrolled natural channel located near right end of dam. The service spillway is an uncontrolled channel excavated through natural ground, 169 ft (52 m) wide, located 900 ft (270 m) to left of left end of dam. The service outlet is a controlled 24-inch-diameter (610-millimeter) concrete pipe that is used for low-flow releases. During the current year, the cities of Stamford and Hamlin diverted 1,840 acre-ft (2.27 hm³) for municipal use. The capacity table is based on sedimentation survey of 1966. Gage-height record was furnished by West Texas Utilities Co. from their powerplant 1.0 mile (1.6 km) upstream from dam. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	1,434.0	-
Crest of spillway.....	1,425.8	-
Crest of spillway.....	1,414.0	53,070
Lowest gated outlet (invert).....	1,380.0	358

COOPERATION.--The capacity table furnished by the Soil Conservation Service. The diversions furnished by city of Stamford.

Capacity table (gage height, in feet, and contents, in acre-feet)

1,408.0	30,100	1,411.0	40,330
1,409.0	33,250	1,412.0	44,280
1,410.0	36,660		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43470	41880	41880	41490	40330	39200	37730	37730	36660	33910	32600	30410
2	43470	42270	41880	41100	40330	39200	37730	37730	36660	33910	32600	30410
3	43470	43070	41880	41100	40330	38830	37370	37370	36660	33910	32280	30410
4	43470	43070	41880	41100	40330	38830	37370	37370	36660	33910	32280	30410
5	43470	43470	41880	41100	39950	38830	37370	37370	36300	33910	31960	30410
6	43470	43070	41880	41100	39950	38830	37370	37370	36300	33580	31960	30410
7	43470	43070	41880	41100	39950	38830	37370	37370	36300	33250	31960	30410
8	43370	43070	41490	41100	39950	38830	37370	37370	36300	33250	31960	30100
9	43070	43070	41490	41100	39950	39200	37370	37370	36300	33250	31960	30100
10	43070	42670	41490	41100	39950	38830	37370	37370	36300	33250	31650	30100
11	43070	42670	41490	41100	39950	38830	37370	37370	36300	33250	31650	30100
12	43070	42670	41490	41100	39950	38830	37370	37370	35950	33250	31650	30100
13	43070	42670	41490	41100	39950	38830	37370	37370	35950	33250	31650	30100
14	43070	42670	41490	40720	39950	38830	37370	37370	35610	33250	31330	29800
15	42670	42670	41490	40720	39950	38830	37370	37370	35610	33250	31330	29800
16	42670	42670	41490	40720	39950	38830	38100	37370	35950	33250	31330	29800
17	42670	42670	41100	40720	39950	38830	38100	37370	35950	33250	31020	29800
18	42670	42670	41100	40720	39950	38830	38100	37370	35950	33250	31020	29800
19	42670	42670	41100	40720	39950	38830	38100	37370	35260	33250	30710	29800
20	42670	42670	41100	40720	39950	38830	38100	37010	35260	33250	30710	31020
21	42670	42670	41100	40720	39950	38460	37730	37010	34920	32920	30710	31020
22	42670	42270	41100	40720	39580	38460	37730	37010	34920	32920	30710	31020
23	42670	42270	41100	40720	39580	38460	37730	37010	34580	32920	30410	31020
24	42670	42270	41100	40720	39580	38460	37730	37010	34580	32920	30410	31020
25	42270	42270	41100	40720	39580	38460	37730	37010	34240	32920	30410	31020
26	42270	42270	41490	40720	39200	38460	37370	37010	34240	32600	30410	31020
27	42270	41880	41490	40330	39200	38460	37370	37010	34240	32600	30410	31020
28	42270	41880	41490	40330	39200	38460	37370	36660	34240	32600	30100	30710
29	41880	41880	41490	40330	39200	38100	37370	36660	34240	32600	30100	30710
30	41880	41880	41490	40330	---	38100	37370	36660	33910	32600	30410	30710
31	41880	---	41490	40330	---	38100	---	36660	---	32600	30410	---
(†)	1411.4	1411.4	1411.3	1411.0	1410.7	1410.4	1410.2	1410.0	1409.2	1408.8	1408.1	1408.2
(*)	-2000	0	-390	-1160	-1130	-1100	-730	-710	-2750	-1310	-2190	+300
(††)	140	110	109	119	114	118	122	164	260	182	263	141
MAX	43470	43470	41880	41490	40330	39200	38100	37730	36660	33910	32600	31020
MIN	41880	41880	41100	40330	39200	38100	37370	36660	33910	32600	30100	29800
CAL YR 1975.....	*	+8570		††	1688		MAX	45950		MIN	30100	
WTR YR 1976.....	*	-13170		††	1842		MAX	43470		MIN	29800	

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use.

08084500 Lake Stamford near Haskell, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT 14...	1325	1130	8.0	24.5	300	140	56	38	110
DATE	TIME	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT 14...	2.8	15	188	0	160	150	.5	4.6	627

08084800 California Creek near Stamford, Tex.

LOCATION.--Lat 32°55'51", long 99°38'32", Jones County, near right bank at downstream side of bridge on Farm Road 142, 9 miles (14 km) east of Stamford, and 19.4 miles (31.2 km), revised, upstream from Paint Creek.

DRAINAGE AREA (revised).--478 mi² (1,238 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year.

Water quality: Chemical analyses: October 1962 to current year. Water temperatures: October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,470 ft (448 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 26.3 ft³/s (0.745 m³/s), 0.75 in/yr (19 mm/yr), 19,050 acre-ft/yr (23.5 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 168 ft³/s (4.76 m³/s) Sept. 19 (gage height, 9.42 ft or 2.871 m); minimum daily, 0.02 ft³/s (0.001 m³/s) June 25-29, Aug. 28.

Period of record: Maximum discharge, 7,420 ft³/s (210 m³/s) May 6, 1969 (gage height, 27.12 ft or 8.266 m), from rating curve extended above 21.0 ft (6.40 m) on basis of indirect discharge measurement of peak flow; no flow at times.

Historic: Maximum stage since at least 1897, 29.6 ft (9.02 m) June 10, 1962 (from floodmark); flood of July 1961 (stage unknown) was second highest. Other large floods are reported to have occurred in June 1909, June 24, 1915, and May 1957; flood of September 1962 reached a stage of 28.1 ft (8.56 m); from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 9,110 micromhos Apr. 7, June 15; minimum daily, 700 micromhos Aug. 3. Maximum water temperatures, 33.0°C Aug. 16; minimum, freezing point Jan. 8.

Period of record: Maximum daily specific conductance, 46,400 micromhos Sept. 16, 1970; minimum daily, 218 micromhos Sept. 20, 1974. Maximum water temperatures, 37.0°C July 4, 6, 16, 1965, July 5, 1968; minimum, freezing point on several days during winter months.

REMARKS.--Discharge records good. Three small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	1.2	1.9	3.7	2.2	.97	.98	5.1	.56	1.2	.16	.16
2	.75	18	1.9	3.4	2.2	1.2	.57	4.0	.59	.10	.13	.16
3	.66	52	1.9	3.0	2.3	1.1	.57	4.4	.38	.06	24	.13
4	.66	43	2.0	2.9	2.1	1.2	.87	3.4	.32	.06	8.2	.13
5	.66	19	2.0	2.7	2.1	1.4	.71	3.7	.27	.27	11	.10
6	.58	9.6	2.0	2.7	2.0	1.6	.69	3.0	.23	.27	3.7	.10
7	.58	5.7	2.2	2.6	2.1	2.7	.96	2.6	.18	.16	1.9	.10
8	.75	4.0	2.2	2.6	2.0	3.7	1.3	2.9	.18	.13	.94	.10
9	.84	2.9	2.4	2.4	2.0	3.4	1.1	2.8	.14	.10	.44	.10
10	.84	2.2	2.4	2.3	1.9	3.2	1.0	2.7	.13	.10	.23	.08
11	.84	1.7	2.5	2.2	1.9	3.4	1.0	2.5	.10	1.7	.19	.08
12	.94	1.7	2.7	2.1	2.0	3.3	2.8	2.5	.10	1.0	.16	.08
13	.84	1.6	2.7	2.3	2.0	3.0	3.8	2.1	.08	51	.16	.08
14	.75	1.4	2.5	2.1	2.1	3.2	1.8	1.4	.05	34	.13	.08
15	.88	1.4	2.4	1.6	2.0	2.7	2.6	1.3	.04	18	.13	.08
16	.83	1.4	2.4	1.4	2.2	2.2	24	1.2	.04	18	.10	.13
17	.73	1.4	2.4	1.5	2.0	2.0	29	.95	.03	6.3	.10	.16
18	.75	1.6	2.2	1.6	1.9	2.0	29	.84	.03	26	.08	.13
19	.75	1.9	2.0	2.3	1.8	2.0	19	.71	.03	42	.08	35
20	.96	2.2	1.9	2.1	1.7	1.9	9.6	.74	.03	22	.08	6.3
21	1.0	2.0	1.9	2.0	1.6	1.7	5.4	.66	.03	7.5	.08	2.5
22	1.4	1.9	2.0	2.0	1.5	1.7	3.8	.66	.04	4.0	.06	2.9
23	1.0	1.9	2.2	2.0	1.5	1.7	2.8	.59	.03	2.4	.06	2.2
24	.94	1.9	3.3	2.1	1.4	1.7	2.4	.58	.03	1.6	.05	.94
25	.84	1.8	4.2	2.2	1.0	1.6	1.8	.59	.02	7.2	.05	.51
26	.66	1.9	4.7	2.0	.97	1.5	1.5	.58	.02	17	.03	.38
27	.84	1.9	5.4	1.8	.98	1.5	1.4	.51	.02	2.4	.03	.27
28	.94	1.9	6.1	1.8	1.1	1.4	3.6	.45	.02	.94	.02	.38
29	.94	2.1	5.1	1.8	.89	1.4	11	.40	.02	.44	1.4	.27
30	.94	2.0	4.3	2.2	---	1.3	4.9	.44	.66	.27	.32	.19
31	1.0	---	3.9	2.2	---	1.2	---	.46	---	.19	.19	---
TOTAL	25.93	193.2	87.7	69.6	51.44	62.87	169.95	54.76	4.40	266.39	54.20	53.82
MEAN	.84	6.44	2.83	2.25	1.77	2.03	5.67	1.77	.15	8.59	1.75	1.79
MAX	1.4	52	6.1	3.7	2.3	3.7	29	5.1	.66	51	24	35
MIN	.58	1.2	1.9	1.4	.89	.97	.57	.40	.02	.06	.02	.08
AC-FT	51	383	174	138	102	125	337	109	8.7	528	108	107

CAL YR 1975 TOTAL 5170.74 MEAN 14.2 MAX 766 MIN .33 AC-FT 10260
WTR YR 1976 TOTAL 1094.26 MEAN 2.99 MAX 52 MIN .02 AC-FT 2170

PEAK DISCHARGE (BASE, 200 FT³/S).--No peak above base.

08084800 California Creek near Stamford, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT.										
14...	1555	.78	7190	8.0	23.5	2400	2300	330	390	850
NOV.										
24...	1510	1.9	5560	8.0	9.0	1900	1600	300	270	830
DEC.										
31...	0900	6.4	6840	7.9	5.0	2400	2300	380	360	720
JAN.										
31...	1000	5.3	7840	7.9	7.0	2900	2700	440	440	1000
FEB.										
19...	1545	1.9	8220	7.8	16.0	3100	2900	460	480	1000
MAR.										
30...	1515	1.3	8710	7.7	17.0	3200	3000	460	510	1200
APR.										
30...	0845	4.7	2810	7.7	14.0	820	700	130	120	330
MAY										
11...	1505	2.5	5950	7.4	25.5	2000	1900	280	320	720
JULY										
31...	1700	1.3	2570	8.1	28.0	780	630	130	110	280
AUG.										
03...	1500	24	698	7.9	27.5	170	72	46	13	69
SEPT.										
15...	1615	.07	4660	7.9	28.0	1600	1400	180	290	520

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT.									
14...	7.5	10	190	0	2200	1200	.6	3.0	5080
NOV.									
24...	8.4	13	310	0	1900	930	--	5.7	4400
DEC.									
31...	6.4	11	141	0	2400	1100	--	1.9	5040
JAN.									
31...	8.1	8.0	278	0	2800	1400	--	2.8	6230
FEB.									
19...	7.8	10	220	0	3200	1400	1.0	1.9	6660
MAR.									
30...	9.2	10	265	0	3200	1500	--	2.3	7010
APR.									
30...	5.0	5.5	150	0	670	500	.6	6.2	1840
MAY									
11...	7.0	11	116	0	2000	1100	--	.9	4490
JULY									
31...	4.4	9.5	178	0	560	420	.5	9.3	1610
AUG.									
03...	2.3	4.8	118	0	62	110	.5	8.8	372
SEPT.									
15...	5.6	6.5	357	0	1100	910	1.2	12	3200

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	25.93	7200	5570	390	1220	86	2480	174	2570
NOV. 1975.....	193.2	3440	2310	1210	540	284	970	504	1040
DEC. 1975.....	87.7	7510	5870	1390	1240	293	2610	618	2700
JAN. 1976.....	69.6	7260	5630	1060	1210	228	2510	470	2600
FEB. 1976.....	50.55	8070	6390	872	1390	190	2840	387	2920
MAR. 1976.....	62.87	8080	6400	1090	1420	240	2840	482	2930
APR. 1976.....	169.95	4280	3010	1380	720	331	1280	588	1390
MAY 1976.....	54.76	6490	4900	725	1110	164	2190	324	2280
JUNE 1976.....	4.4	8410	6720	80	1590	19	2980	35	3060
JULY 1976.....	266.39	1760	1060	760	240	170	380	270	490
AUG. 1976.....	54.2	2360	1590	232	370	54	660	96	660
SEPT 1976.....	53.82	1820	1150	167	250	36	420	61	510
TOTAL	1093.37	**	**	9360	**	2090	**	4010	**
WTD.AVG.	3.00	4340	3200	**	710	**	1400	**	1400

08084800 California Creek near Stamford, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6540	7810	6680	5930	8000	8490	8830	6010	8710	3120	2400	3000
2	6700	3350	7040	6130	8060	8560	8790	6190	8750	3780	2880	3130
3	6740	4050	6830	6700	7990	8500	8680	6550	8830	4110	700	3400
4	6780	1560	6900	6740	7940	8490	8910	6590	8750	4200	813	3660
5	6830	2710	7060	6840	7900	8560	8990	6540	8730	4760	4890	3950
6	6850	3130	7290	6880	7880	8490	8990	6340	8710	5260	6330	4100
7	6870	3410	7470	7050	7900	8150	9110	5730	8740	5390	4360	4260
8	6790	3600	7520	7340	7910	7920	8870	5590	8750	5350	3670	4330
9	6830	3690	7550	7390	7910	7160	8880	5190	8790	5380	3540	4440
10	6880	3750	7570	7230	7940	7430	8900	5510	8830	5280	3670	4630
11	6930	3930	7640	7180	8000	7770	8910	5830	8990	5460	3850	4730
12	7030	3690	7670	7290	8050	7920	8400	6280	8910	5890	3950	4730
13	7110	3840	7700	7370	8160	8020	5750	6600	8990	1220	4040	4700
14	7190	3910	7910	7410	8050	7920	5260	6670	9060	2050	4120	4670
15	7140	4020	7820	7430	7980	7870	5930	7160	9110	2880	4180	4660
16	7150	4100	7860	7480	7870	7930	2470	7340	8990	1620	4300	4810
17	7150	4290	7880	7540	7980	7990	3600	7420	8870	2510	4360	4200
18	7200	4470	7910	7590	8160	8110	3750	7500	8760	2700	4440	4250
19	7200	4670	7840	7680	8220	8220	3900	7580	8690	1220	4530	1000
20	7360	4840	7850	7730	8200	8220	4180	7730	8650	841	4670	1490
21	7430	5140	7840	7670	8260	8390	4770	7450	8610	1430	4810	3730
22	7370	5450	7830	7610	8300	8120	5700	7910	8570	1740	4910	2640
23	7380	5520	7820	7670	8320	8090	6020	8080	8500	1980	4970	4550
24	7370	5590	7650	7650	8360	8060	5800	8260	8360	2260	5090	6340
25	7390	5800	7590	7610	8330	8220	5760	8230	8160	2000	5200	6180
26	7360	6080	7220	7730	8290	8320	5960	8360	8030	1600	5260	6090
27	7630	6170	7350	7790	8360	8460	6260	8460	7850	1710	5300	6000
28	7690	6240	7650	7770	8400	8530	6050	8500	7670	1510	5410	5910
29	7740	6330	7540	7790	8430	8680	3670	8570	7650	1460	3080	6360
30	7680	6520	7670	7820	---	8710	3200	8720	6500	1710	1980	6400
31	7770	---	6840	7850	---	8780	---	8760	---	2540	2660	---
MONTH	7170	4600	7520	7350	8110	8200	6480	7160	8550	3000	4010	4410

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	18.0	12.0	6.0	6.0	22.0	22.0	15.0	27.0	29.0	27.0	25.0
2	21.0	17.0	13.0	5.0	15.0	21.0	14.0	17.0	24.0	26.0	32.0	22.0
3	13.0	16.0	9.0	3.0	10.0	17.0	19.0	19.0	27.0	27.0	23.0	23.0
4	14.0	17.0	15.0	4.0	10.0	14.0	18.0	22.0	26.0	25.0	25.0	24.0
5	15.0	18.0	15.0	7.0	4.0	16.0	23.0	18.0	25.0	---	31.0	29.0
6	23.0	19.0	11.0	9.0	3.0	8.0	18.0	21.0	24.0	26.0	30.0	29.0
7	17.0	19.0	2.0	4.0	2.0	11.0	20.0	17.0	26.0	28.0	28.0	26.0
8	24.0	17.0	8.0	0.0	2.0	9.0	14.0	17.0	27.0	29.0	26.0	24.0
9	19.0	18.0	21.0	1.0	7.0	9.0	21.0	21.0	28.0	26.0	30.0	21.0
10	20.0	16.0	11.0	6.0	18.0	11.0	18.0	---	25.0	23.0	31.0	24.0
11	25.0	15.0	15.0	4.0	15.0	16.0	18.0	23.0	30.0	23.0	30.0	26.0
12	26.0	12.0	9.0	11.0	---	15.0	22.0	25.0	25.0	27.0	31.0	23.0
13	22.0	12.0	11.0	8.0	14.0	9.0	23.0	24.0	27.0	24.0	30.0	27.0
14	21.0	9.0	17.0	10.0	16.0	6.0	25.0	16.0	29.0	25.0	32.0	29.0
15	---	14.0	11.0	11.0	14.0	11.0	23.0	24.0	24.0	22.0	31.0	28.0
16	17.0	11.0	---	10.0	13.0	7.0	14.0	18.0	27.0	24.0	33.0	24.0
17	11.0	9.0	2.0	13.0	17.0	17.0	17.0	---	25.0	29.0	26.0	27.0
18	14.0	15.0	6.0	12.0	17.0	---	16.0	25.0	25.0	27.0	28.0	23.0
19	14.0	13.0	6.0	6.0	11.0	22.0	21.0	23.0	25.0	25.0	30.0	24.0
20	15.0	10.0	8.0	2.0	19.0	16.0	21.0	21.0	21.0	26.0	---	22.0
21	19.0	8.0	4.0	9.0	9.0	13.0	17.0	26.0	28.0	28.0	30.0	19.0
22	22.0	11.0	10.0	10.0	5.0	13.0	23.0	20.0	29.0	27.0	31.0	21.0
23	17.0	6.0	7.0	10.0	9.0	16.0	21.0	---	25.0	31.0	29.0	26.0
24	17.0	5.0	6.0	9.0	9.0	23.0	26.0	27.0	28.0	32.0	30.0	22.0
25	---	---	4.0	8.0	14.0	25.0	18.0	22.0	25.0	29.0	29.0	25.0
26	13.0	8.0	2.0	4.0	15.0	21.0	21.0	21.0	30.0	25.0	30.0	21.0
27	21.0	10.0	2.0	5.0	13.0	22.0	20.0	21.0	24.0	31.0	25.0	24.0
28	19.0	9.0	2.0	10.0	---	14.0	21.0	22.0	30.0	31.0	29.0	18.0
29	18.0	18.0	2.0	12.0	14.0	18.0	16.0	21.0	---	28.0	24.0	21.0
30	16.0	9.0	5.0	14.0	---	14.0	14.0	28.0	28.0	25.0	22.0	18.0
31	21.0	---	5.0	7.0	---	10.0	---	24.0	---	28.0	23.0	---
MONTH	18.5	13.0	8.5	7.5	11.0	15.0	19.5	21.5	26.5	27.0	28.5	24.0

08085500 Clear Fork Brazos River at Fort Griffin, Tex.

LOCATION (revised).--Lat 32°56'04", long 99°13'27", Shackelford County, on right bank just downstream from pier of bridge on old Fort Griffin-Throckmorton road, 0.4 mile (0.6 km) northeast of Fort Griffin, 1.0 mile (1.6 km) upstream from bridge on U.S. Highway 283, 1.7 miles (2.7 km) upstream from Mill Creek, and 74.6 miles (120.0 km) upstream from mouth.

DRAINAGE AREA (revised).--3,988 mi² (10,329 km²).

PERIOD OF RECORD.--Discharge: December 1923 to current year.

Water quality: Chemical analyses: November 1949 to September 1951, November 1967 to current year. Water temperatures: November 1949 to September 1951, November 1967 to current year. Sediment records: November 1949 to September 1951.

GAGE.--Water-stage recorder. Datum of gage is 1,174.09 ft (357.863 m) above mean sea level. Prior to June 23, 1932, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--52 years (1924-76), 222 ft³/s (6.287 m³/s), 160,800 acre-ft/yr (198 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 2,390 ft³/s (67.7 m³/s) Sept. 20 (gage height, 10.07 ft or 3.069 m); minimum, 1.1 ft³/s (0.031 m³/s) July 10.

Period of record: Maximum discharge, 33,600 ft³/s (952 m³/s) Sept. 10, 1932 (gage height, 35.09 ft or 10.695 m); no flow at times. Historic: Maximum stage since 1876, 38.0 ft (11.58 m) in September 1900; flood in July 1876 was probably higher; from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 4,850 micromhos Apr. 8; minimum daily, 475 micromhos Sept. 21. Maximum water temperatures, 32.0°C June 29; minimum, freezing point Jan. 9.

Period of record: Maximum daily specific conductance, 6,680 micromhos May 11, 1972; minimum daily, 204 micromhos July 27, 1950. Maximum water temperatures, 34.0°C June 14, 1969, June 28, 1972; minimum, freezing point on several days during winter months.

REMARKS.--Discharge records good. Diversions above station for irrigation, municipal supply, and oilfield operations materially affect low flow.

REVISIONS (WATER YEARS).--WSP 1992: 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	22	41	47	28	27	12	59	29	2.7	30	2.5
2	21	54	40	46	29	31	10	81	24	2.2	24	3.9
3	19	47	35	43	28	32	11	78	21	31	20	7.7
4	19	249	37	43	27	31	12	62	17	117	756	8.6
5	19	439	35	41	25	31	9.6	59	14	12	363	8.6
6	19	222	35	39	22	30	8.7	61	14	3.5	201	8.5
7	18	130	34	37	22	30	49	54	15	2.5	104	9.9
8	18	94	34	35	23	32	57	60	12	1.6	83	17
9	17	70	33	35	24	31	49	52	10	1.4	73	22
10	18	54	34	35	24	36	36	46	9.6	3.8	59	28
11	21	45	31	36	26	43	27	47	9.5	16	47	52
12	19	38	34	37	26	47	34	44	7.8	7.8	36	36
13	16	35	35	41	26	44	29	40	9.1	5.0	27	24
14	15	37	34	39	26	38	26	37	9.9	11.6	20	23
15	19	31	33	38	26	34	27	36	9.3	190	15	21
16	17	30	37	37	28	29	120	32	9.0	137	11	25
17	17	30	33	38	26	29	88	28	7.3	104	8.5	45
18	18	32	29	37	25	27	170	23	6.4	86	6.7	95
19	16	34	30	34	24	25	331	24	6.4	83	5.6	291
20	18	35	31	35	23	23	218	22	6.8	272	4.8	1050
21	20	35	32	34	22	23	144	19	7.4	158	4.7	293
22	20	35	32	31	21	20	108	17	8.1	122	5.3	329
23	21	36	32	31	20	20	96	17	9.5	70	5.9	200
24	22	35	43	31	22	19	72	17	8.6	54	5.0	85
25	20	35	51	30	19	17	59	18	7.3	50	4.2	67
26	21	37	49	29	17	17	48	31	5.6	88	3.1	68
27	21	38	56	29	18	16	38	25	6.2	66	2.5	68
28	21	43	54	28	19	17	34	22	4.7	61	2.2	64
29	21	42	55	28	23	15	41	46	3.7	53	2.4	56
30	21	44	54	30	---	14	49	44	3.5	46	2.7	49
31	23	---	52	29	---	13	---	34	---	39	2.7	---
TOTAL	600	2108	1195	1103	689	841	2013.3	1235	311.7	2001.5	1935.3	3057.7
MEAN	19.4	70.3	38.5	35.6	23.8	27.1	67.1	39.8	10.4	64.6	62.4	102
MAX	25	439	56	47	29	47	331	81	29	272	756	1050
MIN	15	22	29	28	17	13	8.7	17	3.5	1.4	2.2	2.5
AC-FT	1190	4180	2370	2190	1370	1670	3990	2450	618	3970	3840	6060

CAL YR 1975 TOTAL 54123.0 MEAN 148 MAX 4030 MIN 10 AC-FT 107400
WTR YR 1976 TOTAL 17090.5 MEAN 46.7 MAX 1050 MIN 1.4 AC-FT 33900

PEAK DISCHARGE (BASE, 3,900 FT³/S).--No peak above base.

BRAZOS RIVER BASIN

08085500 Clear Fork Brazos River at Fort Griffin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT 15...	1015	27	3060	8.3	21.5	860	670	200	88	360
NOV 25...	0925	34	2570	8.2	8.0	730	570	170	75	290
DEC 31...	1440	58	3110	8.0	7.0	940	720	210	100	370
JAN 31...	0745	33	4050	8.2	5.5	1300	1000	300	130	490
FEB 19...	1340	24	3700	7.6	15.0	1100	870	240	120	460
MAR 31...	0920	13	4640	7.8	17.0	1500	1300	320	160	570
APR 30...	0850	52	3970	7.9	18.0	1200	1000	260	140	500
MAY 12...	0855	45	2930	8.1	23.5	860	710	180	100	320
JUN 23...	0930	9.4	3440	7.8	25.5	950	750	200	110	400
JUL 02...	1035	2.2	3540	8.0	26.5	1000	780	220	110	430
AUG 31...	0750	2.7	1280	7.9	23.5	350	220	79	36	130
SEP 21...	1155	159	632	7.7	22.0	190	100	50	15	45

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 15...	5.3	12	234	0	760	500	.4	8.8	2040
NOV 25...	4.7	7.5	195	0	610	400	.6	3.3	1650
DEC 31...	5.3	12	262	0	770	550	.7	9.6	2150
JAN 31...	6.0	11	302	0	1100	670	1.0	4.6	2860
FEB 19...	6.1	12	268	0	970	640	--	4.8	2580
MAR 31...	6.5	9.4	205	0	1300	840	.7	7.0	3310
APR 30...	6.2	8.0	248	0	1100	690	.6	5.1	2830
MAY 12...	4.7	7.5	190	0	710	490	.5	5.9	1910
JUN 23...	5.6	12	252	0	860	580	.6	10	2300
JUL 02...	5.9	13	274	0	840	600	.7	11	2360
AUG 31...	3.0	8.0	158	0	230	200	.5	11	772
SEP 21...	1.4	4.9	104	0	100	72	.2	7.0	345

08085500 Clear Fork Brazos River at Fort Griffin, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TUNS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TUNS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TUNS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	606	3370	2300	3720	570	925	850	1370	1020
NOV. 1975.....	2108	3110	2080	11900	520	2970	750	4270	920
DEC. 1975.....	1195	2790	1840	5940	470	1500	640	2060	810
JAN. 1976.....	1103	3650	2680	7970	660	1950	1020	3020	1190
FEB. 1976.....	666	3860	2690	4830	660	1180	1020	1840	1200
MAR. 1976.....	841	4210	2970	6740	720	1640	1150	2600	1320
APR. 1976.....	2013.3	4380	3100	16900	750	4090	1200	6530	1380
MAY 1976.....	1235	3050	2040	6810	510	1710	730	2440	900
JUNE 1976.....	311.7	3610	2490	2090	610	517	930	784	1110
JULY 1976.....	2001.5	3180	2160	11700	540	2890	790	4280	950
AUG. 1976.....	1935.3	2240	1420	7410	370	1910	470	2430	610
SEPT 1976.....	3057.7	1060	630	5200	150	1280	170	1410	320
TOTAL	17067.48	**	**	91200	**	22600	**	33000	**
WTD.AVG.	46.76	2920	2000	**	490	**	720	**	850

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3050	3240	2600	2790	4040	3900	4730	3760	3800	3520	2700	1310
2	3130	3000	2300	3260	3990	3900	4750	3790	3750	3540	2800	1320
3	3190	2990	2200	3380	3940	3930	4780	3080	3690	3540	2850	1310
4	3250	2950	2070	3560	3920	3970	4780	2970	3680	2480	2600	1320
5	3290	2890	2000	3600	3910	4020	4770	2940	3680	889	2500	1340
6	3270	3150	1990	3700	3900	4070	4770	2400	3660	903	2300	1360
7	3250	3240	1960	3740	3910	4070	4800	2600	3630	1050	2200	1380
8	3230	3240	1890	3830	3950	4090	4850	2980	3630	1160	1800	1410
9	3230	3300	1840	3900	3950	4090	4840	2600	3630	1450	1130	1390
10	3230	3460	1950	3950	3930	4090	4790	2520	3650	1590	1130	1320
11	3230	3540	1960	3930	3840	4090	4700	2610	3650	1560	1140	1170
12	3230	3550	2090	3950	3830	4070	4600	2860	3630	1370	1140	1040
13	3220	3510	2170	4010	3800	4070	4500	3060	3620	617	1140	1000
14	3150	3530	2390	4040	3830	4150	4310	3060	3590	1140	1150	970
15	3060	3600	2550	4070	3830	4210	4310	2940	3570	3030	1150	991
16	3070	3630	2790	4020	3820	4190	4150	2940	3550	3440	1150	1070
17	3140	3620	2810	4020	3800	4290	4130	2970	3540	3780	1150	1610
18	3190	3600	3350	4040	3740	4370	3900	3020	3510	3960	1160	1730
19	3310	3540	3350	4020	3700	4400	4570	3060	3490	4190	1170	1080
20	3420	3540	3650	4020	3720	4460	4740	3070	3490	3660	1170	575
21	3560	3410	3660	3990	3820	4450	4570	3100	3490	4190	1180	475
22	3720	3390	3650	3980	3800	4460	4320	3140	3470	3830	1200	1260
23	3830	3120	3610	3980	3820	4460	4320	3140	3440	3700	1220	1330
24	3810	2820	3480	3990	3830	4550	3860	3140	3430	4130	1230	1880
25	3730	2570	3480	4020	3850	4550	3730	3120	3430	3500	1240	1920
26	3690	2570	3450	4040	3850	4580	3900	3140	3420	2600	1250	2050
27	3630	2680	3460	4030	3850	4580	4000	3150	3420	2200	1270	2040
28	3610	2680	3220	4090	3850	4610	4000	3320	3420	1400	1280	2040
29	3580	2810	3100	4070	3840	4610	4060	3440	3420	2800	1280	2100
30	3540	2700	3040	4120	---	4640	4010	3930	3440	2700	1300	2180
31	3430	---	3090	4070	---	4640	---	3920	---	2700	1280	---
MONTH	3360	3200	2750	3880	3860	4280	4420	3070	3560	2600	1520	1400

BRAZOS RIVER BASIN

08085500 Clear Fork Brazos River at Fort Griffin, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.5	18.5	7.5	6.5	10.0	18.0	16.5	16.0	25.0	26.0	---	25.0
2	16.5	17.5	9.5	5.5	8.5	18.5	19.5	21.5	24.0	26.5	---	24.0
3	15.5	17.5	7.5	3.5	10.5	16.5	22.0	20.0	28.0	24.5	---	24.0
4	15.5	16.5	10.0	4.0	---	16.0	18.5	20.0	28.0	28.0	---	---
5	14.5	18.5	11.5	3.5	---	13.5	18.0	19.5	26.5	29.5	---	---
6	16.5	18.5	10.0	5.0	5.5	9.5	20.0	18.5	26.5	28.5	---	---
7	14.5	17.5	10.0	1.5	4.5	11.5	18.5	18.5	26.0	25.0	---	27.0
8	17.5	18.5	9.0	0.5	6.5	12.0	17.0	17.0	21.0	28.0	28.5	26.0
9	21.0	17.5	8.5	0.5	6.5	10.5	18.5	20.0	24.0	26.0	28.5	23.5
10	15.5	16.5	10.0	3.0	10.5	14.0	17.0	19.5	28.0	20.5	30.5	23.0
11	21.5	15.5	10.0	5.5	13.0	13.0	---	21.0	24.5	24.0	30.5	23.0
12	21.5	13.5	10.0	3.5	11.5	13.0	---	23.0	25.5	24.0	30.5	25.5
13	21.5	13.0	9.0	7.0	15.0	11.0	21.0	21.0	26.0	25.5	30.5	23.5
14	21.5	13.0	14.0	5.0	13.0	13.0	21.0	14.5	29.0	25.5	24.0	25.0
15	21.5	13.0	8.5	4.0	15.0	14.0	22.0	14.5	26.5	25.0	29.5	26.0
16	18.5	14.5	7.5	7.5	15.5	11.5	19.5	23.5	26.5	25.5	28.0	26.5
17	18.5	14.5	7.0	4.5	15.5	14.5	19.5	23.5	24.5	25.5	28.5	24.5
18	16.5	13.5	6.5	4.5	15.5	15.5	20.0	22.0	25.0	30.5	30.5	24.0
19	17.5	14.5	2.0	7.5	15.0	14.5	20.5	22.0	23.0	24.0	30.5	24.0
20	16.5	11.5	6.5	5.5	13.0	16.0	19.0	21.0	26.5	27.0	26.5	21.0
21	18.5	10.5	4.5	7.0	11.5	16.5	18.5	24.0	23.5	28.5	25.5	17.0
22	17.5	8.5	6.5	5.5	10.5	10.5	22.0	23.0	25.5	26.0	26.5	22.0
23	16.5	8.5	6.0	8.5	13.5	14.5	21.5	25.0	26.5	26.5	30.5	22.0
24	17.5	8.5	6.0	9.0	9.5	18.0	20.0	26.5	29.5	26.5	25.5	24.5
25	15.5	9.5	4.5	9.0	11.0	17.0	19.5	24.0	25.5	---	28.0	23.5
26	14.5	9.5	4.5	5.5	13.0	20.5	21.0	23.0	28.0	---	26.0	25.0
27	18.5	7.5	6.5	9.0	10.0	15.5	18.5	21.5	29.5	---	30.0	23.5
28	17.5	9.0	5.5	5.5	14.5	15.5	21.0	23.0	25.5	---	25.5	21.0
29	14.5	12.0	5.5	4.0	16.5	16.0	18.5	22.0	32.0	---	26.5	---
30	17.5	10.0	6.0	7.0	---	14.0	18.0	25.5	26.0	---	24.0	23.5
31	16.5	---	7.5	5.5	---	14.5	---	25.5	---	---	23.5	---
MONTH	18.5	13.5	7.5	5.5	11.5	14.5	19.5	21.5	26.0	---	---	24.0

08086150 North Fork Hubbard Creek near Albany, Tex.

LOCATION.--Lat 32°42'27", long 99°16'29", Shackelford County, on downstream side of bridge on U.S. Highway 380, 1.7 miles (2.7 km) south-east of Albany, and 2.0 miles (3.2 km) upstream from Salt Prong Hubbard Creek.

DRAINAGE AREA (revised).--39.3 mi² (101.8 km²).

PERIOD OF RECORD.--Discharge: November 1962 to current year.

Water quality: Chemical analyses: November 1962 to current year. Water temperatures: November 1962 to current year. Sediment records: October 1967 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 1,340.54 ft (408.597 m) above mean sea level.

AVERAGE DISCHARGE.--13 years (1963-76), 4.52 ft³/s (0.128 m³/s), 1.56 in/yr (40 mm/yr), 3,270 acre-ft/yr (4.03 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 450 ft³/s (12.7 m³/s) Sept. 20 (gage height, 4.48 ft or 1.366 m); minimum, 0.01 ft³/s (0.0003 m³/s) June 30, July 2, 3.

Period of record: Maximum discharge, 9,520 ft³/s (270 m³/s) May 5, 1969 (gage height, 19.22 ft or 5.858 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of 4,570 ft³/s (129 m³/s) and contracted-opening measurement of 9,520 ft³/s (270 m³/s); no flow at times.

Historic: Flood information begins in 1940. Floods of June 10, 1940, and July 18, 1953, reached stages of about 21 ft (6.4 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 6,250 micromhos Oct. 2; minimum daily, 741 micromhos Sept. 20. Minimum water temperatures, 2.0°C Jan. 8.

Period of record: Maximum daily specific conductance, 9,750 micromhos Sept. 28-30, 1968; minimum daily, 408 micromhos Sept. 16, 1974. Maximum water temperatures (1962-69, 1974-76), 33.0°C July 11, 1964; minimum, freezing point Jan. 12, 1963, Jan. 29, 1966.

REMARKS.--Discharge records good. No diversion above station. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.08	.20	.41	.42	.26	.13	.24	.12	.02	.04	.17
2	.12	4.7	.28	.38	.42	.26	.12	.19	.10	.01	.04	.15
3	.12	.08	.29	.39	.43	.22	.13	.19	.10	.02	.05	.14
4	.13	.21	.35	.39	.22	.18	.19	.04	.05	.05	3.2	.12
5	.13	.15	.37	.33	.42	.20	.19	.00	.07	.05	.37	.12
6	.13	.17	.27	.33	.41	.20	.17	.87	.07	.04	.17	.11
7	.13	.21	.28	.27	.44	.23	.31	.31	.07	.03	.13	.09
8	.12	.25	.30	.27	.41	.33	.98	.19	.06	.02	.11	.10
9	.12	.29	.34	.30	.39	.32	.29	.18	.06	.02	.10	.14
10	.11	.25	.34	.36	.37	.30	.18	.19	.05	.50	.10	.15
11	.11	.27	.35	.34	.33	.27	.14	.23	.04	3.5	.10	.13
12	.11	.26	.34	.34	.37	.26	1.1	.20	.04	.48	.10	.12
13	.09	.25	.37	.33	.37	.25	.97	.16	.04	.15	.09	.10
14	.09	.27	.38	.34	.31	.24	.40	.13	.04	.23	.09	.09
15	.13	.24	.31	.34	.30	.29	1.8	.14	.03	.27	.09	.09
16	.12	.31	.30	.37	.25	.25	4.7	.14	.03	.12	.09	.09
17	.13	.31	.29	.35	.24	.25	1.5	.14	.04	.10	.09	.09
18	.09	.33	.30	.39	.21	.23	.57	.14	.05	.11	.09	.09
19	.09	.34	.31	.41	.22	.22	.30	.15	.06	.09	.09	1.0
20	.09	.29	.33	.42	.24	.17	.19	.15	.05	.07	.08	.81
21	.08	.27	.34	.42	.18	.16	.19	.16	.03	.05	.08	5.7
22	.10	.27	.35	.47	.16	.17	.21	.17	.03	.05	.07	.44
23	.12	.30	.30	.46	.18	.14	.20	.18	.03	.07	.07	.17
24	.11	.29	.64	.48	.20	.16	.16	.24	.02	.07	.06	.11
25	.08	.30	1.3	.48	.19	.19	.14	.63	.02	.06	.06	.10
26	.07	.26	.65	.46	.21	.17	.14	1.2	.02	.06	.06	.10
27	.07	.30	.46	.48	.23	.17	.16	.28	.02	.06	.05	.12
28	.07	.33	.40	.53	.26	.19	.25	.20	.02	.06	.04	.20
29	.06	.37	.37	.51	.27	.23	1.1	.18	.02	.05	.04	.15
30	.06	.26	.39	.51	---	.17	.36	.13	.01	.05	.66	.13
31	.07	---	.42	.46	---	.15	---	.13	---	.04	.37	---
TOTAL	3.24	12.45	11.94	12.32	8.82	6.93	17.18	8.53	1.42	6.50	71.73	91.31
MEAN	.10	.43	.39	.40	.30	.22	.57	.28	.047	.21	2.31	3.04
MAX	.15	4.7	1.3	.53	.44	.33	4.7	1.2	.12	3.5	.65	.81
MIN	.04	.08	.26	.27	.16	.15	.12	.13	.01	.01	.04	.09
CFSM	.002	.01	.01	.01	.007	.005	.01	.007	.001	.005	.06	.08
IN	.003	.01	.01	.01	.004	.007	.02	.008	.001	.006	.07	.09
AC-FT	6.4	25	24	24	17	14	34	17	2.8	13	142	141

CAL YR 1975 TOTAL 491.24 MEAN .44 MAX 53 MIN .04 CFSM .06 IN .46 AC-FT 1770
WTR YR 1976 TOTAL 252.41 MEAN .69 MAX 81 MIN .01 CFSM .02 IN .24 AC-FT 501

PEAK DISCHARGE (BASE, 100 FT³/S).--Aug. 3 (0830) 375 ft³/s (4.26 ft); Sept. 20 (1100) 450 ft³/s (4.48 ft).

08086150 North Fork Hubbard Creek near Albany, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 24...	0920	.10	6070	7.8	18.0	1500	1300	360	140	680
DEC 31...	1745	.95	5580	8.4	10.0	1400	1200	320	140	630
JAN 13...	1310	.29	5640	7.5	8.5	1400	1300	340	130	630
FEB 24...	1440	.21	6920	7.7	14.0	1600	1400	400	140	710
MAR 08...	1130	1.5	6040	7.8	10.0	1400	1300	330	140	680
APR 30...	1020	.95	3220	7.9	17.0	760	580	200	63	370
MAY 18...	1110	.15	4180	7.8	23.5	980	800	250	86	500
JUL 01...	1055	.02	4890	7.7	29.0	1100	960	270	110	570
AUG 31...	1800	1.0	3190	7.8	27.0	720	570	180	66	360
SEP 13...	1445	.10	3620	7.7	27.0	920	740	230	83	410

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE (P) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 24...	7.7	4.1	185	0	180	1800	.4	10	3270
DEC 31...	7.4	3.6	248	6	190	1700	--	9.2	3120
JAN 13...	7.4	4.0	143	0	170	1800	--	6.4	3150
FEB 24...	7.8	4.0	184	0	190	2000	.4	3.5	3540
MAR 08...	7.9	4.8	82	0	180	1900	--	4.6	3280
APR 30...	5.8	3.8	215	0	95	940	.5	11	1790
MAY 18...	7.0	3.8	215	0	130	1300	.4	9.6	2390
JUL 01...	7.4	4.3	201	0	150	1500	.5	16	2720
AUG 31...	5.8	4.0	184	0	100	880	.4	12	1690
SEP 13...	5.9	4.6	216	0	120	1100	.5	13	2070

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	3.24	6030	3290	29	1850	16	190	1.6	1450
NOV. 1975.....	12.85	4230	2280	79	1240	43	100	3.6	1000
DEC. 1975.....	11.98	5090	2760	89	1530	49	140	4.4	1210
JAN. 1976.....	12.32	5500	2990	99	1670	55	170	5.7	1320
FEB. 1976.....	8.55	5870	3200	74	1800	41	190	4.3	1410
MAR. 1976.....	6.93	5870	3190	60	1790	34	190	3.2	1410
APR. 1976.....	17.18	2790	1500	69	770	36	110	5.1	640
MAY 1976.....	8.53	4040	2180	50	1180	27	100	2.3	950
JUNE 1976.....	1.42	4830	2620	9.9	1450	5.7	97	0.4	1150
JULY 1976.....	6.5	4640	2510	44	1390	25	150	2.5	1100
AUG. 1976.....	71.73	907	480	93	160	31	42	8.1	220
SEPT 1976.....	91.31	852	450	111	200	49	0	1.9	210
TOTAL	252.54	**	**	807	**	412	**	43.1	**
WTD.AVG.	0.69	2200	1200	**	600	**	61	**	490

08086150 North Fork Hubbard Creek near Albany, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C): WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6240	5530	4310	5980	5910	5970	6000	3350	4910	4890	3460	3120
2	6250	3950	4540	6100	5870	5910	6070	3480	4850	4930	3450	2970
3	6100	4120	4520	5250	5800	6000	6060	3770	4910	4920	832	2860
4	6210	4230	4220	5270	5880	6040	6030	3670	4830	4840	908	2890
5	6150	4260	4660	4340	5900	5910	5980	4110	4870	4800	1110	3060
6	6130	4240	4540	5230	5920	6040	6020	4120	4770	4880	1510	3240
7	6100	4230	4600	5900	5940	5860	5280	4130	4790	4960	1680	3430
8	6120	4280	4670	4790	5670	5980	5500	4110	4820	5010	1820	3410
9	6100	4320	4640	4250	5700	6090	5590	4070	4810	5000	1850	3390
10	6150	4400	4750	5440	5670	5910	5660	4140	4840	4890	1710	3250
11	6150	4460	4770	5720	5930	5740	5740	4200	4850	5390	1850	3190
12	6080	4500	4810	5620	5880	5730	5000	4150	4830	3420	1960	3300
13	5970	4540	4790	5640	5930	5740	5060	4140	4840	3390	2030	3520
14	6100	4500	4980	5670	5700	5820	5110	4130	4860	3300	1940	3480
15	5880	4520	5130	5590	5800	5860	1750	4100	4870	3340	2030	3330
16	5920	4540	5220	5730	5880	5890	1100	4120	4860	3370	2140	3260
17	6020	4560	5000	5130	6000	5710	1180	4110	4820	3310	2200	3340
18	6100	4540	5070	5450	6130	5740	1840	4190	4800	3340	2380	3410
19	5920	4420	5280	5730	6220	5820	1860	4040	4770	3360	2360	3860
20	5910	4410	5600	5560	5970	5910	2020	4070	4760	3350	2370	741
21	5890	4360	5410	5700	6080	5860	2170	4050	4780	3380	2360	850
22	5880	4320	5240	5680	5640	5790	2270	4040	4800	3360	2480	1080
23	5800	4330	5570	5670	5750	5760	2250	4020	4790	3350	2570	1180
24	5970	4350	5340	5700	5930	5740	2400	3750	4780	3380	2520	1270
25	5830	4320	4790	5720	6140	5790	2550	3050	4800	3410	2600	1460
26	5860	4440	5920	5760	5960	5810	2650	4060	4820	3420	2690	1680
27	5910	4390	5900	4680	5850	5850	2760	4820	4830	3400	2780	1840
28	5950	4380	5510	5770	5800	5820	2920	4770	4860	3410	2870	1870
29	5960	4370	5070	4750	6010	5800	2760	4730	4830	3430	2950	2010
30	5970	4480	6030	5910	---	5870	3200	5000	4850	3440	2840	2140
31	5780	---	5660	5960	---	5960	---	5730	---	3420	3200	---
MONTH	6010	4410	5050	5470	5890	5860	3830	4120	4830	3940	2240	2610

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	11.0	---	---	---	---	---	30.0	---	---	25.0
2	21.0	21.0	12.0	7.0	13.0	20.0	---	23.0	29.0	---	---	---
3	24.0	19.0	12.0	7.0	12.0	16.0	---	22.0	28.0	---	27.0	27.0
4	21.0	20.0	15.0	5.0	---	15.0	---	22.0	28.0	---	31.0	30.0
5	21.0	21.0	15.0	8.0	12.0	16.0	---	21.0	27.0	---	33.0	---
6	---	20.0	14.0	---	11.0	12.0	---	---	26.0	---	26.0	---
7	23.0	23.0	---	5.0	12.0	12.0	17.0	20.0	---	---	---	28.0
8	---	---	12.0	2.0	18.0	10.0	22.0	14.0	---	---	28.0	26.0
9	22.0	21.0	13.0	3.0	14.0	9.0	---	22.0	---	---	30.0	22.0
10	24.0	19.0	13.0	---	16.0	---	20.0	20.0	---	23.0	33.0	---
11	25.0	17.0	14.0	11.0	16.0	14.0	23.0	21.0	---	24.0	33.0	26.0
12	---	---	16.0	11.0	18.0	---	20.0	21.0	---	24.0	---	---
13	24.0	12.0	15.0	---	19.0	16.0	22.0	---	---	26.0	31.0	25.0
14	26.0	14.0	18.0	11.0	18.0	---	22.0	22.0	---	26.0	31.0	27.0
15	21.0	---	---	9.0	---	16.0	20.0	23.0	---	---	30.0	26.0
16	---	16.0	11.0	13.0	16.0	12.0	---	---	---	24.0	31.0	27.0
17	21.0	18.0	10.0	13.0	16.0	16.0	19.0	25.0	---	27.0	30.0	---
18	22.0	18.0	6.0	---	---	18.0	20.0	---	---	26.0	29.0	25.0
19	20.0	---	10.0	10.0	15.0	20.0	24.0	24.0	---	---	---	25.0
20	---	12.0	10.0	10.0	17.0	17.0	---	23.0	---	29.0	31.0	22.0
21	---	---	---	11.0	12.0	---	24.0	26.0	---	---	30.0	---
22	16.0	9.0	---	14.0	15.0	19.0	21.0	22.0	---	29.0	---	26.0
23	20.0	12.0	9.0	17.0	16.0	19.0	22.0	---	---	30.0	28.0	---
24	20.0	11.0	8.0	---	13.0	20.0	---	---	---	31.0	27.0	28.0
25	18.0	10.0	10.0	---	17.0	21.0	23.0	23.0	---	---	---	---
26	---	---	10.0	10.0	17.0	---	22.0	24.0	---	---	---	26.0
27	---	---	9.0	11.0	---	---	22.0	---	---	---	---	26.0
28	---	17.0	---	10.0	21.0	---	---	27.0	---	---	26.0	22.0
29	19.0	18.0	9.0	13.0	20.0	---	18.0	24.0	---	---	---	28.0
30	20.0	10.0	10.0	12.0	---	---	17.0	---	---	---	25.0	22.0
31	19.0	---	10.0	14.0	---	---	---	24.0	---	---	27.0	---
MONTH	---	---	11.5	---	15.5	---	---	---	---	---	---	---

08086212 Hubbard Creek below Albany, Tex.

LOCATION.--Lat 32°43'58", long 99°08'25", Shackelford County, on left bank 0.5 mile (0.8 km) downstream from Salt Prong Hubbard Creek, 2.8 miles (4.5 km) upstream from Newcomb Creek, 4.5 miles (7.2 km) upstream from U.S. Highway 180, 9.1 miles (14.6 km) east of Albany, and at mile 35.2 (56.6 km), revised.

DRAINAGE AREA (revised).--613 mi² (1,588 km²).

PERIOD OF RECORD.--Discharge: October 1966 to current year.

Water quality: Chemical analyses: October 1966 to current year. Water temperatures: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,184.99 ft (361.185 m) above mean sea level. Prior to June 12, 1968, water-stage recorder at site 2.1 miles (3.4 km) downstream at datum 7.63 ft (2.326 m) lower.

AVERAGE DISCHARGE.--10 years, 61.4 ft³/s (1.739 m³/s), 1.36 in/yr (35 mm/yr), 44,480 acre-ft/yr (54.8 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 2,730 ft³/s (77.3 m³/s) Aug. 3 (gage height, 11.05 ft or 3.368 m), from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of step-backwater method; no flow for many days.

Period of record: Maximum discharge, 27,200 ft³/s (770 m³/s) Jan. 21, 1968 (gage height, 25.10 ft or 7.650 m, at former site and datum), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurement of peak flow; no flow for many days.

Water quality: Current year: Maximum daily specific conductance, 8,350 micromhos Mar. 31; minimum daily, 464 micromhos Apr. 13.

Maximum water temperatures, 34.0°C July 27, Aug. 8, 10, 11; minimum, 3.0°C Jan. 4, 7, 8, Feb. 7.

Period of record: Maximum daily specific conductance (1966-70, 1972-76), 11,800 micromhos Nov. 27, 1968; minimum daily, 253 micromhos Sept. 8, 1967. Maximum water temperatures, 37.0°C July 11, 1969; minimum, freezing point Dec. 11, 1972, Jan. 8, 10, 1973.

REMARKS.--Discharge records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01	.02	1.3	.32	.11	.11	5.1	1.3	0	0	.67
2	.02	9.7	.02	1.1	.32	.07	.16	3.3	.02	0	0	1.3
3	.02	46	.02	.96	.32	.07	.23	2.0	.54	0	849	20
4	.02	26	.02	.82	.32	.04	91	1.6	.23	0	115	52
5	.02	11	.02	.67	.32	.07	76	2.0	.23	0	28	16
6	.02	5.5	.04	.54	.32	.07	26	55	.11	0	11	6.9
7	.02	2.7	.04	.43	.32	.07	12	26	6.9	0	5.8	3.3
8	.02	1.6	.04	.43	.32	.07	41	12	26	0	3.0	1.6
9	.02	.96	.04	.54	.23	.07	46	6.9	9.7	0	2.0	1.1
10	.02	.67	.04	.43	.16	.11	19	4.1	4.8	0	1.1	1.1
11	.01	.43	.04	.43	.16	.11	16	3.3	2.5	.32	.43	.54
12	.01	.43	.04	.43	.16	.07	69	2.3	1.6	6.9	.32	.23
13	0	.32	.04	.43	.16	.07	96	1.6	1.1	3.0	.16	.11
14	0	.23	.02	.43	.16	.07	19	1.3	.67	1.3	.04	.07
15	0	.11	.02	.43	.23	.07	13	1.1	.32	.67	.02	.02
16	0	.11	.02	.43	.23	.11	270	.54	.16	.32	0	.02
17	0	.07	.02	.43	.32	.23	104	.23	.04	.32	0	.01
18	0	.07	.02	.43	.54	.23	95	.11	.02	142	0	0
19	0	.07	.02	.43	.54	.16	38	.04	.02	33	0	.02
20	0	.07	.02	.43	.32	.16	16	.02	0	9.3	0	123
21	0	.07	.02	.43	.23	.16	9.3	.02	0	4.5	0	77
22	0	.07	.04	.43	.23	.16	5.8	.02	0	2.0	0	22
23	0	.67	.02	.43	.23	.16	3.8	.02	0	1.1	0	8.1
24	0	.07	.07	.43	.16	.16	2.7	.02	0	.43	0	4.5
25	0	.07	.32	.43	.11	.16	2.3	.82	0	.23	0	2.7
26	0	.07	1.4	.32	.11	.16	1.4	29	0	.11	0	1.6
27	0	.04	1.8	.32	.32	.16	1.1	29	0	.04	0	1.1
28	0	.02	1.8	.32	.23	.16	.96	9.7	0	.01	0	.67
29	0	.02	1.8	.32	.11	.16	1.6	4.5	0	0	0	.54
30	0	.02	1.8	.32	---	.11	5.1	2.5	0	0	0	.43
31	.01	---	1.4	.32	---	.11	---	1.6	---	0	0	---
TOTAL	.23	106.57	11.03	15.59	7.50	3.69	1075.56	205.74	57.06	205.55	1015.87	346.63
MEAN	.007	3.55	.36	.50	.26	.12	35.9	6.64	1.90	6.63	32.8	11.6
MAX	.02	46	1.8	1.3	.54	.23	270	55	26	142	849	123
MIN	0	.11	.02	.32	.11	.04	.11	.02	0	0	0	0
CFSM	0	.005	0	0	0	0	.06	.01	.003	.01	.05	.02
IN	.00001	.006	.0007	.0009	.0005	.0002	.07	.01	.003	.01	.06	.02
AC-FT	.5	211	22	31	15	7.3	2130	408	113	408	2010	668
CAL Y- 1975	TOTAL	13974.33	MEAN	38.3	MAX	2030	MIN	0	CFSM	.06	IN	.85
WTR Y- 1976	TOTAL	13051.02	MEAN	4.34	MAX	849	MIN	0	CFSM	.01	IN	.19
									AC-FT	27720	AC-FT	6050

PEAK DISCHARGE (BASE, 2,000 FT³/S).--Aug. 3 (1030) 2,730 ft³/s (11.05 ft).

08086212 Hubbard Creek below Albany, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
DEC. 01...	1330	.06	5190	7.7	13.0	960	810	240	88	740
JAN. 09...	1500	.02	5730	7.8	5.0	1100	940	280	89	800
FEB. 18...	1205	.36	7300	7.6	15.0	1200	1000	310	92	1000
MAR. 15...	1400	.08	7180	7.5	21.0	1300	1200	350	110	1100
APR. 27...	0915	1.0	2100	7.8	20.0	450	340	120	37	240
MAY 18...	0930	.17	2350	7.9	21.0	520	390	140	41	280
JULY 27...	1545	.05	1610	7.3	33.0	290	210	84	20	190
SEP. 13...	1635	.11	2650	7.7	26.0	510	400	130	44	330

DATE	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC. 01...	10	6.5	182	0	270	1500	--	3.2	2940
JAN. 09...	11	7.0	156	0	250	1700	--	2.5	3210
FEB. 18...	13	6.5	138	0	240	2100	.3	.9	3820
MAR. 15...	13	8.0	110	0	260	2400	--	.5	4280
APR. 27...	4.9	4.8	131	0	95	550	.3	5.5	1120
MAY 18...	5.4	5.0	152	0	95	640	.3	5.2	1280
JULY 27...	4.8	6.0	100	0	71	400	.3	6.4	827
SEP. 13...	6.4	9.1	133	0	150	690	.3	5.9	1420

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DISSOLVED SOLIDS (MG/L)	DISSOLVED SULFATES (TONS)	DISSOLVED CHLORIDE (MG/L)	DISSOLVED CHLORIDE (TONS)	DISSOLVED SULFATE (MG/L)	DISSOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	0.23	6470	3620	2.3	1970	1.2	230	0.1	1220
NOV. 1975.....	106.57	3450	1890	543	930	269	180	53	670
DEC. 1975.....	11.03	5390	3000	90	1590	47	220	6.7	1030
JAN. 1976.....	15.59	5160	2870	120	1500	63	220	9.8	960
FEB. 1976.....	7.39	6180	3450	69	1870	37	240	4.2	1170
MAR. 1976.....	3.69	7480	4200	42	2330	24	230	2.2	1410
APR. 1976.....	1075.56	1680	920	2680	420	1220	95	275	350
MAY 1976.....	205.74	1380	750	417	330	185	49	27	300
JUNE 1976.....	57.06	1730	940	144	440	67	98	15	360
JULY 1976.....	205.55	1900	1030	573	490	271	95	53	390
AUG. 1976.....	1015.87	603	320	889	97	266	55	152	150
SEPT 1976.....	346.63	1160	630	589	270	250	46	43	250
TOTAL	3050.91	**	**	6160	**	2700	**	641	**
WTD.AVG.	8.36	1370	750	**	330	**	78	**	290

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6400	6750	5190	4620	5870	6440	8240	2480	1650	---	---	2040
2	6420	4590	5100	4560	5890	6460	8200	1710	1740	---	---	1880
3	6410	3970	5190	4480	5870	6480	8000	1670	1790	---	614	2270
4	6390	2610	5190	3960	5940	6500	2580	1720	1820	---	500	1190
5	6400	2620	5320	4540	5950	6530	3920	1990	2000	---	568	1790
6	6440	2870	5350	4620	5970	6570	4980	1050	2320	---	642	2270
7	6490	3030	4620	4870	6040	6680	6730	1040	1530	---	799	2280
8	6520	3020	5570	4980	6070	6660	5940	1050	1680	---	805	2330
9	6500	3410	5760	5350	6100	6740	3240	1080	1740	---	811	2360
10	6530	3440	5830	5760	6080	6720	3500	1090	1850	---	848	2400
11	6510	3510	5590	5380	6100	6770	3750	1150	1920	3980	858	2420
12	6540	3570	5930	5450	6040	6840	579	1240	1940	3420	894	2570
13	---	3660	5940	5450	6140	6890	464	1520	2080	2920	892	2610
14	---	3660	6250	5450	6110	7430	925	1650	2140	2890	891	2660
15	---	3730	6310	5440	6180	7180	1200	1780	2240	3040	937	2650
16	---	3910	5770	5430	6220	7510	714	2140	2200	3120	---	2680
17	---	3930	6550	5420	6280	7480	987	2230	2250	3190	---	2670
18	---	3980	6160	5450	6420	7490	612	2350	2270	1820	---	---
19	---	3930	6770	5470	6380	7510	733	2380	2310	2000	---	2660
20	---	4110	6660	5520	6420	7590	1130	2430	---	1340	---	783
21	---	4130	6940	5580	6410	7860	1030	2480	---	1330	---	1110
22	---	4140	6730	5600	6420	7770	987	2450	---	1320	---	1080
23	---	4050	7050	5620	6410	7790	1170	2400	---	1390	---	1020
24	---	4350	7500	5620	6380	7830	1350	2370	---	1410	---	980
25	---	4520	7000	5650	6390	7860	1680	2310	---	1440	---	933
26	---	4540	6220	5710	6380	7950	1980	2110	---	1550	---	1110
27	---	4540	5950	5810	6320	8020	2110	1490	---	1610	---	1250
28	---	4790	5830	5870	6380	8210	2160	1290	---	1620	---	1360
29	---	4800	4390	5920	6460	8180	2250	1360	---	---	---	1440
30	---	4980	4780	5930	---	8020	2510	1470	---	---	---	1540
31	6740	---	4650	5940	---	8350	---	1550	---	---	---	---
MONTH	---	3970	5870	5340	6190	7300	2790	1780	---	---	---	1870

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	---	13.0	6.0	11.0	18.0	20.0	18.0	25.0	---	---	---
2	---	---	13.0	5.0	12.0	19.0	19.0	18.0	25.0	---	---	28.0
3	---	17.0	9.0	4.0	12.0	19.0	18.0	19.0	27.0	---	23.0	26.0
4	---	17.0	10.0	3.0	11.0	19.0	18.0	20.0	26.0	---	25.0	26.0
5	---	18.0	17.0	4.0	9.0	15.0	18.0	19.0	25.0	---	27.0	27.0
6	---	17.0	10.0	8.0	4.0	12.0	18.0	19.0	---	---	29.5	28.0
7	---	19.0	8.0	3.0	3.0	12.0	18.0	18.0	23.0	---	30.0	29.0
8	---	17.0	8.0	3.0	10.0	11.0	21.0	17.0	21.0	---	34.0	26.0
9	---	20.0	13.0	6.0	12.0	14.0	21.0	18.0	26.0	---	29.0	24.0
10	---	16.0	15.0	5.0	14.0	12.0	20.0	19.0	26.0	---	34.0	22.0
11	---	19.0	13.0	5.0	12.0	14.0	21.0	22.0	25.0	---	34.0	23.0
12	---	14.0	9.0	5.0	10.0	16.0	21.0	22.0	25.0	25.0	29.0	26.0
13	---	12.0	10.0	7.0	15.0	13.0	21.0	21.0	27.0	25.0	28.0	25.0
14	---	11.0	15.0	6.0	16.0	14.0	24.0	20.0	27.0	25.0	28.0	26.0
15	---	14.0	8.0	7.0	16.0	14.0	24.0	19.0	30.0	26.0	29.0	26.0
16	---	14.0	8.0	8.0	16.0	14.0	19.0	20.0	25.0	27.0	---	26.0
17	---	14.0	6.0	6.0	18.0	16.0	19.0	20.0	26.0	28.0	---	26.0
18	---	16.0	6.0	9.0	18.0	18.0	19.0	24.0	26.0	26.0	---	---
19	---	15.0	4.0	8.0	17.0	19.0	21.0	22.0	---	26.0	---	26.0
20	---	11.0	7.0	8.0	19.0	19.0	19.0	25.0	---	26.0	---	22.0
21	---	10.0	12.0	8.0	16.0	20.0	22.0	24.0	---	26.0	---	22.0
22	---	10.0	13.0	10.0	9.0	21.0	23.0	22.0	---	26.0	---	22.0
23	---	10.0	13.0	10.0	11.0	18.0	21.0	23.0	---	26.0	---	22.0
24	---	11.0	11.0	9.0	14.0	18.0	20.0	26.0	---	27.0	---	24.0
25	---	9.0	8.0	7.0	13.0	17.0	20.0	24.0	---	27.0	---	23.0
26	---	5.0	9.0	5.0	16.0	23.0	20.0	23.0	---	28.0	---	25.0
27	---	4.0	8.0	8.0	14.0	18.0	20.0	21.0	---	34.0	---	24.0
28	---	10.0	9.0	5.0	14.0	19.0	20.0	22.0	---	30.0	---	21.0
29	---	11.0	7.0	5.0	18.0	19.0	18.0	22.0	---	---	---	21.0
30	---	11.0	7.0	12.0	---	20.0	18.0	26.0	---	---	---	22.0
31	---	---	7.0	8.0	---	21.0	---	25.0	---	---	---	---
MONTH	---	13.5	10.0	6.5	13.0	17.0	20.0	21.0	---	---	---	24.5

08086290 Big Sandy Creek above Breckenridge, Tex.
(Formerly published as 08086300 Big Sandy Creek near Breckenridge)

LOCATION.--Lat 32°38'54", long 99°00'15", Stephens County, on left bank 600 ft (180 m) downstream from Battle Creek, 1.6 miles (2.6 km) upstream from bridge on Farm Road 576, 9.8 miles (15.8 km) southwest of Breckenridge, and about 14.6 miles (23.5 km) upstream from Hubbard Creek Dam.

DRAINAGE AREA.--280 mi² (725 km²). Area at site used prior to October 1975, 288 mi² (746 km²), revised.

PERIOD OF RECORD.--Discharge: February 1962 to current year.

Water quality: Chemical analyses: February 1962 to current year. Water temperatures: February 1962 to current year. Sediment records: October 1967 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 1,185.83 ft (361.441 m) above mean sea level. Prior to Oct. 1, 1975, at site 1.6 miles (2.6 km) downstream at datum 7.41 ft (2.259 m) lower.

AVERAGE DISCHARGE.--14 years, 29.2 ft³/s (0.827 m³/s), 21,160 acre-ft/yr (26.1 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 1,070 ft³/s (30.3 m³/s) May 26 (gage height, 7.84 ft or 2.390 m); no flow for many days.

Period of record: Maximum discharge, 8,170 ft³/s (231 m³/s) May 13, 1965 (gage height, 23.30 ft or 7.102 m); no flow at times each year.

Historic: According to information from State Highway Department, the floods of May 16, 1949, July 20, 1953, and Apr. 29, 1957, each reached a stage of 24.6 ft (7.50 m).

Water quality: Current year: Maximum daily specific conductance, 28,700 micromhos Apr. 5, 10; minimum daily, 235 micromhos Sept. 20.

Period of record: Maximum daily specific conductance, 28,700 micromhos Apr. 5, 10, 1976; minimum daily, 59 micromhos Nov. 21, 1963.

REMARKS.--Discharge records good. Flow is affected by Lake Cisco (capacity, 25,600 acre-ft or 31.6 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.01	.01	0	0	6.0	1.1	0	0	6.1
2		2.6	0	.01	.01	0	0	2.4	.33	0	0	.87
3		13	0	0	.01	0	0	.81	.09	0	12	.04
4		5.0	0	0	.01	0	0	.27	.02	0	4.1	0
5		.90	0	0	.01	0	.01	39	.01	0	.43	0
6		.09	0	0	.01	0	.02	156	.01	0	.04	0
7		.01	0	0	.01	.03	.02	19	.01	0	0	0
8		0	0	.01	.01	.04	.02	5.5	.01	0	0	0
9		0	0	.01	0	.01	.01	1.7	.01	0	0	.12
10		0	0	.01	0	.01	.01	.72	0	0	0	.01
11		0	0	.01	0	.01	0	.21	0	.92	0	0
12		0	0	.01	0	.01	48	.08	0	.28	0	0
13		0	0	.01	0	.01	74	.02	0	.05	0	0
14		0	0	.01	0	.01	6.7	.01	0	.02	0	0
15		0	0	.01	0	.01	16	.01	0	.01	0	0
16		0	0	0	0	.01	244	.02	0	0	0	0
17		0	0	0	0	.01	32	.02	0	0	0	0
18		0	0	.01	0	0	17	.02	0	7.6	0	0
19		0	0	.01	0	0	6.8	.02	0	2.0	0	48
20		0	0	.01	0	0	6.3	.02	0	.28	0	57
21		0	0	.01	0	0	4.1	.02	0	.02	0	30
22		0	.01	.01	0	0	1.0	.02	0	0	0	6.9
23		0	.01	.01	0	0	.59	.02	0	0	0	2.1
24		0	.14	.01	0	.01	.44	.02	0	0	0	.56
25		0	.14	.01	0	.01	.22	103	0	0	0	.06
26		0	.02	.01	0	.01	.14	229	0	0	0	.01
27		0	.01	.01	0	.01	.05	28	0	0	0	.04
28		0	.01	.01	0	0	.07	13	0	0	0	6.6
29		0	.01	.01	0	.01	2.8	5.1	0	0	0	1.1
30		0	.01	.01	---	0	9.4	2.1	0	0	13	.12
31		---	.01	.01	---	0	---	1.0	---	0	36	---
TOTAL	0	21.60	.37	.24	.08	.21	469.70	613.11	1.59	11.18	65.57	159.63
MEAN	0	.72	.012	.008	.003	.007	15.7	19.8	.053	.36	2.12	5.32
MAX	0	13	.14	.01	.01	.04	244	229	1.1	7.6	36	57
MIN	0	0	0	0	0	0	0	.01	0	0	0	0
AC-FT	0	43	.7	.5	.2	.4	932	1220	3.2	22	130	317

CAL YR 1975 TOTAL 4286.98 MEAN 11.7 MAX 1490 MIN 0 AC-FT 9500
WTR YR 1976 TOTAL 1343.28 MEAN 3.67 MAX 244 MIN 0 AC-FT 2660

PEAK DISCHARGE (BASE, 2,000 FT³/S).--No peak above base.

08086290 Big Sandy Creek above Breckenridge, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPECIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
NOV 07...	1400	.01	2470	7.7	20.0	470	410	140	30	310
DEC 22...	1410	.01	14700	7.6	10.0	2700	2600	800	170	2300
JAN 27...	1030	.01	22700	7.3	4.5	4100	4000	1200	270	3800
FEB 18...	0900	.01	24400	7.4	13.0	4400	4400	1300	290	4100
MAR 15...	1145	.01	25700	7.0	17.0	4500	4500	1300	310	4400
APR 13...	1850	20	748	8.0	21.5	140	78	46	7.1	81
MAY 17...	1440	.02	3660	7.6	25.0	670	560	210	36	520
JUN 07...	1415	.02	2120	8.1	29.0	390	290	120	21	260
SEP 28...	1500	.59	526	8.0	21.0	130	63	42	5.8	41

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV 07...	6.2	6.0	75	0	61	720	.5	4.8	1310
DEC 22...	19	11	139	0	550	5100	--	.6	9000
JAN 27...	26	4.9	150	0	970	7800	--	.7	14100
FEB 18...	27	5.0	101	0	1100	8800	--	.1	15600
MAR 15...	28	5.0	70	0	1200	9100	--	.1	16400
APR 13...	2.9	4.0	81	0	27	170	.3	6.1	381
MAY 17...	8.7	5.5	134	0	120	1100	.3	5.6	2060
JUN 07...	5.8	6.2	119	0	73	560	.3	5.8	1110
SEP 28...	1.6	4.5	80	0	17	100	.2	62	312

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	0	*****	*****	0	*****	0	*****	0	***
NOV. 1975.....	21.6	2910	1580	92	810	47	130	7.7	520
DEC. 1975.....	0.37	12900	7790	7.8	4290	4.2	600	0.6	****
JAN. 1976.....	0.24	21200	13400	8.8	7480	4.8	930	0.6	****
FEB. 1976.....	0.08	23200	14700	3.2	8230	1.6	1020	0.2	****
MAR. 1976.....	0.21	25500	16300	9.1	9120	4.9	1110	0.6	****
APR. 1976.....	469.7	1180	630	804	280	352	76	97	220
MAY 1976.....	613.11	741	390	652	140	238	57	94	150
JUNE 1976.....	1.59	1290	690	2.9	300	1.3	99	0.4	240
JULY 1976.....	11.18	2130	1140	35	560	17	110	3.2	380
AUG. 1976.....	65.57	686	360	64	120	22	63	11	150
SEPT 1976.....	159.63	333	180	77	33	14	50	21	92
TOTAL	1343.28	**	**	1760	**	707	**	236	**
WTD.AVG.	3.68	903	480	**	190	**	65	**	180

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

08086400 Hubbard Creek Reservoir near Breckenridge, Tex.

LOCATION.--Lat 32°49'53", long 98°58'03", Stephens County, on left bank just upstream from dam on Hubbard Creek, 1.4 miles (2.3 km), revised, upstream from U.S. Highway 183, 6.5 miles (10.5 km) northwest of Breckenridge, and 12.6 miles (20.3 km) upstream from mouth.

DRAINAGE AREA (revised).--1,085 mi² (2,810 km²).

PERIOD OF RECORD.--Contents: October 1962 to current year.

Water quality: Chemical analyses: September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 281,200 acre-ft (347 hm³) Oct. 1, 2 (elevation, 1,180.5 ft or 359.82 m); minimum, 236,300 acre-ft (291 hm³) Aug. 29 (elevation, 1,177.1 ft or 358.78 m).

Period of record: Maximum contents, 327,200 acre-ft (403 km³) Feb. 3, 1975 (elevation, 1,183.61 ft or 360.764 m); minimum since normal operating level was reached in May 1969, 171,200 acre-ft (211 hm³) Oct. 18-20, 1972 (elevation, 1,171.3 ft or 357.01 m).

REMARKS.--The reservoir is formed by a rolled earthfill dam 5,630 ft (1,720 m) long. There are two additional levees, the north and south, making an overall length of 3.5 miles (5.6 km). Storage began September 1962 and the dam was completed in December 1962. The emergency spillway is a 2,000-foot-wide (610-meter) cut through natural ground near the left end of dam. The service spillway is a partially controlled morning-glory type with 12 lift gates designed to discharge 30,000 ft³/s (850 m³/s) with a 17.5-foot (5.3-meter) head through a 22.0-foot-diameter (6.7-meter) concrete conduit. The dam is the property of the West Central Texas Municipal Water District. The District has a permit to divert 56,000 acre-ft (69.0 hm³) annually for municipal, mining, and industrial uses. Diversions during the 1976 water year are as follows: 495 acre-ft (0.610 hm³) for municipal use, 4,170 acre-ft (5.14 hm³) for oilfield operation, and 1,350 acre-ft (1.66 hm³) for irrigation and domestic uses. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	1,208.0	-
Crest of spillway.....	1,194.0	515,800
Top of gates.....	1,185.1	350,900
Top of conservation pool.....	1,183.0	317,800
Crest of spillway.....	1,176.6	230,100
Sill of gate.....	1,138.0	5,580
Lowest gated outlet (invert).....	1,136.0	3,470

COOPERATION.--Diversions and capacity table furnished by West Central Texas Municipal Water District.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,177.0	235,000
1,178.0	247,600
1,180.0	274,200

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281200	274200	268800	266100	263400	259400	255500	256800	255500	247600	245100	240000
2	281200	277000	268800	264800	262000	258100	255500	256800	255500	246300	245100	240000
3	279800	277000	268800	264800	262000	258100	255500	256800	254200	246300	245100	240000
4	279800	277000	268800	264800	262000	258100	255500	256800	254200	246300	245100	240000
5	279800	277000	268800	264800	262000	258100	255500	256800	254200	246300	245100	240000
6	279800	277000	268800	264800	262000	258100	255500	256800	254200	245100	243800	240000
7	279800	277000	267500	264800	262000	258100	255500	256800	254200	245100	243800	238800
8	279800	275600	267500	264800	262000	258100	255500	256800	254200	245100	243800	238800
9	278400	275600	267500	264800	262000	258100	255500	256800	254200	245100	243800	238800
10	278400	275600	267500	264800	262000	258100	255500	256800	252800	246300	242600	238800
11	278400	275600	267500	264800	262000	258100	255500	256800	252800	247600	242600	238800
12	278400	275600	266100	264800	262000	258100	255500	256800	252800	247600	242600	238800
13	278400	274200	266100	264800	262000	258100	255500	256800	252800	247600	242600	237500
14	278400	274200	266100	264800	262000	256800	255500	256800	252800	247600	242600	237500
15	277900	274200	266100	264800	262000	256800	256800	255500	251500	247600	241300	237500
16	277000	274200	264800	264800	262000	256800	258100	255500	251500	247600	241300	237500
17	277000	272900	264800	264800	262000	256800	258100	255500	251500	247600	241300	237500
18	277000	274200	264800	264800	260700	256800	258100	255500	250200	247600	241300	237500
19	277000	272900	264800	264800	260700	256800	258100	255500	250200	247600	240000	240000
20	277000	272900	264800	264800	260700	256800	258100	255500	250200	246300	240000	242600
21	277000	272900	264800	264800	260700	256800	258100	255500	250200	246300	240000	242600
22	277000	272900	264800	264800	260700	256800	258100	255500	250200	246300	238800	242600
23	275600	271500	264800	263400	259400	256800	256800	254200	250200	246300	238800	242600
24	275600	271500	266100	263400	259400	255500	256800	254200	248900	246300	237500	242600
25	275600	271500	266100	263400	259400	255500	256800	255500	248900	246300	237500	242600
26	275600	271500	266100	263400	259400	255500	256800	255500	248900	245100	237500	241300
27	275600	270200	266100	263400	259400	255500	256800	255500	248900	245100	237500	241300
28	275600	270200	266100	263400	259400	255500	256800	255500	248900	245100	237500	241300
29	275600	270200	266100	263400	259400	255500	256800	255500	248900	245100	236300	241300
30	274200	270200	266100	263400	---	255500	256800	255500	248900	245100	238800	240000
31	274200	---	266100	263400	---	255500	---	255500	---	245100	240000	---
(†)	1180.0	1179.7	1179.4	1179.2	1178.9	1178.6	1178.7	1178.6	1178.1	1177.8	1177.4	1177.4
(*)	-7000	-4000	-4100	-2700	-4000	-3900	+1300	-1300	-6600	-3800	-5100	0
MAX	281200	277000	268800	266100	263400	259400	258100	256800	255500	247600	245100	242600
MIN	274200	270200	264800	263400	259400	255500	255500	254200	248900	245100	236300	237500
CAL YR 1975.....	* -44100			MAX 327000			MIN 264800					
WTR YR 1976.....	* -41200			MAX 281200			MIN 236300					

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

08086400 Hubbard Creek Reservoir near Breckenridge, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
JAN 23...	0850	1170	8.1	7.5	11.1	92	290	170
MAY 06...	0900	1230	8.3	18.5	8.6	91	300	180
AUG 25...	0905	1330	8.0	26.5	6.5	82	300	200

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE (P) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
JAN 23...	82	20	120	3.1	8.5	140	0	47	260
MAY 06...	84	22	120	3.0	9.5	144	0	47	280
AUG 25...	84	23	130	3.2	13	132	0	55	300

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
JAN 23...	.3	5.6	612	.01	.02	.01	0	0
MAY 06...	.5	4.3	638	.00	.00	.01	10	0
AUG 25...	.5	5.4	676	.00	.01	.00	10	50

08086500 Hubbard Creek near Breckenridge, Tex.

LOCATION.--Lat 32°50'13", long 98°56'52", Stephens County, on downstream side of pier of bridge on U.S. Highway 183, 1.4 miles (2.3 km) downstream from Hubbard Creek Reservoir, 6.8 miles (10.9 km) northwest of Breckenridge, 8.2 miles (13.2 km) upstream from Gonzales Creek, and 11.2 miles (18.0 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA (revised).--1,089 mi² (2,821 km²), of which 1,085 mi² (2,810 km²) is above Hubbard Creek Dam.

PERIOD OF RECORD.--Discharge: April 1955 to current year.

Water quality: Chemical analyses: April 1955 to September 1975. Water temperatures: April 1955 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 1,092.10 ft (332.872 m) above mean sea level. Prior to July 16, 1959, at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--7 years (1955-62) prior to completion of Hubbard Creek Dam, 170 ft³/s (4.814 m³/s), 123,200 acre-ft/yr (152 hm³/yr); 14 years (1962-76) regulated, 25.9 ft³/s (0.733 m³/s), 18,760 acre-ft/yr (23.1 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 127 ft³/s (3.60 m³/s) Sept. 20 (gage height, 6.34 ft or 1.932 m); no flow for many days.

Period of record: Maximum discharge, 34,500 ft³/s (977 m³/s) May 26, 1957 (gage height, 34.00 ft or 10.363 m); no flow at times.

Historic: Maximum stage since at least 1925, 34.2 ft (10.42 m) July 20, 1953, from information by local resident and State Highway Department.

Water quality: Period of record: Maximum daily specific conductance, 9,270 micromhos July 4, 1960; minimum daily, 121 micromhos Apr. 27, 1957. Maximum water temperatures (1955-74), 33.0°C July 15, 1965; minimum, freezing point Jan. 12, 16, 20, 1963.

REMARKS.--Discharge records good. Flow is regulated by Hubbard Creek Reservoir (station 08086400).

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	.10	.12	.09		0		0
2					0	.08	.07	.05		0		0
3					0	.08	.12	.03		0		0
4					0	.08	.14	.01		0		0
5					0	.07	.06	.10		0		0
6					0	.12	.05	.20		0		0
7					0	.14	.05	.08		44		0
8					0	.15	.06	.05		39		0
9					0	.12	.07	.03		.30		0
10					0	.10	.06	.03		.29		0
11					0	.10	.04	.02		.33		0
12					0	.14	.05	.01		.22		0
13					0	.08	.09	.01		.13		0
14					0	.08	.08	0		.14		0
15					0	.10	.10	0		.12		0
16					16	.10	.38	0		.10		0
17					74	.08	.12	0		.16		0
18					45	.06	.08	0		.18		0
19					.40	.07	.07	0		.13		18
20					.10	.07	.06	0		.08		35
21					.07	.06	.04	0		.04		4.0
22					.08	.06	.04	0		.02		1.3
23					.08	.04	.05	0		.01		.87
24					.07	.05	.07	0		0		.62
25					.05	.06	.06	0		.03		.41
26					.05	.12	.04	0		.08		.28
27					.05	.12	.04	0		.05		.17
28					.07	.06	.06	0		.02		.17
29					.10	.05	.13	0		0		.10
30					---	.06	.11	0		0		.06
31		---			---	.12	---	0	---	0		---
TOTAL	0	0	0	0	136.12	2.72	2.51	.71	0	85.43	0	60.98
MEAN	0	0	0	0	4.69	.088	.084	.023	0	2.76	0	2.03
MAX	0	0	0	0	74	.15	.38	.20	0	44	0	35
MIN	0	0	0	0	0	.04	.04	0	0	0	0	0
AC-FT	0	0	0	0	270	5.4	5.0	1.4	0	169	0	121
CAL YR 1975 TOTAL	20549.70			MEAN 56.3	MAX 3110	MIN 0	AC-FT 40760					
WTR YR 1976 TOTAL	288.47			MEAN .79	MAX 74	MIN 0	AC-FT 572					

08087300 Clear Fork Brazos River at Eliasville, Tex.

LOCATION (revised).--Lat 32°57'36", long 98°45'59", Young County, on right bank 5 ft (2 m) upstream from old mill dam, 180 ft (55 m) upstream from bridge on Farm Road 1974, 400 ft (122 m) northwest of U.S. Post Office at Eliasville, and 13.2 miles (21.2 km) upstream from mouth.

DRAINAGE AREA (revised).--5,697 mi² (14,755 km²).

PERIOD OF RECORD.--Discharge: November 1915 to April 1920, December 1923 to August 1925, July 1928 to September 1951, October 1961 to current year. Monthly discharge only for some periods published in WSP 1312 as "near Crystal Falls".
Water quality: Chemical analyses: October 1961 to current year. Pesticide analyses: January 1968 to current year. Water temperatures: October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,027.77 ft (313.264 m) above mean sea level. See WSP 1922 for history of changes prior to Dec. 18, 1961.

AVERAGE DISCHARGE.--41 years (1916-19, 1928-51, 1961-76), 363 ft³/s (10.28 m³/s), 263,000 acre-ft/yr (324 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 6,850 ft³/s (194 m³/s) Sept. 20 (gage height, 14.93 ft or 4.551 m); minimum, 0.06 ft³/s (0.002 m³/s) Aug. 31.

Period of record: Maximum discharge, 35,800 ft³/s (1,010 m³/s) June 11, 1941 (gage height, 33.45 ft or 10.196 m, site and datum then in use), from rating curve extended above 23,000 ft³/s (651 m³/s); no flow at times.

Historic: Maximum stage since 1877, 35 ft (11 m) May 1, 1957, present site and datum; flood in September 1900 reached about same stage, from information by Texas Highway Department and local residents. Other floods are reported to have occurred in 1876, Apr. 27, 1890, 1932, 1941, and 1955.

Water quality: Current year: Maximum daily specific conductance, 4,860 micromhos Apr. 23; minimum daily, 317 micromhos Sept. 20. Maximum water temperatures, 29.5°C Aug. 1, 2, 7; minimum, 1.5°C Jan. 8.

Period of record: Maximum daily specific conductance, 7,400 micromhos Jan. 9, 1971; minimum daily, 300 micromhos Sept. 10, 1962. Maximum water temperatures, 38.0°C Aug. 6, 1964; minimum, freezing point on several days during January 1963, January 1964, December 1972, and January 1973.

REMARKS.--Discharge records good. Many small diversions above station for municipal supply and oilfield operations.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	24	46	61	42	25	9.5	53	53	2.4	22	6.3
2	27	43	49	58	41	28	9.2	55	38	1.4	15	13
3	24	86	46	55	38	34	9.5	73	32	1.4	11	45
4	24	72	45	53	37	35	8.5	79	24	.87	8.4	11
5	21	171	43	51	37	37	6.8	82	20	49	633	3.7
6	20	416	44	50	36	35	7.2	93	16	23	442	1.6
7	19	242	41	47	34	39	9.5	73	14	9.0	230	.85
8	18	155	41	46	33	45	9.1	61	11	17	135	18
9	17	113	41	44	32	47	25	61	10	18	88	146
10	16	90	40	46	29	45	36	61	10	15	86	79
11	15	73	40	58	28	42	42	55	8.4	33	63	34
12	14	59	39	61	31	51	35	49	6.2	21	44	22
13	17	51	39	61	33	52	34	48	4.3	18	32	37
14	18	44	43	63	32	59	34	44	3.6	6.2	22	34
15	16	41	45	69	33	54	32	41	1.9	57	15	25
16	17	41	42	69	33	45	73	39	2.0	165	10	18
17	19	39	39	69	32	40	86	36	1.7	758	7.2	16
18	19	36	42	66	92	36	101	32	1.5	126	4.7	14
19	15	37	40	65	66	34	129	25	3.1	98	3.3	1200
20	16	38	37	65	35	32	282	20	5.5	89	2.6	4390
21	16	38	37	63	28	29	198	20	3.4	232	2.0	2800
22	16	38	40	62	27	24	148	17	1.8	155	1.4	373
23	20	39	39	60	27	20	106	14	1.1	128	1.1	354
24	21	41	51	57	25	16	98	13	.62	81	.87	229
25	21	38	65	56	27	19	75	53	17	187	.68	119
26	22	38	69	53	22	14	63	53	13	150	.57	73
27	22	37	64	40	20	12	53	27	9.2	51	.36	80
28	23	39	61	38	24	9.9	48	24	18	78	.20	64
29	25	42	68	38	24	9.8	42	24	5.5	51	.11	58
30	25	47	63	38	---	9.8	42	66	3.6	45	.08	55
31	23	---	63	40	---	9.6	---	249	---	31	.10	---
TOTAL	613	2268	1462	1702	998	988.1	1851.3	1640	339.42	2697.27	1881.67	10319.45
MEAN	19.8	75.6	47.2	54.9	34.4	31.9	61.7	52.9	11.3	87.0	60.7	344
MAX	29	416	69	69	92	59	282	249	53	758	633	4390
MIN	14	24	37	38	20	9.6	6.8	13	.62	.87	.08	.85
AC-FT	1220	4500	2900	3380	1980	1960	3670	3250	673	5350	3730	20470

CAL YR 1975 TOTAL 93958.00 MEAN 257 MAX 5460 MIN 11 AC-FT 186400
WTR YR 1976 TOTAL 26760.21 MEAN 73.1 MAX 4390 MIN .08 AC-FT 53040

PEAK DISCHARGE (BASE, 6,000 FT³/S).--Sept. 20 (2030) 6,850 ft³/s (14.93 ft).

