1972

Water Resources Data for Texas

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

CALENDAR FOR WATER YEAR 1972

OCTOBER 1971

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Water Resources Data for Texas

Part 1. Surface Water Records

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

Prepared in cooperation with

Texas Water Development Board
Pecos River Commission
Sabine River Compact Administration
City of Fort Worth
City of Dallas
City of Houston
County of Dallas
Texas Highway Department and Bureau of Public Roads
Corps of Engineers, U.S. Army
U.S. Soil Conservation Service
Bureau of Sport Fisheries and Wildlife

Water resources records, 1972, for Texas are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Texas
   Part 1: Surface Water Records

2. Water Resources Data for Texas
   Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Federal Building
300 East 8th Street
Austin, Texas 78701

1973

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WATER RESOURCES DATA FOR TEXAS, 1972

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1972 water year for Texas, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of I. D. Yost, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Texas.

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

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 also are published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65." There will be a similar series of water-supply papers for the period 1966-70.

COOPERATION

The first gaging station in Texas was established on the Rio Grande at El Paso, May 10, 1889, and a few miscellaneous measurements of Central Texas streams were made in 1894, 1895, and 1896. In 1897, Thomas U. Taylor, then Professor of Civil Engineering at the University of Texas, began a systematic study of a few of the principal streams of Texas for the Geological Survey. In 1915, the first cooperative agreement was entered into between the Texas Board of Water Engineers, now, in part, the Texas Water Development Board, and the U.S. Geological Survey for stream-measurement work in Texas.

Organizations that assisted in the collection of data through cooperative agreements with the Geological Survey in 1972 are:

Texas Water Development Board, Harry P. Burleigh, Executive Director; W. E. Tinsley, Chairman; Marvin Shurbet, Vice-Chairman; R. B. Gilmore, John H. McCoy, Milton T. Potts, and Carl Illig, Members.

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

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

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

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

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

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

Texas Highway Department, B. L. DeBarry, State Highway Engineer.

Assistance in the form of funds or services was furnished by the following Federal Agencies:

Corps of Engineers, U.S. Army, in the operation of 133 gaging stations.

Soil Conservation Service, Department of Agriculture, in the operation of 14 gaging stations, 57 water-budget reservoir sites, and 2 rain-gage networks.

Bureau of Sport Fisheries and Wildlife, in the operation of 3 gaging stations.

Acknowledgment is due the National Oceanic and Atmospheric Administration, National Weather Service, for assistance in collecting certain records published herein.

Assistance in the form of funds or services was rendered by the following organizations:

The cities of Abilene, Alice, Arlington, Austin, Brady, Breckenridge, Cleburne, Clyde, Corpus Christi, Dallas, El Paso, Fort Worth, Gainesville, Graham, Houston, Lampasas, San Angelo, and Wichita Falls; Athens Municipal Water Authority; Bistone Municipal Water Supply District; Brazos River Authority; Bexar, Medina, and Atascosa Counties Water Control and Improvement District No. 1; City Public Service Board of San Antonio; Colorado River Municipal Water District; Dallas County; Dallas Power and Light Company; Dow Chemical Company; Edwards Underground 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; Lower Colorado River Authority; Lower Neches Valley Authority; Palo Pinto 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 River Authority; San Antonio City Water Board; San Jacinto River Authority; South Texas Water Company; Tarrant County Water Control and Improvement District No. 1; Texas Electric Service Company; Texas Water Quality Board; Trinity River Authority of Texas; 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.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

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

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

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

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

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

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

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

The 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 river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.HT.) 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 gage height or discharge are obtained. The term "stream-gaging station" is applied to those sites where a continuous record of discharge is computed.

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

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

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

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

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

SPECIAL NETWORKS AND PROGRAMS

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

DOWNSTREAM ORDER AND STATION NUMBERS

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

As an added means of identification, each gaging station 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 continuous-record gaging stations; therefore, the station number for a partial-record station indicates the downstream order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 08096500, includes the part number "08" followed by a 6-digit station number. In this report, the complete number 08096500 appears just to the left of the station name and the records are presented in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State report by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.) Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), and velocity-area studies. The application of the daily mean

gage heights to the rating table gives the daily mean discharge, from which the monthly and yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements. The application of the stage to the capacity table gives the contents from which the daily, monthly, or yearly change in contents is 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.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, 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. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals, a table showing the daily discharge and/or monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the 1972 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

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

of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations 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 of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

Skeleton rating tables are published for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

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

The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. For some reservoirs the elevation at a given time is given in the daily table.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures of 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 rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month. If elevation or gage height is given in the daily table, the monthly summary gives the contents at the end of the month, rather than the elevation or gage height.

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

For reservoir stations the yearly summary gives the change in contents and the maximum and minimum daily content for the calendar year and for the water year.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average

of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE", certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month of more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. 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. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

Accuracy of Data

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

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

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs (except for those months with 10,000 or more cfs-days where computer processing procedures limit printed daily values to tenths of a 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.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. 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 unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

Water-supply papers and other publications of the Geological Survey containing data on the water resources of the United States may be purchased or consulted as follows:

1. Copies may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, who will, on application, furnish lists giving prices. A list of Geological Survey publications may also be obtained by applying to the Director, U.S. Geological Survey, Washington, D. C. 20242.

2. Sets of the reports may be consulted in the libraries of principal cities (and many universities).

3. Sets are available for consultation in the District Office of the Geological Survey at Austin, Texas.

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

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

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

Other Data Available

Data collected at partial-record stations and miscellaneous sites are given at the end of this report. Data for partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements at miscellaneous sites are given in the third table.

Special studies of the low-flow characteristics of a stream or a reach of a stream are presented following measurements at miscellaneous sites. A series of discharge measurements is made to determine gains or losses of base flow, and water samples are analyzed to determine changes in the chemical constituents of the water. Whenever possible, changes in amounts of flow and in chemical content of the water are referred to geologic formations encountered in the reach investigated.

Information of a more detailed nature than that published for most of the gaging stations is on file in the district office, such as discharge measurements and recorder charts or nonrecording-gage readings. At a number of gaging stations data are collected for use in the analyses of rainfall-runoff relationships. Many gaging-stations records in the State through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

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 by request to the office of the United States Section, P. O. Box 1859, El Paso, Texas 79950.

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 averages 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, and annual runoff averages less than 0.1 inch in many areas.

During the 1972 water year, annual runoff over the State was deficient in the east and west, near average in the north and central, and excessive in the south. Figure 1 on page 17 shows a comparison of monthly and annual mean discharges for four index stations in different parts of the State. Conservation storage in a selected group of 57 major reservoirs (combined conservation capacity, 25,993,500 acre-feet) showed no change during the 1972 water year; however, the volume of stored water increased from 78 percent of conversation capacity in September 1971, to 86 percent in December, then gradually decreased to 78 percent at the end of September 1972.

At the beginning of the water year, streamflow was excessive in a north-south band through the middle of the State with the eastern and western parts of the State near normal. This condition continued into December when unusual flooding occurred in northeast Texas. Excessive rains in the Sulphur River basin in December caused record-breaking floods on many streams. The Sulphur River near Talco had a peak stage of 29.40 feet, and a discharge of 77,000 cfs (recurrence interval, 50 years); the South Sulphur River near Cooper had a peak stage of 26.15 feet, and a discharge of 42,500 cfs (recurrence interval, 100 years); and Whiteoak Creek near Talco had a peak stage of 21.2 feet with a discharge of 48,000 (recurrence interval, 60 years).

The areas of excessive flow decreased in January and February 1972 to a small area in south Texas along the Gulf Coast. During March and April, streamflow was deficient in east and west Texas with normal flow elsewhere. During March, flash flooding occurred in Houston when over 8 inches of rain fell, with recorded maximum intensities of 6 inches occurring in a 2-hour period. Peak discharges with recurrence intervals of up to 50 years were recorded on several small streams within the city of Houston.

During May, flash floods occurred again at Houston and in south-central Texas. On May 11, rains of up to 12 inches fell in a 2- to 3-hour period in an area between San Antonio and San Marcos, with the storm center near New Braunfels. The Comal River at New Braunfels crested at 36.55 feet, which is the highest stage during the last 100 years. The Guadalupe River at New Braunfels reached a stage of 31.65 feet, the highest stage since 1935. As a result of this storm at least 17 people drowned with property losses in the millions of dollars. This was an unusual storm in the sense that beginning June 16, 1964, all but 86 square miles above the Guadalupe River at New Braunfels station was completely controlled by Canyon Dam. As a result, all of the runoff that occurred as a result of this storm originated below Canyon Dam.

Streamflow during June and July returned to near normal with one large area of deficient streamflow in northeast Texas during June.

In August, heavy rainstorms occurred near El Paso and in the upper Colorado River basin in Scurry County. As a result of these storms, one person drowned near Snyder (Scurry County) when Deep Creek flooded part of the town. Rainfalls of up to 13 inches were measured in several areas near Snyder. In El Paso, rainfall in excess of 6 inches fell (normal for the year is about 8 inches) causing the Rio Grande to flow bank full on August 26th.

During September streamflow was above normal in south Texas, deficient in the northeast part of the State, and near normal elsewhere in the State.

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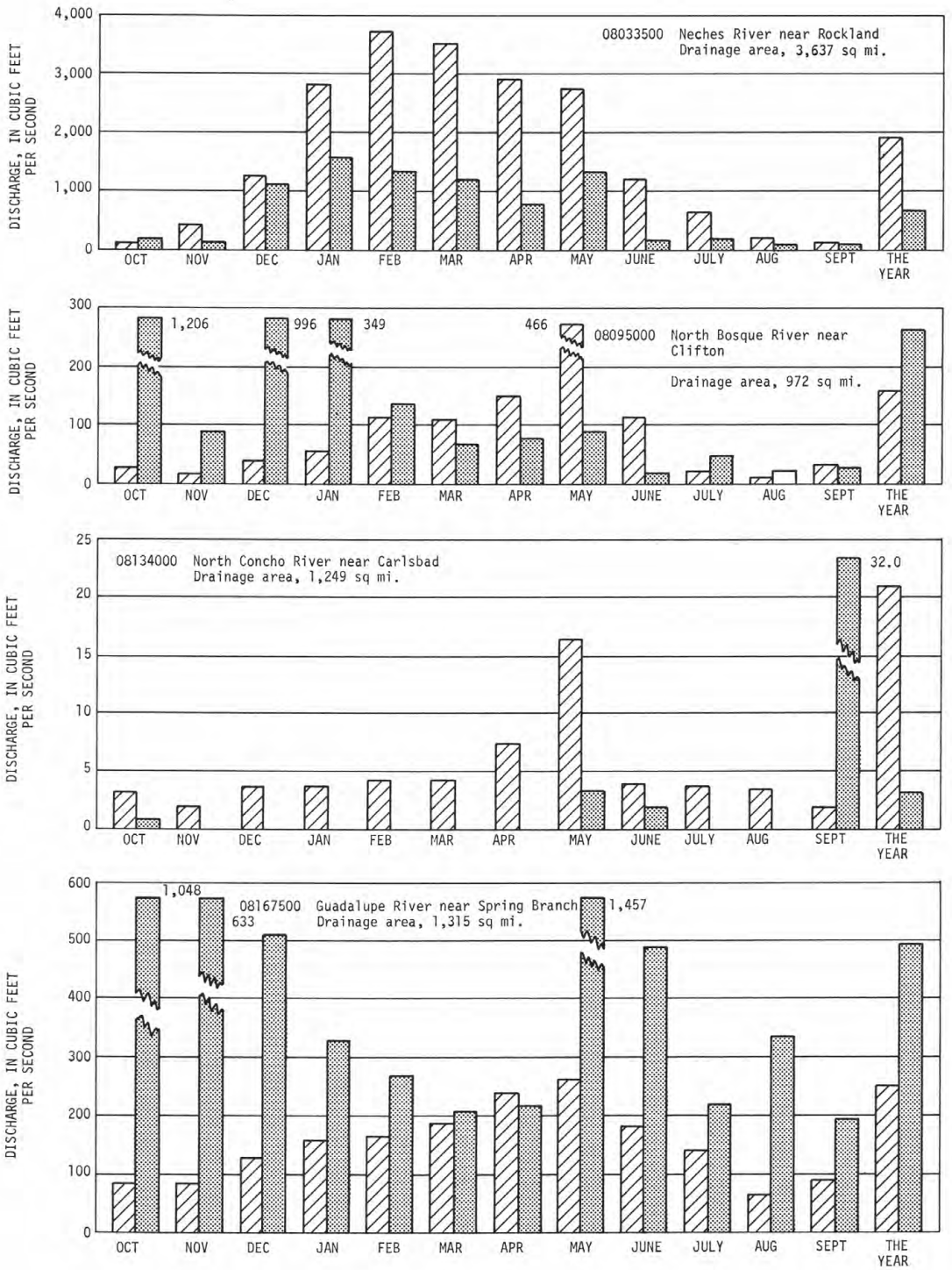

FIGURE 1.--COMPARISON OF DISCHARGE AT FOUR LONG-TERM REPRESENTATIVE GAGING STATIONS DURING THE 1972 WATER YEAR WITH MEDIAN DISCHARGE FOR THE PERIOD 1931-60.

07227200 Tramperos Creek near Stead, N. Mex.

LOCATION.--Lat 36°04'15", long 103°12'10", in NW¼NW¼ sec. 10. T.21 N., R. 35 E., Union County, at downstream end of bridge pier on State Highway 18, 2.1 miles south of Stead, and 26 miles south of Clayton.

DRAINAGE AREA.--556 sq mi, approximately.

PERIOD OF RECORD.--October 1964 to May 1966 (annual maximum only), June 1966 to current year. Prior to October 1966, published as Major Longs Creek near Stead.

GAGE.--Water-stage recorder. Datum of gage is 4,481.19 ft above mean sea level. Prior to Feb. 6, 1969, at site 90 ft upstream at datum 1.61 ft lower.

AVERAGE DISCHARGE.--6 years, 4.99 cfs (3,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,190 cfs July 17 (gage height, 12.75 ft), from rating curve extended above 14 cfs on basis of slope-area measurements at gage heights 12.4 and 14.9 ft; no flow most of time.
Period of record: Maximum discharge, 12,300 cfs Oct. 17, 1965 (gage height, 14.9 ft, from floodmark, present datum), by slope-area measurement; no flow most of time.
A flood in 1904 reached a stage of about 27.4 ft (discharge, about 45,500 cfs) with only a single span bridge, and a flood in 1937 reached a stage of about 20.4 ft (discharge, about 31,600 cfs), from information by State Highway Department.

REMARKS.--Records poor. Minor regulation by detention reservoirs and stock ponds.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0		0	42	1.3
2								0		0	47	1.6
3								0		0	26	1.1
4								0		0	20	.80
5								0		0	21	.40
6								0		0	16	.27
7								0		0	12	.07
8								0		0	4.6	.07
9								0		0	1.7	33
10								1.1		0	1.3	84
11								26		0	.90	29
12								2.7		0	.90	20
13								.05		0	.70	12
14								0		0	.53	50
15								0		0	.40	48
16								0		2.0	.11	29
17								0		1,200	.27	26
18								0		128	.11	28
19								0		66	.07	28
20								0		40	.04	38
21								0		95	0	38
22								0		212	0	22
23								0		158	0	14
24								0		89	0	12
25								0		61	0	9.4
26								0		46	0	6.7
27								0		41	.32	5.1
28								.03		37	5.1	5.9
29								7.6		35	2.4	2.5
30					------			0		35	1.4	1.7
31		------			------		------	0	------	32	1.3	------
TOTAL	0	0	0	0	0	0	0	37.48	0	2,277.0	206.15	547.91
MEAN	0	0	0	0	0	0	0	1.21	0	73.5	6.65	18.3
MAX	0	0	0	0	0	0	0	26	0	1,200	47	84
MIN	0	0	0	0	0	0	0	0	0	0	0	.07
AC-FT	0	0	0	0	0	0	0	74	0	4,520	409	1,090

CAL YR 1971 TOTAL 1,011.17 MEAN 2.77 MAX 462 MIN 0 AC-FT 2,010
WTR YR 1972 TOTAL 3,068.54 MEAN 8.38 MAX 1,200 MIN 0 AC-FT 6,090

PEAK DISCHARGE (BASE, 1,200 CFS).--July 17 (0500) 7,190 cfs (12.75 ft).

07227448 Punta de Agua Creek near Channing, Tex.

LOCATION.--Lat 35°40'03", long 102°28'48", Hartley County, on left bank at downstream side of bridge on Farm Road 767, 8.5 miles west of Channing, and 10.3 miles upstream from mouth.

DRAINAGE AREA.--3,568 sq mi, of which 2,068 sq mi is probably noncontributing.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,390.87 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 17.7 cfs (12,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,200 cfs Aug. 28 (gage height, 6.00 ft); no flow for many days.
Period of record: Maximum discharge, 24,200 cfs Aug. 28, 1972 (gage height, 6.00 ft); no flow for many days each year.

REMARKS.--Records poor. Flow is partly regulated by Lake Rita Blanca on Rita Blanca Creek (capacity, 12,100 acre-ft) 23 miles upstream. Small diversions from Lake Rita Blanca.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	9.4	2.4	.83	.30	1.0	.19	0	2.4	0	3.5	61
2	0	5.5	.99	.62	.04	.62	.19	0	1.4	0	.97	36
3	0	3.5	1.3	.47	0	.83	.19	0	0	0	.46	29
4	0	2.0	20	.20	.10	.58	.19	0	0	0	.15	18
5	0	.63	25	.10	.18	.26	.16	0	0	0	0	7.9
6	0	.15	8.6	.98	.34	.26	.14	0	0	0	0	6.1
7	0	.15	7.0	15	.44	.43	.16	0	0	114	0	3.6
8	0	.01	1.6	22	.49	.22	.10	0	0	23	0	2.4
9	0	.01	1.8	21	.65	.23	.07	0	0	7.8	0	8.5
10	0	0	8.6	11	.45	.43	0	0	0	.8	0	4.3
11	0	0	10	10	.20	.62	0	504	0	46	0	2.0
12	0	0	1.8	.79	.50	.26	0	191	0	1.6	0	33
13	0	0	2.0	.07	.70	.22	0	92	2.0	0	0	10
14	0	0	1.8	0	1.5	.22	0	39	0	0	0	34
15	0	.01	2.7	0	2.9	.22	0	32	.63	0	0	9.4
16	0	535	2.7	0	3.7	.19	0	25	0	0	0	6.6
17	0	35	1.8	.60	4.7	.22	0	16	10	480	0	4.7
18	0	96	1.1	.25	4.2	.19	0	11	24	4,190	0	4.4
19	14	53	.93	.10	3.7	.14	0	9.4	1.1	1,910	0	.46
20	8.0	23	.82	.40	2.9	.12	0	4.5	0	914	.63	4.5
21	4.0	32	.72	.79	2.6	.10	0	3.5	0	4,190	0	3.1
22	1.5	42	.61	.99	2.4	.16	0	.15	0	4,980	0	.46
23	0	27	.47	.60	2.6	.16	0	0	0	1,890	0	.46
24	0	21	1.6	.40	2.4	.16	0	0	1.1	382	0	.30
25	0	21	1.6	.08	2.0	.12	0	0	0	62	0	0
26	6.0	20	.98	.24	1.8	.12	0	0	0	24	0	0
27	5.0	16	.98	.20	2.0	.10	0	0	0	6.5	1.6	0
28	1.0	2.4	1.3	.53	1.6	.12	0	2.3	0	3.8	5,680	0
29	.50	2.0	1.3	.28	1.6	.14	0	330	0	.8	739	0
30	27	2.4	1.2	.39	------	.16	0	15	0	0	65	0
31	.63	------	1.0	.34	------	.16	------	7.0	------	0	33	------
TOTAL	67.63	949.16	114.70	89.25	46.99	8.76	1.39	1,281.85	42.63	19,226.3	6,524.31	290.18
MEAN	2.18	31.6	3.70	2.88	1.62	.28	.046	41.4	1.42	620	210	9.67
MAX	27	535	25	22	4.7	1.0	.19	504	24	4,980	5,680	61
MIN	0	0	.47	0	0	.10	0	0	0	0	0	0
AC-FT	134	1,880	228	177	93	17	2.8	2,540	85	38,140	12,940	576

CAL YR 1971 TOTAL 2,304.83 MEAN 6.31 MAX 535 MIN 0 AC-FT 4,570
WTR YR 1972 TOTAL 28,643.15 MEAN 78.3 MAX 5,680 MIN 0 AC-FT 56,810

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-15	0400	5.17	3,160	7-21	0500	5.85	20,300
5-11	1300	5.00	2,000	8-28	1800	6.00	24,200
7-18	0500	5.80	13,400				

NOTE.--River flows in two channels for which separate records are computed; figures given herein represent combined discharge, and gage heights shown are those for recording gage on left channel.

07227470 Canadian River at Tascosa, Tex.

LOCATION.--Lat 35°31'10", long 102°15'30", Oldham County, on right bank at downstream side of bridge on U.S. Highway 385, 0.8 mile northwest of Tascosa, and 1.0 mile southwest of Boys Ranch.

DRAINAGE AREA.--18,536 sq mi, of which approximately 3,823 sq mi is noncontributing.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,169.25 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 19,100 cfs July 20 (gage height, 8.14 ft), from rating curve extended above 12,000 cfs; no flow at times.
Period of record: Maximum discharge, 27,500 cfs July 27, 1971 (gage height, 8.50 ft), from rating curve extended above 12,000 cfs; no flow at times.
Maximum stage probably occurred October 1904; other major floods occurred in May 1914, October 1937, and July 1941, from information by local residents.

REMARKS.--Records poor. Some regulation by Conchas and Ute Reservoirs in New Mexico (combined capacity, 462,200 acre-ft). Conchas and Bell Ranch Canals divert from Conchas Reservoir for irrigation of about 36,000 acres in New Mexico. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	127	25	43	25	5.8	2.6	0	3.4	2.4	291	3,080
2	104	150	22	44	18	6.4	1.9	0	0	2.6	482	1,530
3	52	98	20	33	9.0	6.5	1.3	0	0	271	321	1,040
4	48	30	20	10	11	5.8	1.2	0	0	94	395	901
5	42	19	30	10	15	5.8	1.1	0	0	19	295	857
6	40	16	40	20	32	5.7	.93	.07	0	163	300	771
7	40	15	62	30	28	4.6	.09	0	0	361	294	721
8	38	15	68	63	30	4.2	.07	0	0	203	275	969
9	25	14	59	79	30	4.8	0	0	0	88	259	1,860
10	23	14	57	75	22	4.9	0	0	0	21	235	5,320
11	22	14	47	76	22	4.4	0	0	0	113	318	3,480
12	20	14	39	53	37	4.0	0	1,820	0	20	477	3,330
13	32	14	37	37	33	4.6	0	461	0	3.9	292	1,740
14	30	13	39	20	26	4.1	0	202	6.9	.9	120	1,190
15	28	74	39	10	23	3.0	0	31	160	3.9	46	1,220
16	26	3,250	35	20	20	3.2	0	11	33	2.5	26	1,260
17	25	2,680	33	31	19	3.9	0	2.6	916	133	14	436
18	28	474	31	39	19	3.7	0	.10	1,310	700	141	468
19	55	214	34	39	16	2.7	0	0	190	221	100	442
20	114	127	34	46	14	1.7	0	0	85	5,160	513	1,190
21	65	114	32	48	8.9	2.6	0	0	31	10,900	77	529
22	79	145	29	45	9.4	2.0	0	0	12	3,750	31	1,160
23	82	118	26	37	10	2.8	0	0	6.3	1,400	27	361
24	38	104	29	26	9.4	3.3	0	0	21	1,910	88	290
25	28	86	32	22	8.9	2.8	0	0	0	1,000	210	347
26	23	60	31	19	8.9	.65	0	0	0	548	368	432
27	22	45	29	15	9.4	.08	0	0	0	487	449	478
28	15	33	30	20	8.9	.09	0	0	0	422	5,560	543
29	25	28	35	32	7.2	.54	0	242	16	385	14,900	555
30	500	28	38	20	------	1.3	0	150	3.7	328	6,680	580
31	96	------	40	23	------	2.6	------	26	------	296	8,070	------
TOTAL	1,921	8,133	1,122	1,085	530.0	108.56	9.19	2,945.77	2,794.3	29,009.2	41,654	37,080
MEAN	62.0	271	36.2	35.0	18.3	3.50	.31	95.0	93.1	936	1,344	1,236
MAX	500	3,250	68	79	37	6.5	2.6	1,820	1,310	10,900	14,900	5,320
MIN	15	13	20	10	7.2	.08	0	0	0	.90	14	290
AC-FT	3,810	16,130	2,230	2,150	1,050	215	18	5,840	5,540	57,540	82,620	73,550

CAL YR 1971 TOTAL 84,206.39 MEAN 231 MAX 4,320 MIN 0 AC-FT 167,000
WTR YR 1972 TOTAL 126,392.02 MEAN 345 MAX 14,900 MIN 0 AC-FT 250,700

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-16	2300	7.80	15,800	8-28	2300	8.00	17,800
7-20	1500	8.14	19,100	8-31	2400	7.80	15,800

07227500 Canadian River near Amarillo, Tex.

LOCATION.--Lat 35°28'13", long 101°52'45", Potter County, near left bank on downstream side of pier of bridge on U.S. Highways 87 and 287, 1,500 ft downstream from Pitcher Creek, 1.4 miles downstream from East Amarillo Creek, 1.7 miles downstream from Panhandle and Santa Fe Railway Co. bridge, 19 miles north of Amarillo, and at mile 537.7.

DRAINAGE AREA.--19,445 sq mi, of which 4,069 sq mi is probably noncontributing.

PERIOD OF RECORD.--January 1924 to December 1925, January 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,989.16 ft above mean sea level. Jan. 16, 1924, to Dec. 31, 1925, and Apr. 3 to June 1, 1938, nonrecording gage at site of old bridge 20 ft upstream at same datum. June 2 to Dec. 5, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years, 385 cfs (278,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 23,500 cfs Nov. 17 (gage height, 8.40 ft); minimum daily, 0.43 cfs May 20, 21.
Period of record: Maximum discharge, 135,000 cfs July 25, 1941 (gage height, 15.7 ft), from rating curve extended above 100,000 cfs; no flow at times January 1924 to December 1925, Aug. 7, 8, 1940.
Flood in May 1914 reached a stage of 24 ft; a higher stage probably occurred during flood in October 1904, from information by local resident.

REMARKS.--Records poor. Extreme low flow is maintained by sewage effluent from Amarillo sewage disposal plant. During the year, the city of Amarillo reported that 6,290 acre-ft of sewage effluent was discharged into East Amarillo Creek (tributary to Canadian River). Some regulation by Conchas and Ute Reservoirs in New Mexico (combined capacity, 462,200 acre-ft). Conchas Canal and Bell Ranch Canal divert from Conchas Reservoir for irrigation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	549	17	50	53	17	17	11	20	60	286	1,540
2	56	241	70	44	27	17	14	14	7.4	33	291	1,010
3	42	152	109	30	30	19	7.8	16	6.6	52	484	1,060
4	29	108	138	15	25	18	12	15	4.6	108	404	876
5	23	65	156	15	30	18	11	132	3.1	65	408	763
6	23	45	99	20	25	17	11	93	5.8	45	351	719
7	21	45	81	30	20	17	8.1	16	1.4	155	326	706
8	20	33	59	70	25	18	7.0	17	3.5	247	314	1,170
9	18	33	62	103	35	18	11	17	3.5	138	540	1,460
10	16	42	86	92	41	17	7.6	254	178	67	326	3,620
11	15	38	86	103	50	7.4	7.2	1,220	257	50	284	2,100
12	15	25	87	104	53	7.4	6.1	280	49	59	501	1,580
13	15	25	83	103	61	8.3	8.1	197	39	51	505	1,390
14	15	21	85	85	61	10	13	83	41	41	308	1,630
15	14	20	79	80	49	8.3	10	42	198	37	175	1,020
16	12	2,430	64	80	47	10	9.6	15	89	32	89	1,710
17	12	6,320	46	74	39	23	27	7.4	573	29	52	1,200
18	31	198	50	68	32	29	26	3.5	1,400	1,280	33	696
19	40	106	49	84	25	12	6.8	2.3	199	1,030	146	470
20	248	113	49	85	25	8.1	3.1	.43	82	1,980	363	709
21	120	130	59	87	26	5.2	8.5	.43	118	8,940	373	644
22	83	92	53	81	23	5.8	6.6	.73	344	9,800	791	970
23	89	89	52	76	22	22	5.8	1.9	81	4,110	592	811
24	83	55	42	59	23	20	3.7	1.1	125	3,940	124	536
25	59	46	47	54	25	17	11	1.4	36	2,500	134	385
26	100	42	40	55	24	13	5.8	3.1	11	1,680	260	352
27	104	31	37	42	22	3.7	10	4.6	6.1	1,350	307	449
28	44	27	35	40	18	8.6	15	85	5.4	1,150	1,940	485
29	19	21	46	40	19	15	16	59	359	922	12,300	503
30	240	21	42	50	------	8.7	21	77	184	671	4,610	507
31	491	------	42	53	------	14	------	66	------	436	751	------
TOTAL	2,187	11,163	2,050	1,972	955	432.5	326.8	2,735.89	4,430.4	41,058	28,368	31,071
MEAN	70.5	372	66.1	63.6	32.9	14.0	10.9	88.3	148	1,324	915	1,036
MAX	491	6,320	156	104	61	29	27	1,220	1,400	9,800	12,300	3,620
MIN	12	20	17	15	18	3.7	3.1	.43	1.4	29	33	352
AC-FT	4,340	22,140	4,070	3,910	1,890	858	648	5,430	8,790	81,440	56,270	61,630

CAL YR 1971 TOTAL 83,559.74 MEAN 229 MAX 6,320 MIN .16 AC-FT 165,700
WTR YR 1972 TOTAL 126,749.59 MEAN 346 MAX 12,300 MIN .43 AC-FT 251,400

PEAK DISCHARGE (BASE, 14,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
11-17	0330	8.40	23,500
7-21	1700	7.78	20,000
8-29	1900	6.37	16,000

07227900 Lake Meredith near Sanford, Tex.

LOCATION.--Lat 35°42'38", long 101°33'03", Hutchinson County, in outlet tower near right end of dam on Canadian River, 1.2 miles northwest of Sanford, and at mile 508.5.

DRAINAGE AREA.--20,220 sq mi, of which 4,172 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Aug. 16, 1965, nonrecording gage read daily at same site and datum.

EXTREMES.--Current year: Maximum contents, 543,000 acre-ft Sept. 24, 25 (elevation, 2,914.67 ft); minimum, 411,500 acre-ft Oct. 19 (elevation, 2,903.61 ft).
Period of record: Maximum contents, 543,000 acre-ft Sept. 24, 25, 1972 (elevation, 2,914.67 ft); minimum since first appreciable storage, 219,900 acre-ft Apr. 10, 11, 1967 (elevation, 2,883.10 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 6,410 ft long. Dam completed and storage began in October 1964. The uncontrolled service spillway is a concrete drop inlet with a crest elevation of 2,965.0 ft, located at left end of dam with a 22-foot-diameter concrete pipe, designed to discharge 19,300 cfs at an elevation of 3,004.9 ft. Flood-control outlet works consist of three gate-controlled outlets, opening into three 15.5-foot concrete conduits, and located to the left of the service spillway. Dam was built by the U.S. Bureau of Reclamation for the Canadian River Municipal Water Authority for flood control and to impound water for municipal and industrial use for the cities of Amarillo, Borger, Brownfield, Lamesa, Levelland, Lubbock, O'Donnel, Pampa, Plainview, Slaton, and Tahoka. The U.S. Bureau of Reclamation furnished the capacity curve which is based on Geological Survey topographic maps dated 1953. Figures given herein represent total contents. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	3,011.0	-
Maximum design flood pool	3,004.9	2,434,200
Crest of service spillway	2,965.0	1,407,600
Invert of flood-control outlet works	2,894.0	313,700
Sill of lower gate	2,850.0	43,050

COOPERATION.--Record of elevations and diversions furnished by the Canadian River Municipal Water Authority.

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

2,903.0	404,800	2,911.0	497,000
2,905.0	426,800	2,913.0	521,700
2,907.0	449,500	2,915.0	547,200
2,909.0	472,900		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416,800	413,900	445,400	445,300	441,700	437,600	430,800	419,800	420,100	430,500	472,500	505,500
2	416,300	415,100	445,700	445,500	441,400	437,600	430,300	419,600	419,900	430,100	472,800	509,100
3	415,600	415,300	446,200	444,200	441,500	437,400	429,600	419,400	419,500	429,600	472,800	511,900
4	415,400	415,400	446,300	444,800	441,200	437,200	429,700	418,800	418,900	429,400	472,800	513,600
5	415,200	415,400	446,200	444,900	441,500	436,800	429,500	418,700	418,500	429,400	472,200	514,900
6	415,100	415,100	446,200	444,500	440,600	436,300	429,500	420,500	418,100	429,400	473,200	515,900
7	414,900	415,100	446,200	444,600	440,700	435,500	429,400	420,100	417,600	429,400	473,000	516,100
8	414,600	415,100	446,200	444,600	440,600	435,900	429,000	419,800	417,100	429,400	473,200	516,400
9	414,200	414,400	446,500	444,600	440,600	436,000	428,400	419,700	416,500	429,400	473,000	517,400
10	414,000	414,400	446,600	444,100	440,200	435,600	428,300	419,800	415,800	429,400	473,500	518,900
11	413,700	414,400	446,400	444,200	440,400	435,600	428,100	420,600	417,300	429,000	473,700	524,900
12	413,400	414,300	446,400	444,700	440,200	435,100	427,900	423,100	417,300	429,000	473,700	528,700
13	412,900	414,200	446,400	444,400	440,200	434,600	427,500	423,700	417,300	428,300	473,700	531,700
14	412,700	413,800	446,300	444,000	439,900	434,700	426,900	423,700	417,400	428,500	474,000	533,300
15	412,300	413,400	446,500	444,000	439,900	434,800	426,400	423,700	418,300	428,300	474,000	536,300
16	412,200	414,300	446,400	444,000	439,900	434,400	426,300	423,700	418,300	428,300	474,000	537,600
17	411,700	431,000	446,400	443,700	439,900	434,100	425,500	423,700	418,300	428,300	473,700	539,900
18	411,800	442,000	446,500	443,400	439,600	433,800	425,200	423,400	419,400	429,200	473,200	540,700
19	411,500	443,900	446,200	443,400	439,600	433,500	424,500	423,100	421,300	431,000	473,000	541,200
20	411,700	444,500	446,000	443,400	439,600	433,000	424,000	422,800	420,800	431,700	472,500	541,300
21	411,900	444,600	445,700	443,400	439,100	432,800	424,000	422,300	421,100	434,600	472,500	541,400
22	412,000	444,900	445,800	443,400	439,100	432,700	423,500	422,100	428,200	449,600	473,500	542,000
23	412,200	445,400	445,800	443,200	439,000	432,300	422,500	421,500	429,200	461,200	474,400	542,700
24	412,100	445,500	445,500	443,200	439,000	432,600	422,500	421,300	429,500	465,700	474,900	543,000
25	411,900	445,800	445,600	443,200	438,900	432,600	422,300	420,900	429,500	469,200	474,400	543,000
26	412,000	445,800	445,700	442,900	438,600	432,400	422,300	420,400	429,300	470,200	474,000	542,500
27	412,600	445,600	445,700	443,000	438,400	431,500	421,800	420,300	429,100	471,800	474,000	542,700
28	412,600	445,600	445,500	442,600	438,400	431,200	421,300	419,500	428,400	472,500	474,400	542,700
29	411,800	445,400	445,500	442,500	438,000	431,100	420,800	420,400	428,100	472,800	479,700	542,700
30	412,200	445,400	445,500	442,100	------	431,000	420,900	420,200	430,500	472,800	495,100	542,700
31	413,000	------	445,400	442,000	------	431,200	------	420,100	------	472,500	503,000	------
(†)	2,903.75	2,906.64	2,906.64	2,906.34	2,906.00	2,905.39	2,904.47	2,904.39	2,905.33	2,908.97	2,911.49	2,914.65
(*)	-3,800	+32,400	0	-3,400	-4,000	-6,800	-10,300	-800	+10,400	+42,000	+30,500	+39,700
(††)	4,923	4,003	3,753	3,326	4,001	4,837	6,253	5,196	6,512	6,376	6,714	5,623
MAX	416,800	445,800	446,600	445,600	441,700	438,000	430,800	423,700	430,500	472,800	503,000	543,000
MIN	411,500	413.400	445,500	442,000	438,000	431,000	420,800	418,700	415,800	428,300	472,200	505,500

CAL YR 1971..... * +27,900 †† 63,036 MAX 444,600 MIN 385,100
WTR YR 1972..... * +125,900 †† 61,517 MAX 543,000 MIN 411,500

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use by Canadian River Municipal Water Authority.

07228000 Canadian River near Canadian, Tex.

LOCATION.--Lat 35°56'01", long 100°22'06", Hemphill County, near left bank on downstream side of pier of bridge on U.S. Highways 60 and 83, 500 ft downstream from Panhandle and Santa Fe Railway Co. bridge, 1.2 miles downstream from Red Deer Creek, 1.6 miles northeast of Canadian, and at mile 433.9.

DRAINAGE AREA.--22,866 sq mi, of which 4,688 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (gage heights only), January 1938 to current year. Prior to April 1938, monthly discharge only published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,301.50 ft above mean sea level. July 1, 1924, to Aug. 31, 1925, and Apr. 21 to Dec. 15, 1938, nonrecording gage; Dec. 16, 1938, to Sept. 30, 1953, water-stage recorder and nonrecording gages; all at site 300 ft upstream at same datum.

AVERAGE DISCHARGE.--26 years (1938-64) prior to completion of Lake Meredith, 549 cfs (397,800 acre-ft per year); 8 years (1964-72) after completion of Lake Meredith, 97.4 cfs (70,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,600 cfs Oct. 18, Nov. 17 (gage height, 7.75 ft); minimum daily, 0.56 cfs Aug. 1.

Period of record: Maximum discharge, 122,000 cfs Sept. 23, 1941 (gage height, 9.8 ft, from graph based on gage readings), from rating curves for two channels extended above 8,000 and 54,000 cfs; no flow at times.

Maximum stage 20.0 ft Oct. 2, 1904. Floods of May 2, 1914, and Oct. 5, 1923, second highest known, reached stages of 12 ft.

REMARKS.--Records fair. Extreme low flow maintained by springs which enter river about 600 ft above gage. Some regulation and diversions upstream by Lake Meredith 75 miles upstream (station 07227900).

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	158	504	380	270	58	33	19	134	26	.56	8.0
2	56	144	1,010	370	199	56	34	15	61	15	.97	3.6
3	31	135	780	360	254	56	36	12	30	23	.68	2.7
4	27	124	760	300	320	58	33	12	19	40	.68	2.0
5	24	129	875	250	211	56	31	11	14	33	.68	1.4
6	22	90	816	250	218	56	38	10	12	31	.68	.97
7	20	105	516	300	199	53	33	9.6	10	27	.68	.97
8	18	83	504	350	199	48	28	9.0	6.6	14	7.2	420
9	15	72	615	400	179	48	24	43	4.5	67	19	90
10	15	69	492	400	134	48	23	101	3.6	9.0	3.0	16
11	14	69	420	330	134	50	22	129	3.4	4.8	1.8	7.0
12	15	83	410	330	163	48	18	218	3.0	3.6	1.6	4.2
13	13	72	456	295	173	46	15	168	7.9	3.6	1.6	3.0
14	13	72	555	270	158	46	11	120	12	2.5	1.6	2.7
15	12	75	492	250	134	44	10	86	23	1.6	1.5	2.0
16	12	1,650	468	300	116	40	13	58	36	1.5	1.4	2.0
17	28	9,630	420	350	113	38	14	31	27	1.2	1.2	2.2
18	4,420	3,050	380	350	109	38	9.6	20	20	2.0	1.2	1.2
19	1,040	3,520	370	303	101	34	7.0	12	14	1.9	1.2	2.0
20	921	1,650	360	303	101	33	7.0	7.5	8.0	25	1.2	3.4
21	238	504	340	295	97	31	7.5	7.0	8.5	36	12	2.0
22	113	468	312	287	90	30	6.6	6.6	7.5	23	1,450	2.0
23	86	444	320	262	94	31	5.2	6.2	5.5	12	95	1.2
24	110	400	380	237	90	42	4.2	5.8	187	6.6	10	1.0
25	139	410	420	218	86	48	3.6	4.2	22	2.4	3.4	1.0
26	158	425	400	205	78	46	3.4	7.5	9.0	1.0	3.2	1.2
27	158	444	370	192	78	36	3.0	7.0	4.8	.88	2.7	1.0
28	94	410	340	199	75	33	3.0	6.6	4.2	.74	2.2	1.0
29	439	444	370	218	66	30	3.6	151	6.6	.68	1.8	.88
30	173	504	370	231	------	30	83	202	11	.68	1.0	.97
31	134	------	360	278	------	31	------	106	------	.62	1.0	------
TOTAL	8,598	25,433	15,185	9,063	4,239	1,342	562.7	1,601.0	715.1	417.30	1,630.73	587.59
MEAN	277	848	490	292	146	43.3	18.8	51.6	23.8	13.5	52.6	19.6
MAX	4,420	9,630	1,010	400	320	58	83	218	187	67	1,450	420
MIN	12	69	312	192	66	30	3.0	4.2	3.0	.62	.56	.88
AC-FT	17,050	50,450	30,120	17,980	8,410	2,660	1,120	3,180	1,420	828	3,230	1,170

CAL YR 1971 TOTAL 71,619.20 MEAN 196 MAX 9,630 MIN .04 AC-FT 142,100
WTR YR 1972 TOTAL 69,374.42 MEAN 190 MAX 9,630 MIN .56 AC-FT 137,600

PEAK DISCHARGE (BASE, 8,900 CFS).--Oct. 18 (1800) 13,600 cfs (7.20 ft); Nov. 17 (0500) 13,600 cfs (7.75 ft).

07233500 Palo Duro Creek near Spearman, Tex.

LOCATION.--Lat 36°12'08", long 101°18'20", Hansford County, on right bank at downstream side of bridge on State Highway 15, 6 miles west of Spearman, and 18 miles upstream from Horse Creek.

DRAINAGE AREA.--960 sq mi, of which 520 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,961.63 ft above mean sea level. May 8, 1968, to Dec. 4, 1969, at site 5 miles downstream at different datum.

AVERAGE DISCHARGE.--27 years, 21.2 cfs (15,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,960 cfs Nov. 17 (gage height, 16.61 ft); no flow at times.
Period of record: Maximum discharge, 21,200 cfs Oct. 7, 1946 (gage height, 19.87 ft); no flow at times.
Maximum stage since 1936, 22.5 ft Sept. 4, 1938, from floodmark (discharge, about 34,000 cfs). Flood of June 4, 1936, reached a stage of 21 ft, from floodmark (discharge, 26,100 cfs, from rating curve extended above 20,000 cfs).

REMARKS.--Records good. Small diversion above station for irrigation.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	6.1	8.9	1.3	.40	.14	.68	14	27	58	11	19
2	.51	44	8.0	1.7	.30	.09	.57	9.2	13	26	154	11
3	.32	35	7.0	1.0	.20	.27	.39	7.6	7.8	182	119	9.7
4	.19	49	6.0	0	.20	.52	.43	4.8	3.8	60	51	10
5	.10	23	5.0	0	.60	.64	1.0	4.5	1.6	30	32	9.1
6	.05	14	4.0	.20	.60	.21	.41	3.9	.65	16	23	7.9
7	.05	10	3.0	.40	.30	.18	.35	3.3	1.9	7.2	17	6.5
8	.03	8.2	3.0	1.0	.30	.10	.52	6.2	.77	3.6	14	6.2
9	0	6.7	4.0	.80	.60	.14	1.6	7.2	.16	2.0	11	19
10	.11	5.7	4.5	.70	.50	.14	1.2	4.2	.03	6.4	12	25
11	.63	4.2	4.2	.60	.30	.09	1.2	3.3	0	30	13	12
12	.91	3.0	3.9	1.2	.40	.07	.28	3.9	0	19	14	10
13	1.2	2.3	3.4	1.0	.50	.05	.16	2.2	0	13	12	8.0
14	1.3	1.4	3.3	0	.71	.04	.06	2.6	0	7.6	13	7.0
15	3.1	1.2	3.5	0	.44	.03	.08	2.8	0	5.5	9.0	6.0
16	3.0	12	3.0	.40	.25	.01	.16	2.2	0	4.2	8.1	6.0
17	7.3	3,540	2.8	.60	.16	.02	.94	1.6	0	4.0	7.4	6.0
18	20	2,120	2.6	.80	.13	.02	.69	.91	0	108	7.3	7.0
19	12	183	1.6	.80	.05	.02	.10	1.3	0	520	6.9	10
20	16	95	1.6	1.0	1.0	.01	0	.90	.09	85	7.2	12
21	9.4	57	1.8	1.1	.61	.01	.40	1.1	3.1	45	9.3	7.5
22	6.2	34	1.6	.91	.33	.02	1.2	.89	4.3	55	7.3	7.9
23	4.2	27	1.6	.82	.97	.09	1.6	.44	299	96	47	5.6
24	3.4	24	1.6	.67	.69	1.0	.91	.16	335	103	16	3.8
25	3.3	19	1.6	.60	.44	.93	3.0	0	114	59	10	3.1
26	6.8	17	1.4	.40	.37	.34	62	0	100	35	7.6	2.8
27	6.3	15	1.4	0	.21	.07	87	.02	62	24	5.9	2.3
28	7.6	11	1.4	0	.14	.03	34	.89	34	18	29	1.8
29	7.2	9.3	1.4	.10	.14	.09	37	213	105	17	112	1.1
30	7.0	9.2	1.4	.20	------	.69	19	269	219	14	45	.63
31	7.9	------	1.4	.30	------	.85	------	64	------	12	22	------
TOTAL	136.61	6,386.3	99.9	18.60	11.84	6.91	256.93	636.11	1,332.20	1,665.5	853.0	243.93
MEAN	4.41	213	3.22	.60	.41	.22	8.56	20.5	44.4	53.7	27.5	8.13
MAX	20	3,540	8.9	1.7	1.0	1.0	87	269	335	520	154	25
MIN	0	1.2	1.4	0	.05	.01	0	0	0	2.0	5.9	.63
AC-FT	271	12,670	198	37	23	14	510	1,260	2,640	3,300	1,690	484

CAL YR 1971 TOTAL 13,775.87 MEAN 37.7 MAX 3,540 MIN 0 AC-FT 27,320
WTR YR 1972 TOTAL 11,647.83 MEAN 31.8 MAX 3,540 MIN 0 AC-FT 23,100

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-17	1600	16.61	8,960	6-23	1730	9.51	732
5-29	1500	8.33	554	7-19	0600	10.63	982

07235000 Wolf Creek at Lipscomb, Tex.

LOCATION.--Lat 36°14'16", long 100°16'28", Lipscomb County, near center of stream on downstream side of bridge on State Highway 305, 0.3 mile north of Lipscomb, 0.7 mile downstream from Little Sandy Creek, 2 miles upstream from Plum Creek, and at mile 61.2.

DRAINAGE AREA.--697 sq mi, of which 222 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1937 to September 1942, October 1961 to current year. Prior to 1941, monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,371.29 ft above mean sea level. Prior to Feb. 25, 1938, nonrecording gage, Feb. 25, 1938, to Sept. 30, 1942, water-stage recorder and nonrecording gage at present site at datum 5.77 ft higher.

AVERAGE DISCHARGE.--16 years (1937-42, 1961-72), 22.2 cfs (16,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,900 cfs Nov. 17 (gage height, 8.75 ft); minimum, 0.05 cfs July 30.
Period of record: Maximum discharge, 20,000 cfs Oct. 21, 1941 (gage height, 11.57 ft, present datum), from rating curve extended above 14,000 cfs on basis of velocity-area studies; no flow at times.
Maximum stage since 1890, 15.5 ft June 23, 1957, present site and datum, from floodmarks. Flood in May 1955 reached a stage of 12.1 ft, present site and datum, from information by State Highway Department.

REMARKS.--Records fair. Small diversion upstream from station for irrigation and recreation.

REVISIONS.--WSP 1311: 1938-39, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	6.7	14	10	7.0	7.5	6.7	4.8	21	4.6	.84	19
2	1.2	6.7	15	10	6.0	7.5	6.7	4.8	17	5.8	.68	15
3	1.0	6.3	15	10	3.0	7.5	6.5	4.6	15	5.8	.68	12
4	.68	5.8	15	6.0	4.0	7.2	6.5	4.4	13	5.8	.68	11
5	.53	6.0	15	3.0	5.0	7.2	6.5	4.4	12	8.0	.53	9.7
6	.53	6.5	14	4.0	6.0	7.2	6.5	4.4	12	7.5	.40	8.2
7	.53	6.3	13	6.0	6.0	7.0	6.3	4.4	11	8.2	.40	5.8
8	.68	5.8	13	8.0	7.0	7.0	6.0	4.4	9.4	5.8	.29	5.1
9	.68	5.3	11	10	7.0	7.0	6.0	4.4	9.0	4.8	.29	4.6
10	.68	5.1	13	10	7.0	7.0	6.0	5.3	8.4	4.8	.29	3.5
11	.68	5.1	13	10	5.0	7.2	5.8	5.5	7.7	4.4	.29	3.0
12	.53	5.1	12	9.4	7.0	7.5	5.5	6.3	7.7	4.2	.20	2.6
13	.40	5.3	12	8.0	8.4	7.5	5.1	5.8	8.2	3.2	.20	2.6
14	.53	5.3	12	5.0	8.0	7.5	4.8	5.1	9.4	3.2	.20	2.3
15	.40	5.5	12	3.0	7.7	7.2	5.1	4.6	8.2	2.8	.20	2.3
16	.53	21	12	5.0	8.0	7.2	5.3	4.2	8.0	3.2	.20	2.3
17	.53	2,310	12	9.7	7.7	7.0	5.3	3.5	7.5	3.0	.20	2.1
18	173	601	12	10	7.5	7.0	5.1	3.0	7.5	4.8	.13	2.1
19	47	80	12	9.4	7.5	6.7	4.8	3.2	6.7	3.0	.13	2.1
20	17	45	11	8.7	7.5	6.7	5.1	3.0	7.5	2.3	.13	1.9
21	12	44	12	8.4	7.2	6.5	5.1	3.0	8.0	1.9	.13	1.9
22	11	42	12	8.2	7.2	6.5	5.1	165	7.0	1.2	.13	1.9
23	9.0	30	11	8.2	7.5	6.7	5.1	201	6.7	.84	1.1	1.9
24	8.0	19	11	7.5	7.7	7.0	5.1	14	6.7	.53	3.3	1.7
25	7.5	17	11	7.2	8.0	7.0	5.1	12	6.5	.40	9.3	1.2
26	7.2	17	11	7.2	8.0	6.7	6.0	45	5.3	.29	2.1	1.0
27	6.3	16	11	7.0	8.2	6.7	5.5	185	4.8	.20	.40	1.0
28	5.8	16	11	4.0	8.2	6.7	5.3	41	4.8	.53	.84	.84
29	6.3	14	11	5.0	8.0	7.0	5.3	168	5.5	.53	.40	.68
30	9.4	14	11	6.0	------	7.0	5.3	46	5.5	.53	130	.68
31	7.7	------	10	7.0	------	7.0	------	26	------	.84	33	------
TOTAL	338.31	3,372.8	380	230.9	202.3	218.4	168.5	996.1	267.0	102.99	187.66	130.00
MEAN	10.9	112	12.3	7.45	6.98	7.05	5.62	32.1	8.90	3.32	6.05	4.33
MAX	173	2,310	15	10	8.4	7.5	6.7	201	21	8.2	130	19
MIN	.40	5.1	10	3.0	3.0	6.5	4.8	3.0	4.8	.20	.13	.68
AC-FT	671	6,690	754	458	401	433	334	1,980	530	204	372	258

CAL YR 1971 TOTAL 6,031.12 MEAN 16.5 MAX 2,310 MIN .20 AC-FT 11,960
WTR YR 1972 TOTAL 6,594.96 MEAN 18.0 MAX 2,310 MIN .13 AC-FT 13,080

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	1500	6.32	684	5-29	0900	6.40	740
11-17	0730	8.75	3,900	8-30	1230	6.12	562
5-22	2330	8.20	2,880				

07295500 Tierra Blanca Creek above Buffalo Lake near Umbarger, Tex.

LOCATION.--Lat 34°50'55", long 102°10'32", Deaf Smith County, on left bank 8.4 miles southwest of Umbarger and 9 miles upstream from Buffalo Lake Dam.

DRAINAGE AREA.--1,968 sq mi, of which 1,430 sq mi is probably noncontributing.

PERIOD OF RECORD.--June 1938 to November 1939 (occasional daily discharges), December 1939 to September 1954 published as "at reservoir near Umbarger", March 1967 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 3,650 ft (from topographic map). Prior to Aug. 29, 1940, water-stage recorder or nonrecording gage at conduit tower at different datum.

AVERAGE DISCHARGE.--19 years (1940-54, 1967-72), 10.9 cfs (7,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 227 cfs June 15 (gage height, 4.73 ft); no flow at times.
Period of record: Maximum discharge, 11,300 cfs June 6, 1941 (computed by rate of change in contents and outflow from reservoir); no flow at times each year.

REMARKS.--Records good. Surface runoff represents inflow to Buffalo Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	1.5	1.1	.84	.22	.46	.43	0	0	.48	.09	0
2	3.2	1.2	1.4	.97	.19	.35	.37	0	0	.48	.05	0
3	3.8	1.0	1.7	1.0	.16	.31	.30	0	0	.41	.01	.01
4	3.9	.80	1.8	.84	.15	.25	.28	0	0	.33	.01	.01
5	3.0	.87	1.8	.74	.15	.25	.25	0	0	.30	.01	.02
6	2.4	.84	1.6	.80	.15	.23	.20	0	0	.28	0	.02
7	2.1	.63	1.4	.94	.15	.20	.16	0	0	.23	47	.12
8	1.7	.52	1.4	.97	.15	.22	.14	0	0	.20	17	.43
9	1.3	.60	1.5	.94	.25	.26	.12	0	0	.15	6.6	1.5
10	.94	.68	1.6	.90	.31	.28	.10	0	0	.11	2.9	1.3
11	1.1	.58	1.6	.94	.43	.26	.08	.01	0	.08	1.5	.71
12	1.3	.46	1.6	1.0	1.1	.23	.11	1.5	0	.05	.90	.41
13	1.1	.39	1.6	.71	1.0	.22	.08	2.2	0	.04	.58	.26
14	1.0	.28	1.5	.68	.97	.22	.05	1.6	0	.03	.39	.14
15	.80	.30	1.4	.66	.77	.18	.03	1.2	80	.01	.25	.09
16	.60	.68	1.4	.66	.71	.16	.02	.84	26	0	.16	.05
17	.52	36	1.3	.68	.58	.14	.02	.68	9.5	0	.11	.02
18	1.1	61	1.2	.68	.43	.16	.01	.52	7.5	.01	.06	.01
19	1.7	28	1.2	.71	.35	.14	.01	.35	4.8	.01	.03	.01
20	2.0	12	1.1	.74	.31	.13	0	.26	2.9	.01	.01	0
21	2.5	7.0	1.1	.80	.33	.11	0	.18	1.9	3.3	.01	0
22	1.9	4.6	1.1	.84	.46	.11	0	.11	2.2	8.4	0	0
23	1.4	3.0	1.2	.90	.50	.08	0	.05	4.9	5.2	0	0
24	1.2	2.0	1.1	.97	.58	.08	0	.03	4.6	6.6	0	0
25	.90	1.6	1.0	1.2	.55	.11	0	.02	2.2	6.1	0	0
26	.74	1.3	.97	2.0	.66	.13	0	.01	1.1	3.1	0	0
27	.58	1.2	.97	1.4	.68	.13	0	.01	.71	1.5	0	0
28	.63	1.1	.94	.66	.63	.20	0	0	.46	.87	0	0
29	.77	1.1	.90	.43	.58	.35	0	.01	.46	.60	0	0
30	1.1	1.1	.87	.35	------	.48	0	0	.55	.35	0	0
31	1.1	------	.84	.28	------	.46	------	.01	------	.18	0	------
TOTAL	49.98	172.33	40.19	26.23	13.50	6.89	2.76	9.59	149.78	39.41	77.67	5.11
MEAN	1.61	5.74	1.30	.85	.47	.22	.092	.31	4.99	1.27	2.51	.17
MAX	3.9	61	1.8	2.0	1.1	.48	.43	2.2	80	8.4	47	1.5
MIN	.52	.28	.84	.28	.15	.08	0	0	0	0	0	0
AC-FT	99	342	80	52	27	14	5.5	19	297	78	154	10

CAL YR 1971 TOTAL 3,039.49 MEAN 8.33 MAX 783 MIN 0 AC-FT 6,030
WTR YR 1972 TOTAL 593.44 MEAN 1.62 MAX 80 MIN 0 AC-FT 1,180

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

07296000 Buffalo Lake near Umbarger, Tex.

LOCATION.--Lat 34°55'26", long 102°06'01", Randall County, on intake structure 100 ft upstream, 200 ft to right of left end of dam on Tierra Blanca Creek, 2 miles south of Umbarger, 20 miles upstream from Palo Duro Creek, and at mile 1,200.

DRAINAGE AREA.--2,075 sq mi, of which 1,500 sq mi is probably noncontributing.

PERIOD OF RECORD.--June 1938 to September 1954, March 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,515.6 ft above mean sea level. Prior to Aug. 29, 1940, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 2,550 acre-ft Dec. 3 (gage height, 115.55 ft); minimum, 701 acre-ft Sept. 29, 30 (gage height, 112.37 ft).
Period of record: Maximum contents, 25,100 acre-ft June 6, 1941 (gage height, 130.43 ft); minimum since first appreciable storage, lake dry Mar. 26 to July 22, 1971.

REMARKS.--Lake is formed by a rolled-fill earthen dam 882 ft long with an uncontrolled concrete service spillway at right end 200 ft long with crest at gage height 127.0 ft. Storage began June 9, 1938, and dam completed June 15, 1938. Outlet works consist of a 4- by 5-foot concrete conduit controlled by a gate in the control tower. Data regarding dam and lake are shown in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	146.8	-
Spillway crest	127.0	18,150
Sill of 4- by 5-foot conduit	97.2	0

COOPERATION.--Capacity curve, based on a 1937 survey was furnished by the Soil Conservation Service. Curve revised below 116.0 ft by Bureau of Sport Fisheries and Wildlife based on their surveys in May 1970.

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

111.0	375	114.0	1,350
112.0	590	115.0	2,000
113.0	890	116.0	2,990

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,430	2,300	2,450	2,460	2,330	2,130	1,800	1,400	1,240	1,240	1,040	842
2	2,400	2,280	2,520	2,450	2,310	2,130	1,790	1,380	1,230	1,210	1,030	842
3	2,390	2,270	2,550	2,450	2,300	2,110	1,770	1,380	1,210	1,190	1,010	848
4	2,380	2,280	2,500	2,440	2,300	2,070	1,770	1,380	1,200	1,190	1,000	842
5	2,380	2,230	2,530	2,440	2,290	2,070	1,760	1,360	1,180	1,210	1,000	842
6	2,380	2,240	2,530	2,440	2,280	2,060	1,750	1,350	1,180	1,210	982	857
7	2,370	2,250	2,520	2,440	2,280	2,050	1,730	1,370	1,170	1,200	973	842
8	2,360	2,200	2,520	2,450	2,280	2,040	1,720	1,360	1,170	1,190	982	836
9	2,350	2,220	2,520	2,450	2,270	2,030	1,720	1,350	1,140	1,180	987	836
10	2,340	2,210	2,520	2,460	2,260	2,020	1,710	1,350	1,140	1,170	987	830
11	2,330	2,200	2,520	2,470	2,270	2,000	1,690	1,350	1,140	1,160	977	842
12	2,320	2,190	2,520	2,440	2,270	1,980	1,690	1,340	1,140	1,150	968	818
13	2,320	2,190	2,510	2,430	2,280	1,980	1,680	1,350	1,130	1,140	968	800
14	2,300	2,200	2,520	2,420	2,290	1,980	1,660	1,350	1,130	1,140	954	791
15	2,280	2,180	2,520	2,410	2,270	1,950	1,620	1,340	1,180	1,120	941	785
16	2,270	2,200	2,510	2,410	2,250	1,950	1,620	1,340	1,190	1,120	936	782
17	2,290	2,200	2,510	2,400	2,230	1,950	1,620	1,330	1,240	1,120	922	779
18	2,300	2,330	2,520	2,400	2,240	1,950	1,600	1,330	1,250	1,130	913	776
19	2,300	2,430	2,520	2,400	2,230	1,940	1,580	1,320	1,220	1,140	899	770
20	2,320	2,460	2,510	2,400	2,230	1,920	1,540	1,320	1,210	1,140	890	761
21	2,330	2,470	2,510	2,410	2,230	1,920	1,540	1,310	1,210	1,150	884	755
22	2,320	2,480	2,510	2,410	2,240	1,900	1,540	1,290	1,210	1,140	884	746
23	2,310	2,480	2,510	2,400	2,220	1,900	1,500	1,270	1,210	1,140	887	740
24	2,300	2,490	2,500	2,390	2,210	1,900	1,490	1,240	1,210	1,130	860	740
25	2,280	2,500	2,500	2,390	2,180	1,900	1,490	1,230	1,200	1,120	857	737
26	2,280	2,470	2,500	2,380	2,170	1,870	1,430	1,220	1,190	1,110	857	731
27	2,270	2,470	2,480	2,370	2,160	1,840	1,450	1,230	1,180	1,100	860	725
28	2,270	2,470	2,470	2,360	2,160	1,820	1,450	1,230	1,150	1,080	863	716
29	2,260	2,450	2,470	2,340	2,150	1,800	1,420	1,250	1,220	1,070	866	701
30	2,270	2,450	2,470	2,340	------	1,800	1,420	1,250	1,240	1,060	860	701
31	2,280	------	2,460	2,340	------	1,800	------	1,250	------	1,050	848	------
(†)	115.28	115.45	115.46	115.34	115.15	114.70	114.10	113.78	113.75	113.35	112.86	112.37
(*)	-170	+170	+10	-120	-190	-350	-380	-170	-10	-190	-202	-147
MAX	2,430	2,500	2,550	2,470	2,330	2,130	1,800	1,400	1,250	1,240	1,040	857
MIN	2,260	2,180	2,450	2,340	2,150	1,800	1,420	1,220	1,130	1,050	848	701

CAL YR 1971..... * +2,318 MAX 2,550 MIN 0
WTR YR 1972..... * -1,749 MAX 2,550 MIN 701

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

07296100 Tierra Blanca Creek below Buffalo Lake near Umbarger, Tex.

LOCATION.--Lat 34°55'27", long 102°05'57", Randall County, 25 ft downstream from Buffalo Lake dam on Tierra Blanca Creek, 2 miles south of Umbarger, 20 miles upstream from Palo Duro Creek, and at mile 1,200.

DRAINAGE AREA.--2,075 sq mi, of which 1,500 sq mi is probably noncontributing. All drainage area is above Buffalo Lake dam.

PERIOD OF RECORD.--March 1967 to current year.

GAGE.--Water-stage recorder and metal H weir. Datum of gage is 3,611.5 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 0.073 cfs (53 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 0.05 cfs Oct. 1 (gage height, 0.23 ft); maximum gage height, 0.94 ft Dec. 11-13; no flow at times.
Period of record: Maximum daily discharge, 14 cfs Mar. 24, 1971; maximum gage height, 2.45 ft Aug. 17, 1971 (backwater from a dam downstream); no flow at times.

REMARKS.--Records poor. Flow regulated by Buffalo Lake (capacity, 18,150 acre-ft) 25 ft upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.02	.01	.01	0	.01	.01	.01	.01	.01	.01	.01
2	.03	.01	.01	.01	0	.01	.01	.01	.01	.01	.01	.01
3	.02	.01	.01	.01	0	.01	.01	.01	.01	.01	.01	.01
4	.01	.01	.01	.01	0	.01	.01	.01	.01	.01	.01	.02
5	.01	.01	.01	.01	0	.01	.01	.01	.01	.01	.01	.01
6	.02	.01	.01	.01	0	.01	.01	.01	.01	0	.01	.01
7	.02	.01	.01	.01	0	.01	.01	.01	0	0	.01	.02
8	.01	.01	.01	.01	0	.01	.01	.01	0	0	.01	.02
9	.01	.01	.01	.01	0	.01	.01	.01	0	0	.01	.02
10	.01	.01	.02	.01	0	.01	.01	.01	0	0	.01	.02
11	.01	.01	.02	0	0	.01	.01	.01	.01	0	.01	.02
12	0	.01	.02	0	0	.01	.01	.01	.01	0	.01	.02
13	0	.01	.02	0	0	.01	.01	.01	.01	0	.01	.02
14	0	.01	.02	.01	0	.01	.01	0	.01	0	.01	.01
15	.01	.01	.02	.02	0	0	.01	0	.01	0	.01	.02
16	.01	.01	.01	.01	0	0	.01	0	0	0	.01	.02
17	.01	.02	.01	.02	0	0	.01	0	.01	0	.02	.02
18	.01	.01	.01	.02	0	.01	.01	0	.01	0	.04	.02
19	.01	.01	.01	.01	0	.01	.01	0	.02	0	.04	.02
20	.01	.01	.01	.01	0	.01	.01	0	.04	0	.03	.02
21	.01	.01	.01	.01	0	.01	.01	0	.04	0	.02	.02
22	.01	.01	.01	.01	.01	.01	.01	0	.03	0	.03	.01
23	.01	.01	.01	0	.01	.01	.01	0	.01	0	.03	.02
24	.01	.01	.01	0	.01	.01	0	0	.01	0	.02	.01
25	.01	.01	.01	0	.01	.01	0	0	.01	0	.02	.01
26	.01	.01	.01	0	.01	.01	0	0	.01	0	.03	.02
27	.01	.01	.01	0	.01	0	0	0	.01	0	.03	.02
28	.01	.01	.01	0	.01	0	0	0	.01	0	.03	.02
29	.01	.01	.01	0	.01	0	.01	0	.01	0	.02	.02
30	.01	.01	.01	0	------	.01	.01	0	.01	0	.01	.02
31	.02	------	.01	0	------	.01	------	.01	------	.01	.01	------
TOTAL	.38	.32	.37	.22	.08	.25	.25	.14	.34	.06	.54	.51
MEAN	.012	.011	.012	.007	.003	.008	.008	.005	.011	.002	.017	.017
MAX	.05	.02	.02	.02	.01	.01	.01	.01	.04	.01	.04	.02
MIN	0	.01	.01	0	0	0	0	0	0	0	.01	.01
AC-FT	.8	.6	.7	.4	.2	.5	.5	.3	.7	.1	1.1	1.0

CAL YR 1971 TOTAL 27.89 MEAN .076 MAX 14 MIN 0 AC-FT 55
WTR YR 1972 TOTAL 3.46 MEAN .010 MAX .0 MIN 0 AC-FT 6.9

07297910 Prairie Dog Town Fork Red River near Wayside, Tex.

LOCATION.--Lat 34°50'15", long 101°24'49", Armstrong County, on left bank at downstream side of bridge on Farm Road 284, 13 miles northeast of Wayside, 26 miles south of Claude, and at mile 1,145.

DRAINAGE AREA.--4,211 sq mi, of which 3,281 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,463.74 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 42.4 cfs (30,720 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,700 cfs May 10 (gage height, 10.90 ft); no flow Sept. 18.
Period of record: Maximum discharge, 58,000 cfs Aug. 28, 1968 (gage height, 13.0 ft, from floodmark); no flow at times.

REMARKS.--Records fair. Several small diversions above station. Flow partly regulated by Buffalo Lake, Amarillo City Lake, Palo Duro Lake, and Lake Tanglewood, having a combined capacity of 28,600 acre-ft. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	16	7.6	3.9	2.1	.85	1.1	.08	3.9	30	.28	1.3
2	19	12	8.8	4.2	1.0	.98	.98	.08	2.9	18	.22	19
3	14	25	13	3.9	.90	1.3	.85	.06	1.8	9.4	.13	2.6
4	11	23	10	3.5	.90	.98	.73	.13	1.3	4.6	.17	1.8
5	7.5	20	13	3.0	1.6	.85	.73	.94	.98	3.5	.73	1.1
6	6.0	17	9.6	4.0	1.6	1.3	.85	23	.85	2.6	.17	.62
7	5.2	15	8.2	5.5	1.4	1.3	.73	4.6	.73	5.3	7.6	1.1
8	5.1	14	8.8	4.6	1.8	.85	.43	1.8	.52	90	1.6	.43
9	4.5	12	9.6	3.5	1.6	.98	.52	50	.35	91	.52	.22
10	3.9	11	7.6	2.6	1.3	1.3	.62	1,460	.28	2.1	.17	.13
11	2.9	11	8.2	2.3	2.3	1.1	.35	46	215	.85	.13	.08
12	2.7	10	8.2	1.8	2.1	.98	.35	26	807	21	.08	.08
13	2.1	10	8.8	1.6	1.8	.98	.28	80	907	125	.06	.10
14	1.8	9.6	11	1.3	1.3	.98	.17	35	259	19	.10	.06
15	1.8	9.6	8.8	1.2	1.1	.73	.17	17	225	11	.06	.06
16	1.6	141	7.0	2.0	1.8	.85	.17	9.6	9.6	7.6	.05	.03
17	1.4	955	6.0	3.2	1.6	.85	.22	6.0	6.5	8.9	.03	.01
18	2,330	74	5.5	2.3	1.3	.85	.17	3.5	6.0	106	.03	0
19	198	34	5.5	2.3	1.3	.73	.17	2.9	3.9	14	.01	.03
20	50	25	5.5	2.1	1.6	.73	.17	2.3	3.2	5.5	.01	.01
21	38	19	5.0	1.6	2.1	.85	.13	1.8	2.9	33	5.9	.13
22	29	17	5.5	1.8	2.3	.98	.13	1.4	107	8.0	17	.62
23	28	15	5.0	1.4	2.3	1.3	.10	.98	4.6	2.1	25	.22
24	23	13	4.6	1.0	1.8	1.4	.10	.98	52	1.4	4.9	.22
25	21	12	4.6	1.1	1.6	.98	.22	.98	8.2	.73	2.1	.22
26	28	8.6	4.2	1.1	1.4	.73	8.8	1.1	4.6	.35	2.1	.35
27	22	7.6	3.9	1.3	1.6	.62	1.6	.73	3.5	.43	5.0	.10
28	17	6.0	4.2	1.0	1.6	.62	.73	.52	2.6	.35	8.6	.10
29	58	7.0	4.6	1.0	1.4	.73	.43	39	5.6	.28	6.8	.05
30	25	7.0	4.6	1.6	------	.73	.17	14	4.6	.28	2.6	.01
31	13	------	4.2	1.4	------	.98	------	5.0	------	.28	1.8	------
TOTAL	2,976.9	1,556.4	221.1	73.1	46.50	29.39	22.17	1,835.48	2,651.41	622.55	93.95	30.78
MEAN	96.0	51.9	7.13	2.36	1.60	.95	.74	59.2	88.4	20.1	3.03	1.03
MAX	2,330	955	13	5.5	2.3	1.4	8.8	1,460	907	125	25	19
MIN	1.4	6.0	3.9	1.0	.90	.62	.10	.06	.28	.28	.01	0
AC-FT	5,900	3,090	439	145	92	58	44	3,640	5,260	1,230	186	61

CAL YR 1971 TOTAL 8,202.79 MEAN 22.5 MAX 2,330 MIN 0 AC-FT 16,270
WTR YR 1972 TOTAL 10,159.73 MEAN 27.8 MAX 2,330 MIN 0 AC-FT 20,150

PEAK DISCHARGE (BASE, 6,000 CFS).--Oct. 18 (0400) 10,800 cfs (10.36 ft); May 10 (0100) 17,700 cfs (10.90 ft).

07298000 North Tule Draw at reservoir near Tulia, Tex.

LOCATION.--Lat 34°33'34", long 101°42'33", Swisher County, at upstream side of dam, 250 ft to left of concrete spillway, 1.0 mile upstream from mouth, and 3.2 miles northeast of Tulia.

DRAINAGE AREA.--About 189 sq mi, of which 124 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1939 to June 1940 (monthly figures only), November 1940 to current year. Prior to October 1950, published as North Tule Creek at reservoir, near Tulia.

GAGE (revised).--Water-stage recorder. Datum of gage is 3,309 ft above mean sea level. Prior to Nov. 27, 1940, nonrecording gage at present datum.

AVERAGE DISCHARGE.--31 years (1941-72), 3.22 cfs (2,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 315 cfs Oct. 18 (gage height, 91.39 ft); maximum gage height, 92.13 ft Oct. 18; no flow most of year.
Period of record: Maximum discharge, 10,600 cfs June 10, 1965; maximum gage height, 98.62 ft June 11, 1965; no flow at times in most years.

REMARKS.--Records poor. Records given herein represent flow into reservoir. Discharge below gage height 91.9 ft (spillway crest) determined from daily change in contents of reservoir; that above gage height 91.9 ft determined by algebraic summation of flow over spillway (computed from spillway rating curve), computed flow through conduit, and change in contents of reservoir (computed from capacity curve and reduced to equivalent cubic feet per second). No outflow through conduit or over emergency spillway during year. No adjustment made for evaporation or seepage losses. Dam completed Jan. 15, 1939. Reservoir capacity, 686 acre-ft. Capacity based on plane table survey made by Geological Survey in May 1965. Reservoir used for recreational purposes and water is rarely released through outlet gate.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0						0	0	0	0	0
2	0	0						0	0	0	0	0
3	0	0						0	0	0	0	0
4	0	0						0	0	0	0	0
5	0	0						0	0	0	0	0
6	0	0						0	0	0	0	0
7	0	0						0	0	0	0	.60
8	0	0						0	0	0	0	.30
9	0	0						0	0	0	0	.10
10	0	0						0	1.5	0	0	0
11	0	0						0	.80	0	0	0
12	0	0						0	.40	0	0	0
13	0	0						0	.20	0	0	0
14	0	0						0	.10	0	0	0
15	0	0						0	0	0	0	0
16	0	0						0	0	0	0	0
17	0	6.0						0	0	0	0	0
18	66	3.0						0	0	2.0	0	0
19	16	1.5						0	0	1.0	0	0
20	11	.80						0	0	.50	0	0
21	3.7	.40						0	0	1.0	.50	0
22	.50	.10						0	.50	.50	.20	0
23	0	0						0	.20	.20	.10	0
24	0	0						0	.10	.10	0	0
25	0	0						0	0	0	0	0
26	0	0						0	0	0	0	0
27	0	0						0	0	0	2.2	0
28	0	0						0	0	0	1.1	0
29	0	0						.50	0	0	.50	0
30	0	0			------			.20	0	0	.20	0
31	0	------			------		------	.10	------	0	.10	------
TOTAL	97.20	11.80	0	0	0	0	0	.80	3.80	5.30	4.90	1.00
MEAN	3.14	.39	0	0	0	0	0	.026	.13	.17	.16	.033
MAX	66	6.0	0	0	0	0	0	.50	1.5	2.0	2.2	.60
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	193	23	0	0	0	0	0	1.6	7.5	11	9.7	2.0
(†)	656	563	489	408	348	288	220	176	129	89	62	36

CAL YR 1971 TOTAL 1,065.00 MEAN 2.92 MAX 306 MIN 0 AC-FT 2,110 † +479
WTR YR 1972 TOTAL 124.80 MEAN .34 MAX 66 MIN 0 AC-FT 248 † -631

† Contents in reservoir, in acre-feet, at end of month.

07298200 Tule Creek near Silverton, Tex.

LOCATION.--Lat 34°32'38", long 101°25'40", Briscoe County, on downstream side of bridge on Farm Road 284, 0.1 mile downstream from Rock Creek, 8.6 miles northwest of Silverton, 15 miles downstream from South Tule Draw, and 17.5 miles upstream from Prairie Dog Town Fork Red River.

DRAINAGE AREA.--1,150 sq mi, of which 960 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,852.44 ft above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--8 years, 10.1 cfs (7,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,420 cfs Oct. 18 (gage height, 5.77 ft); no flow for many days.
Period of record: Maximum discharge, 9,900 cfs June 11, 1965 (gage height, 11.65 ft); no flow for many days each year.
Maximum stage since 1890, occurred in 1892 (stage and discharge unknown); second highest stage occurred September 1926 (stage and discharge unknown); third highest stage occurred May 10, 1934, gage height, 20.3 ft, discharge unknown, from information by local residents.

REMARKS.--Records good. Flow partly regulated by reservoir on North Tule Draw near Tulia 25 miles upstream (station 07298000). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	1.5	.60	1.5	2.8	.11	.02	0	0	0	0	9.1
2	.04	.74	.50	1.5	2.0	.08	.02	0	0	0	0	24
3	.01	.58	.40	1.5	1.0	.11	0	0	0	37	0	.01
4	0	.46	.50	1.0	1.5	.08	0	0	0	9.2	0	0
5	0	.46	1.0	.50	1.8	.04	0	0	0	.46	0	0
6	0	.36	1.5	1.0	2.3	.04	0	0	0	.06	0	0
7	0	.20	1.5	2.3	1.8	.04	0	0	0	0	.10	125
8	0	.36	1.2	2.8	1.8	.02	0	0	0	0	0	.94
9	0	.46	1.0	3.4	2.3	.02	0	0	0	0	0	.02
10	0	.36	1.2	3.4	2.0	.01	0	0	0	0	0	0
11	0	.36	1.2	1.8	1.5	0	0	0	0	0	0	0
12	0	.46	.94	1.6	2.0	0	0	0	0	7.5	0	0
13	0	.36	1.5	1.3	3.4	0	0	0	7.2	3.6	4.3	0
14	0	.36	2.3	1.0	3.4	0	0	0	.18	0	1.8	0
15	0	.36	1.8	.70	2.3	0	0	0	0	0	0	0
16	0	9.8	1.2	.80	2.3	0	0	0	0	0	0	0
17	0	9.4	.94	1.2	1.5	0	0	0	0	.06	0	0
18	145	1.8	1.2	2.3	1.2	0	0	0	0	14	0	0
19	4.1	.94	.94	1.8	1.2	0	0	0	0	.08	0	0
20	70	.94	1.2	2.3	1.2	0	0	0	0	0	0	0
21	35	.94	1.2	2.3	.74	0	0	0	0	28	0	0
22	4.9	1.2	1.2	2.3	.58	0	0	0	129	12	1.7	0
23	1.2	1.2	1.2	2.3	.58	0	0	0	3.4	0	0	0
24	.58	.94	1.2	1.5	.36	.01	0	0	.36	0	0	0
25	.27	.94	1.5	1.5	.36	.02	0	0	.02	0	0	0
26	.27	.74	1.5	1.5	.27	0	0	0	0	0	0	0
27	.27	.74	1.2	1.2	.20	0	0	0	0	0	0	0
28	.20	.58	1.5	1.2	.15	0	0	0	0	0	0	0
29	2.8	.58	1.5	1.8	.15	0	0	2.8	0	0	0	0
30	2.8	.58	1.8	2.3	------	0	0	.06	0	0	0	0
31	1.8	------	1.8	2.3	------	0	------	0	------	0	0	------
TOTAL	269.30	38.70	38.22	53.90	42.69	.58	.04	2.86	140.16	111.96	7.90	159.07
MEAN	8.69	1.29	1.23	1.74	1.47	.019	.001	.092	4.67	3.61	.25	5.30
MAX	145	9.8	2.3	3.4	3.4	.11	.02	2.8	129	37	4.3	125
MIN	0	.20	.40	.50	.15	0	0	0	0	0	0	0
AC-FT	534	77	76	107	85	1.2	.08	5.7	278	222	16	316

CAL YR 1971 TOTAL 3,106.45 MEAN 8.51 MAX 1,120 MIN 0 AC-FT 6,160
WTR YR 1972 TOTAL 865.38 MEAN 2.36 MAX 145 MIN 0 AC-FT 1,720

PEAK DISCHARGE (BASE, 1,000 CFS).--Oct. 18 (0300) 1,420 cfs (5.77 ft); Sept. 7 (0230) 1,140 cfs (5.38 ft).

07299200 Prairie Dog Town Fork Red River near Lakeview, Tex.

LOCATION.--Lat 34°34'23", long 100°44'43", Hall County, on left bank at downstream side of bridge on Farm Road 657, 7.6 miles southwest of Lakeview, 8.6 miles upstream from Little Red River, 13.3 miles downstream from former gage near Brice, and at mile 1,092.5.

DRAINAGE AREA.--6,792 sq mi, of which 4,769 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,926.41 ft above mean sea level. Aug. 29 to Dec. 12, 1968, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--9 years, 69.1 cfs (50,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,400 cfs May 10 (gage height, 7.10 ft); no flow at times.
Period of record: Maximum discharge, 51,000 cfs Aug. 29, 1968 (gage height, 9.10 ft, from floodmarks), from rating curve extended above 19,000 cfs on basis of slope-area measurement of peak flow; maximum gage height, 10.50 ft June 26, 1965; no flow at times.

REMARKS.--Records fair. Several small diversions above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	24	4.5	2.6	.75	.12	.12	0	26	52	.02	.12
2	24	10	22	2.3	.45	.16	.12	0	1.8	4.0	0	15
3	35	6.0	82	2.3	.30	.21	.04	0	.72	3,210	0	15
4	26	5.0	86	2.0	.30	.12	.06	0	.92	106	0	5.5
5	7.5	3.0	70	1.5	.35	.16	.12	.61	.01	19	.01	.06
6	5.5	5.5	49	2.0	.21	.16	.07	.43	0	5.5	.01	.01
7	2.3	5.0	38	3.5	.27	.12	0	1.1	0	.6	480	286
8	1.5	4.5	30	2.6	.27	.09	.01	.22	0	2.5	53	283
9	.60	3.0	28	2.0	.35	.12	.71	0	0	2,260	54	20
10	.40	2.3	24	1.8	.27	.12	.24	1,960	0	110	32	1.6
11	.21	2.0	19	1.3	.90	.12	.09	450	11	5.0	.45	.04
12	.21	1.3	14	.75	.75	.12	.10	252	340	146	0	.01
13	.09	1.1	13	.35	.27	.07	.01	26	2,060	955	6.8	0
14	.12	.75	19	.30	.12	.07	0	81	1,080	130	46	0
15	.10	.75	49	.30	.21	.07	0	40	844	13	26	0
16	.07	.75	34	.50	.27	.07	0	30	110	1.3	.51	0
17	.07	956	26	.75	.16	.07	0	6.0	61	0	.09	0
18	4,220	184	16	.60	.12	.06	0	.90	20	476	.05	0
19	182	46	14	.80	.12	.06	0	.12	4.5	633	.02	0
20	33	19	8.0	.60	.16	.05	0	.07	.35	140	0	0
21	16	9.2	7.0	.75	.12	.06	0	.06	.01	49	.02	0
22	49	15	6.0	.90	.16	.06	0	.04	420	1,040	78	0
23	117	20	5.5	.45	.27	.16	0	.01	165	260	151	0
24	36	18	5.0	.27	.21	.21	0	.01	53	572	145	0
25	26	12	4.5	.27	.21	.09	0	.73	132	58	1.8	0
26	34	10	3.5	.35	.21	.04	0	110	20	2.6	.45	0
27	49	5.0	2.6	.45	.27	.04	0	10	1.5	.2	40	0
28	15	4.0	2.6	.30	.16	.06	0	.21	.05	.1	5.5	0
29	26	2.0	3.0	.30	.16	.07	0	30	.05	.1	6.5	0
30	64	1.8	3.0	.90	------	.12	0	210	85	.1	4.8	0
31	43	------	2.6	.75	------	.16	------	90	------	.1	18	------
TOTAL	5,016.67	1,376.95	690.8	34.54	8.37	3.21	1.69	3,299.51	5,436.91	10,251.1	1,150.03	626.34
MEAN	162	45.9	22.3	1.11	.29	.10	.056	106	181	331	37.1	20.9
MAX	4,220	956	86	3.5	.90	.21	.71	1,960	2,060	3,210	480	286
MIN	.07	.75	2.6	.27	.12	.04	0	0	0	0	0	0
AC-FT	9,950	2,730	1,370	69	17	6.4	3.4	6,540	10,780	20,330	2,280	1,240

CAL YR 1971 TOTAL 18,305.48 MEAN 50.2 MAX 6,090 MIN 0 AC-FT 36,310
WTR YR 1972 TOTAL 27,896.12 MEAN 76.2 MAX 4,220 MIN 0 AC-FT 55,330

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	1200	6.90	13,000	7-3	0500	7.00	14,200
5-10	1030	7.10	15,400	7-9	0300	6.75	11,500
6-13	0700	6.36	7,880				

07299300 Little Red River near Turkey, Tex.

LOCATION.--Lat 34°32'27", long 100°46'13", Hall County, on left bank at downstream side of bridge on Farm Road 657, 10 miles upstream from mouth, and 14.5 miles northeast of Turkey.

DRAINAGE AREA.--139 sq mi.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,925.39 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,070 cfs July 3 (gage height, 12.54 ft); minimum daily, 0.01 cfs June 9, 10.
Period of record: Maximum discharge, 3,570 cfs Aug. 29, 1968 (gage height, 13.48 ft, from floodmarks), from rating curve extended above 450 cfs on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records good. No diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.59	.35	.49	.18	.18	.21	.10	.03	3.4	.27	.24
2	.93	.54	3.0	.44	.18	.18	.21	.10	.03	1.2	.24	328
3	.54	.27	9.6	.39	.18	.18	.18	.07	.03	701	.24	22
4	.44	.27	5.4	.39	.18	.16	.18	.06	.02	16	.24	8.8
5	.31	.27	4.1	.39	.21	.16	.18	.06	.02	6.0	.24	4.5
6	.21	.21	3.9	.35	.21	.14	.18	.08	.02	4.0	.24	1.7
7	.21	.21	2.3	.35	.18	.12	.18	.08	.02	2.5	51	6.7
8	.18	.21	1.9	.35	.18	.12	.16	.07	.02	2.0	1.2	12
9	.16	.18	1.9	.35	.18	.12	.18	.05	.01	447	1.3	4.3
10	.16	.18	1.7	.31	.18	.12	.14	.08	.01	32	.49	2.5
11	.18	.18	1.0	.31	.21	.12	.14	34	91	8.8	.24	1.3
12	.18	.16	.93	.27	.27	.12	.12	282	103	5.7	.21	.77
13	.16	.14	.77	.21	.24	.12	.12	4.8	89	3.6	1.4	.35
14	.16	.12	1.6	.21	.24	.12	.10	1.3	424	3.0	58	.21
15	.16	.12	11	.21	.24	.12	.10	.31	24	2.2	17	.16
16	.14	.14	2.5	.18	.21	.12	.12	.18	2.0	2.0	5.4	.12
17	.14	.29	1.4	.18	.21	.12	.12	.16	.64	1.9	2.3	.10
18	189	.31	1.1	.18	.24	.12	.12	.14	.39	26	1.3	.07
19	21	.27	1.0	.18	.27	.14	.10	.14	.27	8.4	.85	.07
20	6.6	.27	.85	.18	.27	.14	.10	.14	.10	3.5	.77	.07
21	2.6	.31	.70	.18	.27	.16	.10	.14	.06	60	.70	.07
22	30	.44	.64	.21	.31	.14	.12	.14	113	11	3.4	.07
23	23	.39	.64	.18	.31	.18	.12	.12	6.2	.77	123	.07
24	8.4	.44	.64	.18	.27	.21	.12	.12	2.3	.35	86	.07
25	5.1	.35	.59	.18	.24	.21	.14	.17	1.7	.31	6.9	.06
26	11	.31	.59	.18	.24	.18	.14	188	1.3	.31	4.0	.07
27	15	.31	.54	.16	.21	.18	.12	4.6	1.4	.27	31	.07
28	4.3	.31	.49	.16	.21	.18	.12	.27	1.5	.27	12	.07
29	3.0	.31	.49	.16	.18	.21	.14	4.6	1.4	.27	3.7	.08
30	3.2	.31	.49	.16	------	.21	.12	.35	2.2	.27	.59	.08
31	1.1	------	.49	.18	------	.21	------	.06	------	.27	.44	------
TOTAL	328.86	8.41	62.60	7.85	6.50	4.79	4.18	522.49	865.67	1,354.29	414.66	394.67
MEAN	10.6	.28	2.02	.25	.22	.15	.14	16.9	28.9	43.7	13.4	13.2
MAX	189	.59	11	.49	.31	.21	.21	282	424	701	123	328
MIN	.14	.12	.35	.16	.18	.12	.10	.05	.01	.27	.21	.06
AC-FT	652	17	124	16	13	9.5	8.3	1,040	1,720	2,690	822	783

CAL YR 1971 TOTAL 4,954.83 MEAN 13.6 MAX 816 MIN 0 AC-FT 9,830
WTR YR 1972 TOTAL 3,974.97 MEAN 10.9 MAX 701 MIN .01 AC-FT 7,880

PEAK DISCHARGE (BASE, 1,000 CFS, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-11	2400	9.50	1,640	7- 9	0200	10.90	2,270
6-14	0330	11.67	2,670	8-23	2100	8.75	1,320
7- 3	0430	12.54	3,070	9- 2	0130	8.54	1,180

07299540 Prairie Dog Town Fork Red River near Childress, Tex.

LOCATION.--Lat 34°34'09", long 100°11'37", Childress County, on left bank at downstream side of bridge on U.S. Highways 62 and 83, 3.1 miles downstream from Salt Creek, 10.0 miles north of Childress, and at mile 1,061.

DRAINAGE AREA.--7,725 sq mi, of which 4,769 sq is probably noncontributing.

PERIOD OF RECORD.--December 1964 to March 1965 (gage heights only), April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,628.4 ft above mean sea level, from highway bridge plans.

AVERAGE DISCHARGE.--7 years, 100 cfs (72,450 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,000 cfs July 3 (gage height, 9.33 ft); minimum, 0.01 cfs Aug. 20.
Period of record: Maximum discharge, 58,800 cfs June 26, 1965 (gage height, 12.0 ft), from rating curve extended above 33,000 cfs; no flow Aug. 5-8, Sept. 12, 1970.
Maximum stage since at least 1899, 16.9 ft in May or June 1957, from information by local residents and State Highway Department.

REMARKS.--Records fair. Many small diversions above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	80	26	16	5.4	2.5	4.1	23	44	1.4	.05	26
2	14	38	102	13	5.4	2.5	4.1	4.7	7.9	1.4	.05	666
3	9.8	21	152	13	4.1	1.4	3.0	1.2	2.1	5,430	.05	285
4	6.1	16	112	13	4.1	1.4	2.1	1.3	.43	821	.07	34
5	5.4	9.8	117	14	3.6	1.4	3.6	14	.31	78	.22	5.4
6	4.7	8.8	82	16	3.0	2.5	3.6	70	.31	32	.11	1.4
7	4.1	7.0	56	17	3.0	2.1	2.5	54	.43	11	.07	.57
8	4.1	6.1	51	16	3.6	1.7	1.4	23	.43	32	52	25
9	3.0	6.1	50	14	2.5	1.7	1.2	3.6	.43	2,720	90	36
10	3.0	6.1	43	11	2.5	2.1	2.5	140	.57	532	36	17
11	3.0	6.1	36	9.8	3.6	2.1	1.7	1,120	.72	103	11	4.1
12	3.6	6.1	34	6.1	11	2.5	.92	1,070	1.4	378	4.7	.72
13	3.0	6.1	25	4.7	8.8	2.1	.57	180	865	76	5.4	.57
14	2.5	6.1	28	4.7	4.1	2.5	.31	59	2,520	288	118	.72
15	2.5	5.5	59	4.0	3.0	3.0	.31	62	945	41	34	.72
16	2.5	6.1	41	4.5	4.1	3.6	.22	28	895	12	18	.31
17	2.5	36	44	5.4	3.0	3.0	.11	15	265	1.2	11	.31
18	1,370	689	34	4.7	2.1	2.5	.31	11	46	.6	.92	.31
19	1,560	300	26	4.1	2.5	1.4	.22	9.8	11	.64	.22	.72
20	234	123	21	4.1	3.0	.57	.43	11	2.5	118	.07	219
21	75	65	20	4.7	3.0	.57	.43	9.8	1.4	46	.07	1,160
22	44	146	18	4.7	3.0	.57	.16	8.8	174	72	.92	92
23	256	110	18	3.6	3.0	1.4	.11	8.8	523	274	.16	28
24	205	80	17	2.5	3.0	4.1	.16	7.9	166	90	84	11
25	127	60	14	2.1	4.1	2.5	.11	9.1	44	112	95	7.0
26	52	41	14	2.1	4.1	2.1	.31	75	41	28	48	3.6
27	41	30	11	2.1	3.6	2.1	1.2	69	21	4.7	111	6.1
28	57	20	9.0	2.1	3.6	2.1	.43	30	4.1	.7	76	5.4
29	276	14	13	2.5	3.0	2.1	7.6	177	1.4	.4	39	2.1
30	172	18	21	3.6	------	2.5	246	54	1.4	.1	8.8	.92
31	79	------	17	3.0	------	3.6	------	72	------	.1	20	------
TOTAL	4,641.8	1,966.9	1,311.0	228.1	112.8	66.21	289.71	3,422.0	6,585.83	11,368.6	864.88	2,639.97
MEAN	150	65.6	42.3	7.36	3.89	2.14	9.66	110	220	367	27.9	88.0
MAX	1,560	689	152	17	11	4.1	246	1,120	2,520	5,430	118	1,160
MIN	2.5	5.5	9.0	2.1	2.1	.57	.11	1.2	.31	.10	.05	.31
AC-FT	9,210	3,900	2,600	452	224	131	575	6,790	13,060	22,550	1,720	5,240

CAL YR 1971 TOTAL 40,044.46 MEAN 110 MAX 3,680 MIN .01 AC-FT 79,430
WTR YR 1972 TOTAL 33,497.80 MEAN 91.5 MAX 5,430 MIN .05 AC-FT 66,440

PEAK DISCHARGE (BASE, 7,000 CFS).--Oct. 18 (2000) 8,540 cfs (8.90 ft); July 3 (0500) 13,000 cfs (9.33 ft).

07299570 Red River near Quanah, Tex.

LOCATION.--Lat 34°24'47", long 99°44'03", Hardeman County, on right bank at downstream side of bridge on State Highway 283, 8 miles north of Quanah, 30 miles upstream from Salt Fork Red River, and at mile 1,030.

DRAINAGE AREA.--8,321 sq mi, of which 4,769 sq mi is probably noncontributing.

PERIOD OF RECORD.--November 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,412.97 ft above mean sea level.

AVERAGE DISCHARGE.--12 years (1960-72), 144 cfs (104,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,400 cfs July 3 (gage height, 10.30 ft); no flow at times.
Period of record: Maximum discharge, 64,000 cfs June 7, 1960 (gage height, 16.00 ft), from rating curve extended above 32,000 cfs; no flow at times.
Maximum stage since at least 1891 occurred in 1896, about 23 ft; second highest stage occurred June 1, 1957, 21.2 ft, from information by local resident.

REMARKS.--Records poor. Several small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	138	60	36	7.1	1.9	.25	62	7.6	1.4	0	.01
2	50	131	104	34	7.0	1.1	.16	16	.55	.7	0	.01
3	36	104	150	30	5.0	1.1	.09	1.7	.14	4,140	0	654
4	23	78	205	25	4.0	1.1	.03	1.1	.10	2,360	0	118
5	17	62	217	20	5.2	.80	.05	.14	.07	344	0	62
6	14	41	199	25	5.2	.80	.22	15	.06	91	0	33
7	9.4	30	145	28	4.8	.94	.06	30	.06	26	0	16
8	15	26	123	41	5.1	.47	.01	19	.05	16	0	2.8
9	9.4	23	106	33	5.1	.47	.01	7.3	.05	750	4.2	.57
10	7.4	20	106	30	5.6	.57	.02	18	.04	1,240	17	.02
11	4.6	17	78	22	5.0	.47	.05	357	.02	296	6.2	0
12	4.2	16	62	19	8.9	.57	.04	686	.01	410	.68	.54
13	3.2	13	49	15	10	.57	.01	503	.01	174	0	0
14	2.8	11	62	11	8.5	.47	0	76	789	342	2.4	0
15	2.1	9.9	145	5.6	6.4	.47	12	62	766	420	.20	0
16	1.6	8.6	134	6.8	5.3	.47	.19	72	259	43	12	0
17	3.1	12	101	6.2	4.4	.31	.03	77	116	16	.30	0
18	24	137	98	13	3.3	.25	0	50	47	11	0	0
19	789	378	87	11	2.5	.20	0	29	44	2.2	0	0
20	552	223	73	9.4	2.4	.38	.12	16	28	.6	0	0
21	205	155	64	8.7	2.6	.38	.04	7.5	9.3	64	0	307
22	154	183	58	8.7	2.0	.38	0	3.8	23	41	0	286
23	449	174	56	7.4	2.2	1.9	0	2.3	50	86	0	37
24	205	169	47	6.8	2.9	4.6	0	1.4	111	150	81	5.6
25	164	138	45	3.3	3.2	3.2	0	.99	58	80	70	.20
26	134	109	45	2.8	3.7	1.1	0	.61	38	101	41	.02
27	109	87	40	2.8	4.2	.19	0	.51	15	27	16	.01
28	82	67	36	2.5	2.3	.09	0	.50	10	2.8	6.2	.01
29	610	50	36	2.5	2.2	.20	.03	61	4.2	.2	14	.02
30	482	52	37	4.9	------	.16	58	61	2.9	0	1.3	0
31	205	------	37	6.5	------	.31	------	47	------	0	.68	------
TOTAL	4,422.8	2,662.5	2,805	477.9	136.1	25.92	71.41	2,284.85	2,379.16	11,235.9	273.16	1,522.81
MEAN	143	88.8	90.5	15.4	4.69	.84	2.38	73.7	79.3	362	8.81	50.8
MAX	789	378	217	41	10	4.6	58	686	789	4,140	81	654
MIN	1.6	8.6	36	2.5	2.0	.09	0	.14	.01	0	0	0
AC-FT	8,770	5,280	5,560	948	270	51	142	4,530	4,720	22,290	542	3,020

CAL YR 1971 TOTAL 64,256.32 MEAN 176 MAX 9,470 MIN 0 AC-FT 127,500
WTR YR 1972 TOTAL 28,297.51 MEAN 77.3 MAX 4,140 MIN 0 AC-FT 56,130

PEAK DISCHARGE (BASE, 5,000 CFS).--July 3 (1300) 14,400 cfs (10.30 ft).

07299670 Groesbeck Creek at State Highway 283 near Quanah, Tex.

LOCATION.--Lat 34°21'16", long 99°44'24", Hardeman County, near left bank on downstream side of bridge on State Highway 283, 2 miles downstream from confluence of North and South Groesbeck Creeks, 4 miles north of Quanah, and 9 miles upstream from mouth.

DRAINAGE AREA.--303 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,425.69 ft above mean sea level.

AVERAGE DISCHARGE.--10 years (1962-72), 9.12 cfs (6,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 774 cfs Oct. 29 (gage height, 12.95 ft); minimum, 0.02 cfs Aug. 16.
Period of record: Maximum discharge, 12,000 cfs Oct. 18, 1965 (gage height, 22.93 ft), from rating curve extended above 6,100 cfs; no flow at times.
Highest stage occurred in June 1891; highest stage since 1891 occurred in September 1929; other large floods are reported to have occurred in 1912, 1936, 1946, 1951, 1955, and 1957, from information by local residents.

REMARKS.--Records good. Several diversions upstream from station for farm and ranch use and for a gypsum wallboard plant.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	8.6	3.0	2.1	1.9	2.3	2.4	2.6	2.1	1.7	.69	1.5
2	4.8	5.2	3.0	2.2	2.0	2.4	2.4	2.1	2.0	1.6	.65	1.4
3	4.6	4.1	3.0	2.1	1.5	2.4	2.4	1.9	1.9	45	.46	1.7
4	4.3	3.9	2.7	2.0	1.8	2.4	2.4	1.8	1.9	17	.46	2.3
5	3.9	3.8	2.7	1.0	2.0	2.4	2.5	1.7	1.9	5.3	.46	1.9
6	3.6	3.6	2.7	1.5	2.0	2.5	2.5	2.0	1.9	2.9	.32	1.7
7	3.6	3.6	2.7	2.1	2.0	2.5	2.4	2.2	1.9	2.6	.30	1.5
8	3.3	3.6	2.7	2.2	1.9	2.6	2.2	2.1	1.8	2.6	.57	1.5
9	3.0	3.6	2.7	2.1	1.9	2.7	2.2	2.0	1.9	2.3	17	1.5
10	2.9	3.6	2.6	2.0	1.9	2.7	2.5	2.2	1.9	2.1	30	1.5
11	2.9	3.6	2.6	2.0	1.5	2.2	2.3	2.8	1.8	1.9	74	1.4
12	2.6	3.6	2.6	2.1	2.0	2.1	2.2	216	1.8	2.0	3.0	1.5
13	2.1	3.6	2.6	1.9	1.9	1.9	1.9	22	1.9	1.8	.60	1.4
14	2.0	3.6	2.4	1.9	2.0	2.3	2.2	7.9	1.9	1.7	.21	1.3
15	2.1	3.6	2.4	1.0	2.0	1.8	2.4	2.9	2.6	1.5	.06	1.4
16	2.1	3.6	2.4	1.0	2.0	2.4	2.5	2.5	2.2	1.5	.27	1.4
17	2.1	3.6	2.4	1.8	2.0	2.0	2.2	2.3	1.8	1.3	.70	1.3
18	3.8	3.4	2.6	1.9	2.1	2.0	2.1	2.4	1.7	1.2	.67	1.3
19	3.0	3.4	2.6	1.9	2.0	2.0	2.0	2.4	1.7	1.3	.68	1.2
20	3.4	3.4	2.4	1.9	2.0	2.0	2.0	2.3	1.6	1.2	.79	1.3
21	3.0	3.4	2.4	2.0	2.2	1.7	1.9	2.7	1.6	1.2	.76	1.5
22	2.7	3.2	2.3	1.8	2.1	1.8	2.0	2.7	26	1.1	.70	1.3
23	3.1	3.2	2.4	1.8	2.1	2.3	1.9	2.3	4.7	1.1	.60	1.4
24	2.3	3.2	2.4	1.8	2.2	2.4	1.9	2.3	2.2	1.1	1.1	1.5
25	2.3	3.2	2.4	1.8	2.4	2.9	2.0	2.3	2.0	1.0	45	1.5
26	17	3.2	2.3	1.7	2.3	2.8	2.0	2.2	1.8	1.0	138	1.5
27	12	3.2	2.3	1.9	2.4	2.3	2.1	2.1	1.8	.91	27	1.7
28	5.0	3.0	2.3	1.5	2.4	2.0	2.0	2.2	1.7	.84	3.9	1.7
29	396	3.0	2.3	1.5	2.4	2.1	2.1	2.4	1.8	.81	1.7	1.6
30	259	3.0	2.3	1.9	------	2.6	2.7	2.3	1.8	.76	1.4	1.6
31	62	------	2.3	1.9	------	2.4	------	2.1	------	.52	1.3	------
TOTAL	829.6	110.6	78.5	56.3	58.9	70.9	66.3	309.7	83.6	108.84	353.35	45.3
MEAN	26.8	3.69	2.53	1.82	2.03	2.29	2.21	9.99	2.79	3.51	11.4	1.51
MAX	396	8.6	3.0	2.2	2.4	2.9	2.7	216	26	45	138	2.3
MIN	2.0	3.0	2.3	1.0	1.5	1.7	1.9	1.7	1.6	.52	.06	1.2
AC-FT	1,650	219	156	112	117	141	132	614	166	216	701	90

CAL YR 1971 TOTAL 6,023.39 MEAN 16.5 MAX 1,060 MIN 0 AC-FT 11,950
WTR YR 1972 TOTAL 2,171.89 MEAN 5.93 MAX 396 MIN .06 AC-FT 4,310

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

07299840 Greenbelt Reservoir near Clarendon, Tex.

LOCATION.--Lat 35°00'02", long 100°53'40", Donley County, on upstream side and near right end of dam on Salt Fork Red River and 4.3 miles north of Clarendon.

DRAINAGE AREA.--457 sq mi, of which 191 sq mi is probably noncontributing.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Freese, Nichols, and Endress, Consulting Engineers).

EXTREMES.--Current year: Maximum contents, 24,100 acre-ft July 12 (elevation, 2,640.65 ft); minimum, 19,200 acre-ft Oct. 16 (elevation, 2,635.71 ft).
Period of record: Maximum contents, 24,560 acre-ft Apr. 21, 1970 (elevation, 2,641.07 ft); minimum, 2,950 acre-ft Aug. 30, 1967 (elevation, 2,607.37 ft).

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 5,800 ft long. Storage began Dec. 5, 1966, and dam was completed in August 1967. The dam is property of Greenbelt Municipal and Industrial Water Authority and was built to impound water for municipal and industrial use by cities of Childress, Clarendon, Crowell, Hedley, and Quanah. The uncontrolled emergency spillway (elevation, 2,674.0 ft) is an open cut about 1,500 ft wide, located at left end of dam, and will discharge 184,000 cfs at a lake elevation of 2,684.0 ft. Data regarding dam and reservoir are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,686.0	-
Top of design flood pool	2,683.0	105,600
Crest of emergency spillway	2,674.0	81,760
Crest of service spillway (morning glory)	2,663.65	59,110
Inlet to service outlet pipe	2,597.0	900

COOPERATION.--Records of diversion and capacity table (dated April 1964, using the 1962 Geological Survey topographic maps) furnished by Greenbelt Municipal and Industrial Water Authority.

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

2,635.0	18,550	2,639.0	22,370
2,636.0	19,460	2,640.0	23,410
2,637.0	20,400	2,641.0	24,480
2,638.0	21,370		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19,350	20,060	21,110	21,430	21,490	21,500	21,330	20,930	22,200	23,080	23,650	23,130
2	19,340	20,050	21,190	21,470	21,430	21,500	21,330	20,930	22,190	23,050	23,550	23,130
3	19,310	20,050	21,190	21,390	21,420	21,520	21,310	20,930	22,160	23,060	23,530	23,140
4	19,310	20,070	21,230	21,340	21,480	21,500	21,250	21,520	22,140	23,010	23,540	23,340
5	19,300	20,040	21,240	21,330	21,510	21,510	21,270	21,700	22,100	22,990	23,530	23,350
6	19,310	20,010	21,270	21,370	21,440	21,540	21,270	21,890	22,080	22,990	23,520	23,360
7	19,300	20,030	21,290	21,410	21,460	21,520	21,220	21,910	22,050	22,950	23,460	23,360
8	19,260	20,030	21,280	21,460	21,490	21,490	21,220	21,930	22,000	22,930	23,460	23,330
9	19,230	20,020	21,340	21,450	21,530	21,510	21,250	21,940	21,970	24,000	23,390	23,330
10	19,240	20,040	21,240	21,450	21,520	21,540	21,240	21,990	21,950	24,050	23,350	23,310
11	19,230	20,050	21,250	21,450	21,510	21,560	21,250	22,120	22,400	24,070	23,330	23,270
12	19,240	20,080	21,240	21,510	21,510	21,540	21,200	22,160	22,490	24,100	23,310	23,250
13	19,210	20,050	21,270	21,440	21,550	21,530	21,210	22,190	22,710	24,060	23,360	23,230
14	19,210	20,080	21,300	21,370	21,530	21,540	21,130	22,210	23,080	24,050	23,380	23,170
15	19,210	20,080	21,310	21,340	21,540	21,500	21,080	22,220	23,120	24,010	23,370	23,170
16	19,200	20,130	21,300	21,340	21,570	21,500	21,080	22,220	23,110	23,970	23,350	23,160
17	19,710	21,000	21,300	21,340	21,560	21,490	21,080	22,230	23,110	23,920	23,320	23,130
18	19,850	21,030	21,330	21,510	21,550	21,470	21,060	22,200	23,120	24,000	23,290	23,090
19	19,900	21,070	21,330	21,510	21,570	21,490	21,020	22,170	23,130	24,000	23,250	23,070
20	19,920	21,090	21,340	21,510	21,570	21,470	20,960	22,150	23,080	23,980	23,230	23,030
21	19,940	21,090	21,340	21,520	21,570	21,450	20,950	22,140	23,070	23,930	23,220	22,930
22	19,980	21,070	21,360	21,510	21,550	21,440	20,960	22,110	23,060	23,900	23,330	22,920
23	20,010	21,110	21,410	21,490	21,600	21,420	20,880	22,080	23,040	23,880	23,310	22,910
24	20,020	21,110	21,400	21,490	21,590	21,420	20,880	22,050	23,170	23,910	23,260	22,910
25	20,040	21,150	21,440	21,460	21,580	21,430	20,910	22,060	23,190	23,860	23,230	22,860
26	20,040	21,130	21,460	21,410	21,570	21,430	20,900	22,070	23,160	23,830	23,220	22,810
27	20,030	21,160	21,430	21,410	21,580	21,390	20,880	22,070	23,150	23,820	23,250	22,830
28	20,020	21,120	21,390	21,410	21,540	21,310	20,880	22,050	23,120	23,810	23,240	22,790
29	20,050	21,130	21,440	21,440	21,560	21,320	20,880	22,220	23,070	23,750	23,240	22,700
30	20,040	21,130	21,450	21,450	------	21,340	21,000	22,210	23,090	23,730	23,200	22,700
31	20,080	------	21,420	21,480	------	21,330	------	22,210	------	23,690	23,180	------
(†)	2,636.66	2,637.75	2,638.05	2,638.11	2,638.19	2,637.96	2,637.62	2,638.84	2,639.69	2,640.26	2,639.78	2,639.32
(*)	+730	+1,050	+290	+60	+80	-230	-330	+1,210	+880	+600	-510	-480
(††)	159	142	140	154	153	203	221	211	275	291	258	218
MAX	20,080	21,160	21,460	21,520	21,600	21,560	21,270	22,230	23,190	24,100	23,650	23,360
MIN	19,200	20,010	21,110	21,330	21,420	21,310	20,880	20,930	21,950	22,930	23,180	22,700

CAL YR 1971..... * +850 †† 2,590 MAX 21,460 MIN 18,520
WTR YR 1972..... * +3,350 †† 2,420 MAX 24,100 MIN 19,200

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use by Greenbelt Municipal and Industrial Water Authority.

07300000 Salt Fork Red River near Wellington, Tex.

LOCATION.--Lat 34°57'27", long 100°13'14", Collingsworth County, near center of stream on downstream side of bridge on U.S. Highway 83, 4 miles downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 miles south of Lutie, and 7.2 miles north of Wellington.

DRAINAGE AREA.--1,222 sq mi, of which 209 sq mi is probably noncontributing.

PERIOD OF RECORD.--June 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,941.41 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 61.1 cfs (44,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,050 cfs May 12 (gage height, 7.70 ft); minimum daily, 2.7 cfs Aug. 7.
Period of record: Maximum discharge, 146,000 cfs May 16, 1957 (gage height, 19.00 ft), from rating curve extended above 11,000 cfs on basis of slope-area measurement of 63,400 cfs; minimum, 0.1 cfs June 19, 1952.

REMARKS.--Records poor. Flow partly regulated since August 1967 by Greenbelt Reservoir (station 07299840). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	9.1	19	21	11	11	7.8	21	16	19	3.2	34
2	8.4	8.4	34	21	11	11	7.8	15	13	18	3.0	75
3	7.8	8.4	43	19	11	11	7.8	15	13	93	3.0	26
4	7.3	8.4	110	19	11	9.1	8.4	12	12	300	3.2	17
5	6.8	8.4	71	15	11	8.4	8.4	171	13	125	3.0	17
6	7.3	8.4	48	18	11	8.4	8.4	56	13	38	3.0	16
7	6.8	7.8	30	25	12	7.8	7.8	19	14	28	2.7	13
8	6.4	7.8	22	23	12	7.8	7.3	15	13	351	3.0	13
9	5.9	8.4	17	25	12	7.8	7.3	13	13	364	3.8	14
10	5.4	8.4	15	26	12	7.8	7.3	14	12	30	3.8	13
11	5.0	9.1	14	25	12	7.8	7.8	158	13	17	3.2	11
12	4.6	9.1	14	25	19	7.8	7.8	2,370	12	15	3.0	9.8
13	4.2	9.8	13	25	25	7.3	7.8	82	380	14	3.5	7.3
14	3.8	9.8	30	23	23	7.3	7.8	59	1,040	12	6.4	6.8
15	3.8	11	96	18	22	7.3	7.8	38	186	11	5.9	6.8
16	3.8	12	51	16	22	7.3	7.8	28	75	11	3.8	6.4
17	3.8	59	28	17	19	7.3	8.4	12	43	8.4	4.6	5.4
18	332	36	23	18	18	7.3	9.1	7.3	30	7.8	11	4.6
19	93	23	21	17	17	7.8	9.8	6.4	28	7.8	9.8	3.8
20	23	17	21	16	16	8.4	9.8	6.8	19	6.8	4.2	113
21	12	12	21	15	15	8.4	11	6.4	18	6.4	3.2	98
22	31	68	19	14	15	7.8	11	9.1	18	5.9	5.0	21
23	93	54	19	13	14	7.8	11	17	18	5.4	9.8	16
24	26	30	19	12	14	7.8	11	9.1	48	4.6	5.0	14
25	7.3	23	22	11	13	7.8	11	7.8	36	4.2	6.4	13
26	18	22	23	11	12	7.8	11	18	25	4.2	5.4	12
27	32	19	23	11	12	7.8	11	21	23	4.2	5.0	11
28	7.8	19	22	11	12	7.8	11	21	22	3.8	5.4	11
29	43	18	21	11	11	7.8	408	376	21	3.8	5.0	11
30	17	17	22	11	------	8.4	276	64	21	3.5	32	11
31	11	------	21	11	------	7.8	------	26	------	3.5	165	------
TOTAL	845.0	561.3	952	543	425	252.7	934.2	3,693.9	2,208	1,526.3	334.3	630.9
MEAN	27.3	18.7	30.7	17.5	14.7	8.15	31.1	119	73.6	49.2	10.8	21.0
MAX	332	68	110	26	25	11	408	2,370	1,040	364	165	113
MIN	3.8	7.8	13	11	11	7.3	7.3	6.4	12	3.5	2.7	3.8
AC-FT	1,680	1,110	1,890	1,080	843	501	1,850	7,330	4,380	3,030	663	1,250

CAL YR 1971 TOTAL 5,266.02 MEAN 14.4 MAX 332 MIN .56 AC-FT 10,450
WTR YR 1972 TOTAL 12,906.60 MEAN 35.3 MAX 2,370 MIN 2.7 AC-FT 25,600

PEAK DISCHARGE (BASE, 5,000 CFS).--May 12 (0300) 8,050 cfs (7.70 ft).

07300500 Salt Fork Red River at Mangum, Okla.

LOCATION.--Lat 34°51'32", long 99°30'28", in SW¼SE¼ sec. 34, T.5 N., R.22 W., Greer County, near left bank on downstream side of pier of bridge on State Highway 34, 0.5 mile south of Mangum, 13 miles downstream from Fish Creek, and at mile 35.5.

DRAINAGE AREA.--1,566 sq mi, of which 209 sq mi is probably noncontributing.

PERIOD OF RECORD.--April 1905 to June 1906, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,490.87 ft above mean sea level (levels by Bureau of Reclamation). Apr. 11, 1905, to June 30, 1906, nonrecording gage at site 0.2 mile upstream at different datum. Oct. 1, 1937, to Nov. 8, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years (1937-72), 87.9 cfs (63,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,550 cfs May 12 (gage height, 10.67 ft); no flow at times.
Period of record: Maximum discharge, 72,000 cfs May 16, 1957 (gage height, 14.55 ft); maximum gage height, 14.7 ft June 16, 1938; no flow at times each year.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1938.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	52	17	20	14	2.5	.35	210	41	1.1		0
2	4.8	46	20	19	11	1.8	.27	68	26	.03		0
3	4.2	40	39	16	9.1	1.8	.58	29	11	230		1.0
4	2.1	35	48	4.2	11	1.6	1.1	14	8.2	10		.25
5	.90	30	70	7.0	12	1.3	.72	7.4	7.4	26		0
6	.27	26	83	14	9.0	1.3	.35	91	7.4	20		0
7	.03	17	61	25	15	1.3	.02	123	3.7	12		0
8	0	11	53	32	22	1.1	0	61	1.6	17		0
9	0	9.0	48	42	14	1.1	0	42	.60	235		0
10	0	6.0	42	50	17	.90	0	19	.10	261		0
11	0	5.4	37	32	16	.90	0	24	.07	475		0
12	0	5.4	34	37	19	1.1	0	2,390	.02	84		0
13	0	6.0	26	26	20	1.1	0	681	.02	31		0
14	0	5.4	34	10	27	1.3	0	88	527	11		0
15	0	6.0	79	3.5	22	2.1	0	61	250	2.9		0
16	0	6.0	53	7.0	20	2.1	0	48	105	.90		0
17	.68	7.4	50	11	19	2.1	0	42	59	.07		0
18	12	6.7	42	13	13	2.1	0	39	30	.01		0
19	85	10	37	26	9.0	2.1	0	31	23	0		0
20	195	22	34	27	6.7	1.8	0	22	12	0		0
21	79	26	31	17	6.0	.90	0	14	34	0		0
22	45	29	29	20	4.2	.46	0	13	26	0		0
23	89	34	24	22	4.2	.27	0	10	11	0		0
24	106	53	22	16	4.2	.72	0	8.4	3.7	0		0
25	84	50	24	12	4.2	1.1	0	6.0	1.6	0		0
26	61	37	24	10	4.8	.90	0	6.7	.19	0		0
27	50	32	22	4.8	4.2	1.1	0	532	.05	0		0
28	34	27	19	3.4	3.7	1.3	0	61	101	0		0
29	242	22	19	4.8	3.3	.90	0	315	17	0		0
30	80	19	20	6.7	------	.58	527	270	6.7	0		0
31	66	------	20	9.0	------	.46	------	105	------	0		------
TOTAL	1,249.18	681.3	1,161	547.4	344.6	40.09	530.39	5,431.5	1,314.35	1,417.01	0	1.25
MEAN	40.3	22.7	37.5	17.7	11.9	1.29	17.7	175	43.8	45.7	0	.042
MAX	242	53	83	50	27	2.5	527	2,390	527	475	0	1.0
MIN	0	5.4	17	3.4	3.3	.27	0	6.0	.02	0	0	0
AC-FT	2,480	1,350	2,300	1,090	684	80	1,050	10,770	2,610	2,810	0	2.5

CAL YR 1971 TOTAL 7,648.52 MEAN 21.0 MAX 1,400 MIN 0 AC-FT 15,170
WTR YR 1972 TOTAL 12,718.07 MEAN 34.7 MAX 2,390 MIN 0 C-FT 25,230

PEAK DISCHARGE (BASE, 6,000 CFS).--May 12 (1600) 6,550 cfs (10.67 ft).

07301200 McClellan Creek near McLean, Tex.

LOCATION.--Lat 35°19'45", long 100°36'32", Gray County, on left bank at downstream side of bridge on State Highway 273, 5 miles upstream from mouth, and 6.6 miles north of McLean.

DRAINAGE AREA.--759 sq mi, of which 299 sq mi is probably noncontributing.

PERIOD OF RECORD.--Occasional low-flow measurements, 1965-67, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,566.99 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 24.8 cfs (17,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,730 cfs July 9 (gage height, 10.64 ft); no flow at times.
Period of record: Maximum discharge, 8,730 cfs Apr. 18, 1970, July 9, 1972 (gage height, 10.64 ft), from rating curve extended above 1,100 cfs; no flow at times each year.
Maximum stage since 1912, 21 ft May 1957, from information by local residents. Other major floods occurred in 1920, 1941, and 1951.

REMARKS.--Records poor. Flow largely regulated by Lake McClellan (capacity, 5,000 acre-ft) 18 miles upstream. One small diversion from lake upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.0	3.6	19	16	19	12	5.2	16	.88	.01	9.4
2	6.0	7.0	12	19	14	19	12	2.4	14	.30	0	12
3	3.6	9.4	19	24	10	19	12	1.9	14	100	0	9.4
4	3.0	11	12	15	11	14	12	52	12	6.0	0	34
5	2.5	11	14	10	12	12	12	71	11	4.4	0	65
6	2.4	11	14	13	12	12	9.4	32	9.4	3.0	0	9.4
7	3.0	11	11	16	9.0	12	7.0	8.2	8.2	2.4	.24	11
8	3.0	9.4	11	19	9.4	16	7.0	8.2	7.0	4.8	.01	201
9	3.6	9.4	12	16	7.0	21	6.0	7.0	6.0	626	0	95
10	4.4	7.0	14	21	7.0	21	5.2	84	6.0	14	0	14
11	4.4	7.0	11	24	6.0	16	5.2	488	5.2	3.6	0	8.2
12	4.4	4.4	11	28	20	12	5.2	104	143	3.0	0	6.0
13	4.4	4.4	12	26	33	12	5.2	70	790	1.9	0	4.4
14	5.2	5.2	19	20	28	16	4.4	39	120	.64	.49	4.4
15	5.2	5.2	24	10	26	12	4.4	12	31	.64	.53	4.4
16	5.2	8.2	12	12	26	12	3.6	8.2	19	.45	.06	4.4
17	6.0	268	21	15	24	14	3.6	6.0	16	1.1	0	4.4
18	341	1,200	24	19	28	14	2.4	5.2	51	18	0	3.6
19	14	225	19	14	26	14	2.4	4.4	9.4	4.1	0	1.2
20	9.4	33	19	16	12	11	2.4	6.0	4.4	2.5	0	1.9
21	8.2	21	19	16	12	14	2.4	7.0	3.1	3.1	1.7	1.9
22	164	9.4	19	16	14	14	2.4	13	3.6	1.9	533	2.4
23	63	3.6	19	16	19	16	1.5	12	3.6	1.4	42	3.6
24	26	3.6	16	16	24	14	1.5	6.0	8.2	1.1	24	3.6
25	19	3.0	16	19	26	14	73	20	3.6	.40	11	3.0
26	12	2.4	16	17	24	11	25	28	.88	.19	12	3.6
27	14	2.4	16	11	24	11	5.2	14	.45	.05	16	3.6
28	11	1.5	19	11	19	14	4.4	11	.12	.36	24	.88
29	11	1.2	19	12	19	12	141	609	4.6	.23	6.0	.19
30	14	1.9	19	14	------	16	63	31	2.4	.02	24	.19
31	11	------	24	15	------	16	------	21	------	.02	18	------
TOTAL	788.3	1,903.6	496.6	519	517.4	450	452.8	1,786.7	1,323.15	806.48	713.04	526.06
MEAN	25.4	63.5	16.0	16.7	17.8	14.5	15.1	57.6	44.1	26.0	23.0	17.5
MAX	341	1,200	24	28	33	21	141	609	790	626	533	201
MIN	2.4	1.2	3.6	10	6.0	11	1.5	1.9	.12	.02	0	.19
AC-FT	1,560	3,780	985	1,030	1,030	893	898	3,540	2,620	1,600	1,410	1,040

CAL YR 1971 TOTAL 7,424.21 MEAN 20.3 MAX 1,200 MIN 0 AC-FT 14,730
WTR YR 1972 TOTAL 10,283.13 MEAN 28.1 MAX 1,200 MIN 0 AC-FT 20,400

07301300 North Fork Red River near Shamrock, Tex.

LOCATION.--Lat 35°15'51", long 100°14'29", Wheeler County, on left bank at downstream side of bridge on U.S. Highway 83, 2.5 miles north of Shamrock, 16 miles upstream from Oklahoma-Texas State line, and 23 miles downstream from McClellan Creek.

DRAINAGE AREA.--1,082 sq mi, of which 379 sq mi is probably noncontributing.