08087300 Clear Fork Brazos River at Eliasville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CAP-BONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT. 07...	0940	20	3260	8.3	19.5	980	810	230	99	360
NOV. 18...	0910	36	3330	7.8	15.0	930	740	210	98	370
DEC. 18...	0945	43	3690	8.2	8.0	1000	810	240	100	450
JAN. 19...	0715	66	3520	8.0	8.0	980	810	230	99	450
FEB. 09...	1225	33	3950	8.1	10.5	1200	990	260	130	500
MAR. 22...	1150	26	3930	8.3	17.0	1100	910	220	130	500
APR. 09...	0657	14	4140	8.2	17.0	1100	950	260	120	540
MAY 04...	0805	83	4480	7.5	19.5	1400	1200	280	160	560
JUNE 15...	1100	2.9	2680	7.8	28.0	750	590	160	86	300
JULY 27...	1000	47	909	7.2	25.0	180	120	46	15	100
AUG. 26...	0705	.57	1850	8.1	26.0	510	360	120	51	200
SEP. 20...	1605	6830	317	7.7	21.0	130	34	40	6.2	17

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 07...	5.0	10	214	0	740	560	.5	7.6	2110
NOV. 18...	5.3	11	234	0	780	540	.5	5.2	2130
DEC. 18...	6.2	9.0	242	0	930	640	.6	2.7	2490
JAN. 19...	6.3	12	209	0	870	610	.8	4.4	2380
FEB. 09...	6.3	10	236	0	970	770	.8	5.5	2760
MAR. 22...	6.6	11	216	0	870	780	.8	.6	2620
APR. 09...	7.0	12	236	0	980	860	.7	.5	2890
MAY 04...	6.6	10	173	0	1300	790	.7	1.4	3190
JUNE 15...	4.8	7.5	194	0	550	470	.5	4.0	1670
JULY 27...	3.3	3.6	67	0	95	190	.3	4.6	488
AUG. 26...	3.9	8.5	180	0	390	280	.5	10	1150
SEP. 20...	.7	3.6	111	0	29	29	.2	6.8	187

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)
DEC 18...	0945	43	8.0	.0	0	--	.00	.0	.0	0
FEB 26...	0940	22	12.0	.0	0	.00	.00	.0	.0	0
JUN 09...	1430	9.0	29.0	.0	0	.00	.00	.0	.0	0
AUG 05...	0955	1550	29.0	.0	0	.00	.00	.0	.0	0

08087300 Clear Fork Brazos River at Eliasville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)
DEC 18...	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00
FEB 26...	.00	.0	.00	.0	.00	.0	.01	.00	.0	.00
JUN 09...	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00
AUG 05...	.00	.0	.00	.1	.00	.0	.00	.00	.0	.00

DATE	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)
DEC 18...	.0	.00	.00	.0	.00	.0	.00	.0	.00
FEB 26...	.0	.00	.00	.0	.00	.0	.00	.0	.00
JUN 09...	.0	.00	.00	.0	.00	.0	.00	.0	.00
AUG 05...	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
DEC 18...	.00	.00	.00	0	0	.00	.00	.00	.00
FEB 26...	.02	.00	.00	0	0	.00	.00	.00	.00
JUN 09...	.00	.00	.00	0	0	.00	.02	.01	.00
AUG 05...	.00	.00	.00	0	0	.00	.00	.03	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	613	2710	1660	2750	490	816	600	988	790
NOV. 1975.....	2268	3190	2040	12500	590	3620	740	4500	930
DEC. 1975.....	1462	3260	2100	8280	600	2380	760	2980	950
JAN. 1976.....	1702	3000	1910	8780	550	2530	680	3120	870
FEB. 1976.....	974	3970	2710	7130	740	1960	960	2520	1150
MAR. 1976.....	988.1	3850	2600	6940	720	1920	920	2460	1120
APR. 1976.....	1851.3	4250	2950	14800	800	3990	1040	5190	1230
MAY 1976.....	1640	3920	2670	11800	730	3240	940	4180	1140
JUNE 1976.....	339.42	2690	1630	1490	490	447	590	540	780
JULY 1976.....	2697.27	2640	1620	11800	480	3500	580	4200	770
AUG. 1976.....	1881.67	2910	1820	9270	530	2710	660	3330	850
SEPT 1976.....	10319.45	525	320	8830	69	1910	61	1690	150
TOTAL	26736.19	**	**	104000	**	29000	**	35700	**
WTD.AVG.	73.25	2230	1400	**	400	**	500	**	650

08087300 Clear Fork Brazos River at Elliasville, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2640	2400	3290	2320	3560	3830	4010	4070	2860	2950	3560	1820
2	2750	2220	3320	2280	3620	3650	4050	4050	2430	2950	3500	1780
3	2890	2400	3350	2190	3690	3460	4070	4210	2480	2890	3450	1580
4	3010	2560	3350	2110	3750	3390	4090	4440	2660	2890	3440	1580
5	3140	3110	3340	2070	3790	3420	4070	4580	2740	2890	3000	1610
6	3200	3170	3350	2070	3820	3520	4120	4520	2740	2860	3100	1630
7	3260	3300	3350	2160	3880	3630	4120	4520	2710	2800	2760	1660
8	3240	3680	3390	2270	3910	3780	4120	4510	2670	2790	2730	1630
9	3190	3450	3430	2370	3950	3900	4120	4520	2640	2850	3170	1630
10	3120	3170	3480	2500	3970	4030	4120	4460	2640	2870	2310	1400
11	3030	3100	3510	2740	3980	4080	4150	4310	2640	2840	2040	1340
12	2950	3740	3570	2900	3980	3940	4190	4190	2640	2780	1870	1400
13	2910	3360	3610	3120	4020	4010	4150	4040	2640	2700	1850	1400
14	2840	3450	3610	3340	4050	3960	4170	4020	2640	2650	1820	1410
15	2730	3480	3610	3490	4050	3910	4170	3980	2680	2650	1840	1410
16	2660	3450	3640	3590	4070	3930	4090	3880	2670	2800	1840	1400
17	2570	3390	3660	3560	4070	3860	4070	3860	2670	3030	1820	1430
18	2660	3340	3690	3570	4090	3840	4210	3860	2690	2770	1830	1460
19	2600	3290	3700	3560	4140	3900	4210	3880	2690	2890	1830	900
20	2540	3260	3610	3520	4170	3860	4000	3880	2700	2060	1760	317
21	2510	3210	3480	3490	4130	3910	4400	3910	2700	2620	1780	528
22	2460	3190	3300	3400	4090	3930	4680	3960	2710	2440	1820	540
23	2450	3140	3200	3300	4070	3940	4860	3960	2730	1650	1820	490
24	2430	3080	3090	3210	4090	3950	4460	3960	2730	2130	1850	410
25	2450	3070	2990	3180	4090	3980	4190	3960	2730	3290	1860	462
26	2410	3080	3000	3190	4190	3990	4120	2510	2760	2000	1860	446
27	2350	3120	2990	3210	4090	3990	4120	3270	2780	909	1860	466
28	2380	3140	3000	3260	4050	4010	4090	3520	2800	1210	1850	502
29	2380	3200	2880	3300	3970	4010	4050	3560	2950	2220	1850	489
30	2400	3250	2650	3360	---	4010	4030	3560	2980	3120	1860	466
31	2400	---	2440	3440	---	4000	---	2850	---	3510	1860	---
MONTH	2730	3160	3320	2970	3980	3860	4180	3970	2700	2610	2280	1120

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	18.5	9.0	6.5	7.0	15.5	15.0	18.5	23.5	27.0	29.5	25.0
2	19.0	18.0	9.0	6.5	7.0	18.0	16.5	14.5	23.5	28.0	29.5	25.0
3	18.5	17.0	9.0	5.5	8.0	18.0	18.0	19.0	24.5	28.5	28.5	25.0
4	18.5	17.0	9.5	5.0	9.0	16.5	19.0	19.5	25.0	26.5	28.5	26.0
5	18.5	17.0	11.5	4.5	8.5	14.5	17.0	20.0	25.5	26.5	28.5	26.5
6	18.5	17.0	11.0	5.0	7.0	13.5	17.0	19.5	26.0	27.0	28.5	26.5
7	19.0	18.0	9.5	4.5	6.0	13.5	19.0	19.0	26.0	26.5	29.5	26.0
8	19.0	17.0	9.5	1.5	6.5	13.0	18.0	19.0	26.0	26.5	28.5	26.0
9	20.0	18.0	9.5	3.0	5.5	11.5	17.0	20.0	26.0	27.0	28.5	25.5
10	21.0	16.5	9.5	4.5	8.5	11.5	18.5	19.5	26.0	26.5	29.0	25.5
11	21.5	16.5	10.0	4.5	10.0	13.5	19.5	21.0	26.0	25.5	29.0	26.0
12	23.0	15.5	10.0	4.0	10.0	13.5	20.5	23.0	27.0	25.5	29.0	24.5
13	22.0	14.0	11.0	5.5	12.0	12.0	20.0	21.5	27.0	26.5	29.0	24.0
14	22.0	13.5	12.0	5.5	14.5	11.5	20.5	20.5	27.0	26.0	29.0	25.0
15	22.0	13.5	11.0	6.0	14.0	13.0	21.0	20.0	27.0	26.0	29.0	25.0
16	20.5	14.0	10.0	6.0	14.5	11.5	19.5	21.0	25.0	26.5	28.5	25.0
17	19.5	14.5	10.0	6.0	14.5	12.0	20.0	20.0	26.0	26.0	29.0	25.5
18	18.5	15.0	6.0	7.0	14.0	13.5	19.0	20.0	26.5	25.5	28.5	25.5
19	18.0	16.0	7.0	8.0	13.5	14.5	20.0	21.5	25.0	26.0	28.0	25.0
20	18.0	13.5	6.5	6.0	14.5	16.0	20.5	22.0	24.5	26.5	27.0	22.0
21	19.0	14.0	6.0	6.0	12.0	14.0	19.5	23.0	25.0	27.0	26.5	20.5
22	20.0	11.0	6.5	6.0	11.0	14.5	20.0	24.0	26.0	27.0	27.0	21.0
23	19.0	10.5	7.0	7.0	11.0	14.5	21.0	24.5	26.5	26.5	26.5	21.0
24	20.0	9.5	7.0	8.0	10.5	16.0	21.5	24.5	26.5	28.0	26.5	22.0
25	18.0	9.0	6.5	8.5	11.5	17.0	20.0	25.0	26.0	28.5	25.5	22.0
26	16.5	8.5	6.5	8.0	10.5	19.0	20.0	21.0	26.5	27.0	26.0	24.0
27	17.0	7.0	6.5	6.0	12.0	19.5	20.5	22.0	27.0	27.0	26.5	23.5
28	18.0	8.5	7.0	6.5	14.0	18.0	21.0	21.0	26.0	26.0	28.0	23.0
29	17.0	12.0	6.5	6.5	15.0	18.0	20.0	24.0	28.0	27.0	27.0	22.0
30	17.0	10.0	6.0	7.0	---	16.0	20.0	22.0	28.5	28.0	26.0	21.0
31	18.5	---	6.0	7.0	---	15.0	---	23.0	---	29.0	25.5	---
MONTH	19.5	14.0	8.5	6.0	11.0	15.0	19.5	21.0	26.0	26.5	28.0	24.0

08088000 Brazos River near South Bend, Tex.

LOCATION (revised).--Lat 33°01'27", Long 98°38'37", Young County, on left bank 225 ft (69 m) downstream from bridge on State Highway 67, 1.8 miles (2.9 km) downstream from Clear Fork Brazos River, 2.0 miles (3.2 km) northeast of South Bend, and at mile 758.2 (1,219.9 km).

DRAINAGE AREA (revised).--22,673 mi² (58,723 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

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

Water quality: Chemical analyses: January 1942 to March 1948, October 1968 to September 1969. Pesticide analyses: March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,002.98 ft (305.708 m) above mean sea level. Prior to Feb. 23, 1939, nonrecording gage at site 225 ft (69 m) upstream. Feb. 23, 1939, to Mar. 9, 1961, water-stage recorder at site 225 ft (69 m) upstream.

AVERAGE DISCHARGE.--38 years, 851 ft³/s (24.10 m³/s), 616,500 acre-ft/yr (760 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,280 ft³/s (263 m³/s) Sept. 20 (gage height, 14.96 ft or 4.560 m); minimum, 6.8 ft³/s (0.19 m³/s) June 16.

Period of record: Maximum discharge, 87,400 ft³/s (2,480 m³/s) May 4, 1941 (gage height, 27.35 ft or 8.336 m); maximum gage height, 32.70 ft (9.967 m) Aug. 29, 1957; no flow at times.

Maximum stage, 36.2 ft (11.03 m) in 1876, from information by State Highway Department and Corps of Engineers. Flood of Sept. 24, 1900, reached a stage of 29.5 ft (8.99 m), and flood of June 16, 1930, reached a stage of 35.5 ft (10.82 m), from information by local residents.

REMARKS.--Discharge records good.

REVISIONS (WATER YEARS).--WRD Texas 1974: 1973(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	84	114	160	72	55	49	336	291	29	608	90
2	194	105	110	148	69	55	49	546	131	21	507	183
3	181	132	110	142	70	56	49	776	77	24	561	87
4	170	145	110	136	66	56	48	621	63	20	305	62
5	162	359	108	131	68	57	49	454	53	121	410	107
6	154	839	101	126	66	58	49	443	43	55	669	55
7	146	654	101	113	66	68	49	361	39	52	458	50
8	141	469	100	96	65	79	50	282	40	37	462	45
9	135	366	99	95	66	81	50	225	30	37	348	164
10	130	294	97	101	64	80	70	222	27	47	338	174
11	126	244	97	98	63	83	77	220	25	72	261	219
12	121	202	96	101	63	111	75	205	23	56	193	197
13	113	182	101	104	62	114	76	156	21	51	146	502
14	109	165	97	102	66	107	74	131	20	43	126	393
15	107	152	92	102	68	107	87	120	15	42	108	331
16	107	145	95	99	68	99	131	117	13	247	92	356
17	102	138	92	98	67	93	167	118	11	597	80	511
18	98	132	93	95	63	86	209	118	14	579	67	726
19	115	128	96	91	63	80	287	112	16	335	54	4000
20	174	122	93	91	58	74	707	100	40	226	48	6450
21	151	121	91	87	58	71	960	97	54	438	41	5090
22	132	120	94	86	56	67	962	88	36	511	41	1190
23	117	119	95	86	56	67	690	82	26	378	39	884
24	104	112	115	84	56	68	547	76	20	318	38	642
25	99	115	131	77	57	66	421	288	18	259	37	520
26	98	110	134	77	56	57	360	317	16	356	35	570
27	95	114	142	78	56	54	322	265	18	218	34	462
28	91	114	145	75	55	53	315	158	18	177	32	393
29	90	118	144	75	55	53	283	108	19	167	33	338
30	89	109	148	74	---	50	284	79	21	156	103	305
31	90	---	148	70	---	49	---	293	---	347	66	---
TOTAL	3954	6209	3389	3098	1818	2254	7546	7514	1238	6066	6340	25096
MEAN	128	207	109	99.9	62.7	72.7	252	242	41.3	196	205	837
MAX	213	839	148	160	72	114	962	776	291	597	669	6450
MIN	89	84	91	70	55	49	48	76	11	20	32	45
AC-FT	7640	12320	6720	6140	3610	4470	14970	14900	2460	12030	12580	49780

CAL YR 1975 TOTAL 189870 MEAN 520 MAX 11100 MIN 80 AC-FT 376600
WTR YR 1976 TOTAL 74522 MEAN 204 MAX 6450 MIN 11 AC-FT 147800

PEAK DISCHARGE (BASE, 11,000 FT³/S).--No peak above base.

08088000 Brazos River near South Bend, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)
DEC 18...	0900	92	2.0	.0	0	--	.00	.0	.0	0
FEB 26...	0900	58	10.0	.0	0	.00	.00	.0	.0	27
JUN 09...	1400	30	31.5	.0	0	.00	.00	.0	.0	0
AUG 05...	0915	218	25.5	.0	0	.00	.00	.0	.0	0

DATE	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)
DEC 18...	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00
FEB 26...	.00	6.3	.00	.3	.00	.0	.00	.00	2.9	.00
JUN 09...	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00
AUG 05...	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00

DATE	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)
DEC 18...	.0	.00	.00	.0	.00	.0	.00	.0	.00
FEB 26...	.0	.00	.00	.0	.00	.0	.00	.0	.00
JUN 09...	.0	.00	.00	.0	.00	.0	.00	.0	.00
AUG 05...	.0	.00	.00	.0	.00	.0	.00	.0	.00

DATE	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
DEC 18...	.31	.00	.00	0	0	.00	.00	.00	.00
FEB 26...	.00	.00	.00	0	0	.00	.00	.00	.00
JUN 09...	.00	.00	.00	0	0	.00	.00	.03	.00
AUG 05...	.00	.00	.00	0	0	.00	.00	.00	.00

08088100 Salt Creek at Olney, Tex.

LOCATION.--Lat 33°22'13", Long 98°44'40", Young County, on right bank 21 ft (6 m) downstream from bridge on State Highway 199, 0.5 mile (0.8 km) east of Olney, and 32.8 miles (52.8 km) upstream from mouth.

DRAINAGE AREA (revised).--11.8 mi² (30.6 km²).

PERIOD OF RECORD.--Apr 11 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,164.03 ft (354.796 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 2.96 ft³/s (0.0838 m³/s), 3.41 in/yr (87 mm/yr), 2,140 acre-ft/yr (2.64 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 244 ft³/s (6.91 m³/s) June 27 (gage height, 8.29 ft or 2.527 m); no flow for many days.

Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) May 12, 1972 (gage height, 12.25 ft or 3.734 m), from rating curve extended above 1,020 ft³/s (28.9 m³/s) on basis of indirect measurement of 11,500 ft³/s (326 m³/s); no flow at times each year.

Maximum stage since at least 1908, 16.7 ft (5.09 m) in June 1915; flood in May or June 1941 reached a stage of 16 ft (4.9 m), from information by local residents.

REMARKS.--Records good. No diversion above station. Records furnished by the city of Olney show that during the year 977 acre-ft (1.20 hm³) was diverted from reservoirs in the Red River basin for municipal and industrial uses, of which 491 acre-ft (0.605 hm³) was returned as sewage effluent to Salt Creek downstream from station. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 1922: 1958-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0			0	0	0	.06	0		0
2		1.6	0			0	0	0	0	0		0
3		.07	0			0	0	0	0	26		0
4		0	0			0	0	0	0	2.9		0
5		0	0			0	0	.35	0	.06		0
6		0	0			0	0	.07	7.7	.01		0
7		0	0			.05	0	0	2.8	0		0
8		0	0			.27	0	0	.03	0		.13
9		0	0			.02	0	0	0	.01		62
10		0	0			0	0	0	.01	3.3		1.3
11		0	0			.22	0	0	.01	1.0		.07
12		0	0			.01	.04	.06	0	.14		0
13		0	0			0	.02	0	0	.03		.82
14		0	0			0	0	0	0	.01		.02
15		0	0			0	.87	0	0	0		0
16		0	0			0	3.7	0	0	12		0
17		0	0			0	.03	0	25	3.0		0
18		0	0			0	0	0	25	.27		0
19		0	0			0	.01	0	.07	.03		95
20		0	0			0	0	0	.01	0		24
21		0	0			0	0	0	0	0		.96
22		0	0			0	0	0	0	0		.17
23		0	0			0	0	1.0	0	0		.03
24		0	1.5			0	.05	0	0	0		0
25		0	.71			0	0	.73	0	0		0
26		0	.05			0	0	.62	0	0		0
27		0	0			0	0	.05	48	0		0
28		0	0			0	.09	.01	14	0		.10
29		0	0			0	.41	0	.09	0		0
30		0	0		---	0	.08	.09	.01	0		0
31		---	0		---	0	---	1.9	---	0		---
TOTAL	0	1.67	2.26	0	0	.57	5.30	77.15	122.79	48.76	0	184.60
MEAN	0	.056	.073	0	0	.018	.18	2.49	4.09	1.57	0	6.15
MAX	0	1.6	1.5	0	0	.27	3.7	73	48	26	0	95
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	0	.005	.007	0	0	.001	.02	.26	.43	.16	0	.64
IN.	0	.006	.009	0	0	.002	.02	.30	.48	.19	0	.72
AC-FT	0	3.3	4.5	0	0	1.1	11	153	244	97	0	366

CAL YR 1975 TOTAL 1530.70 MEAN 4.19 MAX 277 MIN 0 CFSM .44 IN 5.93 AC-FT 3040
WTR YR 1976 TOTAL 443.10 MEAN 1.21 MAX 95 MIN 0 CFSM .13 IN 1.72 AC-FT 879

PEAK DISCHARGE (BASE, 200 FT³/S).--May 25 (0930) 236 ft³/s (8.21 ft); June 27 (2045) 244 ft³/s (8.29 ft).

08088300 Briar Creek near Graham, Tex.

LOCATION.--Lat 33°12'43", long 98°37'06", Young County, near right bank on downstream side of bridge on Farm Road 1769, 3.7 miles (6.0 km), revised, upstream from mouth, and 7.0 miles (11.3 km) northwest of Graham.

DRAINAGE AREA (revised).--24.2 mi² (62.7 km²).

PERIOD OF RECORD.--April 1958 to current year. Prior to October 1965, published as Oak Creek near Graham.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (332 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 3.78 ft³/s (0.107 m³/s), 2.12 in/yr (54 mm/yr), 2,740 acre-ft/yr (3.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,730 ft³/s (77.3 m³/s) Sept. 19 (gage height, 12.31 ft or 3.752 m); no flow for many days.
Period of record: Maximum discharge, 2,730 ft³/s (77.3 m³/s) Sept. 19, 1976 (gage height, 12.31 ft or 3.752 m); no flow for many days each year.

Maximum stage since at least 1900, 15.2 ft (4.63 m) in September 1955. Flood in May 1957 reached a stage of 15.0 ft (4.57 m), from information by local resident.

REMARKS.--Records good. No diversion above station.

REVISIONS (WATER YEARS).--WSP 2122: 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1								0	3.9	0		0		
2								0	1.3	0		0		
3								0	.15	0		0		
4								0	.01	0		0		
5								0	0	0		0		
6								0	0	0		0		
7								0	0	0		0		
8								0	0	0		5.9		
9								0	0	0		6.6		
10								0	0	0		1.0		
11								0	0	0		.02		
12								0	0	0		0		
13								0	0	0		0		
14								0	0	0		0		
15								0	0	0		0		
16								0	0	0		0		
17								0	0	0		0		
18								0	0	1.0		0		
19								0	0	.67		777		
20								0	0	.01		135		
21								0	0	0		7.2		
22								0	0	0		1.8		
23								0	0	0		.53		
24								0	0	0		.17		
25								2.8	0	0		.07		
26								3.0	0	0		.03		
27								.36	0	0		.02		
28								.01	0	0		.02		
29								0	0	0		.01		
30								0	0	0		.01		
31		---			---		---	6.6	---	0		---		
TOTAL	0	0	0	0	0	0	0	37.97	5.36	1.68	0	935.38		
MEAN	0	0	0	0	0	0	0	1.22	.19	.054	0	31.2		
MAX	0	0	0	0	0	0	0	.28	3.9	1.0	0	777		
MIN	0	0	0	0	0	0	0	0	0	0	0	0		
CFSM	0	0	0	0	0	0	0	.05	.007	.002	0	1.29		
IN.	0	0	0	0	0	0	0	.06	.008	.003	0	1.44		
AC-FT	0	0	0	0	0	0	0	75	11	3.3	0	1860		
CAL YR 1975	TOTAL	1667.89	MEAN	4.57	MAX	245	MIN	0	CFSM	.19	IN	2.56	AC-FT	3310
WTR YR 1976	TOTAL	980.39	MEAN	2.68	MAX	777	MIN	0	CFSM	.11	IN	1.51	AC-FT	1940

PEAK DISCHARGE (BASE, 200 FT³/S).--Sept. 19 (1400) 2,730 ft³/s (12.31 ft).

08088400 Lake Graham near Graham, Tex.

LOCATION.--Lat 33°08'04", long 98°36'48". Young County, near left end of earthen dam on Salt Creek, 2.2 miles (3.5 km) northwest of Graham, 5 miles (8 km) downstream from Briar Creek, and 9.5 miles (15.3 km) above mouth.

DRAINAGE AREA (revised).--221 mi² (572 km²).

PERIOD OF RECORD.--Contents: March 1958 to September 1963 (unpublished record), October 1963 to current year. Prior to October 1965, monthend contents only.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage (Salt Creek datum) is 1.30 ft (0.396 m) above mean sea level. Prior to October 1963, non-recording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 49,270 acre-ft (60.7 hm³) Sept. 21 (gage height, 1,073.25 ft or 327.127 m); minimum, 38,680 acre-ft (47.7 hm³) Aug. 28 (gage height, 1,068.78 ft or 325.764 m).

Period of record: Maximum contents, 61,120 acre-ft (75.4 hm³) Apr. 30, 1970 (gage height, 1,077.77 ft or 328.504 m); minimum, 30,780 acre-ft (38.0 hm³) Aug. 12, 1971 (gage height, 1,065.10 ft or 324.642 m).

REMARKS.--The lake is formed by a rolled earthfill dam 5,000 ft (1,500 m) long. Lake Graham was connected with Lake Eddleman in 1959 by a cut channel at a 1,050.0 ft (320.04 m) gage height. Deliberate impoundment began Apr. 28, 1958, and the dam was completed in July 1958. The uncontrolled emergency spillway is a 1,050-foot-wide (320-meter) cut at the right end of dam. The spillway is designed to discharge 136,500 ft³/s (3,870 m³/s) at a gage height of 1,087.5 ft (331.47 m). The dam is the property of the city of Graham and was built to impound water for municipal and industrial uses. In addition, water is used by Texas Electric Service Co. for operation of their steam generating powerplant. The capacity table is based on an original survey of Lake Eddleman in 1928 and a Salt Creek survey of 1953. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	1,092.0	-
Crest of spillway.....	1,075.0	53,680
Bottom of interconnecting channel.....	1,050.0	8,670
Lowest gated outlet (invert).....	1,050.0	8,670

COOPERATION.--Capacity table was furnished by Freese, Nichols, and Endress, Consulting Engineers. Record of diversions furnished by the city of Graham and Texas Electric Service Co.

Capacity table (gage height, in feet, and contents, in acre-feet)

1,068.0	36,940	1,073.0	48,660
1,069.0	39,180	1,075.0	53,680
1,071.0	43,820		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48340	46630	45590	44940	44090	43210	42150	41420	43610	42290	40990	39230
2	48260	46900	45590	44870	44060	43210	42100	41780	43610	42200	40870	39270
3	48210	46870	45540	44870	44010	43190	42100	41710	43540	42360	40750	39250
4	48140	46820	45590	44800	43990	43140	42060	41640	43490	42380	40660	39200
5	48120	46780	45490	44770	43990	43020	42010	41750	43450	42360	40540	39130
6	48040	46720	45420	44730	43970	43000	41990	41750	43420	42290	40510	39060
7	47970	46720	45450	44650	43940	43020	42010	41680	43400	42220	40420	38970
8	47900	46660	45420	44650	43940	43070	41990	41640	43350	42170	40380	39020
9	47870	46680	45420	44630	43920	43020	41940	41590	43280	42060	40290	39520
10	47850	46610	45370	44630	43900	43020	41820	41570	43210	42100	40200	39740
11	47820	46560	45350	44630	43870	43110	41870	41500	43160	42130	40080	39700
12	47750	46460	45320	44610	43850	43020	41890	41520	43110	42030	39970	39630
13	47680	46410	45300	44610	43820	43020	41870	41450	43000	42030	39880	39590
14	47630	46390	45230	44560	43800	42970	41820	41400	42900	41960	39810	39550
15	47580	46340	45200	44540	43800	42900	41990	41360	42880	41920	39700	39480
16	47500	46340	45180	44510	43780	42900	41920	41290	42780	41990	39590	39450
17	47410	46290	45060	44510	43680	42850	42060	41260	42690	41940	39500	39430
18	47360	46240	45030	44440	43680	42830	42010	41200	42690	41920	39430	39410
19	47330	46170	45010	44420	43660	42780	42150	41130	42690	41870	39360	47380
20	47310	46100	44990	44390	43590	42760	42060	41100	42660	41780	39230	49190
21	47240	46030	44960	44370	43470	42690	41990	41060	42520	41710	39150	49240
22	47160	46000	44940	44350	43470	42690	41990	41030	42450	41640	39090	49170
23	47160	45930	44940	44320	43420	42590	41990	40990	42340	41570	39020	49140
24	47070	45910	45030	44320	43370	42590	42010	40970	42340	41500	38930	49100
25	46990	45780	45110	44180	43330	42550	41940	40940	42240	41480	38870	49050
26	46950	45740	45060	44180	43300	42500	41870	40940	42170	41430	38800	49020
27	46920	45710	45040	44160	43300	42430	41820	40940	42150	41380	38700	48970
28	46850	45710	45030	44160	43260	42410	41870	40940	42130	41330	38730	48900
29	46800	45710	45010	44160	43260	42270	41850	40940	42130	41260	38800	48830
30	46750	45620	44990	44130	43270	42270	41850	40940	42340	41200	39200	48800
31	46700	---	44960	44090	---	42200	---	43610	---	41030	39200	---
(+)	1072.20	1071.75	1071.48	1071.11	1070.76	1070.31	1070.16	1070.91	1070.37	1069.81	1069.01	1073.06
(*)	-1760	-1080	-660	-870	-830	-1060	-350	-1760	-1270	-1310	-1830	+9600
(††)	335	436	443	424	339	343	385	355	519	490	662	382
MAX	48340	46900	45590	44940	44090	43210	42150	43610	43610	42380	40990	49240
MIN	46700	45620	44960	44090	43260	42200	41820	40970	42130	41030	38700	38970

CAL YR 1975..... * +710

WTR YR 1976..... * +340

†† 4458

†† 5113

MAX 57060

MAX 49240

MIN 43820

MIN 38700

+ Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Graham and for use by Texas Electric Service Company powerplant.

08088400 Lake Graham near Graham, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
MAY 04...	1155	663	8.1	20.0	170	62	54	9.6	55
DATE	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAY 04...	1.8	8.5	137	0	19	130	.5	5.9	350

08088420 Brazos River at Farm Road 1287 near Graham, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 33°03'20", long 98°34'54", Young County, at Gooseneck Bridge on Farm Road 1287 and about 3.5 miles (5.6 km) south of Graham.

DRAINAGE AREA.--21,955 mi² (56,863 km²), of which 9,240 mi² (23,930 km²) is noncontributing.

PERIOD OF RECORD.--Occasional discharge measurements: December 1969 to September 1972, May 1974 to current year. Occasional water-quality data: October 1969 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPF-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 06...	1830	147	7920	8.2	21.5	1100	1000	320	76	1300
NOV 17...	1725	157	7150	7.9	17.0	1200	1000	340	82	1100
DEC 29...	1650	120	--	--	5.0	--	--	--	--	--
FEB 09...	1600	50	10300	7.9	11.0	1600	1400	410	130	1800
MAR 22...	1615	28	10100	7.6	18.0	1700	1600	440	150	1800
MAY 03...	1525	792	7860	7.4	20.0	900	780	250	66	1400
JUN 14...	1650	--	10200	7.4	29.5	1600	1500	440	130	1800
JUL 16...	1610	381	3680	7.6	29.0	730	610	220	45	530
SEP 07...	1710	--	10500	7.2	30.0	1500	1400	430	100	2000

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 06...	17	20	140	0	900	2000	--	10	4700
NOV 17...	14	9.5	169	0	950	1700	--	7.1	4270
DEC 29...	--	--	--	--	--	--	--	--	--
FEB 09...	20	13	223	0	1200	2800	--	4.6	6470
MAR 22...	19	12	176	0	1300	2900	--	.3	6690
MAY 03...	20	13	138	0	750	2200	--	9.5	4760
JUN 14...	19	17	132	0	1300	2800	--	4.6	6560
JUL 16...	8.5	9.0	148	0	590	770	.5	12	2250
SEP 07...	23	15	96	0	1200	3000	--	4.6	6800

08088450 Big Cedar Creek near Ivan, Tex.

LOCATION.--Lat 32°49'39", long 98°43'25", Stephens County, on left bank at downstream side of bridge on Farm Road 717, 3.2 miles (5.1 km) south of Ivan, 8.2 miles (13.2 km) northwest of Caddo, and 11.6 miles (18.7 km) northeast of Breckenridge.

DRAINAGE AREA (revised).--97.0 mi² (251.2 km²).

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (332 m), from topographic map.

AVERAGE DISCHARGE.--11 years (1965-76), 12.7 ft³/s (0.360 m³/s), 1.78 in/yr (45 mm/yr), 9,200 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 387 ft³/s (11.0 m³/s) July 17 (gage height, 6.88 ft or 2.097 m); no flow for many days. Period of record: Maximum discharge, 9,590 ft³/s (272 m³/s) July 8, 1968 (gage height, 22.39 ft or 6.824 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of 7,980 ft³/s (226 m³/s); no flow at times each year.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	.01	.16	.26	.02	.25
2							0	0	.04	.01	.02	.37
3							0	0	.01	0	.01	.04
4							0	0	0	.01	.01	.01
5							0	.01	0	0	0	0
6							0	.01	0	0	0	0
7							0	.01	0	0	0	0
8							0	0	0	0	0	0
9							0	0	0	0	0	13
10							0	0	0	0	0	3.1
11							0	0	0	.27	0	.27
12							0	0	0	.08	0	.06
13							0	0	0	.01	0	.02
14							0	0	0	0	0	.01
15							0	0	0	.12	0	0
16							15	0	0	.03	0	0
17							1.2	0	0	86	0	0
18							.16	0	0	13	0	0
19							.09	0	0	1.5	0	10
20							1.6	0	0	.29	0	65
21							1.2	0	0	.08	0	4.4
22							.10	0	0	.03	0	.44
23							.04	0	0	.01	0	.11
24							.02	0	0	0	0	.04
25							.01	.03	0	28	0	.01
26							0	.01	0	7.7	0	.01
27							0	0	0	.56	0	0
28							0	0	0	.17	0	0
29							.01	0	0	.07	4.4	0
30							.01	3.4	.61	.06	21	0
31		---			---	---	---	7.3	---	.04	5.1	---
TOTAL	0	0	0	0	0	0	19.44	10.78	.82	138.30	30.56	97.14
MEAN	0	0	0	0	0	0	.65	.35	.027	4.46	.99	3.24
MAX	0	0	0	0	0	0	15	7.3	.61	86	21	65
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	0	0	0	0	0	0	.006	.003	0	.05	.01	.03
IN.	0	0	0	0	0	0	.007	.004	.0003	.05	.01	.04
AC-FT	0	0	0	0	0	0	39	21	1.6	274	61	193

CAL YR 1975 TOTAL 3700.66 MEAN 10.1 MAX 1620 MIN 0 CFSM .10 IN 1.42 AC-FT 7340
WTR YR 1976 TOTAL 297.04 MEAN .81 MAX 86 MIN 0 CFSM .008 IN .11 AC-FT 589

PEAK DISCHARGE (BASE, 1,000 FT³/S).--No peak above base.

08088500 Possum Kingdom Reservoir near Graford, Tex.

LOCATION.--Lat 32°52'20", long 98°25'32", Palo Pinto County, at dam on Brazos River, 2.6 miles (4.2 km) upstream from Loving Creek, 11.3 miles (18.2 km) southwest of Graford, and at mile 687.5 (1,106.2 km).

DRAINAGE AREA (revised).--23,596 mi² (61,114 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: March 1941 to current year.

Water quality: Chemical analyses: March 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.10 ft (0.030 m) above mean sea level (levels by Brazos River Authority). Prior to Mar. 19, 1968, mercury U-tube in powerhouse at present site and datum.

EXTREMES.--Current year: Maximum contents, 548,100 acre-ft (676 hm³) Sept. 23 (gage height, 998.72 ft or 304.410 m); minimum, 505,400 acre-ft (623 hm³) Apr. 6 (gage height, 996.09 ft or 303.608 m).

Period of record: Maximum contents observed, 743,700 acre-ft (917 hm³) Oct. 5, 1941 (gage height, 1,001.0 ft or 305.10 m); minimum observed, 273,300 acre-ft (337 hm³) Feb. 19 to Mar. 17, 1953 (gage height, 967.0 ft or 294.74 m).

REMARKS.--The reservoir is formed by reinforced concrete dam, Ambursen-type, massive buttress with flat-slab deck, a controlled spillway, two bulkhead sections, and an earthen-dike section. Total length of dam is 2,740 ft (835 m) long. The dam was completed and storage began Mar. 21, 1941. The spillway has nine roof-weir gates (modified bear-trap type) that are 73.66- by 13-foot (22.45- by 4-meter) each and are designed to discharge about 100,000 ft³/s (2,830 m³/s) at a gage height of 1,000.0 ft (304.80 m). The outlet works consist of one controlled 54-inch-diameter (1,372-millimeter) conduit. Water is used for power development, municipal, industrial, irrigation, and recreational purposes. Two generators located in the powerhouse at dam can produce 22,500 kilowatts at a 1,000 ft (305 m) gage height. Eleven major reservoirs, with a combined capacity of 607,800 acre-ft (749 hm³), largely regulate the inflow. The capacity curve is based on recomputation of survey made in 1974. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	1,024.0	-
Design flood (top of gates).....	1,000.0	570,200
Crest of spillway.....	987.0	383,300
Invert of penstock.....	911.5	4,560
Lowest gated outlet (invert of 54-inch conduit).....	874.8	0

COOPERATION.--Capacity table 3-C furnished by Brazos River Authority.

Capacity table (gage height, in feet, and contents, in acre-feet)

996.0	504,000	998.0	536,000
997.0	519,800	999.0	552,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	532400	525900	527000	528500	515800	510100	506500	519800	536700	517800	521400	509300
2	532700	527000	527600	527500	516100	510200	506200	520600	536000	517700	521500	510200
3	532900	527200	527800	527000	515800	509800	506400	521200	535500	519100	520100	510600
4	533000	527500	528000	526400	515800	509800	506000	521800	534900	519600	519100	509600
5	533200	527300	528000	525400	514800	509000	505900	523000	533900	519100	518000	509600
6	533000	529000	527200	524400	512300	509000	505700	524100	534000	519400	517500	509500
7	532700	530400	527000	521700	510900	509000	505600	524100	534000	519400	517000	509000
8	532400	531600	527300	520200	510400	509200	506000	524700	532200	519000	515600	509000
9	531700	532200	527600	519900	511200	509300	506000	524900	530800	519100	514700	509500
10	530800	532200	527500	519800	511000	509500	505700	525600	529900	519400	513600	509500
11	529400	532700	528000	519800	510700	509800	506000	525900	529300	519800	513400	509300
12	529000	531900	527500	519800	511200	509600	505900	526200	528000	520100	512800	509500
13	528800	532100	527800	519800	511200	509000	506200	526200	527300	519100	512400	509900
14	528800	532400	528300	519800	511000	509500	505900	525600	526800	519000	510900	510700
15	528300	532700	527000	520200	511000	509900	506500	525600	526400	518800	510700	511200
16	528100	533000	526700	519900	511000	509000	506800	525400	526200	518800	509600	511500
17	527500	533000	525900	519900	511200	509600	507800	525100	525200	522500	509500	511800
18	527300	532900	525200	519900	510700	510200	508500	524900	525100	524400	509600	512800
19	527800	533000	525100	519800	510700	510100	509800	524600	524700	525400	508800	519910
20	528100	532400	525400	518800	511400	509500	510200	524200	524600	525400	508800	529800
21	528100	532100	525400	517400	510200	509500	512000	524100	523600	525600	508400	539500
22	527500	531700	525400	517400	509900	509500	514500	523900	523800	526400	507300	545200
23	528100	532100	524900	517400	510200	508800	515900	523300	521500	526700	507300	546200
24	526700	529900	525900	517400	509900	509200	517000	522000	520700	525700	508100	544500
25	525900	531900	526700	516700	510100	507800	517500	528300	519900	525600	507000	542400
26	525900	528600	526500	515400	510100	507600	517700	530600	518500	525700	506500	540200
27	525900	528100	527600	515800	510200	507100	518000	529800	518200	524600	506400	537500
28	526000	528300	527500	515800	510100	507600	518800	530400	518000	525100	506200	534400
29	525900	529600	527300	516200	510400	507300	519300	530400	517400	523100	506000	531200
30	525700	527500	527500	516600	---	506500	519400	531600	517500	522800	507400	528800
31	525700	---	528100	515800	---	506400	---	535700	---	521800	508500	---
(†)	997.37	997.48	997.52	996.75	996.41	996.15	996.98	997.98	996.86	997.13	996.29	997.56
(*)	-8400	+1800	+600	-12300	-5400	-4000	+13000	+16300	-18200	+4300	-13300	+20300
MAX	533200	533000	528300	528500	516100	510200	519400	535700	536700	526700	521500	546200
MIN	525700	525900	524900	515400	509900	506400	505600	519800	517400	517700	506000	509000

CAL YR 1975..... * -16500 MAX 563600 MIN 499800
WTR YR 1976..... * -5300 MAX 546200 MIN 505600

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

08088500 Possum Kingdom Reservoir near Graford, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
JAN 24...	1145	3070	8.2	10.5	11.1	100	530	420
MAY 07...	1430	3190	8.1	17.5	8.4	88	540	430
AUG 26...	1325	3460	8.0	28.5	6.1	91	570	510

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
JAN 24...	150	37	440	8.3	7.1	127	0	360	720
MAY 07...	150	40	470	8.8	7.5	128	0	410	770
AUG 26...	160	41	520	9.5	7.8	72	0	420	810

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
JAN 24...	1.0	4.4	1780	.02	.02	.02	10	0
MAY 07...	.5	4.5	1920	.00	.01	.00	20	0
AUG 26...	.6	4.2	2000	.00	.01	.01	10	20

08088600 Brazos River at Possum Kingdom Dam near Graford, Tex.

LOCATION.--Lat 32°52'00", long 98°26'00", Palo Pinto County, immediately below Possum Kingdom Dam, 2.6 miles (4.2 km) upstream from Loving Creek, 11.3 miles (18.2 km) southwest of Graford, and 20 miles (32 km) upstream from gaging station near Palo Pinto.

DRAINAGE AREA.--22,550 mi² (58,400 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1942 to current year. Water temperatures: October 1949 to September 1955, October 1965 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 3,790 micromhos June 1; minimum daily, 2,990 micromhos Dec. 8-12.

Period of record: Maximum daily specific conductance, 6,110 micromhos Feb. 20, 1961; minimum daily, 494 micromhos May 4, 1957.

Maximum water temperatures, 26.5°C on several days during September 1971; minimum, 7.0°C on several days in February 1951.

REMARKS.--Discharges are computed on the basis of records for the gaging station near Palo Pinto and releases from Possum Kingdom Reservoir.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 20...	1615	20	3270	8.0	21.5	550	430	150	42	480
NOV 18...	1545	20	3040	7.9	22.0	510	400	140	39	440
DEC 11...	1615	20	2970	7.9	18.0	500	370	140	36	440
JAN 14...	0920	500	3030	8.1	14.5	530	430	150	38	440
FEB 25...	1035	20	3500	8.0	14.0	580	480	160	45	530
MAR 31...	1350	20	3470	7.9	16.0	570	460	160	41	520
APR 13...	1455	20	3390	8.1	19.0	600	490	170	42	520
MAY 19...	1120	77	3620	8.0	20.5	580	480	160	45	560
JUN 17...	1600	350	3600	7.8	22.0	610	500	170	45	540
JUL 29...	1340	600	3520	7.9	16.5	570	460	160	41	540
AUG 19...	1515	20	3510	8.1	25.0	580	470	160	43	530
SEP 29...	0900	20	3630	8.0	19.0	610	500	170	46	490

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED PULVERIZED SILICUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 20...	8.9	12	146	0	350	770	.4	6.6	1880
NOV 18...	8.5	7.6	132	0	350	710	.4	6.2	1760
DEC 11...	8.6	8.0	154	0	380	710	.5	5.5	1800
JAN 14...	8.3	7.5	127	0	380	720	.5	4.9	1800
FEB 25...	9.5	8.0	130	0	430	900	.5	5.6	2140
MAR 31...	9.5	8.3	132	0	410	880	.4	6.2	2090
APR 13...	9.3	7.5	130	0	420	840	.4	5.6	2070
MAY 19...	10	8.0	134	0	460	880	.6	5.3	2190
JUN 17...	9.5	8.0	134	0	420	860	.4	6.2	2120
JUL 29...	9.9	8.0	135	0	440	840	.5	6.1	2100
AUG 19...	9.6	8.0	130	0	430	840	.5	5.7	2080
SEP 29...	8.6	10	136	0	460	820	.3	5.9	2070

08088600 Brazos River at Possum Kingdom Dam near Grafard, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	4304	3160	1860	21600	730	8530	380	4380	540
NOV. 1975.....	2677	3040	1790	13000	700	5050	360	2620	520
DEC. 1975.....	2257	3050	1800	11000	700	4280	360	2220	520
JAN. 1976.....	8282	3080	1810	40600	710	15900	360	8120	530
FEB. 1976.....	3460	3380	1990	18600	790	7420	410	3820	580
MAR. 1976.....	620	3410	2010	3360	800	1350	410	691	580
APR. 1976.....	600	3400	2000	3240	800	1300	410	667	580
MAY 1976.....	3242	3560	2100	18400	850	7430	440	3810	610
JUNE 1976.....	8417	3580	2110	48000	860	19400	440	9960	610
JULY 1976.....	5134	3540	2090	28900	840	11700	430	5980	610
AUG. 1976.....	10885	3550	2090	61500	850	24900	440	12800	610
SEPT 1976.....	18997	3550	2090	107000	840	43300	430	22200	610
TOTAL	68875	**	**	375000	**	151000	**	77300	**
WTD.AVG.	188.7	3430	2000	*	810	**	420	**	590

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.) * WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3240	3140	3010	3120	3300	3410	3380	3390	3790	3520	3500	3340
2	3130	3160	3010	3100	3300	3410	3450	3380	3720	3570	3510	3510
3	3170	3170	3010	3090	3300	3400	3430	3370	3660	3600	3560	3500
4	3190	3060	3010	3080	3330	3410	3410	3360	3590	3630	3520	3490
5	3200	3060	3010	3060	3440	3430	3390	3220	3520	3660	3560	3480
6	3220	3100	3000	3060	3400	3430	3400	3350	3500	3570	3560	3470
7	3220	3130	3000	3060	3360	3440	3360	3470	3470	3620	3560	3520
8	3220	3100	2990	3070	3320	3440	3380	3500	3620	3550	3560	3570
9	3100	3080	2990	3070	3280	3400	3400	3550	3480	3480	3560	3490
10	3140	3070	2990	3070	3440	3410	3410	3600	3540	3500	3520	3500
11	3120	3100	2990	3070	3420	3380	3410	3590	3480	3530	3500	3520
12	3110	3180	2990	3070	3400	3380	3420	3580	3500	3560	3520	3530
13	3100	3080	3000	3070	3450	3370	3420	3580	3530	3600	3540	3540
14	3110	3060	3000	3070	3470	3360	3420	3550	3560	3540	3520	3490
15	3200	3060	3010	3070	3490	3360	3410	3580	3600	3550	3510	3510
16	3260	3050	3020	3070	3500	3410	3410	3600	3610	3570	3500	3520
17	3260	3050	3060	3070	3520	3390	3400	3650	3610	3570	3510	3550
18	3260	3050	3060	3070	3440	3360	3390	3600	3450	3570	3520	3550
19	3260	3110	3080	3070	3450	3390	3380	3620	3500	3570	3540	3540
20	3260	3130	3100	3070	3400	3390	3450	3540	3550	3660	3580	3540
21	3220	3120	3130	3070	3480	3380	3400	3620	3610	3520	3570	3490
22	3290	3100	3170	3090	3460	3380	3370	3630	3460	3520	3560	3500
23	3280	3080	3120	3090	3350	3390	3390	3650	3540	3540	3550	3510
24	3100	3050	3170	3100	3440	3360	3390	3660	3570	3540	3550	3540
25	3080	3030	3140	3120	3450	3380	3380	3400	3570	3540	3540	3540
26	3070	3020	3120	3140	3450	3450	3380	3390	3600	3540	3630	3550
27	3060	3020	3160	3190	3420	3450	3360	3550	3630	3520	3620	3550
28	3140	3020	3180	3240	3420	3460	3400	3560	3660	3540	3600	3580
29	3170	3020	3210	3250	3420	3460	3380	3580	3700	3520	3570	3580
30	3130	3010	3170	3250	---	3440	3390	3600	3480	3500	3550	3620
31	3120	---	3150	3280	---	3450	---	3680	---	3500	3540	---
MONTH	3180	3080	3070	3110	3410	3410	3400	3530	3570	3550	3550	3520

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

08089000 Brazos River near Palo Pinto, Tex.

LOCATION.--Lat 32°51'45", long 98°18'08", Palo Pinto County, on right bank 100 ft (30 m) upstream from bridge on Farm Road 4, 300 ft (91 m) downstream from Dark Valley Creek, 6.5 miles (10.5 km) north of Palo Pinto, and at mile 667.3 (1,073.7 km).

DRAINAGE AREA (revised).--23,811 mi² (61,670 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--January 1924 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "near Mineral Wells" 1924-33.

GAGE.--Water-stage recorder. Datum of gage is 831.23 ft (253.359 m) above mean sea level. Prior to Nov. 15, 1933, nonrecording gage at site 19 miles (31 km) downstream at datum 38.19 ft (11.640 m) lower.

AVERAGE DISCHARGE.--16 years (1924-40) prior to completion of Possum Kingdom Reservoir, 1,262 ft³/s (35.74 m³/s), 914,300 acre-ft/yr (1,130 hm³/yr); 36 years (1940-76) regulated, 950 ft³/s (26.90 m³/s), 688,300 acre-ft/yr (849 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,770 ft³/s (248 m³/s) May 25 (gage height, 7.33 ft or 2.234 m); minimum, 7.6 ft³/s (0.22 m³/s) Mar. 26.

Period of record: Maximum discharge, 95,600 ft³/s (2,710 m³/s) June 16, 1930, at site 19 miles (31 km) downstream near Mineral Wells (gage height, 30 ft or 9.1 m, present site and datum); no flow at times.

Maximum stage occurred in 1876, from data by Corps of Engineers, and was several feet higher than flood of June 16, 1930, (about 30 ft or 9.1 m), which was the highest since at least 1876.

REMARKS.--Records good. Since 1941 flow largely regulated by Possum Kingdom Reservoir 20 miles (32 km) upstream (see preceding page).

REVISIONS (WATER YEARS).--WSP 1512: 1924-25, 1929, 1932-34. WSP 1712: 1935-36, 1937-38(M), 1939, 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	26	179	29	30	38	18	30	153	132	534	94
2	251	34	234	28	26	38	19	28	75	48	670	113
3	99	43	71	27	25	37	18	25	416	250	365	87
4	47	106	96	256	125	33	19	27	325	239	1010	58
5	31	90	49	535	61	26	20	83	289	101	781	529
6	27	44	31	266	450	26	21	272	288	56	799	121
7	25	32	28	970	1370	26	21	123	340	39	790	53
8	25	28	26	1230	567	33	22	93	269	35	1060	39
9	277	25	27	311	300	35	25	87	768	31	861	150
10	425	24	27	154	73	33	23	77	504	33	936	78
11	551	53	27	62	45	30	21	74	368	43	598	44
12	591	48	25	42	37	29	21	220	311	43	164	34
13	191	30	27	60	35	29	25	238	544	35	292	29
14	83	25	25	221	34	27	25	98	103	282	379	29
15	42	24	23	488	33	22	25	77	51	83	657	139
16	31	24	52	265	32	19	49	76	37	49	225	91
17	25	24	294	71	32	18	50	131	112	633	106	239
18	23	24	79	120	32	17	38	95	344	444	190	101
19	22	25	262	58	31	16	63	86	97	138	109	612
20	20	27	252	38	35	14	226	83	45	83	53	269
21	20	26	72	661	35	15	72	84	28	121	36	1780
22	21	25	44	572	38	15	41	79	285	111	29	1210
23	22	24	72	435	35	14	30	254	95	57	272	1250
24	157	24	204	197	35	13	25	102	814	190	107	1570
25	207	25	80	84	34	13	25	3120	423	585	54	1940
26	68	310	50	72	34	11	24	516	411	442	35	1800
27	39	987	37	221	37	14	21	323	594	435	218	2050
28	116	376	32	137	38	17	23	225	104	335	546	2200
29	72	94	30	144	38	20	28	109	47	686	178	2070
30	40	46	31	59	---	17	33	64	331	719	294	2040
31	30	---	30	35	---	18	---	363	---	110	319	---
TOTAL	3602	2693	2516	7848	3697	713	1071	7262	8561	6588	12667	20819
MEAN	116	89.8	81.2	253	127	23.0	35.7	234	285	213	409	694
MAX	591	987	294	1230	1370	38	226	3120	814	719	1060	2200
MIN	20	24	23	27	25	11	18	25	28	31	29	29
AC-FT	7140	5340	4990	15570	7330	1410	2120	14400	16980	13070	25120	41290
CAL YR 1975	TOTAL	257427	MEAN 705	MAX 15400	MIN 18	AC-FT 510600						
WTR YR 1976	TOTAL	78037	MEAN 213	MAX 3120	MIN 11	AC-FT 154800						

08090300 Lake Palo Pinto near Santo, Tex.

LOCATION.--Lat 32°38'53", long 98°15'56", Palo Pinto County, on left bank near left end of dam on Palo Pinto Creek, 4.0 miles (6.4 km) upstream from bridge on Farm Road 4, 4.4 miles (7.1 km) northwest of Santo, 7.5 miles (12.1 km) upstream from Big Sunday Creek, and 18.7 miles (30.1 km) above mouth.

DRAINAGE AREA.--461 mi² (1,194 km²), revised.

PERIOD OF RECORD.--Contents: April 1964 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Freese, Nichols, and Endress, Consulting Engineers, bench mark).

EXTREMES.--Current year: Maximum contents, 46,010 acre-ft (56.7 hm³) June 1 (elevation, 867.71 ft or 264.478 m); minimum, 30,980 acre-ft (38.2 hm³) Apr. 12 (elevation, 861.52 ft or 262.591 m).

Period of record: Maximum contents, 56,060 acre-ft (69.1 hm³) Oct. 31, 1974 (elevation, 871.15 ft or 265.527 m); minimum since first initial filling to present spillway elevation, 22,150 acre-ft (27.3 hm³) May 27, 1971 (elevation, 857.00 ft or 261.214 m).

REMARKS.--The lake is formed by a rock-faced earthfill dam 1,300 ft (396 m) long with a 550-foot (168-meter) uncontrolled ogee-crested emergency spillway at right end of dam. The dam was completed and storage began in April 1964. During the summer of 1965, the dam was raised 2 ft (0.6 m) and the spillway crest was raised 4 ft (1.2 m) and lengthened from 500 to 550 ft (150 to 168 m). The lake is the property of Palo Pinto County Municipal Water District No. 1 and was built to impound water for municipal use, principally for the city of Mineral Wells. Water is released to the downstream channel through a 30-inch (762-millimeter) gated concrete pipe. It then flows 15 miles (24 km) downstream to a diversion lake where it is then pumped to the city of Mineral Wells. In addition, water is circulated through a steam generating powerplant owned by the Brazos Electric Power Co-Operative, Inc. The capacity table is based on a survey completed in 1959. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	898.0	-
Design flood.....	893.0	163,200
Crest of spillway.....	867.0	44,090
Lowest gated outlet (invert).....	835.0	1,900

COOPERATION.--Capacity table furnished by Freese, Nichols, and Endress, Consulting Engineers for Palo Pinto Municipal Water District No.

1. Records of diversions furnished by city of Mineral Wells.

Capacity table (elevation, in feet, and contents, in acre-feet)

861.0	29,870	866.0	41,480
862.0	32,020	868.0	46,810
864.0	36,570		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37110	35400	34210	33460	32970	32260	31220	35130	45880	41280	42970	40400
2	37060	35570	34180	33440	32940	32260	31150	35080	45340	41180	42760	40700
3	36990	35540	34180	33410	32940	32220	31130	35010	44960	41280	42650	40800
4	36970	35500	34180	33370	32940	32150	31090	35010	44660	41230	42550	40720
5	36900	35450	34140	33370	32830	32060	31090	35570	44470	41150	42470	40600
6	36900	35430	34050	33390	32790	32020	31090	35980	44500	41080	42340	40520
7	36830	35360	34020	33280	32810	32020	31130	36010	44470	41000	42260	40400
8	36730	35330	34000	33300	32830	32150	31090	36030	44360	40920	42130	40440
9	36690	35240	33980	33280	32860	32080	31090	36030	44340	41200	42000	40320
10	36660	35220	33960	33350	32880	32060	31070	36030	43360	41180	41900	40220
11	36570	35100	33930	33300	32880	32300	31020	36030	43300	41180	41800	40120
12	36570	35030	33910	33320	32830	32190	31070	35960	43200	41100	41670	40000
13	36500	34940	33890	33260	32830	32190	31450	35940	43040	41000	41590	39920
14	36360	34940	33800	33260	32830	32170	31480	35840	42970	40950	41480	39840
15	36220	34900	33750	33230	32810	32110	31710	35820	42840	41000	41380	39770
16	36190	34870	33710	33210	32740	32110	32130	35730	42730	41000	41250	39570
17	36100	34830	33620	33210	32770	32020	32240	35640	42630	40850	41230	39600
18	36050	34830	33570	33230	32680	31980	32260	35520	42520	40850	41130	39500
19	36030	34740	33520	33140	32630	31980	33120	35450	42390	40850	41000	39470
20	35980	34620	33500	33140	32680	31870	35080	35360	42290	40850	40870	39570
21	35940	34570	33480	33170	32500	31800	35130	35290	42130	40850	40720	39420
22	35940	34550	33460	33120	32460	31760	35130	35220	42080	40700	40620	39350
23	35870	34550	33440	33120	32460	31690	35130	35100	42000	40590	40500	39270
24	35750	34480	33620	33100	32440	31710	35060	35060	41870	40510	40370	39200
25	35710	34460	33620	33030	32370	31690	35030	40340	41770	40510	40300	39100
26	35680	34390	33590	33010	32370	31630	34960	40320	41720	40490	40140	39000
27	35640	34340	33590	33010	32330	31540	34940	40370	41610	40410	40100	38860
28	35590	34410	33570	33030	32330	31520	35100	40340	41590	40300	39940	38860
29	35540	34410	33570	33010	32300	31430	35150	40390	41480	40300	40120	38780
30	35500	34250	33520	33010	---	31320	35150	40390	41360	40320	40340	38710
31	35450	---	33500	32990	---	31240	---	40340	---	40340	40400	---
(†)	863.52	863.00	862.67	862.44	862.13	861.64	863.39	866.79	865.95	866.60	865.57	864.89
(*)	-1780	-1200	-750	-510	-690	-1060	+3910	+8390	-2180	+1680	-2640	-1690
(††)	188	197	135	174	163	149	180	162	172	229	211	296
MAX	37110	35570	34210	33460	32970	32300	35150	43670	45880	45850	42970	40800
MIN	35450	34250	33440	32990	32300	31240	31020	35010	41360	40920	39940	38710
CAL YR 1975.....	* -10490			†† 2633			MAX 49390	MIN 33440				
WTR YR 1976.....	* +1480			†† 2256			MAX 45880	MIN 31020				

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Mineral Wells.

BRAZOS RIVER BASIN

08090300 Lake Palo Pinto near Santo, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
MAR 17...	0900	561	8.1	18.0	200	52	60	12	36

DATE	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE-SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SI02) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR 17...	1.1	5.5	179	0	45	58	.6	5.8	311

08090500 Palo Pinto Creek near Santo, Tex.

LOCATION.--Lat 32°37'51", long 98°10'50", Palo Pinto County, on left bank 0.5 mile (0.8 km) upstream from the Texas and Pacific Railway Co. bridge, 2.4 miles (3.9 km) downstream from Big Sunday Creek, 2.6 miles (4.2 km) northeast of Santo, 2.8 miles (4.5 km) upstream from Wusser Creek, and 7.2 miles (11.6 km), revised, upstream from mouth.

DRAINAGE AREA (revised).--573 mi² (1,484 km²).

PERIOD OF RECORD.--October 1924 to September 1925, April 1951 to September 1976 (discontinued). Monthly discharge only for October 1924 to September 1925, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 762.63 ft (232.450 m) above mean sea level. Nov. 20, 1924, to Sept. 30, 1925, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years (1924-25, 1951-63) prior to regulation by Lake Palo Pinto, 90.3 ft³/s (2.557 m³/s), 65,420 acre-ft/yr (80.7 hm³/yr); 13 years (1963-76) regulated, 62.9 ft³/s (1.781 m³/s), 45,570 acre-ft/yr (56.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,240 ft³/s (91.8 m³/s) May 25 (gage height, 8.58 ft or 2.615 m); no flow May 14, 15. Period of record: Maximum discharge, 45,100 ft³/s (1,280 m³/s) May 26, 1957 (gage height, 31.05 ft or 9.464 m, from floodmark), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-area measurement of peak flow; no flow at times. Maximum stages since at least 1880 occurred May 8, 1922, and May 26, 1957. Flood of May 8, 1922, reached about the same stage as in 1957, from information by the Texas and Pacific Railway Co., but probably was slightly lower, from information by local residents.

REMARKS.--Records good. Flow largely regulated since April 1964 by Lake Palo Pinto (station 08090300) located about 10 miles (16 km) upstream. At times, water is released from Lake Palo Pinto and flows past station to a channel dam where it is pumped to treatment plant of city of Mineral Wells. Station discontinued Sept. 30, 1976.

REVISIONS.--WSP 1312: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.4	5.5	3.1	6.0	7.0	8.7	2.6	367	2.9	5.2	44
2	6.4	8.3	6.8	3.5	6.0	7.0	8.7	.90	403	2.5	8.4	29
3	7.0	6.7	10	3.5	6.0	7.0	8.7	.34	235	4.5	23	24
4	7.1	7.4	11	3.5	6.1	7.0	8.8	.16	140	4.5	23	22
5	7.0	7.0	11	3.5	6.2	5.6	8.4	.30	84	6.6	23	21
6	7.0	7.0	11	3.5	6.0	1.8	1.8	7.9	50	3.1	23	19
7	7.1	7.3	11	3.8	6.0	.92	.82	2.7	67	3.1	23	18
8	6.7	7.5	10	3.8	6.0	.91	.39	2.4	58	3.1	23	19
9	6.3	7.9	7.6	3.8	6.0	.76	.19	.70	35	49	22	29
10	6.2	8.0	7.5	4.2	6.0	.67	.10	.28	24	86	6.9	26
11	6.5	9.3	7.5	4.2	6.0	1.2	.05	.13	18	15	5.7	22
12	6.4	11	7.5	6.7	5.9	4.6	.06	.07	17	6.7	5.6	20
13	6.4	7.2	7.5	7.5	5.7	1.9	.56	.05	16	4.7	5.6	19
14	32	7.0	7.5	7.2	5.7	.71	13	.01	16	4.5	5.5	19
15	73	7.3	7.1	7.0	5.8	.28	2.9	.02	17	4.1	5.6	19
16	6.6	7.3	7.0	7.0	5.9	.14	70	15	17	4.1	5.5	19
17	5.8	7.3	7.0	7.0	5.6	.07	19	16	17	1130	5.5	19
18	6.0	3.3	7.0	7.0	6.3	3.7	5.4	17	17	875	5.2	19
19	5.8	2.0	7.0	7.5	6.4	8.7	2.3	17	16	426	9.0	20
20	5.8	1.8	7.4	7.2	7.1	8.7	9.1	17	16	230	23	21
21	5.9	1.7	7.5	7.0	7.1	9.0	9.1	18	16	119	23	20
22	6.1	1.8	7.6	5.7	5.7	8.9	2.4	17	17	72	23	20
23	6.3	1.9	7.8	5.3	6.0	8.1	.81	18	16	43	29	20
24	6.0	1.8	10	5.5	6.0	9.1	.39	18	16	25	30	20
25	6.0	1.9	9.5	5.5	6.2	8.6	.18	1250	5.4	16	30	20
26	6.0	1.9	7.8	5.4	6.5	8.2	.09	803	3.7	21	30	20
27	6.0	2.0	4.2	5.5	6.9	8.1	.04	56	3.6	15	28	20
28	6.6	2.0	3.1	5.5	7.0	9.2	.49	29	3.4	9.4	22	21
29	6.5	2.1	3.1	5.5	7.0	9.2	101	22	3.9	6.9	25	20
30	6.8	2.5	3.1	5.5	---	9.3	10	19	3.8	5.7	40	20
31	6.8	---	3.1	5.8	---	9.2	---	51	---	5.2	326	---
TOTAL	290.6	156.6	230.7	166.7	180.1	165.56	397.42	2431.26	1719.6	3203.6	862.7	649
MEAN	9.37	5.22	7.44	5.38	6.21	5.34	13.2	78.4	57.3	103	27.8	21.6
MAX	73	11	11	7.5	7.1	9.3	101	1250	403	1130	326	44
MIN	5.8	1.7	3.1	3.1	5.7	.07	.04	.01	3.6	2.5	5.2	18
AC-FT	576	311	458	331	357	328	788	4820	3410	6350	1710	1290
CAL YR 1975	TOTAL	21000.70	MEAN	57.5	MAX	1530	MIN	.01	AC-FT	41650		
WTR YR 1976	TOTAL	10453.84	MEAN	28.6	MAX	1250	MIN	.01	AC-FT	20740		

08090800 Brazos River near Dennis, Tex.

LOCATION.--Lat 32°36'56", long 97°55'32", Parker County, at downstream side of bridge on Farm Road 1543, 0.2 mile (0.3 km) south of Dennis, 1.0 mile (1.6 km) upstream from Patrick Creek, and at mile 589.8 (949.0 km).

DRAINAGE AREA (revised).--25,237 mi² (65,364 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: May 1968 to current year.

Water quality: Chemical analyses: October 1970 to current year. Water temperatures: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 697.67 ft (212.650 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--8 years, 857 ft³/s (24.27 m³/s), 620,900 acre-ft/yr (766 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 11,300 ft³/s (320 m³/s) May 26 (gage height, 13.42 ft or 4.090 m); minimum, 22 ft³/s (0.62 m³/s) Apr. 2-4.

Period of record: Maximum discharge, 57,100 ft³/s (1,620 m³/s) Oct. 31, 1974 (gage height, 24.0 ft or 7.32 m, from floodmarks); minimum, 3.1 ft³/s (0.088 m³/s) July 19, 20, 1971.

Historic: Maximum stage since at least 1930, 31.8 ft (9.69 m) in May 1957, from floodmark, from information by State Highway Department.

Water quality: Current year: Maximum daily specific conductance, 4,880 micromhos Aug. 29; minimum daily, 337 micromhos July 18.

Maximum water temperatures, 38.5°C July 26; minimum, 3.0°C Nov. 26, Jan. 7, 8.

Period of record: Maximum daily specific conductance, 4,880 micromhos Aug. 29, 1976; minimum daily, 337 micromhos July 18, 1976.

Maximum water temperatures, 38.5°C July 26, 1976; minimum, 0.5°C Jan. 3, 1974.

REMARKS.--Discharge records good. Flow is largely regulated by releases from storage in Possum Kingdom Reservoir (station 08088500) and Lake Palo Pinto (station 08090300). Flow from 46.5 mi² (120.4 km²) is also affected at times by discharge from the flood-detention pools of 10 floodwater-retarding structures below Possum Kingdom Reservoir with a combined conservation capacity of 11,890 acre-ft (14.7 hm³). Many diversions above station for irrigation, municipal supply, and oilfield operations.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	80	233	72	160	38	24	109	1410	100	560	1100
2	68	89	156	64	121	38	24	78	1310	67	274	608
3	63	92	111	59	94	37	22	66	670	156	441	452
4	60	74	173	59	81	35	23	59	447	173	556	568
5	100	63	195	55	68	36	24	82	474	264	569	321
6	126	58	127	53	61	36	26	640	471	281	762	201
7	97	53	100	205	57	36	31	645	390	159	739	323
8	79	72	98	318	297	39	34	285	375	96	788	267
9	68	78	87	774	847	40	34	259	389	66	867	240
10	60	67	80	808	496	40	34	186	417	390	867	284
11	54	59	68	404	369	40	34	143	530	214	815	146
12	238	50	61	271	235	54	34	117	453	101	713	109
13	439	43	58	214	157	51	34	127	341	63	360	122
14	393	43	54	146	115	44	34	353	281	53	288	96
15	231	42	52	112	93	40	34	406	429	46	292	81
16	213	42	50	95	74	37	34	251	221	49	389	70
17	141	49	50	251	62	34	34	173	130	716	86	61
18	107	49	49	336	57	33	32	126	94	2280	162	57
19	98	45	49	221	55	32	193	106	74	1170	251	92
20	76	43	132	143	49	30	221	112	136	819	143	468
21	66	41	123	118	53	28	819	127	161	499	129	1290
22	61	41	242	118	49	28	555	106	104	315	137	1010
23	60	40	197	258	47	27	280	164	76	219	98	1480
24	53	40	149	425	43	31	190	196	113	165	89	1370
25	51	40	142	360	43	34	143	2760	191	157	70	1010
26	50	38	138	267	43	32	115	8980	423	131	128	1660
27	52	38	197	221	42	28	101	2330	312	423	121	1680
28	129	67	140	154	42	31	111	666	309	445	98	1720
29	102	531	105	119	40	29	142	472	389	405	333	1940
30	79	370	89	182	---	25	195	365	183	393	815	1920
31	68	---	77	168	---	25	---	1950	---	641	1160	---
TOTAL	3550	2437	3582	7050	3950	1088	3611	22439	11303	11056	13100	20746
MEAN	115	81.2	116	227	136	35.1	120	724	377	357	423	692
MAX	439	531	242	808	847	54	819	8980	1410	2280	1160	1940
MIN	50	38	49	53	40	25	22	59	74	46	70	57
AC-FT	7040	4830	7100	13980	7830	2160	7160	44510	22420	21930	25980	41150
CAL YR 1975 TOTAL	314164				17200	MIN 38	AC-FT 623100					
WTR YR 1976 TOTAL	103912				8980	MIN 22	AC-FT 206100					

08090800 Brazos River near Dennis, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 08...	--	805	3130	7.8	29.0	540	420	140	47	460
NOV 30...	1800	370	3250	7.9	11.0	550	430	150	42	490
DEC 31...	1300	73	2640	7.8	9.0	470	350	130	35	370
JAN 31...	2000	140	3030	8.0	9.0	540	420	150	40	460
FEB 11...	1510	346	3290	7.9	14.0	580	470	160	44	490
MAR 17...	1545	34	2890	7.9	18.5	530	410	140	44	410
APR 28...	1530	101	1680	7.9	22.0	300	200	85	21	230
MAY 31...	1900	3000	381	7.7	23.0	120	30	39	5.9	25
JUN 30...	2010	200	3580	7.8	32.0	580	470	160	44	540
JUL 20...	1825	738	1670	7.6	32.0	290	180	82	20	220
AUG 23...	1300	100	3550	7.6	35.0	580	470	160	44	520

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 08...	8.6	6.8	152	0	350	730	.4	3.1	1810
NOV 30...	9.1	8.6	142	0	370	760	.4	2.7	1890
DEC 31...	7.4	6.5	151	0	320	600	.4	1.3	1540
JAN 31...	8.6	7.5	142	0	380	760	.6	2.2	1870
FEB 11...	8.9	7.8	134	0	410	830	.5	3.6	2010
MAR 17...	7.7	7.0	150	0	360	680	.4	.6	1720
APR 28...	5.8	7.0	126	0	190	370	.3	2.4	968
MAY 31...	1.0	4.3	112	0	29	39	.3	6.1	204
JUN 30...	9.8	7.8	135	0	420	850	.4	4.9	2090
JUL 20...	5.7	6.0	133	0	180	350	.3	5.6	929
AUG 23...	9.4	9.0	130	0	430	850	.5	3.6	2080

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	3550	3150	1860	17800	760	7260	370	3530	540
NOV. 1975.....	2437	3080	1820	12000	740	4860	360	2370	530
DEC. 1975.....	3582	2970	1750	16900	710	6840	350	3350	510
JAN. 1976.....	7050	3010	1770	33700	720	13700	350	6690	520
FEB. 1976.....	3910	3160	1870	19700	760	8020	370	3900	540
MAR. 1976.....	1088	2970	1750	5140	710	2080	350	1020	520
APR. 1976.....	3611	1690	970	9500	360	3500	200	1920	330
MAY 1976.....	22439	824	460	28100	140	8770	96	5840	200
JUNE 1976.....	11303	1900	1110	34000	430	13200	220	6810	360
JULY 1976.....	11056	1520	880	26100	320	9690	180	5280	300
AUG. 1976.....	13100	3320	1960	69500	800	28500	390	13700	570
SEPT 1976.....	20746	2580	1510	84700	600	33700	300	16900	460
TOTAL	103872	**	**	357000	**	140000	**	71300	**
WTD.AVG.	284.58	2180	1300	**	500	**	250	**	400

08090800 Brazos River near Dennis, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C); WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2880	3050	3180	2670	3030	3080	2840	1180	661	3500	3460	2540
2	2900	3000	3150	2550	3060	3090	2900	1080	622	3550	3440	2140
3	2910	3030	3170	2140	3040	3100	2960	1290	675	3390	3460	1940
4	2980	2860	3150	2340	3050	3130	2980	1450	597	3150	3520	908
5	3030	2850	3110	2020	3030	3150	3080	1240	687	2770	3410	946
6	3110	2820	3070	2210	3040	3170	3120	450	576	3180	3460	1000
7	3170	2850	3030	2740	3030	3130	2630	600	757	3370	3430	1040
8	3130	2900	3020	2840	3120	3040	2960	439	1350	3330	3450	1070
9	3110	2920	3030	3070	3200	3010	2750	473	1840	3100	3410	938
10	3100	3030	3030	3110	3280	3030	2910	772	2250	1630	3450	850
11	3090	3050	3020	3060	3250	3050	3000	1270	3060	919	3520	819
12	3190	3070	2990	3030	3220	2930	2870	1450	3120	1300	3530	887
13	3310	3030	2950	3030	3210	2820	2400	1430	3190	1710	3540	1110
14	3310	3020	2940	3020	3210	2780	2700	1840	3200	1680	3530	1290
15	3280	3010	2950	3010	3180	2730	2780	2000	3440	1710	3520	1380
16	3250	3000	2910	3000	3170	2860	2570	1450	3390	1720	3590	1540
17	3200	2990	2920	3050	3150	2900	2060	1410	3210	725	3600	1720
18	3070	2990	2920	3060	3140	2820	1800	1470	3110	337	3620	1750
19	3000	2950	2890	3010	3120	2870	1080	1460	2950	919	3590	1860
20	3010	2950	2910	3070	3050	2910	1450	1470	2680	1650	3550	1420
21	3020	2970	2940	3040	2960	2960	2350	1400	3040	1570	3530	1500
22	3030	3050	2970	3010	3000	2990	866	1350	3000	1590	3520	1280
23	2950	3010	3090	3040	2990	3020	948	1080	3100	1660	3550	2090
24	3000	3000	2890	3070	2980	2950	1210	896	2460	1620	3360	3170
25	3010	3010	2900	3080	3020	2930	1380	507	2840	1600	3330	3220
26	3010	3030	2740	3080	3010	2960	1510	850	3480	1590	3040	3370
27	2980	3040	2670	3070	3000	2970	1600	601	3330	1250	3260	3440
28	3040	3010	2760	3080	3020	2990	1670	1160	3400	1130	3240	3450
29	3180	3250	2760	3070	3060	2960	1560	1420	3590	1580	4880	3480
30	3150	3260	2730	3060	---	2950	1370	1540	3580	2900	2270	3500
31	3090	---	2660	3060	---	2870	---	375	---	3420	2200	---
MONTH	3080	3000	2950	2890	3090	2970	2210	1140	2440	2050	3430	1850

TEMPERATURE (DEG. C) OF WATER; WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	---	5.0	13.0	10.0	24.0	17.0	23.0	25.5	30.5	34.5	26.0
2	23.0	18.0	6.0	8.0	12.0	25.0	20.0	18.0	27.0	28.5	33.0	28.0
3	22.0	21.0	12.0	6.0	12.0	23.0	24.0	26.0	29.0	26.0	31.0	29.5
4	---	20.0	13.0	7.0	15.0	21.5	20.0	25.0	28.0	---	31.0	30.5
5	23.0	21.0	18.5	6.0	10.0	14.5	19.0	21.5	28.5	30.0	31.5	31.0
6	23.0	23.0	13.0	11.0	6.0	16.0	27.0	20.0	28.0	28.0	32.0	30.0
7	18.0	23.5	13.0	3.0	4.0	14.0	24.0	18.0	27.0	30.0	---	---
8	23.0	23.5	13.0	3.0	---	12.0	23.0	22.0	30.0	29.5	33.5	30.5
9	26.5	22.0	13.0	4.0	14.0	15.5	21.5	20.0	30.0	26.0	33.0	25.0
10	28.0	20.0	13.5	8.0	16.0	20.0	26.0	27.0	28.5	25.0	33.5	27.0
11	22.0	19.0	14.0	9.0	15.5	16.0	30.0	28.0	30.0	25.0	30.0	26.0
12	26.0	15.0	13.5	9.5	19.0	17.0	26.0	30.0	---	28.0	31.5	23.0
13	26.0	14.5	16.5	10.5	19.5	10.0	22.0	25.5	28.0	28.0	33.0	28.0
14	25.5	15.0	14.0	---	18.0	18.5	30.0	22.0	28.0	28.5	---	30.0
15	24.0	13.5	9.5	9.0	20.0	20.0	20.0	25.5	27.0	28.5	32.0	31.0
16	22.0	---	8.5	11.5	20.0	16.0	23.0	25.0	30.0	30.5	30.0	31.0
17	22.0	18.0	9.5	10.0	18.5	18.0	25.0	25.5	29.0	24.0	31.0	29.0
18	17.0	19.0	6.0	---	18.0	20.5	16.0	25.0	28.0	24.0	30.5	29.0
19	20.0	18.0	4.0	8.5	18.0	---	21.5	---	---	28.0	30.0	25.0
20	23.0	11.0	9.0	10.5	17.0	20.0	21.0	24.0	28.0	34.0	31.0	25.0
21	23.0	10.0	---	8.0	10.5	21.0	23.5	28.0	29.0	37.0	29.0	23.0
22	21.0	10.0	9.0	8.5	15.0	21.0	26.5	28.5	29.0	33.0	30.0	27.0
23	25.0	10.0	8.0	14.0	16.5	20.0	24.5	28.0	28.0	34.0	32.0	25.0
24	23.0	10.5	5.5	13.0	14.0	18.0	27.0	29.5	25.0	31.0	32.0	26.0
25	15.0	11.0	7.0	11.0	15.0	24.0	25.0	17.0	31.0	30.0	32.0	27.0
26	18.0	3.0	10.0	8.0	18.0	23.0	23.0	19.0	29.0	38.5	30.0	24.0
27	21.5	10.0	11.0	8.0	20.5	20.0	24.5	18.0	33.5	33.0	33.0	24.0
28	22.0	11.5	12.0	9.0	22.0	20.0	22.0	24.5	33.0	32.0	30.0	24.0
29	21.0	5.5	6.5	10.0	23.0	21.5	18.0	27.0	30.0	34.0	22.0	24.5
30	18.5	11.0	9.5	11.5	---	19.5	19.0	28.0	32.0	33.0	25.0	---
31	19.5	---	10.0	9.0	---	20.0	---	23.0	---	35.5	27.0	---
MONTH	22.0	15.5	10.5	9.0	15.5	19.0	23.0	24.0	29.0	30.0	31.0	27.0

08090900 Lake Granbury near Granbury, Tex.

LOCATION.--Lat 32°22'27", long 97°41'20", Hood County, at right end of spillway of DeCordova Bend Dam on Brazos River, 2.6 miles (4.2 km) upstream from Fall Creek, 7.5 miles (12.1 km) southeast of Granbury, and at mile 542.5 (872.9 km).

DRAINAGE AREA (revised).--25,679 mi² (66,509 km²), of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: October 1968 to current year.

Water quality: Chemical analyses: September 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 151,400 acre-ft (187 hm³) July 17 (elevation, 692.76 ft or 211.153 m); minimum, 140,800 acre-ft (174 hm³) Apr. 15 (elevation, 691.49 ft or 210.766 m).

Period of record: Maximum contents, 153,500 acre-ft (189 hm³) Dec. 30, 1969, June 18, Oct. 8, 1970 (elevation, 693.00 ft or 211.226 m); minimum since first filling in October 1969, 99,150 acre-ft (122 hm³) July 22, 23, 1971 (elevation, 685.53 ft or 208.950 m).

REMARKS.--The lake is formed by an Ambursen-type concrete and earthfill dam 2,256 ft (688 m) long, including a 932-foot (284-meter) concrete spillway. The dam was completed on Aug. 30, 1969, and deliberate impoundment began Sept. 15, 1969. The spillway consists of 16 36- by 35-foot (11.0- by 10.7-meter) tainter gates and two 7- by 8-foot (2.1- by 2.4-meter) sluice gates. The outflow from the sluice gates discharges into a bay where it is then controlled by two 4- by 4.5-foot (1.2- by 1.4-meter) sluice gates with invert at 625.8 ft (190.74 m). The lake was built by the Brazos River Authority for the conservation of water for municipal, industrial, and irrigation uses. At end of year, flow from 52.7 mi² (136.5 km²) above this station was affected at times by discharge from the flood-detention pools of 11 floodwater-retarding structures having a combined capacity of 15,110 acre-ft (18.6 hm³) below the flood-spillway crests. Records furnished by the Brazos River Authority show that 2,160 acre-ft (2.66 hm³) was diverted by Leonards Inc., and that 1,480 acre-ft (1.82 hm³) was diverted by Texas Power and Light Co. during the year. The total monthly diversions are given in the table below. Records furnished by the city of Granbury show that 255 acre-ft (314,000 m³) of sewage effluent was returned above station during the current year. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	706.5	-
Top of tainter gates (design flood).....	693.0	153,500
Crest of spillway.....	658.0	15,440
Lowest gated outlet (invert).....	640.0	2,200

COOPERATION.--Capacity curve was based on data prepared by the Ambursen Engineering Corporation and furnished by the Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

691.0	136,900
692.0	145,000
693.0	153,500

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147300	146500	145400	148200	148400	146700	143200	146300	145600	146700	146100	146200
2	146800	146700	145400	148000	148800	146600	142800	145300	145500	146200	144800	145700
3	146700	146700	145600	147700	148300	146000	142800	145400	145900	146400	145200	146500
4	146300	146500	145200	147200	148700	146500	142900	145100	146000	145900	145300	146700
5	146300	146500	146800	146500	148300	146300	142700	145200	146000	146100	145400	146400
6	146200	146200	145800	148100	148300	145800	142500	146200	146300	146600	146400	145800
7	146100	146600	146200	147500	148000	146000	142900	145400	146300	146800	146800	145800
8	146000	146200	146200	147600	147800	146600	142600	145200	146100	146800	147300	146400
9	146100	146500	146300	148300	149100	145700	142400	145300	145900	147200	148000	146800
10	146100	146200	145700	149100	149500	145600	142100	145400	145900	147800	149200	146900
11	146000	146000	146100	148700	149000	145700	142000	145200	146600	148300	150200	145900
12	145700	146400	146300	147800	148600	145900	142400	145300	145800	148100	150400	145000
13	146600	145600	145200	148600	148900	145400	142600	145800	145600	148100	150300	145100
14	147700	145200	145800	148500	148800	145200	142300	145700	145200	148000	149600	145100
15	148200	144700	146000	148400	148600	145900	144400	146200	145900	148300	148700	145000
16	148600	144500	145700	148800	148700	145000	141600	145700	145500	147600	148300	145000
17	148500	144400	146200	148600	149400	144700	142800	145200	145800	150700	148300	144800
18	148000	144300	145600	149100	147800	144200	143800	145300	145300	150000	147600	145000
19	147800	145500	145400	150400	147900	143800	145000	145400	145200	146400	146700	145600
20	147700	146200	145700	150100	148100	144400	145100	145300	145200	145900	145900	146200
21	147500	146200	145800	150000	148200	144200	146000	145500	145300	145700	145200	146900
22	147700	145800	146100	149600	147600	143900	146900	145300	145400	145600	144300	146100
23	147300	144800	146100	148900	147400	143500	145700	145600	145400	145700	144300	146700
24	147700	145300	147700	149300	146900	144100	145100	145100	145600	145600	144300	147000
25	147000	145000	148200	149300	147200	144300	145300	149200	145800	145400	144300	146500
26	146500	144600	147600	148500	147200	144300	145400	147000	145800	145000	144300	147500
27	146200	144700	147400	148300	147000	143800	145200	144500	145300	144800	144300	147800
28	146700	144600	148700	148800	146900	143800	146700	144700	145600	145600	144500	147000
29	146600	146200	147700	148200	146700	144600	146600	145300	146300	146100	145500	146200
30	146500	146500	147500	149400	---	143600	146800	144900	146700	145900	146000	145400
31	146300	---	147800	148300	---	143300	---	147000	---	146700	147200	---
(†)	692.16	692.18	692.33	692.40	692.21	691.79	692.22	692.24	692.20	692.21	692.27	692.05
(*)	-1000	+200	+1300	+500	-1600	-3400	+3500	+200	-300	0	+500	-1800
(††)	66	166	8	105	447	695	217	11	847	337	914	55
MAX	148600	146700	148700	150400	149500	146700	146900	149200	146700	150700	150400	147800
MIN	145700	144300	145200	146500	146700	143300	141600	144500	145200	144800	144300	144800

CAL YR 1975..... * -1600

WTR YR 1976..... * -1900

†† 3200

†† 3870

MAX 151200

MAX 150700

MIN 138200

MIN 141600

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for irrigation, municipal, and industrial use.

08090900 Lake Granbury near Granbury, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
JAN 25...	1430	2740	7.9	9.0	0	2	10.3	90	.8	4	0
MAY 08...	1245	2820	8.1	20.5	--	--	8.5	94	--	--	--
AUG 29...	1115	1660	8.3	28.5	5	0	6.1	79	1.0	180	0

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
JAN 25...	4	450	330	120	36	390	8.0	6.6	140	0
MAY 08...	--	480	370	130	38	400	7.9	7.0	140	0
AUG 29...	2	300	200	82	22	230	5.8	6.5	116	0

DATE	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN 25...	300	620	.4	1.6	.06	3.6	1550	3	0	.03
MAY 08...	320	670	.4	--	--	2.6	1640	--	--	--
AUG 29...	170	360	.3	1.1	.02	3.4	934	2	1	.00

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	CHLOROPHYLL C (UG/L)
JAN 25...	.00	.10	.71	.01	4.2	5	.00	6.90	6.40	21.0
MAY 08...	--	.01	--	.00	--	--	--	--	--	--
AUG 29...	.00	.02	.65	.01	2.4	1	.00	9.50	15.0	57.0

08090900 Lake Granbury near Granbury, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN 25...	1430	0	0	270	0	0	0	1
MAY 08...	1245	--	--	--	--	--	--	--
AUG 29...	1115	10	2	--	0	1	4	4

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN 25...	10	0	30	0	.0	0	1500	10
MAY 08...	40	--	--	0	--	--	--	--
AUG 29...	30	7	20	20	.0	0	1200	30

BRAZOS RIVER BASIN

08091000 Brazos River near Glen Rose, Tex.

LOCATION.--Lat 32°16'18", long 97°39'48", Somervell County, at downstream side of bridge on U.S. Highway 67, 600 ft (180 m) downstream from Georges Creek, 4.1 miles (6.6 km) upstream from Paluxy River, 6 miles (10 km) northeast of Glen Rose, and at mile 511.2 (822.5 km).

DRAINAGE AREA (revised).--25,818 mi² (66,869 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 567.82 ft (173.072 m) above mean sea level. Prior to May 7, 1931, nonrecording gage at site 2.5 miles (4.0 km) downstream at same datum. May 7, 1931, to Sept. 30, 1957, water-stage recorder at site 2.4 miles (3.9 km) downstream at same datum, used as supplementary gage Oct. 1, 1957, to Apr. 1, 1959. Apr. 27, 1950, to Sept. 30, 1957, water-stage recorder, present gage, used as supplementary gage.

AVERAGE DISCHARGE.--53 years, 1,471 ft³/s (41.66 m³/s), 1,066,000 acre-ft/yr (1.31 km³/yr).

EXTREMES.--Current year: Maximum discharge, 16,000 ft³/s (453 m³/s) May 26 (gage height, 15.20 ft or 4.633 m); minimum, 20 ft³/s (0.57 m³/s) Aug. 29.

Period of record: Maximum discharge, 97,600 ft³/s (2,760 m³/s) May 18, 1935 (gage height, 23.68 ft or 7.218 m, site then in use, from floodmarks); maximum gage height, 33.89 ft (10.330 m), present site, May 27, 1957; no flow at times prior to construction of Possum Kingdom Reservoir dam (1941).

Maximum stage since at least 1876, that of May 27, 1957. Flood in May 1908 reached a stage of 27 ft (8.2 m), and flood in May 1922 reached a stage of 29.5 ft (8.99 m), which could have equaled or exceeded flood in 1957 at present site, each at site 2.4 miles (3.9 km) downstream, from information by local residents.

REMARKS.--Records good except those for July 15 to Aug. 5, which are fair. Flow is largely regulated since September 1969 by Lake Granbury (station 08090900) 31 miles (50 km) upstream. Many diversions above station for irrigation, municipal supply, and oilfield operation.

REVISIONS (WATER YEARS).--WSP 1058: 1932. WSP 1512: 1946-47, 1949. WSP 1712: 1928(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	64	71	79	198	62	66	190	2830	50	569	1800
2	94	85	73	72	89	54	68	251	2130	42	833	1930
3	94	92	81	67	84	45	34	340	1400	128	305	821
4	93	85	74	80	64	59	68	273	568	508	121	768
5	149	89	80	70	57	55	69	172	494	491	469	469
6	87	71	63	98	115	73	100	251	507	249	330	456
7	93	77	70	84	77	80	92	543	530	84	121	451
8	92	64	84	74	51	102	82	1190	496	63	476	238
9	93	62	88	96	234	91	148	368	484	69	504	73
10	67	64	82	227	298	90	79	229	477	66	447	45
11	64	82	84	869	383	130	85	229	303	101	93	85
12	59	82	83	889	884	82	81	222	350	181	164	425
13	62	133	71	513	308	68	93	196	832	237	497	448
14	73	73	73	167	64	100	79	126	417	89	506	246
15	64	68	87	96	55	66	75	184	250	52	512	77
16	56	102	67	87	75	92	575	305	440	47	512	46
17	86	96	65	80	180	73	431	753	309	45	511	41
18	74	91	55	85	272	90	142	289	79	1120	506	37
19	81	89	59	78	241	115	821	67	428	3810	502	33
20	186	70	82	96	64	86	1600	45	207	2320	502	35
21	81	70	75	99	52	76	1490	62	90	543	502	31
22	76	44	94	80	45	69	298	62	57	738	419	810
23	112	59	80	258	47	77	632	82	48	297	466	1160
24	106	92	100	500	81	76	955	963	59	79	132	1150
25	94	75	130	504	52	72	625	676	91	49	57	1160
26	143	66	97	892	50	43	135	12500	165	47	47	1160
27	82	56	71	288	45	27	121	8410	447	47	41	1260
28	89	74	116	65	47	145	89	2390	452	47	31	2120
29	96	76	87	48	51	93	126	619	233	47	25	2000
30	96	93	86	314	---	39	203	285	69	52	233	2680
31	72	---	85	109	---	70	---	966	---	757	859	---
TOTAL	2816	2344	2513	7064	4263	2400	9462	33238	15242	12455	11292	22055
MEAN	90.8	78.1	81.1	228	147	77.4	315	1072	508	402	364	735
MAX	186	133	130	892	884	145	1600	12500	2830	3810	859	2680
MIN	56	44	55	48	45	27	34	45	48	42	25	31
AC-FT	5590	4650	4980	14010	8460	4760	18770	65930	30230	24700	22400	43750
CAL YR 1975 TOTAL	408140											
WTR YR 1976 TOTAL	125144											
MEAN				1118	MAX	17700	MIN 29	AC-FT	809500			
MAX				342	MAX	12500	MIN 25	AC-FT	248200			

08091500 Paluxy River at Glen Rose, Tex.

LOCATION.--Lat 32°13'53", long 97°46'37", Somervell County, on left bank at downstream side of remaining pier of dismantled highway bridge, 500 ft (152 m) upstream from bridge on U.S. Highway 67, 1.0 mile (1.6 km) upstream from Cross Branch, 1.2 miles (1.9 km) southwest of Glen Rose, and 5.1 miles (8.2 km) upstream from mouth.

DRAINAGE AREA.--410 mi² (1,062 km²).

PERIOD OF RECORD.--October 1923 to September 1925, May 1947 to current year. Prior to October 1965, published as Paluxy Creek at Glen Rose.

GAGE.--Water-stage recorder. Datum of gage is 609.66 ft (185.824 m) above mean sea level. Oct. 27, 1923, to Sept. 30, 1925, nonrecording gage at bridge 1.8 miles (2.9 km) downstream at datum 13.62 ft (4.151 m) lower.

AVERAGE DISCHARGE.--30 years (1924-25, 1947-76), 68.4 ft³/s (1,937 m³/s), 2.27 in/yr (57.7 mm/yr), 49,560 acre-ft/yr (61.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,430 ft³/s (267 m³/s) May 25 (gage height, 12.78 ft or 3.895 m); minimum, 0.28 ft³/s (0.008 m³/s) Aug. 18, 24.

Period of record: Maximum discharge, 50,000 ft³/s (1,420 m³/s) Oct. 4, 1959 (gage height, 25.4 ft or 7.74 m), from rating curve extended above 32,000 ft³/s (906 m³/s); no flow at times.

Maximum stage since at least 1877, 27.2 ft (8.29 m) Apr. 17, 1908, present site and datum (discharge, 59,000 ft³/s or 1,670 m³/s, from rating curve extended as explained above). Flood of May 21, 1922, reached a stage of 26.0 ft (7.92 m), present site and datum (discharge, 53,000 ft³/s or 1,500 m³/s, from rating curve extended as explained above). Flood in November 1918 reached about same stage as that of May 21, 1922, from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1392: 1949, 1952. WSP 2122: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.3	4.9	9.5	10	9.8	10	22	462	8.5	4.6	132
2	2.6	2.7	5.2	9.8	10	9.8	9.9	17	159	7.4	4.0	52
3	2.5	2.6	5.3	9.4	10	9.7	9.7	15	64	7.4	3.7	153
4	2.5	2.8	5.8	9.0	10	9.4	14	14	42	9.6	3.2	145
5	2.4	4.3	6.3	8.8	9.8	9.6	16	14	34	7.6	2.9	40
6	2.4	3.7	6.1	9.3	9.7	9.0	15	16	31	7.5	2.7	23
7	2.4	3.7	6.0	9.0	9.5	10	16	16	28	8.8	2.4	17
8	2.3	3.0	6.4	8.8	9.7	14	16	15	28	7.1	2.2	14
9	2.2	2.9	6.5	9.3	10	13	14	13	25	7.0	1.9	12
10	2.0	2.5	6.8	9.5	10	13	14	12	22	428	1.7	11
11	1.9	2.3	6.9	9.6	9.8	12	12	11	19	69	1.4	10
12	1.7	2.0	6.9	9.7	9.8	12	11	12	18	38	1.2	11
13	1.5	2.1	7.3	9.8	9.6	11	13	17	16	29	.96	9.2
14	1.2	2.3	7.7	9.6	9.7	10	41	11	15	22	.85	8.2
15	1.1	2.5	7.1	9.4	9.9	10	28	9.9	13	21	.75	7.5
16	1.2	2.8	7.2	9.5	11	9.9	27	9.3	13	18	.60	6.7
17	1.0	3.4	6.9	9.5	12	9.9	41	8.6	12	710	.53	6.4
18	.92	3.6	6.9	9.5	11	10	34	8.2	12	215	.41	6.2
19	.94	4.2	6.9	9.7	10	11	124	7.7	12	43	.46	6.3
20	1.1	4.3	7.7	9.6	9.7	10	1220	7.8	14	23	.41	7.2
21	1.2	4.2	7.9	9.5	9.9	10	120	7.9	14	16	.37	14
22	1.3	4.1	7.9	9.5	9.5	9.0	52	7.6	11	13	.37	11
23	1.6	4.2	8.0	9.5	9.4	9.3	37	16	11	12	.35	7.9
24	2.0	4.2	13	9.7	9.2	14	32	9.7	33	11	1.2	6.5
25	1.9	4.5	14	9.6	9.1	15	25	3700	128	9.3	.76	5.8
26	2.0	4.8	14	9.5	9.0	20	21	2080	34	8.6	4.0	5.4
27	2.1	5.0	12	9.5	9.1	14	18	161	19	8.0	5.0	6.0
28	2.0	5.4	11	9.4	9.6	13	19	78	14	7.1	1.4	6.4
29	1.9	6.7	10	9.4	9.8	11	43	56	12	6.5	1.4	12
30	2.0	6.1	9.9	9.5	---	11	30	41	9.7	5.7	2.5	12
31	2.1	---	9.5	12	---	11	---	61	---	5.1	498	---
TOTAL	56.86	109.2	248.0	295.4	285.8	350.4	2082.6	6474.7	1324.7	1789.2	552.22	764.7
MEAN	1.83	3.64	8.00	9.53	9.86	11.3	69.4	209	44.2	57.7	17.8	25.5
MAX	2.9	6.7	14	12	12	20	1220	3700	462	710	498	153
MIN	.92	2.0	4.9	8.8	9.0	9.0	9.7	7.6	9.7	5.1	.35	5.4
CFSM	.004	.008	.02	.02	.02	.03	.17	.51	.11	.14	.04	.06
IN.	.005	.010	.02	.03	.03	.03	.19	.59	.12	.16	.05	.07
AC-FT	113	217	492	586	567	695	4130	12440	2630	3550	1100	1520

CAL YR 1975 TOTAL 17719.11 MEAN 48.5 MAX 2490 MIN .48 CFSM .12 IN 1.61 AC-FT 35150
WTR YR 1976 TOTAL 14333.78 MEAN 39.2 MAX 3700 MIN .35 CFSM .10 IN 1.30 AC-FT 28430

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-20	0730	8.99	4,560
5-25	2000	12.78	9,430
7-17	1800	8.75	4,320

08091750 Squaw Creek near Glen Rose, Tex.

LOCATION.--Lat 32°16'12", long 97°43'56", Somervell County, on left bank at downstream side of bridge on State Highway 144, 2.1 miles (3.4 km) upstream from mouth, and 2.8 miles (4.5 km) northeast of Glen Rose.

DRAINAGE AREA (revised).--70.3 mi² (182.1 km²).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 569.02 ft (173.437 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,170 ft³/s (89.8 m³/s) May 25 (gage height, 10.53 ft or 3.210 m, affected by backwater from Paluxy River), from rating curve extended as explained below; minimum, 0.26 ft³/s (0.007 m³/s) Apr. 11-13.

Period of record: Maximum discharge, 9,030 ft³/s (256 m³/s) Apr. 8, 1975 (gage height, 11.90 ft or 3.627 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of velocity-area study; minimum, 0.02 ft³/s (0.001 m³/s) Aug. 28, 29, 1974.

Maximum stage since 1934, about 20.5 ft (6.25 m) in May 1957, from information by Texas Highway Department (discharge not determined).

REMARKS.--Records fair. No known diversions. At present time there is no regulation of streamflow, but a reservoir for impoundment and storage of cooling water for a proposed generating plant is now under construction about 2.5 miles (4.0 km) upstream from gage and will materially affect flows when the dam is completed. Deliberate impoundment is expected to begin about Jan. 1, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	.41	.89	.70	.41	.31	.41	3.6	16	.47	2.5	.79
2	2.0	.41	.79	.70	.41	.31	.41	2.4	10	1.7	1.6	.60
3	2.3	.41	.89	.70	.41	.31	.47	2.3	10	3.4	1.2	133
4	2.5	.36	.79	.70	.41	.36	1.9	2.3	9.0	5.0	1.1	32
5	2.4	.36	.79	.79	.41	.36	.62	1.1	9.0	6.1	1.1	7.4
6	2.3	.36	.79	.89	.41	.36	.36	.74	10	3.7	.89	2.5
7	2.3	.36	.79	.79	.41	.36	.36	.70	7.2	1.3	.86	5.7
8	2.1	.36	.89	.62	.41	.36	.36	.73	4.5	1.6	.79	5.4
9	2.1	.40	.89	.62	.41	.36	.31	1.0	2.7	1.6	.91	2.5
10	2.1	.36	.89	.62	.41	.31	.31	.89	3.2	1.3	1.0	2.9
11	1.8	.39	1.0	.62	.41	.47	.26	.89	1.7	1.3	1.2	3.7
12	1.6	.53	1.0	.62	.36	.47	.26	.90	1.7	1.3	.90	2.7
13	1.4	.60	1.0	.62	.36	.47	.26	10	1.9	1.4	.66	2.2
14	1.1	.65	.89	.62	.36	.47	4.3	7.9	2.7	1.4	.62	2.1
15	1.1	.75	.89	.62	.36	.47	1.7	4.3	2.2	1.4	.70	2.1
16	1.0	.70	.89	.62	.31	.47	1.3	1.8	2.0	1.5	.67	1.9
17	.97	.89	.89	.62	.31	.47	.62	1.2	.93	.84	.62	1.9
18	.89	.89	.89	.62	.31	.47	4.2	1.7	.93	.76	.62	1.7
19	.89	.89	.89	.54	.31	.47	34	4.3	.90	14	.62	1.6
20	.79	.89	.89	.54	.31	.47	5.39	6.0	.73	10	.62	2.5
21	.79	.89	.89	.70	.36	.47	74	3.4	.67	12	.62	2.6
22	.79	.89	.89	.70	.36	.47	26	4.6	.53	6.0	.62	2.2
23	.70	.89	.79	.70	.36	.47	9.0	6.2	.47	27	.62	1.5
24	.70	.79	.89	.70	.36	1.6	3.4	6.3	14	9.8	.67	.81
25	.70	.79	.79	.70	.36	.70	1.3	918	23	5.1	.62	1.1
26	.62	.79	.70	.62	.36	1.3	2.5	296	3.4	3.8	.54	1.3
27	.62	.79	.62	.47	.31	.41	2.9	70	2.1	3.0	.52	4.6
28	.62	.79	.62	.47	.31	.41	7.9	28	2.1	2.2	.47	10
29	.51	.79	.62	.47	.31	.36	24	13	1.1	3.6	.47	5.7
30	.47	.89	.70	.41	---	.36	10	4.0	.54	4.3	.52	3.7
31	.47	---	.70	.41	---	.36	---	25	---	3.1	.60	---
TOTAL	40.53	19.27	25.84	19.52	10.54	15.01	752.41	1436.65	145.20	298.37	25.45	248.70
MEAN	1.31	.64	.83	.63	.37	.48	25.1	45.3	4.84	9.62	.82	8.29
MAX	2.5	.89	1.0	.89	.41	1.6	539	918	23	.84	2.5	133
MIN	.47	.36	.62	.41	.31	.31	.26	.70	.47	.47	.47	.60
AC-FT	90	38	51	39	21	30	1490	2550	289	592	50	493
CAL YR 1975 TOTAL	4908.53			MEAN 13.4	MAX 1510	MIN .26	AC-FT 9740					
WTR YR 1976 TOTAL	3037.54			MEAN 8.30	MAX 918	MIN .26	AC-FT 6020					

08091900 Lake Pat Cleburne near Cleburne, Tex.

LOCATION.--Lat 32°17'20", long 97°24'54", Johnson County, at side of walkway from dam to outlet structure, near left end of Cleburne Dam on Nolan River, 2.2 miles (3.5 km) upstream from Buffalo Creek, 4.3 miles (6.9 km) south of Cleburne, and 21.4 miles (34.4 km) above mouth.

DRAINAGE AREA.--100 mi² (259 km²).

PERIOD OF RECORD.--Contents: April 1965 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Homer Hunter Associates, Consulting Engineers bench mark).

EXTREMES.--Current year: Maximum contents, 29,200 acre-ft (36.0 hm³) May 26 (elevation, 735.75 ft or 224.257 m); minimum, 20,690 acre-ft (25.5 hm³) Apr. 14, 15 (elevation, 730.10 ft or 222.534 m).

Period of record: Maximum contents, 37,200 acre-ft (45.9 hm³) May 13, 1968 (elevation, 740.10 ft or 225.582 m); minimum, 18,890 acre-ft (23.3 hm³) Dec. 11-14, 1967 (elevation, 728.70 ft or 222.108 m).

REMARKS.--The lake is formed by a rock-faced earthfill dam 5,050 ft (1,540 m) long, including a 150-foot-wide (46-meter) uncontrolled concrete service spillway at left end of dam. An emergency spillway, 500 ft (150 m) wide, is cut in natural ground on the right bank about 400 ft (120 m) from right end of dam. Storage began Aug. 4, 1964. Lake is the property of city of Cleburne and was built to impound water for municipal use. Capacity table based on survey of 1958 from Geological Survey topographic maps. Records furnished by city of Cleburne indicate that 2,809 acre-ft (3.46 hm³) of sewage effluent was returned to a tributary of Nolan River which enters below this station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	753.0	-
Top of design flood pool.....	752.3	66,700
Crest of spillway.....	744.0	45,430
Crest of spillway (top of conservation pool).....	733.5	25,560
Lowest gated outlet (invert).....	690.0	115

COOPERATION.--Records of diversions furnished by city of Cleburne. Capacity table furnished by Homer Hunter Associates, Consulting Engineers for the city of Cleburne.

Capacity table (elevation, in feet, and contents, in acre-feet)

730.0	20,600	734.0	26,340
732.0	23,320	735.0	27,950
733.0	24,790	736.0	29,630

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23460	22650	22170	22000	21530	21170	20830	25890	26440	25420	25740	24950
2	23420	22860	22150	21970	21510	21170	20810	25850	26300	25360	25680	24950
3	23380	22840	22140	21940	21480	21170	20780	25820	26170	25400	25640	25170
4	23350	22830	22140	21900	21490	21150	20780	25790	26100	25440	25570	25220
5	23320	22820	22150	21890	21490	21090	20780	25930	26040	25480	25530	25190
6	23290	22800	22140	21890	21450	21030	20770	25930	26180	25560	25480	25170
7	23260	22790	22130	21850	21410	21100	20810	25950	26200	25530	25450	25140
8	23230	22760	22110	21810	21410	21140	20810	25920	26140	25500	25400	25110
9	23220	22790	22100	21790	21380	21070	20770	25900	26070	25480	25370	25110
10	23230	22700	22080	21790	21400	21060	20750	25890	26010	25480	25310	25040
11	23220	22700	22080	21780	21400	21060	20740	25870	25950	25450	25250	24960
12	23170	22630	22070	21770	21400	21070	20730	25930	25930	25420	25190	24930
13	23130	22550	22040	21770	21400	21010	20710	26010	25900	25400	25160	24900
14	23100	22520	22080	21750	21380	20990	20690	25950	25870	25390	25100	24870
15	23090	22500	22040	21740	21370	21010	20820	25920	25840	25370	25040	24840
16	23060	22480	22010	21720	21380	20950	20820	25870	25810	25400	24990	24790
17	22990	22460	22000	21710	21440	20930	20820	25810	25790	28330	24960	24760
18	22930	22430	21940	21700	21380	20930	21290	25780	25870	27350	24880	24730
19	22900	22500	21920	21700	21370	20930	26500	25740	25820	26820	24820	24730
20	22870	22420	21900	21700	21400	20900	26530	25730	25790	26520	24810	24720
21	22830	22380	21880	21680	21360	20870	26340	25710	25730	26310	24750	24660
22	22830	22320	21860	21670	21300	20860	26180	25700	25710	26180	24700	24630
23	22830	22290	21850	21660	21290	20820	26140	25760	25650	26100	24660	24600
24	22840	22270	22080	21670	21230	20990	26060	25740	25640	26060	24630	24570
25	22800	22250	22070	21670	21230	20980	25980	28260	25640	26010	24580	24540
26	22750	22180	22060	21630	21220	20980	25920	28260	25620	25960	24550	24520
27	22730	22150	22040	21600	21210	20930	25850	27300	25590	25920	24520	24520
28	22730	22140	22040	21590	21190	20940	25960	26790	25560	25870	24480	24570
29	22700	22250	22030	21570	21170	20940	25960	26500	25510	25840	24450	24520
30	22690	22220	22010	21560	---	20890	25930	26340	25480	25810	24480	24510
31	22680	---	22010	21560	---	20860	---	26580	---	25790	24480	---
(+)	731.55	731.23	731.08	730.75	730.46	730.23	733.74	734.15	733.45	733.65	732.79	732.81
(+)	-830	-460	-210	-450	-390	-310	+5070	+650	-1100	-1310	-1310	+30
(+)	220	188	208	208	191	206	221	230	240	263	332	250
MAX	23460	22860	22170	22000	21530	21170	26530	28260	26440	28330	25740	25220
MIN	22680	22140	21850	21560	21170	20820	20690	25700	25480	25360	24450	24510
CAL YR 1975.....	+ -4170			++ 2447			MAX 29770			MIN 21850		
WTR YR 1976.....	+ +1000			++ 2757			MAX 28330			MIN 20690		

+ Elevation, in feet, at end of month.

+ Change in contents, in acre-feet.

++ Diversions, in acre-feet, for municipal use by city of Cleburne.

BRAZOS RIVER BASIN

08091900 Lake Pat Cleburne near Cleburne, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (Ca) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
JUL 07...	1644	281	8.2	22.5	120	1	41	3.3	10
DATE	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
JUL 07...	.4	3.4	140	0	12	9.0	.3	7.1	155

08092000 Nolan River at Blum, Tex.

LOCATION.--Lat 32°09'02", long 97°24'10", Hill County, on right bank 60 ft (18 m) upstream from bridge on Farm Road 933, 0.6 mile (1.0 km) northwest of Blum, 2.8 miles (4.5 km) downstream from Mustang Creek, 3.0 miles (4.8 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.2 miles (5.1 km) upstream from Rock Creek, and 8.5 miles (13.7 km) upstream from mouth.

DRAINAGE AREA (revised).--282 mi² (730 km²).

PERIOD OF RECORD.--Discharge: July 1924 to September 1925, November 1947 to current year.

Water quality: Chemical and biochemical analyses: January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.48 ft (168.091 m) above mean sea level. July 29, 1924, to Sept. 30, 1925, and Nov. 14, 1947, to May 28, 1949, nonrecording gage at railway bridge (now abandoned) 0.5 mile (0.8 km) upstream at datum 5.00 ft (1.524 m) higher. May 29 to July 7, 1949, nonrecording gage at present site and datum then in use, 5.00 ft (1.524 m) higher than present datum.

AVERAGE DISCHARGE.--29 years (1924-25, 1948-76), 79.9 ft³/s (2.263 m³/s), 57,890 acre-ft/yr (71.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,110 ft³/s (230 m³/s) Apr. 19 (gage height, 11.55 ft or 3.520 m); minimum, 1.3 ft³/s (0.037 m³/s) Nov. 11.

Period of record: Maximum discharge, 62,200 ft³/s (1,760 m³/s) May 7, 1969 (gage height, 31.23 ft or 9.519 m), from rating curve extended above 22,200 ft³/s (629 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times.

Maximum stage since at least 1887, 35.0 ft (10.67 m) May 8, 1922, present site and datum, from information by local resident.

REMARKS.--Discharge records good. Since August 1964, flow from 100 mi² (259 km²) affected by storage in Lake Pat Cleburne (station 08091900) located 13 miles (21 km) upstream.

REVISIONS (WATER YEARS).--WSP 1312: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.3	4.1	4.1	3.1	4.1	5.1	39	224	9.4	6.7	740
2	1.2	7.6	4.6	3.9	2.9	4.1	5.2	30	111	9.8	6.1	266
3	1.7	17	4.1	3.6	2.6	4.3	5.1	22	79	10	5.3	160
4	4.1	4.1	3.8	3.6	2.9	4.4	28	21	54	66	5.0	126
5	3.1	2.4	4.2	3.9	4.1	4.3	6.9	61	49	17	4.8	24
6	1.4	2.2	3.9	3.9	3.6	3.2	5.4	103	156	380	4.6	13
7	2.2	2.6	3.4	4.1	4.4	4.1	5.8	58	179	35	4.3	8.5
8	2.4	2.6	3.2	4.4	4.4	13	15	92	79	20	4.3	7.0
9	2.9	2.4	3.6	4.7	3.6	14	8.0	41	58	16	4.1	6.4
10	2.1	2.1	3.5	4.1	4.1	7.4	5.5	31	43	15	3.8	5.9
11	2.4	1.3	3.5	3.9	3.9	5.3	4.9	71	36	15	3.8	5.5
12	2.4	1.4	3.5	3.3	3.6	4.6	4.4	77	28	15	3.3	5.2
13	2.2	1.7	3.5	3.1	4.4	4.1	4.2	134	25	14	3.1	5.0
14	2.2	1.4	3.5	3.1	4.4	4.5	5.4	59	21	13	3.1	4.6
15	2.4	2.2	3.7	3.3	4.1	4.1	5.2	39	18	14	3.3	4.5
16	2.2	2.4	3.2	3.6	5.0	3.8	14	29	19	41	3.3	4.1
17	1.9	3.2	3.3	3.6	6.1	3.3	12	27	18	1130	3.1	4.8
18	4.3	3.5	3.3	3.6	8.7	3.6	77	22	16	880	2.7	4.2
19	2.4	3.6	3.3	3.6	8.3	4.1	3260	18	23	333	2.3	4.4
20	3.3	3.4	3.3	3.6	6.1	4.1	457	17	21	179	2.2	5.0
21	3.3	3.1	3.3	3.9	4.7	3.5	190	16	16	101	2.4	5.4
22	3.4	4.1	3.3	6.4	5.4	3.6	115	15	14	70	2.4	5.0
23	4.7	3.8	3.1	4.7	5.4	3.6	44	25	13	51	2.4	4.0
24	4.1	3.8	7.8	3.9	4.7	25	67	24	20	33	2.5	4.8
25	4.1	3.3	47	3.3	4.4	19	54	1110	46	25	2.7	4.4
26	3.4	3.1	4.4	3.3	4.4	7.8	37	3120	21	21	2.6	5.1
27	3.3	3.1	6.4	3.9	4.7	5.5	28	1040	15	17	2.4	6.1
28	3.3	3.9	5.1	3.9	4.1	5.2	43	324	12	12	2.7	58
29	3.1	5.2	4.4	2.9	4.4	7.8	83	173	11	10	2.4	12
30	3.2	8.9	4.1	3.6	---	7.5	44	115	17	9.4	9.4	6.5
31	3.3	---	4.1	3.3	---	5.8	---	277	---	7.6	29	---
TOTAL	90.1	114.2	175.5	118.1	132.5	198.7	4679.1	7270	1439	3569.2	140.1	1515.4
MEAN	2.91	3.61	5.66	3.81	4.57	6.41	156	235	48.0	115	4.52	50.5
MAX	4.7	17	47	6.4	8.7	25	3260	3120	224	1130	29	740
MIN	1.7	1.3	3.1	2.9	2.6	3.2	4.2	15	10	7.6	2.2	4.0
AC-FT	179	227	348	234	263	394	9280	14420	2850	7080	278	3010
CAL YR 1975 TOTAL	43204.2					6720						
WTP YR 1976 TOTAL	19441.9					3260						
MEAN	53.1											
MAX												
MIN	1.3											
AC-FT	85700											

PEAK DISCHARGE (BASE, 5,000 FT³/S).--Apr. 19 (0700) 8,110 ft³/s (11.55 ft); May 26 (0100) 5,120 ft³/s (9.02 ft).

BRAZOS RIVER BASIN

08092000 Nolan River at Blum, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	
NOV. 25...	1200	3.7	645	8.2	7.5	11.4	95	1.5	200	
JAN. 29...	1650	3.0	670	8.5	8.5	18.8	184	4.5	160	
MAR. 24...	1000	11	493	8.1	15.0	7.0	69	>22	130	
MAY 13...	1015	145	376	7.3	20.5	7.8	86	4.1	120	
JULY 14...	1030	7.0	481	7.8	25.5	9.2	115	3.2	190	
SEP. 20...	1640	5.0	518	8.9	28.0	16.2	208	3.6	180	
DATE		NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (Ca) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 25...	0	68	6.4	62	1.9	7.0	275	0	52	
JAN. 29...	0	56	5.8	80	2.7	7.4	200	20	64	
MAR. 24...	0	44	5.0	47	1.8	21	206	0	38	
MAY 13...	8	42	3.6	20	.8	15	136	0	23	
JULY 14...	0	68	4.9	26	.8	3.8	234	0	29	
SEP. 20...	0	64	5.5	42	1.4	6.5	177	31	39	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
NOV. 25...	38	.6	7.0	377	.03	.01	.06	.55	2.9	
JAN. 29...	44	.9	6.1	383	4.7	.20	.11	3.5	4.2	
MAR. 24...	35	.8	7.8	300	.57	.21	1.0	6.3	4.0	
MAY 13...	31	.4	7.0	209	.42	.01	.03	1.5	.61	
JULY 14...	20	.4	8.2	276	.37	.01	.04	.33	.38	
SEP. 20...	32	.5	9.4	317	.62	.02	.05	1.7	.85	

08092500 Whitney Lake near Whitney, Tex.

LOCATION.--Lat 31°51'55", long 97°22'18", Bosque County, on State Highway 22, in intake structure of Whitney Dam on Brazos River, 2.4 miles (3.9 km) upstream from Coon Creek, 3.5 miles (5.6 km) upstream from Iron Creek, 7.4 miles (11.9 km) southwest of Whitney, and at mile 442.4 (712.0 km), revised.

DRAINAGE AREA (revised).--27,189 mi² (70,420 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: December 1951 to current year. Prior to October 1970, published as Whitney Reservoir.
Water quality: Chemical analyses: November 1961 to current year.

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

EXTREMES.--Current year: Maximum contents, 597,500 acre-ft (737 hm³) Oct. 1 (elevation, 531.72 ft or 162.068 m); minimum, 404,300 acre-ft (499 hm³) Apr. 3 (elevation, 521.58 ft or 158.978 m).
Period of record: Maximum contents, 1,980,000 acre-ft (2.44 km³) May 29, 1957 (elevation, 570.25 ft or 173.812 m); minimum daily since power pool elevation first reached in April 1954, 250,200 acre-ft (308 hm³) Nov. 1, 1956 (elevation, 509.52 ft or 155.302 m).

REMARKS.--The lake is formed by a concrete-gravity and rolled earthfill dam 17,695 ft (5,393 m) long, including spillway. The dam was completed in April 1951 and deliberate impoundment began Dec. 10, 1951. The concrete spillway is 680 ft (210 m) long and includes 17 tainter gates 38.0 by 40.0 ft (11.6 by 12.2 m) each. The outlet works are comprised of 16 gate-operated conduits that are 5.0 by 9.0 ft (1.5 by 2.7 m) each. The space between elevations 522.0 and 571.0 ft (159.11 and 174.04 m) is reserved for flood-control storage. At a maximum design elevation of 573.0 ft (174.65 m), the spillway is designed to discharge 684,000 ft³/s (19,400 m³/s). The capacity table is based on a survey made in April and May 1959. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	584.0	-
Design flood.....	573.0	2,100,000
Top of gates.....	571.0	1,999,500
Crest of spillway (sill of gates).....	533.0	627,100
Top of conservation pool (top of designated power storage).....	522.0	411,100
Lowest controlled outlets (invert).....	448.83	4,270

COOPERATION.--Records furnished by the Corps of Engineers and reviewed by the Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

520.0	379,100	530.0	559,200
525.0	461,000	535.0	675,500

CONTENTS. IN ACRE-FEET. WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597000	572400	543700	506600	466400	428400	406500	444500	532900	526300	532300	495300
2	596300	573700	543500	506400	466600	428400	405600	443800	537400	524600	531700	500300
3	595700	573700	542900	504400	465000	427100	404300	443500	539900	525900	526700	503400
4	595200	573300	542600	502300	466200	427100	405100	442800	540700	529600	525700	504000
5	595000	573000	542600	500500	464800	426600	405600	445000	540700	530400	524200	503800
6	594800	572400	543100	500500	459200	424900	405600	446100	542000	532300	523600	504200
7	594100	572600	542400	497800	456500	424900	406200	446100	543100	531500	522200	503800
8	592300	572100	542600	493800	456700	425400	406500	447000	541600	530000	520200	502900
9	590200	572400	542200	493100	456700	423800	406500	447800	542000	530000	518700	503100
10	587800	571700	541200	493600	456300	422300	406500	447800	542000	531100	519100	502300
11	586900	571700	540900	494400	457000	421800	406500	447500	542400	531500	518100	501100
12	586400	571700	541400	495000	457700	421800	406500	447200	541600	531100	515700	500300
13	586200	569700	540700	497100	458700	420300	406400	446800	540700	527900	514300	499900
14	585700	568800	540900	496900	458400	419400	406200	446100	540700	527300	512900	498800
15	585700	568800	538200	496500	458400	419500	406500	445600	540700	527300	511300	498000
16	584600	568000	536900	496700	458900	417900	406900	445100	540300	529000	510900	496700
17	584200	568000	533400	496300	459600	417400	410900	444600	539000	530600	510700	496100
18	583300	568000	530200	495500	456200	416600	414000	445000	539500	538800	510100	495900
19	582600	568400	527900	496700	455100	415100	424900	444100	540300	545000	509100	495900
20	581500	566200	527900	495200	451200	416100	431500	443500	539900	549900	508300	496500
21	580600	562700	527300	494400	451200	414600	436300	442600	538600	551400	507600	495500
22	580600	559200	525100	493300	446100	413300	438000	441800	535900	551400	505200	495200
23	580400	554900	521600	492900	443300	412400	439600	442300	532700	551400	503400	496700
24	580800	552700	523200	493600	441000	414500	441500	442100	533100	549300	503200	498600
25	579700	549700	520600	492300	438500	413700	442800	446200	535900	548400	502300	500100
26	578400	545600	518300	485800	436000	413000	443000	449800	534000	546900	499900	501700
27	577900	544800	515300	480900	435000	411100	442600	520600	531900	545200	497300	503600
28	578600	544600	514100	478000	431700	409900	444500	527700	530600	542600	494200	507700
29	576600	545200	510900	474600	429000	409300	445600	528200	528600	539900	492100	510100
30	574600	545400	508500	471900	---	408500	445300	527300	527700	536700	490400	511500
31	571900	---	505600	468700	---	407800	---	528800	---	534600	490100	---
(+)	530.58	529.36	527.42	525.44	523.10	521.80	524.08	528.57	528.52	528.85	526.61	527.72
(*)	-25600	-26500	-39800	-36900	-39700	-21200	+37500	+83500	-1100	+6900	-44500	+21400
MAX	597000	573700	543700	506600	466600	428400	445600	528800	543100	551400	532300	511500
MIN	571900	544600	505600	468700	429000	407800	404300	441800	527700	524600	490100	495200

CAL YR 1975..... * -102200
WTR YR 1976..... * -86000

MAX 692600
MAX 597000
MIN 505600
MIN 404300

+ Elevation, in feet, at end of month.
* Change in contents, in acre-feet.

08092500 Whitney Lake near Whitney, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
JAN 27...	1210	1780	8.1	9.0	10.8	93	340	210
MAY 09...	1020	1850	8.3	20.5	9.1	100	350	220
AUG 28...	1050	1720	8.1	28.5	6.2	81	310	200

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
JAN 27...	96	24	240	5.7	5.3	152	0	190	380
MAY 09...	100	24	250	5.8	5.5	156	0	200	410
AUG 28...	85	23	240	6.0	5.5	132	0	180	380

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
JAN 27...	.3	4.9	1020	.01	.03	.01	0	0
MAY 09...	.4	4.6	1070	.01	.00	.01	10	20
AUG 28...	.4	5.0	984	.01	.01	.00	10	10

08092600 Brazos River at Whitney Dam near Whitney, Tex.

LOCATION.--Lat 31°52'00", long 97°22'00", Hill County, immediately below Whitney Dam, 3.4 miles (5.5 km) upstream from gaging station near Whitney, 4.0 miles (6.4 km) upstream from Iron Creek, and 7.4 miles (11.9 km) southwest of Whitney.

DRAINAGE AREA.--26,190 mi² (67,830 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1947 to May 1948, October 1948 to current year. Water temperatures: October 1947 to May 1948, October 1948 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 1,900 micromhos Apr. 1; minimum daily, 1,670 micromhos Sept. 3. Maximum water temperatures, 27.0°C Sept. 3; minimum, 3.0°C on several days during January and February.

Period of record: Maximum daily specific conductance, 2,660 micromhos Oct. 1, 1948; minimum daily, 203 micromhos May 23, 1952. Maximum water temperatures, 33.5°C July 3, 1973; minimum, freezing point Jan. 28, 29, 1948.

REMARKS.--Records of discharge are given for gaging station 08093100. No appreciable inflow between dam and gaging station except during periods of heavy local rains.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 30...	0800	900	1740	8.2	20.5	320	200	90	23	240
NOV 29...	0800	100	1840	8.2	18.0	330	210	93	24	240
DEC 23...	0800	1700	1810	8.0	13.5	330	230	94	23	240
JAN 30...	0800	1400	1820	8.1	9.5	350	220	97	25	250
FEB 19...	0800	1500	1860	8.2	11.0	360	230	100	27	260
MAR 31...	0800	600	1880	8.2	--	340	210	97	24	230
APR 25...	0800	100	1870	8.1	18.5	350	230	100	25	260
MAY 15...	0815	550	1860	8.3	20.0	340	210	95	25	250
JUN 30...	0800	1300	1800	8.0	21.5	320	200	90	24	240
JUL 31...	0815	1760	1810	8.1	24.0	320	190	92	22	240
AUG 14...	0800	1000	1780	8.0	24.0	330	200	92	24	230
SEP 29...	0800	430	1740	8.2	24.5	330	210	92	24	220

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 30...	5.8	5.2	146	0	180	360	.5	5.5	976
NOV 29...	5.7	5.3	148	0	190	380	.4	5.4	1010
DEC 23...	5.8	5.8	124	0	200	390	.4	5.4	1020
JAN 30...	5.9	5.5	151	0	200	390	.5	5.3	1050
FEB 19...	6.0	5.5	154	0	200	400	.3	5.2	1070
MAR 31...	5.4	5.9	154	0	200	370	.3	4.8	1010
APR 25...	6.0	5.5	152	0	210	420	.4	4.5	1100
MAY 15...	5.9	5.5	156	0	190	400	.4	4.5	1050
JUN 30...	5.8	5.4	150	0	190	380	.3	5.5	1010
JUL 31...	5.8	5.5	153	0	200	390	.3	6.0	1030
AUG 14...	5.5	6.0	156	0	180	380	.4	6.2	996
SEP 29...	5.3	5.6	140	0	180	360	.2	5.0	956

08092600 Brazos River at Whitney Dam near Whitney, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	10888	1740	960	28300	370	10800	180	5300	320
NOV. 1975.....	7817	1790	1000	21100	380	7990	190	3960	330
DEC. 1975.....	19725	1830	1020	54500	390	20700	190	10100	330
JAN. 1976.....	26479	1820	1020	73000	390	27700	190	13600	330
FEB. 1976.....	27179	1850	1040	76300	390	28800	190	13900	340
MAR. 1976.....	16774	1860	1050	47500	400	17900	190	8590	340
APR. 1976.....	7089	1880	1060	20300	400	7670	190	3650	340
MAY 1976.....	18372	1870	1050	52100	400	19800	190	9460	340
JUNE 1976.....	27321	1820	1020	75200	390	28500	190	14000	330
JULY 1976.....	30560	1820	1020	83900	390	31800	190	15700	330
AUG. 1976.....	36068	1780	990	96400	380	36600	180	17700	330
SEPT 1976.....	12648	1740	960	32900	370	12600	180	6140	320
TOTAL	240920	**	**	661000	**	251000	**	122000	**
WTD.AVG.	658.25	1820	1000	**	390	**	190	**	330

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	1770	1810	1810	1850	1850	1900	1870	1830	1830	1800	1750
2	1710	1760	1810	1810	1850	1850	1880	1870	1830	1830	1800	1720
3	1710	1760	1810	1810	1850	1850	1880	1870	1830	1830	1770	1670
4	1710	1760	1810	1810	1850	1850	1880	1870	1830	1830	1800	1750
5	1710	1760	1810	1810	1840	1850	1880	1890	1830	1810	1800	1750
6	1710	1760	1810	1810	1840	1850	1880	1860	1850	1810	1800	1750
7	1710	1770	1810	1810	1840	1850	1880	1860	1820	1810	1800	1750
8	1700	1770	1810	1810	1840	1770	1880	1860	1820	1830	1770	1750
9	1710	1760	1810	1810	1840	1870	1880	1860	1820	1810	1780	1730
10	1740	1790	1810	1800	1840	1860	1880	1890	1820	1830	1780	1750
11	1740	1770	1810	1810	1840	1850	1870	1860	1830	1810	1780	1750
12	1750	1780	1820	1820	1850	1860	1880	1860	1830	1810	1780	1750
13	1770	1780	1820	1820	1850	1860	1880	1860	1830	1810	1780	1750
14	1820	1780	1820	1820	1850	1860	1880	1860	1830	1810	1780	1740
15	1750	1780	1820	1820	1850	1860	1880	1860	1830	1810	1780	1740
16	1750	1780	1820	1820	1860	1870	1880	1860	1830	1810	1780	1740
17	1750	1780	1820	1820	1820	1870	1880	1860	1820	1810	1780	1740
18	1750	1790	1820	1820	1850	1870	1880	1860	1820	1810	1780	1740
19	1750	1790	1820	1820	1850	1860	1880	1870	1820	1810	1770	1750
20	1750	1800	1830	1830	1860	1880	1880	1870	1820	1810	1780	1740
21	1750	1800	1830	1830	1850	1880	1880	1870	1820	1810	1780	1750
22	1750	1800	1840	1830	1850	1880	1880	1870	1820	1810	1780	1750
23	1750	1790	1840	1830	1850	1880	1880	1870	1820	1810	1780	1730
24	1750	1790	1840	1830	1850	1870	1880	1870	1820	1820	1770	1730
25	1750	1790	1840	1820	1850	1860	1880	1870	1800	1810	1770	1730
26	1750	1800	1820	1820	1850	1860	1880	1870	1800	1820	1770	1730
27	1750	1800	1820	1820	1860	1880	1880	1870	1800	1820	1750	1720
28	1750	1800	1820	1830	1860	1880	1880	1870	1800	1820	1750	1730
29	1750	1800	1830	1830	1860	1860	1870	1870	1800	1820	1760	1730
30	1750	1810	1830	1830	---	1880	1870	1870	1800	1820	1760	1740
31	1740	---	1830	1830	---	1880	---	1850	---	1820	1760	---
MONTH	1740	1780	1820	1820	1850	1860	1880	1870	1820	1820	1780	1740

08092600 Brazos River at Whitney Dam near Whitney, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.5	25.5	16.5	11.0	8.5	9.5	15.5	---	20.5	21.5	24.0	24.5
2	24.5	25.0	16.5	14.5	8.5	10.0	15.5	---	20.5	21.5	24.0	24.5
3	24.0	25.0	16.5	11.0	8.5	10.0	15.5	14.5	20.5	21.5	24.0	27.0
4	---	25.0	16.5	11.0	8.5	10.5	15.5	14.5	20.5	21.5	24.0	26.5
5	24.5	25.0	16.5	11.0	8.5	14.5	16.0	14.5	21.0	21.5	24.0	26.5
6	24.5	25.0	13.5	10.0	8.5	---	16.0	14.0	21.0	21.5	24.0	26.5
7	24.5	25.0	13.5	9.0	8.0	---	16.0	14.5	21.0	21.5	24.0	25.5
8	24.5	21.0	13.0	9.0	8.5	---	16.0	20.0	22.0	21.5	24.0	24.5
9	24.5	21.0	13.0	9.0	---	14.0	16.0	20.0	21.0	21.5	24.0	24.5
10	24.5	25.5	14.5	8.0	8.5	---	16.0	20.0	21.0	23.5	24.0	24.5
11	20.5	20.0	14.5	8.0	8.5	14.0	15.5	---	21.0	23.5	24.0	24.5
12	20.5	21.0	14.5	8.0	8.5	14.0	16.5	20.0	21.0	21.5	24.0	24.5
13	20.5	20.0	14.5	8.0	14.0	14.0	16.0	20.0	21.0	21.5	24.0	24.5
14	24.5	20.0	14.5	8.0	8.5	14.0	16.0	20.0	21.5	21.5	24.0	24.5
15	22.0	20.0	14.5	8.0	8.5	14.0	16.0	20.0	21.5	22.0	---	24.5
16	23.5	20.0	14.5	8.5	8.5	13.5	16.5	20.0	21.5	21.5	24.0	24.5
17	24.5	20.0	14.5	8.0	8.5	---	16.5	20.0	21.5	23.5	24.0	24.5
18	---	19.0	14.5	8.0	8.5	13.5	16.5	20.0	21.5	23.5	24.0	24.5
19	24.5	19.0	14.5	8.0	8.5	13.5	16.0	20.5	21.5	24.5	24.0	24.5
20	---	18.0	12.0	8.0	8.5	14.0	16.5	20.0	21.5	23.5	24.0	24.5
21	22.0	18.0	13.0	9.0	8.5	14.0	16.0	20.0	21.5	23.5	24.0	24.5
22	22.0	16.5	13.5	8.0	8.0	14.0	16.0	20.0	21.5	23.5	---	24.5
23	21.0	16.5	13.5	8.5	10.0	---	18.5	---	21.5	24.0	24.0	24.5
24	21.0	15.5	13.5	8.0	10.0	---	18.5	20.0	21.5	24.0	24.0	24.5
25	21.0	15.5	11.0	8.5	11.0	14.0	18.5	20.5	21.5	24.0	24.5	24.5
26	21.0	18.0	11.0	9.0	11.0	14.0	18.5	20.0	21.5	24.0	24.5	24.5
27	21.0	18.0	11.0	8.5	11.0	14.0	18.5	20.0	21.5	24.0	24.5	25.5
28	21.0	18.0	11.0	8.5	11.0	14.0	18.5	20.5	21.5	24.0	---	24.5
29	20.5	18.0	14.5	8.5	11.0	---	18.5	20.5	21.5	24.0	24.5	24.5
30	20.5	18.0	14.0	9.5	---	---	18.5	20.5	21.5	24.0	---	24.5
31	20.0	---	14.5	8.5	---	---	---	20.5	---	24.0	24.5	---
MONTH	22.5	20.5	14.0	9.0	9.0	---	16.5	20.0	21.5	23.0	24.0	25.0

08093100 Brazos River near Aquilla, Tex.

LOCATION.--Lat 31°48'44", long 97°17'51", Bosque County, on right bank at downstream side of bridge on Farm Road 2114, 2.0 miles (3.2 km) downstream from Tener Creek, 4.9 miles (7.9 km) downstream from Iron Creek, 5.4 miles (8.7 km) southwest of Aquilla, 9.0 miles (14.5 km) downstream from Whitney Dam, and at mile 434.0 (698.3 km).

DRAINAGE AREA (revised).--27,244 mi² (70,560 km²), approximately, of which 9,570 mi² (24,790 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1974, published as Brazos River near Whitney.

GAGE.--Water-stage recorder. Datum of gage is 407.29 ft (124.142 m) above mean sea level. Prior to Oct. 1, 1948, nonrecording gage at site 13.9 miles (22.4 km) upstream at datum 27.77 ft (8.464 m) higher. Oct. 1, 1948, to Feb. 12, 1975, at site 5.6 miles (9.0 km) upstream at datum 13.10 ft (3.993 m) higher.

AVERAGE DISCHARGE.--13 years (1938-51) prior to regulation by Whitney Lake, 1,802 ft³/s (51.03 m³/s), 1,306,000 acre-ft/yr (1.61 hm³/yr); 25 years (1951-76), regulated, unadjusted, 1,472 ft³/s (41.69 m³/s), 1,066,000 acre-ft/yr (1.31 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) July 6 (gage height, 15.51 ft or 4.727 m); minimum daily, 28 ft³/s (0.79 m³/s) Sept. 27.

Period of record: Maximum discharge, 71,800 ft³/s (2,030 m³/s) May 18, 1949 (gage height, 31.03 ft or 9.458 m); minimum daily, 0.4 ft³/s (0.011 m³/s) May 9, 1953. Maximum discharge since construction of Whitney Dam in 1951, 58,200 ft³/s (1,650 m³/s) May 28, 1957 (gage height, 27.34 ft or 8.333 m), site and datum then in use.

Maximum stage since at least 1853, 45 ft (13.7 m) May 9, 1922, at site and datum in use prior to Feb. 12, 1975, from information by local residents.

REMARKS.--Records good. Most of flow is release from storage in Whitney Lake (station 08092500). Brazos River at Whitney Dam (station 08092600) uses the discharge record at this station for publication of water-quality records.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	272	335	429	1510	474	610	577	650	719	1690	449
2	150	114	260	104	283	403	560	567	616	550	778	313
3	115	109	165	512	418	607	535	547	609	690	3440	449
4	110	105	50	692	62	671	500	574	567	3100	788	1720
5	110	107	90	639	1090	639	515	686	504	506	741	1080
6	105	111	85	486	2720	645	135	625	548	2670	802	317
7	100	112	87	1550	1520	680	95	480	359	757	826	460
8	130	105	85	2500	393	530	85	630	1400	809	1290	1090
9	570	114	86	357	227	520	90	589	369	445	1430	491
10	1400	108	84	108	82	535	90	601	313	70	547	66
11	394	106	127	114	254	550	85	608	440	82	398	119
12	147	105	110	111	123	545	90	591	508	276	1060	520
13	103	102	84	114	115	540	85	605	962	1960	1120	557
14	119	104	89	215	115	545	85	599	540	547	956	1040
15	542	101	260	162	122	555	87	593	697	504	1110	982
16	305	97	350	249	123	540	111	585	522	420	768	1140
17	94	100	760	114	628	200	95	568	1080	224	715	290
18	108	102	1400	57	1690	125	1030	561	469	569	745	62
19	105	100	1050	121	1570	115	385	566	544	541	873	55
20	306	615	420	437	1490	470	129	574	553	655	1030	52
21	399	510	218	664	1410	600	105	564	581	682	814	47
22	393	350	1220	554	1470	710	100	572	1230	820	1660	45
23	307	1050	1850	191	1430	800	169	554	1800	934	1450	39
24	830	900	1300	62	1390	135	162	460	1390	1290	854	38
25	58	1150	1200	967	1570	115	105	466	3050	1550	393	35
26	102	675	1330	3880	1640	470	102	502	1450	1210	1190	32
27	343	68	1210	3420	610	1300	102	70	1460	1260	1910	28
28	72	105	1510	1940	1640	750	111	181	1240	1490	1900	301
29	954	112	1630	2200	1480	610	135	977	1570	1930	1620	431
30	817	108	1090	1360	---	760	601	1180	1300	1540	1440	430
31	1100	---	1190	2170	---	635	---	1120	---	1760	1730	---
TOTAL	10888	7817	19725	26479	27179	16774	7089	18372	27321	30560	36068	12648
MEAN	351	261	636	854	937	541	236	593	911	986	1163	422
MAX	1400	1150	1850	3880	2720	1300	1030	1180	3050	3100	3440	1720
MIN	58	68	50	57	62	115	85	70	313	70	393	28
AC-FT	21600	15510	39120	52520	53910	33270	14060	36440	54190	60620	71540	25090
CAL YR 1975 TOTAL	562452			1541	MAX 13600	MIN 32	AC-FT 1116000					
WTR YR 1976 TOTAL	240920			MEAN 658	MAX 3880	MIN 28	AC-FT 477900					

08093400 Cobb Creek near Abbott, Tex.

LOCATION.--Lat 31°55'11", long 97°05'57", Hill County, at downstream side of bridge on service road on downstream side of Interstate Highway 35, 1.5 miles (2.4 km) downstream from Missouri, Kansas, and Texas Railroad Co. bridge, 2.8 miles (4.5 km) northwest of Abbott, and 9.0 miles (14.5 km) upstream from mouth.

DRAINAGE AREA (revised).--12.4 mi² (32.1 km²).

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder with low-water concrete control since Aug. 1, 1975. Datum of gage is 575.00 ft (175.260 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 8.28 ft³/s (0.234 m³/s), 9.07 in/yr (230 mm/yr), 6,000 acre-ft/yr (7.40 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,840 ft³/s (80.4 m³/s) June 24 (gage height, 9.56 ft or 2.914 m); no flow for many days.

Period of record: Maximum discharge, 2,840 ft³/s (80.4 m³/s) June 24, 1976 (gage height, 9.56 ft or 2.914 m); maximum gage height, 10.50 ft (3.200 m) May 9, 1968; no flow at times each year.

Maximum stage since at least 1932, 11.1 ft (3.38 m), date unknown, from information by State Highway Department.

REMARKS.--Records good. No known diversion or regulation above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.71	0	.07	.07	.08	0	.52	1.4	.32	.10	.08
2	0	5.9	0	.07	.07	.07	0	.15	.08	.20	.07	.03
3	0	8.3	0	.02	.06	.07	0	.06	.03	138	.07	14
4	0	6.8	0	.03	.07	.06	.11	.02	.01	731	.06	.46
5	0	5.4	0	.07	.08	.04	.13	15	0	99	.05	.13
6	0	4.2	0	.09	.08	.03	.11	19	107	563	.05	.09
7	0	3.3	0	.07	.06	.10	3.4	4.3	6.4	11	.03	.06
8	0	2.4	0	.06	.08	.66	.36	3.1	.40	5.0	.01	.05
9	0	1.3	0	.07	.09	.11	.11	.84	.12	3.0	0	.03
10	0	.37	0	.12	.10	.07	.05	.58	.05	2.2	0	.01
11	0	.04	0	.09	.10	.07	.03	.23	.02	2.5	0	0
12	0	0	0	.07	.10	.06	.03	.22	0	1.6	0	0
13	0	0	0	.09	.10	.03	.02	.52	0	.84	0	0
14	0	0	0	.06	.10	.03	.02	.15	0	.84	0	0
15	0	0	0	.05	.10	.04	.29	.09	0	11	0	0
16	0	0	0	.06	.10	.02	12	.02	0	52	0	0
17	0	0	0	.05	.11	0	.52	0	0	14	0	0
18	0	0	0	.05	.10	0	81	0	0	6.2	0	0
19	0	0	0	.07	.07	.01	56	0	0	2.2	0	0
20	0	0	0	.07	.08	.01	11	0	0	.97	0	.63
21	0	0	0	.06	.13	0	.60	0	0	.63	0	.06
22	.03	0	0	.07	.06	0	.18	0	0	.46	0	0
23	8.7	0	0	.08	.04	0	.93	1.2	0	.32	0	0
24	8.7	0	2.2	.08	.06	25	.41	0	234	.22	0	0
25	11	0	.19	.09	.06	2.4	.09	34	390	.32	0	0
26	9.3	0	.10	.05	.07	.22	.04	52	6.2	.22	0	7.6
27	7.4	0	.09	.02	.08	.06	.03	.42	2.7	.19	0	.81
28	6.0	0	.09	.05	.09	.03	20	.22	1.4	.16	0	2.1
29	4.4	0	.06	.07	.09	.03	36	.12	.73	.13	0	.63
30	2.8	0	.06	.08	---	0	2.2	.08	.46	.13	0	.46
31	1.7	---	.09	.08	---	0	---	9.3	---	.10	0	---
TOTAL	60.03	38.72	2.88	2.06	2.40	29.30	225.66	142.14	751.00	1647.75	.44	27.23
MEAN	1.94	1.29	.093	.067	.083	.95	7.52	4.59	25.0	53.2	.014	.91
MAX	11	8.3	2.2	.12	.13	25	81	52	390	731	.10	14
MIN	0	0	0	.02	.04	0	0	0	0	.10	0	0
CFSM	.16	.10	.007	.005	.006	.08	.61	.37	2.02	4.29	.001	.07
IN.	.18	.12	.009	.006	.007	.09	.68	.43	2.25	4.94	.001	.08
AC-FT	119	77	5.7	4.1	4.8	58	448	282	1490	3270	.9	54
CAL YR 1975	TOTAL	3237.81	MEAN	8.87	MAX	481	MIN	0	CFSM	.72	IN	9.71
WTR YR 1976	TOTAL	2929.61	MEAN	8.00	MAX	731	MIN	0	CFSM	.65	IN	8.79
									AC-FT	6420		
									AC-FT	5810		

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-6	1715	6.64	996	7-5	1900	6.43	898
6-24	2330	9.56	2,840	7-6	0700	9.20	2,570
7-3	2245	7.54	1,480	7-16	1815	6.12	764
7-4	0245	9.43	2,740				

08093500 Aquilla Creek near Aquilla, Tex.

LOCATION (revised).--Lat 31°50'40", long 97°12'04", Hill County, on downstream side of highway embankment near left end of bridge on Farm Road 1304, 1.0 mile (1.6 km) southeast of Aquilla, 1.2 miles (1.9 km) downstream from Cobb Creek, and 18.2 miles (29.3 km).

DRAINAGE AREA (revised).--308 mi² (798 km²).

PERIOD OF RECORD.--Discharge: December 1938 to current year. Records of daily discharge for December 1924 to August 1925, published in WSP 608, are unreliable.

Water quality: Chemical analyses: May 1965 to June 1966, October 1967 to current year. Chemical and biochemical analyses: January 1968 to current year. Water temperatures: May 1965 to June 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 451.48 ft (137.611 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--37 years (1939-76), 122 ft³/s (3.455 m³/s), 5.38 in/yr (137 mm/yr), 88,390 acre-ft/yr (109 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 27,200 ft³/s (770 m³/s) July 4 (gage height, 29.6 ft or 9.02 m, from floodmark); minimum daily, 0.28 ft³/s (0.008 m³/s) Nov. 12.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) May 10, 1968 (gage height, 30.32 ft or 9.242 m), from rating curve extended above 25,900 ft³/s (733 m³/s) on basis of slope-area measurement of 74,200 ft³/s (2,100 m³/s), adjusted to gage site; no flow at times.

Historic: Flood of Aug. 31, 1887, reached a stage of 34 ft (10.4 m), from information by local resident. Flood of Sept. 27, 1936, was the highest since 1887 and reached a stage of 33 ft (10.1 m), from floodmark; discharge 84,500 ft³/s (2,390 m³/s) by slope-area measurement at site 9 miles (14 km) downstream and 74,200 ft³/s (2,100 m³/s) adjusted to gage site.

Water quality: Current year: Maximum daily specific conductance, 3,080 micromhos Dec. 31; minimum daily, 191 micromhos July 6. Maximum water temperatures, 28.0°C Aug. 1, 2, 6, 7, 9; minimum, freezing point Jan. 8.

Period of record: Maximum daily specific conductance, 3,080 micromhos Dec. 31, 1975; minimum daily, 182 micromhos Oct. 31, 1974. Maximum water temperatures, 30.0°C on several days during summer months; minimum, freezing point Jan. 8, 1976.

REMARKS.--Discharge records fair. Records furnished by the city of Hillsboro show that 1,140 acre-ft (1.41 hm³) of sewage effluent was discharged into a tributary above gage during year.

REVISIONS (WATER YEARS).--WSP 1712: 1944(M), 1957-58. WSP 1922: Drainage area. See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.44	1.3	2.0	2.4	2.6	4.8	4.6	134	11	3.5	4.8
2	1.4	.49	.42	2.0	2.5	2.5	4.8	2.6	22	9.5	3.0	67
3	1.4	1.3	.78	1.9	2.5	2.2	4.6	1.4	15	156	2.5	114
4	1.4	.44	.49	1.9	2.4	2.3	31.6	14	12	13100	2.1	21
5	1.4	.39	1.0	2.0	2.4	2.9	125	131	17	2120	2.0	4.3
6	1.4	.39	.85	2.0	2.5	2.7	12	121.0	174	6860	1.9	3.7
7	1.4	.35	.45	1.9	2.5	2.7	101	251	339	504	1.9	2.8
8	1.4	.35	.72	1.9	2.5	4.0	101	150	147	136	1.8	2.6
9	1.0	.31	.42	2.0	2.5	7.9	28	84	30	76	1.6	2.2
10	2.4	.31	.78	2.0	2.6	4.1	9.2	4.0	12	51	1.5	1.8
11	2.2	.44	.72	2.0	2.7	3.2	6.9	31	10	46	1.0	1.6
12	1.9	.28	.66	2.1	2.7	3.8	6.1	44	8.4	42	1.5	1.4
13	1.4	.31	.85	2.1	2.6	4.4	5.6	223	7.6	33	1.1	1.3
14	1.7	.39	.78	2.1	2.6	4.6	5.0	77	6.5	26	1.0	1.1
15	1.6	.35	.54	2.1	2.7	6.8	4.8	29	5.6	35	.97	1.0
16	1.5	.44	.78	2.2	2.9	4.3	91	19	5.1	280	.92	1.0
17	1.4	.54	.60	2.2	3.0	4.3	24	1.4	5.6	219	2.6	.98
18	1.3	.54	.42	2.2	3.0	5.1	2950	10	5.3	73	4.2	.94
19	1.2	.39	1.1	2.2	3.2	5.3	2770	4.3	5.1	32	4.5	.90
20	1.2	.44	1.2	2.4	3.0	5.1	2250	7.2	4.5	19	5.1	8.3
21	1.1	.85	1.2	2.5	3.2	4.9	183	6.6	4.2	15	6.9	2.4
22	1.1	1.0	1.2	2.6	3.4	6.3	54	6.6	3.6	13	5.4	1.7
23	1.0	1.1	1.3	2.7	3.0	6.2	129	114	3.2	12	3.2	1.6
24	.45	.85	1.4	2.6	3.4	105	75	74	318	10	4.2	1.8
25	.48	1.2	35	2.1	2.9	176	25	786	5840	40	6.0	2.0
26	.72	1.2	4.4	1.9	2.7	20	16	4930	220	27	8.2	9.5
27	.66	1.2	3.6	1.9	2.7	9.5	13	1620	36	15	8.0	22
28	.66	1.4	2.5	2.1	2.7	6.8	58	80	21	8.8	6.2	240
29	.66	1.7	2.2	2.2	2.7	5.5	1020	37	16	6.7	6.9	11
30	.54	.85	2.1	2.2	---	5.1	179	24	12	5.3	4.3	5.5
31	.49	---	2.1	2.4	---	4.4	---	120	---	4.2	3.6	---
TOTAL	43.00	20.24	73.16	66.4	80.6	430.9	10565.8	10233.7	7440.2	23985.5	107.59	540.22
MEAN	1.39	.67	2.36	2.14	2.78	13.9	352	336	248	774	3.47	18.0
MAX	2.4	1.7	35	2.7	3.6	176	2950	4930	5840	13100	8.2	240
MIN	.49	.28	.49	1.9	2.4	2.2	4.6	6.6	3.2	4.2	.92	.90
CFSM	.004	.002	.007	.006	.004	.05	1.14	1.07	.81	2.51	.01	.06
IN	.005	.002	.009	.008	.010	.05	1.28	1.24	.90	2.90	.01	.07
AC-FT	85	40	145	132	160	855	20960	20300	14760	47580	213	1070

CAL YR 1975 TOTAL 70176.85 MEAN 192 MAX 9770 MIN .28 CFSM .62 IN 8.48 AC-FT 139200
WTR YR 1976 TOTAL 53587.31 MEAN 146 MAX 13100 MIN .28 CFSM .47 IN 6.47 AC-FT 106300

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-26	1815	26.92	6,320	7-4	1200	29.6	27,200
6-25	0645	28.06	9,660	7-6	1245	28.61	13,200

a From floodmark.

08093500 Aquilla Creek near Aquilla, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PCT SATU- RATION	HIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT									
11...	1630	1.8	1240	8.0	23.0	--	--	--	290
NOV									
25...	1245	1.5	1660	7.5	8.5	3.2	27	2.8	250
DEC									
30...	0920	2.1	1380	7.8	8.0	--	--	--	340
JAN									
29...	1500	2.2	1690	7.5	8.5	3.6	31	19	340
FEB									
25...	0905	2.9	1600	8.2	17.0	--	--	--	290
MAR									
24...	0630	6.8	1360	7.9	17.0	10.1	104	6.6	270
APR									
14...	1225	4.8	870	7.8	23.0	--	--	--	270
MAY									
13...	0800	352	706	7.4	19.5	7.6	82	3.1	260
JUN									
23...	0930	3.4	1230	8.3	25.0	--	--	--	410
JUL									
14...	0930	25	864	7.6	26.0	6.8	85	1.6	360
AUG									
12...	0900	1.3	1170	8.2	27.0	--	--	--	390
SEP									
20...	1520	5.6	1200	7.4	25.0	7.2	89	2.9	370

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT									
11...	0	100	10	170	4.3	5.5	378	0	260
NOV									
25...	0	86	8.9	280	7.7	7.5	592	0	260
DEC									
30...	87	120	8.7	180	4.3	7.5	303	0	370
JAN									
29...	0	120	9.7	260	6.1	6.5	516	0	360
FEB									
25...	0	100	8.8	260	6.7	6.0	492	0	320
MAR									
24...	0	95	7.2	220	5.9	5.5	436	0	250
APR									
14...	68	99	6.3	80	2.1	4.1	250	0	180
MAY									
13...	96	97	4.7	53	1.4	3.5	202	0	140
JUN									
23...	110	140	14	120	2.6	3.7	365	0	250
JUL									
14...	110	130	7.7	53	1.2	3.2	296	0	150
AUG									
12...	120	130	15	110	2.4	3.4	322	0	280
SEP									
20...	62	130	11	130	2.9	4.5	376	0	250

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT									
11...	55	.9	8.7	796	--	--	--	--	--
NOV									
25...	80	1.6	16	1030	.37	.32	2.9	2.0	5.4
DEC									
30...	61	1.0	11	909	--	--	--	--	--
JAN									
29...	74	1.4	10	1100	.51	.09	4.5	5.5	4.5
FEB									
25...	75	1.5	14	1030	--	--	--	--	--
MAR									
24...	72	1.5	1.5	868	1.2	.08	.11	1.5	3.5
APR									
14...	35	.8	13	541	--	--	--	--	--
MAY									
13...	33	.6	9.0	440	1.5	.06	.07	.93	.53
JUN									
23...	64	.7	13	785	--	--	--	--	--
JUL									
14...	35	.5	13	538	.37	.01	.01	.50	.07
AUG									
12...	59	.6	10	767	--	--	--	--	--
SEP									
20...	62	.8	11	785	1.7	.03	.02	1.3	.28

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	42	1380	890	103	73	8.4	300	35	420
NOV. 1975.....	20.24	1710	1110	61	94	4.8	380	21	520
DEC. 1975.....	73.16	1330	860	169	70	14	290	57	410
JAN. 1976.....	66.4	1840	1190	214	100	18	410	74	550
FEB. 1976.....	77.9	1530	990	207	82	17	340	71	460
MAR. 1976.....	430.9	1190	760	888	60	70	250	293	370
APR. 1976.....	10565.79	316	190	5510	9	265	45	1280	130
MAY 1976.....	10233.7	366	230	6240	11	294	53	1460	150
JUNE 1976.....	7440.2	343	210	4190	10	198	49	979	140
JULY 1976.....	23985.49	297	180	11600	8	497	39	2530	120
AUG. 1976.....	107.59	1250	810	234	65	19	270	78	390
SEPT 1976.....	540.22	446	280	406	16	23	72	105	170
TOTAL	53584.58	**	**	29800	**	1430	**	6980	**
WTD.AVG.	140.81	337	210	**	10	**	48	**	140

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	946	1820	1710	3040	1630	1610	1120	550	636	699	940	1280
2	970	1810	1740	2990	1620	1620	1080	675	826	727	987	580
3	1090	1730	1750	2400	1620	1640	1070	740	835	600	1040	276
4	1100	1750	1790	2440	1580	1540	325	854	848	300	939	300
5	1100	1790	1730	2460	1620	1500	449	650	892	325	1080	475
6	1120	1780	1740	2230	1570	1540	764	440	378	191	1070	612
7	1140	1790	1750	2140	1560	1570	550	479	600	467	1180	631
8	1150	1800	1760	2050	1580	1520	750	510	521	605	1160	675
9	1170	1810	1730	1920	1560	1140	625	600	531	625	1180	724
10	1180	1800	1700	1840	1550	1020	588	696	558	659	877	771
11	1300	1790	1680	1800	1440	1000	650	740	603	685	1090	895
12	1280	1800	1640	1770	1410	1070	719	657	764	730	1170	960
13	1340	1780	1610	1630	1420	1210	706	450	871	713	1130	1040
14	1420	1770	1620	1690	1430	1300	902	417	903	772	1210	1060
15	1490	1800	1660	1710	1450	1350	906	650	892	794	1240	1030
16	1520	1780	1630	1690	1460	1340	857	690	961	693	1260	996
17	1750	1800	1670	1570	1420	1330	594	721	1070	750	1180	1060
18	1720	1770	1630	1580	1450	1300	200	673	1010	721	1150	1020
19	1710	1760	1640	1590	1400	1290	250	796	1030	690	1210	1070
20	1740	1740	1650	1630	1480	1340	274	825	1160	670	1320	1120
21	1780	1630	1660	1650	1580	1400	533	864	1210	685	1360	1400
22	1750	1660	1670	1640	1600	1390	688	880	1220	703	1350	1450
23	1730	1730	1690	1630	1590	1370	742	450	1230	750	1370	1490
24	1770	1650	1670	1650	1570	1210	765	541	850	827	1260	1520
25	1760	1630	1625	1600	1550	1150	800	425	269	600	1400	1550
26	1420	1620	1060	1560	1530	919	831	280	360	637	1290	1540
27	1810	1660	1240	1550	1550	908	936	327	541	938	1310	850
28	1800	1680	1390	1530	1520	945	800	600	623	776	1350	299
29	1810	1650	1980	1610	1570	983	502	780	703	813	1340	515
30	1820	1750	2570	1530	---	1120	498	902	743	869	1400	541
31	1830	---	3080	1610	---	1180	---	650	---	919	1390	---
MONTH	1480	1740	1700	1860	1530	1280	684	636	788	675	1200	924

08093500 Aquilla Creek near Aquilla, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	22.0	13.0	8.0	---	14.0	15.0	---	22.0	26.0	28.0	24.0
2	19.0	---	12.0	7.0	8.0	14.0	16.0	---	23.0	26.0	28.0	24.0
3	19.0	19.0	12.0	7.0	9.0	14.0	18.0	17.0	23.0	26.0	26.0	24.0
4	18.0	19.0	12.0	5.0	10.0	14.0	---	14.0	23.0	24.0	27.0	---
5	18.0	20.0	12.0	5.0	12.0	---	16.0	14.0	23.0	25.0	27.0	---
6	18.0	19.0	13.0	7.0	8.0	---	17.0	18.0	23.0	23.0	28.0	25.0
7	18.0	20.0	---	7.0	8.0	---	16.0	19.0	23.0	25.0	28.0	25.0
8	19.0	20.0	12.0	0.0	8.0	13.0	19.0	---	24.0	26.0	---	25.0
9	19.0	---	11.0	1.0	11.0	12.0	17.0	---	24.0	26.0	28.0	25.0
10	21.0	18.0	12.0	5.0	12.0	12.0	18.0	20.0	25.0	24.0	27.0	24.0
11	23.0	18.0	14.0	---	13.0	14.0	---	21.0	24.0	---	26.0	---
12	23.0	16.0	14.0	7.0	13.0	15.0	20.0	21.0	25.0	24.0	27.0	---
13	23.0	14.0	14.0	8.0	14.0	15.0	20.0	22.0	25.0	25.0	27.0	25.0
14	23.0	14.0	---	8.0	16.0	15.0	20.0	20.0	25.0	26.0	26.0	26.0
15	24.0	15.0	14.0	9.0	---	15.0	20.0	---	25.0	25.0	---	26.0
16	20.0	---	13.0	10.0	17.0	15.0	19.0	---	26.0	25.0	27.0	26.0
17	18.0	16.0	12.0	10.0	17.0	13.0	19.0	20.0	26.0	25.0	26.0	26.0
18	17.0	16.0	10.0	---	17.0	14.0	18.0	18.0	24.0	25.0	25.0	25.0
19	19.0	16.0	8.0	9.0	17.0	16.0	18.0	20.0	24.0	---	25.0	---
20	18.0	15.0	8.0	9.0	16.0	19.0	19.0	19.0	23.0	24.0	26.0	24.0
21	18.0	12.0	---	7.0	15.0	---	20.0	20.0	24.0	26.0	26.0	23.0
22	19.0	12.0	8.0	8.0	---	18.0	20.0	---	25.0	25.0	---	22.0
23	19.0	12.0	9.0	8.0	13.0	18.0	20.0	---	25.0	26.0	25.0	24.0
24	21.0	10.0	---	9.0	12.0	16.0	21.0	21.0	25.0	27.0	25.0	24.0
25	14.0	10.0	8.0	---	12.0	17.0	---	23.0	24.0	---	25.0	25.0
26	16.0	9.0	---	7.0	14.0	17.0	18.0	20.0	---	25.0	25.0	25.0
27	16.0	10.0	---	7.0	16.0	17.0	18.0	21.0	25.0	25.0	24.0	---
28	18.0	11.0	9.0	7.0	17.0	---	20.0	20.0	26.0	25.0	24.0	20.0
29	18.0	12.0	8.0	6.0	---	16.0	16.0	---	26.0	27.0	---	21.0
30	20.0	---	8.0	6.0	---	16.0	16.0	22.0	27.0	27.0	25.0	20.0
31	20.0	---	10.0	7.0	---	15.0	---	22.0	---	27.0	25.0	---
MONTH	19.5	15.0	11.0	7.0	13.0	15.0	18.5	---	24.5	25.5	26.0	24.0

08093700 North Bosque River at Stephenville, Tex.

LOCATION (revised).--Lat 32°12'56", long 98°11'55", Erath County, in center of stream at downstream side of bridge on State Highway 108 (Graham Street) at Stephenville, 0.5 mile (0.8 km) southeast of Erath County Courthouse, 1.5 miles (2.4 km) downstream from Gulf, Colorado, and Santa Fe Railway bridge, and 120.7 miles (194.2 km) upstream from mouth.

DRAINAGE AREA (revised).--95.9 mi² (248.4 km²).

PERIOD OF RECORD.--March 1958 to current year.

GAGE.--Water-stage recorder with rock and concrete control. Datum of gage is 1,223.60 ft (372.953 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 14.5 ft³/s (0.411 m³/s), 10,510 acre-ft/yr (13.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,030 ft³/s (57.5 m³/s) Apr. 19 (gage height, 13.07 ft or 3.984 m); no flow for many days. Period of record: Maximum discharge, 12,100 ft³/s (343 m³/s) Oct. 4, 1959 (gage height, 19.90 ft or 6.066 m, from floodmark), from rating curve extended above 4,250 ft³/s (120 m³/s) on basis of contracted-opening measurements of 40,000 and 49,000 ft³/s (1,130 and 1,390 m³/s); no flow at times each year. Maximum stage since at least 1854, 23.5 ft (7.16 m) May 19, 1955, from floodmarks, discharge, 49,000 ft³/s (1,390 m³/s), by contracted-opening measurement of peak flow. The flood of May 23, 1952, reached a stage of 22.2 ft (6.77 m), from floodmarks, discharge 40,000 ft³/s (1,130 m³/s), by contracted-opening measurement of peak flow.

REMARKS.--Records fair. At end of year, flow from 59.8 mi² (154.9 km²) above this station was affected at times by discharge from the flood-detention pools of 14 floodwater-retarding structures with a combined detention capacity of 25,250 acre-ft (31.1 hm³). No diversion above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.02	.05	.03	0	.37	413	.07	0	10
2		0	0	.03	.04	.04	0	.16	151	.06	0	9.0
3		.14	0	.03	.03	.02	0	.10	61	.05	0	16
4		.03	0	.03	.02	.01	2.5	.06	18	.05	0	9.8
5		0	0	.03	.03	.01	.12	.23	9.4	.03	0	5.2
6		0	0	.04	.03	.01	.04	.48	15	.03	0	3.7
7		0	0	.04	.02	.05	2.5	.60	6.2	.02	0	2.8
8		0	0	.04	.03	.39	.37	.54	4.4	.02	0	2.2
9		0	0	.04	.04	.07	.02	.36	3.4	.24	0	1.9
10		0	0	.05	.04	.03	0	1.5	2.4	17	0	1.5
11		0	0	.06	.05	.02	0	1.6	2.7	5.1	0	1.3
12		0	0	.08	.05	.02	0	.53	1.9	1.9	0	1.0
13		0	0	.05	.04	.01	1.6	.24	1.9	.64	0	.83
14		0	0	.05	.03	.01	.01	.16	2.4	.29	0	.64
15		0	0	.05	.03	.01	.25	.11	1.5	.23	0	.41
16		0	0	.05	.03	.01	7.8	.06	1.0	.18	0	.26
17		0	0	.05	.04	.02	.16	.04	.75	.25	0	.14
18		0	0	.06	.08	.01	.14	.07	.64	.23	0	.07
19		0	0	.05	.06	.01	164	.13	.53	.10	0	.40
20		0	0	.05	.16	.03	640	.06	.44	.08	0	3.7
21		0	0	.05	.40	.01	110	.05	.32	.09	0	2.4
22		0	0	.05	.06	.03	28	.03	1.0	.07	0	1.3
23		0	0	.05	.05	.02	14	.02	.58	.06	0	1.0
24		0	1.4	.06	.03	.59	6.9	.05	1.4	.04	0	.82
25		0	.72	.06	.03	.06	3.2	478	5.8	.02	0	.53
26		0	.15	.05	.02	.03	1.2	527	.53	0	0	.27
27		0	.06	.05	.02	0	.53	148	.32	0	0	14
28		0	.03	.06	.01	0	1.1	74	.23	0	4.7	8.8
29		0	.30	.06	.01	0	2.2	30	.14	0	1.8	3.8
30		0	.03	.05	---	0	.49	13	.10	0	200	2.6
31		---	.02	.05	---	0	---	84	---	0	56	---
TOTAL	0	.21	2.71	1.49	1.53	1.55	987.13	1361.55	707.98	50.61	262.5	106.37
MEAN	0	.007	.087	.048	.053	.050	32.9	43.9	23.6	1.63	8.47	3.55
MAX	0	.18	1.4	.08	.40	.59	640	527	413	24	200	16
MIN	0	0	0	.02	.01	0	0	.02	.10	0	0	.07
AC-FT	0	.4	5.4	3.0	3.0	3.1	1960	2700	1400	100	521	211

CAL YR 1975 TOTAL 1657.83 MEAN 4.54 MAX 438 MIN 0 AC-FT 3290
WTR YR 1976 TOTAL 3483.63 MEAN 9.52 MAX 640 MIN 0 AC-FT 6910

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-19	2400	13.07	2,030
5-25	2300	12.13	1,600
8-30	1900	11.15	1,210

08094000 Green Creek subwatershed No. 1 near Dublin, Tex.

LOCATION.--Lat 32°09'57", long 98°20'28", Erath County, near center of dam on main headwater channel of Green Creek, 0.9 mile (1.4 km) downstream from county road, 1.3 miles (2.1 km) east of Farm Road 219, 5.5 miles (8.8 km) north of Dublin, and 21.2 miles (34.1 km) upstream from mouth.

DRAINAGE AREA (revised).--4.19 mi² (10.85 km²).

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

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 1,408.00 ft (429.158 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--21 years, 536 acre-ft/yr (661,000 m³/yr).

AVERAGE OUTFLOW.--21 years, 373 acre-ft/yr (460,000 m³/yr).

EXTREMES.--Current year: Maximum outflow, 13.6 ft³/s (0.39 m³/s) Apr. 20 (gage height, 12.01 ft or 3.661 m); no outflow most of time. Maximum inflow, 1,130 ft³/s (32.0 m³/s), average for 5-minute interval, Apr. 19, computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 709 ft³/s (20.1 m³/s) May 1, 1956 (gage height, 23.21 ft or 7.074 m); no outflow most of time each year. Maximum inflow, 11,500 ft³/s (326 m³/s), average for 5-minute interval, Apr. 30, 1956, computed from outflow and change in pool contents and adjusted for rainfall on pool surface during time of peak inflow; no inflow for many days each year.

REMARKS.--Records fair. The pool is formed by a rolled earthfill dam 3,000 ft (914 m) long. The dam was completed Apr. 25, 1955, and storage began shortly thereafter. The outlet structure consists of a 30-inch (762-millimeter) square concrete drop inlet that is connected to a 14-inch (356-millimeter) concrete outlet pipe. The gage height at top of the drop inlet is 11.0 ft (3.35 m). The spillway is a 250-foot-wide (76-meter) cut in natural ground at the right end of dam. The gage height at crest of spillway is 21.8 ft (6.64 m). There is a cleanout gate valve at the end of an 8-inch (203-millimeter) pipe which connects to the lower end of the drop-inlet box at a gage height of 3.76 ft (1.146 m). The pool capacity at the crest of spillway is 1,097 acre-ft (1.35 hm³); at top of drop inlet, 223 acre-ft (275,000 m³); and at controlled outlet pipe, 48.0 acre-ft (59,200 m³). The dam was built by the Soil Conservation Service for flood control. A permit issued by the Texas Water Rights Commission grants 181 acre-ft (223,000 m³) per year for irrigation. A total of 55.7 acre-ft (68,700 m³) was diverted from the pool for irrigation during the water year. A recording rain gage is located at station. The surface area and capacity tables are based on a Soil Conservation Service sedimentation survey of June 1967.

REVISIONS (WATER YEARS).--WSP 1922: 1955-60(M). WRD Texas 1971: 1955-63.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	0.8	0.9	2.0	0.1	0.4	0.6	235	57.0	3.7	9.1	14.5	0.8
Outflow	0	0	0	0	0	0	77.9	35.7	5.1	5.1	10.2	0
(+)	-14.5	-9.1	-4.3	-5.9	-7.8	-7.4	+152	+1.2	-28.4	-22.2	-21.0	-14.7
(++)	.70	.79	.91	.11	.52	.91	6.02	2.58	1.66	2.56	1.64	2.30

CAL YR 1975: Inflow 176

Outflow 132

+ -126

++ 18.48

WTR YR 1976: Inflow 325

Outflow 134

+ +17.9

++ 20.70

PEAK INFLOW (BASE, 100 FT³/S).--Apr. 19 (2030) *1,130 ft³/s; May 25 (2000) *168 ft³/s.

1/ Inflow adjusted for rainfall on pool and pool losses.

+ Change in contents, in acre-feet.

++ Rainfall, in inches.

* Average for 5-minute interval.

08094800 North Bosque River at Hico, Tex.

LOCATION.--Lat 31°58'39", long 98°02'05", Hamilton County, on left bank at downstream side of bridge on U.S. Highway 281 near south boundary of Hico, 2.5 miles (4.0 km) downstream from Gilmore Creek, 5.0 miles (8.0 km) upstream from Honey Creek, and at mile 92.4 (148.7 km).

DRAINAGE AREA (revised).--359 mi² (930 km²).

PERIOD OF RECORD.--January 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 982.46 ft (299.454 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 44.8 ft³/s (1.269 m³/s), 32,460 acre-ft/yr (40.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,980 ft³/s (56.1 m³/s) May 26 (gage height, 7.81 ft or 2.380 m); no flow Aug. 20-30.
Period of record: Maximum discharge, 16,800 ft³/s (476 m³/s) May 16, 1965 (gage height, 21.83 ft or 6.654 m), from rating curve extended above 9,000 ft³/s (255 m³/s); no flow at times in 1962-65, 1967-68, 1971, 1974, and 1976.
Maximum stage since at least 1880, 27.6 ft (8.41 m) May 23, 1952, from floodmarks, discharge, 87,800 ft³/s (2,490 m³/s), by contracted-opening measurement.

REMARKS.--Records good. At end of year, flow from 202 mi² (523 km²) above this station may be affected at times by discharge from the flood-detention pools of 40 floodwater-retarding structures with a combined detention capacity of 65,730 acre-ft (81.0 hm³). Records furnished by the city of Stephenville show that during the year 1,018 acre-ft (1.26 hm³) of sewage effluent was discharged above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.0	2.3	2.3	1.5	2.0	1.1	6.7	455	3.0	1.6	108
2	1.2	1.4	2.8	2.0	1.5	2.1	1.1	5.3	229	1.8	1.4	29
3	1.2	1.6	3.1	1.8	1.3	1.2	.99	4.9	109	1.6	1.2	68
4	1.2	1.4	3.4	1.6	1.3	1.0	4.3	4.8	51	1.5	.89	17
5	1.2	1.4	2.7	1.7	1.3	.97	18	5.7	27	1.5	.47	7.7
6	1.1	1.9	2.3	1.7	1.3	.92	3.3	5.8	18	1.5	.43	3.4
7	1.1	1.8	2.6	1.8	1.2	1.2	2.4	5.6	21	1.5	.30	2.1
8	1.7	1.7	3.3	1.8	1.0	2.2	1.8	4.8	14	1.3	.25	1.6
9	2.3	1.4	2.4	1.8	1.1	2.0	2.2	4.4	10	1.4	.20	1.2
10	2.9	1.0	2.4	1.8	1.2	3.9	1.7	4.5	7.3	26	.15	1.1
11	2.6	.91	3.0	1.9	1.9	3.0	1.3	4.7	5.9	18	.10	.80
12	1.4	.91	3.0	1.9	2.2	2.3	1.0	5.6	4.5	11	.08	.54
13	.43	.92	2.4	1.9	1.9	1.9	1.1	7.9	2.9	7.5	.06	.50
14	.48	1.1	2.6	1.9	1.8	1.9	1.4	6.7	2.5	4.9	.04	.49
15	.49	1.3	3.2	1.9	1.8	1.8	2.4	5.2	1.8	3.5	.03	.43
16	.36	1.5	3.0	1.9	1.9	1.5	2.7	4.2	1.7	95	.02	.38
17	.21	1.8	2.6	1.8	1.7	1.4	7.2	3.5	1.7	107	.02	.30
18	.14	1.9	2.2	1.8	1.8	1.5	3.6	3.2	1.4	72	.01	.21
19	.09	2.2	2.7	1.7	1.7	1.5	3.7	3.0	1.4	34	.01	.18
20	.19	2.7	3.0	1.5	1.6	1.4	599	3.0	.79	23	0	.20
21	1.0	2.5	2.7	1.4	1.9	1.2	181	3.0	.90	20	0	.23
22	1.3	2.1	3.7	1.3	1.7	1.2	54	3.0	1.3	18	0	.45
23	1.4	2.0	3.2	1.3	1.6	1.1	28	3.4	1.4	16	0	.88
24	1.4	1.9	5.7	1.3	1.1	1.6	16	3.2	49	13	0	.66
25	1.3	1.9	3.8	1.6	1.3	1.5	9.9	283	391	9.9	0	.53
26	1.2	1.8	6.9	1.6	1.6	1.4	6.9	954	83	7.8	0	.34
27	1.2	1.9	4.8	1.3	1.9	1.1	6.4	240	26	6.0	0	.29
28	1.2	1.9	3.2	1.2	1.9	1.1	5.7	115	10	4.9	0	5.9
29	1.1	2.0	2.9	1.1	2.1	1.1	7.4	69	6.1	3.5	0	4.0
30	1.1	2.0	2.5	1.3	---	1.1	11	33	4.3	2.6	0	1.2
31	.99	---	2.3	1.3	---	1.1	---	25	---	2.1	222	---
TOTAL	34.68	49.84	96.7	51.2	46.1	49.19	986.59	1831.1	1538.89	520.8	229.26	257.61
MEAN	1.12	1.66	3.12	1.65	1.59	1.59	32.9	59.1	51.3	16.8	7.40	8.59
MAX	2.9	2.7	6.9	2.3	2.2	3.9	599	954	455	107	222	108
MIN	.09	.91	2.2	1.1	1.0	.92	.99	3.0	.79	1.3	0	.18
AC-FT	69	99	192	102	91	98	1960	3630	3050	1030	455	511

CAL YR 1975 TOTAL 16564.85 MEAN 28.9 MAX 1620 MIN .09 AC-FT 20960
WTR YR 1976 TOTAL 5691.96 MEAN 15.6 MAX 954 MIN 0 AC-FT 11290

PEAK DISCHARGE (BASE, 2,500 FT³/S).--No peak above base.