PERIOD OF RECORD.--1951-63 (occasional low-flow measurements), February 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,165.55 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 23.7 cfs (17,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,600 cfs May 29 (gage height, 4.50 ft); no flow at times.
Period of record: Maximum discharge, 11,200 cfs June 7, 1967 (gage height, 5.80 ft), from rating curve extended above 3,800 cfs; no flow at times.
Maximum stage since at least 1915, 16.1 ft in May 1957, from information by State Highway Department and local residents.

REMARKS.--Records poor. Some regulation by Lake McClellan (capacity, 5,000 acre-ft) 41 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	29	4.7	7.9	6.0	1.6	0	3.3	11	0	0	1.4
2	.04	25	8.9	7.9	6.0	.18	0	.08	1.8	0	0	32
3	.01	15	31	6.2	4.0	.01	0	0	.11	47	0	2.4
4	0	12	35	2.0	5.0	0	0	.01	.02	52	0	.44
5	0	8.9	43	1.0	15	.03	0	.02	0	22	0	.14
6	0	7.0	34	4.7	31	.07	0	.01	0	3.0	0	.13
7	0	4.7	43	5.4	7.0	0	0	0	0	.10	0	.25
8	0	1.5	37	18	10	0	0	0	0	206	0	.13
9	0	2.6	37	3.0	17	0	0	0	0	751	0	351
10	0	3.5	56	3.5	7.9	0	0	0	0	36	0	46
11	0	5.4	22	11	7.0	0	0	164	0	3.0	0	4.3
12	0	6.2	8.9	48	13	0	0	469	0	.15	0	.14
13	0	5.4	7.0	43	35	0	0	13	6.0	.03	0	.04
14	0	3.0	10	10	26	0	0	5.1	150	0	0	0
15	0	2.2	27	10	12	0	0	1.4	79	0	0	0
16	0	3.5	19	15	13	0	0	.15	11	0	0	0
17	0	563	12	20	15	0	0	.10	.84	0	0	0
18	268	43	12	68	12	0	0	.02	.06	0	0	0
19	77	134	11	40	9.0	0	0	.01	.02	0	0	0
20	40	43	12	29	6.3	0	0	0	0	0	0	10
21	27	6.2	14	29	7.9	0	0	0	.19	0	.16	2.8
22	104	25	12	29	3.1	0	0	0	.02	0	40	.10
23	467	29	15	31	3.0	0	0	5.1	0	0	60	.04
24	137	22	10	25	5.0	0	0	.13	6.5	0	.44	.01
25	175	15	12	12	13	0	0	.06	.21	0	0	0
26	223	10	7.9	7.0	11	0	0	5.8	.01	0	0	0
27	106	5.4	11	2.5	8.8	0	0	2.2	1.6	0	0	.20
28	22	3.5	10	2.0	7.0	0	0	4.1	1.3	0	0	.15
29	60	4.7	10	3.0	6.4	0	27	887	.05	0	0	.10
30	118	4.7	11	4.1	------	0	90	82	.02	0	0	.05
31	43	------	15	5.4	------	0	------	32	------	0	42	------
TOTAL	1,867.05	1,043.4	598.4	503.6	322.4	1.89	117	1,674.59	269.75	1,120.28	142.60	451.82
MEAN	60.2	34.8	19.3	16.2	11.1	.061	3.90	54.0	8.99	36.1	4.60	15.1
MAX	467	563	56	68	35	1.6	90	887	150	751	60	351
MIN	0	1.5	4.7	1.0	3.0	0	0	0	0	0	0	0
AC-FT	3,700	2,070	1,190	999	639	3.8	232	3,320	535	2,220	283	896

CAL YR 1971 TOTAL 4,852.21 MEAN 13.3 MAX 563 MIN 0 AC-FT 9,620
WTR YR 1972 TOTAL 8,112.78 MEAN 22.2 MAX 887 MIN 0 AC-FT 16,090

PEAK DISCHARGE (BASE, 3,000 CFS).--May 29 (1400) 3,600 cfs (4.50 ft); July 9 (0900) 3,260 cfs (4.41 ft).

07301410 Sweetwater Creek near Kelton, Tex.

LOCATION.--Lat 35°28'23", long 100°07'14", Wheeler County, near center of stream on downstream side of bridge on Farm Road 592, 5 miles north of Kelton, 8 miles upstream from Texas-Oklahoma State line, and 8.5 miles northeast of Wheeler.

DRAINAGE AREA.--287 sq mi, of which 20 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,230 ft (from topographic map).

AVERAGE DISCHARGE.--10 years (1962-72), 13.6 cfs (9,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 302 cfs Apr. 30 (gage height, 10.84 ft); minimum, 0.01 cfs Aug. 21.
Period of record: Maximum discharge, 2,110 cfs Apr. 18, 1970 (gage height, 14.95 ft); no flow at times.
Maximum stage since at least 1882, about 20 ft May 16, 1957.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversion above station for ranch use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	8.0	8.5	12	13	11	9.7	36	15	2.8	.32	4.1
2	1.6	8.0	11	12	13	11	9.7	17	12	2.6	.28	2.6
3	1.5	8.0	12	11	12	11	9.4	13	10	12	.18	2.5
4	1.4	10	13	9.0	13	11	9.0	11	9.2	9.0	.16	2.3
5	1.3	20	14	10	14	10	9.0	25	8.0	6.2	.22	2.2
6	1.2	10	15	12	14	10	9.7	26	7.8	5.0	.18	2.1
7	1.2	8.0	15	14	14	11	9.7	13	6.8	4.0	.16	1.8
8	1.2	7.0	14	16	14	9.9	8.5	10	6.6	3.4	.16	1.6
9	1.2	10	13	15	14	9.9	8.5	9.0	6.0	86	.22	1.5
10	1.2	30	13	14	13	10	9.0	9.0	5.8	12	.16	1.4
11	1.1	60	12	13	13	11	8.2	10	5.8	6.0	.12	1.2
12	1.1	20	11	13	15	10	8.0	85	5.8	4.3	.10	1.2
13	1.0	13	11	12	14	9.7	6.8	41	7.5	3.8	.12	.96
14	1.0	12	12	10	14	10	6.6	24	11	3.3	.45	.89
15	1.0	10	12	6.0	13	9.9	6.0	18	10	2.8	.59	.96
16	1.0	11	11	10	13	9.7	6.0	15	7.0	2.3	.36	.89
17	2.0	12	11	15	13	9.7	5.6	13	5.8	2.1	.18	.59
18	20	18	11	15	12	9.4	5.4	12	5.2	1.8	.16	.59
19	15	11	12	14	12	9.7	5.4	11	4.5	1.8	.12	.49
20	10	8.7	11	14	12	9.4	4.8	10	4.0	1.6	.06	.59
21	10	8.2	11	13	12	9.2	5.2	9.0	3.8	1.3	.04	1.1
22	15	9.0	11	13	12	9.2	5.0	8.0	3.5	1.2	.12	.96
23	20	11	11	13	12	9.2	4.8	7.0	3.5	1.1	.16	.89
24	10	9.4	11	13	12	9.9	4.5	7.0	3.7	1.1	.32	.82
25	13	9.0	11	12	12	9.9	4.5	7.0	3.4	.89	.49	.64
26	15	8.7	11	12	12	10	4.8	10	3.0	.76	.28	.59
27	10	8.5	12	12	12	9.4	5.0	58	3.0	.59	.32	.70
28	10	8.7	11	10	12	8.7	4.8	15	2.9	.64	.32	.64
29	16	8.5	11	10	11	9.2	5.0	68	2.9	.76	.28	.59
30	10	8.5	12	10	------	9.7	93	40	3.0	.58	2.1	.59
31	8.0	------	11	12	------	9.7	------	22	------	.44	27	------
TOTAL	203.5	384.2	365.5	377.0	372	307.4	291.6	659.0	186.5	182.16	35.73	37.98
MEAN	6.56	12.8	11.8	12.2	12.8	9.92	9.72	21.3	6.22	5.88	1.15	1.27
MAX	20	60	15	16	15	11	93	85	15	86	27	4.1
MIN	1.0	7.0	8.5	6.0	11	8.7	4.5	7.0	2.9	.44	.04	.49
AC-FT	404	762	725	748	738	610	578	1,310	370	361	71	75

CAL YR 1971 TOTAL 2,723.66 MEAN 7.46 MAX 247 MIN 0 AC-FT 5,400
WTR YR 1972 TOTAL 3,402.57 MEAN 9.30 MAX 93 MIN .04 AC-FT 6,750

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

NOTE.--No gage-height record Oct. 14 to Nov. 16, May 17-26.

07307800 Pease River near Childress, Tex.

LOCATION.--Lat 34°13'39", long 100°04'24", Cottle County, near right bank on downstream side of bridge on Farm Road 104, 0.8 mile upstream from Catfish Creek, 4.4 miles downstream from confluence of North and Middle Forks, and 17 miles southeast of Childress.

DRAINAGE AREA.--3,000 sq mi, of which 800 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1959 to September 1962, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,492.98 ft above mean sea level.

AVERAGE DISCHARGE.--7 years (1960-62, 1967-72), 65.5 cfs (47,450 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,780 cfs May 7 (gage height, 11.16 ft); minimum, 0.01 cfs Aug. 24.
Period of record: Maximum discharge, 19,000 cfs June 9, 1960 (gage height, 13.59 ft); no flow Aug. 10-22, 1969, May 25, 26, 1971.
Maximum stage since at least 1909, 22 ft June 1, 1957; flood in May 1935 reached a stage of 18 ft and was the second highest, from information by local resident.

REMARKS.--Records fair. Three small diversions for irrigation above station. At end of year, flow from 6.97 sq mi above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 1,840 acre-ft below the flood-spillway crests, of which 1,360 acre-ft is floodwater-retarding capacity and 480 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	58	14	12	7.2	3.6	2.0	30	9.2	.40	.15	16
2	41	49	27	11	7.8	3.6	1.8	24	4.4	.40	.15	291
3	29	35	38	11	7.0	4.0	1.4	12	3.2	640	.15	251
4	24	27	36	9.9	5.0	4.0	1.2	4.0	2.0	822	.15	781
5	18	22	54	9.9	6.0	3.6	1.2	3.9	1.8	223	.15	1,490
6	16	16	54	8.0	8.5	3.6	1.4	93	1.2	50	.15	444
7	14	14	51	7.0	7.8	4.0	1.4	2,430	.78	11	.15	172
8	100	12	46	13	7.2	3.6	1.4	513	.63	7.8	.15	80
9	73	12	47	12	7.2	3.2	1.8	211	.40	897	227	54
10	29	12	46	11	8.5	3.6	7.2	504	.40	800	102	44
11	22	12	39	11	9.2	3.6	4.0	177	.31	320	19	41
12	16	9.9	35	9.9	11	3.2	1.2	1,410	4.4	102	2.4	26
13	11	9.9	32	9.9	11	3.2	.31	691	7.2	44	1.4	16
14	9.2	9.9	34	9.2	9.9	3.6	.31	252	2,080	20	55	11
15	7.8	11	38	9.0	5.9	3.6	6.1	163	714	12	531	9.2
16	6.5	11	34	8.0	4.4	2.8	.40	94	536	5.9	122	7.8
17	61	16	34	8.5	4.8	2.8	.31	24	242	3.2	7.8	6.5
18	1,590	8.5	30	7.8	4.4	3.2	.31	14	79	2.8	.78	5.9
19	152	7.2	27	7.2	4.4	3.2	.31	14	44	2.4	.12	4.4
20	52	6.5	24	5.9	4.4	2.8	.31	14	27	1.4	.07	3.6
21	29	6.5	22	5.4	4.4	2.8	.31	13	16	.98	.03	3.2
22	24	18	18	5.9	4.8	2.4	.19	12	600	.78	.02	2.8
23	86	30	16	7.2	4.8	2.4	.19	11	170	.63	.02	2.0
24	211	22	14	6.5	4.8	2.4	.19	7.8	51	.50	37	1.8
25	58	20	13	5.4	4.4	2.4	.19	4.0	26	.50	175	1.2
26	46	18	12	4.8	4.8	2.0	.19	4.0	7.8	.50	75	.98
27	41	16	11	4.4	4.4	2.0	.19	3.6	2.4	.31	13	.63
28	34	13	11	4.4	4.0	1.8	.19	50	.78	.19	9.5	3.7
29	920	12	11	5.4	3.6	1.8	.19	49	.50	.19	1.2	16
30	256	12	13	5.4	------	2.0	84	24	.40	.15	15	3.2
31	75	------	12	4.8	------	2.0	------	11	------	.15	9.2	------
TOTAL	4,111.5	526.4	893	250.8	181.6	92.8	120.19	6,867.3	4,632.80	3,970.18	1,404.74	3,789.91
MEAN	133	17.5	28.8	8.09	6.26	2.99	4.01	222	154	128	45.3	126
MAX	1,590	58	54	13	11	4.0	84	2,430	2,080	897	531	1,490
MIN	6.5	6.5	11	4.4	3.6	1.8	.19	3.6	.31	.15	.02	.63
AC-FT	8,160	1,040	1,770	497	360	184	238	13,620	9,190	7,870	2,790	7,520

CAL YR 1971 TOTAL 31,960.46 MEAN 87.6 MAX 2,880 MIN .02 AC-FT 63,390
WTR YR 1972 TOTAL 26,841.22 MEAN 73.3 MAX 2,430 MIN .02 AC-FT 53,240

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	0900	10.84	5,950	5-12	0300	10.22	4,000
10-28	1100	10.35	4,450	6-14	0730	10.78	5,800
5- 7	0800	11.16	6,780	9- 5	0200	9.92	3,250

07308200 Pease River near Vernon, Tex.

LOCATION.--Lat 34°10'44", long 99°16'40", Wilbarger County, near left bank on downstream side of bridge on U.S. Highway 283, 1.9 miles north of Vernon, and 10 miles upstream from mouth.

DRAINAGE AREA.--3,488 sq mi, of which 559 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,166.03 ft above mean sea level.

AVERAGE DISCHARGE.--12 years (1960-72), 89.5 cfs (64,840 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,300 cfs Sept. 4 (gage height, 13.54 ft); no flow at times.
Period of record: Maximum discharge, 31,000 cfs Sept. 19, 1965 (gage height, 18.50 ft); no flow at times each year.
Maximum stage since at least 1890, 24 ft in 1891; flood in September 1936 reached a stage of 23.5 ft, and flood of June 2, 1957, reached a stage of 22.0 ft, from information by local residents.

REMARKS.--Records fair. Four small diversions for irrigation above station. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Pease River near Childress (station 07307800). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	106	13	15	10	3.0	1.7	130	37	7.7	0	257
2	105	70	17	15	10	2.6	1.4	83	25	15	0	83
3	232	56	23	15	8.0	2.3	1.4	76	16	7.5	0	101
4	96	42	28	10	9.0	2.3	.45	43	12	15	0	4,250
5	67	31	35	9.0	10	2.3	.30	30	8.3	471	0	3,830
6	56	25	38	8.0	10	2.3	.45	38	6.5	257	2.4	1,180
7	48	21	40	10	9.0	2.0	.20	1,840	5.5	96	0	596
8	40	18	45	15	8.0	1.4	.08	1,640	3.4	55	0	335
9	34	17	48	16	8.0	1.2	.04	397	3.0	37	0	193
10	30	16	46	17	8.0	.93	.02	381	2.3	248	22	123
11	71	15	42	16	8.0	.93	.02	543	1.7	870	40	88
12	49	15	38	15	10	.93	.02	4,180	1.2	242	45	76
13	37	15	30	12	12	.68	.01	1,570	.68	118	21	66
14	31	15	32	10	15	.45	.01	612	300	72	19	52
15	26	15	67	9.0	12	.30	.01	327	1,630	48	9.7	43
16	23	15	55	8.0	9.7	.20	.01	221	714	30	118	37
17	20	15	38	12	9.0	.30	.01	169	208	18	74	30
18	18	17	36	13	7.7	.20	.02	125	274	11	41	25
19	17	18	35	13	6.0	.20	.04	94	82	10	26	22
20	126	14	35	13	5.5	.14	9.2	77	44	9.7	15	21
21	105	13	34	13	5.5	.10	.14	66	26	3.4	7.1	29
22	70	15	30	13	4.6	.08	.06	58	175	.93	5.5	32
23	104	15	29	13	5.5	19	.04	52	210	.06	3.8	34
24	85	15	24	12	5.5	141	.04	46	180	0	3.0	20
25	87	15	21	10	5.5	36	.02	40	78	0	17	15
26	135	17	20	9.7	5.1	15	4.6	32	40	0	556	13
27	176	17	18	7.0	4.6	8.3	126	31	28	0	387	12
28	110	15	17	6.0	4.6	5.1	81	30	15	0	171	10
29	107	14	17	6.0	3.8	3.8	38	25	8.3	0	70	8.3
30	1,180	13	17	6.0	------	2.0	335	20	5.5	0	41	10
31	235	------	16	7.0	------	2.0	------	20	------	0	28	------
TOTAL	3,624	705	984	353.7	229.6	257.04	600.29	12,996	4,140.38	2,642.29	1,722.5	11,591.3
MEAN	117	23.5	31.7	11.4	7.92	8.29	20.0	419	138	85.2	55.6	386
MAX	1,180	106	67	17	15	141	335	4,180	1,630	870	556	4,250
MIN	17	13	13	6.0	3.8	.08	.01	20	.68	0	0	8.3
AC-FT	7,190	1,400	1,950	702	455	510	1,190	25,780	8,210	5,240	3,420	22,990

CAL YR 1971 TOTAL 32,758.44 MEAN 89.7 MAX 4,170 MIN 0 AC-FT 64,980
WTR YR 1972 TOTAL 39,846.10 MEAN 109 MAX 4,250 MIN 0 AC-FT 79,030

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	0400	11.28	4,050	6-15	0100	11.60	4,620
5- 7	2400	12.22	6,010	9- 4	2100	13.54	9,300
5-12	1300	12.91	7,720				

07308500 Red River near Burkburnett, Tex.

LOCATION.--Lat 34°06'30", long 98°32'00", Wichita County, on downstream side of bridge on U.S. Highways 277 and 281, 2 miles northeast of Burkburnett, and at mile 933.

DRAINAGE AREA.--20,570 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (monthly discharge only), December 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 956 ft (from topographic map). July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft downstream at same datum.

AVERAGE DISCHARGE.--12 years (1960-72), 688 cfs (498,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,600 cfs May 13 (gage height, 8.64 ft); minimum, 13 cfs Sept. 30.
Period of record: Maximum discharge, 62,800 cfs Oct. 19, 1965 (gage height, 11.46 ft); no flow at times.
Flood of June 3, 1957, reached a stage of 13.54 ft (from floodmarks). According to local residents, higher stages occurred in 1891 and June 1941.

REMARKS.--Records good except those for October, which are poor. Many small diversions for irrigation above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,540	6,060	269	202	122	100	58	4,980	2,380	86	27	86
2	1,160	2,900	281	196	100	97	56	2,700	3,200	73	22	87
3	925	2,010	300	196	90	97	51	1,590	2,690	62	19	244
4	880	1,500	315	100	80	86	46	1,470	1,390	105	18	244
5	688	1,140	351	80	90	83	48	1,090	865	3,030	16	3,060
6	618	835	443	70	115	86	48	1,020	583	1,320	15	3,620
7	408	652	510	140	115	80	41	1,010	425	925	17	1,710
8	329	530	530	186	118	80	37	4,180	315	594	17	1,110
9	244	451	530	186	118	78	33	2,210	244	390	14	910
10	217	425	490	191	115	76	33	1,500	202	264	22	640
11	244	373	460	186	118	76	33	1,560	169	1,260	271	451
12	228	329	425	186	122	73	32	2,040	115	2,110	275	269
13	228	300	399	177	126	71	27	8,110	86	1,620	164	156
14	182	269	366	177	129	69	25	4,870	97	1,120	102	129
15	196	257	554	110	126	69	29	7,200	170	895	65	108
16	169	244	1,260	150	122	67	22	4,400	3,300	530	62	73
17	164	238	2,050	164	122	65	18	3,250	4,450	373	51	53
18	173	217	2,470	147	118	65	17	2,720	3,460	307	123	38
19	217	212	1,140	147	126	62	41	2,070	2,010	226	112	37
20	1,190	207	714	147	126	60	73	1,520	1,180	126	80	27
21	2,860	396	560	147	126	58	100	1,180	792	100	50	33
22	1,040	434	490	143	126	55	56	835	583	91	41	34
23	727	373	416	143	129	53	37	701	470	65	29	29
24	727	322	351	147	126	71	29	629	640	56	21	26
25	940	300	329	143	118	160	22	490	572	43	31	26
26	727	300	294	136	115	129	21	373	366	38	41	36
27	850	288	269	129	115	88	21	307	275	34	340	32
28	1,180	269	263	136	112	76	22	263	244	60	416	22
29	1,010	263	250	132	102	71	804	344	152	40	490	17
30	2,110	263	233	126	------	67	3,020	383	105	37	288	13
31	6,320	------	207	122	------	65	------	640	------	31	147	------
TOTAL	28,491	22,357	17,519	4,642	3,367	2,433	4,900	65,635	31,530	16,011	3,386	13,320
MEAN	919	745	565	150	116	78.5	163	2,117	1,051	516	109	444
MAX	6,320	6,060	2,470	202	129	160	3,020	8,110	4,450	3,030	490	3,620
MIN	164	207	207	70	80	53	17	263	86	31	14	13
AC-FT	56,510	44,350	34,750	9,210	6,680	4,830	9,720	130,200	62,540	31,760	6,720	26,420

CAL YR 1971 TOTAL 215,022.37 MEAN 589 MAX 9,540 MIN 0 AC-FT 426,500
WTR YR 1972 TOTAL 213,591.00 MEAN 584 MAX 8,110 MIN 13 AC-FT 423,700

PEAK DISCHARGE (BASE, 9,000 CFS).--May 13 (1300) 11,600 cfs (8.64 ft).

07311600 North Fork Wichita River near Paducah, Tex.

LOCATION.--Lat 33°57'02", long 100°03'52", Cottle County, near center of stream on downstream side of county bridge, 4 miles downstream from Cottonwood Creek, 7 miles downstream from Salt Creek, 12 miles upstream from Middle Fork, and 14 miles southeast of Paducah.

DRAINAGE AREA.--540 sq mi.

PERIOD OF RECORD.--1951-54 (occasional low-flow measurements), July 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,533 ft, from topographic map.

AVERAGE DISCHARGE.--11 years, 18.1 cfs (13,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,660 cfs Sept. 4 (gage height, 12.84 ft); minimum, 5.6 cfs May 5.
Period of record: Maximum discharge, 9,920 cfs Aug. 25, 1966 (gage height, 15.3 ft, from floodmarks); minimum, 0.3 cfs Sept. 1-4, 1964.
Maximum stage since at least 1908, 29.5 ft in October 1955; flood in May or June 1956 reached a stage of 27 ft, from information by local resident.

REMARKS.--Records good. One small diversion for irrigation above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	10	10	10	7.8	11	26	9.7	12	11	29
2	11	10	15	10	9.0	7.8	12	11	9.0	12	11	27
3	10	9.7	13	9.7	8.4	8.4	10	8.4	9.0	15	11	27
4	9.7	9.7	12	9.0	9.0	6.7	10	6.2	9.0	66	12	1,880
5	9.7	8.4	12	9.0	9.0	7.2	11	6.2	9.0	14	12	722
6	9.0	7.8	12	10	8.4	7.8	12	14	9.0	10	11	66
7	9.7	8.4	11	11	8.4	6.7	10	464	9.0	10	11	29
8	10	8.4	10	11	8.4	7.2	10	53	8.4	9.7	11	20
9	10	8.4	11	11	9.0	7.8	11	20	7.8	10	55	15
10	9.0	8.4	12	10	7.8	8.4	11	16	7.8	10	34	13
11	9.0	8.4	12	10	9.0	7.8	11	17	8.4	10	14	11
12	9.0	9.7	11	10	9.7	7.8	10	65	12	10	12	10
13	8.4	9.7	10	9.7	9.7	7.8	9.7	32	12	10	15	10
14	9.0	9.7	11	10	8.4	8.4	9.7	16	59	10	19	13
15	9.7	9.7	12	10	9.0	8.4	9.7	12	58	11	14	33
16	10	10	10	11	9.0	8.4	9.7	11	61	11	13	10
17	19	11	10	11	8.4	8.4	10	10	18	11	13	10
18	19	9.7	10	11	9.0	8.4	10	9.7	12	12	13	9.7
19	12	9.0	10	10	9.7	8.4	11	9.7	12	12	13	9.7
20	10	9.0	9.7	9.7	9.7	9.0	15	9.7	10	12	13	10
21	9.0	9.0	9.0	10	9.0	9.0	12	10	9.7	12	13	74
22	9.7	9.0	9.7	10	9.0	9.0	10	10	33	12	22	36
23	10	9.0	9.7	10	9.7	11	9.7	9.7	27	12	20	14
24	13	9.0	9.7	9.7	9.7	21	9.7	10	15	12	19	10
25	13	9.0	10	9.7	9.0	10	10	10	13	12	18	10
26	13	7.8	11	9.7	8.4	9.7	12	13	11	12	25	10
27	10	8.4	11	9.7	9.0	9.7	11	54	11	12	30	10
28	9.7	7.8	10	9.7	9.0	9.7	10	23	11	11	28	10
29	58	8.4	11	9.7	9.0	9.7	14	15	11	11	22	10
30	30	9.0	11	9.7	------	11	258	12	12	11	21	10
31	19	------	11	10	------	11	------	10	------	11	22	------
TOTAL	409.6	273.5	336.8	311.0	260.8	279.4	570.2	993.6	503.8	405.7	558	3,148.4
MEAN	13.2	9.12	10.9	10.0	8.99	9.01	19.0	32.1	16.8	13.1	18.0	105
MAX	58	12	15	11	10	21	258	464	61	66	55	1,880
MIN	8.4	7.8	9.0	9.0	7.8	6.7	9.7	6.2	7.8	9.7	11	9.7
AC-FT	812	542	668	617	517	554	1,130	1,970	999	805	1,110	6,240

CAL YR 1971 TOTAL 9,250.2 MEAN 25.3 MAX 1,490 MIN 2.4 AC-FT 18,350
WTR YR 1972 TOTAL 8,050.8 MEAN 22.0 MAX 1,880 MIN 6.2 AC-FT 15,970

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.HT.	DISCHARGE
4-30	0830	5.95	590
5- 7	0700	7.12	1,140
9- 4	1900	12.84	6,660

07311622 North Fork Wichita River near Crowell, Tex.

LOCATION.--Lat 33°52'12", long 99°56'48", Foard County, on left bank 152 ft downstream from ranch road, 2.0 miles upstream from Middle Fork, 15.0 miles southwest of Crowell, and at mile 203.3.

DRAINAGE AREA.--591 sq mi.

PERIOD OF RECORD.--1956-57 (occasional discharge measurements at site 2 miles downstream), October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,448 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 4,200 cfs Sept. 4 (gage height, 8.17 ft); minimum, 1.5 cfs Aug. 21.
Period of record: Maximum discharge, 4,200 cfs Sept. 4, 1972 (gage height, 8.17 ft); minimum, 1.2 cfs July 19, 1971.

REMARKS.--Records good except for December, January, and March, which are poor. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	14	11	13	11	15	54	11	6.7	2.2	4.8
2	13	12	16	12	13	11	14	20	11	6.7	2.2	10
3	13	11	14	11	10	11	14	13	10	11	2.2	16
4	13	11	14	11	10	11	14	9.0	10	101	2.6	974
5	12	11	14	9.0	12	12	14	9.0	8.2	37	2.6	1,080
6	12	11	12	10	12	12	14	106	7.4	16	3.1	92
7	12	11	12	11	12	12	13	297	7.4	11	2.6	32
8	11	11	12	11	11	12	13	62	7.4	11	3.9	18
9	11	11	12	11	11	12	11	22	7.4	11	8.6	14
10	10	11	12	11	11	12	11	23	7.4	11	37	13
11	8.2	11	14	10	11	13	11	14	7.4	11	14	12
12	8.2	10	15	10	11	13	10	110	9.1	11	9.1	11
13	8.2	11	17	10	12	13	9.1	44	12	14	11	11
14	8.2	11	20	10	11	13	8.2	20	100	10	15	22
15	8.2	11	15	9.0	11	14	8.2	13	246	7.4	10	53
16	8.2	12	14	9.0	12	14	8.2	11	57	7.4	6.7	15
17	14	18	13	10	12	13	8.2	11	28	6.7	4.8	11
18	28	15	13	10	12	13	8.2	9.1	14	6.7	4.2	10
19	17	12	12	11	12	13	9.1	7.4	10	7.4	3.6	7.4
20	13	12	12	11	11	13	9.1	7.4	9.1	7.4	3.1	12
21	12	12	12	11	11	13	11	7.4	7.4	7.4	2.2	31
22	14	13	13	11	10	13	9.1	10	147	6.7	4.8	59
23	16	13	12	11	10	13	8.2	9.1	28	6.7	10	20
24	13	12	12	11	10	18	7.4	8.2	18	6.7	7.4	14
25	14	12	12	11	10	18	7.4	8.2	12	4.2	6.7	13
26	17	12	13	11	11	17	20	11	10	3.6	50	13
27	21	11	13	12	11	17	17	60	9.1	3.1	19	13
28	12	12	13	12	11	16	10	26	7.4	2.6	15	13
29	91	14	13	12	11	16	205	16	7.4	2.6	10	13
30	46	14	12	13	------	15	329	15	7.4	2.6	6.0	13
31	18	------	11	13	------	15	------	12	------	2.6	4.8	------
TOTAL	516.2	363	413	336.0	325	419	846.4	1,044.8	833.5	360.2	284.4	2,620.2
MEAN	16.7	12.1	13.3	10.8	11.2	13.5	28.2	33.7	27.8	11.6	9.17	87.3
MAX	91	18	20	13	13	18	329	297	246	101	50	1,080
MIN	8.2	10	11	9.0	10	11	7.4	7.4	7.4	2.6	2.2	4.8
AC-FT	1,020	720	819	666	645	831	1,680	2,070	1,650	714	564	5,200

CAL YR 1971 TOTAL 9,733.8 MEAN 26.7 MAX 973 MIN 1.2 AC-FT 19,310
WTR YR 1972 TOTAL 8,361.7 MEAN 22.8 MAX 1,080 MIN 2.2 AC-FT 16,590

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-29	2300	6.30	2,310	6-22	0400	4.16	695
5- 6	2200	4.77	1,060	9- 4	2400	8.17	4,200
6-15	0300	5.38	1,540				

07311648 Middle Fork Wichita River near Truscott, Tex.

LOCATION.--Lat 33°51'12", long 99°57'44", Foard County, on right bank 32 ft downstream from ranch road, 11.1 miles northwest of Truscott, and at mile 3.0.

DRAINAGE AREA.--161 sq mi.

PERIOD OF RECORD.--1956-57, 1968-70 (occasional discharge measurements made 3 miles downstream), published as "near Crowell", October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,457 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,350 cfs May 7, Sept. 4 (gage height, 9.13 ft); minimum, 2.2 cfs July 27.
Period of record: Maximum discharge, 1,510 cfs May 30, 1971 (gage height, 9.51 ft); minimum, 1.6 cfs July 9, 1971.
Maximum stage since at least 1900 occurred in August 1913, about 17 ft, from information furnished by longtime local resident.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	5.6	5.6	5.4	5.0	4.2	5.8	7.9	3.4	3.1	2.4	3.4
2	6.8	5.2	6.3	5.4	5.4	4.2	5.8	3.6	3.4	3.2	2.4	6.5
3	6.1	5.2	6.3	5.4	5.0	4.1	5.8	3.1	3.4	8.6	2.4	15
4	5.2	5.0	5.8	5.0	5.2	4.1	5.6	3.1	3.2	48	2.4	567
5	4.6	5.0	5.8	5.0	5.0	4.1	5.6	4.5	3.2	32	2.3	95
6	4.6	5.2	5.8	5.6	5.0	3.9	5.6	108	3.1	11	2.4	14
7	4.6	5.2	5.6	5.6	4.8	4.1	5.6	318	3.1	6.5	2.6	4.6
8	4.6	5.0	5.6	5.6	4.8	4.1	5.6	37	3.1	5.2	2.7	3.1
9	4.8	5.2	5.6	5.6	4.8	4.1	5.6	9.7	3.1	4.1	3.0	3.0
10	4.8	5.2	5.6	5.6	4.6	3.9	5.8	5.4	3.1	3.7	3.1	3.1
11	4.6	5.2	5.6	5.6	4.6	3.9	14	3.9	3.1	3.6	3.2	3.1
12	4.6	5.2	5.4	5.6	4.6	3.9	7.4	41	3.6	3.4	3.4	3.1
13	4.6	5.2	5.4	5.6	4.4	3.9	6.5	5.8	9.4	3.2	18	3.1
14	4.6	5.2	6.5	5.6	4.6	3.9	6.3	3.9	139	3.2	13	3.0
15	4.6	5.4	5.8	5.0	4.4	3.9	6.5	3.6	40	3.1	9.6	3.0
16	4.8	5.6	5.6	5.0	4.2	4.1	7.0	3.6	12	3.0	3.7	3.2
17	7.4	7.5	5.4	5.8	4.4	4.1	7.0	3.6	34	3.0	3.1	3.2
18	13	5.6	5.4	6.0	4.2	4.1	7.2	3.2	11	3.0	2.8	3.1
19	7.7	5.4	5.4	6.0	4.1	4.2	7.7	3.1	4.4	3.1	3.0	3.2
20	6.2	5.2	5.4	6.0	4.1	4.4	8.0	3.1	3.6	3.1	3.0	3.4
21	5.2	5.2	5.4	6.0	4.2	4.2	7.7	3.2	3.1	2.8	3.0	3.7
22	8.3	5.2	5.4	6.0	4.1	4.4	8.0	3.2	187	2.8	4.8	3.7
23	6.3	5.4	5.4	6.0	4.1	4.6	8.0	3.4	16	2.8	3.9	3.7
24	5.6	5.4	5.4	6.3	4.2	5.0	8.2	3.6	3.6	2.7	3.9	3.6
25	5.2	5.4	5.4	5.6	4.4	5.4	8.5	3.6	3.4	2.7	9.6	3.6
26	6.7	5.4	5.4	5.6	4.2	4.6	10	3.7	3.4	2.4	162	3.6
27	5.6	5.4	5.4	5.6	4.4	4.4	11	3.6	3.1	2.3	137	3.4
28	5.6	5.4	5.4	5.4	4.4	4.8	11	3.6	3.1	2.3	42	3.4
29	41	5.4	5.4	5.4	4.2	5.2	67	3.4	3.1	2.3	4.6	3.4
30	14	5.4	5.4	5.4	------	5.4	146	3.4	3.1	2.3	3.4	3.2
31	7.0	------	5.4	5.0	------	5.6	------	3.4	------	2.4	3.4	------
TOTAL	223.5	160.9	173.3	172.7	131.4	134.8	419.8	613.2	521.1	184.9	466.1	781.4
MEAN	7.21	5.36	5.59	5.57	4.53	4.35	14.0	19.8	17.4	5.96	15.0	26.0
MAX	41	7.5	6.5	6.3	5.4	5.6	146	318	187	48	162	567
MIN	4.6	5.0	5.4	5.0	4.1	3.9	5.6	3.1	3.1	2.3	2.3	3.0
AC-FT	443	319	344	343	261	267	833	1,220	1,030	367	925	1,550

CAL YR 1971 TOTAL 2,857.8 MEAN 7.83 MAX 416 MIN 2.0 AC-FT 5,670
WTR YR 1972 TOTAL 3,983.1 MEAN 10.9 MAX 567 MIN 2.3 AC-FT 7,900

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-29	2300	6.83	592	8-26	0600	5.82	350
5- 7	0100	9.13	1,350	9- 4	1400	9.13	1,350
6-22	0400	6.21	430				

07311700 North Fork Wichita River near Truscott, Tex.

LOCATION.--Lat 33°49'14", long 99°47'10", Foard-Knox County line, near right bank on downstream side of bridge on State Highway 283, 4.5 miles north of Truscott, about 33 miles upstream from confluence with South Fork, and at mile 188.4.

DRAINAGE AREA.--937 sq mi.

PERIOD OF RECORD.--1952-57 (occasional low-flow measurements), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,351.78 ft above mean sea level. Nov. 6, 1959, to Jan. 2, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years (1960-72), 62.7 cfs (45,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,500 cfs Sept. 4 (gage height, 16.87 ft); minimum daily, 3.4 cfs Aug. 21.
Period of record: Maximum discharge, 28,900 cfs Sept. 19, 1965 (gage height, 21.96 ft); minimum, 0.01 cfs July 25, 1964.
Maximum stage since at least 1900 occurred in September 1919; the next highest flood occurred in May 1954, from information by local resident.

REMARKS.--Records good. One small diversion for irrigation above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	46	19	19	26	26	25	267	19	14	8.9	5.9
2	63	31	28	19	25	27	24	56	17	12	8.0	5.9
3	250	25	34	20	21	27	22	25	16	25	6.8	28
4	27	23	30	15	18	27	21	18	15	87	6.6	3,020
5	20	23	28	12	27	28	21	12	15	183	7.4	3,260
6	18	22	28	12	25	27	21	188	14	54	7.9	337
7	17	22	24	15	25	27	20	1,410	14	30	10	127
8	17	22	22	24	25	27	19	359	13	22	10	70
9	18	22	23	23	25	27	18	103	12	19	11	47
10	16	22	26	23	27	27	18	78	12	17	40	40
11	16	22	22	22	32	27	18	48	14	15	45	37
12	15	22	19	21	32	27	30	1,380	18	17	20	28
13	14	21	18	21	30	26	19	222	16	14	21	24
14	14	21	22	22	27	26	16	78	1,080	18	41	22
15	13	19	30	19	26	26	15	49	601	12	23	94
16	15	18	21	15	27	26	14	42	161	8.2	12	64
17	19	22	19	22	27	26	13	39	95	5.9	6.9	31
18	60	30	18	24	26	25	14	36	53	88	4.3	24
19	48	20	17	23	27	25	19	34	33	51	3.8	22
20	38	17	16	23	27	23	20	31	22	18	3.8	23
21	22	16	16	23	27	23	17	29	15	16	3.4	36
22	26	17	17	24	28	23	19	25	692	14	6.4	91
23	100	20	16	24	28	24	16	23	126	12	7.5	59
24	29	18	15	23	28	25	13	19	58	10	11	32
25	18	17	15	22	29	34	13	16	35	9.0	14	24
26	33	15	16	21	28	30	18	15	24	9.0	1,270	20
27	48	14	16	21	29	23	764	58	17	12	468	19
28	26	14	17	18	27	23	48	72	15	10	116	18
29	153	14	18	17	26	22	34	44	14	11	41	17
30	190	15	19	23	------	24	2,220	29	16	11	17	16
31	81	------	20	23	------	25	------	23	------	10	9.1	------
TOTAL	1,443	630	649	633	775	803	3,549	4,828	3,252	834.1	2,260.8	7,641.8
MEAN	46.5	21.0	20.9	20.4	26.7	25.9	118	156	108	26.9	72.9	255
MAX	250	46	34	24	32	34	2,220	1,410	1,080	183	1,270	3,260
MIN	13	14	15	12	18	22	13	12	12	5.9	3.4	5.9
AC-FT	2,860	1,250	1,290	1,260	1,540	1,590	7,040	9,580	6,450	1,650	4,480	15,160

CAL YR 1971 TOTAL 16,040.94 MEAN 43.9 MAX 1,520 MIN .40 AC-FT 31,820
WTR YR 1972 TOTAL 27,298.70 MEAN 74.6 MAX 3,260 MIN 3.4 AC-FT 54,150

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-27	0515	11.83	2,460	6-14	0730	12.57	2,850
4-30	0715	14.69	4,010	6-22	1145	9.37	1,360
5- 7	0630	11.13	2,120	8-26	1215	12.54	2,820
5-12	0445	12.86	2,980	9- 4	2000	16.87	5,500

07311780 South Fork Wichita River near Guthrie, Tex.

LOCATION.--Lat 33°37'29", long 100°13'04", King County, on left bank 60 ft upstream from ranch road, 3.9 miles upstream from Willow Creek, 6.1 miles east of Guthrie, and at mile 92.5.

DRAINAGE AREA.--239 sq mi.

PERIOD OF RECORD.--1952-54, 1956-57 (discharge measurements only), October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage 1,600 ft, from topographic map.

EXTREMES.--Current year: Maximum discharge, 130 cfs Oct. 2 (gage height, 3.24 ft); minimum, 3.0 cfs May 27.
Period of record: Maximum discharge, 2,060 cfs Aug. 25, 1971 (gage height, 7.15 ft); minimum, 2.1 cfs for many days in 1971.
Maximum stage since 1950, 20.8 ft in May 1954, present site and datum, from floodmarks furnished by local resident.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	6.6	6.0	5.0	4.7	5.3	4.1	4.1	3.3	4.1	3.8	7.0
2	23	6.3	6.6	5.3	4.4	5.3	4.1	4.1	3.3	4.1	3.8	5.6
3	34	6.3	6.3	5.3	4.1	5.6	4.4	4.1	3.3	4.1	3.8	7.3
4	7.4	6.3	6.3	5.3	4.1	5.3	4.4	3.8	3.3	3.8	4.1	11
5	5.3	5.6	6.3	5.3	4.1	5.0	4.4	3.8	3.3	3.8	4.4	9.6
6	5.0	5.6	6.3	5.0	4.1	5.3	4.1	6.6	3.3	3.8	4.4	6.3
7	5.0	5.6	6.0	5.0	4.1	5.3	3.6	5.3	3.6	3.8	4.4	5.0
8	5.0	5.3	6.0	5.6	3.8	5.3	3.3	5.0	3.6	3.8	4.4	4.7
9	5.0	5.3	5.6	5.3	3.8	5.3	3.3	5.0	3.6	3.8	4.4	4.4
10	5.0	5.3	5.6	5.0	3.8	5.6	3.8	4.7	3.6	3.8	6.0	4.4
11	5.0	5.3	5.6	4.7	4.1	5.6	3.8	4.4	3.6	3.8	5.3	4.4
12	5.3	5.3	5.6	4.7	4.4	5.6	3.8	5.0	26	3.8	5.0	4.7
13	5.3	5.3	5.6	4.7	4.1	5.3	3.8	4.7	10	3.8	40	4.7
14	5.3	5.3	6.3	4.7	4.1	5.0	3.8	4.4	5.0	4.1	32	7.2
15	5.3	5.3	6.0	5.0	4.1	4.4	3.6	4.4	11	4.1	8.2	6.3
16	13	5.6	5.3	5.3	4.1	4.1	3.6	4.4	6.6	4.4	6.3	5.3
17	13	6.6	5.3	5.0	3.8	4.1	3.6	4.4	5.0	4.4	5.3	5.0
18	7.4	6.0	5.0	5.0	3.8	4.1	3.6	4.4	4.7	5.0	4.7	5.0
19	6.3	6.0	5.3	5.0	3.8	4.1	5.4	4.1	4.7	5.3	4.1	5.0
20	6.3	6.0	5.3	5.0	4.1	3.8	4.4	4.1	4.1	4.7	4.1	5.0
21	6.0	6.0	5.0	5.0	4.1	3.8	3.8	4.1	4.1	4.4	4.4	5.0
22	10	6.0	5.0	5.0	4.4	3.8	3.8	4.1	8.0	4.4	5.3	5.0
23	17	6.0	5.0	5.0	4.4	3.8	3.6	4.1	4.7	4.4	4.4	5.0
24	8.2	6.0	5.0	4.7	4.7	3.8	3.6	3.8	4.7	4.1	4.1	5.0
25	7.4	6.0	5.3	4.7	5.0	4.1	3.6	3.8	4.7	4.1	4.1	5.0
26	7.4	6.0	5.3	4.7	5.3	4.1	4.4	3.6	4.7	3.8	14	5.0
27	7.4	6.0	5.3	4.7	5.3	3.8	5.0	3.3	4.1	3.8	8.2	5.0
28	6.6	6.3	5.3	4.7	5.3	3.8	4.4	3.3	4.1	3.8	6.3	5.0
29	17	6.0	5.6	4.7	5.6	3.8	4.4	3.3	3.8	4.1	5.6	5.0
30	14	6.0	6.0	4.7	------	4.1	4.1	3.3	3.8	4.1	5.6	5.0
31	7.4	------	5.3	4.7	------	4.1	------	3.3	------	4.1	5.9	------
TOTAL	278.9	175.2	174.4	153.8	125.5	142.4	119.6	130.8	161.6	127.4	226.4	167.9
MEAN	9.00	5.84	5.63	4.96	4.33	4.59	3.99	4.22	5.39	4.11	7.30	5.60
MAX	34	6.6	6.6	5.6	5.6	5.6	5.4	6.6	26	5.3	40	11
MIN	3.6	5.3	5.0	4.7	3.8	3.8	3.3	3.3	3.3	3.8	3.8	4.4
AC-FT	553	348	346	305	249	282	237	259	321	253	449	333

CAL YR 1971 TOTAL 2,653.0 MEAN 7.27 MAX 508 MIN 2.1 AC-FT 5,260
WTR YR 1972 TOTAL 1,983.9 MEAN 5.42 MAX 40 MIN 3.3 AC-FT 3,940

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

07311790 South Fork Wichita River at Ross Ranch near Benjamin, Tex.

LOCATION.--Lat 33°39'18", long 100°00'49", King County, on left bank 170 ft upstream from ranch road, 1.6 miles downstream from Ox Yoke Creek, 13.7 miles northwest of Benjamin, and at mile 64.5.

DRAINAGE AREA.--499 sq mi.

PERIOD OF RECORD.--September 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,451 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,480 cfs Sept. 4 (gage height, 9.70 ft); no flow July 31 to Aug. 6.
Period of record: Maximum discharge, 1,480 cfs Sept. 4, 1972 (gage height, 9.70 ft); no flow at times.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	23	12	9.0	8.4	5.8	5.0	6.8	2.7	20	0	34
2	92	16	18	9.0	7.8	5.8	4.6	5.4	2.3	18	0	20
3	265	14	20	8.4	6.5	6.3	5.0	5.0	1.9	7.3	0	48
4	85	14	16	8.0	6.5	5.8	4.6	4.6	1.7	98	0	508
5	42	14	15	8.0	7.3	5.8	5.0	3.6	1.7	33	0	158
6	23	12	14	8.0	6.8	5.8	5.0	73	1.4	10	0	49
7	18	10	14	9.0	6.3	6.3	4.2	142	1.4	7.8	1.0	26
8	16	10	13	8.4	6.3	5.8	3.6	45	1.2	5.0	.44	18
9	14	10	14	8.4	6.3	6.3	5.1	19	1.0	3.9	.09	12
10	13	10	14	7.8	6.3	6.3	11	14	.79	3.3	.35	11
11	12	9.0	13	7.8	8.4	6.3	3.9	11	.67	2.7	.35	11
12	11	9.0	9.6	7.8	8.4	6.8	3.6	16	1.4	2.5	.91	9.0
13	9.6	9.0	9.6	7.3	7.8	6.8	3.0	16	38	2.1	261	8.4
14	9.0	9.6	12	6.5	6.8	6.8	2.7	14	52	1.7	298	7.3
15	8.4	9.0	15	6.5	5.8	6.3	2.5	10	76	1.4	103	7.8
16	19	9.6	13	6.5	5.8	6.8	2.5	9.6	47	1.0	43	12
17	57	12	9.0	9.0	5.8	6.3	2.5	9.0	18	.79	18	6.8
18	48	13	8.4	8.4	5.4	5.8	2.3	6.8	11	1.9	11	5.8
19	29	10	8.4	7.8	5.4	5.8	3.6	6.3	9.0	2.3	7.3	5.4
20	36	9.6	8.4	7.3	5.8	6.3	7.3	5.4	7.8	5.0	5.8	7.3
21	14	9.6	8.4	6.8	5.8	6.3	6.3	4.6	5.8	5.4	4.2	9.0
22	14	10	8.4	7.3	5.0	6.8	3.3	4.6	132	2.5	8.5	7.3
23	28	12	8.4	7.8	5.4	8.3	2.5	3.9	38	2.1	7.3	6.3
24	31	11	8.4	7.3	6.3	12	2.3	3.6	15	1.0	6.4	5.8
25	17	10	8.4	7.3	6.3	8.4	2.3	3.3	10	.67	163	5.8
26	15	9.6	9.0	6.8	5.8	7.3	113	2.5	6.8	.44	243	5.8
27	17	9.6	9.0	6.3	6.3	6.8	183	3.0	5.8	.20	360	5.8
28	14	9.0	8.4	6.3	6.3	5.0	26	2.7	4.2	.14	133	6.8
29	56	9.0	8.4	7.3	6.3	4.6	17	2.5	3.9	.09	58	6.3
30	71	9.6	9.0	7.3	------	4.6	8.4	2.5	3.6	.01	29	5.8
31	40	------	9.0	7.3	------	5.0	------	2.7	------	0	19	------
TOTAL	1,136.0	332.2	351.2	236.7	187.4	199.1	451.1	458.4	502.06	240.24	1,781.64	1,029.5
MEAN	36.6	11.1	11.3	7.64	6.46	6.42	15.0	14.8	16.7	7.75	57.5	34.3
MAX	265	23	20	9.0	8.4	12	183	142	132	98	360	508
MIN	8.4	9.0	8.4	6.3	5.0	4.6	2.3	2.5	.67	0	0	5.4
AC-FT	2,250	659	697	469	372	395	895	909	996	477	3,530	2,040

CAL YR 1971 TOTAL 5,237.27 MEAN 14.3 MAX 466 MIN 0 AC-FT 10,390
WTR YR 1972 TOTAL 6,905.54 MEAN 18.9 MAX 508 MIN 0 AC-FT 13,700

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-26	2300	8.94	1,160	8-26	0900	7.22	625
5- 6	2300	7.29	650	9- 4	1200	9.70	1,480
8-13	2100	8.02	840				

07311800 South Fork Wichita River near Benjamin, Tex.

LOCATION.--Lat 33°38'39", long 99°48'02", Knox County, on downstream side of bridge on State Highway 283, 2 miles downstream from Panhandle and Santa Fe Railway Co. bridge, 4 miles north of Benjamin, and 34 miles upstream from confluence with North Fork Wichita River.

DRAINAGE AREA.--584 sq mi.

PERIOD OF RECORD.--1952-57 (occasional low-flow measurements), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,334.23 ft above mean sea level. Prior to Jan. 2, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years (1960-72), 44.6 cfs (32,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,080 cfs Apr. 27 (gage height, 14.91 ft); no flow at times.
Period of record: Maximum discharge, 13,000 cfs Oct. 18, 1960 (gage height, 15.40 ft); maximum gage height, 16.48 ft Oct. 18, 1965; no flow at times.
Maximum stage since at least 1903 occurred in September 1919 (stage and discharge unknown), from information by local resident.

REMARKS.--Records good. No known regulation or diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	30	19	11	9.0	6.3	5.1	40	3.7	8.6	.06	281
2	139	25	25	11	8.6	5.8	5.0	20	3.4	8.4	.03	54
3	880	22	29	10	6.0	6.2	4.9	15	3.2	56	0	182
4	168	20	28	6.9	8.0	6.4	4.6	12	2.9	438	0	2,260
5	54	20	29	6.0	9.7	6.2	4.6	10	2.7	151	0	1,460
6	36	19	28	6.0	9.3	6.2	4.5	19	2.4	51	0	110
7	29	20	25	8.0	8.4	6.3	4.2	729	2.2	35	.02	60
8	27	20	24	11	8.1	6.1	4.0	57	2.0	29	.02	37
9	26	21	25	10	7.8	6.2	3.8	23	1.8	27	0	31
10	24	20	32	9.8	7.9	6.2	8.1	23	1.7	25	0	26
11	22	20	26	9.2	9.5	6.2	7.8	21	1.5	22	0	20
12	21	20	23	9.1	10	6.3	4.6	706	1.9	20	0	17
13	21	19	22	8.8	9.8	7.6	3.4	52	1.7	19	162	19
14	20	18	61	8.6	9.1	6.5	2.8	33	39	19	545	16
15	19	18	37	6.0	8.3	6.2	2.3	23	401	17	172	17
16	64	17	21	6.0	7.9	6.4	2.1	19	57	14	76	15
17	97	17	19	9.8	7.6	6.7	1.8	15	30	12	42	15
18	57	18	18	9.6	7.2	6.7	1.7	12	19	395	33	13
19	58	18	17	8.7	7.2	6.5	3.2	11	15	187	27	12
20	76	18	16	8.1	7.0	6.4	7.3	9.9	12	16	24	16
21	31	17	16	8.1	7.0	5.9	4.7	8.1	9.7	9.2	23	20
22	74	19	14	8.2	6.3	5.8	5.2	7.5	638	6.3	23	13
23	104	19	13	8.0	6.5	8.0	4.1	7.0	93	4.0	25	12
24	30	19	13	7.5	6.6	9.1	3.5	6.7	37	2.0	26	11
25	28	19	12	6.9	6.7	7.9	2.9	6.2	22	1.3	1,270	10
26	43	18	12	7.0	6.3	6.3	141	5.7	16	.80	502	9.5
27	43	18	11	7.2	6.9	5.4	3,480	5.4	13	.49	795	10
28	23	17	12	6.5	6.5	5.0	96	5.2	11	.33	383	11
29	143	17	12	6.0	6.3	5.0	33	5.0	9.3	.27	110	10
30	67	18	12	7.5	------	5.1	880	4.5	23	.18	63	9.3
31	41	------	11	7.9	------	5.1	------	4.0	------	.12	45	------
TOTAL	2,478	581	662	254.4	224.9	196.0	4,736.2	1,915.2	1,476.1	1,574.99	4,346.13	4,776.8
MEAN	79.9	19.4	21.4	8.21	7.76	6.32	158	61.8	49.2	50.8	140	159
MAX	880	30	61	11	10	9.1	3,480	729	638	438	1,270	2,260
MIN	13	17	11	6.0	6.0	5.0	1.7	4.0	1.5	.12	0	9.3
AC-FT	4,920	1,150	1,310	505	446	389	9,390	3,800	2,930	3,120	8,620	9,470

CAL YR 1971 TOTAL 12,575.27 MEAN 34.5 MAX 2,340 MIN 0 AC-FT 24,940
WTR YR 1972 TOTAL 23,221.72 MEAN 63.4 MAX 3,480 MIN 0 AC-FT 46,060

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	0300	10.09	1,590	7- 4	0915	10.79	1,850
4-27	0930	14.91	7,080	7-18	2200	10.46	1,730
4-30	0800	11.64	2,180	8-14	0930	7.88	855
5- 7	0500	9.97	1,560	8-25	0530	11.73	2,210
5-12	0800	10.13	1,620	8-27	1030	9.86	1,520
6-15	1030	8.37	1,000	9- 4	1900	13.98	3,710
6-22	1015	10.09	1,600				

07311900 Wichita River near Seymour, Tex.

LOCATION.--Lat 33°42'01", long 99°23'18", Baylor County, near left bank on downstream side of pier of bridge on Ranch Road 1919, 6 miles upstream from head of Lake Kemp, 10 miles downstream from confluence of North and South Forks, and 10.5 miles northwest of Seymour.

DRAINAGE AREA.--1,874 sq mi.

PERIOD OF RECORD.--November 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,152.7 ft above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--12 years (1960-72), 179 cfs (129,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,100 cfs Apr. 27 (gage height, 15.16 ft); 1.3 cfs Aug. 12.
Period of record: Maximum discharge, 23,100 cfs Sept. 20, 1965 (gage height, 17.75 ft); no flow at times.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	138	29	32	24	17	16	2,570	34	49	3.7	120
2	124	91	57	32	18	18	16	465	30	55	3.2	226
3	1,000	69	118	30	14	18	15	203	27	58	2.7	111
4	994	55	126	19	18	18	14	126	24	371	2.6	2,880
5	308	51	127	15	24	18	14	101	22	997	2.6	6,220
6	137	41	102	26	25	19	14	166	20	356	2.1	4,500
7	95	39	64	32	24	19	14	3,220	19	127	2.3	864
8	66	36	54	33	24	18	13	1,940	18	82	2.1	446
9	49	36	54	36	24	17	12	511	16	63	2.3	299
10	44	34	148	29	24	17	12	555	16	50	2.7	238
11	40	34	83	28	28	17	11	297	15	41	2.3	199
12	36	33	68	26	30	16	10	5,230	14	36	1.8	172
13	34	30	63	25	29	15	14	2,640	27	33	77	151
14	33	29	79	24	28	14	14	670	3,250	28	76	136
15	32	28	207	15	26	15	12	301	2,370	24	295	125
16	29	27	108	18	25	15	8.8	198	1,210	20	136	121
17	163	26	66	26	24	15	7.8	157	338	19	79	133
18	157	26	58	24	22	15	6.8	130	192	17	56	152
19	131	27	49	24	21	15	17	111	129	89	38	137
20	394	31	45	25	21	14	48	96	93	330	29	150
21	130	28	44	24	20	14	22	82	70	57	23	214
22	76	28	42	24	20	13	14	72	620	31	20	123
23	595	29	41	24	20	14	9.2	64	1,370	22	17	99
24	238	28	38	23	21	30	7.2	55	294	16	14	105
25	101	28	37	22	20	38	7.1	47	142	12	657	85
26	97	28	36	22	19	26	6.9	42	95	9.5	1,180	70
27	325	26	34	22	19	23	5,410	40	76	7.3	1,620	63
28	129	25	33	18	18	22	2,890	38	66	6.3	1,030	56
29	104	24	33	16	17	20	1,060	59	57	5.8	455	50
30	252	25	32	23	------	17	4,380	54	53	4.9	185	44
31	215	------	32	24	------	17	------	42	------	4.3	118	------
TOTAL	6,202	1,150	2,107	761	647	564	14,095.8	20,282	10,707	3,021.1	6,135.4	18,289
MEAN	200	38.3	68.0	24.5	22.3	18.2	470	654	357	97.5	198	610
MAX	1,000	138	207	36	30	38	5,410	5,230	3,250	997	1,620	6,220
MIN	29	24	29	15	14	13	6.8	38	14	4.3	1.8	44
AC-FT	12,300	2,280	4,180	1,510	1,280	1,120	27,960	40,230	21,240	5,990	12,170	36,280

CAL YR 1971 TOTAL 39,046.36 MEAN 107 MAX 5,140 MIN .01 AC-FT 77,450
WTR YR 1972 TOTAL 83,961.30 MEAN 229 MAX 6,220 MIN 1.8 AC-FT 166,500

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-27	0630	15.16	10,100	5-12	1200	14.63	8,490
4-30	0500	12.91	5,630	6-14	1530	13.63	6,630
5- 7	1000	12.03	4,550	9- 5	1800	13.71	6,740

07312000 Lake Kemp near Mabelle, Tex.

LOCATION.--Lat 33°45'15", long 99°08'42", Baylor County, on outlet gate of control house at dam on Wichita River, 6.2 miles north of Mabelle, 10.2 miles northeast of Seymour, and at mile 126.7.

DRAINAGE AREA.--2,086 sq mi.

PERIOD OF RECORD.--January 1924 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 2.40 ft above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents, 207,300 acre-ft Sept. 28 (gage height, 1,134.23 ft); minimum, 100,100 acre-ft Oct. 1 (gage height, 1,123.85 ft).
Period of record: Maximum contents, 420,900 acre-ft June 30, 1941 (gage height, 1,149.6 ft); minimum since first appreciable storage, 26,160 acre-ft June 30, 1953 (gage height, 1,105.6 ft).

REMARKS.--Lake is formed by a hydraulic earthfill dam 7,500 ft long, with an uncontrolled semicircular concrete service spillway 564 ft long. Capacity of lake, 461,800 acre-ft (gage height, 1,150.6 ft at crest of spillway). No flow has been permitted to pass over spillway. Two uncontrolled emergency spillways are located between the left end of dam and the service spillway, with one spillway 70 ft long with crest at gage height 1,159.1 ft and the other 335 ft long with crest varying from gage heights, 1,159.6 to 1,162.9 ft. Storage began Oct. 1, 1922, and dam was completed Aug. 25, 1923. Outlet works consist of six conduits, 7 ft in diameter controlled by lift-type gates. Water is used for irrigation in the Wichita River Valley, oilfield operation, and industrial use. Forty-two thousand acres of land are available for irrigation. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	1,166.8	-
Top of design flood pool	1,160.6	648,000
Crest of service spillway	1,150.6	461,800
Invert of outlet conduits	1,067.0	0

COOPERATION.--Records of daily gage height furnished by the city of Wichita Falls and Wichita County Water Improvement District No. 2. Capacity table used beginning Oct. 1, 1958, furnished by the Soil Conservation Service, was based on their survey made in 1958.

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

1,122.0	101,000	1,130.0	165,000
1,124.0	114,000	1,132.0	185,000
1,126.0	128,000	1,134.0	205,000
1,128.0	145,000	1,136.0	226,000

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100,100	124,300	124,200	130,900	130,300	130,300	123,000	139,300	187,400	196,400	177,000	174,800
2	100,200	124,400	124,300	130,500	130,300	130,200	123,000	145,000	187,800	196,000	176,100	174,200
3	106,900	124,400	125,200	130,900	130,300	130,000	122,900	146,300	187,400	195,600	174,800	174,200
4	109,900	124,400	125,600	130,900	130,200	130,000	122,200	146,600	186,900	194,800	173,500	178,000
5	112,500	124,400	125,700	130,700	130,300	129,700	121,800	146,300	186,400	196,700	172,800	192,100
6	112,400	124,500	127,000	130,700	130,200	129,600	121,600	147,000	186,000	198,200	171,400	195,800
7	112,500	124,400	127,300	130,600	130,200	129,500	121,300	151,300	185,600	198,400	170,100	203,900
8	112,700	124,200	127,400	130,700	130,200	129,500	120,700	159,300	185,200	198,600	168,800	205,600
9	112,600	124,300	127,400	130,700	130,200	129,400	120,200	163,500	184,600	198,100	168,100	206,500
10	112,600	124,300	128,300	130,800	130,200	129,400	120,000	165,100	184,100	197,600	167,400	206,800
11	112,700	124,300	128,600	130,700	130,300	129,400	119,600	166,900	183,800	197,300	166,200	206,900
12	112,700	124,400	128,900	131,000	130,300	129,500	119,200	170,300	183,300	196,600	165,700	207,100
13	112,700	124,400	128,800	130,700	130,500	129,500	118,600	181,300	182,800	196,200	165,400	207,000
14	112,600	124,300	128,900	130,600	130,600	129,400	117,800	187,000	183,600	195,900	166,000	207,200
15	112,600	124,200	129,700	130,500	130,400	129,300	117,200	188,600	190,200	195,100	165,900	207,000
16	112,500	124,200	130,200	130,400	130,500	129,300	116,600	189,200	195,500	194,300	166,600	207,100
17	112,500	124,200	130,400	130,400	130,500	129,100	115,500	189,500	197,800	193,100	166,900	207,100
18	113,000	124,200	130,400	130,600	130,400	128,100	114,700	189,700	198,400	192,000	166,500	207,000
19	113,500	124,300	130,500	130,500	130,400	127,200	113,900	189,700	198,500	191,100	166,200	206,700
20	117,000	124,200	130,600	130,500	130,400	126,500	113,300	189,700	198,000	190,000	165,800	206,400
21	118,100	124,200	130,700	130,500	130,400	126,000	112,700	189,700	197,200	189,400	165,000	206,900
22	118,300	124,200	130,700	130,400	130,400	125,600	111,800	189,800	197,500	188,400	164,200	207,000
23	118,600	124,200	130,700	130,400	130,400	125,300	110,800	189,800	198,300	187,100	163,300	207,100
24	120,000	124,200	130,700	130,500	130,400	125,100	110,300	189,600	199,500	186,300	162,100	207,100
25	120,200	124,300	130,700	130,500	130,400	124,900	109,900	189,600	199,000	185,100	162,000	207,200
26	120,400	124,400	130,800	130,400	130,400	124,600	109,600	189,300	198,700	183,900	164,900	207,100
27	121,800	124,100	130,900	130,500	130,400	124,100	111,500	189,300	198,300	182,700	167,600	207,100
28	122,500	124,600	130,900	130,400	130,400	123,900	120,800	189,200	197,800	181,300	170,600	207,300
29	122,800	124,200	130,900	130,400	130,300	123,500	126,900	189,100	197,300	180,500	172,700	207,100
30	123,200	124,200	130,900	130,300	------	123,300	130,900	188,800	196,800	179,400	173,600	206,700
31	123,700	------	131,000	130,300	------	123,300	------	188,600	------	178,200	173,700	------
(†)	1,125.39	1,125.45	1,126.43	1,126.33	1,126.33	1,125.33	1,126.42	1,132.36	1,133.18	1,131.32	1,130.87	1,134.17
(*)	+23,720	+500	+6,800	-700	0	-7,000	+7,600	+57,700	+8,200	-18,600	-4,500	+33,000
MAX	123,700	124,600	131,000	131,000	130,600	130,300	130,900	189,800	199,500	198,600	177,000	207,300
MIN	100,100	124,100	124,200	130,300	130,200	123,300	109,600	139,300	182,800	178,200	162,000	174,200

CAL YR 1971..... * -49,000 MAX 179,200 MIN 71,150
WTR YR 1972..... * +106,700 MAX 207,300 MIN 100,100

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

07312100 Wichita River near Mabelle, Tex.

LOCATION.--Lat 33°45'36", long 99°08'33", Baylor County, near left bank on downstream side of bridge on U.S. Highways 183 and 283, 0.3 mile downstream from Lake Kemp Dam, 6 miles north of Mabelle, and 13 miles northeast of Seymour.

DRAINAGE AREA.--2,086 sq mi, all of which is above Lake Kemp Dam.

PERIOD OF RECORD.--1952-58 (occasional discharge measurements), October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,062.72 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 161 cfs (116,600 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 505 cfs June 23 (gage height, 4.74 ft); maximum gage height, 4.86 ft June 22; minimum daily discharge, 9.0 cfs Mar. 8, 9.
Period of record: Maximum daily discharge, 1,800 cfs Sept. 27, 28, 1966, Oct. 1, 2, 4, 6-8, 1967; minimum daily, 2 cfs Jan. 13, 14, 20, 24, 25, 1963 (result of freeze).

REMARKS.--Records good. Flow completely regulated by Lake Kemp (see station 07312000). Water is released from Lake Kemp to supply Lake Diversion. From Lake Diversion it is released for irrigation in vicinity of Wichita Falls (42,000 acres under permit). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	18	18	13	9.7	53	13	102	150	330	157
2	24	17	18	18	13	9.7	54	12	79	150	342	231
3	18	17	18	18	13	9.4	67	12	78	151	419	231
4	14	17	18	18	12	9.4	125	12	78	83	419	110
5	15	17	19	17	12	9.4	125	12	78	17	417	20
6	15	17	18	17	12	9.1	124	15	78	17	417	19
7	14	17	18	18	12	9.1	123	20	77	68	383	18
8	15	17	18	17	12	9.0	122	13	78	148	332	18
9	15	17	18	18	12	9.0	122	12	78	149	333	18
10	15	17	17	18	12	9.1	120	14	78	148	333	17
11	16	17	16	17	12	9.1	126	14	78	150	182	17
12	16	17	16	17	12	9.4	187	21	78	150	104	16
13	16	17	16	18	11	9.2	186	13	78	150	105	16
14	16	18	19	18	11	9.4	185	13	80	186	104	16
15	16	18	16	18	11	9.5	184	13	41	237	104	16
16	16	18	16	17	11	9.6	191	13	19	350	104	17
17	16	18	16	17	11	244	269	13	19	424	104	17
18	17	18	16	17	11	384	269	14	19	426	104	142
19	28	18	16	16	11	290	269	14	115	426	105	231
20	18	18	16	16	11	156	269	14	228	428	140	231
21	16	18	16	16	10	155	269	15	384	430	231	182
22	16	18	18	16	9.8	146	218	15	480	429	237	19
23	16	18	18	16	9.7	109	162	15	505	430	344	16
24	17	18	18	15	9.6	109	102	15	504	429	412	15
25	16	18	18	15	9.6	109	54	15	328	429	219	15
26	19	18	18	15	10	95	53	15	151	430	18	15
27	17	17	18	15	10	53	30	15	150	429	18	15
28	17	18	18	14	9.7	53	13	15	151	430	18	15
29	17	18	18	14	9.7	51	12	15	151	380	17	15
30	17	18	18	14	------	51	15	15	150	330	18	15
31	17	------	18	13	------	53	------	85	------	330	17	------
TOTAL	519	526	539	511	323.1	2,207.1	4,098	512	4,513	8,484	6,430	1,880
MEAN	16.7	17.5	17.4	16.5	11.1	71.2	137	16.5	150	274	207	62.7
MAX	28	18	19	18	13	384	269	85	505	430	419	231
MIN	14	17	16	13	9.6	9.0	12	12	19	17	17	15
AC-FT	1,030	1,040	1,070	1,010	641	4,380	8,130	1,020	8,950	16,830	12,750	3,730

CAL YR 1971 TOTAL 59,070.0 MEAN 162 MAX 595 MIN 12 AC-FT 117,200
WTR YR 1972 TOTAL 30,542.2 MEAN 83.4 MAX 505 MIN 9.0 AC-FT 60,580

07312110 South Side Canal near Dundee, Tex.

LOCATION.--Lat 33°48'50", long 98°55'57", Archer County, on left bank 125 ft downstream from Lake Diversion headgates and 5.3 miles northwest of Dundee.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 1,039.70 ft above mean sea level (Wichita County Water Improvement District bench mark).

EXTREMES.--Period of record: Maximum daily discharge, 325 cfs Aug. 2, 1972 (gage height, 8.09 ft); maximum gage height, 8.13 ft Aug. 3, 4, 1972; minimum daily discharge, 1.1 cfs May 17, 1972.

REMARKS.--Records good. Water diverted from Lake Diversion is used for mining, industrial use, recreation, and irrigation. Forty-two thousand acres were available for irrigation; 20,130 acres were irrigated during the current year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	23	20	11	24	18	76	98	188	183	319	167
2	27	23	21	11	21	22	77	110	203	192	325	144
3	27	23	21	11	21	27	85	136	206	193	324	117
4	27	23	21	16	21	25	100	122	224	205	322	136
5	27	23	21	16	21	28	91	146	236	158	319	123
6	27	23	22	16	20	28	104	140	248	128	318	83
7	27	23	21	15	20	28	119	124	273	172	298	76
8	27	23	22	16	20	28	151	45	285	145	289	84
9	27	23	22	15	21	28	166	17	279	173	284	97
10	27	23	22	15	21	28	176	17	279	151	239	99
11	27	23	22	16	21	31	196	17	280	175	153	99
12	27	23	22	16	22	32	191	24	279	191	132	108
13	35	23	23	15	22	36	224	40	273	197	126	122
14	50	24	22	24	20	42	226	26	267	226	117	134
15	27	25	21	37	20	45	217	7.6	200	245	128	139
16	27	48	20	37	20	53	178	1.5	113	290	150	141
17	27	68	21	36	20	80	186	1.1	64	289	163	142
18	25	51	21	36	21	106	193	34	90	285	173	143
19	60	33	21	38	21	110	177	38	112	296	198	143
20	79	33	21	44	21	110	185	36	147	296	219	144
21	70	33	22	44	22	112	193	38	149	303	231	144
22	26	33	22	40	21	117	154	43	93	307	270	125
23	24	33	22	27	21	123	159	55	67	311	287	94
24	24	33	21	26	20	111	172	62	71	306	300	91
25	24	33	21	27	20	97	177	89	73	296	249	80
26	24	32	21	33	20	93	180	108	98	307	132	63
27	24	33	18	37	20	92	134	142	142	301	110	51
28	24	31	11	36	20	95	42	154	147	301	113	57
29	24	27	11	29	19	82	76	154	168	306	139	57
30	24	20	11	26	------	73	98	155	178	324	168	56
31	24	------	11	25	------	73	------	171	------	320	168	------
TOTAL	946.0	889	618	791	601	1,973	4,503	2,351.2	5,432	7,572	6,763	3,259
MEAN	30.5	29.6	19.9	25.5	20.7	63.6	150	75.8	181	244	218	109
MAX	79	68	23	44	24	123	226	171	285	324	325	167
MIN	7.0	20	11	11	19	18	42	1.1	64	128	110	51
AC-FT	1,880	1,760	1,230	1,570	1,190	3,910	8,930	4,660	10,770	15,020	13,410	6,460

CAL YR 1971	TOTAL	-	MEAN	-	MAX	-	MIN	-	AC-FT	-
WTR YR 1972	TOTAL	35,698.20	MEAN	97.5	MAX	325	MIN	1.1	AC-FT	70,810

07312200 Beaver Creek near Electra, Tex.

LOCATION.--Lat 33°54'21", long 98°54'17", Wichita County, near right bank on downstream side of bridge on Farm Road 2326, 6.5 miles northwest of Kamay, 8 miles upstream from Wichita River, and 9 miles south of Electra.

DRAINAGE AREA.--652 sq mi.

PERIOD OF RECORD.--February 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 991.3 ft above mean sea level (State Highway Department reference point).

AVERAGE DISCHARGE.--12 years, 57.4 cfs (41,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,670 cfs Oct. 20 (gage height, 23.67 ft); no flow June 13.
Period of record: Maximum discharge, 11,700 cfs Mar. 17, 1961 (gage height, 33.57 ft); no flow at times.
Maximum stage since at least 1925, 36.0 ft in 1941 (partly caused by deliberate demolition of Santa Rosa Dam to avoid its failure), from information by local residents.

REMARKS.--Records good. Some regulation by Santa Rosa Lake (capacity, 11,570 acre-ft) about 30 miles upstream. Several small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	6.1	4.8	.26	1.2	.84	.54	55	2.8	3.8	3.4	2.9
2	21	4.4	55	.25	1.0	.85	.58	11	2.5	3.7	3.8	4.3
3	384	2.8	77	.20	.80	.96	.70	5.1	1.6	3.6	4.0	6.6
4	129	2.7	145	.10	1.0	.95	.74	3.0	1.2	5.1	4.2	511
5	35	2.5	179	.15	1.5	.62	.79	1.8	.47	5.2	4.6	782
6	13	2.4	132	.20	1.8	.52	.86	1.5	.21	4.8	5.7	115
7	6.2	2.5	56	.64	2.5	.66	.63	635	.01	4.1	7.7	24
8	5.6	2.1	20	1.2	2.4	.54	.49	158	.01	3.4	8.5	7.4
9	3.3	1.6	25	1.4	2.2	.57	.45	30	.01	3.5	8.2	5.0
10	1.3	1.6	110	1.8	2.1	.92	.49	231	.01	3.8	8.5	4.2
11	.93	2.4	81	1.5	2.2	.80	.36	129	.01	4.0	7.9	3.4
12	2.1	2.1	55	1.5	2.2	.69	.30	573	.01	4.0	7.2	2.5
13	1.9	2.0	23	1.5	2.2	.80	.27	281	0	4.6	7.4	2.9
14	1.6	1.3	43	1.0	2.2	.90	.30	52	71	6.4	11	4.0
15	1.6	1.3	239	.50	2.2	.99	.26	14	174	4.4	12	3.8
16	2.0	2.2	115	1.0	1.9	.90	.14	6.6	70	3.0	8.5	2.7
17	2.4	1.6	79	1.0	1.9	.70	.06	3.8	19	2.5	7.2	1.9
18	123	1.6	58	1.5	1.6	.55	.01	3.0	15	2.5	6.6	2.5
19	287	1.6	37	1.9	1.5	.49	18	2.4	11	4.0	6.4	3.3
20	2,170	1.4	19	2.1	1.1	.41	102	1.6	7.9	3.8	5.9	3.3
21	385	2.2	3.8	2.2	1.4	.67	50	.63	6.9	4.2	4.4	2.7
22	125	5.7	3.0	2.1	1.5	.66	10	.36	971	4.4	3.8	5.7
23	91	2.4	2.9	1.5	1.6	.83	5.1	.57	229	4.2	3.8	4.4
24	41	2.4	2.7	1.5	1.5	2.5	3.1	.83	49	3.8	3.9	4.0
25	12	4.6	1.9	1.5	1.5	3.1	1.8	.73	7.0	3.4	144	3.7
26	9.7	4.0	1.4	1.4	1.4	3.4	.78	.95	4.4	3.2	33	3.6
27	190	2.7	1.2	1.0	1.2	2.3	5.0	.86	3.9	3.2	24	3.7
28	62	2.7	1.1	.80	1.0	1.4	1.2	4.0	3.7	3.6	7.1	3.8
29	30	2.6	.93	1.0	.93	.96	.24	7.5	3.6	3.6	3.5	3.7
30	13	2.4	.93	1.0	------	.61	65	5.5	3.6	3.8	2.9	3.7
31	11	------	.73	1.1	------	.44	------	4.0	------	3.6	2.9	------
TOTAL	4,166.03	77.9	1,573.39	34.80	47.53	31.53	270.19	2,223.73	1,658.84	121.2	372.0	1,531.7
MEAN	134	2.60	50.8	1.12	1.64	1.02	9.01	71.7	55.3	3.91	12.0	51.1
MAX	2,170	6.1	239	2.2	2.5	3.4	102	635	971	6.4	144	782
MIN	.93	1.3	.73	.10	.80	.41	.01	.36	0	2.5	2.9	1.9
AC-FT	8,260	155	3,120	69	94	63	536	4,410	3,290	240	738	3,040

CAL YR 1971 TOTAL 14,188.51 MEAN 38.9 MAX 2,170 MIN 0 AC-FT 28,140
WTR YR 1972 TOTAL 12,108.84 MEAN 33.1 MAX 2,170 MIN 0 AC-FT 24,020

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	0615	23.67	2,670
6-22	1000	19.43	1,650
9- 4	1900	15.81	1,040

07312500 Wichita River at Wichita Falls, Tex.

LOCATION.--Lat 33°54'34", long 98°32'00", Wichita County, near center of stream on downstream side of bridge on Beverly Drive in Wichita Falls, 4 miles upstream from Fort Worth and Denver Railway Co. bridge, 8.4 miles upstream from Holliday Creek, and at mile 55.3.

DRAINAGE AREA.--3,140 sq mi, of which 2,086 sq mi is above Lake Kemp Dam.

PERIOD OF RECORD.--February 1900 to January 1902 (monthly discharge only, published in WSP 1311), October 1910 to December 1911 (gage heights only), March 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 924.26 ft above mean sea level. February 1900 to February 1902 and Oct. 1, 1910, to Dec. 31, 1911, nonrecording gages at site 4 miles downstream at different datum. Mar. 30, 1938, to Dec. 1, 1959, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years (1900-1, 1938-72), 288 cfs (208,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,100 cfs Oct. 3 (gage height, 13.80 ft); minimum daily, 26 cfs Mar. 3.
Period of record: Maximum discharge, 17,800 cfs Oct. 3, 1941 (gage height, 24.0 ft); no flow Oct. 11, 1960 (construction cofferdam upstream).
Maximum discharge, 50,000 cfs June 8, 1915, computed by Vernon L. Sullivan, engineer for Big Wichita River Irrigation Co.

REMARKS.--Records good. Flow from 2,086 sq mi is regulated by Lake Kemp (capacity, 672,100 acre-ft) 71 miles upstream. Since completion of dam in 1923 no flow has been permitted to pass over spillway. Water is diverted from Lake Diversion (capacity, 40,000 acre-ft) 51 miles upstream for irrigation (42,000 acres under permit) in the vicinity of Wichita Falls. During the water year, Wichita County Water Improvement District No. 2 diverted 70,810 acre-ft from Lake Diversion for mining, industrial use, recreation, and irrigation of 19,820 acres. The city of Wichita Falls diverted 12,454 acre-ft from Lake Kickapoo on the North Fork Little Wichita River and 6,573 acre-ft from Lake Arrowhead on Little Wichita River for municipal use, of which 12,077 acre-ft was returned to Wichita River below station as sewage effluent and filter plant washwater. Diversion and return flow records for Lake Kickapoo and Lake Arrowhead furnished by the city of Wichita Falls. Diversions from Lake Diversion computed from streamflow records at station 07312110.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	127	89	71	59	40	52	138	55	55	85	87
2	235	115	108	68	55	30	52	116	54	51	79	67
3	3,090	108	206	64	51	26	57	78	56	58	75	66
4	3,200	102	256	61	50	39	40	58	52	69	82	264
5	1,540	89	279	61	51	47	54	49	57	153	88	786
6	869	86	349	62	51	45	73	50	62	122	83	712
7	526	85	268	61	49	54	43	792	59	61	92	221
8	356	83	167	62	47	53	39	948	68	50	111	145
9	278	82	130	61	45	45	42	274	79	48	105	134
10	234	79	371	60	45	44	58	159	78	51	116	112
11	211	79	329	59	54	55	59	327	88	48	164	100
12	199	77	185	59	55	49	74	990	103	53	140	78
13	189	76	132	60	56	43	60	1,070	88	80	91	71
14	174	75	122	61	53	41	51	392	88	85	75	66
15	167	74	183	61	45	41	95	188	132	61	68	60
16	164	73	336	56	45	36	126	144	349	62	62	56
17	158	70	207	54	46	36	74	109	182	71	61	50
18	154	62	148	52	45	34	61	91	90	95	60	47
19	276	59	123	50	44	33	58	79	65	91	56	49
20	1,290	58	112	50	45	44	59	72	61	94	51	53
21	2,460	56	106	48	44	41	109	66	196	106	51	73
22	898	56	94	47	46	36	118	63	1,110	93	58	104
23	372	58	85	47	43	36	72	60	1,420	93	62	100
24	247	56	84	47	43	52	58	62	335	93	76	69
25	222	55	81	62	45	59	41	67	141	86	238	57
26	196	55	79	63	50	65	47	73	104	75	292	55
27	216	55	77	63	49	52	453	76	80	69	155	44
28	347	56	75	62	46	50	201	75	70	65	98	44
29	214	56	74	62	43	53	129	68	66	67	73	54
30	173	68	71	62	------	58	199	64	54	71	62	52
31	141	------	69	60	------	54	------	58	------	81	58	------
TOTAL	19,055	2,230	4,995	1,816	1,400	1,391	2,654	6,856	5,442	2,357	2,967	3,876
MEAN	615	74.3	161	58.6	48.3	44.9	88.5	221	181	76.0	95.7	129
MAX	3,200	127	371	71	59	65	453	1,070	1,420	153	292	786
MIN	141	55	69	47	43	26	39	49	52	48	51	44
AC-FT	37,800	4,420	9,910	3,600	2,780	2,760	5,260	13,600	10,790	4,680	5,890	7,690

CAL YR 1971 TOTAL 88,455 MEAN 242 MAX 5,630 MIN 31 AC-FT 175,500
WTR YR 1972 TOTAL 55,039 MEAN 150 MAX 3,200 MIN 26 AC-FT 109,200

07312700 Wichita River near Charlie, Tex.

LOCATION.--Lat 34°03'11", long 98°17'47", Clay County, on right bank at upstream side (revised) of bridge on Farm Road 810, 3.0 miles southeast of Charlie, and 5.7 miles northwest of Petrolia.

DRAINAGE AREA.--3,439 sq mi, of which 2,086 sq mi is above Lake Kemp Dam and 143 sq mi is above Lake Wichita Dam.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 872.7 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 250 cfs (181,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,450 cfs Oct. 4 (gage height, 15.45 ft); minimum daily, 5.4 cfs Mar. 4, 5.
Period of record: Maximum discharge, 5,220 cfs Aug. 17, 1971 (gage height, 19.47 ft); minimum, 41 cfs Jan. 7, 1968 (result of freeze-up).

REMARKS.--Records good. Flow is partly regulated by four major reservoirs whose combined capacity is 737,700 acre-ft. For statement concerning regulations and diversions, see station 07312500. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444	216	179	154	94	63	78	350	93	74	105	85
2	342	203	194	151	94	60	80	192	85	68	101	158
3	1,350	180	395	151	90	59	71	155	87	73	95	122
4	3,150	169	461	148	82	54	76	112	86	76	106	166
5	3,210	164	433	148	85	54	80	89	85	146	122	602
6	2,190	163	575	148	85	60	73	76	84	172	122	916
7	1,610	157	481	148	81	61	99	261	90	146	127	747
8	1,090	154	349	148	82	62	97	1,150	93	101	144	303
9	691	154	550	145	80	68	80	882	94	78	149	182
10	503	154	478	145	78	68	81	316	111	79	156	134
11	396	148	748	148	79	66	95	232	124	71	235	110
12	328	148	496	142	79	67	89	711	128	69	219	107
13	285	145	324	139	84	67	79	1,430	152	76	184	108
14	254	142	263	139	84	65	86	1,050	160	92	133	87
15	235	142	361	135	79	68	67	415	189	107	121	78
16	218	137	394	138	74	68	106	227	215	81	113	71
17	209	139	490	132	72	68	146	162	427	76	103	66
18	199	144	338	141	74	63	113	129	241	72	86	67
19	201	161	260	163	74	60	87	113	133	100	78	68
20	752	163	230	141	74	60	104	101	93	93	78	80
21	1,660	146	209	131	70	66	100	91	85	96	74	157
22	1,940	141	202	134	67	70	139	84	459	96	80	198
23	786	168	189	112	66	74	171	80	1,570	85	99	155
24	453	152	209	103	66	82	125	69	1,300	91	94	152
25	350	129	163	104	68	106	95	63	385	108	185	123
26	301	130	163	106	65	97	77	61	185	113	375	98
27	331	130	163	107	63	101	130	67	130	89	393	105
28	377	127	160	105	60	92	536	72	99	79	211	89
29	441	128	157	104	58	75	260	81	88	85	141	92
30	307	131	160	100	------	72	271	98	90	86	116	109
31	246	------	157	96	------	79	------	95	------	89	85	------
TOTAL	24,849	4,565	9,931	4,106	2,207	2,175	3,691	9,014	7,161	2,867	4,430	5,535
MEAN	802	152	320	132	76.1	70.2	123	291	239	92.5	143	185
MAX	3,210	216	748	163	94	106	536	1,430	1,570	172	393	916
MIN	199	127	157	96	58	54	67	61	84	68	74	66
AC-FT	49,290	9,050	19,700	8,140	4,380	4,310	7,320	17,880	14,200	5,690	8,790	10,980

CAL YR 1971 TOTAL 109,928 MEAN 301 MAX 4,720 MIN 50 AC-FT 218,000
WTR YR 1972 TOTAL 80,531 MEAN 220 MAX 3,210 MIN 54 AC-FT 159,700

07314000 Lake Kickapoo near Archer City, Tex.

LOCATION.--Lat 33°39'47", long 98°46'43", Archer County, on intake tower near left end of dam on North Fork Little Wichita River, 8.2 miles south of Mankins, and 9.2 miles northwest of Archer City.

DRAINAGE AREA.--275 sq mi.

PERIOD OF RECORD.--February 1946 to current year. Prior to October 1969, monthend contents only.

GAGE.--Nonrecording gage read twice daily. Datum of gage is at mean sea level. Prior to Oct. 8, 1946, water-stage recorder at same site and datum.

EXTREMES (at 0800).--Current year: Maximum contents, 104,700 acre-ft Oct. 4-9, 20-30 (elevation, 1,044.8 ft); minimum observed, 87,700 acre-ft Sept. 29, 30 (elevation, 1,042.0 ft).
Period of record: Maximum contents, 134,300 acre-ft Aug. 2, 1950 (elevation, 1,049.2 ft); minimum observed since first filling in July 1950, 35,660 acre-ft June 30, 1953 (elevation, 1,029.8 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 6,800 ft long, containing a 483-foot long reinforced concrete ogee-type uncontrolled service spillway at right end of dam. Dam completed Dec. 15, 1945, and storage began Feb. 1, 1946. There are two 48-by 60-inch outlet conduits at elevation 1,000.92 ft. Lake is used as municipal water supply for the city of Wichita Falls. Capacity table based on U.S. Geological Survey topographic maps, 5-foot contour interval, surveyed in 1929. Copy of capacity curve obtained from city of Wichita Falls entitled "Lake Kickapoo Area & Capacity Curve", dated November 1946. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,062.0	-
Maximum design flood (2-foot freeboard)	1,060.0	221,000
Crest of service spillway	1,045.0	106,000
Invert of two 48- by 60-inch outlet conduits	1,000.92	0

COOPERATION.--Capacity curve, record of lake elevations, and diversions for municipal use furnished by the city of Wichita Falls.

REVISIONS.--WSP 1211: Drainage area.

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

1,042.0	87,700	1,044.0	99,700
1,043.0	93,600	1,045.0	106,000

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101,600	104,100	101,600	102,800	101,000	99,700	97,260	94,820	99,090	97,260	93,600	88,290
2	101,600	104,100	101,600	102,800	101,000	99,700	97,260	94,820	99,090	96,650	93,600	88,290
3	103,500	104,100	102,800	102,800	101,000	99,700	97,260	94,820	99,090	96,650	93,600	88,290
4	104,700	104,100	102,800	102,800	101,000	99,700	97,260	94,820	98,480	96,650	93,010	89,470
5	104,700	103,500	102,800	102,800	101,000	99,700	97,260	94,820	98,480	96,650	93,010	88,880
6	104,700	103,500	102,800	102,800	101,000	99,700	97,260	94,820	98,480	96,650	93,010	88,880
7	104,700	103,500	102,800	102,800	101,000	99,700	97,260	94,820	98,480	96,650	93,010	88,880
8	104,700	103,500	102,800	102,800	101,000	99,700	96,650	95,430	98,480	96,650	93,010	88,880
9	104,700	103,500	102,800	102,800	101,000	99,700	96,650	95,430	97,870	96,650	93,010	88,880
10	104,100	103,500	102,800	102,800	101,000	99,700	96,650	95,430	97,870	96,650	93,010	88,880
11	104,100	103,500	102,800	102,800	101,000	99,090	96,650	95,430	97,870	96,650	93,010	88,880
12	104,100	102,800	102,800	102,200	101,000	99,090	96,040	95,430	97,870	96,040	93,010	88,880
13	104,100	102,800	102,800	102,200	101,000	99,090	96,040	99,700	97,870	96,040	93,010	88,880
14	103,500	102,800	102,800	102,200	101,000	99,090	96,040	101,000	97,870	96,040	93,010	88,880
15	103,500	102,800	102,800	102,200	101,000	99,090	96,040	101,000	97,870	96,040	93,010	88,290
16	103,500	102,800	102,800	102,200	101,000	99,090	95,430	101,000	97,870	96,040	91,880	88,290
17	102,800	102,200	102,800	102,200	100,300	97,870	95,430	101,000	97,870	96,040	91,880	88,290
18	102,800	102,200	102,800	102,200	100,300	97,870	95,430	101,000	97,870	96,040	91,880	88,290
19	102,800	102,200	102,800	102,200	100,300	97,870	94,820	101,000	97,870	94,820	91,880	88,290
20	104,700	102,200	102,800	102,200	100,300	97,870	94,820	101,000	97,260	94,820	91,880	88,290
21	104,700	102,200	102,800	101,600	99,700	97,870	94,820	101,000	97,260	94,820	88,290	88,290
22	104,700	101,600	102,800	101,600	99,700	97,870	94,820	101,000	97,260	94,820	88,290	88,290
23	104,700	101,600	102,800	101,600	99,700	97,870	94,820	101,000	97,260	94,210	88,290	88,290
24	104,700	101,600	102,800	101,600	99,700	97,870	94,210	100,300	97,260	94,210	88,290	88,290
25	104,700	101,600	102,800	101,600	99,700	97,870	94,210	100,300	97,260	93,600	88,290	88,290
26	104,700	101,600	102,800	101,600	99,700	97,260	94,210	99,700	97,260	93,600	88,290	88,290
27	104,700	101,600	102,800	101,600	99,700	97,260	94,210	99,700	97,260	93,600	88,290	88,290
28	104,700	101,600	102,800	101,600	99,700	97,260	94,210	99,700	97,260	93,600	88,290	88,290
29	104,700	101,600	102,800	101,600	99,700	97,260	94,210	99,090	97,260	93,600	88,290	87,700
30	104,700	101,600	102,800	101,000	------	97,260	94,820	99,090	97,260	93,600	88,290	87,700
31	104,100	------	102,800	101,000	------	97,260	------	99,090	------	93,600	88,290	------
(†)	1,044.7	1,044.3	1,044.5	1,044.2	1,044.0	1,043.6	1,043.2	1,043.9	1,043.6	1,043.0	1,042.1	1,042.0
(*)	+2,510	-2,500	+1,200	-1,800	-1,300	-2,440	-2,440	+4,270	-1,830	-3,660	-5,310	-590
(††)	1,128	1,159	1,158	1,193	1,134	1,159	786	1,288	1,201	590	817	841
MAX	104,700	104,100	102,800	102,800	101,000	99,700	97,260	101,000	99,090	97,260	93,600	89,470
MIN	101,600	101,600	101,600	101,000	99,700	97,260	94,210	94,820	97,260	93,600	88,290	87,700

CAL YR 1971..... * +20,800 †† 9,673 MAX 104,700 MIN 66,500
WTR YR 1972..... * -13,890 †† 12,454 MAX 104,700 MIN 87,700

* Elevation, in feet, at end of month.
† Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Wichita Falls.

07314500 Little Wichita River near Archer City, Tex.

LOCATION.--Lat 33°39'45", long 98°36'46", Archer County, on left bank at downstream side of bridge on State Highway 79, 1.5 miles downstream from confluence of North and Middle Forks, and 4.8 miles north of Archer City.

DRAINAGE AREA.--481 sq mi.

PERIOD OF RECORD.--May 1932 to January 1956, August 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 934.72 ft above mean sea level. Aug. 17, 1954, to Jan. 6, 1956, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years (1932-45) prior to completion of Lake Kickapoo, 110 cfs (79,700 acre-ft per year); 16 years (1945-55, 1966-72) regulated, 38.9 cfs (28,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,170 cfs May 14 (gage height, 17.75 ft); no flow many days.
Period of record: Maximum discharge, 17,900 cfs Oct. 31, 1941 (gage height, 26.18 ft); no flow at times.
Flood of June 1930 reached a stage of about 28 ft, from information by State Highway Department.

REMARKS.--Records good. Some regulation by Lake Kickapoo (station 07314000) on North Fork Little Wichita River. Records furnished by Wichita Falls show that 12,450 acre-ft was diverted from Lake Kickapoo for municipal use during the 1972 water year. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 827: 1932-35. WRD Texas 1969: 1968. WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	.54	.84	.54	.01	.01	0	250	0	5.6	0	0
2	.21	.60	4.4	.67	.02	.01	0	21	0	2.5	0	0
3	303	.34	90	.67	.01	.01	0	4.9	0	.67	0	0
4	601	.19	95	.67	.01	.01	0	2.0	0	1.2	0	0
5	57	.10	60	1.1	.01	0	0	.67	0	4.3	0	72
6	12	.07	98	2.2	.01	0	0	.48	0	3.3	0	20
7	4.0	.07	47	1.3	.01	0	0	124	0	.92	0	1.8
8	2.1	.07	33	.57	.01	0	0	133	0	.27	0	.43
9	1.1	.05	114	.36	.01	0	0	26	0	.12	0	.12
10	.56	.04	212	.28	.01	0	0	19	0	.04	0	.05
11	.35	.02	261	.25	.01	0	0	41	0	.01	0	.87
12	.34	.01	50	.25	.01	0	0	476	0	.22	.01	.33
13	.46	.01	18	.25	.01	0	0	962	0	7.7	0	.32
14	.18	.01	8.4	.25	.03	0	0	862	.01	4.3	.01	.08
15	.09	.01	17	.25	.07	0	0	50	8.2	.94	.01	.02
16	.06	.01	27	.17	.07	0	0	13	325	.22	.01	.01
17	.02	0	14	.10	.07	0	0	6.1	31	.06	.02	.01
18	.01	0	4.6	.10	.07	0	0	3.2	9.2	.02	.01	0
19	.03	0	2.5	.10	.07	0	.01	1.7	4.6	.01	.02	0
20	198	0	1.4	.10	.07	0	2.4	1.0	1.0	0	.02	0
21	137	0	1.2	.07	.07	0	48	.68	.40	0	.01	0
22	16	0	1.1	.05	.07	0	17	.49	.25	0	0	5.4
23	5.4	0	1.0	.03	.07	0	2.3	.48	.48	0	0	1.1
24	2.8	0	.88	.01	.04	0	.52	.37	1.2	0	0	.24
25	1.4	.01	.67	.01	.03	0	.20	.24	.32	0	0	.10
26	1.1	.25	.63	.01	.03	0	.12	.14	.20	0	0	.03
27	3.6	.24	.46	.01	.03	0	54	.09	.07	0	11	.03
28	5.6	.20	.32	.01	.03	0	30	.07	.04	0	2.2	.01
29	4.7	.14	.32	.01	.01	0	4.2	.07	12	0	.25	.01
30	2.1	.10	.32	.01	------	0	257	.03	26	0	.04	0
31	.96	------	.32	.01	------	0	------	.01	------	0	.01	------
TOTAL	1,361.65	3.08	1,165.36	10.41	.97	.04	415.75	2,999.72	419.97	32.40	13.62	102.96
MEAN	43.9	.10	37.6	.34	.033	.001	13.9	96.8	14.0	1.05	.44	3.43
MAX	601	.60	261	2.2	.07	.01	257	962	325	7.7	11	72
MIN	.01	0	.32	.01	.01	0	0	.01	0	0	0	0
AC-FT	2,700	6.1	2,310	21	1.9	.08	825	5,950	833	64	27	204

CAL YR 1971 TOTAL 9,680.96 MEAN 26.5 MAX 1,470 MIN 0 AC-FT 19,200
WTR YR 1972 TOTAL 6,525.93 MEAN 17.8 MAX 962 MIN 0 AC-FT 12,940

07314800 Lake Arrowhead near Henrietta, Tex.

LOCATION.--Lat 33°45'51", long 98°22'17", Clay County, at intake tower near center of dam on Little Wichita River, 2.3 miles upstream from Lake Creek, 11 miles southwest of Henrietta, and 12.3 miles southeast of Wichita Falls.

DRAINAGE AREA.--822 sq mi.

PERIOD OF RECORD.--June 1967 (corrected) to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.4 ft below mean sea level.

EXTREMES.--Current year: Maximum contents, 150,200 acre-ft May 16 (gage height, 918.20 ft); minimum, 93,300 acre-ft Oct. 2 (gage height, 912.19 ft).
Period of record: Maximum contents, 150,200 acre-ft May 16, 1972 (gage height, 918.20 ft); minimum since first appreciable storage, 6,510 acre-ft June 2, 1967 (gage height, 93.0 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam approximately 3 miles long with an uncontrolled reinforced concrete service spillway, 1,581 ft long at left end of dam. Dam was completed in December 1966 and storage began in June 1967. Capacity at crest of spillway is 262,100 acre-ft (gage height, 926.4 ft). Dead storage is negligible. Figures given herein represent total contents. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	944.4	-
Crest of service spillway	926.4	262,100
Invert of upper 5-foot-diameter inlet to outlet structure	905.7	50,840
Invert of lower 5-foot-diameter inlet to outlet structure	874.1	-

COOPERATION.--Capacity table computed from data furnished by Homer Hunter and Associates, and Biggs and Mathews Consulting Engineers for the city of Wichita Falls. Data based on Geological Survey topographic maps. Record of diversions furnished by the city of Wichita Falls.

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

912.0	91,840	916.0	127,100
913.0	99,890	917.0	137,200
914.0	108,400	918.0	148,000
915.0	117,500	919.0	159,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93,410	97,180	94,680	104,000	102,400	102,000	98,650	102,200	146,000	142,400	134,400	128,600
2	93,810	96,610	95,560	104,400	102,400	101,800	98,730	102,900	145,200	142,300	133,900	128,100
3	94,680	96,850	95,960	104,000	102,400	101,800	97,750	102,700	145,500	142,000	133,400	128,300
4	96,770	96,940	96,450	103,800	102,400	101,000	97,990	103,000	145,100	141,800	133,100	130,400
5	97,990	96,530	96,940	103,600	102,400	101,200	98,240	103,100	144,300	141,500	132,900	130,800
6	98,070	96,040	97,260	103,500	102,400	101,900	98,650	102,800	144,000	141,500	132,600	131,300
7	97,990	96,280	97,500	103,600	102,400	100,500	97,670	104,400	143,800	141,300	132,300	131,100
8	97,750	96,280	98,160	103,800	102,400	101,000	97,420	105,400	143,600	141,300	132,100	130,800
9	97,420	96,040	99,970	103,700	102,400	101,000	97,910	105,400	143,000	141,200	131,900	130,700
10	97,500	96,120	100,900	103,500	102,400	101,200	97,830	105,900	142,500	140,800	132,900	130,600
11	97,500	96,120	102,300	103,900	102,400	101,100	98,070	106,100	142,700	140,600	132,800	130,400
12	97,180	96,200	102,700	104,000	102,700	101,000	97,750	135,900	142,500	140,400	132,700	130,400
13	97,020	96,370	103,000	103,600	102,900	100,700	97,750	143,800	142,200	140,400	132,600	130,100
14	96,940	96,200	103,900	103,400	103,000	101,000	97,100	147,300	142,300	140,100	132,500	129,800
15	97,020	96,280	104,100	103,100	102,800	100,500	96,370	149,300	142,300	139,700	132,300	129,700
16	96,940	96,120	104,300	102,900	102,700	100,400	96,530	149,200	142,500	139,300	132,100	129,700
17	97,100	95,960	104,400	103,600	102,500	100,300	96,610	149,100	142,700	139,100	131,900	129,600
18	96,610	95,320	104,600	103,100	102,400	100,200	96,450	148,900	142,800	138,600	131,700	129,300
19	96,450	95,480	104,400	103,100	102,400	100,500	96,850	148,700	142,700	138,600	131,600	129,300
20	96,850	95,320	104,400	102,700	102,400	100,100	97,260	148,700	142,500	138,800	131,300	128,600
21	97,420	95,160	104,300	102,700	102,800	99,810	97,990	148,300	143,200	138,500	131,000	128,100
22	97,340	95,400	104,400	102,800	102,500	100,100	98,490	148,100	144,300	138,000	130,600	128,200
23	97,420	95,240	104,700	103,400	102,300	99,890	97,750	147,800	144,200	137,800	130,300	128,300
24	97,580	95,400	104,400	102,700	102,200	99,310	97,580	147,600	144,400	137,600	130,100	128,300
25	97,670	95,560	104,400	102,700	102,100	99,640	97,580	147,300	144,200	137,400	129,800	128,100
26	97,990	95,240	104,300	102,300	102,200	99,640	97,420	147,100	143,900	137,200	129,700	127,100
27	97,750	95,560	104,100	102,200	102,300	98,980	99,310	146,900	143,800	136,400	129,600	126,800
28	97,910	94,840	104,200	102,200	102,400	98,240	99,640	146,700	143,400	135,600	129,300	126,700
29	97,750	94,680	104,400	102,200	102,100	98,490	99,720	146,400	142,700	135,200	129,300	125,300
30	97,180	94,840	104,000	102,200	------	98,490	101,000	146,000	142,500	134,900	129,100	125,500
31	97,260	------	104,300	102,100	------	98,400	------	146,100	------	134,600	128,600	------
(†)	912.68	912.38	913.52	913.26	913.26	912.82	913.14	917.83	917.50	916.75	916.15	915.84
(*)	+3,610	-2,420	+9,460	-2,200	0	-3,700	+2,600	+45,100	-3,600	-7,900	-6,000	-3,100
(††)	0	0	0	0	0	0	595	417	1,123	2,053	1,551	834
MAX	98,070	97,180	104,700	104,400	103,000	102,000	101,000	149,300	146,000	142,400	134,400	131,300
MIN	93,410	94,680	94,680	102,100	102,100	98,240	96,370	102,200	142,200	134,600	128,600	125,300

CAL YR 1971..... * +2,400 †† 9,350 MAX 104,700 MIN 74,600
WTR YR 1972..... * +31,850 †† 6,570 MAX 149,300 MIN 93,410

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Wichita Falls.

07315000 Little Wichita River near Henrietta, Tex.

LOCATION.--Lat 33°50'02", long 98°12'31", Clay County, on downstream side of bridge near left bank on State Highway 148, 1.5 miles northwest of Henrietta, 4 miles upstream from Turkey Creek, and 5 miles upstream from Dry Fork Little Wichita River.

DRAINAGE AREA.--1,037 sq mi.

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 831.57 ft above mean sea level. Prior to June 26, 1953, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--13 years (1953-66) prior to completion of Lake Arrowhead, 124 cfs (89,840 acre-ft per year); 6 years (1966-72) regulated, 17.6 cfs (12,750 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,860 cfs May 12 (gage height, 15.02 ft); no flow for many days.
Period of record: Maximum discharge, 7,630 cfs May 1, 1966 (gage height, 18.28 ft); maximum gage height, 18.36 ft May 2, 1957; no flow at times each year.
Flood in 1908 reached a stage of about 21 ft, from information by State Highway Department.

REMARKS.--Records good. Two major reservoirs, Lake Kickapoo and Lake Arrowhead, with a total capacity of 368,100 acre-ft largely regulate the flow above station. The city of Wichita Falls diverted 12,464 acre-ft from Lake Kickapoo and 6,573 acre-ft from Lake Arrowhead for municipal use, and returned 12,077 acre-ft as sewage effluent and filter plant washwater to the Wichita River. The city of Henrietta diverted 362 acre-ft from pool at gage for municipal use. Diversion records were furnished by the cities of Wichita Falls and Henrietta, respectively. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09		0	.02			0	2.9	0	1.1	2.5	0
2	.02		0	.02			0	.75	0	1.7	2.7	0
3	165		11	.01			0	3.2	0	.99	2.9	0
4	276		9.3	0			0	1.2	0	1.0	1.8	16
5	179		26	0			0	.35	0	.43	5.7	27
6	73		41	0			0	.13	0	0	5.4	11
7	32		34	0			0	176	0	0	3.0	7.8
8	19		81	0			0	81	0	0	0	2.6
9	13		164	0			0	30	0	0	1.7	.61
10	5.7		301	0			0	13	0	.27	2.2	.10
11	3.1		187	0			0	6.9	0	11	2.3	.02
12	1.9		121	0			0	1,170	0	13	.02	0
13	1.1		70	0			0	901	0	14	0	0
14	.42		59	0			0	231	0	14	0	0
15	.12		179	0			0	92	0	11	0	0
16	.04		115	0			0	48	0	13	0	0
17	.01		62	0			0	26	0	6.4	0	0
18	.01		34	0			0	15	0	1.5	0	0
19	.01		21	0			0	7.9	0	10	0	0
20	.01		14	0			0	3.5	0	12	0	0
21	0		8.2	0			0	1.3	0	11	0	0
22	0		4.3	0			0	.37	88	13	.53	0
23	0		2.0	0			0	.09	29	10	.01	0
24	0		1.0	0			0	.02	19	1.2	2.4	0
25	0		.84	0			0	0	6.1	0	4.3	0
26	0		.57	0			0	0	1.4	0	.66	0
27	0		.20	0			14	0	1.3	0	.05	0
28	0		.10	0			23	0	.34	0	0	0
29	0		.05	0			12	0	.16	.22	0	0
30	0		.04	0	------		17	0	.18	1.1	0	0
31	0	------	.02	0	------		------	0	------	.01	0	------
TOTAL	769.53	0	1,546.62	.05	0	0	66	2,811.61	145.48	147.92	38.17	65.13
MEAN	24.8	0	49.9	.002	0	0	2.20	90.7	4.85	4.77	1.23	2.17
MAX	276	0	301	.02	0	0	23	1,170	88	14	5.7	27
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1,530	0	3,070	.1	0	0	131	5,580	289	293	76	129

CAL YR 1971 TOTAL 3,906.02 MEAN 10.7 MAX 435 MIN 0 AC-FT 7,750
WTR YR 1972 TOTAL 5,590.51 MEAN 15.3 MAX 1,170 MIN 0 AC-FT 11,090

07315200 East Fork Little Wichita River near Henrietta, Tex.

LOCATION.--Lat 33°48'46", long 98°05'05", Clay County, on downstream side of bridge on U.S. Highway 82, 5.8 miles upstream from Little Wichita River, 6.4 miles east of Henrietta, and 8.9 miles west of Ringgold.

DRAINAGE AREA.--178 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 825.32 ft above mean sea level.

AVERAGE DISCHARGE.--8 years (1964-72), 21.3 cfs (15,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,500 cfs May 12 (gage height, 28.85 ft); no flow for many days.
Period of record: Maximum discharge, 15,500 cfs May 12, 1972 (gage height, 28.85 ft); no flow for many days.
Maximum stage since at least 1920, 28.85 ft in May 1972.
REVISIONS.--The maximum discharge for the water year 1966 has been revised to 6,920 cfs Apr. 30, 1966 (gage height, 26.55 ft), superseding figures published in WRD Texas, 1966.

REMARKS.--Records good. No known diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20		0	.01			0	56	.04	.08		0
2	.07		.01	0			0	30	.04	.06		0
3	26		17	0			0	9.9	.03	.10		0
4	193		35	0			0	3.1	.02	.16		.01
5	40		24	0			0	1.3	.02	.09		50
6	5.2		72	0			0	1.2	.01	.12		18
7	1.2		54	0			0	14	.01	.20		2.6
8	.40		40	0			0	106	.01	.12		.70
9	.26		187	0			0	40	.01	.06		.49
10	.16		315	0			0	11	.01	.03		.32
11	.06		353	0			0	3.7	.01	.01		.18
12	.02		86	0			0	5,510	.01	0		.08
13	0		23	0			0	4,090	0	0		.04
14	0		12	0			0	918	.01	0		.01
15	0		31	0			0	108	.01	0		.01
16	0		29	0			0	18	.01	0		0
17	0		16	0			0	9.6	0	0		0
18	0		8.8	0			0	5.3	0	0		0
19	0		6.3	0			0	2.9	0	0		0
20	0		3.3	0			0	1.8	0	0		0
21	0		1.8	0			21	1.4	.01	0		0
22	0		1.6	0			30	1.0	13	0		0
23	0		1.1	0			8.3	.9	96	0		0
24	0		.67	0			2.9	.6	19	0		0
25	0		.46	0			1.6	.4	4.5	0		0
26	0		.24	0			.98	.2	1.4	0		0
27	0		.09	0			115	.2	.70	0		0
28	0		.05	0			118	.2	.46	0		0
29	0		.04	0			27	.1	.28	0		0
30	0		.02	0	------		19	.1	.16	0		0
31	0	------	.01	0	------		------	.1	------	0		------
TOTAL	266.57	0	1,318.49	.01	0	0	343.78	10,945.0	135.76	1.03	0	72.44
MEAN	8.60	0	42.5	.0003	0	0	11.5	353	4.53	.033	0	2.41
MAX	193	0	353	.01	0	0	118	5,510	96	.20	0	50
MIN	0	0	0	0	0	0	0	.10	0	0	0	0
AC-FT	529	0	2,620	.02	0	0	682	21,710	269	2.0	0	144

CAL YR 1971 TOTAL 2,919.60 MEAN 8.00 MAX 353 MIN 0 AC-FT 5,790
WTR YR 1972 TOTAL 13,083.08 MEAN 35.7 MAX 5,510 MIN 0 AC-FT 25,950

PEAK DISCHARGE (BASE, 300 CFS).--Dec. 11 (1400) 374 cfs (14.58 ft); May 12 (1900) 15,500 cfs (28.85 ft).

07315500 Red River near Terral, Okla.

LOCATION.--Lat 33°52'43", long 97°56'03", Jefferson County, near left bank on downstream side of pier of bridge on U.S. Highway 81, 0.5 mile downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 1.2 miles south of Terral, 3.6 miles downstream from Little Wichita River, and at mile 872.

DRAINAGE AREA.--28,723 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--January 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 770.31 ft above mean sea level. Prior to Jan. 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 2,165 cfs (1,569,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 31,800 cfs May 14 (gage height, 17.64 ft); minimum, 115 cfs Apr. 16.
Period of record: Maximum discharge, 197,000 cfs June 8, 1941 (gage height, 28.12 ft); minimum, 43 cfs Mar. 15, 1939.
Maximum stage since at least 1891, that of June 8, 1941. Flood of May 19, 1935, reached a stage of 27.2 ft; floods in 1891 and May 1, 1908, are reported to have reached about the same stage.

REMARKS.--Records good. Some regulation by Lake Kemp on Wichita River (capacity, 672,100 acre-ft, revised), Lake Kickapoo on North Fork Little Wichita River (capacity, 106,000 acre-ft), Lake Arrowhead on Little Wichita River (capacity, 262,100 acre-ft), Lake Altus on North Fork Red River (capacity, 142,900 acre-ft), Lake Lawtonka on Medicine Creek (capacity, 63,000 acre-ft), Lake Thomas on Little Medicine Creek (capacity, 8,300 acre-ft), and Lake Ellsworth on East Cache Creek (capacity, 94,500 acre-ft). Principal diversions are from Wichita River for irrigation of about 20,000 acres in the vicinity of Wichita Falls, Tex., and from North Fork Red River for irrigation of about 48,000 acres in vicinity of Altus, Okla. Many small diversions for irrigation above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,880	6,940	596	829	322	234	183	2,840	431	396	143	365
2	2,160	7,050	674	808	322	224	174	7,390	417	401	137	271
3	1,990	3,280	828	772	311	218	172	4,930	867	357	137	223
4	4,540	1,940	1,040	729	309	215	161	2,010	1,130	437	138	343
5	9,000	1,410	1,380	690	293	206	158	1,310	873	340	134	479
6	6,960	1,110	1,580	669	301	203	158	1,000	612	1,800	135	2,680
7	4,380	928	1,800	622	306	200	153	1,290	482	986	146	4,350
8	2,770	813	1,860	603	293	197	145	1,720	405	690	144	1,960
9	1,960	729	4,500	596	295	194	152	3,560	353	677	146	912
10	1,500	673	5,730	590	299	194	151	3,820	319	541	161	652
11	1,210	684	6,850	584	321	194	145	1,620	297	442	166	531
12	1,030	739	4,930	560	322	194	138	3,780	289	379	166	438
13	912	603	2,480	523	320	191	136	20,500	281	991	209	363
14	853	524	1,710	496	339	186	140	25,300	281	917	276	314
15	749	517	2,200	479	319	186	132	11,100	304	731	284	273
16	713	492	3,200	455	301	177	119	6,340	309	658	231	249
17	675	528	4,730	435	297	177	123	3,010	865	552	189	226
18	653	479	5,400	434	285	177	141	1,810	4,440	433	169	225
19	639	467	3,810	425	279	172	164	1,300	4,240	362	146	235
20	643	483	2,340	415	270	172	166	1,000	2,010	327	141	211
21	1,330	485	1,740	410	274	174	182	809	1,230	406	156	194
22	4,640	487	1,380	388	273	172	862	685	786	385	156	187
23	3,720	597	1,290	379	272	180	631	592	920	284	140	220
24	1,770	671	1,200	379	267	183	403	509	1,740	251	138	221
25	1,200	630	1,110	349	263	177	295	456	1,830	222	156	198
26	1,120	581	1,040	344	260	200	236	419	1,120	199	137	189
27	1,270	568	991	341	253	227	227	369	526	186	189	169
28	1,030	590	948	338	248	276	302	333	532	174	290	153
29	1,410	598	918	334	240	240	2,740	310	460	160	330	152
30	1,670	590	902	334	------	212	2,580	293	420	146	403	144
31	1,620	------	870	328	------	200	------	322	------	143	391	------
TOTAL	66,997	36,186	70,027	15,638	8,454	6,152	11,469	110,727	28,769	14,973	5,884	17,127
MEAN	2,161	1,206	2,259	504	292	198	382	3,572	959	483	190	571
MAX	9,000	7,050	6,850	829	339	276	2,740	25,300	4,440	1,800	403	4,350
MIN	639	467	596	328	240	172	119	293	281	143	134	144
AC-FT	132,900	71,770	138,900	31,020	16,770	12,200	22,750	219,600	57,060	29,700	11,670	33,970

CAL YR 1971 TOTAL 464,606 MEAN 1,273 MAX 25,100 MIN 80 AC-FT 921,500
WTR YR 1972 TOTAL 392,403 MEAN 1,072 MAX 25,300 MIN 119 AC-FT 778,300

PEAK DISCHARGE (BASE, 21,000 CFS).--May 14 (0100) 31,800 cfs (17.64 ft).

07315950 Moss Lake near Gainesville, Tex.

LOCATION.--Lat 33°46'26", long 97°12'52", Cooke County, at upstream side of outlet tower near right end of dam on Fish Creek, 1.6 miles upstream from Bearhead Creek, 3.7 miles upstream from mouth, and 11 miles northwest of Gainesville.

DRAINAGE AREA.--65 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

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

EXTREMES.--Current year: Maximum contents, 25,670 acre-ft Dec. 10 (elevation, 717.10 ft); minimum, 21,220 acre-ft Sept. 30 (elevation, 713.17 ft).
Period of record: Maximum contents, 26,770 acre-ft May 17, 1968 (elevation, 718.02 ft); minimum since lake first filled in May 1968, 21,220 acre-ft Sept. 30, 1972 (elevation, 713.17 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 1,460 ft long. The dam was completed and storage began Dec. 2, 1966. The service spillway is a concrete structure consisting of a 7- by 7-foot conduit with an uncontrolled rectangular drop inlet designed to discharge 2,500 cfs with a 10-foot head. The emergency spillway is a 400-foot wide cut through natural ground located about 100 ft to left of left end of dam. The dam was built by the city of Gainesville to impound water for municipal use. Area and capacity tables are based on a 1961 survey. There was no diversion from the lake during the current water year. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	740.0	-
Top of design flood pool	736.0	55,230
Crest of emergency spillway	725.0	36,440
Crest of service spillway	715.0	23,210
Invert of 30-inch pipe to intake tower	666.0	78

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

713.0	21,040	716.0	24,360
714.0	22,110	717.0	25,550
715.0	23,210	718.0	26,770

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,800	23,120	23,130	23,210	23,100	23,090	22,990	23,180	22,970	22,580	21,870	21,470
2	22,850	23,100	23,730	23,200	23,090	23,070	22,980	23,170	22,950	22,550	21,840	21,460
3	23,130	23,080	23,770	23,200	23,090	23,040	22,950	23,130	22,940	22,520	21,400	21,440
4	23,140	23,060	23,650	23,170	23,090	23,040	22,940	23,110	22,910	22,500	21,770	21,580
5	23,140	23,040	24,110	23,200	23,090	23,040	22,940	23,090	22,900	22,450	21,750	21,550
6	23,120	23,010	23,910	23,190	23,090	23,030	22,960	23,090	22,880	22,430	21,710	21,540
7	23,110	22,990	23,720	23,180	23,090	23,020	22,940	23,100	22,870	22,400	21,710	21,520
8	23,100	22,980	24,200	23,170	23,090	23,010	22,920	23,090	22,860	22,370	21,690	21,510
9	23,070	22,970	24,720	23,170	23,090	23,010	22,910	23,090	22,820	22,360	21,790	21,490
10	23,060	22,970	24,990	23,160	23,100	23,010	22,910	23,070	22,800	22,340	21,790	21,490
11	23,040	22,970	24,270	23,160	23,120	23,020	22,940	23,070	22,790	22,320	21,770	21,470
12	23,040	22,970	23,910	23,140	23,120	23,020	22,960	24,060	22,900	22,310	21,750	21,450
13	23,020	22,970	23,720	23,140	23,130	23,020	22,950	23,740	22,890	22,300	21,740	21,440
14	23,010	22,960	23,730	23,130	23,120	23,030	22,980	23,530	22,880	22,280	21,740	21,410
15	23,000	22,960	23,670	23,130	23,100	23,020	22,980	23,420	22,870	22,240	21,700	21,390
16	23,000	22,960	23,570	23,120	23,100	23,010	22,970	23,350	22,850	22,220	21,680	21,380
17	23,000	23,300	23,490	23,120	23,100	23,010	22,950	23,290	22,840	22,180	21,660	21,360
18	23,020	23,280	23,420	23,110	23,090	23,000	22,950	23,260	22,850	22,150	21,640	21,340
19	23,410	23,240	23,370	23,110	23,080	23,000	22,990	23,210	22,840	22,130	21,620	21,310
20	23,880	23,210	23,340	23,120	23,080	23,000	23,390	23,190	22,820	22,110	21,600	21,300
21	23,640	23,180	23,300	23,120	23,090	23,010	23,420	23,170	22,790	22,090	21,590	21,350
22	23,470	23,200	23,280	23,110	23,090	23,020	23,350	23,130	22,780	22,080	21,600	21,370
23	23,380	23,180	23,270	23,110	23,100	23,020	23,280	23,120	22,770	22,070	21,560	21,360
24	23,310	23,170	23,260	23,110	23,100	23,030	23,220	23,100	22,760	22,050	21,530	21,340
25	23,260	23,160	23,260	23,100	23,100	23,020	23,180	23,100	22,740	22,020	21,540	21,330
26	23,260	23,140	23,240	23,100	23,100	23,040	23,130	23,080	22,720	21,990	21,540	21,310
27	23,220	23,140	23,240	23,100	23,100	23,020	23,180	23,070	22,680	21,970	21,520	21,310
28	23,200	23,120	23,220	23,100	23,100	23,010	23,180	23,060	22,650	21,970	21,490	21,290
29	23,180	23,110	23,230	23,100	23,100	22,990	23,170	23,030	22,630	21,950	21,470	21,250
30	23,160	23,130	23,230	23,100	------	23,000	23,210	23,010	22,600	21,930	21,440	21,220
31	23,130	------	23,210	23,100	------	22,990	------	22,990	------	21,900	21,460	------
(†)	714.93	714.93	715.00	714.90	714.90	714.80	715.00	714.80	714.45	713.80	713.39	713.17
(*)	+320	0	+80	-110	0	-110	+220	-220	-390	-700	-440	-240
MAX	23,880	23,300	24,990	23,210	23,130	23,090	23,420	24,060	22,970	22,580	21,870	21,580
MIN	22,800	22,960	23,130	23,100	23,080	22,990	22,910	22,990	22,600	21,900	21,440	21,220

CAL YR 1971..... * +390 MAX 24,990 MIN 21,790
WTR YR 1972..... * -1,590 MAX 24,990 MIN 21,220

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

07316000 Red River near Gainesville, Tex.

LOCATION.--Lat 33°43'40", long 97°09'35", in SW¼ sec. 36, T.9 S., R.1 E., Love County, Okla., near center of span on downstream side of bridge on U.S. Highway 77, 0.2 mile downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 5 miles downstream from Fish Creek, 7 miles north of Gainesville, and at mile 791.5.

DRAINAGE AREA.--30,782 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1936 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 627.91 ft above mean sea level. Prior to Jan. 17, 1939, and Feb. 13, 1965, to Nov. 14, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 2,700 cfs (1,956,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,000 cfs May 15 (gage height, 16.75 ft); minimum, 117 cfs Aug. 30.
Period of record: Maximum discharge, 168,000 cfs June 9, 1941 (gage height, 24.15 ft); maximum gage height, 26.53 ft May 21, 1951; minimum discharge, 48 cfs Jan. 27, 1940.

REMARKS.--Records good. Flow slightly regulated by Lake Kemp (station 07312000), since 1943 by Lake Altus, and since 1946 by Lake Kickapoo (station 07314000).