08095000 North Bosque River near Clifton, Tex.

LOCATION.--Lat 31°47'09", long 97°34'04", Bosque County, near right (revised) bank on downstream side of bridge on Farm Road 219, 0.5 mile (0.8 km) northeast of Clifton, 2.5 miles (4.0 km) downstream from Meridian Creek, and 42.0 miles (67.6 km) above mouth.

DRAINAGE AREA.--968 mi² (2,507 km²), revised.

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 605.43 ft (184.535 m) above mean sea level. Prior to Oct. 1, 1955, and from Apr. 23, 1957, to Mar. 26, 1958, nonrecording gage at site 1.1 miles (1.8 km) upstream at datum 17.02 ft (5.188 m) higher; Oct. 1, 1955, to Apr. 22, 1957, and Mar. 27, 1958, to Sept. 30, 1959, water-stage recorder (destroyed by floods of Apr. 27, 1957, and Oct. 4, 1959); and Oct. 1, 1959, to Jan. 1, 1961, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years (1923-67) unregulated, 195 ft³/s (5.522 m³/s), 141,300 acre-ft/yr (174 hm³/yr); 9 years (1967-76) regulated, 204 ft³/s (5.777 m³/s), 147,800 acre-ft/yr (182 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 ft³/s (340 m³/s) May 25 (gage height, 15.88 ft or 4.840 m); minimum daily, 6.4 ft³/s (0.18 m³/s) Mar. 3, 6.

Period of record: Maximum discharge, 92,800 ft³/s (2,630 m³/s) Oct. 4, 1959 (gage height, 34.88 ft or 10.631 m), from rating curve extended above 34,000 ft³/s (963 m³/s) on basis of contracted-opening measurement of 92,800 ft³/s (2,630 m³/s); no flow at times.

Maximum stage since at least 1854, that of Oct. 4, 1959. Flood of May 9, 1922, reached a stage of about 32 ft (9.8 m), from information by local residents.

REMARKS.--Records good. The city of Clifton diverted 27.9 acre-ft (34,400 m³) of water from the river above the station for municipal use and returned 286 acre-ft (353,000 m³) of sewage effluent below station. The city of Meridian discharged 49.3 acre-ft (60,800 m³) of sewage effluent into the river at about mile 56 (90 km). Flow regulated at times by Soil Conservation Service reservoirs above North Bosque River near Hico (station 08094800). Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 788: 1924-26, 1928, 1930. WSP 1058: 1945(M). WSP 1512: 1924(M), 1927, 1928(M), 1929, 1930(M), 1931-33, 1934(M), 1935-37, 1939. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	7.3	9.3	13	8.9	7.2	9.0	28	849	44	18	125
2	12	7.8	9.4	11	8.9	6.6	8.4	24	564	37	16	160
3	12	7.3	9.4	11	8.8	6.4	8.6	20	262	39	15	140
4	12	6.9	9.1	10	11	6.6	18	17	157	55	14	196
5	12	6.6	9.7	9.8	11	6.6	53	87	103	46	13	109
6	12	6.5	10	9.7	9.5	6.4	56	109	69	435	12	51
7	12	6.6	9.8	9.4	8.8	7.4	54	52	55	60	11	36
8	11	6.5	9.3	8.7	8.8	17	39	47	47	42	11	28
9	11	9.5	8.9	8.7	8.8	12	30	45	42	38	10	22
10	10	8.4	8.6	9.1	9.3	9.8	24	38	39	41	9.9	19
11	10	8.4	8.2	9.3	9.4	8.7	20	31	33	64	9.4	17
12	10	8.2	8.5	9.1	9.3	8.9	17	30	28	56	9.1	15
13	9.4	8.7	8.4	8.9	8.8	8.4	15	35	25	61	8.6	13
14	8.6	8.3	8.8	9.2	8.8	8.0	14	25	22	51	8.1	12
15	8.3	8.3	8.7	8.9	9.0	8.1	14	21	21	52	8.3	12
16	8.4	8.2	8.5	9.0	8.8	8.3	27	19	22	139	8.3	11
17	8.1	8.2	8.7	9.2	12	8.5	26	17	19	692	7.7	10
18	7.8	8.5	9.0	9.3	10	8.6	322	15	339	240	7.6	9.5
19	7.8	8.2	9.2	8.7	11	8.7	150	15	1510	156	7.3	8.5
20	7.4	8.1	9.0	8.6	10	8.4	176	14	81	98	7.3	8.2
21	7.0	7.7	9.2	8.4	10	8.0	500	14	46	74	7.3	7.8
22	7.5	7.5	9.2	8.4	9.6	7.6	205	13	34	61	7.2	7.4
23	8.8	7.5	9.2	8.9	9.2	7.2	116	12	28	56	7.2	8.0
24	8.5	7.1	17	11	9.0	11	92	12	26	51	7.5	8.3
25	8.7	7.5	29	9.3	9.3	9.6	57	1960	655	115	8.0	7.9
26	8.8	7.9	23	9.1	9.6	10	43	3550	367	47	8.0	7.7
27	8.0	7.6	18	8.6	9.4	9.3	35	809	164	36	7.9	8.1
28	7.9	7.8	19	8.9	11	9.1	30	296	111	31	7.3	19
29	8.0	8.4	16	9.0	9.3	9.5	33	178	72	26	7.7	10
30	7.4	9.1	13	8.7	---	9.5	33	135	54	23	8.2	8.6
31	7.4	---	13	8.7	---	9.3	---	126	---	21	9.2	---
TOTAL	289.8	234.6	356.1	289.6	283.3	270.7	2225.0	7794	5844	2987	297.1	1095.0
MEAN	9.35	7.82	11.5	9.34	9.77	8.73	74.2	251	195	96.4	9.58	36.5
MAX	12	9.5	29	13	16	17	500	3550	1510	692	18	196
MIN	7.0	6.5	8.2	8.4	8.8	6.4	8.4	12	19	21	7.2	7.4
AC-FT	575	465	706	574	562	537	4410	15460	11590	5920	589	2170

CAL YR 1975 TOTAL 61919.1 MEAN 170 MAX 8990 MIN 6.5 AC-FT 122800
WTR YR 1976 TOTAL 21966.2 MEAN 60.0 MAX 3550 MIN 6.4 AC-FT 43570

PEAK DISCHARGE (BASE, 8,300 FT³/S).--May 25 (1615) 12,000 ft³/s (15.88 ft); June 19 (0015) 8,390 ft³/s (13.13 ft).

08095200 North Bosque River at Valley Mills, Tex.

LOCATION.--Lat 31°40'10", long 97°28'09", Bosque County, on right bank at downstream side of bridge on Farm Road 56, about 0.8 mile (1.3 km) downstream from Thompson Hollow, 0.8 mile (1.3 km) north of intersection of State Highway 6 and Farm Road 56 in Valley Mills, and 28.0 miles (45.1 km) above mouth.

DRAINAGE AREA.--1,146 mi² (2,968 km²), revised.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 524.55 ft (159.883 m) above mean sea level. Prior to Dec. 29, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years (1959-67) unregulated, 263 ft³/s (7.448 m³/s), 190,500 acre-ft/yr (235 hm³/yr); 9 years (1967-76) regulated, 243 ft³/s (6.882 m³/s), 176,100 acre-ft/yr (217 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,900 ft³/s (337 m³/s) June 25 (gage height, 22.49 ft or 6.855 m); minimum, 14 ft³/s (0.40 m³/s) Apr. 2, 3.

Period of record: Maximum discharge, 107,000 ft³/s (3,030 m³/s) Oct. 4, 1959 (gage height, 40.22 ft or 12.259 m, from floodmark), from rating curve extended above 28,200 ft³/s (799 m³/s) on basis of slope-area measurement of 107,000 ft³/s (3,030 m³/s); no flow Oct. 5-12, 1965.

Maximum stage since at least 1868, 43 ft (13.1 m) in May 1908. Floods in September 1936 and April 1945 reached a stage of about 38 ft (11.6 m), from information by local residents.

REMARKS.--Records good. Flow regulated at times by Soil Conservation Service reservoirs above North Bosque River at Hico (station 08094800). Small diversions above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	19	23	28	17	20	15	38	796	74	51	43
2	22	20	23	27	17	18	14	31	616	63	48	210
3	22	21	23	25	17	18	14	28	297	58	46	161
4	22	18	23	24	17	17	15	24	181	720	43	188
5	22	17	23	23	20	17	50	56	134	181	41	154
6	21	17	23	23	19	17	57	221	98	1460	38	81
7	21	17	21	23	17	18	64	83	81	174	35	63
8	21	16	21	22	17	26	51	59	71	54	34	52
9	21	17	21	21	17	34	37	59	63	51	33	44
10	21	19	21	22	18	25	29	53	60	90	32	38
11	20	17	20	22	18	23	24	41	53	81	30	36
12	19	16	19	22	17	21	21	35	47	85	29	34
13	19	16	20	22	17	20	19	44	42	75	29	32
14	18	17	20	21	17	19	17	35	38	72	30	31
15	18	16	20	21	17	18	16	28	35	250	29	30
16	17	17	19	21	18	18	26	25	43	1100	28	29
17	17	18	18	21	19	18	46	22	40	470	27	28
18	17	19	18	22	25	19	456	19	35	220	26	27
19	16	19	19	22	26	19	183	18	2120	150	25	27
20	16	19	19	21	23	19	116	18	140	110	24	27
21	16	18	19	20	22	18	504	17	73	96	24	27
22	17	19	19	20	20	17	241	17	53	90	24	25
23	23	19	20	20	19	17	352	17	41	87	24	25
24	20	19	30	21	19	21	181	48	36	230	24	25
25	19	19	55	23	19	23	84	2420	2740	110	24	25
26	18	19	50	19	19	20	60	3880	534	90	24	26
27	18	20	39	19	20	18	47	1250	326	78	24	26
28	19	20	34	19	19	17	39	364	175	70	23	52
29	18	22	34	18	21	17	41	213	118	65	23	48
30	18	24	30	18	---	16	40	155	89	60	23	32
31	18	---	29	17	---	16	---	135	---	56	28	---
TOTAL	597	554	773	667	551	604	2859	9453	9175	6570	943	1646
MEAN	19.3	18.5	24.9	21.5	19.0	19.5	95.3	305	306	212	30.4	54.9
MAX	23	24	55	28	26	34	504	3880	2740	1460	51	210
MIN	15	16	18	17	17	16	14	17	35	51	23	25
AC-FT	1180	1100	1530	1320	1090	1200	5670	18750	18200	13030	1870	3260
CAL YR 1975	TOTAL	82597	MEAN	226	MAX	10500	MIN	16	AC-FT	163800		
WTR YR 1976	TOTAL	34392	MEAN	94.0	MAX	3880	MIN	14	AC-FT	68220		

PEAK DISCHARGE (BASE, 8,500 FT³/S).--May 25 (2015) 11,200 ft³/s (21.69 ft); June 25 (0445) 11,900 ft³/s (22.49 ft).

08095300 Middle Bosque River near McGregor, Tex.

LOCATION (revised).--Lat 31°30'33", long 97°21'56", McLennan County, on downstream side of bridge on county road, 1,100 ft (335 m) downstream from Pecan Creek, 5.2 miles (8.4 km) northeast of McGregor, and 7.4 miles (11.9 km) upstream from South Bosque River.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 530.51 ft (161.699 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--17 years, 90.7 ft³/s (2.569 m³/s), 6.77 in/yr (172 mm/yr), 65,700 acre-ft/yr (81.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,800 ft³/s (674 m³/s) July 4 (gage height, 19.95 ft or 6.081 m); minimum, 0.19 ft³/s (0.005 m³/s) Oct. 21, 22.

Period of record: Maximum discharge, 33,300 ft³/s (943 m³/s) Oct. 31, 1974 (gage height, 24.62 ft or 7.504 m); no flow at times in 1960-64, 1967, and 1971.

Historical flood information begins with flood in 1889, which reached a stage of 28.5 ft (8.69 m); flood in 1957 reached a stage of 28.2 ft (8.60 m); and floods in 1913 and 1942 or 1943 reached a stage of about 28 ft (8.53 m), from information by local residents.

REMARKS.--Records good. No diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	5.8	4.7	5.6	3.7	2.7	2.0	4.9	134	83	55	8.1
2	1.6	30	4.5	5.1	3.7	2.6	2.0	4.3	60	72	52	24
3	1.5	25	4.6	4.7	3.6	2.5	2.4	3.9	50	229	49	55
4	1.6	11	4.5	4.5	3.6	2.4	14	35	46	6630	45	55
5	1.6	9.7	4.4	4.5	3.6	2.4	4.0	76	42	656	43	23
6	1.5	9.4	4.1	4.8	3.4	2.4	3.7	197	39	5720	40	16
7	1.3	9.0	3.9	4.6	3.3	2.8	5.5	94	37	415	38	13
8	1.2	8.8	3.8	3.8	3.3	4.7	5.7	103	35	259	34	12
9	1.3	8.3	3.9	4.1	3.4	4.5	4.9	80	32	221	32	10
10	1.1	7.4	3.9	4.5	3.4	3.3	4.4	106	29	354	29	9.3
11	.97	6.8	3.7	4.6	3.4	3.0	4.4	371	26	355	27	8.5
12	1.1	6.3	3.7	4.5	3.2	3.2	4.1	262	24	244	25	8.1
13	.90	5.3	3.5	4.5	3.2	3.0	4.0	195	22	195	24	7.8
14	.75	5.5	3.5	4.2	3.1	2.9	3.9	120	19	166	22	8.5
15	.70	5.7	3.6	3.9	3.0	2.8	3.8	101	20	204	21	7.3
16	.71	5.7	3.4	3.9	3.0	2.7	6.9	85	36	3500	20	6.8
17	.59	5.7	3.3	3.9	3.2	2.7	6.1	76	22	1600	19	7.0
18	.52	5.5	3.2	3.9	3.0	2.7	621	69	24	750	17	6.0
19	.52	5.7	3.0*	3.9	3.0	2.7	249	64	888	350	16	6.3
20	.49	5.4	3.0	3.8	3.1	2.7	150	61	67	200	14	6.3
21	.45	5.0	3.0	3.6	3.1	2.5	84	59	43	175	14	8.0
22	.84	4.8	3.1	3.6	2.7	2.3	65	55	35	152	13	6.3
23	7.1	4.8	3.1	3.6	2.6	2.3	59	52	32	137	11	6.2
24	4.9	4.7	9.4	6.5	2.6	3.8	100	48	30	122	10	5.9
25	107	4.6	23	17	2.8	3.6	54	65	2500	111	9.6	5.2
26	17	4.9	9.5	5.1	2.8	3.0	45	296	585	102	9.6	66
27	10	4.6	7.1	4.4	2.8	2.5	43	231	266	93	8.8	107
28	8.0	4.6	6.4	4.2	2.7	2.3	41	88	139	85	7.7	288
29	6.7	5.0	5.9	4.0	2.7	2.4	73	71	111	76	7.1	64
30	6.1	5.3	5.8	3.9	---	2.2	59	62	95	67	7.9	34
31	5.8	---	5.5	3.9	---	2.1	---	62	---	60	8.0	---
TOTAL	239.74	230.3	158.0	147.1	91.0	87.7	1724.8	3315	5488	23383	728.7	888.6
MEAN	7.73	7.68	5.10	4.75	3.14	2.83	57.5	107	183	754	23.5	29.6
MAX	107	30	23	17	3.7	4.7	621	371	2500	6630	55	288
MIN	.45	4.6	3.0	3.6	2.6	2.1	2.0	35	19	60	7.1	5.2
CFSM	.04	.04	.03	.03	.02	.02	.32	.59	1.01	4.14	.13	.16
IN.	.05	.05	.03	.03	.02	.02	.35	.68	1.12	4.78	.15	.18
AC-FT	476	457	313	292	180	174	3420	6580	10890	46380	1450	1760

CAL YR 1975 TOTAL 28901.87 MEAN 79.2 MAX 2090 MIN .45 CFSM .44 IN 5.91 AC-FT 57330
WTR YR 1976 TOTAL 36481.94 MEAN 99.7 MAX 6630 MIN .45 CFSM .55 IN 7.46 AC-FT 72360

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-25	0600	11.07	8,600
7-4	0500	19.95	23,800
7-16	2315	19.30	22,600

08095400 Hog Creek near Crawford, Tex.

LOCATION.--Lat 31°33'20", Long 97°21'22", McLennan County, on downstream side of bridge on Farm Road 185, 5.6 miles (9.0 km) east of Crawford, and 9.8 miles (15.8 km) upstream from South Bosque River.

DRAINAGE AREA.--78.2 mi² (203 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 560.54 ft (170.853 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--17 years, 38.3 ft³/s (1.085 m³/s), 6.65 in/yr (169 mm/yr), 27,750 acre-ft/yr (34.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,690 ft³/s (246 m³/s) June 25 (gage height, 10.46 ft or 3.188 m); minimum, 0.09 ft³/s (0.003 m³/s) Oct. 18.

Period of record: Maximum discharge, 15,400 ft³/s (436 m³/s) Oct. 4, 1959 (gage height, 14.31 ft or 4.362 m); no flow at times in 1959, 1963-64, and 1971.

Maximum stage since 1900, 17.5 ft (5.33 m) Sept. 26, 1936. Flood in April or May 1957 reached a stage of 15.7 ft (4.79 m), from information by local residents.

REMARKS.--Records good. No known diversions above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.68	.85	.59	.43	.33	.26	17	24	32	27	6.6
2	.34	4.8	.82	.56	.42	.33	.26	14	23	26	25	24
3	.37	1.3	.82	.50	.40	.33	.26	12	21	424	24	78
4	.39	.97	.89	.50	.45	.32	10	11	18	503	22	44
5	.40	.91	.95	.56	.47	.26	1.8	28	17	216	20	16
6	.40	.88	.79	.59	.40	.31	1.1	126	17	1290	16	10
7	.38	.87	.74	.52	.40	.45	1.4	38	16	164	18	7.8
8	.33	.86	.76	.48	.40	.98	1.2	34	15	100	17	6.7
9	.33	.81	.73	.53	.40	.53	.93	34	14	80	15	6.2
10	.32	.72	.74	.57	.42	.38	.79	35	13	85	14	5.5
11	.28	.79	.74	.55	.44	.33	.74	29	13	116	13	5.1
12	.26	.69	.74	.54	.41	.32	.67	26	12	91	12	4.9
13	.26	.65	.77	.55	.40	.27	.63	30	12	68	11	4.7
14	.26	.78	.75	.49	.40	.29	.59	25	11	58	10	4.5
15	.25	.80	.70	.49	.40	.31	.61	22	10	60	9.6	4.3
16	.21	.82	.66	.49	.39	.27	1.5	20	12	1200	9.0	4.1
17	.21	.82	.61	.49	.39	.26	.84	18	10	1030	8.5	3.8
18	.21	.82	.59	.49	.34	.28	136	16	10	195	7.8	3.4
19	.21	.89	.49	.49	.33	.30	90	15	142	126	7.2	3.6
20	.21	.75	.49	.50	.39	.29	44	15	35	95	6.8	3.8
21	.21	.70	.49	.49	.41	.26	26	14	19	78	6.5	3.5
22	.41	.70	.49	.49	.31	.26	18	14	14	70	6.0	3.1
23	1.9	.72	.49	.49	.31	.27	70	13	11	64	5.4	2.9
24	13	.84	2.4	.75	.32	.61	153	13	11	56	5.2	3.1
25	7.5	.96	2.1	.89	.33	.45	28	117	2080	51	4.8	2.8
26	1.4	.91	.95	.49	.33	.31	19	150	112	51	4.6	23
27	.92	.93	.78	.49	.34	.26	16	240	89	45	4.2	14
28	.78	1.1	.70	.49	.34	.26	15	51	57	40	3.8	806
29	.70	1.2	.61	.45	.34	.25	24	36	44	34	3.7	53
30	.68	1.3	.59	.44	---	.25	20	29	36	32	3.6	26
31	.69	---	.62	.44	---	.26	---	27	---	27	3.6	---
TOTAL	34.19	29.97	24.85	16.39	11.11	10.58	682.58	1269	2918	6507	344.3	1184.4
MEAN	1.10	1.00	.80	.53	.38	.34	22.8	40.9	97.3	210	11.1	39.5
MAX	13	4.8	2.4	.89	.47	.98	153	240	2080	1290	27	806
MIN	.21	.65	.49	.44	.31	.25	.26	11	10	26	3.6	2.8
CFSM	.01	.01	.01	.006	.004	.004	.29	.52	1.24	2.69	.14	.51
IN.	.02	.01	.01	.008	.005	.005	.32	.60	1.39	3.10	.16	.56
AC-FT	68	59	49	33	22	21	1350	2520	5790	12910	683	2350

CAL YR 1975 TOTAL 14058.01 MEAN 38.6 MAX 1310 MIN .21 CFSM .49 IN 6.71 AC-FT 27960
WTR YR 1976 TOTAL 13032.37 MEAN 35.6 MAX 2080 MIN .21 CFSM .46 IN 6.20 AC-FT 25850

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-25	0900	10.46	8,690	7-16	1945	8.73	5,920
7-3	2300	8.87	6,140	9-28	0245	8.14	5,040
7-6	0200	8.98	6,310				

08095550 Waco Lake near Waco, Tex.

LOCATION.--Lat 31°34'46", long 97°11'51", McLennan County, in intake structure at Waco Dam on Bosque River, at northwest edge of city limits of Waco, and 4.6 miles (7.4 km) upstream from Brazos River.

DRAINAGE AREA.--1,652 mi² (4,279 km²).

PERIOD OF RECORD.--Contents: February 1965 to current year. Prior to October 1970, published as Waco Reservoir.
Water quality: Chemical analyses: October 1969 to current year.

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

EXTREMES.--Current year: Maximum contents, 190,800 acre-ft (235 hm³) July 6 (elevation, 460.45 ft or 140.345 m); minimum, 136,700 acre-ft (169 hm³) Apr. 4 (elevation, 453.24 ft or 138.148 m).
Period of record: Maximum contents, 292,100 acre-ft (360 hm³) May 15, 1968 (elevation, 470.86 ft or 143.518 m); minimum since initial filling, 126,700 acre-ft (156 hm³) Aug. 25, 1974 (elevation, 451.31 ft or 137.559 m).

REMARKS.--The lake is formed by a rolled earthfill dam 24,618 ft (7,504 m) long, including spillway. The lake was built for flood control and water conservation. From Oct. 1, 1964, to Feb. 26, 1965, the lake was operated as a detention basin only. On Feb. 26, 1965, old Lake Waco was breached and deliberate impoundment began. The spillway is controlled by fourteen 40.0- by 35.0-foot (12.2- by 10.7-meter) tainter gates. The outlet works consist of three gate-controlled outlets, 6.7- by 20.0-foot (2.0- 6.1-meter), opening into a 20.0-foot-diameter (6.1-meter) concrete conduit and two 54-inch (1,370-millimeter) concrete pipes. Low-flow releases are made through two 54-inch (1,370-millimeter) butterfly valves. Flow into two wet wells is controlled by four 5.0- by 6.0-foot (1.5- by 1.8-meter) slide gates that are used to release water downstream for the city of Waco municipal water supply. The capacity table No. 2C is based on a sedimentation survey completed in December 1970. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see North Bosque River near Hico (station 08094800). Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	510.0	-
Design flood.....	505.0	824,400
Top of gates.....	500.0	722,500
Crest of spillway.....	465.0	229,900
Top of conservation pool.....	455.0	149,200
Lowest gated outlet (invert).....	400.0	560

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

453.0	135,000	458.0	171,500
454.0	142,000	460.0	187,100
456.0	156,500	462.0	203,600

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145700	144000	142100	142500	142200	141200	140200	152700	157500	155000	151400	145400
2	145400	144400	142000	142400	142200	141200	140100	152200	155600	151900	150800	147000
3	145300	144500	142000	142300	142100	141100	140000	152300	153100	155800	150000	147700
4	145200	144500	142000	142300	142000	141200	141800	152400	152100	140600	149600	148200
5	145000	144400	142000	142100	142100	141000	142300	154100	152300	183900	149600	148700
6	145000	144400	142000	142000	142000	140900	142400	155800	152400	190500	149500	148800
7	144800	144300	142000	142000	141900	141100	143000	156400	152600	186200	149600	148700
8	146000	144300	142000	142000	141800	141500	143200	157000	152600	178800	149500	148700
9	144500	144200	141900	141800	141800	141500	143200	157700	152500	171600	149400	148500
10	144400	144100	141800	141900	141800	141300	143200	157200	152400	164700	149300	148200
11	143000	144000	141800	141900	141800	141300	143200	157100	152400	158000	149000	148000
12	144200	143700	141800	141800	141800	141300	143200	159100	152300	152200	148800	147800
13	144000	143500	141800	141800	141800	141100	143200	160800	152100	149800	148800	147700
14	144000	143400	141800	141800	141800	141100	143200	159700	152000	150500	148500	147600
15	143800	143300	141800	141800	141800	141100	143700	157400	152400	151800	148300	147500
16	143600	143200	141800	141700	141800	140900	144000	154200	152400	163900	148100	147400
17	143400	143200	141700	141600	142200	140800	144400	152900	152400	178400	148000	147300
18	143200	143200	141600	141600	142000	140700	149200	152400	152500	181700	147800	147100
19	143000	143200	141400	141600	141900	140700	151300	152600	158300	180900	147600	147300
20	142800	143200	141300	141600	142100	140600	152800	152800	158700	174500	147500	147300
21	142600	143000	141300	141500	142000	140600	154000	152900	157300	166900	147300	147200
22	143200	142800	141300	141400	141800	140400	154200	152900	154700	158700	147000	147000
23	143200	142700	141300	141400	141600	140600	155000	151100	153400	154700	146700	146800
24	143700	142500	142300	142300	141400	140800	156600	153200	154300	154700	146400	146800
25	144300	142600	142400	142500	141400	140800	156900	157500	175800	154700	146200	146700
26	144200	142300	142500	142500	141400	140800	155600	168900	179200	154500	146000	148500
27	144200	142000	142500	142400	141300	140700	153400	170300	178100	154200	145800	148800
28	144200	142000	142500	142300	141300	140600	153100	167900	173500	153900	145600	153000
29	144200	142200	142500	142300	141200	140600	154000	164600	168500	153300	145400	150500
30	144200	142200	142500	142300	---	140400	153700	162200	163500	152700	145200	149500
31	144100	---	142500	142300	---	140300	---	159600	---	152100	145200	---
(†)	453.83	453.56	453.60	453.58	453.42	453.29	455.16	455.97	456.50	455.40	454.45	455.04
(*)	-1800	-1900	+300	-200	-1100	-900	+13400	+5900	+3900	-11400	-6900	+4300
(††)	2170	1770	1710	1780	1720	1850	1700	1760	2060	2070	3190	2060
MAX	146000	144500	142500	142500	142200	141500	156900	170300	179200	190500	151400	153000
MIN	142600	142000	141300	141400	141200	140300	140000	152200	152000	149800	145200	145400

CAL YR 1975..... * -11200

WTR YR 1976..... * +3600

†† 24320

†† 23830

MAX 205800

MAX 190500

MIN 141300

MIN 140000

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Waco.

BRAZOS RIVER BASIN

08095550 Waco Lake near Waco, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)
MAR 02...	0915	356	7.9	20.0	150	20	51	4.6	15
DATE	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR 02...	.5	2.6	154	0	28	17	.4	8.6	203

08095600 Bosque River near Waco, Tex.

LOCATION.--Lat 31°36'04", long 97°11'36", McLennan County, on downstream side of bridge on Farm Road 1637, 1.8 miles (2.9 km) downstream from Waco Lake Dam, 2.8 miles (4.5 km) upstream from mouth, and 4.7 miles (7.6 km) northwest of courthouse in Waco.

DRAINAGE AREA (revised).--1,656 mi² (4,289 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 365.44 ft (111.386 m) above mean sea level. Prior to Jan. 21, 1960, nonrecording gage, and from Jan. 21 to Aug. 20, 1960, nonrecording gage below 11.38 ft (3.469 m) and water-stage recorder above. All gages at same site and datum. Dec. 30, 1959, to Aug. 29, 1967, auxiliary water-stage recorder 2.7 miles (4.3 km) downstream at datum 4.66 ft (1.420 m) lower. Since Aug. 30, 1967, auxiliary water-stage recorder 0.7 mile (1.1 km) downstream at datum 4.66 ft (1.420 m) lower.

AVERAGE DISCHARGE.--17 years, 449 ft³/s (12.72 m³/s), 325,300 acre-ft/yr (401 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 4,840 ft³/s (137 m³/s) July 21; maximum gage height, 12.58 ft (3.834 m) July 7 (backwater from Brazos Lake); no flow at times.

Period of record: Maximum discharge, 69,000 ft³/s (1,950 m³/s) Oct. 4, 1959 (gage height, 39.8 ft or 12.13 m, from floodmark), from rating curve extended above 51,000 ft³/s (1,440 m³/s) on basis of computation of peak flow through gates at old Lake Waco; no flow at times in 1963-64, 1966-67, 1970, and 1972-74.

Maximum stage since at least 1880, 44.5 ft (13.56 m) Sept. 27, 1936 (discharge, 96,000 ft³/s or 2,720 m³/s), from information by local resident. Maximum stage may be the result of backwater from Brazos River because the discharges on Apr. 22, 1945 (140,000 ft³/s or 3,960 m³/s), and Apr. 20, 1957 (103,000 ft³/s or 2,920 m³/s), exceeded the discharge corresponding to the maximum stage. The discharges for the 1936, 1945, and 1957 floods were obtained from rating curve for tainter gates at old Lake Waco.

REMARKS.--Records poor. Backwater from the Brazos River. Discharge for the entire year is record of releases furnished by Corps of Engineers from Waco Lake. Flow is regulated by Waco Lake (see preceding page). Records furnished by the city of Waco show that 23,830 acre-ft (29.4 hm³) was diverted for municipal use above station. Recording rain gage located at station.

COOPERATION.--Records of releases furnished by Corps of Engineers and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	550	1920	2800	300	0
2							0	201	1920	1660	300	0
3							0	0	1920	0	300	0
4							0	0	760	0	300	0
5							0	0	0	0	0	0
6							0	0	0	1200	0	0
7							0	0	0	3860	0	0
8							0	0	0	4610	0	0
9							0	0	0	4580	0	0
10							0	554	0	4540	0	0
11							0	1220	0	4480	0	0
12							0	0	0	3600	0	0
13							0	0	0	1380	0	0
14							0	817	0	0	0	0
15							0	1400	0	0	0	0
16							0	1400	0	0	0	0
17							0	1120	0	0	0	0
18							0	212	0	0	0	0
19							0	0	0	1420	0	0
20							0	0	0	4300	0	0
21							0	0	788	4840	0	0
22							246	0	1400	4780	0	0
23							464	0	583	2660	0	0
24							0	0	0	300	0	0
25							0	0	0	300	0	0
26							653	0	0	300	0	0
27							1100	775	1630	300	0	0
28							424	1950	2920	300	0	0
29							0	1950	2920	300	0	1920
30							304	1950	2920	300	0	875
31		---			---		---	1940	---	300	0	---
TOTAL	0	0	0	0	0	0	3191	16039	19681	53110	1200	2795
MEAN	0	0	0	0	0	0	106	517	656	1713	38.7	93.2
MAX	0	0	0	0	0	0	1100	1950	2920	4840	300	1920
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	6330	31810	39040	105300	2380	5540
CAL YR 1975	TOTAL	153427.00	MEAN	420	MAX	7140	MIN	0	AC-FT	304300		
WTR YR 1976	TOTAL	96016.00	MEAN	262	MAX	4840	MIN	0	AC-FT	190400		

08096500 Brazos River at Waco, Tex.

LOCATION.--Lat 31°32'06", long 97°04'22", McLennan County, on left bank 2.2 miles (3.5 km) downstream from bridge on La Salle Avenue in Waco and at mile 400.7 (644.7 km).

DRAINAGE AREA (revised).--29,573 mi² (76,594 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: September 1898 to current year (January 1912 to September 1914 monthly records only, published in WSP 1312).

Water quality: Chemical, biochemical, and pesticide analyses: March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 349.34 ft (106.479 m) above mean sea level. Sept. 14, 1898, to Mar. 28, 1918, May 6, 1922, to Feb. 12, 1925, nonrecording gage, and May 28, 1918, to May 5, 1922, Feb. 13, 1925, to Aug. 14, 1969, water-stage recorder. Prior to Aug. 14, 1969, at site 3.9 miles (6.3 km) upstream at datum 7.46 ft (2.274 m) higher.

AVERAGE DISCHARGE.--42 years (1898-1940) unregulated, 2,560 ft³/s (72.50 m³/s), 1,855,000 acre-ft/yr (2.29 km³/yr); 36 years (1940-76) regulated, 2,318 ft³/s (65.65 m³/s), 1,679,000 acre-ft/yr (2.07 km³/yr).

EXTREMES.--Current year: Maximum discharge, 23,700 ft³/s (671 m³/s) July 5 (gage height, 20.10 ft or 6.125 m); minimum daily, 76 ft³/s (2.15 m³/s) Sept. 25.

Period of record: Maximum discharge, 246,000 ft³/s (6,970 m³/s) Sept. 27, 1936 (gage height, 40.90 ft or 12.466 m, at former site and datum), levee on left bank was overtopped and broken by flood; no flow Aug. 20, 21, 1918, and probably for several days in August 1923.

Maximum stage since at least 1847, that of Sept. 27, 1936; maximum stage 1847-98, 34.63 ft (10.555 m) May 28, 1885, from floodmark at site 3.9 miles (6.3 km) upstream.

REMARKS.--Discharge records good. Flow is largely regulated by Whitney Lake (station 08092500) and Waco Lake (station 08095550). Combined capacity of 18 reservoirs above station, 4,135,000 acre-ft (5.10 km³), of which 2,194,000 acre-ft (2.71 km³) is flood-control storage in Whitney and Waco Lakes. Records furnished by city of Waco show that during year they diverted 23,830 acre-ft (29.4 hm³) for municipal use above station; records furnished by the Brazos River Authority show that during year they returned 18,730 acre-ft (23.1 hm³) of treated sewage effluent above station. Many other small diversions above station for municipal supply, irrigation, and oil-field operation will not appreciably affect flow.

REVISIONS (WATER YEARS).--WSP 568: Drainage area. WSP 850 and 878: 1899-1900, 1907-9 (monthly and yearly summaries only). WSP 1512: 1901-5, 1910, 1915, 1925-26(M), 1927-29. WSP 1922: 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	817	335	1000	1600	1210	583	1340	6590	3580	2110	1490
2	284	339	561	350	1020	522	549	935	3020	2270	1820	810
3	262	217	344	250	264	498	543	663	2420	495	1770	1430
4	158	183	304	440	417	717	1030	597	1480	12800	2480	1010
5	184	169	138	700	199	681	1200	949	711	17800	784	1620
6	195	161	167	640	1420	672	368	1940	753	9780	784	790
7	186	169	154	540	2040	721	304	1190	881	14500	727	347
8	287	164	174	1660	971	705	355	713	545	6630	957	632
9	679	164	168	947	287	587	242	745	1380	6020	1110	941
10	896	152	161	269	277	598	181	1080	541	5300	1290	343
11	1150	156	165	208	264	584	153	1610	481	5090	399	200
12	321	157	243	192	218	585	145	847	552	4440	720	239
13	234	143	165	194	182	551	138	1320	586	2780	1070	544
14	201	152	175	173	167	564	138	1380	909	2040	890	550
15	207	154	233	264	172	580	158	1740	546	1010	976	947
16	574	155	1470	229	174	549	476	1690	773	1850	869	727
17	267	161	579	295	256	386	286	1500	638	4430	716	754
18	166	162	1480	170	914	182	2780	808	851	1410	667	581
19	162	178	897	144	1630	209	4610	587	641	2310	683	250
20	173	155	773	160	940	557	2980	592	602	4980	921	153
21	393	858	313	519	1250	560	1000	587	1050	5530	836	109
22	445	1230	368	530	1290	615	589	583	1580	5410	811	92
23	492	1200	1270	458	1310	695	1620	622	1650	3970	1430	87
24	964	1490	1370	265	1180	419	4760	634	1430	1480	1270	83
25	536	1450	1200	321	1260	359	1100	1380	11700	1760	355	76
26	191	1630	1110	2040	1470	595	1110	6560	8490	2330	664	143
27	196	627	1040	3150	1200	824	1470	6960	2830	1790	1030	747
28	360	182	1100	1810	913	359	957	2340	4060	1590	1490	2620
29	189	207	1330	1720	1340	407	1750	2130	3730	2100	1460	2490
30	765	201	1070	1460	---	577	1280	2630	3970	2070	1150	1210
31	801	---	960	1200	---	567	---	3060	---	1820	1340	---
TOTAL	12468	13183	19817	22299	24625	17635	32855	49712	65390	139365	33579	22015
MEAN	402	439	639	719	849	569	1095	1604	2180	4496	1083	734
MAX	1150	1630	1480	3150	2040	1210	4760	6960	11700	17800	2480	2620
MIN	158	143	138	144	167	182	138	583	481	495	355	76
AC-FT	24730	26150	39310	44230	48840	34980	65170	98600	129700	276400	66600	43670
CAL YR 1975	TOTAL	847058	MEAN	2321	MAX	21200	MIN	113	AC-FT	1680000		
WTR YR 1976	TOTAL	452943	MEAN	1238	MAX	17800	MIN	76	AC-FT	898400		

08096500 Brazos River at Waco, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	HARDNESS (CA+MG) (MG/L)			
DATE	TIME											
NOV 25...	1345	1420	1770	7.9	14.0	9.6	92	1.0	300			
JAN 30...	0815	1530	1820	8.2	8.5	11.2	95	1.3	330			
MAR 23...	1530	850	1790	7.6	19.5	9.7	104	4.0	350			
MAY 12...	1545	850	816	8.0	24.5	10.4	124	2.1	210			
JUL 13...	1530	3500	358	7.7	28.5	9.6	125	2.5	130			
SEP 20...	1345	148	1620	7.7	28.0	7.1	92	1.6	310			
DATE	TIME	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)		
NOV 25...	1710	84	23	240	6.0	5.5	164	0	190			
JAN 30...	200	93	24	240	5.7	5.3	156	0	190			
MAR 23...	210	99	24	240	5.6	5.5	170	0	190			
MAY 12...	77	68	9.9	80	2.4	3.3	163	0	76			
JUL 13...	11	46	3.5	19	.7	3.0	144	0	27			
SEP 20...	180	86	22	210	5.2	6.0	153	0	160			
DATE	TIME	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)		
NOV 25...	360	.6	4.7	989	.00	.01	.05	.42	.08			
JAN 30...	370	.3	5.0	1000	.03	.00	.06	.70	.02			
MAR 23...	370	.4	2.9	1020	.00	.00	.01	.41	.06			
MAY 12...	120	.3	5.9	444	.09	.01	.02	.24	.05			
JUL 13...	24	.3	8.4	202	.06	.01	.01	.38	.02			
SEP 20...	340	.4	6.3	906	.00	.00	.01	.68	.03			
DATE	TIME	TOTAL PCB (UG/L)	POLYCHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
JAN 30...	0815	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
JUL 13...	1530	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
SEP 20...	1345	.0	.00	.00	.0	.00	.00	.00	--	.00	.00	--
DATE	TIME	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN 30...		.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
JUL 13...		.00	.00	.00	.00	.00	.01	0	.00	.13	.00	.00
SEP 20...		.00	.00	.00	--	--	--	0	--	.00	.00	.00

08098290 Brazos River near Highbank, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 31°08'02", long 96°49'29", Falls County, near right bank 45 ft (14 m) downstream from bridge on Farm Road 413, 1.4 miles (2.3 km) downstream from Highbank Slough and Spring Branch, 2.6 miles (4.2 km) south of Highbank, and at mile 346.6 (557.7 km).

DRAINAGE AREA (revised).--30,436 mi² (78,829 km²), of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: October 1965 to current year.

Water quality: Chemical and biochemical analyses: November 1967 to current year. Water temperatures: November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 279.29 ft (85.128 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 2,734 ft³/s (77.43 m³/s), 1,981,000 acre-ft/yr (2.44 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 29,500 ft³/s (835 m³/s) July 5 (gage height, 15.32 ft or 4.670 m); minimum daily, 136 ft³/s (3.85 m³/s) Sept. 25, 26.

Period of record: Maximum discharge, 57,900 ft³/s (1,640 m³/s) May 11, 1968 (gage height, 21.88 ft or 6.669 m); minimum daily, 71 ft³/s (2.01 m³/s) Mar. 10, 19, 20, 26, 27, 30, 1971.

Historic: Maximum stages since at least 1909, 42 ft (12.8 m) in December 1913 and 40 ft (12.2 m) in September 1936, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 1,840 micromhos Feb. 25; minimum daily, 267 micromhos Apr. 29. Maximum water temperatures, 34.0°C Aug. 7; minimum, 7.0°C Dec. 18, Jan. 7, 8.

Period of record: Maximum daily specific conductance, 2,170 micromhos Dec. 8, 1972; minimum daily, 267 micromhos Apr. 29, 1976, July 31, 1971, and May 25, 1975. Maximum water temperatures, 34.0°C Aug. 7, 1976; minimum, 1.0°C Jan. 9, 1968.

REMARKS.--Discharge records good. Many diversions for municipal supply, irrigation, and industrial uses above gage (amount unknown). Flow affected by 20 upstream reservoirs with a combined capacity of 4,181,000 acre-ft (5.16 km³). During the year, Texas Power and Light Co. diverted 6,730 acre-ft (8.30 hm³) to Tradinghouse Reservoir above this station. At end of year, flow from 210 mi² (544 km²) above this station was partly controlled by 59 floodwater-retarding structures with a flood-detention capacity of 75,750 acre-ft (93.4 hm³). Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	978	252	1460	1800	1830	735	5990	4500	5280	1880	1430
2	690	1220	213	1600	2170	1710	747	4620	8000	4760	2070	2210
3	536	796	650	650	1540	759	700	2730	4000	3140	1900	1540
4	331	509	536	366	610	620	924	1830	3000	2450	1930	1680
5	282	396	450	660	518	833	2100	1460	2050	24000	2470	1580
6	213	300	338	1010	381	992	2230	11200	1400	17800	924	1820
7	219	252	247	964	1790	924	1190	8020	1500	17300	884	1010
8	219	235	235	712	2700	1180	846	5780	1760	15000	796	601
9	235	235	224	2120	2100	1120	660	4050	1390	8840	937	527
10	554	235	235	1510	600	1050	572	2770	1980	7920	1180	951
11	1120	230	224	650	330	937	396	2370	1070	6850	1320	572
12	1520	219	219	388	310	833	312	5350	747	6470	591	306
13	735	198	252	325	423	796	270	7010	735	5390	582	241
14	427	203	312	306	300	723	224	6790	783	3700	1050	388
15	312	184	252	294	270	735	213	5680	1220	2630	898	554
16	252	193	270	300	252	735	518	4530	898	1820	951	924
17	247	198	1730	351	264	735	858	3240	1110	6580	884	759
18	247	213	858	381	325	650	4600	2680	820	6850	735	771
19	247	208	1930	381	1020	419	12000	1800	1190	4210	670	630
20	224	208	1350	294	2180	300	12600	1280	833	4630	650	500
21	203	208	1150	258	1280	475	8820	1220	783	6280	871	331
22	241	735	610	442	1670	712	4880	1160	1300	6510	808	213
23	582	1500	388	858	1700	820	2970	1200	2180	6310	759	165
24	640	1610	1800	759	1650	1100	4280	1200	2200	4240	1450	139
25	937	1880	2100	450	1610	858	6360	1330	3540	1830	1320	136
26	1330	1880	1800	492	1700	509	3650	5030	15600	2010	640	136
27	572	2010	1620	2630	1980	712	3010	10800	7960	2450	492	156
28	351	1030	1570	3860	1680	1280	3100	8420	5010	1940	1010	1020
29	306	403	1610	2400	1190	846	11000	3690	5640	1760	1540	2940
30	388	258	1860	2440	---	771	7680	2650	5320	2150	1550	3130
31	630	---	1610	2010	---	735	---	2900	---	2100	1320	---
TOTAL	15480	18724	26895	31321	34343	26699	98445	128780	88519	193200	35062	273600
MEAN	499	624	868	1010	1184	861	3282	4154	2951	6232	1131	912
MAX	1520	2010	2100	3860	2700	1830	12600	11200	15600	24000	2470	3130
MIN	203	184	213	258	252	300	213	1160	735	1760	492	136
AC-FT	30700	37140	53350	62130	68120	52960	195300	255400	175600	383200	69550	542700
CAL YR 1975 TOTAL	1165904		MEAN	3194	MAX	39600	MIN	184	AC-FT	2313000		
WTR YR 1976 TOTAL	724828		MEAN	1980	MAX	24000	MIN	136	AC-FT	1438000		

08098290 Brazos River near Highbank, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
OCT 24...	1000	656	1450	8.2	22.5	30	8.4	95	3.7	2400
NOV 24...	1330	1900	1610	7.8	12.0	--	11.4	106	1.0	2500
DEC 11...	1300	206	1570	8.0	17.0	4	17.0	175	2.4	80
JAN 30...	1030	2400	1780	8.2	9.0	20	10.6	91	1.6	660
FEB 19...	1545	1350	1510	8.6	20.5	20	13.8	152	7.0	700
MAR 23...	1415	820	1630	8.4	21.0	10	14.0	156	6.5	180
APR 14...	1130	225	1200	8.6	23.0	20	12.8	147	5.7	3000
MAY 12...	1410	6950	726	7.5	23.0	180	7.2	83	4.2	110000
JUN 09...	1030	1350	1030	8.2	26.5	25	9.1	115	2.7	520
JUL 13...	1315	5000	375	7.5	28.0	45	8.1	104	2.9	860
AUG 11...	1003	1500	1430	7.9	29.0	21	7.5	99	2.6	2600
SEP 21...	0955	380	1480	8.1	23.5	25	8.7	105	3.5	940

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL. ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT 24...	400	580	350	160	100	24	180	4.2	5.0
NOV 24...	240	230	330	190	95	23	210	5.0	4.8
DEC 11...	15	84	350	160	100	25	190	4.4	5.0
JAN 30...	84	96	330	200	93	24	240	5.7	5.5
FEB 19...	130	110	340	150	96	23	190	4.5	5.0
MAR 23...	35	100	340	170	100	22	220	5.2	6.0
APR 14...	100	350	280	100	81	20	140	3.6	4.8
MAY 12...	20000	32000	170	63	57	7.4	70	2.3	3.8
JUN 09...	34	140	250	100	78	13	120	3.3	4.2
JUL 13...	60	400	130	21	46	4.4	22	.8	3.2
AUG 11...	58	600	270	150	77	19	180	4.8	4.8
SEP 21...	44	760	290	150	81	21	190	4.9	6.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT 24...	226	0	150	260	--	4.0	844	836	.00
NOV 24...	172	0	170	310	.3	4.8	--	903	.11
DEC 11...	238	0	160	310	.3	3.3	898	911	.14
JAN 30...	160	0	190	370	.4	4.9	--	1010	.09
FEB 19...	204	14	160	280	.5	1.1	894	872	.00
MAR 23...	193	9	170	320	.5	1.2	944	944	.10
APR 14...	208	8	130	200	.4	3.6	714	690	.00
MAY 12...	134	0	68	110	.4	8.0	--	391	.60
JUN 09...	182	0	100	170	.3	7.3	598	584	.19
JUL 13...	136	0	31	29	.0	8.1	198	211	.08
AUG 11...	148	0	150	300	.3	7.0	842	812	.01
SEP 21...	175	0	150	290	.3	6.4	839	831	.00

08098290 Brazos River near Highbank, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LFNE BLUE ACTIVE SUB- STANCE (MG/L)	SUS- PENDE SEDIT- MENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDIT- MENT DIS- CHARGE (T/DAY)	SUS- SED. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	.01	.11	.75	.27	9.2	--	51	90	100
NOV 24...	.00	.06	.17	.18	--	--	49	251	94
DEC 11...	.02	.06	.28	.15	--	--	9	5.0	72
JAN 30...	.01	.06	.90	.13	--	.1	65	421	71
FEB 19...	.00	.00	.84	.31	6.6	--	100	364	90
MAR 23...	.03	.05	1.0	.51	--	--	32	71	82
APR 14...	.00	.05	1.0	.24	--	--	20	12	95
MAY 12...	.03	.05	2.0	.92	--	--	2550	47900	89
JUN 09...	.00	.02	.65	.16	8.1	--	44	160	84
JUL 13...	.00	.01	.48	.09	--	--	175	2360	53
AUG 11...	.00	.02	.68	.12	2.0	--	76	308	91
SEP 21...	.00	.02	.97	.13	--	--	32	33	98

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 24...	1000	0	3	2	190	0	0	<10	0	0
FEB. 19...	1545	50	4	3	200	0	0	<10	0	0
JUNE 09...	1030	10	3	2	100	0	0	20	0	0
AUG. 11...	1003	20	3	2	--	0	0	30	0	0

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT. 24...	0	2	0	1000	0	0	0	10	60
FEB. 19...	0	5	5	1100	30	8	0	20	160
JUNE 09...	0	9	2	1200	10	8	8	10	60
AUG. 11...	0	8	0	690	0	4	2	10	60

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 24...	0	.8	.5	0	--	0	1300	20	4
FEB. 19...	20	.2	.0	0	0	0	1500	50	0
JUNE 09...	10	.2	.0	0	0	0	1000	60	0
AUG. 11...	0	.1	.0	2	0	0	1000	40	0

08098290 Brazos River near Highbank, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
FEB. 19	20	12	9.5	3.9	0.4	610	Polyethylene strip
SEP. 21	41	41.2	35.9	7.17	.133	730	Polyethylene strip

OCT. 24, 1975 1000 HOURS

NOV. 24, 1975 1330 HOURS

PHYTOPLANKTON 64,000 CELLS/ML

PHYTOPLANKTON 6,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT	ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA			CHLOROPHYTA		
..CHLOROPHYCEAE			..CHLOROPHYCEAE		
...CHLOROCOCCALES			...CHLOROCOCCALES		
...OCCYSTACEAE			...OCCYSTACEAE		
....ANKISTRODESMUS	2,300	4	....ANKISTRODESMUS	100	2
....DICTYOSPHAERIUM	1,000	2	....KIRCHNERIELLA	52	1
....KIRCHNERIELLA	4,000	6	....OOCYSTIS	100	2
....OOCYSTIS	1,300	2	...SCENEDESMACEAE		
....TETRAEDRON	1,300	2	....CRUCIGENIA	830	14
...SCENEDESMACEAE			....SCENEDESMUS	2,500	41
....SCENEDESMUS	12,000	19	....TETRASTRUM		0
..VOLVOCALES			CHRYSOPHYTA		
...CHLAMYDOMONADACEAE			..BACILLARIOPHYCEAE		
....CHLAMYDOMONAS	1,000	2	..CENTRALES		
CHRYSOPHYTA			...COSCINODISCAEAE		
..BACILLARIOPHYCEAE			....CYCLOTELLA	940	16
..CENTRALES			..PENNALES		
...COSCINODISCAEAE			...CYMBELLACEAE		
....CYCLOTELLA	3,700	6	....CYMBELLA	100	2
....MELOSIRA	4,700	7	...DIATOMACEAE		
..PENNALES			....DIATOMA		0
...NITZSCHIAEAE			...NAVICULACEAE		
....NITZSCHIA	2,300	4	....AMPHIPRORA		0
CYANOPHYTA			....DIPLOEIS	52	1
..MYXOPHYCEAE			....NAVICULA	520	9
...CHROOCOCCALES			...NITZSCHIAEAE		
...CHROOCOCCACEAE			....NITZSCHIA	520	9
....AGMENELLUM	27,000	42	CYANOPHYTA		
...OSCILLATORIALES			..MYXOPHYCEAE		
...OSCILLATORIAEAE			...CHROOCOCCALES		
....OSCILLATORIA	2,700	4	...CHROOCOCCACEAE		
EUGLENOPHYTA			....ANACYSTIS	310	5
..EUGLENOPHYCEAE					
..EUGLENALES					
...EUGLENACEAE					
....EUGLENA	330	1			

08098290 Brazos River near Highbank, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

DEC. 11, 1975 1300 HOURS

PHYTOPLANKTON 11,000 CELLS/ML

ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	120	1
....KIRCHNERIELLA	1,300	13
....OCCYSTIS		0
....TETRAEDRON	120	1
....SCENEDESMACEAE		
....CRUCIGENIA		0
....SCENEDESMUS	720	7
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS	3,200	31
..ZYGNEATALES		
...DESMIDIACEAE		
...STAUSTRUM		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCIINODISCACEAE		
...CYCLOTELLA	600	6
..PENNALES		
...CYMBELLACEAE		
...AMPHORA	120	1
...NAVICULACEAE		
...DIPLONEIS		0
...NITZSCHIA		
...NITZSCHIA	3,500	33
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
...AGMENELLUM		0
...ANACYSTIS	720	7
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
...EUGLENA		0
...PHACUS	120	1
...TRACHELOMONAS		0

JAN. 30, 1976 1030 HOURS

PHYTOPLANKTON 8,100 CELLS/ML

ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS		0
....OCCYSTIS	1,200	15
....SELENASTRUM	160	2
....SCENEDESMACEAE		
....SCENEDESMUS	3,100	38
....TETRASTRUM	1,200	15
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCIINODISCACEAE		
...CYCLOTELLA	310	4
..PENNALES		
...DIATOMACEAE		
...DIATOMA	160	2
...NAVICULACEAE		
...DIPLONEIS		0
...NAVICULA	1,700	21
...NITZSCHIA		
...NITZSCHIA	160	2

08098290 Brazos River near Highbank, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

FEB. 19, 1976 1545 HOURS

PHYTOPLANKTON 97,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
....MICRACTINIACEAE		
.....MICRACTINIUM	6,300	7
....OCCYSTACEAE		
.....ANKISTRODESMUS	7,300	8
.....CHODATELLA		0
.....KIRCHNERIELLA	13,000	14
.....OOCYSTIS	4,800	5
.....TETRAEDRON	630	1
....SCENEDESMACEAE		
.....CRUCIGENIA	6,300	7
.....SCENEDESMUS	25,000	26
.....TETRASTRUM	2,500	3
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCACEAE		
.....CYCLOTILLA	17,000	18
...PENNALES		
....DIATOMACEAE		
.....DIATOMA	1,300	1
....NAVICULACEAE		
.....AMPHIPRORA		0
.....GYROSIGMA		0
.....NAVICULA		0
....NITZSCHACEAE		
.....NITZSCHIA	7,000	7
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
.....ANACYSTIS	3,800	4
...OSCILLATORIALES		
....OSCILLATORIA		
.....LYNGRYA		0

MAR. 23, 1976 1415 HOURS

PHYTOPLANKTON 110,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
....COELASTRACEAE		
.....COELASTRUM		0
.....HYDRODICTYACEAE		
.....PEDIATRUM		0
....MICRACTINIACEAE		
.....MICRACTINIUM	23,000	21
....OCCYSTACEAE		
.....ANKISTRODESMUS	1,100	1
.....CHODATELLA		0
.....DICTYOSPHAERIUM	860	1
.....KIRCHNERIELLA	8,000	7
.....OOCYSTIS	3,900	4
.....TETRAEDRON	1,100	1
....SCENEDESMACEAE		
.....CRUCIGENIA	860	1
.....SCENEDESMUS	26,000	24
.....TETRASTRUM	3,500	3
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	1,300	1
...VOLVOCALES		
....GONIUM	4,300	4
....PANDORINA		0
..ZYGNEMATALES		
...DESMIDIACEAE		
....STAUSTRUM		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCACEAE		
.....CYCLOTILLA	18,000	17
.....MELOSTRA	2,800	3
...PENNALES		
....CYMBELLACEAE		
.....AMPHORA		0
.....CYMBELLA		0
....GOMPHONEMACEAE		
.....GOMPHONEMA		0
....NAVICULACEAE		
.....GYROSIGMA		0
.....NAVICULA	860	1
.....NEIDIUM		0
....NITZSCHACEAE		
.....NITZSCHIA	1,900	2
...ACHNANTHACEAE		
....RHOICOSPHEA		0
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
.....ANACYSTIS	10,000	10
...OSCILLATORIALES		
....OSCILLATORIA		0
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENACEAE		
....EUGLENA		0

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

APR. 14, 1976 1130 HOURS

PHYTOPLANKTON 88,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...COELASTRACEAE		
....COELASTRUM	5,900	7
...MICRACTINIACEAE		
....MICRACTINIUM	19,000	21
...OCCYSTACEAE		
....ANKISTRODESMUS	5,900	7
....CHODATELLA		
....DICTYOSPHAERIUM	4,400	5
....KIRCHNERIELLA	1,500	2
....OOCYSTIS	3,700	4
....SELENASTRUM	1,900	2
....TETRAEDRON	740	1
...SCENEDESMACEAE		
....SCENEDESMUS	23,000	26
....TETRASTRUM	4,400	5
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	740	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTILLA	12,000	13
...PENNIALES		
...NITZSCHIA		
....NITZSCHIA		0
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	3,000	3
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDAE		
....CRYPTOMONADACEAE		
....CRYPTOMONAS	1,900	2

MAY 12, 1976 1410 HOURS

PHYTOPLANKTON 2,600 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	99	4
....TETRAEDRON	200	8
...SCENEDESMACEAE		
....SCENEDESMUS	400	15
....TETRASTRUM	400	15
..TETRASPORALES		
...COCCOMYXACEAE		
....ELAKATOTHRIX	99	4
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	300	12
..ZYGNEMATALES		
...DESMIDIACEAE		
....CLOSTERIUM	50	2
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTILLA	50	2
...PENNIALES		
...CYMBELLACEAE		
....AMPHORA	50	2
...NAVICULACEAE		
....NAVICULA	350	13
...NITZSCHIA		
....NITZSCHIA	590	23

JUNE 9, 1976 1030 HOURS

PHYTOPLANKTON 77,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...CHARACIACEAE		
...SCHROEDERIA		
...COELASTRACEAE		
....COELASTRUM	45,000	58
...HYDRODICTYACEAE		
....PEDIASTRUM		0
...OCCYSTACEAE		
....ANKISTRODESMUS	1,600	2
....KIRCHNERIELLA	800	1
....OOCYSTIS		0
....TETRAEDRON		0
...SCENEDESMACEAE		
....ACTINASTRUM	3,200	4
....CRUCIGENIA		0
...SCENEDESMUS	4,800	6
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTILLA	800	1
...MELOSIRA	1,600	2
...PENNIALES		
...NAVICULACEAE		
....NAVICULA	400	1
...NITZSCHIA		
....NITZSCHIA	5,200	7
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM		0
....ANACYSTIS	13,000	17
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA		0
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDAE		
....CRYPTOCHRYSIDACEAE		
....CHROOMONAS	800	1
EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENA	400	1

08098290 Brazos River near Highbank, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

JULY 13, 1976 1315 HOURS

PHYTOPLANKTON 13,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
...OCCYSTIS	390	3
...SCENEDESMACEAE		
...CRUCIGENIA	1,600	12
...SCENEDESMUS	780	6
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS	580	5
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	1,500	11
..PENNALES		
...NAVICULACEAE		
...STAUROGONIA	97	1
...NITZSCHIA		
...NITZSCHIA	580	5
..CHRYSOPHYCEAE		
..CHRYDOMONADALES		
..OCHROMONADACEAE		
...OCHROMONAS	97	1
..BACILLARIOPHYCEAE		
..PENNALES		
...ACHNANTHACEAE		
...RHOICOSPHECIA	97	1
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
..CHROOCOCCACEAE		
...ANACYSTIS	580	5
..OSCILLATORIALES		
..RIVULARIACEAE		
...RAPHIIDIOPSIS	5,800	45
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
...EUGENACEAE		
...EUGLENA	780	6

AUG. 11, 1976 1003 HOURS

PHYTOPLANKTON 400 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...SCENEDESMACEAE		
...SCENEDESMUS	13	3
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	25	6
..PENNALES		
...ACHNANTHACEAE		
...ACHNANTHES	25	6
...COCCONEIS	63	16
...NITZSCHIA		
...NITZSCHIA	38	9
...TABELLARIA		
...TABELLARIA	25	6
..CHRYSOPHYCEAE		
..CHRYDOMONADALES		
..OCHROMONADACEAE		
...DINORRYON	210	53

SEP. 21, 1976 0955 HOURS

PHYTOPLANKTON 140,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...COELASTRACEAE		
...COELASTRUM	1,700	1
...HYDRODICTYACEAE		
...PEDIASTRUM	870	1
...MICRACTINIACEAE		
...MICRACTINIUM	2,600	2
...OCCYSTACEAE		
...ANKISTRODESMUS	4,600	3
...DICTYOSPHAERIUM	10,000	7
...KIRCHNERIELLA	5,400	4
...OCCYSTIS	1,300	1
...TETRAEDRON	1,500	1
..SCENEDESMACEAE		
...CRUCIGENIA	6,900	5
...SCENEDESMUS	13,000	9
..TETRASPORALES		
..COCCOMYXACEAE		
...ELAKATOTHRIX		
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS	1,300	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...NAVICULACEAE		
...NAVICULA		
...NITZSCHIA		
...NITZSCHIA	2,600	2
..CHRYSOPHYCEAE		
..CHRYDOMONADALES		
..OCHROMONADACEAE		
...OCHROMONAS		
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
..CHROOCOCCACEAE		
...AGMENELLUM	32,000	23
...ANACYSTIS	14,000	10
..OSCILLATORIALES		
..NOSTOCACEAE		
...ANABAENA	4,300	3
..OSCILLATORIA		
...OSCILLATORIA	36,000	26

08098290 Brazos River near Highbank, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARNESS (CA+MG) (MG/L)
OCT. 1975.....	15480	1450	420	34200	280	11700	150	6390	300
NOV. 1975.....	18724	1610	910	46000	320	15100	170	8710	320
DEC. 1975.....	26495	1680	950	68900	340	24400	180	13100	320
JAN. 1976.....	31321	1720	970	62200	350	29200	180	15500	330
FEB. 1976.....	33153	1750	990	88700	350	31700	190	16800	330
MAR. 1976.....	26699	1670	950	68200	330	24100	180	12900	320
APR. 1976.....	98445	502	280	74800	57	15300	48	12800	150
MAY 1976.....	128780	549	310	106000	66	22900	51	17600	160
JUNE 1976.....	88519	645	360	85600	88	20900	62	14800	170
JULY 1976.....	133200	451	250	131000	45	23300	42	21800	140
AUG. 1976.....	35062	1450	820	77400	280	26400	150	14400	300
SEPT 1976.....	27366	1190	670	49300	210	15700	120	8950	260
TOTAL	723538	**	**	912000	**	262000	**	164000	**
WTD.AVG.	1982.57	832	470	**	130	**	84	**	200

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	1400	1720	1790	1790	1820	1630	388	612	787	1290	1600
2	1480	1560	1640	1790	1800	1800	1690	546	342	592	1260	1240
3	1520	1500	1710	1720	1800	1790	1730	557	493	680	1290	1200
4	1550	1450	1640	1750	1790	1770	1690	560	526	720	1220	1390
5	1560	1460	1650	1650	1780	1720	1090	609	569	362	1360	1260
6	1560	1510	1660	1750	1770	1760	1430	554	640	280	1410	900
7	1530	1540	1670	1750	1740	1720	1390	560	580	287	1420	728
8	1510	1520	1650	1790	1770	1490	1460	757	854	312	1410	622
9	1480	1450	1640	1720	1790	1540	1290	747	1150	318	1330	1340
10	1440	1370	1590	1760	1770	1620	1160	743	1180	489	1430	1000
11	1490	1380	1580	1750	1760	1630	1230	699	1170	467	1510	716
12	1550	1410	1520	1740	1740	1550	1240	544	1020	414	1510	1100
13	1590	1460	1500	1740	1710	1650	1200	415	1040	381	1550	1200
14	1610	1510	1530	1710	1710	1660	1160	370	1130	395	1470	1410
15	1600	1480	1500	1680	1680	1650	1120	546	1250	503	1540	1280
16	1610	1500	1490	1660	1660	1680	1030	600	1270	620	1510	1330
17	1610	1510	1560	1620	1580	1660	614	659	1230	456	1450	1410
18	1550	1490	1610	1590	1550	1680	550	696	1250	450	1510	1440
19	1570	1480	1670	1580	1510	1660	352	757	1310	706	1520	1460
20	1590	1470	1740	1600	1670	1690	487	700	1410	438	1510	1480
21	1610	1460	1760	1610	1650	1660	381	800	1460	396	1530	1400
22	1630	1480	1750	1620	1700	1640	375	824	1350	350	1520	1410
23	1440	1540	1730	1580	1780	1630	425	1020	1040	396	1530	1300
24	1470	1640	1690	1650	1810	1620	400	1120	725	430	1530	1140
25	1380	1740	1700	1640	1840	1670	281	1300	835	559	1550	1320
26	1440	1770	1680	1600	1800	1600	319	679	350	825	1590	1330
27	1190	1790	1650	1530	1770	1650	350	404	326	1130	1600	1280
28	1030	1780	1690	1780	1790	1630	356	323	766	1260	1650	1150
29	1070	1730	1690	1790	1800	1660	267	355	594	1080	1620	1110
30	1160	1740	1740	1780	---	1730	322	385	612	890	1610	1110
31	1220	---	1770	1790	---	1690	---	395	---	1180	1630	---
MONTH	1470	1540	1650	1690	1730	1670	901	633	903	586	1480	1220

08098290 Brazos River near Highbank, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	22.0	14.5	13.0	9.0	21.0	---	16.0	25.0	30.0	31.0	27.0
2	24.5	22.0	14.0	10.5	13.0	22.0	---	23.0	25.5	28.0	31.5	25.0
3	23.0	23.0	14.0	8.5	14.0	21.5	---	24.5	26.0	29.0	31.0	28.0
4	23.5	21.5	15.0	8.0	17.0	24.0	---	24.0	27.0	---	30.5	30.0
5	24.0	23.0	15.5	9.5	12.0	10.0	---	21.5	26.5	24.5	31.5	28.0
6	27.0	22.0	15.0	8.0	10.0	14.0	---	20.0	27.0	26.5	33.0	29.0
7	26.0	24.0	12.0	7.0	9.5	14.5	19.5	21.0	28.0	26.0	34.0	30.0
8	25.0	21.0	15.5	7.0	13.0	14.5	22.0	19.0	29.0	26.0	33.5	32.0
9	25.5	25.0	14.5	8.0	14.5	14.0	23.0	21.0	30.0	27.0	33.0	27.0
10	24.5	20.5	15.0	9.0	18.0	17.0	23.5	24.0	29.5	28.0	33.0	28.0
11	25.5	21.5	12.0	8.5	20.5	17.0	23.0	25.0	30.5	27.0	33.0	27.0
12	26.5	14.0	18.0	9.0	19.5	18.0	25.0	24.0	27.0	27.0	32.0	29.0
13	27.0	11.0	17.0	10.0	21.5	16.0	25.0	22.0	29.0	29.0	30.5	27.0
14	26.5	15.0	17.0	11.0	20.5	12.0	26.0	22.0	29.0	27.0	31.0	26.0
15	25.0	12.0	11.0	13.0	20.5	12.0	23.0	23.0	30.0	27.0	31.0	31.0
16	23.0	---	12.0	11.5	21.5	11.0	18.5	25.0	32.0	27.0	28.5	31.5
17	21.0	20.0	8.5	11.0	20.0	14.5	21.5	24.5	31.0	26.0	32.0	30.5
18	20.5	20.0	7.0	14.5	22.0	14.0	17.0	24.0	30.0	28.0	31.0	30.5
19	23.5	18.5	9.5	14.5	23.0	16.0	15.5	25.0	29.0	28.5	30.5	30.0
20	22.0	14.0	8.0	13.0	21.0	---	20.0	25.0	28.0	29.0	30.0	29.0
21	23.0	13.0	10.0	12.0	17.0	---	21.5	28.0	29.0	28.5	31.0	30.5
22	21.5	12.0	10.5	13.0	12.0	---	23.5	29.0	28.5	29.0	27.0	27.0
23	24.0	9.5	9.5	14.0	16.0	---	23.0	24.5	28.5	29.5	29.0	29.5
24	25.0	11.5	9.0	14.5	16.0	---	24.0	30.0	28.5	28.0	29.5	30.0
25	17.0	12.0	8.0	16.5	15.0	---	20.0	29.5	28.0	32.0	30.0	29.0
26	18.0	9.5	9.5	9.5	17.0	---	21.5	24.5	29.0	32.0	32.0	28.5
27	19.5	---	11.5	10.0	18.5	---	22.0	22.0	29.5	31.5	32.0	29.0
28	20.0	13.0	10.5	10.0	20.0	---	22.0	23.0	28.5	31.0	31.5	24.5
29	18.0	19.5	9.5	12.0	19.0	---	17.0	22.0	30.0	32.0	31.0	26.0
30	19.0	11.0	8.5	13.0	---	---	18.0	23.0	30.0	33.0	28.0	25.5
31	19.5	---	8.0	10.0	---	---	---	23.0	---	33.0	28.0	---
MONTH	23.0	17.0	12.0	11.0	17.0	---	21.5	24.0	28.5	28.5	31.0	28.5

08098300 Little Pond Creek at Burlington, Tex.

LOCATION.--Lat 31°01'35", long 96°59'17", Milam County, on left bank downstream from bridge on U.S. Highway 77, 1.0 mile (1.6 km) north of Burlington, 2.5 miles (4.0 km) downstream from Keys Creek, and 12.6 miles (20.3 km) upstream from mouth.

DRAINAGE AREA (revised).--23.0 mi² (59.6 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year.

Water quality: Sediment records: January 1966 to September 1975.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 388.51 ft (118.418 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 13.4 ft³/s (0.379 m³/s), 7.91 in/yr (201 mm/yr), 9,710 acre-ft/yr (12.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,140 ft³/s (117 m³/s) May 6 (gage height, 14.42 ft or 4.395 m); no flow for many days.

Period of record: Maximum discharge, 8,570 ft³/s (243 m³/s) May 24, 1975 (gage height, 16.90 ft or 5.151 m); no flow for many days each year.

Maximum stage since at least 1938, 17.5 ft (5.33 m) in 1950, from information by local residents.

REMARKS.--Discharge records good. No diversions above station. A recording rain gage is located at the station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0			0	.02	3.9	13	0		0
2	0	3.0	0			0	.01	1.5	1.6	0		2.7
3	0	.36	0			0	0	.66	.51	0		73
4	0	.06	0			.01	.39	.38	.21	6.3		9.8
5	0	0	0			.28	171	29	.08	23		1.3
6	0	0	0			.18	57	1240	.04	45		.30
7	0	0	0			.31	24	493	.01	7.7		.05
8	0	0	0			106	36	73	.01	1.2		.01
9	0	0	0			16	3.2	7.2	0	.41		0
10	0	0	0			2.2	1.1	89	0	.31		0
11	0	0	0			.76	.47	6.5	0	.72		0
12	0	0	0			.35	.25	4.9	0	.50		0
13	0	0	0			.27	.11	353	0	.21		0
14	0	0	0			.19	.05	6.9	0	.10		0
15	0	0	0			.08	.18	1.5	0	.55		0
16	0	0	0			.03	154	.60	0	12		0
17	0	0	0			.01	12	.26	0	133		0
18	0	0	0			.01	1710	.12	0	7.6		0
19	0	0	0			.01	358	.05	0	1.7		0
20	0	0	0			0	394	.05	0	.61		0
21	0	0	0			0	12	.03	0	.21		0
22	0	0	0			0	2.3	.02	0	.08		0
23	0	0	0			0	.89	.01	0	.01		0
24	0	0	0			76	45	.01	0	0		0
25	1.2	0	0			21	109	.01	.33	0		0
26	.22	0	.28			3.1	2.5	.02	1.8	0		.01
27	.20	0	.11			.94	.70	.02	.43	0		0
28	.01	0	.03			.35	5.3	.01	.14	0		7.8
29	0	0	0			.16	1230	0	.02	0		3.3
30	0	0	0		---	.06	15	.83	0	0		.58
31	0	---	0		---	.03	---	4.8	---	0		---
TOTAL	2.23	3.42	.42	0	0	228.33	4383.08	2317.28	18.18	241.21	0	98.85
MEAN	.072	.11	.014	0	0	7.37	146	74.8	.61	7.78	0	3.30
MAX	1.2	3.0	.28	0	0	106	1710	1240	13	133	0	73
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	.003	.004	0	0	0	.32	6.35	3.25	.03	.34	0	.14
IN.	.004	.006	.0007	0	0	.37	7.09	3.75	.03	.39	0	.16
AC-FT	4.4	6.8	.8	0	0	453	8690	4600	.36	478	0	196
CAL YR 1975	TOTAL	7778.32	MEAN 21.3	MAX 2690	MIN 0	CFSM .93	IN 12.58	AC-FT 15430				
WTR YR 1976	TOTAL	7293.00	MEAN 19.9	MAX 1710	MIN 0	CFSM .87	IN 11.80	AC-FT 14470				

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-18	1230	14.11	3,740	5-6	0330	14.42	4,140
4-20	1230	9.90	776	5-7	0030	11.72	1,570
4-29	0630	13.91	3,500				

08099000 Leon Reservoir near Ranger, Tex.

LOCATION.--Lat 32°21'46", long 98°40'32", Eastland County, at outlet works near left end (revised) of dam on Leon River, 7.4 miles (11.9 km) south of Ranger, 8.7 miles (14.0 km) southeast of Eastland, and 274.1 miles (441.1 km) above mouth.

DRAINAGE AREA.--259 mi² (671 km²), revised.

PERIOD OF RECORD.--Contents: January 1955 to current year. Prior to October 1965 (revised), monthend contents only.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Nonrecording gage Datum of gage is at mean sea level.

EXTREMES (at 1000).--Current year: Maximum contents observed, 24,850 acre-ft (30.6 hm³) Oct. 1-4 (elevation, 1,373.4 ft or 418.61 m); minimum, 20,490 acre-ft (25.3 hm³) Sept. 25-30 (elevation, 1,370.2 ft or 417.64 m).
Period of record: Maximum contents observed, 40,640 acre-ft (50.1 hm³) June 13, 1967 (elevation, 1,382.2 ft or 421.29 m); minimum observed since first appreciable storage, 15,880 acre-ft (19.6 hm³) Jan. 11-21, Feb. 5-7, Apr. 29, 30, 1956 (elevation, 1,366.2 ft or 416.42 m).

REMARKS.--The reservoir is formed by a rolled earthfill dam 3,700 ft (1,130 m) long. Storage began in April 1954 and dam was completed in June 1954. The emergency spillway is a 1,200-foot-wide (366-meter) cut through natural ground near the left end of dam. The service spillway is an uncontrolled circular concrete drop inlet designed for a maximum discharge of 5,000 ft³/s (142 m³/s) through an 11-foot-diameter (3-meter) concrete conduit. The dam is the property of Eastland County Water Supply District and was built to impound water for municipal use by the cities of Ranger, Olden, and Eastland. The capacity table is based on a survey made in 1952. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	1,398.0	-
Crest of spillway..	1,382.0	40,210
Crest of spillway (of conservation pool).....	1,375.0	27,290
Lowest gated outlet (invert for water supply).....	1,335.0	869

COOPERATION.--Elevation and diversion records furnished by Eastland County Water Supply District.

REVISIONS.--WSP 1922: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,370.0	20,240
1,372.0	22,850
1,374.0	25,740

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 1000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24850	23980	23270	22990	22580	22310	21780	23130	22990	22180	21260	20750
2	24850	23980	23270	22990	22580	22310	21780	23130	22990	22050	21260	21000
3	24850	24120	23130	22990	22580	22310	21640	23130	22990	22050	21260	21000
4	24850	24120	23130	22990	22580	22310	21640	22990	22990	22050	21260	21000
5	24700	24120	23130	22850	22580	22310	21640	22990	22990	22050	21260	21000
6	24700	24120	23130	22850	22580	22180	21640	23130	22990	22050	21260	20680
7	24700	23980	23130	22850	22580	22180	21640	23130	22990	22050	21130	20880
8	24700	23980	23130	22850	22580	22180	21640	23130	22990	21910	21130	20880
9	24560	23980	23130	22850	22580	22180	21640	23130	22990	21910	21130	20880
10	24560	23840	23130	22850	22450	22180	21640	23130	22850	21910	21130	20880
11	24560	23840	22990	22850	22450	22180	21640	23130	22850	21910	21130	20880
12	24560	23840	22990	22850	22450	22180	21640	23130	22850	21910	21130	20880
13	24560	23840	22990	22850	22450	22180	21640	23130	22850	21780	21130	20750
14	24410	23840	22990	22850	22450	22180	21780	23130	22720	21780	21130	20750
15	24410	23840	22990	22850	22450	22180	22050	23130	22720	21780	21000	20750
16	24260	23700	22990	22850	22450	22180	22450	23130	22580	21780	21000	20750
17	24260	23700	22990	22850	22450	22180	22850	22990	22580	21780	21000	20750
18	24260	23700	22990	22850	22450	22050	22990	22990	22450	21640	21000	20750
19	24260	23700	22990	22850	22310	22050	22990	22990	22450	21640	21000	20750
20	24260	23700	22990	22850	22310	22050	22990	22990	22450	21640	21000	20750
21	24120	23700	22990	22850	22310	22050	22990	22990	22450	21640	21000	20620
22	24120	23560	22990	22850	22310	22050	22990	22990	22450	21510	21000	20620
23	24120	23560	22990	22850	22310	22050	22990	22990	22450	21510	20880	20620
24	24120	23560	22990	22850	22310	21910	22990	22990	22310	21510	20880	20620
25	24120	23560	22990	22850	22310	21910	22990	22990	22310	21510	20880	20490
26	24120	23410	22990	22850	22310	21910	22990	22990	22310	21510	20880	20490
27	24120	23410	22990	22720	22310	21910	22990	23270	22310	21380	20880	20490
28	24120	23410	22990	22720	22310	21910	22990	23270	22180	21380	20750	20490
29	24120	23270	22990	22720	22310	21780	22990	23270	22180	21380	20750	20490
30	23980	23270	22990	22720	---	21780	23130	23130	22180	21380	20750	20490
31	23980	---	22990	22720	---	21780	---	23130	---	21260	20750	---
(†)	1372.8	1372.3	1372.1	1371.9	1371.6	1371.2	1372.2	1372.2	1371.5	1370.8	1370.4	1370.2
(*)	-1320	-710	-280	-270	-410	-530	+1350	0	-950	-920	-510	-260
(††)	199	165	173	174	156	172	159	167	249	218	268	168
MAX	24850	24120	23270	22990	22580	22310	23130	23270	22990	22180	21260	21000
MIN	23980	23270	22990	22720	22310	21780	21640	22850	22180	21260	20750	20490

CAL YR 1975..... * -4150

WTR YR 1976..... * -4810

†† 2080

†† 2270

MAX 29430

MAX 24850

MIN 22990

MIN 20490

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use.

BRAZOS RIVER BASIN

08099000 Leon Reservoir near Ranger, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	
MAY 18...	0845	733	8.2	21.0	220	99	64	14	64	
DATE		SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAY 18...	1.9	6.5	145	0	54	130	.3	.3	405	

08099100 Leon River near De Leon, Tex.

LOCATION.--Lat 32°10'25", long 98°31'58", Comanche County, on left bank at downstream end of bridge on State Highway 16, 1.5 miles (2.4 km) upstream from Flat Creek, 4.4 miles (7.1 km) northeast of De Leon, 6 miles (10 km) downstream from Hog Creek, and 250.1 miles (402.4 km) upstream from mouth.

DRAINAGE AREA (revised).--479 mi² (1,241 km²).

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,209.93 ft (368.787 m) above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 50.7 ft³/s (1.436 m³/s), 36,730 acre-ft/yr (45.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 884 ft³/s (25.0 m³/s) Apr. 20 (gage height, 8.38 ft or 2.554 m); no flow for many days. Period of record: Maximum discharge, 7,540 ft³/s (214 m³/s) Jan. 21, 1968 (gage height, 15.50 ft or 4.724 m); no flow for many days.

A stage of 19.3 ft (5.88 m) occurred in May 1908 at a point 2,000 ft (610 m) downstream from gage site and is the highest since that time, from information by local resident.

REMARKS.--Records good. Flow partly regulated by Leon Reservoir (station 08099000). Numerous diversions above station for municipal, steam powerplant operation, and other uses. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.10	.26	.37	.09	3.2	5.6	0	0	0
2			0	.11	.23	.37	.07	1.7	1.4	0	0	0
3			0	.11	.28	.37	.10	1.5	.75	0	0	1.2
4			0	.11	.32	.38	19	1.3	.42	0	0	.18
5			0	.11	.32	.32	6.9	6.6	.34	0	0	0
6			0	.11	.32	.28	.21	46	.32	0	0	0
7			0	.15	.32	.28	1.6	24	.24	0	0	0
8			0	.09	.32	.83	3.1	13	.18	0	0	0
9			0	.08	.34	1.1	.06	6.7	.17	0	0	0
10			0	.10	.37	.65	.05	4.4	.17	0	0	0
11			0	.18	.37	.47	.05	3.8	.13	19	0	0
12			0	.18	.37	.46	11	3.5	.09	1.6	0	0
13			0	.17	.37	.42	176	3.2	.07	.19	0	0
14			0	.20	.37	.37	12	2.9	.06	.06	0	0
15			0	.18	.42	.40	17	2.4	.04	.03	0	0
16			0	.17	.42	.32	267	2.2	.03	.01	0	0
17			0	.17	.61	.24	37	1.7	.02	.01	0	0
18			0	.17	.67	.26	13	.86	.02	.01	0	0
19			0	.17	.53	.30	63	.51	.01	.01	0	0
20			0	.17	.42	.24	289	.42	0	0	0	7.8
21			0	.17	.36	.18	33	.41	0	0	0	.64
22			0	.17	.21	.16	13	.32	0	0	0	0
23			0	.23	.15	.11	6.3	.10	0	0	0	0
24			0	.28	.18	.11	4.1	.31	0	0	0	0
25			.06	.37	.26	.07	2.0	73	0	0	0	0
26			.04	.32	.27	.10	1.2	427	0	0	0	0
27			.06	.21	.30	.21	1.2	50	0	0	0	0
28			.11	.21	.35	.12	1.2	16	0	0	0	0
29			.11	.21	.37	.07	7.0	6.1	0	0	.10	0
30			.11	.28	---	.10	8.6	2.7	0	0	.24	0
31		---	.09	.37	---	.10	---	6.2	---	0	0	---
TOTAL	0	0	.58	5.65	10.08	9.76	993.83	712.03	10.06	20.92	.34	9.82
MEAN	0	0	.019	.18	.35	.31	33.1	23.0	.34	.67	.011	.33
MAX	0	0	.11	.37	.67	1.1	289	427	5.6	19	.24	7.8
MIN	0	0	0	.08	.15	.07	.05	.10	0	0	0	0
AC-FT	0	0	1.2	11	20	19	1970	1410	20	41	.7	19
CAL YR 1975	TOTAL	12584.56	MEAN	34.5	MAX	1060	MIN	0	AC-FT	24960		
WTR YR 1976	TOTAL	1773.07	MEAN	4.84	MAX	427	MIN	0	AC-FT	3520		

08099300 Sabana River near De Leon, Tex.

LOCATION.--Lat 32°06'50", long 98°36'19", Comanche County, on left bank at downstream end of bridge on Farm Road 587, 0.6 mile (1.0 km) downstream from Spring Branch, 4.0 miles (6.4 km) west of De Leon, 4.2 miles (6.8 km) upstream from Turkey Creek, and 12.2 miles (19.6 km) upstream from mouth.

DRAINAGE AREA (revised).--264 mi² (684 km²).

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,209.59 ft (368.683 m) above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--16 years, 34.8 ft³/s (0.986 m³/s), 1.79 in/yr (45 mm/yr), 25,210 acre-ft/yr (31.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) May 26 (gage height, 13.20 ft or 4.023 m); no flow for many days.
Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) June 12, 1967 (gage height, 22.05 ft or 6.721 m); no flow at times.
Maximum stage since at least 1890, 24 ft (7.3 m) in May 1908, from information by local resident.

REMARKS.--Records good. Flow is affected by Nabors Lake (capacity unknown) on Spring Branch. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.11	.60	2.1	.78	.64	.19	2.4	6.9	0	0	.31
2	.04	1.1	.60	2.1	.70	.26	.07	3.5	3.0	0	0	.09
3	.04	.26	.60	1.9	.60	.20	.06	1.5	2.1	0	0	.97
4	.04	.12	.60	2.4	.60	.23	6.7	.79	1.9	0	0	.43
5	.04	.11	.66	2.6	.60	.17	1.3	1.1	.94	0	0	13
6	.04	.09	.65	2.6	.85	.15	.35	3.0	.91	0	0	2.0
7	.04	.10	.49	2.6	.69	.19	.34	3.6	.98	0	0	.92
8	.04	.11	.49	2.1	.60	.90	1.9	1.8	.93	0	0	.47
9	.04	.69	.49	2.1	.58	.57	.87	1.5	.68	0	0	.28
10	.04	.17	.49	2.1	.49	.41	.45	1.6	.67	0	0	.32
11	.03	.18	.49	2.6	.49	.40	.40	.93	.65	7.3	0	.18
12	.03	.15	.49	3.7	.49	.48	.66	.84	.48	.73	0	.07
13	.03	.18	.54	1.3	.49	.71	17	.72	.39	.14	0	0
14	.03	.20	.60	.60	.49	.71	.38	9.3	.31	.09	0	0
15	.02	.27	.60	.40	.49	.71	.46	15	.26	.06	0	0
16	.04	.48	.60	.54	.48	.57	113	6.3	.32	.06	0	0
17	.04	.49	.60	.57	.58	.16	51	3.1	.33	32	0	0
18	.04	.49	.60	.49	.55	.57	15	1.7	.24	9.0	0	0
19	.04	.49	1.1	.49	.40	.60	14	1.2	.14	1.3	0	0
20	.04	.49	1.3	.49	.62	.51	78	.67	.09	.38	0	19
21	.04	.48	1.3	.49	1.0	.15	11	.72	.08	.15	0	42
22	.12	.40	1.4	.49	.50	.15	3.1	.55	.07	.15	0	14
23	.29	.40	1.5	.55	.40	.15	2.3	.38	.01	.15	0	6.4
24	.11	.54	3.3	.60	.40	.22	1.5	.37	0	.09	0	1.7
25	.11	.60	4.5	.60	.45	.25	.75	137	0	.05	0	.68
26	.11	.60	2.6	.60	.49	.19	.56	336	0	.04	0	.40
27	.11	.60	2.1	.67	.58	.09	.59	37	0	.03	0	.16
28	.11	.60	2.1	.78	.71	.08	.63	16	0	0	0	.17
29	.11	.60	2.1	1.3	.71	.12	1.8	7.8	0	0	0	.19
30	.11	.60	2.1	1.4	---	.15	.99	4.4	0	0	0	.15
31	.11	---	2.1	.97	---	.17	---	5.9	---	0	3.9	---
TOTAL	2.08	11.70	37.69	42.23	16.81	10.86	325.35	606.67	22.38	51.72	3.9	155.19
MEAN	.067	.39	1.22	1.36	.58	.35	10.8	19.6	.75	1.67	.13	5.17
MAX	.29	1.1	4.5	3.7	1.0	.90	113	336	6.9	32	3.9	.43
MIN	.02	.09	.49	.40	.40	.08	.06	.37	0	0	0	0
AC-FT	4.1	23	75	84	33	22	645	1200	44	103	7.7	308

CAL YR 1975 TOTAL 5766.89 MEAN 15.8 MAX 566 MIN 0 AC-FT 11440
WTR YR 1976 TOTAL 1286.58 MEAN 3.52 MAX 336 MIN 0 AC-FT 2550

PEAK DISCHARGE (BASE, 1,500 FT³/S).--No peak above base.