COOPERATION.--Gage-height record and 35 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,200	1,430	550	794	424	357	254	2,350	435	538	174	281
2	3,240	2,000	574	758	423	348	251	2,580	410	487	164	349
3	2,780	4,740	1,050	721	408	330	240	2,730	457	420	148	364
4	2,800	4,390	1,210	680	401	317	237	4,680	800	821	147	343
5	3,580	2,730	1,560	617	398	309	230	3,610	1,250	582	142	296
6	4,750	2,090	1,750	626	411	305	230	1,930	1,220	581	141	348
7	5,570	2,080	1,950	606	385	300	230	1,430	1,150	508	145	475
8	4,340	2,060	2,060	583	390	296	230	1,240	778	1,200	147	2,180
9	3,140	1,890	3,250	573	401	284	223	1,510	574	1,620	154	3,590
10	2,300	1,670	7,750	554	403	281	211	1,730	488	1,220	196	2,510
11	1,730	1,380	9,410	545	410	269	202	2,840	413	916	267	1,640
12	1,410	1,010	7,810	546	418	258	205	4,590	395	673	182	1,190
13	1,190	786	6,170	532	431	244	205	5,530	398	526	170	960
14	1,030	737	4,250	515	426	234	202	14,000	356	469	173	821
15	910	716	3,180	492	408	227	205	17,800	342	746	180	681
16	811	634	2,790	485	408	227	199	9,620	334	1,170	240	592
17	740	592	3,370	491	394	227	193	6,370	326	1,030	363	486
18	705	716	3,750	505	394	223	193	4,570	332	851	309	403
19	747	660	4,110	487	389	227	182	2,960	489	711	254	336
20	2,180	580	3,960	488	380	223	366	2,200	3,330	524	224	284
21	2,340	544	2,970	496	371	230	1,240	1,730	3,160	422	194	326
22	1,200	532	2,060	488	348	237	673	1,460	2,130	397	172	300
23	1,620	526	1,680	482	352	240	505	1,230	1,500	381	158	264
24	3,570	521	1,480	480	357	251	617	1,070	1,150	472	151	238
25	2,930	526	1,330	461	366	262	1,050	910	1,120	357	151	224
26	1,760	674	1,210	452	371	254	770	780	1,780	280	144	230
27	1,440	667	1,100	458	366	254	623	697	1,880	246	136	244
28	1,260	616	983	440	352	240	572	629	1,230	185	129	220
29	1,250	550	921	435	352	258	523	571	869	185	120	204
30	1,110	580	881	430	------	258	702	515	684	180	123	185
31	1,250	------	832	420	------	254	------	469	------	180	192	------
TOTAL	67,883	38,627	85,951	16,640	11,337	8,224	11,763	104,331	29,780	18,878	5,590	20,564
MEAN	2,190	1,288	2,773	537	391	265	392	3,366	993	609	180	685
MAX	5,570	4,740	9,410	794	431	357	1,240	17,800	3,330	1,620	363	3,590
MIN	705	521	550	420	348	223	182	469	326	180	120	185
AC-FT	134,600	76,620	170,500	33,010	22,490	16,310	23,330	206,900	59,070	37,440	11,090	40,790

CAL YR 1971 TOTAL 431,473 MEAN 1,182 MAX 17,100 MIN 105 AC-FT 855,800
WTR YR 1972 TOTAL 419,568 MEAN 1,146 MAX 17,800 MIN 120 AC-FT 832,200

PEAK DISCHARGE (BASE, 24,000 CFS).--No peak above base.

NOTE.--Discharge computed from once-or-more daily wire-weight gage readings Nov. 6 to Dec. 15, Feb. 13 to Apr. 30.

07316200 Mineral Creek near Sadler, Tex.

LOCATION.--Lat 33°42'08", long 96°50'51", Grayson County, on right bank at downstream side of bridge on Farm Road 901, 1.4 miles north of Sadler, and 2.0 miles upstream from Mustang Creek.

DRAINAGE AREA.--26.0 sq mi.

PERIOD OF RECORD.--December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 650.00 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,810 cfs Dec. 10 (gage height, 13.22 ft); no flow at times.
Period of record: Maximum discharge, 2,270 cfs May 14, 1969 (gage height, 13.62 ft); no flow at times each year.
Maximum stage since about 1900, about 18 ft in 1922, from information by local residents.

REMARKS.--Records good. The city of Whitesboro, which obtained 387 acre-ft of water from wells, discharged 305 acre-ft of sewage effluent into a tributary above the station during the 1972 water year. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.7	1.0	2.8	.82	.82	.60	2.9	.06		0	.35
2	0	1.6	34	2.8	.82	.82	1.1	1.5	.04		0	0
3	414	1.4	30	2.8	.76	.82	.60	1.2	.05		0	0
4	9.9	1.4	4.9	2.7	.70	.82	.55	.88	.05		0	3.0
5	1.7	1.3	162	2.4	.70	.76	1.0	.76	.01		0	.94
6	1.0	1.2	24	2.2	.82	.82	1.5	.70	0		0	.15
7	.60	1.1	7.8	2.2	.76	.88	1.5	.82	0		0	0
8	.40	1.1	403	2.2	.76	.82	1.4	.94	.01		0	0
9	.45	1.1	510	2.4	.76	.82	.82	.70	.01		0	0
10	.35	.82	599	2.4	.76	.82	.88	.65	0		0	0
11	.35	.65	25	2.2	.82	.88	.82	.55	0		0	0
12	.31	.65	14	2.0	1.3	.88	.76	146	0		0	0
13	.27	.55	11	1.9	1.1	1.3	.70	7.3	.06		0	0
14	.27	.55	64	1.5	1.0	1.1	1.4	2.2	1.3		0	0
15	.24	.55	89	1.5	.94	1.0	1.5	1.3	.45		0	0
16	.24	.55	9.4	1.4	.88	1.0	1.0	.88	.04		0	0
17	.31	.60	6.6	1.4	.88	1.0	.70	.70	0		0	0
18	.45	.60	4.9	1.5	.88	1.0	.70	.88	0		0	0
19	14	.60	4.6	1.4	.88	1.1	.76	.55	0		0	0
20	187	.60	4.2	1.3	.88	.70	21	.50	0		0	0
21	6.1	.60	3.6	1.1	.88	.65	5.9	.35	0		0	0
22	4.3	.60	3.3	1.1	.82	.65	2.0	.24	0		0	0
23	3.4	.88	3.2	1.1	.82	.76	1.4	.21	0		0	0
24	3.0	.82	3.2	1.1	.82	.82	1.1	.18	0		0	0
25	2.7	.70	3.2	.88	.88	.76	1.1	.10	0		0	0
26	2.5	.70	3.2	.88	.82	.88	1.1	.06	0		0	0
27	2.4	.70	3.0	1.0	.82	.88	2.7	.06	0		0	.15
28	2.2	.70	2.9	.94	.82	.82	15	.05	0		0	.15
29	2.1	.65	2.9	.94	.88	.70	3.0	.06	0		0	.01
30	2.0	.65	2.9	.88	------	.55	28	.06	0		0	0
31	1.9	------	2.9	.88	------	.65	------	.06	------		3.6	------
TOTAL	664.44	25.62	2,042.7	51.80	24.78	26.28	100.59	173.34	2.08	0	3.6	4.75
MEAN	21.4	.85	65.9	1.67	.85	.85	3.35	5.59	.069	0	.12	.16
MAX	414	1.7	599	2.8	1.3	1.3	28	146	1.3	0	3.6	3.0
MIN	0	.55	1.0	.88	.70	.55	.55	.05	0	0	0	0
CFSM	.82	.03	2.53	.06	.03	.03	.13	.22	.003	0	.005	.006
IN.	.95	.04	2.92	.07	.04	.04	.14	.25	.002	0	.005	.006
AC-FT	1,320	51	4,050	103	49	52	200	344	4.1	0	7.1	9.4

CAL YR 1971 TOTAL 3,274.65 MEAN 8.97 MAX 599 MIN 0 CFSM .35 IN 4.69 AC-FT 6,500
WTR YR 1972 TOTAL 3,119.98 MEAN 8.52 MAX 599 MIN 0 CFSM .33 IN 4.46 AC-FT 6,190

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G.HT.	DISCHARGE
10- 3	0800	12.93	1,600
12- 8	2030	13.18	1,800
12-10	0230	13.22	1,810

07331500 Lake Texoma near Denison, Tex.

LOCATION.--Lat 33°49'05", long 96°34'20", in NE¼ sec. 33, T.8 S., R.7 E., Bryan County, Okla., in control tower of Denison Dam on Red River, 1.2 miles upstream from Shawnee Creek, 1.8 miles upstream from Sand Creek, 4 miles northwest of Denison, and at mile 725.9.

DRAINAGE AREA.--39,719 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1942 to current year. Monthend contents only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 30, 1944, nonrecording gage at same site and datum. Prior to Oct. 1, 1948, auxiliary nonrecording gage in Cumberland pool at same datum.

EXTREMES.--Current year: Maximum contents, 2,800,000 acre-ft Dec. 27 (elevation, 617.75 ft); minimum, 2,124,000 acre-ft Sept. 30 (elevation, 609.40 ft).
Period of record: Maximum contents, 5,991,300 acre-ft June 5, 1957 (elevation, 643.18 ft); minimum since power pool was first filled, 1,565,100 acre-ft Sept. 16, 1964; minimum elevation, 599.96 ft Mar. 1, 2, 1957.

REMARKS.--Lake is formed by a rolled-fill earth dam. Flow was diverted through conduits July 27, 1942; regulated storage began Oct. 31, 1943; power pool was first filled Mar. 15, 1945. Capacity, based on 1962 survey, 5,392,900 acre-ft at elevation 640.0 ft (crest of spillway), 2,733,300 acre-ft at elevation 617.0 ft (maximum power pool), 1,049,200 acre-ft at elevation 590.0 ft (minimum power pool) in Denison pool. Dead storage, 11,000 acre-ft at elevation 610.0 ft in Cumberland pool. When contents are below 2,167,900 acre-ft, the lake is divided into two pools by protective levees around the Cumberland oilfield on the Washita River arm with bottom of outlet channel for the upper pool (known as Cumberland pool) at elevation 610.0 ft. At higher elevations the two pools are considered as being at a common level, contents being computed from gage in the Denison pool. Figures given herein represent total contents of both pools. Lake is used principally for flood control and power development. Revised capacity table, based on survey in 1962, used since Oct. 1, 1963.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1211: Drainage area.

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

609.0	2,095.3	615.0	2,561.5
611.0	2,242.6	617.0	2,733.3
613.0	2,397.7	618.0	2,822.1

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,354.00	2,499.00	2,423.00	2,792.00	2,528.00	2,307.00	2,187.00	2,209.00	2,445.00	2,334.00	2,223.00	2,155.00
2	2,358.00	2,499.00	2,422.00	2,791.00	2,531.00	2,304.00	2,185.00	2,216.00	2,438.00	2,335.00	2,216.00	2,155.00
3	2,390.00	2,495.00	2,418.00	2,795.00	2,503.00	2,300.00	2,176.00	2,224.00	2,439.00	2,335.00	2,216.00	2,154.00
4	2,394.00	2,495.00	2,420.00	2,781.00	2,492.00	2,304.00	2,168.00	2,234.00	2,441.00	2,335.00	2,215.00	2,160.00
5	2,403.00	2,500.00	2,437.00	2,762.00	2,484.00	2,304.00	2,168.00	2,244.00	2,435.00	2,335.00	2,210.00	2,160.00
6	2,413.00	2,504.00	2,436.00	2,751.00	2,481.00	2,296.00	2,172.00	2,253.00	2,428.00	2,335.00	2,210.00	2,159.00
7	2,422.00	2,505.00	2,436.00	2,741.00	2,469.00	2,296.00	2,163.00	2,264.00	2,424.00	2,335.00	2,209.00	2,156.00
8	2,434.00	2,504.00	2,472.00	2,732.00	2,461.00	2,292.00	2,158.00	2,267.00	2,417.00	2,335.00	2,209.00	2,152.00
9	2,444.00	2,497.00	2,533.00	2,724.00	2,451.00	2,289.00	2,157.00	2,266.00	2,410.00	2,337.00	2,201.00	2,155.00
10	2,447.00	2,492.00	2,600.00	2,719.00	2,446.00	2,289.00	2,153.00	2,269.00	2,409.00	2,335.00	2,200.00	2,158.00
11	2,448.00	2,486.00	2,639.00	2,710.00	2,438.00	2,290.00	2,149.00	2,269.00	2,409.00	2,331.00	2,195.00	2,157.00
12	2,442.00	2,482.00	2,668.00	2,702.00	2,430.00	2,292.00	2,143.00	2,310.00	2,406.00	2,327.00	2,192.00	2,156.00
13	2,438.00	2,479.00	2,675.00	2,696.00	2,420.00	2,283.00	2,139.00	2,335.00	2,398.00	2,325.00	2,190.00	2,153.00
14	2,430.00	2,481.00	2,691.00	2,687.00	2,409.00	2,279.00	2,136.00	2,366.00	2,402.00	2,322.00	2,190.00	2,152.00
15	2,426.00	2,474.00	2,717.00	2,670.00	2,394.00	2,274.00	2,139.00	2,406.00	2,399.00	2,319.00	2,186.00	2,150.00
16	2,428.00	2,470.00	2,731.00	2,660.00	2,387.00	2,269.00	2,138.00	2,430.00	2,391.00	2,317.00	2,183.00	2,147.00
17	2,429.00	2,474.00	2,736.00	2,649.00	2,385.00	2,263.00	2,136.00	2,444.00	2,389.00	2,311.00	2,179.00	2,144.00
18	2,426.00	2,475.00	2,743.00	2,646.00	2,379.00	2,263.00	2,135.00	2,451.00	2,387.00	2,306.00	2,176.00	2,141.00
19	2,446.00	2,468.00	2,758.00	2,645.00	2,371.00	2,261.00	2,142.00	2,450.00	2,378.00	2,297.00	2,170.00	2,137.00
20	2,467.00	2,470.00	2,770.00	2,641.00	2,371.00	2,256.00	2,164.00	2,457.00	2,371.00	2,291.00	2,166.00	2,131.00
21	2,476.00	2,467.00	2,777.00	2,631.00	2,364.00	2,245.00	2,170.00	2,462.00	2,370.00	2,284.00	2,159.00	2,137.00
22	2,482.00	2,454.00	2,778.00	2,625.00	2,357.00	2,238.00	2,172.00	2,458.00	2,368.00	2,284.00	2,159.00	2,142.00
23	2,485.00	2,452.00	2,782.00	2,617.00	2,347.00	2,229.00	2,178.00	2,458.00	2,364.00	2,278.00	2,158.00	2,139.00
24	2,490.00	2,441.00	2,785.00	2,608.00	2,346.00	2,223.00	2,178.00	2,452.00	2,361.00	2,269.00	2,155.00	2,139.00
25	2,492.00	2,442.00	2,789.00	2,596.00	2,346.00	2,221.00	2,172.00	2,447.00	2,352.00	2,260.00	2,157.00	2,138.00
26	2,495.00	2,442.00	2,794.00	2,590.00	2,331.00	2,216.00	2,173.00	2,441.00	2,348.00	2,250.00	2,154.00	2,135.00
27	2,500.00	2,439.00	2,800.00	2,584.00	2,323.00	2,209.00	2,186.00	2,441.00	2,345.00	2,240.00	2,154.00	2,134.00
28	2,499.00	2,446.00	2,794.00	2,572.00	2,314.00	2,204.00	2,189.00	2,439.00	2,343.00	2,236.00	2,152.00	2,126.00
29	2,496.00	2,436.00	2,795.00	2,562.00	2,308.00	2,198.00	2,191.00	2,444.00	2,339.00	2,236.00	2,150.00	2,126.00
30	2,501.00	2,430.00	2,794.00	2,551.00	------	2,192.00	2,200.00	2,442.00	2,330.00	2,234.00	2,148.00	2,124.00
31	2,502.00	------	2,791.00	2,538.00	------	2,187.00	------	2,446.00	------	2,230.00	2,155.00	------
(†)	614.29	613.40	617.40	614.72	611.85	610.26	610.44	613.60	612.14	610.83	609.83	609.40
(*)	+152	-72	+361	-253	-230	-121	+13	+246	-116	-100	-75	-31
MAX	2,502.00	2,505.00	2,800.00	2,795.00	2,531.00	2,307.00	2,200.00	2,462.00	2,445.00	2,337.00	2,223.00	2,160.00
MIN	2,354.00	2,430.00	2,418.00	2,538.00	2,308.00	2,187.00	2,135.00	2,209.00	2,330.00	2,230.00	2,148.00	2,124.00

CAL YR 1971..... * +330 MAX 2,800.00 MIN 2,075.00
WTR YR 1972..... * -226 MAX 2,800.00 MIN 2,124.00

† Elevation, in feet, at end of month.
* Change in contents, in thousands of acre-feet.
NOTE.--All figures expressed in thousands.

07331600 Red River at Denison Dam near Denison, Tex.

LOCATION.--Lat 33°49'08", long 96°33'47", Grayson County, on right bank 1,800 ft downstream from Denison Dam powerhouse, 0.4 mile upstream from Shawnee Creek (spillway flow return), 4.5 miles north of Denison, and at mile 725.5.

DRAINAGE AREA.--39,720 sq mi, of which 5,936 sq mi is probably noncontributing. At site used prior to October 1961, drainage area 39,777 sq mi, of which 5,936 sq mi was probably noncontributing.

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1934, published as "near Denison, Tex.," and October 1934 to September 1961, published as "near Colbert, Okla." Gage-height records collected at various sites in this vicinity 1892-93, 1906-28, 1931-49 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above mean sea level. See WSP 1920 for history of changes prior to July 29, 1942.

AVERAGE DISCHARGE.--49 years, 4,707 cfs (3,410,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs Dec. 8 (gage height, 9.12 ft); maximum gage height, 9.33 ft May 19; minimum daily discharge, 59 cfs July 30.
Period of record: Maximum discharge, 201,000 cfs May 21, 1935 (gage height, 31.8 ft, at site and datum then in use); maximum gage height, 32.0 ft Apr. 25, 1942 (at site and datum used in 1943); minimum daily discharge, 12 cfs Jan. 10, 1944.
Flood of May 26, 1908, reached a stage of 45.5 ft at site and datum used July 29, 1942, to Sept. 30, 1961, from records of the National Weather Service.

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma (station 07331500).

COOPERATION.--Gage-height record, 20 discharge measurements, and computations of daily discharge furnished by Corps of Engineers; records reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 807: 1935(M). WSP 1211: Drainage area. WSP 1241: 1924-29, 1932-33, 1934(M), 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,370	4,030	3,540	2,830	4,970	1,350	104	98	2,190	161	1,990	174
2	2,500	2,530	5,770	135	5,210	1,690	92	86	3,740	74	1,710	95
3	236	2,960	5,870	3,640	7,580	1,410	5,930	75	195	75	84	91
4	2,430	2,540	942	7,000	4,660	179	3,620	83	232	76	67	94
5	2,520	2,490	784	7,720	4,060	99	1,120	87	3,490	75	1,480	107
6	2,350	556	6,170	7,350	3,980	3,050	2,320	89	4,210	70	123	612
7	2,300	81	2,640	5,750	4,300	1,720	2,440	84	3,710	73	75	1,800
8	127	3,010	3,870	5,870	4,690	1,520	223	92	3,610	74	1,360	2,010
9	79	4,950	4,100	4,480	4,680	1,990	939	3,240	4,510	73	1,180	1,250
10	80	3,120	4,310	4,470	4,650	116	2,560	236	194	2,300	1,240	871
11	2,410	4,400	1,170	4,480	4,670	85	3,140	3,110	65	2,710	2,690	1,850
12	4,560	2,480	3,300	4,450	4,700	84	3,400	280	2,720	1,960	1,660	1,560
13	3,950	1,600	7,460	4,760	4,670	4,840	4,060	150	3,540	1,650	489	1,770
14	3,670	219	2,900	5,110	6,580	1,760	1,480	147	1,940	1,730	94	947
15	2,630	3,390	2,610	6,890	7,150	3,650	150	3,320	1,360	101	1,240	1,770
16	1,960	2,840	2,870	4,780	4,100	3,060	104	3,640	3,260	810	1,700	935
17	138	2,910	4,360	5,930	2,760	3,010	106	4,740	1,030	3,780	1,580	1,730
18	5,150	2,310	2,380	3,740	2,790	150	76	3,860	1,360	3,930	1,610	2,300
19	4,290	2,510	182	1,070	4,210	82	77	6,610	4,200	4,650	3,090	2,520
20	4,130	663	632	4,430	160	6,090	90	340	4,830	3,930	2,040	2,500
21	2,540	1,080	2,300	4,500	5,210	4,530	126	852	4,080	2,480	2,430	159
22	2,510	5,710	2,600	4,530	3,610	3,070	80	2,780	4,060	120	220	165
23	131	4,070	2,290	4,550	5,280	5,060	77	2,870	4,760	2,930	93	107
24	80	4,780	1,530	5,620	2,910	4,550	91	5,010	4,140	4,120	87	93
25	2,430	783	110	4,650	3,270	189	97	4,160	4,720	4,540	92	919
26	791	885	78	4,620	5,400	90	108	4,270	3,160	4,000	659	2,170
27	748	93	1,610	4,890	5,080	5,920	114	789	2,740	4,180	98	157
28	2,420	76	2,620	5,270	4,580	3,690	97	1,020	2,650	1,820	91	3,290
29	2,440	3,420	2,650	4,690	3,020	3,840	94	142	4,560	99	92	231
30	108	4,450	2,600	4,650	------	3,310	100	1,650	3,910	59	93	85
31	72	------	2,780	6,560	------	1,650	------	88	------	1,430	96	------
TOTAL	68,150	74,936	87,028	149,415	128,930	71,834	33,015	53,998	89,166	54,080	29,553	32,362
MEAN	2,198	2,498	2,807	4,820	4,446	2,317	1,101	1,742	2,972	1,745	953	1,079
MAX	8,370	5,710	7,460	7,720	7,580	6,090	5,930	6,610	4,830	4,650	3,090	3,290
MIN	72	76	78	135	160	82	76	75	65	59	67	85
AC-FT	135,200	148,600	172,600	296,400	255,700	142,500	65,490	107,100	176,900	107,300	58,620	64,190

CAL YR 1971 TOTAL 686,914 MEAN 1,882 MAX 8,370 MIN 72 AC-FT 1,362,000
WTR YR 1972 TOTAL 872,467 MEAN 2,384 MAX 8,370 MIN 59 AC-FT 1,731,000

07332600 Bois d'Arc Creek near Randolph, Tex.

LOCATION.--Lat 33°28'32", long 96°12'52", Fannin County, on right bank at downstream side of bridge on State Highway 11, 2.3 miles upstream from Henson Creek, and 2.4 miles east of Randolph.

DRAINAGE AREA.--72 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 564.38 ft above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years (1963-72), 54.1 cfs (39,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,000 cfs Dec. 9 (gage height, 22.31 ft); no flow at times.
Period of record: Maximum discharge, 13,000 cfs Dec. 9, 1971 (gage height, 22.31 ft); no flow at times most years.
Maximum stage since at least 1922, 24.6 ft about 1935, from information by State Highway Department and local resident.

REMARKS.--Records good. No known diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	18	31	33	14	8.8	4.2	11	.04			0
2	.15	17	380	31	13	8.4	4.2	6.3	.02			0
3	106	15	288	28	12	8.0	4.0	4.6	.01			0
4	60	14	73	25	11	7.6	3.6	3.7	.01			0
5	11	14	1,600	20	11	7.2	3.6	3.1	0			0
6	5.5	13	537	18	13	7.2	4.3	2.8	0			0
7	3.8	12	238	23	11	7.6	4.1	5.3	0			0
8	2.9	12	918	24	10	7.2	3.7	6.4	0			0
9	2.6	13	7,510	25	10	6.8	3.4	5.8	0			0
10	1.8	12	3,020	22	10	6.8	3.6	3.6	0			0
11	1.6	12	171	18	12	6.8	3.7	2.5	0			0
12	1.3	12	105	18	20	7.2	3.6	4.5	.01			0
13	1.1	11	84	16	16	6.8	3.5	5.0	.06			0
14	.78	11	164	13	14	6.8	4.3	13	.18			0
15	.64	10	222	12	12	6.4	4.8	6.0	.11			0
16	1,790	9.9	75	12	11	6.0	3.4	2.8	.05			0
17	70	72	60	14	11	5.4	3.5	1.9	.02			0
18	343	284	49	16	9.6	5.2	3.2	1.5	.01			0
19	2,200	31	47	15	8.8	5.2	3.1	1.1	0			0
20	1,960	22	43	14	9.2	5.2	3.2	.76	0			0
21	91	18	37	13	9.6	5.8	3.4	.63	0			0
22	57	16	33	13	9.6	6.4	3.0	.51	0			0
23	44	44	34	13	9.6	5.2	2.6	.43	.01			0
24	39	28	33	12	10	11	2.3	.35	.01			0
25	33	22	32	10	9.6	8.4	2.0	.29	.01			0
26	28	20	31	11	8.4	7.6	1.8	.22	0			0
27	33	17	30	26	8.0	8.0	6.0	.16	0			15
28	28	17	26	22	8.4	6.0	9.0	.12	0			21
29	23	15	27	16	8.8	5.0	7.5	.12	0			.96
30	21	16	35	14	------	4.7	11	.09	0			.41
31	19	------	28	13	------	4.4	------	.06	------			------
TOTAL	6,978.42	827.9	15,961	560	320.6	209.1	123.6	94.64	.55	0	0	37.37
MEAN	225	27.6	515	18.1	11.1	6.75	4.12	3.05	.018	0	0	1.25
MAX	2,200	284	7,510	33	20	11	11	13	.18	0	0	21
MIN	.15	9.9	26	10	8.0	4.4	1.8	.06	0	0	0	0
CFSM	3.13	.38	7.15	.25	.15	.09	.06	.04	.0003	0	0	.02
IN.	3.61	.43	8.25	.29	.17	.11	.06	.05	0	0	0	.02
AC-FT	13,840	1,640	31,660	1,110	636	415	245	188	1.1	0	0	74

CAL YR 1971 TOTAL 25,618.90 MEAN 70.2 MAX 7,510 MIN 0 CFSM .98 IN 13.24 AC-FT 50,820
WTR YR 1972 TOTAL 25,113.18 MEAN 68.6 MAX 7,510 MIN 0 CFSM .95 IN 12.98 AC-FT 49,810

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-16	1300	18.50	8,700	12-5	1500	12.27	3,960
10-19	0500	15.71	6,470	12-9	1530	22.31	13,000

07335390 Pat Mayse Lake near Chicota, Tex.

LOCATION.--Lat 33°51'10", long 95°32'38", Lamar County, on upstream side of dam on Sanders Creek, 2,800 ft to right of outlet channel, 2.0 miles southeast of Chicota, and 4.6 miles upstream from the Red River.

DRAINAGE AREA.--175 sq mi.

PERIOD OF RECORD.--October 1967 to current year. Prior to October 1970, published as Pat Mayse Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 10, 1968, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 208,000 acre-ft Dec. 11, 12 (elevation, 462.87 ft); minimum, 111,600 acre-ft Sept. 29, 30 (elevation, 448.78 ft).
Period of record: Maximum contents, 208,000 acre-ft Dec. 11, 12, 1971 (elevation, 462.87 ft); minimum since conservation pool was first reached on Apr. 20, 1968, 111,600 acre-ft Sept. 29, 30, 1972 (elevation, 448.78 ft).

REMARKS.--Lake is formed by a rolled earthfill dam about 7,080 ft long with an emergency spillway 100 ft wide located near the right abutment of dam. The flood-control outlet works consist of an uncontrolled morning-glory type drop-inlet spillway with a 7.25-foot-diameter 525-foot long outlet conduit under the dam. A 24-inch-diameter low-flow pipe and a 12-inch water-supply pipe are also provided for additional outlets. The construction of the dam began Mar. 9, 1965; closure for diversion was made Nov. 29, 1966; regulated storage began Sept. 28, 1967. Lake was built for flood control, municipal and industrial water supply, recreation, fish and wildlife conservation, and for channel improvement on Sanders Creek. Records furnished by the Corps of Engineers indicate that 7,000 acre-ft was diverted from the lake for municipal and industrial use by the city of Paris and the Lamar County Water Control and Improvement District. The resultant effluent is discharged into Pine Creek below Lake Cook which is in another drainage basin. The capacity table is based on a Geological Survey topographic map dated 1949. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	488.5	-
Crest of emergency spillway	477.0	352,700
Top of flood-control pool	460.5	189,100
Top of conservation pool (drop inlet)	451.0	124,500
Bed of stream	393.0	0

COOPERATION.--Records furnished by Corps of Engineers and reviewed by the Geological Survey.

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

448.0	107,300	456.0	156,500
450.0	118,600	458.0	170,600
452.0	130,600	460.0	185,300
454.0	143,200	463.0	209,100

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121,600	136,100	129,500	173,000	133,500	128,200	125,200	124,200	122,100	119,800	116,400	113,300
2	121,500	135,300	130,100	171,200	133,100	127,800	125,100	124,200	121,900	119,700	116,300	113,300
3	122,300	134,600	131,200	169,400	132,600	127,700	125,000	124,000	121,800	119,500	116,100	113,100
4	122,500	134,100	132,300	167,400	132,200	127,700	124,800	123,900	121,700	119,400	116,000	113,300
5	122,700	133,500	134,300	165,500	131,800	127,400	124,800	123,800	121,600	119,200	115,900	113,300
6	122,700	132,900	137,900	163,800	131,700	127,300	124,800	123,600	121,400	119,100	115,900	113,300
7	122,700	132,200	140,400	162,100	131,500	127,200	124,800	123,600	121,300	118,900	115,600	113,300
8	122,600	131,800	142,900	160,400	131,200	126,900	124,500	123,600	121,100	118,800	115,500	113,200
9	122,500	131,500	176,300	158,800	130,900	126,900	124,500	123,600	121,000	118,700	115,200	113,100
10	122,400	131,200	206,100	157,100	130,700	126,900	124,500	123,300	120,700	118,500	115,100	113,000
11	122,300	131,000	208,000	155,300	130,400	126,900	124,500	123,300	120,700	118,500	115,300	113,000
12	122,200	130,700	206,500	153,900	130,400	126,900	124,500	123,300	120,600	118,200	115,300	112,900
13	122,100	130,400	204,800	151,800	130,400	126,700	124,500	123,600	120,600	118,200	115,300	112,900
14	122,000	130,200	204,100	150,000	130,400	126,500	124,400	123,400	120,700	118,100	115,300	112,600
15	122,000	129,900	203,100	148,300	130,000	126,500	124,500	123,300	120,700	118,000	115,200	112,600
16	122,100	129,600	201,900	146,700	130,000	126,400	124,100	123,300	120,700	117,800	115,100	112,500
17	122,100	130,400	200,000	145,300	129,700	126,300	124,200	123,200	120,500	117,500	115,000	112,300
18	122,600	131,700	198,100	144,100	129,500	126,300	124,100	123,000	120,500	117,500	114,900	112,300
19	127,700	132,800	196,400	142,800	129,300	126,200	123,900	123,000	120,400	117,400	114,800	112,000
20	142,400	132,800	194,500	141,700	129,200	126,100	124,200	122,900	120,300	117,300	114,800	112,000
21	147,200	132,200	192,600	140,600	129,200	126,200	124,400	122,800	120,100	117,200	114,600	112,000
22	146,200	131,700	190,600	139,600	128,900	126,200	124,400	122,700	120,000	117,200	114,400	112,000
23	145,200	131,600	188,900	138,700	128,900	126,000	124,200	122,400	119,800	117,100	114,400	112,000
24	143,800	131,300	187,100	138,000	128,900	125,900	124,100	122,900	119,800	117,000	114,200	112,000
25	142,500	131,000	185,200	137,000	128,800	125,900	123,700	122,900	119,900	116,900	114,100	112,000
26	141,300	130,800	183,600	136,300	128,500	125,800	123,600	122,800	119,800	116,700	114,100	111,900
27	140,300	130,400	181,700	135,800	128,400	125,800	123,900	122,700	119,700	116,600	114,000	111,900
28	139,300	130,100	179,800	135,300	128,300	125,700	124,000	122,500	119,500	116,300	113,700	111,900
29	138,400	129,800	178,300	134,800	128,200	125,500	124,000	122,600	119,900	116,700	113,700	111,600
30	137,600	129,400	176,500	134,300	------	125,300	124,200	122,400	119,900	116,700	113,600	111,600
31	136,800	------	174,600	133,900	------	125,200	------	122,300	------	116,500	113,300	------
(†)	452.99	451.81	458.56	452.54	451.61	451.12	450.94	450.62	450.22	449.64	449.08	448.78
(*)	+15.2	-7.4	+45.2	-40.7	-5.7	-3.0	-1.0	-1.9	-2.4	-3.4	-3.2	-1.7
(††)	203	356	526	786	786	651	695	865	750	729	415	233
MAX	147,200	136,100	208,000	173,000	133,500	128,200	125,200	124,200	122,100	119,800	116,400	113,300
MIN	121,500	129,400	129,500	133,900	128,200	125,200	123,600	122,300	119,500	116,300	113,300	111,600

CAL YR 1971..... * +48.4 †† 7,350 MAX 208,000 MIN 120,300
WTR YR 1972..... * -10.0 †† 7,000 MAX 208,000 MIN 111,600

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Paris.

07335400 Sanders Creek near Chicota, Tex.

LOCATION.--Lat 33°51'10", long 99°32'28", Lamar County, on upstream side of Pat Mayse Dam, 2,800 ft to right of morning-glory drop inlet, 2.0 miles southeast of Chicota, and 4.6 miles upstream from mouth.

DRAINAGE AREA.--175 sq mi, at Pat Mayse Dam. 184 sq mi at former site 2.6 miles downstream.

PERIOD OF RECORD.--March 1964 to September 1967 (gage heights and discharge measurements only), October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft above mean sea level. Prior to Oct. 1, 1967, at site 2.6 miles downstream at datum 52.77 ft lower. Oct. 1, 1967, to Sept. 30, 1970, at datum 10.00 ft higher.

EXTREMES.-Current year: Maximum outflow, 983 cfs Dec. 11, 12 (gage height, 22.87 ft); no flow at times.
Period of record: Maximum outflow, 1,060 cfs May 19, 1969 (gage height, 10.20 ft, datum then in use); maximum gage height, 22.87 ft Dec. 11, 12, 1971; no flow at times.

REMARKS.--Records good. Flow represents uncontrolled outflow from Pat Mayse Lake (see preceding page). Flow downstream from dam is affected by local runoff and backwater from the Red River.

COOPERATION.--Records furnished by Corps of Engineers and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	346	88	938	223	45	5.8					
2	0	313	89	936	210	40	5.2					
3	0	276	116	933	190	37	4.0					
4	0	249	154	928	174	36	2.3					
5	0	222	197	922	163	34	1.8					
6	0	197	313	917	154	31	1.8					
7	0	174	496	912	144	29	1.8					
8	0	153	574	907	134	25	.70					
9	0	140	834	903	127	23	0					
10	0	127	969	898	119	23	0					
11	0	119	982	893	111	24	0					
12	0	111	982	889	108	24	0					
13	0	101	980	881	105	23	0					
14	0	93	978	872	101	19	0					
15	0	84	977	860	93	19	0					
16	0	73	976	853	89	19	0					
17	0	78	974	829	83	19	0					
18	0	124	972	788	77	18	0					
19	16	166	970	723	70	16	0					
20	374	190	967	661	67	15	0					
21	810	177	965	586	64	16	0					
22	845	161	962	524	58	17	0					
23	822	150	960	483	55	15	0					
24	779	140	958	446	57	13	0					
25	689	130	955	392	56	13	0					
26	629	123	953	354	52	12	0					
27	568	119	951	336	50	13	0					
28	514	105	948	308	48	12	0					
29	464	100	946	281	48	9.9	0					
30	424	89	944	261	------	7.2	0					
31	383	------	941	243	------	6.5	------		------			------
TOTAL	7,317	4,630	24,071	21,657	3,030	653.6	23.40	0	0	0	0	0
MEAN	236	154	776	699	104	21.1	.78	0	0	0	0	0
MAX	845	346	982	938	223	45	5.8	0	0	0	0	0
MIN	0	73	88	243	48	6.5	0	0	0	0	0	0
AC-FT	14,510	9,180	47,740	42,960	6,010	1,300	46	0	0	0	0	0

CAL YR 1971 TOTAL 39,224.10 MEAN 107 MAX 982 MIN 0 AC-FT 77,800
WTR YR 1972 TOTAL 61,382.00 MEAN 168 MAX 982 MIN 0 AC-FT 121,800

07335500 Red River at Arthur City, Tex.

LOCATION.--Lat 33°52'32", long 95°30'08", in NW¼ sec. 11, T.8 S., R.17 E., Choctaw County, Okla., near right bank on downstream side of pier of bridge on U.S. Highway 271 at Arthur City, 10.6 miles downstream from Muddy Boggy River, 26.0 miles upstream from Kiamichi River, and at mile 633.1.

DRAINAGE AREA.--44,531 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--January to September 1905 (gage heights and discharge measurements only), October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1891 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 380.07 ft above mean sea level. 1905-11, nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 7,984 cfs (5,784,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 121,000 cfs Dec. 11 (gage height, 26.35 ft); minimum, 230 cfs Sept. 3, 4 (gage height, 3.70 ft).
Period of record: Maximum discharge, about 400,000 cfs May 28, 1908 (gage height, 43.2 ft), from rating curve extended above 41,000 cfs on basis of records for later years; minimum, 130 cfs Dec. 11, 12, 1956 (gage height, 4.49 ft).

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma (station 07331500) 92.8 miles above station.

COOPERATION.--Gage-height record and 36 discharge measurements furnished by Corps of Engineers; record computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1241: Drainage area. WSP 1311: 1906-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,530	3,380	2,300	7,430	6,250	5,210	3,740	1,990	1,700	3,570	950	258
2	2,380	2,140	4,070	7,340	7,180	4,000	3,130	2,090	2,030	4,570	606	241
3	2,780	2,420	6,080	6,670	6,700	3,250	1,910	3,930	1,370	3,240	1,300	236
4	4,310	4,020	11,900	5,220	6,640	2,600	1,320	3,010	3,200	1,300	1,960	297
5	8,450	3,680	14,600	5,400	8,010	2,400	2,990	1,780	2,800	838	1,750	417
6	7,960	3,670	13,700	8,920	6,680	2,230	4,930	1,280	3,000	662	774	508
7	5,760	3,400	22,800	10,000	5,830	1,490	2,490	1,060	2,700	598	466	459
8	3,830	2,820	23,200	9,100	5,690	2,100	2,330	1,000	3,700	678	959	384
9	3,150	1,640	39,600	8,060	5,680	3,160	2,780	968	4,000	630	750	445
10	2,550	1,540	101,000	8,300	5,610	2,500	2,410	1,000	3,900	529	441	1,230
11	1,280	3,920	108,000	7,470	5,600	2,430	1,210	1,180	4,100	459	822	1,640
12	881	4,210	57,100	7,020	5,790	2,110	1,680	2,440	4,300	431	1,290	1,380
13	811	4,100	41,000	6,930	5,970	1,320	2,880	3,170	1,400	1,740	1,600	1,080
14	2,830	3,960	36,000	6,840	6,100	1,140	2,930	9,600	2,200	2,530	2,120	1,580
15	3,820	3,010	33,800	6,900	6,080	2,350	3,880	8,300	3,000	2,100	1,800	1,560
16	3,760	2,110	29,700	7,050	6,950	3,810	2,900	5,170	3,370	1,910	1,060	1,650
17	3,680	2,040	25,600	8,140	7,250	3,260	1,840	2,760	2,480	1,840	646	1,250
18	5,300	4,000	21,700	7,110	5,460	4,050	1,000	3,880	2,400	910	854	1,550
19	9,450	11,600	18,600	7,330	4,200	3,710	770	4,260	2,930	1,170	1,430	1,200
20	22,300	13,600	14,900	6,190	3,890	2,680	769	4,560	1,770	3,290	1,490	1,600
21	40,100	6,930	11,000	4,250	4,400	1,480	4,590	5,140	2,540	3,890	1,630	2,130
22	31,300	4,050	7,200	6,050	2,570	3,460	10,200	3,910	4,190	4,050	2,310	2,380
23	21,600	2,740	6,100	6,320	4,060	5,250	9,540	1,530	4,640	3,610	2,030	2,310
24	15,200	4,560	6,280	6,230	4,900	4,140	5,790	2,060	4,460	2,490	2,080	2,380
25	11,200	5,100	5,950	6,210	5,420	4,510	2,760	3,600	4,540	1,210	959	3,070
26	6,670	5,100	5,280	6,660	4,660	5,060	1,650	4,380	4,320	3,030	494	1,730
27	4,080	3,320	4,520	6,670	4,300	3,180	1,350	5,060	4,400	4,030	345	1,110
28	3,970	2,370	4,490	6,690	5,600	1,550	1,360	4,620	4,460	4,230	309	1,120
29	3,110	2,050	5,840	6,860	5,700	3,220	1,790	3,530	3,430	4,270	390	1,900
30	3,360	1,600	6,890	6,900	------	4,440	2,190	2,130	3,230	3,640	438	1,030
31	3,840	------	6,690	6,400	------	4,100	------	2,720	------	3,490	297	------
TOTAL	242,242	119,080	695,890	216,660	163,170	96,190	89,109	102,108	96,560	70,935	34,350	38,125
MEAN	7,814	3,969	22,450	6,989	5,627	3,103	2,970	3,294	3,219	2,288	1,108	1,271
MAX	40,100	13,600	108,000	10,000	8,010	5,250	10,200	9,600	4,640	4,570	2,310	3,070
MIN	811	1,540	2,300	4,250	2,570	1,140	769	968	1,370	431	297	236
AC-FT	480,500	236,200	1,380M	429,700	323,600	190,800	176,700	202,500	191,500	140,700	68,130	75,620

CAL YR 1971 TOTAL 1,935,087 MEAN 5,302 MAX 108,000 MIN 320 AC-FT 3,838,000
WTR YR 1972 TOTAL 1,964,419 MEAN 5,367 MAX 108,000 MIN 236 AC-FT 3,896,000

PEAK DISCHARGE (BASE, 50,000 CFS).--Dec. 11 (0515) 121,000 cfs (26.55 ft).

07336750 Little Pine Creek near Kanawha, Tex.

LOCATION.--Lat 33°50'26", long 95°15'55", Red River County, on right bank at downstream side of bridge on Farm Road 410, 1.6 miles south of Kanawha, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--75.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 389.26 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 30,200 cfs Dec. 10 (gage height, 21.26 ft), from rating curve extended as explained below; no flow at times.
Period of record: Maximum discharge, 30,200 cfs Dec. 10, 1971 (gage height, 21.26 ft), from rating curve extended above 4,400 cfs on basis of contracted-opening and flow-over-road measurement of peak flow; no flow at times each year. Maximum stage since 1948, that of Dec. 10, 1971.

REMARKS.--Records good. No known diversion or return of water in vicinity of gage. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.20	4.8	22	29	4.1	.52	.13		0		
2	.02	.18	15	38	25	4.2	.34	.52		0		
3	.01	.62	177	49	22	4.2	.41	1.2		0		
4	.02	2.0	341	47	15	4.2	.43	.41		0		
5	.02	1.0	197	88	11	4.1	.43	.20		0		
6	.05	.20	1,320	53	11	4.1	.48	.10		0		
7	.07	.50	1,430	41	11	3.8	.48	.12		0		
8	.01	.30	848	41	9.8	3.7	.52	.81		0		
9	0	.25	6,170	43	9.2	3.6	.52	4.2		0		
10	0	.25	14,100	49	7.4	3.6	.48	.81		0		
11	0	.25	1,630	39	6.2	3.5	.59	.26		0		
12	0	.25	355	30	21	3.5	.66	.18		0		
13	0	.30	135	25	36	3.5	.59	.17		0		
14	.50	.35	403	19	32	3.6	.48	.16		0		
15	0	.40	655	14	22	3.7	.43	.13		0		
16	0	.38	578	11	16	3.6	.81	.08		0		
17	0	.40	153	9.8	13	3.3	.46	.05		0		
18	3.3	7.3	69	10	9.2	2.9	.36	.01		0		
19	510	29	42	10	7.0	2.3	.24	0		0		
20	3,600	13	27	10	6.2	3.5	.16	0		0		
21	1,860	4.8	17	10	5.6	3.4	.11	0		0		
22	690	2.5	5.7	11	5.2	1.6	.24	0		0		
23	80	2.4	3.2	9.5	5.1	1.7	.23	0		0		
24	36	2.8	2.3	9.0	5.4	1.5	.13	0		0		
25	3.2	2.9	2.0	7.0	5.2	.96	.06	0		0		
26	1.9	2.7	2.0	6.4	5.0	1.2	.03	0		0		
27	2.0	2.6	1.7	36	4.8	1.6	.03	0		0		
28	1.1	2.2	6.4	142	4.4	1.4	.16	0		0		
29	.86	2.2	19	126	4.1	1.6	.38	0		.12		
30	.36	2.4	17	56	------	1.3	.31	0		.05		
31	.23	------	23	37	------	1.3	------	0	------	0		------
TOTAL	6,789.68	84.63	28,749.1	1,098.7	363.8	90.56	11.07	9.54	0	.17	0	0
MEAN	219	2.82	927	35.4	12.5	2.92	.37	.31	0	.006	0	0
MAX	3,600	29	14,100	142	36	4.2	.81	4.2	0	.12	0	0
MIN	0	.18	1.7	6.4	4.1	.96	.03	0	0	0	0	0
CFSM	2.90	.04	12.3	.47	.17	.04	.005	.004	0	.0001	0	0
IN.	3.35	.04	14.18	.54	.18	.04	.005	.004	0	0	0	0
AC-FT	13,470	168	57,020	2,180	722	180	22	19	0	.3	0	0

CAL YR 1971 TOTAL 42,833.16 MEAN 117 MAX 14,100 MIN 0 CFSM 1.55 IN 21.13 AC-FT 84,960
WTR YR 1972 TOTAL 37,197.25 MEAN 102 MAX 14,100 MIN 0 CFSM 1.35 IN 18.35 AC-FT 73,780

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	0900	16.03	4,120
12- 6	1800	15.22	2,180
12-10	0100	21.26	30,200

07336800 Pecan Bayou near Clarksville, Tex.

LOCATION.--Lat 33°41'07", long 94°59'41", Red River County, on right bank at downstream side of bridge on Farm Road 1159, 0.2 mile downstream from Tanyard Bayou, 4.3 miles upstream from Little White Oak Creek, and 6.0 miles northeast of Clarksville.

DRAINAGE AREA.--100 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 360.00 ft above mean sea level. Prior to Oct. 1, 1970, at datum 5.00 ft higher.

AVERAGE DISCHARGE.--10 years, 67.1 cfs (9.11 inches per year, 48,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,300 cfs Dec. 10 (gage height, 15.92 ft); no flow at times.
Period of record: Maximum discharge, 21,300 cfs Dec. 10, 1971 (gage height, 15.92 ft); no flow at times.
Maximum stage since at least 1910, about 17 ft (present datum) in 1957, from information by local residents.

REMARKS.--Records good. No known diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.32	.5	33	26	4.3	1.9	.10				
2	0	.28	1.2	44	20	3.7	1.6	.22				
3	0	.19	3.9	41	15	3.5	1.4	.32				
4	0	.13	5.1	44	13	3.3	1.2	.45				
5	0	.11	58	40	11	2.9	1.0	.40				
6	0	.08	136	38	11	2.7	1.1	.19				
7	0	.07	426	36	10	2.7	1.1	.13				
8	0	.08	842	31	9.3	2.4	.90	.08				
9	0	.06	2,310	31	7.8	2.4	.76	.04				
10	0	.06	14,800	31	7.5	2.4	.62	.02				
11	0	.05	4,360	30	8.7	2.2	.50	.01				
12	0	.06	1,340	27	22	2.0	.50	.04				
13	0	.07	372	22	24	2.0	.45	.03				
14	0	.07	302	17	22	2.2	.36	.02				
15	0	.07	651	13	22	2.0	.32	0				
16	0	.15	840	10	20	1.8	.25	0				
17	0	.15	530	9.0	18	1.5	.25	0				
18	0	.36	176	7.5	15	1.3	.22	0				
19	0	.22	71	7.2	12	1.3	.19	0				
20	.10	.19	42	7.2	9.9	1.1	.19	0				
21	0	.15	29	7.2	8.7	1.3	.32	0				
22	96	.11	23	6.6	7.2	1.3	.19	0				
23	193	.25	18	6.2	6.6	1.2	.11	0				
24	73	.22	16	5.9	6.6	1.8	.10	0				
25	23	.15	14	4.8	6.9	3.0	.08	0				
26	10	.17	12	4.6	6.2	3.9	.06	0				
27	4.8	.17	9.6	7.2	5.6	3.7	.11	0				
28	2.4	.22	9.6	26	5.2	3.0	.08	0				
29	1.0	.17	13	34	4.8	2.5	.07	0				
30	.69	.22	21	46	------	2.2	.06	0				
31	.45	------	24	37	------	2.0	------	0	------			------
TOTAL	404.44	4.60	27,455.9	704.4	362.0	73.6	15.99	2.05	0	0	0	0
MEAN	13.0	.15	886	22.7	12.5	2.37	.53	.066	0	0	0	0
MAX	193	.36	14,800	46	26	4.3	1.9	.45	0	0	0	0
MIN	0	.05	.50	4.6	4.8	1.1	.06	0	0	0	0	0
CFSM	.13	.002	8.86	.23	.13	.02	.005	.0007	0	0	0	0
IN.	.15	.001	10.21	.26	.13	.03	.005	0	0	0	0	0
AC-FT	802	9.1	54,460	1,400	718	146	32	4.1	0	0	0	0

CAL YR 1971 TOTAL 35,311.15 MEAN 96.7 MAX 14,800 MIN 0 CFSM .97 IN 13.14 AC-FT 70,040
WTR YR 1972 TOTAL 29,022.98 MEAN 79.3 MAX 14,800 MIN 0 CFSM .79 IN 10.80 AC-FT 57,570

PEAK DISCHARGE (BASE, 1,000 CFS).--Dec. 10 (1100) 21,300 cfs (15.92 ft).

07336820 Red River near De Kalb, Tex.

LOCATION.--Lat 33°41'15", long 94°41'39", Bowie, Tex.McCurtain, Okla. County line, near left bank at downstream side of bridge on U.S. Highway 259, 4.8 miles upstream from North Mill Creek, 13 miles north of De Kalb, and at mile 556.9.

DRAINAGE AREA.--47,348 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 189,000 cfs Dec. 11 (gage height, 31.55 ft, from graph based on gage readings); minimum, 431 cfs Sept. 4, 5 (gage height, 8.64 ft).
Period of record: Maximum discharge, 189,000 cfs Dec. 11, 1971 (gage height, 31.55 ft, from graph based on gage readings); maximum gage height, 29.00 ft May 19, 1968; minimum discharge, 431 cfs Sept. 4, 5, 1972.
Maximum stage since 1957, 32.2 ft in June 1957. Greatest flood since 1936 occurred in February 1938, stage unknown.

REMARKS.--Records good. Flow partly regulated by Lake Texoma (station 07331500) approximately 169 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,750	5,260	2,850	12,400	9,620	9,060	6,310	4,250	3,120	3,970	3,850	672
2	4,350	5,280	2,430	12,800	9,030	8,750	5,750	4,680	3,050	3,690	2,670	584
3	3,890	4,230	4,250	13,300	9,220	7,130	5,120	4,590	2,430	4,190	1,560	490
4	2,560	3,080	7,990	12,300	9,820	5,920	3,890	5,370	2,340	4,890	1,010	500
5	3,560	3,840	9,880	9,280	9,310	4,610	2,680	6,690	1,960	3,560	1,520	450
6	5,700	5,100	21,400	8,970	10,200	4,110	2,030	5,410	3,180	1,960	2,100	470
7	8,860	4,860	25,100	11,400	10,700	3,810	4,170	4,070	3,280	1,330	2,050	573
8	8,860	4,590	31,000	12,400	9,280	3,220	5,080	3,310	1,860	1,050	1,090	705
9	6,260	4,250	39,800	12,300	8,970	2,530	3,080	2,860	1,760	906	606	694
10	4,670	3,220	111,000	13,400	8,890	3,730	3,030	2,580	3,670	906	796	606
11	4,150	2,080	178,000	15,800	8,800	4,290	3,430	2,360	4,370	880	808	530
12	3,130	2,190	146,000	12,300	8,940	3,690	2,850	2,250	4,410	784	510	1,050
13	2,120	4,730	140,000	9,850	9,390	3,640	2,070	2,590	4,630	683	562	1,810
14	1,450	5,120	131,000	10,100	10,000	2,790	3,350	3,330	3,640	639	1,110	1,790
15	1,320	5,160	111,000	9,560	10,500	2,020	3,600	6,230	2,130	1,710	1,480	1,600
16	3,180	4,610	88,400	9,310	10,800	1,910	3,930	10,200	2,020	2,630	1,980	1,880
17	4,370	3,460	73,000	9,340	10,900	5,420	4,740	8,430	3,240	2,360	1,790	2,050
18	4,450	2,610	54,900	9,940	11,600	6,500	3,730	5,660	3,370	2,190	1,240	2,170
19	6,460	3,620	41,800	10,100	11,000	6,500	2,630	4,230	2,700	2,100	760	1,950
20	23,000	8,850	38,700	9,360	8,550	6,670	1,730	4,740	2,810	1,360	694	1,980
21	49,000	16,600	28,000	9,170	7,210	6,310	1,420	5,120	2,990	1,410	1,200	1,840
22	60,600	13,600	21,000	6,950	7,210	4,230	4,270	5,160	2,200	3,290	1,360	1,930
23	51,900	9,420	16,000	6,760	6,690	3,140	16,700	5,660	2,950	4,150	1,570	2,610
24	37,900	6,260	12,300	7,990	5,240	6,670	23,200	4,090	4,390	4,330	2,200	2,860
25	26,000	5,330	12,300	7,990	7,600	8,430	17,500	2,670	4,870	3,930	2,250	2,850
26	19,200	7,050	11,200	7,860	7,680	7,100	10,800	3,640	4,800	2,850	2,360	2,950
27	13,800	7,440	9,420	8,070	8,040	7,830	6,670	4,630	4,910	1,860	1,860	3,350
28	9,450	6,620	9,200	8,940	6,950	7,680	4,840	5,680	4,760	3,120	1,080	2,100
29	7,780	4,610	9,200	9,360	7,420	4,760	4,170	5,870	5,010	4,410	749	1,380
30	6,520	3,600	10,300	9,590	------	2,860	3,990	5,470	4,820	4,780	617	1,150
31	5,390	------	11,300	9,940	------	5,290	------	4,090	------	4,610	540	------
TOTAL	393,630	166,670	1,408.7M	316,830	259,560	160,600	166,760	145,910	101,670	80,528	43,972	45,574
MEAN	12,700	5,556	45,440	10,220	8,950	5,181	5,559	4,707	3,389	2,598	1,418	1,519
MAX	60,600	16,600	178,000	15,800	11,600	9,060	23,200	10,200	5,010	4,890	3,850	3,350
MIN	1,320	2,080	2,430	6,760	5,240	1,910	1,420	2,250	1,760	639	510	450
AC-FT	780,800	330,600	2,794M	628,400	514,800	318,600	330,800	289,400	201,700	159,700	87,220	90,400

CAL YR 1971 TOTAL 3,180,328 MEAN 8,713 MAX 178,000 MIN 626 AC-FT 6,308,000
WTR YR 1972 TOTAL 3,290,424 MEAN 8,990 MAX 178,000 MIN 450 AC-FT 6,527,000

07337000 Red River at Index, Ark.

LOCATION.--Lat 33°33'07", long 94°02'28", in NW¼SW¼ sec.7, T.14 S., R.28 W., Miller County, near right bank on downstream side of bridge on U.S. Highway 71 at Index, 2.2 miles south of Ogden, 20.6 miles upstream from Little River, and at mile 485.3.

DRAINAGE AREA.--48,030 sq mi, of which 5,936 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1936 to current year. Gage-height records collected at same site since 1917 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft above mean sea level. Prior to Dec. 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 11,630 cfs (8,426,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 142,000 cfs Dec. 14 (gage height, 25.62 ft); minimum, 844 cfs Sept. 8 (gage height, 2.74 ft).
Period of record: Maximum discharge, 297,000 cfs Feb. 23, 1938 (gage height, 34.25 ft); minimum, 378 cfs Nov. 28, 1956.

REMARKS.--Records good. Some regulation since Oct. 31, 1943, by Lake Texoma (station 07331500) 241 miles upstream (capacity, 5,392,000 acre-ft).

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,950	5,400	2,400	14,500	9,680	5,760	3,480	3,320	4,570	4,680	3,880	918
2	4,170	4,800	2,900	16,400	9,400	6,550	4,780	3,410	3,420	4,120	3,660	882
3	2,880	4,800	3,300	16,000	8,860	6,780	4,850	3,670	3,140	3,640	2,970	913
4	2,120	4,350	3,000	16,400	8,600	6,190	4,580	3,740	2,900	3,700	2,170	1,050
5	1,900	3,520	4,600	15,200	8,860	5,220	4,090	3,800	2,650	4,350	1,600	1,050
6	1,900	3,300	14,000	13,100	8,600	4,480	3,290	4,990	2,460	4,170	1,330	983
7	2,600	4,000	23,300	10,600	8,860	3,960	2,590	5,070	2,510	2,930	1,500	886
8	4,640	4,170	27,000	11,500	9,680	3,740	2,630	3,860	3,290	2,050	1,790	850
9	6,660	4,170	35,200	13,800	8,860	3,490	4,150	3,040	2,870	1,710	1,730	872
10	6,000	4,000	55,700	14,500	7,840	3,100	3,890	2,570	2,180	1,500	1,410	917
11	4,440	3,680	99,000	12,800	7,360	3,070	2,980	2,300	2,640	1,360	1,210	940
12	3,300	2,950	118,000	11,800	7,360	3,780	3,050	2,210	3,900	1,350	1,240	912
13	2,600	2,480	133,000	11,500	7,360	3,670	3,140	2,090	4,180	1,310	1,230	876
14	2,010	2,950	140,000	10,600	7,360	3,400	2,600	1,970	4,420	1,240	1,090	1,040
15	1,690	4,170	130,000	9,680	7,840	3,310	2,250	2,420	4,440	1,180	1,100	1,420
16	1,320	4,350	116,000	9,400	8,340	2,840	2,730	3,590	3,310	1,160	1,360	1,490
17	1,320	4,350	94,200	8,860	8,600	2,520	3,300	8,090	2,460	1,820	1,620	1,410
18	2,360	4,440	71,300	8,860	8,860	3,030	3,700	9,430	2,640	2,260	1,860	1,520
19	2,950	4,260	54,900	9,120	9,400	4,760	3,900	7,010	3,410	2,130	1,750	1,620
20	3,370	4,400	43,800	9,680	9,400	4,730	3,120	4,750	3,260	2,030	1,450	1,670
21	19,400	8,300	35,800	8,860	7,840	5,040	2,440	4,300	2,860	1,880	1,210	1,590
22	43,800	13,100	29,400	8,600	6,440	4,900	2,010	4,610	3,090	1,550	1,140	1,600
23	52,600	13,800	24,300	7,120	6,000	4,340	1,890	4,850	2,910	1,790	1,370	1,650
24	45,200	9,960	19,200	6,000	6,000	3,360	9,290	4,960	2,590	2,850	1,490	1,950
25	32,200	5,000	15,600	6,880	5,000	3,640	18,300	4,880	3,400	3,370	1,670	2,640
26	23,300	2,540	13,800	7,360	5,600	5,760	15,700	3,410	4,330	3,410	1,960	2,820
27	17,600	2,200	12,800	7,360	6,220	5,820	10,800	2,920	4,530	3,010	2,000	2,500
28	13,800	2,400	11,800	7,600	6,440	5,660	7,040	3,810	4,550	2,280	1,940	2,620
29	9,960	2,400	10,600	8,860	6,000	6,040	4,530	4,570	4,660	2,100	1,510	2,630
30	7,360	2,400	10,600	9,400	------	5,040	3,600	5,340	4,570	3,030	1,160	2,060
31	6,440	------	11,500	9,400	------	3,490	------	5,200	------	3,730	999	------
TOTAL	333,840	142,640	1,367.0M	331,740	226,660	137,470	144,700	130,180	102,140	77,690	52,399	44,279
MEAN	10,770	4,755	44,100	10,700	7,816	4,435	4,823	4,199	3,405	2,506	1,690	1,476
MAX	52,600	13,800	140,000	16,400	9,680	6,780	18,300	9,430	4,660	4,680	3,880	2,820
MIN	1,320	2,200	2,400	6,000	5,000	2,520	1,890	1,970	2,180	1,160	999	850
AC-FT	662,200	282,900	2,711M	658,000	449,600	272,700	287,000	258,200	202,600	154,100	103,900	87,830

CAL YR 1971 TOTAL 3,109,690 MEAN 8,520 MAX 140,000 MIN 1,030 AC-FT 6,168,000
WTR YR 1972 TOTAL 3,090,738 MEAN 8,445 MAX 140,000 MIN 850 AC-FT 6,130,000

07342500 South Sulphur River near Cooper, Tex.

LOCATION.--Lat 33°21'20", long 95°35'39", Hopkins-Delta County line, on left bank of cut channel at downstream side of bridge on State Highways 19 and 154 (revised), 1.0 mile downstream from Big Creek, 1.0 mile upstream from Brushy Creek, 4.5 miles downstream from Doctors Creek, and 5.6 miles southeast of Cooper.

DRAINAGE AREA.--527 sq mi.

PERIOD OF RECORD.--May 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 371.91 ft above mean sea level. Prior to Oct. 1, 1970, at datum 3.00 ft higher. May 9, 1942, to Nov. 8, 1949, nonrecording gage, and Nov. 9, 1949, to May 13, 1955, water-stage recorder at site 700 ft to right of present gage.

AVERAGE DISCHARGE.--30 years, 380 cfs (9.79 inches per year, 275,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42,500 cfs Dec. 10 (gage height, 26.15 ft, from floodmark in gage well); no flow July 31 to Aug. 8, Aug. 29 to Sept. 24.
Period of record: Maximum discharge, 42,500 cfs Dec. 10, 1971 (gage height, 26.15 ft, from floodmark in gage well); no flow at times.

REMARKS.--Records good. Small diversions upstream from station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	10	13	42	16	4.5	12	8.5	.42	1.0	0	0
2	5.0	6.1	30	182	14	4.3	9.9	6.3	.34	.67	0	0
3	4.8	7.3	942	194	12	4.1	8.3	22	.25	.75	0	0
4	188	6.4	1,390	429	10	4.0	7.0	70	.16	.79	0	0
5	789	5.2	1,910	586	9.1	3.6	6.1	47	.14	.56	0	0
6	361	3.9	3,750	204	8.3	3.3	5.3	19	.10	.47	0	0
7	61	3.3	5,930	105	7.5	3.1	5.0	12	.08	.46	0	0
8	26	2.9	4,980	80	7.1	2.9	4.5	8.4	.08	.50	0	0
9	14	2.4	6,910	67	7.0	2.4	2.8	6.2	.10	.78	.01	0
10	8.9	2.1	36,400	65	6.8	2.2	3.7	13	.07	.84	.01	0
11	7.6	1.9	19,800	51	6.8	2.1	3.6	24	.05	.62	.03	0
12	5.2	1.8	6,400	37	21	2.0	3.5	15	.04	.45	.02	0
13	4.1	1.8	2,960	29	57	2.1	3.0	10	11	.37	.01	0
14	3.7	1.8	2,080	22	45	2.1	3.2	8.0	11	6.2	.01	0
15	2.9	1.6	1,890	18	22	2.2	3.4	17	8.2	.98	.28	0
16	2.2	1.2	1,470	14	15	2.2	3.3	22	5.2	.27	1.3	0
17	51	1.2	805	12	14	2.0	3.5	14	21	.16	.96	0
18	502	2.4	232	11	13	1.8	3.7	8.9	28	.13	.40	0
19	3,330	2.5	130	11	10	1.6	3.3	6.1	12	.12	.25	0
20	26,500	132	85	10	8.6	1.5	3.6	4.5	7.0	.20	.18	0
21	19,600	67	58	10	7.5	1.7	4.6	3.3	5.2	.21	.13	0
22	7,610	23	43	10	6.8	1.6	3.7	2.2	6.1	.16	.08	0
23	3,400	20	32	10	6.3	1.5	3.6	1.7	180	.11	.06	0
24	1,340	18	26	10	5.9	576	3.1	2.9	90	.06	.04	0
25	381	16	22	9.7	5.6	1,310	2.4	18	26	.04	.04	4.4
26	131	20	19	9.5	5.2	733	2.2	16	12	.03	.03	2.9
27	55	16	18	11	5.1	136	3.1	7.3	7.3	.02	.02	2.3
28	32	15	16	96	5.0	48	3.6	3.7	4.3	.01	.01	41
29	23	16	16	99	4.8	27	5.2	1.9	2.6	.01	0	43
30	18	14	17	42	------	18	8.4	1.2	1.7	.01	0	31
31	13	------	16	23	------	14	------	.82	------	0	0	------
TOTAL	64,477.3	422.8	98,390	2,499.2	362.4	2,920.8	138.6	400.92	440.43	16.98	3.87	124.6
MEAN	2,080	14.1	3,174	80.6	12.5	94.2	4.62	12.9	14.7	.55	.12	4.15
MAX	26,500	132	36,400	586	57	1,310	12	70	180	6.2	1.3	43
MIN	2.2	1.2	13	9.5	4.8	1.5	2.2	.82	.04	0	0	0
CFSM	3.95	.03	6.02	.15	.02	.18	.009	.02	.03	.001	.0002	.008
IN.	4.55	.03	6.95	.18	.03	.21	.009	.03	.03	.001	0	.008
AC-FT	127,900	839	195,200	4,960	719	5,790	275	795	874	34	7.7	247

CAL YR 1971 TOTAL 176,570.38 MEAN 484 MAX 36,400 MIN 0 CFSM .92 IN 12.46 AC-FT 350,200
WTR YR 1972 TOTAL 170,197.90 MEAN 465 MAX 36,400 MIN 0 CFSM .88 IN 12.01 AC-FT 337,600

PEAK DISCHARGE (BASE, 8,000 CFS).--Oct. 20 (1000) 33,000 cfs (24.94 ft); Dec. 10 (1200) 42,500 cfs (26.15 ft, from floodmark in gage well).

07343000 North Sulphur River near Cooper, Tex.

LOCATION.--Lat 33°28'25", long 95°35'15", Delta-Lamar County line, near center of span at downstream side of downstream bridge on State Highways 19 and 24, 2.3 miles upstream from Auds Creek, 5.5 miles upstream from Hickory Creek, 8.7 miles northeast of Cooper, and at mile 15.6.

DRAINAGE AREA.--276 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 372.42 ft above mean sea level (levels by Corps of Engineers). Prior to Nov. 8, 1949, nonrecording gage, Nov. 8, 1949, to May 21, 1960, water-stage recorder at site 50 ft upstream at datum 9.00 ft higher, and May 22, 1960, to Sept. 30, 1970, at datum 5.00 ft higher.

AVERAGE DISCHARGE.--23 years, 238 cfs (11.71 inches per year, 172,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 90,600 cfs Oct. 19 (gage height, 36.16 ft, from floodmarks); no flow at times. Period of record: Maximum discharge, 90,600 cfs Oct. 19, 1971 (gage height, 36.16 ft, from floodmarks); no flow at times. Maximum stage since at least 1915, that of Oct. 19, 1971. Flood of May 2, 1944, reached a stage of 35.6 ft (present datum), and flood in 1932 reached about same stage, from information by Corps of Engineers and local residents.

REMARKS.--Records good except those above 10,000 cfs, which are fair. In 1928-29 the channel was rectified for a distance of 28 miles upstream and 18 miles downstream from station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	16	32	196	31	11	3.1	2.8	.04	.64	0	0
2	1.6	14	54	148	19	8.2	3.1	5.3	.02	.18	0	0
3	1,080	11	907	79	17	7.6	3.1	5.3	.02	.42	0	0
4	1,180	11	248	290	16	6.6	3.1	4.5	.01	11	0	0
5	67	12	6,420	61	16	7.6	3.1	3.1	0	4.2	0	0
6	20	11	2,560	37	17	7.6	3.1	1.8	0	2.1	0	0
7	11	11	955	46	17	8.2	2.8	3.8	0	1.1	0	0
8	7.2	10	329	60	15	11	2.4	30	0	.94	0	0
9	5.8	9.9	2,690	90	14	7.2	2.1	8.7	0	.52	0	0
10	4.2	8.7	15,900	62	14	6.2	1.8	2.1	.02	.25	0	0
11	3.4	8.7	616	40	15	5.8	2.1	.18	0	.18	34	0
12	2.8	8.2	232	39	46	5.8	2.4	.94	0	.06	73	0
13	2.1	7.6	233	52	48	7.6	1.8	.64	0	.02	11	0
14	1.8	7.2	320	34	28	6.6	2.4	.25	.13	.09	9.9	0
15	2.1	7.2	1,230	48	22	8.2	3.1	1.6	.78	.09	28	0
16	477	8.7	245	21	16	6.6	3.1	.25	9.9	.94	7.6	0
17	376	9.9	139	26	13	6.6	3.1	.09	7.6	.42	4.5	0
18	221	1,330	113	46	8.2	6.2	2.8	.01	6.2	.42	4.2	0
19	40,900	146	78	29	8.2	4.9	2.1	.02	5.3	.25	1.8	0
20	9,630	61	64	25	12	4.5	1.8	0	2.8	.09	.64	0
21	655	42	54	13	13	4.9	1.6	0	4.2	.02	.18	0
22	204	37	46	17	13	5.8	2.4	.02	25	0	.09	0
23	108	57	41	14	13	63	1.8	.01	39	0	.09	0
24	78	52	40	19	13	224	1.8	.02	28	0	0	0
25	57	41	38	15	11	39	1.3	2.1	10	0	0	2.8
26	44	40	37	18	12	16	.78	.25	7.2	0	0	1.8
27	36	32	37	78	10	12	4.5	.78	4.2	0	0	.78
28	48	28	78	38	10	11	9.9	.33	2.4	0	0	.42
29	32	26	50	29	10	8.2	7.2	.33	1.3	0	0	.25
30	26	24	81	25	------	5.3	5.3	.18	1.3	0	0	.42
31	22	------	64	53	------	3.8	------	.02	------	0	0	------
TOTAL	55,304.8	2,088.1	33,931	1,748	497.4	537.0	88.98	75.42	155.42	23.93	175.00	6.47
MEAN	1,784	69.6	1,095	56.4	17.2	17.3	2.97	2.43	5.18	.77	5.65	.22
MAX	40,900	1,330	15,900	290	48	224	9.9	30	39	11	73	2.8
MIN	1.6	7.2	32	13	8.2	3.8	.78	0	0	0	0	0
CFSM	6.46	.25	3.97	.20	.06	.06	.01	.009	.02	.003	.02	.0008
IN.	7.45	.28	4.57	.24	.07	.07	.01	.01	.02	.003	.02	0
AC-FT	109,700	4,140	67,300	3,470	987	1,070	176	150	308	47	347	13

CAL YR 1971 TOTAL 106,570.07 MEAN 292 MAX 40,900 MIN 0 CFSM 1.06 IN 14.36 AC-FT 211,400
WTR YR 1972 TOTAL 94,631.52 MEAN 259 MAX 40,900 MIN 0 CFSM .94 IN 12.75 AC-FT 187,700

PEAK DISCHARGE (BASE, 20,000 CFS).--Oct. 19 (about 1600) 90,600 cfs (36.16 ft, from floodmark); Dec. 10 (about 0300) 64,300 cfs (34.30 ft, from floodmark).

NOTE.--Gage-height record Oct. 19 to Mar. 16 from daily readings of wire-weight gage.

07343200 Sulphur River near Talco, Tex.

LOCATION.--Lat 33°23'11", long 95°07'57", Red River-Titus County line, on right bank at downstream side of pier of bridge on U.S. Highway 271, 2.2 miles northwest of Talco, 3.2 miles downstream from Mustang Creek, and at mile 162.

DRAINAGE AREA.--1,365 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 290.82 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 1,386 cfs (13.79 inches per year, 1,004,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 77,000 cfs Dec. 11 (gage height, 29.40 ft, from floodmark)); minimum daily, 0.06 cfs Sept. 15, 16, 18-21.
Period of record: Maximum discharge, 77,000 cfs Dec. 11, 1971 (gage height, 29.40 ft, from floodmark); no flow at times in 1957, 1964-65, 1970.
Floods in 1908 and 1914 each reached a stage of 27.5 ft, and flood in 1945 reached a stage of 26.5 ft, from information by local residents.

REMARKS.--Records good. At end of year, flow from 17.7 sq mi above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 6,960 acre-ft below the flood-spillway crests, of which 5,930 acre-ft is floodwater-retarding capacity and 1,030 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Records furnished by the Texas Power and Light Co. show that they diverted 612 acre-ft during October and December 1971 into an off-channel reservoir located 1.0 mile upstream from gage. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	218	69	382	145	20	53	30	7.6	4.8	.77	.19
2	20	168	90	785	112	26	43	30	5.2	3.0	.70	.16
3	14	133	3,620	748	91	27	38	32	4.1	2.9	.70	.14
4	1,570	115	8,680	886	75	23	31	47	3.5	23	.64	.14
5	1,020	107	6,020	1,340	65	22	23	69	3.4	106	.64	.16
6	945	102	17,200	1,020	63	22	19	94	3.0	42	.64	.19
7	465	94	21,800	551	64	20	16	74	2.9	18	.58	.16
8	148	83	19,400	376	62	19	13	97	2.7	9.0	.58	.14
9	89	73	20,800	347	56	18	11	59	2.4	5.8	.53	.10
10	64	64	56,400	355	49	17	11	59	2.3	3.5	.53	.10
11	46	58	64,000	302	47	17	9.6	36	2.2	2.7	.53	.12
12	31	53	30,100	231	80	20	9.0	29	2.2	2.3	.53	.10
13	24	50	18,900	180	276	21	10	44	3.7	2.2	18	.08
14	18	47	15,000	144	317	21	11	36	6.9	1.9	43	.07
15	14	43	13,400	113	222	21	11	26	6.7	1.8	19	.06
16	11	39	11,600	91	152	21	11	18	19	1.7	21	.06
17	575	35	11,000	83	101	21	10	15	30	1.5	33	.07
18	305	244	6,780	78	78	20	9.3	31	30	1.5	14	.06
19	2,140	1,100	3,900	80	66	16	9.0	28	42	1.4	6.0	.06
20	24,300	392	2,630	83	53	14	9.0	18	48	1.6	3.0	.06
21	43,100	223	2,070	80	45	15	9.3	14	32	1.8	1.8	.06
22	37,200	206	1,570	76	38	15	10	9.8	20	1.7	.92	.10
23	28,800	138	1,140	75	37	17	17	7.3	77	1.3	.77	.22
24	20,200	125	960	73	34	47	19	5.8	362	1.1	.64	.22
25	14,000	133	883	69	30	1,360	16	4.8	231	1.0	.58	.30
26	7,310	109	814	64	29	2,090	12	4.6	89	.92	.53	.26
27	1,990	91	740	75	25	1,080	11	4.1	49	.84	.43	.26
28	611	84	746	184	22	296	11	12	29	.77	.34	.22
29	413	76	739	349	19	137	14	23	16	.77	.30	.26
30	324	68	613	317	------	90	23	19	8.5	.77	.22	1.4
31	268	------	485	219	------	68	------	14	------	.77	.19	------
TOTAL	186,048	4,471	342,149	9,756	2,453	5,621	499.2	990.4	1,141.3	248.34	171.09	5.52
MEAN	6,002	149	11,040	315	84.6	181	16.6	31.9	38.0	8.01	5.52	.18
MAX	43,100	1,100	64,000	1,340	317	2,090	53	97	362	106	43	1.4
MIN	11	35	69	64	19	14	9.0	4.1	2.2	.77	.19	.06
CFSM	4.40	.11	8.09	.23	.06	.13	.01	.02	.03	.006	.004	.0001
IN.	5.07	.12	9.32	.27	.07	.15	.01	.03	.03	.006	.004	0
AC-FT	369,000	8,870	678,700	19,350	4,870	11,150	990	1,960	2,260	493	339	11

CAL YR 1971 TOTAL 593,998.90 MEAN 1,627 MAX 64,000 MIN .05 CFSM 1.19 IN 16.19 AC-FT 1,178,000
WTR YR 1972 TOTAL 553,553.85 MEAN 1,512 MAX 64,000 MIN .06 CFSM 1.11 IN 15.09 AC-FT 1,098,000

PEAK DISCHARGE (BASE, 15,000 CFS).--Oct. 21 (1300) 46,000 cfs (26.30 ft); Dec. 11 (about 0100) 77,000 cfs (29.40 ft, from floodmark).

07343300 Cuthand Creek near Bogata, Tex.

LOCATION.--Lat 33°32'51", long 95°10'22", Red River County, near center of channel at downstream side of bridge on State Highway 37, 6.0 miles northeast of Bogata, and 8 miles upstream from Scatter Creek.

DRAINAGE AREA.--69 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 352.44 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 59.1 cfs (11.63 inches per year, 42,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,400 cfs Dec. 10 (gage height, 21.58 ft); no flow at times.
Period of record: Maximum discharge, 20,400 cfs Dec. 10, 1971 (gage height, 21.58 ft); no flow at times each year.
Maximum stage since at least 1950, that of Dec. 10, 1971.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.2	0	20	7.7	1.6	.58	.18				
2	0	1.6	45	15	6.4	1.5	.44	.18				
3	0	1.1	417	10	4.9	1.2	.38	.14				
4	0	.66	154	8.0	4.6	1.2	.32	.06				
5	0	.44	522	20	4.1	1.2	.32	.06				
6	0	.18	1,490	18	3.6	1.0	.32	.03				
7	0	.10	1,300	16	3.2	.92	.32	.03				
8	0	.10	324	14	3.2	.92	.27	.03				
9	0	.06	3,180	12	3.4	.83	.27	.02				
10	0	.06	10,000	11	3.2	.74	.27	.01				
11	0	.06	1,130	10	3.2	.66	.27	0				
12	0	.06	107	9.0	77	.83	.27	.06				
13	0	.06	90	14	40	.83	.32	.10				
14	0	.06	837	8.4	15	.66	.32	.06				
15	0	.06	942	3.4	8.4	.74	.38	.03				
16	0	.06	309	5.1	6.4	.74	.32	.01				
17	0	.10	80	4.1	5.1	.58	.22	0				
18	.01	52	25	3.9	3.9	.58	.18	0				
19	.02	74	15	3.9	3.4	.51	.14	0				
20	594	22	12	4.1	2.8	.44	.14	0				
21	1,250	4.1	10	3.9	2.6	.58	.51	0				
22	158	.83	9.0	3.6	2.6	.58	.58	0				
23	42	.38	8.0	3.6	2.6	.66	.27	0				
24	24	.02	7.0	3.6	2.2	4.0	.14	0				
25	20	.18	6.0	3.0	2.4	6.0	.06	0				
26	14	.58	5.0	2.8	2.4	1.9	.02	0				
27	8.4	.51	4.0	4.1	2.4	1.4	.14	0				
28	5.4	0	4.0	41	2.2	.92	.27	0				
29	4.4	0	4.0	77	1.9	.83	.32	0				
30	3.0	0	4.0	23	------	.66	.22	0				
31	2.8	------	4.0	11	------	.66	------	0	------			------
TOTAL	2,126.03	161.56	21,044.0	386.5	230.8	35.87	8.58	1.00	0	0	0	0
MEAN	68.6	5.39	679	12.5	7.96	1.16	.29	.032	0	0	0	0
MAX	1,250	74	10,000	77	77	6.0	.58	.18	0	0	0	0
MIN	0	0	0	2.8	1.9	.44	.02	0	0	0	0	0
CFSM	.99	.08	9.84	.18	.12	.02	.004	.0005	0	0	0	0
IN.	1.15	.09	11.35	.21	.12	.02	.004	0	0	0	0	0
AC-FT	4,220	320	41,740	767	458	71	17	2.0	0	0	0	0

CAL YR 1971 TOTAL 26,694.28 MEAN 73.1 MAX 10,000 MIN 0 CFSM 1.06 IN 14.39 AC-FT 52,950
WTR YR 1972 TOTAL 23,994.34 MEAN 65.6 MAX 10,000 MIN 0 CFSM .95 IN 12.94 AC-FT 47,590

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	1100	15.28	1,610	12-10	0300	21.58	20,400
12- 6	2100	15.28	1,610	12-15	0900	14.18	1,120

07343500 White Oak Creek near Talco, Tex.

LOCATION.--Lat 33°19'20", long 95°05'33", Titus County, near center of main channel on downstream side of bridge on U.S. Highway 271, 0.8 mile downstream from Lewis Creek, 2.4 miles upstream from Ripley Creek, 2.7 miles south of Talco, and at mile 38.4.

DRAINAGE AREA.--494 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 286.45 ft above mean sea level.

AVERAGE DISCHARGE.--22 years (1950-72), 405 cfs (11.13 inches per year, 293,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 48,000 cfs Dec. 11 (gage height, 21.20 ft); no flow Aug. 7 to Sept. 29.
Period of record: Maximum discharge, 48,000 cfs Dec. 11, 1971 (gage height, 21.20 ft), from rating curve extended above 23,000 cfs; no flow at times in 1954, 1956, 1964-65, and 1969-72.
Maximum stage since at least 1870, 22.9 ft Mar. 31, 1945, from floodmarks and from information by local residents.

REMARKS.--Records good. Several small diversions above station for municipal supply. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1711: Elevation of historical maximum.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	22	10	211	411	39	103	12	3.7	13	.21	0
2	26	19	7	579	263	34	52	23	7.1	8.9	.18	0
3	16	14	90	940	166	29	37	23	4.4	6.6	.15	0
4	14	11	394	1,330	127	29	30	16	2.8	8.7	.10	0
5	13	7.8	731	1,610	101	35	26	13	1.8	18	.06	0
6	21	5.7	1,400	1,790	83	36	23	13	1.5	31	.03	0
7	126	7.8	3,330	1,710	73	35	20	14	1.4	17	0	0
8	159	13	7,930	1,440	63	30	19	57	1.3	7.6	0	0
9	85	14	10,100	1,010	61	25	17	61	1.9	4.2	0	0
10	42	13	28,600	469	69	28	17	30	2.0	5.7	0	0
11	24	12	38,000	237	67	83	16	17	3.0	7.1	0	0
12	16	9.2	14,300	181	78	61	15	14	.95	4.2	0	0
13	13	6.6	5,540	148	179	40	14	13	.34	2.7	0	0
14	11	4.4	3,620	112	306	30	14	12	1.8	2.1	0	0
15	11	3.3	2,610	98	337	26	13	13	12	1.6	0	0
16	13	2.6	2,050	120	231	24	12	13	62	1.3	0	0
17	12	2.0	1,530	87	168	23	12	9.5	184	1.1	0	0
18	9.2	9.8	978	58	167	22	11	7.1	137	.95	0	0
19	9.2	57	667	48	110	20	11	6.6	51	.87	0	0
20	94	188	375	47	76	19	10	5.7	21	.73	0	0
21	553	202	205	49	61	17	10	4.4	12	.73	0	0
22	2,860	120	152	50	51	16	9.7	3.7	17	.66	0	0
23	5,930	56	150	49	46	15	8.9	3.1	67	.54	0	0
24	3,600	32	115	47	44	19	8.4	3.1	291	.54	0	0
25	2,480	24	84	44	46	214	8.1	2.5	445	.34	0	0
26	1,750	41	72	40	50	521	8.4	1.8	333	.24	0	0
27	798	58	64	45	48	545	10	1.3	153	.21	0	0
28	163	47	63	101	43	332	11	1.1	72	.15	0	0
29	56	28	72	304	43	150	11	1.2	34	.18	0	0
30	36	16	167	461	------	197	10	1.0	20	.24	0	141
31	26	------	170	506	------	205	------	1.0	------	.24	0	------
TOTAL	19,023.4	1,046.2	123,576	13,921	3,568	2,899	567.5	397.1	1,944.99	147.42	.73	141
MEAN	614	34.9	3,986	449	123	93.5	18.9	12.8	64.8	4.76	.024	4.70
MAX	5,930	202	38,000	1,790	411	545	103	61	445	31	.21	141
MIN	9.2	2.0	7.0	40	43	15	8.1	1.0	.34	.15	0	0
CFSM	1.24	.07	8.07	.91	.25	.19	.04	.03	.13	.010	0	.010
IN.	1.43	.08	9.31	1.05	.27	.22	.04	.03	.15	.01	0	.01
AC-FT	37,730	2,080	245,100	27,610	7,080	5,750	1,130	788	3,860	292	1.5	280

CAL YR 1971 TOTAL 169,437.78 MEAN 464 MAX 38,000 MIN 0 CFSM .94 IN 12.76 AC-FT 336,100
WTR YR 1972 TOTAL 167,232.34 MEAN 457 MAX 38,000 MIN 0 CFSM .93 IN 12.59 AC-FT 331,700

PEAK DISCHARGE (BASE, 9,000 CFS).--Dec. 11 (0300) 48,000 cfs (21.20 ft).

07344200 Lake Texarkana near Texarkana, Tex.

LOCATION.--Lat 33°18'16", long 94°09'38", Bowie-Cass County line, in intake structure of Texarkana Dam on the Sulphur River, 0.5 mile upstream from U.S. Highway 59, and 10 miles southwest of Texarkana.

DRAINAGE AREA.--3,443 sq mi.

PERIOD OF RECORD.--July 1953 to current year. Prior to October 1970, published as Texarkana Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). July 19 to Dec. 31, 1953, nonrecording gage at site about 125 ft upstream at datum 200 ft higher.

EXTREMES.--Current year: Maximum contents, 1,128,300 acre-ft Dec. 21 (elevation, 242.95 ft); minimum, 154,300 acre-ft Mar. 24 (elevation, 220.37 ft).
Period of record: Maximum contents, 1,912,100 acre-ft May 9, 1966 (elevation, 252.64 ft); minimum since first appreciable storage and after deliberate impoundment began, 137,500 acre-ft Sept. 5, 1958.

REMARKS.--Lake is formed by an 18,500-foot earthfill dam, with a 200-foot uncontrolled concrete spillway and a mile-long dike. Flood-control outlet works consist of two 20-foot-diameter conduits controlled by four 10- by 20-foot electrically driven broome-type gates. Flow over spillway is discharged into an outlet channel and then to the Sulphur River. Sulphur River was blocked and storage began July 2, 1953; first passage of water through conduits began July 18, 1953; gates closed and impoundment of water began June 27, 1956. Dam completed in December 1957. Figures given herein represent total contents. Lake built for flood control and conservation. Capacity table is based on 1948 survey. Cities of Texarkana, Texas, and Arkansas have been allocated 13,400 acre-ft of storage in the lake and during the water year 1972 diverted 9,550 acre-ft. At end of year, flow from 34.3 sq mi above this station was partly controlled by 24 floodwater-retarding structures with a total combined capacity of 13,870 acre-ft below the flood-spillway crests, of which 11,170 acre-ft is floodwater-retarding capacity and 2,700 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Data regarding dam and lake are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	286.0	-
Crest of spillway	259.5	2,654,300
Top of conservation pool	220.0	145,300
Invert of two 20-foot-diameter conduits	200.0	2,600

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1561: 1957(M). WSP 1711: 1959(M).

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

220.0	145,300	228.0	364,100	236.0	706,200
222.0	189,300	230.0	437,250	238.0	813,200
224.0	240,200	232.0	518,450	240.0	924,400
226.0	298,500	234.0	607,900	244.0	1,191,900

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 0700, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273.98	370.33	163.69	1,002.60	510.04	158.33	173.29	176.49	177.40	175.57	175.57	165.42
2	273.08	371.04	161.97	1,002.00	490.38	159.40	174.43	177.63	176.72	176.26	175.34	164.98
3	271.58	366.43	167.61	989.31	477.16	158.55	175.12	179.47	176.26	175.12	174.89	164.98
4	268.92	357.83	167.83	986.81	455.15	158.55	174.20	180.62	175.80	175.80	174.43	164.12
5	264.88	344.91	166.73	974.94	435.88	158.33	176.26	180.85	175.34	175.80	173.97	165.42
6	262.02	326.57	170.10	961.89	416.16	159.19	177.40	180.85	174.66	175.12	174.20	165.20
7	258.31	304.79	174.43	949.49	396.09	158.97	177.40	180.85	174.66	175.57	174.43	165.20
8	255.75	283.60	177.17	935.30	377.80	155.79	174.89	181.77	174.20	175.12	172.61	165.20
9	254.05	263.16	180.62	924.43	357.83	159.19	175.57	180.85	173.97	174.89	171.69	164.55
10	252.07	241.10	182.92	910.06	339.17	159.40	176.72	179.70	173.75	174.89	171.47	163.47
11	249.24	218.78	183.15	896.94	320.77	159.40	176.95	179.47	171.92	174.66	171.69	163.47
12	245.58	197.97	197.72	882.68	301.30	158.97	177.40	179.93	172.38	174.66	171.92	163.26
13	242.76	186.17	273.08	868.62	279.68	158.97	177.17	181.54	172.15	174.89	171.47	163.26
14	238.93	173.75	490.38	847.35	258.60	158.12	176.49	182.46	173.06	174.43	171.47	162.83
15	235.17	166.07	734.13	827.93	247.83	158.76	177.40	181.77	173.75	174.43	171.01	162.40
16	231.98	162.40	908.27	810.48	246.14	159.83	178.78	181.54	173.29	173.75	170.56	163.47
17	226.41	161.11	1,009.70	784.60	243.04	158.97	176.49	181.77	173.29	173.06	170.56	163.47
18	222.98	167.61	1,064.90	764.91	237.32	158.97	176.26	180.85	172.83	172.61	170.33	163.04
19	219.83	172.83	1,100.50	745.74	225.09	157.91	176.26	180.16	172.83	172.83	169.42	162.83
20	216.15	176.95	1,119.40	727.82	204.37	157.48	176.49	180.62	172.83	172.61	169.19	163.69
21	214.86	178.78	1,126.90	707.95	189.92	157.48	176.26	180.16	172.83	171.92	168.97	163.90
22	212.58	176.95	1,124.90	688.62	177.40	157.27	176.26	179.93	172.61	172.15	168.28	163.26
23	210.83	175.34	1,124.90	670.96	170.56	157.70	175.80	179.70	172.38	172.38	168.28	164.33
24	212.58	172.38	1,119.40	651.11	163.69	158.12	172.83	179.24	171.92	171.92	167.38	166.07
25	215.37	170.10	1,111.30	630.76	161.75	158.33	173.06	179.01	172.38	171.69	167.61	173.06
26	220.09	168.74	1,099.80	607.79	156.85	158.76	173.29	178.55	172.38	171.47	167.61	173.29
27	236.24	166.29	1,085.70	589.26	157.06	159.83	175.34	178.09	172.61	171.01	167.38	173.29
28	275.18	164.12	1,069.60	574.56	158.12	160.90	175.34	177.63	172.61	170.78	165.85	173.29
29	318.84	165.42	1,049.80	556.97	158.12	164.33	175.34	177.86	173.75	175.57	166.51	173.75
30	346.60	163.47	1,037.50	539.80	------	165.42	175.80	178.09	174.66	175.34	166.29	173.52
31	363.66	------	1,014.90	527.12	------	171.01	------	176.72	------	175.34	165.85	------
(†)	228.06	220.83	241.07	231.81	220.55	221.19	221.37	221.42	221.32	221.32	220.88	221.25
(*)	+89,380	-200,190	+851,430	-487,780	-369,000	+12,890	+4,790	+920	-2,060	+680	-9,490	+7,670
(††)	761	678	691	715	669	770	684	842	956	999	925	859
MAX	363.66	371.04	1,126.90	1,002.60	510.04	171.01	178.78	182.46	177.40	176.26	175.57	173.75
MIN	210.83	161.11	161.97	527.12	156.85	155.79	172.83	176.49	171.92	170.78	165.85	162.40

CAL YR 1971..... * +853,150 †† 8,880 MAX 1,126.90 MIN 153.46
WTR YR 1972..... * -100,760 †† 9,550 MAX 1,126.90 MIN 155.79

† Elevation, in feet, at midnight, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Texarkana.
NOTE.--All figures expressed in thousands.

07344500 Big Cypress Creek near Pittsburg, Tex.

LOCATION.--Lat 33°01'15", long 94°52'55", Camp-Titus County line, near center of stream at downstream side of bridge on State Highway 11, 0.5 mile upstream from Louisiana & Arkansas Railway Co. bridge, 1.4 miles upstream from Williamson Creek, 5.2 miles east of Pittsburg, and at mile 110.0.

DRAINAGE AREA.--366 sq mi.

PERIOD OF RECORD.--March 1943 to January 1963 (published as Cypress Creek near Pittsburg), October 1967 to current year. Gage-height records collected at this site September 1963 to December 1967 are published in reports by Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 247.49 ft above mean sea level. Prior to Nov. 12, 1954, water-stage recorder at site 1,900 ft downstream at present datum.

AVERAGE DISCHARGE.--24 years (1943-62, 1967-72), 327 cfs (12.13 inches per year, 236,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,470 cfs Dec. 11 (gage height, 15.15 ft); minimum, 1.6 cfs Sept. 14.
Period of record: Maximum discharge, 58,500 cfs Mar. 30, 1945 (gage height, 28.3 ft, from floodmark and adjusted to present site on basis of record for flood of Apr. 27, 1958), from rating curve extended above 20,000 cfs; no flow Aug. 20 to Oct. 3, 1954, July 19 to Nov. 4, 1956.
Maximum stage since at least 1895, that of Mar. 30, 1945; flood in January 1938 reached a stage of about 25 ft, present site adjusted as above, from information by local resident.

REMARKS.--Records good. Small diversions upstream for municipal water supply. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.9	19	392	605	55	50	26	6.1	15	3.6	2.6
2	3.3	3.0	21	1,070	390	95	44	24	4.9	12	2.8	2.5
3	3.9	2.1	66	1,410	258	179	40	26	4.4	8.7	3.2	2.4
4	5.6	1.9	158	1,550	174	105	40	28	4.1	7.7	3.4	2.7
5	7.6	3.2	174	1,550	124	98	40	21	3.7	8.7	3.3	2.6
6	7.1	3.0	468	1,370	108	76	39	18	4.0	50	3.2	2.1
7	5.2	3.1	1,030	920	105	61	39	16	3.2	46	3.1	1.8
8	4.2	2.8	1,310	725	105	109	39	14	3.2	22	2.6	2.6
9	4.0	3.2	1,490	560	94	189	34	13	3.8	8.6	2.3	3.2
10	3.4	3.3	3,460	347	85	93	30	13	5.1	8.9	2.5	4.2
11	3.1	3.0	4,430	248	79	63	28	12	21	19	2.7	3.9
12	3.0	4.2	2,160	192	94	58	28	13	67	20	3.3	2.6
13	2.5	4.6	1,330	158	132	52	27	20	18	10	3.7	1.9
14	2.1	4.4	945	132	140	51	26	29	25	6.8	4.5	1.8
15	2.6	3.9	820	108	124	51	24	26	150	5.6	4.2	2.7
16	3.1	3.4	800	91	105	51	24	23	292	4.8	3.1	3.0
17	3.6	3.0	880	82	94	50	19	17	150	4.5	3.2	3.1
18	3.8	199	740	79	82	48	16	13	74	3.5	3.1	3.0
19	2.9	613	500	82	75	46	15	30	41	3.1	3.0	2.6
20	6.8	753	284	88	67	42	11	34	21	3.8	3.0	2.1
21	32	266	187	88	63	40	9.3	21	18	3.8	2.7	2.1
22	35	70	136	85	62	40	9.8	17	83	4.0	2.3	3.0
23	16	43	105	82	65	31	11	11	274	4.0	2.1	4.0
24	12	38	91	77	68	54	9.1	8.9	344	3.8	2.5	7.1
25	20	33	85	72	69	171	20	7.6	292	2.9	2.8	28
26	21	28	79	70	69	183	16	7.2	266	2.4	2.7	16
27	16	24	77	98	64	119	14	6.0	177	2.9	3.2	9.5
28	11	23	78	174	57	196	26	5.4	64	3.2	3.5	13
29	9.3	21	98	378	55	122	36	5.8	31	3.2	2.6	6.3
30	7.2	20	112	635	------	79	28	4.4	21	3.7	2.0	17
31	5.6	------	150	695	------	61	------	5.0	------	5.1	2.6	------
TOTAL	266.3	2,188.0	22,283	13,608	3,612	2,668	792.2	515.3	2,471.5	307.7	92.8	159.4
MEAN	8.59	72.9	719	439	125	86.1	26.4	16.6	82.4	9.93	2.99	5.31
MAX	35	753	4,430	1,550	605	196	50	34	344	50	4.5	28
MIN	2.1	1.9	19	70	55	31	9.1	4.4	3.2	2.4	2.0	1.8
CFSM	.02	.20	1.96	1.20	.34	.24	.07	.05	.23	.03	.008	.01
IN.	.03	.22	2.26	1.38	.37	.27	.08	.05	.25	.03	.009	.02
AC-FT	528	4,340	44,200	26,990	7,160	5,290	1,570	1,020	4,900	610	184	316

CAL YR 1971 TOTAL 37,719.0 MEAN 103 MAX 4,430 MIN 1.0 CFSM .28 IN 3.83 AC-FT 74,820
WTR YR 1972 TOTAL 48,964.2 MEAN 134 MAX 4,430 MIN 1.8 CFSM .37 IN 4.98 AC-FT 97,120

PEAK DISCHARGE (BASE, 3,000 CFS).--Dec. 11 (0300) 5,470 cfs (15.15 ft).

07345000 Boggy Creek near Daingerfield, Tex.

LOCATION.--Lat 33°02'10", long 94°47'15", Morris County, on right bank at downstream side of bridge on State Highway 11, 0.4 mile upstream from Louisiana & Arkansas Railway Co. bridge, 3.8 miles west of Daingerfield, and 9 miles upstream from mouth.

DRAINAGE AREA.--72 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 258.41 ft above mean sea level. Prior to Oct. 1, 1954, at site 1,700 ft downstream at same datum.

AVERAGE DISCHARGE.--29 years, 76.0 cfs (14.33 inches per year, 55,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 976 cfs Dec. 10 (gage height, 10.27 ft); no flow at times.
Period of record: Maximum discharge, 28,900 cfs Apr. 27, 1958 (gage height, 17.80 ft), from rating curve extended above 13,000 cfs; no flow at times most years.
Maximum stage since at least 1900, that of Apr. 27, 1958; flood in January 1938 reached a stage of 17.5 ft (adjusted to present site), from information by local residents.

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

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1561: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.0	13	148	130	28	26	8.7	10	.72		0
2	0	.90	14	515	89	69	22	13	4.1	.52		0
3	0	.72	40	584	74	88	19	24	2.2	.39		0
4	0	.52	69	346	60	61	18	17	1.4	.35		0
5	0	.43	70	391	48	37	19	9.1	1.0	.31		0
6	0	.27	127	290	47	29	18	6.4	.78	.72		0
7	0	.16	259	200	50	26	17	5.6	.57	1.0		0
8	0	.10	424	140	48	70	15	13	.39	.84		0
9	0	.04	284	110	43	66	12	12	.27	.47		0
10	0	.02	750	104	38	38	10	8.0	1.4	.27		0
11	0	0	673	97	37	30	9.8	5.6	1.6	.18		0
12	0	0	319	82	48	28	9.8	7.9	2.1	.08		0
13	0	0	190	72	64	26	9.1	14	1.3	.02		0
14	0	0	120	61	62	25	7.9	13	1.9	0		0
15	0	0	138	51	50	24	7.2	8.0	6.8	0		0
16	0	0	170	43	45	25	6.8	5.0	9.6	0		0
17	0	.02	172	38	40	23	5.8	3.8	4.1	0		0
18	0	77	120	43	36	19	5.0	3.0	2.1	0		0
19	0	157	88	45	31	16	4.5	2.4	1.4	0		0
20	3.3	159	72	48	28	15	4.3	2.1	.84	0		0
21	9.8	67	64	46	27	15	4.5	1.6	.16	0		0
22	7.6	25	58	43	28	15	4.6	1.4	7.2	0		0
23	4.7	18	47	43	32	14	4.2	1.2	16	0		0
24	3.2	17	43	42	33	34	3.4	1.1	26	0		.08
25	2.4	17	42	38	33	84	2.8	.96	16	0		.02
26	2.0	16	42	33	32	65	2.3	.84	14	0		0
27	1.7	14	40	52	27	51	6.4	.78	6.9	0		0
28	1.5	14	40	82	24	93	18	.72	3.2	0		0
29	1.5	13	46	122	23	88	18	.72	1.8	0		.05
30	1.2	13	54	168	------	84	12	15	1.1	0		11
31	1.1	------	76	187	------	58	------	27	------	0		------
TOTAL	40.0	611.18	4,664	4,264	1,327	1,344	322.4	232.92	146.21	5.87	0	11.15
MEAN	1.29	20.4	150	138	45.8	43.4	10.7	7.51	4.87	.19	0	.37
MAX	9.8	159	750	584	130	93	26	27	26	1.0	0	11
MIN	0	0	13	33	23	14	2.3	.72	.16	0	0	0
CFSM	.02	.28	2.08	1.92	.64	.60	.15	.10	.07	.003	0	.005
IN.	.02	.32	2.41	2.20	.69	.69	.17	.12	.08	.003	0	.005
AC-FT	79	1,210	9,250	8,460	2,630	2,670	639	462	290	12	0	22

CAL YR 1971 TOTAL 10,543.38 MEAN 28.9 MAX 750 MIN 0 CFSM .40 IN 5.45 AC-FT 20,910
WTR YR 1972 TOTAL 12,968.73 MEAN 35.4 MAX 750 MIN 0 CFSM .49 IN 6.70 AC-FT 25,720

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

07345900 Lake O' the Pines near Jefferson, Tex.

LOCATION.--Lat 32°45'04", long 94°29'59", Marion County, in intake structure of Ferrell's Bridge Dam on Big Cypress Creek, on Farm Road 726, 9.0 miles west of Jefferson, and at mile 80.1.

DRAINAGE AREA.--850 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Nov. 12, 1957, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 278,950 acre-ft Jan. 4 (elevation, 229.64 ft); minimum, 235,120 acre-ft Sept. 21 (elevation, 227.31 ft).
Period of record: Maximum contents, 694,360 acre-ft May 5, 1966 (elevation, 245.41 ft); minimum since December 1959, 219,700 acre-ft Nov. 16, 1963 (elevation, 226.54 ft).

REMARKS.--Lake is formed by a 10,600-foot rolled earthfill dam and a 200-foot concrete spillway. Flood-control outlet works consist of two 10-foot-diameter conduits controlled by two 8.0- by 12.5-foot electrically driven broome-type gates. Low-flow outlet works consist of one 14-inch pipe and valve. Flow over spillway is discharged into a 2,000-foot channel and then into Cypress Creek. Cofferdam closure was made Aug. 21, 1957; water began flowing through conduits Sept. 25, 1957. Dam completed in December 1957. Deliberate impoundment began in August 1958, and the lake was in full use by December 1959. Capacity table based on 1950 survey. Figures given herein represent total contents. Lake built for flood control, conservation, and water supply. During year, 323 acre-ft was diverted by city of Daingerfield, 243 acre-ft was diverted by city of Hughes Springs, 226 acre-ft was diverted by city of Mount Pleasant, and 6,030 acre-ft was diverted by Southwestern Electric Power Company. Data regarding dam and lake are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	277.0	-
Crest of spillway	249.5	842,100
Top of conservation storage space	228.5	254,900
Invert of 14-inch intake to wet well	202.5	5,760
Invert of two 10-foot-diameter conduits	200.0	2,860

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

227.0	227,650	232.0	324,770
228.0	245,600	234.0	369,130
230.0	283,680	236.0	417,140

CONTENTS, IN ACRE-FEET, AT 0700, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255,700	254,570	258,900	260,030	261,540	257,200	260,030	260,780	253,440	257,770	251,010	241,980
2	255,320	255,130	258,900	266,290	261,730	260,590	259,080	262,290	252,690	256,830	250,820	241,440
3	255,130	254,950	261,350	268,230	264,380	259,270	258,330	261,350	252,690	256,260	250,260	241,620
4	256,260	254,010	260,590	276,010	261,540	258,900	259,270	260,220	252,320	257,950	250,070	240,890
5	255,890	253,260	260,400	276,410	260,780	259,650	258,900	258,710	251,570	260,030	249,700	240,710
6	255,890	252,880	263,240	276,210	260,590	259,460	258,900	258,330	251,380	259,460	249,320	240,170
7	255,510	252,510	264,570	276,210	260,970	259,080	258,900	258,520	251,380	258,710	248,950	239,810
8	254,760	251,760	264,000	274,840	260,220	259,840	259,080	259,270	251,010	258,330	248,200	239,810
9	254,760	251,760	263,240	273,870	259,650	260,400	258,520	258,710	250,820	258,330	247,830	239,630
10	254,570	251,760	263,050	271,730	258,900	259,460	257,950	258,140	250,450	258,140	247,640	239,810
11	253,440	251,200	262,100	268,810	258,520	259,270	258,330	258,140	250,070	258,140	247,450	239,450
12	253,260	251,010	266,870	267,260	259,460	258,520	258,520	257,390	249,510	257,390	247,270	238,900
13	253,440	251,200	274,450	267,260	258,900	258,520	258,710	259,650	249,320	257,200	246,900	238,720
14	253,070	251,010	276,800	262,670	257,950	258,520	258,710	260,220	250,450	256,640	247,450	238,180
15	252,690	250,820	277,190	261,540	259,080	258,900	258,900	259,650	252,690	256,070	247,450	238,000
16	252,510	250,820	275,040	259,650	258,900	259,080	260,590	259,080	252,880	255,510	247,090	238,180
17	252,880	250,450	272,700	258,710	259,270	258,710	259,270	258,710	252,690	255,130	246,530	237,820
18	252,880	255,510	269,590	258,710	260,590	258,900	259,080	258,140	252,690	255,510	245,990	237,640
19	253,070	256,640	266,870	259,270	259,840	258,520	258,900	257,770	252,880	255,510	245,620	237,280
20	254,950	256,070	266,100	259,460	259,650	258,330	258,900	257,580	252,880	255,320	245,620	236,740
21	256,070	257,010	264,570	259,840	260,030	258,140	258,900	257,200	253,630	254,760	245,250	236,740
22	255,510	256,640	261,920	260,030	260,400	258,330	259,840	256,830	253,260	255,130	244,710	238,720
23	255,320	258,520	261,730	260,590	259,650	257,770	259,460	256,640	256,640	254,760	244,340	239,080
24	255,510	259,270	260,780	260,590	259,080	257,580	259,460	253,630	256,450	254,200	243,980	241,800
25	255,320	258,710	260,400	260,780	258,520	259,080	258,520	255,890	256,450	255,890	243,620	245,620
26	254,950	258,710	260,220	260,590	258,710	257,580	258,330	255,700	257,010	253,820	243,430	245,800
27	255,510	259,460	259,840	260,590	257,950	259,080	258,900	255,130	257,200	253,260	243,980	245,800
28	255,130	258,900	259,650	262,290	257,580	260,590	261,160	254,950	257,010	252,510	243,430	245,800
29	255,130	259,840	258,900	261,730	257,580	261,540	261,160	254,570	257,770	251,940	243,070	245,620
30	254,950	258,900	259,460	262,100	------	260,400	260,970	254,950	258,140	251,940	242,710	247,640
31	254,950	------	258,710	261,920	------	260,590	------	253,630	------	251,570	241,980	------
(†)	228.35	228.59	228.58	228.76	228.52	228.70	228.70	228.30	228.56	228.18	227.68	227.95
(*)	-940	+3,950	-190	+3,210	-4,340	+3,010	+380	-7,340	+4,510	-6,570	-9,590	+5,660
(††)	964	969	258	46	37	42	67	662	911	968	980	920
MAX	256,260	259,840	277,190	276,410	264,380	261,540	261,160	262,290	258,140	260,030	251,010	247,640
MIN	252,510	250,450	258,710	258,710	257,580	257,200	257,950	253,630	249,320	251,570	241,980	236,740

CAL YR 1971..... * -1,880 †† - MAX 277,190 MIN 240,710
WTR YR 1972..... * -8,250 †† 6,820 MAX 277,190 MIN 236,740

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by cities of Daingerfield, Hughes Springs, and Mount Pleasant.

07346045 Black Cypress Bayou at Jefferson, Tex.

LOCATION.--Lat 32°46'40", long 94°21'26", Marion County, near center of channel at downstream side of bridge on U.S. Highway 59, 1.1 miles north of Jefferson, 2.0 miles upstream from Texas and Pacific Railway bridge, and at mile 5.2.

DRAINAGE AREA.--365 sq mi.

PERIOD OF RECORD.--September 1968 to current year. May 1938 to September 1955 (daily gage heights) and November 1956 to August 1968 (daily gage heights and discharge measurements) published by Corps of Engineers as "Black Cypress Creek at Jefferson". September 1964 to August 1968 operated as low-flow partial-record station only.

GAGE.--Water-stage recorder. Datum of gage is 171.47 ft above mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Jan. 7 (gage height, 13.53 ft); no flow at times.
Period of record: Maximum discharge, 3,420 cfs Apr. 17, 1969 (gage height, 15.41 ft); no flow at times most years.
Maximum stage since 1938, 22.42 ft Apr. 29, 1958, from records by Corps of Engineers.

REMARKS.--Records good. No known regulation or diversion in vicinity of gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	12	67	219	310	169	232	118	7.2	23	3.4	.11
2	2.5	11	59	330	352	196	248	217	6.2	19	3.0	.16
3	2.5	9.4	67	430	402	182	264	226	5.5	15	2.7	3.4
4	2.5	7.9	69	581	460	175	264	195	4.9	15	2.1	.95
5	2.2	7.0	74	820	492	189	256	166	4.4	14	1.6	.38
6	2.0	6.4	89	1,190	492	224	224	192	4.0	10	.95	.16
7	1.9	5.8	127	1,360	476	248	189	216	3.8	8.5	.70	.07
8	1.6	5.3	157	1,360	430	256	169	230	3.4	7.6	.34	.03
9	1.5	5.0	182	1,220	376	240	157	229	3.2	7.7	.16	.01
10	1.2	4.0	217	1,020	330	224	151	207	3.4	7.9	.07	.01
11	.82	3.6	256	850	291	196	151	158	3.3	7.6	.04	.01
12	1.1	3.9	291	730	273	175	145	144	2.7	6.9	.03	.01
13	1.5	4.1	320	640	264	169	136	137	1.9	6.1	.09	0
14	1.5	4.1	352	581	256	157	121	114	5.3	5.3	.95	0
15	1.3	4.1	389	526	240	151	104	93	6.2	4.4	1.3	0
16	1.4	4.6	416	476	240	145	99	81	11	3.6	4.3	0
17	1.9	5.0	445	416	240	139	96	74	13	3.6	5.0	0
18	1.6	11	460	376	232	133	86	65	14	5.0	5.0	0
19	1.6	14	460	341	232	130	78	58	19	5.2	3.9	0
20	1.7	28	460	300	224	130	74	49	21	4.3	3.2	0
21	2.0	26	445	273	210	130	69	41	18	4.4	2.3	0
22	4.1	32	430	248	203	127	67	33	18	5.8	1.3	0
23	7.7	57	402	232	196	121	63	28	19	7.9	.76	0
24	6.9	89	376	224	182	130	56	23	19	9.4	.70	.01
25	8.7	104	352	210	175	145	57	19	15	7.6	.47	4.9
26	22	109	310	203	169	145	62	16	15	6.5	.22	31
27	25	104	273	196	163	142	72	14	22	6.1	.13	29
28	23	96	240	210	163	175	94	11	26	5.6	2.0	44
29	20	89	210	240	163	210	94	10	28	4.9	1.9	62
30	17	79	189	273	------	224	86	9.6	27	4.6	.76	79
31	14	------	175	291	------	224	------	8.7	------	4.1	.30	------
TOTAL	185.72	941.2	8,359	16,366	8,236	5,401	3,964	3,182.3	350.4	246.6	49.67	255.21
MEAN	5.99	31.4	270	528	284	174	132	103	11.7	7.95	1.60	8.51
MAX	25	109	460	1,360	492	256	264	230	28	23	5.0	79
MIN	.82	3.6	59	196	163	121	56	8.7	1.9	3.6	.03	0
CFSM	.02	.09	.74	1.45	.78	.48	.36	.28	.03	.02	.004	.02
IN.	.02	.10	.85	1.67	.84	.55	.40	.32	.04	.03	.005	.03
AC-FT	368	1,870	16,580	32,460	16,340	10,710	7,860	6,310	695	489	99	506

CAL YR 1971 TOTAL 32,969.42 MEAN 90.3 MAX 460 MIN 0 CFSM .25 IN 3.36 AC-FT 65,390
WTR YR 1972 TOTAL 47,537.10 MEAN 130 MAX 1,360 MIN 0 CFSM .36 IN 4.84 AC-FT 94,290

PEAK DISCHARGE (BASE, 4,000 CFS).--No peak above base.

07346050 Little Cypress Creek near Ore City, Tex.

LOCATION.--Lat 32°40'21", long 94°45'03", Gregg-Upshur County line, on right bank at downstream side of bridge on U.S. Highway 259, 4 miles downstream from Clear Creek, 9 miles south of Ore City, and 12 miles north of Longview.

DRAINAGE AREA.--383 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 232.67 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1963-72), 202 cfs (7.16 inches per year, 146,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,620 cfs Jan. 5 (gage height, 11.33 ft); no flow Oct. 1-22, Aug. 4 to Sept. 23.
Period of record: Maximum discharge, 23,500 cfs Apr. 24, 1966 (gage height, 20.20 ft); no flow at times each year.
Maximum stage since at least 1902 occurred in March 1945; maximum stage since 1945, that of Apr. 24, 1966. The flood in April 1958 reached a stage of 19.4 ft, or 1.3 ft lower than the flood of March 1945 at a point 6 miles upstream, from information by local resident.

REMARKS.--Records good except those for period Dec. 8 to Apr. 4, which are fair. No known diversion above station. During water year, the city of Gilmer discharged 1,860 acre-ft of sewage effluent into tributaries above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	5.0	32	200	550	120	180	71	2.5	30	.06	0
2	0	5.6	31	800	500	200	160	70	2.6	20	.03	0
3	0	6.8	40	1,400	450	200	130	92	2.8	15	.01	0
4	0	6.8	63	2,000	400	190	110	89	2.5	13	0	0
5	0	7.2	82	2,300	350	180	94	80	2.4	12	0	0
6	0	7.4	136	2,200	320	170	84	59	1.6	9.7	0	0
7	0	6.5	208	2,000	290	160	79	41	.69	8.4	0	0
8	0	5.9	250	1,600	270	150	74	36	.43	6.1	0	0
9	0	5.0	300	1,300	240	140	71	36	.33	5.9	0	0
10	0	4.3	400	1,000	220	130	68	50	.33	5.1	0	0
11	0	3.8	450	900	200	120	62	56	.33	4.6	0	0
12	0	3.6	500	700	250	115	56	44	5.6	5.7	0	0
13	0	3.8	550	600	240	110	52	53	15	20	0	0
14	0	3.8	600	500	220	105	49	72	16	19	0	0
15	0	3.5	650	400	210	100	48	84	17	14	0	0
16	0	3.2	650	350	190	95	50	82	32	7.7	0	0
17	0	3.0	630	300	180	90	47	52	44	6.5	0	0
18	0	12	600	250	170	88	39	32	46	6.8	0	0
19	0	58	580	210	160	86	36	24	30	2.7	0	0
20	0	105	550	190	150	84	32	20	17	1.8	0	0
21	0	136	500	170	140	82	28	17	16	3.2	0	0
22	0	156	450	150	130	82	28	13	88	2.9	0	0
23	23	173	400	130	125	80	42	11	247	1.6	0	0
24	37	173	350	120	120	80	47	10	262	1.0	0	5.5
25	27	136	300	110	115	200	36	8.3	207	.72	0	28
26	20	94	250	100	110	180	28	5.8	193	.57	0	67
27	15	70	200	200	105	150	38	5.7	190	.33	0	69
28	11	54	160	400	100	250	84	4.8	158	.22	0	43
29	6.2	42	130	500	100	220	96	3.7	98	.14	0	26
30	4.3	35	110	600	------	200	80	4.7	54	.12	0	58
31	4.8	------	100	650	------	190	------	3.4	------	.09	0	------
TOTAL	148.3	1,329.2	10,252	22,330	6,605	4,347	2,028	1,230.4	1,752.11	224.89	.10	296.5
MEAN	4.78	44.3	331	720	228	140	67.6	39.7	58.4	7.25	.003	9.88
MAX	37	173	650	2,300	550	250	180	92	262	30	.06	69
MIN	0	3.0	31	100	100	80	28	3.4	.33	.09	0	0
CFSM	.01	.12	.86	1.88	.60	.37	.18	.10	.15	.02	0	.03
IN.	.01	.13	1.00	2.17	.64	.42	.20	.12	.17	.02	0	.03
AC-FT	294	2,640	20,330	44,290	13,100	8,620	4,020	2,440	3,480	446	.2	588

CAL YR 1971 TOTAL 23,167.03 MEAN 63.5 MAX 650 MIN 0 CFSM .17 IN 2.25 AC-FT 45,950
WTR YR 1972 TOTAL 50,543.50 MEAN 138 MAX 2,300 MIN 0 CFSM .36 IN 4.91 AC-FT 100,300

PEAK DISCHARGE (BASE, 2,000 CFS).--Jan. 5 (unknown) 2,620 cfs (11.33 ft).

07346070 Little Cypress Creek near Jefferson, Tex.

LOCATION.--Lat 32°42'46", long 94°20'44", Harrison-Marion County line, near center of channel at downstream side of bridge on U.S. Highway 59, 0.3 mile downstream from Texas and Pacific Railway Co. bridge, 3.3 miles downstream from Grays Creek, and 3.5 miles south of Jefferson.

DRAINAGE AREA.--675 sq mi.

PERIOD OF RECORD.--June 1946 to current year (monthly discharge only for June 1946 to September 1963, published in WSP 1920).

GAGE.--Water-stage recorder. Datum of gage is 174.60 ft above mean sea level. Prior to Sept. 19, 1947, nonrecording gage at upstream side of bridge at same datum.

AVERAGE DISCHARGE.--26 years, 496 cfs (9.98 inches per year, 359,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,290 cfs Jan. 11 (gage height, 11.42 ft); no flow Sept. 13-23.
Period of record: Maximum discharge, 35,500 cfs Apr. 26, 1966 (gage height, 22.28 ft); no flow at times.
Maximum stage since May 1944, that of Apr. 26, 1966; flood in May 1944 reached a stage of 21.1 ft.

REMARKS.--Records good. During water year, the city of Gilmer discharged about 1,860 acre-ft of sewage effluent into tributaries above station. No known diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	14	90	326	618	203	221	182	11	173	5.0	.02
2	1.7	13	75	475	618	319	197	257	10	148	4.3	.01
3	1.8	12	91	545	605	407	182	300	9.0	109	3.5	.01
4	2.6	11	95	845	568	475	182	280	8.2	72	2.8	.01
5	2.0	10	108	1,160	545	535	182	221	7.1	58	2.1	.02
6	1.4	9.2	182	1,160	535	568	187	160	6.6	44	1.6	.01
7	.85	9.0	263	1,090	545	515	182	139	5.7	47	1.2	.01
8	.60	8.6	269	1,090	568	399	167	127	5.2	43	.82	.01
9	.43	8.0	299	1,460	618	340	149	111	4.4	31	.58	.01
10	.30	7.4	333	2,060	645	312	133	90	4.0	23	.41	.01
11	.20	7.2	347	2,220	645	299	122	73	3.8	19	.32	.01
12	.14	6.8	347	1,990	630	281	116	68	4.0	17	.27	.01
13	.11	6.7	340	1,740	580	257	112	74	4.7	15	.63	0
14	.11	6.6	340	1,540	515	233	102	85	7.1	13	3.3	0
15	.10	6.4	340	1,340	431	221	95	86	20	12	1.5	0
16	.11	6.2	340	1,160	383	198	91	81	25	10	.85	0
17	.15	6.2	347	1,020	347	182	83	84	56	9.6	.52	0
18	.31	11	361	915	319	172	80	90	65	15	.33	0
19	17	24	368	780	300	158	80	91	56	18	.19	0
20	16	22	383	675	287	149	75	81	46	17	.11	0
21	11	30	407	568	281	145	68	62	46	18	.07	0
22	8.6	31	431	495	275	141	62	47	50	21	.06	0
23	6.8	44	455	423	263	137	56	37	67	18	.05	0
24	7.0	66	495	368	245	145	52	30	135	15	.05	.01
25	6.6	86	515	326	239	192	48	25	198	12	.06	.03
26	5.6	102	525	293	221	221	46	23	226	9.5	.06	.04
27	4.8	116	515	275	209	245	61	20	231	7.8	.04	.06
28	4.3	126	485	287	197	257	98	18	226	6.6	.04	.04
29	4.0	122	439	354	192	287	122	16	209	6.0	.03	30
30	4.2	108	391	555	------	257	158	15	189	6.0	.02	60
31	11	------	326	630	------	239	------	13	------	5.5	.02	------
TOTAL	122.11	1,036.3	10,302	28,165	12,424	8,489	3,509	2,986	1,935.8	1,019.0	30.83	90.32
MEAN	3.94	34.5	332	909	428	274	117	96.3	64.5	32.9	.99	3.01
MAX	17	126	525	2,220	645	568	221	300	231	173	5.0	60
MIN	.10	6.2	75	275	192	137	46	13	3.8	5.5	.02	0
CFSM	.006	.05	.49	1.35	.63	.41	.17	.14	.10	.05	.002	.005
IN.	.006	.06	.57	1.55	.68	.47	.19	.16	.11	.06	.001	.004
AC-FT	242	2,060	20,430	55,870	24,640	16,840	6,960	5,920	3,840	2,020	61	179

CAL YR 1971 TOTAL 32,975.97 MEAN 90.3 MAX 525 MIN 0 CFSM .13 IN 1.82 AC-FT 65,410
WTR YR 1972 TOTAL 70,109.36 MEAN 192 MAX 2,220 MIN 0 CFSM .28 IN 3.86 AC-FT 139,100

07346140 Frazier Creek near Linden, Tex.

LOCATION.--Lat 33°03'16", long 94°17'22", Cass County, on right bank at downstream side of bridge on U.S. Highway 59, 1.6 miles upstream from Colley Creek, 3.7 miles upstream from Johns Creek, and 5.5 miles northeast of Linden.

DRAINAGE AREA.--48.0 sq mi.

PERIOD OF RECORD.--August 1958 to June 1961 (low-flow partial record only), November 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 228.7 ft above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--7 years (1965-72), 29.0 cfs (8.20 inches per year, 21,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 212 cfs Jan. 3 (gage height, 8.00 ft); no flow at times.
Period of record: Maximum discharge, 2,620 cfs Apr. 24, 1966 (gage height, 12.28 ft); no flow at times each year.
Maximum stage since at least 1945, 15.6 ft Apr. 26, 27, 1958, from information by State Highway Department.

REMARKS.--Records good. No known diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.15	2.7	67	57	16	17	12	.04			0
2	0	.15	4.5	140	48	39	15	91	.02			0
3	0	.09	16	195	40	47	15	135	.01			0
4	0	.07	29	195	31	28	59	53	0			0
5	0	.09	17	183	28	22	76	23	0			0
6	0	.09	29	131	30	18	36	15	0			0
7	.02	.05	51	71	30	18	28	12	0			0
8	.01	.01	42	56	25	18	23	16	0			0
9	0	.01	28	51	22	17	18	16	0			0
10	0	.13	41	48	22	15	15	11	0			0
11	0	.25	63	40	21	15	14	9.0	0			0
12	0	.25	31	33	30	15	14	9.8	0			0
13	0	.28	22	31	37	16	12	17	0			0
14	0	.31	25	27	28	15	10	14	0			0
15	0	.28	42	22	25	15	10	7.5	0			0
16	0	.25	62	20	23	16	13	4.6	0			0
17	0	.25	32	20	21	14	11	3.3	0			0
18	0	3.0	24	21	19	13	7.4	2.6	0			0
19	0	36	19	22	17	11	6.1	2.2	0			0
20	0	18	17	22	16	10	5.4	1.6	0			0
21	6.0	7.0	16	22	17	11	7.7	1.5	0			0
22	4.2	4.0	13	20	18	11	13	1.2	0			0
23	1.2	3.5	11	19	22	9.8	8.4	.94	0			0
24	.50	5.0	11	18	22	15	5.0	.70	0			.75
25	.34	5.3	11	16	21	38	3.6	.50	0			20
26	.38	4.0	10	14	18	36	2.8	.34	0			15
27	.25	3.3	10	32	16	22	4.4	.22	0			2.8
28	.19	3.2	21	74	14	46	25	.13	0			1.5
29	.13	2.8	41	123	15	45	20	.11	0			1.3
30	.13	2.7	38	132	------	26	15	.08	0			1.2
31	.13	------	37	95	------	19	------	.06	------			------
TOTAL	13.49	100.51	816.2	1,960	733	656.8	509.8	461.38	.07	0	0	42.55
MEAN	.44	3.35	26.3	63.2	25.3	21.2	17.0	14.9	.002	0	0	1.42
MAX	6.0	36	63	195	57	47	76	135	.04	0	0	20
MIN	0	.01	2.7	14	14	9.8	2.8	.06	0	0	0	0
CFSM	.009	.07	.55	1.32	.53	.44	.35	.31	0	0	0	.03
IN.	.01	.08	.63	1.52	.57	.51	.40	.36	0	0	0	.03
AC-FT	27	199	1,620	3,890	1,450	1,300	1,010	915	.1	0	0	84

CAL YR 1971 TOTAL 3,378.77 MEAN 9.26 MAX 66 MIN 0 CFSM .19 IN 2.62 AC-FT 6,700
WTR YR 1972 TOTAL 5,293.80 MEAN 14.5 MAX 195 MIN 0 CFSM .30 IN 4.10 AC-FT 10,500

PEAK DISCHARGE (BASE, 700 CFS).--No peak above base.

08017200 Cowleech Fork Sabine River at Greenville, Tex.

LOCATION.--Lat 33°07'56", long 96°04'40", Hunt County, on right bank at downstream side of downstream bridge on Interstate Highway 30 (U.S. Highway 67), 0.3 mile downstream from Horse Creek, 0.9 mile downstream from Louisiana and Arkansas Railroad Co. bridge, 1.8 miles east of Greenville, and at mile 558.3.

DRAINAGE AREA.--77.7 sq mi.

PERIOD OF RECORD.--February 1959 to current year. Prior to October 1963, published as Sabine River at Greenville.

GAGE.--Water-stage recorder. Datum of gage is 485.07 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 59.9 cfs (10.47 inches per year, 43,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,500 cfs Dec. 9 (gage height, 17.58 ft); no flow July 29, 30, Aug. 4-10.
Period of record: Maximum discharge, 10,800 cfs May 7, 1969 (gage height, 17.95 ft); no flow at times in 1964, 1969-70, 1972.
Maximum stage since 1895, 22 ft in May 1935, from information by local resident and city engineer of Greenville. Flood of July 3, 1913, reached a stage of 20 ft, from information by local resident.

REMARKS.--Records good prior to July 18 and fair thereafter. The city of Greenville reported that during the current water year 4,480 acre-ft of water was diverted from city lakes upstream from station and 2,510 acre-ft from Lake Tawakoni for municipal use, and 2,640 acre-ft of sewage effluent was returned to a tributary downstream from station. Extreme low flow is largely sustained by returned water from water treatment plant upstream. Recording rain gage located at station was discontinued Apr. 19, 1972.

REVISIONS (WATER YEARS).--WSP 1732: Drainage area. WSP 1922: 1960. WRD Texas 1968: 1966-67.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.4	1.7	5.2	22	2.0	1.2	.44	.61	.76	.19	.01	.27
2	.4	2.0	52	12	1.9	.77	.24	3.5	.41	.14	.01	.26
3	116	2.2	426	12	1.8	1.0	.28	2.9	.74	.11	.02	.26
4	520	.98	38	48	2.0	.64	.39	1.2	.53	.05	0	.20
5	23	1.0	976	12	2.0	.60	.21	.61	.25	.04	0	.15
6	4.7	1.6	2,130	7.0	1.9	.76	.43	.75	.32	.05	0	.14
7	2.4	1.6	622	6.1	2.6	1.4	.51	.86	.01	.05	0	.12
8	1.3	1.3	312	5.3	2.4	.71	.36	.68	.01	.19	0	.17
9	1.0	.83	6,100	5.2	2.0	1.8	.17	.56	.02	.21	0	.14
10	.5	1.8	6,030	5.2	2.6	.71	.28	.38	.02	.09	0	.09
11	.5	1.4	448	3.6	4.2	.60	.35	.30	.01	.07	2.0	.16
12	.6	2.3	83	3.3	2.9	.63	.18	1.7	.01	.20	.60	.15
13	.6	2.1	46	2.5	2.8	.44	.42	.86	.01	.40	2.5	.18
14	.6	1.3	72	2.2	2.9	.73	.58	.22	2.7	.23	1.0	.26
15	.8	1.9	291	1.8	3.2	.52	1.0	.17	1.1	.11	4.0	.37
16	1.0	1.6	51	1.8	2.9	.51	.33	.10	.81	.05	1.5	.34
17	.3	2.1	24	1.7	2.7	.91	.14	.17	.45	.04	.75	.25
18	3.7	13	15	2.0	2.5	.72	.24	.70	.24	3.9	.50	.32
19	4,260	21	11	1.9	2.2	.67	.38	1.1	.18	2.1	.35	.32
20	5,140	4.3	8.2	1.7	2.1	1.2	.16	.59	.12	.16	.31	.30
21	777	2.6	6.6	1.7	2.0	.90	.88	.29	.11	.08	.28	.31
22	45	3.1	4.7	1.8	2.2	1.3	.59	.36	2.2	.09	.26	.33
23	23	7.9	3.7	1.8	1.6	1.2	.19	.48	.59	.06	.31	.31
24	13	2.6	3.5	1.5	2.3	4.8	.22	.49	.32	.09	.27	4.4
25	8.4	2.3	2.8	1.2	2.5	3.3	.70	.52	.46	.05	.36	1.2
26	5.6	1.8	2.6	1.9	2.4	1.5	.27	.92	.36	.05	.33	.47
27	5.0	2.0	2.7	2.5	2.5	1.1	12	.62	.30	.02	.29	.24
28	3.0	1.6	2.6	2.3	2.4	.66	3.4	.68	.30	.02	.19	.14
29	3.0	1.6	1.9	2.0	1.5	.47	1.2	.62	.69	0	.15	.20
30	2.1	2.3	2.8	2.0	------	.65	.67	.71	.52	0	.15	.16
31	2.5	------	2.1	2.0	------	.50	------	.88	------	.02	.28	------
TOTAL	10,965.4	93.81	17,776.4	178.0	69.0	32.90	27.21	24.53	14.55	8.86	16.42	12.21
MEAN	354	3.13	573	5.74	2.38	1.06	.91	.79	.49	.29	.53	.41
MAX	5,140	21	6,100	48	4.2	4.8	12	3.5	2.7	3.9	4.0	4.4
MIN	.30	.83	1.9	1.2	1.5	.44	.14	.10	.01	0	0	.09
CFSM	4.56	.04	7.37	.07	.03	.01	.01	.01	.006	.004	.007	.005
IN.	5.25	.04	8.51	.09	.03	.02	.01	.01	.006	.004	.007	.005
AC-FT	21,750	186	35,260	353	137	65	54	49	29	18	33	24

CAL YR 1971 TOTAL 31,760.24 MEAN 87.0 MAX 6,100 MIN .08 CFSM 1.12 IN 15.21 AC-FT 63,000
WTR YR 1972 TOTAL 29,219.29 MEAN 79.8 MAX 6,100 MIN 0 CFSM 1.03 IN 13.99 AC-FT 57,960

PEAK DISCHARGE (BASE, 2,000 CFS).--Oct. 19 (1045) 8,290 cfs (17.57 ft); Dec. 9 (1800) 10,500 cfs (17.58 ft).

08017300 South Fork Sabine River near Quinlan, Tex.

LOCATION.--Lat 32°53'52", long 96°15'11", Hunt County, on right bank at downstream side of bridge on Farm Road 1565, 2.4 miles upstream from Dry Creek, 6.2 miles upstream from Bearpen Creek, and 7 miles southwest of Quinlan.

DRAINAGE AREA.--78.7 sq mi.

PERIOD OF RECORD.--February 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 461.40 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 56.2 cfs (9.70 inches per year, 40,720 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,000 cfs Oct. 20 (gage height, 16.90 ft); no flow for many days.
Period of record: Maximum discharge, 14,500 cfs May 7, 1969 (gage height, 16.93 ft); no flow at times each year.
Maximum stage since at least 1890, 21 ft July 29, 1902, from information by local resident. Flood of Apr. 27, 1957, reached a stage of 17.76 ft, from floodmarks.

REMARKS.--Records good. Recording rain gage located at station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.94	.4	54	.82	.04	0	1.9	0			
2	0	.76	137	66	.66	.01	0	3.6	0			
3	434	.54	437	89	.45	0	0	4.1	0			
4	1,180	.40	35	507	.34	0	0	.35	0			
5	55	.32	1,440	32	.26	0	0	.12	0			
6	7.5	.19	1,780	15	.37	0	0	.10	0			
7	2.4	.13	421	16	.36	0	0	.07	0			
8	.9	.11	261	14	.26	0	0	.01	0			
9	.7	.09	4,760	13	.22	0	0	.05	0			
10	.5	.07	4,200	11	.17	0	0	0	0			
11	.3	.07	249	6.7	.16	0	0	0	0			
12	.2	.04	32	4.5	.59	0	0	0	0			
13	.1	.04	18	3.2	.90	0	0	0	0			
14	.1	.04	57	2.3	.67	0	0	0	7.2			
15	.1	.03	293	1.4	.42	0	0	0	6.6			
16	.1	.02	37	.97	.33	0	0	0	.64			
17	0	.04	16	.95	.26	0	0	0	.07			
18	26	8.3	9.4	1.2	.16	0	0	0	0			
19	5,060	5.0	6.7	1.3	.12	0	0	0	0			
20	6,600	1.9	5.4	1.3	.09	0	0	0	0			
21	508	1.1	4.1	1.3	.08	0	0	0	1.5			
22	34	.70	3.1	1.1	.07	0	0	0	3.1			
23	13	7.4	2.7	1.0	.07	0	0	0	.73			
24	7.6	5.8	2.5	.94	.07	0	0	0	.06			
25	5.0	2.8	2.3	.67	.08	1.5	0	0	0			
26	3.4	1.6	2.2	.52	.07	.82	0	0	0			
27	3.0	1.1	2.1	.74	.05	.40	164	0	0			
28	2.6	.70	2.0	1.0	.04	.28	138	0	0			
29	2.2	.54	1.6	.97	.03	.16	13	0	0			
30	1.9	.40	1.8	1.2	------	.07	4.4	0	0			
31	1.4	------	1.4	.99	------	.02	------	0	------			------
TOTAL	13,950.0	41.17	14,220.7	851.25	8.17	3.30	319.4	10.30	19.90	0	0	0
MEAN	450	1.37	459	27.5	.28	.11	10.6	.33	.66	0	0	0
MAX	6,600	8.3	4,760	507	.90	1.5	164	4.1	7.2	0	0	0
MIN	0	.02	.40	.52	.03	0	0	0	0	0	0	0
CFSM	5.72	.02	5.83	.35	.004	.001	.13	.004	.008	0	0	0
IN.	6.59	.02	6.72	.40	.003	.001	.15	.004	.009	0	0	0
AC-FT	27,670	82	28,210	1,690	16	6.6	634	20	39	0	0	0

CAL YR 1971 TOTAL 29,284.56 MEAN 80.2 MAX 6,600 MIN 0 CFSM 1.02 IN 13.84 AC-FT 58,090
WTR YR 1972 TOTAL 29,424.19 MEAN 80.4 MAX 6,600 MIN 0 CFSM 1.02 IN 13.91 AC-FT 58,360

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	0200	15.02	1,910	12-5	2045	15.48	3,860
10-20	0345	16.90	14,000	12-9	1745	15.87	6,600

08017400 Lake Tawakoni near Wills Point, Tex.

LOCATION.--Lat 32°48'40", long 95°54'56", Rains-Van Zandt County line, in stairwell at left end of spillway of Iron Bridge Dam on Sabine River, 750 ft upstream from bridge on Farm Road 47, 3 miles upstream from McBee Creek, 9.0 miles northeast of Wills Point, and at mile 514.5.

DRAINAGE AREA.--756 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

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

EXTREMES.--Current year: Maximum contents, 1,079,000 acre-ft Dec. 11 (elevation, 441.29 ft); minimum, 816,400 acre-ft Sept. 30 (elevation, 434.06 ft).
Period of record: Maximum contents, 1,130,000 acre-ft May 1, 1966 (elevation, 442.58 ft); minimum since lake first filled in May 1965, 816,400 acre-ft Sept. 30, 1972 (elevation, 434.06 ft).

REMARKS.--Lake is formed by a rolled earthfill dam, 29,560 ft long including a 480-foot uncontrolled concrete gravity spillway with ogee weir section. Outlet works consist of two 4- by 6-foot sluice gates and two 20-inch steel pipes controlled by service valves. Closure of earth dam began July 1, 1960, and deliberate impoundment of water began Oct. 7, 1960. Capacity table based on 1956 survey. Records furnished by Sabine River Authority show that during year the city of Dallas diverted 50,850 acre-ft of water for municipal use in the Trinity River Basin, the city of Greenville diverted 2,510 acre-ft, and that 19 other users in the Sabine River Basin diverted a total of 1,380 acre-ft. Lake built for water conservation. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	454.0	-
Crest of spillway	437.5	936,200
Invert of lowest intake to wet well	416.5	342,700
Invert of two 4- by 6-foot sluice gates	378.0	0

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

434.0	814,300	440.0	1,029,000
436.0	882,800	442.0	1,107,000
438.0	954,300		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	841.70	963.90	934.40	963.20	940.20	935.20	915.30	909.30	891.30	876.20	850.60	831.90
2	841.10	961.30	939.50	961.30	944.60	929.40	913.20	909.70	890.20	875.90	849.60	831.90
3	848.20	958.00	940.90	968.00	937.70	927.90	916.00	908.60	889.90	875.50	848.90	831.60
4	853.00	954.30	941.70	967.60	936.60	929.00	913.20	908.30	889.20	875.20	848.20	830.90
5	856.50	953.20	955.80	963.20	936.20	927.20	912.90	907.20	888.10	873.40	847.20	829.60
6	856.50	952.20	972.80	961.30	939.10	926.10	911.80	907.20	887.40	871.40	845.80	828.90
7	855.40	948.90	981.60	959.50	935.90	927.90	913.60	908.30	886.70	870.70	844.80	828.50
8	855.10	948.50	983.50	958.80	935.50	926.10	911.10	906.50	886.30	870.00	843.80	828.20
9	854.80	947.80	1,032.00	957.60	935.20	925.40	911.10	905.40	884.90	869.60	843.10	827.90
10	852.70	946.40	1,077.00	956.20	935.20	925.00	910.70	904.70	884.20	868.90	842.40	826.90
11	851.60	945.30	1,071.00	954.30	936.60	924.00	910.70	903.70	883.50	868.20	841.40	826.20
12	851.60	944.90	1,054.00	952.90	935.90	924.30	909.00	905.10	882.80	866.90	841.40	825.80
13	850.90	943.50	1,039.00	953.20	935.20	925.00	908.30	904.70	882.10	866.50	840.10	824.50
14	849.90	942.80	1,028.00	951.40	935.90	923.60	910.70	903.70	886.00	865.50	840.40	824.10
15	849.20	942.40	1,021.00	947.50	935.50	924.30	911.10	903.00	885.60	864.10	841.40	823.80
16	849.20	942.40	1,014.00	946.40	934.80	923.20	910.00	902.60	884.60	863.10	841.40	823.10
17	850.60	942.00	1,005.00	945.30	935.20	922.90	908.60	902.20	884.20	863.10	841.40	822.10
18	854.40	945.30	997.70	946.00	934.10	921.80	908.30	901.20	883.10	862.70	839.40	822.10
19	881.70	942.00	991.20	946.00	933.00	921.40	908.30	900.80	882.80	862.40	838.00	821.10
20	995.00	941.70	985.30	945.60	933.00	921.10	908.30	900,10	882.10	861.00	838.00	820.40
21	1,011.00	940.60	981.60	944.90	933.40	921.10	909.00	898.70	883.90	861.00	838.00	821.10
22	1,007.00	936.20	976.50	944.90	933.00	920.00	907.60	898.40	883.10	861.30	836.70	821.10
23	999.90	941.70	973.20	943.80	932.60	919.60	909.00	898.00	882.80	860.60	835.70	820.10
24	991.20	939.90	970.90	944.20	932.60	923.20	906.80	896.90	882.10	859.90	834.60	820.40
25	985.00	938.80	968.70	942.00	934.80	920.30	904.70	896.60	881.10	858.60	834.30	819.70
26	984.60	939.90	966.50	942.40	932.30	918.90	904.00	895.50	879.70	857.20	835.70	819.70
27	976.50	937.00	965.40	944.20	932.30	920.30	909.00	894.80	879.00	856.50	836.00	819.10
28	973.20	938.80	961.70	942.00	931.50	922.10	909.30	894.80	878.60	854.80	834.60	818.40
29	969.80	936.20	964.30	942.00	931.50	918.50	909.00	895.20	878.60	854.10	834.00	821.10
30	968.70	935.90	959.90	941.30	------	917.50	909.00	893.80	877.60	852.70	832.30	816.40
31	965.00	------	957.60	940.20	------	916.40	------	892.30	------	851.60	831.90	------
(†)	438.29	437.49	438.09	437.61	437.37	436.95	436.74	436.27	435.85	435.10	434.52	434.06
(*)	+122,600	-29,100	+21,700	-17,400	-8,700	-15,100	-7,400	-16,700	-14,700	-26,000	-19,700	-15,500
(††)	5,610	3,490	3,050	3,590	3,620	4,580	1,140	3,970	6,280	7,230	6,730	5,450
MAX	1,011.00	963.90	1,077.00	968.00	944.60	935.20	916.00	909.70	891.30	876.20	850.60	831.90
MIN	841.10	935.90	934.40	940.20	931.50	916.40	904.00	892.30	877.60	851.60	831.90	816.40

CAL YR 1971..... * +34,400 †† 65,000 MAX 1,077.00 MIN 827.20
WTR YR 1972..... * -26,000 †† 54,740 MAX 1,077.00 MIN 816.40

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use.
NOTE.--All figures expressed in thousands.

08017410 Sabine River near Wills Point, Tex.

LOCATION.--Lat 32°48'34", long 95°54'46", Van Zandt County, on right bank at downstream side of bridge on Farm Road 47, 750 ft downstream from Iron Bridge Dam which forms Lake Tawakoni, 3.0 miles upstream from McBee Creek, 9.0 miles northeast of Wills Point, and at mile 514.3.

DRAINAGE AREA.--756 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 13,600 cfs Dec. 11 (gage height, 18.5 ft, from graph based on gage readings); no flow Oct. 1, 2, 6-17.
Period of record: Maximum discharge, 13,600 cfs Dec. 11, 1971 (gage height, 18.5 ft, from graph based on gage readings); no flow Oct. 1, 2, 6-17, 1971.
Maximum discharge since construction of Iron Bridge Dam in 1960, about 21,000 cfs May 1, 1966, from theoretical rating curve of flow over dam 750 ft upstream.

REMARKS.--Records good. Flow regulated by Lake Tawakoni (see station 08017400).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	960	63	820	59	190	36	16	.19	.37	.19	.02
2	0	940	164	940	309	356	33	22	.19	.06	4.5	.18
3	.6	912	255	986	580	20	64	16	.19	.19	.06	.06
4	.4	682	78	1,780	20	59	65	15	.19	.19	.06	.06
5	.1	505	345	1,100	1.5	51	34	15	.19	.41	.06	4.6
6	0	592	1,120	900	189	32	34	15	3.7	.02	.06	.12
7	0	389	1,940	850	236	38	38	26	.06	3.8	.19	.19
8	0	246	2,260	775	1.6	59	45	32	.06	.19	5.4	.19
9	0	274	4,490	730	.01	32	27	18	.06	.19	.06	.16
10	0	209	10,700	670	.01	31	27	12	.06	.28	.06	.06
11	0	169	12,000	670	76	31	27	12	.19	.46	.06	.06
12	0	144	9,150	520	40	32	23	17	.28	.06	.19	4.3
13	0	124	6,860	684	33	32	24	12	.37	.06	.06	.01
14	0	112	5,540	695	7.8	33	24	17	1.3	.02	.19	.01
15	0	105	4,830	548	65	67	24	15	.55	.02	.50	.01
16	0	102	4,200	226	17	76	29	27	.55	.06	4.9	.01
17	0	86	3,680	191	34	31	22	24	.55	.33	.06	.01
18	.8	355	3,120	186	131	95	27	24	.55	4.4	.06	.01
19	55	321	2,700	186	1.8	31	26	24	.55	.06	.06	4.1
20	1,210	80	2,450	180	.37	32	26	24	2.1	.06	.06	.01
21	3,380	156	2,220	202	.06	36	54	24	1.4	.19	.06	.01
22	3,980	49	1,940	164	25	32	25	24	.74	.28	.06	.01
23	3,750	104	1,700	147	24	31	23	24	.64	.28	4.6	.01
24	3,060	107	1,500	213	23	56	29	17	.74	.28	.06	.10
25	2,550	16	1,330	154	22	54	21	16	.74	4.7	.02	.01
26	2,260	81	1,180	102	216	30	22	.46	.74	.06	.02	4.4
27	2,100	55	1,030	226	24	30	25	.19	.74	.06	.02	.35
28	1,900	173	980	329	22	78	24	.46	.74	.06	.06	.01
29	1,540	132	865	496	24	152	14	.74	.84	.06	.06	3.1
30	1,270	81	835	231	------	38	14	11	5.2	.06	4.5	.56
31	1,070	------	760	80	------	35	------	.64	------	.19	.07	------
TOTAL	28,126.9	8,261	90,285	15,981	2,182.15	1,900	906	501.49	24.40	17.45	26.31	22.73
MEAN	907	275	2,912	516	75.2	61.3	30.2	16.2	.81	.56	.85	.76
MAX	3,980	960	12,000	1,780	580	356	65	32	5.2	4.7	5.4	4.6
MIN	0	16	63	80	.01	20	14	.19	.06	.02	.02	.01
AC-FT	55,790	16,390	179,100	31,700	4,330	3,770	1,800	995	48	35	52	45

CAL YR 1971 TOTAL 142,004.08 MEAN 389 MAX 12,000 MIN 0 AC-FT 281,700
WTR YR 1972 TOTAL 148,234.43 MEAN 405 MAX 12,000 MIN 0 AC-FT 294,000

08017500 Sabine River near Emory, Tex.

LOCATION.--Lat 32°46'23", long 95°47'56", Rains-Van Zandt County line, on left bank at downstream side of bridge on State Highway 19, 3.7 miles upstream from Sandy Creek, 7.2 miles south of Emory, 12.3 miles downstream from McBee Creek, 13.8 miles downstream from Lake Tawakoni, and at mile 500.7.

DRAINAGE AREA.--888 sq mi, including Little and Yellow Steer Sloughs.

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 350.28 ft above mean sea level (Texas Reclamation Department bench mark).

AVERAGE DISCHARGE.--7 years (1952-59) prior to regulation by Lake Tawakoni, 547 cfs (396,300 acre-ft per year); 13 years (1959-72) after regulation by Lake Tawakoni, 411 cfs (297,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,100 cfs Dec. 10 (gage height, 17.62 ft); no flow for many days.
Period of record: Maximum discharge, 74,000 cfs Apr. 27, 1957 (gage height, 25.06 ft), from rating curve extended above 47,000 cfs; no flow at times. Maximum discharge since construction of Lake Tawakoni dam in 1960, 24,900 cfs May 1, 1966 (gage height, 18.38 ft).
Maximum stage since at least 1900, 25.7 ft in June 1943, from information by local resident and State Highway Department.

REMARKS.--Records good. Flow largely regulated by Lake Tawakoni (see station 08017400) since October 1960. Records include flow in Little and Yellow Steer Sloughs.

REVISIONS (WATER YEARS).--WSP 1562: 1957. WSP 1632: 1957. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	1,420	158	1,320	77	27	40	12	1.5	0		
2	2.0	1,210	195	2,030	70	264	36	13	.48	0		
3	2.1	1,070	725	1,810	579	169	35	20	.31	.11		
4	55	942	479	2,220	282	44	78	15	.25	.34		
5	105	671	525	2,460	43	81	48	11	.34	.36		
6	34	532	2,240	1,680	13	58	38	9.9	.20	.15		
7	8.9	574	2,450	1,210	296	41	37	11	.08	.05		
8	4.4	377	2,440	983	86	59	48	28	.02	0		
9	2.6	316	9,180	842	14	59	33	33	.16	0		
10	1.9	334	19,700	775	6.4	40	24	15	.74	.09		
11	1.2	259	14,200	704	5.5	38	24	7.6	.54	.23		
12	.9	225	11,800	622	75	38	23	7.1	.30	.10		
13	.6	206	10,000	554	55	37	16	10	.13	.02		
14	.4	191	8,570	694	42	36	14	7.2	13	.21		
15	.3	184	8,040	645	33	35	14	8.2	4.6	.40		
16	.2	176	7,080	355	61	58	15	9.0	8.4	.20		
17	.3	169	6,370	222	29	74	20	19	1.5	.19		
18	4.0	315	5,360	203	55	49	13	23	.21	.13		
19	607	529	4,240	196	101	82	18	23	.26	.03		
20	3,830	269	3,460	193	22	38	17	22	.15	0		
21	6,800	188	3,000	200	5.4	33	20	22	1.3	.13		
22	6,070	216	2,680	191	3.2	39	45	22	2.4	.67		
23	5,940	149	2,320	169	14	34	21	22	.70	.42		
24	5,020	245	2,010	152	31	33	19	21	.39	.17		
25	3,920	166	1,790	228	31	61	23	12	.17	.04		
26	3,190	96	1,610	117	89	53	20	10	.17	0		
27	2,760	181	1,440	112	115	32	27	2.8	.03	0		
28	2,400	120	1,360	334	41	33	33	.64	.06	0		
29	2,070	294	1,250	234	28	114	26	.25	.12	0		
30	1,820	199	1,080	245	------	94	15	.12	.04	0		
31	1,600	------	967	144	------	43	------	1.0	------	.02		------
TOTAL	46,253.9	11,823	136,719	21,844	2,302.5	1,896	840	417.81	38.55	4.06	0	0
MEAN	1,492	394	4,410	705	79.4	61.2	28.0	13.5	1.29	.13	0	0
MAX	6,800	1,420	19,700	2,460	579	264	78	33	13	.67	0	0
MIN	.20	96	158	112	3.2	27	13	.12	.02	0	0	0
AC-FT	91,740	23,450	271,200	43,330	4,570	3,760	1,670	829	76	8.1	0	0

CAL YR 1971 TOTAL 222,765.55 MEAN 610 MAX 19,700 MIN 0 AC-FT 441,900
WTR YR 1972 TOTAL 222,138.82 MEAN 607 MAX 19,700 MIN 0 AC-FT 440,600

08018200 Grand Saline Creek near Grand Saline, Tex.

LOCATION.--Lat 32°40'20", long 95°36'36", Van Zandt County, on right bank at upstream side of bridge on U.S. Highway 80, 0.3 mile downstream from Texas and Pacific Railway Co. bridge, 1.7 miles upstream from mouth, and 5.5 miles east of Grand Saline.

DRAINAGE AREA.--91.4 sq mi.

PERIOD OF RECORD.--January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 325.5 ft above mean sea level (Texas Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 6,850 cfs Dec. 10 (gage height, 12.85 ft); maximum gage height, 16.62 ft Dec. 10 (backwater from Sabine River); minimum daily discharge, 0.11 cfs Sept. 2, 13-15.
Period of record: Maximum discharge, 6,850 cfs Dec. 10, 1971 (gage height, 12.85 ft); maximum gage height, 16.62 ft Dec. 10, 1971 (backwater from Sabine River); no flow at times in 1969-71.
Maximum stage since about 1945, 16.62 ft Dec. 10, 1971 (backwater from Sabine River). Flood in April 1957 reached a stage of 15.9 ft, from information by local residents.

REMARKS.--Records good. No known diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.85	12	830	52	12	4.4	4.6	1.2	.60	.29	.12
2	.29	.85	27	1,300	38	12	4.1	5.6	.68	.56	.32	.11
3	.38	.85	140	80	31	12	4.2	3.5	.60	.48	.38	.16
4	.68	.85	40	35	26	12	4.2	2.2	.42	.64	.52	.18
5	1.1	.85	195	25	24	12	3.9	1.4	.29	1.1	.56	.20
6	.78	.85	245	22	23	11	3.9	1.1	.24	1.0	.56	.22
7	.48	.84	40	20	23	10	3.9	1.0	.20	.64	.56	.24
8	.45	.84	30	19	21	10	3.8	.94	.18	.48	.56	.22
9	.42	.84	2,800	18	20	9.7	3.4	.89	.18	.52	.56	.35
10	.38	.84	5,800	18	20	9.1	2.5	.84	.18	.78	.52	.45
11	.35	.78	1,620	17	19	8.7	2.6	.64	.18	1.1	.66	.20
12	.35	.73	350	17	24	8.7	2.9	40	.24	1.4	2.6	.16
13	.35	.84	120	18	25	8.7	2.9	25	.35	.56	1.0	.11
14	.42	.89	65	18	24	9.1	2.9	7.8	702	.42	.48	.11
15	.48	1.0	55	19	22	9.1	3.0	4.2	549	.42	.32	.11
16	.68	.94	20	19	20	8.7	2.9	2.3	60	.42	.56	.22
17	.94	.84	15	19	19	8.4	2.5	1.4	16	.42	.88	.56
18	1.0	452	10	20	17	8.1	2.1	1.1	6.3	.38	.38	.48
19	132	200	7.0	20	15	7.6	1.9	.73	2.8	.35	.29	.32
20	593	40	4.0	20	14	7.0	1.9	.60	2.2	.32	.27	.29
21	300	25	2.5	20	14	7.0	2.7	.48	2.0	.40	.24	.24
22	130	21	1.5	20	14	7.3	3.6	.42	24	5.9	.24	.20
23	60	38	1.0	19	15	7.3	3.2	.35	14	2.4	.22	.18
24	25	38	1.0	18	15	10	2.2	.52	7.0	.68	.22	.89
25	10	29	1.0	17	15	14	1.6	1.0	4.8	.45	.22	5.0
26	7.0	24	1.0	16	14	9.1	1.4	.64	2.9	.35	.88	4.8
27	4.0	19	1.0	27	13	7.3	2.5	.35	1.8	.27	1.0	1.7
28	2.5	17	2.0	100	12	6.8	11	.27	1.1	.24	.48	.56
29	1.5	15	1.5	180	12	6.3	7.6	.29	.84	.24	.16	.35
30	1.0	14	1.0	251	------	5.0	5.8	6.1	.64	.27	.12	.70
31	.90	------	1.0	116	------	4.6	------	4.2	------	.29	.12	------
TOTAL	1,276.78	946.48	11,609.5	3,338	601	278.6	105.5	120.46	1,402.32	24.08	16.17	19.43
MEAN	41.2	31.5	375	108	20.7	8.99	3.52	3.89	46.7	.78	.52	.65
MAX	593	452	5,800	1,300	52	14	11	40	702	5.9	2.6	5.0
MIN	.29	.73	1.0	16	12	4.6	1.4	.27	.18	.24	.12	.11
CFSM	.45	.34	4.10	1.18	.23	.10	.04	.04	.51	.009	.006	.007
IN.	.52	.39	4.73	1.36	.24	.11	.04	.05	.57	.009	.006	.007
AC-FT	2,530	1,880	23,030	6,620	1,190	553	209	239	2,780	48	32	39

CAL YR 1971 TOTAL 15,487.21 MEAN 42.4 MAX 5,800 MIN 0 CFSM .46 IN 6.30 AC-FT 30,720
WTR YR 1972 TOTAL 19,738.32 MEAN 53.9 MAX 5,800 MIN .11 CFSM .59 IN 8.03 AC-FT 39,150

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.HT.	DISCHARGE
12-10	0300	12.85	6,850
1- 2	0400	11.03	2,090
6-14	1700	10.34	1,340

08018500 Sabine River near Mineola, Tex.

LOCATION.--Lat 32°36'46", long 95°29'08", Smith-Wood County line, near center of main channel on downstream side of bridge on U.S. Highway 69, 3.5 miles south of Mineola, 4.5 miles upstream from Missouri Pacific Railway Lines bridge, 16.2 miles upstream from Lake Fork Creek, and at mile 461.1.

DRAINAGE AREA.--1,357 sq mi.

PERIOD OF RECORD.--May 1939 to September 1959, October 1967 to current year. Gage-height records collected at this site since July 1946 are contained in reports published by the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 304.16 ft above mean sea level. May 12, 1939, to Dec. 11, 1955, at site 55 ft upstream; Dec. 12, 1955, to Dec. 12, 1959, at present site; Oct. 1, 1967, to Sept. 12, 1968, nonrecording gage at present site. All gages at present datum.

AVERAGE DISCHARGE.--20 years (1939-59) prior to regulation by Lake Tawakoni, 1,054 cfs (763,600 acre-ft per year); 5 years (1967-72) after regulation by Lake Tawakoni, 1,009 cfs (731,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 37,700 cfs Dec. 11 (gage height, 21.53 ft); no flow Aug. 29 to Sept. 1, Sept. 7.
Period of record: Maximum discharge, 76,000 cfs Apr. 1, 1945 (gage height, 24.00 ft); maximum gage height, 24.37 ft June 8, 1943; no flow at times.
Maximum stage since at least 1890, that of June 8, 1943.

REMARKS.--Records good. Flow partly regulated by Lake Tawakoni (station 08017400) located 53 miles upstream since October 1960. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	2,550	217	2,090	1,300	131	133	39	24	11	.18	0
2	24	2,380	215	3,160	995	144	90	37	18	8.3	.11	.02
3	19	2,150	429	3,720	575	171	73	36	19	6.5	.08	.02
4	17	1,900	884	4,230	432	343	69	30	17	5.7	.07	.02
5	15	1,560	1,320	4,520	621	248	66	29	15	5.4	.07	.02
6	13	1,330	1,730	3,940	488	144	90	29	12	4.8	.06	.01
7	27	1,080	2,080	3,710	261	147	82	27	9.6	4.3	.04	0
8	37	788	2,580	3,380	236	140	61	25	7.1	9.0	.02	1.7
9	29	569	3,480	2,970	371	116	53	24	5.1	22	.02	8.2
10	21	401	17,000	2,310	266	124	55	22	4.3	24	.02	9.2
11	15	307	36,200	1,810	163	124	56	27	5.8	18	.01	11
12	11	274	25,700	1,400	144	106	46	40	5.4	12	.12	12
13	8.6	214	13,900	1,220	152	97	41	97	4.0	9.1	.75	12
14	6.7	170	9,260	1,060	200	94	40	62	33	6.5	.81	13
15	5.5	154	7,560	933	188	94	36	37	556	4.5	1.6	13
16	4.5	139	6,460	907	160	94	32	29	772	3.2	1.8	15
17	4.3	131	6,100	887	149	92	29	26	456	2.4	1.8	18
18	4.7	641	5,230	675	153	109	28	24	156	2.2	.99	21
19	37	1,340	4,520	459	133	122	28	22	65	3.1	.55	17
20	453	1,600	4,080	375	152	115	29	23	40	2.5	.31	15
21	1,270	1,670	3,790	353	169	123	28	25	30	1.9	.23	14
22	2,120	1,390	3,580	339	129	104	30	25	34	1.4	.12	14
23	3,610	892	3,620	340	111	97	30	24	120	3.0	.08	14
24	4,340	502	3,430	324	105	99	34	24	128	11	.04	19
25	3,980	338	3,120	293	106	105	34	25	80	7.4	.03	26
26	3,760	324	2,860	286	116	106	26	25	59	4.1	.02	22
27	3,600	268	2,530	362	115	125	27	24	40	2.4	.02	25
28	3,400	173	2,260	442	179	111	34	21	26	1.6	.02	33
29	3,170	170	2,000	862	167	102	40	19	18	1.0	0	19
30	2,910	156	1,880	1,290	------	123	40	24	13	.69	0	19
31	2,750	------	1,760	1,410	------	167	------	25	------	.36	0	------
TOTAL	35,696.3	25,561	179,775	50,057	8,336	4,017	1,460	946	2,772.3	199.35	9.97	371.19
MEAN	1,151	852	5,799	1,615	287	130	48.7	30.5	92.4	6.43	.32	12.4
MAX	4,340	2,550	36,200	4,520	1,300	343	133	97	772	24	1.8	33
MIN	4.3	131	215	286	105	92	26	19	4.0	.36	0	0
AC-FT	70,800	50,700	356,600	99,290	16,530	7,970	2,900	1,880	5,500	395	20	736

CAL YR 1971 TOTAL 277,621.12 MEAN 761 MAX 36,200 MIN 0 AC-FT 550,700
WTR YR 1972 TOTAL 309,201.11 MEAN 845 MAX 36,200 MIN 0 AC-FT 613,300

08019000 Lake Fork Creek near Quitman, Tex.

LOCATION.--Lat 32°45'45", long 95°27'48", Wood County, near center of main channel at downstream side of bridge on State Highway 37, 0.3 mile downstream from Dry Creek, 2.4 miles south of Quitman, and 23.4 miles upstream from mouth.

DRAINAGE AREA.--585 sq mi.

PERIOD OF RECORD.--June 1924 to April 1926, February 1939 to current year. Discharge for some high-water periods in 1925-26 published in WSP 1342. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1961, published as Lake Fork Sabine River near Quitman.

GAGE.--Nonrecording gage read twice daily, more often during floods. Datum of gage is 317.42 ft above mean sea level. June 27, 1924, to Apr. 30, 1926, nonrecording gage at site 1,000 ft downstream at same datum.

AVERAGE DISCHARGE.--34 years (1924-25, 1939-72), 420 cfs (9.75 inches per year, 304,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 43,850 cfs Dec. 10 (gage height, 25.1 ft); no flow Aug. 29 to Sept. 15.
Period of record: Maximum discharge, 75,600 cfs Mar. 30, 1945 (gage height, 29.85 ft, from floodmark), from rating curve extended above 49,000 cfs; no flow at times most years.
Maximum stage since at least 1890, that of Mar. 30, 1945. Flood in July 1895 reached a stage of about 25.9 ft, from information by local resident.

REMARKS.--Records good. No large diversion above station. At end of year, flow from 51.8 sq mi above this station was partly controlled by 18 floodwater-retarding structures with a total combined capacity of 19,550 acre-ft below the flood-spillway crests, of which 17,700 acre-ft is floodwater-retarding capacity and 1,850 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	53	28	963	539	68	128	35	3.6	16	.31	0
2	30	40	34	2,430	385	82	66	29	3.5	12	.25	0
3	21	34	126	2,660	256	116	51	25	3.5	10	.24	0
4	20	27	364	3,820	195	68	44	20	3.5	9.4	.24	0
5	55	23	441	3,280	168	63	40	17	3.3	8.2	.20	0
6	212	19	750	2,660	148	58	39	14	2.8	7.4	.17	0
7	252	15	1,180	2,230	136	54	37	14	2.3	6.6	.16	0
8	201	12	4,620	1,810	130	58	34	15	1.9	6.0	.17	0
9	59	9.6	5,860	1,110	129	78	32	14	1.6	5.6	.12	0
10	37	8.2	25,000	668	118	112	30	11	1.5	5.1	.07	0
11	23	6.8	33,300	419	113	90	29	9.4	1.3	5.6	.13	0
12	18	6.0	10,900	312	125	75	25	25	1.2	5.0	.22	0
13	14	5.6	4,620	253	182	62	23	41	1.2	4.5	.24	0
14	10	5.0	2,600	202	293	58	22	25	61	4.0	.22	0
15	8.0	4.6	2,090	171	274	55	22	18	642	3.6	.24	0
16	6.0	4.0	1,850	148	276	53	19	14	1,170	3.0	.25	2.3
17	4.3	4.0	1,770	129	265	51	18	12	1,510	2.6	.18	7.6
18	3.0	266	1,670	121	229	47	16	10	840	2.3	.14	1.0
19	6.6	494	1,330	119	172	45	15	8.0	223	2.1	.12	.29
20	273	388	1,120	124	133	41	14	7.2	45	1.7	.10	.17
21	969	275	910	127	110	39	16	5.8	63	1.3	.06	.14
22	4,380	100	754	125	96	37	16	4.8	266	1.2	.02	.16
23	4,320	88	606	122	92	37	14	4.2	410	1.1	.01	.25
24	2,510	106	508	115	92	52	13	4.3	429	.95	.01	1.3
25	1,690	59	430	108	90	87	14	5.0	344	.85	.01	2.0
26	1,100	60	354	103	89	101	13	5.1	243	.77	.02	1.9
27	678	55	312	141	87	154	16	4.2	76	.65	.01	1.3
28	346	44	302	318	79	127	30	3.4	39	.51	.01	.65
29	145	36	300	486	73	173	29	3.5	27	.48	0	.51
30	92	31	322	595	------	278	33	5.1	20	.42	0	.77
31	71	------	310	634	------	260	------	5.3	------	.36	0	------
TOTAL	17,608.9	2,278.8	104,761	26,503	5,074	2,679	898	414.3	6,439.2	129.29	3.92	20.34
MEAN	568	76.0	3,379	855	175	86.4	29.9	13.4	215	4.17	.13	.68
MAX	4,380	494	33,300	3,820	539	278	128	41	1,510	16	.31	7.6
MIN	3.0	4.0	28	103	73	37	13	3.4	1.2	.36	0	0
CFSM	.97	.13	5.78	1.46	.30	.15	.05	.02	.37	.007	.0002	.001
IN.	1.12	.14	6.66	1.69	.32	.17	.06	.03	.41	.008	0	.001
AC-FT	34,930	4,520	207,800	52,570	10,060	5,310	1,780	822	12,770	256	7.8	40

CAL YR 1971 TOTAL 147,905.65 MEAN 405 MAX 33,300 MIN 0 CFSM .69 IN 9.41 AC-FT 293,400
WTR YR 1972 TOTAL 166,809.75 MEAN 456 MAX 33,300 MIN 0 CFSM .78 IN 10.61 AC-FT 330,900

PEAK DISCHARGE (BASE, 6,600 CFS).--Dec. 10 (2200) 43,850 cfs (25.1 ft).

08019300 Lake Winnsboro near Winnsboro, Tex.

LOCATION.--Lat 32°53'11", long 95°20'37", Wood County, near left end of dam on Big Sandy Creek, 0.8 mile upstream from bridge on State Highway 37, 2.5 miles upstream from Indian Creek, and 5.8 miles southwest of Winnsboro.

DRAINAGE AREA.--27.1 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Jan. 19, 1963, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 8,980 acre-ft Dec. 10 (elevation, 420.05 ft); minimum, 6,070 acre-ft Nov. 17 (elevation, 416.27 ft).
Period of record: Maximum contents, 10,020 acre-ft May 7, 1969 (elevation, 421.23 ft); minimum since first appreciable storage, 2,430 acre-ft Jan. 19, 20, 1965 (elevation, 409.79 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 2,500 ft long. Storage began June 11, 1962, and dam was completed in August 1962. Dam was built by Wood County for flood control and recreation. Service spillway is an uncontrolled 20-foot square drop-inlet structure, with crest elevation at 419.0 ft. The crest was raised in April 1966 from elevation 417 to 419 ft. Emergency spillway is a 300-foot cut through natural ground near right end of dam. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	437.0	-
Maximum design water level	433.0	22,500
Crest of emergency spillway	427.0	16,270
Crest of service spillway	419.0	8,110
Bottom of outlet pipe	392.2	0

COOPERATION.--Capacity curve (based on 1960 Geological Survey topographic maps) furnished by Wisenbaker, Fix and Associates, Consulting Engineers for Wood County.

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

416.0	5,890	419.0	8,110
417.0	6,590	420.0	8,940
418.0	7,330	421.0	9,820

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,180	6,230	6,180	8,770	8,330	8,130	8,020	7,860	7,520	8,060	7,610	7,120
2	6,170	6,210	6,230	8,810	8,290	8,100	8,020	7,860	7,500	8,030	7,590	7,110
3	6,210	6,180	6,240	8,810	8,250	8,100	8,020	7,850	7,480	8,020	7,560	7,080
4	6,210	6,170	6,240	8,870	8,240	8,100	8,020	7,840	7,460	8,100	7,560	7,080
5	6,200	6,160	6,320	8,730	8,220	8,080	8,020	7,820	7,450	8,100	7,540	7,060
6	6,190	6,150	6,420	8,630	8,230	8,060	8,010	7,820	7,440	8,070	7,520	7,050
7	6,170	6,130	6,490	8,550	8,210	8,140	8,020	7,820	7,410	8,050	7,500	7,040
8	6,160	6,120	6,580	8,510	8,200	8,150	7,990	7,810	7,390	8,040	7,480	7,030
9	6,150	6,120	8,040	8,450	8,190	8,140	7,980	7,810	7,390	8,020	7,440	7,010
10	6,120	6,110	8,930	8,400	8,180	8,150	7,980	7,790	7,380	8,010	7,430	7,000
11	6,120	6,100	8,780	8,370	8,180	8,130	7,980	7,790	7,360	7,990	7,420	6,990
12	6,110	6,090	8,620	8,350	8,190	8,130	7,970	7,820	7,350	7,980	7,400	6,970
13	6,100	6,090	8,570	8,310	8,200	8,140	7,960	7,810	7,370	7,950	7,390	6,960
14	6,090	6,090	8,580	8,270	8,220	8,130	7,960	7,790	7,910	7,930	7,380	6,940
15	6,090	6,090	8,620	8,240	8,220	8,130	7,940	7,780	8,050	7,900	7,370	6,940
16	6,080	6,080	8,560	8,220	8,210	8,120	7,920	7,770	8,060	7,890	7,370	6,950
17	6,090	6,090	8,480	8,220	8,200	8,110	7,910	7,750	8,050	7,870	7,350	6,940
18	6,120	6,240	8,410	8,220	8,180	8,070	7,900	7,740	8,040	7,860	7,340	6,940
19	6,210	6,230	8,380	8,220	8,160	8,090	7,900	7,710	8,030	7,840	7,300	6,920
20	6,300	6,220	8,310	8,220	8,160	8,070	7,890	7,710	8,020	7,820	7,300	6,910
21	6,300	6,220	8,280	8,200	8,160	8,080	7,890	7,700	8,100	7,800	7,280	6,890
22	6,290	6,200	8,240	8,200	8,150	8,070	7,880	7,680	8,310	7,790	7,270	6,880
23	6,280	6,230	8,240	8,190	8,170	8,070	7,870	7,660	8,360	7,770	7,240	6,890
24	6,280	6,220	8,230	8,190	8,170	8,100	7,850	7,660	8,300	7,760	7,220	6,930
25	6,270	6,220	8,220	8,160	8,180	8,100	7,830	7,650	8,240	7,740	7,240	6,930
26	6,260	6,220	8,210	8,190	8,150	8,090	7,820	7,640	8,190	7,730	7,220	6,930
27	6,260	6,210	8,210	8,210	8,140	8,120	7,860	7,620	8,150	7,700	7,210	6,920
28	6,260	6,200	8,190	8,240	8,140	8,100	7,870	7,600	8,140	7,680	7,190	6,910
29	6,250	6,200	8,210	8,340	8,140	8,060	7,860	7,590	8,110	7,650	7,160	6,930
30	6,250	6,180	8,250	8,360	------	8,050	7,860	7,570	8,070	7,640	7,150	6,900
31	6,230	------	8,230	8,350	------	8,040	------	7,540	------	7,610	7,130	------
(†)	416.49	416.42	419.15	419.30	419.03	418.91	418.68	418.28	418.95	418.37	417.74	417.43
(*)	+30	-50	+2,050	+120	-210	-100	-180	-320	+530	-460	-480	-230
MAX	6,300	6,240	8,930	8,870	8,330	8,150	8,020	7,860	8,360	8,100	7,610	7,120
MIN	6,080	6,080	6,180	8,160	8,140	8,040	7,820	7,540	7,350	7,610	7,130	6,880

CAL YR 1971..... * +1,240 MAX 8,930 MIN 6,080
WTR YR 1972..... * +700 MAX 8,930 MIN 6,080

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

08019500 Big Sandy Creek near Big Sandy, Tex.

LOCATION.--Lat 32°36'12", long 95°05'32", Upshur County, on left bank at downstream side of bridge on State Highway 155, 0.5 mile upstream from St. Louis Southwestern Railway Lines bridge, 1.6 miles northeast of Big Sandy, and 6.5 miles upstream from mouth.

DRAINAGE AREA.--231 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 278.38 ft above mean sea level. Prior to Oct. 5, 1940, nonrecording gage and Oct. 5, 1940, to Nov. 26, 1951, water-stage recorder at site 1.3 miles upstream at datum 3.00 ft higher.

AVERAGE DISCHARGE.--33 years, 174 cfs (126,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,520 cfs Dec. 13 (gage height, 12.97 ft); minimum, 10 cfs Aug. 9, 10, Sept. 11, 12.
Period of record: Maximum discharge, 24,000 cfs Mar. 31, 1945 (gage height, 24.1 ft, present site and datum, from floodmark), from rating curve extended above 13,000 cfs; minimum, 5.0 cfs Aug. 15, 1956.
Maximum stage since at least 1875, that of Mar. 31, 1945, from information by local residents.

REMARKS.--Records good. Flow partly regulated by Lake Winnsboro (station 08019300) since June 1962.

REVISIONS (WATER YEARS).--WSP 1732: 1941(M), 1945-46, 1956, drainage area. WSP 1922: 1944(M), 1945-46.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	41	199	311	77	91	76	23	53	13	13
2	16	19	46	636	400	95	77	141	19	38	13	13
3	18	18	104	777	366	100	71	101	18	29	13	13
4	24	17	95	1,030	294	114	71	67	17	28	12	12
5	28	17	118	1,280	232	136	70	54	17	31	13	12
6	29	17	213	1,070	203	154	68	50	17	39	13	12
7	24	16	240	875	185	147	66	49	16	40	11	12
8	21	19	231	773	155	165	65	63	16	42	11	12
9	20	19	210	581	136	155	61	75	16	49	11	12
10	23	17	239	492	124	151	56	66	17	55	11	11
11	20	16	300	391	119	162	55	50	26	54	11	11
12	17	17	495	328	127	179	53	61	23	39	12	11
13	16	20	1,380	285	129	177	51	115	19	26	13	11
14	16	23	1,300	253	128	153	49	104	34	23	13	12
15	15	18	1,020	209	126	137	48	73	86	21	22	12
16	19	17	799	180	120	127	47	60	85	19	21	14
17	18	19	596	165	119	114	45	56	58	18	19	16
18	19	250	474	164	114	107	41	48	62	21	17	19
19	20	389	397	156	108	101	38	40	82	20	17	19
20	32	190	355	136	103	97	36	35	88	17	16	19
21	55	148	322	124	98	95	40	31	65	16	16	19
22	55	113	283	119	95	93	52	29	84	16	16	20
23	42	109	247	116	99	88	42	27	102	17	16	22
24	35	100	215	113	87	105	35	26	67	15	16	51
25	41	80	187	108	83	116	33	24	62	14	18	46
26	36	64	157	103	81	111	32	22	81	15	20	40
27	28	54	137	105	84	111	48	21	101	14	23	33
28	25	53	125	142	84	118	75	20	111	13	21	29
29	22	49	121	190	79	114	68	19	103	14	18	26
30	21	44	128	215	------	100	61	23	77	14	15	37
31	20	------	139	231	------	97	------	27	------	14	14	------
TOTAL	791	1,951	10,714	11,546	4,389	3,796	1,645	1,653	1,592	824	475	589
MEAN	25.5	65.0	346	372	151	122	54.8	53.3	53.1	26.6	15.3	19.6
MAX	55	389	1,380	1,280	400	179	91	141	111	55	23	51
MIN	15	16	41	103	79	77	32	19	16	13	11	11
AC-FT	1,570	3,870	21,250	22,900	8,710	7,530	3,260	3,280	3,160	1,630	942	1,170

CAL YR 1971 TOTAL 27,192 MEAN 74.5 MAX 1,380 MIN 11 AC-FT 53,940
WTR YR 1972 TOTAL 39,965 MEAN 109 MAX 1,380 MIN 11 AC-FT 79,270

PEAK DISCHARGE (BASE, 1,500 CFS).--Dec. 13 (1600) 1,520 cfs (12.97 ft).

08020000 Sabine River near Gladewater, Tex.

LOCATION.--Lat 32°31'37", long 94°57'36", Gregg County, on right bank 46 ft downstream from bridge on U.S. Highway 271, 0.4 mile downstream from Glade Creek, 1.2 miles southwest of Gladewater, and at mile 397.5.

DRAINAGE AREA.--2,791 sq mi.

PERIOD OF RECORD.--October 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 243.85 ft above mean sea level (Texas Reclamation Department bench mark based on Geological Survey datum). Prior to Oct. 13, 1933, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years (1932-60) prior to regulation by Lake Tawakoni, 2,010 cfs (1,458,000 acre-ft per year); 12 years (1960-72) after regulation by Lake Tawakoni, 1,498 cfs (1,085,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 41,400 cfs Dec. 14 (gage height, 38.78 ft); minimum, 12 cfs Aug. 13.
Period of record: Maximum discharge, 138,000 cfs Apr. 2, 1945 (gage height, 44.16 ft, from floodmark), from rating curve extended above 91,000 cfs; minimum, 5.6 cfs Aug. 16, 1939.
Maximum stage since at least 1892, that of Apr. 2, 1945. Flood in May 1914 reached a stage of about 41.7 ft (discharge, 85,900 cfs), from information by local resident.

REMARKS.--Records good. Flow partly regulated by Lake Tawakoni (station 08017400) and five smaller reservoirs, with a combined capacity of 975,500 acre-ft. Many diversions above station for oilfield operations and municipal supply. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08019000.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	4,720	398	5,210	2,360	544	525	342	93	241	31	22
2	454	4,720	392	5,180	2,470	668	620	582	88	171	29	21
3	346	4,570	531	5,180	2,520	660	627	571	85	142	27	21
4	230	4,620	777	5,460	2,430	716	520	406	84	119	23	21
5	174	4,210	1,020	5,710	2,280	678	443	311	77	107	21	20
6	152	3,590	1,560	5,960	1,800	745	383	253	69	108	21	21
7	138	2,820	2,160	6,300	1,420	739	352	222	63	104	20	20
8	125	2,140	2,700	6,840	1,240	800	351	208	56	93	19	19
9	212	1,580	2,940	7,520	1,010	1,070	352	211	56	93	17	18
10	329	1,140	3,150	8,110	846	1,070	313	206	58	114	18	20
11	312	844	3,220	8,330	863	864	284	186	53	111	23	18
12	214	616	3,520	8,160	863	709	271	182	59	98	15	17
13	149	474	11,100	7,720	798	693	266	231	68	94	14	16
14	115	403	38,300	7,140	749	659	255	292	89	83	23	16
15	97	348	38,900	6,950	739	585	249	325	103	72	24	15
16	83	289	34,300	6,540	761	535	247	315	175	63	40	15
17	82	250	27,900	6,150	794	496	225	254	526	57	43	19
18	77	678	22,300	5,120	801	477	209	204	954	62	35	25
19	72	1,630	18,600	3,500	776	455	189	172	1,180	70	32	31
20	73	2,060	16,000	2,200	752	453	176	151	1,210	62	31	31
21	100	2,030	14,100	1,470	701	466	172	135	1,150	56	30	29
22	475	2,000	12,600	1,070	656	457	178	124	1,080	54	30	35
23	986	2,020	11,300	955	647	453	191	115	1,150	50	30	49
24	1,370	2,000	10,100	900	598	463	179	107	862	48	37	57
25	1,710	1,890	9,110	860	547	577	171	101	658	46	30	57
26	2,090	1,440	8,280	813	525	582	162	95	696	44	30	57
27	2,590	936	7,570	770	499	535	219	88	689	42	34	57
28	3,130	680	6,990	834	492	527	329	83	627	40	39	57
29	3,650	577	6,470	1,160	489	547	352	80	514	38	35	58
30	4,040	468	6,010	1,720	------	546	344	82	363	46	29	58
31	4,570	------	5,550	2,150	------	499	------	84	------	34	25	------
TOTAL	28,664	55,743	327,848	135,982	31,426	19,268	9,154	6,718	12,935	2,562	855	920
MEAN	925	1,858	10,580	4,387	1,084	622	305	217	431	82.6	27.6	30.7
MAX	4,570	4,720	38,900	8,330	2,520	1,070	627	582	1,210	241	43	58
MIN	72	250	392	770	489	453	162	80	53	34	14	15
AC-FT	56,860	110,600	650,300	269,700	62,330	38,220	18,160	13,330	25,660	5,080	1,700	1,820

CAL YR 1971 TOTAL 517,564.5 MEAN 1,418 MAX 38,900 MIN 7.4 AC-FT 1,027,000
WTR YR 1972 TOTAL 632,075.0 MEAN 1,727 MAX 38,900 MIN 14 AC-FT 1,254,000

08020200 Prairie Creek near Gladewater, Tex.

LOCATION (revised).--Lat 32°28'45", long 94°57'14", Gregg County, on downstream side of bridge on State Highway 135, 0.7 mile upstream from Little Caney Creek, 3.5 miles upstream from mouth, and 4.0 miles south of Gladewater.

DRAINAGE AREA.--48.9 sq mi.

PERIOD OF RECORD.--January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 280.95 ft above mean sea level (State Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 210 cfs Jan. 4 (gage height, 6.95 ft); minimum daily, 0.01 cfs Aug. 22, 23, Aug. 30 to Sept. 2, Sept. 8, 9, 14-22.
Period of record: Maximum discharge, 4,030 cfs May 10, 1968 (gage height, 9.91 ft); no flow at times.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.70	4.0	43	28	27	13	18	.96	3.4	.76	.01
2	2.2	.64	6.0	149	24	123	13	51	.76	2.7	.58	.01
3	2.2	.53	28	161	22	161	12	26	.70	1.9	.43	.64
4	2.3	.43	22	173	21	52	11	16	.58	2.1	.30	1.1
5	2.8	.38	23	162	21	29	10	12	.48	3.2	.23	.26
6	2.9	.34	70	82	21	24	11	10	.43	2.9	.17	.10
7	2.0	.38	83	51	21	23	11	9.0	.38	1.9	.12	.05
8	.76	.53	56	39	22	43	11	8.1	.30	1.5	.08	.01
9	.43	.58	42	36	24	70	9.1	6.9	.30	3.8	.08	.01
10	.30	.70	46	35	25	42	8.6	5.9	.96	42	.05	1.8
11	.26	.70	43	30	24	29	8.8	5.3	1.0	30	.48	1.2
12	.20	.70	26	27	22	26	8.8	7.0	.58	12	.12	.26
13	.17	.76	24	27	20	25	8.2	12	1.1	7.1	.12	.07
14	.17	.76	40	24	20	25	7.3	8.2	2.6	5.6	.20	.01
15	.20	.70	70	20	19	25	6.9	6.0	11	4.6	.76	.01
16	.20	.64	66	18	19	22	8.6	4.8	22	3.9	.70	.01
17	.34	.70	46	18	19	21	7.4	4.4	9.1	4.0	.82	.01
18	2.9	14	30	17	18	19	6.4	3.8	3.4	7.6	.48	.01
19	2.3	23	24	17	16	17	5.9	3.4	2.2	13	.26	.01
20	1.1	7.3	19	17	16	16	5.4	3.0	1.5	8.2	.14	.01
21	.89	4.5	17	16	17	16	5.5	2.8	1.6	5.6	.07	.01
22	.96	3.4	14	14	18	15	6.0	2.3	47	6.3	.01	.01
23	.96	4.5	14	14	18	14	5.2	2.0	101	3.5	.01	.05
24	.96	8.6	14	14	18	28	4.3	1.7	42	2.2	.26	29
25	.96	6.2	14	14	17	51	3.9	1.6	13	1.6	1.3	52
26	.96	5.0	14	13	16	28	3.5	1.4	8.1	1.2	1.4	12
27	.82	4.4	14	13	14	21	8.2	1.4	5.5	1.0	.38	6.6
28	.76	4.2	14	20	13	19	26	1.2	3.8	.76	.14	11
29	.76	5.1	13	115	14	17	17	1.1	3.1	.76	.06	7.1
30	.70	4.6	16	72	------	15	11	1.2	3.4	1.1	.01	8.2
31	.76	------	18	38	------	14	------	1.3	------	.96	.01	------
TOTAL	35.42	104.97	930.0	1,489	567	1,057	274.0	238.8	288.83	186.38	10.53	131.56
MEAN	1.14	3.50	30.0	48.0	19.6	34.1	9.13	7.70	9.63	6.01	.34	4.39
MAX	2.9	23	83	173	28	161	26	51	101	42	1.4	52
MIN	.17	.34	4.0	13	13	14	3.5	1.1	.30	.76	.01	.01
CFSM	.02	.07	.61	.98	.40	.70	.19	.16	.20	.12	.007	.09
IN.	.03	.08	.71	1.13	.43	.80	.21	.18	.22	.14	.008	.10
AC-FT	70	208	1,840	2,950	1,120	2,100	543	474	573	370	21	261

CAL YR 1971 TOTAL 3,690.17 MEAN 10.1 MAX 84 MIN 0 CFSM .21 IN 2.81 AC-FT 7,320
WTR YR 1972 TOTAL 5,313.49 MEAN 14.5 MAX 173 MIN .01 CFSM .30 IN 4.04 AC-FT 10,540

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

NOTE.--No gage-height record Jan. 17 to Feb. 16.

08020700 Rabbit Creek at Kilgore, Tex.

LOCATION.--Lat 32°23'17", long 94°54'11", Gregg County, near center of channel on downstream side of bridge on State Highway 31 at Kilgore, 0.4 mile upstream from Big Caney Creek, 4.4 miles upstream from Peavine Creek, and 14 miles upstream from mouth.

DRAINAGE AREA.--75.8 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 299.80 ft above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 41.1 cfs (7.36 inches per year, 29,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,120 cfs Jan. 4 (gage height, 10.75 ft); no flow July 28, Aug. 5-9, Aug. 30 to Sept. 2, Sept. 13-21.
Period of record: Maximum discharge, 15,200 cfs Apr. 24, 1966 (gage height, 16.40 ft); no flow at times in 1964, 1967-68, 1972.
Maximum stage since at least 1943, 19.6 ft July 11, 1945, from information by local resident and State Highway Department.

REMARKS.--Records good. Small diversions for oilfield operations upstream from station. Low flow partly sustained by effluents from oilfield operations.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.4	8.8	116	60	62	17	13	1.9	4.4	.31	0
2	1.9	2.1	27	193	55	198	16	31	1.4	3.5	.05	0
3	1.9	2.1	90	209	42	78	16	17	1.2	2.0	.02	2.4
4	2.3	1.8	32	831	34	36	15	11	1.0	2.4	.01	1.5
5	4.0	1.5	148	348	33	28	15	9.1	.92	3.9	0	2.6
6	3.0	1.3	212	84	35	23	15	8.0	.92	3.6	0	3.2
7	2.3	1.4	121	54	34	23	16	8.3	.72	1.7	0	.48
8	1.9	1.8	46	41	34	48	14	8.5	.72	.94	0	.27
9	1.5	2.1	41	39	28	34	13	7.5	.61	.76	0	.06
10	1.5	2.4	57	35	27	22	12	6.7	1.3	11	4.0	.03
11	1.4	2.4	38	28	28	20	13	6.5	1.0	5.1	9.4	.05
12	1.0	2.4	24	25	37	20	13	9.7	.92	3.0	1.2	.01
13	1.0	2.6	29	24	33	19	14	14	2.8	.88	11	0
14	1.0	2.8	36	20	29	19	13	8.0	11	.82	42	0
15	1.0	2.8	39	18	28	18	15	6.3	94	3.8	22	0
16	5.3	2.3	30	17	26	18	19	5.2	244	1.4	2.7	0
17	13	2.3	22	17	25	16	14	4.8	52	.31	4.7	0
18	7.0	61	19	18	23	15	10	4.4	13	.63	1.2	0
19	5.4	45	19	19	22	14	9.7	4.0	6.8	3.7	.34	0
20	4.0	15	17	18	21	13	9.1	3.4	4.3	3.4	.13	0
21	4.2	9.1	17	18	22	15	8.8	3.2	22	1.6	.08	0
22	4.2	7.2	14	17	23	14	9.4	3.0	282	.35	.03	.01
23	3.4	20	14	17	22	13	8.0	2.8	221	.53	.02	2.3
24	3.4	18	14	16	23	95	7.0	2.4	40	.24	2.1	53
25	3.2	11	15	15	23	54	6.3	3.0	18	.07	3.6	26
26	2.9	8.8	14	13	22	28	6.1	2.6	12	.03	1.0	5.4
27	2.6	8.3	15	14	21	26	33	1.8	8.1	.01	.23	5.8
28	2.4	8.0	14	28	20	24	53	4.0	5.7	0	.05	17
29	2.4	7.7	14	204	21	21	21	2.4	4.3	.01	.02	12
30	2.4	7.5	17	262	------	18	14	2.4	4.1	12	0	12
31	2.4	------	18	92	------	18	------	2.4	------	3.1	0	------
TOTAL	96.3	263.1	1,221.8	2,850	851	1,050	445.4	216.4	1,057.71	75.18	106.19	144.11
MEAN	3.11	8.77	39.4	91.9	29.3	33.9	14.8	6.98	35.3	2.43	3.43	4.80
MAX	13	61	212	831	60	198	53	31	282	12	42	53
MIN	1.0	1.3	8.8	13	20	13	6.1	1.8	.61	0	0	0
CFSM	.04	.12	.52	1.21	.39	.45	.20	.09	.47	.03	.05	.06
IN.	.05	.13	.60	1.40	.42	.52	.22	.11	.52	.04	.05	.07
AC-FT	191	522	2,420	5,650	1,690	2,080	883	429	2,100	149	211	286

CAL YR 1971 TOTAL 6,278.86 MEAN 17.2 MAX 212 MIN .15 CFSM .23 IN 3.08 AC-FT 12,450
WTR YR 1972 TOTAL 8,377.19 MEAN 22.9 MAX 831 MIN 0 CFSM .30 IN 4.11 AC-FT 16,620

PEAK DISCHARGE (BASE, 800 CFS).--Jan. 4 (0900) 1,120 cfs (10.75 ft).

08021500 Lake Cherokee near Longview, Tex.

LOCATION.--Lat 32°22'36", long 94°38'30", Gregg-Rusk County line, on left wingwall of intake structure of electric generating plant of Southwestern Electric Power Co., 2.3 miles upstream from dam on Cherokee Bayou, 10 miles upstream from Sabine River, and 10.3 miles southeast of Longview.

DRAINAGE AREA.--158 sq mi.

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 49,880 acre-ft Jan. 5 (elevation, 280.8 ft); minimum observed, 36,560 acre-ft Nov. 12-17 (elevation, 277.2 ft).
Period of record: Maximum contents observed, 71,170 acre-ft May 3, 1959 (elevation, 285.5 ft); minimum observed, 34,620 acre-ft Oct. 16-18, 31, 1956, Aug. 9, 18-21, Aug. 31 to Sept. 8, 11-18, 1958 (elevation, 276.6 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 4,000 ft long with an uncontrolled concrete spillway 828 ft long. Emergency spillway is a 160-foot wide cut in natural ground near right end of dam. Storage began in October 1948 and dam was completed Nov. 19, 1948. Lake was built for recreational purposes, to supply cooling water for generating plant of Southwestern Electric Power Co., and for municipal use by city of Longview. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	295.0	-
Top of design flood pool	291.0	-
Crest of emergency spillway	287.7	-
Crest of service spillway	280.0	46,700
Invert of 18-inch outlet pipe	260.0	4,510

COOPERATION.--Elevation record furnished by Southwestern Electric Power Co. Record of diversions furnished by city of Longview. Capacity curve data from "Report of Sedimentation of Lake Cherokee, Gregg & Rusk Counties, Apr. 4 to May 13, 1960", by Soil Conservation Service.

REVISIONS.--WSP 1732: Drainage area.

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

277.0	35,900	280.0	46,700
278.0	39,300	281.0	50,700
279.0	42,900		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38,250	37,910	37,230	44,010	48,270	47,480	47,100	47,100	45,540	46,700	45,920	41,790
2	38,250	37,570	37,910	44,010	47,880	47,480	47,100	47,480	45,540	46,700	45,540	41,790
3	38,950	37,570	37,910	46,700	47,480	47,880	47,480	47,480	45,540	46,700	45,540	41,790
4	38,600	37,230	38,250	49,470	47,480	47,480	47,100	47,480	45,540	46,700	45,150	41,790
5	38,600	37,230	38,600	49,880	47,480	47,480	46,700	47,480	45,540	46,700	45,150	42,160
6	38,600	37,230	39,300	48,270	47,480	47,480	46,700	47,480	45,150	46,700	45,150	42,160
7	38,600	37,230	39,650	48,270	47,480	47,480	46,700	47,480	45,150	46,700	44,770	42,160
8	38,600	37,230	40,710	47,480	47,480	47,480	46,700	47,100	44,390	46,320	44,770	42,160
9	38,600	37,230	41,070	47,480	46,700	47,480	46,700	47,100	44,010	45,920	44,770	42,160
10	38,600	37,230	41,430	47,480	46,700	47,480	46,700	46,700	44,010	45,920	44,390	41,790
11	38,600	37,230	41,790	47,480	47,100	47,100	46,700	46,700	44,010	45,920	44,390	41,790
12	38,600	36,560	41,790	47,480	47,100	47,100	46,700	47,100	43,640	45,920	44,390	41,430
13	38,600	36,560	41,790	47,100	47,100	47,100	46,700	47,100	43,640	45,920	44,010	41,430
14	38,600	36,560	42,530	47,100	47,100	47,100	46,700	46,700	44,390	45,920	44,010	41,430
15	38,600	36,560	42,530	47,100	47,100	47,100	46,700	46,700	44,390	45,540	43,640	41,430
16	38,600	36,560	42,530	47,100	47,100	47,100	46,700	46,700	46,320	45,920	43,640	41,070
17	38,600	36,560	42,160	47,100	47,100	47,100	46,700	46,700	47,100	45,540	43,640	40,710
18	38,250	37,230	42,160	46,700	47,100	47,100	46,700	46,700	47,480	45,920	43,270	40,710
19	37,910	37,230	42,160	46,700	47,100	46,700	46,700	46,700	47,880	46,700	43,270	40,710
20	37,910	37,230	42,160	46,700	47,100	46,700	46,700	46,700	47,480	45,540	43,270	40,710
21	37,910	37,230	42,530	47,100	47,100	47,100	46,700	46,700	48,270	45,150	43,270	40,710
22	37,910	37,230	42,160	46,700	47,100	47,100	46,700	46,320	48,670	45,920	43,270	40,710
23	37,910	37,230	42,160	46,700	47,100	46,700	46,700	46,320	47,480	45,540	42,900	40,350
24	37,910	37,230	42,530	47,100	47,100	47,880	46,320	45,920	48,270	45,540	42,900	40,350
25	37,910	37,230	42,530	47,100	47,100	47,480	46,320	45,920	47,880	45,540	42,900	40,350
26	37,910	37,230	42,900	47,100	47,100	47,480	46,320	45,920	47,480	45,540	42,900	40,350
27	37,910	37,230	42,900	47,100	47,100	47,480	46,700	45,540	47,480	45,540	42,900	40,710
28	37,910	37,230	42,900	47,480	47,100	47,480	47,100	45,540	47,480	45,540	42,900	40,710
29	37,910	37,230	42,530	48,270	47,100	47,480	47,100	45,540	46,700	45,920	42,530	40,710
30	37,910	37,230	42,900	48,270	------	47,480	47,100	45,540	46,700	45,920	42,160	40,710
31	37,910	------	42,900	48,270	------	47,100	------	45,540	------	46,700	42,160	------
(†)	277.6	277.4	279.0	280.4	280.1	280.1	280.1	279.7	280.0	280.0	278.8	278.4
(*)	-690	-680	+5,670	+5,370	-1,170	0	0	-1,560	+1,160	0	-4,540	-1,450
(††)	1,010	926	951	1,000	899	1,010	1,080	1,290	1,430	1,290	1,490	1,310
MAX	38,950	37,910	42,900	49,880	48,270	47,880	47,480	47,480	48,670	46,700	45,920	42,160
MIN	37,910	36,560	37,230	44,010	46,700	46,700	46,320	45,540	43,640	45,150	42,160	40,350

CAL YR 1971..... * -4,200 †† 13,094 MAX 48,670 MIN 36,560
WTR YR 1972..... * +2,110 †† 13,686 MAX 49,880 MIN 36,560

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Longview.

08022000 Sabine River near Tatum, Tex.

LOCATION.--Lat 32°22'11", long 94°27'28", Panola County, near right bank on downstream side of pier of bridge on State Highway 43, 5.1 miles northeast of Tatum, 5.2 miles upstream from Potters Creek, 5.6 miles downstream from Cherokee Bayou, and at mile 339.4.

DRAINAGE AREA.--3,493 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for October 1938 to January 1939, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 204.18 ft above mean sea level (levels by Corps of Engineers). Prior to Sept. 21, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--22 years (1938-60) prior to regulation by Lake Tawakoni, 2,663 cfs (1,929,000 acre-ft per year); 12 years (1960-72) after regulation by Lake Tawakoni, 1,907 cfs (1,382,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 27,100 cfs Dec. 19 (gage height, 26.95 ft); minimum, 14 cfs Sept. 20.
Period of record: Maximum discharge, 123,000 cfs Apr. 4, 1945 (gage height, 33.80 ft, from graph based on gage readings), from rating curve extended above 66,000 cfs on basis of partly estimated measurement of 88,900 cfs; minimum observed, 2.4 cfs Aug. 11, 12, 1964.
Maximum stage since at least 1884, that of Apr. 4, 1945. Flood in May 1884 reached a stage of about 32 ft, from information by local residents.

REMARKS.--Records good. Flow partly regulated by Lake Tawakoni (station 08017400) located 175 miles upstream and six small reservoirs (combined capacity, 1,022,000 acre-ft). Several diversions above station and below Lake Tawakoni for oilfield operation, municipal, and industrial use. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Lake Fork Creek near Quitman (station 08019000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	465	3,720	608	10,300	3,780	660	652	511	109	490	61	40
2	482	3,990	541	9,860	3,670	1,300	621	532	107	378	59	38
3	482	4,200	636	9,410	3,530	2,140	656	746	105	303	56	38
4	447	4,320	886	10,100	3,380	1,960	775	881	104	261	52	47
5	358	4,370	969	10,300	3,180	1,590	755	781	104	238	47	61
6	266	4,300	1,640	10,400	2,920	1,300	615	602	105	193	44	60
7	218	4,010	2,500	9,980	2,530	1,130	516	453	97	165	42	39
8	184	3,440	2,900	9,250	2,090	1,100	475	361	91	153	41	34
9	166	2,710	3,100	8,650	1,800	1,110	434	322	87	152	40	33
10	150	2,000	3,270	8,250	1,540	1,310	399	290	84	147	40	31
11	210	1,470	3,460	8,070	1,290	1,380	389	265	81	141	39	25
12	300	1,060	3,580	8,080	1,220	1,240	376	258	146	178	37	23
13	290	814	3,780	8,220	1,310	1,020	354	271	146	172	41	22
14	234	624	4,260	8,390	1,240	927	337	292	127	144	51	23
15	181	492	5,060	8,510	1,130	881	323	304	217	132	59	23
16	148	412	7,580	8,560	1,050	834	313	315	411	124	72	23
17	177	354	11,000	8,510	1,030	772	316	329	720	121	92	21
18	176	416	15,500	8,270	1,030	679	302	314	631	127	67	22
19	150	710	25,800	7,770	1,020	622	274	274	831	133	52	19
20	152	1,530	25,700	6,960	985	577	257	232	1,090	114	57	16
21	128	2,000	22,700	5,520	954	559	245	194	1,260	105	56	16
22	122	2,110	20,100	3,540	928	562	232	158	1,750	104	51	22
23	134	2,120	18,200	2,120	873	549	224	149	2,390	113	43	89
24	551	2,160	16,600	1,600	849	611	224	146	2,700	118	46	114
25	1,050	2,150	15,400	1,410	837	964	224	136	2,210	106	46	354
26	1,480	2,040	14,500	1,250	775	1,100	213	130	1,460	95	46	708
27	1,870	1,730	13,700	1,130	709	1,010	249	125	1,050	83	51	488
28	2,270	1,270	13,000	1,080	660	903	499	118	849	72	48	325
29	2,680	896	12,400	1,420	641	812	651	113	714	66	42	290
30	3,060	707	11,700	2,810	------	754	574	110	611	64	39	258
31	3,400	------	11,000	3,670	------	690	------	109	------	62	39	------
TOTAL	21,981	62,125	292,070	203,390	46,951	31,046	12,474	9,821	20,387	4,854	1,556	3,302
MEAN	709	2,071	9,422	6,561	1,619	1,001	416	317	680	157	50.2	110
MAX	3,400	4,370	25,800	10,400	3,780	2,140	775	881	2,700	490	92	708
MIN	122	354	541	1,080	641	549	213	109	81	62	37	16
AC-FT	43,600	123,200	579,300	403,400	93,130	61,580	24,740	19,480	40,440	9,630	3,090	6,550

CAL YR 1971 TOTAL 515,551.5 MEAN 1,412 MAX 25,800 MIN 6.7 AC-FT 1,023,000
WTR YR 1972 TOTAL 709,957.0 MEAN 1,940 MAX 25,800 MIN 16 AC-FT 1,408,000

NOTE.--Gage-height record May 20 to June 11 and July 20 to Aug. 22 from once-daily readings of wire-weight gage.

08022200 Murvaul Lake near Gary, Tex.

LOCATION.--Lat 32°02'04", long 94°25'15", Panola County, at outlet structure of Murvaul Lake Dam on Murvaul Bayou, 3.0 miles west of Gary, and 9.0 miles southwest of Carthage.

DRAINAGE AREA.--115 sq mi.

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

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

EXTREMES.--Current year: Maximum contents, 53,280 acre-ft Jan. 4 (elevation, 267.12 ft); minimum, 41,020 acre-ft Nov. 17 (elevation, 264.06 ft).
Period of record: Maximum contents, 58,050 acre-ft Mar. 30, 1965 (elevation, 268.24 ft); minimum since lake first filled in 1958, 26,670 acre-ft about Sept. 19, 1958 (elevation, 259.9 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 8,300 ft long. Spillway is an uncontrolled concrete flat-crested weir section 270 ft long at right end of dam, designed to discharge 26,700 cfs under a 10-foot head. Storage began in November 1957 and dam completed in June 1958. Outlet works consist of an outlet tower and a 36-inch-diameter pipe through the dam with flow controlled by a valve in control tower. The pipe terminates in a tee at downstream side of dam with one branch discharging below the dam and the other branch connected to a pipeline for municipal supply. The lake is the property of Panola County Fresh Water Supply District No. 1, Carthage, and was built to impound water for municipal and industrial use. Records furnished by the Panola County Water District show that 835 acre-ft was diverted for municipal use during the current year. Occasional releases. Figures given herein represent total contents. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	280.0	-
Top of design flood pool	275.0	91,520
Crest of spillway	265.3	45,840
Invert of lowest sluice gate	235.0	25

COOPERATION.--Capacity table from data furnished by Panola County Fresh Water Supply District No. 1, based on survey made in 1955.

REVISIONS.--WSP 1732: Drainage area.

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

264.0	40,790	267.0	52,780
265.0	44,650	268.0	57,020
266.0	48,660		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42,500	41,890	42,430	47,680	47,560	47,040	46,520	47,880	45,600	45,920	47,120	45,880
2	42,500	41,890	42,700	48,660	47,640	47,200	46,440	50,340	45,480	45,840	46,960	45,800
3	42,620	41,740	43,250	50,420	47,200	47,280	46,440	50,920	45,400	46,200	46,880	45,680
4	42,620	41,660	43,320	53,240	47,080	47,200	46,320	48,460	45,320	46,280	46,800	45,680
5	42,620	41,550	43,910	51,940	47,000	47,080	46,360	48,040	45,240	46,200	46,720	45,600
6	42,580	41,470	45,240	50,550	47,400	47,000	46,360	47,720	45,200	46,080	46,640	45,560
7	42,500	41,360	46,000	49,560	47,400	46,920	46,360	47,520	45,120	46,000	46,520	45,480
8	42,470	41,360	46,360	48,910	47,360	46,840	46,240	47,320	45,080	45,880	46,400	45,440
9	42,390	41,320	46,960	48,460	47,240	46,800	46,160	47,040	45,040	45,880	46,320	45,360
10	42,310	41,320	47,280	48,130	47,160	46,800	46,120	46,920	45,000	45,800	46,320	45,280
11	42,200	41,280	47,440	47,880	47,200	46,720	46,080	46,760	44,810	45,720	46,280	45,200
12	42,120	41,250	47,440	47,640	47,200	46,720	46,040	47,120	44,690	45,680	46,520	45,160
13	42,080	41,210	47,320	47,440	47,160	46,720	46,040	47,040	44,880	45,680	46,640	45,080
14	42,040	41,170	47,480	47,320	47,120	46,680	46,000	47,040	45,080	45,680	46,600	45,000
15	41,970	41,090	47,320	47,160	47,040	46,680	45,960	46,880	45,240	45,640	46,480	44,960
16	42,040	41,060	47,320	47,040	47,040	46,600	45,880	46,800	45,680	45,560	46,440	44,880
17	42,040	41,060	47,280	46,960	47,000	46,560	45,840	46,640	45,880	45,920	46,400	44,880
18	42,120	42,430	47,200	46,880	46,920	46,520	45,840	46,480	45,880	45,920	46,360	44,840
19	42,120	42,500	47,160	46,840	46,840	46,440	45,800	46,440	45,840	45,840	46,280	44,810
20	42,350	42,500	47,040	46,840	46,760	46,720	45,760	46,400	45,760	45,720	46,240	44,770
21	42,350	42,470	46,960	46,800	46,760	46,800	45,720	46,320	46,080	46,960	46,160	44,810
22	42,310	42,350	46,920	46,760	46,720	46,760	45,680	46,280	46,320	47,040	46,000	44,840
23	42,310	42,580	46,840	46,760	46,760	46,720	45,640	46,200	46,400	46,960	45,920	44,810
24	42,230	42,500	46,840	46,680	46,720	46,680	45,600	46,160	46,400	46,840	46,000	44,810
25	42,200	42,500	46,840	46,560	46,720	46,640	45,560	46,120	46,320	46,760	46,360	44,770
26	42,120	42,500	46,800	46,520	46,640	46,640	45,440	46,040	46,240	46,640	46,320	44,840
27	42,080	42,470	46,760	46,600	46,640	46,640	46,240	46,000	46,200	46,520	46,240	45,320
28	42,010	42,540	46,720	46,640	46,600	46,640	46,960	45,960	46,120	46,440	46,160	45,320
29	41,970	42,500	46,760	47,160	46,600	46,640	47,320	45,880	46,080	47,320	46,080	45,600
30	41,930	42,470	46,760	47,600	------	46,600	47,400	45,840	46,000	47,320	46,000	45,440
31	41,930	------	46,640	47,600	------	46,560	------	45,680	------	47,200	45,920	------
(†)	264.30	264.44	265.50	265.74	265.49	265.48	265.69	265.26	265.34	265.64	265.32	265.20
(*)	-650	+540	+4,170	+960	-1,000	-40	+840	-1,720	+320	+1,200	-1,280	-480
(††)	71.5	64.3	65.6	66.1	63.5	70.2	65.3	78.6	85.6	64.1	75.5	64.7
MAX	42,620	42,580	47,480	53,240	47,640	47,280	47,400	50,920	46,400	47,320	47,120	45,880
MIN	41,930	41,060	42,430	46,520	46,600	46,440	45,440	45,680	44,690	45,560	45,920	44,770

CAL YR 1971..... * +2,340 †† 880 MAX 50,790 MIN 41,060
WTR YR 1972..... * +2,860 †† 835 MAX 53,240 MIN 41,060

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions for municipal and industrial use, by Panola County Fresh Water District No. 1.

08022300 Murvaul Bayou near Gary, Tex.

LOCATION.--Lat 32°02'54", long 94°22'31", Panola County, near center of main channel on downstream side of bridge on Farm Road 10, 0.3 mile downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.0 mile downstream from Indian Creek, 1.5 miles north of Gary, and 3 miles downstream from Murvaul Lake.

DRAINAGE AREA.--134 sq mi.

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 217.82 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 70.5 cfs (51,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,390 cfs Jan. 4 (gage height, 10.72 ft); no flow at times.
Period of record: Maximum discharge, 3,590 cfs Mar. 18, 1969 (gage height, 11.57 ft); no flow at times in 1967-72.
Maximum stage since at least 1928, about 14.5 ft in July 1933, from information by local resident.

REMARKS.--Records good. Discharge largely regulated by Murvaul Lake (see preceding page).

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.11	.97	36	115	21	20	71	.06	.26	36	.03
2	1.6	.11	1.2	138	103	53	14	175	.03	.11	30	.02
3	1.6	.09	4.5	279	106	80	11	300	.01	.20	22	.02
4	1.7	.07	5.0	1,120	67	76	9.4	340	0	27	16	.01
5	1.8	.08	3.0	1,190	54	65	6.0	233	0	15	12	0
6	1.6	.23	18	846	70	58	5.4	153	0	2.9	9.7	0
7	.64	2.6	24	612	94	50	5.6	109	0	1.2	7.3	0
8	.23	1.4	8.6	395	82	46	5.6	84	0	.52	4.3	0
9	.13	1.0	7.7	286	74	38	2.7	65	0	.26	2.6	0
10	.11	.97	27	233	65	34	1.7	52	0	.17	1.8	0
11	.02	1.2	34	178	58	32	1.6	42	0	.26	1.9	0
12	0	.91	38	136	64	30	1.6	40	0	.09	1.5	0
13	0	.74	41	106	64	28	1.6	56	0	.06	4.5	0
14	.02	.74	37	80	59	27	1.6	56	0	.04	6.2	0
15	.02	.79	52	64	54	27	1.1	48	1.0	.02	5.4	0
16	.04	.74	53	50	50	29	.91	38	3.1	.02	3.9	0
17	.08	1.3	53	41	47	26	.97	32	.74	.06	2.9	0
18	.11	4.0	47	36	44	20	.69	23	.26	.07	2.2	0
19	.13	6.7	38	33	38	18	.56	16	.07	.08	1.6	0
20	.15	3.9	34	33	32	15	.32	11	.02	.04	.85	0
21	.20	1.8	31	33	29	31	.60	8.8	.07	.16	.48	0
22	.20	1.1	26	32	29	37	.97	5.7	2.3	23	.26	0
23	.23	1.4	22	30	28	33	.91	3.8	7.4	34	.11	1.1
24	.15	1.6	20	28	29	30	.40	2.8	6.9	28	.07	.69
25	.11	1.2	18	26	29	33	.17	2.0	5.8	21	.15	.13
26	.09	1.0	17	20	27	29	.08	1.6	4.3	15	.36	.04
27	.09	.85	15	19	23	27	31	1.1	3.1	10	.78	4.1
28	.09	.69	15	21	22	28	109	.69	2.0	7.4	.85	15
29	.08	1.2	13	37	21	40	94	.44	1.0	31	.60	2.9
30	.08	.85	13	125	------	32	82	.26	.52	59	.26	2.4
31	.09	------	13	125	------	23	------	.13	------	44	.08	------
TOTAL	12.79	39.37	729.97	6,388	1,577	1,116	411.48	1,971.32	38.68	320.92	176.65	26.44
MEAN	.41	1.31	23.5	206	54.4	36.0	13.7	63.6	1.29	10.4	5.70	.88
MAX	1.8	6.7	53	1,190	115	80	109	340	7.4	59	36	15
MIN	0	.07	.97	19	21	15	.08	.13	0	.02	.07	0
AC-FT	25	78	1,450	12,670	3,130	2,210	816	3,910	77	637	350	52

CAL YR 1971 TOTAL 4,395.21 MEAN 12.0 MAX 624 MIN 0 AC-FT 8,720
WTR YR 1972 TOTAL 12,808.62 MEAN 35.0 MAX 1,190 MIN 0 AC-FT 25,410

08022400 Socagee Creek near Carthage, Tex.

LOCATION.--Lat 32°13'54", long 94°05'31", Panola County, on right bank at downstream side of bridge on Farm Road 123, 1.4 miles upstream from Salt Creek, 15 miles east of Carthage, and at mile 20.5.

DRAINAGE AREA.--82.6 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 230.00 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 34.5 cfs (5.67 inches per year, 25,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,000 cfs Jan. 5 (gage height, 9.55 ft); no flow for many days.
Period of record: Maximum discharge, 6,300 cfs Apr. 17, 1969 (gage height, 11.58 ft), from rating curve extended above 2,300 cfs on basis of area-velocity study; no flow for many days.

REMARKS.--Records good. No known diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	4.3	92	5.6	3.5	8.6	0	0	230	0
2		0	.05	52	54	54	2.7	107	0	0	39	0
3		0	3.5	178	37	202	2.3	131	0	0	13	0
4		0	.75	338	28	190	1.9	64	0	0	6.7	0
5		0	6.6	880	21	76	1.9	30	0	5.9	4.1	0
6		0	20	839	17	40	2.5	14	0	11	2.9	0
7		0	46	358	47	26	2.6	7.7	0	3.3	2.1	0
8		0	63	127	92	18	2.1	5.1	0	.98	1.5	0
9		0	38	57	57	12	1.7	3.8	0	.31	1.1	0
10		0	22	42	35	9.5	1.3	3.0	0	.10	2.6	0
11		0	14	34	25	7.6	1.0	2.5	0	.02	4.0	0
12		0	14	29	22	6.4	.80	3.1	0	0	1.4	0
13		0	14	24	25	5.6	.64	25	0	0	1.1	0
14		0	10	19	31	5.3	.51	65	0	0	.78	0
15		0	7.3	15	28	4.9	.53	35	.02	0	.51	0
16		0	5.4	12	23	4.4	.67	15	7.9	0	.33	0
17		0	4.3	9.8	18	3.9	.41	6.5	25	0	.23	0
18		.13	5.6	8.6	14	3.5	.26	3.4	12	0	.15	0
19		.70	6.7	7.9	11	3.0	.29	2.3	10	0	.08	0
20		.04	5.8	7.8	9.5	3.0	.24	1.6	4.4	0	.04	0
21		0	4.5	7.5	8.2	5.4	.28	1.1	1.8	0	.02	0
22		0	3.9	7.5	7.1	10	.26	.78	1.4	0	0	0
23		0	2.8	7.3	6.4	17	.20	.53	1.4	0	.01	0
24		0	2.1	7.0	6.1	12	.70	.50	6.4	0	.01	0
25		0	1.6	6.3	6.0	7.9	.49	.34	3.7	0	0	0
26		0	1.3	5.5	5.8	10	.21	.23	1.4	0	0	0
27		0	.97	5.0	5.5	12	.17	.10	.58	0	0	0
28		0	.80	5.1	5.2	10	.36	.05	.20	0	0	0
29		0	.55	13	4.8	8.8	1.7	.02	.05	12	0	0
30		0	.50	59	------	6.1	6.4	0	.01	315	0	1.7
31		------	.46	116	------	4.5	------	0	------	640	0	------
TOTAL	0	.87	306.48	3,281.6	741.6	784.4	38.62	537.25	76.26	988.61	311.66	1.7
MEAN	0	.029	9.89	106	25.6	25.3	1.29	17.3	2.54	31.9	10.1	.057
MAX	0	.70	63	880	92	202	6.4	131	25	640	230	1.7
MIN	0	0	0	4.3	4.8	3.0	.17	0	0	0	0	0
CFSM	0	.0004	.12	1.28	.31	.31	.02	.21	.03	.39	.12	.0007
IN.	0	0	.14	1.48	.33	.35	.02	.24	.03	.45	.14	0
AC-FT	0	1.7	608	6,510	1,470	1,560	77	1,070	151	1,960	618	3.4

CAL YR 1971 TOTAL 5,190.16 MEAN 14.2 MAX 832 MIN 0 CFSM .17 IN 2.34 AC-FT 10,290
WTR YR 1972 TOTAL 7,069.05 MEAN 19.3 MAX 880 MIN 0 CFSM .23 IN 3.18 AC-FT 14,020

PEAK DISCHARGE (BASE, 900 CFS).--Jan. 5 (1800) 1,000 cfs (9.55 ft).

08022500 Sabine River at Logansport, La.

LOCATION.--Lat 31°58'20", long 94°00'22", De Soto Parish, La.-Shelby County, Tex. State line at Logansport, just upstream from bridge on U.S. Highway 84, 3 miles upstream from Bayou Castor, 111 miles upstream from Toledo Bend Dam, and at mile 267.1.

DRAINAGE AREA.--7,178 sq mi (see station 08025350).

PERIOD OF RECORD.--Gage-height record March 1968 to current year. Discharge record July 1903 to February 1968.

GAGE.--Water-stage recorder. Datum of gage is 147.72 ft above mean sea level. July 1, 1903, to Sept. 30, 1956, nonrecording gage. Oct. 1, 1956, to Jan. 16, 1964, water-stage recorder 4,600 ft upstream. Jan. 16, 1964, to Dec. 10, 1968, water-stage recorder 4,700 ft upstream. All gages to present datum except prior to Dec. 31, 1906, when datum was 2 ft lower.

AVERAGE DISCHARGE.--64 years (1903-67), 3,208 cfs (2,324,000 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 28.37 ft Dec. 28; minimum, 18.57 ft Sept. 30.
Period of gage-height record 1968-72: Maximum gage height, 32.50 ft Apr. 20, 1969; minimum since initial filling of Toledo Bend Reservoir in June 1968, 18.57 ft Sept. 30, 1972.
Period of discharge record 1903-67: Maximum discharge, 92,000 cfs Apr. 8, 1945 (gage height, 44.07 ft, from floodmark); minimum, 16 cfs Sept. 26-28, Oct. 3, 4, 1939.
Maximum stage since at least 1884, that of Apr. 8, 1945. Flood in May 1884 reached a stage of 39.4 ft, present site and datum.

REMARKS.--Records good. Station discontinued as daily streamflow station on Mar. 1, 1968, due to backwater from storage in Toledo Bend Reservoir (station 08025350). Eight major reservoirs, with a combined capacity of 1,068,000 acre-ft, largely regulate the flow. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Lake Fork Creek near Quitman (station 08019000). Numerous diversions above station for oilfield operations, municipal, and industrial use.

REVISIONS (WATER YEARS).--WSP 1312: 1903-6 (monthly and annual means). WSP 1732: 1929(M), 1933(M).

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.96	21.30	21.53	27.20	23.55	22.26	23.62	23.95	22.88	22.34	22.38	20.50
2	20.94	21.38	21.61	27.04	23.64	22.42	23.77	24.05	22.85	22.31	22.32	20.45
3	20.99	21.39	21.58	27.05	23.50	22.78	23.77	24.14	22.82	22.37	22.24	20.44
4	20.95	21.52	21.63	27.11	23.38	22.76	23.69	24.34	22.82	22.80	22.13	20.44
5	20.95	21.67	21.82	27.29	23.36	22.73	23.78	24.21	22.74	22.74	22.10	20.37
6	20.95	21.66	22.14	27.51	23.30	22.77	23.86	24.18	22.68	22.69	22.02	20.30
7	20.94	21.62	22.42	27.84	23.23	22.67	23.74	24.13	22.58	22.67	21.98	20.20
8	20.89	21.67	22.66	28.25	23.08	22.58	23.71	24.08	22.57	22.78	21.90	20.05
9	20.83	21.59	22.84	28.32	22.81	22.62	23.74	24.00	22.48	22.72	21.77	19.92
10	20.84	21.47	22.83	27.93	22.55	22.65	23.81	23.93	22.44	22.70	21.70	19.89
11	20.88	21.38	22.90	27.43	22.40	22.72	23.80	23.89	22.40	22.73	21.62	19.87
12	20.88	21.32	22.99	26.87	22.27	22.75	23.89	23.85	22.41	22.73	21.55	19.74
13	20.87	21.32	23.03	26.27	22.26	22.68	23.89	23.84	22.43	22.68	21.55	19.64
14	20.88	21.30	23.23	25.77	22.28	22.72	23.89	23.83	22.40	22.72	21.55	19.53
15	20.89	21.23	23.10	25.39	22.14	22.72	23.79	23.83	22.50	22.65	21.45	19.39
16	20.95	21.22	23.23	25.19	22.09	22.73	23.74	23.74	22.53	22.67	21.45	19.49
17	20.95	21.31	23.36	25.05	22.01	22.79	23.78	23.63	22.52	22.64	21.35	19.52
18	20.98	21.33	23.58	24.93	21.96	22.70	23.85	23.46	22.55	22.62	21.25	19.46
19	20.88	21.42	23.80	24.84	21.93	22.79	23.90	23.43	22.53	22.53	21.10	19.33
20	20.87	21.47	23.93	24.75	22.05	22.85	23.76	23.40	22.55	22.47	21.05	19.20
21	20.82	21.52	24.12	24.65	22.11	23.17	23.52	23.41	22.54	22.37	21.07	19.11
22	20.83	21.63	24.39	24.23	22.07	23.28	23.59	23.40	22.53	22.37	21.04	19.00
23	20.79	21.54	24.91	23.81	22.10	23.40	23.56	23.35	22.62	22.33	21.00	18.90
24	20.80	21.53	25.83	23.39	22.14	23.40	23.47	23.23	22.72	22.28	21.02	18.89
25	20.85	21.59	27.09	22.79	22.16	23.42	23.49	23.17	22.82	22.19	20.95	18.93
26	20.92	21.61	27.96	22.64	22.08	23.72	23.60	23.10	22.81	22.15	20.95	18.93
27	20.95	21.58	28.31	22.57	22.07	23.60	23.66	23.07	22.64	22.06	20.90	18.95
28	20.99	21.59	28.29	22.43	22.15	23.61	23.68	23.00	22.46	22.02	20.80	18.88
29	21.01	21.56	28.06	22.59	22.19	23.53	23.72	23.00	22.33	22.13	20.70	18.79
30	21.09	21.49	27.76	22.93	------	23.62	23.82	22.88	22.31	22.24	20.65	18.71
31	21.18	------	27.40	23.31	------	23.60	------	22.86	------	22.40	20.58	------
MAX	21.18	21.67	28.31	28.32	23.64	23.72	23.90	24.34	22.88	22.80	22.38	20.50
MIN	20.79	21.22	21.53	22.43	21.93	22.26	23.47	22.86	22.31	22.02	20.58	18.71

CAL YR 1971 MAX 28.31 MIN 20.79
WTR YR 1972 MAX 28.32 MIN 18.71

08023200 Tenaha Creek near Shelbyville, Tex.

LOCATION.--Lat 31°45'56", long 94°05'02", Shelby County, near center of span at downstream side of bridge on State Highway 87, 0.5 mile northwest of Shelbyville, 4.2 miles downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 5.0 miles upstream from Beauchamp Creek.

DRAINAGE AREA.--97.8 sq mi.

PERIOD OF RECORD.--March 1952 to current year.

GAGE.--Water-stage recorder. Prior to May 9, 1963, nonrecording gage at same site and datum. Datum of gage is 205.71 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 72.2 cfs (10.03 inches per year, 52,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 730 cfs Jan. 30 (gage height, 8.98 ft); no flow Nov. 9-13.
Period of record: Maximum discharge, 15,200 cfs Mar. 11, 1953 (gage height, 13.85 ft); no flow at times.
Maximum stage since at least 1884, 15 ft Nov. 23, 1940, from information by local residents.

REMARKS.--Records fair. The city of Center reported that during the year they diverted 1,550 acre-ft upstream from gage and returned 911 acre-ft as sewage effluent 1.0 mile downstream from gage.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.06	.63	20	370	11	8.8	11	2.5	.27	3.0	.07
2	.01	.06	1.1	343	123	35	7.3	151	1.7	.18	2.0	.06
3	.02	.06	93	310	64	40	7.3	261	1.2	.20	1.2	.09
4	.10	.04	76	379	34	20	6.2	133	.90	6.8	.90	.73
5	.07	.03	24	419	25	13	3.9	21	.68	10	.58	1.8
6	1.7	.03	160	234	34	9.6	3.8	9.8	.58	3.0	.50	2.3
7	.84	.02	197	79	96	8.3	4.3	7.1	.46	1.6	.54	1.2
8	.20	.02	114	49	57	8.3	3.9	7.6	.38	.96	.46	.68
9	.06	0	37	42	30	7.3	2.4	7.3	.91	.78	.27	.39
10	.03	0	27	46	23	6.4	2.2	5.2	3.6	.96	.14	.24
11	.02	0	32	43	20	6.2	2.5	4.1	1.6	1.9	.11	.16
12	.02	0	30	34	58	6.4	2.7	10	.84	.84	.33	.30
13	.01	0	20	30	96	6.7	2.7	43	.73	.84	1.2	.22
14	.02	.02	16	24	45	6.0	2.1	19	2.6	.42	1.2	.09
15	.02	.03	21	20	29	5.6	1.5	14	6.5	.27	1.2	.06
16	.07	.03	68	18	22	52	1.3	6.4	115	.36	.63	.42
17	.08	.04	348	17	18	28	1.4	3.8	30	.78	.39	2.2
18	.07	2.7	272	17	16	13	1.9	2.7	7.1	.54	.22	.86
19	.06	48	69	17	13	7.8	1.2	2.1	3.8	1.2	.12	.44
20	2.5	11	36	61	11	7.3	1.0	1.7	2.5	1.0	.11	.37
21	1.1	3.6	25	99	11	216	1.0	1.4	2.0	.60	.10	.31
22	.46	1.5	19	52	11	165	1.8	1.3	1.9	1.0	.09	2.1
23	.30	.96	15	34	9.3	48	2.1	1.2	3.8	1.5	.11	5.2
24	.24	.84	14	28	10	24	1.2	1.5	3.5	1.0	.14	5.5
25	.16	.96	12	22	9.3	31	.96	2.2	2.3	.60	.24	2.2
26	.12	.84	12	16	8.8	24	.73	1.6	1.7	.40	.42	2.1
27	.08	.63	12	14	6.7	17	.78	1.0	1.2	.30	.68	1.8
28	.07	.63	11	15	6.7	14	57	.78	.68	.20	1.0	26
29	.06	.54	10	66	7.3	15	139	16	.78	.20	.58	9.4
30	.06	.84	10	630	------	30	38	23	.42	.60	.27	9.3
31	.06	------	13	659	------	15	------	4.8	------	7.8	.10	------
TOTAL	8.62	73.48	1,794.73	3,837	1,264.1	896.9	310.97	775.58	201.86	47.10	18.83	76.59
MEAN	.28	2.45	57.9	124	43.6	28.9	10.4	25.0	6.73	1.52	.61	2.55
MAX	2.5	48	348	659	370	216	139	261	115	10	3.0	26
MIN	.01	0	.63	14	6.7	5.6	.73	.78	.38	.18	.09	.06
CFSM	.003	.03	.59	1.27	.45	.30	.11	.26	.07	.02	.006	.03
IN.	.003	.03	.68	1.46	.48	.34	.12	.30	.08	.02	.007	.03
AC-FT	17	146	3,560	7,610	2,510	1,780	617	1,540	400	93	37	152

CAL YR 1971 TOTAL 3,585.90 MEAN 9.82 MAX 348 MIN 0 CFSM .10 IN 1.36 AC-FT 7,110
WTR YR 1972 TOTAL 9,305.76 MEAN 25.4 MAX 659 MIN 0 CFSM .26 IN 3.54 AC-FT 18,460

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

08024400 Sabine River near Milam, Tex.

LOCATION.--Lat 31°28'01", long 93°44'41", Sabine Parish, La.-Sabine County, Tex. State line, on right bank at bridge on Texas State Highway 21, 6.5 miles northeast of Milam, 38 miles upstream from Toledo Bend Dam, and at mile 194.8.

DRAINAGE AREA.--7,178 sq mi (see station 08025350).

PERIOD OF RECORD.--Gage-height record, October 1966 to January 1968, December 1968 to current year (published as Toledo Bend Reservoir near Milam, December 1968 to September 1970). Discharge record, October 1923 to September 1925 (published as "Sabine River at Sabinetown"), January 1939 to September 1966.

GAGE.--Water-stage recorder. Datum of gage is 97.96 ft above mean sea level.

AVERAGE DISCHARGE.--29 years (1923-25, 1939-66), 4,982 cfs (3,607,000 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 73.82 ft May 8; minimum, 68.38 ft Sept. 30.
Period of gage-height record: Maximum gage height, 75.22 ft Mar. 20, 1969; minimum, 68.38 ft Sept. 30, 1972.
Period of discharge record 1923-25, 1939-66: Maximum discharge, 83,400 cfs Apr. 12, 1945 (gage height, 48.87 ft); minimum, 25 cfs Oct. 14-19, 1956.

REMARKS.--Station discontinued as daily streamflow station Sept. 30, 1966, due to backwater from storage in Toledo Bend Reservoir (station 08025350).

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.57	70.59	71.17	72.24	72.53	71.85	73.30	73.25	72.56	71.91	71.97	70.08
2	70.56	70.63	71.30	72.28	72.45	71.93	73.30	73.52	72.53	71.90	71.93	70.07
3	70.60	70.62	71.23	72.45	72.47	71.94	73.35	73.61	72.51	71.88	71.90	70.07
4	70.66	70.63	71.25	72.47	72.38	71.97	73.33	73.68	72.49	72.28	71.85	70.08
5	70.66	70.64	71.49	72.64	72.28	72.05	73.35	73.72	72.43	72.36	71.77	69.95
6	70.65	70.63	71.63	72.69	72.22	72.09	73.37	73.75	72.37	72.37	71.72	69.86
7	70.64	70.68	71.71	72.74	72.19	72.15	73.39	73.81	72.29	72.36	71.65	69.76
8	70.61	70.73	71.80	72.78	72.12	72.20	73.36	73.74	72.22	72.34	71.56	69.68
9	70.53	70.78	71.88	72.89	71.98	72.22	73.38	73.67	72.19	72.35	71.44	69.58
10	70.58	70.83	71.97	72.93	71.88	72.23	73.38	73.59	72.09	72.34	71.38	69.55
11	70.55	70.83	72.02	72.95	71.87	72.25	73.38	73.52	72.09	72.32	71.29	69.48
12	70.53	70.87	72.15	72.96	71.84	72.27	73.38	73.53	72.03	72.31	71.30	69.39
13	70.54	70.87	72.18	72.93	71.79	72.31	73.37	73.55	72.03	72.30	71.30	69.28
14	70.54	70.87	72.10	72.85	71.76	72.32	73.37	73.57	72.08	72.31	71.25	69.18
15	70.54	70.87	72.12	72.81	71.72	72.37	73.43	73.47	72.10	72.30	71.20	69.08
16	70.63	70.88	72.14	72.74	71.66	72.39	73.43	73.40	72.18	72.32	71.12	69.15
17	70.63	70.88	72.16	72.67	71.63	72.37	73.42	73.32	72.21	72.30	71.03	69.12
18	70.63	71.05	72.13	72.61	71.64	72.40	73.41	73.18	72.23	72.26	70.93	69.05
19	70.62	71.09	72.06	72.55	71.66	72.41	73.29	73.16	72.20	72.17	70.83	68.94
20	70.62	71.08	71.98	72.55	71.64	72.66	73.19	73.15	72.16	72.08	70.83	68.86
21	70.62	71.08	71.88	72.48	71.68	72.84	73.26	73.15	72.16	72.09	70.75	68.75
22	70.59	71.05	71.87	72.42	71.72	72.93	73.23	73.07	72.14	72.05	70.66	68.68
23	70.58	71.02	71.84	72.34	71.73	72.98	73.23	72.98	72.12	72.04	70.70	68.68
24	70.55	71.04	71.79	72.24	71.74	73.11	73.13	72.93	72.12	71.96	70.65	68.73
25	70.53	71.08	71.75	72.21	71.76	73.10	73.09	72.87	72.15	71.88	70.57	68.68
26	70.54	71.09	71.75	72.20	71.76	73.10	73.10	72.80	72.09	71.82	70.55	68.58
27	70.54	71.11	71.81	72.17	71.78	73.19	73.23	72.70	72.03	71.74	70.57	68.54
28	70.53	71.14	71.87	72.10	71.80	73.19	73.25	72.67	71.99	71.68	70.48	68.52
29	70.52	71.17	72.02	72.17	71.86	73.24	73.28	72.68	71.95	71.77	70.37	68.41
30	70.53	71.11	72.11	72.40	------	73.23	73.24	72.57	71.93	71.96	70.28	68.42
31	70.55	------	72.15	72.48	------	73.28	------	72.57	------	71.98	70.18	------
MAX	70.66	71.17	72.18	72.96	72.53	73.28	73.43	73.81	72.56	72.37	71.97	70.08
MIN	70.52	70.59	71.17	72.10	71.63	71.85	73.09	72.57	71.93	71.68	70.18	68.41

CAL YR 1971 MAX 72.18 MIN 70.52
WTR YR 1972 MAX 73.81 MIN 68.41

08025350 Toledo Bend Reservoir near Burkeville, Tex.

LOCATION.--Lat 31°11'47", long 93°34'24", Sabine Parish, La.-Newton County, Tex. State line, on upstream side of dam near right abutment of spillway of Toledo Bend Dam on the Sabine River, 1.0 mile upstream from Bayou Toro, 15 miles northeast of Burkeville, and at mile 156.5.

DRAINAGE AREA.--7,178 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sabine River Authority). Prior to July 20, 1967, nonrecording gage read once daily at same site and datum.

EXTREMES.--Current year: Maximum contents, 4,476,000 acre-ft May 8 (elevation, 172.00 ft); minimum, 3,552,000 acre-ft Sept. 29 (elevation, 166.51 ft).
Period of record: Maximum contents, 4,739,000 acre-ft Mar. 21, 1969 (elevation, 173.42 ft); minimum since initial filling of reservoir in June 1968, 3,552,000 acre-ft Sept. 29, 1972 (elevation, 166.51 ft).

REMARKS.--Reservoir is formed by a rolled earthfill dam, 11,243 ft long, including dikes. Closure at embankment completed and deliberate impoundment was begun Oct. 3, 1966. Reservoir is operated for hydro-electric power generation and water conservation. A gate controlled, gravity concrete, ogee weir is located near the left abutment of the dam. Net opening of 440 ft is controlled by eleven 40- by 28-foot tainter gates. A low-flow release sluiceway is located in an enlarged gate pier near the center of the spillway structure. This sluiceway is a single 8.33- by 12-foot concrete conduit controlled by a single gate. Two 20-inch-diameter conduits are provided which bypass the sluice gate. Water for turbines is admitted through four 16.75- by 29-foot penstocks and controlled by vertically operated caterpillar-type gates. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Lake Fork Creek near Quitman (station 08019000). For statement regarding regulation by upstream reservoirs, see Sabine River near Logansport (station 08022500). Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	185.0	-
Maximun design water surface	175.3	5,102,000
Top of gates	173.0	4,660,000
Top of power drawdown storage	172.0	4,476,000
Top of power head storage	162.2	2,922,000
Spillway crest (controlled)	145.0	1,162,000
Invert of low-flow release sluiceway	100.0	4,090

COOPERATION.--Capacity table furnished by Sabine River Authority, based on Geological Survey 15-minute quadrangle sheets, scale 1:62,500 with 20-foot contour intervals.

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

166.5	3,550,000	170.0	4,123,000
168.0	3,788,000	172.0	4,476,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,898.00	3,915.00	4,026.00	4,202.00	4,237.00	4,166.00	4,381.00	4,390.00	4,244.00	4,120.00	4,133.00	3,832.00
2	3,895.00	3,930.00	4,052.00	4,187.00	4,273.00	4,140.00	4,368.00	4,413.00	4,239.00	4,121.00	4,128.00	3,829.00
3	3,915.00	3,927.00	4,031.00	4,234.00	4,241.00	4,128.00	4,379.00	4,431.00	4,241.00	4,132.00	4,125.00	3,827.00
4	3,920.00	3,920.00	4,029.00	4,283.00	4,211.00	4,168.00	4,386.00	4,440.00	4,239.00	4,192.00	4,125.00	3,824.00
5	3,922.00	3,915.00	4,068.00	4,264.00	4,185.00	4,154.00	4,382.00	4,440.00	4,229.00	4,216.00	4,114.00	3,811.00
6	3,918.00	3,955.00	4,089.00	4,267.00	4,213.00	4,152.00	4,375.00	4,449.00	4,218.00	4,214.00	4,099.00	3,783.00
7	3,913.00	3,939.00	4,101.00	4,275.00	4,189.00	4,170.00	4,395.00	4,467.00	4,202.00	4,211.00	4,085.00	3,762.00
8	3,918.00	3,934.00	4,109.00	4,275.00	4,168.00	4,192.00	4,395.00	4,458.00	4,187.00	4,200.00	4,069.00	3,751.00
9	3,932.00	3,956.00	4,121.00	4,299.00	4,147.00	4,189.00	4,386.00	4,451.00	4,184.00	4,200.00	4,054.00	3,740.00
10	3,903.00	3,955.00	4,152.00	4,313.00	4,135.00	4,190.00	4,382.00	4,431.00	4,175.00	4,200.00	4,044.00	3,740.00
11	3,898.00	3,956.00	4,155.00	4,317.00	4,139.00	4,187.00	4,381.00	4,409.00	4,166.00	4,195.00	4,029.00	3,721.00
12	3,895.00	3,955.00	4,180.00	4,304.00	4,130.00	4,192.00	4,377.00	4,417.00	4,145.00	4,192.00	4,029.00	3,705.00
13	3,895.00	3,953.00	4,178.00	4,336.00	4,114.00	4,202.00	4,373.00	4,420.00	4,147.00	4,194.00	4,027.00	3,689.00
14	3,890.00	3,955.00	4,171.00	4,326.00	4,103.00	4,204.00	4,372.00	4,426.00	4,150.00	4,187.00	4,019.00	3,672.00
15	3,898.00	3,958.00	4,171.00	4,299.00	4,111.00	4,223.00	4,400.00	4,409.00	4,162.00	4,192.00	4,014.00	3,661.00
16	3,908.00	3,958.00	4,184.00	4,267.00	4,098.00	4,220.00	4,404.00	4,395.00	4,180.00	4,190.00	4,002.00	3,666.00
17	3,912.00	3,948.00	4,189.00	4,255.00	4,099.00	4,214.00	4,395.00	4,375.00	4,185.00	4,192.00	3,985.00	3,661.00
18	3,913.00	4,023.00	4,170.00	4,249.00	4,101.00	4,230.00	4,384.00	4,355.00	4,190.00	4,189.00	3,965.00	3,652.00
19	3,915.00	4,001.00	4,154.00	4,241.00	4,082.00	4,220.00	4,352.00	4,355.00	4,187.00	4,164.00	3,953.00	3,639.00
20	3,915.00	3,999.00	4,148.00	4,239.00	4,082.00	4,288.00	4,336.00	4,355.00	4,180.00	4,152.00	3,953.00	3,623.00
21	3,922.00	4,004.00	4,137.00	4,232.00	4,096.00	4,297.00	4,301.00	4,350.00	4,175.00	4,162.00	3,937.00	3,610.00
22	3,917.00	3,978.00	4,132.00	4,216.00	4,101.00	4,315.00	4,364.00	4,336.00	4,175.00	4,155.00	3,925.00	3,597.00
23	3,920.00	4,006.00	4,116.00	4,199.00	4,094.00	4,319.00	4,368.00	4,311.00	4,162.00	4,157.00	3,920.00	3,587.00
24	3,912.00	3,999.00	4,111.00	4,227.00	4,101.00	4,336.00	4,355.00	4,310.00	4,164.00	4,143.00	3,906.00	3,602.00
25	3,906.00	3,992.00	4,103.00	4,200.00	4,103.00	4,342.00	4,352.00	4,302.00	4,162.00	4,126.00	3,900.00	3,589.00
26	3,895.00	4,007.00	4,099.00	4,185.00	4,118.00	4,324.00	4,328.00	4,288.00	4,143.00	4,106.00	3,903.00	3,579.00
27	3,906.00	3,999.00	4,109.00	4,180.00	4,114.00	4,348.00	4,364.00	4,269.00	4,138.00	4,092.00	3,903.00	3,581.00
28	3,905.00	4,019.00	4,130.00	4,171.00	4,111.00	4,379.00	4,368.00	4,271.00	4,145.00	4,082.00	3,895.00	3,564.00
29	3,905.00	4,016.00	4,140.00	4,199.00	4,118.00	4,390.00	4,372.00	4,262.00	4,142.00	4,101.00	3,879.00	3,552.00
30	3,908.00	4,026.00	4,170.00	4,230.00	------	4,386.00	4,366.00	4,266.00	4,135.00	4,135.00	3,859.00	3,573.00
31	3,912.00	------	4,175.00	4,234.00	------	4,381.00	------	4,255.00	------	4,143.00	3,846.00	------
(†)	168.75	169.43	170.30	170.64	169.97	171.47	171.39	170.26	170.07	170.12	168.35	166.65
(*)	0	+114,000	+149,000	+59,000	-116,000	+263,000	-15,000	-111,000	-120,000	+8,000	-297,000	-273,000
MAX	3,932.00	4,026.00	4,189.00	4,336.00	4,273.00	4,390.00	4,404.00	4,467.00	4,244.00	4,216.00	4,133.00	3,832.00
MIN	3,890.00	3,915.00	4,026.00	4,171.00	4,082.00	4,128.00	4,301.00	4,255.00	4,135.00	4,082.00	3,846.00	3,552.00

CAL YR 1971..... * +13,000 MAX 4,199.00 MIN 3,887.00
WTR YR 1972..... * -339,000 MAX 4,467.00 MIN 3,552.00

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
NOTE.--All figures expressed in thousands.

08025360 Sabine River at Toledo Bend Reservoir near Burkeville, Tex.

LOCATION.--Lat 31°10'25", long 93°33'57", Newton County, in powerhouse at right end of Toledo Bend Dam, 1.6 miles south of Toledo Bend Reservoir gage, 10 miles upstream from Sabine River near Burkeville gage, and at mile 156.5.

DRAINAGE AREA.--7,178 sq mi.

PERIOD OF RECORD.--October 1971 to September 1972.

GAGE.--Water-stage recorders. Datum of gages is at mean sea level (levels by Sabine River Authority).

EXTREMES.--Current year: Maximum daily discharge, 15,400 cfs Jan. 5, 6; maximum elevation (forebay), 172.00 ft May 8; maximum gage height (tailrace), 99.20 ft Jan 4; minimum discharge, 100 cfs (estimated) for many days; minimum elevation, (forebay and tailrace) not determined.
Period of record: Maximum daily discharge, 15,400 cfs Jan. 5, 6, 1972; maximum elevation (forebay), 172.00 ft May 8, 1972; maximum gage height (tailrace), 99.20 ft Jan. 4, 1972; minimum discharge, 100 cfs (estimated) for many days; minimum elevation (forebay and tailrace) not determined.

REMARKS.--Discharge is based upon megawatt-discharge relationships with adjustments for differential water surface elevations during release periods and estimates of turbine leakage during nonrelease periods, and low-flow sluiceway discharge based on discharge measurements.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,170	130	130	15,000	5,850	100	130	5,720	130	130	3,580	5,840
2	130	130	5,570	15,000	8,900	100	130	130	130	130	3,610	100
3	2,300	130	8,010	15,000	11,600	1,460	130	130	130	3,260	3,470	100
4	130	130	130	15,200	11,600	100	130	130	130	130	3,450	4,650
5	130	130	130	15,400	11,600	100	130	130	4,670	130	4,270	6,890
6	130	130	130	15,400	11,600	100	130	130	4,620	170	3,410	6,800
7	130	130	130	14,900	11,800	100	130	130	6,190	130	4,630	6,800
8	130	130	130	14,800	13,200	100	130	6,250	5,820	130	6,890	6,890
9	130	130	130	15,000	15,000	100	130	6,570	2,690	130	6,890	5,990
10	130	130	130	15,000	11,200	100	130	7,410	4,770	130	6,800	100
11	130	130	130	15,000	7,160	100	130	7,270	130	130	5,490	4,480
12	130	130	130	15,000	7,630	100	130	7,070	3,200	130	100	6,960
13	130	130	4,380	15,000	7,610	100	130	130	2,870	130	100	6,960
14	130	130	9,370	15,000	4,650	100	130	130	3,010	130	3,940	6,960
15	130	130	9,610	15,000	7,380	1,800	130	6,910	100	130	4,180	4,520
16	130	130	12,400	15,000	7,550	100	130	7,300	130	130	6,430	100
17	130	130	14,600	14,800	5,150	670	130	9,400	130	2,140	6,890	100
18	130	130	15,000	15,200	130	130	130	11,100	130	3,330	6,710	4,700
19	130	130	15,000	15,000	130	130	8,620	130	2,510	7,940	6,030	6,960
20	130	130	15,000	15,000	130	130	9,280	130	3,190	5,080	100	7,060
21	130	130	14,400	15,000	130	130	130	130	2,140	5,680	4,510	6,960
22	130	4,090	11,400	15,000	130	130	2,500	5,230	2,150	3,450	6,990	4,500
23	130	4,790	12,000	15,000	130	130	130	5,960	3,380	130	6,890	100
24	130	130	15,000	12,500	130	130	7,350	5,410	130	5,980	6,890	100
25	130	130	15,300	7,090	130	130	130	5,230	130	5,950	4,750	4,470
26	130	130	15,000	5,490	130	130	130	4,940	6,460	5,620	100	6,960
27	130	130	13,700	5,510	130	130	130	6,500	4,110	4,570	100	6,960
28	1,980	130	11,000	7,350	100	130	130	130	4,080	2,620	4,650	6,960
29	2,380	130	7,120	7,650	100	130	130	130	4,620	100	6,890	6,350
30	130	130	9,920	130	------	130	130	4,850	1,140	100	6,990	100
31	130	------	14,800	5,300	------	130	------	130	------	2,550	5,510	------
TOTAL	13,340	12,520	249,880	396,720	160,980	7,150	31,130	114,940	73,020	60,490	141,240	136,420
MEAN	430	417	8,061	12,800	5,551	231	1,038	3,708	2,434	1,951	4,556	4,547
MAX	3,170	4,790	15,300	15,400	15,000	1,800	9,280	11,100	6,460	7,940	6,990	7,060
MIN	130	130	130	130	100	100	130	130	100	100	100	100
AC-FT	26,460	24,830	495,600	786,900	319,300	14,180	61,750	228,000	144,800	120,000	280,100	270,600

WTR YR 1972 TOTAL 1,397,830 MEAN 3,819 MAX 15,400 MIN 100 AC-FT 2,773,000

08026000 Sabine River below Toledo Bend near Burkeville, Tex.

LOCATION.--Lat 31°03'50", long 93°31'10", Newton County, Tex.-Vernon Parish, La. State line, near left edge of low-water channel at downstream side of bridge on State Highway 63, about 200 ft downstream from Pearl Creek, 10 miles northeast of Burkeville, 16 miles downstream from Bayou Toro, and at mile 139.7.

DRAINAGE AREA.--7,482 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 70.59 ft above mean sea level. Prior to Aug. 23, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years (1955-66) prior to completion of Toledo Bend Reservoir, 4,653 cfs (3,371,000 acre-ft per year); 6 years (1966-72) regulated, 3,346 cfs (2,424,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,700 cfs Jan. 4 (gage height, 21.41 ft); minimum daily, 180 cfs Oct. 12, 14.
Period of record: Maximum discharge, 52,900 cfs May 15, 1957 (gage height, 32.43 ft); minimum daily, 38 cfs Sept. 14, 15, 1967.
Maximum stage since at least 1860, 35.9 ft in May 1884, from information by local resident. Flood of Apr. 15, 1945, reached a stage of 35.8 ft, and flood of May 23, 1953, reached a stage of 35.3 ft, from floodmarks.