08099400 Proctor Lake near Proctor, Tex.

LOCATION.--Lat 31°58'07", long 98°29'09", Comanche County, in intake structure at Proctor Lake on Leon River, 2.0 miles (3.2 km) upstream from U.S. Highways 67 and 377, 3.5 miles (5.6 km) west of Proctor, and 228.1 miles (367.0 km) upstream from mouth.

DRAINAGE AREA (revised).--1,259 mi² (3,261 km²).

PERIOD OF RECORD.--Contents: January 1963 to current year. Prior to October 1970, published as Proctor Reservoir.

Water quality: Chemical analyses: January 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 28, 1963, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 55,470 acre-ft (68.4 hm³) June 2 (elevation, 1,161.13 ft or 353.912 m); minimum, 44,020 acre-ft (54.3 hm³) Apr. 2, 3 (elevation, 1,158.33 ft or 353.059 m).

Period of record: Maximum contents, 137,500 acre-ft (170 hm³) Jan. 26, 1968 (elevation, 1,174.84 ft or 358.091 m); minimum since first filling of lake, 26,620 acre-ft (32.8 hm³) Sept. 14, 1967 (elevation, 1,152.82 ft or 351.380 m).

REMARKS.--The lake is formed by a reinforced concrete gated structure and rolled earthfill section, total length 13,460 ft (4,103 m). The lake was operated as a detention basin from Jan. 30 to July 5, 1963. The gates were closed July 6, 1963, but lake was operated to elevation 1,156.0 ft (352.35 m) until construction was completed. Deliberate impoundment began Sept. 30, 1963. The spillway is a gated concrete gravity structure located on the left bank, with an ogee weir section and stilling basin. The spillway is controlled by eleven 40.0- by 35.0-foot (12.2- by 10.7-meter) tainter gates. The spillway was designed to discharge 431,800 ft³/s (12,200 m³/s) at an elevation of 1,201.0 ft (366.06 m). The lake is operated for flood control and water conservation. One major reservoir partly regulates the inflow (see station 08099000). Inflow is affected at times by discharge from the flood-detention pools of 21 floodwater-retarding structures with combined detention capacity of 32,950 acre-ft (40.6 hm³). These structures control runoff from 131 mi² (339 km²) in the Leon River and Rush Creek watersheds. The capacity table is based on a survey made in 1946. Borrow is not included in capacity totals. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	1,206.0	-
Design flood.....	1,201.0	427,500
Top of gates.....	1,197.0	374,200
Crest of spillway (top of conservation pool).....	1,162.0	59,400
Lowest gated outlet (invert).....	1,128.0	68

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,158.0	42,790
1,160.0	50,620
1,162.0	59,390

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51290	49190	47980	47180	46400	45430	44140	52180	55380	52640	50050	47660
2	51120	49800	47980	47340	46360	45390	44020	52130	55420	51920	49800	47820
3	51040	49630	47940	47140	46240	45350	44020	52050	55420	51880	49630	47900
4	50960	49590	47900	47060	46240	45350	44510	51880	55330	51750	49430	47980
5	50870	49510	47900	46990	46320	45430	44780	52050	55290	51630	49230	47980
6	50830	49430	47900	46990	46240	45240	44630	52180	55200	51460	49060	47900
7	50750	49470	47900	46990	46130	45240	44930	52180	55160	51290	48860	47820
8	50620	49350	47860	46950	46090	45350	44820	52050	55070	51250	48700	47740
9	50540	49390	47860	46870	46050	45280	44740	52010	54980	51420	48420	47740
10	50500	49310	47740	46870	46090	45160	44700	52010	54880	51630	48100	47580
11	50420	49270	47620	46870	46090	45160	44670	52010	54720	51840	47820	47460
12	50330	49190	47540	46830	46010	45310	44780	52090	54540	51710	47620	47340
13	50170	49060	47380	46830	46010	45120	44930	52010	54410	51750	47460	47300
14	50050	48900	47380	46790	46010	45050	44970	51920	54280	51670	47140	47260
15	50090	48860	47580	46790	45970	45240	45430	51790	54320	51580	46990	47180
16	50000	48780	47420	46790	46010	45010	45620	51790	54190	51630	46750	47100
17	49960	48740	47500	46750	46050	44820	46400	51710	54060	51630	46480	46990
18	49800	48660	47340	46670	46090	44780	46550	51580	54060	51790	46320	46910
19	49680	48580	47260	46790	45930	44670	47260	51460	53930	51710	46090	46870
20	49630	48740	47220	46710	45930	44820	51080	51460	53760	51630	45890	47860
21	49510	48660	47220	46670	46010	44740	51750	51420	53460	51500	45700	47900
22	49920	48500	47180	46630	45820	44700	51790	51290	53160	51420	45550	47820
23	49720	48420	47180	46630	45740	44590	51960	51330	52940	51250	45350	47740
24	49880	48340	47740	46630	45580	44630	52180	51290	53070	51210	45280	47700
25	49590	48260	47540	46710	45580	44590	52090	51750	53030	51120	45050	47660
26	49470	48220	47380	46590	45580	44630	51880	54110	52900	51000	44890	47620
27	49430	48100	47380	46480	45550	44510	51880	55020	52810	50870	44700	47540
28	49470	48060	47500	46440	45470	44440	52130	55160	52690	50670	44860	47660
29	49430	48180	47420	46440	45470	44510	52220	55110	52560	50500	45430	47460
30	49350	48140	47300	46440	---	44400	52260	55160	52430	50380	46320	47420
31	49270	---	47220	46440	---	44250	---	55330	---	50170	46990	---
(†)	1159.67	1159.39	1159.16	1158.96	1158.71	1158.39	1160.39	1161.10	1160.43	1159.89	1159.10	1159.21
(*)	-2060	-1130	-920	-780	-970	-1220	-8010	+3070	-2900	-2260	-3180	+430
MAX	51290	49800	47980	47340	46400	45430	52260	55330	55420	52640	50050	47980
MIN	49270	48060	47180	46440	45470	44250	44020	51290	52430	50170	44700	46870

CAL YR 1975..... * -21450

MAX 70240

MIN 47180

WTR YR 1976..... * -3910

MAX 55420

MIN 44020

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

08099400 Proctor Lake near Proctor, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	
MAY 18...	1515	1040	7.7	25.0	240	130	56	25	110	
		SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAY 18...	3.1	7.0	138	0	64	220	.4	1.7	552	

08099500 Leon River near Hasse, Tex.

LOCATION.--Lat 31°57'28", long 98°27'32", Comanche County, on left bank at downstream side of bridge on U.S. Highways 67 and 377, 500 ft (150 m) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 0.3 mile (0.5 km) upstream from Walnut Creek, 2.0 miles (3.2 km) downstream from Proctor Lake, 2.1 miles (3.4 km) northeast of Hasse, and 225.2 miles (362.4 km), revised, upstream from mouth.

DRAINAGE AREA (revised).--1,261 mi² (3,266 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,115.01 ft (339.855 m) above mean sea level.

AVERAGE DISCHARGE.--24 years (1939-63) prior to completion of Proctor Lake, 151 ft³/s (4.276 m³/s), 109,400 acre-ft/yr (135 hm³/yr); 13 years (1963-76) regulated, 112 ft³/s (3.172 m³/s), 81,140 acre-ft/yr (100 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 656 ft³/s (18.6 m³/s) Aug. 30 (gage height, 6.70 ft or 2.042 m); no flow part of each day Oct. 1, 3.

Period of record: Maximum discharge, 38,500 ft³/s (1,090 m³/s) May 24, 1952 (gage height, 21.49 ft or 6.550 m); maximum gage height, 21.72 ft (6.620 m) Oct. 4, 1959; no flow at times.

Maximum stage since at least 1858, occurred in May 1908, from information by local resident. At location about 2.5 miles (4.0 km) upstream, flood of May 1908 was 9.1 ft (2.77 m) higher than that of May 24, 1952, from information by local resident.

REMARKS.--Records good. Flow regulated by Proctor Lake (station 08099400) since October 1963. Numerous diversions above station for municipal, steam powerplant operation, and other uses.

REVISIONS (WATER YEARS).--WSP 1342: 1952. WSP 1392: 1952. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.92	2.3	2.3	1.7	1.4	.37	2.9	5.6	34	39	19
2	.17	2.2	2.3	2.3	1.8	1.4	.51	2.8	6.1	33	39	9.9
3	.11	2.4	1.5	2.1	2.0	1.0	.35	2.8	5.7	34	38	4.9
4	1.4	1.3	1.1	2.1	2.0	.79	.61	2.7	5.3	36	35	3.4
5	2.4	1.5	1.3	2.3	1.6	.47	1.0	3.0	5.0	36	35	2.6
6	1.7	2.1	1.2	2.4	1.7	.43	1.4	3.9	5.2	32	39	2.1
7	1.0	1.7	1.2	2.0	1.8	.93	1.3	3.1	5.8	28	48	1.9
8	5.4	2.1	1.3	1.8	1.8	2.6	2.0	3.2	5.6	28	50	1.4
9	2.0	2.1	1.0	1.6	1.6	2.2	1.3	3.1	5.3	31	59	1.2
10	5.0	2.2	1.5	1.8	1.4	1.9	1.2	3.2	5.1	32	95	1.6
11	1.5	2.2	47	2.1	1.1	2.0	.94	2.4	4.5	32	50	1.6
12	1.5	2.1	39	1.9	1.4	1.8	1.1	2.5	4.2	26	45	1.4
13	1.5	2.2	3.8	2.0	1.6	1.6	1.4	3.2	3.9	7.1	39	1.6
14	1.6	2.5	3.5	1.9	1.4	1.9	1.4	2.8	4.1	6.3	36	7.8
15	1.6	2.4	2.8	2.1	1.8	1.9	1.2	2.6	3.6	6.6	39	24
16	1.5	2.3	2.4	2.2	2.0	1.5	3.3	1.7	17	6.3	58	13
17	1.7	2.5	2.3	2.1	1.4	1.6	1.9	1.0	32	6.0	107	12
18	.50	2.3	2.4	1.8	1.5	1.6	1.8	.94	16	6.2	44	12
19	.63	2.6	2.4	2.3	1.4	1.6	1.6	.88	16	5.9	44	13
20	1.0	2.6	2.4	2.3	1.3	1.5	1.7	1.0	16	6.1	40	18
21	.98	2.5	2.6	2.3	1.7	1.1	1.4	.75	40	20	39	13
22	.90	2.7	2.8	2.1	1.8	.89	1.3	.73	66	29	40	12
23	1.4	2.6	2.2	1.9	1.7	.77	1.3	1.8	13	39	41	2.5
24	.76	2.8	3.8	1.6	1.3	1.2	1.9	4.3	13	32	43	1.4
25	.62	2.5	3.3	1.4	1.3	1.8	2.1	6.2	15	32	45	1.4
26	.91	2.4	2.8	1.4	1.3	1.3	2.1	7.8	15	31	45	1.6
27	1.1	2.6	2.1	1.4	1.4	.94	2.1	5.2	15	30	45	1.9
28	.69	2.6	2.2	1.4	1.3	.90	2.3	5.4	14	30	48	2.1
29	.80	2.6	2.4	1.4	1.2	.95	3.8	5.1	13	32	51	2.1
30	.80	2.2	2.2	1.4	---	.64	3.0	5.1	17	39	101	1.6
31	.68	---	2.2	1.5	---	.42	---	5.4	---	37	21	---
TOTAL	142.67	67.72	164.8	59.2	45.3	41.03	47.68	97.50	393.0	783.5	1498	192.0
MEAN	4.60	2.26	5.32	1.91	1.56	1.32	1.59	3.15	13.1	25.3	48.3	6.40
MAX	20	2.8	47	2.4	2.0	2.6	3.8	7.8	66	39	107	24
MIN	.02	.92	1.0	1.4	1.1	.42	.35	.73	3.6	5.9	21	1.2
AC-FT	283	134	327	117	90	81	95	193	780	1550	2970	381
CAL YR 1975	TOTAL	27302.48	MEAN	74.8	MAX	685	MIN	.02	AC-FT	54150		
WTR YR 1976	TOTAL	3532.40	MEAN	9.65	MAX	107	MIN	.02	AC-FT	7010		

BRAZOS RIVER BASIN

08100000 Leon River near Hamilton, Tex.

LOCATION.--Lat 31°47'19", long 98°07'16", Hamilton County, on downstream side of bridge on U.S. Highway 281, 2.2 miles (3.5 km) upstream from Mesquite Creek, 3.6 miles (5.8 km) downstream from Bear Creek, 5.9 miles (9.5 km) north of Hamilton, and 172.9 miles (278.3 km), revised, above mouth.

DRAINAGE AREA.--1,891 mi² (4,898 km²), revised.

PERIOD OF RECORD.--January 1925 to September 1931, September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 955.38 ft (291.200 m) above mean sea level. Jan. 7, 1925, to Sept. 30, 1931, nonrecording gage 1.4 miles (2.3 km) downstream at datum 1.87 ft (0.570 m) higher. Sept. 1 to Nov. 22, 1960, nonrecording gage at same site and 5.00-foot (1.524-meter) higher datum. Nov. 22, 1960, to Sept. 30, 1972, recording gage at same site and 5.00-foot (1.524-meter) higher datum.

AVERAGE DISCHARGE.--6 years (1925-31) unregulated, 130 ft³/s (3.682 m³/s), 94,180 acre-ft/yr (116 hm³/yr); 16 years (1960-76) regulated, 165 ft³/s (4.673 m³/s), 119,500 acre-ft/yr (147 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 518 ft³/s (14.7 m³/s) Aug. 31 (gage height, 9.82 ft or 2.993 m); no flow for many days. Period of record: Maximum discharge, 18,600 ft³/s (527 m³/s) Sept. 9, 1962 (gage height, 31.93 ft or 9.732 m); no flow at times. Maximum stage since at least 1858, 38.4 ft (11.70 m) in May 1908 and December 1913; flood in September 1911 reached a stage of 37.0 ft (11.28 m), all at present site and datum, from information by local residents. The flood in October 1959 reached a stage of 34.1 ft (10.39 m), present datum.

REMARKS.--Records good. Since 1960, at least 10 percent of drainage area is regulated by reservoirs, Leon Reservoir (station 08099000) and Proctor Lake (station 08099400). Numerous diversions above station for irrigation, municipal supply, and industrial uses. At end of year, flow from 43.9 mi² (113.7 km²) above this station was partly controlled by 14 floodwater-retarding structures with a total detention capacity of 11,610 acre-ft (14.3 hm³). Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	.15	.36	5.4	2.9	2.0	.66	12	31	2.8	.08	291
2	2.5	.19	.36	5.4	2.7	2.0	.92	11	7.3	2.1	.04	195
3	1.4	.26	.49	4.5	3.0	2.0	.74	10	5.0	1.5	0	224
4	.96	.25	.51	4.3	3.3	1.7	.52	10	4.2	1.0	0	102
5	.54	.31	.58	4.5	2.9	1.5	.78	12	3.8	.66	0	30
6	.36	.33	.67	5.3	2.5	1.2	.88	13	3.6	8.5	0	7.7
7	.27	.34	.58	4.8	2.4	1.1	1.2	14	3.5	13	0	2.7
8	.17	.32	.55	4.3	2.5	1.3	1.4	15	3.5	16	0	1.4
9	.13	.31	.54	4.5	2.4	1.0	1.1	13	3.5	11	0	.88
10	.11	.81	.46	5.0	3.0	1.2	.92	11	2.8	7.0	0	.62
11	.07	.82	.42	5.4	3.0	1.2	.80	11	3.6	12	0	.34
12	.03	.71	.43	4.8	2.8	3.0	1.6	11	4.4	23	24	.21
13	.01	.45	26	5.5	2.8	2.0	2.6	12	3.7	20	6.9	.08
14	0	.37	45	5.1	2.9	1.9	2.3	11	3.6	20	1.6	.04
15	0	.42	22	5.0	2.9	2.7	1.3	11	3.4	14	.55	.02
16	0	.39	11	6.5	2.9	2.1	1.3	10	3.3	7.5	.33	.01
17	2.5	.43	7.4	5.6	2.7	1.4	2.1	9.0	3.3	5.1	.09	0
18	4.3	.86	4.8	5.3	2.6	1.6	2.0	8.1	3.2	116	.02	0
19	3.5	1.0	4.6	5.3	2.6	2.0	13	7.1	3.1	28	35	1.4
20	3.0	.84	4.7	4.4	2.5	1.3	13	6.9	2.8	11	6.6	2.6
21	1.8	.98	4.8	4.1	2.6	1.0	10	6.1	2.3	2.5	1.4	97
22	.86	1.2	4.7	4.2	2.3	.98	9.4	5.6	2.0	.50	.42	65
23	.60	1.2	5.0	4.9	2.3	.97	9.5	5.2	1.7	.15	.18	18
24	.38	1.2	6.0	4.7	2.3	1.3	9.6	5.1	28	.08	.04	8.5
25	.34	.87	6.0	5.2	2.1	2.6	9.0	4.7	22	.06	0	6.6
26	.35	.76	5.3	4.8	2.1	2.3	9.2	5.0	9.7	1.5	0	4.1
27	.29	3.0	5.4	4.8	2.2	1.5	9.0	4.0	6.9	18	0	2.7
28	.20	1.7	5.4	4.1	2.2	2.1	8.8	8.8	5.1	4.9	.19	20
29	.16	.76	6.9	3.5	2.3	1.8	9.2	4.8	4.0	1.3	1.4	9.6
30	.17	.50	5.4	3.2	---	1.1	9.8	3.6	3.4	.34	42	15
31	.17	---	5.3	3.2	---	.76	---	3.8	---	.16	260	---
TOTAL	29.47	21.73	191.65	147.6	75.7	50.71	142.62	355.8	187.7	349.65	380.84	1106.50
MEAN	.95	.72	6.18	4.76	2.61	1.64	4.75	11.5	6.26	11.3	12.3	36.9
MAX	4.3	3.0	45	6.5	3.3	3.0	13	50	31	116	260	291
MIN	0	.15	.36	3.2	2.1	.76	.52	3.6	1.7	.06	0	0
AC-FT	58	43	380	293	150	101	283	706	372	694	755	2190
CAL YR 1975	TOTAL	41330.95	MEAN 113	MAX 3570	MIN 0	AC-FT 81980						
WTR YR 1976	TOTAL	30339.97	MEAN 8.3	MAX 291	MIN 0	AC-FT 6030						

08100500 Leon River at Gatesville, Tex.

LOCATION.--Lat 31°25'58", long 97°45'42", Coryell County, on right bank at upstream side of county road bridge, 800 ft (240 m) downstream from U.S. Highway 84 bridge in Gatesville, 0.3 mile (0.5 km) downstream from Dodds Creek, 5.2 miles (8.4 km) upstream from Cottonwood Creek, and 99.0 miles (159.3 km) upstream from mouth.

DRAINAGE AREA (revised).--2,342 mi² (6,066 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 723.85 ft (220.629 m) above mean sea level. Oct. 1, 1950, to Feb. 8, 1951, nonrecording gage; Feb. 9, 1951, to Jan 21, 1969, water-stage recorder; all at site 800 ft (240 m) upstream at same datum.

AVERAGE DISCHARGE.--26 years, 264 ft³/s (7.476 m³/s), 191,300 acre-ft/yr (236 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) July 4 (gage height, 27.81 ft or 8.476 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Aug. 27.

Period of record: Maximum discharge, 51,200 ft³/s (1,450 m³/s) Oct. 4, 1959 (gage height, 34.14 ft or 10.406 m), from rating curve extended above 41,000 ft³/s (1,160 m³/s); no flow at times in 1951-52, 1954-55, and 1971.

Maximum stage since at least 1854, 35 ft (10.7 m) in May 1908, from information by local residents.

REMARKS.--Records good. Some upstream regulation by Lake Proctor (08099400), and flow at times slightly affected by discharge from 16 floodwater-retarding structures, having a combined detention capacity of 11,820 acre-ft (14.6 hm³). Numerous diversions above station for irrigation, municipal supply, and oilfield operation. The city of Hamilton reported that 340 acre-ft (419,000 m³) was diverted above station during the water year for municipal use and 342 acre-ft (422,000 m³) was returned to the Leon River as sewage effluent. The city of Gatesville reported that 387 acre-ft (477,000 m³) of sewage effluent was discharged into the Leon River below station during the water year.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	6.0	8.3	10	12	10	8.1	11	21	20	6.1	9.6
2	15	7.0	7.7	9.9	12	11	8.1	9.0	15	16	6.4	6.9
3	14	6.5	8.2	11	12	11	7.9	8.6	21	69	5.8	223
4	14	6.0	10	11	11	10	8.5	8.8	44	6400	4.9	188
5	13	5.6	9.8	10	12	10	9.7	126	23	376	4.5	175
6	11	5.6	8.3	10	12	10	9.7	161	16	192	4.2	111
7	9.4	5.6	7.2	9.6	12	9.1	23	59	19	96	4.0	64
8	8.1	5.9	6.9	9.4	12	12	14	42	10	68	3.8	35
9	7.9	6.1	6.7	9.4	12	11	8.5	39	8.1	56	3.7	18
10	7.8	6.2	6.7	9.4	12	8.9	7.5	42	7.0	115	3.5	10
11	7.5	6.0	6.7	9.7	14	8.6	6.9	34	6.4	345	3.4	7.9
12	7.2	5.6	6.7	9.7	14	8.2	6.6	30	6.1	162	3.2	6.8
13	7.0	5.6	6.9	9.9	13	7.6	6.7	36	5.8	87	3.0	6.0
14	7.1	5.6	7.2	9.7	12	7.5	6.7	28	5.5	65	2.9	5.6
15	6.9	5.9	7.2	9.7	12	7.5	7.4	23	5.1	77	2.7	5.2
16	6.5	5.8	25	10	12	7.1	11	21	7.4	105	2.5	4.9
17	6.6	6.0	43	10	14	6.7	30	18	7.1	473	2.3	4.6
18	6.6	6.9	23	10	13	6.9	286	16	9.3	149	2.3	4.5
19	6.7	7.5	12	10	16	7.2	54	15	470	98	2.3	4.5
20	6.8	7.1	8.7	10	15	7.9	83	14	106	79	2.2	4.5
21	7.1	7.0	7.0	10	14	8.1	28	13	30	88	2.1	4.5
22	7.7	6.7	5.9	12	13	7.8	17	13	17	59	2.0	4.4
23	8.2	6.5	5.7	12	12	7.9	28	12	12	46	1.9	4.3
24	7.2	7.0	21	12	11	11	20	12	9.2	33	1.8	7.2
25	8.3	7.0	24	12	11	10	16	11	1550	23	1.7	41
26	9.3	7.1	18	12	11	9.2	17	14	135	17	1.7	32
27	7.4	7.0	15	11	11	8.6	12	20	93	13	1.6	50
28	6.7	7.1	13	10	11	7.9	10	20	55	11	1.7	77
29	6.8	8.0	12	13	11	8.1	29	77	37	9.4	62	73
30	6.6	8.6	12	12	---	8.0	15	43	26	7.9	194	42
31	6.2	---	11	12	---	7.9	---	29	---	6.7	44	---
TOTAL	266.6	194.5	370.8	326.4	359	272.7	795.3	1005.4	2777.0	9362.0	388.2	1292.5
MEAN	8.60	6.48	12.0	10.5	12.4	8.80	26.5	32.4	92.6	302	12.5	43.1
MAX	16	8.6	43	13	16	12	286	161	1550	6400	194	223
MIN	6.2	5.6	5.7	9.4	11	6.7	6.6	8.6	5.1	6.7	1.6	4.3
AC-FT	529	386	735	647	712	541	1580	1990	5510	18570	770	2560
CAL YR 1975	TOTAL	95018.2	MEAN	260	MAX	5040	MIN	5.6	AC-FT	188500		
WTR YR 1976	TOTAL	17410.4	MEAN	47.6	MAX	6400	MIN	1.6	AC-FT	34530		

BRAZOS RIVER BASIN

08101000 Cowhouse Creek at Pidcoke, Tex.

LOCATION.--Lat 31°17'05", long 97°53'05", Coryell County, on left bank 125 ft (38 m) downstream from bridge on Farm Road 116, 0.1 mile (0.2 km) downstream from Beehouse Creek, 0.6 mile (1.0 km) northeast of Pidcoke, 4.9 miles (7.9 km) upstream from Table Rock Creek, and 34.6 miles (55.7 km) above mouth.

DRAINAGE AREA.--455 mi² (1,178 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.71 ft (224.549 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 92.8 ft³/s (2,628 m³/s), 2.77 in/yr (70 mm/yr), 67,230 acre-ft/yr (82.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,700 ft³/s (813 m³/s) July 4 (gage height, 32.43 ft or 9.885 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Mar. 6.

Period of record: Maximum discharge, 66,200 ft³/s (1,870 m³/s) Oct. 4, 1959 (gage height, 40.1 ft or 12.22 m, from floodmark), from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement of 55,800 ft³/s (1,580 m³/s); no flow at times.

Maximum stage since at least 1882, that of Oct. 4, 1959, from information by local resident.

REMARKS.--Records good. No known diversion above station.

REVISIONS (WATER YEARS).--WSP 1712: 1955. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.1	2.2	2.1	1.6	1.2	1.9	6.0	4.7	4.0	31	14
2	2.1	2.3	2.2	2.0	1.6	1.2	1.8	5.2	4.1	3.2	26	145
3	2.1	2.4	2.2	1.9	1.6	1.3	1.7	4.6	3.7	3.0	23	173
4	2.1	2.3	2.2	1.8	1.7	1.3	2.2	4.3	3.6	7460	21	132
5	2.0	2.1	2.2	1.8	1.6	1.2	3.5	61	3.3	515	20	67
6	1.9	2.2	2.2	1.8	1.6	1.1	3.4	40	3.3	458	18	34
7	1.9	2.1	2.1	1.8	1.5	1.3	17	12	3.3	171	17	21
8	2.0	2.1	2.1	1.7	1.5	3.4	9.7	11	3.4	118	15	14
9	1.9	2.0	2.1	1.7	1.6	3.3	5.7	8.3	3.6	97	14	10
10	1.8	1.9	2.0	1.8	1.5	3.1	4.1	8.1	3.2	286	12	7.7
11	1.7	1.8	2.1	1.8	1.4	3.0	3.2	6.9	3.1	539	11	6.4
12	1.7	1.8	2.2	1.7	1.4	3.0	2.9	9.3	3.0	156	10	5.7
13	1.7	1.7	2.1	1.8	1.4	2.6	2.6	14	2.9	105	9.6	5.0
14	1.6	1.6	2.2	1.8	1.4	2.5	2.5	8.4	2.9	83	8.8	4.5
15	1.6	1.8	2.2	1.8	1.4	2.5	2.5	6.9	2.8	145	8.7	4.1
16	1.5	1.9	2.1	1.8	1.4	2.4	4.5	6.1	3.3	181	8.5	3.8
17	1.5	2.0	2.0	1.8	1.5	2.2	6.2	5.5	3.5	646	7.8	3.4
18	1.5	2.1	1.9	1.8	1.4	2.2	142	4.8	3.7	262	8.1	3.0
19	1.5	2.2	2.1	1.8	1.7	2.1	13	4.5	83	186	7.4	3.1
20	1.5	2.2	2.1	1.9	2.0	2.1	29	4.4	11	147	6.8	3.5
21	1.6	2.1	2.0	1.6	1.8	1.9	10	4.4	7.1	124	6.3	3.4
22	1.7	2.1	2.0	1.7	1.7	1.8	7.5	4.4	5.0	112	5.9	2.9
23	2.4	2.0	2.1	1.7	1.6	1.8	6.4	4.2	4.0	102	5.4	2.6
24	2.4	2.0	4.2	1.8	1.6	2.5	6.0	4.2	3.4	90	4.8	2.3
25	2.6	1.9	4.7	1.7	1.5	2.7	5.3	56	1370	81	4.6	2.2
26	3.0	2.0	3.7	1.7	1.5	2.3	4.8	134	142	72	4.7	2.2
27	2.6	1.9	3.0	1.6	1.3	2.2	4.4	12	75	62	4.5	1.9
28	2.4	2.0	2.7	1.7	1.3	2.2	4.5	7.0	13	53	4.0	33
29	2.3	2.3	2.5	1.7	1.3	2.1	9.0	5.8	7.1	45	4.7	52
30	2.2	2.3	2.3	1.7	---	2.0	7.6	5.1	5.1	39	93	13
31	2.1	---	2.1	1.7	---	1.9	---	4.9	---	34	28	---
TOTAL	61.2	61.2	73.8	55.0	44.4	66.4	324.9	473.3	1787.1	12379.2	449.6	775.7
MEAN	1.97	2.04	2.38	1.77	1.53	2.14	10.8	15.3	59.6	399	14.5	25.9
MAX	3.0	2.4	4.7	2.1	2.0	3.4	142	134	1370	7460	93	173
MIN	1.5	1.6	1.9	1.6	1.3	1.1	1.7	4.2	2.8	3.0	4.0	1.9
AC-FT	121	121	146	109	88	132	644	939	3540	24550	892	1540
CAL YR 1975	TOTAL	48103.9	MEAN	132	MAX	5380	MIN	1.5	AC-FT	95410		
WTR YR 1976	TOTAL	16551.8	MEAN	45.2	MAX	7460	MIN	1.1	AC-FT	32430		

PEAK DISCHARGE (BASE, 3,500 FT³/S).--June 25 (0400) 7,900 ft³/s (16.50 ft); July 4 (0330) 28,700 ft³/s (32.43 ft).

08102000 Belton Lake near Belton, Tex.

LOCATION.--Lat 31°06'22", long 97°28'28", Bell County, in intake structure at Belton Dam on Leon River, 1.6 miles (2.6 km) upstream from bridge on State Highway 317, 3.5 miles (5.6 km) north of Belton, 8.9 miles (14.3 km) upstream from Nolan Creek, and 16.7 miles (26.9 km) upstream from mouth.

DRAINAGE AREA (revised).--3,531 mi² (9,145 km²).

PERIOD OF RECORD.--Contents: March 1954 to current year. Prior to October 1970, published as Belton Reservoir.
Water quality: Chemical analyses: October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels of Corps of Engineers). Prior to Feb. 20, 1955, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 508,800 acre-ft (627 hm³) July 7 (elevation, 599.14 ft or 182.618 m); minimum, 416,400 acre-ft (513 hm³) Mar. 23 (elevation, 591.90 ft or 180.411 m).
Period of record: Maximum contents, 870,300 acre-ft (1,070 hm³) June 6, 1957 (elevation, 620.45 ft or 189.113 m); minimum since initial filling, 113,400 acre-ft (140 hm³) Dec. 16, 1956 (elevation, 553.06 ft or 168.573 m).

REMARKS.--The lake is formed by a rolled earthfill dam 5,524 ft (1,684 m) long, including a 1,300-foot (396-meter) uncontrolled broad-crested spillway in a saddle near left end of dam and a 418-foot-long (127-meter) dike. Deliberate impoundment began Mar. 8, 1954, and dam was completed in December 1954. The lake was built for flood control and conservation storage. The controlled outlet works consist of a 22.0-foot-diameter (6.7-meter) conduit that is controlled by three 7.0- by 22.0-foot (2.1- by 6.7-meter) broome-type gates. The service outlet consists of one 36- by 36-inch (914- by 914-millimeter) gated outlet that discharges into the flood-control conduit. The capacity table prior to June 1973 was based on surveys dated 1936, 1937, and 1948. From June 1973 to December 1975, the table is based on a survey made in 1961. Beginning January 1976, the table is based on a sedimentation survey made in 1966. During the year, the city of Temple diverted 6,720 acre-ft (8.29 hm³) from river channel downstream for municipal use. There are many small diversions upstream for irrigation, municipal supply, and oilfield operations. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Leon River near Hamilton (station 08100000). Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	662.0	-
Design flood.....	656.9	-
Crest of spillway.....	631.0	1,086,000
Top of conservation pool.....	594.0	442,000
Service outlet (invert).....	540.0	51,200
Lowest gated outlet (invert).....	483.0	2

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

590.0	394,200	600.0	520,500
592.0	417,600	603.0	562,200
595.0	454,500	606.0	606,100
597.0	480,400	609.0	653,100

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	437800	433500	428200	422500	418700	417000	418900	445100	443100	445300	442100	436700
2	437400	434800	428200	422300	418500	417300	418700	445000	443000	443400	442000	440200
3	437100	434600	428100	421900	418200	417000	418700	445200	443000	443600	441700	443900
4	436900	434500	428100	421700	418200	417900	418800	445200	442900	443600	441600	444500
5	436500	434300	428200	421600	418200	418000	419700	449500	442900	449600	441400	445300
6	436300	434000	428100	421200	418300	417900	419700	453900	442900	508700	441400	445700
7	435900	434100	427800	421200	418200	418100	420700	455600	443000	504800	441400	445700
8	435600	433900	427800	421000	418000	418500	421000	456400	443000	497600	441100	445600
9	435400	433900	427700	420600	417800	418500	421000	457100	442900	489600	441100	445100
10	435300	433600	427300	421100	417600	418500	420900	456800	442500	483100	440900	444300
11	435100	433600	427500	420900	417900	418500	420900	456700	442000	478500	440600	443600
12	434800	433500	427200	420600	417900	418300	420700	458400	441700	472100	440200	442600
13	434600	432400	427300	420300	417800	418100	420500	459000	441200	466700	439900	442200
14	434500	432000	427300	420100	417600	418000	420500	459200	441400	464800	439500	442200
15	434300	431800	427500	420100	417600	418200	421800	459500	441400	463000	439000	442100
16	434000	431700	427300	420300	417600	417600	421600	459800	441100	466000	439800	442100
17	433500	431600	427100	420100	418700	417300	423000	459500	440700	471900	438800	441900
18	433100	431200	426700	420000	418500	417000	429400	457800	440700	474600	438600	441900
19	432700	431300	426500	420000	418200	417300	432600	455300	443600	474500	438400	441900
20	432400	431200	426600	420000	418600	417000	435200	452000	444600	472300	438000	442600
21	432200	430700	426500	419900	418600	416900	435600	449100	444500	470100	437700	442000
22	432700	430200	426300	419800	418200	416800	435900	446500	444100	467600	437400	441700
23	432900	430400	426400	419400	418000	417800	436200	444100	444000	465000	437500	441500
24	432800	429900	427600	419500	417800	419400	436500	442600	443900	462400	436900	441200
25	434100	430000	428300	419800	417900	419400	436700	442700	445800	459600	436700	441100
26	434100	429000	428200	419500	417600	419500	436500	443900	446000	456700	436200	441100
27	434100	428800	428400	419300	417500	419400	436400	443000	459200	453300	435900	441100
28	434100	428400	428200	419200	417300	419200	442000	442000	456200	450400	435800	442600
29	434000	429100	428200	419100	417400	419400	444600	441700	452400	447900	435800	442600
30	433600	428400	427900	418800	---	419400	445000	441700	449100	444700	435800	442500
31	433400	---	427800	418900	---	419100	---	442900	---	442600	436200	---
(†)	592.85	592.44	592.39	592.11	591.98	592.12	594.24	594.07	594.57	594.05	593.53	594.04
(*)	-5000	-5000	-600	-8900	-1500	+1700	+25900	-2100	+6200	-6500	-6400	+6300
(††)	1650	1340	1190	1260	1290	1540	1470	1550	1760	1670	2260	1680
MAX	437800	434800	428400	422500	418700	419500	445000	459800	460000	508700	442100	445700
MIN	432200	428400	426300	418800	417300	416800	418700	441700	440700	442600	435800	436700

CAL YR 1975..... * -129800

WTR YR 1976..... * +4100

†† 17860

†† 18660

MAX 552400

MAX 508700

MIN 426300

MIN 416800

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by Bell County Water Control and Improvement District.

08102000 Belton Lake near Belton, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)
JAN 30...	0930	436	8.3	10.5	9.8	88	170	27	52	10	21
MAY 18...	1115	416	8.3	22.0	9.3	106	160	24	47	10	22
AUG 31...	0800	368	8.4	27.5	6.2	79	130	10	37	8.7	19
DATE	SODIUM AD-SORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
JAN 30...	.7	3.0	176	0	25	34	.3	5.4	237	.01	.00
MAY 18...	.8	3.1	164	0	24	32	.3	4.9	224	.01	.00
AUG 31...	.7	3.1	144	0	22	27	.4	6.2	194	.00	.00

08102000 Belton Lake near Belton, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
JAN 30...	0930	436	8.3	10.5	9.8	88	170	27
MAY 18...	1115	416	8.3	22.0	9.3	106	160	24
AUG 31...	0800	368	8.4	27.5	6.2	79	130	10

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM AD-SORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
JAN 30...	52	10	21	.7	3.0	176	0	25	34
MAY 18...	47	10	22	.8	3.1	164	0	24	32
AUG 31...	37	8.7	19	.7	3.1	144	0	22	27

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
JAN 30...	.3	5.4	237	.21	.01	.00	0	0
MAY 18...	.3	4.9	224	.10	.01	.00	10	10
AUG 31...	.4	6.2	194	.00	.00	.00	20	10

08102500 Leon River near Belton, Tex.

LOCATION (revised).--Lat 31°04'12", long 97°26'28", Bell County, on left bank 1,400 ft (427 m) upstream from bridge on Farm Road 817, 2,000 ft (610 m) upstream from concrete dam, 1.0 mile (1.6 km) upstream from bridge on Interstate Highway 35 and U.S. Highway 81, 1.6 miles (2.6 km) northeast of Belton, 3.2 miles (5.1 km) downstream from Belton Dam, 5.2 miles (8.4 km) upstream from Nolan Creek, and 13.1 miles (21.1 km) upstream from mouth.

DRAINAGE AREA (revised).--3,542 mi² (9,174 km²).

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 476.68 ft (145.292 m) above mean sea level. Prior to May 21, 1931, non-recording gage.

AVERAGE DISCHARGE.--30 years (1923-53) unregulated, 659 ft³/s (18.66 m³/s), 477,400 acre-ft/yr (589 hm³/yr); 23 years (1953-76) regulated, 564 ft³/s (15.97 m³/s), 408,600 acre-ft/yr (504 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,780 ft³/s (135 m³/s) July 7 (gage height, 7.53 ft or 2.295 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 19.

Period of record: Maximum discharge, 56,500 ft³/s (1,600 m³/s) Apr. 22, 1945 (gage height, 24.41 ft or 7.440 m); no flow at times. Flood in December 1913 reached a stage of 25 ft (7.6 m), and flood in September 1921 reached a stage of 21 ft (6.4 m), from information by local residents.

REMARKS.--Records good. The city of Temple reported that during the year 6,720 acre-ft (8.29 hm³) was diverted from gage pool for municipal use, 1,850 acre-ft (2.28 hm³) of treated sewage effluent was returned to Little Elm Creek, and 2,880 acre-ft (3.55 hm³) of treated sewage effluent was returned to the Leon River below station. Flow regulated by Belton Lake (station 08102000) since Mar. 8, 1954.

REVISIONS (WATER YEARS).--WSP 1442: 1925(M), 1935(M), 1936, 1938(M), 1941-42(M), 1944-45(M). WSP 1712: 1937(M). WSP 1922: Drainage area, 1938.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	18	9.2	13	14	9.1	8.3	16	27	1860	562	22
2	11	23	9.9	15	14	10	8.7	20	26	1240	29	21
3	18	27	11	14	10	9.2	8.5	22	26	24	26	100
4	15	24	11	15	9.5	10	8.6	22	28	24	24	24
5	17	26	10	15	10	9.9	10	28	27	25	23	29
6	17	23	10	14	9.6	8.9	8.4	32	25	781	23	35
7	13	27	11	14	8.6	10	8.1	33	23	3520	20	38
8	17	27	12	14	11	11	7.9	31	22	4780	25	20
9	22	12	11	15	11	8.8	8.2	32	21	4770	24	7.9
10	19	11	11	14	9.2	9.2	7.8	231	20	4770	17	175
11	22	12	11	16	9.4	9.9	8.5	453	21	4760	20	341
12	19	15	11	15	9.1	10	6.3	37	22	4750	21	337
13	8.5	18	12	16	10	9.2	7.0	44	21	3500	20	200
14	6.5	20	11	16	11	10	6.4	67	22	1730	19	9.1
15	8.2	23	11	18	11	9.8	8.7	69	17	1730	17	4.8
16	11	24	9.5	22	11	8.7	12	49	20	1730	17	3.7
17	14	23	10	22	12	8.8	8.5	352	21	892	18	3.1
18	17	23	10	12	11	9.1	44	583	22	35	18	2.4
19	14	23	9.7	10	11	9.3	20	1330	21	650	19	2.2
20	12	23	11	9.7	10	9.5	17	1910	22	1760	16	3.8
21	12	22	11	9.8	11	8.5	11	1740	20	1760	17	4.4
22	13	24	13	10	10	8.1	11	1410	15	1750	18	4.3
23	18	25	12	11	10	8.3	10	1280	18	1760	17	3.8
24	17	26	15	9.3	10	13	9.6	898	20	1750	15	3.9
25	20	30	16	10	10	11	11	222	30	1750	17	3.2
26	21	31	14	13	10	10	11	29	31	1750	18	3.0
27	16	31	13	14	10	9.8	11	619	935	1750	20	3.5
28	17	27	14	14	9.9	9.8	44	620	1870	1750	18	3.8
29	18	13	15	14	9.4	9.6	140	27	1860	1750	21	3.3
30	20	11	13	14	---	8.1	20	24	1860	1540	26	2.9
31	19	---	13	14	---	8.6	---	28	---	1210	21	---
TOTAL	481.7	662	361.3	432.8	302.7	295.2	501.5	12258	7113	61851	1166	1415.1
MEAN	15.5	22.1	11.7	14.0	10.4	9.52	16.7	395	237	1995	37.6	47.2
MAX	22	31	16	22	14	13	140	1910	1870	4780	562	341
MIN	6.5	11	9.2	9.3	8.6	8.1	6.3	16	15	24	15	2.2
AC-FT	955	1310	717	858	600	586	995	24310	14110	122700	2310	2810
CAL YR 1975	TOTAL	312007.4	MEAN	855	MAX	5690	MIN	6.5	AC-FT	618900		
WTR YR 1976	TOTAL	86840.3	MEAN	237	MAX	4780	MIN	2.2	AC-FT	172200		

LOCATION.--Lat 31°03'06", long 97°27'25", Bell County, on left bank 43 ft (13 m) downstream from northbound service road of Interstate Highway 35, 0.5 mile (0.8 km) southeast of the courthouse at Belton, and 2.7 miles (4.3 km), revised, upstream from mouth.

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Water-stage recorder. Datum at gage is 480.84 ft (146.560 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 4,860 ft³/s (138 m³/s) Apr. 29 (gage height, 15.21 ft or 4.636 m); minimum daily, 17 ft³/s (0.48 m³/s) Jan. 21, Feb. 29, Mar. 1, 21, 22.
Period of record: Maximum discharge, 36,100 ft³/s (1,020 m³/s) Oct. 31, 1974 (gage height, 26.90 ft or 8.199 m); minimum, 6.8 ft³/s (0.19 m³/s) July 22, 1974.
Maximum stages since at least 1900, 26.90 ft (8.199 m) Oct. 31, 1974. Floods in December 1913, September 1921, May 1957, and May 1965 reached a stage of 24.5 ft (7.47 m), from information by local residents.

REMARKS.--Records good. Low flow is sustained by sewage effluent from Fort Hood military installation and by the cities of Killeen, Nolanville, and Harker Heights. Records indicate that 14,650 acre-ft (18.1 hm³) of treated sewage effluent was returned to the stream above station during the current year. At end of year, flow from 47.4 mi² (122.8 km²) above this station was partly controlled by 13 floodwater-retarding structures with a combined detention capacity of 15,430 acre-ft (19.0 hm³).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	29	20	18	17	21	142	72	47	36	36
2	20	38	26	19	18	18	20	94	48	42	35	80
3	21	71	23	18	19	18	19	71	43	38	35	150
4	20	27	23	18	18	26	19	67	41	237	34	92
5	19	34	23	18	18	28	75	149	41	86	34	60
6	20	24	23	19	18	26	59	990	41	87	33	36
7	21	23	21	19	18	28	34	196	57	64	33	31
8	22	23	22	19	18	80	68	150	47	47	32	29
9	21	23	23	20	18	45	29	117	44	46	31	28
10	20	22	22	20	19	24	26	105	39	76	31	27
11	20	21	22	20	19	22	23	86	38	132	30	26
12	19	22	22	19	19	20	22	91	37	70	30	25
13	18	21	23	21	18	19	23	302	36	54	32	60
14	19	22	22	19	19	18	22	104	34	50	33	48
15	18	22	22	18	18	18	26	80	31	109	30	35
16	25	21	31	19	18	18	162	69	45	137	28	25
17	20	23	23	18	33	18	45	62	36	420	27	24
18	19	24	21	21	38	18	335	58	32	110	29	23
19	19	26	21	18	21	19	251	56	205	84	30	25
20	19	24	19	18	21	19	244	55	39	62	27	45
21	19	22	19	17	27	17	97	55	29	103	26	36
22	24	23	19	18	22	17	71	53	27	138	26	31
23	136	21	19	18	21	24	58	52	27	64	27	28
24	30	21	140	19	20	267	51	51	25	52	29	28
25	127	22	115	19	18	62	46	51	790	48	26	27
26	68	22	34	21	18	38	43	116	131	46	26	26
27	33	22	26	19	18	27	41	79	92	43	26	27
28	20	22	25	18	18	23	193	53	63	41	25	70
29	23	23	21	18	17	22	1650	47	51	40	27	45
30	23	30	21	19	---	23	239	46	46	39	114	32
31	22	---	22	18	---	22	---	60	---	37	41	---
TOTAL	925	760	922	585	585	1041	4012	3707	2287	2649	1023	1255
MEAN	29.8	25.3	29.7	18.9	20.2	33.6	134	120	76.2	85.5	33.0	41.8
MAX	136	71	140	21	38	267	1650	990	790	420	114	150
MIN	18	21	19	17	17	17	19	46	25	37	25	23
AC-FT	1830	1510	1830	1160	1160	2060	7960	7150	4540	5250	2030	2490
CAL YR 1975	TOTAL	32972	MEAN	90.3	MAX	2290	MIN	18	AC-FT	65400		
WTR YR 1976	TOTAL	19751	MEAN	54.0	MAX	1650	MIN	17	AC-FT	39180		

BRAZOS RIVER BASIN

08103800 Lampasas River near Kempner, Tex.

LOCATION.--Lat 32°04'54", long 98°00'59", Lampasas County, on left bank 800 ft (240 m) upstream from centerline of U.S. Highway 190, 0.6 mile (1.0 km) upstream from Mesquite Creek, 0.8 mile (1.3 km) west of Kempner, 0.9 mile (1.4 km) downstream from Sulphur Creek, and 72.3 miles (116.4 km), revised, above mouth.

DRAINAGE AREA.--818 mi² (2,119 km²), revised.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.38 ft (252.490 m) above mean sea level. Prior to Aug. 4, 1967, at site 800 ft (240 m) downstream.

AVERAGE DISCHARGE.--14 years, 147 ft³/s (4.163 m³/s), 106,500 acre-ft/yr (131 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) July 4 (gage height, 12.51 ft or 3.813 m); minimum daily, 16 ft³/s (0.45 m³/s) Apr. 3, 4.

Period of record: Maximum discharge, 71,000 ft³/s (2,010 m³/s) May 16, 1965 (gage height, 32.98 ft or 10.052 m); minimum daily, 1.4 ft³/s (0.040 m³/s) July 17, 1971.

Maximum stage since at least 1871 occurred in September 1873 (stage unknown). Flood of May 13, 1957, reached a stage of 37 ft (11.3 m), and flood of Oct. 4, 1959, reached a stage of 34 ft (10.4 m), from information by local residents.

REMARKS.--Records good. At times, flow is affected by discharge from the flood-detention pools of 13 floodwater-retarding structures with a combined detention capacity of 40,760 acre-ft (50.3 hm³). These structures control runoff from 131 mi² (339 km²) in the Sulphur and Bennett Creek watersheds. There are many small diversions above station for irrigation and municipal supply. Records furnished by the city of Lampasas show that 1,480 acre-ft (1.82 hm³) was diverted from Sulphur Creek and 611 acre-ft (0.753 hm³) of sewage effluent was returned to the creek above this station. A recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	32	21	27	26	21	18	22	69	67	68	147
2	27	33	26	26	27	21	17	21	55	58	64	156
3	29	34	27	26	27	22	16	22	37	50	59	76
4	29	34	28	26	27	22	16	22	31	2660	55	72
5	29	34	31	26	27	21	22	25	28	363	54	66
6	28	34	30	28	26	20	28	38	27	254	51	50
7	27	39	28	28	26	23	21	30	79	168	48	42
8	27	26	26	27	26	31	31	32	40	129	43	37
9	27	29	27	27	25	28	23	29	30	113	40	33
10	27	29	27	27	32	26	21	28	22	636	37	31
11	27	29	24	29	22	25	20	79	27	816	35	29
12	27	29	24	29	24	26	19	162	26	511	34	29
13	27	30	27	29	24	26	19	50	19	622	33	29
14	29	32	27	31	24	24	19	40	19	376	30	26
15	29	31	28	32	24	24	19	35	22	359	29	26
16	29	31	26	30	24	25	33	31	23	385	27	25
17	29	29	24	29	25	20	27	28	19	1470	27	24
18	29	29	25	31	24	19	40	27	24	396	27	24
19	30	29	26	31	24	21	31	26	1590	283	27	22
20	30	27	26	32	24	20	30	27	91	224	24	27
21	31	26	26	28	26	17	26	29	47	187	24	36
22	32	26	27	28	23	18	23	28	40	168	24	30
23	41	26	27	29	22	19	22	25	38	154	24	29
24	39	27	47	31	22	38	22	29	35	144	24	28
25	36	27	52	30	21	27	20	77	1650	129	22	27
26	38	27	35	28	21	21	19	561	342	121	25	25
27	36	27	31	26	21	19	18	87	499	113	25	24
28	35	28	28	26	21	18	27	48	178	103	23	270
29	33	29	28	28	21	18	86	39	121	92	55	85
30	32	29	27	30	---	18	31	33	88	77	34	47
31	32	---	27	29	---	18	---	32	---	76	71	---
TOTAL	951	892	883	884	706	694	764	1762	5316	11304	1163	1572
MEAN	30.7	29.7	28.5	28.5	24.3	22.4	25.5	56.8	177	365	37.5	52.4
MAX	41	39	52	32	32	38	86	561	1650	2660	71	270
MIN	27	26	21	26	21	17	16	21	19	50	22	22
AC-FT	1890	1770	1750	1750	1400	1380	1520	3490	10540	22420	2310	3120

CAL YR 1975	TOTAL	81524	MEAN	223	MAX	3990	MIN	21	AC-FT	161700
WTR YR 1976	TOTAL	26891	MEAN	73.5	MAX	2660	MIN	16	AC-FT	53340

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-19	0400	11.17	7,980	7- 4	0700	12.51	10,400
6-25	0630	9.86	5,850	7-17	0430	8.81	4,360

08103900 South Fork Rocky Creek near Briggs, Tex.
(Hydrologic bench-mark station)

LOCATION.--Lat 30°54'41", long 98°02'12", Burnet County, on upstream side of bridge on Ranch Road 963, 6 miles (10 km) above confluence with North Fork Rocky Creek, 7 miles (11 km) west of Briggs, and 12.9 miles (20.8 km) above mouth.

DRAINAGE AREA.--33.3 mi² (86.2 km²), revised.

PERIOD OF RECORD.--Discharge: April 1963 to current year.

Water quality: Chemical analyses: October 1961 to January 1964. Chemical, biochemical, and pesticide analyses: January 1968 to current year. Sediment records: February 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 955.8 ft (291.33 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 12.3 ft³/s (0.348 m³/s), 4.88 in/yr (124 mm/yr), 8,910 acre-ft/yr (11.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,200 ft³/s (884 m³/s) June 19 (gage height, 22.70 ft or 6.919 m); no flow for many days.

Period of record: Maximum discharge, 31,200 ft³/s (884 m³/s) June 19, 1976 (gage height, 22.70 ft or 6.919 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurements of 3,580 and 8,510 ft³/s (101 and 241 m³/s) and conveyance-slope study; no flow for many days each year from 1963-74 and 1976.

Maximum stage since at least 1904, 22.70 ft (6.919 m) on June 19, 1976.

REMARKS.--Discharge records good. Three recording rain gages located in watershed, one at station and two above station.

REVISIONS (WATER YEARS).--WRD Texas 1974: 1972-73(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.35	.04	.30	.25	.12	.36	36	127	22	16	7.1
2	.32	.56	.04	.28	.22	.32	.31	30	38	20	15	28
3	.30	.56	.08	.25	.22	.16	.27	27	31	18	14	10
4	.31	.32	.13	.25	.25	0	.27	24	29	55	13	5.8
5	.31	.30	.13	.25	.26	0	1.4	138	26	32	12	4.6
6	.21	.30	.14	.25	.26	0	2.0	68	24	24	11	3.9
7	.13	.29	.12	.25	.26	.02	1.4	62	24	37	10	3.5
8	.04	.27	.12	.22	.26	2.4	1.4	50	23	25	9.0	3.2
9	0	.31	.12	.22	.29	1.8	1.3	42	20	24	8.1	2.9
10	0	.23	.12	.23	.25	.85	1.1	40	18	169	7.4	2.8
11	0	.19	.12	.25	.26	.54	.97	34	16	101	6.7	2.7
12	0	.16	.10	.28	.27	.39	.87	34	14	75	6.2	2.6
13	0	.01	.10	.30	.27	.27	.87	55	13	68	5.8	2.5
14	0	.06	.10	.28	.27	.25	.87	32	12	63	5.2	2.4
15	0	.13	.14	.25	.27	.22	1.0	28	11	75	4.8	2.1
16	0	.16	.12	.26	.27	.25	5.1	26	41	64	4.4	1.9
17	0	.17	.10	.22	.29	.20	15	24	13	64	4.2	1.8
18	0	.17	.08	.22	.29	.19	59	22	11	51	4.5	1.6
19	0	.20	.09	.20	.23	.10	36	21	1510	44	4.3	3.3
20	0	.14	.10	.19	.26	.07	72	21	40	39	3.8	2.5
21	0	.05	.10	.19	.53	0	31	22	28	37	3.5	2.7
22	0	.09	.10	.17	.59	0	25	19	23	35	3.3	2.2
23	1.3	.13	.10	.16	.36	.13	23	17	20	33	2.9	1.8
24	.50	.18	1.8	.20	.52	11	22	17	18	30	2.8	1.6
25	.75	.18	2.7	.31	.38	3.1	18	119	100	28	2.6	1.5
26	.76	.17	1.4	.20	.29	1.5	16	120	49	26	2.4	1.4
27	.38	.15	.85	.20	.22	.94	16	57	37	24	2.2	1.4
28	.30	.16	.55	.20	.29	.72	31	31	30	23	2.0	4.2
29	.29	.19	.41	.20	.23	.54	139	27	27	20	1.9	3.0
30	.27	.12	.32	.20	---	.49	43	25	24	18	26	2.1
31	.24	---	.32	.22	---	.42	---	152	---	17	23	---
TOTAL	6.78	6.30	10.74	7.20	8.61	26.99	565.49	1420	2397	1361	238.0	117.1
MEAN	.22	.21	.35	.23	.30	.87	18.8	45.8	79.9	43.9	7.68	3.90
MAX	1.3	.56	2.7	.31	.59	11	139	152	1510	169	26	28
MIN	0	.01	.04	.16	.22	0	.27	17	11	17	1.9	1.4
CFSM	.006	.006	.01	.006	.009	.03	.56	1.38	2.40	1.32	.23	.12
IN.	.008	.007	.01	.008	.010	.03	.63	1.59	2.68	1.52	.27	.13
AC-FT	13	12	21	14	17	54	1120	2820	4750	2700	472	232

CAL YR 1975	TOTAL	5796.63	MEAN	15.9	MAX	326	MIN	0	CFSM	.48	IN	6.48	AC-FT	11500
WTR YR 1976	TOTAL	6165.21	MEAN	16.8	MAX	1510	MIN	0	CFSM	.50	IN	6.89	AC-FT	12230

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-5	2100	7.19	2,010	5-31	2245	7.93	2,430
5-25	2245	5.60	1,190	6-19	0245	22.70	31,200

08103900 South Fork Rocky Creek near Briggs, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
OCT. 06...	1126	.26	495	8.0	18.5	8.4	89	360	88
DEC. 15...	1200	.20	523	7.7	14.0	9.0	87	430	280
MAR. 09...	1030	1.8	443	8.0	12.0	9.9	92	360	300
APR. 05...	1145	1.8	432	7.7	17.0	7.1	73	2900	1000
JUNE 07...	1000	3.8	494	7.5	22.0	8.2	96	1000	29
AUG. 02...	1650	13	464	7.7	31.5	8.0	108	110	26

DATE	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA, MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AN- SURP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
OCT. 06...	360	250	12	56	26	9.0	.3	1.6	286
DEC. 15...	670	260	14	58	29	8.6	.2	1.9	305
MAR. 09...	600	220	15	48	24	7.9	.2	1.2	248
APR. 05...	2000	220	21	49	23	7.5	.2	1.7	239
JUNE 07...	230	260	9	61	25	7.7	.2	1.2	300
AUG. 02...	63	240	10	54	25	8.4	.2	1.2	278

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FIL- TRABLE RESIDUE (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT. 06...	0	15	12	--	10	287	271	7	.01
DEC. 15...	0	18	14	.6	9.5	288	290	--	.02
MAR. 09...	0	18	14	.5	8.3	270	244	--	--
APR. 05...	0	16	11	.4	8.6	240	235	--	.00
JUNE 07...	0	17	16	.6	9.3	262	286	--	.01
AUG. 02...	0	15	9.2	.5	11	212	261	--	.00

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
DEC. 15...	1200	0	20	0	20	0	0
JUNE 07...	1000	1	500	1	40	0	0

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	CYANIDE (CN) (MG/L)
DEC. 15...	0	0	.3	0	0	10	.00
JUNE 07...	0	0	.0	0	0	0	.00

08103900 South Fork Rocky Creek near Briggs, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

	DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDEO GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDEO GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDEO GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	DIS- SOLVED URANIUM (U) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	
	OCT 06...	1120	<3.0	<.4	2.5	<.4	2.0	<.4	.03	.70	290	
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)
DEC. 15...	1200	.0	0	.00	.0	.0	0	.00	.0	.00	.0	.00
DATE	TIME	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)
DEC. 15...		.0	.00	.00	.0	.00	.0	.00	.0	.00	.0	.00
DATE	TIME	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
DEC. 15...		.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00
	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)							
	NOV 10...	1000	.21	17.0	.01							
	DEC 15...	1200	.14	14.0	.01							
	JAN 26...	1215	.20	9.0	.01							
	FEB 09...	1030	.29	12.0	.00							
	MAR 08...	1135	2.4	18.5	.10							
	APR 05...	1145	1.4	17.0	.01							
	26...	1100	15	19.0	.17							
	JUN 04...	1045	29	--	.08							
	07...	1000	24	22.0	.19							
	JUL 12...	1200	75	24.0	2.2							
	AUG 02...	1650	15	31.5	.12							
	23...	1100	2.9	24.0	.00							

BRAZOS RIVER BASIN

08104000 Lampasas River at Youngsfort, Tex.

LOCATION.--Lat 30°57'26", long 97°42'30", Bell County, on left bank 600 ft (180 m) downstream from county road low-water crossing, 2,000 ft (610 m) downstream from bridge on county road, 0.7 mile (1.1 km) east of Youngsfort, 4.5 miles (7.2 km) downstream from Rocky Creek, and 40.8 miles (65.6 km) above mouth.

DRAINAGE AREA (revised).--1,240 mi² (3,212 km²).

PERIOD OF RECORD.--February 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 630.88 ft (192.29 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 14, 1931, nonrecording gage, and Mar. 14, 1931, to Mar. 11, 1965, water-stage recorder at site 1,000 ft (305 m) upstream at datum 2.58 ft (0.786 m) higher.

AVERAGE DISCHARGE.--52 years, 280 ft³/s (7.930 m³/s), 202,900 acre-ft/yr (250 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,500 ft³/s (326 m³/s) June 19 (gage height, 13.82 ft or 4.212 m); minimum, 20 ft³/s (0.57 m³/s) Mar. 23.
 Period of record: Maximum discharge, 87,900 ft³/s (2,490 m³/s) May 17, 1965 (gage height, 37.7 ft or 11.49 m, from floodmarks), from rating curve extended above 40,000 ft³/s (1,130 m³/s) on basis of maximum discharge of May 13, 1957, measured at highway bridge 22 miles (35 km) downstream; no flow at times in 1925, 1934, 1950-52, 1954, 1956, 1963-67, 1971.
 Maximum stage since at least 1873, 45.2 ft (13.78 m) Sept. 8, 1873, from information by local residents at time the former gage was established 1,000 ft (305 m) upstream, adjusted to present site and datum.

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply.

REVISIONS (WATER YEARS).--WSP 788: 1926, 1928, 1931. WSP 1632: 1957. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	39	35	33	27	27	25	455	606	215	230	191
2	43	42	32	33	27	27	24	388	367	180	210	288
3	42	44	32	31	27	26	23	336	269	158	231	317
4	42	43	32	31	27	27	23	292	224	2290	191	161
5	42	40	33	31	27	25	27	862	199	921	175	133
6	42	39	33	30	26	25	30	1030	183	573	163	119
7	41	39	33	30	27	27	39	511	182	444	152	100
8	40	39	33	30	27	31	40	500	296	400	140	85
9	39	40	32	29	27	44	38	419	191	345	128	75
10	39	32	32	29	27	34	43	394	160	621	119	68
11	38	32	32	29	29	31	35	895	142	1570	109	60
12	38	32	33	29	29	26	31	743	134	973	101	57
13	37	31	33	29	25	25	29	700	126	902	95	59
14	36	31	34	29	26	25	28	489	111	804	88	55
15	36	31	33	28	27	25	27	426	102	714	82	51
16	36	34	32	28	27	24	43	386	144	819	77	48
17	35	34	34	27	29	23	63	349	192	1940	73	46
18	33	34	32	28	29	23	295	321	110	908	71	43
19	32	35	31	28	27	23	426	301	2890	683	67	43
20	32	34	30	27	27	23	480	265	529	592	63	46
21	33	33	30	27	28	22	304	291	247	532	60	68
22	35	32	30	27	27	22	206	271	173	503	57	61
23	49	32	30	27	26	22	179	249	143	468	56	53
24	49	32	40	28	25	39	196	226	127	441	53	46
25	58	32	83	29	26	59	163	252	1540	410	50	44
26	59	32	71	29	25	56	131	1620	751	385	49	42
27	52	32	50	28	25	37	121	633	695	350	45	42
28	47	32	43	27	25	32	153	381	468	337	43	112
29	42	34	39	27	26	29	2290	300	332	300	42	304
30	40	35	36	27	---	28	598	263	263	272	97	128
31	39	---	34	27	---	27	---	250	---	246	138	---
TOTAL	1270	1051	1137	892	777	914	6110	14798	11896	20296	3255	2945
MEAN	41.0	35.0	36.7	28.8	26.8	29.5	204	477	397	655	105	98.2
MAX	59	44	83	33	29	59	2290	1620	2890	2290	231	317
MIN	32	31	30	27	25	22	23	226	102	158	42	42
AC-FT	2520	2080	2260	1770	1540	1810	12120	29350	23600	40260	6460	5840

CAL YR 1975 TOTAL 157245 MEAN 431 MAX 5630 MIN 30 AC-FT 311900
 WTR YR 1976 TOTAL 65341 MEAN 179 MAX 2890 MIN 22 AC-FT 129600

PEAK DISCHARGE (BASE, 5,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-29	0230	9.31	5,900
6-19	1130	13.82	11,500
7-4	1630	11.95	9,220

08104050 Stillhouse Hollow Lake near Belton, Tex.

LOCATION.--Lat 31°01'20", long 97°31'57", Bell County, in intake structure at Stillhouse Hollow Dam on Lampasas River, 5 miles (8 km) southwest of Belton, and 16.0 miles (25.7 km) upstream from mouth.

DRAINAGE AREA (revised).--1,313 mi² (3,401 km²).

PERIOD OF RECORD.--Contents: September 1966 to current year. Prior to October 1970, published as Stillhouse Hollow Reservoir.
Water quality: Chemical analyses: October 1969 to current year.

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

EXTREMES.--Current year: Maximum contents, 257,800 acre-ft (318 hm³) July 19 (elevation, 625.33 ft or 190.601 m); minimum, 233,200 acre-ft (288 hm³) Oct. 21 (elevation, 621.61 ft or 189.467 m).
Period of record: Maximum contents, 334,600 acre-ft (413 hm³) Nov. 27, 1974 (elevation, 635.70 ft or 193.761 m); minimum since conservation storage was reached in Apr. 12, 1969, 196,600 acre-ft (242 hm³) July 23, 1971 (elevation, 615.55 ft or 187.620 m).

REMARKS.--The lake is formed by a rolled earthfill dam 15,624 ft (4,762 m) long, including a 1,650-foot (503-meter) spillway and a 5,894-foot (1,796-meter) dike. The lake was operated as a temporary detention basin from Sept. 2, 1966, to Feb. 19, 1968. Deliberate impoundment began Feb. 19, 1968. The lake was built for flood control and water conservation. The spillway is an uncontrolled broad-crested weir 1,650 ft (503 m) long located near right end of dam. The flood-control outlet consists of a 12.0-foot-diameter (3.7-meter) conduit controlled by two 5.67-foot by 12.0-foot (1.73- by 3.7-meter) slide gates at an invert elevation of 515.0 ft (156.97 m). The capacity curve is based on maps prepared by Brazos River Authority in 1937 and supplemented by contour maps prepared by the Corps of Engineers in 1958. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08103800. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	698.0	-
Design flood.....	693.2	1,013,300
Crest of spillway.....	666.0	630,400
Top of conservation pool.....	622.0	235,700
Lowest gated outlet (invert).....	515.0	775

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

620.0	223,100	624.0	248,800
622.0	235,700	626.0	262,300

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234400	234400	233700	234800	234700	235600	235600	249900	236800	239100	238300	237300
2	234200	234900	233700	234700	234700	235700	235600	250700	236700	238200	236500	238800
3	234100	234900	233700	234600	234600	235800	235600	249300	236400	238300	235700	239600
4	234000	234900	233800	234500	234700	236000	235600	245500	236100	242900	235300	240000
5	234000	234900	233800	234500	234700	235900	236300	243800	235700	244700	235400	240100
6	234000	234800	233800	234500	234600	236100	236300	247300	236000	245500	235500	240100
7	233900	234800	233800	234500	234600	236300	236500	248400	236500	245800	235700	239500
8	233900	234900	233800	234400	234600	236600	236500	249400	236900	246300	235800	236600
9	234000	234900	233800	234400	234600	236500	236500	250400	237100	246400	236000	235500
10	234000	234800	233800	234400	234700	236600	236500	250300	236700	246900	236000	235400
11	234000	234500	233800	234500	234700	236700	236600	249500	236600	250100	236100	235400
12	233900	234600	233900	234500	234900	236500	236600	251500	236300	251700	236100	235300
13	233800	234500	234000	234600	234900	236500	236700	253100	236000	252100	236100	236200
14	233900	234500	234200	234600	234900	236600	236700	252300	235800	251700	236100	236300
15	233900	234400	234000	234600	234900	236600	237200	249100	235800	251500	236000	236300
16	233800	234400	234000	234500	235100	236500	237400	245800	235700	251800	236000	236300
17	233500	234400	233900	234500	235600	236500	237800	242400	235900	254800	236100	236300
18	233400	234400	233800	234500	235500	236500	239800	238900	235900	256900	236000	236300
19	233300	234500	233800	234700	235500	236600	241200	236700	241600	257300	236000	236900
20	233300	234300	233800	234600	235700	236500	242100	235900	242400	256300	236000	237000
21	233200	234200	233700	234600	235500	236500	242700	235800	241900	254800	236000	236800
22	233600	234000	233700	234600	235400	236500	243100	236300	240600	253700	235900	236300
23	233700	234000	233700	234500	235400	236900	243500	236700	239300	252800	235900	235800
24	233800	239000	234600	234800	235300	237400	244000	236900	238000	251300	235800	235600
25	234200	233800	234700	234700	235300	237300	244300	237000	241700	250000	235700	235500
26	234200	233700	234700	234700	235400	236600	243200	240600	243000	248500	235700	235700
27	234300	233500	234700	234700	235400	235700	240600	240800	242900	247000	235600	235600
28	234300	233600	234800	234700	235400	235700	238600	239400	242300	245300	235600	236500
29	234400	233800	234900	234700	235500	235600	247700	238600	241400	243700	235900	236900
30	234400	233700	234800	234700	---	235600	249100	237400	240400	241700	236300	237100
31	234300	---	234700	234700	---	235600	---	236500	---	240200	236500	---
(†)	621.78	621.69	621.85	621.85	621.97	621.98	624.05	622.13	622.72	622.70	622.12	622.21
(*)	-200	-600	+1000	0	+800	+100	+13500	-12600	+3900	-200	-3700	+600
MAX	234400	239000	234900	234800	235700	237400	249100	253100	243000	257300	238300	240100
MIN	233200	233500	233700	234400	234600	235600	235600	235800	235700	236200	235300	235300
CAL YR 1975.....	* -73600			MAX 305700			MIN 233200					
WTR YR 1976.....	* +2600			MAX 257300			MIN 233200					

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.

08104050 Stillhouse Hollow Lake near Belton, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 08...	0900	444	8.4	22.0	190	26	43	19	20
MAR 01...	1045	484	8.3	14.5	190	24	45	19	23
DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	RICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 08...	.6	2.3	187	4	18	34	.3	7.9	241
MAR 01...	.7	2.5	203	0	20	42	.6	7.8	260

08104100 Lampasas River near Belton, Tex.

LOCATION.--Lat 31°00'06", long 97°29'32", Bell County, on left bank 22 ft (7 m) upstream from upstream bridge of three bridges on Interstate Highway 35 and U.S. Highway 81, 3.5 miles (5.6 km) downstream from Stillhouse Hollow Dam, 4.1 miles (6.6 km) southwest of Belton, and 12.7 miles (20.4 km) above mouth.

DRAINAGE AREA.--1,321 mi² (3,421 km²), revised.

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

GAGE.--Water-stage recorder. Datum of gage is 476.58 ft (145.262 m) above mean sea level, adjustment unknown (Texas Highway Department bench mark).

AVERAGE DISCHARGE.--13 years, 274 ft³/s (7.760 m³/s), 198,500 acre-ft/yr (245 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,840 ft³/s (109 m³/s) Apr. 28 (gage height, 14.49 ft or 4.417 m); minimum daily, 4.4 ft³/s (0.12 m³/s) Feb. 14-16.

Period of record: Maximum discharge, 77,900 ft³/s (2,210 m³/s) May 17, 1965 (gage height, 43.58 ft or 13.283 m); no flow Aug. 9, 10, 12-15, Sept. 5, 6, 1967.

Maximum stage since at least 1877, 45 ft (13.7 m) September 1921, from information by local residents. Flood of May 1957 reached a stage of 44.4 ft or 13.53 m (discharge, 83,500 ft³/s or 2,360 m³/s).

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply. Since Sept. 2, 1966, flow largely regulated by Stillhouse Hollow Lake (see preceding page).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.8	8.8	8.8	5.6	7.0	8.8	19	438	776	1070	8.8
2	11	12	8.8	8.8	5.9	7.6	8.9	18	438	622	1070	31
3	11	9.7	8.8	8.8	5.9	7.6	8.8	930	438	203	800	66
4	11	8.8	8.8	8.8	5.9	7.5	8.8	2090	438	207	131	12
5	11	8.8	8.8	8.8	5.9	7.7	11	2090	340	204	42	12
6	11	8.2	8.2	8.8	5.5	7.3	10	200	116	206	41	11
7	11	8.2	8.2	8.2	5.4	8.2	9.5	17	21	204	36	568
8	11	9.1	8.2	8.2	5.4	9.2	9.5	16	16	204	11	1190
9	11	9.5	8.2	8.2	5.3	8.0	9.5	16	88	204	10	611
10	11	9.5	8.2	8.2	4.9	7.6	9.6	453	200	205	10	11
11	11	9.5	8.2	8.2	4.9	7.6	9.5	1350	201	206	9.5	10
12	11	8.8	8.2	8.2	4.9	7.5	9.5	25	201	206	9.5	10
13	10	8.8	8.2	7.4	4.7	7.7	9.5	16	201	633	9.5	16
14	11	8.8	8.8	7.4	4.4	8.2	9.5	801	173	1080	9.4	12
15	11	8.8	8.8	7.0	4.4	8.2	9.8	1900	80	1080	8.8	11
16	11	9.1	8.8	7.4	4.4	7.7	13	1900	79	1080	8.8	11
17	11	9.5	8.8	7.0	9.5	7.6	10	1890	78	589	8.8	11
18	11	8.8	8.8	7.6	7.6	7.6	85	1880	78	15	9.3	11
19	11	8.8	8.8	7.6	7.0	7.9	19	1300	78	380	9.5	11
20	11	8.8	8.8	7.6	7.1	8.2	22	727	78	1080	9.3	12
21	11	8.8	8.8	7.6	6.9	8.1	16	315	432	1090	8.8	93
22	11	8.8	8.4	7.6	6.7	7.6	16	13	769	1090	8.8	258
23	13	8.8	8.2	7.6	7.0	8.3	17	12	769	1080	8.8	258
24	10	8.2	12	7.6	7.0	14	17	171	769	1080	8.8	127
25	11	8.2	10	7.4	7.0	95	17	336	369	1080	8.8	11
26	11	8.2	9.5	7.0	7.0	417	616	19	343	1080	8.8	10
27	10	8.2	9.5	7.0	7.1	415	1430	405	776	1080	8.2	11
28	10	8.8	9.5	6.9	7.1	193	1740	915	776	1080	8.2	15
29	9.5	9.4	8.4	6.4	6.4	10	415	916	776	1080	8.7	12
30	9.5	8.8	8.8	6.4	---	9.5	20	918	776	1080	21	11
31	8.8	---	8.8	5.8	---	9.3	---	679	---	1080	9.8	---
TOTAL	333.8	268.5	273.1	238.3	176.8	1342.7	4595.2	22337	10335	21284	3422.1	3441.8
MEAN	10.8	8.95	8.81	7.69	6.10	43.3	153	721	345	687	110	115
MAX	13	12	12	8.8	9.5	417	1740	2090	776	1090	1070	1190
MIN	8.8	8.2	8.2	5.8	4.4	7.0	8.8	12	16	15	8.2	8.8
AC-FT	662	533	542	473	351	2660	9110	44310	20500	42220	6790	6830
CAL YR 1975	TOTAL	198222.0		MEAN 543	MAX 3450	MIN 4.5	AC-FT 393200					
WTR YR 1976	TOTAL	68048.3		MEAN 186	MAX 2090	MIN 4.4	AC-FT 135000					

08104500 Little River near Little River, Tex.

LOCATION.--Lat 30°57'59", long 97°20'45", Bell County, on right bank 25 ft (8 m) downstream from State Highway 95, 2.4 miles (3.9 km) southeast of Little River, 5 miles (8 km) downstream from confluence of Leon and Lampasas Rivers, and 96.3 miles (155.0 km), revised, upstream from mouth.

DRAINAGE AREA (revised).--5,228 mi² (13,541 km²).

PERIOD OF RECORD.--Discharge: October 1923 to May 1929, August 1962 to current year.

Water quality: Chemical analyses: October 1964 to current year. Water temperatures: October 1964 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 400.11 ft (121.954 m) above mean sea level. Oct. 5, 1923, to May 27, 1929, nonrecording gage on railroad bridge 0.5 mile (0.8 km) upstream at same datum.

AVERAGE DISCHARGE.--5 years (1923-28) unregulated, 709 ft³/s (20.08 m³/s), 513,700 acre-ft/yr (633 hm³/yr); 14 years (1962-76) regulated, 939 ft³/s (26.59 m³/s), 680,300 acre-ft/yr (839 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 11,900 ft³/s (337 m³/s) Apr. 29 (gage height, 30.69 ft or 9.354 m); minimum daily, 69 ft³/s (1.95 m³/s) Mar. 3, 4.

Period of record: Maximum discharge, 79,600 ft³/s (2,250 m³/s) May 17, 1965 (gage height, 42.85 ft or 13.061 m); minimum daily, 8.2 ft³/s (0.23 m³/s) Aug. 6, 19, 1963.

Historic: Maximum stage since at least 1900, 46.8 ft (14.26 m) in September 1921, from information by local residents.

Water quality: Period of record: Maximum daily specific conductance (1964-73), 1,140 micromhos Oct. 28, 1964; minimum daily, 245 micromhos May 16, 1965. Maximum water temperatures, 38.0°C July 7, 1969, Sept. 15, 1972; minimum, 3.0°C Jan. 10, 1973.

REMARKS.--Discharge records good. Many small diversions for irrigation and municipal supply affect very low flows. Flow regulated by Belton Lake (station 08102000) on Leon River beginning Mar. 8, 1954, and by Stillhouse Hollow Lake (station 08104050) on the Lampasas River beginning Sept. 2, 1966. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	98	101	91	77	70	90	606	621	2650	2010	128
2	103	105	96	90	77	70	85	432	573	2500	1210	441
3	102	175	96	86	79	69	84	685	545	456	1140	1120
4	105	124	93	85	82	69	86	2600	539	1020	359	221
5	103	108	97	86	81	132	153	2700	513	1060	189	140
6	103	109	96	88	77	94	213	2960	311	629	175	130
7	102	98	92	87	74	137	107	677	190	3220	166	286
8	99	98	90	85	77	161	139	560	182	4800	145	1250
9	104	102	91	85	82	188	108	407	154	4800	130	1040
10	101	98	90	87	80	101	95	489	283	4810	128	161
11	99	95	90	87	78	93	90	2360	294	4930	128	377
12	97	95	91	86	76	92	88	943	291	4860	127	377
13	100	91	90	88	76	87	87	921	287	4580	124	389
14	96	91	90	87	77	89	86	665	285	2930	127	199
15	94	92	89	83	78	86	88	2390	201	2910	125	106
16	93	94	93	83	79	83	331	2410	190	3290	120	100
17	101	94	96	82	102	80	169	2550	191	2910	121	95
18	94	94	88	87	152	79	1730	2920	175	417	121	92
19	93	97	85	87	97	81	1710	2980	358	433	119	102
20	93	99	85	84	86	82	1240	2870	204	2830	117	138
21	93	97	84	81	94	78	477	2560	270	2880	111	147
22	92	93	84	80	86	75	294	1720	789	3050	111	257
23	257	92	84	80	79	77	233	1500	784	2880	113	280
24	134	91	99	82	79	480	207	1350	795	2860	107	256
25	176	92	383	84	75	244	659	908	1650	2850	103	113
26	226	91	130	83	74	415	403	442	384	2840	98	98
27	128	92	112	80	71	468	1400	568	1420	2830	95	97
28	107	93	104	80	72	403	1890	2050	2730	2820	95	311
29	101	100	97	81	72	115	7220	1130	2700	2820	93	156
30	100	100	93	79	---	96	1100	1100	2670	2760	180	112
31	99	---	92	80	---	96	---	1030	---	2320	157	---
TOTAL	3505	2998	3201	2614	2391	4490	20662	47483	20579	86945	8144	8719
MEAN	113	99.9	103	84.3	82.4	145	689	1532	686	2805	263	291
MAX	257	175	383	91	152	480	7220	2980	2730	4930	2010	1250
MIN	92	91	84	79	71	69	84	407	154	417	93	92
AC-FT	6950	5950	6350	5180	4740	8910	40980	94180	40820	172500	16150	17290
CAL YR 1975 TOTAL	641635			MEAN 1758	MAX 11700	MIN 84	AC-FT 1273000					
WTR YR 1976 TOTAL	211731			MEAN 579	MAX 7220	MIN 69	AC-FT 420000					

08104500 Little River near Little River, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPECIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT. 29...	0930	100	512	8.3	18.5	220	26	68	12	19
DEC. 09...	0950	91	625	8.0	11.5	250	22	77	15	29
JAN. 20...	1025	86	617	8.2	10.5	250	28	75	15	30
MAR. 01...	1610	66	610	8.1	20.0	250	33	74	15	32
APR. 07...	1624	106	506	8.1	19.5	210	38	67	9.7	24
MAY 25...	1030	919	503	8.0	19.0	200	28	56	15	23
JULY 15...	1600	2990	462	7.8	23.5	170	19	48	13	23
AUG. 26...	1200	93	574	7.8	26.0	230	27	71	13	29

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 29...	.6	2.8	236	0	24	22	.4	11	276
DEC. 09...	.8	3.4	283	0	29	34	.6	9.1	337
JAN. 20...	.8	3.2	270	0	30	36	.6	5.9	329
MAR. 01...	.9	3.8	260	0	34	38	.7	8.7	334
APR. 07...	.7	3.8	206	0	33	29	.5	8.4	277
MAY 25...	.7	2.6	212	0	25	38	.3	7.5	272
JULY 15...	.8	2.9	188	0	20	37	.4	7.6	245
AUG. 26...	.8	3.5	249	0	29	34	.6	11	314

BRAZOS RIVER BASIN

08104700 North Fork San Gabriel River near Georgetown, Tex.

LOCATION.--Lat 30°39'42", long 97°42'40", Williamson County, on left bank 1.5 miles (2.4 km) upstream from Middle Fork San Gabriel River, 2.7 miles (4.3 km) upstream from Interstate Highway 35, 2.7 miles (4.3 km) northwest of Georgetown, and 3.4 miles (5.5 km), revised, upstream from mouth.

DRAINAGE AREA (revised).--248 mi² (642 km²).

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 689.06 ft (210.025 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 92.8 ft³/s (2.628 m³/s), 5.08 in/yr (129 mm/yr), 67,230 acre-ft/yr (82.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,850 ft³/s (194 m³/s) Apr. 29 (gage height, 11.50 ft or 3.505 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Apr. 12, 13.

Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) Sept. 17, 1974 (gage height, 26.20 ft or 7.986 m); no flow July 23-25, 1971.

Maximum stage since at least 1875, 39.5 ft (12.04 m) in September 1921. Flood in April 1957 reached a stage of 34.5 ft (10.52 m), from information by local residents.

REMARKS.--Records fair. Recording rain gage located at station. Beginning on Apr. 6, 1976, flow was partly regulated by detention basin at North Fork Lake (under construction) located about 1 mile (2 km) upstream from gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	10	6.2	6.7	5.8	4.7	5.1	256	114	77	103	22
2	9.6	12	8.6	6.7	5.6	4.3	4.1	191	109	71	96	57
3	9.1	11	7.8	6.6	5.6	4.7	4.4	159	98	67	87	45
4	9.0	12	8.0	6.2	5.8	4.7	4.7	141	90	174	83	34
5	9.0	10	8.0	6.2	5.7	4.8	9.6	139	87	394	81	29
6	9.0	10	8.0	6.2	6.0	5.4	7.1	181	81	296	76	24
7	9.0	9.6	7.4	5.7	5.8	5.4	1.1	167	78	146	67	21
8	8.5	9.3	7.0	5.7	5.7	9.7	.49	211	80	108	65	20
9	8.5	9.1	7.6	5.7	6.0	11	.27	156	77	97	63	19
10	8.0	8.6	7.6	6.9	5.0	12	.13	153	72	177	58	17
11	7.9	8.0	7.6	6.8	5.0	12	.07	159	68	651	52	16
12	7.9	7.5	7.4	6.8	5.0	9.7	.06	168	66	657	49	15
13	7.5	7.6	7.4	6.4	5.8	7.6	.06	312	63	545	46	15
14	7.5	7.8	7.2	6.0	5.8	8.7	.37	218	59	435	45	14
15	7.5	7.6	7.3	5.7	5.8	7.4	.20	64	57	438	40	13
16	7.6	7.4	7.2	4.5	4.8	6.3	.34	31	56	538	37	13
17	7.2	8.4	7.0	5.0	6.7	5.4	.21	93	64	528	36	13
18	7.2	9.5	7.0	5.6	7.4	5.4	218	95	58	459	36	12
19	7.0	9.8	6.8	5.9	7.3	6.3	533	95	300	378	36	11
20	7.1	9.1	6.6	5.9	6.5	5.9	430	94	410	308	34	16
21	7.2	7.8	6.8	5.7	7.1	5.1	383	95	176	260	33	15
22	7.1	7.8	6.7	5.4	5.2	5.0	211	102	78	255	30	14
23	8.8	7.8	6.7	5.2	5.2	4.7	144	95	63	224	28	13
24	10	7.6	11	7.2	5.0	6.9	108	92	57	196	26	12
25	21	8.0	16	11	5.4	5.1	90	93	351	178	26	9.6
26	26	7.6	13	7.1	5.0	7.8	90	439	525	163	25	10
27	13	8.0	11	6.6	5.1	9.5	83	483	389	152	24	13
28	12	8.0	11	7.2	4.4	8.6	80	370	195	144	23	37
29	12	9.1	9.1	6.8	4.7	6.9	2800	212	104	129	24	27
30	11	8.0	7.2	6.6	---	6.5	405	136	85	121	24	27
31	11	---	6.8	5.9	---	6.3	---	119	---	109	21	---
TOTAL	303.2	264.0	253.0	195.9	164.2	213.8	5613.30	5319	4110	8475	1474	603.6
MEAN	9.78	8.80	8.16	6.32	5.66	6.90	187	172	137	273	47.5	20.1
MAX	26	12	16	11	7.4	12	2800	483	525	657	103	57
MIN	7.0	7.4	6.2	4.5	4.4	4.3	.06	31	56	67	21	9.6
CFSM	.04	.04	.03	.03	.02	.03	.75	.69	.55	1.10	.19	.08
IN-	.05	.04	.04	.03	.02	.03	.84	.80	.62	1.27	.22	.09
AC-FT	601	524	502	389	326	424	11130	10550	8150	16810	2920	1200

CAL YR 1975	TOTAL	57634.20	MEAN	158	MAX	4120	MIN	6.2	CFSM	.64	IN	8.65	AC-FT	114300
WTR YR 1976	TOTAL	26989.00	MEAN	73.7	MAX	2800	MIN	.06	CFSM	.30	IN	4.05	AC-FT	53530

08104900 South Fork San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°37'32", long 97°41'27", Williamson County, on right bank at downstream side of downstream bridge of two bridges on Interstate Highway 35, 1.1 miles (1.8 km) southwest of the courthouse at Georgetown, and 2.4 miles (3.9 km) upstream from mouth.

DRAINAGE AREA (revised).--133 mi² (345 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948, 1962-67, December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 687.72 ft (209.617 m) above mean sea level.