REMARKS.--Records good. Flow regulated by Toledo Bend Reservoir (station 08025350) 16.8 miles upstream (capacity, 4,660,000 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,430	224	238	14,700	6,000	309	585	2,560	380	720	4,000	6,460
2	1,640	227	2,980	15,400	7,230	909	487	3,750	262	260	4,000	1,940
3	888	225	7,880	15,600	11,600	1,670	426	1,070	244	1,250	3,700	204
4	1,250	219	3,600	18,700	11,700	1,040	398	728	236	2,540	3,400	1,970
5	271	214	901	19,100	11,600	453	372	631	1,580	1,280	4,200	6,570
6	215	215	3,070	18,000	11,700	351	346	587	4,390	1,030	3,400	6,840
7	204	212	2,280	16,800	11,800	316	332	713	5,850	601	4,500	6,840
8	202	210	1,060	15,200	12,300	303	319	4,630	6,620	348	6,540	6,940
9	189	229	592	15,100	15,000	451	306	8,190	4,050	312	6,780	6,890
10	187	236	446	15,700	14,500	581	293	7,040	3,040	330	6,660	1,960
11	182	222	455	15,700	7,880	402	290	6,810	2,930	321	6,540	1,990
12	180	216	398	15,300	7,620	319	280	6,990	1,360	391	2,000	6,700
13	181	214	1,780	15,000	7,810	281	270	3,860	2,950	316	450	6,970
14	180	210	8,410	14,900	5,890	267	260	600	3,550	297	4,000	6,990
15	184	211	9,710	14,800	6,740	1,460	250	3,550	1,710	332	4,000	6,420
16	192	218	10,800	14,800	7,370	1,430	250	7,230	660	295	6,000	1,090
17	214	211	15,100	14,700	6,520	960	290	7,320	793	1,050	6,800	233
18	214	303	15,700	14,800	1,990	596	290	12,200	530	2,940	6,600	2,060
19	203	438	15,600	15,000	504	371	3,930	4,070	1,740	5,250	6,000	6,680
20	197	290	15,300	15,200	399	342	8,830	462	2,190	6,360	500	7,090
21	195	256	15,300	15,400	377	2,400	4,980	289	2,590	5,470	4,500	7,080
22	194	1,890	11,900	15,100	364	2,570	1,200	2,120	2,150	3,840	7,000	6,470
23	191	4,190	11,100	15,100	351	1,750	1,900	5,190	2,980	2,210	7,030	1,110
24	189	2,640	14,300	14,800	338	1,600	3,830	5,340	1,530	3,000	7,280	192
25	185	371	15,200	7,910	328	1,540	3,590	5,130	296	5,800	6,810	1,910
26	184	260	15,000	6,220	316	1,060	485	5,120	2,320	5,800	1,330	6,650
27	182	245	14,800	5,500	303	731	400	5,800	5,790	5,500	215	7,200
28	1,180	241	11,200	7,500	292	522	892	3,550	3,650	4,500	1,980	7,350
29	2,170	243	8,390	7,500	262	887	657	424	4,360	1,000	6,630	7,420
30	944	239	7,380	500	------	1,400	446	1,910	2,870	1,000	7,010	2,320
31	253	------	13,200	5,000	------	955	------	2,910	------	3,000	5,840	------
TOTAL	14,270	15,319	254,070	415,030	169,084	28,226	37,184	120,774	73,601	67,343	145,695	140,539
MEAN	460	511	8,196	13,390	5,830	911	1,239	3,896	2,453	2,172	4,700	4,685
MAX	2,170	4,190	15,700	19,100	15,000	2,570	8,830	12,200	6,620	6,360	7,280	7,420
MIN	180	210	238	500	262	267	250	289	236	260	215	192
AC-FT	28,300	30,390	503,900	823,200	335,400	55,990	73,750	239,600	146,000	133,600	289,000	278,800

CAL YR 1971 TOTAL 590,414 MEAN 1,618 MAX 15,700 MIN 109 AC-FT 1,171,000
WTR YR 1972 TOTAL 1,481,135 MEAN 4,047 MAX 19,100 MIN 180 AC-FT 2,938,000

08028500 Sabine River near Bon Wier, Tex.

LOCATION.--Lat 30°44'49", long 93°36'30", Beauregard Parish, La.-Newton County, Tex. State line, near left bank at downstream side of bridge on U.S. Highway 190, 0.7 mile upstream from Quicksand Creek, 0.8 mile upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.0 miles east of Bon Wier, 2.4 miles upstream from Caney Creek, and at mile 97.7.

DRAINAGE AREA.--8,229 sq mi.

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312. Gage-height records collected in this vicinity since 1913 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 46.42 ft above mean sea level. Prior to July 8, 1931, nonrecording gage at site 0.8 mile downstream at same datum. July 8, 1931, to Oct. 15, 1958, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years (1923-66) prior to completion of Toledo Bend Reservoir, 6,846 cfs (4,960,000 acre-ft per year); 6 years (1966-72) regulated, 3,995 cfs (2,894,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,500 cfs Jan. 5 (gage height, 17.26 ft); minimum daily, 320 cfs (estimated) Nov. 6-9, 14-16.
Period of record: Maximum discharge, 115,000 cfs May 19, 1953 (gage height, 25.70 ft); minimum daily, 134 cfs Nov. 9, 1966. Maximum stage since at least 1833, 30.5 ft Apr. 23 or 24, 1913, from information by Gulf, Colorado, and Santa Fe Railway Co. and local residents. Flood in May 1884 reached a stage of 26 ft. Floods occurring about 1844 and 1860 were higher than flood in May 1884, from information by local residents.

REMARKS.--Records fair. Flow regulated by Toledo Bend Reservoir (station 08025350) located 58.8 miles upstream.

REVISIONS (WATER YEARS).--WSP 1342: 1953. WSP 1442: 1924, 1926-27(M), 1929(M), 1939. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,380	563	535	13,700	9,100	1,240	2,190	809	2,610	3,190	5,580	6,600
2	1,880	430	1,380	15,700	9,490	2,200	1,600	3,590	866	1,360	6,040	6,000
3	1,880	380	7,170	17,100	10,900	3,730	1,330	3,750	626	727	5,490	2,520
4	1,230	340	9,690	19,100	12,700	4,260	1,170	1,760	569	2,250	5,050	890
5	1,570	330	4,720	23,600	12,600	3,090	1,060	1,120	536	2,500	4,710	3,500
6	780	320	8,780	23,700	12,500	2,050	1,030	877	2,440	1,800	4,910	6,400
7	750	320	11,100	22,800	12,600	1,640	984	795	4,840	1,300	4,680	7,000
8	563	320	7,200	21,800	12,900	1,480	934	1,840	6,440	1,000	5,090	7,200
9	490	320	5,020	20,200	13,800	1,660	859	5,590	6,740	850	6,700	7,200
10	479	330	3,840	20,000	15,500	1,710	814	7,310	4,420	800	7,100	6,000
11	448	350	2,970	20,300	12,700	1,740	767	7,400	4,260	850	7,000	2,430
12	415	340	2,290	19,700	9,230	1,440	736	7,450	2,830	800	6,400	3,370
13	379	330	1,990	18,500	9,090	1,240	712	7,790	2,320	1,000	2,500	6,500
14	362	320	4,760	17,100	9,060	1,140	687	4,000	3,600	900	1,050	7,100
15	367	320	9,830	16,500	7,270	1,080	659	900	4,370	800	2,910	7,200
16	379	320	11,000	16,100	8,100	2,890	651	5,500	3,010	750	4,700	6,400
17	425	330	13,400	15,800	8,400	3,250	676	7,500	2,050	750	6,400	1,930
18	547	390	16,300	15,700	7,100	2,400	653	9,190	2,280	2,000	7,200	882
19	544	500	17,100	15,800	3,150	1,800	630	10,200	2,340	4,500	7,000	3,410
20	469	600	17,000	17,000	1,870	1,340	5,240	3,920	3,470	6,610	6,000	7,050
21	426	500	16,600	19,600	1,550	3,080	8,600	1,200	3,780	6,560	2,530	7,440
22	406	450	15,500	19,400	1,440	6,550	4,070	790	3,580	6,210	3,700	7,500
23	396	2,000	12,900	18,500	1,370	5,370	2,110	3,140	3,100	4,580	7,000	5,880
24	385	4,030	12,700	17,500	1,310	3,910	2,120	5,780	3,870	2,500	7,400	1,790
25	377	2,400	14,800	14,400	1,230	3,690	4,640	5,840	2,190	4,000	7,500	832
26	364	889	15,500	9,640	1,190	5,010	3,320	5,770	940	6,340	6,500	3,240
27	358	578	15,500	7,750	1,140	3,880	1,030	5,640	3,620	6,020	2,300	7,080
28	357	509	14,400	7,130	1,110	2,800	844	6,380	5,740	5,380	936	7,470
29	1,110	477	11,800	7,940	1,130	2,310	1,330	3,230	4,520	4,370	3,410	7,630
30	2,200	467	9,040	8,890	------	2,650	1,110	1,050	5,060	1,970	6,400	6,890
31	1,290	------	9,800	7,430	------	2,840	------	2,920	------	3,410	7,000	------
TOTAL	24,006	19,753	304,615	508,380	209,530	83,470	52,556	133,031	97,017	86,077	161,186	155,334
MEAN	774	658	9,826	16,400	7,225	2,693	1,752	4,291	3,234	2,777	5,200	5,178
MAX	2,380	4,030	17,100	23,700	15,500	6,550	8,600	10,200	6,740	6,610	7,500	7,630
MIN	357	320	535	7,130	1,110	1,080	630	790	536	727	936	832
AC-FT	47,620	39,180	604,200	1,008M	415,600	165,600	104,200	263,900	192,400	170,700	319,700	308,100

CAL YR 1971 TOTAL 807,298 MEAN 2,212 MAX 17,100 MIN 320 AC-FT 1,601,000
WTR YR 1972 TOTAL 1,834,955 MEAN 5,014 MAX 23,700 MIN 320 AC-FT 3,640,000

08029500 Big Cow Creek near Newton, Tex.

LOCATION.--Lat 30°49'08", long 93°47'07", Newton County, near center of span at downstream side of bridge on State Highway 87, 2.6 miles southwest of Newton, 5.0 miles downstream from Melhomes Creek, and 8.0 miles upstream from Whiteoak Creek.

DRAINAGE AREA.--128 sq mi.

PERIOD OF RECORD.--April 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 134.69 ft above mean sea level (levels by Topographic Division). Prior to Dec. 19, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 91.9 cfs (9.75 inches per year, 66,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,470 cfs Jan. 5 (gage height, 14.92 ft); minimum, 13 cfs July 3.
Period of record: Maximum discharge, 20,200 cfs Apr. 29, 1953 (gage height, 19.45 ft); minimum daily, 10 cfs July 7, 8, 21-23, 1971.
Maximum stage since at least 1907, 27.5 ft in April 1922, from information by local resident.

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

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	46	62	188	72	62	65	25	14	56	22
2	15	21	119	245	118	198	58	236	23	14	33	21
3	15	21	362	211	93	151	54	267	22	14	31	21
4	16	21	202	622	76	87	51	106	21	69	34	25
5	26	21	240	1,260	68	68	49	62	20	156	25	36
6	41	21	1,040	360	79	56	48	51	20	93	21	60
7	41	21	1,030	158	132	51	47	87	20	46	19	35
8	31	21	255	114	111	55	45	494	20	41	18	28
9	22	20	165	125	81	60	41	178	20	35	17	25
10	18	20	332	702	71	55	40	87	20	31	17	22
11	17	22	182	241	66	48	40	68	20	27	17	21
12	17	22	108	127	96	45	40	71	19	25	18	20
13	17	20	164	99	111	43	39	183	19	35	19	19
14	16	20	132	81	84	42	36	142	20	56	19	19
15	17	20	147	70	70	45	34	74	28	39	46	18
16	18	20	320	64	64	135	40	55	40	28	40	19
17	136	20	417	62	60	122	45	46	52	27	36	43
18	117	29	194	62	58	72	38	42	47	33	26	24
19	60	48	111	62	54	54	34	38	32	39	22	20
20	42	73	90	306	51	50	32	35	26	29	19	19
21	33	42	78	303	50	740	32	32	22	26	18	21
22	29	32	68	138	49	899	69	30	21	26	17	21
23	27	34	62	96	49	240	60	29	20	28	63	20
24	24	43	59	78	48	125	42	28	20	26	212	22
25	23	47	58	69	47	301	35	28	19	22	114	30
26	22	36	57	62	46	177	32	37	18	20	74	35
27	22	30	56	58	45	108	34	32	17	19	54	33
28	22	29	53	56	44	90	167	46	15	18	39	74
29	21	28	51	57	46	87	175	34	14	18	32	52
30	21	37	52	245	------	90	87	28	14	31	27	57
31	21	------	57	487	------	72	------	26	------	56	24	------
TOTAL	962	860	6,307	6,682	2,155	4,438	1,606	2,737	694	1,141	1,207	882
MEAN	31.0	28.7	203	216	74.3	143	53.5	88.3	23.1	36.8	38.9	29.4
MAX	136	73	1,040	1,260	188	899	175	494	52	156	212	74
MIN	15	20	46	56	44	42	32	26	14	14	17	18
CFSM	.24	.22	1.59	1.69	.58	1.12	.42	.69	.18	.29	.30	.23
IN.	.28	.25	1.83	1.94	.63	1.29	.47	.80	.20	.33	.35	.26
AC-FT	1,910	1,710	12,510	13,250	4,270	8,800	3,190	5,430	1,380	2,260	2,390	1,750

CAL YR 1971 TOTAL 18,284 MEAN 50.1 MAX 1,040 MIN 10 CFSM .39 IN 5.31 AC-FT 36,270
WTR YR 1972 TOTAL 29,671 MEAN 81.1 MAX 1,260 MIN 14 CFSM .63 IN 8.62 AC-FT 58,850

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
12- 7	0300	14.69	1,330
1- 5	1100	14.92	1,470
3-22	0400	14.60	1,270

08030000 Cypress Creek near Buna, Tex.

LOCATION.--Lat 30°25'52", long 93°54'28", Jasper County, near center of span at downstream side of bridge on Farm Road 253, 0.3 mile downstream from Boggy Creek, 3.2 miles east of Buna, and 9.5 miles upstream from Little Cypress Creek.

DRAINAGE AREA.--69.2 sq mi.

PERIOD OF RECORD.--March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 46.16 ft above mean sea level. Prior to Oct. 23, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 62.8 cfs (12.32 inches per year, 45,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,210 cfs Jan. 20 (gage height, 10.89 ft); no flow for many days.
Period of record: Maximum discharge, 7,100 cfs Sept. 18, 1963 (gage height, 13.28 ft); no flow at times.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No known diversions above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03	7.5	35	248	126	10	1.9	.07	0	0	.25
2	0	.01	118	95	200	205	7.0	47	.06	0	0	.20
3	0	0	416	130	147	175	5.1	103	.05	0	0	.15
4	.03	0	368	187	89	104	4.0	50	.03	0	0	.30
5	2.9	0	534	490	50	58	3.2	20	.03	0	0	.50
6	3.1	0	1,360	505	109	33	2.6	7.3	.02	0	0	.60
7	.37	0	1,470	415	285	19	2.2	4.8	.01	0	0	1.0
8	.12	0	961	244	114	19	1.9	41	.01	0	0	.80
9	.05	0	625	147	67	22	1.5	54	0	0	0	.60
10	.02	0	482	154	46	12	1.2	34	0	0	0	.50
11	0	0	424	126	35	7.6	1.0	27	0	0	0	.40
12	0	0	320	96	126	6.3	.86	88	0	0	0	.30
13	0	0	180	63	136	5.1	.76	203	0	.28	0	.25
14	0	0	120	44	84	4.3	.66	104	0	6.4	0	.20
15	0	0	114	30	58	18	.55	51	0	3.6	.13	.15
16	3.5	0	158	18	44	414	.57	22	0	1.7	5.0	.10
17	73	0	180	12	32	455	.54	10	.53	1.2	.99	.10
18	102	40	195	9.7	22	123	.47	5.3	.74	1.0	.46	.10
19	82	119	150	23	15	48	.37	3.2	.45	.79	2.7	.10
20	42	66	114	1,550	11	28	.29	2.0	.25	.58	14	.10
21	24	24	84	1,360	7.8	735	.76	1.5	.12	.50	1.3	5.0
22	14	13	58	881	6.6	713	2.3	1.1	.08	.42	.60	10
23	9.6	15	40	588	6.0	331	1.5	.79	.05	.31	.19	5.0
24	6.0	79	27	321	5.2	150	.91	.54	.04	.19	.22	5.0
25	3.4	36	20	137	4.8	196	.61	.39	.03	.09	.32	40
26	1.8	15	16	68	4.2	97	.40	.35	.02	.04	.47	15
27	.95	10	13	40	3.8	45	.30	.35	.01	.01	.58	5.0
28	.44	7.5	12	28	3.3	35	3.1	.27	0	0	.60	2.2
29	.19	5.7	10	22	18	31	4.6	.19	0	0	.50	1.5
30	.09	9.0	9.6	190	------	25	2.7	.14	0	0	.40	10
31	.05	------	30	380	------	17	------	.10	------	0	.30	------
TOTAL	369.61	439.24	8,616.1	8,388.7	1,977.7	4,257.3	61.95	884.22	2.60	17.11	28.76	105.40
MEAN	11.9	14.6	278	271	68.2	137	2.07	28.5	.087	.55	.93	3.51
MAX	102	119	1,470	1,550	285	735	10	203	.74	6.4	14	40
MIN	0	0	7.5	9.7	3.3	4.3	.29	.10	0	0	0	.10
CFSM	.17	.21	4.02	3.92	.99	1.98	.03	.41	.001	.008	.01	.05
IN.	.20	.24	4.63	4.51	1.06	2.29	.03	.48	.001	.009	.02	.06
AC-FT	733	871	17,090	16,640	3,920	8,440	123	1,750	5.2	34	57	209

CAL YR 1971 TOTAL 12,234.14 MEAN 33.5 MAX 1,470 MIN 0 CFSM .48 IN 6.58 AC-FT 24,270
WTR YR 1972 TOTAL 25,148.69 MEAN 68.7 MAX 1,550 MIN 0 CFSM .99 IN 13.52 AC-FT 49,880

PEAK DISCHARGE (BASE, 1,000 CFS).--Dec. 7 (0800) 1,570 cfs (10.46 ft); Jan. 20 (1500) 2,210 cfs (10.89 ft).

NOTE.--No gage-height record Aug. 28 to Sept. 30.

08030500 Sabine River near Ruliff, Tex.

LOCATION.--Lat 30°18'13", long 93°44'37", Calcasieu Parish, La.-Newton County, Tex. State line, at downstream side of bridge on Texas State Highway 12, 2.4 miles north of Ruliff, 4.2 miles upstream from the Kansas City Southern Railway Co. bridge, 4.5 miles downstream from Cypress Creek, and at mile 40.2.

DRAINAGE AREA.--9,329 sq mi.

PERIOD OF RECORD.--October 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4.08 ft above mean sea level. Prior to Mar. 1, 1941, nonrecording gage at Kansas City Southern Railway Co. bridge, 4.2 miles downstream and at datum 2.02 ft lower. Mar. 1, 1941, to Dec. 8, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years (1924-66) prior to completion of Toledo Bend Reservoir, 8,422 cfs (6,102,000 acre-ft per year); 6 years (1966-72) regulated, 5,345 cfs (3,872,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 27,400 cfs Jan. 9 (gage height, 14.78 ft); minimum daily, 387 cfs Nov. 9.
Period of record: Maximum discharge, 121,000 cfs May 22, 1953 (gage height, 19.98 ft); minimum, 270 cfs Sept. 27-30, Oct. 1-3, 17-20, 1956.
Maximum stage since at least 1835, 22.2 ft in May or June 1884 (adjusted to present site and datum on basis of slope of flood of June 8, 9, 1950); flood of Apr. 26-29, 1913, reached a stage of 19.5 ft, present site and datum, from information by local resident.

REMARKS.--Records good. Flow partly regulated by Toledo Bend Reservoir (station 08025350) 116.3 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1282: 1941(M), 1942. WSP 1442: 1925-29, 1937-39, 1943. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,930	1,760	953	16,100	13,500	1,890	4,180	2,110	2,380	4,690	3,390	6,290
2	2,980	1,150	1,180	14,900	13,400	2,650	3,780	2,060	3,200	4,430	4,360	7,030
3	2,120	718	3,240	14,600	13,300	4,010	3,090	3,380	2,230	2,950	5,400	7,080
4	2,240	534	6,420	16,100	13,300	5,300	2,520	5,100	1,310	1,680	5,840	5,830
5	1,690	465	9,320	17,900	13,500	5,920	2,160	4,510	993	1,670	5,690	3,200
6	1,760	432	15,000	19,500	14,300	5,630	1,920	3,240	881	3,390	5,340	2,490
7	1,480	410	19,300	22,500	15,000	4,460	1,770	2,210	1,210	3,440	5,120	4,840
8	1,180	390	20,800	25,700	15,700	3,430	1,690	1,840	3,290	2,770	5,080	6,350
9	1,080	387	22,100	27,100	16,100	2,790	1,600	2,280	4,680	2,320	4,950	7,210
10	912	394	22,000	26,100	16,100	2,570	1,510	4,170	5,650	1,890	5,660	7,660
11	745	398	19,000	24,200	16,100	2,580	1,430	6,000	5,830	1,550	6,740	7,790
12	664	405	14,900	22,900	16,600	2,550	1,350	7,570	4,930	1,470	7,480	6,570
13	592	422	10,500	22,600	16,800	2,370	1,290	8,660	4,300	1,650	7,480	4,310
14	524	427	7,190	22,400	16,000	2,140	1,250	9,060	2,940	1,920	6,560	5,210
15	492	420	6,060	21,100	14,800	2,040	1,200	8,760	3,240	1,930	3,230	6,500
16	507	406	7,720	19,900	13,400	2,910	1,160	6,490	4,040	1,720	2,420	7,340
17	843	395	10,300	19,500	11,900	4,000	1,110	4,860	4,180	1,540	3,750	7,650
18	915	480	12,400	18,900	11,000	5,140	1,090	5,850	3,140	1,480	5,100	6,060
19	849	817	14,300	18,700	10,500	5,120	1,090	7,060	2,660	1,550	6,560	3,230
20	1,050	892	16,200	20,400	9,010	4,180	1,060	8,180	2,610	2,760	7,880	2,510
21	988	1,200	17,800	23,100	5,940	4,180	2,330	8,640	2,920	4,380	7,480	4,840
22	795	1,420	19,000	24,900	3,790	5,250	5,240	6,360	3,450	5,840	6,400	6,390
23	664	1,190	19,400	24,900	2,850	7,200	6,380	3,370	3,730	6,530	4,290	7,320
24	593	1,300	19,500	24,400	2,480	8,610	5,000	2,430	3,480	6,290	5,360	7,810
25	543	3,070	19,000	23,300	2,290	8,740	3,640	4,190	3,490	4,970	6,940	6,260
26	506	3,600	18,000	21,600	2,160	7,610	3,490	5,290	3,290	3,690	7,980	3,320
27	476	2,300	17,400	19,900	2,040	6,930	4,490	5,730	2,010	4,840	8,350	2,600
28	454	1,400	17,400	18,000	1,940	6,780	3,320	5,900	1,910	5,730	6,920	5,030
29	438	1,190	17,700	15,300	1,860	6,040	2,110	6,050	4,060	5,950	3,790	6,740
30	474	1,070	17,900	13,900	------	5,050	1,910	5,840	4,660	5,570	2,740	7,970
31	1,390	------	17,500	13,700	------	4,370	------	3,690	------	4,250	4,830	------
TOTAL	31,874	29,442	439,483	634,100	305,660	142,440	74,160	160,880	96,694	104,840	173,110	173,430
MEAN	1,028	981	14,180	20,450	10,540	4,595	2,472	5,190	3,223	3,382	5,584	5,781
MAX	2,980	3,600	22,100	27,100	16,800	8,740	6,380	9,060	5,830	6,530	8,350	7,970
MIN	438	387	953	13,700	1,860	1,890	1,060	1,840	881	1,470	2,420	2,490
AC-FT	63,220	58,400	871,700	1,258M	606,300	282,500	147,100	319,100	191,800	208,000	343,400	344,000

CAL YR 1971 TOTAL 1,142,083 MEAN 3,129 MAX 22,100 MIN 387 AC-FT 2,265,000
WTR YR 1972 TOTAL 2,366,113 MEAN 6,465 MAX 27,100 MIN 387 AC-FT 4,693,000

08031000 Cow Bayou near Mauriceville, Tex.

LOCATION.--Lat 30°11'10", long 93°54'30", Orange County, near center of span at downstream side of bridge on State Highway 12, 0.4 mile upstream from Kansas City Southern Railway Co. bridge, and 2.7 miles southwest of Mauriceville.

DRAINAGE AREA.--83.3 sq mi.

PERIOD OF RECORD.--March 1952 to current year (October 1956 to September 1957, monthly discharge only).

GAGE.--Water-stage recorder. Datum of gage is 4.73 ft above mean sea level. Prior to Oct. 23, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 87.2 cfs (14.21 inches per year, 63,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 998 cfs Dec. 8 (gage height, 12.52 ft); minimum daily, 0.02 cfs Nov. 4-18.
Period of record: Maximum discharge, 4,600 cfs Sept. 19, 1963 (gage height, 18.15 ft); no flow at times.
Maximum stage since at least 1940, 18.16 ft Oct. 28, 1970.

REMARKS.--Records good except those for April and May, which are poor. No large diversion above station. Base flow partly sustained by springs.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	.04	9.1	28	566	7.8	49	10	.20	.22	5.2	1.5
2	1.8	.03	146	38	585	250	33	50	.15	.12	4.0	1.3
3	1.5	.03	230	40	527	155	23	90	.10	.06	3.3	1.0
4	1.8	.02	191	125	402	120	16	90	.08	2.7	2.3	.75
5	3.8	.02	295	191	301	122	12	50	.06	4.5	1.6	.48
6	5.8	.02	886	179	272	111	9.0	30	.04	3.3	1.2	.31
7	40	.02	939	179	268	92	6.9	120	.04	2.2	.96	.30
8	56	.02	986	199	210	73	5.4	140	.05	1.5	.64	.30
9	39	.02	977	215	163	55	4.1	92	.05	35	.72	.68
10	24	.02	916	235	135	39	3.3	62	.05	26	.70	1.2
11	13	.02	820	203	126	28	2.6	150	.05	9.4	.57	.60
12	6.6	.02	675	167	159	21	2.3	200	.07	5.1	.44	.39
13	4.3	.02	505	143	154	15	2.0	300	.28	3.7	.40	.34
14	2.9	.02	373	135	136	11	1.8	300	.19	8.2	.34	.18
15	2.2	.02	314	123	119	9.4	1.5	250	.75	32	.28	.12
16	2.0	.02	259	101	104	83	1.3	150	8.1	54	.92	.28
17	2.3	.02	301	75	89	159	1.2	100	9.2	91	1.3	1.5
18	3.6	1.3	306	54	78	237	1.1	60	14	69	.67	1.8
19	3.2	4.3	296	45	63	253	1.0	40	25	46	.56	2.7
20	4.3	1.9	279	311	50	232	1.0	20	36	29	.30	1.6
21	4.7	1.4	243	364	39	542	2.0	12	34	17	.20	.91
22	3.6	1.1	199	484	30	482	3.0	6.0	18	14	.14	.46
23	2.2	1.1	167	650	24	501	2.5	4.0	9.8	8.7	37	.28
24	1.4	.99	135	760	19	504	2.0	2.5	5.8	5.2	17	4.6
25	1.1	.88	104	760	15	448	1.5	2.0	3.7	3.1	6.6	13
26	.77	.77	82	630	13	349	1.3	1.5	2.1	2.1	3.2	12
27	.40	.57	65	422	11	264	1.2	1.0	1.1	1.5	2.0	25
28	.26	.77	51	285	8.6	202	8.0	.70	.60	1.4	2.7	36
29	.16	5.1	39	209	7.3	144	15	.50	.32	2.1	1.8	23
30	.10	8.4	30	474	------	95	12	.40	.20	4.6	1.7	44
31	.06	------	24	530	------	69	------	.30	------	6.3	1.6	------
TOTAL	234.85	28.96	10,842.1	8,354	4,673.9	5,673.2	226.0	2,334.90	170.08	489.00	100.34	176.58
MEAN	7.58	.97	350	269	161	183	7.53	75.3	5.67	15.8	3.24	5.89
MAX	56	8.4	986	760	585	542	49	300	36	91	37	44
MIN	.06	.02	9.1	28	7.3	7.8	1.0	.30	.04	.06	.14	.12
CFSM	.09	.01	4.20	3.23	1.93	2.20	.09	.90	.07	.19	.04	.07
IN.	.10	.01	4.84	3.73	2.09	2.53	.10	1.04	.08	.22	.04	.08
AC-FT	466	57	21,510	16,570	9,270	11,250	448	4,630	337	970	199	350

CAL YR 1971 TOTAL 19,916.86 MEAN 54.6 MAX 986 MIN .02 CFSM .66 IN 8.89 AC-FT 39,510
WTR YR 1972 TOTAL 33,303.91 MEAN 91.0 MAX 986 MIN .02 CFSM 1.09 IN 14.87 AC-FT 66,060

PEAK DISCHARGE (BASE, 900 CFS).--Dec. 8 (2200) 998 cfs (12.52 ft).

08031200 Kickapoo Creek near Brownsboro, Tex.

LOCATION.--Lat 32°18'34", long 95°36'19", Henderson County, on left bank 94 ft downstream from bridge on Farm Road 314 and 1.0 mile northeast of Brownsboro.

DRAINAGE AREA.--232 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 358.62 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 119 cfs (6.97 inches per year, 86,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,960 cfs Dec. 11 (gage height, 13.33 ft); no flow Sept. 3, 12-23.
Period of record: Maximum discharge, 14,800 cfs Apr. 27, 1966 (gage height, 14.79 ft); maximum gage height, 15.34 ft May 11, 1968; no flow for many days.
Maximum stage since 1935, 16.4 ft in 1936 or 1937, from information by local residents.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	22	63	148	557	67	53	55	3.8	6.8	12	.02
2	13	20	55	302	486	66	47	59	2.8	5.4	5.1	.01
3	10	18	65	1,120	384	67	39	48	8.3	4.5	2.5	0
4	8.8	16	78	2,110	314	72	35	36	8.2	3.3	1.6	.31
5	8.8	15	121	2,230	264	79	34	28	5.2	2.9	1.2	.27
6	8.6	14	202	1,710	219	81	34	22	3.2	2.7	.93	1.5
7	7.7	13	361	903	168	79	36	20	2.1	2.1	.36	.79
8	7.1	12	518	590	130	80	38	17	1.4	1.6	.11	.28
9	6.5	11	703	464	111	73	38	15	.92	1.2	.05	.09
10	7.3	11	1,360	381	103	67	35	14	.62	.91	.02	.04
11	7.6	10	6,740	321	101	63	32	13	.39	.76	.01	.02
12	6.7	10	3,690	277	100	60	30	13	.23	.55	.01	0
13	6.0	10	1,440	238	100	58	28	15	.12	.40	.19	0
14	5.3	10	784	207	100	57	27	18	5.0	.34	.17	0
15	4.7	10	586	173	101	57	26	22	19	1.3	9.2	0
16	4.2	9.9	548	143	103	57	24	23	33	3.6	16	0
17	3.4	13	571	125	103	56	23	19	27	2.3	16	0
18	3.0	50	631	111	98	55	22	13	19	2.7	12	0
19	2.7	132	539	100	93	54	20	10	16	2.3	14	0
20	7.1	180	440	93	86	51	18	7.8	13	1.3	12	0
21	15	439	363	90	80	48	17	6.0	12	1.3	10	0
22	37	532	307	91	74	46	16	4.8	29	3.6	11	0
23	57	452	256	93	73	43	16	3.8	66	2.6	26	0
24	83	354	202	94	71	41	16	3.3	78	2.2	32	.08
25	126	285	171	91	72	41	18	3.2	74	1.4	31	.17
26	164	219	146	87	72	42	19	3.2	65	.89	12	.10
27	155	169	121	87	72	45	21	2.8	48	.53	2.2	.04
28	110	139	107	96	71	51	33	2.7	24	.32	.82	.03
29	60	116	102	174	70	55	47	4.5	12	.41	.31	.22
30	34	92	103	376	------	52	49	5.4	8.5	2.6	.10	2.0
31	26	------	106	511	------	51	------	4.4	------	16	.04	------
TOTAL	1,015.5	3,383.9	21,479	13,536	4,376	1,814	891	511.9	585.78	78.81	228.92	5.97
MEAN	32.8	113	693	437	151	58.5	29.7	16.5	19.5	2.54	7.38	.20
MAX	164	532	6,740	2,230	557	81	53	59	78	16	32	2.0
MIN	2.7	9.9	55	87	70	41	16	2.7	.12	.32	.01	0
CFSM	.14	.49	2.99	1.88	.65	.25	.13	.07	.08	.01	.03	.0009
IN.	.16	.54	3.44	2.17	.70	.29	.14	.08	.09	.01	.04	0
AC-FT	2,010	6,710	42,600	26,850	8,680	3,600	1,770	1,020	1,160	156	454	12

CAL YR 1971 TOTAL 34,753.78 MEAN 95.2 MAX 6,740 MIN 0 CFSM .41 IN 5.57 AC-FT 68,930
WTR YR 1972 TOTAL 47,906.78 MEAN 131 MAX 6,740 MIN 0 CFSM .56 IN 7.68 AC-FT 95,020

PEAK DISCHARGE (BASE, 1,000 CFS).--Dec. 11 (1200) 7,960 cfs (13.33 ft); Jan. 5 (1600) 2,560 cfs (11.00 ft).

08031290 Flat Creek Reservoir near Athens, Tex.

LOCATION.--Lat 32°12'15", long 95°43'30", Henderson County, at upstream side of dam on Flat Creek, 8 miles east of Athens, 5 miles downstream from Underwood Lake, and 18 miles upstream from Neches River.

DRAINAGE AREA.--21.6 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

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

EXTREMES.--Current year: Maximum contents, 33,410 acre-ft Jan. 3 (elevation, 440.40 ft); minimum, 30,790 acre-ft Oct. 14-19 (elevation, 438.66 ft).
Period of record: Maximum contents, 36,500 acre-ft May 10, 1968 (elevation, 442.37 ft); minimum since operating level was reached (May 7, 1968), 30,400 acre-ft Sept. 22, 1971 (elevation, 438.40 ft).

REMARKS.--Reservoir is formed by compacted earthfill embankment 3,000 ft long. The uncontrolled emergency spillway is a 300-foot-wide trapezoidal-shaped ditch cut in clay. Deliberate impoundment began Nov. 1, 1962; dam was completed in May 1963. A 72-inch square drop inlet (elevation, 440.0 ft) will maintain the normal operation level (32,790 acre-ft). Total capacity, 42,600 acre-ft (elevation, 446.0 ft, crest of spillway). Area and capacity tables furnished by city of Athens and computed from Geological Survey topographic maps dated 1949 and 1950. Water used for municipal purposes by the city of Athens.

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

438.0	29,820	440.0	32,790
439.0	31,290	441.0	34,340

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30,900	31,130	31,360	33,190	33,340	33,010	32,930	32,990	32,600	32,930	32,520	32,220
2	30,800	31,140	31,540	33,220	33,210	32,990	32,950	32,990	32,570	32,880	32,460	32,220
3	30,800	31,140	31,540	33,380	33,250	32,980	32,980	32,980	32,540	32,860	32,440	32,190
4	30,860	31,110	31,540	33,330	33,220	32,980	32,990	32,950	32,490	32,840	32,380	32,320
5	30,890	31,070	31,800	33,340	33,210	32,980	33,010	32,900	32,490	32,820	32,380	32,340
6	30,890	30,980	31,950	33,310	33,180	32,950	32,990	32,880	32,440	32,750	32,370	32,340
7	30,890	30,960	31,990	33,280	33,180	32,960	32,990	32,880	32,430	32,730	32,310	32,320
8	30,890	31,010	32,050	33,300	33,180	32,950	32,990	32,880	32,370	32,720	32,280	32,290
9	30,860	30,950	32,370	33,270	33,160	32,950	32,980	32,870	32,320	32,690	32,250	32,250
10	30,830	30,930	32,490	33,250	33,130	32,950	32,960	32,820	32,290	32,670	32,290	32,230
11	30,830	30,890	32,520	33,240	33,130	32,950	32,960	32,790	32,260	32,670	32,410	32,230
12	30,800	30,890	32,570	33,220	33,140	32,950	32,960	32,900	32,260	32,640	32,460	32,200
13	30,800	30,860	32,610	33,180	33,130	32,950	32,950	32,900	32,230	32,820	32,440	32,170
14	30,790	30,880	32,720	33,130	33,130	33,020	32,950	32,900	32,640	32,820	32,440	32,140
15	30,790	30,840	32,750	33,130	33,130	33,100	32,900	32,880	32,700	32,810	32,440	32,100
16	30,790	30,840	32,780	33,100	33,130	33,140	32,880	32,880	32,760	32,790	32,440	32,080
17	30,790	31,100	32,780	33,070	33,100	33,110	32,870	32,870	32,810	32,750	32,410	32,050
18	30,790	31,390	32,780	33,070	33,080	33,100	32,840	32,820	32,820	32,760	32,400	32,020
19	30,790	31,390	32,810	33,100	33,050	33,080	32,840	32,820	32,820	32,760	32,380	32,020
20	31,140	31,390	32,810	33,100	33,050	33,050	32,810	32,810	32,790	32,720	32,370	31,990
21	31,140	31,390	32,820	33,080	33,070	32,960	32,880	32,790	33,250	32,750	32,320	31,960
22	31,170	31,410	32,820	33,100	33,070	32,930	32,840	32,750	33,280	32,760	32,380	31,920
23	31,130	31,420	32,820	33,100	33,050	32,900	32,840	32,730	33,270	32,760	32,370	31,920
24	31,130	31,420	32,870	33,070	33,070	32,880	32,820	32,750	33,220	32,760	32,380	32,100
25	31,160	31,410	32,870	33,050	33,070	32,870	32,760	32,720	33,180	32,750	32,350	32,170
26	31,160	31,390	32,900	33,050	33,040	32,860	32,750	32,670	33,100	32,700	32,350	32,160
27	31,160	31,390	32,920	33,040	33,040	32,840	32,980	32,610	33,040	32,690	32,370	32,160
28	31,140	31,390	32,920	33,100	33,020	32,820	32,990	32,640	33,020	32,640	32,320	32,160
29	31,140	31,390	32,960	33,360	33,020	32,810	32,990	32,640	32,980	32,570	32,290	32,190
30	31,130	31,380	32,990	33,360	------	32,870	32,990	32,640	32,950	32,570	32,260	32,170
31	31,110	------	32,980	33,360	------	32,900	------	32,610	------	32,540	32,250	------
(†)	438.88	439.06	440.12	440.37	440.15	-	440.13	439.88	440.10	439.83	439.64	439.59
(*)	+290	+270	+1,600	+380	-340	-120	+90	-380	+340	-410	-290	-80
(††)	88.5	79.4	70.6	78.4	70.8	95.8	105	109	136	132	129	86.5
MAX	31,170	31,420	32,990	33,380	33,340	33,140	33,010	32,990	33,280	32,930	32,520	32,340
MIN	30,790	30,840	31,360	33,040	33,020	32,810	32,750	32,610	32,230	32,540	32,250	31,920

CAL YR 1971..... * -60 †† 1,230 MAX 33,180 MIN 30,420
WTR YR 1972..... * +1,350 †† 1,180 MAX 33,380 MIN 30,790

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Athens.

08031400 Lake Palestine near Frankston, Tex.

LOCATION.--Lat 32°03'12", long 95°26'12", Anderson-Cherokee County line, in outlet tower near right bank, 140 ft upstream from Blackburn Crossing Dam on Neches River, 5 miles east of Frankston, 11 miles upstream from gage, Neches River near Neches, and at mile 354.0.

DRAINAGE AREA.--839 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 20, 1962, nonrecording gage read once daily.

EXTREMES.--Current year: Maximum contents, 235,000 acre-ft May 14 (elevation, 336.82 ft); minimum, 33,140 acre-ft Oct. 16 (elevation, 317.62 ft).
Period of record: Maximum contents, 235,000 acre-ft May 14, 1972 (elevation, 336.82 ft); minimum since first appreciable storage, 11,450 acre-ft Nov. 28, 1970.

REMARKS.--Lake is formed by a rolled earthfill embankment 5,720 ft (revised) long, including a 500-foot (revised) uncontrolled emergency spillway near the the left end of dam. Outlet works consist of a gated concrete tower, connected to a 8.5-foot-diameter conduit through the dam. Outflow is also controlled by two 36-inch-diameter cast-iron pipes connected to tower structure for low-flow releases. Dam completed and deliberate impoundment of water began May 1, 1962. Third stage of lake completed January 1972. Capacity table furnished by Upper Neches River Municipal Water Authority, based on Geological Survey quadrangle sheets dated 1946, 1948-49. No large diversions above station. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	364.0	-
Crest of emergency spillway and operating level	345.0	411,800
Invert of low-flow outlet	309.5	10,600
Invert of 8.5-foot diameter conduit	298.0	550

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

310.0	11,450	319.0	39,560
311.0	13,350	323.0	64,680
313.0	17,800	329.0	121,100
315.0	23,420	337.0	238,100
317.0	30,500		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,260	35,520	48,370	126,700	194,700	218,400	228,600	233,200	230,400	230,200	225,000	219,900
2	33,390	35,860	49,750	127,400	200,300	216,100	226,600	234,100	229,200	228,800	224,800	219,600
3	33,430	35,760	50,170	135,000	198,500	215,100	231,100	234,100	229,500	229,500	225,300	219,400
4	33,560	35,710	50,830	141,600	200,300	217,300	229,200	233,900	229,400	231,300	225,200	219,800
5	33,560	35,660	52,840	146,500	201,100	216,800	228,300	233,400	229,400	229,500	224,600	219,400
6	33,560	36,100	54,410	154,400	205,700	215,900	228,500	233,700	229,000	228,800	223,600	218,900
7	33,480	35,760	55,720	162,400	203,900	219,300	230,600	234,400	228,800	228,500	223,600	218,900
8	33,520	35,760	57,290	166,700	204,400	220,400	229,700	234,100	228,500	228,000	223,000	218,900
9	33,520	35,810	59,480	170,400	205,100	221,800	228,800	233,700	228,100	228,100	222,900	218,900
10	33,390	35,860	62,260	172,400	205,900	223,200	228,600	233,600	228,000	228,100	222,700	218,600
11	33,350	35,710	64,760	174,100	207,100	223,800	229,200	233,000	228,000	227,600	223,200	217,900
12	33,300	35,760	71,210	174,500	207,700	225,200	229,500	234,400	227,600	227,100	223,000	217,400
13	33,300	35,620	85,960	177,400	208,100	225,700	229,200	234,100	227,200	227,100	222,900	217,300
14	33,260	35,760	95,400	178,700	209,700	225,800	230,800	234,400	228,600	226,400	222,900	216,900
15	33,260	35,710	101,000	177,500	209,900	226,700	230,600	234,100	231,100	226,700	222,900	217,400
16	33,350	35,810	104,600	177,800	210,100	226,900	230,600	233,900	230,000	226,200	222,900	216,800
17	33,300	36,630	106,600	178,300	210,600	226,900	230,000	233,700	230,200	226,900	222,700	216,300
18	33,300	38,550	108,400	179,300	211,100	227,200	229,400	233,700	230,200	227,200	222,400	216,300
19	33,350	38,600	110,200	180,000	210,800	226,900	229,900	233,400	230,000	227,100	221,800	215,900
20	33,980	38,840	112,200	180,500	210,900	227,400	229,400	233,000	229,500	226,700	221,800	215,800
21	34,070	39,320	114,200	181,400	211,900	228,000	230,800	232,500	231,100	226,700	221,100	215,900
22	34,110	40,320	115,600	182,000	212,400	228,100	230,600	231,800	232,200	226,900	221,500	215,600
23	34,240	41,410	116,700	182,100	211,700	227,800	230,600	232,200	231,300	227,100	221,100	215,800
24	34,410	42,170	117,800	184,100	212,900	230,000	230,400	232,700	230,800	226,700	221,000	219,400
25	34,500	43,040	118,600	183,000	213,800	228,500	229,700	232,500	230,800	226,400	221,100	219,800
26	34,500	44,020	119,100	183,600	214,200	227,200	228,100	232,300	229,500	225,700	221,300	220,600
27	34,750	44,780	120,200	184,700	214,800	229,000	232,000	231,400	229,000	225,200	221,300	220,800
28	34,890	46,080	120,900	185,600	214,200	232,300	231,800	231,400	230,400	224,800	221,100	220,100
29	35,040	47,040	121,000	188,600	214,800	229,500	232,200	232,300	230,800	225,000	220,600	223,800
30	35,230	47,820	122,500	190,000	------	229,000	231,300	232,200	230,800	226,600	220,100	221,500
31	35,420	------	123,000	192,000	------	228,300	------	230,800	------	226,000	219,900	------
(†)	318.14	320.47	329.16	334.25	335.65	336.44	336.61	336.58	336.58	336.31	335.96	336.05
(*)	+2,160	+12,400	+75,180	+69,000	+22,800	+13,500	+3,000	-500	0	-4,800	-6,100	+1,600
MAX	35,420	47,820	123,000	192,000	214,800	232,300	232,200	234,400	232,200	231,300	225,300	223,800
MIN	33,260	35,520	48,370	126,700	194,700	215,100	226,600	230,800	227,200	224,800	219,900	215,600

CAL YR 1971..... * +110,750 MAX 123,000 MIN 12,020
WTR YR 1972..... * +188,240 MAX 234,400 MIN 33,260

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

08032000 Neches River near Neches, Tex.

LOCATION.--Lat 31°53'32", long 95°25'50", Anderson-Cherokee County line, on left bank downstream from bridge on U.S. Highway 79, 1.0 mile downstream from Missouri Pacific Railroad Co. bridge, 1.4 miles downstream from Walnut Creek, 4.4 miles northeast of Neches, and at mile 333.2.

DRAINAGE AREA.--1,145 sq mi.

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

GAGE.--Water-stage recorder and Conductance Monitor System. Datum of gage is 264.06 ft above mean sea level. Prior to Oct. 27, 1945, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--22 years (1939-61) unregulated, 804 cfs (582,500 acre-ft per year); 11 years (1961-72) regulated, 512 cfs (370,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,640 cfs Jan. 6 (gage height, 13.35 ft); minimum daily, 15 cfs July 4.
Period of record: Maximum discharge, 45,500 cfs Apr. 2, 1945 (gage height, 22.07 ft); no flow Oct. 3-5, 1939.
Flood in May 1908, stage 24.3 ft, was the highest since flood in May 1884, which was probably higher.

REMARKS.--Records good. Some regulation by Lake Palestine (station 08031400) 11 miles upstream and Flat Creek Reservoir (station 08031290) 50 miles upstream (total capacity, 100,200 acre-ft). No large diversion above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	33	67	145	440	109	67	72	26	19	31	26
2	26	33	70	446	403	115	63	59	25	17	27	26
3	26	32	117	669	326	110	60	56	24	16	27	27
4	27	30	173	974	266	104	95	45	24	15	26	34
5	31	30	213	1,360	224	102	135	37	23	16	26	28
6	33	29	410	1,580	206	94	102	33	22	18	25	26
7	31	29	526	1,280	213	88	79	31	22	19	25	25
8	28	29	518	956	202	88	72	32	21	18	24	24
9	28	29	454	662	183	98	65	33	21	17	24	25
10	28	29	401	462	170	97	55	32	22	16	24	27
11	26	29	353	363	160	89	51	30	22	17	24	25
12	26	30	306	305	165	87	49	31	23	17	25	24
13	25	30	306	270	177	88	46	36	29	16	25	24
14	25	30	320	240	172	87	44	43	32	18	26	22
15	26	30	300	218	167	86	42	45	50	18	27	22
16	26	30	277	198	160	82	49	45	65	17	24	32
17	27	31	251	187	151	78	56	46	96	17	21	43
18	28	61	220	184	141	75	47	68	75	19	20	33
19	28	188	189	185	130	71	39	71	51	25	19	27
20	29	250	162	181	120	68	37	73	37	27	19	25
21	68	244	144	175	118	71	35	73	32	26	18	25
22	85	213	130	167	118	75	35	67	63	25	18	25
23	77	165	118	161	123	72	34	46	101	25	23	34
24	73	139	110	155	126	71	32	34	74	24	29	49
25	57	123	108	145	126	109	29	33	50	24	37	117
26	46	106	106	135	123	131	29	32	38	23	35	116
27	39	98	105	130	116	132	33	30	29	23	33	88
28	35	90	105	134	109	117	93	28	23	22	30	139
29	34	80	104	196	106	99	134	27	21	22	28	157
30	34	70	105	405	------	86	97	27	19	26	27	116
31	33	------	108	460	------	74	------	27	------	38	26	------
TOTAL	1,132	2,340	6,876	13,128	5,241	2,853	1,804	1,342	1,160	640	793	1,411
MEAN	36.5	78.0	222	423	181	92.0	60.1	43.3	38.7	20.6	25.6	47.0
MAX	85	250	526	1,580	440	132	135	73	101	38	37	157
MIN	25	29	67	130	106	68	29	27	19	15	18	22
AC-FT	2,250	4,640	13,640	26,040	10,400	5,660	3,580	2,660	2,300	1,270	1,570	2,800

CAL YR 1971 TOTAL 46,693 MEAN 128 MAX 833 MIN 19 AC-FT 92,620
WTR YR 1972 TOTAL 38,720 MEAN 106 MAX 1,580 MIN 15 AC-FT 76,800

08032500 Neches River near Alto, Tex.

LOCATION.--Lat 31°34'45", long 95°09'55", Houston-Cherokee County line, near left bank on downstream side of pier of bridge on State Highway 21, 600 ft downstream from Bowles Creek, 7.5 miles southwest of Alto, and at mile 273.9.

DRAINAGE AREA.--1,945 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 198.29 ft above mean sea level.

AVERAGE DISCHARGE.--17 years (1944-61) unregulated, 1,272 cfs (921,600 acre-ft per year); 11 years (1961-72) regulated, 836 cfs (605,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,880 cfs Jan. 6 (gage height, 13.87 ft); minimum daily, 18 cfs Sept. 17, 18.
Period of record: Maximum discharge, 42,800 cfs Apr. 4, 1945 (gage height, 26.85 ft); minimum, 0.1 cfs Sept. 27, 28, 1954.
Maximum stage since at least 1861, 28.2 ft in May 1884, from information by local residents (discharge, about 50,000 cfs).

REMARKS.--Records good. Flow partly regulated since 1962 by Flat Creek Reservoir (station 08031290) and Lake Palestine (station 08031400); minor regulation by Lake Jacksonville since 1957; total combined capacity, 130,700 acre-ft. During the current year, Upper Neches River Municipal Water Authority diverted 2,650 acre-ft from stream at Rocky Point Crossing 50 miles upstream for municipal and industrial use in the Palestine area. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	54	131	242	572	272	292	180	36	45	56	31
2	43	52	133	473	649	296	243	198	35	39	44	26
3	41	50	219	838	694	349	214	178	33	34	46	23
4	54	47	306	1,230	676	360	214	167	31	140	57	24
5	67	45	308	1,690	637	332	275	149	29	350	51	32
6	84	43	548	1,860	592	303	321	120	27	316	40	82
7	73	41	917	1,810	602	275	280	104	26	149	34	46
8	58	40	946	1,720	566	258	274	94	24	90	30	36
9	51	39	799	1,680	500	248	243	88	23	71	27	31
10	46	38	802	1,660	470	237	207	84	22	65	26	27
11	42	37	872	1,610	450	234	180	79	22	85	24	26
12	38	37	824	1,450	444	237	166	78	21	164	28	24
13	36	38	703	1,150	459	240	152	82	22	119	66	23
14	35	38	609	863	450	221	143	99	37	107	54	22
15	34	39	543	680	433	217	134	85	129	93	45	20
16	35	38	511	572	423	212	130	80	288	69	38	19
17	39	38	501	509	379	206	130	78	214	58	35	18
18	42	60	479	470	352	199	132	76	195	64	40	18
19	45	119	448	446	338	191	128	74	161	61	38	19
20	51	172	412	437	324	185	125	71	141	73	37	20
21	111	160	374	436	308	208	123	74	121	77	29	27
22	115	180	334	427	297	248	126	80	108	68	26	26
23	78	264	299	414	290	233	134	81	103	62	25	23
24	78	326	271	400	285	210	117	80	94	60	24	22
25	98	332	252	383	286	255	102	77	96	56	47	24
26	95	277	237	368	287	396	93	70	109	54	61	50
27	88	226	231	354	286	425	92	58	101	47	47	68
28	79	194	225	343	271	424	119	49	81	40	41	84
29	71	165	221	343	261	460	174	45	65	38	41	106
30	63	144	219	422	------	449	165	42	53	43	41	119
31	57	------	222	540	------	363	------	40	------	61	36	------
TOTAL	1,895	3,333	13,896	25,820	12,581	8,743	5,228	2,860	2,447	2,798	1,234	1,116
MEAN	61.1	111	448	833	434	282	174	92.3	81.6	90.3	39.8	37.2
MAX	115	332	946	1,860	694	460	321	198	288	350	66	119
MIN	34	37	131	242	261	185	92	40	21	34	24	18
AC-FT	3,760	6,610	27,560	51,210	24,950	17,340	10,370	5,670	4,850	5,550	2,450	2,210

CAL YR 1971 TOTAL 82,005 MEAN 225 MAX 1,670 MIN 12 AC-FT 162,700
WTR YR 1972 TOTAL 81,951 MEAN 224 MAX 1,860 MIN 18 AC-FT 162,500

08033000 Neches River near Diboll, Tex.

LOCATION.--Lat 31°07'59", long 94°48'36", Angelina-Polk County line, near center of main span on upstream side of upstream bridge on U.S. Highway 59, 630 ft downstream from Texas and New Orleans Railroad Co. bridge, 3.2 miles downstream from Alabama Creek, 3.8 miles south of Diboll, and at mile 203.5.

DRAINAGE AREA.--2,724 sq mi.

PERIOD OF RECORD.--October 1923 to September 1925, March 1939 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage read twice daily. Datum of gage is 134.46 ft above mean sea level. Prior to July 10, 1925, nonrecording gage at site 630 ft upstream; July 10 to Aug. 31, 1925, and Mar. 30, 1939, to Sept. 24, 1943, nonrecording gage at site 500 ft upstream, all at present datum.

AVERAGE DISCHARGE.--24 years (1923-25, 1939-61) unregulated, 1,807 cfs (1,309,000 acre-ft per year); 11 years (1961-72) regulated, 1,058 cfs (766,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs Feb. 2 (gage height, 10.48 ft); minimum daily, 11 cfs Sept. 21.
Period of record: Maximum discharge, 49,900 cfs May 4, 1944 (gage height, 18.70 ft); no flow Aug. 15-22, 1925.
Maximum stage since at least 1874, 21 ft in May 1884 (discharge, about 110,000 cfs, from rating curve extended above 40,000 cfs); flood in 1900 reached a stage of 19.9 ft (discharge, about 80,000 cfs); from information by local residents.

REMARKS.--Records fair. No large diversion above station. For regulation by upstream reservoirs, see Neches River near Alto (station 08032500).

REVISIONS (WATER YEARS).--WSP 1242: 1950. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	107	278	278	1,940	366	790	484	81	121	67	45
2	82	96	262	457	2,030	366	700	610	81	102	58	39
3	74	85	318	574	1,780	398	592	1,340	76	92	56	35
4	70	75	334	700	1,370	520	502	1,900	72	75	64	34
5	61	68	366	952	1,080	538	475	1,700	69	78	61	35
6	59	64	466	1,060	970	511	448	934	62	318	53	32
7	65	61	511	1,130	916	484	430	538	57	628	48	30
8	79	58	718	1,200	880	448	439	390	56	556	53	30
9	86	56	898	1,280	844	414	430	326	54	422	50	33
10	80	55	992	1,340	808	390	406	270	54	318	50	54
11	74	54	1,010	1,430	754	374	382	232	52	209	48	48
12	66	53	1,010	1,490	718	350	350	239	50	166	41	40
13	58	52	970	1,550	682	342	310	350	48	161	44	30
14	56	50	934	1,580	646	326	278	318	60	120	48	23
15	52	46	898	1,580	646	326	262	270	62	164	58	20
16	56	44	844	1,580	628	342	239	232	86	216	66	18
17	54	46	772	1,550	610	334	216	205	334	209	104	18
18	53	57	700	1,340	574	326	201	185	574	232	110	16
19	52	107	628	1,010	556	318	190	165	590	201	87	13
20	58	157	592	898	511	382	186	157	422	198	70	13
21	86	151	556	826	475	754	188	144	326	169	64	11
22	73	159	511	736	457	592	191	135	278	148	50	15
23	76	208	475	682	439	592	190	129	246	130	46	19
24	102	239	439	646	422	556	187	122	216	121	46	25
25	127	254	414	610	406	736	185	129	190	116	50	30
26	133	310	366	574	390	718	182	133	164	103	102	30
27	120	366	334	538	382	682	198	130	136	93	90	27
28	113	382	310	511	374	754	448	129	130	82	68	33
29	124	358	286	718	374	1,100	520	124	133	74	56	47
30	124	318	270	1,620	------	1,060	556	110	133	69	62	78
31	117	------	270	1,940	------	916	------	90	------	67	54	------
TOTAL	2,515	4,136	17,732	32,380	22,662	16,315	10,671	12,220	4,892	5,758	1,924	921
MEAN	81.1	138	572	1,045	781	526	356	394	163	186	62.1	30.7
MAX	133	382	1,010	1,940	2,030	1,100	790	1,900	590	628	110	78
MIN	52	44	262	278	374	318	182	90	48	67	41	11
AC-FT	4,990	8,200	35,170	64,230	44,950	32,360	21,170	24,240	9,700	11,420	3,820	1,830

CAL YR 1971 TOTAL 99,188 MEAN 272 MAX 1,200 MIN 19 AC-FT 196,700
WTR YR 1972 TOTAL 132,126 MEAN 361 MAX 2,030 MIN 11 AC-FT 262,100

08033300 Piney Creek near Groveton, Tex.

LOCATION.--Lat 31°08'25", long 95°05'11", Trinity County, on left bank at downstream side of bridge on State Highway 94, 6.3 miles northeast of Groveton, and 7.3 miles upstream from Caney Creek.

DRAINAGE AREA.--79.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 251.40 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 21.5 cfs (3.70 inches per year, 15,580 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 222 cfs Jan. 30 (gage height, 8.34 ft); no flow for many days.
Period of record: Maximum discharge, 5,520 cfs May 7, 1969 (gage height, 15.26 ft); no flow at times.
Maximum stage since at least 1921, 17 ft in May 1942, from information by local residents.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	2.1	26	.13	.67	1.6				
2			.03	3.3	9.4	.14	.33	.82				
3			.03	1.2	5.4	.13	.20	5.6				
4			0	1.7	3.3	.10	.12	1.8				
5			.04	2.3	2.3	.09	.08	.78				
6			2.4	1.7	2.0	.08	.07	.38				
7			.23	.93	1.6	.07	.05	.26				
8			.65	1.1	1.7	.07	.03	.18				
9			.51	.79	1.5	.07	.02	.13				
10			.39	.56	1.2	.06	.02	.09				
11			.25	.39	1.0	.06	.02	.08				
12			.18	.30	.89	.06	.02	4.7				
13			.35	.25	.78	.04	.01	5.6				
14			.32	.19	.81	.04	.01	1.5				
15			.30	.14	.75	.06	.01	.64				
16			.25	.11	.63	.12	.01	.27				
17			.21	.09	.55	.11	0	.15				
18			.17	.09	.40	.07	0	.06				
19			.13	.08	.33	.04	0	.02				
20			.10	.12	.30	.07	0	.01				
21			.08	.09	.28	.16	0	0				
22			.06	.08	.27	5.9	0	0				
23			.04	.07	.28	2.9	0	0				
24			.04	.06	.24	1.7	0	0				
25			.02	.05	.18	1.1	0	0				
26			.02	.04	.16	21	0	0				
27			.01	.03	.16	12	.05	0				
28			.01	.02	.16	6.6	13	0				
29			.01	3.1	.15	8.8	15	0				
30			.01	162	------	3.4	4.1	0				
31		------	.01	112	------	1.5	------	0	------			------
TOTAL	0	0	6.85	294.98	62.72	66.67	33.82	24.67	0	0	0	0
MEAN	0	0	.22	9.52	2.16	2.15	1.13	.80	0	0	0	0
MAX	0	0	2.4	162	26	21	15	5.6	0	0	0	0
MIN	0	0	0	.02	.15	.04	0	0	0	0	0	0
CFSM	0	0	.003	.12	.03	.03	.01	.01	0	0	0	0
IN.	0	0	.003	.14	.03	.03	.02	.01	0	0	0	0
AC-FT	0	0	14	585	124	132	67	49	0	0	0	0

CAL YR 1971 TOTAL 29.73 MEAN .08 MAX 10 MIN 0 CFSM .001 IN .01 AC-FT 59
WTR YR 1972 TOTAL 489.71 MEAN 1.34 MAX 162 MIN 0 CFSM .02 IN .23 AC-FT 971

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

08033500 Neches River near Rockland, Tex.

LOCATION.--Lat 31°01'45", long 94°23'46", Tyler-Jasper County line, on left bank 2,100 ft upstream from Texas and New Orleans Railroad Co. bridge, 2,200 ft downstream from bridge on U.S. Highway 69, 1.0 mile north of Rockland, and 3.6 miles downstream from Billams Creek.

DRAINAGE AREA.--3,637 sq mi.

PERIOD OF RECORD.--July 1903 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage read twice daily. Datum of gage is 91.41 ft above mean sea level.

AVERAGE DISCHARGE.--58 years (1903-61) unregulated, 2,362 cfs (1,711,000 acre-ft per year); 11 years (1961-72) regulated, 1,466 cfs (1,062,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,380 cfs Mar. 21 (gage height, 11.20 ft, from graph based on gage readings); minimum daily, 45 cfs Sept. 17.
Period of record: Maximum discharge, 49,800 cfs May 6, 1944 (gage height, 31.84 ft); minimum observed during period of daily records, 1.6 cfs Sept. 28-30, Oct. 1, 2, 1956.
Historical flood information begins with flood in May 1884 which reached a stage of 34.9 ft, from information by local resident (discharge, about 62,000 cfs).

REMARKS.--Records good. No large diversion above station. For regulation by upstream reservoirs, see Neches River near Alto (station 08032500).

REVISIONS (WATER YEARS).--WSP 878: 1926-27. WSP 1342: 1922(M), 1935. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	109	304	552	5,060	411	1,520	1,700	131	139	89	72
2	109	106	456	746	4,580	452	1,150	2,740	116	133	86	68
3	96	102	1,020	1,290	3,800	508	935	4,460	109	122	77	64
4	92	91	1,070	2,780	3,260	478	768	4,400	99	113	71	59
5	89	83	1,290	2,600	2,900	512	658	3,980	91	102	68	57
6	94	76	2,600	1,880	2,240	573	594	3,500	86	94	65	57
7	122	70	2,480	1,640	1,820	552	552	3,020	83	91	65	58
8	102	66	2,000	1,520	1,400	512	512	2,180	77	322	65	52
9	86	63	1,460	1,520	1,210	474	512	1,320	71	680	63	48
10	100	60	1,240	1,880	1,070	445	508	814	68	594	67	46
11	94	58	1,180	1,700	1,020	411	489	594	64	380	84	46
12	86	56	1,700	1,580	1,020	380	452	1,310	71	301	80	62
13	86	54	2,360	1,520	935	367	424	2,960	71	237	68	60
14	77	53	1,820	1,520	885	351	397	2,240	71	200	67	57
15	68	51	1,340	1,520	814	344	360	1,340	89	166	152	52
16	182	51	1,460	1,580	768	532	357	1,070	174	143	107	47
17	532	49	2,240	1,580	746	594	310	746	250	200	185	45
18	636	88	1,940	1,580	702	552	281	508	387	224	124	72
19	322	170	1,290	1,520	658	470	261	384	512	219	124	84
20	438	210	960	1,580	615	485	247	329	573	219	135	60
21	680	272	791	2,120	594	5,440	292	256	504	219	120	59
22	316	232	702	1,820	532	5,120	532	232	411	200	97	52
23	178	200	636	1,460	504	3,380	364	202	322	174	83	109
24	131	202	552	1,270	478	2,000	272	196	261	154	81	116
25	102	250	512	988	463	1,940	247	193	229	141	70	84
26	92	256	474	768	442	1,880	237	170	205	131	89	78
27	120	253	438	658	431	1,520	610	160	182	120	104	267
28	124	278	401	615	421	1,290	3,940	158	158	115	102	258
29	113	301	384	615	407	2,120	3,380	154	145	106	106	196
30	106	301	357	2,720	------	2,000	2,240	147	133	97	86	380
31	106	------	357	4,700	------	1,880	------	139	------	86	70	------
TOTAL	5,607	4,211	35,814	49,822	39,775	37,973	23,401	41,602	5,743	6,222	2,850	2,765
MEAN	181	140	1,155	1,607	1,372	1,225	780	1,342	191	201	91.9	92.2
MAX	680	301	2,600	4,700	5,060	5,440	3,940	4,460	573	680	185	380
MIN	68	49	304	552	407	344	237	139	64	86	63	45
AC-FT	11,120	8,350	71,040	98,820	78,890	75,320	46,420	82,520	11,390	12,340	5,650	5,480

CAL YR 1971 TOTAL 119,998 MEAN 329 MAX 2,600 MIN 21 AC-FT 238,000
WTR YR 1972 TOTAL 255,785 MEAN 699 MAX 5,440 MIN 45 AC-FT 507,300

08033900 East Fork Angelina River near Cushing, Tex.

LOCATION.--Lat 31°51'36", long 94°49'23", Rusk County, near left bank on downstream side of bridge on Farm Road 225, 0.1 mile downstream from Everett Branch, 0.9 mile upstream from Reagan Branch, 3.5 miles north of Cushing, and 8 miles upstream from Angelina River.

DRAINAGE AREA.--158 sq mi.

PERIOD OF RECORD.--January 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 275.29 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 80.7 cfs (6.94 inches per year, 58,470 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 710 cfs Jan. 5 (gage height, 9.52 ft); minimum, 3.0 cfs Sept. 22.
Period of record: Maximum discharge, 11,100 cfs July 23, 1968 (gage height, 11.66 ft), from rating curve extended above 4,600 cfs; minimum, 0.7 cfs Aug. 14, 1964.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	7.3	15	66	103	45	31	36	5.7	5.4	18	3.9
2	6.2	7.3	24	256	80	93	29	30	5.5	5.2	12	3.6
3	6.2	6.9	89	287	70	142	28	30	5.2	4.9	9.6	3.6
4	14	6.2	76	463	58	87	27	28	4.9	20	8.2	3.6
5	24	5.8	56	607	52	60	26	22	4.6	54	7.2	17
6	17	5.8	163	645	92	50	26	19	4.3	23	6.3	28
7	12	5.8	229	371	221	47	26	19	4.2	12	5.7	12
8	9.8	5.8	154	159	168	47	25	19	4.0	8.9	5.2	8.2
9	8.6	6.0	100	118	100	46	23	19	3.8	7.3	4.8	6.5
10	8.0	6.2	171	112	80	42	21	17	3.9	11	4.4	5.5
11	7.4	6.5	171	109	74	41	21	16	4.0	10	4.3	4.9
12	6.9	6.5	97	91	85	41	21	19	4.1	7.5	7.1	4.4
13	6.7	6.5	63	80	104	41	20	28	3.9	6.4	8.5	4.1
14	6.7	6.4	52	73	86	40	19	26	5.6	6.0	7.3	3.9
15	6.7	6.4	54	63	74	39	18	20	8.4	6.5	8.5	3.7
16	7.3	6.4	61	56	67	39	17	16	25	6.8	10	3.5
17	11	6.4	56	56	62	37	16	14	45	6.0	6.9	3.5
18	12	26	56	56	56	33	15	13	23	9.0	5.9	3.7
19	11	86	50	58	51	32	15	11	15	8.7	6.2	3.6
20	12	47	46	61	48	32	15	10	12	6.9	5.6	3.4
21	12	26	43	66	48	79	17	9.7	15	5.6	4.9	3.2
22	16	19	40	61	49	93	23	9.1	52	11	4.3	3.1
23	11	22	37	56	49	56	21	8.6	52	19	4.0	4.2
24	10	31	37	54	49	44	17	8.7	28	9.6	6.7	5.1
25	9.2	25	37	49	48	42	15	8.7	17	7.1	9.9	6.1
26	8.8	21	36	45	45	37	13	8.5	12	5.7	7.3	6.9
27	8.0	17	36	44	43	36	32	7.3	9.4	4.7	5.6	13
28	7.6	16	36	45	41	37	200	6.7	7.3	4.3	5.2	28
29	7.6	16	35	52	41	39	149	7.0	6.2	13	5.6	28
30	7.4	17	36	135	------	37	55	7.0	5.7	52	5.1	21
31	7.3	------	40	164	------	34	------	6.2	------	34	4.4	------
TOTAL	305.1	477.2	2,196	4,558	2,144	1,568	981	499.5	396.7	391.5	214.7	249.2
MEAN	9.84	15.9	70.8	147	73.9	50.6	32.7	16.1	13.2	12.6	6.93	8.31
MAX	24	86	229	645	221	142	200	36	52	54	18	28
MIN	6.2	5.8	15	44	41	32	13	6.2	3.8	4.3	4.0	3.1
CFSM	.06	.10	.45	.93	.47	.32	.21	.10	.08	.08	.04	.05
IN.	.07	.11	.52	1.07	.50	.37	.23	.12	.09	.09	.05	.06
AC-FT	605	947	4,360	9,040	4,250	3,110	1,950	991	787	777	426	494

CAL YR 1971 TOTAL 15,764.3 MEAN 43.2 MAX 2,450 MIN 2.5 CFSM .27 IN 3.71 AC-FT 31,270
WTR YR 1972 TOTAL 13,980.9 MEAN 38.2 MAX 645 MIN 3.1 CFSM .24 IN 3.29 AC-FT 27,730

PEAK DISCHARGE (BASE, 600 CFS).--Jan. 5 (2400) 710 cfs (9.52 ft).

08034000 Lake Tyler near Whitehouse, Tex.

LOCATION.--Lat 32°14'30", long 95°10'33", Smith County, at city of Tyler pumphouse, 2.0 miles north of Whitehouse Dam on Prairie Creek, 3.0 miles northwest of Mud Creek Dam on Mud Creek, and 3.2 miles northeast of Whitehouse.

DRAINAGE AREA.--107 sq mi. Prior to May 29, 1968, 45.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (city of Tyler bench mark). Prior to May 3, 1949, nonrecording gage at dam. May 3, 1949, to July 11, 1951, nonrecording gage at pumphouse. July 12, 1951, to Feb. 1, 1968, water-stage recorder at intake tower in lake 660 ft south of pumphouse. All gages at same datum.

EXTREMES.--Current year: Maximum contents, 79,420 acre-ft Mar. 17 (elevation, 375.09 ft); minimum, 65,300 acre-ft Nov. 17 (elevation, 371.96 ft).
Period of record: Maximum contents, 84,710 acre-ft Apr. 13, 1969; maximum elevation, 378.3 ft Apr. 24, 1966, prior to joining of lakes; minimum contents since first appreciable storage in 1950, 29,200 acre-ft Oct. 25 to Nov. 29, 1964 (elevation, 368.9 ft), prior to joining of lakes.

REMARKS.--Lake is formed by earthfill dams (4,708 ft and 4,700 ft long), Lake Tyler on Prairie Creek, and Lake Tyler East on Mud Creek. These dams are connected by an excavated canal. The west spillway is a concrete flume 200 ft wide located 800 ft left of Whitehouse Dam. The east spillway is a concrete weir 300 ft wide located near center of Mud Creek Dam. Storage at original lake began Jan. 8, 1949, and dam completed May 13, 1949. Dam was closed on Mud Creek in January 1967, and lakes were joined through interconnecting canal on May 29, 1968. Capacity tables furnished and based on surveys made by city of Tyler in 1948-49 and 1966-67. Data regarding dams and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	390.0	-
Crest of spillway	375.4	80,900
Invert of upper sluice gate, Mud Creek Dam	362.0	30,420
Invert of middle sluice gate, Whitehouse Dam	356.0	16,340
Bottom of canal between lakes	355.0	14,480
Invert of lower sluice gate, Whitehouse Dam	350.0	-
Invert of low-flow outlet, Mud Creek Dam	346.75	-

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

371.0	61,270	374.0	74,330
372.0	65,470	375.0	79,000
373.0	69,820	376.0	83,820

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68,240	66,670	66,160	70,980	76,730	78,100	78,860	77,770	75,710	73,740	70,940	68,630
2	68,190	66,590	66,760	71,300	76,640	78,380	78,810	77,770	75,710	72,960	70,710	68,500
3	68,280	66,460	66,800	73,280	76,780	78,380	78,760	77,770	75,250	72,960	70,580	68,410
4	68,240	66,370	66,850	74,060	76,830	78,520	78,760	77,770	75,110	72,960	70,540	68,370
5	68,150	66,160	67,800	74,240	76,880	78,520	78,660	77,770	74,970	72,960	70,400	68,370
6	68,020	66,160	68,410	74,420	76,920	78,430	78,620	77,770	74,880	73,060	70,270	67,980
7	67,980	65,990	68,540	74,510	76,970	78,860	78,710	77,770	74,740	72,920	70,090	67,720
8	67,930	65,860	68,720	74,650	77,020	79,050	78,620	77,770	74,650	72,920	70,000	67,580
9	67,720	65,810	69,030	74,740	77,200	79,090	78,520	77,770	74,470	72,870	69,780	67,540
10	67,630	65,730	69,070	74,790	77,200	79,090	78,470	77,770	74,380	72,740	69,690	67,450
11	67,490	65,640	69,160	74,790	77,250	79,140	78,470	77,770	74,290	72,560	69,600	67,360
12	67,410	65,600	69,160	74,880	77,340	79,190	78,430	77,770	74,200	72,510	69,820	67,280
13	67,360	65,510	69,290	74,930	77,440	79,240	78,470	77,770	74,150	72,510	69,740	67,110
14	67,320	65,470	69,560	74,880	77,440	79,240	78,470	77,770	74,610	72,380	69,820	67,020
15	67,280	65,420	69,650	74,840	77,580	79,280	78,570	77,770	74,650	72,240	69,820	66,930
16	67,280	65,380	69,690	74,840	77,580	79,330	78,520	77,770	74,650	72,240	69,740	66,890
17	67,410	65,470	69,690	74,790	77,580	79,330	78,430	77,770	74,650	72,240	69,690	66,800
18	67,360	66,330	69,690	74,930	77,580	79,330	78,280	76,920	74,650	72,290	69,600	66,670
19	67,320	66,290	69,690	75,020	77,530	79,330	78,240	76,880	74,650	72,240	69,510	66,630
20	67,360	66,240	69,690	75,020	77,580	79,280	78,140	76,830	74,560	72,150	69,650	66,550
21	67,280	66,160	69,650	75,020	77,630	79,280	78,140	76,880	74,330	72,020	69,250	66,370
22	67,190	66,240	69,650	75,110	77,670	79,280	78,140	76,550	74,330	71,930	69,250	66,330
23	67,150	66,370	69,650	75,110	77,670	79,280	78,000	76,550	74,330	71,840	69,160	66,200
24	67,060	66,330	69,690	75,160	77,770	79,240	77,910	76,460	74,330	71,790	69,470	66,420
25	67,020	66,240	69,690	75,160	77,770	79,280	77,820	76,320	73,880	71,610	69,070	66,800
26	66,930	66,200	69,740	75,110	77,770	79,190	77,770	76,230	73,880	71,520	69,030	66,800
27	66,930	66,160	69,820	75,200	77,770	79,240	77,770	76,090	73,880	71,390	68,980	66,890
28	66,890	66,110	69,870	75,430	77,820	79,190	77,770	76,040	73,880	71,210	68,980	67,190
29	66,800	66,110	69,820	76,270	77,820	79,240	77,770	75,710	73,420	71,160	68,940	67,410
30	66,800	66,200	69,960	76,550	------	78,950	77,770	75,710	73,420	71,160	68,850	67,720
31	66,720	------	70,000	76,590	------	78,900	------	75,710	------	71,070	68,590	------
(†)	372.29	372.17	373.04	374.49	374.75	374.98	374.74	374.30	373.80	373.28	372.72	372.52
(*)	-1,650	-520	+3,800	+6,590	+1,230	+1,080	-1,130	-2,060	-2,290	-2,350	-2,480	-870
(††)	973	927	865	866	854	975	1,129	1,249	1,296	1,194	1,203	990
MAX	68,280	66,670	70,000	76,590	77,820	79,330	78,860	77,770	75,710	73,740	70,940	68,630
MIN	66,720	65,380	66,160	70,980	76,640	78,100	77,770	75,710	73,420	71,070	68,590	66,200

CAL YR 1971..... * -6,360 †† 13,223 MAX 79,710 MIN 65,380
WTR YR 1972..... * -650 †† 12,521 MAX 79,330 MIN 65,380

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, by city of Tyler.

08034500 Mud Creek near Jacksonville, Tex.

LOCATION.--Lat 31°58'35", long 95°09'38", Cherokee County, on right bank on downstream side of pile bent of bridge on U.S. Highway 79, 0.6 mile downstream from Caney Creek, 3.9 miles downstream from another Caney Creek, 4 miles downstream from Missouri Pacific Railroad Co. bridge, 6.9 miles east of Jacksonville, and 25.9 miles upstream from mouth.

DRAINAGE AREA.--376 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 271.64 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1939-48) prior to regulation by Lake Tyler, 383 cfs (277,500 acre-ft per year); 24 years (1948-72) regulated, 197 cfs (142,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,880 cfs Jan. 5 (gage height, 8.54 ft); minimum daily, 1.0 cfs Aug. 10.
Period of record: Maximum discharge, 27,500 cfs Apr. 25, 1966 (gage height, 15.20 ft); no flow at times.
Maximum stage since May 1884, 20 ft in May 1908 and December 1913; flood in May 1884 was higher, stage unknown, from information by local residents.

REMARKS.--Records poor. Some regulation by Lake Tyler (station 08034000, capacity 80,900 acre-ft). Several diversions above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.4	13	51	412	68	40	52	4.5	2.5	2.4	1.7
2	3.1	4.6	15	228	409	137	36	33	4.8	2.6	2.1	1.6
3	3.3	4.3	26	360	380	98	34	25	5.8	2.4	1.6	1.4
4	5.2	3.9	56	738	268	98	34	23	4.8	2.3	2.0	2.6
5	9.1	3.7	94	1,400	166	97	38	30	3.9	2.3	2.0	6.3
6	6.1	3.4	207	1,420	128	82	40	25	3.5	2.6	1.5	2.1
7	5.3	3.3	245	768	127	71	41	17	3.3	2.3	1.2	2.2
8	7.3	3.3	265	570	120	77	36	15	3.1	2.0	1.1	1.9
9	6.8	3.3	265	482	113	137	32	14	2.9	2.0	1.1	1.6
10	5.0	3.4	280	368	99	164	28	13	2.7	2.1	1.0	1.5
11	4.0	3.6	265	246	94	166	26	12	3.7	2.1	1.1	2.5
12	3.3	3.8	205	181	108	186	25	14	11	2.2	1.5	3.1
13	2.9	4.1	151	148	113	134	24	20	5.3	3.2	2.7	2.1
14	2.8	4.5	130	124	112	95	22	22	8.3	6.5	3.0	1.6
15	2.7	4.5	109	107	120	83	21	24	57	4.8	4.8	1.5
16	2.5	4.5	100	97	108	78	21	21	43	3.4	5.3	1.9
17	2.8	4.5	100	92	99	71	23	13	46	2.7	6.1	1.9
18	3.4	6.7	100	87	93	64	22	10	36	2.5	4.6	1.7
19	3.5	22	94	89	88	57	27	8.3	22	2.3	3.2	1.7
20	3.9	26	74	93	81	53	21	7.0	13	2.2	2.6	1.8
21	4.1	34	55	92	79	58	17	6.2	11	2.1	2.2	2.4
22	5.2	43	45	88	77	60	16	5.6	15	2.1	1.9	2.4
23	6.1	41	40	85	78	55	14	5.3	14	4.8	1.7	3.6
24	7.2	28	35	81	79	53	13	5.2	9.1	4.0	1.5	5.0
25	8.7	24	33	76	79	49	13	6.1	11	3.1	1.4	4.2
26	7.3	24	31	70	77	49	11	7.1	12	4.1	2.1	12
27	6.1	32	31	66	72	46	12	6.7	7.2	6.2	2.4	29
28	5.3	27	30	69	67	48	49	5.8	4.6	3.7	2.8	114
29	4.9	20	29	109	63	86	68	4.9	3.4	2.7	4.8	111
30	4.6	16	30	350	------	66	65	4.5	2.7	2.6	3.5	76
31	4.5	------	31	394	------	45	------	4.5	------	2.3	2.3	------
TOTAL	150.8	410.8	3,184	9,129	3,909	2,631	869	460.2	374.6	92.7	77.5	402.3
MEAN	4.86	13.7	103	294	135	84.9	29.0	14.8	12.5	2.99	2.50	13.4
MAX	9.1	43	280	1,420	412	186	68	52	57	6.5	6.1	114
MIN	2.5	3.3	13	51	63	45	11	4.5	2.7	2.0	1.0	1.4
AC-FT	299	815	6,320	18,110	7,750	5,220	1,720	913	743	184	154	798

CAL YR 1971 TOTAL 17,646.83 MEAN 48.3 MAX 1,210 MIN 0 AC-FT 35,000
WTR YR 1972 TOTAL 21,690.90 MEAN 59.3 MAX 1,420 MIN 1.0 AC-FT 43,020

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

08036500 Angelina River near Alto, Tex.

LOCATION.--Lat 31°40'10", long 94°57'24", Nacogdoches-Cherokee County line, near center of rectified channel at downstream side of pier of bridge on State Highway 21, 0.4 mile upstream from Allen Creek, 1.5 miles upstream from Bingham Creek, 7.5 miles east of Alto, and at mile 149.3.

DRAINAGE AREA.--1,276 sq mi.

PERIOD OF RECORD.--May to August 1940 (discharge measurements only), September 1940 to March 1949 (fragmentary for 1941-42, 1944-49), February 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 204.30 ft above mean sea level. May 9, 1940, to Mar. 31, 1949, nonrecording gage on bridge at natural channel 1,400 ft to right at same datum. Feb. 18 to Sept. 15, 1959, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--14 years (1942-43, 1959-72), 677 cfs (490,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,360 cfs Jan. 10 (gage height, 16.13 ft); minimum daily, 6.3 cfs Sept. 20.
Period of record: Maximum discharge, 30,600 cfs Apr. 28, 1966 (gage height, 21.51 ft), but may have been higher during period of no gage-height record in November 1940; minimum, 2.0 cfs Aug. 14, 15, 1964.
Maximum stage since at least 1905, about 22 ft in May 1908, from information by local residents. Flood in 1932 reached a stage of 21.5 ft, and flood in May 1958 reached a stage of 20.3 ft, from floodmarks and information by local residents.

REMARKS.--Records good. No large diversion above station. Flow partly regulated since May 1957 by Striker Creek Reservoir 35.5 miles upstream and Lake Tyler 69.9 miles upstream since January 1949 (total capacity, 107,900 acre-ft). Recording rain gage located at station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	25	64	160	570	306	306	390	26	54	45	15
2	38	24	70	282	750	510	270	360	24	44	69	13
3	34	23	101	450	900	630	222	246	23	40	55	12
4	37	21	107	810	918	630	234	228	21	61	37	11
5	31	20	151	1,100	810	622	210	306	20	66	26	11
6	30	20	306	1,330	810	600	210	306	19	43	21	13
7	36	19	405	1,750	918	480	200	195	18	71	18	11
8	49	18	450	2,410	882	375	175	125	18	74	16	13
9	46	18	540	3,100	780	318	160	107	17	61	14	28
10	39	17	615	3,340	690	288	150	96	19	45	13	24
11	33	17	645	3,150	615	306	145	88	20	37	11	18
12	29	23	630	2,760	630	450	140	82	20	32	10	14
13	27	47	615	2,250	675	450	135	87	18	32	9.9	11
14	26	53	600	1,800	645	360	130	84	25	39	10	10
15	24	54	555	1,330	570	330	130	115	82	37	16	9.8
16	23	54	465	990	510	330	135	128	122	32	23	9.4
17	23	54	390	810	465	300	140	105	155	28	20	7.9
18	24	85	345	720	420	264	140	86	360	29	23	7.0
19	42	85	318	585	375	234	135	75	450	28	27	6.6
20	62	89	294	450	345	216	130	66	465	28	25	6.3
21	65	120	258	390	318	234	135	57	420	27	22	7.2
22	55	145	228	375	294	294	145	50	240	28	18	8.7
23	43	128	205	360	282	450	150	45	175	26	21	9.0
24	37	104	195	345	276	540	145	39	252	24	18	11
25	37	85	175	330	270	480	140	39	360	25	13	8.5
26	34	84	160	306	264	300	128	36	435	33	14	7.0
27	32	96	155	288	264	246	127	34	420	30	15	8.7
28	29	92	150	276	252	240	180	33	246	27	20	14
29	27	80	145	282	246	228	216	33	104	29	24	35
30	27	69	145	345	------	222	306	30	69	29	23	125
31	26	------	145	435	------	270	------	27	------	30	19	------
TOTAL	1,109	1,769	9,627	33,309	15,744	11,503	5,169	3,698	4,643	1,189	695.9	485.1
MEAN	35.8	59.0	311	1,074	543	371	172	119	155	38.4	22.4	16.2
MAX	65	145	645	3,340	918	630	306	390	465	74	69	125
MIN	23	17	64	160	246	216	127	27	17	24	9.9	6.3
AC-FT	2,200	3,510	19,100	66,070	31,230	22,820	10,250	7,330	9,210	2,360	1,380	962

CAL YR 1971 TOTAL 73,348.1 MEAN 201 MAX 2,850 MIN 4.5 AC-FT 145,500
WTR YR 1972 TOTAL 88,941.0 MEAN 243 MAX 3,340 MIN 6.3 AC-FT 176,400

08037000 Angelina River near Lufkin, Tex.

LOCATION.--Lat 31°27'26", long 94°43'34", Angelina-Nacogdoches County line, near right bank at downstream side of bridge on U.S. Highway 59, 200 ft upstream from Procella Creek, 1.5 miles downstream from Bayou Loco, 1.5 miles upstream from Southern Pacific Lines bridge, 8 miles north of Lufkin, and at mile 109.5.

DRAINAGE AREA.--1,600 sq mi.

PERIOD OF RECORD.--October 1923 to September 1934, July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 164.72 ft above mean sea level. Oct. 29, 1923, to Jan. 17, 1926, nonrecording gage at Southern Pacific Lines bridge 1.5 miles downstream at datum 1.39 ft lower; Jan. 18, 1926, to Sept. 30, 1934, nonrecording gage at Lufkin-Nacogdoches highway bridge 1,400 ft upstream at present datum.

AVERAGE DISCHARGE.--20 years (1923-34, 1939-48) unregulated, 1,438 cfs (1,042,000 acre-ft per year); 24 years (1948-72) regulated, 918 cfs (665,100 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 2,720 cfs Jan. 15 (gage height, 10.35 ft); minimum daily, 9.0 cfs Sept. 22.
Period of record: Maximum discharge, 38,200 cfs Feb. 24, 1932; maximum gage height, 18.55 ft May 7, 1944; minimum discharge, 0.8 cfs Oct. 29, 30, 1956.
Flood in May 1884 reached a stage of 26.5 ft and is the highest since at least that date, and flood in May 1908 reached a stage of 25 ft; from information by local residents.

REMARKS.--Records good. No large diversion above station. For statement regarding regulation of flow, see Angelina River near Alto (station 08036500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 718: 1924, 1926. WSP 1312: 1924(M). WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	27	114	245	950	360	334	366	34	140	41	24
2	52	27	115	396	785	390	349	398	31	96	31	24
3	51	25	200	528	732	536	362	424	29	70	32	23
4	83	25	255	680	802	654	435	383	27	94	55	21
5	85	24	250	900	880	711	447	304	26	540	61	21
6	73	24	355	1,180	975	726	406	285	24	852	50	18
7	46	23	515	1,320	950	716	334	324	23	487	37	16
8	34	21	650	1,420	950	682	297	324	22	194	29	16
9	32	19	680	1,500	1,030	603	269	253	21	129	25	15
10	37	19	732	1,640	1,030	498	240	193	20	135	22	15
11	42	19	768	1,840	975	431	218	158	20	129	23	15
12	39	19	785	2,090	880	398	204	147	20	83	23	23
13	30	18	785	2,340	840	424	187	156	21	70	22	23
14	31	19	785	2,600	820	486	171	141	24	89	23	20
15	30	24	785	2,720	820	491	162	128	33	75	26	16
16	29	40	732	2,600	802	467	166	129	57	58	21	14
17	31	49	732	2,340	750	445	172	144	170	54	18	14
18	36	131	680	1,750	680	416	174	149	203	66	22	12
19	39	172	565	1,260	605	371	171	128	230	67	27	11
20	47	208	470	1,000	565	343	167	116	291	53	27	9.8
21	42	162	423	785	515	436	169	102	345	40	26	9.1
22	59	134	360	635	480	501	183	88	382	33	26	9.0
23	69	140	314	528	450	457	190	76	350	40	28	14
24	65	168	280	460	423	475	180	66	239	38	37	20
25	55	172	255	423	405	562	170	58	195	29	32	15
26	45	150	232	387	396	613	162	56	247	25	30	11
27	38	128	216	360	378	586	220	51	316	23	27	13
28	36	116	208	344	369	666	523	44	357	22	21	18
29	35	116	224	369	360	600	598	38	314	25	18	22
30	32	118	232	802	------	450	454	37	217	34	18	25
31	29	------	240	1,050	------	365	------	36	------	61	22	------
TOTAL	1,415	2,337	13,937	36,492	20,597	15,859	8,114	5,302	4,288	3,851	900	506.9
MEAN	45.6	77.9	450	1,177	710	512	270	171	143	124	29.0	16.9
MAX	85	208	785	2,720	1,030	726	598	424	382	852	61	25
MIN	29	18	114	245	360	343	162	36	20	22	18	9.0
AC-FT	2,810	4,640	27,640	72,380	40,850	31,460	16,090	10,520	8,510	7,640	1,790	1,010

CAL YR 1971 TOTAL 80,890.3 MEAN 222 MAX 2,170 MIN 9.3 AC-FT 160,400
WTR YR 1972 TOTAL 113,598.9 MEAN 310 MAX 2,720 MIN 9.0 AC-FT 225,300

08037050 Bayou LaNana at Nacogdoches, Tex.

LOCATION.--Lat 31°36'58", long 94°38'28", Nacogdoches County, on right bank at downstream side of bridge on Farm Road 1878 in Nacogdoches and 14.5 miles upstream from mouth.

DRAINAGE AREA.--31.3 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 264.23 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 21.9 cfs (9.50 inches per year, 15,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 814 cfs July 4 (gage height, 13.23 ft); no flow for many days.
Period of record: Maximum discharge, 2,870 cfs May 7, 1969 (gage height, 17.29 ft); no flow at times.
Maximum stage since at least 1956, 19.6 ft in April 1957, from information furnished by Texas Highway Department and local resident.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	.53	36	49	15	5.2	11	.24	.19	4.0	.24
2	0	.02	32	127	42	23	5.3	17	.48	.20	3.0	.25
3	8.2	.02	35	45	30	13	5.1	12	.49	65	2.1	.40
4	7.5	.01	8.6	190	25	12	4.6	7.3	.26	285	1.5	.53
5	.29	.01	20	88	24	9.8	4.4	5.6	.23	39	1.1	.28
6	.16	.01	112	45	44	8.7	4.8	8.2	.19	13	.90	.20
7	.34	0	38	34	47	9.3	4.4	7.4	.16	8.0	.68	.20
8	.13	0	21	29	29	8.8	3.3	6.5	.14	7.0	.59	.20
9	.02	0	70	29	25	7.7	2.8	5.1	.10	6.0	1.3	.20
10	0	0	45	28	23	7.7	2.8	4.2	.09	5.0	1.2	.20
11	0	0	22	28	22	7.9	3.2	4.0	.09	3.8	.61	.20
12	0	0	17	23	40	8.0	2.7	9.5	.09	3.1	.29	.26
13	0	0	14	21	30	7.8	2.4	7.1	2.9	3.9	6.5	.27
14	0	0	14	17	24	7.4	2.0	5.2	2.0	3.0	.97	.18
15	0	0	22	14	22	12	5.8	3.2	34	2.9	.32	.89
16	3.5	0	21	13	20	8.3	4.0	2.6	42	2.4	1.2	.18
17	.53	0	34	14	21	6.5	2.0	2.2	9.3	3.8	3.2	.13
18	1.2	82	18	14	16	5.8	1.6	1.5	3.3	4.2	.81	.13
19	.98	8.6	14	14	14	5.2	1.6	1.5	1.2	3.3	.49	.13
20	6.7	2.3	14	26	14	17	1.4	1.4	.56	1.9	.34	.13
21	2.8	.78	11	21	14	35	9.1	1.2	12	4.4	.28	.13
22	.20	.61	9.8	18	14	15	4.1	.77	9.4	39	.26	.18
23	.06	3.9	9.0	15	14	10	1.8	.88	3.7	6.8	.41	.32
24	.06	1.1	8.6	14	13	9.3	1.3	.62	1.8	3.3	.40	.14
25	.04	.88	8.6	11	13	8.7	1.1	1.2	.84	2.0	.35	.30
26	.02	.53	8.3	11	12	7.3	.87	.69	.47	1.4	.28	.14
27	.01	.40	8.3	12	11	11	94	.49	.31	.98	.25	.95
28	.02	.40	7.9	13	11	13	94	.37	.27	1.2	.25	1.1
29	.02	.46	7.6	72	11	7.5	24	.33	.25	57	.24	2.6
30	.02	.46	8.6	142	------	6.0	14	.29	.21	24	.24	3.1
31	.02	------	8.3	58	------	5.4	------	.28	------	7.2	.24	------
TOTAL	32.82	102.51	668.13	1,222	674	329.1	313.67	129.62	127.07	607.97	34.30	14.16
MEAN	1.06	3.42	21.6	39.4	23.2	10.6	10.5	4.18	4.24	19.6	1.11	.47
MAX	8.2	82	112	190	49	35	94	17	42	285	6.5	3.1
MIN	0	0	.53	11	11	5.2	.87	.28	.09	.19	.24	.13
CFSM	.03	.11	.69	1.26	.74	.34	.34	.13	.14	.63	.04	.02
IN.	.04	.12	.79	1.45	.80	.39	.37	.15	.15	.72	.04	.02
AC-FT	65	203	1,330	2,420	1,340	653	622	257	252	1,210	68	28

CAL YR 1971 TOTAL 1,328.30 MEAN 3.64 MAX 112 MIN 0 CFSM .12 IN 1.58 AC-FT 2,630
WTR YR 1972 TOTAL 4,255.35 MEAN 11.6 MAX 285 MIN 0 CFSM .37 IN 5.06 AC-FT 8,440

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

08038000 Attoyac Bayou near Chireno, Tex.

LOCATION.--Lat 31°30'15", long 94°18'15", Nacogdoches-San Augustine County line, on right bank on downstream side of pier of bridge on State Highway 21, 2.2 miles upstream from Amaladeros Creek, 2.8 miles east of Chireno, 5.4 miles downstream from Arenoso Creek, and 41 miles upstream from mouth.

DRAINAGE AREA.--503 sq mi

PERIOD OF RECORD.--January 1924 to September 1925, July 1939 to November 1954, and October 1955 to current year. Monthly discharge only for some periods, published in WSP 1312 and 1732.

GAGE.--Water-stage recorder. Datum of gage is 169.58 ft above mean sea level. Jan. 24, 1924, to Aug. 29, 1925, and Sept. 6, 1957, to Oct. 27, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 427 cfs (11.53 inches per year, 309,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 864 cfs May 2 (gage height, 12.21 ft); minimum, 7.1 cfs Sept. 16, 17.
Period of record: Maximum discharge, 31,900 cfs Nov. 24, 1940 (gage height, 25.97 ft); minimum, 0.8 cfs Aug. 26, 27, 1956. Maximum stage since at least 1865, 29.9 ft June 29, 1902, from information by local residents. Flood in July 1933 reached a stage of 25.2 ft, from information by local residents.

REMARKS.--Records fair. At end of year, flow from 18.5 sq mi above this station was partly controlled by four floodwater-retarding structures with a total combined capacity of 6,130 acre-ft below the flood-spillway crests, of which 5,800 acre-ft is floodwater-retarding capacity and 334 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,640 acre-ft, of which 196 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	16	59	131	831	109	104	629	21	17	112	13
2	15	15	114	368	818	122	92	791	19	12	89	11
3	14	15	293	524	762	150	86	837	18	11	64	11
4	34	14	284	631	497	163	82	791	17	28	40	10
5	64	13	413	711	291	147	78	678	16	54	29	11
6	73	13	629	688	234	138	74	387	15	45	22	20
7	46	12	600	674	229	119	73	188	14	34	17	22
8	37	13	550	688	283	109	71	162	20	48	14	22
9	29	13	528	715	399	104	67	155	20	46	13	17
10	24	13	461	737	432	99	63	135	21	34	15	18
11	21	13	328	679	349	93	61	112	17	24	42	15
12	19	14	314	429	267	88	59	128	14	18	55	13
13	17	14	327	278	269	84	57	174	13	17	32	12
14	17	14	259	233	265	79	53	147	18	26	28	11
15	28	15	279	194	244	81	50	133	31	40	26	8.7
16	114	15	282	166	218	108	49	115	69	51	21	7.6
17	100	15	498	148	193	98	52	91	154	51	18	7.3
18	52	127	527	137	176	88	55	74	247	64	17	8.4
19	57	235	384	132	160	81	54	61	164	100	19	10
20	40	187	255	170	145	73	47	50	105	97	17	9.8
21	57	192	197	300	137	203	45	45	83	90	14	9.7
22	39	153	165	270	132	307	49	40	72	84	13	17
23	33	128	145	216	129	286	59	37	77	88	21	34
24	34	98	131	183	126	259	63	35	76	129	20	22
25	29	81	122	159	124	200	58	32	79	108	28	18
26	25	66	117	137	121	162	47	31	71	84	28	17
27	22	63	112	123	116	138	123	28	48	68	29	19
28	20	61	109	116	110	123	504	27	35	56	21	48
29	19	65	106	160	107	105	565	26	26	53	23	208
30	18	67	105	599	------	137	592	24	20	58	20	150
31	16	------	117	817	------	126	------	23	------	125	16	------
TOTAL	1,130	1,760	8,810	11,513	8,164	4,179	3,432	6,186	1,600	1,760	923	800.5
MEAN	36.5	58.7	284	371	282	135	114	200	53.3	56.8	29.8	26.7
MAX	114	235	629	817	831	307	592	837	247	129	112	208
MIN	14	12	59	116	107	73	45	23	13	11	13	7.3
CFSM	.07	.12	.56	.74	.56	.27	.23	.40	.11	.11	.06	.05
IN.	.08	.13	.65	.85	.60	.31	.25	.46	.12	.13	.07	.06
AC-FT	2,240	3,490	17,470	22,840	16,190	8,290	6,810	12,270	3,170	3,490	1,830	1,590

CAL YR 1971 TOTAL 33,886.9 MEAN 92.8 MAX 690 MIN 5.5 CFSM .18 IN 2.51 AC-FT 67,210
WTR YR 1972 TOTAL 50,257.5 MEAN 137 MAX 837 MIN 7.3 CFSM .27 IN 3.72 AC-FT 99,690

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

08039100 Ayish Bayou near San Augustine, Tex.

LOCATION.--Lat 31°23'46", long 94°09'03", San Augustine County, near center of span at downstream side of pier of bridge on State Highway 103, 3.0 miles upstream from Turkey Creek, and 9.5 miles south of San Augustine.

DRAINAGE AREA.--89.0 sq mi.

PERIOD OF RECORD.--February 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 190.22 ft above mean sea level. Prior to June 2, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 63.9 cfs (9.75 inches per year, 46,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 860 cfs Jan. 30 (gage height, 11.42 ft); minimum, 0.33 cfs July 2-4, Aug. 9, 10.
Period of record: Maximum discharge, 13,200 cfs Apr. 9, 1968 (gage height, 16.82 ft); no flow at times.
Maximum discharge since October 1957, 15,900 cfs Sept. 21 or 22, 1958 (gage height, 17.5 ft, from floodmarks).

REMARKS.--Records good. No known diversion above station. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WRD Texas 1967: 1966(M). WSP 1922: 1959(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.6	20	35	199	37	31	44	2.3	.50	3.0	.85
2	1.8	1.7	57	202	138	64	27	458	1.9	.40	2.7	.68
3	1.7	1.5	206	173	104	64	24	471	1.6	.33	1.8	.60
4	2.4	1.3	97	311	80	45	22	94	1.4	.68	1.3	.70
5	17	1.2	124	362	72	37	20	57	1.2	1.4	1.0	7.7
6	16	1.2	460	168	71	30	20	41	1.1	2.9	.82	3.9
7	8.0	1.2	455	113	79	28	20	37	.94	1.7	.64	3.0
8	4.4	1.1	143	93	68	28	18	42	.82	1.8	.49	2.6
9	2.9	1.2	82	85	60	28	13	38	.77	1.8	.40	2.0
10	2.2	1.3	83	97	55	26	13	29	.73	4.2	.44	1.5
11	1.7	1.4	84	87	53	24	12	25	.85	2.5	.61	2.4
12	1.6	1.4	66	72	66	24	12	47	1.0	1.8	.86	2.6
13	1.5	1.4	235	66	77	23	11	113	.85	1.4	.55	1.4
14	1.4	1.5	119	59	61	22	10	61	1.2	2.7	3.0	1.2
15	1.4	1.5	95	48	55	22	9.1	36	4.9	2.3	2.7	1.2
16	1.7	1.8	118	41	51	34	9.3	25	4.2	2.0	1.9	.98
17	3.0	1.7	283	40	47	34	8.6	19	5.0	3.1	1.6	.92
18	5.2	29	212	41	43	25	6.6	16	3.8	11	1.3	2.1
19	5.5	102	102	42	39	21	5.6	13	2.7	9.7	1.1	1.7
20	5.7	42	82	62	34	39	5.3	11	1.8	4.9	.86	1.5
21	7.2	24	68	90	34	235	6.2	9.2	1.6	4.0	.72	2.4
22	4.7	13	54	68	34	182	71	7.9	4.1	12	.57	2.4
23	5.1	12	46	56	34	87	29	7.0	3.4	16	1.1	1.7
24	3.9	29	44	48	34	62	15	6.0	2.2	6.5	.93	1.7
25	3.2	22	42	41	33	54	10	5.2	1.6	3.5	1.8	1.9
26	2.9	15	40	33	31	46	8.0	4.6	1.3	2.0	1.9	2.3
27	2.4	12	38	32	29	39	46	3.7	1.0	1.3	5.0	2.8
28	1.9	11	36	33	27	70	421	3.3	.84	1.0	3.3	8.4
29	1.8	12	33	147	27	77	157	2.8	.73	.89	2.1	36
30	1.8	22	33	636	------	52	67	3.1	.63	1.1	1.4	18
31	1.6	------	33	597	------	37	------	2.7	------	3.6	1.1	------
TOTAL	123.5	369.0	3,590	3,978	1,735	1,596	1,127.7	1,732.5	56.46	109.00	46.99	117.13
MEAN	3.98	12.3	116	128	59.8	51.5	37.6	55.9	1.88	3.52	1.52	3.90
MAX	17	102	460	636	199	235	421	471	5.0	16	5.0	36
MIN	1.4	1.1	20	32	27	21	5.3	2.7	.63	.33	.40	.60
CFSM	.04	.14	1.30	1.44	.67	.58	.42	.63	.02	.04	.02	.04
IN.	.05	.15	1.50	1.66	.73	.67	.47	.72	.02	.05	.02	.05
AC-FT	245	732	7,120	7,890	3,440	3,170	2,240	3,440	112	216	93	232
(††)	4.10	4.00	6.50	5.20	.60	4.87	3.62	3.15	1.60	4.88	2.70	3.87

CAL YR 1971 TOTAL 5,882.82 MEAN 16.1 MAX 460 MIN .10 CFSM .18 IN 2.46 AC-FT 11,670 †† 36.00
WTR YR 1972 TOTAL 14,581.28 MEAN 39.8 MAX 636 MIN .33 CFSM .45 IN 6.09 AC-FT 28,920 †† 45.09

PEAK DISCHARGE (BASE, 1,200 CFS).--No peak above base.

†† Rainfall, in inches.

08039300 Sam Rayburn Reservoir near Jasper, Tex.

LOCATION.--Lat 31°03'38", long 94°06'21", Jasper County, in the powerhouse-intake structure of Sam Rayburn Dam on the Angelina River, 10 miles northwest of Jasper, and 25.2 miles upstream from mouth.

DRAINAGE AREA.--3,449 sq mi.

PERIOD OF RECORD.--January 1965 to current year.

GAGE.--Stevens type AP recording transmitter. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Apr. 20, 1965, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 2,812,000 acre-ft May 14 (elevation, 163.64 ft); minimum, 2,172,000 acre-ft Nov. 17 (elevation, 157.55 ft).
Period of record: Maximum contents, 3,574,000 acre-ft May 17, 1969 (elevation, 169.91 ft); minimum since conservation storage was reached in 1968, 2,180,000 acre-ft Nov. 17, 1971 (elevation, 157.64 ft).

REMARKS.--Reservoir is formed by a rolled earthfill dam, 19,430 ft long including spillway and dikes. Closure of embankment section started on Jan. 15, 1965. Deliberate impoundment began on Mar. 29, 1965. Reservoir is operated for flood control and power generation. Flood-control outlet works consist of two 10- by 20-foot rectangular concrete lined conduits controlled by two 10- by 20-foot tractor type service gates and one 10- by 20-foot tractor type emergency gate. Water for turbines is admitted through four 18- by 26-foot penstocks and controlled by two wheeled-leaf type headgates. The emergency spillway is an uncontrolled broad-crested weir 2,200 ft wide on right bank 7,000 ft to right of outlet works designed to discharge 125,300 cfs at maximum design water level of 183.0 ft. Surface area and capacity tables are based on topographic maps and detailed sedimentation ranges established in 1961. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08038000. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	190.0	-
Maximum design water surface	183.0	5,610,000
Crest of emergency spillway	176.0	4,442.400
Top of flood-control pool	173.0	3,997,600
Top of power designated power pool (top of conservation storage)	164.0	2,852,600
Top of power head and sediment pool	149.0	1,452,000
Invert of flood-control outlet works	105.0	21,940

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

157.0	2,125,000	161.0	2,524,000
158.0	2,221,000	162.0	2,631,000
159.0	2,319,000	163.0	2,741,000
160.0	2,421,000	164.0	2,853,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,193.00	2,202.00	2,205.00	2,369.00	2,538.00	2,610.00	2,734.00	2,744.00	2,726.00	2,577.00	2,492.00	2,387.00
2	2,192.00	2,200.00	2,216.00	2,366.00	2,547.00	2,611.00	2,732.00	2,772.00	2,718.00	2,573.00	2,484.00	2,388.00
3	2,193.00	2,196.00	2,215.00	2,382.00	2,550.00	2,610.00	2,733.00	2,780.00	2,708.00	2,571.00	2,476.00	2,383.00
4	2,196.00	2,194.00	2,217.00	2,393.00	2,543.00	2,610.00	2,733.00	2,782.00	2,700.00	2,584.00	2,471.00	2,389.00
5	2,200.00	2,192.00	2,245.00	2,386.00	2,546.00	2,611.00	2,733.00	2,780.00	2,690.00	2,582.00	2,465.00	2,378.00
6	2,199.00	2,191.00	2,250.00	2,376.00	2,557.00	2,612.00	2,733.00	2,784.00	2,681.00	2,579.00	2,461.00	2,371.00
7	2,196.00	2,190.00	2,253.00	2,379.00	2,561.00	2,614.00	2,732.00	2,794.00	2,674.00	2,577.00	2,456.00	2,367.00
8	2,198.00	2,186.00	2,256.00	2,381.00	2,560.00	2,617.00	2,731.00	2,794.00	2,662.00	2,577.00	2,450.00	2,364.00
9	2,198.00	2,189.00	2,256.00	2,392.00	2,563.00	2,618.00	2,730.00	2,794.00	2,655.00	2,578.00	2,449.00	2,364.00
10	2,197.00	2,188.00	2,272.00	2,399.00	2,566.00	2,619.00	2,728.00	2,794.00	2,648.00	2,579.00	2,449.00	2,361.00
11	2,189.00	2,187.00	2,272.00	2,403.00	2,578.00	2,619.00	2,727.00	2,791.00	2,638.00	2,582.00	2,443.00	2,352.00
12	2,186.00	2,186.00	2,281.00	2,405.00	2,581.00	2,622.00	2,725.00	2,808.00	2,625.00	2,576.00	2,441.00	2,348.00
13	2,187.00	2,183.00	2,281.00	2,416.00	2,583.00	2,622.00	2,725.00	2,810.00	2,628.00	2,573.00	2,443.00	2,342.00
14	2,186.00	2,182.00	2,281.00	2,414.00	2,585.00	2,622.00	2,723.00	2,812.00	2,634.00	2,566.00	2,449.00	2,338.00
15	2,187.00	2,181.00	2,295.00	2,419.00	2,587.00	2,631.00	2,725.00	2,809.00	2,631.00	2,569.00	2,444.00	2,334.00
16	2,200.00	2,180.00	2,316.00	2,422.00	2,589.00	2,632.00	2,730.00	2,809.00	2,638.00	2,566.00	2,439.00	2,334.00
17	2,200.00	2,180.00	2,327.00	2,416.00	2,590.00	2,631.00	2,725.00	2,799.00	2,639.00	2,567.00	2,434.00	2,334.00
18	2,204.00	2,204.00	2,327.00	2,419.00	2,591.00	2,633.00	2,721.00	2,794.00	2,636.00	2,562.00	2,429.00	2,325.00
19	2,206.00	2,204.00	2,332.00	2,425.00	2,590.00	2,633.00	2,709.00	2,793.00	2,630.00	2,559.00	2,424.00	2,322.00
20	2,208.00	2,203.00	2,334.00	2,440.00	2,591.00	2,665.00	2,698.00	2,790.00	2,624.00	2,554.00	2,416.00	2,316.00
21	2,210.00	2,202.00	2,336.00	2,448.00	2,592.00	2,691.00	2,704.00	2,789.00	2,623.00	2,551.00	2,408.00	2,321.00
22	2,210.00	2,200.00	2,340.00	2,448.00	2,594.00	2,697.00	2,701.00	2,785.00	2,617.00	2,551.00	2,406.00	2,312.00
23	2,211.00	2,198.00	2,338.00	2,451.00	2,596.00	2,699.00	2,701.00	2,779.00	2,610.00	2,550.00	2,407.00	2,312.00
24	2,206.00	2,197.00	2,341.00	2,455.00	2,599.00	2,704.00	2,691.00	2,776.00	2,608.00	2,542.00	2,406.00	2,312.00
25	2,205.00	2,197.00	2,340.00	2,457.00	2,599.00	2,707.00	2,688.00	2,767.00	2,599.00	2,532.00	2,408.00	2,306.00
26	2,204.00	2,198.00	2,342.00	2,459.00	2,602.00	2,711.00	2,686.00	2,758.00	2,592.00	2,520.00	2,410.00	2,312.00
27	2,203.00	2,195.00	2,343.00	2,462.00	2,604.00	2,714.00	2,723.00	2,756.00	2,586.00	2,513.00	2,412.00	2,317.00
28	2,203.00	2,195.00	2,345.00	2,464.00	2,606.00	2,730.00	2,739.00	2,754.00	2,581.00	2,502.00	2,410.00	2,309.00
29	2,203.00	2,196.00	2,346.00	2,497.00	2,609.00	2,735.00	2,742.00	2,748.00	2,580.00	2,507.00	2,408.00	2,308.00
30	2,203.00	2,200.00	2,348.00	2,520.00	------	2,735.00	2,744.00	2,751.00	2,578.00	2,512.00	2,406.00	2,306.00
31	2,203.00	------	2,354.00	2,529.00	------	2,734.00	------	2,737.00	------	2,501.00	2,397.00	------
(†)	157.81	157.78	159.34	161.04	161.79	162.94	163.03	162.97	161.50	160.77	159.77	158.87
(+)	+8.0	-3.0	+154.0	+175.0	+80.0	+125.0	+10.0	-7.0	-159.0	-77.0	-104.0	-91.0
MAX	2,211.00	2,204.00	2,354.00	2,529.00	2,609.00	2,735.00	2,744.00	2,812.00	2,726.00	2,584.00	2,492.00	2,389.00
MIN	2,186.00	2,180.00	2,205.00	2,366.00	2,538.00	2,610.00	2,686.00	2,737.00	2,578.00	2,501.00	2,397.00	2,306.00

CAL YR 1971..... + -110.0 MAX 2,511.00 MIN 2,180.00
WTR YR 1972..... + +111.0 MAX 2,812.00 MIN 2,180.00

† Elevation, in feet, at end of month.
+ Change in contents, in thousands of acre-feet.
NOTE.--All figures expressed in thousands.

08039500 Angelina River at Horger, Tex.

LOCATION.--Lat 31°02'08", long 94°07'48", Jasper County, on right bank 0.4 mile downstream from Jordans Creek, 4 miles northeast of the abandoned town of Horger, and 7.6 miles downstream from Sam Rayburn Dam.

DRAINAGE AREA.--3,486 sq mi (3,449 sq mi at Sam Rayburn Dam).

PERIOD OF RECORD.--March 1928 to April 1951, February 1958 to current year (1958-65 medium- and high-water records only).

GAGE.--Water-stage recorder. Auxiliary water-stage recorder 3.2 miles downstream. Datum of gage is 68.54 ft above mean sea level. Mar. 7, 1928, to Apr. 16, 1951, nonrecording gage, and Feb. 19, 1958, to July 13, 1962, water-stage recorder 4.8 miles downstream at same datum. Water-stage recorder for B. A. Steinhagen Lake (station 08040000) used as auxiliary gage for this station Feb. 19, 1958, to July 13, 1962. July 14, 1962, to Oct. 16, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--22 years (1928-50) prior to completion of Sam Rayburn Reservoir, 3,280 cfs (2,375,000 acre-ft per year); 7 years (1965-72) after completion of Sam Rayburn Reservoir, 1,227 cfs (889,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,200 cfs Sept. 29 (gage height, 20.30 ft); no flow at times.
Period of record: Maximum discharge, 49,900 cfs May 6, 1944 (gage height, 36.90 ft); minimum observed prior to closure of Sam Rayburn Dam, 13 cfs Sept. 22, 1937; no release at times.
Maximum stage since 1885, 39.5 ft (at site 4.8 miles downstream) in August 1915 (discharge, 82,000 cfs, from rating curve extended above 50,000 cfs), from information by local residents. Floods in 1884 and 1885 probably were higher, from information by local residents.

REMARKS.--Discharges since March 1965 are releases from Sam Rayburn Reservoir. Local runoff between the dam and this gage is not included in these records. Recording rain gage located at auxiliary gage.

COOPERATION.--Records of releases furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS (WATER YEAR).--WSP 928: 1932 (yearly runoff only, in acre-ft). WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	3,500	413	3,530	3,500
2	0	0	773	0	0	5.0	0	0	3,460	0	3,500	0
3	3,070	0	487	0	1,150	360	0	0	3,440	904	3,530	0
4	0	0	0	0	583	0	0	0	3,440	0	2,090	0
5	0	0	0	5,130	0	5.0	0	5.0	3,440	0	2,220	3,530
6	0	0	392	5,060	0	0	0	0	3,460	0	0	1,790
7	5.0	0	1,200	343	421	5.0	854	0	3,500	0	2,150	1,710
8	0	0	0	0	883	0	683	0	3,530	0	1,740	1,740
9	0	0	0	0	0	175	0	0	3,540	0	1,740	206
10	0	0	0	0	0	5.0	1,060	0	3,540	0	1,750	0
11	0	0	0	0	5.0	0	854	0	3,540	0	1,750	1,760
12	0	0	0	0	0	0	1,010	0	3,500	1,710	0	1,790
13	0	0	0	0	0	1,360	84	0	1,710	1,710	0	2,050
14	5.0	0	0	3,280	0	0	1,000	0	1,720	1,710	1,720	1,790
15	271	0	0	0	0	0	0	0	1,660	0	1,990	1,790
16	0	0	514	0	0	0	0	978	0	0	1,720	0
17	0	0	0	3,470	0	0	2,270	3,860	0	1,710	1,740	0
18	0	0	0	0	0	0	1,680	2,610	1,630	1,710	1,750	3,390
19	0	0	0	0	0	0	4,940	5.0	1,780	1,710	2,540	2,040
20	0	0	0	0	0	0	5,150	1,050	1,790	1,710	2,890	1,750
21	0	0	0	0	0	0	763	0	1,780	1,710	2,190	1,790
22	0	1,980	0	0	5.0	0	1,110	1,070	1,710	0	1,750	1,790
23	0	688	0	0	0	142	0	2,040	1,710	0	1,750	0
24	0	0	0	0	0	190	3,880	2,150	1,880	3,420	0	0
25	0	0	0	0	0	0	848	3,550	1,960	3,420	0	1,790
26	5.0	0	0	0	0	0	0	3,010	2,440	3,420	0	1,790
27	0	0	0	0	0	0	0	0	1,710	3,420	0	1,790
28	0	0	0	0	0	0	0	0	2,310	3,420	5.0	3,040
29	0	0	0	0	0	0	0	1,890	1,190	0	5.0	4,040
30	0	0	0	0	------	0	0	0	5.0	0	5.0	0
31	0	------	0	0	------	10	------	3,430	------	3,250	3,500	------
TOTAL	3,356.0	2,668	3,366	17,283	3,047.0	2,257.0	26,186	25,648.0	68,875.0	35,347	47,555.0	44,866
MEAN	108	88.9	109	558	105	72.8	873	827	2,296	1,140	1,534	1,496
MAX	3,070	1,980	1,200	5,130	1,150	1,360	5,150	3,860	3,540	3,420	3,530	4,040
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	6,660	5,290	6,680	34,280	6,040	4,480	51,940	50,870	136,600	70,110	94,330	88,990
(††)	3.12	3.31	10.49	5.07	1.23	3.89	2.89	2.55	1.86	4.73	.90	1.75

CAL YR 1971 TOTAL 159,368 MEAN 437 MAX 4,030 MIN 0 AC-FT 316,100 †† -
WTR YR 1972 TOTAL 280,454 MEAN 766 MAX 5,150 MIN 0 AC-FT 556,300 †† 41.79

†† Rainfall, in inches.

08040000 B. A. Steinhagen Lake at Town Bluff, Tex.

LOCATION.--Lat 30°47'43", long 94°10'48", Tyler County, near right bank 70 ft upstream from outlet structure of Town Bluff Dam on Neches River, 0.4 mile north of Town Bluff, and at mile 113.7.

DRAINAGE AREA.--7,573 sq mi.

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1967, published as Dam B Reservoir at Town Bluff.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 25, 1954, at site 490 ft upstream at same datum.

EXTREMES.--Current year: Maximum contents, 101,100 acre-ft Mar. 21 (elevation, 83.49 ft); minimum, 53,380 acre-ft July 24 (elevation, 79.37 ft).
Period of record: Maximum contents, 128,400 acre-ft May 22, 1953 (elevation, 85.21 ft); no storage Sept. 18 to Oct. 13, 1954.

REMARKS.--Lake is formed by earthfill dam with a concrete section. Total length of dam, 6,698 ft including concrete spillway and nonoverflow section. There is a 6,100-foot uncontrolled emergency spillway on left bank with crest at elevation 85.0 ft. There is also a 326-foot gated spillway with six 40- by 35-foot tainter gates with sill at elevation 50.0 ft. Capacity of service spillway, 80,000 cfs with pool level at 85.0 ft. Total spillway capacity, 218,300 cfs at elevation 93.0 ft, maximum design level. Capacity curve based on survey made in 1945. Dam completed in June 1951, and deliberate impoundment of water began Apr. 16, 1951. Water used for industrial, municipal, and irrigation supplies. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Maximum design level	93.0	-
Uncontrolled spillway and top of tainter gates	85.0	124,700
Normal operating level (top of conservation storage)	83.0	94,200
Invert of sluice intake	52.0	20
Sill, six tainter gates	50.0	0

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1732: Drainage area.

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

79.0	50,090	82.0	81,280
80.0	59,320	84.0	108,700

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70,720	74,430	81,920	90,230	90,750	88,410	87,370	82,960	77,210	90,880	75,130	78,370
2	69,050	74,310	89,580	92,170	88,540	87,890	85,430	88,800	78,030	88,930	79,300	76,170
3	73,270	73,500	91,650	92,430	88,280	88,410	83,480	92,170	78,840	86,980	83,480	72,110
4	72,920	72,570	90,620	93,860	86,980	89,060	80,930	89,450	79,530	84,650	87,890	69,360
5	71,650	71,530	94,250	95,260	85,560	88,280	78,610	88,800	80,460	81,920	84,780	73,850
6	70,830	71,530	94,250	91,010	88,150	88,020	76,290	89,580	81,270	79,770	82,960	75,130
7	69,910	70,250	90,100	85,430	88,410	87,760	77,100	92,040	82,180	77,910	83,740	75,940
8	69,050	69,360	86,460	85,820	88,930	87,760	76,400	90,230	82,960	76,170	84,260	76,750
9	68,740	69,260	82,830	86,590	87,370	87,240	73,850	87,240	83,480	73,730	84,520	74,890
10	67,600	68,740	84,650	88,410	86,720	86,460	73,270	85,430	84,520	71,070	84,260	71,650
11	66,780	68,230	85,300	88,150	87,500	85,430	72,920	83,740	85,300	67,710	83,610	71,300
12	65,850	67,710	88,410	86,460	88,020	85,300	72,810	87,630	86,080	67,090	80,000	72,340
13	65,220	67,190	90,360	87,110	88,280	87,500	71,300	90,490	86,720	67,090	75,710	73,730
14	64,500	66,670	89,060	91,650	88,150	86,460	69,360	89,710	87,890	66,880	76,050	74,430
15	64,400	66,260	85,430	88,020	88,280	87,890	67,190	87,240	89,840	63,880	77,450	75,240
16	65,530	65,740	88,800	86,590	87,760	87,760	63,880	87,370	87,630	59,840	78,490	72,570
17	66,570	65,330	91,140	87,890	87,630	86,210	63,460	89,840	84,650	59,840	79,300	69,360
18	67,500	68,230	88,930	87,110	87,890	85,170	64,190	92,300	84,390	60,360	80,110	71,410
19	68,230	68,020	87,500	87,500	87,110	83,610	68,640	86,720	85,820	60,670	81,270	71,760
20	70,370	68,430	86,210	88,150	86,720	88,540	76,170	85,170	87,240	60,980	84,650	75,470
21	73,270	69,160	85,690	88,280	86,850	100,600	81,160	83,220	88,930	61,390	87,110	77,210
22	74,200	73,500	85,950	88,280	86,460	93,470	82,700	81,920	89,580	58,770	88,280	78,260
23	74,550	76,630	85,690	87,110	86,460	87,240	81,400	81,920	89,580	54,710	88,930	76,290
24	74,890	76,870	85,690	88,410	86,590	87,760	86,210	82,310	90,230	57,110	86,210	74,890
25	74,890	77,100	85,690	87,370	86,460	88,670	86,080	85,040	90,100	61,390	83,480	75,710
26	74,550	77,910	85,300	86,850	86,850	88,410	83,090	89,060	90,230	65,430	80,810	77,210
27	74,890	78,030	84,780	87,110	86,850	88,410	89,060	86,330	90,620	69,160	78,260	78,950
28	74,890	79,530	85,040	87,370	86,460	88,150	93,600	81,530	91,140	73,390	75,590	80,690
29	74,890	80,110	84,780	88,800	86,980	88,150	92,040	79,880	92,820	71,410	72,810	90,230
30	74,890	81,040	85,430	93,600	------	88,540	86,080	77,450	92,170	67,910	69,910	89,970
31	74,780	------	86,460	94,830	------	88,150	------	76,290	------	70,140	72,230	------
(†)	81.44	81.98	82.40	83.04	82.44	82.53	82.37	81.57	82.84	81.04	81.22	82.67
(*)	+2,550	+6,260	+5,420	+8,370	-7,850	+1,170	-2,070	-9,790	+15,880	-22,030	+2,090	+17,740
MAX	74,890	81,040	94,250	95,260	90,750	100,600	93,600	92,300	92,820	90,880	88,930	90,230
MIN	64,400	65,330	81,920	85,430	85,560	83,610	63,460	76,290	77,210	54,710	69,910	69,360

CAL YR 1971..... * +9,360 MAX 94,250 MIN 28,870
WTR YR 1972..... * +17,740 MAX 100,600 MIN 54,710

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

08040500 Neches River at Town Bluff, Tex.

LOCATION.--Lat 30°47'36", long 94°10'28", Jasper-Tyler County line, on left bank 0.3 mile downstream from Town Bluff Dam, 0.5 mile northeast of Town Bluff, 2.5 miles upstream from Walnut Run, 8 miles downstream from Wolf Creek, and at mile 113.4.

DRAINAGE AREA.--7,573 sq mi.

PERIOD OF RECORD.--March 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 21, 1953, water-stage recorder, and May 21, 1953, to Dec. 3, 1954, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years (1951-64) prior to regulation by Sam Rayburn Reservoir, 4,406 cfs (3,192,000 acre-ft per year); 8 years (1964-72) regulated, 3,018 cfs (2,187,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs Mar. 23 (elevation, 64.06 ft); minimum daily, 23 cfs Nov. 30.
Period of record: Maximum discharge, 90,900 cfs May 21, 22, 1953 (elevation, 82.85 ft); no flow at times due to regulation of B. A. Steinhagen Lake.
Flood of May 1884 (stage about 86.8 ft, discharge about 120,000 cfs) is the highest since at least that date, from information by Corps of Engineers.

REMARKS.--Records good except those below 100 cfs, which are fair. Flow regulated by B. A. Steinhagen Lake 0.3 mile upstream (see preceding page) and Sam Rayburn Reservoir (station 08039300) 37.9 miles upstream. Some diversions above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	671	235	43	638	7,190	688	2,310	4,580	3,270	917	1,650	1,480
2	894	318	271	932	6,680	705	2,300	2,410	3,280	1,320	1,660	1,670
3	806	362	1,400	2,070	5,410	731	2,300	3,770	3,290	1,850	1,670	1,880
4	861	426	2,090	3,790	5,090	688	2,270	5,850	3,290	2,060	1,670	1,780
5	953	429	3,000	6,140	4,270	671	2,110	5,120	3,290	1,700	1,670	1,400
6	572	423	5,810	9,360	2,930	815	1,840	3,580	3,300	1,240	1,670	1,500
7	589	422	7,010	8,140	2,520	956	1,650	3,690	3,290	1,150	1,660	1,600
8	583	426	5,720	2,260	2,510	953	1,640	4,630	3,300	1,150	1,660	1,600
9	429	427	3,470	1,720	2,480	948	1,650	4,120	3,300	1,610	1,830	1,590
10	420	387	2,280	2,180	1,890	949	1,790	2,440	3,310	2,140	2,080	1,590
11	478	344	1,250	2,540	1,340	947	1,830	2,030	3,310	2,130	2,180	1,580
12	547	341	1,120	2,740	1,340	944	1,830	2,040	3,310	2,120	2,180	1,580
13	457	339	2,170	2,250	1,360	937	2,100	2,880	2,580	2,120	2,180	1,580
14	396	339	3,880	2,360	1,340	937	2,240	3,740	1,570	2,120	2,030	1,590
15	429	355	3,680	3,350	1,320	940	2,150	3,300	1,650	2,110	1,570	1,590
16	410	376	2,740	2,360	1,310	1,220	2,150	2,210	1,940	2,100	1,560	1,590
17	417	378	3,840	3,110	1,130	1,440	2,110	1,690	2,200	2,020	1,570	1,590
18	304	285	4,570	3,600	968	1,390	2,090	2,990	1,720	1,920	1,560	1,580
19	182	156	3,000	2,000	967	1,380	2,110	3,980	1,610	1,920	1,560	1,580
20	129	128	2,220	2,000	968	1,410	2,120	2,250	1,610	1,920	1,560	1,460
21	44	82	1,560	2,600	963	5,840	2,030	1,610	1,750	1,920	1,470	1,320
22	35	79	1,010	2,470	958	11,400	1,570	1,720	1,900	1,920	1,550	1,330
23	31	79	896	2,420	818	9,730	1,480	2,020	1,900	1,910	1,780	1,330
24	30	78	918	1,920	678	4,400	1,420	2,180	1,900	1,890	1,790	1,330
25	87	79	915	1,410	676	2,410	1,640	2,180	2,070	1,850	1,660	1,350
26	134	77	912	1,260	668	2,810	1,730	2,180	2,230	1,810	1,500	1,340
27	98	73	906	1,000	666	2,240	2,090	2,360	2,230	1,820	1,490	1,340
28	96	73	801	857	666	2,420	5,490	2,660	2,080	1,830	1,490	1,350
29	128	51	615	747	672	2,390	6,050	2,430	1,300	1,840	1,480	1,350
30	172	23	612	1,810	------	2,350	5,950	2,220	629	1,830	1,470	1,360
31	173	------	618	4,750	------	2,320	------	2,960	------	1,730	1,470	------
TOTAL	11,555	7,590	69,327	84,784	59,778	67,959	70,040	91,820	72,409	55,967	52,320	45,210
MEAN	373	253	2,236	2,735	2,061	2,192	2,335	2,962	2,414	1,805	1,688	1,507
MAX	953	429	7,010	9,360	7,190	11,400	6,050	5,850	3,310	2,140	2,180	1,880
MIN	30	23	43	638	666	671	1,420	1,610	629	917	1,470	1,320
AC-FT	22,920	15,050	137,500	168,200	118,600	134,800	138,900	182,100	143,600	111,000	103,800	89,670

CAL YR 1971 TOTAL 349,500 MEAN 958 MAX 7,010 MIN 23 AC-FT 693,200
WTR YR 1972 TOTAL 688,759 MEAN 1,882 MAX 11,400 MIN 23 AC-FT 1,366,000

08041000 Neches River at Evadale, Tex.

LOCATION.--Lat 30°21'22", long 94°05'36", Jasper-Hardin County line, near center of channel on downstream side of pier of bridge on U.S. Highway 96 at Evadale, 0.8 mile upstream from Mill Creek, 16 miles upstream from Village Creek, and at mile 55.6.

DRAINAGE AREA.--7,951 sq mi.

PERIOD OF RECORD.--July 1904 to December 1906, April 1921 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 8.25 ft above mean sea level. July 1, 1904, to Dec. 31, 1906, nonrecording gage on Gulf, Colorado, and Santa Fe Railway Co. bridge at site 1.2 miles downstream at datum 5.50 ft lower; Apr. 1, 1921, to Dec. 7, 1948, nonrecording gages at site 1.2 miles downstream at present datum; Dec. 8, 1948, to Nov. 8, 1963, water-stage recorder at site 1.2 miles downstream at present datum.

AVERAGE DISCHARGE.--45 years (1904-6, 1921-64) prior to regulation by Sam Rayburn Reservoir, 6,308 cfs (4,570,000 acre-ft per year); 8 years (1964-72) regulated, 3,385 cfs (2,452,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,400 cfs Mar. 25 (gage height, 14.58 ft); minimum daily, 208 cfs Oct. 27.
Period of record: Maximum discharge, 92,100 cfs May 11, 1944 (gage height, 23.58 ft, from floodmark, at site then in use); minimum daily, 63 cfs Nov. 26-28, 1956.
Flood in May 1884 (stage, 26.2 ft at former site, discharge, about 125,000 cfs) and flood in August 1915 (stage, 24.5 ft at former site, discharge, about 102,000 cfs) are the highest since at least 1884. Stages by Gulf, Colorado, and Santa Fe Railway Co.

REMARKS.--Records good. Flow regulated by B. A. Steinhagen Lake (station 08040000) 58.1 miles upstream (capacity, 124,700 acre-ft) and Sam Rayburn Reservoir (station 08039300) 95.7 miles upstream (capacity, 4,442,000 acre-ft). Some diversions upstream for municipal use. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 718: 1929. WSP 1342: 1905-7, 1924. WSP 1732: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	263	248	858	4,310	995	3,320	7,200	2,940	1,320	2,100	1,580
2	330	264	387	952	6,300	1,130	3,220	7,400	3,450	1,010	2,000	1,580
3	680	289	1,450	1,230	7,650	1,270	3,150	6,200	3,650	1,310	1,990	1,660
4	762	352	2,520	2,260	7,670	1,270	3,100	5,000	3,720	1,780	1,970	1,960
5	850	388	3,490	4,290	7,010	1,190	3,050	5,800	3,770	2,200	1,970	2,060
6	1,000	427	5,000	5,960	6,450	1,090	2,960	7,000	3,800	2,190	1,970	1,780
7	950	436	6,940	7,720	5,440	1,060	2,680	6,400	3,800	1,730	1,970	1,650
8	720	437	8,410	9,180	4,230	1,170	2,360	5,700	3,810	1,470	1,970	1,730
9	680	444	8,860	8,080	3,620	1,210	2,190	5,470	3,810	1,390	1,970	1,750
10	620	458	7,630	5,190	3,350	1,200	2,150	5,680	3,820	1,540	2,050	1,740
11	550	452	5,620	3,680	3,030	1,190	2,180	4,970	3,840	2,170	2,300	1,720
12	520	425	3,500	3,560	2,320	1,180	2,400	3,790	3,880	2,480	2,500	1,710
13	560	402	2,210	3,610	2,070	1,170	2,400	3,370	3,880	2,710	2,570	1,710
14	600	395	2,340	3,340	2,040	1,160	2,500	3,590	3,660	2,690	2,570	1,700
15	530	389	3,720	2,900	1,960	1,190	2,800	4,290	2,620	2,720	2,470	1,700
16	560	386	4,670	3,640	1,860	1,360	2,800	4,520	2,150	2,630	2,010	1,710
17	700	397	4,670	3,390	1,780	1,530	2,800	3,800	2,160	2,600	1,730	1,710
18	740	469	4,860	3,280	1,660	1,850	2,800	2,680	2,510	2,510	1,690	1,710
19	740	546	5,720	4,130	1,410	1,840	2,730	2,680	2,240	2,350	1,680	1,700
20	680	430	5,510	5,030	1,290	1,760	2,710	3,950	1,980	2,280	1,680	1,690
21	560	420	4,410	5,190	1,250	2,350	2,730	3,730	1,900	2,260	1,680	1,650
22	460	370	3,270	5,180	1,240	4,500	2,760	2,550	1,930	2,260	1,630	1,520
23	345	334	2,240	4,770	1,230	7,730	2,380	2,040	2,110	2,250	1,570	1,450
24	285	323	1,620	4,170	1,200	10,500	2,120	2,170	2,170	2,250	1,820	1,450
25	246	313	1,410	3,500	1,080	10,900	1,960	2,410	2,170	2,230	1,920	1,470
26	215	299	1,310	2,560	1,010	7,660	1,950	2,480	2,240	2,200	1,900	1,470
27	208	285	1,250	2,060	984	5,440	2,220	2,490	2,440	2,140	1,710	1,460
28	252	268	1,200	1,670	964	4,190	2,450	2,570	2,520	2,120	1,650	1,460
29	237	262	1,140	1,370	966	3,760	4,600	2,850	2,480	2,150	1,620	1,470
30	220	256	973	1,450	------	3,640	6,000	2,920	2,090	2,150	1,600	1,540
31	222	------	873	2,220	------	3,480	------	2,640	------	2,150	1,590	------
TOTAL	16,262	11,179	107,451	116,420	85,374	89,965	83,470	128,340	87,540	65,240	59,850	49,490
MEAN	525	373	3,466	3,755	2,944	2,902	2,782	4,140	2,918	2,105	1,931	1,650
MAX	1,000	546	8,860	9,180	7,670	10,900	6,000	7,400	3,880	2,720	2,570	2,060
MIN	208	256	248	858	964	995	1,950	2,040	1,900	1,010	1,570	1,450
AC-FT	32,260	22,170	213,100	230,900	169,300	178,400	165,600	254,600	173,600	129,400	118,700	98,160

CAL YR 1971 TOTAL 433,847 MEAN 1,189 MAX 8,860 MIN 82 AC-FT 860,500
WTR YR 1972 TOTAL 900,581 MEAN 2,461 MAX 10,900 MIN 208 AC-FT 1,786,000

08041500 Village Creek near Kountze, Tex.

LOCATION.--Lat 30°23'52", long 94°15'48", Hardin County, at downstream side of bridge on Farm Road 418, 1.6 miles upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.1 miles upstream from Cypress Creek, 3.4 miles northeast of Kountze, and 4.3 miles downstream from Beech Creek.

DRAINAGE AREA.--860 sq mi.

PERIOD OF RECORD.--May 1924 to September 1927, October 1927 to November 1929 (discharge measurements only), April 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 25.12 ft above mean sea level. Prior to Apr. 30, 1939, nonrecording gage at site 1.6 miles downstream at different datum. Apr. 30, 1939, to Sept. 30, 1966, water-stage recorder at site 2,000 ft downstream at present datum.

AVERAGE DISCHARGE.--36 years, 746 cfs (11.78 inches per year, 540,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,700 cfs Dec. 8 (gage height, 16.17 ft); minimum daily, 58 cfs Sept. 22, 23.
Period of record: Maximum discharge, 67,200 cfs Nov. 26, 1940 (gage height, 27.6 ft, former site, from floodmark), from rating curve extended above 32,000 cfs; minimum not determined, probably occurred during period of no gage-height record Sept. 16 to Oct. 3, 1956; minimum daily, 16 cfs Oct. 1, 2, 1956.
Maximum stage since 1884, about 34 ft in August 1915 at site 2,000 ft downstream at present datum. Flood of May 27, 1929, reached a stage of about 32 ft at site 2,000 ft downstream at present datum. Above stages were determined on basis of information by engineers of Gulf, Colorado, and Santa Fe Railway Co. for site 1.6 miles downstream.

REMARKS.--Records good. Small diversions above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	106	232	766	2,040	345	2,010	2,560	213	79	115	88
2	86	102	400	960	2,230	467	1,890	3,480	200	76	107	78
3	82	96	1,000	1,360	2,230	555	1,620	3,440	180	73	102	68
4	88	92	1,700	1,660	1,970	516	1,050	3,740	169	97	99	66
5	101	90	2,400	2,500	1,560	475	674	4,090	155	229	95	63
6	106	85	3,600	2,800	1,070	454	566	4,030	148	213	92	65
7	162	80	5,000	2,500	933	389	509	3,630	136	204	88	104
8	214	77	5,590	2,000	969	346	471	3,090	128	234	84	122
9	204	75	5,150	1,500	1,020	331	434	3,050	121	176	79	129
10	172	74	4,590	1,400	959	318	396	3,600	116	134	76	114
11	140	74	3,650	1,400	821	302	362	4,130	115	122	75	96
12	114	80	2,770	1,500	770	288	335	4,190	112	126	77	85
13	96	89	2,080	1,500	925	276	318	3,720	115	395	90	76
14	86	96	1,630	1,400	985	269	303	3,380	127	478	99	71
15	84	92	1,480	1,100	962	263	277	3,560	127	451	107	68
16	280	86	1,660	900	857	364	267	3,680	187	458	108	65
17	644	81	2,690	700	751	544	380	3,660	322	422	111	64
18	476	114	4,590	564	664	449	399	2,970	337	417	115	64
19	308	492	5,150	618	595	370	360	1,970	296	378	117	62
20	378	518	4,590	2,040	515	324	292	1,060	215	312	113	62
21	434	420	3,850	2,430	449	899	245	680	158	299	103	61
22	364	392	3,070	2,380	408	2,000	272	557	118	261	93	58
23	315	343	2,330	2,380	405	2,710	403	484	105	233	83	58
24	336	287	1,540	2,160	397	3,120	839	432	101	199	80	65
25	287	308	1,000	1,780	392	3,820	1,210	391	97	207	80	92
26	214	336	802	1,210	384	3,980	1,130	357	93	228	83	137
27	172	322	730	880	367	3,160	630	328	89	183	107	161
28	144	262	694	748	341	2,150	556	308	86	151	122	156
29	131	238	676	675	328	1,500	1,090	277	83	139	121	197
30	118	268	644	778	------	1,570	1,710	244	83	135	118	201
31	110	------	644	1,540	------	1,860	------	230	------	122	105	------
TOTAL	6,523	5,775	75,932	46,129	26,297	34,414	20,998	71,318	4,532	7,231	3,044	2,796
MEAN	210	193	2,449	1,488	907	1,110	700	2,301	151	233	98.2	93.2
MAX	644	518	5,590	2,800	2,230	3,980	2,010	4,190	337	478	122	201
MIN	77	74	232	564	328	263	245	230	83	73	75	58
CFSM	.24	.22	2.85	1.73	1.05	1.29	.81	2.68	.18	.27	.11	.11
IN.	.28	.25	3.28	2.00	1.14	1.49	.91	3.08	.20	.31	.13	.12
AC-FT	12,940	11,450	150,600	91,500	52,160	68,260	41,650	141,500	8,990	14,340	6,040	5,550

CAL YR 1971 TOTAL 131,876 MEAN 361 MAX 5,590 MIN 20 CFSM .42 IN 5.70 AC-FT 261,600
WTR YR 1972 TOTAL 304,989 MEAN 833 MAX 5,590 MIN 58 CFSM .97 IN 13.19 AC-FT 604,900

08041700 Pine Island Bayou near Sour Lake, Tex.

LOCATION.--Lat 30°06'21", long 94°20'04", Jefferson-Hardin County line, on right bank at downstream side of bridge on county road and 5.1 miles southeast of Sour Lake.

DRAINAGE AREA.--336 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

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

AVERAGE DISCHARGE.--5 years, 233 cfs (9.42 inches per year, 168,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,720 cfs May 15 (elevation, 26.72 ft); minimum daily, 2.4 cfs Sept. 16.
Period of record: Maximum discharge, 4,250 cfs Oct. 30, 1970 (elevation, 27.80 ft); minimum daily, 0.58 cfs Nov. 8, 1967.
Maximum stage since at least 1917, about 31 ft in September 1963, from information by local residents.

REMARKS.--Records good. No known diversions. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	23	31	148	1,520	32	450	715	29	23	31	8.3
2	12	18	84	133	1,780	94	255	961	28	25	22	5.2
3	15	15	157	136	1,810	143	164	1,180	23	17	25	4.1
4	31	9.5	230	212	1,670	140	122	1,140	21	84	25	34
5	54	7.1	510	341	1,500	100	116	1,060	21	191	22	62
6	40	5.3	1,240	400	1,380	81	153	932	23	120	19	23
7	30	4.5	1,660	420	1,260	62	148	816	23	105	12	11
8	22	3.6	2,220	420	1,110	46	126	752	23	105	11	6.7
9	20	3.4	2,600	380	953	35	73	678	26	167	9.5	6.0
10	20	3.5	2,500	341	766	27	58	584	24	146	10	9.6
11	30	3.1	2,400	314	582	21	53	574	29	140	15	5.2
12	33	3.0	2,220	305	462	17	54	960	39	111	70	3.6
13	29	3.0	1,900	282	411	14	25	1,610	50	67	50	3.0
14	23	3.6	1,660	247	384	12	24	2,230	68	65	35	2.6
15	20	3.6	1,450	205	354	14	37	2,670	62	102	31	2.6
16	26	2.9	1,300	166	318	29	41	2,530	157	107	22	2.4
17	60	3.0	1,120	133	283	51	84	2,180	151	94	50	2.8
18	68	10	1,000	106	245	57	92	1,780	128	105	59	4.2
19	54	23	980	90	200	22	66	1,500	120	110	56	5.4
20	46	22	1,020	358	158	37	84	1,270	122	104	38	5.1
21	60	37	1,060	661	126	453	106	975	101	100	25	4.2
22	84	112	1,080	856	101	705	233	661	79	124	18	3.9
23	94	109	1,100	1,000	85	936	227	343	57	178	12	13
24	111	111	1,100	1,040	71	1,130	224	162	44	138	75	128
25	98	114	1,080	1,020	59	1,220	203	113	40	104	98	297
26	96	110	1,000	940	50	1,270	175	95	34	79	46	345
27	84	96	856	859	42	1,280	124	82	30	57	32	429
28	65	72	674	760	36	1,230	438	80	26	45	37	376
29	48	50	450	609	33	1,100	531	61	23	38	43	278
30	36	36	268	891	------	915	626	48	19	33	29	221
31	28	------	191	1,280	------	700	------	35	------	30	17	------
TOTAL	1,449	1,017.1	35,141	15,053	17,749	11,973	5,112	28,777	1,620	2,914	1,044.5	2,301.9
MEAN	46.7	33.9	1,134	486	612	386	170	928	54.0	94.0	33.7	76.7
MAX	111	114	2,600	1,280	1,810	1,280	626	2,670	157	191	98	429
MIN	12	2.9	31	90	33	12	24	35	19	17	9.5	2.4
CFSM	.14	.10	3.38	1.45	1.82	1.15	.51	2.76	.16	.28	.10	.23
IN.	.16	.11	3.89	1.67	1.97	1.33	.57	3.19	.18	.32	.12	.25
AC-FT	2,870	2,020	69,700	29,860	35,210	23,750	10,140	57,080	3,210	5,780	2,070	4,570

CAL YR 1971 TOTAL 57,980.9 MEAN 159 MAX 2,600 MIN 2.0 CFSM .47 IN 6.42 AC-FT 115,000
WTR YR 1972 TOTAL 124,151.5 MEAN 339 MAX 2,670 MIN 2.4 CFSM 1.01 IN 13.75 AC-FT 246,300

08042000 Taylor Bayou near LaBelle, Tex.

LOCATION.--Lat 29°52'30", long 94°09'34", Jefferson County, near center of stream at downstream side of bridge on county road, 0.7 mile south of LaBelle, 6.0 miles upstream from Hillebrandt Bayou, 7.2 miles upstream from State Highway 73, and 11.2 miles upstream from salt-water gates and barge locks. Distances are measured along rectified channel.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--April 1954 to current year (all discharges above 1,000 cfs and complete records for storms of 1.0 inch or more runoff, except for the period Sept. 10-22, 1961).

GAGE.--Water-stage recorder. Datum of gage is 4.63 ft below mean sea level (determined by several comparisons of water surface with auxiliary water-stage recorder 7.2 miles downstream during times of no flow and ideal weather conditions).

EXTREMES.--Current year: Maximum discharge, 6,060 cfs Dec. 7 (gage height, 8.69 ft); maximum gage height, 8.73 ft Dec. 7; minimum discharge not determined (affected by tides and pumping); minimum gage height, 4.16 ft Feb. 4.
Period of record: Maximum discharge, 9,590 cfs Sept. 22, 1963; maximum gage height, 11.78 ft Sept. 20, 1963 (backwater from Hillebrandt Bayou); minimum discharge not determined (affected by tides and pumping); minimum gage height, 2.31 ft July 17, 1954.
Maximum stage since at least 1941, that of Sept. 20, 1963. Flood in 1941 reached a stage of 11.3 ft, from information by Corps of Engineers; flood in 1946 reached a stage of 10.4 ft, from county bridge plans; flood of Sept. 13, 1961 (Hurricane Carla), reached a stage of 11.51 ft

REMARKS.--Records poor. Discharge above 1,000 cfs computed using fall as a factor. Discharge below 1,000 cfs is estimated for storm recessions. Low flow regulated by drainage from ricefields and operation of salt-water gates and barge locks. An unknown amount of water is diverted above and below gage for rice irrigation.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			-	-	2,320		-	400				-
2			700	-	1,170		-	2,030				-
3			1,500	-	300		-	3,780				-
4			400	1,260	-		-	1,900				-
5			1,500	2,140	-		-	400				-
6			4,740	500	-		-	-				-
7			5,750	-	-		-	-				-
8			4,730	-	-		-	-				-
9			2,690	-	-		-	-				-
10			1,200	-	-		-	-				-
11			400	-	-		-	960				-
12			-	-	-		-	1,880				-
13			-	-	-		-	3,770				-
14			-	-	-		-	3,570				-
15			-	-	-		-	2,160				-
16			-	-	-		-	900				-
17			-	-	-		-	-				-
18			-	-	-		-	-				-
19			-	-	-		-	-				-
20			-	-	-		-	-				-
21			-	-	-		-	-				-
22			-	-	-		-	-				-
23			-	-	-		-	-				-
24			-	-	-		-	-				200
25			-	-	-		-	-				1,100
26			-	-	-		-	-				2,180
27			-	-	-		100	-				2,760
28			-	-	-		1,100	-				2,720
29			-	100	-		1,870	-				2,220
30			-	1,970	-------		900	-				1,440
31		-------	-	3,690	-------		-------	-	-------			-------
MAX			5,750	3,690	2,320		1,870					2,760

CAL YR 1971..... MAX 5,750
WTR YR 1972..... MAX 5,750

NOTE.--No gage-height record Dec. 2-5.

08042500 Hillebrandt Bayou near Lovell Lake, Tex.

LOCATION.--Lat 29°55'44", long 94°06'35", Jefferson County, near center of stream at downstream side of bridge on county road, 1.3 miles southeast of Lovell Lake, and 4.4 miles upstream (along rectified channel) from Taylor Bayou.

DRAINAGE AREA.--128 sq mi.

PERIOD OF RECORD.--April 1954 to current year (all discharges above 1,000 cfs and complete records for storms of 1.0 inch or more runoff, except for the period Sept. 11-18, 1961).

GAGE.--Water-stage recorder. Auxiliary water-stage recorder 3.0 miles downstream. Datum of gage is 4.63 ft below mean sea level (determined by comparisons of water surface with Taylor Bayou near LaBelle, auxiliary gage, 5.6 miles downstream, during times of no flow and ideal weather conditions). Prior to Aug. 28, 1963, auxiliary water-stage recorder on Taylor Bayou 1.2 miles downstream from Hillebrandt Bayou, nonrecording gages on Taylor Bayou 2.3 and 5.2 miles downstream from Hillebrandt Bayou.

EXTREMES.--Current year: Maximum discharge, 4,630 cfs Dec. 6 (gage height, 8.82 ft); minimum discharge not determined (affected by tides and pumping); minimum gage height, 4.26 ft Feb. 4.
Period of record: Maximum discharge, 15,000 cfs Sept. 18, 1963; maximum gage height, 12.34 ft Sept. 19, 1963; minimum discharge not determined (affected by tides and pumping); minimum gage height, 2.33 ft July 17, 1954.
Maximum stage since 1941, 12.34 ft Sept. 19, 1963. A stage of 11.56 ft occurred Sept. 13, 1961 (backwater caused by Hurricane Carla).

REMARKS.--Records poor. Discharge above 1,000 cfs computed using fall as a factor. Discharge below 1,000 cfs not computed because of insufficent fall or estimated using storm recession. Low flow regulated by drainage from ricefields and operation of salt-water gates and barge locks. An unknown amount of water is diverted above and below gage for rice irrigation.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			-	-	400	-	-	-				-
2			-	-	-	-	-	1,430				-
3			-	-	-	-	-	1,450				-
4			-	1,060	-	-	-	200				-
5			1,170	600	-	-	-	-				-
6			4,250	-	-	-	-	-				-
7			3,560	-	-	-	-	-				-
8			1,400	-	-	-	-	-				-
9			300	-	-	-	-	-				-
10			-	-	-	-	-	-				-
11			-	-	-	-	-	1,000				-
12			-	-	-	-	-	2,000				-
13			-	-	-	-	-	2,000				-
14			-	-	-	-	-	1,000				-
15			-	-	-	-	-	500				-
16			-	-	-	-	-	-				-
17			-	-	-	-	-	-				-
18			-	-	-	-	-	-				-
19			-	-	-	-	-	-				-
20			-	-	-	200	-	-				-
21			-	-	-	1,420	-	-				-
22			-	-	-	200	-	-				-
23			-	-	-	-	-	-				-
24			-	-	-	-	-	-				500
25			-	-	-	-	-	-				1,000
26			-	-	-	-	-	-				1,000
27			-	-	-	-	400	-				500
28			-	-	-	-	2,810	-				1,500
29			-	100	-	-	1,450	-				1,000
30			-	2,020	-------	-	500	-				500
31		-------	-	1,800	-------	-	-------	-	-------			-------
MAX			4,250	2,020	400	1,420	2,810	2,000				1,500

CAL YR 1971..... MAX 4,250
WTR YR 1972..... MAX 4,250

08042700 North Creek near Jacksboro, Tex.

LOCATION.--Lat 33°16'57", long 98°17'53", Jack County, near left bank on downstream side of bridge on U.S. Highway 281, 1.5 miles upstream from Henderson Creek, 9.3 miles northwest of Jacksboro, and 14 miles upstream from mouth.

DRAINAGE AREA.--21.6 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,016.33 ft above mean sea level (State Highway Department bench mark), unadjusted.

AVERAGE DISCHARGE.--16 years, 5.20 cfs (3.27 inches per year, 3,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,640 cfs May 12 (gage height, 16.29 ft); no flow for long periods.
Period of record: Maximum discharge, 6,990 cfs Apr. 28, 1957 (gage height, 24.45 ft); no flow at times each year.
Flood of May 3, 1956, reached a stage of 21.58 ft, from floodmarks.

REMARKS.--Records good. No diversions above station. Five rain gages (two nonrecording and three recording) are operated in the basin. At end of year, flow from 16.3 sq mi above this station was partly controlled by five floodwater-retarding structures with a total combined capacity of 4,420 acre-ft below the flood-spillway crests, of which 3,940 acre-ft is floodwater-retarding capacity and 479 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,320 acre-ft, of which 280 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	.09	.07	.06	0	.07				
2	0		.25	.09	.07	.04	0	.04				
3	32		.76	.10	.05	.04	0	.03				
4	3.2		.04	.09	.05	.05	0	.02				
5	.25		4.0	.12	.06	.05	0	.01				
6	.16		.68	.12	.07	.06	0	.13				
7	.05		.07	.14	.05	.07	0	28				
8	.05		.04	.16	.04	.05	0	1.3				
9	.03		5.2	.16	.05	.07	0	.07				
10	0		21	.20	.05	.08	0	0				
11	0		1.5	.20	.05	.07	0	1.0				
12	0		.25	.20	.04	.06	0	440				
13	0		.06	.20	.04	.05	0	42				
14	0		.09	.15	.04	.05	0	30				
15	0		1.4	.12	.03	.05	0	24				
16	0		.19	.14	.03	.05	0	12				
17	0		.07	.16	.03	.06	0	5.0				
18	.20		.03	.13	.03	.06	0	.68				
19	.96		.01	.16	.03	.02	0	.16				
20	5.4		.01	.16	.03	.02	.02	.07				
21	.35		.01	.16	.06	.02	.38	.07				
22	.12		.01	.12	.05	.03	0	0				
23	.07		.02	.12	.06	.07	0	0				
24	.05		.03	.12	.07	4.4	0	0				
25	.01		.03	.12	.07	0	0	0				
26	.01		.03	.09	.05	0	0	0				
27	.25		.06	.09	.05	0	23	0				
28	.07		.05	.09	.05	0	.35	0				
29	.03		.06	.09	.08	0	.07	0				
30	0		.07	.08	------	0	.07	.01				
31	0	------	.07	.08	------	0	------	0	------			------
TOTAL	43.26	0	36.09	4.05	1.45	5.58	23.89	584.66	0	0	0	0
MEAN	1.40	0	1.16	.13	.050	.18	.80	18.9	0	0	0	0
MAX	32	0	21	.20	.08	4.4	23	440	0	0	0	0
MIN	0	0	0	.08	.03	0	0	0	0	0	0	0
AC-FT	86	0	72	8.0	2.9	11	47	1,160	0	0	0	0

CAL YR 1971 TOTAL 366.83 MEAN 1.01 MAX 51 MIN 0 AC-FT 728
WTR YR 1972 TOTAL 698.98 MEAN 1.91 MAX 440 MIN 0 AC-FT 1,390

08042800 West Fork Trinity River near Jacksboro, Tex.

LOCATION.--Lat 33°17'36", long 98°04'43", Jack County, near left bank on downstream side of bridge on State Highway 24, 4 miles downstream from North Creek, 7 miles upstream from Carroll Creek, and 7 miles northeast of Jacksboro.

DRAINAGE AREA.--683 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 869.28 ft above mean sea level (State Highway Department bench mark). Sept. 20, 1960, to May 30, 1961, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 107 cfs (77,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,900 cfs May 13 (gage height, 27.26 ft); no flow at times.
Period of record: Maximum discharge, 35,100 cfs Apr. 27, 1957 (gage height, 32.10 ft, from floodmark); no flow at times each year.
Maximum stage since at least 1900, that of Apr. 27, 1957. Flood in June 1941 reached a stage of 30 ft, from information by local residents.

REMARKS.--Records good. At end of year, flow from 66.8 sq mi above this station was partly controlled by 20 floodwater-retarding structures with a total combined capacity of 21,710 acre-ft below the flood-spillway crests, of which 18,940 acre-ft is floodwater-retarding capacity and 2,770 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 3,480 acre-ft, of which 339 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	.92	.02	.67	.03	0	.67	56	.98	.16		0
2	5.6	.39	9.8	.60	.02	0	.85	32	.66	.06		0
3	217	.22	14	.48	.02	0	.82	18	.42	.03		0
4	676	.14	43	.44	.02	0	.67	12	.29	1.8		.52
5	891	.10	104	.34	.02	0	.44	5.6	.19	16		.81
6	449	.08	133	.26	.02	0	.26	4.0	.15	99		.63
7	50	.06	97	.23	.01	0	.15	131	.11	71		.48
8	24	.04	141	.22	.01	0	.09	415	.09	23		.02
9	14	.03	154	.22	.01	0	.07	367	.06	8.3		0
10	7.3	.03	463	.24	.01	0	.06	169	.04	4.1		0
11	4.3	.03	676	.21	.01	0	.04	33	.03	2.3		0
12	3.0	.02	548	.20	.01	0	.03	917	.02	8.2		0
13	2.4	.02	186	.20	.01	0	.03	15,300	.01	5.6		0
14	1.5	.02	76	.15	.01	0	.18	12,300	.02	19		0
15	1.0	.01	69	.13	0	0	.13	4,240	.02	6.7		0
16	.72	.01	74	.09	0	0	.06	2,020	.01	2.0		0
17	.56	.01	133	.08	0	0	.03	1,160	.01	.89		0
18	1.1	.01	72	.08	0	0	.03	238	37	.25		0
19	19	0	39	.08	0	0	.02	64	23	.10		0
20	236	0	23	.07	0	0	.03	52	9.2	.05		0
21	74	0	13	.07	0	0	.04	46	4.5	.03		0
22	20	.02	8.0	.06	0	0	.32	40	5.0	.02		0
23	7.4	.13	5.5	.05	0	0	1.6	37	5.5	0		0
24	3.8	.09	4.1	.04	0	10	1.4	25	8.1	0		0
25	2.5	.06	3.0	.03	0	13	.71	13	9.0	0		0
26	1.8	.04	2.4	.03	0	2.2	.28	8.0	7.0	0		0
27	1.7	.03	2.1	.03	0	1.3	20	4.6	2.2	0		0
28	2.1	.03	1.5	.03	0	.80	36	3.0	.84	0		0
29	3.1	.02	1.2	.03	0	.47	10	2.1	.73	0		0
30	2.3	.02	1.0	.02	------	.24	61	1.5	.36	0		0
31	1.7	------	.80	.02	------	.17	------	1.2	------	0		------
TOTAL	2,731.82	2.58	3,097.42	5.40	.21	28.18	136.01	37,715.0	115.54	268.59	0	2.46
MEAN	88.1	.086	99.9	.17	.007	.91	4.53	1,217	3.85	8.66	0	.082
MAX	891	.92	676	.67	.03	13	61	15,300	37	99	0	.81
MIN	.50	0	.02	.02	0	0	.02	1.2	.01	0	0	0
AC-FT	5,420	5.1	6,140	11	.4	56	270	74,810	229	533	0	4.9

CAL YR 1971 TOTAL 13,560.88 MEAN 37.2 MAX 891 MIN 0 AC-FT 26,900
WTR YR 1972 TOTAL 44,103.21 MEAN 121 MAX 15,300 MIN 0 AC-FT 87,480

PEAK DISCHARGE (BASE, 1,200 CFS).--May 13 (2100) 17,900 cfs (27.26 ft).

08043000 Bridgeport Reservoir above Bridgeport, Tex.

LOCATION.--Lat 33°13'22", long 97°49'54", Wise County, at left end of Bridgeport Dam on West Fork Trinity River, 4.6 miles west of Bridgeport, and 13 miles upstream from Big Sandy Creek.

DRAINAGE AREA.--1,111 sq mi.

PERIOD OF RECORD.--April 1932 to current year (prior to October 1950, monthend figures only).

GAGE.--Nonrecording gage read once daily. Datum of gage is 0.06 ft above mean sea level. Prior to Jan. 26, 1944, nonrecording gages at various sites in vicinity of present gage at present datum.

EXTREMES (at 0730).--Current year: Maximum contents observed, 237,400 acre-ft May 19-22 (gage height, 822.7 ft); minimum observed, 143,700 acre-ft Sept. 30 (gage height, 811.5 ft).
Period of record: Maximum contents observed, 407,600 acre-ft Apr. 29, 30, 1942 (gage height, 836.2 ft); minimum since first appreciable storage in 1935, 7,170 acre-ft Oct. 12-16, 1956.

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 1,900 ft long including a concrete spillway with three 20-foot bays, two of which are equipped with vertical lift gates and the other left open. There are two emergency spillways of natural ground. Outlet works consist of two concrete conduits through the dam with flow through one controlled by two 48-inch-diameter valves and through the other by one 48-inch- and one 30-inch-diameter valve. Dam completed Dec. 15, 1931; storage began Apr. 1, 1932. Reservoir used for flood control and municipal supply for city of Fort Worth. Water is released to flow downstream to Eagle Mountain Reservoir (station 08045000). During year, several small diversions, totaling about 3,250 acre-ft, were made from lake for municipal and industrial use. Figures given herein represent total contents. Capacities based on surveys made in 1956 and 1968. At end of year, flow from 76.2 sq mi above this station was partly controlled by 24 floodwater-retarding structures with a total combined capacity of 24,160 acre-ft below the flood-spillway crests, of which 20,880 acre-ft is floodwater-retarding capacity and 3,280 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 3,480 acre-ft, of which 339 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Data regarding dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of service spillway (top of conservation storage).....	826.1	271,400
Invert of three 48-inch valves.....	751.4	0

COOPERATION.--Gage-height record furnished by Tarrant County Water Control and Improvement District No. 1.

REVISIONS.--WSP 1922: Drainage area.

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

811.0	140,200	819.0	203,500
813.0	154,800	821.0	221,500
815.0	170,200	823.0	240,300
817.0	186,400		

CONTENTS, IN ACRE-FEET, AT 0730, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146,600	154,000	153,200	168,600	167,800	167,000	165,500	167,800	230,800	202,600	185,600	154,800
2	145,900	154,000	153,200	168,600	167,800	167,000	165,500	167,800	229,900	201,800	184,800	153,200
3	146,600	154,000	153,200	168,600	167,800	167,000	165,500	167,800	228,900	200,900	183,900	153,200
4	147,400	154,000	154,000	168,600	167,000	167,000	164,700	167,000	228,900	200,000	183,100	152,500
5	149,500	154,000	154,000	169,400	167,000	167,000	164,700	167,000	228,000	199,200	181,500	152,500
6	151,800	154,000	154,800	168,600	167,000	167,000	164,700	167,000	227,000	198,300	181,500	151,800
7	152,500	154,000	155,500	168,600	167,000	167,000	164,700	167,000	225,200	197,400	179,800	151,800
8	153,200	154,000	155,500	168,600	167,000	166,200	164,700	167,000	224,300	196,600	179,000	151,000
9	153,200	154,000	156,200	168,600	167,000	166,200	164,700	167,800	222,400	194,900	178,200	150,300
10	153,200	154,000	160,800	168,600	167,000	166,200	163,900	168,600	221,500	194,000	176,600	149,500
11	152,500	154,000	163,100	168,600	167,000	166,200	163,900	169,400	221,500	193,200	175,800	148,800
12	152,500	154,000	164,700	168,600	167,000	166,200	163,900	170,200	220,600	192,300	175,000	148,100
13	152,500	154,000	166,200	168,600	167,000	166,200	163,900	173,400	218,700	191,500	173,400	148,100
14	152,500	154,000	167,000	168,600	167,000	166,200	165,500	180,600	218,700	190,600	172,600	147,400
15	152,500	153,200	168,600	168,600	167,000	166,200	165,500	200,900	217,800	191,500	171,800	147,400
16	152,500	153,200	167,800	168,600	167,000	166,200	165,500	226,100	216,900	191,500	171,000	147,400
17	152,500	153,200	167,800	168,600	167,000	166,200	164,700	233,600	216,000	191,500	169,400	146,600
18	152,500	153,200	167,800	168,600	167,000	165,500	164,700	236,500	215,100	190,600	167,800	145,900
19	152,500	153,200	168,600	168,600	167,000	165,500	164,700	237,400	214,200	190,600	167,000	145,900
20	153,200	153,200	168,600	168,600	167,000	165,500	164,700	237,400	213,300	189,800	166,200	145,900
21	153,200	153,200	168,600	168,600	167,000	165,500	165,500	237,400	212,400	189,800	165,500	145,200
22	153,200	153,200	168,600	167,800	167,000	165,500	165,500	237,400	211,500	189,800	164,700	145,200
23	154,000	153,200	168,600	167,800	167,000	165,500	164,700	236,500	210,600	188,900	163,100	145,200
24	154,000	154,000	168,600	167,800	167,000	166,200	164,700	236,500	209,700	188,900	162,400	145,200
25	154,000	153,200	168,600	167,800	167,000	166,200	164,700	236,500	208,800	188,900	161,600	144,400
26	154,000	153,200	168,600	167,800	167,000	166,200	163,900	235,500	207,900	188,100	160,800	144,400
27	154,000	153,200	168,600	167,800	167,000	166,200	165,500	235,500	207,000	188,100	159,300	144,400
28	154,000	153,200	168,600	167,800	167,000	166,200	168,600	235,500	206,200	188,100	157,800	144,400
29	154,000	153,200	168,600	167,800	167,000	166,200	167,800	234,600	204,400	187,300	157,000	144,400
30	154,000	153,200	168,600	167,800	------	165,500	167,800	232,700	203,500	186,400	156,200	143,700
31	154,000	------	168,600	167,800	------	165,500	------	231,700	------	186,400	155,500	------
(†)	812.9	812.8	814.8	814.7	814.6	814.4	814.7	822.1	819.0	817.0	813.1	811.5
(*)	+6,600	-800	+15,400	-800	-800	-1,500	+2,300	+63,900	-28,200	-17,100	-30,900	-11,800
MAX	154,000	154,000	168,600	169,400	167,800	167,000	168,600	237,400	230,800	202,600	185,600	154,800
MIN	145,900	153,200	153,200	167,800	167,000	165,500	163,900	167,000	203,500	186,400	155,500	143,700

CAL YR 1971..... * -67,900 MAX 236,500 MIN 143,000
WTR YR 1972..... * -3,700 MAX 237,400 MIN 143,700

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

08044000 Big Sandy Creek near Bridgeport, Tex.

LOCATION.--Lat 33°13'54", long 97°41'40", Wise County, on downstream side of bridge on U.S. Highway 380, 1.9 miles upstream from Greathouse Branch, 4.0 miles east of Bridgeport, and 4.4 miles upstream from mouth.

DRAINAGE AREA.--333 sq mi.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 727.44 ft above mean sea level.

AVERAGE DISCHARGE.--36 years, 74.4 cfs (53,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,840 cfs May 13 (gage height, 9.02 ft); no flow for many days.
Period of record: Maximum discharge, 53,000 cfs June 10, 1941 (gage height, 15.69 ft, from floodmark), from rating curve extended above 22,000 cfs; no flow at times.
Maximum stage since at least 1887 occurred in 1908 and 1915 and reached about same stage as that of June 10, 1941.

REMARKS.--Records good. Since May 1, 1956, runoff from 103 sq mi above station partly controlled by Amon Carter Reservoir 30 miles upstream, capacity 15,240 acre-ft at elevation 920.0 ft (service spillway). Records furnished by city of Bowie show that during the year 605 acre-ft of water was diverted from Amon Carter Reservoir for municipal use and 295 acre-ft of sewage effluent was discharged into a tributary above station. At end of year, flow from 37.5 sq mi above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 10,840 acre-ft below the flood-spillway crests, of which 9,440 acre-ft is floodwater-retarding capacity and 1,400 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1148: Drainage area. WRD Texas 1969: 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	11	11	18	12	15	8.2	49	7.4	17		
2	1.8	11	75	17	13	15	8.4	19	7.2	5.1		
3	174	9.4	365	17	12	14	8.7	11	6.7	2.9		
4	642	8.7	200	16	10	15	8.2	8.2	5.7	3.8		
5	754	9.0	165	13	10	14	7.7	7.0	5.1	4.6		
6	243	9.0	319	14	12	14	8.2	6.4	4.4	3.6		
7	118	8.2	187	16	12	15	8.2	32	4.0	2.2		
8	51	7.7	154	16	11	15	7.2	130	3.1	1.4		
9	33	8.2	278	17	10	14	6.2	34	2.6	1.0		
10	20	8.2	942	14	11	13	6.0	15	2.2	.76		
11	15	8.2	1,300	14	12	15	6.4	11	1.9	.37		
12	12	8.2	471	13	20	15	6.2	198	1.8	.12		
13	11	8.2	165	13	20	15	5.7	1,720	2.1	.02		
14	9.7	8.2	111	12	21	14	9.4	1,550	2.2	0		
15	9.0	8.0	169	10	18	13	17	418	3.3	0		
16	8.0	9.7	166	9.7	16	12	15	146	2.8	0		
17	7.4	26	89	12	16	11	6.4	110	2.1	0		
18	8.2	81	52	14	13	11	4.9	78	1.6	0		
19	28	14	44	14	12	10	4.4	54	1.5	0		
20	1,570	10	40	13	11	9.7	4.6	38	1.4	0		
21	530	9.0	34	13	12	11	59	29	1.1	0		
22	136	11	29	13	13	10	40	25	26	0		
23	57	97	27	24	13	9.4	13	21	27	0		
24	33	34	27	14	15	22	8.2	19	11	0		
25	22	17	25	12	15	17	6.4	16	4.0	0		
26	17	14	25	10	15	12	5.5	14	1.9	0		
27	28	12	25	11	13	10	158	12	.76	0		
28	29	11	22	12	15	9.4	106	10	.20	0		
29	20	10	21	12	14	8.4	26	9.4	38	0		
30	15	10	21	12	------	8.0	29	9.0	89	0		
31	13	------	19	11	------	8.2	------	8.2	------	0		------
TOTAL	4,617.0	496.9	5,578	426.7	397	395.1	608.1	4,807.2	268.06	42.87	0	0
MEAN	149	16.6	180	13.8	13.7	12.7	20.3	155	8.94	1.38	0	0
MAX	1,570	97	1,300	24	21	22	158	1,720	89	17	0	0
MIN	1.8	7.7	11	9.7	10	8.0	4.4	6.4	.20	0	0	0
AC-FT	9,160	986	11,060	846	787	784	1,210	9,540	532	85	0	0

CAL YR 1971 TOTAL 12,987.65 MEAN 35.6 MAX 1,570 MIN 0 AC-FT 25,760
WTR YR 1972 TOTAL 17,636.93 MEAN 48.2 MAX 1,720 MIN 0 AC-FT 34,980

08044500 West Fork Trinity River near Boyd, Tex.

LOCATION.--Lat 33°05'08", long 97°33'30", Wise County, on right bank at downstream side of bridge on Farm Road 730, 0.6 mile northeast of Boyd, 3.5 miles downstream from Boggy Creek, and at mile 602.

DRAINAGE AREA.--1,725 sq mi.

PERIOD OF RECORD.--January 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 660.57 ft above mean sea level. Prior to Dec. 14, 1954, water-stage recorder at site 2.2 miles downstream at datum 5.48 ft lower.

AVERAGE DISCHARGE.--25 years, 223 cfs (161,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,260 cfs Dec. 11 (gage height, 16.60 ft); minimum, 7.8 cfs Mar. 17.
Period of record: Maximum discharge, 27,300 cfs Oct. 5, 1959 (gage height, 22.17 ft); no flow at times.
Maximum stage since at least 1880, 25 ft (present site and datum) in May 1908, from information by local residents, who also report a flood of about the same height in the period 1870-80. Flood in April 1942 reached a stage of 20.6 ft (present site and datum), from information by State Highway Department.

REMARKS.--Records good. Flow largely regulated by Bridgeport Reservoir (station 08043000) since 1932 and Amon Carter Reservoir near Bowie since May 1956; combined capacity, 286,100 acre-ft. Sustained flow during several periods was released water from Bridgeport Reservoir 21 miles upstream. At end of year, flow from 73.5 sq mi above this station was partly controlled by 28 floodwater-retarding structures with a total combined capacity of 22,430 acre-ft below the flood-spillway crests, of which 19,860 acre-ft is floodwater-retarding capacity and 2,570 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 526 acre-ft, of which 205 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Some diversions above station.

REVISIONS (WATER YEARS).--WSP 1392: 1947(M), 1948, 1949(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	24	20	43	21	12	10	277	319	430	311	308
2	294	21	186	41	23	11	10	179	320	407	377	307
3	526	18	715	41	23	11	10	142	320	402	379	305
4	760	16	360	40	21	11	9.5	133	319	406	381	321
5	647	14	236	38	20	10	9.2	130	318	407	380	347
6	428	13	372	34	21	10	9.0	131	318	402	381	306
7	188	11	300	31	21	9.8	8.6	142	388	400	381	303
8	110	9.9	196	32	20	9.7	41	216	405	397	403	302
9	73	9.3	1,010	33	19	9.3	19	127	406	395	450	301
10	58	9.0	1,800	33	18	8.6	12	49	407	393	474	301
11	46	9.1	2,090	32	19	8.4	10	36	407	392	479	301
12	37	9.3	1,470	30	23	9.0	10	160	408	392	485	262
13	31	9.4	460	28	29	9.4	9.8	449	407	408	483	232
14	26	9.4	205	27	29	9.3	13	988	411	393	483	207
15	21	9.2	217	23	27	8.9	32	987	412	213	479	180
16	18	9.0	241	21	26	8.5	31	350	411	80	478	176
17	17	11	173	21	24	8.2	25	148	408	78	481	175
18	16	49	128	23	21	13	15	103	407	75	482	175
19	26	85	100	27	17	15	12	77	406	75	479	174
20	909	52	89	28	15	14	12	60	407	74	477	94
21	1,030	34	83	25	14	11	163	51	408	75	476	67
22	378	27	76	24	14	10	110	46	416	75	474	66
23	159	129	66	22	15	9.7	45	42	429	74	452	67
24	94	117	62	32	15	36	25	40	378	73	483	66
25	66	48	61	23	15	53	16	62	409	72	589	65
26	52	31	60	21	14	30	115	141	403	71	480	64
27	41	22	59	21	14	20	654	142	401	71	460	64
28	39	21	56	21	12	15	772	141	399	71	438	64
29	39	19	52	22	13	13	331	142	425	78	344	63
30	35	18	49	21	------	11	268	282	466	82	306	63
31	28	------	46	20	------	11	------	319	------	82	304	------
TOTAL	6,486	863.6	11,038	878	563	425.8	2,807.1	6,292	11,738	7,043	13,529	5,726
MEAN	209	28.8	356	28.3	19.4	13.7	93.6	203	391	227	436	191
MAX	1,030	129	2,090	43	29	53	772	988	466	430	589	347
MIN	16	9.0	20	20	12	8.2	8.6	36	318	71	304	63
AC-FT	12,860	1,710	21,890	1,740	1,120	845	5,570	12,480	23,280	13,970	26,830	11,360

CAL YR 1971 TOTAL 71,944.5 MEAN 197 MAX 2,090 MIN 3.7 AC-FT 142,700
WTR YR 1972 TOTAL 67,389.5 MEAN 184 MAX 2,090 MIN 8.2 AC-FT 133,700

08045000 Eagle Mountain Reservoir above Fort Worth, Tex.

LOCATION.--Lat 32°52'39", long 97°28'29", Tarrant County, at right end of main section (left) of Eagle Mountain Dam on West Fork Trinity River and 11.8 miles northwest of Fort Worth.

DRAINAGE AREA.--1,970 sq mi.

PERIOD OF RECORD.--February 1934 to current year (prior to October 1950, monthend figures only).

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level. Prior to Feb. 24, 1943, nonrecording gages at several sites within 1.0 mile of present site at present datum.

EXTREMES (at 0800).--Current year: Maximum contents observed, 192,300 acre-ft Dec. 12, 13 (elevation, 649.3 ft); minimum observed, 167,500 acre-ft Aug. 25-27 (elevation, 646.5 ft).
Period of record: Maximum contents, 333,500 acre-ft Apr. 26, 1942 (elevation, 659.9 ft); minimum since first appreciable storage in 1935, 57,690 acre-ft Nov. 19, 20, 1956.

REMARKS.--Reservoir is formed by a composite rolled-fill and hydraulic-fill earthen dam in two sections. The main section at the river channel contains the outlet works which consist of two concrete conduits with two 48-inch-diameter valves in each conduit. The section to right of main dam is across a saddle and contains a concrete service spillway with four 25-foot bays, three of which are equipped with vertical lift gates and the fourth left open. In 1971, a side-channel spillway located 300 ft to left of service spillway and containing six 11.25-foot wide vertical lift gates with crest at elevation 637.0 ft was constructed. There is an emergency spillway of natural ground. Dam completed Oct. 24, 1932, and storage began Feb. 28, 1934. Reservoir is used for flood control and to maintain level of Lake Worth from which the city of Fort Worth derives its municipal water supply. Information furnished by Tarrant County Water Control and Improvement District No. 1 shows that 2,280 acre-ft of water was diverted to a generating plant of the Texas Electric Service Company and that 2,130 acre-ft was diverted by five other users for municipal and industrial use. Capacities based on survey made in 1968. For storage above reservoir, see REMARKS for West Fork Trinity River near Boyd (station 08044500). Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Crest of Burgess Gap emergency spillway	676.0	558,000
Crest of service Spillway	649.1	190,400
Invert of four 48-inch-diameter valves	599.9	94

COOPERATION.--Capacity table and records of daily elevations furnished by Tarrant County Water Control and Improvement District No. 1.

REVISIONS.--WSP 1922: Drainage area.

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

646.0	163,300	649.0	189,500
647.0	171,700	650.0	198,800
648.0	180,400		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174,300	181,300	172,600	186,800	184,000	181,300	176,900	170,900	171,700	175,200	170,000	174,300
2	174,300	181,300	172,600	186,800	184,000	181,300	176,900	170,900	170,900	175,200	169,200	175,200
3	175,200	181,300	174,300	186,800	184,000	181,300	176,000	171,700	170,900	175,200	169,200	175,200
4	177,800	180,400	176,000	187,700	184,000	181,300	176,000	171,700	171,700	175,200	169,200	174,300
5	178,700	179,600	176,900	187,700	183,100	181,300	175,200	171,700	171,700	176,000	169,200	175,200
6	179,600	178,700	177,800	186,800	184,000	180,400	175,200	171,700	171,700	176,000	169,200	175,200
7	180,400	178,700	178,700	185,800	184,000	179,600	174,300	171,700	171,700	176,000	169,200	175,200
8	180,400	178,700	179,600	185,800	183,100	179,600	174,300	172,600	171,700	176,000	169,200	174,300
9	181,300	177,800	183,100	186,800	183,100	179,600	174,300	172,600	171,700	176,000	169,200	174,300
10	181,300	176,900	191,300	186,800	183,100	179,600	173,400	172,600	171,700	176,000	169,200	174,300
11	181,300	176,900	191,300	186,800	183,100	179,600	172,600	172,600	171,700	176,000	169,200	174,300
12	180,400	176,000	192,300	185,800	183,100	179,600	172,600	172,600	171,700	176,000	170,000	174,300
13	180,400	176,000	192,300	185,800	183,100	179,600	171,700	172,600	172,600	176,900	170,000	174,300
14	180,400	176,000	191,300	185,800	183,100	179,600	171,700	172,600	172,600	176,900	170,000	174,300
15	179,600	175,200	190,400	185,800	183,100	179,600	171,700	173,400	172,600	176,900	170,900	174,300
16	178,700	175,200	188,600	185,800	183,100	179,600	171,700	176,900	173,400	176,000	170,900	174,300
17	178,700	175,200	187,700	184,900	182,200	179,600	171,700	176,900	173,400	176,000	170,900	173,400
18	178,700	175,200	186,800	184,900	182,200	179,600	171,700	176,900	173,400	175,200	170,900	173,400
19	179,600	174,300	186,800	184,900	182,200	179,600	170,900	176,900	173,400	174,300	170,900	172,600
20	181,300	174,300	185,800	184,900	182,200	178,700	170,000	176,900	173,400	174,300	171,700	172,600
21	182,200	174,300	186,800	184,900	182,200	179,600	169,200	176,900	173,400	174,300	171,700	171,700
22	183,100	173,400	186,800	184,900	182,200	179,600	169,200	176,000	173,400	173,400	171,700	171,700
23	184,000	174,300	186,800	184,900	182,200	179,600	169,200	175,200	174,300	173,400	171,700	171,700
24	184,000	174,300	186,800	184,900	182,200	178,700	168,300	174,300	174,300	173,400	172,600	171,700
25	183,100	173,400	186,800	184,900	182,200	179,600	167,500	174,300	174,300	173,400	172,600	171,700
26	183,100	173,400	186,800	184,900	182,200	178,700	167,500	173,400	174,300	172,600	174,300	171,700
27	183,100	173,400	186,800	184,900	182,200	178,700	167,500	172,600	174,300	172,600	174,300	171,700
28	183,100	173,400	186,800	184,900	182,200	178,700	169,200	172,600	174,300	172,600	174,300	171,700
29	182,200	173,400	186,800	184,900	181,300	178,700	170,900	172,600	175,200	171,700	175,200	171,700
30	182,200	172,600	186,800	184,900	------	177,800	170,900	172,600	175,200	170,900	175,200	171,700
31	181,300	------	186,800	184,000	------	176,900	------	171,700	------	170,900	175,200	------
(†)	648.1	647.1	648.7	648.4	648.1	647.6	646.9	647.0	647.4	646.9	647.4	647.0
(*)	+7,000	-8,700	+14,200	-2,800	-2,700	-4,400	-6,000	+800	+3,500	-4,300	+4,300	-3,500
MAX	184,000	181,300	192,300	187,700	184,000	181,300	176,900	176,900	175,200	176,900	175,200	175,200
MIN	174,300	172,600	172,600	184,000	181,300	176,900	167,500	170,900	170,900	170,900	169,200	171,700

CAL YR 1971..... * +15,900 MAX 192,300 MIN 166,600
WTR YR 1972..... * -2,600 MAX 192,300 MIN 167,500

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

08046000 Clear Fork Trinity River near Aledo, Tex.

LOCATION.--Lat 32°38'25", long 97°33'50", Parker County, on left bank 3 miles downstream from Turkey Creek, 3.5 miles upstream from bridge on U.S. Highway 377, 4 miles southeast of Aledo, and 11.8 miles upstream from Benbrook Dam.

DRAINAGE AREA.--251 sq mi.

PERIOD OF RECORD.--August 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 723.33 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--9 years (1947-56) prior to regulation by Lake Weatherford, 32.6 cfs (23,620 acre-ft per year); 16 years (1956-72) after regulation by Lake Weatherford, unadjusted, 39.1 cfs (28,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,590 cfs Dec. 9 (gage height, 12.18 ft); no flow June 25 to Sept. 20.
Period of record: Maximum discharge, 34,000 cfs May 25, 1957 (gage height, 29.00 ft); no flow at times most years.
Maximum stage since at least 1858, 34 ft in April 1922, from information by local resident.

REMARKS.--Records good. Since Dec. 15, 1956, Lake Weatherford, located about 15 miles upstream, has partly controlled runoff from 105 sq mi above station. Lake Weatherford has a capacity of 19,600 acre-ft at elevation 896.0 ft (fixed glory hole outlet) and 35,180 acre-ft at elevation 906.0 ft (emergency flood spillway). At end of year, flow from 37.6 sq mi above this station was partly controlled by 12 floodwater-retarding structures with a total combined capacity of 12,820 acre-ft below flood-spillway crests, of which 11,160 acre-ft is floodwater-retarding capacity and 1,660 acre-ft is sediment-storage capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. During the year, the city of Weatherford diverted 1,840 acre-ft from Lake Weatherford for municipal use and returned 1,170 acre-ft of sewage effluent into a tributary above station.

REVISIONS (WATER YEARS).--WSP 1312: 1949(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	6.9	7.3	34	13	16	6.0	20	2.1			0
2	.52	6.5	43	32	14	15	14	11	3.1			0
3	13	6.5	122	29	13	17	12	10	3.7			0
4	77	6.2	13	30	13	18	11	9.7	3.8			0
5	8.1	6.2	85	26	12	16	11	9.5	4.5			0
6	4.5	6.2	65	26	12	16	11	9.2	4.2			0
7	3.3	5.8	23	25	11	16	11	8.8	3.9			0
8	4.3	5.1	202	25	11	17	11	8.6	4.0			0
9	6.5	5.4	1,000	25	11	16	10	8.4	4.3			0
10	2.9	5.8	1,040	23	11	16	11	8.1	4.6			0
11	2.2	5.4	198	22	11	16	11	7.8	6.3			0
12	1.8	5.4	85	20	18	17	10	84	5.8			0
13	1.6	5.4	52	19	16	18	9.7	64	3.6			0
14	2.0	5.1	55	17	14	17	8.3	32	3.2			0
15	1.4	4.8	92	15	13	17	18	24	13			0
16	1.6	4.3	55	14	13	17	58	11	9.9			0
17	1.9	7.9	45	15	13	17	16	7.7	7.3			0
18	3.2	34	39	17	12	18	8.5	6.0	4.6			0
19	60	20	39	17	11	18	7.1	4.8	2.5			0
20	363	7.3	37	17	12	17	7.2	4.2	1.1			0
21	18	5.8	33	17	12	49	24	3.8	.61			187
22	9.7	11	31	15	11	26	21	3.0	.50			41
23	7.3	62	39	15	12	15	8.0	3.0	.13			20
24	6.5	14	36	14	13	14	5.3	3.0	.01			8.6
25	6.2	7.3	33	12	13	22	3.7	2.7	0			7.0
26	5.8	5.8	31	12	13	14	3.6	2.3	0			5.5
27	8.8	4.5	31	12	12	11	223	2.1	0			20
28	10	4.8	29	12	13	10	79	1.9	0			8.6
29	8.4	4.5	29	12	14	9.2	249	2.1	0			7.5
30	7.7	5.4	27	12	------	8.8	44	2.7	0			6.0
31	7.3	------	25	12	------	7.2	------	2.9	------			------
TOTAL	655.27	285.3	3,641.3	593	367	521.2	922.4	378.3	96.75	0	0	311.2
MEAN	21.1	9.51	117	19.1	12.7	16.8	30.7	12.2	3.23	0	0	10.4
MAX	363	62	1,040	34	18	49	249	84	13	0	0	187
MIN	.52	4.3	7.3	12	11	7.2	3.6	1.9	0	0	0	0
AC-FT	1,300	566	7,220	1,180	728	1,030	1,830	750	192	0	0	617

CAL YR 1971 TOTAL 6,413.22 MEAN 17.6 MAX 1,040 MIN 0 AC-FT 12,720
WTR YR 1972 TOTAL 7,771.72 MEAN 21.2 MAX 1,040 MIN 0 AC-FT 15,420

08046500 Benbrook Lake near Benbrook, Tex.

LOCATION.--Lat 32°39'02", long 97°26'54", Tarrant County, in intake structure of Benbrook Dam on Clear Fork Trinity River, 2.5 miles south of Benbrook, 3.5 miles upstream from Marys Creek, and 14.6 miles upstream from mouth.

DRAINAGE AREA.--429 sq mi.

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1970, published as Benbrook Reservoir.

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

EXTREMES.--Current year: Maximum contents, 114,000 acre-ft Dec. 15 (elevation, 700.20 ft); minimum, 69,900 acre-ft Oct. 3 (elevation, 688.82 ft).
Period of record: Maximum contents, 185,000 acre-ft June 6, 1957 (elevation, 713.35 ft); minimum since lake first filled in 1957, 64,630 acre-ft Sept. 15, 1964 (elevation, 687.18 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 9,130 ft long including a 500-foot uncontrolled off-channel concrete gravity spillway with ogee weir section with a 100-foot notch in center. Outlet works consist of a 13-foot-diameter concrete conduit controlled by two 6.5- by 13-foot broome-type gates and two 30-inch steel pipes controlled by slide gates. Deliberate impoundment of water began Sept. 29, 1952. From August 1950 to Sept. 28, 1952, lake operated as detention basin only. Figures given herein represent total contents. Capacities are from survey made in 1945. Lake built for flood control, navigation, and low-flow regulation. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08046000. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Crest of spillway	724.0	258,600
Crest of notch in spillway	710.0	164,800
Top of conservation storage	694.0	88,250
Inverts at intake to wet wells	656.0	6,550
Invert of two 6.5- by 13-foot broome-type gates	622.0	12

COOPERATION.--Records of elevation and contents furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

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

688.0	67,250	696.0	95,990
690.0	73,900	698.0	104,200
692.0	80,890	701.0	117,600
694.0	88,250		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70,010	79,930	81,650	93,120	87,690	89,930	90,650	88,400	87,430	85,230	83,140	80,710
2	69,970	79,900	82,820	91,950	87,800	89,970	90,650	88,210	87,320	85,080	83,000	80,710
3	70,630	79,860	83,400	90,420	87,840	90,040	90,580	88,250	87,240	85,010	82,850	80,470
4	70,730	79,830	83,690	89,160	87,880	89,970	90,500	88,180	87,210	84,970	82,740	80,470
5	70,730	79,790	85,490	88,290	88,060	90,000	90,500	88,100	87,130	84,900	82,640	80,430
6	70,700	79,690	86,540	88,060	88,100	90,000	90,500	88,480	87,060	84,820	82,530	80,400
7	70,670	79,690	87,240	88,100	88,140	90,000	90,500	88,630	87,060	84,710	82,450	80,290
8	70,730	79,620	90,080	88,250	88,250	90,040	90,500	88,710	86,950	84,640	82,310	80,220
9	70,700	79,650	103,600	88,360	88,330	90,160	90,500	88,750	86,910	84,530	82,240	80,180
10	70,630	79,650	110,200	88,480	88,440	90,190	90,540	88,750	86,800	84,420	82,160	80,150
11	70,600	79,650	111,400	88,590	88,590	90,270	90,540	88,750	86,760	84,340	82,160	80,080
12	70,560	79,650	112,200	88,630	88,710	90,310	90,540	89,130	86,690	84,340	81,870	80,010
13	70,530	79,650	113,100	88,670	88,860	90,350	90,540	89,160	86,690	84,420	81,910	79,930
14	70,500	79,650	113,800	88,590	88,900	90,390	90,540	89,200	86,650	84,340	81,800	79,830
15	70,460	79,650	113,900	88,630	88,970	90,420	90,230	88,940	86,650	84,230	81,760	79,790
16	70,430	79,650	113,600	88,670	89,090	90,420	89,890	88,400	86,570	84,160	81,730	79,830
17	70,600	80,320	113,100	88,710	89,130	90,420	89,360	88,180	86,540	84,050	81,690	79,760
18	70,930	80,540	112,600	88,750	89,160	90,420	88,780	88,180	86,460	83,940	81,620	79,650
19	77,000	80,610	112,100	88,820	89,240	90,390	88,400	88,180	86,390	83,910	81,550	79,580
20	79,160	80,610	111,600	88,860	89,360	90,540	88,630	88,140	86,310	83,800	81,470	79,510
21	79,400	80,610	110,500	88,780	89,390	90,580	88,520	88,060	86,240	83,730	81,400	80,080
22	79,470	80,860	109,100	88,360	89,430	90,610	88,140	87,990	86,160	84,160	81,330	80,150
23	79,580	81,150	107,800	87,950	89,510	90,650	87,840	87,990	86,090	84,090	81,250	80,150
24	79,620	81,250	106,500	87,500	89,580	90,690	87,800	87,910	86,020	83,980	81,180	80,110
25	79,650	81,360	105,100	87,060	89,700	90,690	87,730	87,840	85,900	83,910	81,180	80,040
26	79,790	81,400	103,800	86,980	89,740	90,770	87,690	87,800	85,750	83,800	81,110	79,970
27	79,830	81,470	102,400	87,130	89,810	90,800	88,900	87,730	85,640	83,690	81,070	79,970
28	79,860	81,470	99,760	87,240	89,850	90,690	88,900	87,690	85,530	83,540	81,000	79,930
29	79,900	81,440	97,610	87,320	89,890	90,650	89,320	87,620	85,420	83,470	80,930	79,830
30	79,900	81,550	95,680	87,430	------	90,650	88,900	87,540	85,420	83,360	80,860	79,690
31	79,930	------	94,220	87,540	------	90,610	------	87,470	------	83,250	80,710	------
(†)	691.73	692.18	695.55	693.81	694.43	694.62	694.17	693.79	693.24	692.65	691.95	691.66
(*)	+9,890	+1,620	+12,670	-6,680	+2,350	+720	-1,710	-1,430	-2,050	-2,170	-2,540	-1,020
MAX	79,930	81,550	113,900	93,120	89,890	90,800	90,650	89,200	87,430	85,230	83,140	80,710
MIN	69,970	79,620	81,650	86,980	87,690	89,930	87,690	87,470	85,420	83,250	80,710	79,510

CAL YR 1971..... * +13,790 MAX 113,900 MIN 69,550
WTR YR 1972..... * +9,650 MAX 113,900 MIN 69,970

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

08047000 Clear Fork Trinity River near Benbrook, Tex.

LOCATION.--Lat 32°39'54", long 97°26'30", Tarrant County, on left bank 1.5 miles downstream from Benbrook Dam, 1.7 miles southeast of Benbrook, 2.9 miles upstream from Marys Creek, and at mile 13.1 upstream from West Fork Trinity River.

DRAINAGE AREA.--431 sq mi.

PERIOD OF RECORD.--July 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 604.22 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--5 years (1947-52) prior to regulation by Benbrook Lake, 105 cfs (76,070 acre-ft per year); 20 years (1952-72) after regulation by Benbrook Lake, unadjusted, 55.3 cfs (40,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,530 cfs Dec. 27 (gage height, 6.82 ft); no flow at times.
Period of record: Maximum discharge, 82,900 cfs May 17, 1949 (gage height, 28.72 ft), from rating curve extended above 11,000 cfs on basis of velocity-area studies and slope-area measurement of 82,900 cfs; no flow at times. Maximum discharge since construction of Benbrook Dam in 1952, 4,350 cfs June 26, 1957 (gage height, 11.28 ft).
Maximum stage known since at least 1922, that of May 17, 1949.

REMARKS.--Records good. Flow regulated by Benbrook Lake (station 08046500) since September 1952. Diversion 1.0 mile upstream for Pecan Valley Golf Course (revised).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.20	.2	1,080	.82	.15	.26	285	.63	.50	.20	.04
2	.01	.15	20	1,080	.82	.11	.26	92	.82	.40	22	.02
3	4.4	.11	2.0	1,080	.82	.08	.26	.32	.82	.40	32	28
4	.50	.11	.6	1,080	.82	.11	.08	.26	.82	.63	.20	.40
5	.08	.11	21	631	.82	.15	.08	.32	.63	.50	.04	.20
6	.06	.11	8.8	304	.63	.15	.11	1.3	.63	.40	14	.06
7	.04	.11	4.6	151	.63	.11	.08	2.4	.63	.40	19	.01
8	.08	.20	18	68	.50	.08	.08	.82	.63	.40	27	0
9	.11	.08	102	68	.50	.06	.11	.82	.63	.40	.11	0
10	.08	.08	40	66	.50	.06	.08	1.0	.63	.32	.02	0
11	.08	.08	6.3	66	.63	.08	.11	1.6	.63	.32	.01	0
12	.06	.11	4.6	66	.82	.08	.11	6.3	.63	.32	132	0
13	.06	.11	4.6	66	.82	.08	.11	1.0	.63	1.0	2.8	0
14	.04	.11	384	66	.82	.08	45	1.3	.82	.63	1.3	0
15	.04	.11	660	68	1.0	.08	195	128	.63	.40	1.3	0
16	.04	.15	660	68	.40	.08	195	326	.63	.32	1.6	0
17	.08	7.0	660	68	.32	.08	292	130	.50	.26	1.0	0
18	11	.32	660	70	.26	.08	369	1.3	.50	.20	.08	0
19	81	.08	660	70	.26	.08	272	1.3	.50	.15	.01	0
20	34	.08	660	70	.32	.11	2.4	2.0	.40	.15	0	0
21	.40	.11	969	142	.26	.15	82	2.0	.32	.08	0	9.4
22	.15	3.6	1,120	333	.26	.15	189	.82	.32	.11	0	.26
23	.06	.40	1,120	333	.26	.15	142	.63	.32	.32	0	.08
24	.06	.08	1,080	333	.20	.15	.20	.63	.32	.63	0	.15
25	.08	.06	1,080	333	.20	.15	.06	.63	.32	16	0	.15
26	.15	.06	1,080	138	.15	.15	.06	.63	.20	2.0	.04	.20
27	.26	.08	1,340	1.3	.20	.20	10	.63	.20	3.2	.04	.32
28	.06	.11	1,480	1.0	.20	.20	148	2.0	.15	16	.01	.11
29	.08	.08	1,480	1.0	.15	.20	351	1.0	30	8.0	0	.11
30	.11	.15	1,360	.82	------	1.4	333	1.3	.82	4.6	0	.11
31	.11	------	1,080	1.0	------	.26	------	.63	------	4.1	.38	------
TOTAL	133.29	14.14	17,765.7	7,903.12	14.39	5.05	2,627.45	993.94	45.71	63.14	255.14	39.62
MEAN	4.30	.47	573	255	.50	.16	87.6	32.1	1.52	2.04	8.23	1.32
MAX	81	7.0	1,480	1,080	1.0	1.4	369	326	30	16	132	28
MIN	.01	.06	.20	.82	.15	.06	.06	.26	.15	.08	0	0
AC-FT	264	28	35,240	15,680	29	10	5,210	1,970	91	125	506	79

CAL YR 1971 TOTAL 21,320.67 MEAN 58.4 MAX 1,480 MIN 0 AC-FT 42,290
WTR YR 1972 TOTAL 29,860.69 MEAN 81.6 MAX 1,480 MIN 0 AC-FT 59,230

08047500 Clear Fork Trinity River at Fort Worth, Tex.

LOCATION.--Lat 32°43'56", long 97°21'31", Tarrant County, at Fort Worth pumping station on left bank, 240 ft upstream from the Texas and Pacific Railway Co. bridge in Fort Worth, 830 ft upstream from East-West Expressway bridge, 2.5 miles upstream from mouth, 5 miles downstream from Marys Creek, and 10 miles downstream from Benbrook Dam.

DRAINAGE AREA.--518 sq mi.

PERIOD OF RECORD.--March 1924 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 532.91 ft above mean sea level. Prior to Apr. 3, 1970, various nonrecording and recording gages within 650 ft of present site at different datums.

AVERAGE DISCHARGE.--28 years (1924-52) prior to regulation by Benbrook Lake, 112 cfs (81,140 acre-ft per year); 20 years (1952-72) after regulation by Benbrook Lake, unadjusted, 83.9 cfs (60,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,810 cfs Dec. 9 (gage height, 13.57 ft); no flow June 29, July 17-21, July 27 to Aug. 3, Aug. 7, 8 (result of pumping from pool at gage on June 29, Aug. 3, 7, 8).
Period of record: Maximum discharge, 107,000 cfs May 17, 1949 (gage height, 28.20 ft, present datum), from rating curve extended above 16,000 cfs on basis of contracted-opening measurement of 107,000 cfs; no flow at times.
Maximum stage since at least 1900, 28.20 ft May 17, 1949, present datum. Flood of Apr. 25, 1922, reached a stage of 27.5 ft, present datum (discharge, 74,300 cfs, by slope-area measurement of peak flow, data furnished by city engineer of Fort Worth).

REMARKS.--Records good. Flow largely regulated by Benbrook Lake (station 08046500). The city of Fort Worth reported that during year 735 acre-ft was diverted above station for irrigation and 288 acre-ft was diverted from pool at gage for municipal and industrial use.

REVISIONS (WATER YEARS).--WSP 1392: 1924-25, 1927. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	6.8	25	980	29	13	8.1	254	.70	3.2	0	4.1
2	.06	6.3	329	928	29	12	8.1	122	1.2	1.6	0	2.4
3	85	5.4	85	928	25	12	6.8	21	.90	4.5	0	47
4	22	4.5	321	915	25	12	5.9	9.6	.70	4.1	.25	48
5	7.6	4.5	309	630	24	12	6.3	7.7	.50	2.4	2.4	15
6	3.6	5.4	150	260	25	12	7.7	44	.50	1.6	.87	6.3
7	2.0	5.4	110	187	25	12	6.8	61	.70	1.2	0	3.2
8	8.4	5.0	457	100	23	10	5.0	27	.70	.70	0	1.6
9	6.3	4.5	2,680	100	23	11	5.0	12	.70	.70	.10	.90
10	4.5	4.1	1,450	100	22	11	6.3	8.1	.50	.50	1.6	2.0
11	4.5	4.1	211	95	28	11	5.9	7.7	.90	.06	.90	.70
12	4.5	4.5	150	90	31	12	5.0	54	2.0	.70	92	.10
13	4.5	4.1	120	85	27	11	5.0	21	.70	1.6	42	.30
14	3.6	4.1	451	85	24	11	4.4	18	8.3	.50	15	.06
15	2.8	3.6	697	85	22	11	126	46	6.1	.06	5.9	.06
16	2.0	3.6	610	85	22	10	135	260	16	.03	3.6	4.5
17	6.3	192	577	85	20	9.6	175	165	10	0	1.2	4.5
18	96	105	566	85	19	10	253	15	5.9	0	.90	.90
19	1,170	20	566	85	17	10	234	11	2.4	0	1.6	.30
20	398	12	544	85	15	15	47	6.8	4.5	0	3.2	.10
21	48	10	725	107	16	28	67	5.4	12	0	.90	22
22	28	54	967	288	16	12	135	5.0	7.7	1.9	.50	37
23	20	87	967	288	17	11	130	4.5	2.8	2.0	1.2	18
24	15	25	967	281	18	9.6	23	3.6	2.4	.30	2.0	14
25	13	18	967	281	17	9.1	8.1	3.2	1.6	.06	27	9.1
26	16	15	967	181	14	11	5.4	2.8	.50	.03	26	27
27	31	13	1,140	39	12	11	266	2.4	.18	0	7.2	56
28	16	12	1,310	33	12	8.1	114	2.8	.10	0	2.4	13
29	10	11	1,310	30	13	7.2	556	2.4	0	0	.90	9.1
30	8.6	14	1,230	29	------	6.8	274	1.2	2.3	0	.70	5.9
31	7.2	------	915	28	------	7.7	------	.50	------	0	.30	------
TOTAL	2,044.52	663.9	21,873	7,578	610	349.1	2,634.8	1,204.70	93.48	27.74	240.62	353.12
MEAN	66.0	22.1	706	244	21.0	11.3	87.8	38.9	3.12	.89	7.76	11.8
MAX	1,170	192	2,680	980	31	28	556	260	16	4.5	92	56
MIN	.06	3.6	25	28	12	6.8	4.4	.50	0	0	0	.06
AC-FT	4,060	1,320	43,390	15,030	1,210	692	5,230	2,390	185	55	477	700

CAL YR 1971 TOTAL 30,887.29 MEAN 84.6 MAX 2,680 MIN 0 AC-FT 61,260
WTR YR 1972 TOTAL 37,672.98 MEAN 103 MAX 2,680 MIN 0 AC-FT 74,720

08048000 West Fork Trinity River at Fort Worth, Tex.

LOCATION.--Lat 32°45'39", long 97°19'56", Tarrant County, on left bank 125 ft upstream from Texas Electric Service Co.'s concrete dam, 980 ft downstream from centerline of Paddock Viaduct (North Main Street) at Fort Worth, 2,600 ft downstream from Clear Fork Trinity River, and at mile 556.8.

DRAINAGE AREA.--2,615 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Gage-height records collected in this vicinity since 1910 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder and concrete dam control with angle-iron-crested notch for flow below 50 cfs. Datum of gage is 519.24 ft above mean sea level (Texas Reclamation Department bench mark based on Coast and Geodetic Survey datum). Prior to Aug. 22, 1954, at site 1,200 ft upstream at same datum. Aug. 22, 1954, to Oct. 15, 1955, at site 2,000 ft upstream at same datum.

AVERAGE DISCHARGE.--52 years, 377 cfs (273,100 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 9,600 cfs Dec. 10 (gage height, 5.07 ft); minimum, 0.45 cfs Aug. 3, 4.
Period of record: Maximum discharge, 85,000 cfs Apr. 25, 1922 (gage height, 23.95 ft, site then in use), by slope-area measurement of peak flow by city engineer of Fort Worth; maximum gage height, 25.91 ft (site then in use) May 17, 1949 (discharge, 64,300 cfs); no flow at times.
Maximum stage since at least 1866, that of May 17, 1949. Maximum stages have been affected by levee construction, levee breaks, and channel rectification.

REMARKS.--Records good. Flow largely regulated by six major upstream reservoirs with a total combined capacity of 686,900 acre-ft, of which 76,550 acre-ft is for flood control. Records furnished by city of Fort Worth show that during year 89,020 acre-ft was diverted above station for municipal and industrial use, and 61,100 acre-ft of sewage effluent was returned to river below station. Many small diversions above station.

REVISIONS (WATER YEARS).--WSP 1392: 1925. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	18	42	1,140	35	25	21	301	5.3	2.2	1.9	18
2	10	18	716	1,040	37	23	21	147	4.9	3.2	.90	15
3	396	16	160	1,050	34	21	20	39	7.8	6.5	.75	31
4	133	15	61	1,070	33	23	17	31	12	10	.75	123
5	39	14	643	791	33	23	17	26	12	8.0	.75	32
6	28	14	274	373	34	21	19	74	11	6.5	2.2	16
7	19	14	194	276	31	22	20	93	7.3	5.6	2.8	9.8
8	40	13	743	137	33	21	16	45	4.8	4.8	1.6	7.0
9	33	15	3,480	135	32	24	14	34	4.8	4.8	.90	5.6
10	20	18	2,960	130	32	25	15	29	3.6	4.4	.90	8.6
11	17	17	1,340	131	40	23	15	23	4.0	3.6	1.9	6.5
12	16	18	1,480	125	45	22	14	102	5.6	7.0	91	4.8
13	16	19	1,450	123	37	22	13	40	5.6	29	111	3.6
14	16	17	1,830	122	35	22	12	38	37	17	35	2.8
15	16	15	2,130	119	32	21	101	33	40	7.5	18	2.2
16	16	14	1,910	118	32	22	166	278	60	4.8	10	5.2
17	31	366	1,580	120	31	21	200	214	22	3.6	9.2	11
18	216	148	1,200	124	29	20	308	37	14	2.8	10	10
19	1,590	35	947	125	27	21	314	32	9.8	2.2	11	7.0
20	834	27	865	122	26	22	63	24	7.5	2.2	15	5.6
21	67	20	939	130	24	48	109	17	13	3.2	8.0	43
22	42	175	1,110	358	24	32	156	15	20	28	5.2	60
23	37	154	1,080	370	26	30	160	13	12	24	5.2	32
24	30	40	1,060	366	27	30	47	9.7	9.2	9.8	7.5	37
25	26	34	1,040	360	28	26	25	8.1	8.0	6.0	123	18
26	24	29	1,030	274	25	25	16	7.7	5.2	4.0	98	40
27	52	24	1,190	59	24	27	515	9.1	2.8	2.8	24	163
28	35	23	1,420	42	23	29	160	11	1.6	2.5	15	29
29	26	25	1,400	38	23	22	724	11	1.3	2.2	9.2	29
30	21	32	1,350	36	------	19	319	8.9	1.3	2.2	8.0	24
31	19	------	1,030	35	------	20	------	6.8	------	2.2	7.0	------
TOTAL	3,876	1,387	36,654	9,439	892	752	3,617	1,757.3	353.4	222.6	635.65	799.7
MEAN	125	46.2	1,182	304	30.8	24.3	121	56.7	11.8	7.18	20.5	26.7
MAX	1,590	366	3,480	1,140	45	48	724	301	60	29	123	163
MIN	10	13	42	35	23	19	12	6.8	1.3	2.2	.75	2.2
AC-FT	7,690	2,750	72,700	18,720	1,770	1,490	7,170	3,490	701	442	1,260	1,590

CAL YR 1971 TOTAL 53,470.60 MEAN 146 MAX 3,480 MIN 3.1 AC-FT 106,100
WTR YR 1972 TOTAL 60,385.65 MEAN 165 MAX 3,480 MIN .75 AC-FT 119,800

08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°39'55", long 97°19'16", Tarrant County, on left bank at upstream side of bridge on frontage road on upstream side of Interstate Highway 35-W, 5.8 miles south of Fort Worth City Hall, and 8.9 miles upstream from mouth.

DRAINAGE AREA.--17.7 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

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

EXTREMES.--Current year: Maximum discharge, 5,450 cfs Oct. 19 (elevation, 639.77 ft); no flow at times.
Period of record: Maximum discharge, 5,450 cfs Oct. 19, 1971 (elevation, 639.77 ft); no flow at times.
Flood of May 6, 1969, reached an elevation of 640.1 ft, from floodmarks (discharge, 5,800 cfs). Flood in 1908 reached an elevation of 645.9 ft, and flood in 1938 reached an elevation of 644.4 ft, from information by State Highway Department.

REMARKS.--Records good except those for period of no elevation record, which are poor. Flow is slightly affected by several small farm ponds on tributaries above station. At times, low flow may be sustained by effluents from commercial establishments. Two recording rain gages are operated in basin above this station, and one recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	0	4.7	27	1.4	.27	.04	4.2	0	.05	0	1.3
2	3.3	0	165	5.2	1.3	.26	.05	3.4	0	.01	0	.06
3	48	0	32	4.0	1.2	.25	.05	1.6	0	.50	0	.04
4	8.8	0	10	3.5	1.1	.11	.17	2.3	0	.11	0	3.4
5	3.0	0	165	3.2	1.0	.05	.06	1.0	0	.06	0	.50
6	1.6	0	59	3.0	.96	.06	.11	17	0	0	0	.04
7	.50	0	35	2.8	.90	.11	.04	37	0	0	0	.01
8	10	0	227	2.7	.84	.17	.03	12	0	0	0	0
9	2.5	0	470	2.6	.80	.11	.03	3.4	0	0	0	0
10	1.2	0	174	2.5	.72	.11	.04	3.0	0	0	0	0
11	.70	0	24	2.4	.68	.17	.04	2.6	0	0	0	0
12	.40	0	16	2.3	.64	.17	.03	14	1.0	0	.70	0
13	.25	0	13	2.2	.60	.25	.02	2.6	.05	.35	.11	0
14	.05	0	36	2.1	.57	.17	5.7	1.3	2.6	.03	.05	0
15	.06	0	30	2.1	.53	.17	3.4	.70	1.0	0	.01	.35
16	.05	0	13	2.0	.50	.11	.17	.50	1.6	0	0	.35
17	1.3	41	9.4	2.0	.47	.11	.03	.50	.05	0	0	.06
18	31	15	7.6	2.0	.45	.06	0	1.3	.03	0	0	.01
19	816	.70	7.0	1.9	.43	.06	0	1.6	.01	0	0	0
20	251	.04	6.9	1.9	.41	1.3	38	.35	.02	0	0	0
21	13	.01	5.2	1.9	.39	4.2	18	.17	1.9	0	0	12
22	7.0	24	5.2	1.9	.37	.17	1.9	.06	.06	0	0	6.4
23	3.0	11	5.2	1.9	.35	.06	.35	.06	.02	0	7.0	1.0
24	1.3	1.3	4.7	1.9	.34	.05	.17	.06	.01	0	1.3	.35
25	.50	.17	4.2	1.9	.33	.05	.11	.05	0	0	4.2	.11
26	.50	.06	4.2	1.9	.31	5.7	.11	.04	0	0	2.6	.05
27	7.6	.04	3.8	3.0	.30	1.6	250	.03	0	0	.06	.01
28	.25	.04	3.4	1.9	.29	.11	52	.02	0	0	.04	0
29	.05	.03	3.4	1.7	.28	.11	121	.03	5.7	0	.03	0
30	.01	3.8	3.0	1.6	------	.04	9.4	.02	1.3	0	0	0
31	0	------	2.2	1.5	------	.04	------	.01	------	0	0	------
TOTAL	1,212.95	97.19	1,549.1	98.5	18.46	16.20	501.05	110.90	15.35	1.11	16.10	26.04
MEAN	39.1	3.24	50.0	3.18	.64	.52	16.7	3.58	.51	.036	.52	.87
MAX	816	41	470	27	1.4	5.7	250	37	5.7	.50	7.0	12
MIN	0	0	2.2	1.5	.28	.04	0	.01	0	0	0	0
CFSM	2.21	.18	2.82	.18	.04	.03	.94	.20	.03	.002	.03	.05
IN.	2.55	.20	3.26	.21	.04	.03	1.05	.23	.03	.002	.03	.05
AC-FT	2,410	193	3,070	195	37	32	994	220	30	2.2	32	52

CAL YR 1971 TOTAL 3,617.67 MEAN 9.91 MAX 816 MIN 0 CFSM .56 IN 7.60 AC-FT 7,180
WTR YR 1972 TOTAL 3,662.95 MEAN 10.0 MAX 816 MIN 0 CFSM .57 IN 7.70 AC-FT 7,270

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-19	0745	633.53	824	12- 9	0945	634.20	1,170
10-19	2115	639.77	5,450	4-27	1930	634.58	1,260
12- 8	1945	634.21	1,170	4-29	0400	633.86	1,000

NOTE.--No elevation record Jan. 26 to Mar. 2.

08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex.

LOCATION.--Lat 32°41'08", long 97°19'44", Tarrant County, on right bank near entrance to culvert under Missouri, Kansas, and Texas Railroad, 0.2 mile northeast of intersection of Hemphill Street and Seminary Drive in Fort Worth, 1.8 miles upstream from mouth, and 4.5 miles south of Fort Worth City Hall.

DRAINAGE AREA.--0.97 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

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

EXTREMES.--Current year: Maximum discharge, 584 cfs Oct. 19 (elevation, 655.49 ft); minimum daily, 0.01 cfs at times.
Period of record: Maximum discharge, 584 cfs Oct. 19, 1971 (elevation, 655.49 ft); no flow at times.
Maximum stage since 1966, about 656.0 ft in August 1966 (discharge not determined), from information by local resident.

REMARKS.--Records fair. Low flow sustained by effluent from commercial establishments above station. One recording rain gage is operated in basin above station, and one is located below station in Seminary South Shopping Center. Records of precipitation and hydrologic data for selected storms are published elsewhere in supplementary basic-data reports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.10	2.1	.10	.05	.04	.10	.02	.02	.02	.79
2	.92	.02	11	.13	.85	.04	.04	.08	.02	.02	.05	.31
3	5.7	.02	.62	1.1	.92	.04	.08	.06	.02	.58	.02	.13
4	.67	.02	.47	.10	.06	.02	.04	.06	.04	.05	.05	1.4
5	.04	.02	8.1	.16	.08	.05	.08	.06	.04	.02	.06	.08
6	.02	.02	2.9	.10	.13	.05	.08	2.6	.02	.02	.19	.08
7	.02	.02	.73	.10	.43	.05	.13	3.8	.02	.02	.02	.06
8	1.2	.04	13	.10	.73	.05	.06	.28	.02	.06	.02	.08
9	.02	.04	29	.10	.92	.06	.04	.19	.02	.02	.02	.16
10	.02	.03	5.3	.13	.79	.05	.02	.13	.02	.16	.02	.16
11	.02	.03	.92	.10	1.5	.05	.04	.08	.79	.02	.04	.08
12	.01	.04	.85	.08	1.1	.05	.02	1.9	.02	.01	.79	.08
13	.02	.04	.74	.16	1.4	.06	.02	.10	.01	.01	.35	.08
14	.02	.04	2.4	.13	.73	.06	.79	.08	.67	.01	.08	.08
15	.02	.04	.28	.13	.13	.06	.62	.08	.14	.01	.02	.43
16	.04	.04	.22	.25	.16	.05	.02	.08	.04	.01	.04	.52
17	.67	6.7	.19	.13	.31	.04	.02	.08	.02	.01	.06	.16
18	3.7	.35	.13	.10	.13	.05	.02	.62	.02	.02	.02	.08
19	43	.19	.13	.08	.10	.06	.02	.08	.02	.02	.02	.08
20	1.9	.16	.13	.08	.08	.79	3.1	.06	.40	.01	.06	.10
21	.25	.13	.13	.08	.06	.22	.92	.05	1.1	.02	.02	2.1
22	.16	4.2	.13	.08	.05	.05	.06	.05	.05	.05	.01	1.2
23	.08	.22	.13	.06	.05	.06	.06	.05	.04	.06	1.7	.19
24	.04	.10	.10	.05	.05	.06	.05	.05	.10	.05	.02	.25
25	.04	.08	.10	.05	.05	.06	.06	.05	.04	.02	.79	.06
26	.52	.06	.08	.19	.04	.99	.10	.04	.04	.01	.08	.06
27	.31	.06	.08	.31	.04	.06	13	.04	.04	.01	.08	.05
28	.04	.06	.08	.05	.05	.06	.35	.05	.04	.02	.08	.08
29	.04	.06	.08	.05	.05	.02	6.1	.05	.70	.01	.04	.19
30	.02	.67	.08	.08	------	.08	.31	.05	.07	.02	.04	.13
31	.02	------	.08	.08	------	.02	------	.04	------	.02	.05	------
TOTAL	59.55	13.52	78.28	6.44	11.09	3.41	26.29	11.04	4.59	1.39	4.86	9.25
MEAN	1.92	.45	2.53	.21	.38	.11	.88	.36	.15	.045	.16	.31
MAX	43	6.7	29	2.1	1.5	.99	13	3.8	1.1	.58	1.7	2.1
MIN	.01	.02	.08	.05	.04	.02	.02	.04	.01	.01	.01	.05
CFSM	1.98	.46	2.61	.22	.39	.11	.91	.37	.15	.05	.16	.32
IN.	2.28	.52	3.00	.25	.43	.13	1.01	.42	.18	.05	.19	.35
AC-FT	118	27	155	13	22	6.8	52	22	9.1	2.8	9.6	18

CAL YR 1971 TOTAL 253.55 MEAN .69 MAX 43 MIN .01 CFSM .71 IN 9.72 AC-FT 503
WTR YR 1972 TOTAL 229.71 MEAN .63 MAX 43 MIN .01 CFSM .65 IN 8.81 AC-FT 456

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-19	2025	655.49	584	12- 9	2150	652.45	204
11-17	1930	652.85	258	4-20	2015	652.79	250
12- 8	1805	652.48	207	4-29	0220	653.33	313

08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°14'18", long 97°19'11", Tarrant County, on left bank at culvert on downstream side of access road to Interstate Highway 35-W, 0.3 mile north of Seminary Drive in Fort Worth, 1.2 miles upstream from mouth, and 4.3 miles south of Fort Worth City Hall.

DRAINAGE AREA.--1.35 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

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

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Oct. 19 (elevation, 628.41 ft); minimum daily, 0.02 cfs Oct. 1, July 15. Period of record: Maximum discharge, 1,100 cfs Oct. 19, 1971 (elevation, 628.41 ft); minimum daily, 0.01 cfs for many days. Maximum elevation since 1969, that of Oct. 19, 1971. Flood in May 1969 reached an elevation of 627.2 ft, from floodmarks.

REMARKS.--Records fair. Records include runoff from a shopping center. Low flows sustained by effluents. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.06	.20	3.7	.37	.07	.06	.09	.04	.05	.11	1.5
2	2.2	.06	21	.23	1.4	.14	.06	.09	.11	.05	.22	.58
3	12	.06	.83	1.9	1.6	.20	.12	.06	.09	.97	.13	.15
4	.96	.06	.46	.28	.21	.22	.09	.07	.07	.22	.09	3.4
5	.15	.09	14	.29	.21	.09	.13	.07	.08	.09	.07	.11
6	.15	.06	4.5	.23	.32	.12	.10	3.8	.09	.13	.24	.09
7	.07	.06	1.1	.21	.63	.09	.15	6.0	.08	.06	.09	.07
8	2.1	.07	23	.22	1.0	.09	.08	.26	.12	.04	.11	.08
9	.08	.07	46	.21	1.1	.12	.06	.21	.10	.07	.07	.23
10	.04	.07	6.8	.25	.98	.09	.06	.15	.04	.26	.10	.17
11	.05	.07	1.4	.21	2.8	.11	.06	.18	1.2	.07	.09	.11
12	.08	.07	1.4	.21	2.0	.13	.06	3.5	.13	.18	2.3	.15
13	.06	.07	1.1	.31	1.7	.12	.06	.14	.12	.12	.82	.18
14	.05	.09	5.0	.19	.92	.12	2.6	.11	2.1	.12	.20	.19
15	.04	.09	.88	.18	.21	.09	1.2	.09	.58	.02	.07	.86
16	.07	.09	.56	.27	.39	.09	.07	.09	.17	.03	.10	.87
17	1.5	15	.45	.16	.42	.09	.09	.09	.07	.03	.16	.16
18	7.0	.39	.38	.23	.26	.09	.08	1.1	.06	.05	.09	.08
19	88	.16	.29	.16	.23	.09	.06	.10	.11	.07	.06	.08
20	2.5	.11	.23	.15	.21	1.7	6.3	.07	.60	.06	.09	.07
21	.53	.10	.21	.15	.18	.45	1.4	.07	3.9	.24	.12	3.2
22	.26	7.5	.21	.15	.18	.15	.08	.06	.13	.08	.08	1.8
23	.12	.60	.21	.15	.15	.28	.07	.06	.07	.10	6.0	.32
24	.12	.17	.21	.15	.15	.37	.08	.04	.08	.08	.13	.35
25	.12	.11	.21	.15	.10	.55	.07	.04	.03	.09	1.2	.13
26	1.2	.09	.21	.68	.07	3.3	.11	.07	.07	.06	.09	.13
27	.70	.09	.21	1.1	.07	.12	24	.07	.07	.07	.09	.09
28	.12	.11	.21	.21	.07	.08	.51	.06	.09	.09	.10	.08
29	.09	.12	.21	.22	.07	.07	13	.08	2.2	.07	.07	.20
30	.07	1.6	.32	.21	------	.11	.15	.06	.10	.07	.07	.14
31	.06	------	.32	.23	------	.07	------	.04	------	.14	.06	------
TOTAL	120.51	27.29	132.11	12.99	18.00	9.41	50.96	16.92	12.70	3.78	13.22	15.57
MEAN	3.89	.91	4.26	.42	.62	.30	1.70	.55	.42	.12	.43	.52
MAX	88	15	46	3.7	2.8	3.3	24	6.0	3.9	.97	6.0	3.4
MIN	.02	.06	.20	.15	.07	.07	.06	.04	.03	.02	.06	.07
CFSM	2.88	.67	3.16	.31	.46	.22	1.26	.41	.31	.09	.32	.39
IN.	3.32	.75	3.64	.36	.50	.26	1.40	.47	.35	.10	.36	.43
AC-FT	239	54	262	26	36	19	101	34	25	7.5	26	31

CAL YR 1971 TOTAL 485.89 MEAN 1.33 MAX 88 MIN .01 CFSM .99 IN 13.39 AC-FT 964
WTR YR 1972 TOTAL 433.46 MEAN 1.18 MAX 88 MIN .02 CFSM .87 IN 11.94 AC-FT 860

PEAK DISCHARGE (BASE, 300 CFS, REVISED)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-19	2025	628.41	1,100	4-27	0600	622.11	327
11-17	1930	622.40	370	4-29	0220	624.04	616
12- 8	1805	622.25	348	8-23	1800	622.86	439
4-20	2015	622.52	388				

08048600 Dry Branch at Fain Street, Fort Worth, Tex.

LOCATION.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft upstream from culvert on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles upstream from mouth, and 2.9 miles northeast of Tarrant County Courthouse.

DRAINAGE AREA.--2.15 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 352 cfs Oct. 19 (gage height, 5.10 ft); minimum daily, 0.02 cfs June 27.
Period of record: Maximum discharge, 352 cfs Oct. 19, 1971 (gage height, 5.10 ft); minimum daily, 0.02 cfs June 25, 1971, and June 27, 1972.
Maximum stage since April 1964, 9.0 ft in April 1966 at upstream side of Fain Street culvert, from information by local resident (discharge not determined).

REMARKS.--Records good above 1.0 cfs and fair below. Low flow sustained by effluent from commercial establishments and industry above station. Two recording rain gages are operated in basin above station.

REVISIONS.--WRD Texas 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.13	.61	4.5	.13	.05	.13	.13	.08	.03	.05	3.2
2	.38	.13	35	.38	.13	.05	.13	.05	.22	.05	.05	.38
3	25	.05	3.0	1.1	.13	.05	.08	.08	.22	.38	.08	.05
4	1.9	.05	1.6	.22	.13	.05	.13	.08	.38	.05	.08	6.6
5	.22	.05	21	.22	.22	.05	.13	.08	.22	.05	.13	.38
6	.08	.08	7.3	.22	.13	.05	.08	5.0	.22	.05	.13	.13
7	.22	.08	2.6	.38	.13	.05	.08	1.6	.22	.08	.05	.05
8	2.6	.08	26	.22	.13	.05	.13	.38	.38	.08	.05	.05
9	.22	.08	75	.22	.13	.05	.13	.22	.22	.08	.05	.05
10	.05	.08	20	.22	.13	.05	.13	.13	.13	.08	.05	.08
11	.05	.08	1.9	.22	1.4	.05	.13	.08	.61	.08	.05	.08
12	.05	.08	1.4	.22	.38	.05	.13	6.6	.61	.05	1.1	.08
13	.05	.08	1.1	.22	.08	.05	.13	.22	.22	2.4	1.7	.08
14	.05	.08	6.0	.38	.08	.03	.22	.61	6.6	.38	.61	.08
15	.05	.08	2.6	.38	.08	.03	1.1	.61	1.4	.08	.08	.08
16	.05	.08	1.4	.38	.08	.03	.13	.13	.38	.03	.08	.38
17	6.0	25	1.1	.22	.08	.03	.08	.08	.22	.03	.61	.08
18	16	1.0	.61	.22	.08	.03	.08	.08	.22	.05	.13	.08
19	62	.61	.61	.22	.08	.03	.08	.08	.13	.05	.13	.08
20	17	.22	.38	.22	.08	.38	1.3	.08	.05	.05	.22	.08
21	.61	.22	.22	.38	.08	1.1	1.6	.08	.03	.05	.22	1.9
22	.08	11	.22	.38	.08	.08	.22	.08	.03	.38	.22	2.8
23	.08	2.6	.22	.38	.08	.13	.13	.08	.03	.22	1.1	.22
24	.13	.38	.22	.38	.05	.08	.05	.05	.03	.13	.38	.13
25	.08	.22	.22	.22	.05	.08	.05	.03	.03	.05	.38	.08
26	.61	.13	.22	.38	.05	.13	.13	.03	.03	.03	.13	1.1
27	1.7	.13	.38	1.1	.03	.13	17	.03	.02	.03	.13	1.4
28	.38	.13	.13	.13	.03	.08	.38	.03	.03	.03	.13	.13
29	.22	.22	.13	.13	.05	.08	9.6	.03	.03	.03	.05	.61
30	.22	1.6	.22	.13	------	.13	.22	.03	.03	.05	.05	.22
31	.13	------	.22	.13	------	.13	------	.05	------	.05	.05	------
TOTAL	136.29	44.75	211.61	14.10	4.31	3.36	33.91	16.84	13.02	5.18	8.27	20.66
MEAN	4.40	1.49	6.83	.45	.15	.11	1.13	.54	.43	.17	.27	.69
MAX	62	25	75	4.5	1.4	1.1	17	6.6	6.6	2.4	1.7	6.6
MIN	.05	.05	.13	.13	.03	.03	.05	.03	.02	.03	.05	.05
CFSM	2.05	.69	3.18	.21	.07	.05	.53	.25	.20	.08	.13	.32
IN.	2.36	.77	3.66	.24	.07	.06	.59	.29	.23	.09	.14	.36
AC-FT	270	89	420	28	8.6	6.7	67	33	26	10	16	41
(††)	7.65	2.84	6.93	.59	.24	.20	2.96	1.41	1.27	.62	1.04	2.26

CAL YR 1971 TOTAL 594.28 MEAN 1.63 MAX 75 MIN .02 CFSM .76 IN 10.28 AC-FT 1,180 †† 34.24
WTR YR 1972 TOTAL 512.30 MEAN 1.40 MAX 75 MIN .02 CFSM .65 IN 8.86 AC-FT 1,020 †† 28.01

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	1300	2.90	115	12- 8	1915	3.13	136
10-18	1715	3.00	124	12- 9	0930	4.52	282
10-19	2130	5.10	352	4-27	0645	3.12	135
11-17	1900	3.47	169	4-29	0345	2.78	104
12- 2	1445	3.30	152				

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

08048800 Big Fossil Creek at Haltom City, Tex.

LOCATION.--Lat 32°48'26", long 97°14'54", Tarrant County, at center of channel at downstream side of downstream bridge on State Highways 121 and 183, near east boundary of Haltom City, 1.5 miles upstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 2.0 miles upstream from Little Fossil Creek, and 3.5 miles upstream from mouth.

DRAINAGE AREA.--52.8 sq mi.

PERIOD OF RECORD.--January 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 489.48 ft above mean sea level. Prior to Oct. 1, 1967, at same site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--13 years, 21.6 cfs (15,650 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,200 cfs Dec. 10 (gage height, 8.92 ft); no flow Sept. 7-13, 17-30.
Period of record: Maximum discharge, 27,000 cfs Sept. 7, 1962 (gage height, 26.90 ft, present datum), from rating curve extended above 16,500 cfs on basis of contracted-opening measurement of peak flow; no flow at times most years.
Maximum stage since at least 1900 and prior to channel rectification, that of Sept. 7, 1962.

REMARKS.--Records poor. Low flows are generally sustained by waste water. Recording rain gage located at station. Channel rectification and improvement completed in vicinity of gage during 1966 water year.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.40	1.6	24	7.5	8.1	5.4	1.0	.16	.02	.02	2.2
2	1.3	.30	494	16	7.0	12	5.0	.30	.16	.02	.02	.06
3	276	.23	222	15	5.9	12	5.0	.16	.23	.76	.02	.04
4	161	.23	16	12	6.4	9.4	3.9	.11	.16	.05	.03	3.0
5	8.6	.23	580	12	8.7	7.5	3.4	.08	.06	.31	.02	.71
6	2.9	.23	229	9.4	8.7	7.0	2.9	2.7	.02	.06	.03	.07
7	1.9	.16	155	10	8.7	7.5	3.2	2.4	.02	.06	.03	0
8	2.7	.16	794	11	8.7	5.0	3.4	1.2	.23	.30	.03	0
9	.85	.16	3,020	12	8.1	4.2	2.9	.55	.23	.30	.02	0
10	.70	.23	2,670	11	8.1	12	2.5	.30	.23	.11	.06	0
11	.70	.23	234	10	11	12	2.5	.30	.16	.02	.08	0
12	.70	.23	110	9.4	15	11	2.5	6.4	.30	.02	.04	0
13	.70	.30	61	8.7	13	10	2.1	2.2	.11	.02	.40	0
14	.70	.30	134	7.5	11	9.4	2.2	1.6	5.9	.30	.55	.01
15	.70	.30	324	6.4	11	10	2.7	.70	1.0	.40	.06	.01
16	.55	.23	92	6.4	9.4	9.4	1.4	.55	.40	.30	.04	.01
17	2.4	160	46	7.0	16	8.7	1.2	.70	.23	.08	.04	0
18	4.6	135	28	8.1	11	8.1	1.4	1.4	.23	.02	.04	0
19	1,160	5.4	26	8.7	11	7.5	1.4	1.3	.23	.03	.23	0
20	1,040	2.5	22	7.5	11	8.7	3.8	.40	.08	.04	.04	0
21	16	1.0	18	7.0	10	7.0	1.3	.30	.11	.30	.03	0
22	4.6	20	15	7.5	10	7.0	.70	.30	.16	1.0	.02	0
23	2.9	61	15	7.0	10	8.7	.70	.16	.16	.40	.09	0
24	1.8	7.5	14	6.4	11	11	.55	.23	.11	.16	.04	0
25	1.6	3.2	14	5.9	10	7.5	.30	.16	.11	.06	.29	0
26	1.3	2.0	14	9.4	10	9.4	.23	.23	.06	.04	.03	0
27	1.8	2.2	12	8.7	12	7.5	31	.30	.06	.04	.03	0
28	1.2	1.2	12	8.1	11	5.0	2.0	.30	.04	.04	.02	0
29	1.2	1.0	11	8.1	9.4	3.9	8.0	.23	.02	.16	.02	0
30	.85	1.6	12	8.1	------	5.0	1.3	.16	.02	.16	.01	0
31	.40	------	10	7.5	------	6.4	------	.23	------	.16	.02	------
TOTAL	2,701.85	407.52	9,405.6	295.8	290.6	257.9	104.88	26.95	10.99	5.74	2.40	6.11
MEAN	87.2	13.6	303	9.54	10.0	8.32	3.50	.87	.37	.19	.077	.20
MAX	1,160	160	3,020	24	16	12	31	6.4	5.9	1.0	.55	3.0
MIN	.40	.16	1.6	5.9	5.9	3.9	.23	.08	.02	.02	.01	0
AC-FT	5,360	808	18,660	587	576	512	208	53	22	11	4.8	12

CAL YR 1971 TOTAL 13,128.38 MEAN 36.0 MAX 3,020 MIN 0 AC-FT 26,040
WTR YR 1972 TOTAL 13,516.34 MEAN 36.9 MAX 3,020 MIN 0 AC-FT 26,810

PEAK DISCHARGE (BASE, 1,800 CFS).--Oct. 19 (2300) 8,040 cfs (8.15 ft); Dec. 10 (0300) 10,200 cfs (8.92 ft).

08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex.

LOCATION.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles northeast of county courthouse, and approximately 4.3 miles upstream from Big Fossil Creek.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,580 cfs Dec. 9 (gage height, 8.90 ft); no flow at times.
Period of record: Maximum discharge, 1,580 cfs Dec. 9, 1971 (gage height, 8.90 ft); no flow at times each year.
Maximum stage since 1955, 10.5 ft (at Alta Vista Road) in September 1962, from information by local resident (discharge not determined). Flood of Mar. 20, 1968, reached a stage of 8.7 ft (discharge, 1,600 cfs), from floodmarks at upstream side of Alta Vista Road Bridge.

REMARKS.--Records good. Flow slightly regulated by several small farm ponds located on tributaries above station. Low flow sustained at times by effluent from industrial park 2.6 miles upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.72	1.8	6.1	.99	.57	.26	.44	0	0	0	.10
2	.05	.64	127	3.9	.99	.50	.26	.26	0	0	0	.02
3	29	.57	22	3.4	.90	.50	.26	.13	0	.01	0	.01
4	8.7	.50	6.1	3.1	.81	.50	.26	.10	0	0	0	1.5
5	1.5	.50	114	2.6	.72	.50	.26	.10	0	0	0	.72
6	.64	.50	35	2.4	.72	.50	.26	.81	0	0	0	.21
7	.38	.50	20	2.4	.72	.50	.26	.64	0	0	0	.10
8	1.1	.50	215	2.4	.72	.50	.26	.32	0	0	0	.05
9	.64	.50	550	2.2	.64	.50	.26	.26	0	0	0	.01
10	.38	.50	250	2.0	.64	.50	.26	.13	0	0	0	0
11	.21	.50	14	2.0	.81	.50	.26	.13	0	0	0	0
12	.17	.38	9.2	1.6	1.1	.50	.26	2.2	0	0	.02	0
13	.17	.38	6.9	1.6	.81	.50	.21	.72	0	1.5	.13	0
14	.13	.38	23	1.5	.72	.50	.21	.44	.64	.57	.90	0
15	.13	.38	22	1.3	.72	.44	.57	.21	.50	.02	.07	0
16	.10	.38	7.7	1.3	.64	.44	.44	.13	.99	0	.01	0
17	1.3	29	5.7	1.2	.64	.44	.21	.13	.17	0	0	0
18	5.4	12	4.8	1.2	.64	.44	.13	.10	.05	0	0	0
19	189	2.2	4.5	1.2	.64	.44	.13	.10	.02	0	0	0
20	78	1.3	3.9	1.2	.57	.44	.21	.07	0	0	0	0
21	4.8	1.2	3.6	1.2	.57	.50	.57	.05	0	0	0	.01
22	2.6	10	3.6	1.1	.57	.50	.38	.03	0	0	0	.10
23	1.8	13	3.6	1.1	.57	.44	.21	.02	0	0	.10	.21
24	1.3	3.6	3.6	1.1	.57	.44	.13	.01	0	0	.02	.10
25	1.2	2.6	3.6	1.1	.57	.44	.10	.07	0	0	0	.10
26	.99	1.8	3.4	.99	.57	.44	.07	.07	0	0	.01	.10
27	2.9	1.6	3.1	1.2	.57	.44	11	.02	0	0	0	.57
28	1.5	1.6	2.9	1.2	.57	.44	1.3	.01	0	0	0	.13
29	.99	1.3	2.8	1.2	.57	.32	3.1	0	0	0	0	.05
30	.90	1.6	2.6	1.1	------	.26	.81	0	0	0	0	.02
31	.72	------	2.4	.99	------	.26	------	0	------	0	0	------
TOTAL	336.71	90.63	1,477.8	56.88	20.27	14.19	22.90	7.70	2.37	2.10	1.26	4.11
MEAN	10.9	3.02	47.7	1.83	.70	.46	.76	.25	.079	.068	.041	.14
MAX	189	29	550	6.1	1.1	.57	11	2.2	.99	1.5	.90	1.5
MIN	.01	.38	1.8	.99	.57	.26	.07	0	0	0	0	0
CFSM	.89	.25	3.88	.15	.06	.04	.06	.02	.006	.006	.003	.01
IN.	1.02	.27	4.47	.17	.06	.04	.07	.02	.007	.006	.003	.01
AC-FT	668	180	2,930	113	40	28	45	15	4.7	4.2	2.5	8.2
(††)	6.46	2.32	6.53	.52	.25	.06	2.46	1.13	1.10	1.51	1.68	2.41

CAL YR 1971 TOTAL 2,188.39 MEAN 6.00 MAX 550 MIN 0 CFSM .49 IN 6.62 AC-FT 4,340 †† 31.98
WTR YR 1972 TOTAL 2,036.92 MEAN 5.57 MAX 550 MIN 0 CFSM .45 IN 6.16 AC-FT 4,040 †† 26.43

PEAK DISCHARGE (BASE, 290 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2200	8.61	1,520	12-8	1945	7.45	1,250
12- 2	1600	5.42	514	12-9	1100	8.90	1,580
12- 5	1000	4.68	326	12-9	2400	7.95	1,380

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

08049200 Lake Arlington at Arlington, Tex.

LOCATION.--Lat 32°43'04", long 97°11'36", Tarrant County, in pumphouse at right end of Arlington Dam on Village Creek near western boundary of Arlington, 1.5 miles upstream from The Texas and Pacific Railway Co. bridge, and 7 miles upstream from West Fork Trinity River.

DRAINAGE AREA.--143 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 9, 1957, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 45,360 acre-ft Jan. 12 (elevation, 549.84 ft); minimum, 18,110 acre-ft Oct. 17 (elevation, 534.27 ft).
Period of record: Maximum contents, 56,620 acre-ft May 1, 1966 (elevation, 554.65 ft); minimum since lake first filled in April 1957, 18,110 acre-ft Oct. 17, 1971 (elevation, 534.27 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 6,482 ft long. Service spillway is an uncontrolled circular drop inlet designed to discharge 4,000 cfs through 10-foot-diameter concrete conduit. Emergency spillway 882 ft wide is cut through natural ground near right end of dam. Dam completed and storage began Mar. 31, 1957. Capacities based on 1955 survey. Dam built by city of Arlington to impound water for municipal and industrial use. Records furnished by city of Arlington show that during year, 18,920 acre-ft of water was diverted for municipal use and 10,110 acre-ft of sewage effluent was discharged into West Fork Trinity River. Several small municipalities operate sewage disposal plants in basin above lake. Water is circulated for cooling purposes from lake to generating plant of Texas Electric Service Co. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Crest of emergency spillway	559.7	70,140
Crest of service spillway	550.0	45,710
Invert of lowest valve	505.0	180

REVISIONS.--WSP 1922: Drainage area.

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

534.0	17,770	544.0	33,570
536.0	20,390	546.0	37,390
538.0	23,320	548.0	41,430
540.0	26,520	550.0	45,710
542.0	29,950		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18,260	30,320	29,420	45,120	44,820	43,860	42,000	42,650	41,640	38,360	33,810	29,370
2	18,220	30,250	30,610	45,160	44,770	43,820	41,960	42,590	41,490	38,200	33,550	29,300
3	18,500	30,180	30,880	45,210	44,730	43,780	41,770	42,520	41,330	38,020	33,370	29,230
4	18,550	30,130	30,910	45,270	44,710	43,690	41,680	42,420	41,200	37,940	33,220	29,160
5	18,540	30,090	32,610	45,300	44,680	43,630	41,640	42,330	41,100	37,810	33,070	29,090
6	18,500	30,000	33,160	45,300	44,640	43,580	41,580	42,520	40,980	37,690	32,890	29,020
7	18,460	29,930	33,460	45,300	44,620	43,500	41,430	43,370	40,870	37,530	32,670	28,900
8	18,480	29,860	34,550	45,300	44,580	43,410	41,310	43,540	40,770	37,410	32,490	28,810
9	18,430	29,810	40,960	45,320	44,560	43,370	41,200	43,540	40,650	37,270	32,340	28,670
10	18,380	29,770	43,950	45,320	44,510	43,330	41,160	43,500	40,500	37,120	32,180	28,550
11	18,340	29,740	44,190	45,300	44,560	43,290	41,100	43,460	40,360	36,960	32,070	28,450
12	18,300	29,700	44,250	45,340	44,530	43,240	41,040	43,410	40,260	36,810	31,920	28,310
13	18,260	29,690	44,320	45,230	44,510	43,180	40,960	43,430	40,200	36,690	31,830	28,180
14	18,210	29,630	44,620	45,140	44,490	43,140	40,890	43,430	40,220	36,580	31,740	28,020
15	18,170	29,580	44,840	45,140	44,430	43,070	40,870	43,460	40,110	36,380	31,580	27,900
16	18,140	29,540	44,880	45,100	44,400	42,970	40,770	43,370	40,110	36,230	31,430	27,820
17	18,160	29,530	44,900	45,100	44,380	42,900	40,670	43,290	40,030	36,090	31,330	27,720
18	18,390	29,530	44,950	45,080	44,340	42,820	40,580	43,200	39,990	35,920	31,220	27,600
19	24,690	29,510	44,950	45,080	44,300	42,760	40,480	43,200	39,890	35,770	31,060	27,480
20	30,310	29,510	44,950	45,060	44,270	42,760	40,690	43,100	39,750	35,630	30,950	27,310
21	30,360	29,490	44,950	45,080	44,230	42,710	40,690	42,990	39,790	35,460	30,770	27,280
22	30,360	29,480	44,920	45,060	44,190	42,670	40,630	42,860	39,710	35,420	30,590	27,310
23	30,340	29,480	44,950	45,060	44,210	42,590	40,460	42,780	39,600	35,350	30,540	27,290
24	30,340	29,460	44,920	45,010	44,140	42,520	40,360	42,650	39,520	35,210	30,410	27,260
25	30,340	29,460	44,950	44,970	44,080	42,440	40,260	42,520	39,380	35,060	30,310	27,180
26	30,380	29,460	44,970	44,950	44,040	42,480	40,160	42,380	39,200	34,870	30,240	27,120
27	30,380	29,460	44,970	44,950	44,020	42,400	41,470	42,250	39,000	34,680	30,130	27,070
28	30,400	29,460	44,950	44,900	43,990	42,270	41,960	42,140	38,820	34,490	29,990	26,960
29	30,410	29,460	44,970	44,880	43,970	42,210	42,690	42,020	38,660	34,280	29,810	26,840
30	30,400	29,440	44,920	44,840	------	42,140	42,710	41,850	38,540	34,120	29,670	26,720
31	30,380	------	44,920	44,840	------	42,060	------	41,720	------	33,930	29,440	------
(†)	542.24	541.71	549.64	549.60	549.20	548.30	548.61	548.14	546.58	544.19	541.71	540.12
(*)	+12,040	-940	+15,480	-80	-870	-1,910	+650	-990	-3,180	-4,610	-4,490	-2,720
(††)	788	653	911	1,080	1,120	1,550	1,700	1,770	2,280	2,490	2,700	1,880
MAX	30,410	30,320	44,970	45,340	44,820	43,860	42,710	43,540	41,640	38,360	33,810	29,370
MIN	18,140	29,440	29,420	44,840	43,970	42,060	40,160	41,720	38,540	33,930	29,440	26,720

CAL YR 1971..... * +12,740 †† 14,770 MAX 44,970 MIN 18,140
WTR YR 1972..... * +8,380 †† 18,920 MAX 45,340 MIN 18,140

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Arlington.

08049500 West Fork Trinity River at Grand Prairie, Tex.

LOCATION.--Lat 32°45'46", long 96°59'42", Dallas County, on left bank at upstream side of bridge on Belt Line Road, 1.3 miles northeast of Grand Prairie, 3.7 miles upstream from Bear Creek, 6.5 miles upstream from Mountain Creek, and at mile 514.6.

DRAINAGE AREA.--3,065 sq mi.

PERIOD OF RECORD.--March 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 410.42 ft above mean sea level. Prior to Dec. 6, 1933, nonrecording gage at bridge on old channel 2,500 ft southeast of present site at datum 2.56 ft higher. Dec. 6, 1933, to May 24, 1956, water-stage recorder at site 440 ft downstream from site of nonrecording gage at datum 2.56 ft higher than present datum. May 25, 1956, to Apr. 18, 1957, nonrecording gage at site 1.5 miles downstream at different datum. Apr. 19 to Aug. 13, 1957, nonrecording gage on bridge at present site and datum.

AVERAGE DISCHARGE.--47 years, 539 cfs (390,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,800 cfs Dec. 10 (gage height, 23.84 ft); minimum daily, 98 cfs June 11, July 3, 31, Aug. 7.

Period of record: Maximum discharge, 62,000 cfs May 17, 1949 (gage height, 28.00 ft, site and datum then in use), from rating curve extended above 36,000 cfs; minimum observed, 3.2 cfs June 6, 1925.

Maximum stage since at least 1900, 30.6 ft (former site and datum) in May 1908, from information by local resident. Flood in April 1922 reached a stage of 29.0 ft (former site and datum), from floodmarks.