AVERAGE DISCHARGE.--8 years (1968-76), 48.2 ft³/s (1.365 m³/s), 4.92 in/yr (125 mm/yr), 34,920 acre-ft/yr (43.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,700 ft³/s (303 m³/s) Apr. 29 (gage height, 12.87 ft or 3.923 m); no flow part of many days.
Period of record: Maximum discharge, 20,200 ft³/s (572 m³/s) Oct. 31, 1974 (gage height, 16.61 ft or 5.063 m); no flow at times.
Maximum stage since at least 1887, about 41 ft (12.5 m) on Apr. 24, 1957, from information by local residents.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	8.2	5.2	3.5	3.8	1.3	1.5	154	58	40	54	16
2	5.5	9.3	3.4	2.8	2.5	.28	2.9	112	54	36	55	39
3	5.0	11	4.1	3.4	1.1	.62	4.4	93	50	36	53	30
4	6.3	9.2	4.5	3.7	1.7	.92	7.0	79	47	42	47	24
5	5.5	8.3	3.8	2.9	1.6	2.2	7.7	72	61	100	47	20
6	4.0	7.3	4.7	2.5	1.8	1.2	9.1	106	87	58	45	16
7	3.3	7.9	6.5	3.0	2.4	1.6	9.9	108	80	43	44	13
8	3.5	9.8	6.9	3.4	3.4	2.0	14	106	80	39	42	13
9	3.7	10	6.7	2.5	2.6	4.6	13	88	74	40	40	12
10	4.0	8.4	4.5	4.3	1.1	2.7	6.4	85	69	118	35	11
11	5.8	5.5	3.8	5.2	1.1	1.4	5.0	76	62	186	32	9.6
12	5.2	4.6	4.5	4.2	2.3	1.1	3.2	76	60	103	30	11
13	3.7	5.5	4.9	4.4	2.8	1.5	3.8	139	56	74	29	11
14	1.8	4.7	5.9	3.1	2.6	2.6	1.1	92	49	68	29	9.7
15	3.1	6.4	4.4	2.9	4.0	2.6	1.1	82	46	180	26	7.8
16	1.5	7.5	3.4	3.1	3.1	.87	3.7	78	45	240	24	9.1
17	1.9	7.1	3.6	3.1	2.5	.73	5.9	70	45	158	24	8.7
18	2.9	7.0	3.6	4.7	4.9	1.3	245	67	38	121	23	8.1
19	3.8	7.9	3.6	4.1	4.4	1.8	315	65	38	103	22	8.9
20	3.7	7.2	4.7	2.5	4.9	2.4	196	64	37	94	17	14
21	1.8	8.9	5.1	2.7	6.2	3.2	110	66	30	89	16	13
22	3.3	6.3	3.8	2.5	4.5	2.0	52	63	28	85	17	8.5
23	5.0	7.4	2.9	2.8	2.4	.36	45	60	26	82	17	7.9
24	5.0	6.6	6.0	4.2	1.4	1.3	41	57	24	80	13	7.5
25	7.6	5.9	7.1	7.1	2.4	2.4	37	59	721	76	14	7.1
26	9.9	7.6	7.4	4.6	1.6	4.3	33	540	103	71	13	6.9
27	9.4	7.3	5.0	2.5	1.5	1.9	32	428	88	68	12	9.7
28	8.6	6.9	4.1	2.1	1.2	.33	32	98	65	62	12	27
29	6.7	7.1	2.3	1.9	1.2	.21	1580	76	51	60	14	27
30	6.4	6.0	1.7	1.8	---	.09	764	66	44	57	17	15
31	6.0	---	2.1	3.3	---	.10	---	63	---	52	12	---
TOTAL	149.7	222.8	140.2	104.8	77.0	49.91	3581.7	3388	2316	2661	875	421.5
MEAN	4.83	7.43	4.52	3.38	2.66	1.61	119	109	77.2	85.8	28.2	14.1
MAX	9.9	11	7.4	7.1	6.2	4.6	1580	540	721	240	55	39
MIN	1.5	4.6	1.7	1.8	1.1	.09	1.1	57	24	36	12	6.9
CFSM	.04	.06	.03	.03	.02	.01	.89	.82	.58	.65	.21	.11
IN.	.04	.06	.04	.03	.02	.01	1.00	.95	.65	.74	.24	.12
AC-FT	297	442	278	208	153	99	7100	6720	4590	5280	1740	836

CAL YR 1975 TOTAL 26052.20 MEAN 71.4 MAX 2210 MIN 1.5 CFSM .54 IN 7.29 AC-FT 51670
WTR YR 1976 TOTAL 13987.61 MEAN 34.2 MAX 1580 MIN .09 CFSM .29 IN 3.91 AC-FT 27740

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
4-29	0515	12.87	10,700
5-26	0330	7.40	2,550
6-25	1015	9.27	4,660

08105000 San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°39'13", long 97°39'19", Williamson County, at former gaging station site 100 ft (30 m) downstream from Missouri-Kansas-Texas Railroad Co. bridge, 1.2 miles (1.9 km) downstream from confluence of North and South Forks, and 1.8 miles (2.9 km) northeast of Georgetown.

DRAINAGE AREA.--399 mi² (1,033 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July 1974 to September 1976 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COHALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.											
23...	1600	551	7.6	23.0	0	1	9.7	111	.8	270	36
NOV.											
24...	1330	550	7.1	15.5	0	0	9.5	94	.4	260	16
DEC.											
11...	1700	562	7.1	18.0	0	1	10.2	107	2.1	270	34
JAN.											
29...	0830	587	7.5	11.0	0	3	8.0	72	1.9	270	27
FEB.											
19...	0935	518	7.6	18.5	5	1	9.1	97	1.3	250	38
MAR.											
24...	1345	537	7.3	19.5	0	2	8.7	94	1.3	250	28
APR.											
14...	1445	525	7.1	23.0	0	1	10.0	115	.4	250	26
MAY											
13...	1350	465	7.6	22.5	0	25	8.8	100	1.0	220	12
JUNE											
09...	1400	465	7.6	27.0	0	5	9.0	114	.5	220	17
JULY											
14...	1330	435	7.5	26.0	0	1	9.1	114	.9	210	15
AUG.											
11...	1330	425	7.5	29.0	0	2	8.2	108	.0	190	12
SEP.											
20...	1040	431	7.6	24.5	0	1	6.9	84	.5	190	16

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SOPH- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)
OCT.											
23...	78	19	13	.3	1.1	240	0	24	21	--	10
NOV.											
24...	71	19	13	.4	1.2	242	0	18	21	.1	8.7
DEC.											
11...	77	20	13	.3	1.2	293	0	14	21	.2	8.4
JAN.											
29...	78	19	14	.4	1.3	300	0	20	28	.3	6.4
FEB.											
19...	67	19	14	.4	1.0	254	0	20	25	.3	7.1
MAR.											
24...	72	18	13	.4	1.1	276	0	21	24	.4	6.7
APR.											
14...	68	19	12	.3	1.1	271	0	20	19	.3	7.3
MAY											
13...	64	15	9.6	.3	1.4	255	0	20	13	.3	8.2
JUNE											
09...	62	16	11	.3	1.2	250	0	19	15	.4	9.6
JULY											
14...	64	13	9.0	.3	1.8	242	0	14	12	.3	13
AUG.											
11...	51	16	12	.4	1.0	222	0	17	15	.5	13
SEP.											
20...	51	16	13	.4	1.2	216	0	17	18	.3	11

08105000 San Gabriel River at Georgetown, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 23...	311	6	2	2.5	.00	.09	.28	.04	2.4	0	.0
NOV. 24...	296	2	1	.98	.00	.01	.19	.00	2.2	0	.0
DEC. 11...	303	2	1	2.3	.01	.05	.15	.01	2.0	0	.0
JAN. 29...	317	8	1	2.3	.05	.48	.62	.29	3.2	6	.1
FEB. 19...	279	2	1	.99	.01	.02	.24	.01	3.6	0	.0
MAR. 24...	292	3	3	1.1	.01	.01	.20	.01	1.4	0	.0
APR. 14...	280	1	0	2.1	.01	.01	.26	.00	12	1	.1
MAY 13...	257	55	3	.56	.00	.01	.35	.02	3.9	1	--
JUNE 09...	259	8	2	.75	.00	.00	.15	.00	8.3	1	.0
JULY 14...	246	7	2	.35	.00	.01	.24	.00	3.1	1	.0
AUG. 11...	236	3	0	.67	.00	.02	.21	.03	.7	3	.0
SEP. 20...	234	1	0	.84	.00	.02	.24	.01	1.8	0	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 23...	1600	1	0	440	0	0	0	0
FEB. 19...	0935	20	0	70	2	0	2	4
JUNE 09...	1400	20	0	50	4	0	0	8
AUG. 11...	1330	10	1	--	0	0	0	0

DATE	DIS- SOLVED IRON (FF) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 23...	0	0	0	0	.5	0	500	8
FEB. 19...	0	13	0	0	.0	0	450	0
JUNE 09...	10	8	10	10	.1	0	1200	0
AUG. 11...	30	2	0	0	.1	2	870	10

08105100 Berry Creek near Georgetown, Tex.

LOCATION.--Lat 30°41'28", long 97°39'21", Williamson County, on right bank at upstream side of upstream service road on Interstate Highway 35 and 2.9 miles (4.7 km) north of the county courthouse at Georgetown, and 63.2 miles (100.2 km) above mouth.

DRAINAGE AREA (revised).--83.1 mi² (215.2 km²).

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 659.97 ft (201.159 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 29.0 ft³/s (0.821 m³/s), 4.74 in/yr (120 mm/yr), 21,010 acre-ft/yr (25.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,960 ft³/s (140 m³/s) Apr. 29 (gage height, 12.64 ft or 3.853 m); minimum, 0.46 ft³/s (0.013 m³/s) Apr. 12, 13.

Period of record: Maximum discharge, 15,500 ft³/s (439 m³/s) Oct. 31, 1974 (gage height, 19.33 ft or 5.892 m); no flow at times in 1967, 1971-72.

Maximum stage since at least 1921 occurred September 1921, 25 ft (7.6 m), from information by Texas Highway Department and local residents. Discharge not determined.

REMARKS.--Records fair. No regulation or diversion. Recording rain gage at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	3.3	2.0	1.7	.96	.96	.63	53	22	13	13	4.3
2	6.9	3.3	1.9	1.6	.94	.96	.63	41	22	12	12	4.6
3	6.6	3.3	2.0	1.6	.92	.96	.57	34	21	11	12	4.7
4	6.3	3.2	1.7	1.6	.90	.97	.57	29	19	289	11	5.0
5	6.3	3.2	1.7	1.6	.88	1.1	.75	30	18	44	11	6.3
6	6.0	3.3	1.7	1.6	.88	1.1	.73	83	17	17	11	6.0
7	6.0	3.3	1.7	1.5	.87	1.2	.64	46	17	14	11	5.5
8	5.8	3.2	1.6	1.5	.86	1.4	.69	56	17	12	11	4.6
9	5.5	3.2	1.4	1.5	.84	1.2	.63	38	16	11	10	3.9
10	5.5	3.2	1.3	1.5	.82	1.1	2.3	34	16	12	9.7	3.7
11	5.5	3.2	1.3	1.6	.80	1.1	.82	32	15	55	9.1	3.5
12	5.5	2.9	1.3	1.5	.77	1.1	.57	87	15	22	8.9	3.5
13	5.5	3.2	1.3	1.5	.75	1.1	.51	76	15	18	8.2	3.5
14	5.3	3.2	1.1	1.4	.75	1.1	.57	44	14	16	7.5	3.4
15	5.0	3.0	1.1	1.4	.75	1.1	.63	32	14	56	6.9	3.3
16	5.8	3.0	1.1	1.3	.75	1.0	.96	28	13	77	6.3	3.3
17	5.8	3.0	1.1	1.3	.94	.89	.75	26	12	58	6.0	3.2
18	5.8	3.1	1.2	1.3	1.0	.89	455	24	12	32	6.0	3.2
19	5.5	2.8	1.1	1.2	.96	.89	194	23	11	26	5.8	3.3
20	5.0	2.8	1.3	1.2	.98	.86	148	23	10	23	5.8	3.7
21	4.8	2.8	1.1	1.2	1.1	.82	47	23	9.9	20	5.5	3.9
22	4.6	2.7	1.3	1.2	.96	.82	28	22	9.2	20	5.3	3.7
23	4.8	2.7	1.3	1.1	.96	.75	22	21	8.2	19	5.3	3.7
24	4.1	2.7	1.8	1.1	.89	.80	19	20	7.8	16	5.3	3.5
25	4.4	2.7	1.8	1.2	.89	.82	17	23	21	16	5.3	3.5
26	4.5	2.4	1.7	1.1	.93	.81	14	113	41	17	5.3	3.2
27	4.0	2.4	1.7	1.1	.96	.75	13	43	38	16	4.8	3.3
28	3.7	2.4	1.6	1.1	1.0	.82	13	29	20	15	4.7	4.3
29	3.7	2.4	1.6	1.0	.96	.81	1350	26	15	14	4.3	3.8
30	3.7	1.9	1.6	1.0	---	.75	80	24	13	13	4.6	3.7
31	3.6	---	1.6	.98	---	.73	---	23	---	13	4.3	---
TOTAL	142.7	87.8	46.0	41.48	25.97	29.66	2412.95	1206	499.1	997	236.9	119.1
MEAN	5.25	2.93	1.48	1.34	.90	.96	80.4	38.9	16.6	32.2	7.64	3.97
MAX	7.2	3.3	2.0	1.7	1.1	1.4	1350	113	41	289	13	6.3
MIN	3.6	1.9	1.1	.98	.75	.73	.51	20	7.8	11	4.3	3.2
AC-FT	323	174	91	82	52	59	4790	2390	990	1980	470	236

CAL YR 1975 TOTAL 14859.20 MEAN 40.7 MAX 1500 MIN 1.1 AC-FT 29470
WTR YR 1976 TOTAL 5864.66 MEAN 16.0 MAX 1350 MIN .51 AC-FT 11630

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-18	2000	10.65	2,990
4-29	0600	12.64	4,960
7-4	1700	10.36	2,750

08105400 San Gabriel River near Circleville, Tex.

LOCATION.--Lat 30°37'43", long 97°28'23", Williamson County, on right bank at upstream side of county bridge, 2.3 miles (3.7 km) west of Circleville, 3.1 miles (5.0 km) upstream from bridge on State Highway 95, and 47.4 miles (76.3 km) upstream from mouth.

DRAINAGE AREA (revised).--599 mi² (1,551 km²). Area at site used prior to July 13, 1967, 602 mi² (1,559 km²).

PERIOD OF RECORD.--February 1924 to September 1934 (published as "at Circleville"), July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.62 ft (158.685 m) above mean sea level. Feb. 1, 1924, to Sept. 30, 1934, water-stage recorder at site 3.1 miles (5.0 km) downstream and at 15.35 ft (4.679 m) lower datum.

AVERAGE DISCHARGE.--19 years (1924-34, 1967-76), 194 ft³/s (5.494 m³/s), 4.40 in/yr (112 mm/yr), 140,600 acre-ft/yr (173 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,200 ft³/s (515 m³/s) Apr. 29 (gage height, 28.54 ft or 8.699 m); minimum daily, 28 ft³/s (0.79 m³/s) Apr. 15.

Period of record: Maximum discharge, 53,400 ft³/s (1,510 m³/s) May 29, 1929 (gage height, 34.20 ft or 10.424 m, from floodmark, former site and datum); no flow Sept. 5, 6, 8, 11, 1924, and Aug. 10-16, 1967.

Maximum stage since at least 1852, about 46 ft (14.0 m) present site and datum, Sept. 10, 1921 (discharge not determined). Flood of Apr. 24, 1957 (second highest since 1852), reached a stage of about 41 ft (12.5 m), from information by local residents.

REMARKS.--Records good. Recording rain gage located at station. Low flow is partly sustained by sewage effluent from city of Georgetown, which released 770 acre-ft (949,000 m³) of treated sewage effluent into the river 13.9 miles (22.4 km) above gage during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	50	43	38	29	33	34	605	403	170	181	68
2	52	52	47	38	32	33	32	476	332	158	172	99
3	51	54	44	37	32	31	32	406	294	152	162	114
4	51	54	45	36	32	31	31	361	275	250	155	79
5	5	51	45	36	35	51	49	433	261	900	147	75
6	50	51	45	36	33	41	62	1050	241	430	143	71
7	49	49	42	34	30	45	44	1110	236	240	135	65
8	45	44	40	34	31	44	42	595	290	207	131	60
9	47	44	43	34	33	58	49	445	253	149	130	58
10	46	47	43	34	35	55	46	423	220	218	121	55
11	44	45	43	34	33	49	39	485	205	614	113	54
12	45	44	42	34	33	47	35	1050	195	523	109	53
13	45	43	42	34	32	43	32	1440	187	434	106	52
14	42	44	41	34	32	41	29	513	186	383	102	52
15	45	43	40	34	32	43	28	345	170	495	101	53
16	44	42	41	30	32	41	45	238	170	799	101	48
17	43	45	40	29	34	37	42	273	163	600	100	48
18	40	49	40	32	38	39	2220	274	167	469	100	47
19	41	46	39	35	35	41	1510	262	155	401	99	47
20	41	49	37	35	33	45	1210	255	421	355	94	72
21	43	44	39	33	46	46	627	261	400	324	89	67
22	42	44	38	31	36	48	375	256	210	307	88	51
23	47	44	38	29	32	48	284	242	155	300	90	49
24	51	43	47	31	30	49	247	229	130	277	78	48
25	41	45	74	33	32	50	245	253	520	259	79	46
26	47	43	53	38	33	45	201	1730	900	243	75	47
27	49	45	52	31	34	46	196	1040	460	230	71	50
28	64	45	52	30	34	46	179	598	376	218	67	106
29	60	47	47	30	33	43	6330	454	230	206	66	80
30	54	51	41	30	---	40	978	374	192	194	79	69
31	52	---	39	31	---	35	---	339	---	185	70	---
TOTAL	1571	1409	1362	1035	966	1348	15263	16815	8395	10770	3354	1883
MEAN	50.7	47.0	43.9	33.4	33.3	43.5	509	542	280	347	108	62.8
MAX	87	58	74	38	46	58	6330	1730	900	900	181	114
MIN	40	42	37	29	29	31	28	229	130	152	66	46
CFSM	.08	.08	.07	.06	.06	.07	.85	.90	.47	.58	.18	.10
IN4	.10	.09	.08	.06	.06	.08	.95	1.04	.52	.67	.21	.12
AC-FT	3120	2790	2700	2050	1920	2670	30270	33350	16650	21360	6650	3730
CAL YR 1975	TOTAL	131515	MEAN	360	MAX	9100	MIN	37	CFSM	.60	IN	8.17
WTR YR 1976	TOTAL	64171	MEAN	175	MAX	6330	MIN	28	CFSM	.29	IN	3.99
AC-FT												

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-18	0830	14.50	5,020	5-6	2145	16.51	6,230
4-29	1100	28.54	18,200	5-13	0045	14.87	5,250

08105700 San Gabriel River at Laneport, Tex.

LOCATION.--Lat 30°41'40", long 97°16'43", Williamson County, on right bank 22 ft (7 m) downstream from county bridge, 0.2 mile (0.3 km) north of Laneport, 3.4 miles (5.5 km) downstream from Willis Creek, 7.5 miles (12.1 km) northwest of Thrall, and 26.2 miles (42.2 km) upstream from mouth.

DRAINAGE AREA (revised).--738 mi² (1,911 km²).

PERIOD OF RECORD.--Discharge: July 1965 to current year.

Water quality: Chemical and biochemical analyses: July 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 412.60 ft (125.760 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 299 ft³/s (8.468 m³/s), 5.50 in/yr (140 mm/yr), 216,600 acre-ft/yr (267 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,000 ft³/s (368 m³/s) Apr. 29 (gage height, 26.42 ft or 8.053 m); minimum daily, 36 ft³/s (1.02 m³/s) Mar. 4.

Period of record: Maximum discharge, 31,200 ft³/s (884 m³/s), Oct. 31, 1974 (gage height, 30.80 ft or 9.388 m); minimum daily, 0.35 ft³/s (0.010 m³/s) July 19-26, 1971.

Maximum stages since 1910 occurred September 1921 (39.6 ft or 12.07 m), April 1957 (34.6 ft or 10.55 m), and October 1959 (33.8 ft or 10.30 m), from floodmarks at present site and datum. Discharge not determined.

REMARKS.--Discharge records good. For statement regarding regulation and diversions, see San Gabriel River near Circleville (station 08105400).

REVISIONS (WATER YEARS).--WRD Texas 1974: 1965(M), 1966(P), 1967(M), 1968, 1969(P), 1973(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	62	52	54	44	38	43	768	471	199	204	94
2	62	62	52	53	43	38	40	593	385	185	195	102
3	60	65	52	52	45	38	38	506	343	173	184	173
4	61	69	53	49	44	36	38	428	316	221	177	122
5	61	63	57	50	43	37	45	428	300	950	171	99
6	62	62	54	52	45	56	69	905	277	554	167	94
7	61	61	53	50	42	56	65	3210	271	407	159	84
8	58	60	52	49	40	83	65	1200	333	262	151	78
9	54	60	54	49	42	72	57	665	291	240	150	74
10	57	58	53	50	43	70	60	602	253	239	140	70
11	56	55	53	50	44	66	49	538	236	494	132	67
12	55	54	53	51	41	60	46	1080	224	608	128	65
13	56	55	53	52	41	58	41	2000	215	507	123	64
14	54	52	53	50	40	52	38	799	207	447	121	65
15	54	52	54	48	41	52	39	526	195	458	117	66
16	52	63	58	48	41	64	57	366	196	788	109	64
17	51	53	55	47	43	50	73	347	187	773	107	61
18	49	56	52	47	44	45	4290	362	192	569	109	59
19	49	57	51	48	48	44	2120	347	178	472	116	57
20	50	59	50	51	45	45	1780	340	421	414	103	63
21	52	53	50	47	54	44	886	348	398	380	95	102
22	56	52	51	47	56	43	494	338	242	356	92	70
23	61	60	51	47	45	43	357	319	180	345	93	60
24	66	69	63	48	41	46	573	299	147	324	90	59
25	105	62	101	57	40	51	593	285	501	304	82	57
26	117	53	80	52	37	50	254	1660	946	286	84	57
27	95	50	69	53	38	45	225	1140	560	266	84	63
28	82	54	66	46	38	48	220	737	437	253	80	97
29	75	56	61	46	39	49	6490	549	304	237	78	127
30	67	59	57	46	---	46	2160	449	226	223	105	92
31	64	---	55	45	---	47	---	403	---	215	107	---
TOTAL	1968	1746	1768	1534	1252	1572	21215	23337	9432	12149	3847	2405
MEAN	63.5	58.2	57.6	49.5	43.2	50.7	707	753	314	392	124	80.2
MAX	117	69	101	57	56	83	6490	3210	946	950	204	173
MIN	49	50	50	45	37	36	38	285	147	173	78	57
CFSM	.09	.08	.08	.07	.06	.07	.96	1.02	.43	.53	.17	.11
IN.	.10	.09	.09	.08	.06	.08	1.07	1.18	.48	.61	.19	.12
AC-FT	3900	3460	3510	3040	2480	3120	42080	46290	18710	24100	7630	4770
CAL YR 1975	TOTAL	153796	MEAN 421	MAX 9560	MIN 49	CFSM .57	IN 7.75	AC-FT 305100				
WTR YR 1976	TOTAL	82225	MEAN 225	MAX 6490	MIN 36	CFSM .30	IN 4.14	AC-FT 163100				

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-18	1600	23.80	8,810	5-7	2000	17.74	4,930
4-29	2030	26.42	13,000	5-13	1000	19.53	5,960

08105700 San Gabriel River at Laneport, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT 23...	1450	56	564	7.6	22.0	0	45	7.8	89	1.4	250	43
NOV 24...	1435	68	624	7.7	12.0	0	20	10.2	94	.6	240	46
DEC 11...	1645	55	624	7.5	15.0	0	10	10.0	98	1.4	280	46
JAN 29...	1010	46	596	7.9	9.0	0	3	11.2	97	1.0	260	47
FEB 19...	1105	45	644	7.9	18.0	0	20	8.2	86	1.2	280	39
MAR 23...	1015	40	577	7.5	19.0	0	15	8.8	94	1.7	240	44
APR 14...	1345	38	591	7.6	23.0	0	15	8.1	93	.8	240	36
MAY 12...	1025	1920	310	7.2	19.5	10	100	8.6	92	5.5	130	8
JUN 09...	1230	275	486	7.8	26.0	0	65	7.7	96	.9	220	27
JUL 13...	1030	507	394	7.5	26.0	5	55	7.6	95	1.2	180	13
AUG 11...	1155	132	425	7.7	29.5	0	9	7.6	100	.0	180	16
SEP 21...	1400	102	450	7.9	25.5	0	20	8.0	100	.6	190	24

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)
OCT 23...	74	16	22	.6	1.7	254	0	33	31	--	9.5
NOV 24...	72	15	29	.8	2.2	238	0	49	48	.3	5.8
DEC 11...	85	17	24	.6	1.7	288	0	34	35	.2	5.1
JAN 29...	76	17	25	.7	1.3	260	0	36	38	.3	2.7
FEB 19...	82	17	26	.7	1.8	288	0	36	38	.3	9.7
MAR 23...	73	15	27	.8	1.5	244	0	37	40	.5	4.3
APR 14...	69	17	26	.7	1.7	252	0	37	40	.3	8.4
MAY 12...	47	3.8	8.8	.3	2.3	152	0	17	11	.3	9.0
JUN 09...	67	12	16	.5	1.5	232	0	27	23	.3	10
JUL 13...	57	10	10	.3	1.9	208	0	15	12	.3	11
AUG 11...	50	14	16	.5	1.3	204	0	23	21	.4	13
SEP 21...	53	15	18	.6	1.4	208	0	23	25	.3	7.6

08105700 San Gabriel River at Laneport, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 23...	313	84	12	2.1	.01	.05	.56	.08	3.0	0	.0
NOV 24...	339	35	5	2.3	.01	.01	.39	.03	12	0	.0
DEC 11...	344	16	2	.94	.01	.03	.21	.03	5.0	0	.0
JAN 29...	324	24	0	2.2	.01	.03	.49	.04	4.9	5	.0
FEB 19...	354	33	5	.78	.01	.04	.31	.03	3.0	3	.0
MAR 23...	319	26	6	.69	.01	.01	.42	.02	2.4	0	.0
APR 14...	324	29	5	.96	.01	.02	.41	.05	7.6	2	.1
MAY 12...	174	2460	--	1.1	.02	.23	2.4	1.1	29	2	.0
JUN 09...	272	134	29	1.3	.01	.03	.39	.08	9.1	3	.0
JUL 13...	220	128	17	.56	.01	.01	.21	.04	4.2	4	.0
AUG 11...	240	18	3	.96	.01	.01	.26	.06	.6	2	.0
SEP 21...	246	42	10	1.1	.01	.01	.32	.02	2.4	0	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 23...	1450	2	1	80	0	0	0	0
FEB. 19...	1105	0	2	90	0	0	2	0
JUNE 09...	1230	0	1	70	0	0	0	0
AUG. 11...	1155	10	1	--	0	3	0	0

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 23...	0	0	1	0	.6	0	700	4
FEB. 19...	0	0	10	10	.0	0	700	0
JUNE 09...	10	0	10	0	.2	0	880	0
AUG. 11...	0	0	10	0	.2	0	720	20

LOCATION.--Lat 30°41'38", long 97°04'42", Milam County, on left bank 36 ft (11 m) upstream from bridge on Farm Road 908, 4.7 miles (7.6 km), revised, upstream from mouth, and 5.3 miles (8.5 km) northwest of Rockdale.

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 325.56 ft (99.231 m) above mean sea level. Prior to Feb. 4, 1970, water-stage recorder at site 150 ft (46 m) downstream at datum 5.00 ft (1.524 m) higher. Feb. 5 to Sept. 3, 1970, nonrecording gage at site 150 ft (46 m) downstream at present datum.

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) Apr. 19 (gauge height, 30.76 ft or 9.376 m, from floodmark), backwater from San Gabriel River; minimum daily, 7.3 ft³/s (0.21 m³/s) Sept. 27.

Period of record: Maximum discharge, 12,300 ft³/s (348 m³/s), May 24, 1975 (gage height, 28.43 ft or 8.665 m); maximum gage height, 31.09 ft (9.476 m) Jan. 20, 1968, prior to channel rectification, present datum, from floodmark; minimum discharge, 0.04 ft³/s (0.001 m³/s) Sept. 4, 1967.

Maximum stage since at least 1903, 54.5 ft (16.61 m), present datum, in September 1921, from information by local residents.

REMARKS.--Records fair except those for Apr. 18-20, 29, 30, and May 7-9, which are poor (backwater from San Gabriel River 2.8 miles or 4.5 km downstream). At end of year, flow from 138 mi² (357 km²) above this station was partly controlled by 45 floodwater-retarding structures with a combined capacity of 43,760 acre-ft (54.0 hm³). In 1970, the channel was rectified in the vicinity of the gate. Backwater occurs at times from the San Gabriel River 2.8 miles (4.5 km) downstream.

REVISIONS (WATER YEARS).--WRD Texas 1973: 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	20	18	24	20	18	14	1270	384	42	25	17
2	15	33	18	24	20	18	14	359	1700	38	22	35
3	14	302	17	22	18	18	13	256	306	35	20	78
4	14	100	16	18	18	18	37	187	172	1930	19	96
5	13	54	16	16	17	55	140	160	138	5330	18	53
6	13	36	16	16	17	71	124	181	117	993	17	31
7	13	26	17	16	17	112	82	1060	100	618	16	22
8	13	22	18	16	17	198	47	1200	112	211	15	17
9	12	20	17	15	16	258	60	446	241	151	15	14
10	12	19	17	15	16	92	43	354	98	120	14	12
11	12	18	17	15	16	60	30	283	79	118	14	11
12	12	16	17	15	17	117	24	202	69	109	13	9.8
13	11	15	17	15	18	421	21	2430	63	96	13	9.2
14	11	14	17	16	17	78	19	2530	58	84	11	8.7
15	10	14	19	16	17	53	17	358	55	81	11	8.1
16	9.8	13	19	15	17	39	37	224	51	413	10	7.8
17	9.5	13	19	14	18	30	95	169	49	297	10	7.5
18	10	14	22	14	18	26	3990	142	45	216	9.6	7.7
19	10	14	22	14	25	23	8560	123	43	128	9.4	8.4
20	10	16	19	14	22	22	4860	109	41	89	9.4	8.9
21	11	17	18	15	27	21	3660	210	38	69	9.3	20
22	12	18	18	16	96	20	1300	129	36	74	9.1	27
23	274	16	18	16	40	18	594	108	32	58	8.5	16
24	78	15	20	15	26	17	531	95	36	51	8.2	11
25	54	14	76	297	21	17	1840	87	67	49	8.5	9.4
26	421	14	86	140	20	19	414	1760	50	43	8.6	8.1
27	150	15	47	47	20	19	268	4380	79	38	8.2	7.3
28	62	15	33	30	20	18	204	1350	92	33	8.2	23
29	42	16	27	24	19	17	3660	430	66	30	11	113
30	31	16	24	22	---	16	4650	297	50	27	11	47
31	24	---	24	21	---	15	---	231	---	25	11	---
TOTAL	1406.3	935	749	973	650	1924	35348	21120	4467	11596	393.0	743.9
MEAN	45.2	31.2	24.2	31.4	22.4	62.1	1178	681	149	374	12.7	24.8
MAX	421	302	86	297	96	421	8560	4380	1700	5330	25	113
MIN	9.5	13	16	14	16	15	13	87	32	25	8.2	7.3
AC-FT	2780	1850	1490	1930	1290	3820	70110	41890	8860	23000	780	1480
CAL YR 1975	TOTAL	106158.3	MEAN	291	MAX	7710	MIN	9.5	AC-FT	210600		
WTR YR 1976	TOTAL	80299.2	MEAN	219	MAX	8560	MIN	7.3	AC-FT	159300		

08106500 Little River at Cameron, Tex.

LOCATION.--Lat 30°49'53", long 96°57'01", Milam County, on right bank at site of old McCowan Bridge, 2,020 ft (616 m) upstream from bridge on U.S. Highway 77, 1.1 miles (1.8 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2 miles (3 km) southeast of Cameron, and at mile 33.6 (54.1 km).

DRAINAGE AREA (revised).--7,065 mi² (18,298 km²).

PERIOD OF RECORD.--Discharge: November 1916 to current year.

Water quality: Chemical analyses: October 1959 to September 1974. Chemical and biochemical analyses: January 1968 to current year. Water temperatures: October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 281.89 ft (85.920 m) above mean sea level (levels by Corps of Engineers). Nov. 2, 1916, to Sept. 30, 1922, nonrecording gage at site 1.8 miles (2.9 km) upstream at different datum. Oct. 1, 1922, to Apr. 8, 1926, nonrecording gage at McCowan Bridge 30 ft (9 m) downstream at same datum. Apr. 9, 1926, to Oct. 9, 1933, nonrecording gage at bridge on U.S. Highway 77, 2,020 ft (616 m) downstream at datum 1.58 ft (0.482 m) lower.

AVERAGE DISCHARGE.--36 years (1917-53) unregulated, 1,807 ft³/s (51.17 m³/s), 1,309,000 acre-ft/yr (1.61 km³/yr); 23 years (1953-76) regulated, 1,691 ft³/s (47.89 m³/s), 1,225,000 acre-ft/yr (1.51 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 29,900 ft³/s (847 m³/s) Apr. 19 (gage height, 33.93 ft or 10.342 m); minimum daily, 111 ft³/s (3.14 m³/s) Mar. 4.

Period of record: Maximum discharge, 647,000 ft³/s (18,300 m³/s) Sept. 10, 1921 (gage height, 53.2 ft or 16.22 m, present datum, from floodmark), from rating curve extended above 110,000 ft³/s (3,120 m³/s) on basis of slope-area measurement of 647,000 ft³/s (18,300 m³/s); no flow July 12-27, 1956.

Historic: Maximum stage since 1852, that of Sept. 10, 1921; flood in 1852 reached about the same stage. Flood in December 1913 reached a stage of 49.0 ft (14.94 m). Stages based on information by local resident.

Water quality: Current year: Maximum daily specific conductance, 800 micromhos Dec. 26; minimum daily, 205 micromhos July 4.

Maximum water temperatures, 29.0°C Aug. 12; minimum, 6.0°C Jan. 8, 9.

Period of record: Maximum daily specific conductance, 1,280 micromhos Sept. 25, 26, 1963; minimum daily, 154 micromhos Sept. 13, 1974. Maximum water temperatures, 33.0°C Aug. 6, 1964, Aug. 1, 1969; minimum, 4.0°C Jan. 11, 1968, Jan. 12-14, 1973.

REMARKS.--Discharge records fair. Many small diversions for irrigation and municipal supply affect very low flows. Since 1954, at least 10 percent of the drainage area is regulated by reservoirs. Some regulation by Belton Lake (station 08102000) on Leon River beginning Mar. 8, 1954, and by Stillhouse Hollow Lake (station 08104050) on Lampasas River beginning Sept. 2, 1966. Records of the Aluminum Co. of America indicate that they diverted 3,030 acre-ft (3.74 hm³) from river above gage during the current year for use at their Rockdale plant. At end of year, flow from 221 mi² (572 km²) above this station was partly controlled by 66 floodwater-retarding structures with a combined detention capacity of 71,520 acre-ft (88.2 hm³).

REVISIONS (WATER YEARS).--WSP 718: 1918-20, 1922. WSP 1512: 1918-20(M), 1921, 1922(M), 1924(M), 1926, 1929-30, 1934, 1935(M), 1936, 1940(M), 1941, 1944-45(M). WSP 1922: 1954, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	289	224	223	206	164	113	196	13700	1990	2810	2640	410
2	271	212	215	204	160	114	188	2970	2800	2780	2390	427
3	263	748	222	197	153	112	174	1850	2230	2680	1650	687
4	252	535	214	187	152	111	327	1500	1430	6320	1500	1530
5	255	367	217	187	156	122	1360	2740	1270	11400	980	795
6	256	259	220	193	156	268	1200	3760	1220	6580	669	417
7	250	239	215	190	156	325	798	8500	1060	2610	551	341
8	238	251	212	186	152	382	484	8640	924	3790	517	310
9	240	236	204	185	148	773	464	4990	1070	4860	486	1120
10	231	233	206	190	148	515	437	2310	829	5030	439	1260
11	224	231	207	190	158	342	323	2010	771	5030	411	539
12	218	216	208	190	163	241	264	2920	826	5440	387	462
13	217	201	208	194	157	693	237	5880	793	5440	369	562
14	206	200	210	192	153	324	216	9280	760	5050	358	577
15	198	195	212	185	153	211	203	3580	738	3710	344	510
16	187	200	215	183	151	192	276	3010	740	3870	334	293
17	179	218	220	175	156	181	560	3070	707	4870	320	216
18	178	209	219	170	168	158	6880	3030	644	4270	311	199
19	178	220	217	172	228	143	23700	3300	616	1860	308	191
20	174	220	206	180	250	153	20700	3370	716	1260	305	192
21	186	219	198	182	217	177	11900	3410	962	2850	293	254
22	212	212	205	177	248	170	4930	3220	777	3250	280	359
23	911	203	198	171	263	164	2160	2540	1050	3370	267	321
24	607	209	221	170	196	219	1570	2150	1140	3250	264	415
25	714	224	287	380	175	338	3220	2040	1170	3190	260	420
26	1390	214	840	640	161	630	2420	2350	1800	3150	250	300
27	1100	201	450	256	122	407	1270	5540	1940	3120	240	200
28	559	204	246	215	116	574	1710	4490	2510	3060	233	205
29	332	215	224	186	114	576	6780	3170	2850	3050	232	657
30	262	222	211	174	---	396	18900	2330	2890	3020	229	564
31	239	---	209	171	---	221	---	2030	---	2970	282	---
TOTAL	11015	7539	7559	6478	4894	9345	113847	123580	39223	123960	18099	14733
MEAN	355	251	244	209	169	301	3795	3986	1307	3999	584	491
MAX	1390	748	840	640	263	773	23700	13700	2890	11400	2640	1530
MIN	174	195	198	170	114	111	174	1500	616	1260	229	191
AC-FT	21850	14950	14990	12850	9710	18540	225800	245100	77800	245900	35900	29220
CAL YR 1975 TOTAL	1039238			2847		57900		174		2061000		
WTR YR 1976 TOTAL	480272			1312		23700		111		952600		

08106500 Little River at Cameron, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT									
21...	1300	187	727	8.2	20.0	--	--	--	290
NOV									
24...	1230	208	752	7.6	11.0	11.4	103	.5	290
DEC									
23...	1150	221	764	8.5	11.5	--	--	--	300
JAN									
29...	1300	182	751	7.9	10.0	11.2	99	1.6	280
FEB									
24...	1340	190	777	8.0	14.0	--	--	--	280
MAR									
23...	1130	160	768	7.5	19.5	9.5	102	2.4	300
APR									
27...	0905	835	583	7.9	18.5	--	--	--	190
MAY									
12...	1210	2840	548	7.5	23.0	7.6	87	1.2	240
JUN									
29...	0830	2840	462	7.8	28.0	--	--	--	180
JUL									
13...	1215	5440	440	7.3	23.5	8.1	98	1.2	170
AUG									
20...	0800	305	661	8.4	27.0	--	--	--	270
SEP									
21...	1210	259	612	7.7	26.0	7.4	92	1.0	240

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT									
21...	30	45	20	39	1.0	2.9	323	0	47
NOV									
24...	16	85	18	50	1.3	2.8	330	0	51
DEC									
23...	34	92	18	45	1.1	2.8	313	8	55
JAN									
29...	42	86	17	46	1.2	3.0	296	0	60
FEB									
24...	44	85	16	55	1.4	3.3	285	0	63
MAR									
23...	51	91	17	50	1.3	3.0	300	0	57
APR									
27...	60	63	7.8	39	1.2	5.5	158	0	63
MAY									
12...	31	81	9.9	21	.6	2.6	259	0	35
JUN									
29...	23	54	12	21	.7	2.8	196	0	25
JUL									
13...	20	52	10	21	.7	3.0	184	0	25
AUG									
20...	27	77	18	35	.9	2.6	284	4	46
SEP									
21...	16	68	16	34	1.0	2.7	268	0	43

BRAZOS RIVER BASIN

08106500 Little River at Cameron, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT									
21...	45	.5	8.6	407	--	--	--	--	--
NOV									
24...	50	.4	8.8	429	2.2	.01	.04	.43	.43
DEC									
23...	51	.4	8.0	435	--	--	--	--	--
JAN									
29...	57	.5	4.9	420	2.3	.04	.09	.69	.48
FEB									
24...	64	.7	9.9	437	--	--	--	--	--
MAR									
23...	63	.6	8.4	438	2.0	.02	.04	.84	.59
APR									
27...	49	.6	11	317	--	--	--	--	--
MAY									
12...	27	.4	11	316	1.6	.04	.04	1.1	.52
JUN									
29...	31	.3	9.6	252	--	--	--	--	--
JUL									
13...	32	.3	7.3	241	.16	.01	.06	.33	.08
AUG									
21...	41	.4	12	376	--	--	--	--	--
SEP									
21...	37	.5	9.4	343	1.6	.01	.03	.49	.19

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1975.....	11015	589	330	9890	40	1170	38	1130	250
NOV. 1975.....	7539	667	380	7670	47	967	43	875	280
DEC. 1975.....	7554	754	430	8690	56	1150	49	995	320
JAN. 1976.....	6476	716	400	7080	52	915	46	807	310
FEB. 1976.....	4780	767	430	5570	57	741	50	639	330
MAR. 1976.....	9345	677	380	9630	48	1220	44	1110	290
APR. 1976.....	113847	341	190	59000	15	4530	22	6820	150
MAY 1976.....	123580	412	230	77500	22	7270	27	8920	180
JUNE 1976.....	39223	505	280	30100	31	3280	33	3440	220
JULY 1976.....	123960	416	240	78700	23	7570	27	8990	180
AUG. 1976.....	18099	551	310	15200	36	1740	36	1740	240
SEPT 1976.....	14733	514	290	11600	32	1270	33	1320	220
TOTAL	480158	**	**	321000	**	31800	**	36800	**
WTD.AVG.	1315.5	438	250	**	25	**	28	**	190

08106500 Little River at Cameron, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673	610	743	619	748	757	644	288	516	467	452	659
2	625	625	748	657	749	767	660	419	450	469	456	585
3	682	551	743	684	754	752	675	480	461	471	475	494
4	659	485	747	626	762	759	540	526	555	205	504	420
5	642	564	742	658	757	767	431	500	529	263	518	405
6	713	639	757	730	784	777	533	476	542	323	551	434
7	648	671	770	746	786	783	566	355	565	379	580	458
8	650	675	772	664	760	725	629	335	581	432	600	487
9	652	683	778	730	764	783	683	342	589	442	614	483
10	695	717	752	755	764	707	760	453	581	428	528	487
11	674	696	772	684	752	688	693	502	617	449	597	504
12	687	701	770	730	776	712	707	475	627	454	628	535
13	719	696	772	759	770	691	723	432	603	449	646	510
14	715	713	755	714	765	521	713	305	585	441	633	496
15	703	717	765	753	784	633	723	411	603	459	628	487
16	706	711	771	764	768	702	710	468	598	454	648	512
17	707	720	775	772	798	712	590	516	592	445	655	553
18	684	713	773	714	776	702	320	531	603	452	667	570
19	704	726	780	753	786	712	273	526	614	474	668	578
20	693	725	759	774	769	719	318	513	580	502	670	607
21	716	749	754	766	759	748	339	489	545	509	671	612
22	722	725	759	755	764	778	368	485	552	467	675	626
23	575	740	750	770	776	757	407	505	513	463	679	621
24	467	752	768	780	770	695	443	491	497	461	623	570
25	575	735	743	741	757	690	356	513	509	462	667	583
26	461	733	806	641	752	679	465	505	420	461	680	572
27	491	731	726	671	730	671	471	336	362	460	676	587
28	499	760	690	726	755	462	448	378	394	459	680	599
29	527	762	708	753	742	539	381	468	462	454	679	565
30	557	752	698	774	---	558	282	479	448	452	674	556
31	549	---	638	740	---	615	---	509	---	447	668	---
MONTH	639	691	751	722	765	696	528	452	536	437	616	539

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	19.0	14.0	10.0	9.0	19.0	18.0	17.0	21.0	23.0	25.0	27.0
2	20.0	19.0	12.0	10.0	11.0	19.0	---	17.0	22.0	23.0	25.0	25.0
3	19.0	20.0	12.0	9.0	11.0	19.0	19.0	18.0	23.0	22.0	25.0	25.0
4	18.0	20.0	12.0	8.0	13.0	20.0	19.0	20.0	23.0	24.0	24.0	25.0
5	18.0	20.0	14.0	8.0	13.0	19.0	17.0	21.0	24.0	24.0	25.0	26.0
6	18.0	20.0	15.0	8.0	11.0	16.0	18.0	20.0	24.0	25.0	26.0	26.0
7	18.0	20.0	13.0	6.0	10.0	14.0	18.0	18.0	24.0	25.0	27.0	27.0
8	19.0	21.0	14.0	6.0	9.0	14.0	19.0	18.0	24.0	25.0	27.0	27.0
9	21.0	21.0	14.0	6.0	11.0	13.0	20.0	18.0	25.0	23.0	28.0	27.0
10	22.0	20.0	13.0	7.0	13.0	14.0	20.0	18.0	24.0	20.0	28.0	24.0
11	22.0	19.0	14.0	9.0	15.0	15.0	20.0	20.0	25.0	20.0	28.0	23.0
12	22.0	18.0	15.0	10.0	15.0	16.0	21.0	21.0	25.0	21.0	29.0	23.0
13	24.0	15.0	15.0	13.0	18.0	14.0	22.0	19.0	26.0	21.0	28.0	23.0
14	23.0	15.0	17.0	13.0	17.0	13.0	22.0	20.0	25.0	21.0	28.0	25.0
15	23.0	13.0	15.0	12.0	17.0	15.0	22.0	20.0	25.0	22.0	28.0	25.0
16	22.0	15.0	14.0	11.0	18.0	14.0	21.0	21.0	25.0	22.0	28.0	25.0
17	21.0	17.0	13.0	9.0	19.0	15.0	20.0	10.0	26.0	23.0	28.0	25.0
18	19.0	17.0	10.0	10.0	18.0	15.0	17.0	19.0	27.0	23.0	28.0	25.0
19	18.0	18.0	10.0	12.0	18.0	17.0	20.0	19.0	27.0	24.0	27.0	26.0
20	18.0	17.0	9.0	11.0	18.0	20.0	21.0	18.0	26.0	25.0	27.0	25.0
21	18.0	15.0	9.0	11.0	17.0	18.0	21.0	18.0	25.0	26.0	26.0	26.0
22	19.0	13.0	9.0	10.0	15.0	19.0	21.0	18.0	25.0	25.0	26.0	24.0
23	20.0	10.0	9.0	11.0	15.0	19.0	22.0	17.0	26.0	23.0	26.0	23.0
24	20.0	11.0	9.0	13.0	14.0	18.0	21.0	20.0	25.0	23.0	27.0	23.0
25	20.0	11.0	8.0	13.0	14.0	19.0	20.0	21.0	24.0	24.0	27.0	23.0
26	16.0	10.0	8.0	11.0	14.0	20.0	22.0	21.0	24.0	24.0	27.0	23.0
27	16.0	9.0	8.0	10.0	16.0	18.0	22.0	22.0	24.0	24.0	27.0	24.0
28	18.0	11.0	10.0	9.0	17.0	17.0	21.0	22.0	25.0	24.0	27.0	24.0
29	19.0	15.0	10.0	9.0	17.0	19.0	20.0	22.0	25.0	24.0	27.0	23.0
30	19.0	15.0	9.0	10.0	---	17.0	18.0	22.0	24.0	24.0	27.0	22.0
31	20.0	---	10.0	10.0	---	18.0	---	21.0	---	25.0	27.0	---
MONTH	19.5	16.0	11.5	10.0	14.5	17.0	20.0	19.5	24.5	23.5	27.0	24.5

08109000 Brazos River near Bryan, Tex.

LOCATION.--Lat 30°36'52", long 96°29'10" (revised), Brazos-Burleson County line, on left bank 2.4 miles (3.9 km) downstream from Little Brazos River, 5 miles (8 km) downstream from Texas and New Orleans Railroad Co. bridge, 9 miles (14 km) southwest of Bryan, and at mile 281.1 (452.3 km).

DRAINAGE AREA (revised).--39,515 mi² (102,344 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--August 1899 to December 1902, February 1918 to January 1926, June 1926 to current year. Monthly figures only for some periods, published in WSP 1312. Prior to September 1925, published as "near College Station".

GAGE.--Water-stage recorder. Datum of gage is 192.33 ft (58.622 m) above mean sea level. Aug. 1, 1899, to Dec. 31, 1902, and Feb. 23, 1918, to Sept. 17, 1925, nonrecording gage at site 7.5 miles (12.1 km) downstream at different datum. Sept. 11, 1925, to Oct. 24, 1932, nonrecording gage at site 3,000 ft (914 m) upstream at present datum.

AVERAGE DISCHARGE.--24 years (1899-1902, 1918-25, 1926-40) unregulated, 5,652 ft³/s (160.1 m³/s), 4,095,000 acre-ft/yr (5.05 km³/yr); 36 years (1940-76) regulated, 5,065 ft³/s (143.4 m³/s), 3,670,000 acre-ft/yr (4.53 km³/yr).

EXTREMES.--Current year: Maximum discharge, 41,400 ft³/s (1,170 m³/s) Apr. 21 (gage height, 22.43 ft or 6.837 m); minimum daily, 517 ft³/s (14.6 m³/s) Oct. 22.

Period of record: Maximum gage height, 54 ft (16.5 m) Sept. 12, 1921, present site and datum (discharge not determined); minimum daily discharge, 89 ft³/s (2.52 m³/s) Aug. 24, 1934.

Maximum stage since at least 1854, that of Sept. 12, 1921. Flood of Dec. 5, 1913, reached a stage of 51 ft (15.5 m), present site and datum, from information by Texas and New Orleans Railroad Co. at their bridge 5 miles (8 km) upstream and from comparison of maximum stages reached by floods in 1913 and 1921 at gage near College Station. Flood in 1854 reached about the same stage as flood of Dec. 5, 1913.

REMARKS.--Records good. Flow partly regulated by four upstream reservoirs with a combined capacity of 4,447,600 acre-ft (5.48 km³), of which 3,200,800 acre-ft (3.95 km³) is for flood control. Many small diversions above station for irrigation, municipal and industrial uses, and oilfield operation. At end of year, flow from 430 mi² (1,114 km²) above this station was partly controlled by 125 floodwater-retarding structures with a combined detention capacity of 147,270 acre-ft (182 hm³). Since 1941, at least 10 percent of drainage area is regulated by reservoirs.

REVISIONS (WATER YEARS).--WSP 1442: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	992	966	781	1770	2290	1200	1100	31700	9580	8200	5560	1860
2	993	1300	689	1590	1890	1650	1020	21900	14700	8000	4870	1900
3	1030	1910	675	1630	2270	1670	1000	10300	15000	7440	4640	3070
4	984	2650	702	1260	1810	1190	1050	5770	10500	6310	3910	3890
5	789	1610	927	849	1260	1040	2590	3880	7770	19500	3270	3910
6	716	1230	812	723	893	1140	6760	6650	4950	33500	3160	3070
7	663	951	743	1010	847	1620	6040	25200	3310	22800	2190	2420
8	615	797	656	1080	1150	1560	3340	27100	2790	22900	1820	1810
9	607	738	597	1010	2500	1880	2420	21300	2580	18400	1730	1400
10	607	679	576	1600	1790	2510	1920	12700	2500	15000	1650	1620
11	635	648	568	1690	1200	1970	1530	8340	2700	13900	1700	2200
12	1070	620	581	1170	848	1610	1170	5670	2070	12800	1780	1730
13	1480	574	579	829	748	1270	954	11100	1850	12900	1540	1090
14	1270	547	567	696	691	1350	834	21300	1660	11400	1120	1070
15	825	543	576	631	675	1320	766	18800	1700	9380	1310	1050
16	687	534	621	601	618	1030	1160	11000	1960	7000	1470	1290
17	591	523	577	572	593	973	1780	8860	2020	6760	1390	1230
18	546	552	1030	577	611	961	4020	6790	2170	13700	1420	1280
19	779	584	1220	619	591	946	30300	5870	1770	11400	1310	1160
20	710	586	1560	748	751	821	39200	5230	1890	6370	1220	1190
21	569	566	1540	655	1980	676	39100	4700	1760	5920	1140	1200
22	517	557	1300	579	1510	614	26700	4570	1950	9500	1160	1050
23	558	644	1110	546	1680	784	14500	4200	1860	10300	1290	1060
24	1740	1380	871	779	1730	954	8070	3420	2950	10100	1190	844
25	1890	1600	1280	1280	1730	1510	7840	3060	3450	8030	1440	802
26	3850	1950	2260	1230	1640	2050	11400	3080	5480	5810	1580	806
27	4290	1900	2290	1140	1640	1660	6640	7610	16200	5760	1400	789
28	2940	2180	2080	1640	1780	1210	4330	16200	8600	6080	932	683
29	1870	1620	1870	3550	1750	1630	9900	12000	7050	5590	1110	1490
30	1260	1080	1700	2860	---	1590	30100	6910	8670	5250	1650	3780
31	1070	---	1870	2370	---	1320	---	5420	---	5640	1820	---
TOTAL	37142	32019	33208	37284	39466	41709	267534	341030	151440	344940	61772	50744
MEAN	1198	1067	1071	1203	1361	1345	8918	11000	5048	11130	1993	1691
MAX	4290	2650	2290	3550	2500	2510	39200	31700	16200	33500	5560	3910
MIN	517	523	567	546	591	614	766	3060	1660	5250	932	683
AC-FT	73670	63510	65870	73950	78280	82730	530700	676400	300400	684200	122500	100700
WAL YR 1975	TOTAL	2365648	MEAN	6481	MAX	72500	MIN	517	AC-FT	4692000		
CAL YR 1976	TOTAL	1438288	MEAN	3930	MAX	39200	MIN	517	AC-FT	2853000		

08109500 Brazos River near College Station, Tex.

LOCATION (revised).--Lat 30°32'33", long 96°25'21", Brazos County, at bridge on Farm Road 60, 6.5 miles (10.5 km) south of College Station, 9 miles (14 km) downstream from gaging station near Bryan, and at mile 271.9 (437.6 km).

DRAINAGE AREA (revised).--39,599 mi² (102,561 km²), of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1961 to current year. Water temperatures: August 1961 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 1,710 micromhos Feb. 1, 3; minimum daily, 275 micromhos Apr. 30. Maximum water temperatures, 32.0°C Aug. 7; minimum, 3.5°C Jan. 9.

Period of record: Maximum daily specific conductance (1961-71, 1972-76), 2,030 micromhos Oct. 1, 1963; minimum daily, 245 micromhos Sept. 14, 1974. Maximum water temperatures, 34.5°C June 16, 1971; minimum, 2.0°C on several days during winter months.

REMARKS.--Sampling at this site began in September 1966. From August 1961 to September 1965, samples were collected at State Highway 21 near Bryan 17 miles (27 km) upstream and, from October 1965 to September 1966, at the gaging station near Bryan 9 miles (14 km) upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 31...	2000	1000	691	8.2	22.0	200	47	60	11	61
NOV 20...	1645	585	1010	8.2	16.0	280	74	78	20	110
DEC 31...	1445	1850	1470	8.4	11.5	320	160	92	21	180
JAN 05...	1700	800	1500	7.9	6.5	310	150	91	21	200
FEB 11...	1330	1050	1610	8.1	16.0	330	170	96	23	210
MAR 31...	1630	1250	1120	7.8	20.5	260	100	76	16	120
APR 30...	2335	30000	277	8.0	--	110	15	38	3.2	11
MAY 04...	1520	5200	438	7.7	22.5	150	24	52	6.0	25
JUN 01...	1145	8100	348	8.0	28.0	120	17	40	5.7	17
JUL 22...	1630	8600	489	8.0	28.0	170	20	55	8.2	28
AUG 31...	1810	1820	1410	8.2	30.0	280	140	78	21	180
SEP 10...	0830	1450	804	7.7	27.0	200	66	58	13	79

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 31...	1.9	4.8	180	0	59	84	.4	10	379
NOV 20...	2.9	4.1	248	0	95	140	.4	7.8	578
DEC 31...	4.4	5.0	184	4	160	290	.4	5.9	849
JAN 05...	4.9	4.5	203	0	160	290	.4	5.3	872
FEB 11...	5.0	5.0	195	0	180	330	.5	5.1	946
MAR 31...	3.3	5.2	188	0	110	190	.4	5.4	616
APR 30...	.5	3.3	116	0	18	12	.4	9.9	153
MAY 04...	.9	4.0	159	0	35	32	.4	10	243
JUN 01...	.7	3.5	130	0	29	19	.3	8.1	187
JUL 22...	.9	3.5	184	0	34	37	.3	11	268
AUG 31...	4.7	5.0	170	0	140	270	.3	7.8	786
SEP 10...	2.4	4.3	161	0	84	110	.3	8.0	436

08109500 Brazos River near College Station, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	37142	919	510	51100	140	13900	85	8550	240
NOV. 1975.....	32015	1140	640	55400	200	17000	110	9110	270
DEC. 1975.....	33208	1370	780	70300	260	23600	130	11600	300
JAN. 1976.....	37284	1430	820	82400	280	28200	130	13300	310
FEB. 1976.....	39466	1540	880	94300	310	33100	140	15200	320
MAR. 1976.....	41709	1280	730	81900	240	26700	120	13500	290
APR. 1976.....	267534	424	230	168000	31	22500	40	28600	160
MAY 1976.....	341030	434	240	218000	32	29100	40	37100	160
JUNE 1976.....	151440	601	330	134000	66	26900	56	22800	200
JULY 1976.....	344940	442	240	225000	33	31100	41	38200	160
AUG. 1976.....	61772	1060	600	99400	180	29200	98	16400	260
SEPT 1976.....	50744	932	520	70800	140	19400	87	11900	240
TOTAL	1444284	**	**	1350000	**	301000	**	226000	**
WTD.AVG.	3929.75	627	350	**	78	**	58	**	200

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	874	739	1470	1500	1710	1680	1140	282	348	620	750	1350
2	949	850	1410	1540	1640	1680	1270	302	505	617	788	1290
3	1010	1040	1320	1560	1710	1660	1370	380	461	707	871	1250
4	1120	756	1310	1570	1640	1620	1320	457	431	775	909	859
5	1110	773	1290	1490	1630	1590	792	498	467	409	1010	750
6	1100	934	1410	1390	1340	1450	762	555	506	300	1120	1000
7	1070	905	1320	1360	1320	1320	739	337	577	304	1020	930
8	1080	898	1310	1490	1460	1210	882	365	625	294	1060	870
9	1050	880	1300	1490	1680	1150	852	362	603	327	1070	843
10	1020	958	1230	1550	1640	1250	797	396	617	360	1080	648
11	1030	987	1220	1560	1620	1110	825	442	753	388	1120	573
12	1050	1050	1180	1550	1570	1140	862	560	840	444	1120	648
13	1260	1090	1150	1480	1500	1160	918	629	929	429	1200	700
14	1300	1100	1140	1400	1420	1190	900	379	865	422	1150	770
15	1330	1010	1160	1340	1340	1200	926	362	825	430	1070	850
16	1240	1000	1150	1280	1390	1230	598	360	796	441	1260	922
17	1190	1050	1180	1250	1250	1250	690	600	929	495	1190	991
18	1160	1020	1200	1230	1190	1250	781	643	903	584	1260	1090
19	1120	1020	1260	1270	1210	1270	450	572	970	469	1230	1170
20	1350	1020	1360	1310	1180	1240	385	585	961	432	1190	1190
21	1320	1060	1490	1250	1320	1330	314	600	1030	429	1190	1210
22	1180	1090	1500	1180	1380	1410	329	572	1020	473	1200	974
23	1130	1110	1540	1090	1470	1310	334	555	1000	436	1220	962
24	850	1210	1510	1150	1490	1390	336	617	1170	475	1210	890
25	719	1360	1390	1210	1550	1390	395	634	1210	434	1200	942
26	725	1470	1460	1190	1600	1090	350	725	703	500	1310	885
27	740	1530	1490	1130	1610	1020	365	941	623	550	1350	831
28	667	1660	1350	1040	1610	1080	397	569	362	628	1280	801
29	633	1610	1370	1530	1660	1150	356	394	405	713	1190	930
30	665	1550	1470	1610	---	1240	275	432	623	729	1300	893
31	696	---	1470	1680	---	1110	---	390	---	701	1400	---
MONTH	1020	1090	1340	1380	1490	1300	690	500	735	494	1140	934

08109500 Brazos River near College Station, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	21.5	12.0	---	12.0	21.5	22.0	---	28.0	28.0	---	---
2	21.0	---	13.5	10.5	13.0	21.0	---	---	25.0	27.0	29.0	26.5
3	---	21.5	14.5	7.0	13.5	22.0	21.5	---	25.5	28.0	28.5	26.0
4	20.5	20.5	16.5	7.0	6.0	---	20.5	---	26.5	---	28.0	28.5
5	---	20.5	18.0	7.0	13.0	16.5	18.0	---	26.5	25.0	---	28.5
6	22.0	21.0	18.0	9.5	10.0	---	20.0	---	27.0	26.0	30.0	28.5
7	24.0	23.5	25.5	4.5	10.5	14.0	19.0	---	26.5	26.0	32.0	---
8	23.5	23.0	16.0	5.0	12.0	15.0	21.5	---	26.5	25.5	29.5	---
9	25.5	26.5	14.5	3.5	13.5	14.0	20.5	---	28.0	---	---	28.5
10	27.0	22.0	16.0	---	17.0	15.5	21.0	---	28.0	25.0	31.0	26.0
11	26.0	21.5	16.0	9.5	19.0	16.5	23.5	---	29.0	25.0	30.0	26.0
12	28.0	16.5	18.5	13.5	20.0	18.0	---	---	---	24.5	29.5	25.5
13	22.0	16.5	19.5	13.0	20.0	---	---	---	27.0	25.5	30.0	---
14	---	11.5	19.0	12.0	---	---	---	---	---	25.0	30.0	27.0
15	23.0	16.5	13.0	12.0	19.0	18.0	---	---	28.5	---	29.0	27.0
16	23.0	18.5	13.0	13.0	21.0	18.0	---	22.0	29.0	25.5	28.0	28.0
17	21.0	18.0	12.0	---	21.0	18.0	---	23.0	30.0	25.5	29.5	28.0
18	23.0	19.0	8.0	---	20.0	18.5	---	23.0	29.0	26.0	30.0	27.0
19	23.0	21.5	---	---	20.5	19.0	---	22.0	28.0	24.5	30.0	26.5
20	22.0	16.0	9.5	---	20.0	20.0	---	---	27.0	28.0	31.0	---
21	22.0	14.0	8.5	---	17.0	---	---	23.0	28.0	28.0	28.5	24.0
22	23.0	12.0	8.0	---	14.5	20.5	---	22.0	---	28.0	31.0	24.0
23	24.0	13.0	8.0	---	15.5	20.0	---	23.5	27.0	27.0	30.0	27.0
24	---	11.0	8.5	---	16.0	20.0	---	24.5	28.0	28.5	30.0	28.0
25	22.0	11.5	7.0	---	15.5	21.5	---	25.5	28.5	28.0	30.0	24.5
26	---	10.0	6.5	---	18.0	19.0	---	25.5	26.0	---	29.0	---
27	20.0	8.0	9.0	9.0	19.0	20.5	---	23.5	26.0	---	29.0	26.0
28	22.0	---	11.5	10.5	19.0	---	---	23.5	28.0	28.5	29.5	24.0
29	23.0	20.5	8.5	11.0	19.5	22.0	---	---	28.5	28.5	30.0	23.0
30	---	---	9.5	---	---	19.0	---	24.5	28.5	27.0	29.0	23.0
31	22.0	---	11.5	10.0	---	20.5	---	---	---	30.0	30.0	---
MONTH	23.0	17.5	13.0	---	16.5	18.5	---	---	27.5	26.5	29.5	26.5

08109700 Middle Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°20'21", long 96°54'16", Lee County, on right bank 25 ft (8 m) upstream from centerline of State Highway 21, 4.5 miles (7.2 km) upstream from West Yegua Creek, 5.0 miles (8.0 km) southwest of Dime Box, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--236 mi² (611 km²).

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 295.4 ft (90.04 m) above mean sea level (from Texas Highway Department bridge plans). June 30 to July 21, 1970, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 56.1 ft³/s (1.589 m³/s), 40,640 acre-ft/yr (50.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,800 ft³/s (79.3 m³/s) Apr. 20 (gage height, 11.93 ft or 3.636 m); no flow part or all of each day Aug. 26-28.

Period of record: Maximum discharge, 11,400 ft³/s (323 m³/s) May 24, 1975 (gage height, 15.16 ft or 4.621 m); no flow at times most years.

Maximum stage since at least 1851, 16 ft (4.9 m) in December 1913, from information by local residents.

REMARKS.--Records fair. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1.2	6.6	3.7	7.2	6.8	7.4	17	327	436	7.2	3.7	.60		
2	.99	4.5	4.2	6.7	6.7	7.4	15	1080	979	6.4	2.8	2.7		
3	.64	4.9	4.6	5.7	6.4	7.1	12	715	2070	6.0	1.9	11		
4	.62	8.0	4.7	5.3	6.4	6.9	28	311	1440	5.7	1.5	17		
5	.63	15	5.0	5.2	6.4	16	255	92	891	5.7	1.4	11		
6	.67	9.8	5.1	5.2	6.7	62	264	44	524	22	1.2	6.7		
7	.71	6.8	4.6	4.9	6.7	92	191	150	173	46	1.2	4.6		
8	.65	4.8	4.4	4.3	6.4	114	191	275	101	27	.99	3.2		
9	.55	4.4	4.7	4.0	6.4	121	194	332	83	16	.83	1.6		
10	.48	3.4	4.5	4.7	6.3	108	117	587	74	12	.54	1.3		
11	.37	2.8	4.4	4.9	6.5	94	55	732	48	11	.41	1.0		
12	.31	2.4	4.4	5.0	6.9	51	34	436	31	9.7	.32	.81		
13	.26	1.5	4.4	5.2	6.8	30	25	294	23	8.9	.30	.66		
14	.22	1.3	4.9	5.2	6.9	46	20	162	18	8.3	.29	.62		
15	.22	1.2	5.7	5.2	6.9	45	18	116	16	8.1	.24	.66		
16	.23	1.2	6.2	5.1	7.0	28	62	150	15	13	.20	.70		
17	.20	1.2	8.0	4.7	7.2	21	73	169	14	15	.23	1.2		
18	.17	1.3	8.0	4.3	8.0	17	158	88	13	13	.21	1.9		
19	.15	1.4	6.9	4.4	13	15	320	39	12	15	.16	1.4		
20	.14	1.9	6.6	13	14	14	2340	35	11	13	.12	1.9		
21	.12	2.3	4.8	30	15	13	1560	44	10	9.1	.09	3.3		
22	.13	2.4	4.4	25	14	12	973	31	9.7	7.4	.06	1.6		
23	.17	2.4	4.0	15	12	12	764	33	9.1	6.3	.03	1.1		
24	.17	2.1	6.0	12	10	11	575	29	8.7	5.4	.02	1.6		
25	1.1	2.5	25	11	9.1	12	300	23	8.1	5.1	.01	1.7		
26	4.9	2.1	33	10	8.3	13	126	44	7.4	4.4	0	1.6		
27	11	1.8	24	10	7.7	13	88	61	7.6	10	0	2.4		
28	11	1.9	14	11	7.3	12	65	83	8.3	10	.61	3.5		
29	16	2.8	10	10	7.3	11	196	125	8.3	8.5	4.2	3.1		
30	13	3.8	5.6	8.8	---	16	208	135	8.0	6.5	2.9	10		
31	11	---	7.2	7.8	---	20	---	66	---	5.1	1.1	---		
TOTAL	78.05	108.5	242.9	260.8	239.1	1047.8	9244	6808	7057.2	346.8	27.56	100.45		
MEAN	2.52	3.62	7.84	8.41	8.24	33.8	308	220	235	11.2	.89	3.35		
MAX	16	15	33	30	15	121	2340	1080	2070	46	4.2	17		
MIN	.12	1.2	3.7	4.0	6.3	6.9	12	23	7.4	4.4	0	.60		
CFSM	.01	.02	.03	.04	.03	.14	1.31	.93	1.00	.05	.003	.01		
IN.	.01	.02	.04	.04	.04	.17	1.46	1.07	1.11	.05	.004	.02		
AC-FT	155	215	482	517	474	2080	18340	13500	14000	688	55	199		
CAL YR 1975	TOTAL	39819.33	MEAN	109	MAX	5600	MIN	.12	CFSM	.46	IN	6.28	AC-FT	78980
WTR YR 1976	TOTAL	25561.16	MEAN	69.8	MAX	2340	MIN	0	CFSM	.30	IN	4.03	AC-FT	50700

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-20	0600	11.93	2,800	5-11	0030	9.91	775
5-2	0500	10.45	1,170	6-3	0800	11.82	2,650

08109800 East Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°24'26", long 96°49'02", Burleson County, on left bank 49 ft (15 m) upstream from centerline of State Highway 21, 0.8 mile (1.3 km) downstream from Buffalo Creek, 3.5 miles (5.6 km) north of Dime Box, and 12.2 miles (19.6 km) upstream from mouth.

DRAINAGE AREA (revised).--244 mi² (632 km²).

PERIOD OF RECORD.--Discharge: August 1962 to current year.

Water quality: Sediment records: June 1966 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 284.00 ft (86.56 m) above mean sea level (State Highway Department bench mark). Nov. 6 to Dec. 10, 1970, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--14 years, 59.2 ft³/s (1.677 m³/s), 42,890 acre-ft/yr (52.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,710 ft³/s (76.7 m³/s) Apr. 19 (gage height, 10.76 ft or 3.280 m); minimum, 0.26 ft³/s (0.007 m³/s) Aug. 12.

Period of record: Maximum discharge, 14,000 ft³/s (396 m³/s) May 24, 1975 (gage height, 13.91 ft or 4.240 m); no flow at times most years.

Maximum stage since at least 1886, 17 ft (5.2 m) in 1899 and 1957, from information by local residents.

REMARKS.--Discharge records good. Diversions above station for irrigation. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.4	5.0	8.4	8.2	9.3	17	1340	533	5.4	3.4	.38
2	1.1	2.9	4.9	7.5	7.9	6.9	14	680	1050	4.0	2.7	5.7
3	.81	3.2	5.2	7.4	7.7	6.5	11	172	1070	3.2	2.2	4.8
4	.74	4.2	5.2	6.8	7.8	6.6	32	46	448	2.5	1.7	38
5	.74	6.3	5.9	6.2	8.1	29	849	30	77	7.8	1.6	20
6	.71	5.8	6.3	6.1	8.2	132	1090	28	26	71	1.4	11
7	.67	4.5	5.9	6.1	8.2	245	992	243	20	132	1.6	6.1
8	.79	4.1	5.7	6.1	8.1	274	461	349	51	57	1.1	3.9
9	.84	3.6	4.7	5.8	8.1	220	115	323	29	23	.61	2.3
10	.83	3.0	4.4	6.1	8.4	200	39	291	20	22	.50	2.2
11	.77	2.8	4.1	6.4	8.5	82	27	130	14	23	.45	1.8
12	.67	2.6	4.4	6.6	8.4	39	23	84	11	15	.37	1.6
13	.74	2.3	4.7	7.0	8.1	90	20	103	9.1	12	1.0	1.1
14	.73	2.3	5.5	7.0	8.0	84	18	124	7.8	8.9	.42	.84
15	.67	2.2	5.7	7.0	7.9	42	18	154	6.8	7.9	.73	.88
16	.57	2.0	8.6	6.6	8.2	30	138	73	6.2	7.5	.69	.93
17	.47	1.8	12	6.3	8.9	23	140	37	5.4	9.1	.68	1.2
18	.37	1.9	9.9	6.0	11	17	249	26	9.7	13	.52	1.9
19	.32	2.6	8.2	6.1	16	16	1300	21	15	12	.56	1.4
20	.34	3.2	6.9	19	15	16	1900	17	14	8.7	.69	1.7
21	.37	3.3	5.5	45	20	16	1190	16	22	7.1	.60	4.0
22	.41	3.1	4.9	31	16	15	877	16	19	6.2	.53	1.9
23	.58	2.8	4.7	20	14	12	392	14	15	5.2	.41	1.3
24	.62	2.7	15	15	11	13	125	13	11	4.7	.42	1.8
25	1.9	2.7	60	12	9.4	15	57	12	10	5.5	.40	1.9
26	7.2	2.7	51	11	8.5	15	51	29	9.9	7.6	.37	1.8
27	8.8	2.6	30	11	8.0	16	39	89	15	12	.61	2.4
28	10	2.6	18	12	7.8	14	31	83	16	9.7	.73	4.1
29	7.0	2.8	13	11	7.6	13	182	31	13	7.5	2.1	3.8
30	5.9	5.2	11	10	---	35	509	19	7.8	5.9	3.4	13
31	4.3	---	9.2	9.2	---	24	---	18	---	4.4	.76	---
TOTAL	61.16	95.2	345.5	331.7	282.8	1756.3	10906	4611	3561.7	520.8	33.25	143.73
MEAN	1.97	3.17	11.1	10.7	9.75	56.7	364	149	119	16.8	1.07	4.79
MAX	10	6.3	60	45	20	274	1900	1340	1070	132	3.4	38
MIN	.32	1.8	4.1	5.8	7.6	6.5	11	12	5.4	2.5	.37	.38
AC-FT	121	189	685	658	561	3480	21630	9150	7060	1030	66	285

CAL YR 1975 TOTAL 39224.22 MEAN 107 MAX 9490 MIN .32 AC-FT 77800
WTR YR 1976 TOTAL 22649.14 MEAN 61.9 MAX 1900 MIN .32 AC-FT 44920

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-5	1500	9.48	1,160	5-1	0300	9.84	1,500
4-19	1900	10.76	2,710	6-1	1300	9.79	1,440

08109900 Somerville Lake near Somerville, Tex.

LOCATION.--Lat 30°19'20", long 96°31'32" (revised), Burleson County, in intake structure of Somerville Dam on Yegua Creek, at the south-west edge of the city limits of Somerville, and at mile 20.0 (32.2 km).

DRAINAGE AREA (revised).--1,007 mi² (2,608 km²).

PERIOD OF RECORD.--Contents: February 1966 to current year. Prior to October 1970, published as Somerville Reservoir.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 241,100 acre-ft (297 hm³) June 5 (elevation, 244.19 ft or 74.429 m); minimum, 152,400 acre-ft (188 hm³) Sept. 18, 19 (elevation, 237.32 ft or 72.335 m).
Period of record: Maximum contents, 294,200 acre-ft (363 hm³) June 28, 1968 (elevation, 247.56 ft or 75.456 m); minimum, 117,000 acre-ft (144 hm³) Nov. 16, 1971 (elevation, 233.88 ft or 71.287 m).

REMARKS.--The lake is formed by a rolled earthfill dam 20,210 ft (6,160 m) long, with a 4,715-foot-long (1,437-meter) dike and a 1,250-foot-long (381-meter) uncontrolled spillway. Deliberate impoundment began Jan. 3, 1967, and the dam was completed Oct. 27, 1967. The emergency spillway is an uncontrolled ogee weir 1,250-foot (381-meter) wide located near right end of dam. The low-flow outlet consists of one 10.0-foot-diameter (3.0-meter) conduit that is controlled by two 5.0- by 10.0-foot (1.5- by 3.0-meter) tractor-type gates. Capacity table is based on Geological Survey topographic maps dated 1959. The lake was designed for flood control and water conservation. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	280.0	
Design flood.....	274.5	1,028,800
Spillway crest.....	258.0	507,500
Top of conservation pool.....	238.0	160,100
Lowest gated outlet (invert of 10-foot conduit).....	206.0	200

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

237.0	148,900	242.0	210,000
238.0	160,100	244.0	238,300
239.0	171,800	246.0	268,800
240.0	184,000		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157500	157800	156000	158700	160500	161300	160900	209700	219600	184300	157800	152700
2	157100	158200	155900	158700	160300	161300	160900	210500	227900	182000	157300	152900
3	156800	158400	156000	158400	160200	161100	160800	211000	234500	180300	157000	153000
4	156800	158400	155800	157900	160200	161300	163400	211000	239500	178500	156800	153000
5	156600	158400	156000	158100	160900	161300	168800	210000	240500	177600	156600	153200
6	156600	158400	156500	158200	160900	161500	172600	208300	239200	175900	156500	153300
7	156400	158300	156500	158100	160700	162200	176600	213900	235400	174600	156200	153100
8	156100	158300	156500	157900	160800	163900	178300	219400	231900	173600	156600	153000
9	156100	158300	156400	157600	160900	164700	178200	224200	227500	174800	156600	152700
10	156100	157900	156400	157800	160900	165800	177500	230900	222900	173000	156200	153700
11	156000	157800	156200	157900	160900	166000	176200	232300	219600	171600	156000	153300
12	156000	157500	156100	157900	161000	165300	174200	235100	217600	169900	155800	153100
13	155700	157100	156200	157800	161000	163800	172400	238300	215200	168200	155600	153100
14	155600	156700	156000	157800	161100	161900	170600	239500	213500	166700	155300	152900
15	155600	156600	157300	157900	161100	161000	168700	236400	211700	165300	155200	152800
16	155300	156600	157300	157800	161400	160100	174200	232400	209800	164000	155000	152800
17	155000	156400	157000	157800	161500	159700	177400	227800	207800	162200	154900	152800
18	154700	157300	156900	157700	161400	159800	179700	223600	205700	160600	154600	152400
19	154400	157600	156800	158400	161400	159800	182800	220300	203900	159700	154600	152700
20	154200	157600	156700	158300	161300	159700	189200	218700	202100	159500	154200	153100
21	154000	157100	156700	158400	161600	159900	195300	217600	201700	159300	153900	153100
22	154400	156800	156600	158600	161400	159900	200600	215600	200700	159200	153800	153000
23	154400	156700	156500	158900	161300	159900	203900	214200	198800	159200	153500	152900
24	154400	156500	158300	159000	161300	160100	205500	212400	196800	159200	153300	152800
25	157500	156200	158200	159900	161300	160300	205700	210200	195100	159100	153100	152800
26	157700	156000	158200	160100	161300	160300	204900	210600	194000	158900	153000	153100
27	157700	156000	158100	160200	161300	160200	203100	209600	192300	158600	152800	153100
28	157800	156000	159000	160300	161300	160500	201400	208100	190400	158400	152700	153500
29	157800	156500	158900	160300	161300	160600	205300	206500	188400	158400	152700	153500
30	157800	156000	158700	160300	---	161000	207900	204900	186600	158200	152500	153500
31	157800	---	158600	160500	---	161000	---	204700	---	158100	152700	---
(+)	237.80	237.64	237.87	238.03	238.10	238.08	241.84	241.60	240.20	237.82	237.34	237.42
(*)	0	-1800	+2600	+1900	+800	-300	+46900	-3200	-18100	-28500	-5400	+800
(††)	147	123	127	136	129	134	133	138	148	161	202	142
MAX	157800	158400	159000	160500	161600	166000	207900	239500	240500	184300	157800	153700
MIN	154000	156000	155800	157600	160200	159700	160800	204700	186600	158100	152500	152400

CAL YR: 1975..... * -700

†† 1570

MAX 286200

MIN 154000

WTR YR 1976..... * -4300

†† 1720

MAX 240500

MIN 152400

+ Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Brenham.

08109900 Somerville Lake near Somerville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
FEB 03...	1430	369	7.9	12.5	10.3	96	110	58
APR 29...	1525	409	7.5	21.5	7.8	88	120	68
AUG 20...	0900	375	7.3	28.0	4.8	62	98	46

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
FEB 03...	31	7.2	24	1.0	5.5	60	0	54	41
APR 29...	33	8.5	29	1.2	6.0	60	0	65	49
AUG 20...	27	7.4	26	1.1	5.8	63	0	52	44

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
FEB 03...	.2	9.9	203	.00	.01	.04	170	140
APR 29...	.4	6.9	227	.07	.10	.01	0	0
AUG 20...	.2	12	205	.01	.01	.02	10	10

08110000 Yegua Creek near Somerville, Tex.

LOCATION.--Lat 30°19'18", long 96°30'26", Burtleson County, on left bank 40 ft (12 m) downstream from centerline of bridge on State Highway 36, 860 ft (262 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.0 mile (1.6 km) downstream from Somerville Lake, 2.0 miles (3.2 km) south of Somerville, 5.0 miles (8.0 km) upstream from Davidson Creek, and 18.4 miles (29.6 km) upstream from mouth.

DRAINAGE AREA (revised).--1,009 mi² (2,613 km²).

PERIOD OF RECORD.--Discharge: May 1924 to current year.

Water quality: Chemical analyses: September 1961 to September 1967, October 1968 to current year. Water temperatures: September 1961 to September 1967.

GAGE.--Water-stage recorder. Datum of gage is 199.21 ft (60.719 m) above mean sea level. Prior to Jan. 30, 1934, nonrecording gage at railway bridge 860 ft (262 m) upstream at datum 34.30 ft (10.455 m) higher. Jan. 30, 1934, to Nov. 30, 1970, water-stage recorder at highway bridge 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--41 years (1924-65) unregulated, 290 ft³/s (8.213 m³/s), 210,100 acre-ft/yr (259 hm³/yr); 11 years (1965-76) regulated, 310 ft³/s (8.779 m³/s), 224,600 acre-ft/yr (277 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 ft³/s (70.2 m³/s) May 16 (gage height, 8.67 ft or 2.643 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Sept. 9.

Period of record: Maximum discharge, 56,800 ft³/s (1,610 m³/s) July 1, 1940 (gage height, 19.27 ft or 5.873 m); no flow at times.

Maximum stage since at least 1875, 22 ft (6.7 m) Dec. 5, 1913, present site and datum, from information by Gulf, Colorado, and Santa Fe Railway Co.

REMARKS.--Discharge records good. Flow regulated by Somerville Lake (station 08109900) since Feb. 3, 1966.

REVISIONS (WATER YEARS).--WSP 1512: 1926(M), 1929, 1935. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.7	2.2	1.1	.70	2.3	5.7	409	923	926	1.1	.54
2	1.1	1.7	2.3	1.2	.75	2.5	5.0	591	134	925	1.2	.51
3	1.1	1.6	2.3	1.2	.74	2.6	4.4	364	17	926	1.3	.42
4	1.1	1.6	2.4	1.1	.81	2.7	4.1	982	199	921	1.3	.37
5	1.2	1.6	2.5	1.1	1.4	2.7	8.3	980	1250	927	1.4	.37
6	1.2	1.5	3.5	1.2	6.0	2.9	8.0	980	2320	918	1.5	.36
7	1.3	1.5	3.0	1.2	3.5	3.8	3.8	685	2420	912	1.6	.32
8	1.5	1.5	2.6	1.2	2.3	7.2	181	69	2430	718	1.8	.16
9	2.0	1.4	2.4	1.2	2.0	6.8	814	15	2410	391	2.0	.08
10	2.3	1.4	2.2	1.2	2.0	3.7	1020	22	2410	889	2.0	.09
11	1.3	1.4	2.2	1.3	1.9	94	1040	20	2130	897	1.9	.09
12	1.5	1.3	2.2	1.3	1.8	595	1040	13	1240	897	1.9	.10
13	1.3	1.3	2.3	1.3	1.8	749	1050	23	1040	903	2.0	.09
14	1.4	1.3	2.4	1.3	1.7	750	1050	426	1020	903	2.1	.11
15	1.5	1.2	3.0	1.2	1.8	671	1050	1700	1030	910	.86	.11
16	1.7	1.2	3.6	1.2	1.8	503	819	2430	1040	920	.93	.11
17	1.8	1.2	3.4	1.2	2.0	355	82	2460	1030	911	1.0	.11
18	1.8	1.3	2.9	1.2	2.0	19	7.8	2460	1030	912	.98	.10
19	1.7	1.6	2.7	1.2	1.9	4.1	10	2120	1030	601	.95	.10
20	1.7	1.6	2.6	1.7	1.8	3.7	24	1190	939	25	.87	.19
21	1.7	1.6	2.5	1.8	2.3	3.6	11	991	117	3.0	.82	.24
22	1.8	1.6	2.5	1.6	2.2	3.4	41	986	299	1.2	.70	.21
23	1.9	1.6	2.6	1.5	2.1	3.2	465	986	935	.89	.69	.22
24	1.9	1.6	4.9	1.5	2.0	3.9	828	986	956	.83	.72	.21
25	1.9	1.5	5.8	5.3	1.9	4.2	842	975	964	.85	.80	.21
26	1.9	1.6	2.4	2.2	2.0	4.1	932	986	952	.86	.67	.24
27	1.9	1.6	1.4	.99	2.1	4.2	1060	975	955	.88	.55	.29
28	1.8	1.8	1.1	.65	2.1	4.3	1060	969	948	.88	.48	.43
29	1.8	2.1	1.1	.58	2.2	4.6	768	964	943	.92	.46	.41
30	1.7	2.2	1.1	.59	---	5.7	178	959	937	.99	.55	.37
31	1.7	---	1.1	.65	---	6.9	---	959	---	1.0	.60	---
TOTAL	50.3	46.1	79.2	41.96	57.60	3829.1	14412.1	29275	34052	16344.30	35.73	7.16
MEAN	1.62	1.54	2.55	1.35	1.99	124	480	944	1135	527	1.15	.24
MAX	2.3	2.2	5.8	5.3	6.0	750	1060	2460	2430	927	2.1	.54
MIN	1.1	1.2	1.1	.58	.70	2.3	3.8	13	17	.83	.46	.08
AC-FT	100	91	157	83	114	7600	28590	58070	67540	32420	71	14
CAL YR 1975	TOTAL	161735.36	MEAN 443	MAX 2720	MIN .46	AC-FT 370800						
WTR YR 1976	TOTAL	98230.55	MEAN 268	MAX 2460	MIN .08	AC-FT 194800						

08110000 Yegua Creek near Somerville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT. 08...	1610	1.6	550	7.8	23.0	150	100	45	10	37
NOV. 17...	1450	1.2	712	7.3	18.5	200	150	62	12	50
JAN. 05...	1335	1.2	1050	7.9	8.0	300	250	91	17	82
FEB. 10...	1540	1.9	1250	7.1	18.0	360	310	110	20	110
MAY 04...	1410	887	422	7.3	22.0	120	67	33	8.2	29
JUNE 15...	1115	1030	367	7.5	27.0	100	52	29	6.9	25
JULY 14...	1125	931	361	7.4	27.0	100	53	29	7.1	25
JULY 23...	0955	.88	571	6.9	28.0	160	100	47	11	41
SEP. 09...	1515	.09	1190	7.6	30.0	320	260	95	21	90

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	HICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RINE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT. 08...	1.3	6.6	61	0	79	77	.3	12	297
NOV. 17...	1.5	7.6	62	0	110	110	.4	12	394
JAN. 05...	2.1	8.0	62	0	180	170	.3	15	594
FEB. 10...	2.5	9.0	60	0	240	220	.3	13	752
MAY 04...	1.2	6.0	60	0	65	51	.4	7.1	229
JUNE 15...	1.1	6.0	60	0	53	42	.3	9.4	201
JULY 14...	1.1	5.5	59	0	51	41	.3	10	198
JULY 23...	1.4	6.5	74	0	70	84	.3	14	310
SEP. 09...	2.2	10	76	0	140	240	.3	15	649

08110100 Davidson Creek near Lyons, Tex.

LOCATION.--Lat 30°25'10", long 96°32'24", Burleson County, on left bank 83 ft (25 m) downstream from Farm Road 60, 1.2 miles (1.9 km) downstream from Berry Creek, 2.8 miles (4.5 km) northeast of Lyons, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year.

Water quality: Sediment records: June 1966 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 220.26 ft (67.135 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 64.1 ft³/s (1.815 m³/s), 4.46 in/yr (113 mm/yr), 46,440 acre-ft/yr (57.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,920 ft³/s (111 m³/s) June 2 (gage height, 15.49 ft or 4.721 m); no flow Sept. 13-19.

Period of record: Maximum discharge, 23,200 ft³/s (657 m³/s) June 24, 1968 (gage height, 18.67 ft or 5.691 m); no flow at times each year.

Maximum stage since at least 1902, that of June 24, 1968. Flood in 1947 reached a stage of 17 ft (5.2 m), from information by local resident.