REMARKS.--Records good. Flow largely regulated by seven major reservoirs with a total combined capacity of 732,600 acre-ft, of which 76,550 acre-ft is for flood control. For amount of sewage effluent discharged between station at Fort Worth and this station by cities of Fort Worth and Arlington, see stations 08048000 and 08049200. Several diversions above Arlington for municipal and other uses. The river channel at station was relocated in 1956. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 628: 1925. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	148	214	1,460	216	163	129	489	118	115	110	120
2	114	152	987	1,540	218	164	128	457	118	105	108	149
3	1,150	144	3,110	1,380	214	159	123	319	115	98	110	122
4	1,570	140	578	1,400	213	153	128	195	110	115	118	149
5	357	136	1,790	1,360	208	158	129	164	112	118	108	340
6	211	132	2,580	1,130	197	145	132	204	118	122	100	194
7	160	128	1,280	628	195	156	132	681	120	110	98	146
8	173	125	1,230	524	209	163	130	628	115	105	102	130
9	255	132	7,850	410	199	155	125	280	112	108	112	120
10	177	132	12,400	378	195	154	123	204	112	102	120	110
11	137	132	6,840	375	195	164	124	176	98	112	132	120
12	137	133	2,430	375	230	164	135	221	112	155	115	120
13	133	132	2,270	375	238	159	124	358	146	170	182	112
14	130	124	2,140	372	208	163	124	194	228	197	256	112
15	127	122	3,000	368	201	159	166	188	410	161	167	112
16	123	127	2,740	364	190	161	251	197	322	118	125	118
17	172	158	2,340	358	187	165	300	382	224	105	118	115
18	718	1,410	1,900	354	189	159	358	322	155	115	115	120
19	2,370	350	1,450	354	180	149	451	204	125	118	112	120
20	9,100	188	1,200	354	175	145	433	164	130	115	118	120
21	2,950	161	1,100	350	169	216	408	138	218	112	110	194
22	517	164	1,220	347	175	237	322	130	179	112	115	277
23	351	781	1,350	508	187	185	296	128	143	128	112	340
24	288	348	1,330	516	182	172	292	135	138	149	140	246
25	233	210	1,290	514	174	162	215	132	125	125	164	188
26	220	173	1,260	506	168	181	166	128	112	115	246	158
27	284	161	1,240	470	158	216	937	120	118	115	252	294
28	281	152	1,480	306	156	174	1,790	122	120	110	132	326
29	216	140	1,700	246	164	146	950	110	112	105	125	191
30	180	143	1,700	227	------	152	1,000	143	118	105	115	173
31	159	------	1,630	209	------	132	------	130	------	98	110	------
TOTAL	23,111	6,678	73,629	18,058	5,590	5,131	10,121	7,443	4,483	3,738	4,147	5,136
MEAN	746	223	2,375	583	193	166	337	240	149	121	134	171
MAX	9,100	1,410	12,400	1,540	238	237	1,790	681	410	197	256	340
MIN	114	122	214	209	156	132	123	110	98	98	98	110
AC-FT	45,840	13,250	146,000	35,820	11,090	10,180	20,080	14,760	8,890	7,410	8,230	10,190

CAL YR 1971 TOTAL 154,218 MEAN 423 MAX 12,400 MIN 82 AC-FT 305,900
WTR YR 1972 TOTAL 167,265 MEAN 457 MAX 12,400 MIN 98 AC-FT 331,800

08049550 Big Bear Creek near Grapevine, Tex.

LOCATION.--Lat 32°54'48", long 97°07'44", Tarrant County, at downstream side of bridge on State Highway 121, 100 ft downstream from St. Louis Southwestern Railway Lines bridge, 3.5 miles southwest of Grapevine, and 7 miles upstream from confluence with Little Bear Creek.

DRAINAGE AREA.--29.6 sq mi.

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 554.00 ft above mean sea level.

AVERAGE DISCHARGE.--5 years (1967-72), 8.00 cfs (5,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,940 cfs Oct. 19 (gage height, 13.68 ft); no flow for many days.
Period of record: Maximum discharge, 2,600 cfs May 6, 1969 (gage height, 14.35 ft); no flow at times each year.
Maximum stage since at least 1930, about 20 ft on Sept. 21, 1964, from information by local residents.

REMARKS.--Records good. No known diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.19	.03	.75	1.7	1.3	.58	2.7	2.8			
2	0	.16	150	.90	1.8	1.2	.58	2.5	2.7			
3	152	.10	92	.75	1.7	1.1	.63	2.1	2.4			
4	28	.06	7.7	.63	1.7	1.1	.48	2.1	2.3			
5	2.8	.05	243	.58	1.6	.90	.48	2.5	1.9			
6	.35	.05	63	.53	1.8	.82	.43	2.8	1.6			
7	.19	.04	54	.53	1.8	.82	.43	3.0	1.5			
8	.14	.05	204	.69	1.6	.69	.39	3.4	1.2			
9	.08	.14	1,050	.90	1.7	.69	.28	3.4	1.1			
10	.04	.25	529	1.3	1.7	.75	.28	3.4	.75			
11	.03	.25	32	1.4	1.7	.58	.28	3.4	.48			
12	.02	.31	12	1.3	1.9	.69	.22	4.4	.31			
13	.02	.31	7.4	1.3	1.8	.63	.10	4.2	.16			
14	.01	.25	9.9	1.1	1.8	.58	.10	4.4	.12			
15	.01	.19	47	.90	1.7	.58	.14	4.6	.16			
16	.01	.16	9.3	.90	1.6	.82	.19	4.6	.22			
17	.01	48	4.6	.90	1.6	.90	.16	4.6	.12			
18	.04	144	3.0	1.1	1.3	.69	.16	4.9	.03			
19	287	5.5	2.4	1.1	1.2	.69	.16	5.1	0			
20	496	.43	1.9	1.5	1.2	.63	.16	4.6	0			
21	12	.10	1.6	1.7	1.2	.58	.14	4.4	0			
22	4.2	.96	1.4	1.8	1.2	.58	.12	4.2	0			
23	.90	29	1.2	2.1	1.3	.63	.12	4.4	0			
24	.39	3.2	1.1	1.7	1.5	.75	.08	4.6	0			
25	.22	.25	.98	1.7	1.3	1.1	.05	4.4	0			
26	.16	.04	.90	1.9	1.2	.82	.05	4.0	0			
27	.31	.01	.90	1.9	1.2	.69	12	3.8	0			
28	.25	.01	.75	1.9	1.3	.69	10	3.8	0			
29	.25	.02	.69	1.9	1.4	.63	4.4	3.8	0			
30	.19	.02	.69	1.9	------	.69	3.2	3.6	0			
31	.22	------	.63	1.7	------	.63	------	3.2	------			------
TOTAL	985.84	234.10	2,533.07	39.26	44.5	23.95	36.39	116.9	19.85	0	0	0
MEAN	31.8	7.80	81.7	1.27	1.53	.77	1.21	3.77	.66	0	0	0
MAX	496	144	1,050	2.1	1.9	1.3	12	5.1	2.8	0	0	0
MIN	0	.01	.03	.53	1.2	.58	.05	2.1	0	0	0	0
CFSM	1.07	.26	2.76	.04	.05	.03	.04	.13	.02	0	0	0
IN.	1.24	.29	3.18	.05	.06	.03	.05	.15	.02	0	0	0
AC-FT	1,960	464	5,020	78	88	48	72	232	39	0	0	0

CAL YR 1971 TOTAL 3,827.32 MEAN 10.5 MAX 1,050 MIN 0 CFSM .35 IN 4.81 AC-FT 7,590
WTR YR 1972 TOTAL 4,033.86 MEAN 11.0 MAX 1,050 MIN 0 CFSM .37 IN 5.07 AC-FT 8,000

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2200	13.68	1,940	12-2	2200	9.44	623
11-18	0100	9.56	681	12-9	1800	12.60	1,500

08049600 Mountain Creek near Cedar Hill, Tex.

LOCATION.--Lat 32°35'03", long 97°01'23", Dallas County, on right bank 50 ft downstream from county road bridge, 3.5 miles downstream from Texas and New Orleans Railroad Co. bridge, 4.5 miles southwest of Cedar Hill, and 12 miles upstream from Mountain Creek Lake Dam.

DRAINAGE AREA.--119 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 478.31 ft above mean sea level. Prior to Nov. 25, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 47.8 cfs (34,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,440 cfs Oct. 19 (gage height observed, 22.77 ft); no flow at times.
Period of record: Maximum discharge, 28,300 cfs May 7, 1969 (gage height, 25.10 ft), from rating curve extended above 14,000 cfs; no flow at times each year.
Maximum stage since at least 1910, 30 ft May 25, 1922, from information by local resident.

REMARKS.--Records good except during periods of no gage-height record, which are poor. At end of year, flow from 14.2 sq mi above this station was partly controlled by three floodwater-retarding structures with a total combined capacity of 6,750 acre-ft below flood-spillway crests, of which 5,550 acre-ft is floodwater-retarding capacity and 1,200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	9.8	.8	70	11	2.8	1.1	5.0	.20	25		
2	0	2.8	199	110	11	3.0	1.0	4.0	.10	10		
3	20	.78	540	240	11	3.0	.90	3.0	.10	5.0		
4	200	.36	69	700	11	3.0	.80	2.0	.10	25		
5	30	.23	1,270	110	10	3.0	.70	2.0	0	30		
6	10	.14	767	81	9.0	3.0	.70	5.0	0	15		
7	2.0	.07	520	69	8.0	3.0	.96	900	0	5.0		
8	1.0	.06	359	61	7.0	2.5	1.1	240	0	3.0		
9	.30	.06	4,830	53	6.0	2.5	1.1	60	0	2.0		
10	.10	.05	2,580	47	5.0	2.5	1.3	20	0	1.0		
11	0	3.8	223	42	5.0	3.0	2.1	9.8	0	.50		
12	0	.58	144	37	6.0	3.0	2.7	11	0	.30		
13	0	.20	124	35	6.0	3.0	2.4	12	0	.20		
14	0	.18	171	32	6.0	3.5	2.4	6.0	0	.10		
15	0	.16	441	30	5.0	4.0	2.2	3.0	1.0	.10		
16	0	.10	142	28	4.0	3.5	1.8	9.0	3.0	0		
17	0	.48	120	26	4.0	3.5	1.5	26	1.0	0		
18	20	7.8	100	24	4.0	3.0	1.2	3.0	.50	0		
19	4,000	1.4	90	24	3.0	3.0	.96	2.0	.30	0		
20	1,730	.36	80	23	3.0	3.0	.96	1.0	.10	0		
21	148	.20	70	22	6.0	3.5	3.0	.70	.10	0		
22	102	.20	71	21	5.0	3.0	2.0	.60	0	0		
23	91	2.7	69	20	4.0	3.0	1.5	.50	0	0		
24	86	1.7	69	20	3.0	3.0	1.2	.50	0	0		
25	81	1.1	67	17	2.0	3.0	1.0	.40	0	0		
26	78	.70	61	15	2.0	3.0	.80	.40	0	0		
27	69	.64	41	14	2.0	3.0	290	.30	0	0		
28	53	.64	25	13	2.0	2.5	490	.30	0	0		
29	47	.58	16	13	3.0	2.0	140	.30	2.0	0		
30	34	.48	12	12	------	1.5	160	.20	200	0		
31	16	------	10	12	------	1.2	------	.20	------	0		------
TOTAL	6,818.40	38.35	13,280.8	2,021	164.0	89.5	1,117.38	1,328.20	208.50	122.20	0	0
MEAN	220	1.28	428	65.2	5.66	2.89	37.2	42.8	6.95	3.94	0	0
MAX	4,000	9.8	4,830	700	11	4.0	490	900	200	30	0	0
MIN	0	.05	.80	12	2.0	1.2	.70	.20	0	0	0	0
AC-FT	13,520	76	26,340	4,010	325	178	2,220	2,630	414	242	0	0

CAL YR 1971 TOTAL 24,025.83 MEAN 65.8 MAX 4,830 MIN 0 AC-FT 47,660
WTR YR 1972 TOTAL 25,188.33 MEAN 68.8 MAX 4,830 MIN 0 AC-FT 49,960

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	1300	22.77	10,440	1-4	0200	16.55	1,540
12- 5	2100	19.40	3,600	5-7	1900	17.80	2,220
12- 9	1600	21.50	7,280				

NOTE.--No gage-height record Jan. 21 to Feb. 29, Mar. 2 to Apr. 5, May 14 to June 19, and June 16 to July 26.

08049700 Walnut Creek near Mansfield, Tex.

LOCATION.--Lat 32°34'51", long 97°06'06", Tarrant County, on right bank at downstream side of bridge on county road, 2.6 miles northeast of Mansfield, 3.3 miles downstream from Texas and New Orleans Railroad Co. bridge, and 10.2 miles upstream from mouth.

DRAINAGE AREA.--62.8 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 531.08 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 13.4 cfs (9,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,140 cfs Dec. 9 (gage height, 19.95 ft); no flow at times.
Period of record: Maximum discharge, 6,820 cfs May 7, 1969 (gage height, 28.05 ft); no flow at times each year.

REMARKS.--Records good. The city of Mansfield reported the discharge of about 398 acre-ft of sewage effluent into tributary 2.5 miles upstream from station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.04	.83	14	2.6	2.1	.34	6.3	.04	.29		0
2	0	.04	175	15	2.8	1.6	.52	4.2	.03	.05		0
3	13	.03	45	27	2.4	1.3	.34	2.8	.02	.03		0
4	2.6	.03	5.3	80	2.1	1.3	.22	1.9	.02	26		0
5	.06	.04	399	13	2.1	1.0	.22	1.5	.02	8.0		0
6	0	.05	70	9.0	2.6	1.0	.22	20	.02	.26		0
7	0	.05	70	7.6	2.8	1.0	.22	232	0	.05		0
8	0	.05	304	7.1	2.4	1.0	.22	31	0	0		0
9	0	.05	1,560	7.1	2.2	.68	.19	7.6	0	0		0
10	0	.05	758	6.6	2.1	.59	.39	3.8	0	.15		0
11	0	.06	53	5.8	2.2	.68	.39	2.8	0	.08		0
12	0	.06	26	5.1	2.4	.78	.29	12	0	0		0
13	0	.06	19	4.6	2.6	.88	.26	9.0	0	0		0
14	0	.06	20	3.6	2.8	.88	.19	3.2	0	0		0
15	0	.06	33	3.4	2.6	1.5	.29	1.6	.08	0		0
16	0	.06	15	3.4	2.4	1.5	.26	2.6	.22	0		0
17	0	.10	11	3.4	2.6	1.3	.16	1.9	.05	0		0
18	47	.77	9.0	3.6	2.6	1.1	.13	1.0	.03	0		0
19	674	.09	8.8	3.6	2.4	1.1	.11	.78	0	0		0
20	461	.05	8.2	3.6	2.2	1.1	.08	.68	0	0		0
21	10	.06	7.4	3.6	2.2	1.5	.89	.59	0	0		1.5
22	2.1	1.5	6.3	3.6	2.4	1.5	.19	.45	0	0		.08
23	.68	1.0	6.3	3.4	2.4	1.1	.11	.39	0	0		.04
24	.34	.13	6.3	3.2	2.4	1.0	.09	.34	0	0		0
25	.16	.08	6.1	2.6	2.4	.78	.08	.26	0	0		0
26	.11	.08	6.1	2.4	2.1	.78	.08	.19	0	0		0
27	.16	.08	5.8	2.8	1.9	.68	86	.13	0	0		0
28	.45	.08	5.8	3.0	1.9	.59	44	.08	0	0		0
29	.16	.08	6.1	2.8	1.9	.52	215	.30	31	0		0
30	.06	.09	6.1	2.6	------	.39	15	.45	33	0		0
31	.04	------	5.8	2.6	------	.34	------	.05	------	0		------
TOTAL	1,211.92	4.98	3,658.23	259.1	68.5	31.57	366.48	349.89	64.53	34.91	0	1.62
MEAN	39.1	.17	118	8.36	2.36	1.02	12.2	11.3	2.15	1.13	0	.054
MAX	674	1.5	1,560	80	2.8	2.1	215	232	33	26	0	1.5
MIN	0	.03	.83	2.4	1.9	.34	.08	.05	0	0	0	0
AC-FT	2,400	9.9	7,260	514	136	63	727	694	128	69	0	3.2
(††)	4.80	1.97	6.89	1.19	.17	.12	2.64	3.14	1.94	2.18	1.72	4.36

CAL YR 1971 TOTAL 6,056.49 MEAN 16.6 MAX 1,560 MIN 0 AC-FT 12,010 †† 31.26
WTR YR 1972 TOTAL 6,051.73 MEAN 16.5 MAX 1,560 MIN 0 AC-FT 12,000 †† 31.12

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2000	16.68	1,240	12- 9	1900	19.95	2,140
12- 5	1200	14.28	775	4-29	1500	14.83	868

†† Weighted-mean rainfall, in inches.

08049900 Mountain Creek near Duncanville, Tex.

LOCATION.--Lat 32°39'43", long 96°58'56", Dallas County, at downstream side of bridge on Farm Road 1382, 2.3 miles downstream from Walnut Creek, 4.5 miles west of Duncanville, and 5.5 miles upstream from Mountain Creek Lake Dam.

DRAINAGE AREA.--225 sq mi.

PERIOD OF RECORD.--October 1970 to September 1971.

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

EXTREMES.--Current year: Maximum elevation, 465.50 ft Oct. 19; minimum daily, 454.88 ft Aug. 27 to Sept. 1, Sept. 5.
Period of record: Maximum elevation, 465.50 ft Oct. 19, 1971; minimum daily, 454.88 ft Aug. 27 to Sept. 1, Sept. 5, 1972.

REMARKS.--This station is used as an aid in the operation of Mountain Creek Lake. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Mountain Creek near Cedar Hill (station 08049600).

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	455.27	457.90	456.53	458.57	457.11	456.62	456.30	457.44	455.89	456.86	454.93	454.88
2	455.25	457.60	460.78	458.22	457.11	456.58	456.31	457.11	455.85	456.36	454.93	454.89
3	455.79	457.15	459.13	459.56	456.98	456.55	456.39	456.92	455.85	456.21	454.93	454.89
4	458.07	456.75	458.11	459.25	456.94	456.55	456.46	456.85	455.85	456.65	454.93	454.89
5	456.85	456.50	462.84	458.62	456.89	456.52	456.51	456.85	455.79	457.10	454.92	454.88
6	456.43	456.35	460.30	458.16	456.93	456.50	456.53	457.60	455.67	456.66	454.92	454.90
7	456.27	456.25	459.37	457.96	456.89	456.52	456.55	462.27	455.59	456.26	454.92	454.90
8	456.18	456.25	461.77	457.88	456.87	456.53	456.42	459.58	455.49	456.10	454.92	454.90
9	456.13	456.23	464.69	457.84	456.84	456.50	456.25	457.86	455.42	456.02	454.92	454.90
10	456.08	456.23	461.52	457.74	456.83	456.50	456.15	457.19	455.40	455.92	454.92	454.90
11	456.05	456.22	459.20	457.61	456.85	456.53	456.11	456.87	455.38	455.87	454.91	454.90
12	456.02	456.21	458.91	457.54	456.93	456.58	456.16	456.90	455.30	455.80	454.91	454.90
13	456.00	456.20	458.79	457.44	456.94	456.60	456.15	457.21	455.21	455.82	454.90	454.90
14	455.97	456.43	459.43	457.33	456.95	456.61	456.17	456.80	455.25	455.74	454.90	454.90
15	455.95	456.40	459.29	457.21	456.90	456.60	456.18	456.53	455.36	455.72	454.90	454.90
16	455.92	456.35	458.77	457.20	456.87	456.56	456.18	456.41	455.76	455.68	454.90	454.90
17	455.95	456.43	458.59	457.25	456.84	456.53	456.11	456.76	455.84	455.54	454.90	454.90
18	459.77	456.83	458.51	457.30	456.78	456.50	456.11	456.44	455.86	455.49	454.90	454.90
19	464.94	456.64	458.32	457.31	456.73	456.47	456.08	456.33	455.84	455.44	454.90	454.89
20	461.49	456.47	458.22	457.32	456.73	456.45	456.07	456.25	455.76	455.36	454.90	454.89
21	458.59	456.37	458.18	457.24	456.76	456.52	456.09	456.22	455.76	455.26	454.89	454.90
22	458.21	456.39	458.11	457.19	456.78	456.53	456.12	456.13	455.77	455.25	454.89	454.90
23	458.10	456.62	458.09	457.18	456.79	456.54	456.18	456.11	455.76	455.22	454.89	454.90
24	458.05	456.61	458.07	457.14	456.80	456.53	456.10	456.13	455.74	455.14	454.89	454.90
25	458.00	456.55	458.04	457.05	456.80	456.45	456.06	456.07	455.70	455.05	454.89	454.90
26	458.00	456.48	457.96	457.04	456.74	456.48	456.05	456.04	455.61	454.95	454.89	454.90
27	458.00	456.42	457.71	457.12	456.67	456.41	460.53	456.06	455.52	454.96	454.88	454.90
28	458.10	456.38	457.49	457.12	456.63	456.37	459.94	456.06	455.40	454.95	454.88	454.90
29	458.10	456.39	457.39	457.12	456.63	456.35	461.28	456.02	455.32	454.94	454.88	454.90
30	458.10	456.41	457.34	457.11	------	456.33	458.41	455.94	458.80	454.94	454.88	454.90
31	458.05	------	457.26	457.07	------	456.32	------	455.93	------	454.93	454.88	------
MEAN	457.41	456.53	458.99	457.60	456.85	456.50	456.73	456.87	455.72	455.68	454.90	454.90
MAX	464.94	457.90	464.69	459.56	457.11	456.62	461.28	462.27	458.80	457.10	454.93	454.90
MIN	455.25	456.20	456.53	457.04	456.63	456.32	456.05	455.93	455.21	454.93	454.88	454.88

CAL YR 1971 MEAN 115.35 MAX 464.94 MIN 454.91
WTR YR 1972 MEAN 456.56 MAX 464.94 MIN 454.88

08050050 Mountain Creek Lake near Grand Prairie, Tex.

LOCATION.--Lat 32°43'55", long 96°56'35", Dallas County, at right end of spillway in Mountain Creek Dam on Mountain Creek, 2.5 miles upstream from Texas and Pacific Railway Co. bridge, and 3.7 miles southeast of Grand Prairie.

DRAINAGE AREA.--295 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 21, 1960, nonrecording gage at powerplant at same datum.

EXTREMES.--Current year: Maximum contents, 22,450 acre-ft Dec. 10 (elevation, 456.85 ft); minimum, 14,640 acre-ft Sept. 29 (elevation, 453.50 ft).
Period of record: Maximum contents, 25,790 acre-ft May 7, 1969 (elevation, 458.02 ft); minimum, 14,640 acre-ft Sept. 29, 1972 (elevation, 453.50 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 5,800 ft long including a gated spillway with six 34- by 27-foot tainter gates. Dam completed about Jan. 1, 1937, and deliberate impoundment of water began on Mar. 24, 1937. Capacity curve based on survey made in 1963 and furnished by Dallas Power and Light Co. Lake built and operated by Dallas Power and Light Co. to supply cooling water for generating plant. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Mountain Creek near Cedar Hill (station 08049600). Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	467.0	-
Top of tainter gates	458.0	25,720
Top of dry weather conservation storage	457.0	22,840
Top of wet weather conservation storage	456.0	20,260
Sill of tainter gates	431.0	-

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

453.0	13,600	456.0	20,260
454.0	15,670	456.5	21,550
455.0	17,890	457.0	22,840
455.5	19,080		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19,100	19,430	19,380	19,790	20,290	19,930	19,360	22,120	19,410	18,620	17,110	15,650
2	19,080	19,410	20,600	20,070	20,260	19,900	19,480	22,120	19,360	18,530	17,050	15,630
3	20,650	19,380	20,570	20,210	20,260	19,930	19,240	22,120	19,290	18,390	16,960	15,590
4	21,030	19,360	21,030	21,860	20,310	19,830	19,240	21,990	19,220	18,360	16,910	15,590
5	20,310	19,340	19,830	20,260	20,390	19,830	19,290	21,940	19,170	18,360	16,890	15,570
6	20,310	19,220	19,620	20,520	20,340	19,900	19,410	22,070	19,120	18,360	16,850	15,520
7	20,310	19,190	20,090	20,720	20,360	19,740	19,190	20,020	19,080	18,320	16,710	15,460
8	20,360	19,150	19,720	20,910	20,390	19,760	19,150	19,600	19,050	18,290	16,670	15,420
9	20,290	19,120	21,450	21,030	20,420	19,790	19,170	19,930	19,030	18,270	16,670	15,360
10	20,260	19,120	22,090	21,140	20,420	19,810	19,240	20,000	18,860	18,200	16,650	15,340
11	20,210	19,150	20,050	21,220	20,520	19,830	19,260	20,050	18,840	18,130	16,600	15,300
12	20,190	19,120	20,540	21,400	20,520	19,810	19,290	20,210	18,840	18,270	16,580	15,260
13	20,160	19,220	21,030	21,270	20,600	19,740	19,170	20,260	18,930	18,360	16,560	15,170
14	20,140	19,150	19,290	21,190	20,540	19,830	19,100	20,260	18,810	18,320	16,510	15,130
15	20,120	19,100	20,020	21,290	20,540	19,740	19,100	20,260	19,080	18,220	16,470	15,090
16	20,090	19,080	20,520	21,370	20,600	19,690	19,030	20,310	19,100	18,170	16,420	15,090
17	20,340	19,260	20,830	21,450	20,600	19,670	19,030	20,290	19,050	18,080	16,380	15,050
18	19,430	19,290	21,110	21,500	19,950	19,670	19,030	20,260	19,080	18,060	16,340	14,990
19	20,340	19,290	21,370	21,520	20,000	19,640	19,000	20,210	19,080	18,010	16,310	14,950
20	20,700	19,260	21,520	21,600	20,020	19,640	19,100	20,160	19,030	17,910	16,270	14,900
21	19,170	19,240	21,680	19,950	20,000	19,640	19,000	20,140	19,030	17,850	16,220	15,050
22	19,430	19,310	20,260	20,000	20,000	19,640	19,030	20,070	19,080	17,800	16,160	15,130
23	19,600	19,360	20,520	20,140	20,120	19,640	18,860	20,000	19,080	17,760	16,110	15,130
24	19,790	19,380	20,600	20,050	20,020	19,570	18,840	19,930	19,080	17,710	16,070	15,130
25	19,900	19,410	20,750	20,050	19,980	19,600	18,770	19,880	18,960	17,650	16,020	15,130
26	20,090	19,380	20,980	20,090	19,980	19,720	18,720	19,810	18,880	17,580	16,000	15,070
27	19,220	19,410	20,960	20,140	20,000	19,570	19,640	19,740	18,770	17,510	15,980	15,050
28	19,290	19,360	21,060	20,160	20,050	19,480	20,600	19,690	18,530	17,470	15,890	15,050
29	19,360	19,310	19,550	20,160	20,070	19,430	21,240	19,600	18,440	17,290	15,850	14,950
30	19,380	19,340	19,480	20,190	------	19,410	22,040	19,500	18,510	17,220	15,760	14,920
31	19,430	------	19,520	20,240	------	19,380	------	19,450	------	17,160	15,670	------
(†)	455.65	455.61	455.69	455.99	455.92	455.63	456.69	455.66	455.26	454.67	454.00	453.64
(*)	+260	-90	+180	+720	-170	-690	+2,660	-2,590	-940	-1,350	-1,490	-750
MAX	21,030	19,430	22,090	21,860	20,600	19,930	22,040	22,120	19,410	18,620	17,110	15,650
MIN	19,080	19,080	19,290	19,790	19,950	19,380	18,720	19,450	18,440	17,160	15,670	14,900

CAL YR 1971..... * -720 MAX 22,090 MIN 18,170
WTR YR 1972..... * -4,250 MAX 22,120 MIN 14,900

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

08050100 Mountain Creek at Grand Prairie, Tex.

LOCATION.--Lat 32°44'52", long 96°55'33", Dallas County, on right bank at downstream side of downstream bridge on Jefferson Street, 1,000 ft upstream from bridge on U.S. Highway 80, 1.2 miles upstream from Texas and Pacific Railroad Co. bridge, 1.5 miles downstream from Mountain Creek Lake Dam, and 4.4 miles east of Grand Prairie.

DRAINAGE AREA.--298 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 407.31 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 89.6 cfs (64,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,040 cfs Dec. 10 (gage height, 20.87 ft); no flow at times.
Period of record: Maximum discharge, 35,000 cfs May 7, 1969 (gage height, 24.62 ft); no flow Jan. 25-28, 1964.

REMARKS.--Records good. Flow regulated by Mountain Creek Lake (station 08050050).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.7	2.6	4.3	3.6	.56	.17	.03	1.6	.39	.47	.04	.05
2	.2	2.2	38	2.3	.56	.47	.01	.95	.56	.47	.02	.14
3	58	2.3	1,090	2.6	.80	.67	.02	.56	.95	.26	.02	.14
4	7.4	2.9	7.9	4.2	.80	.39	.14	32	1.8	.04	.05	.47
5	354	2.6	2,140	782	.47	.39	1.5	2.9	1.1	.01	.05	.47
6	3.6	2.0	2,690	7.0	.39	.39	1.8	3.3	.17	0	.02	.21
7	1.1	2.3	697	2.6	.32	.26	.80	1,480	0	.02	0	.09
8	.7	2.5	1,070	1.8	.81	.17	.26	1,040	0	.07	0	.04
9	.5	2.5	9,110	1.6	1.8	.26	.32	6.3	0	.26	.14	.03
10	.3	2.5	11,300	1.5	.47	.32	.56	2.0	0	.32	.67	.05
11	.2	2.3	3,690	1.6	.47	.26	1.1	1.8	.09	.26	.14	.09
12	.2	1.8	8.7	1.6	.95	.26	.47	3.8	.32	.32	.21	.07
13	.1	2.0	7.9	1.1	.80	.21	.21	2.3	.47	1.6	.47	.07
14	.2	1.6	992	1.1	.67	.21	.04	1.3	.80	.47	.26	.04
15	.2	1.1	15	1.6	.56	.21	.01	1.1	1.3	.17	.14	.04
16	.2	.17	4.2	1.6	.32	.26	0	1.6	2.6	.17	.14	.14
17	.2	.37	3.4	1.3	.26	.32	.01	1.8	.39	.17	.07	.39
18	900	1.6	3.3	1.1	233	.32	.03	.80	.17	.17	.09	.21
19	5,000	2.6	2.8	.67	2.7	.39	.09	.56	.21	.32	.11	.11
20	4,700	2.5	2.0	.56	.67	.47	.11	.67	.21	.17	.09	.04
21	1,280	2.3	1.5	675	.32	.47	1.1	.47	2.8	.09	.05	1.2
22	8.4	2.6	584	7.6	.21	.39	.95	.39	1.8	.11	.05	2.2
23	7.2	5.5	4.3	1.8	.39	.32	.32	.56	.80	.11	.17	2.0
24	6.6	3.6	1.6	.67	.56	.26	.32	.56	.67	.09	.17	.80
25	6.0	3.1	1.1	.47	.21	.32	.56	.56	.56	.11	.17	.47
26	5.2	2.6	1.0	.56	.21	.67	.47	.26	.39	.11	.39	.21
27	471	2.8	.8	.80	.39	.56	6.3	.17	.32	.07	.80	.21
28	5.2	2.3	.8	1.3	.26	.32	4.8	.21	.26	.04	.26	.32
29	4.7	2.5	439	1.3	.21	.39	19	.26	.32	.03	.11	.21
30	4.0	3.3	251	.95	------	.80	2.9	.39	.47	.04	.05	.32
31	2.9	------	2.3	.80	------	.39	------	.56	------	.07	.02	------
TOTAL	12,829.0	71.04	34,163.9	1,512.68	250.14	11.29	44.23	2,589.73	19.92	6.61	4.97	10.83
MEAN	414	2.37	1,102	48.8	8.63	.36	1.47	83.5	.66	.21	.16	.36
MAX	5,000	5.5	11,300	782	233	.80	19	1,480	2.8	1.6	.80	2.2
MIN	.10	.17	.80	.47	.21	.17	0	.17	0	0	0	.03
AC-FT	25,450	141	67,760	3,000	496	22	88	5,140	40	13	9.9	21

CAL YR 1971 TOTAL 50,840.56 MEAN 139 MAX 11,300 MIN .05 AC-FT 100,800
WTR YR 1972 TOTAL 51,514.34 MEAN 141 MAX 11,300 MIN 0 AC-FT 102,200

08050200 Elm Fork Trinity River subwatershed No. 6-0 near Muenster, Tex.

LOCATION.--Lat 33°37'13", long 97°24'15", Cooke County, near center of earthfill dam on unnamed tributary of Elm Fork Trinity River, 1.0 mile west of Farm Road 373, and 2.6 miles southwest of Muenster.

DRAINAGE AREA.--0.77 sq mi.

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

GAGE.--Water-stage recorder and flat-crested weir on concrete drop inlet. Datum of gage is 941.75 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE INFLOW.--16 years, 310 acre-ft per year.

AVERAGE OUTFLOW.--16 years, 272 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 7.48 cfs Oct. 20 (gage height, 23.17 ft); no outflow at times. Maximum inflow, 220 cfs (average for 5-minute interval) Oct. 19, computed from outflow and change in pool contents and adjusted for rainfall on pool surface during time of peak inflow; no inflow at times.
Period of record: Maximum outflow, 14.1 cfs Apr. 29, 1957 (gage height, 28.77 ft); maximum gage height, 33.16 ft Nov. 19, 1964; no outflow for many days each year. Maximum inflow, 842 cfs (average for 15-minute interval) Oct. 3, 1959; no inflow at times.

REMARKS.--Records good. The pool is formed by a rolled earthfill dam 800 ft long with an emergency spillway located at the left end of dam. The dam was completed in August 1956 and storage began in December 1956, although the first appreciable storage did not begin until Apr. 25, 1957. The outlet structure is a 2.5-foot square concrete drop inlet connected to a 17-inch concrete pipe. The concrete pipe has a steel baffle plate with an 8-inch circular opening at entrance. The crest of the drop inlet is at gage height 19.83 ft; crest of emergency spillway is at gage height 34.2 ft. There is also a valve-controlled 8-inch-diameter water-supply outlet at the bottom of the drop-inlet structure at gage height 9.33 ft. The capacity of pool at crest of the emergency spillway is 279 acre-ft, at crest of the drop inlet 75.1 acre-ft, and at the controlled outlet pipe 17.8 acre-ft. The capacity table was computed by the end-area method from a surface area table furnished by the Soil Conservation Service and was based on a sedimentation survey dated July 1964. A recording rain gage is located at the station.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	83.4	17.1	24.5	11.4	3.8	1.9	5.7	20.6	2.0	1.6	0.8	0.4
Outflow	79.7	15.7	23.1	10.1	2.5	.4	0	18.0	2.5	4.4	4.5	1.2
(†)	2.73	.07	-.07	-.28	-.44	-1.95	1.80	-2.38	-7.95	-9.71	-8.60	-2.31
(††)	5.97	1.17	0	.14	.25	.40	3.34	2.38	.35	.34	1.62	5.61

CAL YR 1971: Inflow 222 Outflow 182 † 3.07 †† 27.31
WTR YR 1972: Inflow 173 Outflow 162 † -29.1 †† 21.57

PEAK INFLOW (BASE, 100 CFS).--Oct. 19 (2245) 220 cfs.

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Weighted-mean rainfall, in inches.

08050300 Elm Fork Trinity River near Muenster, Tex.

LOCATION.--Lat 33°36'36", long 97°22'57", Cooke County, on left bank 40 ft upstream from bridge on Farm Road 373, 2.5 miles south of Muenster, 2.5 miles downstream from Long Branch, and 6.5 miles upstream from Brushy Elm Creek.

DRAINAGE AREA.--46.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 889.33 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--16 years, 19.3 cfs (5.61 inches per year, 13,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,490 cfs Oct. 3 (gage height, 11.09 ft); no flow at times.
Period of record: Maximum discharge, 5,900 cfs May 1, 1958 (gage height, 20.20 ft), from rating curve extended above 1,300 cfs on basis of indirect measurement of 3,440 cfs; no flow at times.
Maximum stage since at least 1900, about 23 ft in May 1935, from information by local resident.

REMARKS.--Records good. At end of year, flow from 33.5 sq mi above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 12,380 acre-ft below the flood-spillway crests, of which 10,500 acre-ft is floodwater-retarding capacity and 1,880 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Station operated as part of Elm Fork Trinity River Basin hydrologic cooperative program to evaluate rainfall-runoff relation, soil conservation practices, and the effects of floodwater-retarding structures. Four recording and one nonrecording rain gages are located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	23	13	22	7.0	4.7	2.3	8.4	.62	0		0
2	.11	18	173	21	7.4	4.5	2.4	7.0	.49	0		0
3	472	14	207	20	6.7	3.8	2.4	5.6	.33	.03		0
4	207	12	148	19	5.8	3.5	2.3	4.5	.31	.08		.14
5	155	11	254	17	6.0	3.5	2.4	3.7	.28	.03		.09
6	134	8.4	181	17	6.4	3.3	2.6	3.3	.26	.01		.04
7	112	5.7	150	17	5.9	3.3	2.6	3.6	.24	.01		.02
8	80	5.1	154	17	5.5	3.3	2.3	4.2	.24	0		0
9	42	5.1	241	18	5.4	3.2	2.3	3.8	.23	0		0
10	23	4.8	473	17	5.4	3.1	2.4	3.5	.20	.05		0
11	16	4.8	177	16	5.8	3.4	2.3	2.7	.20	.05		0
12	13	4.8	161	16	6.9	3.6	2.1	205	.22	.01		0
13	8.7	4.8	151	14	6.6	3.7	2.1	114	.25	0		0
14	7.0	4.8	143	9.7	6.5	3.9	3.0	87	.26	0		0
15	6.3	4.8	152	8.6	6.1	3.8	3.6	54	.24	0		0
16	6.0	4.5	133	8.1	5.7	3.8	3.1	24	.24	0		0
17	6.1	31	107	8.6	5.3	3.7	2.5	16	.22	0		0
18	8.0	39	91	8.5	5.0	3.5	2.2	9.5	.16	0		0
19	68	13	83	8.8	4.4	3.2	2.2	7.7	.14	0		0
20	402	9.5	69	8.7	4.5	3.1	12	6.2	.11	0		0
21	171	6.7	62	8.5	4.6	3.5	14	5.2	.09	0		0
22	160	8.0	54	8.1	5.0	3.4	9.6	4.3	.09	0		0
23	147	34	50	8.1	5.1	3.4	5.5	3.5	.07	0		0
24	133	18	43	7.9	5.3	3.7	4.1	2.9	.07	0		0
25	117	14	38	7.2	5.3	3.6	3.3	2.3	.06	0		0
26	100	13	34	7.1	4.8	3.5	2.7	1.8	.04	0		0
27	120	11	29	7.6	4.4	3.3	15	1.4	.02	0		0
28	96	10	25	7.7	4.2	3.3	13	1.1	.01	0		0
29	83	7.8	25	7.0	4.6	3.1	9.7	.94	.01	0		0
30	48	7.4	25	6.8	------	3.1	7.3	.80	0	0		0
31	31	------	23	6.5	------	2.3	------	.77	------	0		------
TOTAL	2,972.28	358.0	3,669	374.5	161.6	108.1	143.3	598.71	5.70	.27	0	.29
MEAN	95.9	11.9	118	12.1	5.57	3.49	4.78	19.3	.19	.009	0	.010
MAX	472	39	473	22	7.4	4.7	15	205	.62	.08	0	.14
MIN	.07	4.5	13	6.5	4.2	2.3	2.1	.77	0	0	0	0
AC-FT	5,900	710	7,280	743	321	214	284	1,190	11	.5	0	.6

CAL YR 1971 TOTAL 8,547.40 MEAN 23.4 MAX 840 MIN 0 AC-FT 16,950
WTR YR 1972 TOTAL 8,391.75 MEAN 22.9 MAX 473 MIN 0 AC-FT 16,650

08050500 Elm Fork Trinity River near Sanger, Tex.

LOCATION.--Lat 33°23'11", long 97°05'05", Denton County, on right bank on downstream side of pier of bridge on Farm Road 455, 4.1 miles downstream from Spring Creek, 5.0 miles upstream from Isle du Bois Creek, and 5.4 miles northeast of Sanger.

DRAINAGE AREA.--381 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 553.72 ft above mean sea level. Prior to May 7, 1955, at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--23 years, 142 cfs (102,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,100 cfs Dec. 10 (gage height, 26.46 ft); minimum, 1.3 cfs Sept. 20, 21.
Period of record: Maximum discharge, 35,000 cfs Feb. 9, 1966 (gage height, 27.71 ft); no flow at times.
Maximum stage since at least 1903, 30.7 ft in May 1908, from information by local residents. Flood of May 18, 1935, reached a stage of 29.7 ft, from floodmarks.

REMARKS.--Records good. At end of year, flow from 94.7 sq mi above this station was partly controlled by 41 floodwater-retarding structures with a total combined capacity of 30,920 acre-ft below the flood-spillway crests, of which 26,790 acre-ft is floodwater-retarding capacity and 4,130 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	47	37	92	38	24	15	69	16	3.4	1.9	7.5
2	8.3	41	447	89	38	23	15	28	14	3.5	1.8	9.1
3	4,410	36	2,450	86	38	22	15	26	13	3.5	1.7	3.1
4	1,910	32	775	81	35	22	14	24	11	3.7	1.8	2.4
5	458	32	1,850	76	34	20	14	22	9.6	3.6	1.8	5.3
6	289	32	2,070	71	34	20	15	21	8.4	3.6	1.8	4.1
7	227	29	624	71	34	20	15	21	8.2	3.5	1.7	2.4
8	171	27	1,810	73	34	19	14	23	7.1	3.4	1.7	1.7
9	127	26	7,220	77	33	18	14	22	7.1	3.1	1.8	1.7
10	85	25	10,700	78	33	18	13	21	7.1	2.9	2.6	1.6
11	61	25	2,730	72	33	18	14	20	6.9	2.9	2.9	1.6
12	46	24	1,050	69	37	18	13	1,280	6.9	2.7	2.6	1.6
13	38	23	695	62	38	18	13	1,080	7.5	2.9	2.6	1.5
14	31	23	582	58	38	18	16	195	8.8	2.8	2.6	1.6
15	26	23	2,100	49	36	18	18	105	7.4	2.8	2.6	1.6
16	22	23	516	47	35	18	19	63	7.2	2.8	2.3	1.6
17	21	22	365	47	32	18	14	39	6.5	2.7	2.3	1.7
18	20	397	267	48	30	18	13	32	5.9	2.6	2.3	1.6
19	159	150	234	50	29	17	13	28	5.7	2.3	2.2	1.5
20	2,500	63	207	49	29	18	586	27	5.6	2.4	2.0	1.4
21	885	44	184	47	28	19	156	24	5.3	2.5	2.0	8.7
22	367	38	171	46	28	20	56	21	5.7	2.4	1.7	8.4
23	246	79	157	45	28	17	25	20	4.7	2.4	1.6	3.4
24	200	112	150	44	28	19	18	20	4.7	2.5	1.8	3.0
25	178	64	131	41	27	18	15	19	4.6	2.5	2.2	2.1
26	144	48	124	40	26	17	13	19	4.3	2.1	2.4	1.9
27	155	42	117	40	25	17	17	19	3.9	2.0	2.2	3.0
28	170	38	103	41	25	16	59	19	3.9	2.0	2.0	102
29	115	35	95	41	24	15	49	19	3.8	2.1	1.9	7.6
30	92	33	100	40	------	15	106	19	3.6	2.1	1.8	2.8
31	63	------	101	38	------	15	------	19	------	2.0	2.0	------
TOTAL	13,235.3	1,633	38,162	1,808	927	573	1,377	3,364	214.4	85.7	64.6	197.5
MEAN	427	54.4	1,231	58.3	32.0	18.5	45.9	109	7.15	2.76	2.08	6.58
MAX	4,410	397	10,700	92	38	24	586	1,280	16	3.7	2.9	102
MIN	8.3	22	37	38	24	15	13	19	3.6	2.0	1.6	1.4
AC-FT	26,250	3,240	75,690	3,590	1,840	1,140	2,730	6,670	425	170	128	392

CAL YR 1971 TOTAL 60,765.1 MEAN 166 MAX 10,700 MIN 1.1 AC-FT 120,500
WTR YR 1972 TOTAL 61,641.5 MEAN 168 MAX 10,700 MIN 1.4 AC-FT 122,300

PEAK DISCHARGE (BASE, 4,000 CFS).--Oct. 3 (1630) 7,290 cfs (24.47 ft); Dec. 10 (0800) 15,100 cfs (26.46 ft).

08051000 Isle du Bois Creek near Pilot Point, Tex.

LOCATION.--Lat 33°24'23", long 97°00'45", Denton County, on left bank at downstream side of bridge on Farm Road 372, 2.4 miles downstream from Wolf Creek, 3.0 miles west of Pilot Point, and 6.3 miles upstream from mouth.

DRAINAGE AREA.--266 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 555.48 ft above mean sea level (Corps of Engineers bench mark). Prior to Feb. 8, 1958, water-stage recorder at site 1.0 mile upstream at datum 4.22 ft higher.

AVERAGE DISCHARGE.--23 years, 111 cfs (80,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,860 cfs Dec. 10 (gage height, 25.67 ft); no flow June 28 to Aug. 11, Aug. 29, 30, Sept. 14-23.
Period of record: Maximum discharge, 22,700 cfs Apr. 26, 1957 (gage height, 28.2 ft, present site and datum); no flow at times each year.
Maximum stage since at least 1900, 30.4 ft in May 1908, present site and datum, from information by local resident.

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

REVISIONS (WATER YEARS).--WSP 1512: 1950. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	5.8	9.4	20	9.2	4.6	2.1	55	.19		0	18
2	1.0	4.1	217	19	8.2	4.4	1.9	21	.19		0	2.7
3	1,720	3.0	1,500	19	7.6	6.6	1.8	9.4	.20		0	1.5
4	2,550	4.3	954	24	10	4.3	1.7	5.2	.13		0	6.4
5	656	3.9	868	26	9.2	3.8	1.6	2.4	.14		0	21
6	57	2.7	2,160	14	8.0	5.2	1.8	1.6	.13		0	13
7	19	6.4	959	12	7.8	3.8	1.8	1.5	.09		0	2.2
8	7.9	3.5	706	13	9.8	3.3	1.6	1.4	.07		0	.83
9	4.2	2.0	5,880	13	6.6	5.0	1.6	1.3	.06		0	.32
10	4.7	1.8	9,460	13	6.1	3.8	1.4	1.5	.06		0	.08
11	2.5	1.6	4,200	12	5.8	3.4	1.4	1.5	.06		0	.13
12	1.3	1.6	436	13	6.6	3.6	1.5	356	.05		62	.05
13	1.1	1.5	147	11	7.6	3.7	1.8	603	.06		2.8	.01
14	1.2	1.4	116	17	7.6	3.8	2.6	140	.47		2.7	0
15	1.6	1.3	916	20	7.5	3.5	4.1	40	.43		.67	0
16	1.8	1.3	737	13	7.0	3.5	3.9	16	.20		.15	0
17	1.3	1.4	168	8.6	6.5	3.2	3.4	8.8	.10		.04	0
18	60	532	86	9.1	6.3	3.1	2.8	5.9	.05		.02	0
19	728	552	54	9.7	6.5	3.0	2.3	4.1	.04		23	0
20	3,460	57	45	10	5.4	3.0	2.0	3.2	.03		1.2	0
21	3,070	20	37	9.9	4.8	2.8	27	2.6	.01		.15	0
22	176	11	34	10	4.6	2.7	12	2.1	.31		.02	0
23	61	29	27	9.2	5.4	2.9	4.8	1.6	.07		.01	0
24	32	29	25	8.7	5.4	6.8	3.1	1.4	.03		1.6	4.3
25	20	18	24	8.5	5.1	5.1	2.2	1.2	.02		1.4	4.4
26	14	11	23	8.6	4.9	3.6	2.0	.92	.01		.35	1.3
27	11	7.4	23	8.0	10	3.0	2.4	.70	.01		.09	.46
28	9.1	5.7	28	8.0	5.3	2.7	3.0	.56	0		.01	.13
29	7.6	4.2	23	9.9	4.5	2.6	13	.48	0		0	8.6
30	6.2	3.9	19	8.6	------	2.2	31	.37	0		0	2.0
31	5.8	------	20	9.8	------	2.4	------	.25	------		1.7	------
TOTAL	12,693.0	1,327.8	29,901.4	395.6	199.3	115.4	143.6	1,290.98	3.21	0	97.91	87.41
MEAN	409	44.3	965	12.8	6.87	3.72	4.79	41.6	.11	0	3.16	2.91
MAX	3,460	552	9,460	26	10	6.8	31	603	.47	0	62	21
MIN	1.0	1.3	9.4	8.0	4.5	2.2	1.4	.25	0	0	0	0
AC-FT	25,180	2,630	59,310	785	395	229	285	2,560	6.4	0	194	173

CAL YR 1971 TOTAL 50,989.29 MEAN 140 MAX 9,460 MIN 0 AC-FT 101,100
WTR YR 1972 TOTAL 46,255.61 MEAN 126 MAX 9,460 MIN 0 AC-FT 91,750

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE
10- 3	2230	18.55	2,950
10-20	2300	23.09	5,240
12-10	0930	25.67	9,860

08051500 Clear Creek near Sanger, Tex.

LOCATION.--Lat 33°20'09", long 97°10'44", Denton County, on right bank at downstream side of bridge on county road (formerly U.S. Highway 77), 1,000 ft downstream from Interstate Highway 35 and U.S. Highway 77, 1,350 ft downstream from Duck Creek, 1.1 miles upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 1.8 miles south of Sanger.

DRAINAGE AREA.--295 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 587.23 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--23 years, 75.4 cfs (54,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,340 cfs Dec. 10 (gage height, 20.95 ft); no flow July 12 to Sept. 30.
Period of record: Maximum discharge, 18,200 cfs Sept. 13, 1950 (gage height, 24.80 ft); no flow at times in most years. Maximum stage since at least 1880, 31.5 ft in May 1908, from information by Gulf, Colorado, and Santa Fe Railway Co. Flood in May 1935 reached a stage of 29.0 ft, from information by State Highway Department.

REMARKS.--Records good. No appreciable diversion above station. At end of year, flow from 153 sq mi above this station was partly controlled by 65 floodwater-retarding structures with a total capacity of 44,480 acre-ft below the flood-spillway crests, of which 39,310 acre-ft is floodwater-retarding capacity and 5,170 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1950, 1955. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	38	32	75	32	20	13	85	6.4	1.5		
2	1.3	34	130	69	34	19	13	43	6.0	1.5		
3	1,380	32	909	64	29	18	13	30	5.7	1.2		
4	562	28	420	59	28	18	12	24	5.3	1.3		
5	267	27	737	58	29	17	11	20	4.9	2.0		
6	130	24	900	56	29	16	12	19	4.6	1.6		
7	68	21	410	54	28	17	12	20	4.4	.98		
8	43	19	823	51	26	17	11	25	3.8	.55		
9	31	16	2,540	55	26	15	10	21	3.6	.29		
10	23	13	4,540	55	25	15	11	17	3.5	.13		
11	20	13	1,510	54	26	16	12	15	3.2	.04		
12	17	13	1,240	53	31	17	12	1,040	3.0	0		
13	15	13	1,040	51	33	17	11	490	2.8	0		
14	15	12	824	46	31	17	14	220	5.3	0		
15	13	12	1,030	38	29	16	20	119	4.3	0		
16	13	12	500	35	26	17	20	75	4.7	0		
17	12	12	300	43	25	16	13	49	4.0	0		
18	14	144	163	43	24	15	10	32	3.1	0		
19	39	71	84	42	22	15	10	25	2.5	0		
20	1,710	44	63	41	21	15	237	20	2.1	0		
21	644	34	66	40	22	16	150	16	6.6	0		
22	320	29	91	39	22	16	71	14	6.1	0		
23	163	63	100	39	21	15	34	12	6.0	0		
24	76	72	97	38	23	21	23	11	5.1	0		
25	51	54	98	35	23	22	17	10	3.1	0		
26	47	46	86	32	22	18	13	9.0	2.2	0		
27	56	39	77	34	20	17	57	8.3	1.4	0		
28	63	34	71	35	20	16	80	7.7	.97	0		
29	48	30	69	34	20	14	46	7.4	1.1	0		
30	44	27	78	33	------	13	57	7.0	.96	0		
31	42	------	83	32	------	13	------	6.8	------	0		------
TOTAL	5,928.8	1,026	19,111	1,433	747	514	1,025	2,498.2	116.73	11.09	0	0
MEAN	191	34.2	616	46.2	25.8	16.6	34.2	80.6	3.89	.36	0	0
MAX	1,710	144	4,540	75	34	22	237	1,040	6.6	2.0	0	0
MIN	1.3	12	32	32	20	13	10	6.8	.96	0	0	0
AC-FT	11,760	2,040	37,910	2,840	1,480	1,020	2,030	4,960	232	22	0	0

CAL YR 1971 TOTAL 28,604.15 MEAN 78.4 MAX 4,540 MIN 0 AC-FT 56,740
WTR YR 1972 TOTAL 32,410.82 MEAN 88.6 MAX 4,540 MIN 0 AC-FT 64,290

PEAK DISCHARGE (BASE, 3,000 CFS).--Oct. 20 (0930) 4,580 cfs (16.81 ft); Dec. 10 (0330) 8,340 cfs (20.95 ft).

08052630 Little Elm Creek subwatershed No. 10 near Gunter, Tex.

LOCATION.--Lat 33°24'33", long 96°48'41", Grayson County, near center of dam on Walnut Fork tributary to Little Elm Creek, 1.6 miles upstream from mouth, and 4.7 miles southwest of Gunter.

DRAINAGE AREA.--2.10 sq mi.

PERIOD OF RECORD.--April 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 615.51 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE INFLOW.--6 years, 855 acre-ft per year.

AVERAGE OUTFLOW.--6 years, 780 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 27.1 cfs Dec. 10 (gage height, 24.40 ft); no outflow most of time. Maximum inflow, 1,450 cfs (average for 5-minute interval) Nov. 17, computed and adjusted as explained below; no flow at times.
Period of record: Maximum outflow, 31.9 cfs Apr. 30, 1966 (gage height, 27.09 ft); no outflow most of time each year. Maximum inflow, 3,240 cfs (average for 5-minute interval) May 30, 1967, computed from outflow and change in pool contents and adjusted for rainfall on pool surface during time of peak inflow: no inflow at times each year.

REMARKS.--Records fair. Dam completed Mar. 16, 1966, and storage began in April 1966. Pool is formed by rolled-fill earthen dam 1,588 ft long, with a 130-foot wide emergency spillway at left end of dam, with crest at gage height 29.2 ft. Outlet structure is a 2.0- by 4.0-foot uncontrolled concrete drop-inlet structure with crest at gage height 20.00 ft and connected to a 24-inch concrete pipe with invert at gage height 13.0 ft. There is also a 12-inch controlled slide gate used as a water-supply outlet that is connected to the drop inlet at gage height 13.5 ft. Pool capacity is 868 acre-ft at spillway crest, 159 acre-ft at crest of drop inlet, and 40 acre-ft at controlled slide gate. Capacity table is based on Soil Conservation Service map prepared prior to construction and adjusted for borrow by the Geological Survey. Recording rain gage located at station. Records of precipitation and hydrologic data for selected storms are published elsewhere in supplementary basic-data report.

REVISIONS.--WRD Texas 1968: Drainage area.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	210	214	372	0	2.8	2.6	9.1	3.4	0	0.1	1.7	33.4
Outflow	187	212	383	1.0	0	0	23.7	15.9	50.4	6.2	0	0
(†)	25.0	3.7	-4.0	-6.4	-5.2	-8.6	-24.4	-22.8	-60.2	-9.4	-.1	30.8
(††)	4.90	3.74	5.09	0	.24	1.44	2.89	1.92	1.41	.30	3.25	4.12

CAL YR 1971: Inflow 940 Outflow 843 † 16.9 †† 32.60
WTR YR 1972: Inflow 849 Outflow 879 † -81.6 †† 29.30

PEAK INFLOW (BASE, 100 CFS)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
10-18	1255	141	11-17	2010	1,450
10-19	0050	160	12- 9	unknown	a500

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Weighted-mean rainfall, in inches.
a Estimated.

08052650 Little Elm Creek near Celina, Tex.

LOCATION.--Lat 33°21'55", long 96°49'25", Collin County, on left bank at downstream side of bridge on Farm Road 455, 3.6 miles northwest of Celina, and 10 miles upstream from Mustang Creek.

DRAINAGE AREA.--46.7 sq mi.

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 582.4 ft above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--6 years, 29.1 cfs (8.46 inches per year, 21,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,130 cfs Dec. 10 (gage height, 11.56 ft); no flow for many days.
Period of record: Maximum discharge, 5,340 cfs May 31, 1967 (gage height, 13.32 ft); no flow for many days each year.

REMARKS.--Records good. Small diversions for irrigation above station. Four standard and two recording rain gages are located in basin above station. At end of year, flow from 28.4 sq mi above this station was partly controlled by 12 floodwater-retarding structures with a total combined capacity of 9,490 acre-ft below the flood-spillway crests, of which 7,960 acre-ft is floodwater-retarding capacity and 1,530 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Texas 1970: 1968-69, Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.1	31	4.0	.20	0	0	13				0
2	1.8	3.1	372	4.0	.20	0	0	1.4				0
3	292	2.4	364	3.3	.10	0	0	.07				0
4	163	1.8	197	3.0	.05	0	0	0				0
5	78	1.3	663	1.9	.05	0	0	0				0
6	46	.85	362	1.4	.05	0	0	0				0
7	23	.74	266	1.4	.02	0	0	.07				0
8	14	.50	508	1.5	.02	0	0	.05				0
9	9.2	.20	1,290	1.9	.03	0	0	.02				0
10	5.5	.14	1,050	2.4	.03	0	0	.01				0
11	3.5	.07	444	1.8	.03	0	0	.01				0
12	2.3	.05	392	1.3	.20	0	0	72				0
13	1.7	.02	357	.96	.50	0	0	18				0
14	1.2	.01	388	.74	.14	0	0	7.9				0
15	.85	0	423	.20	.05	0	0	4.0				0
16	.50	0	226	.14	.02	0	0	1.1				0
17	2.2	231	149	.02	.03	0	0	.10				0
18	86	737	100	.05	.02	0	0	3.0				0
19	495	277	70	.10	.01	0	0	4.1				0
20	704	208	55	.28	0	0	0	0				0
21	281	132	38	.50	0	0	0	0				0
22	222	102	25	.38	0	0	0	0				88
23	143	138	18	.20	0	0	0	0				8.9
24	76	67	13	.14	0	.95	0	0				.74
25	48	42	10	.10	0	.96	0	0				.05
26	31	27	8.3	.05	0	.10	0	0				5.0
27	24	18	7.1	.05	0	.01	0	0				22
28	16	12	5.8	.62	0	0	0	0				.62
29	11	9.2	4.6	.50	0	0	.01	0				0
30	7.3	9.4	5.7	.38	------	0	23	0				0
31	5.5	------	4.6	.20	------	0	------	0	------			------
TOTAL	2,797.25	2,024.88	7,847.1	33.51	1.75	2.02	23.01	124.83	0	0	0	125.31
MEAN	90.2	67.5	253	1.08	.060	.065	.77	4.03	0	0	0	4.18
MAX	704	737	1,290	4.0	.50	.96	23	72	0	0	0	88
MIN	.50	0	4.6	.02	0	0	0	0	0	0	0	0
CFSM	1.93	1.45	5.42	.02	.001	.001	.02	.09	0	0	0	.09
IN.	2.23	1.61	6.25	.03	.001	.001	.02	.10	0	0	0	.10
AC-FT	5,550	4,020	15,560	66	3.5	4.0	46	248	0	0	0	249

CAL YR 1971 TOTAL 13,780.38 MEAN 37.8 MAX 1,290 MIN 0 CFSM .81 IN 10.98 AC-FT 27,330
WTR YR 1972 TOTAL 12,979.66 MEAN 35.5 MAX 1,290 MIN 0 CFSM .76 IN 10.34 AC-FT 25,750

08052700 Little Elm Creek near Aubrey, Tex.

LOCATION.--Lat 33°17'00", long 96°53'33", Denton County, on left bank at downstream side of bridge on Farm Road 1385, 1.5 miles upstream from Mustang Creek, 5.5 miles east of Aubrey, and 18 miles upstream from Lewisville Dam.

DRAINAGE AREA.--75.5 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 534.76 ft above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--16 years, 40.3 cfs (29,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,780 cfs Dec. 10 (gage height, 15.08 ft); no flow for many days.
Period of record: Maximum discharge, 7,830 cfs Apr. 26, 1957 (gage height, 17.34 ft); no flow at times each year.
Maximum stage since about 1900, 18.2 ft in May 1941, from information by local residents.

REMARKS.--Records good. Small diversions for irrigation above station. Ten rain gages, six standard and four recording gages, are operated in basin above station. At end of year, flow from 35.7 sq mi above this station was partly controlled by 16 floodwater-retarding structures with a total combined capacity of 12,340 acre-ft below the flood-spillway crests, of which 10,260 acre-ft is floodwater-retarding capacity and 2,080 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	5.6	26	6.4	.56	.07	.08	15				0
2	2.5	4.2	309	6.1	.45	.04	.03	7.3				0
3	224	3.4	677	5.5	.30	.02	.02	1.1				0
4	368	2.5	262	4.6	.30	.02	.01	.06				0
5	101	1.8	650	3.7	.26	.02	0	0				0
6	52	1.0	614	3.0	.26	.02	.01	0				0
7	26	.50	366	2.7	.20	.01	.01	0				0
8	15	.23	376	3.0	.17	.02	.01	0				0
9	11	.14	2,050	3.2	.20	0	0	.01				0
10	7.3	.12	2,030	3.4	.12	0	0	0				0
11	5.1	.12	513	3.6	.12	0	0	0				0
12	3.6	.10	424	2.7	.26	0	0	95				0
13	2.6	.06	395	2.2	.63	0	0	26				0
14	1.8	.05	398	1.6	.56	0	0	7.6				0
15	.86	.04	529	.95	.56	0	0	4.1				0
16	.40	8.9	319	.70	.35	.50	0	2.0				0
17	.23	183	230	.45	.26	.56	0	.35				0
18	24	1,090	163	.40	.17	.50	0	.95				0
19	503	375	115	.50	.08	.26	0	1.2				0
20	1,080	263	80	.50	.07	.23	0	.78				0
21	424	171	50	.56	.07	.30	0	.05				8.1
22	303	112	40	.63	.08	.12	0	0				191
23	214	230	31	.56	.06	.06	0	0				134
24	114	94	25	.50	.10	.70	.02	0				18
25	56	56	21	.30	.12	.95	0	0				6.3
26	34	38	18	.26	.12	6.6	0	0				3.0
27	25	26	16	.35	.07	13	1.1	0				37
28	18	12	14	.70	.06	2.9	2.3	0				10
29	13	8.7	11	.95	.07	1.7	2.9	0				4.2
30	9.3	8.2	11	.78	------	.40	42	0				2.1
31	7.2	------	8.4	.56	------	.20	------	0	------			------
TOTAL	3,650.09	2,695.66	10,771.4	61.35	6.63	29.20	48.49	161.50	0	0	0	413.7
MEAN	118	89.9	347	1.98	.23	.94	1.62	5.21	0	0	0	13.8
MAX	1,080	1,090	2,050	6.4	.63	13	42	95	0	0	0	191
MIN	.23	.04	8.4	.26	.06	0	0	0	0	0	0	0
CFSM	1.56	1.19	4.60	.03	.003	.01	.02	.07	0	0	0	.18
IN.	1.80	1.33	5.31	.03	.003	.01	.02	.08	0	0	0	.20
AC-FT	7,240	5,350	21,370	122	13	58	96	320	0	0	0	821

CAL YR 1971 TOTAL 18,461.93 MEAN 50.6 MAX 2,050 MIN 0 CFSM .67 IN 9.10 AC-FT 36,620
WTR YR 1972 TOTAL 17,838.02 MEAN 48.7 MAX 2,050 MIN 0 CFSM .65 IN 8.79 AC-FT 35,380

08052800 Lewisville Lake near Lewisville, Tex.

LOCATION.--Lat 33°04'09", long 96°57'51", Denton County, in intake structure of Lewisville Dam on Elm Fork Trinity River, 2 miles upstream from bridge on State Highway 121, 2.4 miles northeast of Lewisville, 12 miles upstream from Denton Creek, and at mile 30.0.

DRAINAGE AREA.--1,660 sq mi.

PERIOD OF RECORD.--November 1954 to current year. Prior to October 1970, published as Garza-Little Elm Reservoir near Lewisville.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 17, 1955, nonrecording gage at site 4,000 ft upstream at same datum.

EXTREMES.--Current year: Maximum contents, 765,900 acre-ft Dec. 16 (elevation, 525.78 ft); minimum, 343,200 acre-ft Sept. 21 (elevation, 509.14 ft).
Period of record: Maximum contents, 1,146,000 acre-ft June 3, 1957 (elevation, 535.57 ft); minimum since initial filling in 1957, 307,200 acre-ft Feb. 29, 1964 (elevation, 507.00 ft).

REMARKS.--Lake is formed by a rolled-fill dam, 32,888 ft long including a 560-foot uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of a 16-foot-diameter conduit controlled by three 6.5- by 13-foot broome-type gates and two 60-inch steel pipes controlled by service valves. Deliberate impoundment of water began Nov. 1, 1954, and main dam was completed in August 1955. Lake built for flood control and water conservation. The city of Dallas derives most of its water for municipal use from this lake. Figures given herein represent total contents. Capacity table based on survey made in 1960. At end of year, flow from 296 sq mi above this station was partly controlled by 128 floodwater-retarding structures with a total combined capacity of 92,391 acre-ft below the flood-spillway crests, of which 80,409 acre-ft is floodwater-retarding capacity and 11,982 acre-ft is sediment-pool capacity. Three structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,260 acre-ft, of which 268 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	560.0	-
Crest of spillway	532.0	989,700
Top of conservation storage	515.0	464,500
Inverts of lowest intakes to wet wells	481.0	44,080
Invert of three 6.5- by 13-foot broome-type gates	448.0	33

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

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

509.0	340,800	515.0	464,500	521.0	619,100
511.0	377,100	517.0	512,600	523.0	678,500
513.0	419,300	519.0	563,600	526.0	773,100

08052800 Lewisville Lake near Lewisville, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	348,900	469,500	466,200	642,000	465,300	460,000	449,200	437,400	438,300	414,100	380,000	356,400
2	348,900	468,800	474,700	632,500	465,000	459,500	448,500	437,200	437,600	413,000	378,300	355,900
3	372,600	468,300	487,200	626,200	464,100	459,000	448,700	436,700	436,500	411,700	377,300	355,400
4	394,100	467,100	495,000	616,200	463,900	458,600	447,600	435,600	435,800	411,700	376,400	356,200
5	404,700	466,200	519,700	605,400	464,300	457,900	446,700	434,700	434,700	410,400	375,200	355,900
6	406,500	465,300	534,100	597,200	465,000	457,900	446,000	434,300	433,600	408,900	373,900	355,400
7	407,400	464,300	539,400	587,400	464,100	457,900	445,100	436,300	432,500	407,400	372,800	354,500
8	408,000	463,400	555,400	578,800	463,900	456,800	445,100	435,800	431,300	406,300	371,500	353,800
9	408,000	463,600	622,300	570,100	463,900	456,300	443,000	434,900	430,000	405,400	371,500	352,700
10	407,600	462,700	703,700	561,100	463,900	456,100	441,400	434,700	428,700	404,500	370,500	352,000
11	407,100	462,000	744,600	552,000	464,100	455,600	440,500	433,600	428,000	403,200	370,400	351,000
12	406,900	461,800	756,600	543,000	463,900	455,100	439,400	436,900	427,600	403,400	370,000	350,300
13	406,700	460,600	759,800	535,100	463,200	455,100	438,300	440,900	427,500	402,600	370,200	349,200
14	406,300	459,700	761,400	525,200	464,100	454,200	437,800	445,300	427,300	401,100	369,400	348,300
15	405,800	459,700	765,600	516,700	463,400	454,200	438,900	446,200	426,900	400,200	369,000	346,900
16	405,800	459,300	764,700	505,800	463,400	454,200	438,500	446,700	426,400	399,300	368,300	346,800
17	406,700	467,400	758,800	497,200	463,400	454,000	436,900	446,700	425,500	398,000	367,700	345,900
18	413,900	474,200	751,400	489,200	462,900	453,500	435,600	446,700	425,300	396,800	367,000	345,200
19	436,000	476,600	744,300	481,600	462,300	453,100	435,600	446,700	424,200	396,200	365,300	344,300
20	460,600	477,500	738,200	476,800	462,000	452,600	435,600	446,400	423,300	397,200	364,900	343,600
21	477,800	477,500	730,600	473,300	462,000	452,600	436,700	445,700	424,400	393,700	363,200	343,200
22	484,900	479,400	722,800	470,900	462,000	451,900	436,500	445,100	424,000	393,100	362,500	344,800
23	486,100	480,600	715,900	468,300	461,300	451,900	436,000	444,600	423,100	392,100	361,500	345,000
24	486,800	479,200	708,000	467,400	462,000	453,500	434,900	444,100	422,200	391,200	360,000	344,800
25	487,500	478,000	701,600	466,900	461,300	452,400	433,800	443,900	421,500	390,000	361,000	344,300
26	487,200	475,400	692,900	466,900	461,100	451,900	433,400	443,200	420,400	388,200	360,800	344,500
27	487,000	472,300	685,200	467,400	460,900	452,900	436,300	442,500	418,900	386,900	359,800	344,500
28	483,900	471,400	675,900	466,900	460,600	452,600	436,700	442,300	418,000	385,500	358,900	344,300
29	480,400	469,300	666,600	466,700	460,200	451,900	436,700	441,600	417,300	384,500	357,800	343,900
30	476,800	467,400	657,600	466,000	------	450,800	436,300	440,500	415,600	383,000	356,900	343,600
31	472,100	------	648,300	466,000	------	450,300	------	439,400	------	381,600	356,600	------
(†)	515.32	515.12	522.06	515.06	514.81	514.38	513.76	513.90	512.83	511.22	509.90	509.16
(*)	+122,700	-4,700	+180,900	-182,300	-5,800	-9,900	-14,000	+3,100	-23,800	-34,000	-25,000	-13,000
(††)	699	616	548	543	545	615	636	716	953	1,080	935	759
MAX	487,500	480,600	765,600	642,000	465,300	460,000	449,200	446,700	438,300	414,100	380,000	356,400
MIN	348,900	459,300	466,200	466,000	460,200	450,300	433,400	433,600	415,600	381,600	356,600	343,200

CAL YR 1971..... * +212,000 †† 8,220 MAX 765,600 MIN 337,000
WTR YR 1972..... * -5,800 †† 8,640 MAX 765,600 MIN 343,200

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Denton.

08053000 Elm Fork Trinity River near Lewisville, Tex.

LOCATION.--Lat 33°02'43", long 96°57'41", Denton County, on left bank at downstream side of pier of bridge on State Highway 121, 1.8 miles east of Lewisville, 1.9 miles downstream from Lewisville Lake, and 8.3 miles upstream from Denton Creek.

DRAINAGE AREA.--1,673 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 432.39 ft above mean sea level (Corps of Engineers bench mark). Prior to Jan. 6, 1950, nonrecording gage 0.6 mile upstream at datum 3.26 ft lower.

AVERAGE DISCHARGE.--23 years, 558 cfs (404,300 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 5,010 cfs Dec. 29, 30 (gage height, 22.02 ft); minimum daily, 33 cfs May 20.
Period of record: Maximum discharge, 21,700 cfs Sept. 15, 1950 (gage height, 30.75 ft); minimum daily, 0.8 cfs Jan. 19, 1955. Maximum discharge since construction of Lewisville Dam in 1954, 11,400 cfs May 27, 1957 (includes about 4,000 cfs passing over spillway of Lewisville Dam and bypassing gage).
Maximum stage since at least 1907, 33.8 ft in 1908, present site and datum, from information by local resident.

REMARKS.--Records good. Flow regulated by Lewisville Lake (see preceding page) since November 1954. Most of flow is used by city of Dallas for municipal supply (see station 08055500).

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	1,520	853	5,000	184	159	126	247	302	244	418	213
2	132	285	499	4,980	183	158	142	190	279	310	400	178
3	218	279	582	4,950	184	159	202	176	316	316	380	177
4	65	283	560	4,920	176	160	246	209	285	219	341	179
5	43	285	514	4,900	167	160	256	209	291	207	313	169
6	75	285	528	4,890	167	168	333	158	345	260	411	229
7	75	285	503	4,950	152	199	435	89	361	286	485	247
8	67	195	484	4,960	138	183	437	90	349	350	475	364
9	63	146	1,270	4,950	168	182	437	144	324	351	407	440
10	100	153	1,510	4,930	191	182	439	124	333	354	245	329
11	100	109	696	4,920	172	182	419	90	336	349	221	332
12	100	242	516	4,910	157	182	379	87	314	344	221	327
13	73	389	510	4,900	157	183	359	86	269	357	222	299
14	112	173	1,690	4,890	157	184	359	105	200	291	200	328
15	156	173	3,350	4,870	156	174	267	113	153	248	193	374
16	78	167	4,260	4,860	130	134	174	70	153	314	237	289
17	86	161	4,410	4,840	158	134	369	40	187	315	312	204
18	115	195	4,380	4,820	151	134	322	39	180	314	324	203
19	421	245	4,360	4,590	133	156	267	39	180	301	287	273
20	1,260	242	4,350	3,490	162	183	267	33	197	254	334	273
21	42	242	4,330	1,990	207	182	268	47	250	313	414	235
22	45	246	4,320	1,350	195	181	267	73	156	305	334	175
23	73	343	4,300	1,330	159	198	272	73	162	243	233	174
24	52	727	4,280	865	160	209	367	59	251	293	289	147
25	76	1,070	4,270	292	160	170	338	37	241	371	279	140
26	131	1,060	4,300	262	159	170	301	173	241	465	254	195
27	430	1,060	4,540	202	160	144	284	122	326	408	271	166
28	1,240	1,060	4,940	190	176	139	192	153	342	409	281	153
29	2,110	1,060	5,010	188	203	167	189	156	370	409	341	183
30	2,110	1,060	5,010	186	------	161	203	296	302	367	340	174
31	2,110	------	5,000	185	------	127	------	236	------	364	313	------
TOTAL	11,889	13,740	86,125	103,560	4,822	5,204	8,916	3,763	7,995	9,931	9,775	7,169
MEAN	384	458	2,778	3,341	166	168	297	121	267	320	315	239
MAX	2,110	1,520	5,010	5,000	207	209	439	296	370	465	485	440
MIN	42	109	484	185	130	127	126	33	153	207	193	140
AC-FT	23,580	27,250	170,800	205,400	9,560	10,320	17,680	7,460	15,860	19,700	19,390	14,220

CAL YR 1971 TOTAL 160,413 MEAN 439 MAX 5,010 MIN 16 AC-FT 318,200
WTR YR 1972 TOTAL 272,889 MEAN 746 MAX 5,010 MIN 33 AC-FT 541,300

08053500 Denton Creek near Justin, Tex.

LOCATION.--Lat 33°07'08", long 97°17'25", Denton County, on right bank at downstream side of bridge on Farm Road 156, 100 ft upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.2 miles north of Justin, 3.0 miles upstream from Olivers Creek, 12.9 miles upstream from Harriet Creek, and 32.9 miles upstream from Grapevine Dam.

DRAINAGE AREA.--400 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 606.66 ft above mean sea level.

AVERAGE DISCHARGE.--23 years, 81.7 cfs (59,190 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,600 cfs Dec. 10 (gage height, 15.54 ft); no flow for many days.
Period of record: Maximum discharge, 29,800 cfs May 24, 1957 (gage height, 17.64 ft); no flow at times 1949-65, 1967-72.
Flood in May 1935 was the highest flood since 1908 and reached a stage of 20.6 ft at site about 1,500 ft upstream, from information by local resident. Flood in May 1908 reached a stage about 1.0 ft higher than flood in May 1935, from information by local resident.

REMARKS.--Records good. Several small diversions above station. At end of year, flow from 170 sq mi above this station was partly controlled by 87 floodwater-retarding structures with a total combined capacity of 52,040 acre-ft below the flood-spillway crests, of which 45,260 acre-ft is floodwater-retarding capacity and 6,780 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 931 acre-ft, of which 100 acre-ft 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).--WSP 1732: 1950(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	15	17	60	33	29	15	80	8.8	.07	0	.38
2	1.8	13	106	63	36	27	15	38	8.1	.01	0	.62
3	936	11	545	59	33	26	15	23	7.6	0	0	.05
4	1,020	9.1	199	55	32	25	14	20	6.8	0	0	1.4
5	309	8.0	386	42	32	25	14	16	4.6	0	0	3.5
6	179	7.2	488	46	34	24	13	13	2.3	.01	0	.53
7	86	7.3	201	54	33	24	13	14	1.9	.01	0	.75
8	59	6.8	1,020	52	31	25	10	43	1.5	0	0	1.3
9	42	6.3	2,090	55	30	24	8.6	28	1.1	0	0	.36
10	29	6.2	5,570	54	30	23	8.0	19	.73	0	0	.09
11	21	6.9	1,900	50	31	25	8.1	15	1.3	0	0	.01
12	18	6.9	746	46	36	26	8.4	916	1.5	0	0	0
13	15	6.9	471	45	40	27	8.5	2,020	1.3	0	1.9	0
14	13	7.0	341	40	38	27	8.7	562	1.7	0	1.2	0
15	11	7.1	550	33	35	26	19	314	2.0	0	.23	0
16	9.5	6.9	319	31	32	26	23	195	1.6	0	.02	0
17	9.0	8.7	224	37	31	26	12	111	1.2	0	0	0
18	16	71	160	42	30	26	7.3	80	1.2	0	0	0
19	58	47	132	42	30	25	6.4	63	.64	0	0	0
20	1,230	29	114	40	28	25	38	50	.44	0	0	0
21	486	22	100	38	29	26	151	39	3.3	0	0	0
22	178	19	90	37	30	27	50	32	25	0	0	0
23	98	58	84	37	30	27	24	30	31	0	0	0
24	57	58	80	37	30	54	16	24	17	0	0	0
25	41	39	78	34	30	41	11	21	7.9	0	18	0
26	32	29	74	31	29	25	9.0	18	4.0	0	15	0
27	30	25	73	32	28	22	202	15	2.1	0	3.1	0
28	37	20	69	35	27	20	146	14	.91	0	1.1	0
29	27	15	63	34	27	17	56	13	.37	0	.32	0
30	22	15	67	33	------	16	39	12	.20	0	.03	0
31	18	------	63	32	------	15	------	11	------	0	0	------
TOTAL	5,091.2	587.3	16,420	1,326	915	801	969.0	4,849	148.09	.10	40.90	8.99
MEAN	164	19.6	530	42.8	31.6	25.8	32.3	156	4.94	.003	1.32	.30
MAX	1,230	71	5,570	63	40	54	202	2,020	31	.07	18	3.5
MIN	1.8	6.2	17	31	27	15	6.4	11	.20	0	0	0
AC-FT	10,100	1,160	32,570	2,630	1,810	1,590	1,920	9,620	294	.2	81	18

CAL YR 1971 TOTAL 24,982.98 MEAN 68.4 MAX 5,570 MIN 0 AC-FT 49,550
WTR YR 1972 TOTAL 31,156.58 MEAN 85.1 MAX 5,570 MIN 0 AC-FT 61,800

PEAK DISCHARGE (BASE, 3,000 CFS).--Dec. 10 (0100) 7,600 cfs (15.54 ft); May 13 (0745) 3,020 cfs (13.10 ft).

08054500 Grapevine Lake near Grapevine, Tex.

LOCATION.--Lat 32°58'21", long 97°03'22", Tarrant County, in intake structure of Grapevine Dam on Denton Creek, 2.7 miles northeast of Grapevine, 4.3 miles upstream from bridge on State Highway 121, and 11.7 miles upstream from mouth.

DRAINAGE AREA.--695 sq mi.

PERIOD OF RECORD.--July 1952 to current year. Prior to October 1970, published as Grapevine Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 16, 1953, nonrecording gage at site 1,000 ft upstream at present datum.

EXTREMES.--Current year: Maximum contents, 226,600 acre-ft Dec. 16 (elevation, 539.86 ft); minimum, 131,100 acre-ft Oct. 2 (elevation, 526.30 ft).
Period of record: Maximum contents, 445,800 acre-ft June 6, 1957 (elevation, 560.80 ft); minimum since lake first filled in 1957, 114,000 acre-ft Mar. 6, 1964 (elevation, 523.33 ft).

REMARKS.--Lake is formed by a rolled earthfill dam, 12,850 ft long including a 500-foot uncontrolled off-channel concrete gravity spillway with ogee weir section. Dam completed in June 1952 and deliberate impoundment of water began July 3, 1952. Figures given herein represent total contents. Capacities based on survey made in May 1946. Lake built for flood control, navigation, and water conservation. The city of Dallas uses part of this water for their municipal supply. At end of year, flow from 190 sq mi above this station was partly controlled by 90 floodwater-retarding structures with a total combined capacity of 57,670 acre-ft below the flood-spillway crests, of which 50,360 acre-ft is floodwater-retarding capacity and 7,310 acre-ft is sediment-pool capacity. Three structures were built during the current year and have a total combined capacity below flood-spillway crests of 5,630 acre-ft, of which 529 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	588.0	-
Crest of spillway	560.0	435,500
Top of conservation storage	535.0	188,500
Inverts of lowest intakes to wet wells	500.5	24,750
Invert of two 6.5- by 13-foot broome-type gates sill	475.0	830

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

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

526.0	129,300	534.0	181,300
528.0	141,400	536.0	196,000
530.0	154,000	538.0	211,500
532.0	167,300	540.0	227,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131,300	158,600	159,500	212,100	189,700	190,300	180,800	182,000	177,100	169,900	160,100	152,600
2	131,100	158,600	161,700	211,000	189,700	190,300	180,600	181,900	176,900	169,400	159,700	152,400
3	140,400	158,400	163,600	210,400	189,700	190,300	180,400	181,800	176,600	169,000	159,400	152,100
4	144,100	158,200	164,400	209,200	189,700	190,200	180,200	181,500	176,300	168,900	159,100	152,300
5	145,000	158,000	168,600	207,800	189,800	190,100	180,200	181,300	176,100	168,500	158,800	152,200
6	145,400	157,800	171,100	206,700	189,900	190,000	180,100	181,300	175,800	168,200	158,400	151,800
7	145,400	157,600	172,100	205,600	189,900	190,000	179,800	181,500	175,600	167,800	158,200	151,600
8	145,600	157,500	176,400	204,500	189,900	190,000	179,900	181,300	175,300	167,500	157,800	151,500
9	145,500	157,500	195,900	203,700	189,900	189,900	179,900	181,000	174,800	167,200	157,600	151,300
10	145,400	157,400	215,400	202,700	190,000	189,900	179,800	180,700	174,500	166,900	157,300	151,300
11	145,200	157,300	221,000	201,600	190,100	189,900	179,800	180,300	174,300	166,600	157,200	151,000
12	145,200	157,100	223,300	200,600	190,300	189,900	179,800	180,800	174,100	166,400	157,100	150,700
13	145,100	157,100	224,700	199,500	190,300	189,900	179,800	184,800	173,800	166,100	157,000	150,400
14	145,000	156,900	225,600	198,200	190,500	189,900	179,800	186,000	173,800	165,700	156,700	150,100
15	144,800	156,900	226,600	196,900	190,500	189,800	180,000	186,500	173,500	165,400	156,400	149,900
16	144,700	156,800	226,500	195,700	190,400	189,700	179,800	186,300	173,300	165,100	156,100	149,700
17	144,800	158,900	225,900	194,600	190,300	189,500	179,600	185,400	173,000	164,700	156,000	149,400
18	145,500	159,200	225,000	193,600	190,300	189,300	179,500	184,300	172,800	164,500	155,700	149,200
19	151,200	159,100	224,200	192,700	190,200	189,100	179,400	183,400	172,600	164,200	155,400	148,800
20	155,800	159,100	223,400	191,700	190,300	189,000	179,400	182,900	172,200	163,900	155,100	148,600
21	157,800	159,100	222,400	190,700	190,300	189,000	179,700	182,300	172,800	163,500	154,900	148,500
22	158,100	159,400	221,400	190,200	190,300	188,900	179,700	181,700	172,400	163,300	154,600	148,400
23	158,600	159,600	220,400	189,700	190,400	188,800	179,700	181,200	172,200	163,100	154,300	148,300
24	158,600	159,700	219,500	189,400	190,400	189,300	179,500	180,600	172,100	162,800	154,100	148,100
25	158,600	159,700	218,500	189,300	190,500	189,200	179,400	180,000	171,800	162,400	153,900	147,900
26	158,600	159,700	217,500	189,400	190,500	189,300	178,900	179,300	171,400	162,100	153,900	147,700
27	158,700	159,600	216,600	189,600	190,400	189,300	180,800	178,900	171,100	161,800	153,800	147,500
28	158,700	159,600	215,800	189,700	190,400	189,300	181,300	178,200	170,700	161,500	153,500	147,300
29	158,700	159,500	214,800	189,700	190,400	188,900	181,600	178,000	170,400	161,100	153,200	147,000
30	158,600	159,500	213,800	189,700	------	188,800	181,700	177,800	170,200	160,800	152,900	146,600
31	158,600	------	212,900	189,700	------	188,500	------	177,400	------	160,400	152,800	------
(†)	530.71	530.85	538.17	535.15	535.25	534.99	535.08	534.49	533.47	532.07	530.92	529.97
(‡)	+27,200	+900	+53,400	-23,200	+700	-1,900	-6,800	-4,300	-7,200	-9,800	-7,600	-6,200
(††)	55	54	61	60	55	65	71	73	91	110	110	76
MAX	158,700	159,700	226,600	212,100	190,500	190,300	181,700	186,500	177,100	169,900	160,100	152,600
MIN	131,100	156,800	159,500	189,300	189,700	188,500	178,900	177,400	170,200	160,400	152,800	146,600

CAL YR 1971..... ‡ +32,400 †† 1,540 MAX 226,600 MIN 129,600
WTR YR 1972..... ‡ +15,200 †† 881 MAX 226,600 MIN 131,100

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Grapevine.

08055000 Denton Creek near Grapevine, Tex.

LOCATION.--Lat 32°59'13", long 97°00'45", Denton County, on left bank at downstream side of left pier of bridge on State Highway 121, 1.3 miles downstream from Bakers Branch, 4.3 miles downstream from Grapevine Dam, 5.0 miles northeast of Grapevine, and 6.1 miles upstream from mouth.

DRAINAGE AREA.--705 sq mi.

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 439.11 ft above mean sea level.

AVERAGE DISCHARGE.--5 years (1947-52) prior to regulation, 140 cfs (101,400 acre-ft per year); 20 years (1952-72) after regulation, unadjusted, 139 cfs (100,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,780 cfs Oct. 19 (gage height, 17.14 ft); minimum, 6.4 cfs Oct. 25.
Period of record: Maximum discharge, 13,900 cfs Feb. 26, 1948 (gage height, 30.38 ft), from rating curve extended above 6,000 cfs on basis of conveyance-slope study; no flow at times. Maximum discharge since construction of Grapevine Dam in 1952, 6,430 cfs Sept. 21, 1964 (gage height, 26.50 ft).
Flood in May 1908 was slightly higher than the flood in April 1942, which reached a stage of 35.9 ft, from floodmarks, from information by local resident.

REMARKS.--Records good. Flow regulated by Grapevine Lake since July 1952 (see preceding page). Much of flow is used by city of Dallas for municipal supply (see station 08055500).

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	8.0	16	570	18	22	68	14	72	73	67	68
2	32	8.0	104	570	18	22	69	28	80	73	67	68
3	89	8.0	31	570	16	22	70	63	79	73	68	69
4	27	8.0	14	570	16	22	38	63	78	73	69	73
5	26	8.4	120	570	17	22	16	64	76	73	69	69
6	32	8.8	33	556	17	23	16	64	76	71	69	68
7	32	9.6	23	556	16	23	16	76	75	71	66	68
8	33	14	136	556	16	23	15	67	75	71	66	68
9	32	20	516	556	16	23	15	94	77	72	66	75
10	32	17	206	556	16	24	16	142	76	72	66	76
11	32	17	29	556	17	23	16	129	76	72	67	73
12	32	17	23	556	17	23	16	67	75	71	68	73
13	32	18	22	556	16	23	16	64	75	71	69	73
14	32	18	254	556	16	35	16	64	79	71	69	72
15	32	18	615	556	16	90	16	100	77	71	69	72
16	33	20	600	556	89	89	15	321	77	71	69	73
17	33	22	600	556	85	88	65	556	77	71	69	73
18	67	16	600	556	24	88	14	556	77	71	69	73
19	277	14	600	556	23	89	14	424	76	70	69	73
20	387	14	600	556	23	62	14	238	75	70	68	73
21	10	13	585	461	24	23	15	238	82	69	68	74
22	11	19	585	318	23	23	15	238	76	68	68	74
23	9.2	20	585	311	23	25	15	238	75	68	67	74
24	6.8	13	585	201	24	25	15	238	75	67	68	74
25	6.8	13	585	21	60	23	14	238	74	66	69	74
26	7.6	13	585	20	24	23	15	238	73	66	71	74
27	8.0	14	570	20	24	23	25	202	73	66	69	74
28	7.6	14	570	19	24	38	14	202	73	66	68	74
29	8.0	16	570	19	22	69	14	132	73	66	68	74
30	8.0	16	570	18	------	68	14	47	73	66	68	75
31	8.0	------	570	18	------	68	------	80	------	67	68	------
TOTAL	1,415.0	434.8	11,502	12,616	740	1,244	697	5,285	2,275	2,166	2,111	2,171
MEAN	45.6	14.5	371	407	25.5	40.1	23.2	170	75.8	69.9	68.1	72.4
MAX	387	22	615	570	89	90	70	556	82	73	71	76
MIN	6.8	8.0	14	18	16	22	14	14	72	66	66	68
AC-FT	2,810	862	22,810	25,020	1,470	2,470	1,380	10,480	4,510	4,300	4,190	4,310

CAL YR 1971 TOTAL 33,977.1 MEAN 93.1 MAX 780 MIN 1.5 AC-FT 67,390
WTR YR 1972 TOTAL 42,656.8 MEAN 117 MAX 615 MIN 6.8 AC-FT 84,610

08055500 Elm Fork Trinity River near Carrollton, Tex.

LOCATION.--Lat 32°57'57", long 96°56'39", Dallas County, near left bank at downstream side of bridge on Sandy Lake Road, 40 ft upstream from Carrollton Dam, 0.3 mile downstream from Denton Creek, 1.0 mile upstream from St. Louis Southwestern Railway Lines bridge, 2.3 miles northwest of Carrollton, and at mile 18.2.

DRAINAGE AREA.--2,459 sq mi.

PERIOD OF RECORD.--January 1907 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to November 1923, published as "near Dallas".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 433.40 ft above mean sea level. Prior to November 1923, non-recording gage at site 15.5 miles downstream at different datum. Nov. 1, 1923, to Nov. 13, 1934, nonrecording gage, and Nov. 14, 1934, to July 6, 1938, water-stage recorder at present site and datum. July 7, 1938, to Apr. 14, 1939, nonrecording gage at site 9.3 miles downstream at datum 22.94 ft lower. Apr. 15, 1939, to Sept. 30, 1955, water-stage recorder at site 8.5 miles downstream at datum 22.94 ft lower.

AVERAGE DISCHARGE.--65 years, 779 cfs (564,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,530 cfs Oct. 20 (gage height, 6.95 ft); no flow Nov. 12.
Period of record: Maximum gage height, about 17 ft May 25, 1908, present site and datum, from information by local resident (discharge not determined); maximum gage height subsequent to 1908, 14.5 ft Apr. 26, 1942, present site and datum, from observation by National Weather Service (formerly U.S. Weather Bureau; discharge at site 8.5 miles downstream, 90,700 cfs); no flow at times. Flood in 1866 reached about the same stage as flood of May 25, 1908.

REMARKS.--Records good. Flow largely regulated by Lewisville Lake (station 08052800) since November 1954 and by Grapevine Lake (station 08054500) since July 1952. Records furnished by Dallas show that during year 103,000 acre-ft was diverted from pool at gage and 54,960 acre-ft was diverted from river channel 14 miles downstream for municipal use. About 400 acre-ft was returned from a water treatment plant to the river below this station. Records furnished by the Dallas Power and Light Co. show that during year 3,362 acre-ft was diverted from pool at gage to North Lake for cooling water at electric generating plant.

REVISIONS (WATER YEARS).--WSP 788: 1924. WSP 1148: Drainage area at former site. WSP 1632: 1908(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	1,770	881	5,590	34	77	79	172	172	136	200	136
2	42	232	851	5,550	33	72	77	136	129	190	200	136
3	588	163	1,020	5,550	32	85	125	122	168	195	210	136
4	249	152	476	5,520	32	89	228	151	177	129	168	132
5	1.5	146	1,560	5,480	13	75	197	151	147	122	136	132
6	4.4	145	906	5,460	18	72	206	164	220	147	164	79
7	21	154	674	5,520	16	116	289	140	241	160	265	129
8	28	114	1,090	5,550	.45	96	307	112	215	190	295	210
9	13	17	6,080	5,550	.04	103	319	160	200	215	277	390
10	57	31	3,800	5,520	48	94	307	172	181	195	172	235
11	50	1.6	720	5,570	56	87	301	143	220	200	118	185
12	49	0	554	5,550	14	103	235	65	210	185	118	205
13	25	260	800	5,550	21	98	210	72	160	241	115	168
14	19	60	1,930	5,520	7.6	91	253	85	115	181	140	205
15	119	31	4,030	5,500	4.0	149	210	129	74	126	147	247
16	18	28	4,970	5,480	2.6	121	82	200	91	177	132	235
17	29	28	5,040	5,460	92	110	230	449	115	160	185	172
18	650	251	5,040	5,460	14	97	210	380	96	177	200	112
19	1,880	70	5,040	5,230	1.3	115	129	339	58	253	185	177
20	4,820	141	5,000	4,190	.17	144	126	87	27	156	205	172
21	137	138	5,000	2,220	34	110	151	155	85	136	283	168
22	16	131	5,000	1,560	47	86	160	172	61	190	172	105
23	35	275	5,000	1,540	28	97	118	177	112	122	77	122
24	9.8	577	5,000	914	87	155	200	168	190	118	79	132
25	1.4	1,030	5,020	154	80	101	225	118	181	115	132	79
26	1.4	1,040	5,130	129	57	100	181	205	136	315	160	115
27	197	1,030	5,460	78	68	81	230	200	195	215	172	105
28	1,040	995	5,570	49	56	48	136	185	205	215	160	72
29	1,900	958	5,570	50	196	117	118	177	247	241	241	102
30	1,920	1,010	5,570	47	------	122	143	156	172	205	241	156
31	1,980	------	5,570	34	------	85	------	132	------	168	190	------
TOTAL	15,946.5	10,978.6	108,352	115,575	1,092.16	3,096	5,782	5,274	4,600	5,575	5,539	4,749
MEAN	514	366	3,495	3,728	37.7	99.9	193	170	153	180	179	158
MAX	4,820	1,770	6,080	5,590	196	155	319	449	247	315	295	390
MIN	1.4	0	476	34	.04	48	77	65	27	115	77	72
AC-FT	31,630	21,780	214,900	229,200	2,170	6,140	11,470	10,460	9,120	11,060	10,990	9,420

CAL YR 1971 TOTAL 173,382.25 MEAN 475 MAX 6,080 MIN 0 AC-FT 343,900
WTR YR 1972 TOTAL 286,559.26 MEAN 783 MAX 6,080 MIN 0 AC-FT 568,400

NOTE.--Gage-height record July 20 to Sept. 30 based on once-daily reading of telemark.

08055700 Bachman Branch at Dallas, Tex.

LOCATION.--Lat 32°51'39", long 96°49'53", Dallas County, on left bank at end of Bluffview Boulevard in Dallas, 1,300 ft downstream from bridge on Northwest Highway, 1.9 miles upstream from Bachman Lake Dam, and 6.0 miles northwest of Dallas City Hall.

DRAINAGE AREA.--9.58 sq mi. Area at site used prior to May 1, 1970, 10.0 sq mi.

PERIOD OF RECORD.--October 1963 to current year. Records since May 1, 1970, are equivalent to earlier records.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 1, 1970, at site 2,300 ft downstream at same datum.

AVERAGE DISCHARGE.--9 years, 9.20 cfs (13.04 inches per year, 6,670 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,650 cfs Oct. 19 (elevation, 469.00 ft), from rating curve extended above 1,330 cfs; no flow Aug. 30, 31, Sept. 9-12, 15.
Period of record: Maximum discharge, 16,000 cfs Apr. 28, 1966 (elevation, 467.97 ft, former site), from rating curve extended above 4,000 cfs on basis of contracted-opening measurements of 5,300, 9,200, and 16,000 cfs; no flow at times most years.
Maximum stage since at least 1900, that of Apr. 28, 1966. Flood of Oct. 8, 1962, the second highest flood since 1900, reached an elevation of 465.6 ft (discharge, 9,200 cfs) at former site.

REMARKS.--Records fair. Flow slightly regulated by several small channel dams above station. Two recording rain gages are operated in the basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	1.7	3.7	19	2.3	2.8	1.6	1.3	.43	.59	.14	.50
2	.78	1.8	95	3.5	2.8	2.1	1.4	1.2	.34	.43	.22	2.0
3	427	1.7	7.2	11	2.6	2.8	1.4	.98	.65	.48	.27	.34
4	15	1.8	4.0	3.3	2.5	2.8	1.3	.92	.50	1.1	.27	4.6
5	5.7	1.7	146	2.8	2.6	2.8	1.4	.87	.56	.74	.27	1.3
6	5.7	1.7	28	2.5	2.6	2.8	1.5	6.8	.52	.44	.32	.34
7	5.9	1.7	14	2.6	2.5	2.3	1.5	14	.42	.43	.22	.14
8	9.2	1.7	110	2.8	2.3	2.3	1.3	1.8	.38	.45	.26	.02
9	4.2	1.7	650	2.6	2.4	2.2	1.4	1.0	.54	.47	4.0	0
10	3.3	1.6	158	2.4	2.4	2.2	1.3	.91	.46	.40	1.2	0
11	3.1	1.6	24	2.3	7.2	2.1	1.4	.86	.62	.75	.62	0
12	2.9	1.7	14	2.4	3.7	1.9	1.4	17	.52	126	3.8	0
13	2.5	1.6	9.5	2.3	2.3	1.9	1.4	.99	1.8	6.9	1.6	.12
14	2.0	1.2	21	2.2	2.3	1.8	1.4	.85	17	1.2	.79	.05
15	2.2	1.1	11	2.0	2.2	1.7	12	.69	1.0	.77	.38	0
16	2.4	1.0	7.2	2.0	2.2	1.8	1.3	.65	.94	.72	.37	.17
17	22	29	5.9	2.3	2.2	1.8	1.0	.76	.75	.52	.39	1.0
18	146	4.9	5.4	2.4	2.2	1.8	1.1	.66	2.9	.43	.32	.34
19	428	1.2	5.2	2.3	2.1	1.8	1.1	.75	.67	.21	.26	.10
20	93	1.0	5.2	2.3	2.1	1.8	1.1	.58	.53	.35	.21	.02
21	14	1.1	5.2	2.3	2.0	1.6	4.8	.59	68	.62	.17	3.4
22	8.2	15	5.4	2.4	2.0	1.6	1.2	.50	1.8	.48	.12	3.5
23	4.7	4.3	5.4	2.5	2.3	1.6	.94	.73	.92	.93	.20	.78
24	3.5	1.5	5.0	2.5	2.3	18	.94	.56	.83	.38	.07	1.1
25	2.6	1.5	4.7	2.4	2.5	1.8	.94	.62	.76	.35	.92	.40
26	4.9	1.5	4.3	3.5	2.5	1.9	.83	.57	.69	.31	.34	2.0
27	9.1	1.5	4.3	4.5	2.6	1.9	160	.54	.57	.25	.69	4.3
28	1.8	1.5	3.7	2.6	2.8	1.6	2.9	.61	.70	.28	.10	.73
29	1.7	1.4	3.5	2.4	2.9	1.6	4.4	.54	.54	.25	.02	.95
30	1.7	6.0	3.4	2.4	------	1.4	1.6	.70	.50	.12	0	.97
31	1.7	------	2.8	2.3	------	1.4	------	.60	------	.03	0	------
TOTAL	1,235.46	96.7	1,372.0	104.8	75.4	77.9	215.85	60.13	106.84	147.38	18.54	29.17
MEAN	39.9	3.22	44.3	3.38	2.60	2.51	7.20	1.94	3.56	4.75	.60	.97
MAX	428	29	650	19	7.2	18	160	17	68	126	4.0	4.6
MIN	.68	1.0	2.8	2.0	2.0	1.4	.83	.50	.34	.03	0	0
CFSM	4.16	.34	4.62	.35	.27	.26	.75	.20	.37	.50	.06	.10
IN.	4.80	.38	5.33	.41	.29	.30	.84	.23	.41	.57	.07	.11
AC-FT	2,450	192	2,720	208	150	155	428	119	212	292	37	58
(††)	9.99	1.59	7.70	.99	.24	.48	2.98	1.19	2.36	2.78	.98	1.24

CAL YR 1971 TOTAL 4,462.44 MEAN 12.2 MAX 650 MIN .04 CFSM 1.27 IN 17.33 AC-FT 8,850 †† 42.77
WTR YR 1972 TOTAL 3,540.17 MEAN 9.67 MAX 650 MIN 0 CFSM 1.01 IN 13.75 AC-FT 7,020 †† 32.50

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10- 3	1000	466.70	3,580	12- 9	0800	466.38	3,320
10-18	1800	464.35	1,780	12- 9	2400	463.20	1,060
10-19	2230	469.00	5,650	6-21	1300	463.50	1,240
12- 8	2200	463.25	1,090	7-12	2100	465.70	2,780

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

08056500 Turtle Creek at Dallas, Tex.

LOCATION.--Lat 32°48'26", long 96°48'08", Dallas County, on left bank 68 ft upstream from Hall Street Dam, 210 ft upstream from Hall Street in Dallas, and 2.0 miles north of Dallas County Courthouse.

DRAINAGE AREA.--7.98 sq mi.

PERIOD OF RECORD.--Annual maximums, water years 1948-51. October 1951 to current year. Daily discharge records for April 1948 to September 1951, published in WSP 1392, are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 428.13 ft above mean sea level. Prior to Dec. 17, 1951, at site 52 ft upstream at same datum.

AVERAGE DISCHARGE.--21 years, 7.64 cfs (13.00 inches per year, 5,540 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,590 cfs Oct. 19 (gage height, 7.14 ft); minimum daily, 0.56 cfs June 1.
Period of record: Maximum discharge, 12,200 cfs Apr. 28, 1966 (gage height, 10.54 ft), from rating curve extended above 2,460 cfs on basis of contracted-opening measurement of 12,200 cfs; no flow at times.
Maximum stage since at least 1903, that of April 28, 1966.

REMARKS.--Records good. Flow slightly regulated by eight small channel dams above station. Five recording rain gages are operated in basin above station.

REVISIONS (WATER YEARS).--See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.1	4.7	27	2.6	2.2	1.5	5.8	.56	1.1	.95	.95
2	1.3	1.8	110	2.9	2.0	1.6	1.7	2.7	.70	.82	.86	2.2
3	463	1.6	6.8	14	1.6	1.6	1.4	1.7	.62	.78	.78	.86
4	21	1.5	3.9	4.7	1.6	1.9	.91	1.5	.57	2.7	.86	13
5	6.0	1.6	141	3.9	1.8	1.7	.97	1.8	.61	1.1	.78	3.4
6	4.3	1.8	29	3.6	2.3	1.5	1.1	18	.68	.82	.65	1.4
7	3.3	1.4	8.2	3.2	1.7	1.3	1.9	30	.73	.85	.71	1.0
8	8.2	1.0	106	3.2	1.6	1.3	1.2	3.5	.79	1.0	.78	.95
9	3.3	.88	484	3.1	1.9	1.7	1.2	2.7	.84	.92	76	.95
10	1.8	.71	79	2.9	2.0	1.8	1.5	2.3	.78	.75	3.4	.95
11	1.5	.83	10	3.3	9.9	2.7	1.1	1.9	2.3	.82	2.2	.78
12	1.6	1.9	6.6	2.7	4.7	4.4	1.1	19	1.3	57	2.6	.71
13	1.7	1.5	6.2	2.4	2.2	3.2	1.0	2.1	.94	9.1	3.9	.78
14	1.5	1.2	18	2.1	2.3	1.5	2.6	1.6	14	2.0	1.8	.78
15	1.4	1.1	6.2	2.0	1.9	1.3	16	1.3	24	1.2	1.2	.71
16	1.5	1.1	5.2	2.0	1.9	.85	1.6	1.1	4.6	1.0	1.2	1.8
17	21	55	4.5	2.2	2.0	1.1	1.0	.96	1.5	1.0	1.0	1.8
18	185	5.8	4.2	2.0	1.8	1.4	1.3	1.7	1.5	10	.95	.86
19	368	1.5	3.7	1.7	1.6	1.1	1.2	.97	1.8	2.4	.78	.78
20	73	1.3	3.4	1.6	2.0	1.4	.84	.88	1.2	1.8	.78	.86
21	8.5	1.2	3.2	2.0	1.9	1.2	10	.95	84	2.5	1.0	3.5
22	5.6	20	3.4	2.0	1.3	1.4	1.5	1.1	3.6	5.8	1.2	9.5
23	4.3	5.5	3.2	2.1	1.4	1.9	1.2	.87	2.3	3.0	1.0	3.0
24	3.8	1.5	3.1	2.0	2.3	5.3	1.0	.99	1.6	1.4	.86	1.5
25	3.5	1.7	3.1	1.5	2.1	1.8	.83	.82	1.3	1.2	2.0	1.2
26	7.9	1.5	2.8	2.3	2.0	30	.94	.67	1.3	1.2	1.6	4.3
27	14	.98	2.8	6.3	1.8	3.8	156	.67	1.1	1.0	.95	8.6
28	3.0	1.8	2.5	2.5	1.7	1.6	5.5	.74	.97	1.0	.71	1.6
29	2.7	1.3	2.4	3.1	1.5	3.1	7.9	.65	.95	1.0	.71	3.8
30	2.6	9.4	2.7	1.9	------	2.4	3.1	.64	1.1	.95	.71	1.5
31	2.1	------	2.2	1.9	------	1.8	------	.67	------	.86	.71	------
TOTAL	1,227.7	130.50	1,072.0	118.1	65.4	89.85	229.09	110.28	158.24	117.07	113.63	74.02
MEAN	39.6	4.35	34.6	3.81	2.26	2.90	7.64	3.56	5.27	3.78	3.67	2.47
MAX	463	55	484	27	9.9	30	156	30	84	57	76	13
MIN	1.3	.71	2.2	1.5	1.3	.85	.83	.64	.56	.75	.65	.71
CFSM	4.96	.55	4.34	.48	.28	.36	.96	.45	.66	.47	.46	.31
IN.	5.72	.61	5.00	.55	.30	.42	1.07	.51	.74	.55	.53	.35
AC-FT	2,440	259	2,130	234	130	178	454	219	314	232	225	147
(††)	10.74	1.77	7.69	1.17	.25	.51	3.02	1.42	2.29	1.60	1.53	1.31

CAL YR 1971 TOTAL 4,124.24 MEAN 11.3 MAX 484 MIN .52 CFSM 1.42 IN 19.23 AC-FT 8,180 †† 42.48
WTR YR 1972 TOTAL 3,505.88 MEAN 9.58 MAX 484 MIN .56 CFSM 1.20 IN 16.34 AC-FT 6,950 †† 33.30

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	0945	6.55	3,000	10-19	2300	7.14	3,590
10-18	1900	5.38	1,980	12- 9	0730	5.54	2,120

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

08057000 Trinity River at Dallas, Tex.

LOCATION.--Lat 32°46'31", long 96°49'11", Dallas County, on left bank on downstream side of left pier of Commerce Street viaduct in Dallas, 5.2 miles downstream from confluence of West and Elm Forks, and at mile 500.3.

DRAINAGE AREA.--6,106 sq mi.

PERIOD OF RECORD.--October 1898 to December 1899 (gage heights only published in WSP 28 and 37), July 1903 to current year.

GAGE.--Water-stage recorder. Datum of gage is 368.02 ft above mean sea level. Oct. 1, 1898, to Dec. 31, 1899, nonrecording gage at site 2 miles upstream at different datum. July 1, 1903, to July 20, 1930, nonrecording gage at present site and datum. July 21, 1930, to Sept. 30, 1932, nonrecording gage at site 6 miles downstream at datum 3.08 ft lower.

AVERAGE DISCHARGE.--69 years, 1,479 cfs (1,072,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 33,400 cfs Dec. 10 (gage height, 38.80 ft); minimum, 142 cfs July 8, 31.
Period of record: Maximum discharge, 184,000 cfs May 25, 1908 (gage height, 52.6 ft), from rating curve extended above 109,000 cfs; minimum observed for periods 1903-6, 1920-72, 1.2 cfs July 4, 1953, result of storage behind temporary dam 4 miles upstream. Maximum stage since at least 1840, that of May 25, 1908. Flood in 1866 reached about the same stage.

REMARKS.--Records good. Flow is largely regulated by 11 major upstream reservoirs having a total combined capacity of 2,201,000 acre-ft of which 848,800 acre-ft is for flood control. The city of Dallas reported the diversion for municipal use during the year of 157,900 acre-ft of water from the Elm Fork, 50,850 acre-ft from Lake Tawakoni (on Sabine River), the purchase of 8,760 acre-ft from North Texas Municipal Water District (from the East Fork), and the return of 147,900 acre-ft of sewage effluent to river 4 miles downstream from station. For other diversions and effluent returns above station see records for stations 08048000 and 08049200.

REVISIONS (WATER YEARS).--WSP 850: 1903-6 (monthly and annual means). WSP 1732: 1937(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	2,340	1,410	6,850	352	282	168	878	179	178	153	200
2	176	1,190	2,110	6,860	356	242	165	712	183	169	169	242
3	2,970	412	7,210	6,710	338	236	160	504	174	167	160	204
4	7,920	390	5,490	6,810	362	236	165	352	171	202	165	213
5	3,350	366	4,030	6,750	356	239	224	256	169	188	164	404
6	848	350	10,500	7,640	315	231	234	440	175	174	153	324
7	372	340	8,790	6,120	306	232	335	1,830	185	174	155	218
8	356	340	5,080	5,720	302	234	276	4,440	188	158	171	196
9	388	258	14,200	5,560	306	232	280	925	188	185	608	218
10	311	248	30,200	5,520	282	229	287	352	189	176	456	248
11	258	245	23,500	5,480	370	229	313	302	221	174	213	188
12	253	231	11,300	5,440	412	232	288	548	247	237	193	190
13	244	342	6,110	5,400	378	229	213	462	266	1,190	196	195
14	236	333	4,930	5,360	331	226	208	279	428	362	372	168
15	232	234	6,910	5,320	300	228	465	287	472	261	261	168
16	221	218	7,440	5,300	288	219	324	377	792	186	200	234
17	375	345	7,360	5,280	296	224	344	832	340	172	189	266
18	1,380	1,870	7,090	5,290	645	209	422	592	228	182	196	186
19	9,990	1,270	6,580	5,300	274	203	519	442	197	234	183	175
20	19,600	511	6,210	5,320	240	216	497	234	182	193	185	179
21	20,400	440	5,980	4,450	242	250	557	212	687	181	175	282
22	10,700	497	6,170	3,520	282	320	539	204	684	181	185	398
23	3,370	1,240	6,620	2,120	279	263	331	200	276	181	212	442
24	1,010	1,200	6,040	2,060	277	256	338	199	207	190	188	386
25	522	1,270	5,930	1,140	271	287	290	200	220	168	282	272
26	478	1,330	5,880	779	286	296	245	189	192	186	303	226
27	1,280	1,280	5,880	768	250	356	2,240	185	172	224	458	255
28	1,030	1,260	6,080	515	226	258	3,030	179	179	179	245	474
29	2,020	1,180	6,390	420	242	196	1,800	189	204	189	206	279
30	2,320	1,290	7,770	382	------	197	1,710	182	252	188	183	252
31	2,280	------	7,050	354	------	189	------	189	------	157	178	------
TOTAL	95,062	22,820	246,240	134,538	9,164	7,476	16,967	17,172	8,247	6,986	7,157	7,682
MEAN	3,067	761	7,943	4,340	316	241	566	554	275	225	231	256
MAX	20,400	2,340	30,200	7,640	645	356	3,030	4,440	792	1,190	608	474
MIN	172	218	1,410	354	226	189	160	179	169	157	153	168
AC-FT	188,600	45,260	488,400	266,900	18,180	14,830	33,650	34,060	16,360	13,860	14,200	15,240

CAL YR 1971 TOTAL 462,563 MEAN 1,267 MAX 30,200 MIN 146 AC-FT 917,500
WTR YR 1972 TOTAL 579,511 MEAN 1,583 MAX 30,200 MIN 153 AC-FT 1,149,000

08057100 White Rock Creek at Keller Springs Road, Dallas, Tex.

LOCATION.--Lat 32°58'13", long 96°48'19", Dallas County, on left bank at downstream side of bridge on Keller Springs Road, 0.5 mile upstream from St. Louis Southwestern Railway Lines bridge, 0.9 mile upstream from Spanky Branch, and 13 miles north of Dallas County Courthouse.

DRAINAGE AREA.--29.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 25, 1961, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 18.4 cfs (8.50 inches per year, 13,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,250 cfs Dec. 9 (elevation, 564.25 ft); no flow at times.
Period of record: Maximum discharge, 37,900 cfs Sept. 21, 1964 (elevation, 574.51 ft), from rating curve extended above 5,000 cfs on basis of contracted-opening measurement of 37,900 cfs; no flow for many days most years.
Maximum elevation since at least 1886, that of Sept. 21, 1964. Flood of Apr. 19, 1942, reached an elevation of 569.6 ft, from information by local resident.

REMARKS.--Records good. The Preston Trail Golf Club, 0.5 mile upstream, diverted 57 acre-ft during year for irrigation. Flow slightly regulated by two small floodwater-retarding structures above station. Three recording rain gages are operated in the basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	8.4	14	28	6.0	3.4	1.2	2.9	0			
2	.74	8.4	209	22	6.0	3.4	1.2	3.1	0			
3	775	7.2	68	24	4.8	2.8	.88	.95	0			
4	70	6.0	26	25	6.0	2.4	.44	.88	0			
5	22	4.8	516	14	6.0	2.4	.88	1.1	0			
6	14	7.2	90	13	6.0	2.4	1.2	1.6	0			
7	11	7.2	54	14	6.0	2.4	.88	3.6	0			
8	11	6.0	508	16	6.0	2.0	.88	4.8	0			
9	11	6.0	2,520	17	4.8	2.0	.88	1.5	0			
10	8.4	6.0	596	16	4.8	2.4	.74	1.0	0			
11	7.2	6.0	58	14	6.0	2.8	.63	1.0	0			
12	7.2	6.0	40	13	9.6	2.8	.53	5.8	0			
13	6.0	4.8	35	13	9.6	2.8	.44	2.4	0			
14	7.2	3.4	107	12	8.4	2.8	.37	1.4	2.6			
15	6.0	3.4	97	9.6	8.0	2.0	1.5	1.2	1.1			
16	6.0	3.4	33	9.6	7.8	2.0	1.2	1.0	.53			
17	7.2	18	27	11	7.8	2.0	.88	.88	2.1			
18	278	60	23	9.6	7.6	2.0	.63	.70	3.2			
19	796	11	23	9.6	7.6	1.7	.74	.63	.22			
20	637	7.2	21	9.6	7.4	1.5	.53	.74	.13			
21	38	7.2	18	9.6	7.4	1.5	.63	.74	5.3			
22	26	11	17	9.6	7.4	1.7	.88	.29	1.2			
23	21	33	17	9.6	7.2	1.0	.88	.08	.53			
24	18	17	16	8.4	7.2	13	.31	.15	.16			
25	14	12	14	8.4	6.0	2.8	.16	.10	.11			
26	13	11	13	8.4	6.0	2.0	.26	.09	.07			
27	24	11	14	8.4	6.0	1.7	41	.09	.03			
28	14	11	12	8.4	4.0	1.0	5.3	.04	.01			
29	11	11	12	8.4	3.4	1.2	2.0	.02	0			
30	11	12	14	8.4	------	1.2	1.4	.01	0			
31	9.6	------	14	7.2	------	1.0	------	0	------			------
TOTAL	2,881.28	326.6	5,226	394.8	190.8	76.1	69.45	38.79	17.29	0	0	0
MEAN	92.9	10.9	169	12.7	6.58	2.45	2.32	1.25	.58	0	0	0
MAX	796	60	2,520	28	9.6	13	41	5.8	5.3	0	0	0
MIN	.74	3.4	12	7.2	3.4	1.0	.16	0	0	0	0	0
CFSM	3.16	.37	5.75	.43	.22	.08	.08	.04	.02	0	0	0
IN.	3.65	.41	6.61	.50	.24	.10	.09	.05	.02	0	0	0
AC-FT	5,720	648	10,370	783	378	151	138	77	34	0	0	0
(††)	9.51	2.09	9.05	.94	.32	1.23	3.14	1.83	3.42	.65	1.42	2.30

CAL YR 1971 TOTAL 9,377.69 MEAN 25.7 MAX 2,520 MIN 0 CFSM .87 IN 11.87 AC-FT 18,600 †† 44.86
WTR YR 1972 TOTAL 9,221.11 MEAN 25.2 MAX 2,520 MIN 0 CFSM .86 IN 11.67 AC-FT 18,290 †† 35.90

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10- 3	1030	558.72	4,310	12- 8	2200	552.84	1,850
10-18	2030	552.22	1,640	12- 9	1100	564.25	8,250
10-19	1200	552.08	1,590	12-10	0045	556.45	3,250
10-20	0015	559.90	4,920				

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

08057200 White Rock Creek at Greenville Avenue, Dallas, Tex.

LOCATION.--Lat 32°53'21", long 96°45'23", Dallas County, on left bank 20 ft downstream from bridge on Greenville Avenue in Dallas, 1.1 miles downstream from Texas and New Orleans Railroad Co. bridge, 1.2 miles downstream from Cottonwood Creek, 2.9 miles upstream from White Rock Lake, and 8.2 miles northeast of Dallas County Courthouse.

DRAINAGE AREA.--66.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 24, 1961, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 57.9 cfs (11.84 inches per year, 41,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,800 cfs Dec. 9 (elevation, 488.39 ft); minimum daily, 0.04 cfs Aug. 8.
Period of record: Maximum discharge, 38,100 cfs Sept. 21, 1964 (elevation, 490.43 ft); minimum daily, 0.01 cfs July 8, 1970, June 27, July 14, 1971.
Maximum elevation since at least 1886, that of Sept. 21, 1964.

REMARKS.--Records fair. Some regulation at low flow by on- and off-channel dams from which many small diversions are made. The Royal Oaks Country Club, 0.1 mile upstream, diverted 99 acre-ft during water year. Twelve recording rain gages were operated in basin above station during the year. Five of these rain gages were discontinued on Sept. 30, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	18	18	103	14	7.4	6.8	13	4.5	1.5	.42	1.5
2	6.0	16	487	39	14	6.5	7.4	15	4.2	2.1	.68	2.2
3	2,700	14	159	63	13	6.0	6.7	11	4.9	1.9	.86	1.9
4	244	13	43	50	13	6.7	5.2	8.6	6.3	2.1	.71	20
5	61	13	1,050	33	14	6.3	4.8	7.8	4.3	1.4	1.2	6.7
6	39	11	237	32	15	6.3	4.9	34	2.5	.98	1.5	2.6
7	30	11	133	32	13	7.1	4.9	69	4.1	.50	1.2	1.5
8	38	9.9	777	31	13	6.6	5.0	20	3.7	1.0	.04	1.0
9	26	10	6,010	31	12	6.1	5.0	14	4.6	1.6	11	.92
10	21	9.3	1,750	28	13	7.5	6.2	12	5.1	1.4	4.8	5.2
11	19	9.2	194	25	23	5.9	4.7	12	6.0	1.2	2.0	1.2
12	17	8.1	130	23	17	5.7	4.5	95	4.7	43	12	.88
13	16	7.8	103	23	13	6.0	3.3	22	5.4	20	5.0	.50
14	15	7.4	212	20	12	5.9	4.0	17	105	3.2	2.6	.77
15	14	7.1	234	19	12	4.4	32	17	9.1	2.1	1.9	.65
16	13	7.0	83	19	12	6.9	7.6	15	6.6	2.0	1.3	1.1
17	50	96	70	20	11	12	6.3	15	70	1.5	1.3	3.3
18	459	99	60	21	8.1	8.8	5.1	11	86	5.2	1.0	1.6
19	1,540	13	56	20	9.5	5.8	3.9	8.8	11	3.8	1.2	.74
20	1,970	10	52	19	9.5	4.7	3.7	6.8	9.5	1.8	1.6	.67
21	120	9.3	46	18	9.7	7.1	15	8.2	184	1.8	.80	2.9
22	65	59	42	18	8.5	4.3	5.7	7.0	20	1.4	.93	9.1
23	46	42	42	17	8.5	4.1	5.4	5.2	11	2.3	1.3	4.6
24	37	15	40	18	8.9	148	5.4	7.1	5.6	1.6	1.3	6.2
25	30	12	37	17	6.7	15	4.0	5.2	4.9	1.1	2.0	2.4
26	33	12	36	19	7.9	15	2.4	4.7	3.0	.15	1.6	9.2
27	70	11	36	23	6.5	13	381	7.3	2.2	.46	5.0	4.6
28	26	11	33	16	6.9	9.6	27	7.5	1.8	.74	2.3	1.6
29	23	9.8	33	16	7.0	8.4	22	6.2	1.7	.71	1.2	1.3
30	20	19	34	15	------	8.1	14	4.0	2.1	.56	.30	3.1
31	18	------	30	14	------	8.1	------	4.4	------	.34	.76	------
TOTAL	7,773.1	589.9	12,267	842	331.7	373.3	613.9	490.8	593.8	109.44	69.80	99.93
MEAN	251	19.7	396	27.2	11.4	12.0	20.5	15.8	19.8	3.53	2.25	3.33
MAX	2,700	99	6,010	103	23	148	381	95	184	43	12	20
MIN	6.0	7.0	18	14	6.5	4.1	2.4	4.0	1.7	.15	.04	.50
CFSM	3.78	.30	5.96	.41	.17	.18	.31	.24	.30	.05	.03	.05
IN.	4.35	.33	6.87	.47	.19	.21	.34	.27	.33	.06	.04	.06
AC-FT	15,420	1,170	24,330	1,670	658	740	1,220	974	1,180	217	138	198
(††)	9.51	1.84	8.60	.93	.29	1.14	2.97	1.62	3.30	.55	1.05	1.87

CAL YR 1971 TOTAL 26,924.64 MEAN 73.8 MAX 6,010 MIN .01 CFSM 1.11 IN 15.08 AC-FT 53,410 †† 42.92
WTR YR 1972 TOTAL 24,154.67 MEAN 66.0 MAX 6,010 MIN .04 CFSM .99 IN 13.53 AC-FT 47,910 †† 33.67

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10- 3	1100	488.25	14,400	12- 9	1300	488.39	15,800
10-19	2330	487.81	9,860	12-10	0300	486.76	6,640
12- 8	2230	485.64	4,670				

†† Weighted-mean rainfall, in inches, based on 12 rain gages.

08057300 White Rock Creek at White Rock Lake, Dallas, Tex.

LOCATION.--Lat 32°48'31", long 96°43'32", Dallas County, on right bank 500 ft upstream from right end of White Rock Lake spillway, 1,500 ft upstream from bridge on Garland Road (State Highway 78) in Dallas, and 10.3 miles upstream from mouth.

DRAINAGE AREA.--100 sq mi.