REMARKS.--Discharge records good. During year, the city of Caldwell discharged 244 acre-ft (0.301 hm³) of sewage effluent into creek above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.62	2.90	4.6	6.2	5.4	1.8	405	1420	3.7	.79	.15
2	.32	.62	2.0	4.2	5.4	5.4	9.4	155	3440	2.8	.70	.14
3	.32	.62	2.0	3.6	5.1	4.9	7.3	51	1650	2.1	.59	.12
4	.31	.46	1.7	3.1	4.4	4.5	6.5	32	487	2.1	.52	.09
5	.31	.46	1.7	2.9	4.3	4.4	53.1	23	79	2.2	.36	.06
6	.30	.68	1.5	2.4	4.5	47	1100	1.8	44	6.4	.32	.04
7	.32	1.3	1.3	2.3	4.4	257	1080	77	29	3.7	.32	.02
8	.44	1.4	1.3	2.0	4.8	164	358	750	20	2.7	.57	.03
9	.46	1.2	1.2	1.9	4.7	334	77	497	14	123	.68	.08
10	.46	.72	1.2	2.0	4.2	136	44	294	12	239	.45	.09
11	.33	.54	2.0	2.1	4.2	53	31	151	10	41	.28	.06
12	.32	.41	1.3	2.0	4.4	32	24	87	8.7	19	.21	.05
13	.34	.39	1.3	2.0	4.1	64	19	244	7.6	12	.19	0
14	.31	.39	1.5	2.0	4.8	49	17	221	6.5	8.4	.15	0
15	.12	.39	1.5	2.4	4.8	28	15	92	5.7	7.2	.10	0
16	.41	.41	1.3	2.5	5.5	22	432	4.3	5.7	6.5	.08	0
17	.46	.46	1.3	2.2	4.8	18	788	30	5.2	51	.10	0
18	.44	2.2	1.3	2.1	15	14	217	21	4.6	14	.10	0
19	.54	16	2.0	2.1	15	13	664	16	4.4	7.5	.10	0
20	.54	4.9	2.3	59	11	12	682	15	4.1	4.8	.12	.01
21	.54	3.2	2.3	85	29	11	948	14	3.6	3.6	.12	3.2
22	.54	2.1	2.1	30	37	9.6	555	14	3.3	3.3	.10	1.0
23	.47	2.1	1.9	16	22	8.4	126	12	3.7	3.1	.08	.65
24	1.1	1.5	2.1	10	12	8.0	98	10	3.6	2.8	.30	.67
25	1.7	1.2	25	8.9	8.4	8.4	166	8.7	3.8	4.8	.32	.39
26	3.9	.92	52	40	6.9	10	82	11	63	4.4	.14	.22
27	13	.90	27	65	5.4	9.3	40	46	55	2.8	.21	.23
28	7.5	.90	13	22	5.2	8.2	26	73	16	2.0	.16	.33
29	3.6	.90	8.8	12	5.6	7.4	376	23	8.1	1.5	.27	.21
30	1.7	.90	6.5	8.6	---	19	703	13	5.4	1.1	.40	.22
31	.94	---	5.0	7.3	---	54	---	11	---	.88	.19	---
TOTAL	42.93	48.85	176.30	412.2	253.9	1420.9	9241.7	3488.7	7423.0	589.38	9.02	8.06
MEAN	1.34	1.63	5.69	13.3	8.76	45.8	308	113	247	19.0	.29	.27
MAX	13	16	52	85	37	334	1100	750	3440	239	.79	3.2
MIN	.12	.39	.90	1.9	4.2	4.4	6.5	8.7	3.3	.88	.08	0
CFSM	.007	.008	.03	.07	.04	.23	1.58	.58	1.27	.10	.001	.001
IN.	.008	.009	.03	.08	.05	.27	1.76	.67	1.42	.11	.002	.002
AC-FT	85	97	350	818	504	2820	18330	6920	14720	1170	18	16

CAL YR 1975 TOTAL 26289.40 MEAN 72.0 MAX 1950 MIN .12 CFSM .37 IN 5.02 AC-FT 52150
WTR YR 1976 TOTAL 23114.94 MEAN 63.2 MAX 3440 MIN 0 CFSM .32 IN 4.41 AC-FT 45850

PEAK DISCHARGE (BASE, 1,500 FT³/S).--June 2 (1300 3,920 ft³/s (15.49 ft).

08110200 Brazos River at Washington, Tex.

LOCATION.--Lat 30°21'40", long 96°09'18", Washington County, near right bank beneath floor of bridge on State Highway 105, 2.4 miles (3.9 km) upstream from Navasota River, 2.5 miles (4.0 km) north of Washington, and at mile 228.8 (368.1 km).

DRAINAGE AREA (revised).--41,192 mi² (106,687 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1965 to current year. Gage heights collected in this vicinity since 1915 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 140.13 ft (42.712 m) above mean sea level. Auxiliary water-stage recorder 1.8 miles (2.9 km) downstream at same datum.

AVERAGE DISCHARGE.--10 years, 5,341 ft³/s (151.3 m³/s), 3,870,000 acre-ft/yr (4.77 km³/yr).

EXTREMES.--Current year: Maximum discharge, 44,000 ft³/s (1,250 m³/s) Apr. 21 (gage height, 25.56 ft or 7.791 m); minimum daily, 585 ft³/s (16.6 m³/s) Oct. 23.

Period of record: Maximum discharge, 82,500 ft³/s (2,340 m³/s) Jan. 24, 1968 (gage height, 33.60 ft or 10.241 m); maximum gage height, 36.74 ft (11.198 m) Apr. 28, 1966 (backwater from Navasota River); minimum daily discharge, 276 ft³/s (7.82 m³/s) Feb. 17, 19, 1971.

Maximum stage since at least 1856, 62.0 ft (18.90 m) Dec. 6, 1913, from information by local residents.

REMARKS.--Records good. Backwater at times from Navasota River. Many diversions above station for irrigation, municipal, industrial and oilfield operations. At times, flow is affected by five upstream reservoirs with a combined capacity of 4,955,000 acre-ft (6.11 km³). At end of year, flow from 431 mi² (1,116 km²) above this station was partly affected by 127 floodwater-retarding structures with a combined detention capacity of 147,720 acre-ft (182 hm³). Recording rain gage located at auxiliary gage 1.8 miles (2.9 km) downstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	1190	1350	2260	2890	2110	1490	32700	14600	11200	6320	2300
2	1130	1060	977	2060	2650	1580	1190	31300	19800	10600	6110	2230
3	1110	1410	822	1860	2430	1970	1070	18800	20500	10000	5700	2450
4	1130	2240	779	1910	2640	2010	1060	10700	15400	9470	5420	4360
5	1090	3000	810	1510	2160	1470	1480	6620	9980	11600	4480	4470
6	881	1950	1070	1090	1660	1310	4750	5150	6670	30000	4540	4520
7	782	1490	932	911	1230	1660	8580	15600	5150	30600	4380	3140
8	727	1150	838	1250	1040	2390	7010	28200	4860	22200	2740	2810
9	712	934	752	1380	1600	2570	4580	24900	4240	23200	2340	2150
10	719	820	678	1300	2840	2890	3680	17600	4010	18000	2140	1520
11	727	766	652	1960	2120	3070	3330	11200	3980	16600	2080	1860
12	766	728	617	1940	1510	2400	3060	6890	3960	15300	2230	2500
13	1330	713	625	1430	1070	2580	2680	6610	2790	14700	2320	1880
14	1870	704	625	992	896	2470	2490	15100	2490	14500	1930	1260
15	1630	680	651	813	807	2670	2400	22000	2850	12900	1550	1200
16	1160	660	655	727	779	2320	3470	16000	3090	11100	1790	1150
17	974	659	674	688	758	1780	4430	11500	3080	9290	1910	1360
18	856	639	645	662	768	1470	3440	10300	3090	11300	1860	1330
19	832	669	1230	653	774	1240	11100	9190	3200	15800	1810	1350
20	1110	698	1440	758	683	1170	32700	8750	2710	10300	1670	1310
21	1100	705	1920	912	1010	983	42400	7780	2460	6270	1560	1330
22	631	692	1820	849	2290	810	37000	6850	1620	6750	1460	1240
23	585	677	1600	713	1900	716	23500	6790	2120	8930	1520	1120
24	633	785	1430	643	2010	921	14800	5880	2650	9080	1620	1100
25	2140	1730	1260	1120	2060	1170	10800	5130	3970	8660	1510	884
26	2750	2080	1800	1480	2050	1860	11400	5300	4290	6320	1860	833
27	4800	2420	2760	1380	1970	2310	11400	6080	12600	5220	1970	911
28	4960	2500	2890	1380	2000	1840	6820	17500	16000	5570	1680	983
29	3480	2740	2610	2230	2180	1460	5660	17600	9530	5920	1160	667
30	2190	1980	2240	3930	---	1450	19000	11000	10700	5780	1350	1440
31	1480	---	2120	3170	---	1830	---	9080	---	5870	2030	---
TOTAL	45365	38469	39272	43961	48775	56880	286770	408000	202390	383030	81040	55658
MEAN	1463	1282	1267	1418	1682	1835	9559	13160	6746	12360	2614	1855
MAX	4960	3000	2890	3930	2890	3070	42400	32700	20500	30600	6320	4520
MIN	585	639	617	643	683	716	1060	5130	1620	5220	1160	667
AC-FT	89980	76300	77900	87200	96750	112800	568800	809300	401400	759700	160700	110400
CAL YR 1975	TOTAL	2717201	MEAN	7444	MAX	68600	MIN	585	AC-FT	5390000		
WTR YR 1976	TOTAL	1689610	MEAN	4616	MAX	42400	MIN	585	AC-FT	3351000		

08110300 Lake Mexia near Mexia, Tex.

LOCATION (revised).--Lat 31°38'37", long 96°34'43", Limestone County, 550 ft (168 m) downstream from Cedar Creek, 610 ft (186 m) upstream from spillway of dam on Navasota River, 1.0 mile (1.6 km) upstream from Echo Dam, 1.6 miles (2.6 km) upstream from Jacks Creek, 6 miles (10 km) southwest of Mexia, and 180.0 miles (289.6 km) upstream from mouth.

DRAINAGE AREA (revised).--196 mi² (508 km²).

PERIOD OF RECORD.--Contents: July 1961 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 420.0 ft (128.02 m) above mean sea level.

EXTREMES.--Current year: Maximum contents, 14,230 acre-ft (17.5 hm³) Apr. 19 (gage height, 31.34 ft or 9.552 m); minimum, 7,630 acre-ft (9.41 hm³) Oct. 22 (gage height, 26.92 ft or 8.205 m).
Period of record: Maximum contents, 20,320 acre-ft (25.1 hm³) Oct. 31, 1974 (gage height, 34.40 ft or 10.485 m); minimum, 3,730 acre-ft (4.60 hm³) Jan. 15, 1964 (gage height, 21.40 ft or 6.523 m).

REMARKS.--The lake is formed by a 1,645-foot (501-meter) earthfill dam, including a 520-foot (158-meter) uncontrolled concrete ogee type spillway near the center of dam. The dam was completed and deliberate impoundment of water began June 5, 1961. The Bistone Municipal Water Supply District reported a diversion of 1,620 acre-ft (2.00 hm³) for municipal use during the current year. Data regarding the dam is given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	42.3	
Crest of spillway.....	28.3	9,400
Lowest gated outlet (invert).....	2.1	531

COOPERATION.--Capacity table computed from data furnished by Fowler and Grafe, Inc., Consulting Engineers, Dallas. Data based on pre-construction survey in 1958 and was not adjusted for borrow in the lake area. Diversions from lake for municipal use furnished by the Bistone Municipal Water Supply District.

Capacity table (gage height, in feet, and contents, in acre-feet)

26.0	6,650	30.0	12,010
27.0	7,720	31.0	13,620
28.0	8,970	32.0	15,410
29.0	10,400		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8160	8230	8270	8350	8120	8980	9370	9770	11210	9480	9380	8520
2	8120	8490	8260	8330	8110	8970	9340	9530	10090	9440	9340	8620
3	8080	8640	8240	8310	8070	8970	9330	9570	9710	9470	9310	8780
4	8060	8640	8210	8270	8070	9010	9440	9510	9600	10510	9270	8840
5	8040	8620	8230	8260	8090	8970	9510	10040	9540	10090	9210	8860
6	8010	8580	8210	8260	8060	8980	9540	11480	9510	9870	9200	8860
7	7990	8570	8190	8260	8020	9070	9560	10330	9530	9830	9170	8840
8	7980	8540	8180	8220	8010	10000	9510	9930	9510	9640	9140	8810
9	7940	8540	8160	8190	8010	9790	9500	9790	9500	9570	9080	8780
10	7930	8490	8140	8210	7990	9610	9470	9800	9460	9560	9060	8740
11	7920	8480	8130	8190	7990	9570	9460	9800	9430	9540	9000	8690
12	7880	8470	8120	8180	7980	9500	9440	9940	9400	9510	8960	8670
13	7870	8440	8070	8180	7980	9460	9430	11400	9370	9660	8920	8640
14	7830	8420	8110	8170	7960	9440	9400	10130	9330	9860	8870	8620
15	7820	8420	8120	8160	7940	9460	9510	9760	9340	10040	8840	8610
16	7810	8420	8090	8130	7940	9400	9740	9630	9580	10800	8810	8580
17	7760	8390	8070	8120	8440	9370	9790	9560	9610	11410	8790	8580
18	7720	8370	8040	8090	9070	9360	12220	9510	9660	10000	8760	8570
19	7690	8360	8030	8120	9140	9330	13220	9500	9770	9690	8730	8570
20	7670	8380	8020	8080	9180	9340	11110	9500	9660	9580	8690	8560
21	7650	8350	8010	8060	9170	9310	9970	9480	9560	9540	8660	8490
22	7740	8310	7990	8040	9110	9300	8980	9470	9500	9510	8630	8470
23	7720	8310	7970	8530	9080	9240	11140	9500	9460	9510	8590	8460
24	7810	8290	8180	8060	9070	9690	13090	9480	9440	9500	8560	8440
25	8240	8330	8350	8090	9070	9640	10560	10330	11450	9470	8560	8390
26	8280	8290	8370	8160	9060	9570	9800	10370	11170	9670	8530	8480
27	8280	8290	8370	8160	9030	9510	9640	9830	10010	9580	8490	8470
28	8290	8290	8430	8140	9010	9470	9660	9640	9710	9530	8470	8890
29	8270	8330	8380	8130	9000	9440	11510	9570	9580	9480	8440	8920
30	8260	8310	8370	8130	---	9430	10310	9510	9530	9440	8430	8910
31	8240	---	8350	8130	---	9400	---	9530	---	9410	8490	---
(†)	27.42	27.47	27.50	27.33	28.02	28.30	28.94	28.39	28.39	28.31	27.62	27.95
(*)	+60	+70	+40	-220	+870	+400	+910	-780	0	-120	-920	+420
(††)	146	133	127	129	108	121	138	149	139	171	205	183
MAX	8290	8640	8430	8530	9180	10000	13220	11480	11450	11410	9380	8920
MIN	7650	8230	7970	8040	7940	8970	8980	9470	9330	9410	8430	8390

CAL YR 1975..... * -1290

WTR YR 1976..... * +730

†† 1627

†† 1749

MAX 13820

MAX 13220

MIN 7650

MIN 7650

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)
OCT 30...	0840	333	7.5	18.5	120	12	42	2.7	18
MAR 03...	0850	388	7.7	18.5	140	21	49	4.0	21
DATE	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 30...	.7	4.2	127	0	16	24	.3	1.8	172
MAR 03...	.8	4.5	144	0	20	34	.5	3.8	208

08110400 Navasota River near Groesbeck, Tex.

LOCATION.--Lat 31°30'45", long 96°27'03", Limestone County, on left bank 43 ft (13 m) downstream from State Highway 164, 0.4 mile (0.6 km) downstream from Pin Oak Creek, 5 miles (8 km) east of Groesbeck, and at mile 154.6 (248.8 km).

DRAINAGE AREA (revised).--311 mi² (805 km²).

PERIOD OF RECORD.--Discharge: March 1965 to current year.

Water quality: Chemical analyses: November 1967 to current year. Water temperatures: November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 353.84 ft (107.850 m) above mean sea level. Prior to Oct. 1, 1972, at 5.0 ft (1.52 m) higher datum.

AVERAGE DISCHARGE.--11 years, 201 ft³/s (5.692 m³/s), 145,600 acre-ft/yr (180 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 9,880 ft³/s (280 m³/s) Apr. 19 (gage height, 23.04 ft or 7.023 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 25.

Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Nov. 1, 1974 (gage height, 25.55 ft or 7.788 m); no flow at times in 1967, 1969, and 1971-72.

Historic: Maximum stage since at least 1902 occurred in 1944 (stage unknown), from information by local residents. Maximum stage occurred in 1932 and reached a stage of 28.7 ft (8.75 m), from information by Texas Highway Department.

Water quality: Current year: Maximum daily specific conductance, 2,190 micromhos on several days during August; minimum daily, 107 micromhos Apr. 29. Maximum water temperatures, 33.0°C on several days during August; minimum, 4.0°C Jan. 8.

Period of record: Maximum daily specific conductance, 6,590 micromhos Oct. 8, 9, 1969; minimum daily, 71 micromhos June 4, 1973. Maximum water temperatures, 38.0°C on several days during July 1974; minimum, 1.5°C Jan. 10, 1973.

REMARKS.--Discharge records fair. Flow partly regulated by Lake Mexia (station 08110300) 14.4 miles (23.2 km) upstream (capacity, 9,400 acre-ft or 11.6 hm³) and Springfield Lake 8.0 miles (12.9 km) upstream (approximate capacity, 3,100 acre-ft or 3.82 hm³). Several diversions above station for irrigation, municipal supply, and oilfield operation (total amount unknown). The city of Mexia discharged 636 acre-ft (784,000 m³) of sewage effluent during year into river above station. The city of Groesbeck diverted 362 acre-ft (446,000 m³) for municipal use and returned 14.5 acre-ft (17,900 m³) of washwater and 187 acre-ft (231,000 m³) of sewage effluent above station during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	1.9	2.1	2.0	1.8	2.1	14	1470	4310	43	7.9	155
2	3.5	2.1	2.0	2.0	1.8	2.1	11	317	2680	25	6.3	137
3	3.4	1.1	2.1	1.9	1.7	2.0	8.9	121	1160	15	5.0	75
4	3.3	9.0	2.0	1.8	1.7	2.0	11	67	259	13	4.2	13
5	3.5	3.8	1.9	1.8	1.8	2.4	11	84	118	1300	3.5	4.9
6	3.7	2.4	1.9	1.8	1.9	3.9	14	2270	69	2210	3.3	2.7
7	3.6	2.1	1.8	1.9	1.9	3.2	16	3330	46	617	3.1	2.2
8	3.3	2.0	1.8	1.9	1.8	3.7	17	2220	32	245	2.7	2.0
9	3.5	1.9	1.7	1.8	1.7	2.95	19	697	23	132	2.7	1.9
10	3.4	1.9	1.7	1.8	1.8	2.05	16	493	17	71	2.6	1.8
11	3.3	1.8	1.7	1.9	1.9	112	13	278	11	48	2.4	1.7
12	2.8	1.7	1.9	2.0	2.0	62	11	314	7.9	35	2.1	1.6
13	2.7	1.6	1.9	2.0	1.9	48	8.9	2260	5.6	26	2.0	1.5
14	2.6	1.6	2.0	2.0	1.9	30	7.6	2600	4.2	32	1.9	1.4
15	2.6	1.6	2.1	2.0	1.9	22	6.5	1240	3.3	118	1.9	1.4
16	2.8	1.7	2.0	1.9	1.9	20	187	276	3.2	464	1.8	1.4
17	2.8	1.8	2.0	1.8	2.2	16	150	121	3.4	1550	1.8	1.3
18	2.6	1.9	1.8	1.8	8.8	11	1750	66	3.9	2100	1.6	1.4
19	2.5	2.0	1.7	1.9	8.8	9.2	7110	44	15	835	1.6	1.7
20	2.3	2.2	1.7	2.0	4.4	8.8	7320	33	56	213	1.5	2.2
21	2.4	2.1	1.7	1.9	3.6	9.8	3320	26	67	109	1.4	1.8
22	3.1	2.1	1.7	1.9	3.3	8.1	908	22	47	72	1.4	1.6
23	16	2.1	1.8	1.8	3.5	7.3	207	19	26	49	1.5	1.4
24	13	1.8	2.9	1.9	2.7	92	3270	19	17	34	1.7	1.2
25	10	1.9	21	2.0	2.5	210	5740	81	63	24	1.6	1.1
26	20	1.9	11	3.0	2.3	201	2360	1190	1350	18	1.5	1.6
27	11	1.8	4.7	3.0	2.1	108	435	962	1840	13	1.4	18
28	4.7	1.9	2.9	2.3	2.4	49	135	318	691	22	1.5	306
29	2.7	1.9	2.5	2.0	2.1	32	2440	120	203	20	1.5	183
30	2.3	2.1	2.1	1.9	---	26	2690	55	82	14	1.5	41
31	2.0	---	2.0	1.9	---	19	---	382	---	10	1.7	---
TOTAL	149.1	75.6	92.1	61.6	78.1	1985.9	38206.9	21495	13213.5	10477	76.6	967.8
MEAN	4.81	2.52	2.97	1.99	2.69	64.1	1274	693	440	338	2.47	32.3
MAX	20	11	21	3.0	8.8	367	7320	3330	4310	2210	7.9	306
MIN	2.0	1.6	1.7	1.8	1.7	2.0	6.5	19	3.2	10	1.4	1.1
CFSM	.02	.008	.009	.006	.008	.21	4.10	2.23	1.41	1.09	.007	.10
IN.	.02	.009	.01	.007	.009	.24	4.57	2.57	1.58	1.25	.009	.12
AC-FT	296	150	183	122	155	3940	75780	42640	26210	20780	152	1920
CAL YR 1975 TOTAL	80762.7			MEAN 221	MAX 8840	MIN 1.6	CFSM .71	IN 9.66	AC-FT 160200			
WTR YR 1976 TOTAL	86879.2			MEAN 237	MAX 7320	MIN 1.1	CFSM .76	IN 10.39	AC-FT 172300			

08110400 Navasota River near Groesbeck, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT										
30...	1035	2.3	1570	7.5	19.0	250	100	79	12	220
NOV										
30...	1400	1.9	1150	8.2	16.0	330	98	110	14	110
DEC										
10...	1140	1.7	1200	8.2	12.0	360	98	120	14	120
JAN										
31...	1100	1.9	1180	7.7	12.0	310	85	100	14	130
FEB										
29...	1200	2.1	1180	7.8	20.0	280	68	91	12	130
MAR										
03...	1102	1.9	1140	8.1	21.5	300	73	99	13	130
31...	1200	19	821	7.7	19.0	140	47	47	5.9	97
APR										
30...	1200	2690	172	7.7	20.0	61	1	21	2.0	7.3
MAY										
26...	1352	1330	258	7.6	23.5	86	7	29	3.2	16
JUN										
30...	1200	78	286	7.8	29.0	90	2	32	2.5	16
JUL										
31...	0730	10	644	7.9	27.0	190	62	66	6.8	50
AUG										
31...	1030	1.6	2110	8.0	29.0	530	310	170	26	240
SEP										
30...	1200	36	441	8.0	22.0	160	21	55	5.2	27

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RINE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT									
30...	6.1	7.1	174	0	52	360	.5	10	826
NOV									
30...	2.6	4.6	286	0	71	180	.4	13	644
DEC									
10...	2.8	5.5	316	0	87	180	.3	13	696
JAN									
31...	3.2	7.5	271	0	94	190	.6	7.0	677
FEB									
29...	3.4	4.8	254	0	61	210	.5	12	647
MAR									
03...	3.3	5.0	278	0	63	190	.4	13	650
31...	3.5	5.4	116	0	23	180	.3	3.6	419
APR									
30...	.4	3.6	73	0	6.4	8.9	.4	9.6	95
MAY									
26...	.8	3.6	96	0	12	20	.3	9.0	140
JUN									
30...	.7	4.0	108	0	16	20	.3	7.7	152
JUL									
31...	1.6	4.2	160	0	44	90	.4	12	352
AUG									
31...	4.5	4.5	272	0	210	430	.5	11	1230
SEP									
30...	.9	4.0	168	0	18	40	.1	11	243

08110400 Navasota River near Groesbeck, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	149.1	1370	770	310	250	103	73	29	350
NOV. 1975.....	75.6	1060	600	122	180	36	56	12	290
DEC. 1975.....	92.1	1160	660	163	200	49	62	15	310
JAN. 1976.....	61.6	1090	620	102	180	29	58	9.7	290
FEB. 1976.....	75	1360	770	158	250	51	72	15	350
MAR. 1976.....	1985.9	668	380	2020	96	512	35	190	180
APR. 1976.....	38206.89	207	120	12000	20	2020	11	1130	55
MAY 1976.....	21495	219	120	7210	21	1210	12	671	59
JUNE 1976.....	13213.48	227	130	4500	22	777	12	434	61
JULY 1976.....	10477	248	140	3970	24	681	13	376	67
AUG. 1976.....	76.6	1540	870	180	310	63	83	17	370
SEPT 1976.....	967.8	326	186	481	38	99	17	45	87
TOTAL	86876.93	**	**	31200	**	5630	**	2940	**
WTD.AVG.	238.02	236	130	**	24	**	13	**	63

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C); WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1440	1150	1070	1190	1140	825	197	181	319	720	220
2	1420	1400	1160	1040	1200	1140	850	246	201	371	807	231
3	1430	1050	1140	759	1190	1150	881	287	214	424	915	334
4	1450	654	1140	983	1110	1160	816	347	269	507	1010	636
5	1510	700	1150	983	1210	1150	888	398	345	243	1110	743
6	1530	778	1170	1020	1230	1120	760	184	391	207	1300	755
7	1580	830	1170	1060	1230	1060	874	194	455	240	1410	776
8	1620	903	1190	1020	1220	550	835	187	544	253	1610	815
9	1610	996	1220	1070	1210	454	793	221	619	265	1700	882
10	1680	1090	1200	1050	1190	750	807	217	676	323	1740	937
11	1820	1150	1220	1050	1210	983	819	267	764	370	1780	1000
12	1850	1230	1210	1070	1200	974	822	268	864	418	1840	1090
13	1820	1250	1220	1090	1210	1000	854	159	970	433	1880	1140
14	1800	1280	1200	1100	1190	983	871	206	1090	531	2020	1180
15	1780	1300	1190	1090	1210	991	899	224	1190	307	2000	1260
16	1820	1310	1180	1100	1220	962	620	274	1270	484	2020	1330
17	1880	1320	1160	1100	1230	950	485	326	1340	228	2050	1350
18	1940	1310	1150	1110	1190	958	213	370	1320	200	2040	1360
19	2000	1250	1160	1130	1180	974	314	435	1260	257	2050	1370
20	2040	1220	1150	1140	1890	991	185	500	623	264	2090	1390
21	2030	1200	1170	1160	2160	1020	197	572	392	296	2120	1420
22	2040	1180	1190	1140	2110	1030	207	638	365	329	2190	1450
23	2050	1170	1190	1170	1670	1040	227	700	431	383	2190	1460
24	2030	1150	1190	1150	1450	650	179	750	433	427	2190	1440
25	991	1130	1020	1180	1330	449	156	550	350	498	2190	1490
26	822	1120	1000	1170	1290	618	166	258	247	570	2180	1400
27	1190	1130	1740	1140	1250	735	198	280	250	633	2190	1230
28	1720	1150	1550	1100	1200	800	244	293	255	594	2190	209
29	1670	1160	1310	1160	1180	806	107	332	258	514	2180	370
30	1570	1150	1180	1170	---	820	169	396	286	541	2090	439
31	1500	---	1120	1190	---	822	---	420	---	644	2120	---
MONTH	1600	1130	1200	1090	1320	911	542	345	595	389	1800	990

08110400 Navasota River near Groesbeck, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.0	24.0	13.0	13.0	9.0	21.0	20.0	20.0	26.0	29.0	28.0	27.0
2	24.0	23.0	15.0	10.0	11.0	21.0	21.0	22.0	25.0	30.0	28.0	24.0
3	23.0	22.0	15.0	9.0	10.0	21.0	21.0	23.0	26.0	31.0	28.0	25.0
4	25.0	21.0	16.0	11.0	15.0	21.0	20.0	24.0	26.0	28.0	32.0	27.0
5	25.0	21.0	18.0	7.0	14.0	18.0	18.0	23.0	28.0	28.0	28.0	28.0
6	24.0	22.0	15.0	7.0	9.0	18.0	20.0	21.0	27.0	28.0	---	28.0
7	25.0	20.0	14.0	6.0	10.0	18.0	19.0	20.0	27.0	29.0	31.0	31.0
8	26.0	23.0	15.0	4.0	14.0	13.0	22.0	20.0	27.0	27.0	32.0	29.0
9	26.0	24.0	15.0	5.0	13.0	15.0	21.0	22.0	26.0	27.0	31.0	31.0
10	28.0	22.0	14.0	10.0	14.0	5.0	22.0	22.0	28.0	27.0	31.0	27.0
11	26.0	21.0	17.0	10.0	16.0	14.0	20.0	20.0	28.0	27.0	30.0	26.0
12	27.0	16.0	17.0	11.0	18.0	19.0	23.0	22.0	29.0	27.0	31.0	28.0
13	28.0	14.0	18.0	15.0	18.0	13.0	22.0	21.0	28.0	28.0	33.0	27.0
14	27.0	15.0	20.0	16.0	21.0	14.0	24.0	20.0	29.0	28.0	33.0	26.0
15	26.0	15.0	15.0	10.0	18.0	17.0	24.0	23.0	29.0	29.0	31.0	27.0
16	23.0	18.0	15.0	15.0	21.0	15.0	20.0	24.0	31.0	27.0	30.0	30.0
17	22.0	19.0	14.0	12.0	21.0	16.0	21.0	25.0	29.0	27.0	33.0	27.0
18	23.0	17.0	10.0	12.0	21.0	19.0	19.0	23.0	28.0	28.0	33.0	29.0
19	24.0	21.0	11.0	13.0	18.0	22.0	20.0	24.0	26.0	28.0	27.0	27.0
20	24.0	16.0	11.0	11.0	20.0	21.0	20.0	24.0	29.0	29.0	31.0	27.0
21	25.0	14.0	12.0	12.0	12.0	19.0	22.0	23.0	29.0	29.0	33.0	28.0
22	20.0	12.0	10.0	13.0	9.0	20.0	24.0	26.0	27.0	27.0	21.0	27.0
23	22.0	14.0	10.0	14.0	10.0	21.0	22.0	25.0	27.0	29.0	27.0	28.0
24	24.0	11.0	10.0	13.0	12.0	17.0	23.0	27.0	29.0	27.0	28.0	25.0
25	18.0	10.0	10.0	14.0	16.0	20.0	23.0	24.0	27.0	28.0	31.0	28.0
26	20.0	10.0	10.0	10.0	17.0	18.0	21.0	24.0	27.0	29.0	32.0	28.0
27	18.0	10.0	11.0	10.0	18.0	18.0	21.0	23.0	27.0	28.0	33.0	27.0
28	20.0	18.0	12.0	7.0	20.0	19.0	23.0	25.0	28.0	27.0	29.0	20.0
29	21.0	20.0	10.0	12.0	20.0	19.0	18.0	24.0	29.0	28.0	33.0	22.0
30	22.0	16.0	11.0	13.0	---	19.0	20.0	25.0	29.0	27.0	27.0	22.0
31	22.0	---	10.0	12.0	---	19.0	---	24.0	---	27.0	29.0	---
MONTH	23.5	17.5	13.5	11.0	15.5	17.5	21.0	23.0	27.5	28.0	30.0	27.0

08110500 Navasota River near Easterly, Tex.

LOCATION.--Lat 31°10'10", long 96°17'54", Leon-Robertson County line, near center of span at downstream side of bridge on U.S. Highway 79, 1.0 mile (1.6 km) upstream from Missouri Pacific Railroad Co. bridge, 7 miles (11 km) northeast of Easterly, and at mile 105.7 (170.1 km).

DRAINAGE AREA (revised).--968 mi² (2,507 km²).

PERIOD OF RECORD.--Discharge: March 1924 to current year.

Water quality: Chemical analyses: October 1968 to current year. Sediment records: October 1968 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 276.46 ft (84.265 m) above mean sea level. Prior to June 11, 1932, nonrecording gage at railroad bridge 1.0 mile (1.6 km) downstream at datum 24.86 ft (7.577 m) higher.

AVERAGE DISCHARGE.--36 years (1924-60) unregulated, 406 ft³/s (11.50 m³/s), 294,100 acre-ft/yr (363 hm³/yr); 16 years (1960-76) regulated, 486 ft³/s (13.76 m³/s), 352,100 acre-ft/yr (434 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft³/s (402 m³/s) June 2 (gage height, 17.31 ft or 5.276 m); minimum daily, 3.2 ft³/s (0.091 m³/s) Oct. 18, 19.

Period of record: Maximum discharge, 60,300 ft³/s (1,710 m³/s) May 2, 1944 (gage height, 22.13 ft or 6.745 m); no flow at times.

Maximum stage since about 1845, 24 ft (7.3 m) in June 1899, from information by local residents (discharge, 90,000 ft³/s or 2,550 m³/s, from rating curve extended above 60,000 ft³/s or 1,700 m³/s).

REMARKS.--Discharge records good. Since 1961, at least 10 percent of drainage area is regulated by reservoirs. Numerous diversions above station for irrigation, municipal supply, and oilfield operation.

REVISIONS (WATER YEARS).--WSP 898: 1924, 1926-27, 1928(M), 1929-30, 1931(M). WSP 1512: 1932(M), 1936. WSP 1922: 1956, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	37	16	33	18	18	87	10300	2580	752	29	21
2	5.5	31	15	30	19	18	69	7180	8160	236	24	20
3	5.1	30	14	27	19	19	55	4300	11700	87	19	140
4	4.2	35	13	23	19	18	48	2730	6670	74	17	194
5	4.2	174	14	19	21	21	73	680	3780	120	15	125
6	4.2	101	17	13	19	34	159	339	2010	365	13	67
7	5.0	58	17	13	18	38	181	833	289	583	11	42
8	4.9	39	16	15	17	80	146	3310	168	1110	10	29
9	4.7	30	15	15	17	240	126	7420	135	1630	9.5	19
10	4.6	23	14	16	17	679	103	6500	111	1100	8.8	15
11	4.3	20	14	18	17	908	88	4080	94	320	8.1	13
12	3.9	18	14	19	17	457	70	2530	83	135	7.1	11
13	3.6	14	15	19	17	184	54	1470	74	91	6.7	11
14	3.5	13	15	19	17	147	44	1500	66	80	6.7	10
15	3.4	12	16	18	17	117	37	2460	59	82	7.0	9.3
16	3.3	13	17	18	18	93	187	4860	54	87	6.6	7.1
17	3.3	13	17	17	65	76	727	3820	49	244	6.5	6.4
18	3.2	12	17	17	58	66	1180	2210	47	520	6.3	5.6
19	3.2	12	16	18	33	58	1870	409	104	875	6.1	5.5
20	3.5	13	16	23	38	49	4990	209	259	1340	5.9	10
21	3.7	13	15	39	69	46	13400	168	308	1830	5.4	13
22	4.2	13	14	26	61	46	10300	144	239	1190	5.5	18
23	32	12	13	22	47	43	6570	130	121	136	5.3	15
24	289	10	18	20	38	73	3970	118	91	81	4.9	11
25	599	8.4	36	18	32	166	2460	136	77	65	4.6	9.5
26	959	8.2	83	19	27	377	1500	624	70	53	4.5	9.3
27	784	8.5	222	26	27	623	3840	1060	228	44	4.2	18
28	340	9.5	125	26	23	749	5090	1840	461	37	4.1	52
29	142	11	75	22	19	501	5080	2040	933	27	4.4	225
30	78	12	52	14	---	194	9460	1340	1340	22	6.6	673
31	51	---	39	14	---	112	---	973	---	32	9.3	---
TOTAL	3366.9	803.6	1000	636	824	6250	71964	75713	40360	13388	282.1	1804.7
MEAN	109	26.8	32.3	20.5	28.4	202	2399	2442	1345	432	9.10	60.2
MAX	959	174	222	39	69	908	13400	10300	11700	1830	29	673
MIN	3.2	8.2	13	13	17	18	37	118	47	22	4.1	5.5
AC-FT	6680	1590	1980	1260	1630	12400	142700	150200	80050	26560	560	3580

CAL YR 1975 TOTAL 192644.3 MEAN 528 MAX 17200 MIN 3.2 AC-FT 382100
WTR YR 1976 TOTAL 216392.3 MEAN 591 MAX 13400 MIN 3.2 AC-FT 429200

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-21	1000	17.25	13,900	5-16	1200	15.68	5,290
5-1	0600	16.81	10,900	6-2	2400	17.31	14,200
5-9	1400	16.35	8,300				

08110500 Navasota River near Easterly, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT. 07...	1645	5.0	589	7.6	19.5	140	68	39	9.5	58
NOV. 19...	1400	12	472	7.9	17.5	110	50	29	8.4	45
JAN. 06...	1515	12	558	7.6	6.5	130	71	35	10	53
FEB. 10...	0920	17	745	7.5	12.5	140	110	48	14	72
MAY 05...	1530	427	399	7.2	21.5	91	27	27	5.7	22
JUNE 16...	1515	49	724	7.6	28.5	190	93	53	14	63
JULY 08...	1400	1210	241	7.8	27.5	77	9	25	3.6	15
AUG. 19...	1015	5.6	732	7.4	28.0	180	80	55	11	69

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED PHOSPHATE SILICUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 07...	2.2	3.4	84	0	63	88	.3	16	319
NOV. 19...	1.9	4.1	70	0	52	70	.3	17	260
JAN. 06...	2.0	5.5	70	0	62	88	.2	18	306
FEB. 10...	2.4	4.0	86	0	87	130	.6	16	414
MAY 05...	1.0	4.2	78	0	29	36	.3	13	176
JUNE 16...	2.0	4.2	118	0	80	110	.3	17	400
JULY 08...	.7	4.5	83	0	14	19	.3	9.0	131
AUG. 19...	2.2	3.8	125	0	65	120	.3	17	403

08111000 Navasota River near Bryan, Tex.

LOCATION.--Lat 30°52'10", long 96°11'32", Brazos-Madison County line, on right bank at upstream side of bridge on U.S. Highway 190, 2.5 miles (4.0 km) upstream from Shepherd Creek, 17 miles (27 km) northeast of Bryan, and at mile 68.4 (110.1 km).

DRAINAGE AREA (revised).--1,454 mi² (3,766 km²).

PERIOD OF RECORD.--Discharge: January 1951 to current year.

Water quality: Chemical and biochemical analyses: October 1958 to current year. Water temperatures: October 1958 to current year. Sediment records: October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.64 ft (68.470 m) above mean sea level.

AVERAGE DISCHARGE.--9 years (1951-60) unregulated, 437 ft³/s (12.38 m³/s), 316,600 acre-ft/yr (390 hm³/yr); 16 years (1960-76) regulated, 627 ft³/s (17.76 m³/s), 454,300 acre-ft/yr (560 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) Apr. 23 (gage height, 14.22 ft or 4.334 m); minimum daily, 8.9 ft³/s (0.25 m³/s) Aug. 30.

Period of record: Maximum discharge, 38,200 ft³/s (1,080 m³/s) Apr. 29, 1966 (gage height, 16.57 ft or 5.051 m); no flow at times. Historic: Maximum stage since about 1840, 19.5 ft (5.94 m) in June 1899, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 817 micromhos Sept. 6; minimum daily, 128 micromhos May 3. Maximum water temperatures, 31.0°C July 31, Aug. 7-9; minimum, 5.0°C Jan. 8, 9. Maximum daily sediment concentration, 350 mg/l June 16; minimum daily, 25 mg/l Dec. 24. Maximum daily sediment loads, 2,250 tons May 2; minimum daily, 1.1 tons Aug. 30.

Period of record: Maximum daily specific conductance, 4,190 micromhos Feb. 8, 1964; minimum daily, 55 micromhos Sept. 17, 1964. Maximum water temperatures, 32.0°C Aug. 4, 1959, July 5, 1974; minimum, 1.0°C Jan. 13, 1962. Maximum daily sediment concentrations (1975-76), 350 mg/l June 16, 1976; minimum daily, 25 mg/l Dec. 24, 1975. Maximum daily sediment loads (1975-76), 2,250 tons May 2, 1976; minimum daily, 1.1 tons Aug. 30, 1976.

REMARKS.--Discharge records good. Since 1961, at least 10 percent of drainage area regulated by reservoirs. Numerous diversions above station for irrigation, municipal, and oilfield operation.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE* IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	132	35	89	72	65	257	7590	2440	627	46	12
2	18	87	36	75	64	61	186	10400	2150	782	50	22
3	16	66	38	67	63	58	155	8900	2100	629	50	61
4	13	57	39	62	63	57	136	6760	6750	287	44	57
5	13	57	38	58	62	73	172	5380	8730	170	40	193
6	12	90	38	52	62	75	378	4230	6340	404	36	217
7	12	172	38	48	65	139	399	2740	5010	796	33	163
8	12	131	39	43	65	330	456	1790	3400	1430	30	104
9	14	84	41	40	61	629	399	1400	1480	1790	28	65
10	15	63	40	39	57	449	289	2060	530	1780	25	45
11	14	51	39	39	57	505	232	5310	263	1710	23	33
12	14	43	38	41	59	644	198	6180	189	1450	22	27
13	15	38	37	45	58	699	173	5340	156	800	20	22
14	14	35	37	48	58	468	150	4260	132	330	18	20
15	14	33	38	49	58	257	132	2760	113	238	17	18
16	14	31	41	47	62	207	256	1950	98	202	16	20
17	14	30	44	44	64	182	421	1890	85	182	17	26
18	15	31	47	42	72	157	565	2860	78	222	18	23
19	15	31	46	41	134	137	921	4130	151	417	15	17
20	14	32	43	67	148	126	1370	3310	433	598	15	15
21	14	32	41	124	120	118	1830	1580	447	775	14	15
22	14	33	39	126	141	113	3440	569	435	1020	14	17
23	16	33	39	113	173	110	10900	267	379	1300	13	22
24	18	33	41	85	150	150	9040	188	259	1190	12	27
25	80	32	49	311	117	279	6820	161	178	456	12	28
26	354	33	91	417	91	348	5420	564	148	190	12	25
27	540	32	143	241	77	412	4200	689	129	136	10	23
28	750	31	195	172	70	494	2820	900	153	104	9.8	25
29	755	31	227	131	66	585	3280	1110	294	81	9.4	28
30	439	32	169	104	---	620	5700	1360	438	69	8.9	101
31	209	---	122	86	---	464	---	1720	---	59	9.4	---
TOTAL	3513	1616	1948	2946	2409	9011	60695	98348	43488	20224	687.5	1471
MEAN	113	53.9	62.8	95.0	83.1	291	2023	3173	1450	652	22.2	49.0
MAX	755	172	227	417	173	699	10900	10400	8730	1790	50	217
MIN	12	30	35	39	57	57	132	161	78	59	8.9	12
AC-FT	6970	3210	3860	5840	4780	17870	120400	195100	86260	40110	1360	2920

CAL YR 1975 TOTAL 248496.0 MEAN 631 MAX 15000 MIN 12 AC-FT 492900
WTR YR 1976 TOTAL 246356.5 MEAN 673 MAX 10900 MIN 8.9 AC-FT 488600

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-23	0900	14.22	11,400	5-19	1000	13.09	4,230
5-2	1000	14.12	10,600	6-4	2400	14.06	10,100
5-12	0100	13.64	6,470				

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTERRER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT 21...	1240	14	433	6.8	20.0	10	45	7.2	78	1.3	110	56
NOV 19...	1230	31	413	7.8	17.0	--	--	--	--	--	100	42
DEC 10...	1415	44	431	6.5	14.5	5	35	9.2	89	1.5	110	64
JAN 06...	1230	55	474	7.1	7.0	--	--	--	--	--	110	60
FEB 19...	1322	161	503	7.3	20.0	20	55	7.9	86	1.7	120	70
MAR 19...	1245	143	643	7.8	17.0	--	--	--	--	--	130	77
APR 14...	0825	158	586	6.9	21.5	60	60	6.8	76	1.4	140	81
MAY 06...	1120	5340	177	7.2	27.0	--	--	--	--	--	54	5
JUN 08...	1530	3000	190	6.7	27.0	60	50	6.1	77	2.3	58	7
JUL 08...	1640	1570	191	6.7	27.5	--	--	--	--	--	46	18
AUG 10...	1455	23	584	7.2	31.5	10	30	6.2	84	1.4	150	61

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)
OCT 21...	32	8.3	38	1.5	4.2	72	0	49	62	--	14
NOV 19...	27	7.8	35	1.5	5.0	70	0	40	57	.2	17
DEC 10...	30	8.4	37	1.5	4.2	56	0	52	63	.2	20
JAN 06...	30	9.6	40	1.6	5.0	66	0	55	70	.3	17
FEB 19...	31	10	46	1.8	3.8	60	0	65	76	.2	16
MAR 19...	36	9.9	69	2.6	5.2	65	0	55	120	.3	11
APR 14...	33	13	53	2.0	5.0	67	0	66	94	.2	13
MAY 06...	16	3.4	10	.6	4.0	60	0	12	15	.2	10
JUN 08...	17	3.8	12	.7	4.0	63	0	12	17	.3	9.7
JUL 08...	13	3.3	14	.9	4.0	34	0	20	24	.2	8.1
AUG 10...	45	10	51	1.8	4.4	114	0	56	87	.3	15

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT 21...	244	89	12	.01	.01	.08	.45	.07	6.2	1	.0
NOV 19...	224	--	--	--	--	--	--	--	--	--	--
DEC 10...	242	58	7	.03	.01	.01	.58	.11	7.6	0	.0
JAN 06...	259	--	--	--	--	--	--	--	--	--	--
FEB 19...	278	116	13	.04	.00	.01	.55	.12	3.0	0	.0
MAR 19...	338	--	--	--	--	--	--	--	--	--	--
APR 14...	310	140	14	.13	.01	.06	.79	.11	3.8	0	.1
MAY 06...	100	--	--	--	--	--	--	--	--	--	--
JUN 08...	107	70	16	.00	.01	.02	.80	.13	7.9	1	.0
JUL 08...	103	--	--	--	--	--	--	--	--	--	--
AUG 10...	326	60	5	.01	.00	.01	.48	.06	3.4	2	.0

BRAZOS RIVER BASIN

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA. WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 21...	1240	2	0	50	0	0	0	0
FEB. 19...	1322	20	0	70	0	0	1	0
JUNE 08...	1530	0	1	70	3	0	0	4
AUG. 10...	1455	10	0	--	0	2	0	4

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 21...	10	0	10	0	.8	0	430	2
FEB. 19...	90	3	20	10	.0	2	420	0
JUNE 08...	90	7	10	30	.0	0	250	10
AUG. 10...	0	2	20	60	.1	2	500	20

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
APR 19...	1235	945	20.0	195	498	84	85
MAY 27...	1255	682	22.0	264	486	82	89
JUN 17...	0800	86	27.0	186	43	86	90
JUL 07...	1045	707	26.0	154	294	81	92

DATE	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
APR 19...	86	89	91	93	95	97	99
MAY 27...	96	97	98	98	99	99	100
JUN 17...	95	96	98	98	98	99	100
JUL 07...	93	95	96	96	98	99	100

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	3513	289	160	1470	37	355	30	286	74
NOV. 1975.....	1616	368	200	863	51	225	39	168	94
DEC. 1975.....	1948	514	280	1460	78	411	53	279	120
JAN. 1976.....	2946	419	230	1800	61	483	44	350	110
FEB. 1976.....	2343	540	290	1850	82	521	56	357	120
MAR. 1976.....	9011	540	290	7120	92	1990	56	1350	120
APR. 1976.....	60695	242	130	21400	29	4710	25	4170	61
MAY 1976.....	98348	190	100	27300	21	5530	20	5240	48
JUNE 1976.....	43488	196	110	12500	22	2640	21	2420	50
JULY 1976.....	20224	260	140	7710	32	1750	27	1490	66
AUG. 1976.....	687.5	575	310	578	89	166	59	109	130
SEPT 1976.....	1471	510	280	1100	77	305	52	206	120
TOTAL	246290.4	**	**	85200	**	19100	**	16400	**
WTD.AVG.	674.77	237	130	**	29	**	25	**	60

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	278	410	568	500	663	425	175	234	292	456	653
2	353	305	408	522	502	659	449	138	253	284	473	630
3	365	318	400	496	500	649	476	128	225	297	487	548
4	373	322	392	480	489	640	502	131	160	308	506	404
5	378	323	392	470	486	599	547	148	130	328	522	614
6	381	323	398	474	502	626	342	171	135	286	546	817
7	362	339	404	484	510	649	442	206	153	225	551	490
8	368	372	407	493	520	570	459	231	190	190	565	390
9	378	413	422	504	511	658	500	291	236	195	582	372
10	397	525	428	504	516	483	489	197	281	217	587	390
11	394	413	432	498	511	589	497	180	345	231	604	388
12	412	377	430	492	509	516	539	176	406	243	611	389
13	415	374	422	479	518	403	567	185	458	269	617	397
14	419	379	414	480	526	479	582	218	491	297	628	394
15	415	385	432	487	524	547	596	249	519	338	637	398
16	415	391	450	482	522	615	500	278	541	308	642	398
17	420	394	464	496	541	637	378	243	566	357	646	405
18	428	399	460	490	543	634	503	218	594	407	637	405
19	430	399	465	490	509	643	394	202	500	435	646	424
20	435	398	478	515	595	654	378	227	338	320	651	436
21	438	397	493	450	608	662	306	252	356	277	657	433
22	443	399	509	393	518	662	249	293	438	257	675	426
23	442	402	512	429	479	658	207	338	447	254	675	407
24	440	404	504	532	532	648	219	410	419	270	669	372
25	432	406	516	400	601	435	207	458	472	292	665	369
26	390	407	500	279	637	536	202	261	493	311	667	381
27	354	413	458	337	655	568	216	123	516	343	669	383
28	230	415	518	334	659	662	241	347	516	373	665	373
29	220	417	618	407	655	479	211	326	502	398	667	390
30	243	413	686	445	---	411	180	294	345	418	665	439
31	257	---	721	478	---	413	---	278	---	444	675	---
MONTH	380	383	469	464	541	582	393	244	375	305	611	444

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	18.0	12.0	9.0	10.0	19.0	18.0	19.0	24.0	29.0	30.0	27.0
2	20.0	20.0	11.0	10.0	10.0	20.0	19.0	20.0	24.0	29.0	30.0	26.0
3	19.0	20.0	11.0	8.0	11.0	20.0	18.0	21.0	26.0	28.0	30.0	27.0
4	18.0	19.0	11.0	7.0	13.0	21.0	18.0	22.0	26.0	28.0	28.0	26.0
5	19.0	19.0	15.0	7.0	13.0	18.0	18.0	22.0	27.0	27.0	28.0	27.0
6	20.0	18.0	15.0	7.0	12.0	16.0	18.0	21.0	---	27.0	30.0	27.0
7	20.0	19.0	14.0	---	11.0	15.0	18.0	21.0	25.0	26.0	31.0	26.0
8	19.0	20.0	13.0	5.0	10.0	14.0	19.0	20.0	27.0	27.0	31.0	26.0
9	20.0	20.0	13.0	5.0	11.0	14.0	20.0	20.0	27.0	27.0	31.0	26.0
10	22.0	19.0	12.0	6.0	13.0	14.0	20.0	22.0	27.0	26.0	30.0	26.0
11	23.0	19.0	14.0	---	16.0	15.0	21.0	22.0	27.0	26.0	30.0	25.0
12	24.0	17.0	14.0	10.0	17.0	15.0	22.0	24.0	27.0	26.0	28.0	24.0
13	23.0	14.0	15.0	12.0	18.0	14.0	22.0	22.0	27.0	27.0	30.0	26.0
14	24.0	13.0	17.0	10.0	18.0	13.0	22.0	22.0	27.0	26.0	30.0	27.0
15	24.0	14.0	---	10.0	19.0	14.0	22.0	21.0	27.0	27.0	29.0	27.0
16	23.0	15.0	13.0	10.0	19.0	15.0	21.0	22.0	27.0	26.0	29.0	26.0
17	22.0	16.0	12.0	10.0	19.0	14.0	21.0	22.0	27.0	27.0	28.0	27.0
18	20.0	16.0	9.0	11.0	19.0	15.0	20.0	21.0	28.0	27.0	28.0	27.0
19	19.0	18.0	9.0	12.0	19.0	17.0	20.0	23.0	27.0	28.0	28.0	26.0
20	18.0	16.0	9.0	11.0	19.0	18.0	20.0	---	25.0	28.0	27.0	25.0
21	19.0	14.0	8.0	10.0	17.0	17.0	20.0	24.0	26.0	28.0	28.0	26.0
22	20.0	---	9.0	10.0	15.0	20.0	23.0	24.0	26.0	28.0	29.0	25.0
23	22.0	10.0	8.0	12.0	14.0	18.0	22.0	24.0	26.0	28.0	29.0	25.0
24	21.0	10.0	9.0	12.0	15.0	18.0	23.0	26.0	27.0	29.0	27.0	23.0
25	20.0	---	8.0	13.0	14.0	18.0	22.0	26.0	27.0	29.0	27.0	24.0
26	18.0	10.0	8.0	13.0	15.0	20.0	23.0	21.0	28.0	28.0	29.0	24.0
27	18.0	8.0	9.0	11.0	17.0	19.0	22.0	22.0	28.0	29.0	27.0	24.0
28	18.0	10.0	9.0	9.0	17.0	18.0	23.0	22.0	28.0	29.0	29.0	23.0
29	19.0	15.0	9.0	9.0	18.0	20.0	20.0	25.0	29.0	29.0	28.0	24.0
30	19.0	14.0	10.0	10.0	---	18.0	19.0	24.0	29.0	28.0	30.0	23.0
31	18.0	---	8.0	10.0	---	18.0	---	24.0	---	31.0	28.0	---
MONTH	20.5	16.0	11.0	9.5	15.0	17.0	20.5	22.5	27.0	27.5	29.0	25.5

08111000 Navasota River near Bryan, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16	94	4.1	132	120	43	35	80	7.6
2	18	100	4.9	87	120	28	36	82	8.0
3	16	102	4.4	66	118	21	38	87	8.9
4	13	100	3.5	57	115	18	39	90	9.5
5	13	95	3.3	57	112	17	38	95	9.7
6	12	90	2.9	90	110	27	38	95	9.7
7	12	85	2.8	172	107	50	38	85	8.7
8	12	88	2.9	131	107	38	39	82	8.6
9	14	85	3.2	84	105	24	41	82	9.1
10	15	85	3.4	63	103	18	40	82	8.9
11	14	82	3.1	51	100	14	39	85	9.0
12	14	82	3.1	43	100	12	38	85	8.7
13	15	80	3.2	38	95	9.7	37	85	8.5
14	14	80	3.0	35	90	8.5	37	80	8.0
15	14	75	2.8	33	85	7.6	38	80	8.2
16	14	70	2.6	31	85	7.1	41	60	6.6
17	14	75	2.8	30	85	6.9	44	50	5.9
18	15	78	3.2	31	90	7.5	47	45	5.7
19	15	80	3.2	31	100	8.4	46	42	5.2
20	14	85	3.2	32	100	8.6	43	35	4.1
21	14	90	3.4	32	100	8.6	41	30	3.3
22	14	95	3.6	33	100	8.9	39	30	3.2
23	16	108	4.7	33	97	8.6	39	30	3.2
24	18	122	5.9	33	95	8.5	41	25	2.8
25	80	138	30	32	90	7.8	49	35	4.6
26	354	150	143	33	85	7.6	91	67	16
27	580	157	246	32	82	7.1	143	67	26
28	750	105	213	31	80	6.7	195	45	24
29	755	118	241	31	70	5.9	227	32	20
30	439	120	142	32	75	6.5	169	35	16
31	209	120	68	---	---	---	122	40	13
TOTAL	3513	---	1166.2	1616	---	450.5	1948	---	290.7
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	89	45	11	72	62	12	65	70	12
2	75	45	9.1	64	60	10	61	67	11
3	67	55	9.9	63	60	10	58	65	10
4	62	55	9.2	63	72	12	57	70	11
5	58	55	8.6	62	85	14	73	75	15
6	52	50	7.0	62	87	15	75	80	16
7	48	55	7.1	65	90	16	139	160	60
8	43	55	6.4	65	95	17	330	210	187
9	40	52	5.6	61	97	16	629	152	258
10	39	50	5.3	57	97	15	449	135	164
11	39	50	5.3	57	100	15	505	172	235
12	41	55	6.1	59	100	16	644	220	383
13	45	60	7.3	58	100	16	699	170	321
14	48	65	8.4	58	100	16	468	150	190
15	49	65	8.6	58	100	16	257	140	97
16	47	72	9.1	62	100	17	207	135	75
17	44	74	8.8	64	100	17	182	127	62
18	42	80	9.1	72	100	19	157	122	52
19	41	105	12	134	105	38	137	115	43
20	67	215	39	148	105	42	126	110	37
21	124	230	77	120	105	34	118	97	31
22	126	135	46	141	105	40	113	90	27
23	113	97	30	173	92	43	110	80	24
24	85	77	18	150	77	31	150	115	47
25	311	167	140	117	70	22	279	220	166
26	417	205	231	91	70	17	348	200	188
27	241	155	101	77	70	15	412	195	217
28	172	115	53	70	65	12	494	180	240
29	131	95	34	66	65	12	585	175	276
30	104	80	22	---	---	---	620	155	259
31	86	70	16	---	---	---	464	150	188
TOTAL	2946	---	960.9	2409	---	575	9011	---	3902

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	APRIL				MAY				JUNE			
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)			
1	257	150	104	7590	70	1430	2440	77	507			
2	186	140	70	10400	80	2250	2150	70	406			
3	155	135	56	8900	60	1440	2100	89	505			
4	136	140	51	6760	60	1100	6750	80	1460			
5	172	160	74	5380	55	799	8730	56	1320			
6	378	140	143	4230	45	514	6340	42	719			
7	399	120	129	2740	48	355	5010	42	568			
8	456	105	129	1790	72	348	3400	42	386			
9	399	95	102	1400	95	359	1480	78	312			
10	289	97	76	2060	65	362	530	100	143			
11	232	97	61	5310	60	860	263	90	64			
12	198	97	52	6180	45	751	189	70	36			
13	173	100	47	5340	37	533	156	70	29			
14	150	100	40	4260	46	529	132	60	21			
15	132	100	36	2760	65	484	113	55	17			
16	256	170	118	1950	70	369	98	350	93			
17	421	135	153	1890	70	357	85	170	39			
18	565	130	198	2860	45	347	78	150	32			
19	921	180	448	4130	45	502	151	75	31			
20	1370	115	425	3310	50	447	433	50	58			
21	1830	110	544	1580	60	256	447	55	66			
22	3440	160	1490	569	60	92	435	78	92			
23	10900	70	2060	267	55	40	379	90	92			
24	9040	45	1100	188	50	25	259	100	70			
25	6820	40	737	161	45	20	178	120	58			
26	5420	30	439	564	310	472	148	130	52			
27	4200	30	340	689	285	530	129	130	45			
28	2820	55	419	900	160	389	153	160	66			
29	3280	80	708	1110	105	315	294	210	167			
30	5700	60	923	1360	98	360	438	210	248			
31	---	---	---	1720	86	399	---	---	---			
TOTAL	60695	---	11272	98348	---	17034	43488	---	7702			
DAY	JULY				AUGUST				SEPTEMBER			
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)			
1	627	180	305	46	105	13	12	45	1.5			
2	782	160	338	50	95	13	22	65	3.9			
3	629	150	255	50	90	12	61	75	12			
4	287	125	97	44	85	10	57	90	14			
5	170	115	53	40	75	8.1	193	155	81			
6	404	120	131	36	70	6.8	217	140	82			
7	796	145	312	33	70	6.2	163	120	53			
8	1430	108	417	30	67	5.4	104	102	29			
9	1790	84	406	28	65	4.9	65	100	18			
10	1780	100	481	25	65	4.4	45	100	12			
11	1710	115	531	23	65	4.0	33	100	8.9			
12	1450	105	411	22	65	3.9	27	95	6.9			
13	800	102	220	20	65	3.5	22	90	5.3			
14	330	105	94	18	65	3.2	20	88	4.8			
15	238	105	67	17	65	3.0	18	75	3.6			
16	202	105	57	16	60	2.6	20	70	3.8			
17	182	105	52	17	55	2.5	26	70	4.9			
18	222	115	69	18	55	2.7	23	70	4.3			
19	417	145	163	15	45	1.8	17	75	3.4			
20	598	170	274	15	50	2.0	15	70	2.8			
21	775	145	303	14	63	2.4	15	70	2.8			
22	1020	110	303	14	79	3.0	17	70	3.2			
23	1300	86	302	13	78	2.7	22	76	4.5			
24	1190	71	228	12	75	2.4	27	75	5.5			
25	456	87	107	12	65	2.1	28	75	5.7			
26	190	87	45	12	55	1.8	25	75	5.1			
27	136	95	35	10	50	1.4	23	75	4.7			
28	104	95	27	9.8	50	1.3	25	75	5.1			
29	81	105	23	9.4	50	1.3	28	70	5.3			
30	69	110	20	8.9	45	1.1	101	100	27			
31	59	110	18	9.4	50	1.3	---	---	---			
TOTAL	20224	---	6144	687.5	---	133.8	1471	---	424.0			
YEAR	246356.5		50055.1									

08111500 Brazos River near Hempstead, Tex.

LOCATION (revised).--Lat 30°07'35", long 96°11'05", Washington-Waller County line, at downstream side of bridge on U.S. Highway 290, 6,000 ft (1,830 m) upstream from Texas and New Orleans Railroad Co. bridge, 6.5 miles (10.5 km) northwest of Hempstead, 10.5 miles (16.9 km) upstream from Caney Creek, and at mile 193.8 (311.8 km).

DRAINAGE AREA (revised).--43,880 mi² (113,649 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1938 to current year. Gage-height records collected in this vicinity at intermittent periods since 1903 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 117.90 ft (35.936 m) above mean sea level. Prior to Nov. 1, 1940, nonrecording gage at railroad bridge 6,000 ft (1,830 m) downstream at datum 5.80 ft (1.768 m) lower. Nov. 1, 1940, to Sept. 30, 1963, nonrecording gage at site 1,500 ft (457 m) downstream at present datum. Oct. 1, 1964, to July 31, 1974, water-stage recorder 1,500 ft (457 m) downstream at present datum.

AVERAGE DISCHARGE.--38 years, 6,703 ft³/s (189.8 m³/s), 4,856,000 acre-ft/yr (5.99 km³/yr).

EXTREMES.--Current year: Maximum discharge, 41,300 ft³/s (1,170 m³/s) Apr. 21 (gage height, 23.92 ft or 7.291 m); minimum daily, 655 ft³/s (18.5 m³/s) Jan. 19.

Period of record: Maximum discharge, 143,000 ft³/s (4,050 m³/s) May 2, 1957 (gage height, 44.21 ft or 13.475 m, at site 1,500 ft or 457 m downstream); minimum daily, 137 ft³/s (3.88 m³/s) Nov. 6, 1952.

Maximum stage since at least 1899, 56.1 ft (17.10 m) Dec. 8, 1913, at site 1,500 ft (457 m) downstream at present datum, from information by Texas and New Orleans Railroad Co., obtained at bridge 6,000 ft (1,830 m) downstream. Flood of July 4, 1899, reached a stage of 53.6 ft (16.34 m), at site 1,500 ft (457 m) downstream at present datum, from information by Texas and New Orleans Railroad Co.

REMARKS.--Records fair. There are many small diversions above station for irrigation, municipal and industrial uses, and oilfield operations. At times, flow is affected by reservoirs on the Brazos River above Waco, and by reservoirs on the Lampasas and Little Rivers above Cameron.

REVISIONS (WATER YEARS).--WSP 1442: Drainage area. WSP 1512: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	2030	1750	2130	2930	2120	2390	32600	14800	9120	5570	1810
2	1120	1900	1330	2240	2630	1970	2290	33800	24000	9190	5630	2090
3	1100	1920	1070	2080	2320	1660	2170	25200	22400	9090	5260	2060
4	1100	2120	948	1900	2200	1900	2090	17800	21500	8860	4970	2380
5	1110	2670	905	1820	2230	1870	2180	15500	18100	8470	4480	3670
6	1070	2560	957	1460	1910	1490	3210	14500	15000	20000	3850	4150
7	936	1880	1110	1130	1530	1440	7240	17000	12500	28700	4030	3870
8	859	1510	1040	956	1290	1990	9290	31100	11300	21500	3320	2860
9	811	1280	968	1120	1210	2590	7690	32500	11800	20800	2430	2490
10	769	1140	890	1190	1860	2890	5810	27700	11800	18100	2130	1990
11	734	1090	831	1210	2390	3360	4890	22600	11400	15700	1980	1660
12	715	1020	804	1680	1940	3510	4200	17200	10900	14900	1930	1940
13	755	947	777	1660	1490	3410	3650	14200	9730	14200	2000	2160
14	1110	909	753	1240	1180	3600	3140	17100	7550	14200	2010	1660
15	1430	875	728	943	1040	3500	2740	24500	5570	13700	1700	1330
16	1230	855	840	798	963	3500	4120	23700	4550	12600	1480	1260
17	929	853	869	731	930	3090	8050	18700	4000	10600	1660	1230
18	789	843	838	681	906	2690	6800	16800	3960	9320	1680	1330
19	724	835	794	655	916	2210	10600	15000	3920	12900	1660	1320
20	689	827	1250	685	995	1820	31700	13500	3890	12900	1600	1360
21	798	812	1420	789	1060	1570	40300	11800	3670	8440	1500	1340
22	800	801	1740	938	1770	1350	38700	10100	3450	6570	1420	1340
23	732	791	1700	941	2500	1160	28700	9340	2980	8470	1370	1290
24	685	781	1600	824	2230	1050	18700	9290	3420	10200	1380	1200
25	1280	898	2210	801	2220	1200	13400	8790	4030	10500	1420	1110
26	4270	1530	2000	1580	2220	1390	12200	7900	4930	9410	1350	964
27	4640	1860	2150	1910	2180	2030	16400	7030	6180	7390	1610	1050
28	4950	2060	2520	1730	2080	2310	15600	8550	14100	6830	1690	1350
29	4320	2180	2530	1710	2050	2130	14400	15400	11700	6870	1480	1630
30	3160	2200	2330	2810	---	1970	20900	14200	8390	6340	1140	1740
31	2410	---	2150	3650	---	2350	---	10300	---	5730	1320	---
TOTAL	47165	41977	41802	43992	51170	69120	343550	543700	291520	371600	75050	55634
MEAN	1521	1399	1348	1419	1764	2230	11450	17540	9717	11990	2421	1854
MAX	4950	2670	2530	3650	2930	3600	40300	33800	24000	28700	5630	4150
MIN	685	781	728	655	906	1050	2090	7030	2980	5730	1140	964
AC-FT	93550	83260	82910	87260	101500	137100	681400	1078000	578200	737100	148900	110400

CAL YR 1975 TOTAL 3209148 MEAN 8792 MAX 63500 MIN 685 AC-FT 6365000
WTR YR 1976 TOTAL 1976280 MEAN 5400 MAX 40300 MIN 655 AC-FT 3920000

08111700 Mill Creek near Bellville, Tex.

LOCATION.--Lat 29°52'51", long 96°12'18", Austin County, on left bank at upstream side of abandoned bridge pier about 5 ft (2 m) downstream from State Highway 36, 5.0 miles (8.0 km) southeast of Bellville, 6.0 miles (9.7 km) upstream from Brazos River, and 9.0 miles (14.5 km) above mouth.

DRAINAGE AREA.--376 mi² (974 km²), revised.

PERIOD OF RECORD.--Discharge: July 1963 to current year.

Water quality: Chemical analyses: October 1968 to current year. Sediment records: October 1966 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 122.82 ft (37.436 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 225 ft³/s (6.372 m³/s), 8.10 in/yr (206 mm/yr) 163,000 acre-ft/yr (201 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,530 ft³/s (270 m³/s) June 2 (gage height, 13.98 ft or 4.261 m); minimum daily, 8.2 ft³/s (0.23 m³/s) Sept. 18.

Period of record: Maximum discharge, 44,400 ft³/s (1,260 m³/s) June 13, 1973 (gage height, 17.95 ft or 5.471 m); minimum daily, 0.08 ft³/s (0.002 m³/s) July 22, 23, 1971.

Maximum stage since 1899, 22.8 ft (6.95 m) in 1940, from information by local residents and the Texas Highway Department.

REMARKS.--Discharge records fair. During the year, the city of Bellville discharged about 308 acre-ft (380,000 m³) of sewage effluent into a tributary of Mill Creek above gage.

REVISIONS (WATER YEARS).--WSP 2122: 1965(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	49	62	59	44	34	28	591	4340	22	22	18
2	21	46	51	58	42	34	25	160	7850	19	20	28
3	20	57	47	54	41	34	24	106	5370	58	18	69
4	20	186	45	49	40	33	26	82	1070	440	17	61
5	20	107	45	46	41	32	100	70	230	435	16	28
6	20	65	47	47	42	45	687	64	134	326	15	20
7	20	54	59	49	41	133	562	166	106	237	14	17
8	20	49	109	45	39	387	146	2720	92	84	14	13
9	19	47	64	44	40	379	97	4180	81	122	16	11
10	20	44	53	45	40	193	74	813	69	172	16	17
11	19	40	49	47	41	91	62	261	58	145	14	10
12	19	38	49	48	41	71	52	325	51	78	13	9.1
13	19	36	48	48	40	59	48	839	45	55	13	8.6
14	18	37	48	47	40	56	46	1080	40	106	12	8.6
15	18	37	50	44	39	54	43	567	36	92	15	9.2
16	22	37	71	42	39	54	523	168	195	611	32	8.7
17	21	38	154	40	40	47	1980	116	282	588	57	8.3
18	19	38	92	40	42	43	1880	92	95	324	27	8.2
19	19	45	68	40	40	41	569	79	56	120	21	8.5
20	19	64	57	67	39	41	950	71	54	78	17	90
21	19	69	53	96	53	40	775	68	69	58	14	115
22	20	52	52	78	53	37	431	90	38	53	13	33
23	25	45	53	62	51	33	150	75	31	59	12	27
24	23	42	119	57	42	33	110	59	27	56	12	18
25	142	41	380	57	38	36	150	52	96	55	11	15
26	483	43	228	62	36	38	182	65	81	68	10	14
27	467	42	123	73	36	35	112	353	49	45	10	233
28	165	43	86	57	35	31	83	778	62	34	9.6	724
29	87	45	73	48	36	34	541	306	37	29	17	1160
30	64	70	65	46	---	33	851	103	26	26	13	155
31	54	---	61	46	---	32	---	80	---	24	16	---
TOTAL	1945	1606	2561	1641	1191	2243	11307	14579	20770	4619	526.6	2945.2
MEAN	62.7	53.5	82.6	52.9	41.1	72.4	377	470	692	149	17.0	98.2
MAX	483	186	380	96	53	387	1980	4180	7850	611	57	1160
MIN	18	36	45	40	35	31	24	52	26	19	9.6	8.2
CFSM	.17	.14	.22	.14	.11	.19	1.00	1.25	1.84	.40	.05	.26
IN	.19	.16	.25	.16	.12	.22	1.12	1.44	2.05	.46	.05	.29
AC-FT	3860	3190	5080	3250	2360	4450	22430	28920	41200	9160	1040	5840

CAL YR 1975 TOTAL 125155.0 MEAN 343 MAX 10900 MIN 18 CFSM .91 IN 12.35 AC-FT 248200
WTR YR 1976 TOTAL 65933.8 MEAN 180 MAX 7850 MIN 8.2 CFSM .48 IN 6.51 AC-FT 130800

PEAK DISCHARGE (BASE, 2,700 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-17	2400	12.71	3,040
5- 9	0400	13.28	5,380
6- 2	1600	13.98	9,530

08111700 Mill Creek near Bellville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
NOV. 03...	1600	62	573	7.8	23.0	230	20	83	4.4	29
JAN. 28...	1600	53	658	7.4	10.5	240	14	89	4.3	36
MAR. 08...	1300	372	581	7.0	16.0	180	32	65	4.4	39
APR. 19...	1100	530	478	7.4	23.5	160	19	59	3.1	26
MAY 25...	1500	50	709	7.2	26.5	260	5	95	4.9	35
JULY 08...	1630	74	454	7.6	26.5	170	12	61	3.3	22
AUG. 17...	1600	57	394	7.0	27.5	130	13	48	3.1	21

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
NOV. 03...	.8	3.9	250	0	11	51	.6	23	329
JAN. 28...	1.0	2.4	276	0	14	60	.3	15	357
MAR. 08...	1.3	4.4	181	0	22	71	.4	16	311
APR. 19...	.9	5.0	172	0	14	44	.3	20	256
MAY 25...	1.0	7.0	308	0	12	60	.5	21	387
JULY 08...	.7	3.9	188	0	8.2	39	.3	18	248
AUG. 17...	.8	3.9	146	0	11	37	.3	17	213

08113500 Richmond Irrigation Co.'s canal near Richmond, Tex.

LOCATION.--Lat 29°34'02", long 95°47'03" (revised), Fort Bend County, on right downstream wingwall of first bridge downstream from pump plant, about 0.5 mile (0.8 km) upstream from previous gage, 1.2 miles (1.9 km) downstream from pump plant, and 1.7 miles (2.7 km) southwest of Richmond.

PERIOD OF RECORD.--October 1927 to September 1954, March 1956 to current year. Records for water years 1928-31, 1955-56 incomplete yearly estimates only published in WSP 1312 and 1732.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

AVERAGE DISCHARGE.--49 years, 43.6 ft³/s (1.235 m³/s), 31,590 acre-ft/yr (39.0 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 267 ft³/s (7.56 m³/s) Nov. 15, 28, 1957; no flow for several months each year.

REMARKS.--Records fair. Water for irrigation is diverted by pumping from right bank of Brazos River 6 miles (10 km) upstream from Richmond. Figures of discharge represent water pumped from river.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50					0	101	0	128	191	0	
2	60					0	102	0	0	192	51	
3	82					0	102	15	0	191	88	
4	2.5					0	102	90	0	190	89	
5	0					0	102	90	0	191	66	
6	0					0	101	90	30	190	0	
7	0					0	156	0	147	179	0	
8	0					0	185	90	193	165	0	
9	0					0	195	90	195	53	34	
10	0					0	197	90	195	0	88	
11	0					0	194	90	195	0	37	
12	0					0	192	90	192	0	0	
13	0					0	188	90	191	0	0	
14	0					0	185	90	189	0	0	
15	0					0	180	90	187	0	0	
16	0					0	175	0	78	0	0	
17	0					0	150	90	76	0	31	
18	0					0	90	116	174	0	86	
19	0					0	90	161	177	0	89	
20	0					0	90	161	177	0	87	
21	0					0	90	180	177	32	89	
22	0					0	90	180	177	95	37	
23	0					0	90	180	173	93	0	
24	0					0	90	180	170	87	0	
25	0					0	90	180	170	93	0	
26	0					0	90	180	176	93	0	
27	0					58	90	131	178	93	0	
28	0					99	90	180	183	93	0	
29	0					100	71	180	195	91	0	
30	0				---	100	0	180	189	30	0	
31	0	---			---	100	---	0	---	0	0	---
TOTAL	194.5	0	0	0	0	457	3668	3284	4312	2342	872	0
MEAN	6.27	0	0	0	0	14.7	122	106	144	75.5	28.1	0
MAX	82	0	0	0	0	100	197	180	195	192	89	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	386	0	0	0	0	906	7280	6510	8550	4650	1730	0
CAL YR 1975	TOTAL	19532.50	MEAN 53.5	MAX 231	MIN 0	AC-FT 38740						
WTR YR 1976	TOTAL	15129.50	MEAN 41.3	MAX 197	MIN 0	AC-FT 30010						

08114000 Brazos River at Richmond, Tex.

LOCATION.--Lat 29°34'56", long 95°45'27", Fort Bend County, on right bank at downstream side of downstream bridge on U.S. Highway 59 in Richmond, 925 ft (282 m) downstream from Texas and New Orleans Railroad Co. bridge, and at mile 92.0 (148.0 km).

DRAINAGE AREA (revised).--45,007 mi² (116,568 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: January 1903 to June 1906 and October 1922 to current year. Published as "at Rosenberg" October 1922 to September 1931 and equivalent except for diversion by Richmond Irrigation Co.'s canal. June to November 1901 and June to September 1902 in U.S. Department of Agriculture, Office of Experiment Stations, Bulletin Nos. 119 and 133. Gage-height records collected in this vicinity since 1914 are contained in reports of the National Weather Service.

Water quality: Chemical analyses: October 1945 to current year. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: February 1968 to current year. Water temperatures: November 1950 to current year. Sediment records: January 1966 to current year.

GAGE (revised).--Water-stage recorder. Datum of gage is 37.94 ft (11.564 m) above mean sea level. Prior to Oct. 1, 1922, various types of nonrecording gages at railroad bridge 925 ft (282 m) upstream at different datums. Oct. 1, 1922, to Sept. 30, 1931, nonrecording chain gage at Rosenberg 7.6 miles (12.2 km) upstream at datum about 7 ft (2.1 m) higher; Oct. 1, 1931, to Sept. 30, 1975, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--20 years (1903-5, 1922-40) unregulated, 7,209 ft³/s (204.2 m³/s), 5,223,000 acre-ft/yr (6.44 km³/yr); 36 years (1940-76) regulated, 7,402 ft³/s (209.6 m³/s), 2.84 in/yr (72 mm/yr), 5,363,000 acre-ft/yr (6.61 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 44,300 ft³/s (1,250 m³/s) Apr. 22 (gage height, 22.05 ft or 6.721 m); minimum daily, 942 ft³/s (26.7 m³/s) Nov. 26.

Period of record: Maximum discharge, 123,000 ft³/s (3,480 m³/s) June 6, 1929 (gage height, 43.6 ft or 13.29 m, from floodmarks), present site and datum; minimum daily, 35 ft³/s (0.99 m³/s) Aug. 23, 1934.

Historic: Maximum stage since at least 1852, 51.2 ft (15.61 m) Dec. 10, 1913, present datum, from floodmarks on right bank 1,000 ft (305 m) upstream from gage. From information by Texas and New Orleans Railroad Co., stages of other floods at railroad bridge, present datum, are as follows: May 1884, 46.7 ft (14.23 m); June 13, 1885, 47.7 ft (14.54 m); July 1899, 48.6 ft (14.81 m); May 2, 1915, 46.3 ft (14.11 m); May 9, 1922, 43.9 ft (13.38 m).

Water quality: Current year: Maximum daily specific conductance, 1,600 micromhos Mar. 8; minimum daily, 225 micromhos May 4.

Maximum water temperatures, 29.0°C on several days during August; minimum, 6.0°C Dec. 26. Maximum daily sediment concentrations, 5,450 mg/l July 8; minimum daily, 19 mg/l Oct. 4. Maximum daily sediment loads, 548,000 tons Apr. 22; minimum daily, 70 tons Oct. 4.

Period of record: Maximum daily specific conductance, 2,540 micromhos Sept. 4, 1951; minimum daily, 187 micromhos Aug. 31, 1947. Maximum water temperatures, 33.0°C Aug. 5, 1951; minimum 1.0°C Jan. 8, 1970. Maximum daily sediment concentrations, 8,300 mg/l Apr. 27, 1966; minimum daily, 8 mg/l Nov. 29, 1967. Maximum daily sediment loads, 1,190,000 tons Apr. 28, 1966; minimum daily, 15 tons Apr. 8-10, 1967.

REMARKS.--Discharge records good. Considerable water diverted above station for irrigation and municipal supply (see stations 08112500 and 08113500).

REVISIONS (WATER YEARS).--WSP 1392: 1933. WSP 1442: Drainage area. WSP 1632: 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	3316	2380	2720	3100	2320	1810	24300	15700	9130	6600	1400
2	1280	2690	2420	2540	3860	2290	2060	34000	22900	8480	6050	1420
3	1300	2500	2050	2516	3310	2350	2140	33000	29100	9070	5910	2150
4	1360	2170	1660	2570	2990	2220	2060	25100	26000	8950	5770	2280
5	1380	2130	1410	2420	2860	1940	1990	18700	22500	9230	5380	2320
6	1380	2310	1260	2256	2570	2070	2050	15000	19000	9130	5220	2640
7	1340	2870	1180	2140	2630	2100	2270	14700	16100	19700	4680	3520
8	1370	2620	1160	1480	2290	1950	4090	18100	13700	26400	4220	3720
9	1300	2060	1280	1580	1900	2170	7370	31500	12100	21700	4300	4550
10	1200	1660	1320	1400	1780	3020	8000	33100	12000	20600	3430	4250
11	1140	1460	1210	1440	1650	3250	6360	27700	12100	18500	2720	2810
12	1100	1330	1140	1560	2070	3340	5040	22500	11700	16200	2450	2450
13	1060	1260	1070	1580	2670	3620	4300	18100	11200	15300	2270	2170
14	1000	1190	1030	1850	2370	3700	3620	15000	10400	14800	2210	2270
15	1020	1120	990	1930	1930	3730	3190	17000	9030	14600	2220	2410
16	1230	1090	1000	1640	1610	3830	2710	23000	7940	14500	2500	2090
17	1530	1060	1040	1360	1430	3750	2660	22000	6370	14300	2050	1750
18	1550	1020	1060	1200	1330	3600	6550	18500	5340	12500	1750	1650
19	1310	990	1150	1090	1290	3360	9520	16500	4590	10600	1790	1620
20	1140	955	1110	1040	1240	2430	10700	15000	4440	12000	1790	1670
21	1040	955	1060	1020	1240	2500	33900	13600	4350	13900	1720	1730
22	479	955	1200	1040	1300	2090	43200	12300	4100	10300	1710	2350
23	980	969	1570	1090	1370	1790	41600	10900	3810	7690	1650	2090
24	1060	962	2160	1140	1830	1560	31400	9360	3410	7610	1570	1800
25	1120	949	3340	1290	2550	1340	21800	9420	3100	9890	1510	1680
26	1300	942	3590	1190	2500	1240	16200	9210	3430	10700	1500	1600
27	2790	909	3600	1110	2470	1190	13600	8500	4350	10200	1530	1590
28	5020	1390	2940	1580	2460	1240	16500	8000	5150	8520	1510	1510
29	5090	1860	2720	2130	2420	1750	17200	8170	10800	7440	1640	1860
30	4900	2140	2980	2070	---	2950	16800	13000	12700	7280	1820	2450
31	4250	---	2940	2060	---	1990	---	14000	---	7190	1760	---
TOTAL	53958	47686	55028	52406	63020	76520	340690	566580	327410	386410	91240	67850
MEAN	1741	1540	1775	1720	2173	2463	11360	18280	10910	12460	2943	2262
MAX	5090	3310	3000	2690	3860	3830	43200	34000	29100	26400	6600	4550
MIN	479	942	990	1020	1240	1190	1810	8040	3100	7190	1500	1400
AC-FT	107000	94590	109100	101900	125000	151800	675800	1124000	649400	766400	181000	134600
CAL YR 1975 TOTAL	3571580			MEAN 9785	MAX 62800	MIN 942	AC-FT 7084000					
WTR YR 1976 TOTAL	2128790			MEAN 5816	MAX 43200	MIN 942	AC-FT 4222000					

08114000 Brazos River at Richmond, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 20...	0600	1160	1040	8.1	20.0	--	--	--	--	--	270
NOV. 18...	1100	1080	851	7.6	19.0	25	15	8.6	91	3.6	260
DEC. 09...	0605	120	1370	8.5	12.0	--	--	--	--	--	300
JAN. 20...	1015	1050	1340	7.7	12.5	20	15	9.4	88	4.4	300
FEB. 08...	0600	3200	1540	8.1	9.0	--	--	--	--	--	300
MAR. 17...	1015	3800	867	6.7	14.5	140	150	9.0	87	2.4	210
APR. 14...	0605	3800	647	8.0	21.0	--	--	--	--	--	160
MAY 05...	1015	18000	279	6.9	20.5	60	320	6.7	74	1.6	100
JUNE 22...	0600	4400	618	7.8	27.0	--	--	--	--	--	180
JULY 14...	1000	15800	361	7.2	26.5	30	300	7.0	89	1.0	130
AUG. 23...	0645	1900	1060	8.1	28.0	--	--	--	--	--	250
SEP. 28...	1030	1400	981	7.8	26.5	50	50	7.2	91	2.2	240

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 20...	79	73	21	110	2.9	3.9	231	0	93	160	.3
NOV. 18...	57	79	15	71	1.9	4.4	246	0	65	99	.5
DEC. 09...	120	87	20	160	4.0	4.5	214	4	120	240	.4
JAN. 20...	120	86	20	150	3.8	4.2	212	0	130	230	.4
FEB. 08...	160	87	20	190	4.8	5.2	174	0	160	310	.5
MAR. 17...	93	62	13	90	2.7	5.5	142	0	110	130	.4
APR. 14...	69	52	8.5	57	1.9	5.5	117	0	62	87	.3
MAY 05...	0	33	4.2	13	.6	3.8	125	0	19	16	.4
JUNE 22...	54	55	10	48	1.6	4.3	152	0	61	71	.4
JULY 14...	17	41	5.4	18	.7	3.4	132	0	29	24	.3
AUG. 23...	87	70	19	110	3.0	4.2	202	0	93	170	.3
SEP. 28...	64	68	17	110	3.1	4.2	216	0	85	150	.3

08114000 Brazos River at Richmond, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 20...	8.5	583	--	--	--	--	--	--	--	--
NOV. 18...	11	466	27	2	.00	.00	.01	.56	.12	7.8
DEC. 09...	8.5	750	--	--	--	--	--	--	--	--
JAN. 20...	2.3	729	25	1	.00	.00	.00	.78	.12	4.4
FEB. 08...	6.8	865	--	--	--	--	--	--	--	--
MAR. 17...	10	492	364	38	.16	.01	.07	.89	.24	12
APR. 14...	11	341	--	--	--	--	--	--	--	--
MAY 05...	11	162	1610	328	.43	.04	.06	.94	.61	14
JUNE 22...	9.2	334	--	--	--	--	--	--	--	--
JULY 14...	8.5	195	782	174	.37	.01	.04	1.1	.28	11
AUG. 23...	11	577	--	--	--	--	--	--	--	--
SEP. 28...	9.7	552	162	46	.02	.00	.01	.67	.15	6.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 20...	1015	0	2	160	0	0	0	2
MAR. 17...	1015	10	4	100	0	0	6	3
JULY 14...	1000	70	3	120	0	0	0	6
SEP. 28...	1030	100	4	--	0	0	2	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 20...	0	0	20	0	.3	0	950	10
MAR. 17...	40	0	30	0	.0	0	580	0
JULY 14...	30	2	0	0	.3	5	320	20
SEP. 28...	10	2	20	0	.2	2	860	10

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)
JAN. 20...	1015	.0	0	--	.00	.0	.0	2	.00	.8	.00	3.6
MAR. 17...	1015	.0	0	.00	.00	.0	.0	3	.00	.0	.00	.0
JULY 14...	1000	.0	0	.00	.00	.0	.0	0	.00	.0	.01	.0
SEP. 28...	1030	.0	0	.00	.00	.0	.0	0	.00	.0	.00	.4

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)
JAN. 20...	.00	.4	.00	.00	.2	.00	.0	.00	.00	.0	.00	.0
MAR. 17...	.00	.0	.00	.00	.2	.00	.0	.00	.00	.0	.00	.0
JULY 14...	.00	.0	.01	.00	.0	.00	.0	.00	.00	.0	.00	.0
SEP. 28...	.00	.0	.00	.00	.0	.00	.0	.00	.00	.0	.00	.0

DATE	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 20...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00
MAR. 17...	.00	.0	.00	.00	.00	.00	0	0	.00	.01	.00	.00
JULY 14...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00
SEP. 28...	.00	.0	.00	.00	.00	.00	0	0	.00	.00	.00	.00

08114000 Brazos River at Richmond, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
OCT 29...	0600	5123	20.0	865	12000	56	66
31...	1200	4219	20.0	437	4980	67	70
APR 12...	1405	4928	21.0	719	9570	22	28
22...	1440	44020	22.5	5200	618000	14	15
MAY 28...	1000	8102	25.0	385	8420	58	65
JUL 09...	0720	22160	26.0	3500	209000	58	65
13...	1430	11180	29.0	1280	38600	38	46

DATE	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
OCT 29...	75	82	86	90	97	98	100
31...	77	86	89	91	96	98	100
APR 12...	72	89	90	93	98	99	100
22...	30	68	82	84	93	98	100
MAY 28...	70	77	83	91	98	99	100
JUL 09...	75	81	90	94	99	99	100
13...	52	63	71	76	95	99	100

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	53958	871	490	70900	130	18200	78	11400	230
NOV. 1975.....	47686	781	440	56000	110	13800	68	8780	220
DEC. 1975.....	55026	1100	610	91000	170	25900	100	15600	260
JAN. 1976.....	52400	1270	710	100000	210	29600	130	17900	280
FEB. 1976.....	60600	1270	710	116000	210	34500	130	20600	280
MAR. 1976.....	76520	1100	610	127000	170	36000	110	21800	260
APR. 1976.....	340690	471	260	242000	50	45900	39	36100	160
MAY 1976.....	566580	348	200	299000	29	44400	28	43400	120
JUNE 1976.....	327410	425	240	209000	41	36400	35	30900	140
JULY 1976.....	386410	434	240	253000	43	44400	35	37000	150
AUG. 1976.....	91240	815	460	112000	120	28400	73	17900	220
SEPT 1976.....	67850	935	520	95500	140	25600	86	15800	240
TOTAL	2126376	**	**	1770000	**	383000	**	277000	**
WTD.AVG.	5825.67	552	310	**	67	**	48	**	180

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C); WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711	642	1040	1220	873	1260	1240	306	456	620	466	1110
2	742	625	1200	1350	926	1360	1180	295	340	418	531	1110
3	770	639	1310	1360	962	1390	967	226	324	390	668	1080
4	841	682	1380	1310	1340	1450	891	225	307	465	717	1160
5	866	652	1400	1290	1410	1500	940	240	327	544	724	1120
6	896	621	1410	1290	1520	1500	953	274	340	538	683	1050
7	928	582	1420	1310	1520	1450	949	312	347	500	712	1150
8	954	616	1390	1350	1540	1600	810	310	353	450	750	1270
9	967	699	1370	1370	1540	1510	936	280	368	437	791	1160
10	972	838	1350	1390	1480	1330	748	278	389	316	862	1000
11	924	944	1240	1360	1480	1140	612	316	375	341	914	683
12	908	1020	1270	1350	1440	1320	553	317	365	303	839	725
13	920	809	1230	1340	1340	1070	645	318	370	330	977	795
14	932	762	1180	1360	1330	981	647	319	375	362	995	930
15	972	751	1130	1280	1340	891	639	336	380	383	934	971
16	986	802	1120	1240	1360	1000	651	404	405	433	826	1010
17	1040	860	1110	1360	1450	903	635	410	458	408	951	884
18	1030	863	1160	1290	1390	830	600	335	524	390	986	762
19	1050	878	1140	1280	1390	774	494	328	539	394	968	730
20	1040	883	1090	1360	1370	792	475	328	575	398	995	572
21	1030	886	1080	1320	1320	807	589	405	614	440	1000	618
22	1020	902	1050	1270	1310	817	357	484	618	531	1070	721
23	1100	914	1040	1260	1300	782	400	462	634	605	1060	762
24	1130	944	980	1240	1260	804	340	489	718	610	1020	525
25	1120	971	881	1170	1200	861	342	477	676	437	1110	703
26	1100	990	843	1310	1030	972	347	465	700	440	1080	858
27	950	990	961	1090	1050	1040	342	454	734	446	1120	888
28	764	995	877	1000	1070	1080	357	443	794	520	1150	957
29	766	976	939	930	1200	1100	350	459	760	584	1120	934
30	678	992	962	1150	---	1140	382	600	730	473	1090	909
31	667	---	1090	1180	---	1190	---	762	---	463	1110	---
MONTH	928	824	1150	1270	1300	1120	646	376	497	451	910	905

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	19.0	10.0	---	9.0	15.0	16.0	18.0	22.0	28.0	26.0	28.0
2	18.0	21.0	10.0	16.0	11.0	20.0	18.0	18.0	21.0	28.0	26.0	27.0
3	19.0	20.0	11.0	9.0	11.0	21.0	18.0	18.0	22.0	28.0	27.0	27.0
4	19.0	20.0	15.0	8.0	17.0	21.0	19.0	19.0	24.0	---	27.0	---
5	18.0	19.0	17.0	7.0	16.0	21.0	19.0	19.0	24.0	28.0	26.0	28.0
6	18.0	19.0	18.0	8.0	13.0	18.0	15.0	20.0	25.0	26.0	27.0	28.0
7	19.0	19.0	15.0	12.0	9.0	---	---	22.0	25.0	26.0	27.0	---
8	20.0	19.0	14.0	---	9.0	---	19.0	21.0	25.0	---	---	28.0
9	21.0	22.0	12.0	---	12.0	14.0	19.0	---	25.0	26.0	28.0	---
10	24.0	21.0	12.0	9.0	15.0	14.0	19.0	20.0	25.0	25.0	29.0	28.0
11	24.0	18.0	14.0	13.0	16.0	16.0	21.0	20.0	25.0	26.0	29.0	27.0
12	24.0	18.0	16.0	11.0	18.0	18.0	21.0	21.0	25.0	26.0	29.0	---
13	---	15.0	18.0	16.0	18.0	15.0	21.0	---	---	26.0	29.0	27.0
14	24.0	13.0	18.0	14.0	19.0	14.0	21.0	19.0	---	28.0	29.0	27.0
15	24.0	13.0	19.0	11.0	19.0	14.0	---	19.0	26.0	25.0	29.0	27.0
16	23.0	15.0	---	12.0	20.0	13.0	22.0	21.0	26.0	25.0	28.0	27.0
17	22.0	17.0	11.0	9.0	21.0	12.0	21.0	21.0	26.0	25.0	29.0	27.0
18	---	18.0	---	16.0	18.0	13.0	22.0	20.0	27.0	26.0	29.0	27.0
19	19.0	19.0	7.0	14.0	17.0	16.0	21.0	20.0	27.0	---	28.0	---
20	20.0	17.0	8.0	12.0	19.0	18.0	---	20.0	28.0	26.0	28.0	27.0
21	20.0	14.0	9.0	---	18.0	17.0	20.0	21.0	27.0	26.0	28.0	25.0
22	20.0	11.0	9.0	9.0	---	17.0	19.0	21.0	27.0	26.0	28.0	24.0
23	22.0	9.0	8.0	12.0	11.0	16.0	21.0	22.0	27.0	26.0	28.0	24.0
24	22.0	9.0	---	13.0	12.0	18.0	21.0	23.0	27.0	---	29.0	24.0
25	21.0	9.0	9.0	16.0	14.0	18.0	---	23.0	27.0	27.0	28.0	24.0
26	18.0	11.0	6.0	9.0	14.0	21.0	19.0	---	---	---	25.0	25.0
27	---	9.0	7.0	---	16.0	---	20.0	23.0	28.0	27.0	28.0	25.0
28	20.0	14.0	10.0	---	16.0	20.0	21.0	21.0	28.0	---	28.0	25.0
29	20.0	18.0	9.0	---	18.0	---	---	23.0	28.0	26.0	---	23.0
30	19.0	---	8.0	---	---	---	20.0	---	28.0	27.0	28.0	22.0
31	20.0	---	---	8.0	---	15.0	---	25.0	---	27.0	28.0	---
MONTH	20.5	16.0	12.0	---	15.0	16.5	19.5	20.5	25.5	26.5	28.0	26.0

08114000 Brazos River at Richmond, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1310	200	707	3310	470	4200	2380	400	2570
2	1280	220	760	2690	470	3410	2420	250	1630
3	1300	120	421	2500	450	3040	2050	120	664
4	1360	19	70	2170	450	2640	1660	50	224
5	1380	36	134	2130	420	2420	1410	79	301
6	1380	63	235	2310	420	2620	1260	105	357
7	1380	70	261	2670	300	2160	1180	62	198
8	1370	80	296	2620	220	1560	1160	45	141
9	1300	70	246	2060	150	834	1280	69	238
10	1200	63	204	1660	70	314	1320	63	225
11	1140	70	215	1460	100	394	1210	88	287
12	1100	46	137	1330	50	180	1140	45	139
13	1060	70	200	1260	70	238	1070	59	170
14	1000	106	286	1190	60	193	1030	46	128
15	1020	74	204	1120	50	151	996	72	194
16	1230	98	325	1090	60	177	1000	60	162
17	1530	144	595	1060	63	180	1040	55	154
18	1550	170	711	1020	93	256	1060	47	135
19	1310	61	216	990	50	134	1150	32	99
20	1140	81	249	955	34	88	1110	45	135
21	1040	111	312	955	30	77	1060	59	169
22	979	59	156	955	40	103	1200	50	162
23	989	170	454	969	35	92	1570	170	721
24	1060	100	286	962	35	91	2160	300	1750
25	1120	100	302	949	35	90	3340	500	4510
26	1300	220	772	942	40	102	3590	420	4070
27	2790	1100	9720	969	30	78	3600	300	2920
28	5020	1620	21500	1390	150	563	2940	300	2380
29	5090	750	10300	1860	220	1100	2720	250	1840
30	4980	500	6720	2140	320	1850	2980	162	1300
31	4250	450	5160	---	---	---	2940	188	1490
TOTAL	53958	---	62154	47686	---	29335	55026	---	29463

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2720	174	1280	3100	200	1670	2320	100	626
2	2540	56	384	3860	400	4170	2290	200	1240
3	2510	48	325	3310	450	4020	2350	120	761
4	2570	55	382	2990	320	2580	2220	100	599
5	2420	90	588	2860	150	1160	1940	56	293
6	2250	111	674	2570	72	500	2070	68	380
7	2140	68	393	2630	150	1070	2100	50	283
8	1880	70	355	2290	200	1240	1950	45	237
9	1580	80	341	1900	70	359	2170	100	586
10	1400	108	408	1780	100	481	3020	150	1220
11	1440	100	389	1650	64	285	3250	200	1760
12	1560	400	1680	2070	100	559	3340	220	1980
13	1560	600	2530	2670	200	1440	3620	200	1950
14	1850	350	1750	2370	250	1600	3780	200	2040
15	1930	420	2190	1930	57	297	3730	250	2520
16	1640	270	1200	1610	120	522	3830	250	2590
17	1360	100	367	1430	50	193	3750	200	2030
18	1200	100	324	1330	50	180	3680	250	2480
19	1090	350	1030	1290	46	160	3360	250	2270
20	1040	300	842	1240	80	268	2930	200	1580
21	1020	70	193	1240	68	228	2500	170	1150
22	1040	100	281	1300	70	246	2090	120	677
23	1090	150	441	1370	150	555	1790	120	580
24	1140	200	616	1830	200	988	1560	120	505
25	1290	120	418	2550	100	688	1380	120	447
26	1190	131	421	2500	200	1350	1240	170	569
27	1110	92	276	2470	300	2000	1190	70	225
28	1580	250	1070	2460	270	1790	1280	68	235
29	2130	400	2300	2420	150	980	1750	84	397
30	2070	150	838	---	---	---	2050	100	553
31	2060	150	834	---	---	---	1990	70	376
TOTAL	52400	---	25120	63020	---	31579	76520	---	33139

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1410	94	459	24300	2400	157000	15700	3400	144000
2	2060	94	523	34000	5030	473000	22900	2800	173000
3	2140	130	751	33800	4350	397000	29100	2600	204000
4	2060	137	762	25100	2650	180000	26000	1850	130000
5	1990	126	677	18700	2200	111000	22500	1400	85100
6	2050	131	725	15900	1500	64400	19000	1500	77000
7	2270	150	919	14700	1150	45600	16100	1150	50000
8	3090	450	4970	18100	2000	97700	13700	800	29600
9	7370	750	14900	31500	4440	381000	12100	600	19600
10	6000	1200	25900	33100	3130	280000	12000	550	17800
11	6350	1150	19700	27700	2900	217000	12100	500	16300
12	5040	750	10200	22500	2100	128000	11700	500	15800
13	4330	450	5220	18100	1450	70900	11200	450	13600
14	3620	300	2930	15800	1100	46900	10400	420	11800
15	3190	200	1720	17800	1100	52900	9030	470	11500
16	2710	250	1830	23600	1950	124000	7940	770	16500
17	2660	300	2150	22900	2800	173000	6370	500	8600
18	4550	977	21100	18500	2100	105000	5340	420	6060
19	4520	1100	28300	16500	1300	57900	4590	420	5210
20	10700	1010	34200	15000	750	30400	4440	350	4700
21	33900	5260	492000	13600	600	22000	4350	300	3520
22	43200	4700	548000	12300	450	14900	4100	270	2990
23	41600	3300	371000	10900	400	11400	3810	270	2760
24	31400	2600	220000	9860	350	9320	3410	250	2300
25	21800	2000	118000	9420	400	10200	3100	220	1440
26	16200	1400	61200	9210	350	8700	3430	250	2320
27	13600	1200	44100	8680	400	9370	4350	350	4110
28	16500	1200	53500	8040	400	8680	5150	420	5840
29	17200	1300	60400	8170	550	12100	10800	2240	73100
30	16800	1400	63500	13900	1800	67600	12700	2150	73900
31	---	---	---	14900	3550	143000	---	---	---
TOTAL	340690	---	2209636	566580	---	3510370	327410	---	1212370
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9130	2100	51800	6600	520	9270	1400	74	280
2	8480	1900	43500	6060	500	8180	1420	68	261
3	9070	1520	37200	5910	420	6700	2150	134	778
4	4950	1250	30200	5770	400	6230	2280	156	960
5	4230	950	23700	5380	370	5370	2320	180	1130
6	9130	850	21000	5220	350	4930	2690	300	2180
7	19700	3450	210000	4680	300	3790	3520	470	4470
8	26400	5450	390000	4220	220	2510	3720	350	3520
9	21700	3500	205000	4300	220	2550	4550	450	5530
10	20600	2570	143000	3430	200	1850	4250	370	4250
11	18500	2300	115000	2720	150	1100	2810	300	2280
12	16200	2200	96200	2450	120	794	2450	220	1460
13	15300	1650	68200	2270	120	735	2170	120	703
14	14800	1320	52700	2210	70	418	2270	100	613
15	14600	1050	41400	2220	270	1620	2410	100	651
16	14500	1000	39200	2500	600	4050	2090	96	542
17	14300	970	37500	2050	200	1110	1750	98	463
18	12500	950	32100	1750	150	709	1650	73	325
19	10600	750	21500	1790	100	483	1620	70	306
20	12000	750	24300	1790	100	483	1670	38	171
21	13900	1150	43200	1720	70	325	1730	70	327
22	10300	1150	32000	1710	70	323	2350	120	761
23	7690	920	19100	1650	70	312	2090	60	339
24	7610	820	16800	1570	70	297	1800	50	243
25	9890	750	20000	1510	70	285	1680	70	318
26	10700	750	21700	1500	58	235	1600	62	268
27	10200	750	20700	1530	59	244	1590	100	429
28	8520	650	15000	1510	80	326	1510	52	212
29	7440	670	13500	1640	92	407	1860	100	502
30	7280	620	12200	1820	91	447	2450	220	1460
31	7190	600	11600	1760	90	423	---	---	---
TOTAL	386410	---	1909300	91240	---	66511	67850	---	35732
YEAR	2128790		9154709						

08115000 Big Creek near Needville, Tex.

LOCATION.--Lat 29°28'35", long 95°48'45", Fort Bend County, near center of stream at downstream side of bridge on State Highway 36, 1.5 miles (2.4 km) downstream from Coon Creek, 5.5 miles (8.8 km) north of Needville, and 10.5 miles (16.9 km) upstream from Fairchild Creek, and 33.0 miles (53.1 km) upstream from mouth.

DRAINAGE AREA (revised).--42.8 mi² (110.9 km²).

PERIOD OF RECORD.--May 1947 to June 1950, March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 59.39 ft (18.102 m) above mean sea level, adjustment of 1943. Prior to June 30, 1950, and May 29, 1959, to Mar. 29, 1960, nonrecording gage at 10.00 ft (3.048 m) higher datum. March 1952 to May 28, 1959, and Mar. 30, 1960, to Sept. 30, 1967, water-stage recorder at 10.00 ft (3.048 m) higher datum.

AVERAGE DISCHARGE.--26 years (1947-49, 1952-76), 33.5 ft³/s (0.949 m³/s), 10.63 in/yr (270 mm/yr), 24,270 acre-ft/yr (29.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,320 ft³/s (65.7 m³/s) June 1 (gage height, 19.59 ft or 5.971 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Oct. 1.

Period of record: Maximum discharge, 10,400 ft³/s (295 m³/s) June 26, 1960 (gage height, 23.81 ft or 7.257 m); maximum gage height, 24.03 ft (7.324 m) Oct. 31, 1959; no flow at times.

Maximum stage since 1913, 24.4 ft (7.44 m) in August 1945 before channel rectification, from information by local resident.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Channel rectification was completed in April 1955. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1148: 1947. WSP 1712: 1957-58, 1959(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.47	.56	3.0	.87	.87	.80	12	1270	1.8	1.4	.41
2	.34	9.6	.53	2.0	.84	.81	.80	4.4	547	1.8	1.0	.44
3	.34	370	.53	1.2	.78	.72	.80	2.7	181	1.9	.79	.51
4	.33	75	.51	1.0	.80	.72	.80	2.1	82	2.0	.76	.41
5	.34	13	.55	.90	.80	.71	.80	1.8	35	3.0	.71	.40
6	.36	4.0	.55	.90	.80	.72	.80	1.6	14	5.2	.71	.42
7	.32	1.6	.55	.90	.80	.81	.80	10	6.7	5.5	.58	.40
8	.63	1.0	.52	.80	.80	1.3	.80	5.0	4.6	11	.52	.40
9	.40	.83	.50	.80	.80	1.8	.80	3.0	4.0	237	.58	.45
10	.36	.68	.53	.80	.80	1.0	.80	250	2.9	132	.50	.74
11	.33	.57	.53	.80	.80	.90	.80	150	2.3	57	.49	.47
12	.31	.58	.53	.70	.80	.80	.80	50	2.1	26	.52	.45
13	.32	.50	.55	.70	.80	.80	.80	250	1.8	16	.49	.42
14	.32	.50	.56	.70	.80	.80	.80	110	1.5	38	.52	.42
15	.34	.53	.58	.70	.80	.80	.80	40	3.0	34	.57	.43
16	1.1	.55	.58	.60	.78	.80	.80	15	9.8	12	.88	.45
17	.70	.50	.58	.60	.74	.80	.80	10	2.9	11	.78	.44
18	.41	.52	.58	.60	.78	.80	.80	5.0	1.7	12	2.1	.42
19	.35	.55	.54	.60	.92	.80	1.0	3.0	1.7	10	.96	.49
20	.32	.56	.53	.60	.86	.80	14	2.4	1.6	7.4	.76	.73
21	.32	.53	.53	.60	.94	.80	4.3	2.0	1.5	4.8	.62	.55
22	.34	.54	.55	.60	1.0	.80	2.3	1.5	1.5	3.6	.55	.49
23	.36	.60	.55	.60	.82	.80	1.8	1.2	1.4	3.1	.49	.45
24	.36	.59	500	.60	.89	.80	1.4	1.0	2.0	3.5	.49	.45
25	3.2	.57	600	.60	.80	.80	1.2	1.0	1.9	4.1	.48	.44
26	121	.59	150	2.0	.86	.80	1.0	1.0	1.7	5.1	.47	.45
27	26	.61	40	1.5	.87	.80	1.0	5.0	1.7	5.4	.47	1.9
28	4.9	.61	30	1.3	.87	.80	1.0	3.0	2.0	5.4	.47	22
29	1.8	.53	25	1.1	.90	.80	100	1.7	2.1	5.4	.46	14
30	.87	.55	10	.94	---	.80	40	1.0	2.0	3.9	.48	3.1
31	.62	---	5.0	.90	---	.80	---	30	---	2.4	.44	---
TOTAL	167.99	487.26	1372.52	29.64	24.12	26.36	183.40	976.4	2193.4	671.3	21.04	53.13
MEAN	5.42	16.2	44.3	.96	.83	.85	6.11	31.5	73.1	21.7	.68	1.77
MAX	121	370	600	3.0	1.0	1.8	100	250	1270	237	2.1	22
MIN	.30	.47	.50	.60	.74	.71	.80	1.0	1.4	1.8	.44	.40
CFSM	.13	.38	1.04	.02	.02	.02	.14	.74	1.71	.51	.02	.04
IN.	.15	.42	1.19	.03	.02	.02	.16	.85	1.91	.58	.02	.05
AC-FT	333	966	2720	59	48	52	364	1940	4350	1330	42	105

CAL YR 1975 TOTAL 10249.10 MEAN 28.1 MAX 1900 MIN .30 CFSM .66 IN 8.91 AC-FT 20330
WTR YR 1976 TOTAL 6206.56 MEAN 17.0 MAX 1270 MIN .30 CFSM .40 IN 5.39 AC-FT 12310

PEAK DISCHARGE (BASE, 1,000 FT³/S).--June 1 (1800) 2,320 ft³/s (19.59 ft).

NOTE.--No gage-height record Dec. 24 to Feb. 2, Mar. 9 to Apr. 19, Apr. 23 to May 31.

08116400 Dry Creek near Rosenberg, Tex.

LOCATION.--Lat 29°30'42", long 95°44'45", Fort Bend County, on right bank 38 ft (12 m) downstream from county road bridge, 5.0 miles (8.0 km) southeast of Rosenberg, and 8.2 miles (13.2 km) upstream from Smither's Lake (Lake George) spillway.

DRAINAGE AREA (revised).--8.65 mi² (22.40 km²). See REMARKS.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 71.90 ft (21.915 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 11.3 ft³/s (0.320 m³/s), 8,190 acre-ft/yr (10.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 573 ft³/s (16.2 m³/s) June 1 (gage height, 9.84 ft or 2.999 m); no flow for many days.

Period of record: Maximum discharge, 2,410 ft³/s (68.3 m³/s) Oct. 31, 1959 (gage height, 12.66 ft or 3.859 m); no flow for many days each year.

Highest flood since at least 1932, that of Oct. 31, 1959, from information by local residents.

REMARKS.--Records fair. Runoff given herein includes return flow from irrigation, and at times flow is diverted from Richmond Irrigation Co.'s canal (station 08113500) into Dry Creek for storage in Smither's Lake. Recording rain gage located in basin from January 1969 to September 1974.

REVISIONS (WATER YEARS).--WSP 1732: Drainage area. WSP 1922: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.09	0	.81	0	66	2.7	332	.24	0	0	0
2	.95	.99	0	.46	0	62	.91	75	.24	0	3.5	3.5
3	2.4	121	0	.27	0	61	1.6	16	.24	0	3.8	3.8
4	.98	13	0	.14	0	60	10	6.3	.21	.01	.85	.85
5	.06	3.8	0	.09	0	66	8.9	2.4	.22	.02	.30	.30
6	0	1.3	0	.07	0	66	8.0	1.2	1.6	0	.10	.10
7	0	.55	0	.07	0	83	13	1.0	2.7	0	.01	.01
8	0	.27	0	.03	0	132	13	1.7	14	0	.04	.04
9	0	.14	0	.03	0	119	12	1.8	231	0	1.2	1.2
10	0	.07	0	.03	0	115	43	1.0	65	0	.65	.65
11	0	.03	0	.01	0	112	58	.74	19	0	.30	.30
12	0	.01	0	0	0	105	10	.61	7.8	0	.13	.13
13	0	0	0	0	0	111	55	.50	2.9	0	.06	.06
14	0	0	0	0	0	116	24	.46	13	0	.01	.01
15	0	0	0	0	0	115	20	.78	20	0	0	0
16	0	0	0	0	0	83	8.3	9.6	7.8	.10	0	0
17	0	0	0	0	0	37	2.4	3.1	2.6	1.7	0	0
18	0	0	0	0	0	4.8	5.8	1.0	1.1	47	0	0
19	0	0	0	0	0	4.7	10	.55	.53	50	0	0
20	0	0	0	0	0	15	10	.39	.24	40	0	0
21	0	0	0	0	0	22	20	.38	.44	35	1.4	1.4
22	0	0	0	0	0	29	22	.36	1.3	28	.85	.85
23	0	0	0	0	0	52	21	.36	1.1	1.9	.30	.30
24	0	0	116	0	0	70	20	.35	.41	.13	.10	.10
25	.85	0	120	0	0	43	19	.31	.16	0	.01	.01
26	18	0	14	.88	0	26	14	.33	.08	0	0	0
27	5.6	0	5.2	.76	.29	12	10	7.0	.06	0	.85	.85
28	11	0	7.4	.30	10	3.6	9.7	15	.08	0	20	20
29	4.2	0	4.9	.12	25	37	6.1	3.1	.07	0	11	11
30	.91	0	2.3	.06	29	10	5.3	.28	.05	0	2.2	2.2
31	.27	---	1.4	.03	---	56	---	12	.01	0	---	---
TOTAL	45.61	141.25	271.2	4.16	0	120.29	1838.1	475.71	483.60	394.18	203.86	47.66
MEAN	1.47	4.71	8.75	.13	0	3.88	61.3	15.3	16.1	12.7	6.58	1.59
MAX	18	121	120	.88	0	56	132	58	332	231	50	20
MIN	0	0	0	0	0	0	3.6	.91	.28	.01	0	0
AC-FT	90	280	538	8.3	0	239	3650	944	959	782	404	95

CAL YR 1975 TOTAL 2721.75 MEAN 7.46 MAX 250 MIN 0 AC-FT 5400
WTR YR 1976 TOTAL 4025.62 MEAN 11.0 MAX 332 MIN 0 AC-FT 7980

PEAK DISCHARGE (BASE, 400 FT³/S).--June 1 (0800) 573 ft³/s (9.84 ft); July 9 (1200) 515 ft³/s (9.36 ft).

08116650 Brazos River near Rosharon, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 29°20'58", long 95°34'56", Fort Bend-Brazoria County line, on right bank at downstream side of bridge on Farm Road 1462, 2.0 miles (3.2 km) downstream from Big Creek, 2.1 miles (3.4 km) upstream from Cow Creek, and 7.3 miles (11.7 km) west of Rosharon, and at mile 56.7 (91.2 km), revised.

DRAINAGE AREA (revised).--45,339 mi² (117,428 km²), approximately, of which 9,566 mi² (24,776 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: April 1967 to current year.

Water quality: Chemical and biochemical analyses: October 1967 to current year. Pesticide analyses: February 1968 to current year. Water temperatures: October 1967 to current year. Sediment records: October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--9 years, 8,061 ft³/s (228.3 m³/s), 5,840,000 acre-ft/yr (720 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 37,200 ft³/s (1,050 m³/s) Apr. 23 (elevation, 34.07 ft or 10.385 m); minimum daily, 1,010 ft³/s (28.6 m³/s) Dec. 16.

Period of record: Maximum discharge, 79,900 ft³/s (2,260 m³/s) May 14, 1968 (elevation, 50.74 ft or 15.466 m); minimum daily, 40 ft³/s (1.13 m³/s) Apr. 7-10, 1967.

Historic: Maximum elevation since at least 1884, 56.4 ft (17.19 m) about Dec. 11, 1913, from information by Texas Highway Department.

Water quality: Current year: Maximum daily specific conductance, 1,520 micromhos Feb. 9, 10; minimum daily, 296 micromhos May 5, 6. Maximum water temperatures, 31.0°C Aug. 10; minimum, 7.0°C Jan. 8, 9.

Period of record: Maximum daily specific conductance (1968-76), 4,430 micromhos Aug. 8, 1971; minimum daily, 203 micromhos Oct. 26, 1970. Maximum water temperatures, 31.0°C on several days during summer months; minimum, 4.0°C Jan. 12, 13, 1973.

REMARKS.--Discharge records good. Water diverted above station for irrigation, industrial, and municipal supply materially affects low flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	4130	2090	2840	2130	2230	1670	17900	15900	10100	6500	1600
2	1490	3390	2270	2690	2980	2180	1550	29200	24200	8040	5990	1390
3	1470	3020	2240	2530	3250	2170	1740	33700	32300	8180	5670	1580
4	1500	3230	1930	2480	2810	2200	1790	28900	30200	8470	5530	2450
5	1550	2600	1610	2460	2540	1920	1650	20900	25500	8480	5250	2430
6	1530	2550	1410	2350	2400	1730	1660	16400	21600	8730	4960	2510
7	1470	2670	1260	2250	2330	1840	1700	14500	17900	13200	4670	2890
8	1470	2950	1200	2100	2310	1900	2020	14500	14700	25300	4170	3960
9	1440	2740	1270	1890	2030	1770	4010	26000	12400	25900	3960	4260
10	1360	2280	1340	1660	1670	2070	6560	33600	11100	24000	3810	3740
11	1350	1960	1330	1530	1550	2670	6460	31000	11100	22300	3030	3030
12	1290	1720	1190	1560	1460	2840	5190	25400	11000	18400	2590	2670
13	1230	1540	1220	1640	1950	2880	4240	20500	10600	16100	2370	2250
14	1200	1470	1220	1650	2270	3180	3610	16800	10100	15100	2250	2030
15	1200	1410	1070	1900	2010	3330	3010	16100	9240	14800	2220	2150
16	1330	1340	1010	1890	1680	3280	2640	21200	10300	14400	2330	2190
17	1510	1300	1020	1620	1440	3240	2260	24200	9180	14100	2300	1930
18	1790	1260	1020	1410	1300	3110	2900	21000	7070	13000	1980	1700
19	1730	1160	1050	1280	1200	3120	7060	17300	5630	11000	1710	1630
20	1500	1120	1120	1210	1150	2850	7850	15500	4990	10100	1710	1800
21	1250	1100	1090	1150	1120	2510	21900	13700	4640	12400	1690	1860
22	1150	1090	1050	1140	1090	2170	34900	12300	4370	11500	1640	2000
23	1110	1080	1230	1130	1140	1830	36500	10900	3980	8520	1610	2550
24	1130	1080	1910	1190	1220	1540	30600	9580	3660	7110	1550	2160
25	1380	1080	5380	1290	1750	1390	22000	8830	3210	8050	1490	1870
26	1580	1090	5120	1360	2200	1310	15600	8610	3050	9450	1470	1760
27	1890	1060	4040	1250	2160	1180	12200	8360	3530	9760	1480	1810
28	3750	1090	3530	1230	2140	1150	12600	7830	4350	8950	1490	1860
29	5050	1510	2960	1750	2160	1290	15300	7360	6270	7560	1540	1830
30	5040	1910	2860	2070	---	1700	15600	9520	11300	6800	1610	2340
31	4840	---	2930	2020	---	1860	---	13700	---	6730	1710	---
TOTAL	57160	55930	59970	54520	55440	68440	286770	555290	343370	386530	90280	68230
MEAN	1844	1864	1935	1759	1912	2208	9559	17910	11450	12470	2912	2274
MAX	5050	4130	5380	2840	3250	3330	36500	33700	32300	25900	6500	4260
MIN	1110	1060	1010	1130	1090	1150	1550	7360	3050	6730	1470	1390
AC-FT	113400	110900	119000	108100	110000	135800	568800	1101000	681100	766700	179100	135300
CAL YR 1975	TOTAL	3600550	MEAN	9865	MAX	60900	MIN	1010	AC-FT	7142000		
WTR YR 1976	TOTAL	2081930	MEAN	5688	MAX	36500	MIN	1010	AC-FT	4130000		

BRAZOS RIVER BASIN

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT 14...	0940	1170	928	7.5	24.0	--	25	7.0	82	2.5
NOV 04...	1000	3350	578	6.9	22.5	--	250	7.8	89	1.7
DEC 08...	0915	1150	1390	7.6	15.5	30	15	9.2	91	3.2
JAN 05...	0945	2450	1270	7.6	8.5	5	20	12.8	108	2.8
FEB 18...	0945	1240	1440	7.2	19.5	10	25	8.0	86	3.0
MAR 10...	1000	1870	1470	7.8	16.5	40	50	9.5	97	3.3
APR 06...	0930	1550	952	7.7	19.5	--	70	9.8	105	3.5
MAY 10...	1015	34000	311	6.6	21.5	60	180	6.6	74	2.1
JUN 02...	0930	23200	961	7.0	23.5	--	300	6.4	74	2.4
JUL 07...	1430	15000	575	7.3	27.5	30	300	6.6	85	.9
AUG 24...	0930	1900	1070	7.6	28.5	20	60	7.1	92	1.3
SEP 15...	1030	2050	949	7.9	28.0	30	80	7.9	101	2.6

DATE	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION PATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT 14...	1800	28	32	280	65	81	19	85	2.2	3.8
NOV 04...	56000	4100	1900	160	52	49	10	58	2.0	4.7
DEC 08...	400	12	30	310	120	89	21	160	4.0	4.4
JAN 05...	2000	50	60	290	120	83	19	140	3.6	4.3
FEB 18...	720	34	12	330	140	94	22	170	4.1	4.5
MAR 10...	2200	40	38	300	130	86	20	170	4.3	4.5
APR 06...	7300	5600	1200	230	86	67	15	90	2.6	4.6
MAY 10...	26000	3300	2700	110	14	35	4.9	16	.7	3.5
JUN 02...	92000	4000	7500	120	33	38	5.0	140	5.7	3.8
JUL 07...	4300	500	250	160	47	48	8.9	45	1.6	3.8
AUG 24...	23000	60	30	260	87	75	18	120	3.2	4.2
SEP 15...	7700	54	31	220	76	63	15	100	2.9	4.4

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)
OCT 14...	262	0	71	110	--	10	552	509	--	--
NOV 04...	136	0	51	76	.3	9.9	359	327	--	--
DEC 08...	228	0	120	230	.5	5.9	757	743	26	3
JAN 05...	205	0	120	210	.5	5.3	727	684	51	15
FEB 18...	231	0	140	260	.4	5.3	812	811	52	11
MAR 10...	207	0	140	270	.4	4.9	838	798	152	78
APR 06...	174	0	88	150	.6	7.3	498	508	--	--
MAY 10...	114	0	23	20	.3	9.4	176	169	--	--
JUN 02...	100	0	46	210	.6	8.8	510	502	--	--
JUL 07...	134	0	47	70	.4	8.3	334	297	--	--
AUG 24...	214	0	86	170	.4	11	562	591	108	8
SEP 15...	174	0	84	150	.4	7.9	531	510	167	36

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	SUS- SED. SIEVE DIAM. % FINER THAN .062 MM
OCT 14...	.00	.00	.00	.26	.09	--	22	69	86
NOV 04...	.50	.01	.06	1.3	.64	9.2	663	6000	92
DEC 08...	.01	.00	.00	.74	.13	--	15	47	94
JAN 05...	.04	.01	.10	.60	.17	--	61	404	49
FEB 18...	.01	.00	.01	1.1	.10	--	44	147	95
MAR 10...	.06	.00	.01	.74	.24	7.8	43	217	98
APR 06...	.03	.01	.01	1.4	.20	--	98	410	99
MAY 10...	.26	.01	.03	2.0	.93	15	383	35200	79
JUN 02...	.65	.05	.11	2.0	.70	--	--	--	--
JUL 07...	.38	.01	.04	.85	.44	--	434	33800	100
AUG 24...	.00	.01	.03	.87	.11	--	107	549	99
SEP 15...	.11	.01	.04	1.4	.15	3.6	126	697	99

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV. 04...	1000	30	11	4	90	0	0	<10	0	6
JAN. 05...	0945	0	4	4	160	1	0	<10	0	0
FEB. 18...	0945	10	4	3	170	0	0	<10	0	0
MAY 10...	1015	90	44	3	50	0	0	140	0	18
AUG. 24...	0930	60	4	3	120	0	0	20	0	2

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
NOV. 04...	0	14	4	14000	0	20	3	10	190
JAN. 05...	0	2	0	690	0	0	0	20	40
FEB. 18...	0	1	0	1100	10	0	0	10	140
MAY 10...	0	43	3	63000	60	30	0	0	1500
AUG. 24...	0	5	2	3100	60	12	0	20	140

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 04...	50	.1	.1	0	0	0	390	70	5
JAN. 05...	0	.1	.0	0	0	0	940	20	10
FEB. 18...	0	.0	.0	0	0	0	1000	30	0
MAY 10...	0	.1	.0	0	0	0	300	210	20
AUG. 24...	20	.4	.1	0	1	0	980	640	10

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL PCB (UG/L)	POLY- CHLOR- INATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)
NOV 04...	1000	--	--	ND	ND	ND	ND	ND	ND	ND	.6	ND
MAR 10...	1000	--	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 10...	1015	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 24...	0930	--	--	ND	--	ND	--	ND	--	ND	--	ND
SEP 15...	1030	.0	.00	.00	--	.0	--	.00	--	.00	--	.00

DATE	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)
NOV 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 10...	--	.03	--	ND	--	ND	--	ND	--	ND	--
MAY 10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 24...	--	ND	--	ND	--	ND	--	ND	--	ND	--
SEP 15...	--	.07	--	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	METHOX- YCHLOR IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)
NOV 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 10...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
MAY 10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 24...	ND	--	ND	--	ND	--	ND	--	ND	--	ND
SEP 15...	.00	--	.00	--	.00	--	--	--	.00	--	.00

DATE	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ATRA- ZINE (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV 04...	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
MAR 10...	--	ND	--	ND	--	ND	--	ND	ND	ND	ND
MAY 10...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 24...	--	ND	--	ND	--	ND	--	ND	ND	ND	ND
SEP 15...	--	.00	--	0	--	.00	--	--	.00	.00	.00

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERI PHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
MAR. 10	21	4.3	4.0	0.7	0.2	460	Polyethylene strip
MAY 10	34	.769	.615	.000	.000	.0	Polyethylene strip

OCT. 14, 1975 0940 HOURS

DEC. 8, 1975 0915 HOURS

PHYTOPLANKTON 120,000 CELLS/ML

PHYTOPLANKTON 78,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT	ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA			CHLOROPHYTA		
..CHLOROPHYCEAE			..CHLOROPHYCEAE		
...CHLOROOCOCCALES			...CHLOROOCOCCALES		
...CHARACTIACEAE			...COELASTRACEAE		
...SCHROEDERIA	670	1	...COELASTRUM	1,000	1
...OCCYSTACEAE			...HYDRODICTYACEAE		
...ANKISTRODESMUS	1,300	1	...PEDIASTRUM		0
...CHODATELLA	1,300	1	...OCCYSTACEAE		
...DICTYOSPHAERTUM	13,000	11	...ANKISTRODESMUS		0
...SELENASTRUM	670	1	...CHODATELLA	390	1
...TETRAEDRON	670	1	...DICTYOSPHAERIUM		0
...SCENEDESMACEAE			...OOCYSTIS	6,500	8
...CRUCIGENIA			...TETRAEDRON	650	1
...SCENEDESMUS	4,000	3	...SCENEDESMACEAE		
...VOLVOCALFS			...CRUCIGENIA	2,100	3
...CHLAMYDOMONADACEAE			...SCENEDESMUS	7,000	9
...CHLAMYDOMONAS	670	1	...TETRASTRUM		0
CHRYSOPHYTA			...TETRASPORALES		
..BACILLARIOPHYCEAE			...COCOMOXYACEAE		
..CENTRALES			...ELAKATOTHRIX		0
...COSCINODISCAEAE			...VOLVOCALFS		
...CYCLOTELLA	16,000	13	...VOLVOCACEAE		
...MELOSIRA	1,300	1	...PANDORINA	2,100	3
...PENNALFS			...ZYGNEHATALES		
...NITZSCHIAEAE			...DESMIDIACEAE		
...NITZSCHIA	2,700	2	...CLOSTERIUM		0
CYANOPHYTA			CHRYSOPHYTA		
..MYXOPHYCEAE			..BACILLARIOPHYCEAE		
...CHROOCOCCALES			..CENTRALES		
...CHROOCOCCACEAE			...COSCINODISCAEAE		
...AGMENELLUM	27,000	22	...CYCLOTELLA	46,000	59
...ANACYSTIS	25,000	20	...PENNALFS		
...ANACYSTIS INCERTA	28,000	23	...NAVICULACEAE		
			...GYROSIGMA		0
			...NAVICULA		0
			...NITZSCHIAEAE		
			...NITZSCHIA	780	1
			...CHRYSOPHYCEAE		
			...CHRYSOMONADALES		
			...OCHROMONADACEAE		
			...DINOBRYON		0
			CYANOPHYTA		
			..MYXOPHYCEAE		
			...CHROOCOCCALES		
			...CHROOCOCCACEAE		
			...AGMENELLUM	2,100	3
			...ANACYSTIS		
			...ANACYSTIS INCERTA	6,500	8
			...ANACYSTIS		0
			...OSCILLATORIALES		
			...OSCILLATORIAEAE		
			...LYNGBYA	2,600	3
			EUGLENOPHYTA		
			..CRYPTOPHYCEAE		
			...CRYPTOMONIDALES		
			...CRYPTOMONODACEAE		
			...CRYPTOMONAS		0
			..EUGLENOPHYCEAE		
			..EUGLENALES		
			...EUGLENACEAE		
			...PHACUS		0

08116650 Brazos River near Rosharon, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

JAN. 5, 1976 0945 HOURS

PHYTOPLANKTON 54,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	410	1
....DICTYOSPHAERIUM	3,300	6
....OOCYSTIS	1,600	3
....SELENASTRUM	2,500	5
...SCENEDESMACEAE		
....SCENEDESMUS	5,800	11
....TETRASTRUM	3,300	6
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	1,200	2
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	28,000	52
....MELOSIRA	820	2
...PENNALES		
...NAVICULACEAE		
....NAVICULA	410	1
...NITZSCHIACEAE		
....NITZSCHIA	6,600	12

FEB. 18, 1976 0945 HOURS

PHYTOPLANKTON 79,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...MICRACTINIACEAE		
....MICRACTINIUM	7,900	10
...OCCYSTACEAE		
....ANKISTRODESMUS	5,600	7
....CHODATELLA	590	1
....DICTYOSPHAERIUM	8,500	11
....KIRCHNERIELLA	4,100	5
....OOCYSTIS	8,800	11
....QUADRIGULA	1,200	1
....TETRAEDRON		0
....WESTELLA	880	1
...SCENEDESMACEAE		
....CRUCIGENIA	16,000	21
....SCENEDESMUS	20,000	25
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	1,500	2
...ZYGNEMATALES		
...DESMIDIACEAE		
....CLOSTERIUM		0
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	2,400	3
...PENNALES		
...FRAGILARIACEAE		
....SYNEDRA		0
...NITZSCHIACEAE		
....NITZSCHIA	1,200	1

MAR. 10, 1976 1000 HOURS

PHYTOPLANKTON 66,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	1,400	2
....CHODATELLA	2,800	4
....DICTYOSPHAERIUM	5,300	8
....OOCYSTIS	3,600	5
....SELENASTRUM	1,100	2
...SCENEDESMACEAE		
....CRUCIGENIA	16,000	24
....SCENEDESMUS	9,200	14
....TETRASTRUM	7,100	11
...ZYGNEMATALES		
...DESMIDIACEAE		
....STAUSTRUM	360	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	3,200	5
...PENNALES		
...DIATOMACEAE		
....DIATOMA		0
...NAVICULACEAE		
....NAVICULA		0
...NITZSCHIACEAE		
....NITZSCHIA	1,400	2
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	14,000	22
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDALES		
...CRYPTOMONODACEAE		
....CRYPTOMONAS	360	1
..EUGLENOPHYCEAE		
...EUGLENALES		
....EUGLENACEAE		
....EUGLENA	360	1

APR. 6, 1976 0930 HOURS

PHYTOPLANKTON 130,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...MICRACTINIACEAE		
....MICRACTINIUM	6,900	5
...OCCYSTACEAE		
....ANKISTRODESMUS	2,600	2
....CHODATELLA	1,700	1
....SELENASTRUM	860	1
....WESTELLA	6,900	5
...SCENEDESMACEAE		
....SCENEDESMUS	37,000	29
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	42,000	34
....MELOSIRA	5,200	4
...PENNALES		
...NAVICULACEAE		
....NAVICULA	860	1
...NITZSCHIACEAE		
....NITZSCHIA	6,900	5
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	2,600	2
...OSCILLATORIALES		
...NOSTOCACEAE		
....APHANIZOMENON		0
EUGLENOPHYTA		
..CRYPTOPHYCEAE		
...CRYPTOMONIDALES		
...CRYPTOMONODACEAE		
....CRYPTOMONAS	10,000	8
..EUGLENOPHYCEAE		
...EUGLENALES		
....EUGLENACEAE		
....EUGLENA	860	1
....TRACHELONAS	860	1

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

MAY 10, 1976 1015 HOURS

PHYTOPLANKTON 2,400 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...HYDRODICTYACEAE		
...PEDIASTHUM	1,500	62
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...NITZSCHIAEAE		
...NITZSCHIA	750	31
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
...TRACHELUMONAS	190	8

JUNE 2, 1976 0930 HOURS

PHYTOPLANKTON 7,900 CELLS/ML

ORGANISM NAME	CELLS/ML	PER CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESUS	110	1
...KIRCHNERIELLA	110	1
...SCENEDESMAEAE		
...ACTINASTRUM	3,200	40
...SCENEDESUS	230	3
...ULOTRICHIALES		
...ULOTRICHACEAE		
...ULOTHRIX	230	3
CHRYSPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	110	1
..PENNALES		
...CYMBELLACEAE		
...CYMBELLA		0
...NAVICULACEAE		
...NAVICULA	110	1
...NITZSCHIAEAE		
...NITZSCHIA	2,800	36
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
...CHROOCOCCACEAE		
...ANACYSTIS	910	11
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
...EUGLENA	110	1

JULY 7, 1976 1430 HOURS

PHYTOPLANKTON 470 CELLS/ML

_ORGANISM_NAME_____	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...PENNALES		
....NITZSCHIAEAE		
.....NITZSCHIA	470	100

AUG. 24, 1976 0930 HOURS

PHYTOPLANKTON 200,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....DICTYOSPHAERIUM	8,500	4
....OOCYSTIS	4,200	2
....SCENEDESMACEAE		
....SCENEDESMUS	13,000	6
....VOLVOCALES		
...PHACOTACEAE		
...PTEROMONAS	1,100	1
CHRYCOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...ACHNANTHACEAE		
...COCconeIS	2,100	1
...FRAGILARIACEAE		
...ASTERTIONELLA	5,300	3
...NITZSCHIAACEAE		
....NITZSCHIA	4,200	2
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM	21,000	10
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	11,000	5
...OSCILLATORIAACEAE		
....OSCILLATORIA	130,000	65

SEP. 15, 1976 1030 HOURS

PHYTOPLANKTON 210,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMIUS		0
....DICTYOSPHAERIUM	23,000	11
....KIRCHNEFFELLA		0
....OOCYSTIS	2,600	1
....TETRAEORON		0
...SCENEDESMACEAE		
....SCENEDESMUS	2,600	1
..TETRASPOALES		
...PALMELLACEAE		
....SPHAEROCYSTIS	11,000	5
..VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS		0
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCEAE		
....MELOSIIRA	2,600	1
...PENNALES		
...NAVICULACEAE		
....NAVICULA		0
...NITZSCHACEAE		
....NITZSCHIA	1,300	1
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....AGMENELLUM	84,000	40
....ANACYSTIS	4,500	2
..OSCILLATORIALES		
....OSCILLATORIAEAE		
....LYNGBYA	7,800	4
....OSCILLATORIA	67,000	32

08116650 Brazos River near Rosharon, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	57160	893	490	75000	140	21200	82	12600	240
NOV. 1975.....	55930	763	410	62600	110	16400	69	10400	220
DEC. 1975.....	59970	1010	550	88800	160	26100	93	15100	250
JAN. 1976.....	54520	1250	680	100000	210	31200	120	17200	280
FEB. 1976.....	53280	1270	690	99900	220	31400	120	17100	280
MAR. 1976.....	68440	1100	600	111000	180	33700	100	18900	260
APR. 1976.....	286770	455	250	190000	43	33000	38	29500	150
MAY 1976.....	555290	361	200	294000	25	38200	29	43000	120
JUNE 1976.....	343370	562	300	282000	66	61100	49	45000	170
JULY 1976.....	386530	450	250	256000	42	43800	38	39300	140
AUG. 1976.....	90280	784	430	104000	110	27600	71	17200	230
SEPT 1976.....	68230	944	510	94800	150	27200	87	16000	240
TOTAL	2079770	**	**	1760000	**	391000	**	281000	**
WTD.AVG.	5698	576	310	**	69	**	50	**	180

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C); WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	781	679	971	1030	892	1200	1170	367	704	976	454	1080
2	761	653	1040	1200	908	1240	1220	355	889	554	475	1110
3	780	558	1130	1300	943	1340	1190	328	1110	407	552	1120
4	802	599	1250	1330	975	1380	1000	297	525	395	659	1050
5	858	649	1350	1310	1330	1420	919	296	332	573	701	1160
6	877	659	1390	1270	1390	1470	927	296	371	578	715	1080
7	904	630	1410	1250	1490	1500	949	314	450	541	673	1080
8	941	595	1400	1300	1510	1490	962	325	340	586	714	1190
9	958	615	1410	1300	1520	1500	823	325	372	397	764	1270
10	967	679	1380	1360	1520	1500	1010	347	374	391	795	1160
11	1000	815	1360	1370	1490	1340	776	323	394	329	857	1020
12	972	940	1300	1340	1470	1130	613	333	370	342	909	718
13	945	1050	1270	1320	1450	1310	565	328	370	307	834	747
14	936	894	1250	1300	1350	1080	648	328	374	347	955	799
15	945	781	1210	1330	1330	1010	654	336	374	380	950	921
16	972	775	1450	1290	1380	891	646	354	367	413	963	971
17	1000	799	1130	1200	1330	995	663	413	388	425	847	1050
18	1040	868	1110	1340	1450	903	649	360	443	404	921	947
19	1050	890	1170	1290	1400	827	500	343	505	389	977	829
20	1060	899	1150	1370	1390	774	441	324	533	398	972	660
21	1070	910	1130	1320	1350	785	400	344	602	403	986	598
22	1060	906	1080	1340	1340	813	386	438	606	460	1000	617
23	1050	910	1080	1290	1320	823	371	485	612	550	1030	712
24	1050	927	1040	1250	1320	807	354	462	625	622	1070	826
25	1090	953	617	1240	1280	813	337	491	699	567	1020	592
26	1070	949	563	1190	1210	858	339	481	678	437	1060	678
27	1060	995	723	1160	1050	945	339	480	685	472	1090	806
28	900	1010	905	1110	1040	1040	340	451	694	458	1090	840
29	708	1000	820	1120	1060	1060	358	443	766	454	1110	922
30	752	971	918	1060	---	1100	381	467	893	451	1090	927
31	680	---	922	985	---	1120	---	556	---	480	1080	---
MONTH	937	819	1130	1250	1290	1110	664	380	548	467	881	916

BRAZOS RIVER BASIN

08116650 Brazos River near Rosharon, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	21.0	19.0	12.0	11.0	20.0	18.0	21.0	25.0	29.0	30.0	28.0
2	23.0	22.0	14.0	15.0	12.0	21.0	20.0	20.0	23.0	29.0	30.0	28.0
3	22.0	22.0	14.0	12.0	13.0	22.0	20.0	20.0	24.0	29.0	30.0	28.0
4	20.0	22.0	15.0	10.0	15.0	22.0	21.0	19.0	24.0	29.0	29.0	28.0
5	20.0	21.0	17.0	9.0	16.0	22.0	21.0	20.0	25.0	29.0	29.0	29.0
6	21.0	21.0	18.0	9.0	16.0	20.0	20.0	21.0	26.0	28.0	30.0	29.0
7	21.0	22.0	16.0	12.0	12.0	18.0	21.0	23.0	26.0	27.0	30.0	29.0
8	22.0	22.0	15.0	7.0	11.0	18.0	20.0	22.0	26.0	27.0	30.0	30.0
9	23.0	23.0	15.0	7.0	13.0	17.0	21.0	22.0	26.0	26.0	30.0	30.0
10	25.0	23.0	14.0	8.0	16.0	16.0	21.0	22.0	26.0	26.0	31.0	29.0
11	25.0	21.0	15.0	11.0	17.0	18.0	21.0	22.0	27.0	26.0	30.0	28.0
12	25.0	21.0	17.0	13.0	18.0	19.0	22.0	22.0	27.0	27.0	30.0	27.0
13	25.0	17.0	18.0	15.0	19.0	18.0	22.0	22.0	27.0	27.0	30.0	27.0
14	25.0	15.0	19.0	15.0	20.0	16.0	22.0	22.0	28.0	27.0	29.0	28.0
15	25.0	15.0	20.0	14.0	20.0	15.0	23.0	22.0	28.0	27.0	29.0	28.0
16	25.0	16.0	15.0	14.0	21.0	15.0	23.0	23.0	27.0	27.0	29.0	28.0
17	23.0	17.0	14.0	12.0	21.0	15.0	22.0	23.0	28.0	27.0	28.0	28.0
18	22.0	19.0	12.0	12.0	20.0	15.0	23.0	23.0	29.0	27.0	28.0	27.0
19	20.0	20.0	10.0	13.0	18.0	17.0	22.0	22.0	29.0	27.0	28.0	27.0
20	20.0	19.0	10.0	14.0	20.0	19.0	22.0	23.0	28.0	27.0	28.0	27.0
21	21.0	15.0	9.0	12.0	20.0	18.0	22.0	23.0	28.0	28.0	28.0	26.0
22	22.0	14.0	11.0	11.0	15.0	18.0	20.0	24.0	28.0	28.0	28.0	25.0
23	22.0	12.0	11.0	12.0	13.0	18.0	21.0	25.0	28.0	28.0	28.0	25.0
24	24.0	12.0	12.0	14.0	14.0	19.0	22.0	25.0	29.0	28.0	28.0	25.0
25	24.0	12.0	11.0	16.0	15.0	20.0	22.0	26.0	29.0	28.0	28.0	25.0
26	20.0	13.0	9.0	14.0	16.0	22.0	22.0	26.0	29.0	29.0	28.0	26.0
27	19.0	11.0	10.0	11.0	17.0	20.0	22.0	25.0	29.0	30.0	28.0	26.0
28	21.0	14.0	11.0	10.0	18.0	21.0	24.0	25.0	29.0	29.0	29.0	26.0
29	21.0	17.0	12.0	11.0	19.0	21.0	24.0	25.0	30.0	30.0	28.0	25.0
30	21.0	19.0	11.0	12.0	---	23.0	22.0	25.0	29.0	30.0	29.0	24.0
31	20.0	---	10.0	14.0	---	18.0	---	26.0	---	30.0	28.0	---
MONTH	22.5	18.0	13.5	12.0	16.5	18.5	21.5	23.0	27.0	28.0	29.0	27.0

08116700 Brazos River at Harris Reservoir near Angleton, Tex.

LOCATION.--Lat 29°14'35", long 95°33'41", Brazoria County, at Harris Pumping Plant of Dow Chemical Co. and 10 miles (16 km) northwest of Angleton.

DRAINAGE AREA.--44,000 mi² (114,000 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1962 to current year. Water temperatures: October 1966 to current year.

EXTREMES.--Period of record: Maximum daily specific conductance (1962-75), 7,190 micromhos Mar. 3, 1964; minimum daily, 217 micromhos Oct. 26, 1970. Maximum water temperatures, 31.0°C on many days during summer months; minimum, 2.0°C Jan. 8, 9, 1970.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT 31...	1000	656	8.1	21.0	180	41	53	11	60
NOV 28...	1000	1010	7.8	13.5	310	110	94	19	83
DEC 31...	1000	894	7.8	11.0	220	67	67	12	90
JAN 30...	1000	1100	8.0	12.0	290	62	83	20	120
FEB 27...	1000	1090	8.0	17.0	240	78	69	17	130
MAR 31...	1001	1130	8.3	18.5	260	87	77	17	120
APR 30...	1000	377	7.6	22.0	130	28	43	5.4	22
MAY 28...	1000	460	8.1	24.5	150	32	46	9.0	29
JUN 30...	1000	863	7.9	29.0	230	100	70	13	78
JUL 30...	1000	465	7.9	30.0	150	22	49	7.3	30
AUG 25...	1000	1050	8.3	29.0	260	84	72	19	110
SEP 02...	1000	1080	8.2	29.0	260	90	72	20	120

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 31...	2.0	4.6	166	0	51	80	.3	11	353
NOV 28...	2.0	3.9	247	0	80	120	.3	12	534
DEC 31...	2.7	4.7	182	0	69	130	.2	9.2	472
JAN 30...	3.1	3.8	277	0	88	160	.4	7.7	619
FEB 27...	3.6	4.5	200	0	100	180	--	9.3	608
MAR 31...	3.2	4.8	214	0	98	170	.4	9.8	603
APR 30...	.8	4.6	124	0	34	30	.3	11	211
MAY 28...	1.0	3.7	146	0	36	46	.3	9.2	251
JUN 30...	2.2	4.4	152	0	85	130	.3	7.0	463
JUL 30...	1.1	3.3	156	0	32	43	.3	9.1	250
AUG 25...	3.0	4.0	212	0	90	160	.3	11	571
SEP 02...	3.2	4.2	210	0	100	180	.3	11	611

BRAZOS RIVER BASIN

08116700 Brazos River at Harris Reservoir near Angleton, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

08117200 Brazos River at Brazoria Reservoir near Brazoria, Tex.

LOCATION.--Lat 29°30'09", long 95°33'00", Brazoria County, at Brazoria Pumping Plant of Dow Chemical Co. and 1.5 miles (2.4 km) east of Brazoria.

DRAINAGE AREA.--44,000 mi² (114,000 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1962 to current year. Water temperatures: October 1966 to current year.

EXTREMES.--Period of record: Maximum daily specific conductance (1962-75), 37,000 micromhos Aug. 28, 1963; minimum daily, 221 micromhos Oct. 27, 1970. Maximum water temperatures, 32.0°C July 28, 1973; minimum, 2.0°C Jan. 14, 15, 1968.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT									
31...	0700	742	7.6	21.0	200	57	59	12	68
NOV									
28...	0700	875	7.9	13.5	210	40	57	17	74
DEC									
31...	0700	851	8.0	11.0	200	62	60	12	90
JAN									
30...	0700	1160	8.2	13.5	280	98	81	19	120
FEB									
27...	0700	1306	8.1	16.5	320	98	92	21	150
MAR									
31...	0700	966	8.4	21.0	250	71	72	16	100
APR									
30...	0700	357	8.1	21.0	120	20	40	5.2	20
MAY									
28...	0700	483	7.7	24.0	150	31	46	8.6	31
JUN									
30...	0700	805	7.5	29.0	220	89	70	11	74
JUL									
30...	0700	452	7.7	29.0	150	23	44	7.3	27
AUG									
26...	0700	1010	8.3	29.0	250	77	72	18	110
SEP									
28...	0700	1080	8.2	29.5	260	99	73	18	120

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RINE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT									
31...	2.1	4.4	170	0	58	100	.3	9.9	395
NOV									
28...	2.2	4.1	210	0	62	100	.3	13	431
DEC									
31...	2.8	4.6	167	0	68	130	.3	7.9	455
JAN									
30...	3.1	4.0	222	0	91	180	.4	5.9	611
FEB									
27...	3.7	4.5	260	0	120	220	.5	8.5	748
MAR									
31...	2.8	5.0	201	6	85	150	.4	9.2	543
APR									
30...	.8	4.7	124	0	32	28	.3	12	203
MAY									
28...	1.1	3.8	145	0	38	47	.4	9.3	256
JUN									
30...	2.2	4.0	160	0	78	120	.3	6.6	443
JUL									
30...	1.0	3.2	158	0	31	39	.3	9.3	244
AUG									
26...	3.0	4.0	216	0	87	160	.3	11	569
SEP									
28...	3.3	4.2	192	0	100	190	.4	9.4	610

08117200 Brazos River at Brazoria Reservoir near Brazoria, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

[illegible]

08117500 San Bernard River near Boling, Tex.

LOCATION.--Lat 29°18'47", long 95°53'36", Wharton-Fort Bend County line, near left bank at downstream side of pile bent of bridge on Farm Road 442, 2.5 miles (4.0 km) downstream from Snake Creek, and 4.5 miles (7.2 km) northeast of Boling.

DRAINAGE AREA.--727 mi² (1,883 km²).

PERIOD OF RECORD.--May 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 30.81 ft (9.391 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 497 ft³/s (14.08 m³/s), 360,100 acre-ft/yr (444 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,930 ft³/s (111 m³/s) June 5 (gage height, 21.14 ft or 6.443 m); minimum daily, 11 ft³/s (0.31 m³/s) Apr. 4.

Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) June 28, 1960 (gage height, 42.41 ft or 12.927 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Nov. 27-30, 1956.

Maximum stage since at least 1900, 43.5 ft (13.26 m) in 1913 (probably December). Flood in September 1938 reached a stage of 43.3 ft (13.20 m), from information by local resident.

REMARKS.--Records good. Part of low flow is drainage from areas irrigated with diversions from Colorado River. Diversions above station for irrigation and other uses.

REVISIONS (WATER YEARS).--WSP 1712: 1958. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	199	16	200	25	13	12	606	900	197	122	93
2	248	169	15	150	23	13	12	517	3480	181	103	106
3	248	886	15	120	21	13	12	327	3590	163	84	121
4	218	603	15	100	19	13	11	283	3750	146	63	133
5	204	286	14	80	19	15	12	223	3890	152	59	141
6	195	150	15	65	18	18	53	160	3610	184	50	154
7	175	84	18	55	18	15	99	125	2840	283	45	166
8	174	51	17	47	17	15	100	187	1360	332	57	164
9	179	38	16	40	17	18	86	286	679	642	57	155
10	170	29	15	35	17	18	90	294	432	885	54	174
11	149	24	14	32	16	16	78	258	276	984	59	207
12	131	20	14	28	16	46	60	272	183	1070	75	213
13	123	17	14	25	16	66	42	298	131	1050	82	175
14	111	16	14	22	17	55	30	415	107	950	85	144
15	101	15	14	20	16	44	23	507	101	1000	89	136
16	121	14	15	19	16	38	22	430	420	950	100	140
17	104	14	15	18	15	29	22	372	412	887	417	152
18	82	14	15	18	15	22	19	381	477	791	1110	148
19	73	14	14	17	15	19	17	334	368	691	1050	153
20	60	14	14	17	14	17	204	237	307	646	700	185
21	53	14	14	17	15	16	984	159	277	610	378	233
22	43	13	14	24	14	16	1630	110	248	532	225	313
23	34	13	14	23	14	15	1890	84	213	416	163	324
24	29	13	319	23	14	15	1800	70	178	296	128	253
25	25	13	2940	24	14	14	1090	71	148	230	107	198
26	118	13	2220	31	13	14	604	81	124	216	92	161
27	327	13	1590	29	13	13	416	83	139	181	94	171
28	395	15	1060	33	13	14	264	103	166	160	95	263
29	351	16	637	32	13	14	232	138	199	142	90	451
30	285	16	458	29	---	15	459	119	213	149	84	508
31	250	---	300	27	---	13	---	110	---	145	88	---
TOTAL	4986	2796	9865	1400	473	662	10373	7640	29218	15261	6005	5935
MEAN	161	93.2	318	45.2	16.3	21.4	346	246	974	492	194	198
MAX	395	886	2940	200	25	66	1890	606	3890	1070	1110	508
MIN	25	13	14	17	13	13	11	70	101	142	45	93
AC-FT	9890	5550	19570	2780	938	1310	20570	15150	57950	30270	11910	11770
CAL YR 1975 TOTAL	206745		MEAN 566	MAX 14600	MIN 13	AC-FT 410100						
WTR YR 1976 TOTAL	94614		MEAN 259	MAX 3890	MIN 11	AC-FT 187700						

PEAK DISCHARGE (BASE, 3,000 FT³/S).--Dec. 25 (1300) 3,240 ft³/s (19.21 ft); June 5 (0700) 3,930 ft³/s (21.14 ft).

SAN BERNARD RIVER BASIN

08117700 San Bernard River near West Columbia, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 29°09'37", long 95°45'56", Brazoria County, at bridge on Farm Road 1301, 7.6 miles (12.2 km) west of West Columbia.

PERIOD OF RECORD.--Occasional discharge measurements: January 1949, April 1970 to September 1971, January 1973 to current year. Occasional water-quality data: October 1969 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPF-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
OCT 29...	1420	374	479	6.9	21.0	140	34	39	9.4	36
DEC 11...	1520	26	1490	7.8	14.0	410	110	120	26	160
JAN 22...	1400	30	1180	7.4	12.0	330	53	96	22	120
MAR 04...	1330	15	1220	7.5	22.5	350	20	100	25	130
APR 15...	1425	9.3	686	7.1	23.0	210	14	61	13	56
MAY 24...	1400	91	462	7.5	25.5	140	18	41	8.5	35
JUL 07...	1230	327	639	7.8	27.5	170	32	49	12	56
AUG 26...	1400	91	578	7.3	28.0	190	19	52	14	41

DATE	SODIUM ADSORPTION RATIO	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT 29...	1.3	6.1	124	0	30	59	.5	16	257
DEC 11...	3.5	3.9	366	0	56	260	.3	16	823
JAN 22...	2.9	4.1	338	0	38	190	.2	15	652
MAR 04...	3.0	2.9	406	0	35	170	.5	17	681
APR 15...	1.7	3.4	234	0	19	80	.4	15	363
MAY 24...	1.3	3.5	146	0	19	55	.3	13	247
JUL 07...	1.9	2.2	171	0	38	87	.3	17	346
AUG 26...	1.3	6.0	205	0	17	72	.5	34	337

08117900 Big Bogy Creek near Wadsworth, Tex.

LOCATION.--Lat 28°48'26" (revised), long 95°57'02", Matagorda County, on right bank at downstream end of bridge on Farm Road 521, 1.3 miles (2.1 km) upstream from State Highway 60, 2.0 miles (3.2 km) southwest of Wadsworth, and 13.1 miles (21.1 km) upstream from mouth (Big Bogy Cut).

DRAINAGE AREA.--10.3 mi² (26.7 km²).

PERIOD OF RECORD.--Discharge: June 1970 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.36 ft (4.072 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 12.8 ft³/s (0.362 m³/s) 9,270 acre-ft/yr (11.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 448 ft³/s (12.7 m³/s) July 10 (gage height, 9.81 ft or 2.990 m); no flow Nov. 22, 23, Feb. 4, 5, Mar. 1-7.

Period of record: Maximum discharge, 448 ft³/s (12.7 m³/s) July 10, 1976 (gage height, 9.81 ft or 2.990 m); maximum gage height, 11.90 ft (3.627 m) Sept. 6, 1973; no flow at times.

Maximum stages since 1901, 11.4 ft (3.47 m) May 31, 1970, and 10.9 ft (3.32 m) in September 1961, from information by local residents.

REMARKS.--Discharge records fair. No known diversions above station. An undetermined amount of water from irrigated ricefields enters stream upstream at various points. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	.36	.16	.50	.08	0	1.9	11	60	29	2.6	21
2	8.8	.36	.13	.42	.03	0	1.8	9.1	89	25	2.4	23
3	14	.46	.10	.29	.01	0	1.6	4.0	52	25	2.6	25
4	9.5	.26	.07	.16	0	0	2.4	1.5	35	26	3.8	23
5	19	.16	.05	.13	0	0	6.1	1.0	28	26	8.4	22
6	13	.11	.05	.26	.07	0	8.2	.74	22	29	11	36
7	6.2	.08	.05	.45	.07	0	5.7	1.4	19	28	8.3	35
8	3.4	.06	.05	.17	.05	.22	4.9	1.3	18	64	5.2	28
9	1.9	.06	.03	.12	.03	.32	7.8	1.2	12	281	3.6	23
10	1.2	.05	.02	.11	.03	.10	5.5	2.0	13	373	2.8	19
11	.75	.03	.02	.09	.03	.06	5.3	5.6	15	226	3.1	14
12	.49	.03	.02	.08	.06	.08	5.3	2.6	14	108	1.9	12
13	.27	.02	.01	.08	.05	.12	1.6	37	15	59	1.2	14
14	.19	.02	.02	.38	.05	.07	.28	25	15	76	1.6	14
15	.36	.01	.02	.33	.05	.04	.14	10	16	63	1.9	19
16	1.5	.01	.03	.19	.03	.04	3.8	10	30	36	2.4	21
17	3.0	.01	.02	.13	.04	.02	2.8	9.9	42	28	2.2	21
18	1.4	.01	.02	.11	.06	.01	2.7	5.7	34	22	5.0	19
19	.56	.02	.02	.08	.06	.01	1.7	5.6	28	16	7.9	137
20	.34	.03	.01	.11	.05	.01	38	1.4	28	14	8.8	236
21	.24	.02	.01	.12	.09	.10	28	5.2	27	14	9.0	112
22	.17	0	.01	.12	.08	.19	14	8.5	25	15	7.2	63
23	.13	0	.01	.09	.05	.13	9.1	6.5	24	15	7.1	35
24	.11	.01	.21	.08	.03	.08	5.1	5.9	23	14	5.3	24
25	.11	.26	38	.12	.02	.24	2.7	5.9	21	13	4.1	13
26	.50	.58	20	.15	.02	.21	2.2	16	24	10	5.1	5.3
27	.94	.50	8.7	.15	.01	.49	1.1	24	24	8.6	5.1	6.7
28	1.2	.25	4.6	.12	.01	1.8	1.0	12	28	5.3	4.7	9.0
29	1.1	.13	2.4	.10	.01	1.2	15	7.2	27	5.2	8.6	10
30	.81	.16	1.4	.08	---	2.3	18	6.7	26	4.3	12	11
31	.54	---	.75	.11	---	1.9	---	8.9	---	4.7	17	---
TOTAL	49.85	4.66	97.78	5.43	1.17	9.74	203.72	252.84	834	1663.1	171.9	1051.0
MEAN	3.22	.14	3.15	.18	.040	.31	6.79	8.16	27.8	53.6	5.55	35.0
MAX	19	.58	38	.50	.09	2.3	38	37	89	373	17	236
MIN	.11	0	.01	.08	0	0	.14	.74	12	4.3	1.2	5.3
AC-FT	198	8.1	194	11	2.3	19	404	502	1650	3300	341	2080

CAL YR 1975 TOTAL 2990.02 MEAN 8.19 MAX 83 MIN 0 AC-FT 5930
WTR YR 1976 TOTAL 4394.59 MEAN 12.0 MAX 373 MIN 0 AC-FT 8720

PEAK DISCHARGE (BASE, 200 FT³/S).--July 10 (1100) 448 ft³/s (9.81 ft); Sept. 19 (2200) 341 ft³/s (9.08 ft).

BIG BOGGY CREEK BASIN

08117900 Big Buggy Creek near Wadsworth, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT 09...	1130	1.9	717	8.0	26.5	25	10.6	129	1.4	250	44
NOV 13...	0925	.01	656	8.4	10.5	30	9.7	87	1.0	170	94
DEC 23...	1340	.01	877	8.2	18.0	55	11.2	118	2.1	210	80
MAR 15...	1440	.04	651	8.7	21.0	5	10.7	119	4.5	180	69
APR 29...	1325	12	235	7.0	24.0	170	6.9	81	17	61	13
JUN 11...	0940	15	422	7.4	27.5	40	6.8	87	7.8	150	22
JUL 09...	1530	360	135	6.9	24.5	35	5.5	67	3.7	46	16
JUL 21...	1545	16	438	7.4	31.0	50	7.2	97	1.7	160	22
SEP 02...	1020	22	555	7.4	28.0	60	5.6	72	4.7	180	5

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)
OCT 09...	62	22	48	1.3	4.9	245	0	28	87	--	--
NOV 13...	39	18	60	2.0	6.0	91	2	48	120	.2	.6
DEC 23...	49	21	91	2.7	5.6	157	0	28	190	.2	--
MAR 15...	44	16	65	2.1	8.0	130	0	44	120	.5	.4
APR 29...	16	5.1	21	1.2	5.7	58	0	14	33	.4	--
JUN 11...	45	10	25	.9	2.8	160	0	32	35	.4	--
JUL 09...	12	3.8	9.5	.6	2.8	36	0	12	18	.2	--
JUL 21...	41	15	27	.9	3.0	174	0	22	48	.4	.3
SEP 02...	43	17	34	1.1	14	210	0	15	63	.5	--

DATE	IODIDE (I) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 09...	--	18	391	38	.00	.00	.00	.73	.04	8.6
NOV 13...	.05	5.0	344	54	.00	.01	.02	.71	.05	10
DEC 23...	--	5.1	467	119	.01	.00	.04	.53	.06	--
MAR 15...	.06	4.9	368	60	.00	.00	.00	1.2	.06	15
APR 29...	--	8.7	133	332	.36	.07	.28	1.9	.30	19
JUN 11...	--	13	242	96	.20	.28	.84	1.4	.13	12
JUL 09...	--	9.2	85	67	.06	.01	.03	.65	.08	11
JUL 21...	.22	19	262	104	--	--	--	--	.10	11
SEP 02...	--	39	329	96	.01	.02	1.0	2.4	.11	13

08117900 Big Boggy Creek near Wadsworth, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
NOV. 13...	0925	10	1	120	0	0	0	2					
MAR. 15...	1440	30	1	90	0	0	0	2					
JULY 21...	1545	10	2	100	0	0	0	2					
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)				
NOV. 13...	10	0	6	70	.0	0	420	10					
MAR. 15...	50	0	0	100	.2	0	280	10					
JULY 21...	90	1	10	40	.1	0	360	0					
DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	
NOV. 13...	0925	.0	0	--	.00	.0	.0	0	.00	.0	.00	.0	
MAR. 15...	1440	.0	0	.00	.00	.0	.0	0	.00	.0	.00	.0	
JULY 21...	1545	.0	0	.00	.00	.0	.0	0	.00	.0	.00	.0	
DATE	TIME	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)
NOV. 13...	.00	.0	.00	.00	.0	.00	.0	.00	.00	.0	.00	.00	.0
MAR. 15...	.00	.0	.00	.00	.0	.00	.0	.00	.00	.0	.00	.00	.0
JULY 21...	.00	.0	.00	.00	.0	.00	.0	.00	.00	.0	.00	.00	.0
DATE	TIME	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOXAPHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 13...	.00	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
MAR. 15...	.00	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00
JULY 21...	.00	.0	.00	.00	.00	.00	.00	0	0	.00	.00	.00	.00

Because the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than continuous stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage of those events. The data collected for special reasons are called measurements at miscellaneous sites.

Streamflow data collected at partial-record stations where water-quality data other than observations of water temperature are not obtained are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and (or) discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low and high flows are given in a third table. Discharge measurements and water-quality data collected at partial-record stations are presented in downstream order in the section of this report entitled "Gaging-station records."

Low-flow partial-record stations

Measurements of streamflow at low-flow partial-record stations that are not published in the gaging-station section are given in the following table. Most of the measurements of low flow were made during periods when streamflow was sustained primarily by ground-water discharge. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will indicate the low-flow potential of the stream. The years listed in the column headed "Period of record" identifies the water years in which measurements were made at the same or at practically the same site.

Discharge measurements made at low-flow partial-record stations during water year 1976

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
San Jacinto River basin						
08068600	Spring Creek near Humble, Tex.	Lat 30°02'04", long 95°18'43", Montgomery-Harris County line, 600 ft upstream from confluence with Cypress Creek and about 4 miles northwest of Humble (discontinued).	435	1937, 1962, 1970-76	11-13-75 3- 3-76 6-12-76	40 35 66
08070200	East Fork San Jacinto River near New Caney, Tex.	Lat 30°08'43", long 95°07'27", Montgomery County, at bridge on Farm Road 1485 and 5.5 miles east of New Caney (discontinued).	388	1952-54, 1956-57, 1969-76	11-14-75 6-12-76	75 112
08070600	Caney Creek near New Caney, Tex.	Lat 30°08'55", long 95°11'31", Montgomery County, at bridge on Farm Road 1485 and 1.3 miles east of New Caney (discontinued).	178	1970-76	11-13-75 3- 3-76 6-12-76	42 43 52
08071100	Peach Creek near New Caney, Tex.	Lat 30°08'48", long 95°10'16", Montgomery County, at bridge on Farm Road 1485 and 2.5 miles east of New Caney (discontinued).	155	1970-76	11-14-75 6-12-76	39 42
08071200	Tarkington Bayou near Dayton, Tex.	Lat 30°11'23", long 95°00'05", Liberty County, about 1.5 miles upstream from mouth on county road and about 12 miles northwest of Dayton (discontinued).	142	1964-71, 1974-76	11-18-75 3- 5-76 8-20-76	1.6 2.4 .62
Brazos River basin						
08079530	North Fork Double Mountain Fork Brazos River above Buffalo Springs Lake near Lubbock, Tex.	Lat 33°31'33", long 101°43'38", Lubbock County, at Farm Road 835, upstream from Buffalo Springs Lake, and 7.8 miles southeast of Lubbock.	-	1952-54, 1957, 1962, 1967-76	10- 1-75 11-12-75 12-16-75 1-28-76 3- 9-76 4-20-76 6- 2-76 8-24-76	7.7 8.4 6.6 9.0 6.8 6.5 4.9 4.1
08079551	North Fork Double Mountain Fork Brazos River below Buffalo Springs Lake near Lubbock, Tex.	Lat 33°31'58", long 101°41'34", Lubbock County, at downstream end of Buffalo Springs Lake spillway and about 9 miles southeast of Lubbock.	-	1952-54, 1962-63, 1969-76	10- 1-75 11-12-75 12-16-75 1-28-76 3- 9-76 4-20-76 6- 2-76 8-24-76	11 11 7.1 8.8 14 9.2 5.6 5.1
08080900	White River below falls near Crosbyton, Tex.	Lat 33°39'57", long 101°09'35", Crosby County, at bridge on U.S. Highway 82 and 4.5 miles east of Crosbyton.	(c)	1951-76	10- 1-75 1-27-76 4-20-76 7-12-76	.61 .23 .90 2.4
08081050	Short Croton Creek at mouth near Jayton, Tex.	Lat 33°18'27", long 100°31'57", Kent County, at mouth, 0.2 mile upstream from county road crossing on Croton Creek, and 4.7 miles north-east of Jayton.	-	1959-76	12-16-75 1-28-76 4- 7-76 5-20-76 6- 9-76 7- 7-76 8- 2-76 8-24-76	0 0 0 0 0 0 0 0

c Not applicable

Discharge measurements made at low-flow partial-record stations during water year 1976--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Brazos River basin--Continued						
08110325	Navasota River above Groesbeck, Tex.	Lat 31°34'27", long 96°31'14", Limestone County, at city of Groesbeck filtration plant, 1.2 miles downstream from Springfield Lake, and 3.7 miles north of Groesbeck.	239	1975-76	10-30-75	0.80
					12-10-75	1.1
					1-21-76	.96
					3- 3-76	.86
					4-15-76	5.0
					8-18-76	.78
					9- 8-76	1.6
08110430	Big Creek near Freestone, Tex.	Lat 31°30'25", long 96°19'31", Limestone County, at downstream side of bridge on State Highway 164, 5.1 miles southwest of Freestone, and 8.2 miles upstream from Navasota River.	57.1	1975-76	10-30-75	4.7
					12-10-75	1.1
					1-21-76	2.2
					3- 3-76	2.4
					4-15-76	5.2
					8-18-76	.02
					9- 8-76	1.6
08110460	Navasota River near Marquez, Tex.	Lat 31°21'01", long 96°19'11", Robertson County, at old Jewitt McKenzie Road crossing, 0.4 mile upstream from Mine Creek, and 8.5 miles northwest of Marquez.	611	1975-76	10-30-75	19
					12-10-75	12
					1-21-76	9.8
					3- 3-76	10
					4-15-76	21
					9- 9-76	*11
08111600	Piney Creek near Bellville, Tex.	Lat 29°57'06", long 96°10'20", Austin County, at bridge on county road and about 5.1 miles east of Bellville.	30.7	1948,	1-28-76	5.0
				1955,	8-17-76	5.8
				1958,		
				1964-76		
08111650	West Fork Mill Creek near Industry, Tex.	Lat 29°58'55", long 96°30'00", Austin County, at bridge on Farm Road 109 and 0.6 mile north of Industry.	75.3	1964-76	1-28-76	5.4
					8-18-76	.23

* Measurement made 3.4 miles downstream. Backwater at Jewitt McKenzie Road crossing.

Crest-stage partial-record stations

The following table contains annual maximum stage and (or) discharge at partial-record stations operated primarily for the purpose of defining the flooding characteristics of the streams. At stations where discharge is given, or is footnoted "to be determined", a stage-discharge relation has been, or will be, defined by discharge measurements obtained by current meter or by indirect procedures. Water-stage recorders are located at these flood-hydrograph stations to facilitate complete hydrograph definition. At stations where only the maximum stage is given (discharge column is dashed), data are generally collected for use in stage-frequency studies or flood-profile definition. Gages at these stations usually consist of a device that will register the peak stage occurring between inspections of the gage. The years used in the column "Period of record" identify the years in which the annual maximum has been determined.

Annual maximum stage and (or) discharge during water year 1976

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
San Jacinto River basin							
0806438	Swale No. 8 at Woodlands, Tex.	Lat 30°08'38", long 95°28'09", Montgomery County, on upstream side of upstream bridge on Grogan's Mill Road at Woodlands (discontinued).	0.55	1975-76	5- 7-76	31.70	53
08072400	Buffalo Bayou near Clodine, Tex.	Lat 29°43'06", long 95°43'53", Fort Bend County, on private road to Cinco Ranch, 2.8 miles west of Clodine, and 9.0 miles upstream from Barker Reservoir discharge structure.	89.2	1974-76	6- 1-76	95.27	1,150
08072700	South Mayde Creek near Addicks, Tex.	Lat 29°48'03", long 95°41'33", Harris County, at bridge on Groeschke Road, 3.2 miles west of Addicks, and 4.6 miles upstream from Langham Creek.	34.9	1974-76	6- 1-76	105.82	469
08072800	Langham Creek near Addicks, Tex.	Lat 29°50'08", long 95°37'32", Harris County, at bridge on Clay Road, 3.6 miles north of Addicks, and 4.4 miles upstream from mouth.	45.1	1974-76	6- 2-76	100.75	810
08074200	Brickhouse Gully at Clarblak Street, Houston, Tex.	Lat 29°49'53", long 95°31'42", Harris County, at bridge on Clarblak Street in northwest Houston.	2.16	1965-76	6- 1-76	92.92	240
08074750	Brays Bayou at Addicks-Clodine Road near Houston, Tex.	Lat 29°43'11", long 95°39'37", Harris County, at culvert on Addicks-Clodine Road, about 1 mile west of State Highway 6, and about 19 miles west of downtown Houston.	.87	1975-76	6-15-76	3.38	20
08074780	Keegans Bayou at Keegan Road near Houston, Tex.	Lat 29°39'55", long 95°35'42", Harris County, at bridge on Keegan Road and about 16 miles southwest of Houston.	6.93	1965-71, 1975-76	6- 1-76	78.46	485
08074850	Bintliff Ditch at Bissonnet Street, Houston, Tex.	Lat 29°41'16", long 95°30'20", Harris County, at bridge on Bissonnet Street in southwest Houston.	4.38	1968-76	6-15-76	63.19	1,170
08075550	Berry Bayou at Gilphin Street, Houston, Tex.	Lat 29°38'32", long 95°13'22", Harris County, at bridge on Gilpin Street in southeast Houston.	3.28	1965-76	6-16-76	34.80	332
08075780	Greens Bayou at Cutten Road near Houston, Tex.	Lat 29°56'56", long 95°31'10", Harris County, at bridge on Cutten Road and about 16.5 miles northwest of Houston.	8.06	1965-76	9- 2-76	117.48	223
08076200	Halls Bayou at Deertrail Street near Houston, Tex.	Lat 29°54'07", long 95°25'21", Harris County, at bridge on Deertrail Street, 0.6 mile west of U.S. Highway 75, and about 11 miles northwest of Houston.	6.54	1965-76	9-20-76	p86.07	905
Clear Creek basin							
08077100	Clear Creek tributary at Hall Road, Houston, Tex.	Lat 29°36'09", long 95°16'41", Harris County, at bridge on Hall Road in south Houston.	1.31	1965-76	7- 2-76	p45.18	170
08077600	Clear Creek near Friendswood, Tex.	Lat 29°31'02", long 95°10'42", Galveston County, at bridge on Farm Road 528 and 1.5 miles southeast of Friendswood.	-	1966-76	6-17-76	12.75	-
Highland Bayou basin							
08077780	Highland Bayou near Texas City, Tex.	Lat 29°19'54", long 94°56'42", Galveston County, at bridge on State Highway 6, 0.4 mile southwest of U.S. Highway 75, 1.5 miles from mouth, and about 3 miles southwest of Texas City.	-	1974-76	3-27-75 4-17-76	e2.76 2.88	-

e Revised.

p Occurred at different time than peak discharge.

Annual maximum stage and (or) discharge during water year 1976--Continued

Annual maximum stage and (or) discharge during water year 1976--continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Elevation (feet)	Discharge (cfs)
Brazos River basin							
08093370	Aquilla Creek below Farm Road 310 near Aquilla, Tex.	Lat 31°53'22", long 97°12'04", Hill County, on left bank 0.8 mile downstream from Farm Road 310, 2.8 miles upstream from Cobb Creek, 2.9 miles northeast of Aquilla, and 4.0 miles upstream from gaging station Aquilla Creek near Aquilla at Farm Road 1304 (08093500).	-	1976	7- 4-76	502.51	-
08093530	Aquilla Creek at abandoned Missouri-Kansas-Texas Railroad bridge near Aquilla, Tex.	Lat 31°48'59", long 97°11'35", Hill County, on right bank at downstream side of abandoned Missouri-Kansas-Texas Railroad bridge, 0.8 mile downstream from Alligator Creek, 2.5 miles downstream from gaging station Aquilla Creek near Aquilla at Farm Road 1304 (08093500), 2.5 miles upstream from Farm Road 2114, and 2.8 miles southeast of Aquilla.	-	1976	7- 4-76	467.47	-
08093540	Aquilla Creek at Farm Road 2114 near Aquilla, Tex.	Lat 31°47'23", long 97°11'13", McLennan County, on right bank at downstream side of bridge on Farm Road 2114, 2.1 miles upstream from Snake Creek, 3.3 miles downstream from Alligator Creek, and 4.6 miles southeast of Aquilla.	-	1976	7- 4-76	453.46	-
08093560	Aquilla Creek at Farm Road 1858 near Ross, Tex.	Lat 31°43'33", long 97°12'39", McLennan County, on right bank at downstream side of bridge on Farm Road 1858, 0.9 mile downstream from Patten Branch, 1.6 miles upstream from Dry Creek, 3.4 miles west of Ross, and 4.4 miles upstream from Farm Road 933.	-	1976	7- 4-76	423.59	-
08093580	Aquilla Creek at Farm Road 933 near Ross, Tex.	Lat 31°41'06", long 97°11'02", McLennan County, on left bank at downstream side of bridge on Farm Road 933, 1.5 miles downstream from Elm Creek, 2.5 miles southwest of Ross, 2.6 miles upstream from mouth (Brazos River), and 2.8 miles downstream from Dry Creek.	-	1976	7- 4-76	393.50	-

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table:

Discharge measurements made at miscellaneous sites during water year 1976						
Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
San Jacinto River basin						
Sims Bayou	Buffalo Bayou	Lat 29°38'42", long 95°20'13", Harris County, at bridge on South Park Blvd. in south Houston, Tex.	-	-	6-16-76 6-16-76 6-17-76	6,760 4,640 545
Garners Bayou	Greens Bayou	Lat 29°56'02", long 95°14'02", Harris County, at bridge on North Belt Drive-Lockwood Road, about 1.3 miles above mouth, and 4.5 miles southeast of Humble, Tex.	-	-	9-21-76	1,170
Greens Bayou	Buffalo Bayou	Lat 29°53'30", long 95°14'17", Harris County, at bridge on Lake Houston Parkway and about 11 miles northeast of Houston, Tex.	-	1963, 1971-75	12-16-75 1-21-76 3- 1-76	14 24 17
Halls Bayou	Greens Bayou	Lat 29°50'52", long 95°15'42", Harris County, at bridge on East Houston Road at Houston, Tex.	-	1963, 1971-75	12-16-75 1-21-76 3- 1-76	23 21 16
Chocolate Bayou basin						
Chocolate Bayou Company's Canal	Chocolate Bayou (Diversion)	Lat 29°19'08", long 95°16'11", Brazoria County, 300 ft below pumps, 3,400 ft southeast of crossing with Farm Road 2917, and 8.0 miles south of Alvin, Tex.	-	1975	10-29-75	96
Brazos River basin						
Brazos River	Gulf of Mexico	Lat 32°51'52", long 98°25'02", Palo Pinto County, 4,000 ft downstream from Possum Kingdom Dam and 9.5 miles northwest of Palo Pinto, Tex.	-	1971-72 1974	2-10-76 3- 4-76 3-23-76	26.8 22.0 14.8
Chocolate Bayou Company's Canal	Brazos River (Diversion)	Lat 29°27'07", long 95°29'30", Fort Bend County, at concrete flume over Oyster Creek, 1 mile west of Juliff, Tex., and 2.5 miles below pumps.	-	1939, 1948-49, 1951-52, 1956, 1958, 1963-75	10- 8-75 4- 8-76 4-22-76 5- 3-76 6-15-76 6-29-76 7-27-76 8- 4-76 9- 2-76	79 281 353 87 620 573 233 199 127

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FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	*hectares (ha)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	**liters (l)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons (10 ⁶ gal)	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days [(ft ³ /s) · d]	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (l/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (l/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day (mgal/d)	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit liter is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

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