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

GAGE.--Water-stage recorder and flat-crested concrete dam. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--10 years, 70.6 cfs (9.59 inches per year, 51,150 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Dec. 9 (elevation, 461.95 ft, from crest-stage gage); no flow at times.
Period of record: Maximum discharge, 28,300 cfs Sept. 21, 1964 (elevation, 465.60 ft); no flow at times each year.
Maximum elevation since 1910, that of Sept. 21, 1964. Flood of Apr. 20, 1942, reached an elevation of 465.2 ft, from information by city of Dallas.

REMARKS.--Records poor below 50 cfs and fair above. Discharge is outflow of White Rock Lake (capacity, 10,700 acre-ft in 1970 at spillway crest). Storage began in White Rock Lake in 1910 and has been used at times by city of Dallas as a source of municipal water supply. Records furnished by city of Dallas show that during year 13 acre-ft was diverted for irrigation. Fourteen recording rain gages, including one at station, have been operated in watershed above this station since the 1962 water year. Seven of these rain gages, including the one at this station, were discontinued Sept. 30, 1972. A lake sedimentation survey by the Soil Conservation Service was made in October 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	34	10	86	6.5	.38	.28	20	0			
2	18	30	395	72	4.6	.06	.28	4.6	0			
3	2,530	10	338	60	1.1	0	.12	4.6	0			
4	1,150	10	48	38	1.6	0	0	3.6	0			
5	227	10	1,070	26	2.8	0	0	3.6	0			
6	94	6.5	761	34	3.6	0	0	17	0			
7	60	2.1	270	38	.50	0	0	79	0			
8	54	2.1	361	38	1.1	0	0	60	0			
9	43	3.6	4,500	48	2.8	0	0	34	0			
10	26	6.5	3,920	38	3.6	0	0	23	0			
11	23	10	409	34	10	0	0	26	0			
12	23	6.5	170	30	26	0	0	86	0			
13	23	4.6	123	20	20	0	0	86	0			
14	23	3.6	129	2.1	17	0	.18	30	0			
15	23	2.8	306	1.1	4.6	0	3.6	14	0			
16	23	2.1	113	2.1	4.6	0	2.8	2.8	0			
17	34	29	60	6.5	3.6	0	1.6	2.1	0			
18	251	322	48	23	1.6	0	1.6	1.6	.13			
19	2,130	14	48	34	1.1	0	1.6	.50	10			
20	3,230	6.5	48	34	1.6	0	1.1	.28	4.6			
21	406	4.6	43	26	2.8	.06	1.1	.12	179			
22	123	10	26	26	3.6	.06	2.8	0	158			
23	79	86	34	26	2.8	.06	2.1	0	34			
24	66	10	38	23	6.5	37	.50	0	4.6			
25	60	4.6	38	10	4.6	20	.28	0	3.6			
26	60	3.6	34	10	.75	24	.06	0	2.1			
27	113	2.8	38	17	.50	43	512	0	.75			
28	79	2.8	23	4.6	.50	6.5	183	0	.38			
29	60	2.1	30	4.6	1.1	.28	48	0	.12			
30	48	6.5	34	2.8	------	.18	23	0	0			
31	38	------	23	3.6	------	.18	------	0	------			------
TOTAL	11,120.6	648.9	13,488	818.4	141.45	131.76	786.00	498.80	410.15	0	0	0
MEAN	359	21.6	435	26.4	4.88	4.25	26.2	16.1	13.7	0	0	0
MAX	3,230	322	4,500	86	26	43	512	86	179	0	0	0
MIN	3.6	2.1	10	1.1	.50	0	0	0	0	0	0	0
CFSM	3.59	.22	4.35	.26	.05	.04	.26	.16	.14	0	0	0
IN.	4.14	.24	5.02	.30	.05	.05	.29	.19	.15	0	0	0
AC-FT	22,060	1,290	26,750	1,620	281	261	1,560	989	814	0	0	0

CAL YR 1971 TOTAL 32,198.86 MEAN 88.2 MAX 4,500 MIN 0 CFSM .88 IN 11.98 AC-FT 63,870
WTR YR 1972 TOTAL 28,044.06 MEAN 76.6 MAX 4,500 MIN 0 CFSM .77 IN 10.43 AC-FT 55,630

08057400 White Rock Creek at Scyene Road, Dallas, Tex.

LOCATION.--Lat 32°45'57", long 96°43'49", Dallas County, on left bank 30 ft downstream from Texas and New Orleans Railroad Co. bridge, 125 ft downstream from Scyene Road (State Highway 352) in Dallas, 4.5 miles east of Dallas County Courthouse, and 5.8 miles upstream from mouth.

DRAINAGE AREA.--122 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Dec. 7, 1962, nonrecording gage 30 ft upstream at same datum.

AVERAGE DISCHARGE.--10 years, 99.2 cfs (11.04 inches per year, 71,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,000 cfs Oct. 19 (elevation, 402.37 ft); minimum daily, 1.1 cfs Aug. 30, 31.
Period of record: Maximum discharge, 30,200 cfs Sept. 21, 1964 (elevation, 404.30 ft), from rating curve extended above 20,000 cfs on basis of contracted-opening measurement of 30,200 cfs; minimum daily, 0.4 cfs Aug. 2, 3, 1964.
Maximum elevation since at least 1886, 409.2 ft May 26, 1908 (affected by backwater from the Trinity River); maximum discharge since at least 1886, that of Sept. 21, 1964; the second highest discharge occurred Apr. 20, 1942 (28,000 cfs), from Geological Survey Open-File Report "Frequency and Extent of Flooding on Lower White Rock Creek at Dallas, Tex."

REMARKS.--Records fair. Flow partly regulated by White Rock Lake (capacity, 10,700 acre-ft, at normal level) 4.5 miles upstream. The Dallas Power and Light Company reported diversion of 1,510 acre-ft to off-channel reservoir at generating plant 0.8 mile upstream from station. Low flow sustained by wastewater. Fourteen recording rain gages above station and one at station have been operated in basin since 1962. Seven of these rain gages were discontinued Sept. 30, 1972.

REVISIONS.--WRD Texas 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	47	71	164	17	2.7	3.2	62	1.9	10	1.7	2.1
2	12	50	535	152	32	4.5	3.1	52	2.1	6.0	1.6	3.4
3	3,840	55	1,060	139	48	11	3.7	26	2.4	4.0	1.9	3.1
4	2,450	24	242	203	13	9.3	4.7	16	2.2	4.4	3.1	2.7
5	320	22	1,670	92	5.7	16	5.3	6.6	2.0	3.6	2.2	3.0
6	116	45	1,740	62	7.0	8.0	3.2	22	2.0	2.8	1.6	2.1
7	90	33	458	66	6.2	3.7	2.4	110	2.0	2.6	1.4	1.9
8	76	16	541	61	5.8	3.4	1.9	127	1.9	2.8	1.9	1.7
9	72	20	6,820	64	5.6	7.1	1.6	42	1.9	2.6	330	1.7
10	53	22	6,330	64	5.4	3.3	1.6	21	1.9	2.0	35	1.8
11	35	20	1,980	63	61	4.4	1.4	20	1.9	2.2	3.7	1.9
12	31	22	428	50	46	5.5	1.4	111	1.9	16	5.6	1.9
13	29	23	259	69	36	5.6	1.4	85	2.3	15	4.3	1.8
14	17	23	259	61	28	6.4	1.8	50	28	2.2	1.9	1.8
15	5.3	24	461	51	42	5.9	12	28	13	1.8	2.3	1.8
16	6.4	24	263	18	22	3.4	10	17	7.2	1.6	2.3	3.3
17	56	127	183	20	26	3.0	4.1	14	1.8	1.4	1.9	3.7
18	415	329	124	32	34	8.0	3.6	11	1.9	19	1.8	1.8
19	4,980	104	110	42	15	12	3.2	9.4	1.8	8.0	1.7	1.7
20	4,700	43	107	44	10	5.9	3.1	6.3	2.1	3.0	1.6	1.7
21	858	47	99	47	8.6	3.3	36	3.9	192	5.8	1.6	4.9
22	250	111	82	36	4.5	4.1	9.7	3.1	247	8.4	2.7	10
23	149	126	75	36	4.7	5.9	7.1	2.1	89	4.6	2.8	3.2
24	107	92	78	43	4.5	97	6.0	1.2	45	2.1	1.9	2.0
25	88	56	77	38	4.3	79	5.6	1.6	28	2.2	1.9	2.6
26	78	49	74	22	3.4	54	5.3	2.0	19	2.1	1.7	3.2
27	143	44	71	43	3.1	94	663	2.2	14	2.1	2.0	2.7
28	113	41	77	52	3.0	39	419	2.4	10	1.9	1.4	2.8
29	81	42	57	36	2.8	38	121	2.2	16	1.8	1.3	12
30	67	57	67	43	------	23	79	2.1	12	1.4	1.1	4.3
31	62	------	60	18	------	3.9	------	2.0	------	1.4	1.1	------
TOTAL	19,315.7	1,738	24,458	1,931	504.6	570.3	1,424.4	861.1	754.2	144.8	427.0	92.6
MEAN	623	57.9	789	62.3	17.4	18.4	47.5	27.8	25.1	4.67	13.8	3.09
MAX	4,980	329	6,820	203	61	97	663	127	247	19	330	12
MIN	5.3	16	57	18	2.8	2.7	1.4	1.2	1.8	1.4	1.1	1.7
CFSM	5.11	.47	6.47	.51	.14	.15	.39	.23	.21	.04	.11	.03
IN.	5.89	.53	7.46	.59	.15	.17	.43	.26	.23	.04	.13	.03
AC-FT	38,310	3,450	48,510	3,830	1,000	1,130	2,830	1,710	1,500	287	847	184

CAL YR 1971	TOTAL 57,326.3	MEAN 157	MAX 6,820	MIN 1.4	CFSM 1.29	IN 17.48	AC-FT 113,700
WTR YR 1972	TOTAL 52,221.7	MEAN 143	MAX 6,820	MIN 1.1	CFSM 1.17	IN 15.92	AC-FT 103,600

08057410 Trinity River below Dallas, Tex.

LOCATION.--Lat 32°42'27", long 96°44'08", Dallas County, on left bank at downstream side of bridge on South Loop Highway 12, 1.0 mile downstream from White Rock Creek, 1.5 miles upstream from Fivemile Creek, 6.4 miles southeast of Dallas County Courthouse in Dallas, and at mile 491.8.

DRAINAGE AREA.--6,278 sq mi.

PERIOD OF RECORD.--November 1956 to September 1961 (monthly records only), October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 365.89 ft above mean sea level.

AVERAGE DISCHARGE.--15 years (1957-72), 1,567 cfs (1,135,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 28,200 cfs Dec. 10 (gage height, 28.39 ft); minimum, 288 cfs Aug. 1, 6, 7.
Period of record: Maximum discharge, 65,700 cfs May 27, 1957 (gage height, 32.02 ft); minimum daily, 131 cfs Dec. 9, 1956. Flood of May 25, 1908, reached a stage of 41.1 ft, from information by Corps of Engineers, and is the highest since that time. Floods in 1866 and 1908 reached about same stage at Dallas.

REMARKS.--Records good. Flow largely regulated by reservoirs above Dallas (see station 08057000) and White Rock Lake (capacity, 12,500 acre-ft). Cities of Fort Worth and Dallas divert water for municipal use and return sewage effluent above station (see stations 08057000 and 08048000). Low flows largely maintained by sewage effluent. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	442	2,380	1,580	7,030	574	531	424	1,210	424	433	354	433
2	451	1,570	2,370	7,120	574	461	406	1,030	424	345	362	433
3	3,660	689	6,020	6,940	574	461	415	845	406	354	362	424
4	8,400	643	4,900	7,120	574	451	415	643	388	345	362	406
5	5,080	597	4,480	7,120	551	451	461	531	397	345	362	620
6	1,800	574	8,700	7,300	511	461	511	737	397	345	328	643
7	923	531	8,540	6,510	511	461	643	1,890	397	345	345	461
8	767	531	6,070	6,080	501	461	551	3,880	406	345	362	424
9	741	471	10,600	5,830	501	461	531	1,680	406	345	876	415
10	643	451	25,400	5,710	481	461	551	689	397	336	969	461
11	551	442	26,100	5,650	597	461	597	574	511	345	442	424
12	531	424	17,300	5,590	666	451	551	871	531	354	406	415
13	531	511	9,620	5,530	597	461	481	923	511	1,320	397	415
14	511	531	6,570	5,480	551	471	481	597	689	620	597	379
15	491	415	6,940	5,430	531	471	741	551	952	491	501	379
16	471	415	7,500	5,380	531	461	574	574	1,150	362	424	424
17	603	544	7,500	5,330	511	471	597	866	574	370	406	491
18	1,810	2,120	7,400	5,330	786	424	666	1,080	471	379	424	424
19	10,300	1,750	7,030	5,380	614	424	793	871	397	461	406	406
20	20,600	762	6,590	5,330	451	461	767	643	379	424	388	397
21	22,700	630	6,290	4,520	471	481	975	451	536	379	388	481
22	14,600	629	6,290	3,280	501	551	845	451	1,020	379	406	666
23	6,230	1,370	6,510	2,240	511	481	597	451	643	370	433	689
24	2,110	1,460	6,290	2,210	511	551	620	442	531	388	397	643
25	1,030	1,340	6,150	1,530	501	620	574	442	415	370	491	531
26	871	1,460	6,010	949	511	531	511	451	406	370	531	481
27	1,550	1,400	6,010	975	471	715	2,470	406	379	433	666	471
28	845	1,340	6,080	767	471	574	3,520	397	397	379	511	715
29	2,090	1,290	6,510	620	471	471	2,180	415	397	379	433	531
30	2,380	1,360	7,210	597	------	481	1,940	451	461	362	415	491
31	2,350	------	7,120	574	------	451	------	442	------	362	406	------
TOTAL	116,062	28,630	251,680	139,452	15,606	15,123	25,388	25,484	15,392	12,835	14,150	14,573
MEAN	3,744	954	8,119	4,498	538	488	846	822	513	414	456	486
MAX	22,700	2,380	26,100	7,300	786	715	3,520	3,880	1,150	1,320	969	715
MIN	442	415	1,580	574	451	424	406	397	379	336	328	379
AC-FT	230,200	56,790	499,200	276,600	30,950	30,000	50,360	50,550	30,530	25,460	28,070	28,910

CAL YR 1971 TOTAL 562,915 MEAN 1,542 MAX 26,100 MIN 312 AC-FT 1,117,000
WTR YR 1972 TOTAL 674,375 MEAN 1,843 MAX 26,100 MIN 328 AC-FT 1,338,000

08057450 Tenmile Creek at State Highway 342 at Lancaster, Tex.

LOCATION.--Lat 32°34'42", long 96°45'21", Dallas County, on left bank at downstream side of bridge on State Highway 342, 0.1 mile downstream from Missouri, Kansas, and Texas Railroad bridge, 0.5 mile downstream from Deep Branch, 1.0 mile south of Lancaster, and 14.1 miles upstream from mouth.

DRAINAGE AREA.--52.8 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

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

EXTREMES.--Current year: Maximum discharge, 11,000 cfs Oct. 19 (elevation, 464.92 ft, from floodmarks), from rating curve extended as explained below; no flow Aug. 16 to Sept. 15.
Period of record: Maximum discharge, 11,000 cfs Oct. 19, 1971 (elevation, 464.92 ft, from floodmarks), from rating curve extended above 2,600 cfs on basis of contracted-opening measurement of peak flow; no flow at times.
Maximum elevation since 1942, 468.4 ft June 1, 1964 (discharge not determined), from information by Corps of Engineers. Other outstanding floods occurred in 1908, 1942, 1949, 1957, and 1966 (elevations and discharges unknown) according to the Corps of Engineers. The flood of May 6, 1969, reached an elevation of 466.0 ft, from floodmarks at downstream side of bridge, and a discharge of 12,900 cfs, on the basis of a contracted-opening measurement of peak flow.

REMARKS.--Records good except those for period of no elevation record, which are fair. Flow is slightly regulated by numerous small stock ponds above station. Low flows are partly sustained by effluent from the municipalities of Duncanville and De Soto. Five recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	38	29	125	30	12	8.2	12	2.4	1.9	.08	0
2	.90	34	214	64	29	11	8.1	12	2.3	.79	.07	0
3	359	31	90	155	25	11	7.3	8.0	2.1	.54	.06	0
4	166	30	49	120	24	12	6.3	6.7	1.8	.63	.09	0
5	35	28	547	68	25	10	6.3	6.0	1.5	.69	.10	0
6	12	26	278	69	26	11	8.2	31	1.5	1.0	.07	0
7	4.4	23	214	66	22	11	8.1	28	1.3	.46	.05	0
8	23	21	270	63	21	9.8	5.2	19	1.5	.32	.02	0
9	6.6	20	1,580	62	21	10	6.2	13	1.2	.25	.01	0
10	2.8	19	1,050	57	20	11	5.5	12	.98	.17	.01	0
11	2.5	19	238	52	20	11	6.4	11	.84	.13	.01	0
12	2.0	19	171	53	22	13	5.8	12	.78	.09	.01	0
13	1.7	19	131	49	20	13	5.0	12	1.2	.06	.01	0
14	1.3	19	163	46	19	11	5.0	9.1	4.9	.06	.01	0
15	1.0	19	163	43	18	11	15	7.3	3.0	.04	.01	0
16	.88	18	93	43	17	11	7.9	7.1	6.5	.02	0	10
17	50	19	80	43	16	10	4.7	12	2.6	.03	0	4.0
18	266	78	75	43	15	10	4.0	6.7	1.7	.04	0	.15
19	2,300	22	72	41	15	9.5	4.1	5.5	1.2	.07	0	.03
20	1,200	21	66	41	15	11	3.9	5.1	.84	.06	0	.02
21	235	20	60	41	15	14	14	4.9	5.9	.05	0	.90
22	164	22	57	41	14	11	7.2	4.2	8.9	.06	0	1.5
23	121	38	57	39	14	10	4.0	4.0	2.3	.08	0	1.5
24	95	23	53	38	13	10	3.2	4.0	.71	.10	0	.32
25	80	23	53	35	13	9.3	2.9	4.1	.66	.10	0	.15
26	93	23	54	35	12	12	3.0	3.7	2.0	.09	0	.09
27	68	22	51	38	11	12	115	3.0	1.3	.09	0	.06
28	56	21	47	35	12	8.9	34	2.8	.91	.10	0	.06
29	47	21	47	34	12	8.0	15	3.0	13	.09	0	.05
30	43	21	45	32	------	7.9	12	5.0	12	.08	0	.05
31	41	------	42	31	------	7.9	------	2.7	------	.09	0	------
TOTAL	5,479.02	757	6,139	1,702	536	330.3	341.5	276.9	87.82	8.28	.61	18.88
MEAN	177	25.2	198	54.9	18.5	10.7	11.4	8.93	2.93	.27	.020	.63
MAX	2,300	78	1,580	155	30	14	115	31	13	1.9	.10	10
MIN	.88	18	29	31	11	7.9	2.9	2.7	.66	.02	0	0
CFSM	3.35	.48	3.75	1.04	.35	.20	.22	.17	.06	.005	.0004	.01
IN.	3.86	.53	4.33	1.20	.38	.23	.24	.20	.06	.005	0	.01
AC-FT	10,870	1,500	12,180	3,380	1,060	655	677	549	174	16	1.2	37
(††)	12.66	1.66	6.92	1.65	.20	.20	3.47	1.88	2.24	.52	.61	2.17

CAL YR 1971 TOTAL 13,722.74 MEAN 37.6 MAX 2,300 MIN 0 CFSM .71 IN 9.67 AC-FT 27,220 †† 41.57
WTR YR 1972 TOTAL 15,677.31 MEAN 42.8 MAX 2,300 MIN 0 CFSM .81 IN 11.05 AC-FT 31,100 †† 34.18

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10- 3	1500	451.62	1,240	12- 2	1815	448.88	832
10-19	about 1100	a464.92	11,000	12- 5	1430	452.77	1,450
				12- 8	2330	451.02	1,150
10-20	about 0200	a462.00	6,700	12- 9	1745	459.88	4,500
				12-10	0130	459.58	4,260

†† Weighted-mean rainfall, in inches, based on five rain gages.
a From floodmark.
NOTE.--No elevation record Oct. 4 to Nov. 8.

08057500 Honey Creek subwatershed No. 11 near McKinney, Tex.

LOCATION.--Lat 33°18'12", long 96°41'22", Collin County, near center of dam on unnamed tributary of Honey Creek, 1.5 miles west of Farm Road 543, and 8.4 miles northwest of McKinney.

DRAINAGE AREA.--2.14 sq mi.

PERIOD OF RECORD.--September 1952 to current year.

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 629.00 ft above mean sea level (Soil Conservation Service bench mark).

AVERAGE INFLOW.--20 years, 868 acre-ft per year.

AVERAGE OUTFLOW.--20 years, 669 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 7.4 cfs Dec. 10 (gage height, 23.13 ft); no outflow at times. Maximum inflow, 912 cfs (average for 5-minute interval) Dec. 9, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 716 cfs May 26, 1957 (gage height, 28.77 ft); no outflow at times each year. Maximum inflow, 3,360 cfs (average for 5-minute interval) Apr. 30, 1966, 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 good. The pool is formed by a rolled earthfill dam, 1,303 ft long with an emergency spillway located at right end of dam. The dam was completed Feb. 9, 1952, but no appreciable storage began until April 1952. The first outflow occurred on Apr. 21, 1957. The outlet structure consists of an uncontrolled 2.5-foot square concrete drop-inlet structure that is connected to a 12-inch concrete outlet pipe. The emergency spillway crest is at gage height 26.8 ft; crest of drop-inlet structure is at gage height 14.84 ft; and invert at bottom of outlet pipe is at gage height 4.8 ft. There is also an 8-inch controlled outlet pipe connected to the drop inlet at gage height 4.8 ft. Pool capacity is 1,170 acre-ft at crest of emergency spillway, 428 acre-ft at crest of drop inlet, and 123 acre-ft at the controlled outlet pipe. The area and capacity tables presently in use are based on a sedimentation survey by the Soil Conservation Service in July 1967. The dam was built by the Soil Conservation Service for flood control and conservation. A recording rain gage is located at the station.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	105	39.0	684	77.1	38.1	40.4	22.8	16.7	0.2	8.5	1.7	3.2
Outflow	0	0	373	329	30.4	28.1	7.2	6.1	0	0	0	0
(†)	107	30.2	323	-260	-3.0	1.7	-2.1	-15.4	-29.1	-27.9	-22.3	-13.3
(††)	6.93	1.74	7.28	.40	.20	2.86	2.02	1.52	1.38	1.08	2.92	2.77

CAL YR 1971: Inflow 855 Outflow 373 † 374 †† 33.74
WTR YR 1972: Inflow 1,040 Outflow 774 † 88.8 †† 31.10

PEAK INFLOW (BASE, 100 CFS)

DATE	TIME	DISCHARGE
10-19	2325	*236
12- 8	2030	*486
12- 9	1205	*912

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches.
* Average for 5-minute interval.

08058000 Honey Creek subwatershed No. 12 near McKinney, Tex.

LOCATION.--Lat 33°18'20", long 96°40'12", Collin County, near center of dam on unnamed tributary of Honey Creek, 0.5 mile west of Farm Road 543, and 7.8 miles northwest of McKinney.

DRAINAGE AREA.--1.26 sq mi.

PERIOD OF RECORD.--September 1952 to current year.

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 623.00 ft above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--20 years, 518 acre-ft per year.

AVERAGE OUTFLOW.--20 years, 438 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 8.5 cfs Dec. 10 (gage height, 24.53 ft); no outflow at times. Maximum inflow, 448 cfs (average for 5-minute interval) Dec. 9, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 766 cfs May 26, 1957 (gage height, 29.23 ft); no outflow most of time each year. Maximum inflow, 1,490 cfs (average for 15-minute interval) May 21, 1957, computed from 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 good prior to July and fair thereafter. The pool is formed by a rolled earthfill dam, 1,253 ft long with an emergency spillway located at right end of dam. The dam was completed Jan. 11, 1952, but no appreciable storage began until April 1952. The first outflow occurred on May 12, 1954. The outlet structure consists of an uncontrolled 2.5-foot square concrete drop-inlet structure that is connected to a 12-inch concrete outlet pipe. The emergency spillway crest is at gage height 27.0 ft; crest of drop-inlet structure is at gage height 14.99 ft; and invert at bottom of outlet pipe is at gage height 5.0 ft. There is also an 8-inch controlled outlet pipe connected to the drop inlet at gage height 5.0 ft. Pool capacity is 477 acre-ft at the emergency spillway crest, 104 acre-ft at the crest of drop inlet, and zero acre-ft at the controlled outlet pipe. The area and capacity tables presently in use are based on a sedimentation survey completed by the Soil Conservation Service in July 1969. The dam was built by the Soil Conservation Service for flood control and conservation. A recording rain gage is located at station.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	162	23.3	389	14.4	11.6	33.0	9.7	6.5	1.1	0.2	0.7	2.6
Outflow	113	18.8	400	11.3	8.4	25.2	1.4	4.0	0	0	0	0
(†)	49.6	.9	-1.1	0	-1.3	1.1	.6	-6.3	-9.4	-11.6	-7.3	-3.1
(††)	5.81	1.40	6.96	.19	.21	1.86	2.20	1.63	.82	.72	2.70	2.45

CAL YR 1971: Inflow 604 Outflow 532 † 31.2 †† 32.45
WTR YR 1972: Inflow 654 Outflow 582 † 12.1 †† 26.95

PEAK INFLOW (BASE, 100 CFS)

DATE	TIME	DISCHARGE
10-19	2025	*434
12- 8	1950	*338
12- 9	1110	*448

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Weighted-mean rainfall, in inches.
* Average for 5-minute interval.

08058500 Honey Creek near McKinney, Tex.

LOCATION.--Lat 33°16'42", long 96°39'27", Collin County, on right bank at downstream side of bridge on county road, 4.5 miles downstream from Haw Branch, 5.6 miles upstream from mouth, and 6.0 miles northwest of McKinney.

DRAINAGE AREA.--39.0 sq mi.

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 563.68 ft above mean sea level (Soil Conservation Service reference mark).

AVERAGE DISCHARGE.--21 years, 18.7 cfs (13,550 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,930 cfs Dec. 9 (gage height, 17.35 ft); no flow at times.
Period of record: Maximum discharge, 7,920 cfs May 26, 1957 (gage height, 20.29 ft); no flow at times each year.
Maximum stage since at least 1930, 23.0 ft in spring of 1950, from information by local resident.

REMARKS.--Records good. At end of year, flow from 24.6 sq mi above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 9,080 acre-ft below the flood-spillway crests, of which 6,930 acre-ft is floodwater-retarding capacity and 2,150 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	5.3	13	28	6.1	2.8	3.7	5.4	.19			
2	0	4.0	117	27	6.7	3.2	3.5	3.0	.15			
3	46	2.6	163	25	5.3	2.0	3.2	1.9	.11			
4	35	2.1	62	25	3.8	1.8	2.6	1.4	.08			
5	13	2.0	388	18	4.3	1.7	2.3	1.2	.04			
6	5.0	1.8	249	18	5.6	1.5	2.5	1.4	.02			
7	2.8	1.7	181	19	5.6	1.8	2.6	4.9	.01			
8	1.5	1.5	362	20	4.0	1.5	2.0	7.5	.01			
9	1.4	1.5	1,390	22	4.0	1.3	1.7	4.1	0			
10	1.2	1.4	666	20	4.0	1.4	1.7	2.7	0			
11	.98	1.3	308	19	4.8	1.7	1.8	2.0	0			
12	.89	1.3	293	18	7.8	1.7	1.7	19	0			
13	.80	1.3	275	17	7.0	1.7	1.5	12	0			
14	.80	1.3	261	16	6.4	1.5	1.8	6.5	.50			
15	.72	1.3	275	15	5.8	1.7	4.4	3.1	.23			
16	.57	1.3	221	14	4.6	1.7	2.6	2.0	.06			
17	.98	15	197	15	4.0	1.5	1.6	1.4	0			
18	21	85	181	16	3.8	1.3	1.4	1.3	0			
19	271	30	149	16	2.8	1.8	1.4	1.4	0			
20	413	26	101	16	2.8	2.6	1.3	1.1	0			
21	202	18	92	16	3.2	2.2	1.9	.89	0			
22	142	12	84	15	3.4	1.7	1.5	.80	0			
23	64	28	83	13	3.6	1.4	1.2	.72	0			
24	54	17	77	11	3.6	14	.99	.57	0			
25	50	13	73	8.7	3.6	7.1	.93	.43	0			
26	35	11	73	7.9	3.6	40	.93	.37	0			
27	24	9.6	72	7.9	2.4	47	4.4	.37	0			
28	12	8.8	70	7.8	2.2	16	8.9	.32	0			
29	9.0	7.2	66	7.7	2.4	9.7	7.9	.32	0			
30	7.8	6.1	60	7.4	------	5.5	6.6	.32	0			
31	7.2	------	38	7.2	------	4.5	------	.23	------			------
TOTAL	1,423.64	318.4	6,640	493.6	127.2	185.3	80.55	88.64	1.40	0	0	0
MEAN	45.9	10.6	214	15.9	4.39	5.98	2.69	2.86	.047	0	0	0
MAX	413	85	1,390	28	7.8	47	8.9	19	.50	0	0	0
MIN	0	1.3	13	7.2	2.2	1.3	.93	.23	0	0	0	0
AC-FT	2,820	632	13,170	979	252	368	160	176	2.8	0	0	0

CAL YR 1971 TOTAL 8,668.32 MEAN 23.7 MAX 1,390 MIN 0 AC-FT 17,190
WTR YR 1972 TOTAL 9,358.73 MEAN 25.6 MAX 1,390 MIN 0 AC-FT 18,560

08059000 East Fork Trinity River near McKinney, Tex.

LOCATION.--Lat 33°12'13", long 96°35'44", Collin County, on right bank at downstream side of bridge on U.S. Highway 380, 1.2 miles northeast of McKinney, 4.2 miles downstream from Honey Creek, 11 miles upstream from Wilson Creek, 22 miles upstream from Lavon Dam, and at mile 82.4.

DRAINAGE AREA.--190 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 511.69 ft above mean sea level. Since Feb. 21, 1966, supplementary water-stage recorder on overflow channel, 3,680 ft to left of main channel.

AVERAGE DISCHARGE.--23 years, 102 cfs (73,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,300 cfs Dec. 9 (gage height, 16.57 ft); no flow July 6 to Sept. 30.
Period of record: Maximum discharge not determined; maximum gage height, 17.23 ft June 11, 1950; maximum discharge measured, 23,900 cfs May 26, 1957 (gage height, 16.65 ft); no flow at times.
Maximum stage since at least 1913, 21 ft in April 1942, from information by local residents.

REMARKS.--Records fair. Low flow is partly sustained by sewage effluent from U.S. Government training facility upstream from station. Small diversions for irrigation above station. At end of year, flow from 88.5 sq mi above this station was partly controlled by 50 floodwater-retarding structures with a total combined capacity of 32,780 acre-ft below the flood-spillway crests, of which 26,030 acre-ft is floodwater-retarding capacity and 6,750 acre-ft 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).--WSP 1512: 1950, 1951(P). WSP 1732: 1950-54(P), 1956(P). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	83	110	160	52	24	27	97	1.2	.27		
2	20	70	304	155	53	24	24	46	.98	.17		
3	307	56	1,580	136	49	21	23	35	.98	.10		
4	377	45	429	130	40	19	20	28	.84	.06		
5	158	40	1,350	105	39	17	18	21	.72	.02		
6	105	35	2,790	101	45	15	17	18	.51	0		
7	77	31	1,170	103	46	16	19	43	.51	0		
8	53	29	728	105	39	16	18	50	.42	0		
9	41	28	6,810	110	37	13	14	39	.38	0		
10	29	27	6,810	107	36	12	13	27	.31	0		
11	22	25	2,130	97	37	13	12	21	.31	0		
12	18	25	1,680	90	54	13	11	38	.42	0		
13	15	23	1,460	86	61	14	11	89	2.1	0		
14	12	23	1,310	76	52	13	9.3	49	5.2	0		
15	11	22	1,570	66	47	13	10	34	1.4	0		
16	9.0	22	1,220	63	41	12	22	25	1.2	0		
17	11	27	727	66	38	12	14	21	1.9	0		
18	32	668	611	72	35	11	9.0	18	2.0	0		
19	1,140	409	513	74	30	9.3	7.5	16	1.7	0		
20	4,720	258	430	71	27	8.8	6.8	12	1.1	0		
21	2,400	159	378	68	29	10	5.6	8.0	1.3	0		
22	811	113	332	64	30	16	6.3	6.0	1.3	0		
23	473	206	302	61	29	13	5.8	4.8	1.1	0		
24	358	168	279	55	30	39	4.1	4.3	.84	0		
25	296	125	253	46	31	68	2.6	3.8	.66	0		
26	252	107	240	42	29	38	1.9	2.9	.56	0		
27	230	96	228	51	25	139	25	2.4	.84	0		
28	182	86	218	76	23	77	49	2.1	.84	0		
29	141	76	204	65	23	45	60	1.8	.38	0		
30	116	68	205	60	------	32	31	1.6	.34	0		
31	98	------	165	54	------	28	------	1.4	------	0		------
TOTAL	12,541.0	3,150	36,536	2,615	1,107	801.1	496.9	766.1	32.34	.62	0	0
MEAN	405	105	1,179	84.4	38.2	25.8	16.6	24.7	1.08	.020	0	0
MAX	4,720	668	6,810	160	61	139	60	97	5.2	.27	0	0
MIN	9.0	22	110	42	23	8.8	1.9	1.4	.31	0	0	0
AC-FT	24,880	6,250	72,470	5,190	2,200	1,590	986	1,520	64	1.2	0	0

CAL YR 1971 TOTAL 55,737.38 MEAN 153 MAX 6,810 MIN 0 AC-FT 110,600
WTR YR 1972 TOTAL 58,046.06 MEAN 159 MAX 6,810 MIN 0 AC-FT 115,100

08059500 Sister Grove Creek near Princeton, Tex.

LOCATION.--Lat 33°11'35", long 96°28'32", Collin County, on right bank at upstream side of bridge on Farm Road 1377, 1.4 miles northeast of Princeton, 2.3 miles downstream from Stiff Creek, 5 miles upstream from mouth, and 15 miles upstream from Lavon Dam.

DRAINAGE AREA.--113 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 487.52 ft above mean sea level (Corps of Engineers bench mark), unadjusted.

AVERAGE DISCHARGE.--23 years, 64.0 cfs (46,370 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,440 cfs Dec. 9 (gage height, 15.98 ft); no flow June 21 to Sept. 30.
Period of record: Maximum discharge, 9,080 cfs Apr. 26, 1957 (gage height, 16.28 ft), from rating curve extended above 5,200 cfs on basis of contracted-opening measurement of 7,560 cfs; maximum gage height, 16.55 ft Apr. 30, 1966; no flow at times.
Maximum stage since at least 1865, 22 ft in July 1913, from information by local residents.

REMARKS.--Records good. At end of year, flow from 57.6 sq mi above this station was partly controlled by 37 floodwater-retarding structures with a total combined capacity of 19,870 acre-ft below the flood-spillway crests, of which 15,600 acre-ft is floodwater-retarding capacity and 4,270 acre-ft 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).--WSP 1392: 1950, 1951(P). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	73	38	121	34	23	17	19	.50			
2	.21	53	126	110	34	23	16	36	.44			
3	17	33	375	98	34	22	16	22	.43			
4	131	22	258	100	28	21	15	15	.39			
5	94	16	519	90	26	20	13	10	.31			
6	51	16	1,110	80	28	18	12	7.6	.23			
7	31	12	951	82	31	14	12	13	.16			
8	15	7.4	503	83	28	14	11	13	.10			
9	9.1	6.8	2,970	86	25	14	9.9	15	.07			
10	8.9	6.7	3,980	84	25	13	8.4	14	.02			
11	5.8	7.4	1,930	73	28	12	7.0	9.5	.61			
12	3.0	9.8	1,110	66	30	13	6.7	8.6	1.9			
13	2.2	9.7	1,000	59	37	14	6.5	7.2	.95			
14	1.7	8.8	908	53	35	14	6.6	12	.75			
15	1.4	6.3	889	46	31	13	5.9	11	.59			
16	.87	7.0	902	41	28	13	5.7	6.7	.43			
17	1.0	7.3	597	42	25	15	14	5.3	.26			
18	3.5	157	463	45	24	17	12	4.3	.15			
19	192	172	378	49	21	17	7.0	3.4	.07			
20	878	89	296	49	18	15	6.2	2.8	.02			
21	1,100	55	253	47	18	15	5.2	2.4	0			
22	508	44	217	45	19	17	4.6	2.2	0			
23	284	47	205	40	21	19	4.0	1.9	0			
24	216	75	202	38	23	24	3.5	1.7	0			
25	175	61	195	36	28	65	4.1	1.4	0			
26	137	50	191	32	27	42	2.1	1.4	0			
27	133	46	183	35	25	80	3.9	1.5	0			
28	134	43	163	48	22	59	5.9	1.3	0			
29	104	39	146	49	22	38	26	.92	0			
30	88	34	148	41	------	27	25	.71	0			
31	78	------	136	36	------	20	------	.58	------			------
TOTAL	4,404.64	1,214.2	21,342	1,904	775	731	292.2	251.41	8.38	0	0	0
MEAN	142	40.5	688	61.4	26.7	23.6	9.74	8.11	.28	0	0	0
MAX	1,100	172	3,980	121	37	80	26	36	1.9	0	0	0
MIN	.21	6.3	38	32	18	12	2.1	.58	0	0	0	0
AC-FT	8,740	2,410	42,330	3,780	1,540	1,450	580	499	17	0	0	0

CAL YR 1971 TOTAL 27,932.06 MEAN 76.5 MAX 3,980 MIN 0 AC-FT 55,400
WTR YR 1972 TOTAL 30,922.83 MEAN 84.5 MAX 3,980 MIN 0 AC-FT 61,340

PEAK DISCHARGE (BASE, 1,800 CFS).--Dec. 9 (1830) 5,440 cfs (15.98 ft).

08060500 Lavon Lake near Lavon, Tex.

LOCATION.--Lat 33°01'54", long 96°28'56", Collin County, in right abutment of spillway in dam on East Fork Trinity River, 3,850 ft upstream from St. Louis Southwestern Railway Lines bridge, 4,000 ft upstream from bridge on State Highway 78, 2.9 miles west of Lavon, and at mile 55.9.

DRAINAGE AREA.--770 sq mi.

PERIOD OF RECORD.--September 1953 to current year. Prior to October 1970, published as Lavon Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Jan. 20, 1954, nonrecording gage in the approach channel at same datum.

EXTREMES.--Current year: Maximum contents, 362,600 acre-ft Dec. 17 (elevation, 486.84 ft); minimum, 91,380 acre-ft Sept. 30 (elevation, 466.67 ft).
Period of record: Maximum contents, 462,800 acre-ft May 26, 1957 (elevation, 491.90 ft); minimum since lake first filled in 1957, 87,980 acre-ft Sept. 22, 1971 (elevation, 466.27 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 9,499 ft long, including a 568-foot gated spillway with twelve 40- by 28-foot tainter gates. The low-flow outlets consist of five 36-inch-diameter gate-controlled sluices with inverts at elevation 453.0 ft. Deliberate impoundment of water began Sept. 14, 1953, and dam completed in October 1953. Figures given herein represent total contents. Lake is designed for flood control and water conservation. Capacity table is based on survey made in 1952. Water for municipal supply can be withdrawn to elevation 453.0 ft. At end of year, flow from 230 sq mi above this station was partly controlled by 139 floodwater-retarding structures with a total combined capacity of 82,780 acre-ft below the flood-spillway crests, of which 65,880 acre-ft is floodwater-retarding capacity and 16,900 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	502.0	-
Top of tainter gates	490.0	423,400
Top of conservation storage	472.0	143,600
Crest of spillway (sill of tainter gates)	462.0	56,290
Invert of lowest intake	453.0	14,330

COOPERATION.--Records furnished by the Corps of Engineers and reviewed by the Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

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

466.0	85,690	476.0	191,800
468.0	103,100	478.0	218,900
470.0	122,400	480.0	248,000
472.0	143,600	483.0	295,300
474.0	166,700	487.0	365,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92,310	171,600	143,900	288,800	143,800	141,800	140,900	137,100	132,400	123,300	110,500	99,640
2	92,480	168,700	144,700	280,700	143,600	141,500	140,700	137,600	131,900	122,700	109,900	99,370
3	95,610	165,600	148,100	274,300	143,500	141,500	140,600	137,500	131,500	122,700	109,600	99,280
4	98,210	162,000	153,500	266,400	143,000	141,400	140,400	137,200	131,200	122,400	109,300	99,100
5	100,100	159,900	162,000	257,900	143,200	141,400	140,300	136,800	130,900	121,900	108,900	98,920
6	100,900	158,000	176,600	251,000	143,600	141,400	140,200	137,100	130,600	121,300	108,300	98,380
7	100,900	154,900	188,200	244,400	143,600	141,300	140,100	137,400	130,100	120,900	108,100	98,210
8	101,200	152,200	199,100	235,900	143,700	141,200	140,000	137,600	129,500	120,400	107,400	98,030
9	101,300	150,400	253,300	228,100	143,800	141,000	139,800	137,400	129,200	120,100	107,000	97,490
10	101,200	148,500	327,800	220,100	144,000	140,900	139,600	137,100	128,800	119,700	106,700	96,860
11	101,100	146,800	343,100	212,400	144,400	140,900	139,100	137,100	129,000	119,400	106,300	96,500
12	100,900	145,700	348,100	203,800	144,700	140,900	138,900	137,500	128,800	119,000	106,100	95,880
13	100,600	144,600	351,800	197,100	144,700	140,900	139,000	137,400	128,200	118,600	106,000	95,610
14	100,800	143,600	354,900	188,800	144,900	140,700	139,000	137,300	128,800	118,100	105,800	95,610
15	100,600	143,200	359,100	180,900	144,900	140,600	138,800	137,100	128,700	117,800	105,600	94,800
16	100,400	143,200	362,400	171,300	144,700	140,500	138,400	136,700	128,500	117,500	105,100	94,540
17	101,500	144,100	362,600	163,800	144,500	140,500	138,100	136,600	128,100	117,100	104,900	94,270
18	102,900	144,700	362,000	156,900	144,100	139,900	137,800	136,600	127,900	116,800	104,400	94,180
19	115,500	146,800	360,400	150,500	143,600	139,700	137,800	136,500	127,400	116,400	104,300	93,750
20	147,500	147,900	360,000	145,100	143,500	140,200	137,700	136,200	127,100	116,200	103,800	93,330
21	165,500	148,100	362,200	143,500	143,500	140,100	137,300	136,200	127,400	115,600	103,300	93,330
22	175,900	149,200	362,000	143,700	143,300	139,700	137,000	135,500	126,800	115,400	102,900	93,240
23	180,300	149,300	356,300	144,100	143,100	139,700	137,100	135,200	126,700	115,100	102,600	93,070
24	182,900	149,100	349,000	144,200	142,900	140,900	136,700	135,100	126,500	114,800	101,900	92,740
25	184,500	147,900	341,300	144,200	142,800	141,000	136,500	134,900	126,100	114,300	102,100	92,650
26	185,300	147,300	334,000	144,700	142,800	141,100	135,900	134,400	125,700	113,600	101,800	92,400
27	185,400	146,200	326,800	144,900	142,500	141,300	137,100	134,000	125,200	113,000	101,400	92,230
28	184,000	145,800	318,700	144,900	142,500	141,500	137,100	133,800	124,900	112,500	101,100	91,970
29	181,300	144,700	310,900	144,700	142,200	141,500	137,100	133,700	124,600	112,300	100,400	91,630
30	178,800	144,000	303,700	144,400	------	141,400	137,100	133,400	124,000	111,900	99,990	91,380
31	175,900	------	295,300	144,000	------	141,200	------	132,900	------	111,200	99,820	------
(†)	474.75	472.04	483.00	472.04	471.87	471.78	471.40	471.02	470.16	468.86	467.63	466.67
(*)	+83,590	-31,900	+151,300	-151,300	-1,800	-1,000	-4,100	-4,200	-8,900	-12,800	-11,380	-8,440
(††)	3,050	3,630	2,890	3,150	2,710	3,530	4,790	3,990	4,780	5,820	5,860	4,630
MAX	185,400	171,600	362,600	288,800	144,900	141,800	140,900	137,600	132,400	123,300	110,500	99,640
MIN	92,310	143,200	143,900	143,500	142,200	139,700	135,900	132,900	124,000	111,200	99,820	91,380

CAL YR 1971..... * +166,200 †† 43,590 MAX 362,600 MIN 88,060
WTR YR 1972..... * -930 †† 48,830 MAX 362,600 MIN 91,380

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use by North Texas Municipal Water District.

08061000 East Fork Trinity River near Lavon, Tex.

LOCATION.--Lat 33°01'25", long 96°28'31", Collin County, on left bank at downstream side of St. Louis Southwestern Railway Lines bridge, 150 ft upstream from bridge on State Highway 78, 3,550 ft downstream from Lavon Dam, 2.5 miles west of Lavon, and at mile 54.9.

DRAINAGE AREA.--773 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 429.58 ft above mean sea level. Prior to Oct. 1, 1969, at site 150 ft downstream at same datum.

AVERAGE DISCHARGE.--19 years, 359 cfs (260,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,830 cfs Dec. 24 (gage height, 15.59 ft); no flow for many days.
Period of record: Maximum discharge, 39,000 cfs May 26, 27, 1957, from records of released flow from Lavon Lake furnished by Corps of Engineers; maximum gage height, 17.34 ft May 26, 1957; no flow at times each year.
Maximum stage since at least 1894, 22.3 ft in 1913 and in April 1942, from information by St. Louis Southwestern Railway Lines and local residents.

REMARKS.--Records good. Flow regulated by Lavon Lake (station 08060500).

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1,680	630	4,500	151	.03	0		0		0	
2	0	1,680	618	4,350	151	.03	0		0		0	
3	13	1,620	606	4,350	125	.01	0		0		0	
4	1.2	1,620	474	4,200	22	.01	0		0		0	
5	.01	1,590	101	4,200	.03	.01	0		0		0	
6	0	1,590	38	4,200	.01	.01	0		0		0	
7	0	1,340	42	4,200	.03	.01	0		0		0	
8	0	800	51	4,350	.06	.01	0		0		0	
9	0	1,010	85	4,500	.06	.01	0		0		0	
10	0	1,010	2,020	4,350	.06	0	0		0		0	
11	0	925	2,400	4,200	.06	0	0		0		0	
12	0	663	2,500	4,200	.12	0	0		0		0	
13	0	558	2,500	4,200	.12	0	0		0		0	
14	0	558	2,500	4,050	22	0	0		0		0	
15	0	226	2,500	3,900	177	0	0		0		0	
16	0	.2	2,500	3,750	177	0	0		6.2		0	
17	0	.1	2,500	3,750	177	0	0		0		0	
18	0	.1	2,500	3,600	177	0	0		0		0	
19	30	.1	2,500	3,450	177	0	0		0		0	
20	108	.1	1,740	3,130	177	0	0		0		0	
21	3.3	.1	4.7	1,060	177	0	0		0		0	
22	2.0	.2	866	.2	121	0	0		0		0	
23	1.6	.2	1,570	0	38	0	0		0		0	
24	1.6	.4	4,800	0	.35	0	0		0		0	
25	1.6	.6	4,800	0	.22	0	0		0		0	
26	263	.1	4,650	0	.22	0	0		0		0	
27	973	.2	4,650	0	.22	0	.06		0		0	
28	1,610	196	4,650	42	.22	0	.06		0		0	
29	1,740	707	4,650	151	.22	0	.01		0		0	
30	1,740	641	4,500	151	------	0	0		0		.22	
31	1,680	------	4,500	151	------	0	------		------		.01	------
TOTAL	8,168.31	18,416.4	68,445.7	82,985.2	1,871.00	.13	.13	0	6.2	0	.23	0
MEAN	263	614	2,208	2,677	64.5	.004	.004	0	.21	0	.007	0
MAX	1,740	1,680	4,800	4,500	177	.03	.06	0	6.2	0	.22	0
MIN	0	.10	4.7	0	.01	0	0	0	0	0	0	0
AC-FT	16,200	36,530	135,800	164,600	3,710	.3	.3	0	12	0	.5	0

CAL YR 1971 TOTAL 95,071.01 MEAN 260 MAX 4,800 MIN 0 AC-FT 188,600
WTR YR 1972 TOTAL 179,893.30 MEAN 492 MAX 4,800 MIN 0 AC-FT 356,800

08061540 Rowlett Creek near Sachse, Tex.

LOCATION.--Lat 32°57'35", long 96°36'51", Dallas County, on left bank at downstream side of bridge on State Highway 78, 150 ft downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 250 ft downstream from Spring Creek, and 1.5 miles southwest of Sachse.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 450.00 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 24,700 cfs Dec. 9 (gage height, 28.35 ft); minimum, 0.35 cfs Aug. 21.
Period of record: Maximum discharge, 24,700 cfs Dec. 9, 1971 (gage height, 28.35 ft); no flow Aug. 24 to Sept. 2, 1969.
Maximum stage since at least 1942, 35.4 ft in 1942, from information by Texas Highway Department.

REMARKS.--Records good. No known diversion above station. The city of Plano reported the discharge of 3,070 acre-ft of sewage effluent into a tributary above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	67	60	122	41	28	19	20	6.8	3.0	2.3	2.1
2	14	64	473	88	42	26	19	23	6.4	1.9	1.8	1.8
3	3,240	59	508	75	38	27	19	16	6.4	1.4	1.8	1.3
4	550	57	124	71	36	27	17	14	6.1	1.9	1.9	1.2
5	127	56	2,180	71	37	24	15	13	5.4	1.4	2.3	2.7
6	82	55	621	72	40	24	16	19	5.6	1.7	1.8	3.1
7	63	52	332	74	37	26	16	67	4.9	1.6	1.1	2.6
8	61	51	794	75	36	25	14	39	4.6	1.8	2.0	2.2
9	59	51	9,740	76	35	25	13	23	4.4	2.2	1.9	2.0
10	50	50	6,360	72	34	25	14	18	4.3	2.0	2.6	45
11	50	49	411	65	36	27	15	16	4.3	1.9	1.8	7.2
12	46	48	288	63	46	24	15	70	3.3	1.6	2.0	2.9
13	43	46	226	61	38	24	13	31	3.7	2.8	3.0	2.2
14	42	46	329	56	36	24	12	18	147	2.0	1.5	1.8
15	39	45	627	52	34	23	24	15	47	2.0	2.2	1.8
16	38	44	206	55	32	24	16	14	22	2.0	1.6	1.7
17	40	46	172	55	33	24	12	14	12	1.5	1.5	2.9
18	182	277	146	56	32	21	11	13	7.7	2.2	1.6	1.1
19	2,640	63	140	55	30	21	11	13	5.6	2.2	1.6	2.3
20	3,870	53	129	53	30	24	11	13	4.9	2.2	1.5	1.9
21	255	50	116	50	32	29	15	11	4.9	1.9	1.3	2.0
22	145	48	107	48	32	23	12	11	12	1.8	1.2	2.6
23	118	109	106	47	31	23	11	10	8.1	1.6	1.7	2.6
24	106	67	102	46	31	141	9.3	10	5.9	1.3	1.8	2.7
25	94	57	100	43	31	32	9.2	9.9	4.9	2.2	1.6	3.5
26	87	55	99	43	29	26	8.7	9.1	4.0	1.9	1.6	3.2
27	125	52	100	49	27	27	249	8.2	3.4	2.0	1.8	3.4
28	90	50	93	46	29	23	47	11	3.1	2.0	1.3	3.1
29	81	48	93	43	28	21	27	17	3.1	1.9	1.6	9.8
30	75	48	97	41	------	19	23	8.9	3.0	2.0	1.7	16
31	71	------	87	40	------	20	------	7.1	------	1.4	1.9	------
TOTAL	12,496	1,863	24,966	1,863	993	877	713.2	582.2	364.8	59.3	55.3	138.7
MEAN	403	62.1	805	60.1	34.2	28.3	23.8	18.8	12.2	1.91	1.78	4.62
MAX	3,870	277	9,740	122	46	141	249	70	147	3.0	3.0	45
MIN	13	44	60	40	27	19	8.7	7.1	3.0	1.3	1.1	1.1
AC-FT	24,790	3,700	49,520	3,700	1,970	1,740	1,410	1,150	724	118	110	275

CAL YR 1971 TOTAL 45,123.46 MEAN 124 MAX 9,740 MIN .35 AC-FT 89,500
WTR YR 1972 TOTAL 44,971.50 MEAN 123 MAX 9,740 MIN 1.1 AC-FT 89,200

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	1500	24.87	10,200	12-5	1600	21.51	4,610
10-20	0445	24.37	10,000	12-9	1530	28.35	24,700

08061550 Lake Ray Hubbard near Forney, Tex.

LOCATION.--Lat 32°48'00", long 96°29'45", Kaufman County, near right end of spillway in Forney Dam on East Fork Trinity River, 0.5 mile upstream from Duck Creek, 1.8 miles upstream from bridge on Interstate Highway 20, 3.8 miles northwest of Forney, 24 miles downstream from Lavon Dam, and at mile 31.8.

DRAINAGE AREA.--1,071 sq mi.

PERIOD OF RECORD.--January 1968 to current year.

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

EXTREMES.--Current year: Maximum contents, 490,800 acre-ft Nov. 11 (elevation, 435.54 ft); minimum, 376,000 acre-ft Oct. 1, 2 (elevation, 430.11 ft).
Period of record: Maximum contents, 490,800 acre-ft Nov. 11, 1971 (elevation, 435.54 ft); minimum since first appreciable filling following closure of gates on Mar. 22, 1970, 371,000 acre-ft July 23, 1971 (elevation, 429.85 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 12,500 ft long, including a 664-foot gated spillway with fourteen 40- by 28-foot tainter gates. Low-flow releases are through three 4.5- by 6.75-foot sluiceways, with inverts at elevation 388.0 ft. Flow in each sluiceway can be controlled by three sluice gates. One gate is 4- by 6-foot with invert at elevation 388.0 ft, one is 2- by 3-foot with invert at elevation 409.0 ft, and one is 1.5- by 2-foot with invert at elevation 409.0 ft. Closure of dam was made in September 1967 but gates were left open and lake functioned as a detention basin until Mar. 22, 1970, when tainter gates were closed. Area and capacity tables were prepared by Forrest and Cotton, Consulting Engineers, for the city of Dallas, from surveys made in 1953 and 1959. The lake was built by the city of Dallas for municipal water supply. No water was diverted from lake during year. Figures given herein represent total contents. At end of year, flow from 44.5 sq mi above this station and below Lavon Lake (station 08060500) was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 14,470 acre-ft below the flood-spillway crests, of which 12,520 acre-ft is floodwater-retarding capacity and 1,950 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	448.0	-
Design flood level	440.5	611,500
Top of tainter gates	437.5	536,700
Top of conservation storage	435.5	489,900
Crest of spillway (sill of tainter gates)	409.5	83,130
Invert of three 4- by 6-foot sluice gates	388.0	80

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

430.0	373,900	434.0	456,500
431.0	393,700	435.0	478,600
432.0	414,000	436.0	501,400
433.0	435,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376,200	473,300	463,100	458,500	459,300	461,300	455,600	458,000	453,000	446,500	432,200	422,700
2	376,400	477,100	467,000	456,500	461,300	459,600	454,300	458,200	452,600	445,900	431,600	422,900
3	392,100	478,600	465,500	459,800	458,700	458,000	457,200	457,600	452,400	445,700	431,100	421,900
4	394,300	481,300	464,800	457,600	457,800	459,800	455,400	456,900	452,100	446,300	430,900	421,700
5	394,900	484,200	473,700	455,000	457,400	458,500	454,800	456,500	451,500	445,200	430,300	421,500
6	394,900	488,100	472,400	454,800	459,100	457,200	454,100	456,900	451,300	443,500	429,700	420,900
7	394,900	488,800	468,600	454,800	457,400	460,200	456,900	459,600	450,800	443,100	429,700	420,700
8	395,100	489,200	468,400	455,800	456,900	458,000	455,200	458,700	450,400	442,900	429,200	420,700
9	394,900	489,900	478,600	457,400	456,700	457,800	454,300	458,200	450,000	440,900	429,200	421,100
10	394,700	490,400	466,400	458,000	457,200	457,600	454,300	458,200	449,800	441,800	429,000	420,400
11	394,300	489,900	459,600	458,200	457,600	457,600	453,700	457,600	450,400	441,600	428,600	419,800
12	394,300	489,200	459,800	458,000	457,600	458,000	453,200	459,100	450,000	441,400	428,400	419,200
13	394,500	487,400	457,200	459,300	457,400	458,700	453,900	458,900	449,500	440,700	428,000	418,800
14	393,900	486,700	457,800	459,100	458,200	457,200	455,000	458,700	451,100	440,100	428,000	418,600
15	394,100	485,800	458,200	456,100	458,200	458,700	456,100	458,000	450,600	440,100	428,000	418,400
16	394,300	483,600	458,000	454,300	458,200	458,200	455,400	457,800	450,400	439,200	427,800	418,200
17	395,300	483,400	456,900	454,100	458,700	458,500	454,800	457,800	450,200	438,600	427,600	417,300
18	401,300	480,900	456,900	456,900	458,900	458,000	454,300	458,000	449,500	438,800	427,100	417,700
19	428,600	475,500	458,700	458,700	458,200	457,400	454,800	457,600	449,300	438,400	426,700	417,300
20	447,400	471,900	460,600	460,200	458,900	457,800	453,200	457,400	449,300	437,900	426,500	416,900
21	448,700	468,400	461,300	460,000	459,800	458,000	455,400	456,700	450,400	437,500	426,100	417,500
22	450,600	466,400	461,500	460,200	460,000	457,400	454,500	456,500	450,000	437,300	426,300	417,300
23	451,300	463,500	463,100	459,800	459,800	457,200	455,600	456,100	449,500	437,100	425,900	416,500
24	451,700	462,000	464,800	460,400	460,400	460,600	454,800	456,100	449,100	436,700	424,400	416,300
25	452,600	461,100	465,100	459,800	463,100	458,500	453,000	455,800	448,700	435,800	425,300	415,700
26	453,700	462,000	463,100	460,000	460,200	457,400	453,000	455,400	447,800	435,400	424,800	416,100
27	455,400	461,100	463,100	460,900	460,200	459,300	458,000	455,000	446,500	435,000	424,600	416,100
28	458,500	461,300	459,800	459,800	459,800	460,900	457,600	454,500	447,400	434,500	424,200	415,000
29	462,000	462,200	457,800	460,400	459,800	458,200	457,600	455,000	447,400	435,000	423,400	418,200
30	466,400	463,300	456,900	459,800	------	457,400	456,900	454,500	446,900	433,900	422,900	414,800
31	469,200	------	456,500	459,300	------	456,500	------	453,400	------	433,100	422,700	------
(†)	434.58	434.31	434.00	434.13	434.15	434.00	434.02	433.86	433.56	432.91	432.42	432.04
(*)	+92,500	-5,900	-6,800	+2,800	+500	-3,300	+400	-3,500	-6,500	-13,800	-10,400	-7,900
MAX	469,200	490,400	478,600	460,900	463,100	461,300	458,000	459,600	453,000	446,500	432,200	422,900
MIN	376,200	461,100	456,500	454,100	456,700	456,500	453,000	453,400	446,500	433,100	422,700	414,800

CAL YR 1971..... * +62,200 MAX 490,400 MIN 372,400
WTR YR 1972..... * +38,100 MAX 490,400 MIN 376,200

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

08061700 Duck Creek near Garland, Tex.

LOCATION.--Lat 32°49'59", long 96°35'43", Dallas County, on right bank at downstream side of bridge on Belt Line Road, 6.0 miles southeast of Garland, and 7.7 miles upstream from mouth.

DRAINAGE AREA.--31.6 sq mi.

PERIOD OF RECORD.--January 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 430.02 ft above mean sea level. Prior to Oct. 1, 1962, at datum 4.00 ft higher.

AVERAGE DISCHARGE.--14 years, 23.4 cfs (10.06 inches per year, 16,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,550 cfs Oct. 3 (gage height, 18.26 ft); no flow Aug. 31 to Sept. 4, Sept. 15-21. Period of record: Maximum discharge, 16,000 cfs July 27, 1962 (gage height, 20.80 ft, present datum); no flow at times. Maximum stage since about 1895, 21.5 ft, present datum, June 13, 1949, from information by local residents.

REMARKS.--Records good. Flow slightly regulated by several small on-channel dams. Small diversion for irrigation of golf course above station. Low flows may be sustained by effluents from city of Garland. Three recording rain gages above station and one at station are operated in basin.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	6.2	23	83	4.7	1.7	2.1	4.4	.56	2.4	.07	0
2	13	5.0	459	14	4.5	1.6	2.1	3.6	.68	.98	.05	0
3	1,750	3.9	76	79	4.1	1.6	1.8	2.3	.56	.56	.03	0
4	122	3.5	19	33	3.8	1.5	1.8	2.4	.56	.56	.23	0
5	17	3.4	814	11	4.0	1.6	1.8	2.1	.23	.82	1.6	4.1
6	11	3.4	126	11	4.6	1.4	2.0	11	.23	.56	.45	.23
7	11	3.2	54	10	4.3	1.3	1.9	122	.68	.45	.18	.18
8	9.2	2.8	390	9.1	3.4	1.2	1.6	13	.56	.36	.13	.07
9	8.6	3.1	1,990	9.1	3.5	1.1	1.7	5.2	1.8	.28	3.3	.03
10	5.0	3.1	992	9.1	3.2	1.1	1.8	3.4	.98	.18	7.0	1.6
11	3.8	2.8	57	8.5	6.1	1.3	2.0	2.8	.68	.18	.40	.13
12	3.6	2.8	32	8.5	11	1.4	1.6	21	3.6	.18	2.2	.07
13	3.2	3.4	24	8.0	4.9	1.7	1.6	7.5	6.0	.36	4.6	.03
14	3.2	2.4	72	7.5	3.8	1.8	3.8	3.4	27	.68	.44	.01
15	3.0	2.8	78	5.2	3.1	1.6	16	2.4	4.2	.36	.18	0
16	2.5	2.6	17	5.6	3.1	2.2	3.5	1.8	1.8	.36	.13	0
17	12	39	16	6.0	2.9	1.6	1.3	1.8	1.8	.18	.08	0
18	193	135	13	8.1	3.1	2.2	1.0	1.6	52	.23	.06	0
19	1,710	9.1	13	6.4	2.8	1.2	.96	1.8	3.4	7.0	.13	0
20	1,080	5.6	12	5.9	2.3	1.2	.97	1.6	1.2	.98	.09	0
21	41	4.8	11	6.0	2.1	1.8	13	.98	93	.45	.06	0
22	25	13	9.2	5.7	2.3	1.5	3.4	.82	16	.23	.05	7.8
23	21	45	9.5	5.7	2.2	1.1	1.6	.68	4.8	.23	1.3	4.3
24	18	9.1	9.8	5.5	2.1	90	1.1	.68	2.6	.18	.13	.23
25	16	6.0	9.5	4.6	2.5	6.6	.87	.82	1.2	.18	.07	.13
26	14	5.2	9.1	4.6	2.7	16	.78	.68	.56	.23	.18	.10
27	21	4.6	9.3	11	2.0	11	335	.56	4.8	.18	.10	.05
28	13	4.2	8.5	9.7	1.9	4.2	18	.82	2.8	.18	.05	.18
29	9.6	4.0	8.3	6.1	1.7	3.1	8.3	2.6	87	.13	.03	.10
30	8.5	4.8	12	5.0	------	2.4	5.7	.82	10	.13	.02	4.9
31	6.6	------	8.0	4.3	------	2.3	------	.56	------	.07	0	------
TOTAL	5,155.78	343.8	5,381.2	406.2	102.7	170.3	439.08	225.12	331.28	19.85	23.34	24.24
MEAN	166	11.5	174	13.1	3.54	5.49	14.6	7.26	11.0	.64	.75	.81
MAX	1,750	135	1,990	83	11	90	335	122	93	7.0	7.0	7.8
MIN	.98	2.4	8.0	4.3	1.7	1.1	.78	.56	.23	.07	0	0
CFSM	5.25	.36	5.51	.41	.11	.17	.46	.23	.35	.02	.02	.03
IN.	6.07	.40	6.33	.48	.12	.20	.52	.27	.39	.02	.03	.03
AC-FT	10,230	682	10,670	806	204	338	871	447	657	39	46	48
†††	11.22	1.86	7.46	1.14	.27	1.13	3.13	1.62	3.08	.29	.69	1.11

CAL YR 1971 TOTAL 13,597.06 MEAN 37.3 MAX 1,990 MIN 0 CFSM 1.18 IN 16.01 AC-FT 26,970 †† 40.92
WTR YR 1972 TOTAL 12,622.89 MEAN 34.5 MAX 1,990 MIN 0 CFSM 1.09 IN 14.86 AC-FT 25,040 †† 33.00

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	1200	18.26	7,550	12-5	1400	15.82	2,480
10-19	1000	16.98	4,370	12-8	2345	16.09	2,850
10-19	2400	18.05	6,940	12-9	1630	17.00	4,400
12- 2	1830	15.44	2,030				

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

08061950 South Mesquite Creek at Mercury Road near Mesquite, Tex.

LOCATION.--Lat 32°43'32", long 96°34'12", Dallas County, on left bank at downstream side of bridge on Mercury Road, 3.3 miles southeast of Mesquite, and 3.6 miles upstream from mouth.

DRAINAGE AREA.--23.0 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 389.91 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,890 cfs Oct. 20 (gage height, 10.67 ft); no flow at times.
Period of record: Maximum discharge, 5,260 cfs May 7, 1969 (gage height, 12.06 ft), from rating curve extended above 1,300 cfs; no flow at times.
Maximum stage since about 1918, 14.3 ft Apr. 27, 1957 (discharge not determined), from information by Corps of Engineers. Floods in April 1942, April 1958, and in 1962 reached stages almost as high as that of flood of Apr. 27, 1957, from information by Corps of Engineers.

REMARKS.--Records fair. Flow slightly affected by numerous small stock ponds. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	1.2	13	109	2.8	1.0	.13	2.4	0	2.1	0	0
2	.05	1.1	240	20	2.7	1.0	.11	5.1	0	.66	0	0
3	687	.85	154	82	2.3	.82	.07	1.4	0	.27	0	.88
4	177	.51	11	94	1.7	.90	.08	.67	0	.15	0	.18
5	9.6	.43	530	9.2	1.6	1.2	.06	.58	0	.10	0	.06
6	3.9	.41	140	8.8	2.8	1.3	.07	8.3	0	.11	0	.02
7	2.1	.44	71	7.2	4.4	1.5	.05	176	0	.04	0	.01
8	1.5	.29	121	5.4	3.2	2.0	.07	36	0	.01	0	.96
9	5.6	.35	863	5.5	2.4	2.1	.05	3.5	0	.01	0	.12
10	1.5	.58	723	4.9	1.9	1.8	.07	1.4	0	0	.72	.43
11	.85	.68	21	3.8	3.8	2.2	.08	.65	5.2	0	.61	.08
12	.85	.68	8.8	4.2	12	2.6	.06	11	1.2	0	.09	.02
13	1.1	1.2	4.8	3.4	3.8	2.5	.05	5.0	4.9	0	.15	0
14	1.1	3.2	48	2.5	1.5	2.5	8.9	1.1	11	0	.07	0
15	1.2	1.6	84	1.8	.75	2.4	14	.48	4.8	0	.02	0
16	1.3	.73	9.4	1.6	.50	2.7	3.0	.32	9.3	0	.02	0
17	3.1	.49	6.6	2.4	.54	2.9	.26	.27	.75	0	.19	0
18	106	110	5.4	2.7	.49	2.6	.09	.29	32	0	.06	0
19	1,380	4.6	4.5	3.3	.38	2.1	.05	1.0	1.3	0	.03	0
20	1,020	2.2	3.8	3.5	.47	1.7	.07	.62	.24	0	.01	0
21	19	1.6	3.5	3.5	.50	3.1	37	.27	106	.26	0	3.2
22	9.0	1.2	3.3	3.3	.48	3.3	2.3	.19	49	3.7	0	10
23	6.6	28	2.9	3.6	.66	.92	.26	.14	1.9	1.0	0	12
24	5.5	4.1	2.8	3.5	.72	.49	.14	.15	.91	.12	0	.55
25	3.9	1.8	2.9	3.4	.74	3.1	.09	.06	.45	.03	0	.11
26	3.3	1.3	2.9	3.3	1.1	1.1	.04	.03	.24	.01	0	.04
27	19	1.2	3.0	3.9	.77	6.1	246	.01	.12	0	0	.02
28	5.0	1.5	3.5	4.2	.71	.91	106	0	.08	0	.32	0
29	2.5	1.9	3.4	2.7	.72	.37	9.9	0	65	0	.26	0
30	1.9	1.6	4.4	3.5	------	.36	5.1	0	80	0	.14	.10
31	1.6	------	4.4	2.9	------	.20	------	0	------	0	.03	------
TOTAL	3,481.18	175.74	3,099.3	413.0	56.43	57.77	434.15	256.93	374.39	8.57	2.72	28.78
MEAN	112	5.86	100	13.3	1.95	1.86	14.5	8.29	12.5	.28	.088	.96
MAX	1,380	110	863	109	12	6.1	246	176	106	3.7	.72	12
MIN	.05	.29	2.8	1.6	.38	.20	.04	0	0	0	0	0
CFSM	4.87	.25	4.35	.58	.08	.08	.63	.36	.54	.01	.004	.04
IN.	5.63	.28	5.01	.67	.09	.09	.70	.42	.61	.01	.004	.05
AC-FT	6,900	349	6,150	819	112	115	861	510	743	17	5.4	57
(††)	14.54	1.66	7.81	1.63	.30	.16	3.94	1.75	4.45	.70	.74	1.66

CAL YR 1971 TOTAL 8,351.27 MEAN 22.9 MAX 1,380 MIN 0 CFSM 1.00 IN 13.51 AC-FT 16,560 †† 46.09
WTR YR 1972 TOTAL 8,388.96 MEAN 22.9 MAX 1,380 MIN 0 CFSM 1.00 IN 13.57 AC-FT 16,640 †† 39.34

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	1630	9.91	2,270	12- 2	2215	8.20	920
10-19	1100	10.13	2,670	12- 5	1630	8.88	1,260
10-20	0215	10.67	3,890	12- 9	0400	8.12	888
				12-10	0445	9.67	1,910

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

08062000 East Fork Trinity River near Crandall, Tex.

LOCATION.--Lat 32°38'18", long 96°29'05", Kaufman County, on right bank at downstream side of bridge on U.S. Highway 175, 0.7 mile downstream from Mustang Creek, 1.8 miles northwest of Crandall, 4.0 miles upstream from Buffalo Creek, and at mile 11.0.

DRAINAGE AREA.--1,256 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 343.69 ft above mean sea level.

AVERAGE DISCHARGE.--4 years (1949-53) prior to regulation by Lavon Lake, 652 cfs (472,400 acre-ft per year); 19 years (1953-72) regulated, 559 cfs (405,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,100 cfs Dec. 10 (gage height, 21.25 ft); minimum daily, 20 cfs Sept. 5.
Period of record: Maximum discharge, 33,000 cfs May 28, 1957 (gage height, 22.81 ft); no flow at times.

REMARKS.--Records good. Flow largely regulated by Lavon Lake (station 08060500) since September 1953 and Lake Ray Hubbard (station 08061550) since Mar. 22, 1970. At end of year, flow from 39.2 sq mi above this station and below Lake Ray Hubbard was partly controlled by 20 floodwater-retarding structures with a total combined capacity of 13,670 acre-ft below the flood-spillway crests, of which 11,750 acre-ft is floodwater-retarding capacity and 1,920 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Records furnished by the city of Garland show that 19,040 acre-ft of sewage effluent was returned by the city to a tributary below Lake Ray Hubbard and above station, and records furnished by the city of Mesquite show that 5,830 acre-ft of sewage effluent was returned by that city to a tributary above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	104	123	4,960	300	85	69	46	29	81	25	25
2	29	90	240	4,960	307	86	29	43	28	35	26	24
3	271	77	1,150	4,960	314	88	26	40	28	28	27	26
4	1,330	69	1,610	5,440	300	84	26	35	27	26	28	24
5	1,600	62	1,380	5,200	300	82	28	31	26	26	27	20
6	341	56	2,780	4,720	242	84	28	33	26	26	28	23
7	112	50	3,620	4,500	215	68	29	53	28	27	24	36
8	81	314	3,840	4,280	220	40	30	251	28	28	25	29
9	69	486	5,440	4,060	168	38	28	95	27	27	27	23
10	62	477	18,100	4,060	138	40	24	45	28	26	30	23
11	53	495	19,100	4,060	94	40	40	37	28	26	28	21
12	51	660	8,630	4,060	67	38	50	36	30	28	30	22
13	50	860	4,280	4,060	73	37	35	58	28	29	28	22
14	48	895	4,720	4,280	66	43	28	50	36	28	24	22
15	47	930	4,500	4,720	62	41	40	35	59	28	27	23
16	46	970	3,840	4,720	84	37	56	33	55	27	25	24
17	47	970	3,840	4,720	146	34	53	32	38	25	28	26
18	74	1,010	3,620	4,280	120	33	33	31	41	27	28	23
19	1,330	1,450	3,180	3,620	102	33	28	31	69	28	27	23
20	8,420	1,800	2,400	3,180	90	31	27	30	38	29	26	24
21	6,970	1,800	1,610	3,180	82	88	28	29	36	31	25	28
22	2,030	1,800	651	1,580	85	40	64	28	193	30	27	43
23	825	1,610	458	365	85	30	56	29	96	33	28	44
24	463	1,610	1,590	186	87	32	37	30	43	28	27	34
25	276	1,200	4,060	150	91	98	26	30	32	27	25	26
26	226	692	4,960	138	90	112	24	30	28	27	35	26
27	195	560	5,440	138	84	142	30	29	53	36	30	23
28	195	560	5,440	142	84	154	305	28	30	30	23	22
29	158	540	5,440	246	85	134	421	27	30	28	23	24
30	138	258	5,440	300	------	130	70	28	115	26	24	25
31	120	------	4,960	307	------	181	------	28	------	25	26	------
TOTAL	25,687	22,455	136,442	95,572	4,181	2,203	1,768	1,361	1,353	926	831	778
MEAN	829	749	4,401	3,083	144	71.1	58.9	43.9	45.1	29.9	26.8	25.9
MAX	8,420	1,800	19,100	5,440	314	181	421	251	193	81	35	44
MIN	29	50	123	138	62	30	24	27	26	25	23	20
AC-FT	50,950	44,540	270,600	189,600	8,290	4,370	3,510	2,700	2,680	1,840	1,650	1,540

CAL YR 1971 TOTAL 197,691 MEAN 542 MAX 19,100 MIN 19 AC-FT 392,100
WTR YR 1972 TOTAL 293,557 MEAN 802 MAX 19,100 MIN 20 AC-FT 582,300

08062500 Trinity River near Rosser, Tex.

LOCATION.--Lat 32°25'36", long 96°27'44", Ellis-Kaufman County line, on left bank at downstream side of left pier of bridge on State Highway 34, 2.5 miles south of Rosser, 8.5 miles downstream from East Fork Trinity River, and at mile 451.4.

DRAINAGE AREA.--8,146 sq mi.

PERIOD OF RECORD.--July 1924 to September 1925, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 302.65 ft above mean sea level. July 25, 1924, to Sept. 30, 1925, nonrecording gage at abandoned lock and dam No. 7, 1.7 miles upstream from present site at datum 6.94 ft higher.

AVERAGE DISCHARGE.--35 years, 2,502 cfs (1,813,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 53,400 cfs Dec. 12 (gage height, 34.80 ft); minimum, 278 cfs June 5.
Period of record: Maximum discharge not determined, occurred Apr. 23 or 24, 1942, following numerous breaks in levee system along both banks; maximum gage height, 41.55 ft Apr. 22, 1942, just prior to levee breaks; maximum daily discharge, 133,000 cfs Apr. 23, 1942; minimum discharge, 32 cfs for several days in 1924-25.
Flood in May 1908 reached a stage of about 33 ft, present site and datum, from information by Corps of Engineers (discharge believed to have been about the same as that of Apr. 23 or 24, 1942).

REMARKS.--Records good. Flow is largely regulated by 14 major upstream reservoirs having a total capacity of 3,131,000 acre-ft (1,129,000 acre-ft for flood control). A levee system constructed in 1916 extends several miles upstream and downstream from station. At end of year, flow from 76.7 sq mi above this station and below stations Trinity River at Dallas (station 08057000) and Lake Ray Hubbard near Forney (station 08061550) was partly controlled by 38 floodwater-retarding structures with a total combined capacity of 26,870 acre-ft below flood-spillway crests, of which 22,690 acre-ft is floodwater-retarding capacity and 4,180 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. The cities of Fort Worth and Dallas and several small cities divert considerable water for municipal use, of which about 60 percent is returned as effluent from sewage disposal plants. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	394	2,860	1,870	12,000	1,070	603	514	1,790	346	616	370	394
2	370	2,820	1,950	12,300	1,070	629	442	1,160	346	430	370	394
3	693	1,580	4,920	12,300	1,040	577	418	980	335	335	394	430
4	6,710	980	7,500	14,500	1,040	564	418	720	324	335	382	382
5	8,620	920	7,370	13,800	1,040	551	490	616	302	382	382	370
6	6,480	860	10,500	12,700	1,010	538	490	526	324	358	370	551
7	2,250	804	11,500	12,100	920	551	514	804	324	335	335	551
8	1,070	804	12,200	11,400	860	538	590	2,720	335	324	358	430
9	920	1,040	13,200	10,900	832	526	514	3,830	358	324	382	406
10	804	1,130	22,000	10,400	776	514	502	1,620	370	335	879	394
11	655	1,130	42,600	10,000	748	514	514	804	346	335	804	430
12	564	1,130	52,200	9,810	860	514	564	629	358	346	454	394
13	526	1,280	38,600	9,740	832	514	538	890	454	538	394	370
14	502	1,400	21,200	9,600	776	526	466	890	454	1,100	394	382
15	478	1,500	15,400	9,530	720	514	490	616	694	577	577	358
16	454	1,460	13,200	9,670	681	502	748	551	920	442	454	346
17	430	1,500	12,100	9,740	694	502	577	655	920	335	394	430
18	922	2,000	11,600	9,810	748	478	590	832	551	335	382	466
19	5,980	3,640	11,300	9,670	1,010	454	655	920	406	358	430	382
20	19,400	3,130	10,700	9,250	694	478	748	720	394	430	538	358
21	28,800	2,770	9,950	8,690	603	551	776	526	382	394	358	370
22	28,800	2,720	8,900	8,060	616	603	920	370	1,190	358	358	490
23	21,300	2,950	7,780	5,540	642	577	804	382	1,220	382	358	629
24	11,900	3,450	7,500	3,310	616	538	590	358	694	346	442	642
25	5,450	3,310	8,130	2,720	642	681	590	370	478	370	382	577
26	2,210	3,130	9,460	1,670	616	629	514	358	418	335	478	478
27	1,910	2,460	10,200	1,340	616	776	584	358	394	346	538	430
28	2,310	2,190	10,700	1,310	577	720	2,440	335	382	430	642	466
29	2,150	2,110	11,100	1,100	577	616	4,020	324	370	394	478	629
30	2,860	1,990	11,400	1,160	------	590	2,770	406	538	382	442	514
31	3,000	------	11,700	1,100	------	590	------	394	------	382	358	------
TOTAL	168,912	59,048	428,730	255,220	22,926	17,458	24,790	26,454	14,927	12,689	13,877	13,443
MEAN	5,449	1,968	13,830	8,233	791	563	826	853	498	409	448	448
MAX	28,800	3,640	52,200	14,500	1,070	776	4,020	3,830	1,220	1,100	879	642
MIN	370	804	1,870	1,100	577	454	418	324	302	324	335	346
AC-FT	335,000	117,100	850,400	506,200	45,470	34,630	49,170	52,470	29,610	25,170	27,530	26,660

CAL YR 1971 TOTAL 838,979 MEAN 2,299 MAX 52,200 MIN 271 AC-FT 1,664,000
WTR YR 1972 TOTAL 1,058,474 MEAN 2,892 MAX 52,200 MIN 302 AC-FT 2,099,000

08062650 Cedar Creek Reservoir spillway outflow near Trinidad, Tex.

LOCATION.--Lat 32°14'18", long 96°08'38", Henderson County, near center of channel at downstream side of bridge on State Highway 274, 0.2 mile downstream from Cedar Creek Reservoir Spillway, 1.8 miles upstream from mouth of cut channel at Trinity River, and 7.6 miles north of Trinidad.

DRAINAGE AREA.--1,007 sq mi (that of Cedar Creek Reservoir).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to July 9, 1966, nonrecording gage at same site and datum. Auxiliary water-stage recorder 6,000 ft downstream from base gage at same datum.

AVERAGE DISCHARGE.--7 years, 514 cfs (372,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 55,800 cfs Dec. 10 (elevation, 294.48 ft); no flow for many days.
Period of record: Maximum discharge, 81,200 cfs May 8, 1969 (elevation, 299.80 ft), from rating curve extended above 55,000 cfs on basis of velocity-area study; no flow at times.

REMARKS.--Records good above 10 cfs and fair below. Except for a small amount of local runoff and seepage around gates, flow is water released from Cedar Creek Reservoir (station 08063010).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	0	0	3,990	1,640	.10	.15	.05	.10			0
2	1.5	0	0	6,830	583	0	.10	.05	.10			0
3	2.0	.3	1,310	6,870	.05	0	.15	0	.10			0
4	2.0	.1	1,910	9,380	.05	.05	.15	0	.10			0
5	1.5	.1	1,760	9,560	.05	0	.15	0	.05			0
6	1.5	.2	2,260	11,100	.05	0	.15	0	.05			0
7	1.5	12	3,010	4,260	.05	.05	.22	.05	0			0
8	1.5	.3	5,190	3,290	.05	.10	.15	.05	0			0
9	2.0	.3	36,400	2,760	.05	0	.10	.05	0			0
10	1.5	.2	54,600	2,880	.05	0	.15	0	0			0
11	2.0	.2	28,600	2,360	.05	0	.15	0	0			0
12	2.0	.3	4,850	2,480	.05	0	.15	.22	0			0
13	2.0	.3	7,160	2,300	.05	0	.10	.15	0			0
14	2.0	.3	7,910	1,880	.10	0	.10	.22	.50			0
15	2.0	.3	7,210	1,730	.10	0	.10	.15	.15			0
16	2.0	1,080	6,320	1,850	.05	0	.10	.10	.15			0
17	3.0	1,700	5,000	1,750	.05	0	.10	.15	.10			0
18	4.0	4,500	3,230	1,720	.05	0	.10	.15	.10			0
19	3.0	5,930	2,900	1,910	.05	.05	.10	.30	.10			0
20	12,400	4,800	2,660	2,010	.05	.05	.10	.22	.05			0
21	39,500	4,470	2,510	1,840	.05	.10	.15	.15	.15			0
22	5,970	3,840	2,360	1,680	.05	.10	.10	.15	.30			0
23	1,890	3,800	2,150	1,250	.05	.10	.10	.10	.15			0
24	0	2,990	1,930	1.1	.05	.10	.10	.15	.10			0
25	1,140	774	1,940	.1	.05	.10	.05	.15	.05			0
26	764	112	1,800	.1	0	.10	.05	.10	0			0
27	369	110	1,840	.1	0	.15	.05	.10	0			0
28	2.6	0	2,070	.1	0	.10	.05	.05	0			0
29	0	.1	2,300	695	0	.10	.05	.05	0			.05
30	0	.1	2,360	1,490	------	.10	.05	.10	0			.10
31	0	------	2,530	1,610	------	.10	------	.10	------			------
TOTAL	62,074.1	34,121.1	206,070	89,476.5	2,224.25	1.55	3.32	3.11	2.40	0	0	.15
MEAN	2,002	1,137	6,647	2,886	76.7	.050	.11	.10	.080	0	0	.005
MAX	39,500	5,930	54,600	11,100	1,640	.15	.22	.30	.50	0	0	.10
MIN	0	0	0	.10	0	0	.05	0	0	0	0	0
AC-FT	123,100	67,680	408,700	177,500	4,410	3.1	6.6	6.2	4.8	0	0	.3

CAL YR 1971 TOTAL 330,170.05 MEAN 905 MAX 54,600 MIN 0 AC-FT 654,900
WTR YR 1972 TOTAL 393,976.48 MEAN 1,076 MAX 54,600 MIN 0 AC-FT 781,500

08062700 Trinity River at Trinidad, Tex.

LOCATION.--Lat 32°08'05", long 96°06'20", Navarro-Henderson County line, on left bank at pumping station of Texas Power and Light Co., near southwest boundary of Trinidad, 0.5 mile downstream from St. Louis Southwestern Railway Lines bridge, 0.9 mile downstream from bridge on State Highway 31, 8 miles upstream from Cedar Creek, and at mile 391.2.

DRAINAGE AREA.--8,538 sq mi, not including 1,007 sq mi upstream from Cedar Creek Reservoir.

PERIOD OF RECORD.--October 1964 to current year. Records of gage height collected in this vicinity for period October 1913 to September 1915 are contained in reports of Corps of Engineers, and records collected since October 1915 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 239.21 ft above mean sea level. Prior to May 3, 1967, at site 0.9 mile upstream at datum 1.28 ft higher.

AVERAGE DISCHARGE.--8 years, 3,616 cfs (2,620,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 77,000 cfs Dec. 11 (gage height, 44.00 ft); minimum daily, 312 cfs Aug. 9.
Period of record: Maximum discharge, 83,000 cfs May 8, 1969 (gage height, 44.10 ft); minimum daily, 312 cfs Aug. 9, 1972. Maximum stage since at least 1908, 49.8 ft Apr. 25, 1942 (present site and datum), from records of the National Weather Service. Flood in 1908 reached a stage of 48.3 ft (present site and datum), from records of the National Weather Service.

REMARKS.--Records good. For regulation by upstream reservoirs, see Trinity River near Rosser (station 08062500). The spillway outflow from Cedar Creek Reservoir (station 08062650) enters the Trinity River 13 miles upstream from station. At end of year, flow from 126 sq mi above this station and below Trinity River at Dallas (station 08057000) and Lake Ray Hubbard near Forney (station 08061550) was partly controlled by 62 floodwater-retarding structures with a total combined capacity of 46,410 acre-ft below the flood-spillway crests, of which 38,690 acre-ft is floodwater-retarding capacity and 7,720 acre-ft is sediment-pool capacity. Many diversions above station for municipal supply for cities of Fort Worth, Dallas, and several small towns. Sewage effluent from the Fort Worth-Dallas area maintains low flows.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	488	3,120	2,000	11,800	3,280	630	637	3,420	449	449	347	392
2	443	3,010	2,070	15,800	2,500	657	639	2,230	402	598	332	404
3	415	2,830	4,070	20,600	1,220	694	542	1,320	388	458	321	420
4	798	1,750	7,040	26,100	1,150	637	480	1,030	377	347	330	428
5	5,370	1,090	8,730	28,600	1,130	619	468	846	377	317	343	424
6	7,300	987	10,000	29,900	1,130	604	482	653	359	361	339	377
7	7,040	936	11,000	28,600	1,090	595	528	536	354	367	339	419
8	3,300	888	12,500	21,400	976	600	526	775	368	330	318	617
9	1,180	868	24,900	17,200	921	602	611	2,890	375	320	312	462
10	925	1,050	65,300	14,900	899	575	569	4,060	384	320	339	419
11	824	1,180	75,400	13,200	846	562	542	2,010	392	315	699	392
12	699	1,180	53,300	12,300	806	564	564	912	401	317	967	420
13	597	1,190	43,300	11,600	889	560	615	728	374	314	530	408
14	552	1,320	47,800	11,000	933	560	606	897	484	403	420	383
15	526	1,540	43,900	10,600	847	569	532	985	495	985	399	383
16	502	1,860	37,000	10,300	800	578	510	772	683	616	514	375
17	484	2,430	30,300	10,000	754	571	729	628	941	444	520	375
18	462	6,320	24,400	9,880	753	548	674	744	1,050	346	449	384
19	1,370	9,380	19,500	9,830	796	548	622	911	660	328	413	464
20	7,520	9,800	16,300	9,810	992	512	666	1,050	455	336	410	417
21	25,100	8,960	14,100	9,750	862	504	773	892	461	386	417	375
22	39,300	6,780	12,800	9,580	666	532	791	699	438	391	392	375
23	32,700	6,080	12,100	9,150	659	606	947	478	990	352	397	428
24	31,900	5,980	11,300	7,190	683	622	872	432	1,310	348	410	630
25	30,400	4,680	10,500	3,990	710	578	657	426	812	343	429	672
26	26,300	3,490	9,830	2,850	692	584	595	420	511	339	419	619
27	18,500	3,240	9,630	1,880	679	699	593	419	403	341	458	520
28	10,100	2,560	9,810	1,520	672	683	703	418	377	332	518	447
29	4,500	2,210	10,100	2,470	639	848	3,510	397	361	381	615	426
30	2,690	2,090	10,500	4,140	------	765	4,540	386	351	372	526	586
31	3,020	------	11,000	3,610	------	650	------	419	------	352	428	------
TOTAL	265,305	98,799	660,480	379,550	28,974	18,856	25,523	32,783	15,782	12,208	13,650	13,441
MEAN	8,558	3,293	21,310	12,240	999	608	851	1,058	526	394	440	448
MAX	39,300	9,800	75,400	29,900	3,280	848	4,540	4,060	1,310	985	967	672
MIN	415	868	2,000	1,520	639	504	468	386	351	314	312	375
AC-FT	526,200	196,000	1,310M	752,800	57,470	37,400	50,620	65,030	31,300	24,210	27,070	26,660

CAL YR 1971 TOTAL 1,241,783 MEAN 3,402 MAX 75,400 MIN 343 AC-FT 2,463,000
WTR YR 1972 TOTAL 1,565,351 MEAN 4,277 MAX 75,400 MIN 312 AC-FT 3,105,000

M Expressed in thousands.

08062800 Cedar Creek near Kemp, Tex.

LOCATION.--Lat 32°30'12", long 96°06'45", Kaufman County, on left bank at downstream side of bridge on Farm Road 1836, 3 miles upstream from Williams Creek, 8 miles northeast of Kemp, and at mile 51.5.

DRAINAGE AREA.--189 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 341.48 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 107 cfs (77,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,600 cfs Dec. 10 (gage height, 14.66 ft); no flow June 10-13, July 14 to Sept. 30.
Period of record: Maximum discharge, 29,000 cfs Apr. 26, 1966 (gage height, 16.00 ft); no flow at times each year.
Maximum stage since at least 1889, about 20.5 ft in 1945, from information by State Highway Department and local residents.

REMARKS.--Records good. Flow is regulated by Terrell Municipal Lake, capacity 8,300 acre-ft. Records furnished by city of Terrell show that during year the city diverted 2,860 acre-ft from Terrell Municipal Lake for municipal use and returned 2,230 acre-ft of sewage effluent into a tributary of Kings Creek which enters downstream from station. At end of year, flow from 44.8 sq mi above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 17,050 acre-ft below the flood-spillway crests, of which 15,930 acre-ft is floodwater-retarding capacity and 1,120 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. A recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	11	6.7	464	45	7.6	4.9	2.8	2.9	1.8		
2	2.2	9.2	70	1,670	29	11	4.3	2.5	4.4	1.1		
3	1.5	7.6	850	1,380	21	15	3.8	2.0	3.1	.68		
4	1.5	6.5	935	1,700	16	10	2.9	3.0	1.8	.58		
5	6.8	6.4	334	1,610	14	7.4	2.7	3.5	.78	14		
6	18	5.3	1,510	750	13	6.2	2.7	3.0	.32	12		
7	11	4.9	1,930	176	12	5.5	2.1	2.4	.17	4.2		
8	7.6	5.2	1,360	101	11	5.0	1.7	1.8	.04	1.7		
9	5.2	5.3	6,170	68	10	4.6	1.5	1.6	.01	.84		
10	3.5	5.2	8,400	54	10	4.2	1.4	1.5	0	.40		
11	2.3	4.6	2,300	44	9.8	4.0	.96	1.1	0	.20		
12	4.9	4.1	1,480	37	9.4	3.9	.90	1.1	0	.04		
13	4.7	3.7	1,080	31	8.9	3.9	.96	.96	0	.01		
14	4.6	2.1	994	25	9.5	3.9	1.0	.68	.04	0		
15	4.2	.78	1,130	22	9.4	4.4	1.0	.53	2.2	0		
16	3.5	.40	1,080	19	9.2	4.6	.96	.73	34	0		
17	3.2	.63	543	18	8.9	4.0	.96	1.1	36	0		
18	12	387	333	16	8.4	3.3	1.0	2.8	16	0		
19	184	855	201	14	8.2	2.6	.84	8.4	8.6	0		
20	2,210	105	134	14	7.9	2.5	.73	6.0	3.9	0		
21	3,100	23	97	13	7.6	2.1	.73	4.2	5.4	0		
22	1,520	13	62	12	7.0	1.6	.58	3.2	393	0		
23	896	38	45	11	6.8	1.8	.73	2.4	311	0		
24	687	79	37	11	6.8	2.6	.90	1.7	40	0		
25	282	31	33	10	6.7	3.3	1.0	1.1	20	0		
26	111	16	28	9.8	7.0	3.9	.78	.48	14	0		
27	62	11	24	9.5	7.6	5.7	1.1	.20	9.5	0		
28	42	8.2	24	52	7.8	6.0	1.4	.09	6.5	0		
29	29	6.1	47	158	7.9	5.7	.90	.14	3.9	0		
30	20	5.5	36	240	------	5.3	2.7	.48	2.5	0		
31	15	------	33	116	------	5.2	------	.07	------	0		------
TOTAL	9,258.4	1,660.71	31,306.7	8,855.3	335.8	156.8	48.13	61.56	920.06	37.55	0	0
MEAN	299	55.4	1,010	286	11.6	5.06	1.60	1.99	30.7	1.21	0	0
MAX	3,100	855	8,400	1,700	45	15	4.9	8.4	393	14	0	0
MIN	1.5	.40	6.7	9.5	6.7	1.6	.58	.07	0	0	0	0
AC-FT	18,360	3,290	62,100	17,560	666	311	95	122	1,820	74	0	0

CAL YR 1971 TOTAL 56,875.34 MEAN 156 MAX 8,400 MIN 0 AC-FT 112,800
WTR YR 1972 TOTAL 52,641.01 MEAN 144 MAX 8,400 MIN 0 AC-FT 104,400

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	2400	13.73	4,960
12-10	0700	14.66	13,600
1- 4	1800	13.27	2,230

08062900 Kings Creek near Kaufman, Tex.

LOCATION.--Lat 32°30'47", long 96°19'43", Kaufman County, on left bank at downstream side of bridge on Farm Road 1388, 3 miles upstream from Big Cottonwood Creek, 4 miles downstream from Big Brushy Creek, and 5 miles south of Kaufman.

DRAINAGE AREA.--233 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 343.24 ft above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 144 cfs (104,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,400 cfs Oct. 20 (gage height, 22.39 ft); minimum, 0.66 cfs Sept. 1, 2.
Period of record: Maximum discharge, 33,800 cfs May 7, 1969 (gage height, 23.34 ft), from rating curve extended above 17,000 cfs; no flow at times.
Maximum stage since at least 1942, 23.34 ft May 7, 1969. Flood in 1949 reached a stage of 23.1 ft, from information by State Highway Department.

REMARKS.--Records good. During the water year, the city of Terrell diverted 2,860 acre-ft from Cedar Creek Basin and returned 2,230 acre-ft of sewage effluent into the basin above this station. The city of Kaufman diverted 943 acre-ft from Big Cottonwood Creek (enters Kings Creek below gage) and returned 393 acre-ft of sewage effluent above gage. At end of year, flow from 28.7 sq mi above this station was partly controlled by 19 floodwater-retarding structures with a total combined capacity of 11,730 acre-ft below the flood-spillway crests, of which 9,680 acre-ft is floodwater-retarding capacity and 2,050 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,530 acre-ft of which 528 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	58	2.6	227	11	5.0	4.6	12	2.5	2.5	1.1	.70
2	4.1	34	118	1,130	10	3.8	4.1	10	2.0	2.4	1.1	.84
3	16	21	998	888	9.5	4.1	3.9	9.5	2.0	2.1	1.1	1.1
4	794	15	434	2,450	8.6	4.2	3.6	8.9	1.8	4.8	1.2	1.2
5	330	25	686	1,560	8.6	4.6	3.3	8.4	1.8	10	1.3	1.1
6	57	25	2,340	263	8.6	4.6	3.6	7.8	1.4	2.5	1.2	1.2
7	37	20	2,490	127	8.1	4.4	4.1	7.6	1.3	1.7	1.2	1.2
8	28	17	1,940	90	8.6	4.2	3.9	8.1	1.6	1.5	1.2	1.0
9	29	13	2,300	71	11	4.2	4.2	7.6	2.3	1.6	1.2	1.3
10	26	15	6,980	57	10	4.4	4.1	6.8	2.6	1.6	1.1	1.6
11	22	32	3,650	42	13	6.4	3.6	7.6	2.7	1.5	1.2	1.8
12	14	32	1,180	32	18	6.6	3.3	7.3	2.6	1.4	1.4	1.9
13	11	30	414	26	14	6.2	3.6	7.1	3.9	1.3	1.4	1.9
14	6.8	29	304	20	13	5.6	3.8	9.8	8.8	1.5	1.4	1.9
15	4.8	27	468	17	12	6.8	3.9	6.4	7.8	1.4	1.4	1.9
16	3.6	22	426	16	11	6.6	3.8	5.4	27	1.5	1.4	2.6
17	3.2	20	187	14	9.8	5.2	3.6	4.6	16	1.4	1.4	3.0
18	13	21	130	14	8.9	4.6	3.2	4.4	6.2	1.4	1.4	3.4
19	1,780	14	100	14	8.1	4.1	3.0	4.2	3.4	1.4	1.4	3.3
20	15,100	9.8	75	12	7.8	4.2	3.2	3.6	2.3	1.3	1.4	2.9
21	7,490	6.2	48	10	7.6	3.9	3.2	2.9	2.9	1.4	1.3	2.4
22	1,970	4.8	29	9.8	7.3	3.5	3.3	2.9	252	1.4	1.1	2.7
23	757	7.8	17	10	6.2	3.8	3.8	2.5	35	1.5	.99	3.4
24	539	15	10	11	6.2	4.1	3.6	2.4	11	1.4	.87	4.3
25	375	7.8	7.6	9.8	6.2	8.1	3.2	2.5	5.0	1.3	.88	4.8
26	312	5.6	5.6	9.2	5.4	10	2.8	2.9	3.2	1.2	1.1	3.8
27	248	5.6	4.6	10	5.2	5.8	4.2	2.5	2.8	1.1	1.1	3.2
28	201	4.2	5.0	12	5.2	4.6	29	2.5	2.3	1.1	1.0	2.4
29	145	3.0	5.2	22	5.2	3.9	54	2.6	2.5	1.1	1.1	2.0
30	107	2.6	5.2	19	------	3.9	18	2.8	2.6	1.1	.87	1.9
31	81	------	3.9	13	------	6.4	------	2.1	------	1.2	.74	------
TOTAL	30,508.6	542.4	25,363.7	7,205.8	264.1	157.8	199.5	175.7	419.3	58.6	36.55	66.74
MEAN	984	18.1	818	232	9.11	5.09	6.65	5.67	14.0	1.89	1.18	2.22
MAX	15,100	58	6,980	2,450	18	10	54	12	252	10	1.4	4.8
MIN	3.2	2.6	2.6	9.2	5.2	3.5	2.8	2.1	1.3	1.1	.74	.70
AC-FT	60,510	1,080	50,310	14,290	524	313	396	349	832	116	73	132

CAL YR 1971 TOTAL 63,699.28 MEAN 175 MAX 15,100 MIN .40 AC-FT 126,300
WTR YR 1972 TOTAL 64,998.79 MEAN 178 MAX 15,100 MIN .70 AC-FT 128,900

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	1545	22.39	21,400
12-10	1000	19.91	8,230
1- 4	1800	18.07	3,080

08063010 Cedar Creek Reservoir near Trinidad, Tex.

LOCATION.--Lat 32°14'34", long 96°08'28", Henderson County, at site of future pump station 1,000 ft north of spillway, 5.5 miles upstream from Joe B. Hogsett Dam on Cedar Creek, and 8.0 miles northwest of Trinidad.

DRAINAGE AREA.--1,007 sq mi.

PERIOD OF RECORD.--January 1965 to current year.

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

EXTREMES.--Current year: Maximum contents, 700,500 acre-ft Dec. 9 (elevation, 322.62 ft); minimum, 582,600 acre-ft Sept. 20-23 (elevation, 319.00 ft).
Period of record: Maximum contents, 700,500 acre-ft Dec. 9, 1971 (elevation, 322.62 ft); minimum since first appreciable storage in 1966, 332,900 acre-ft Mar. 19, 1967 (elevation, 309.42 ft).

REMARKS.--Reservoir is formed by a rolled earthfill dam 3 miles long. The spillway is located on the right bank 5.5 miles upstream from the dam and discharges into the Trinity River through a cut channel 2 miles long. The spillway is 472 ft long and has eight 40- by 24-foot radial gates and two automatically operated 40- by 8.5-foot hinged gates. Water may be released through a 5-foot-diameter conduit in the dam. Deliberate impoundment of water began July 2, 1965. Dam is property of Tarrant County Water Control and Improvement District No. 1 and was built for municipal and industrial supply and recreation. Capacity table prepared from a survey made during the period 1940 to 1958. Records furnished by Tarrant County Water Control and Improvement District No. 1 show that the city of Trinidad diverted 1,500 acre-ft and 12 other permitters diverted 910 acre-ft directly from reservoir during year. At end of year, flow from 131 sq mi above this station was partly controlled by 54 floodwater-retarding structures with a total combined capacity of 49,640 acre-ft below the flood-spillway crests, of which 42,840 acre-ft is floodwater-retarding capacity and 6,800 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,530 acre-ft, of which 508 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Figures given herein represent total contents. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	340.0	-
Top of 8 radial gates	325.0	785,100
Top of 2 automatic gates	322.5	696,400
Top of conservation pool	322.0	679,200
Crest of weir for automatic gates	314.0	441,000
Crest of weir for radial gates	302.0	197,800
Invert of conduit in dam	263.5	430

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

319.0	582,600	322.0	679,200
320.0	613,800	323.0	713,500
321.0	646,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	660,000	676,900	644,100	655,700	645,400	647,400	639,900	635,100	627,400	623,800	607,000	590,100
2	660,000	677,200	650,300	655,700	644,400	644,700	637,700	635,400	626,400	621,900	605,100	589,200
3	663,000	675,600	654,300	665,000	644,400	643,500	641,200	635,700	625,700	621,200	604,200	588,600
4	663,000	674,200	656,000	667,300	644,400	645,100	638,900	635,400	625,100	620,900	603,800	588,600
5	664,300	673,900	662,300	658,300	644,100	643,500	638,300	634,400	624,500	620,300	603,200	587,600
6	664,000	674,600	671,300	643,800	643,800	642,200	638,900	634,400	624,100	619,600	602,900	587,000
7	663,000	672,900	679,200	636,000	643,800	644,100	638,900	634,400	623,200	619,000	602,300	586,400
8	662,600	672,300	685,100	644,100	643,500	642,800	638,900	633,800	622,500	618,300	601,400	586,400
9	662,300	672,600	687,800	643,800	643,500	642,800	638,900	633,200	621,200	617,000	600,700	586,100
10	661,300	671,600	666,000	644,100	643,500	642,200	638,600	632,800	620,300	616,700	600,400	585,400
11	661,000	671,300	647,000	644,400	644,100	641,800	638,300	632,200	620,300	616,700	599,800	585,100
12	660,300	670,900	658,600	645,700	644,400	641,800	637,700	635,100	619,900	616,400	599,500	584,200
13	660,000	670,300	658,000	646,000	644,400	642,800	636,700	633,200	619,600	616,400	598,900	583,600
14	659,600	670,600	655,000	646,000	644,400	642,200	637,300	634,800	625,100	615,800	598,500	583,300
15	659,300	669,900	652,000	645,100	644,400	643,100	637,000	633,800	625,700	615,400	598,200	582,900
16	659,300	669,300	649,000	644,100	644,700	642,500	636,000	633,800	626,100	614,800	598,200	584,800
17	659,300	675,900	646,400	643,500	645,400	643,800	635,700	634,400	625,400	614,500	598,200	584,200
18	663,300	685,100	648,400	644,700	645,100	641,800	634,100	634,400	625,100	613,800	598,200	583,600
19	667,600	674,600	650,300	645,100	645,100	640,600	633,800	633,500	624,500	613,800	596,700	583,300
20	693,000	666,000	652,000	645,400	644,400	640,200	634,100	633,200	623,500	613,200	596,700	582,600
21	657,000	658,600	653,300	645,100	644,100	640,200	634,400	632,200	626,400	612,600	595,700	582,600
22	661,300	653,000	653,700	645,700	644,100	640,200	634,400	631,500	627,400	612,900	595,700	582,600
23	667,300	650,700	654,000	645,400	644,100	640,200	634,400	631,200	627,700	613,200	595,400	582,600
24	670,300	645,700	655,000	645,700	644,100	641,500	634,100	631,200	628,300	612,300	593,200	585,400
25	672,300	643,800	653,300	645,400	644,100	642,200	633,200	630,600	627,400	611,300	593,900	585,800
26	671,600	645,400	652,300	646,400	644,100	642,200	632,800	630,600	625,700	610,100	593,600	586,100
27	673,900	643,500	651,300	648,400	644,100	642,200	635,100	629,900	625,100	609,800	593,600	584,800
28	674,600	644,700	650,300	650,300	644,100	642,200	636,000	629,000	624,100	608,800	592,600	584,200
29	675,900	644,400	649,000	652,000	644,700	641,500	635,400	629,900	624,100	608,500	592,000	587,300
30	676,600	644,100	647,700	651,000	------	640,900	635,100	629,900	623,500	608,200	591,100	583,900
31	676,600	------	650,000	648,700	------	639,900	------	628,000	------	607,600	590,100	------
(†)	321.92	320.94	321.12	321.08	320.96	320.81	320.66	320.44	320.30	319.80	319.24	319.04
(*)	+15,600	-32,500	+5,900	-1,300	-4,000	-4,800	-4,800	-7,100	-4,500	-15,900	-17,500	-6,200
MAX	693,000	685,100	687,800	667,300	645,400	647,400	641,200	635,700	628,300	623,800	607,000	590,100
MIN	657,000	643,500	644,100	636,000	643,500	639,900	632,800	628,000	619,600	607,600	590,100	582,600

CAL YR 1971..... * -16,000 MAX 693,000 MIN 576,000
WTR YR 1972..... * -77,100 MAX 693,000 MIN 582,600

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

08063050 Navarro Mills Lake near Dawson, Tex.

LOCATION.--Lat 31°57'27", long 96°41'21", Navarro County, in left abutment of spillway of Navarro Mills Dam on Richland Creek, 1.7 miles upstream from bridge on State Highway 31, 3.0 miles upstream from St. Louis Southwestern Railway Lines bridge, 4.2 miles upstream from Post Oak Creek, 4.6 miles north of Dawson, and at mile 63.9.

DRAINAGE AREA.--320 sq mi.

PERIOD OF RECORD.--August 1962 to current year. Prior to October 1970, published as Navarro Mills Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Oct. 8, 1962, nonrecording gage in low-water channel at same datum.

EXTREMES.--Current year: Maximum contents, 83,980 acre-ft Dec. 16 (elevation, 428.21 ft); minimum, 50,260 acre-ft Sept. 30 (elevation, 421.78 ft).
Period of record: Maximum contents, 183,300 acre-ft May 18, 1968 (elevation, 440.36 ft); minimum since initial filling in May 1965, 48,840 acre-ft Apr. 10, 1967 (elevation, 421.47 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 7,570 ft long, including an off-channel 240-foot gated spillway with six 40- by 29-foot tainter gates with sill at elevation 414.0 ft. The low-flow outlet works consist of two 36-inch-diameter gate-controlled conduits with inverts at elevation 400.0 ft. Deliberate impoundment began Mar. 15, 1963. From Aug. 27, 1962, to Mar. 14, 1963, the lake was operated as a detention basin only. Capacities are from survey made in February 1956 by the Cors of Engineers. The lake was built for flood control and water conservation. At end of year, flow from 61.1 sq mi above this station was partly controlled by 31 floodwater-retarding structures with a total combined capacity of 21,170 acre-ft below the flood-spillway crests, of which 18,320 acre-ft is floodwater-retarding capacity and 2,850 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 5,450 acre-ft, of which 516 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.
Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	457.0	-
Top of tainter gates	443.0	212,200
Top of conservation pool	424.5	63,300
Crest of spillway	414.0	22,100
Invert of two 36-inch-diameter conduits	400.0	2,370

COOPERATION.--Records furnished by the Corps of Engineers and reviewed by the Geological Survey.

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

421.0	46,740	426.0	71,180
422.0	51,250	427.0	76,760
423.0	55,940	428.0	82,680
424.0	60,820	429.0	89,000
425.0	65,890		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57,360	60,970	62,030	70,870	64,520	63,100	62,490	61,730	60,920	58,140	55,710	52,570
2	57,310	60,820	63,100	70,340	64,210	63,050	62,490	61,630	60,820	57,990	55,570	52,430
3	57,650	60,770	63,860	75,090	63,450	63,050	62,390	61,530	60,670	57,940	55,430	52,330
4	57,650	60,620	63,960	77,940	63,100	63,000	62,290	61,430	60,570	58,770	55,430	52,190
5	57,650	60,570	66,580	77,650	63,100	63,000	62,290	61,270	60,430	58,770	55,290	52,100
6	57,550	60,280	68,110	77,530	63,200	63,000	62,240	61,170	60,330	58,620	55,150	52,000
7	57,450	60,180	69,070	77,050	63,200	62,950	62,140	61,780	60,180	58,620	55,000	51,960
8	57,450	60,280	69,860	76,480	63,300	62,790	61,980	61,780	60,090	58,430	54,860	51,860
9	57,400	60,230	73,140	75,920	63,300	62,850	61,980	61,780	59,990	58,380	54,770	51,720
10	57,210	60,180	80,140	75,310	63,400	62,850	61,930	61,680	59,890	58,380	54,720	51,630
11	57,110	60,140	81,140	74,580	63,500	62,850	61,980	61,680	59,790	58,230	54,680	51,530
12	57,010	60,090	81,850	74,030	63,560	62,850	61,930	61,930	59,700	58,140	54,580	51,490
13	57,010	60,090	82,330	73,250	63,560	62,850	61,880	62,290	59,700	58,090	54,490	51,390
14	56,920	60,040	83,000	72,190	63,610	62,850	61,830	62,290	59,790	57,940	54,390	51,300
15	56,870	59,990	83,820	70,760	63,710	62,900	61,780	62,240	59,840	57,790	54,300	51,210
16	56,820	59,990	83,880	69,400	63,710	62,900	61,630	62,240	59,840	57,700	54,250	51,210
17	56,870	60,820	83,320	68,110	63,710	62,740	61,530	62,390	59,840	57,550	54,110	51,070
18	57,160	61,170	82,560	67,000	63,610	62,690	61,430	62,340	59,750	57,450	54,070	50,980
19	57,700	61,170	82,090	65,480	63,560	62,590	61,380	62,290	59,650	57,360	53,970	50,890
20	60,480	61,120	81,380	64,720	63,450	62,640	61,320	62,240	59,550	57,210	53,880	50,800
21	60,870	60,970	80,670	63,560	63,450	62,640	61,480	62,090	59,450	57,160	53,740	50,710
22	61,020	61,430	79,900	63,150	63,400	62,590	61,430	61,980	59,310	57,160	53,640	50,670
23	61,070	62,140	79,190	63,300	63,400	62,590	61,320	61,880	59,310	57,110	53,690	50,580
24	61,020	62,140	78,480	63,200	63,350	62,490	61,220	61,780	59,110	57,010	53,600	50,530
25	61,020	62,190	77,770	63,100	63,300	62,490	61,120	61,730	59,010	56,870	53,550	50,530
26	61,070	62,190	77,050	63,250	63,150	62,740	60,820	61,580	58,920	56,720	53,410	50,490
27	61,070	62,190	76,310	63,500	63,150	62,850	61,630	61,530	58,620	56,580	53,320	50,400
28	61,020	62,190	75,640	63,710	63,200	62,790	61,680	51,430	58,480	56,530	53,180	50,400
29	61,020	62,090	74,860	64,570	63,250	62,640	61,630	61,320	58,380	56,230	53,030	50,400
30	61,070	62,190	73,530	65,080	------	62,640	61,680	61,220	58,380	56,090	52,890	50,260
31	61,020	------	71,850	64,920	------	62,590	------	61,000	------	55,850	52,710	------
(†)	424.04	424.27	426.12	424.81	424.48	424.35	424.17	424.04	423.50	422.98	422.31	421.78
(*)	+3,520	+1,170	+9,660	-6,930	-1,670	-660	-910	-660	-2,640	-2,530	-3,140	-2,450
(††)	287	274	349	363	309	322	330	348	410	415	461	387
MAX	61,070	62,190	83,880	77,940	64,520	63,100	62,490	62,390	60,920	58,770	55,710	52,570
MIN	56,820	59,990	62,030	63,100	63,100	62,490	60,820	51,430	58,380	55,850	52,710	50,260

CAL YR 1971..... * +9,710 †† 3,940 MAX 83,880 MIN 56,820
WTR YR 1972..... * -7,240 †† 4,260 MAX 83,880 MIN 50,260

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by the cities of Dawson and Corsicana.

08063100 Richland Creek near Dawson, Tex.

LOCATION.--Lat 31°56'18", long 96°40'52", Navarro County, at downstream side of bridge on State Highway 31, 1.3 miles upstream from St. Louis Southwestern Railway Lines bridge, 1.5 miles downstream from Navarro Mills Dam, 2.5 miles upstream from Post Oak Creek, and 3.6 miles northeast of Dawson.

DRAINAGE AREA.--333 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 370.52 ft above mean sea level. Prior to Nov. 21, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 143 cfs (103,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,050 cfs Jan. 2 (gage height, 13.46 ft); no flow at times.
Period of record: Maximum discharge, 25,500 cfs July 3, 1961 (gage height, 22.50 ft), from rating curve extended above 14,000 cfs; no flow at times. Maximum discharge since completion of Navarro Mills Dam in 1963, 3,650 cfs Sept. 22-24, 27-30, 1968 (gage height, 19.83 ft).
Maximum stage since about 1895, about 28 ft June 19, 1929, from information by local residents. Floods in 1946 and 1957 reached a stage of about 23 ft, from information by local residents.

REMARKS.--Records fair. Flow regulated since Mar. 15, 1963, by Navarro Mills Lake (station 08063050). There are diversions from Navarro Mills Lake for municipal use. At end of year, flow from 1.28 sq mi below Navarro Mills Lake and above this station was partly controlled by one floodwater-retarding structure with a capacity of 382 acre-ft below the flood-spillway crest, of which 297 acre-ft is floodwater-retarding capacity and 85 acre-ft is sediment-pool capacity. The capacity in this pool allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.10	.57	1,030	275	.33	.18	8.0	0	0	5.2	11
2	.20	.10	6.9	784	275	.33	.21	7.0	0	0	0	11
3	.20	.10	2.6	590	270	.30	.21	6.0	0	0	0	11
4	1.0	.10	.57	331	184	.33	.21	4.0	0	1.2	0	6.3
5	.30	.10	19	256	54	.37	.21	3.1	0	.97	0	0
6	.18	.10	8.3	260	1.2	.57	.27	3.8	0	.57	0	0
7	.15	.10	3.5	413	.79	.51	.30	7.8	0	.30	0	0
8	.15	.08	.79	556	.70	.51	.24	10	0	.30	0	0
9	.15	.08	412	556	.70	.51	.10	7.0	0	.57	0	0
10	.15	.08	91	556	.70	.46	.06	4.5	0	.41	0	0
11	.15	.08	1.2	556	.63	.46	.06	2.9	0	.37	0	0
12	.18	.08	.15	556	.63	.46	.06	3.8	0	.30	0	0
13	.21	.08	.06	556	.63	.46	.06	6.0	0	.15	0	0
14	.21	.08	1.4	612	.57	.41	2.4	11	0	.01	0	0
15	.21	.08	6.0	836	.57	.41	1.1	5.8	.36	0	0	0
16	.18	.08	169	822	.46	.37	.21	2.0	.24	0	0	0
17	.18	.41	568	822	13	.33	.48	1.3	.10	0	0	0
18	.41	3.3	568	822	46	.33	.51	1.1	.08	0	0	0
19	.79	.33	568	808	46	.24	.51	.63	.01	0	0	0
20	1.9	.30	568	808	47	.21	.51	.46	0	0	0	0
21	.97	.27	568	693	48	.21	.97	.37	0	.70	0	0
22	.79	.33	568	289	50	.21	.63	.27	0	.79	0	0
23	.57	3.3	556	67	50	.18	.70	.27	0	.79	0	0
24	.27	1.6	556	3.1	50	.18	1.5	.33	0	2.6	0	0
25	.27	.88	556	1.0	44	.15	2.2	.37	0	2.2	0	0
26	.21	.79	556	.7	37	.18	2.2	.37	0	.21	0	0
27	.18	.70	556	.8	20	.27	6.8	.27	0	.58	0	0
28	.15	.63	556	1.5	.57	.24	9.7	.24	0	4.8	0	0
29	.12	.57	556	8.7	.33	.24	8.2	.21	0	47	0	0
30	.10	.51	811	11	------	.18	7.8	0	0	11	17	0
31	.10	------	1,020	126	------	.18	------	0	------	8.8	34	------
TOTAL	10.84	15.34	9,854.04	13,731.8	1,517.48	10.12	48.59	98.89	.79	84.62	56.2	39.3
MEAN	.35	.51	318	443	52.3	.33	1.62	3.19	.026	2.73	1.81	1.31
MAX	1.9	3.3	1,020	1,030	275	.57	9.7	11	.36	47	34	11
MIN	.10	.08	.06	.70	.33	.15	.06	0	0	0	0	0
AC-FT	22	30	19,550	27,240	3,010	20	96	196	1.6	168	111	78

CAL YR 1971 TOTAL 12,777.53 MEAN 35.0 MAX 1,020 MIN 0 AC-FT 25,340
WTR YR 1972 TOTAL 25,468.01 MEAN 69.6 MAX 1,030 MIN 0 AC-FT 50,520

08063200 Pin Oak Creek near Hubbard, Tex.

LOCATION.--Lat 31°48'01", long 96°43'02", Limestone County, on right bank 85 ft downstream from bridge on State Highway 171, 5.8 miles southeast of Hubbard, and 11 miles upstream from Elm Creek.

DRAINAGE AREA.--17.6 sq mi.

PERIOD OF RECORD.--September 1956 to September 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,240.97 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 10.5 cfs (8.10 inches per year, 7,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs Dec. 9 (gage height, 10.90 ft); no flow for many days.
Period of record: Maximum discharge, 4,340 cfs Aug. 24, 1958 (gage height, 13.86 ft); no flow at times each year.
Maximum stage since at least 1900, about 17 ft in August 1919, from information by local resident.

REMARKS.--Records good. Since 1964, flow from 9.68 sq mi above this station has been partly controlled by six floodwater-retarding structures with a total combined capacity of 3,480 acre-ft below the flood-spillway crests, of which 2,850 acre-ft is floodwater-retarding capacity and 630 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Three recording and two standard rain gages are located in the basin above the station, and one recording rain gage is located at the station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.04	59	13	.22	.02	.68	0	.10		
2	0	0	16	64	7.8	.22	.02	.47	0	.01		
3	1.8	0	12	70	4.4	.22	.02	.33	0	0		
4	5.1	0	2.4	62	2.9	.22	.01	.10	0	27		
5	2.6	0	41	27	2.4	.22	.02	.02	0	4.8		
6	1.4	0	20	18	2.6	.22	.02	.02	0	.06		
7	.40	0	7.5	12	2.1	.22	.02	.13	0	0		
8	.10	0	.89	7.5	1.5	.22	.01	.10	0	0		
9	.02	0	510	4.4	1.2	.22	.01	.02	0	0		
10	.01	0	179	2.1	1.1	.22	.02	.01	0	0		
11	0	0	109	1.1	1.1	.22	.02	.01	0	0		
12	0	0	82	.33	1.1	.22	.03	.08	0	0		
13	0	0	51	.22	.94	.22	.04	.27	0	0		
14	0	0	33	.08	1.4	.22	.08	.03	0	0		
15	0	0	22	.03	1.2	.22	.10	.01	.94	0		
16	0	0	9.9	.02	.94	.22	.10	.01	.03	0		
17	0	.04	4.6	.01	.55	.22	.04	.01	0	0		
18	0	30	1.8	.01	.47	.10	.04	0	0	0		
19	0	2.7	.68	.01	.40	.08	.04	0	0	0		
20	9.3	1.1	.27	.01	.40	.08	.02	0	0	0		
21	3.5	.55	.10	.01	.40	.08	.03	0	0	0		
22	1.7	1.5	.02	.01	.40	.08	.01	0	0	0		
23	.79	14	.01	.01	.40	.08	.01	0	0	0		
24	.33	2.4	2.3	.01	.40	.08	0	0	0	0		
25	.10	.94	1.5	0	.33	.03	0	0	0	0		
26	.03	.68	.47	0	.33	.03	0	0	0	0		
27	.02	.55	.22	0	.27	.03	4.6	0	0	0		
28	.01	.40	.08	.04	.22	.03	4.6	0	0	0		
29	0	.22	.02	79	.22	.04	1.7	0	0	0		
30	0	.10	.02	42	------	.02	.79	0	.47	0		
31	0	------	.01	20	------	.02	------	0	------	0		------
TOTAL	27.21	55.18	1,107.83	468.90	50.47	4.52	12.42	2.30	1.44	31.97	0	0
MEAN	.88	1.84	35.7	15.1	1.74	.15	.41	.074	.048	1.03	0	0
MAX	9.3	30	510	79	13	.22	4.6	.68	.94	27	0	0
MIN	0	0	.01	0	.22	.02	0	0	0	0	0	0
CFSM	.05	.10	2.03	.86	.10	.009	.02	.004	.003	.06	0	0
IN.	.06	.12	2.34	.99	.11	.009	.03	.004	.003	.07	0	0
AC-FT	54	109	2,200	930	100	9.0	25	4.6	2.9	63	0	0

CAL YR 1971 TOTAL 1,220.59 MEAN 3.34 MAX 510 MIN 0 CFSM .19 IN 2.58 AC-FT 2,420
WTR YR 1972 TOTAL 1,762.24 MEAN 4.81 MAX 510 MIN 0 CFSM .27 IN 3.72 AC-FT 3,500

08063500 Richland Creek near Richland, Tex.

LOCATION.--Lat 31°57'00", long 96°25'17", Navarro County, at downstream side of bridge on U.S. Highway 75, 800 ft downstream from Texas and New Orleans Railroad Co. bridge, 1.0 mile north of Richland, 3.5 miles downstream from Pin Oak Creek, and at mile 36.7.

DRAINAGE AREA.--734 sq mi.

PERIOD OF RECORD.--December 1924 to February 1925 (discharge measurements and gage heights only), March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 299.12 ft above mean sea level. Dec. 11, 1924, to Feb. 11, 1925, nonrecording gage at site 800 ft upstream. Mar. 17, 1939, to Feb. 14, 1958, water-stage recorder at site 50 ft upstream. Feb. 15, 1958, to Jan. 28, 1959, nonrecording gage at present site. June 8, 1955, to Feb. 14, 1958, and since Feb. 6, 1959, supplementary water-stage recorder in overflow channel 3,900 ft to right of main channel gage. All gages at present datum.

AVERAGE DISCHARGE.--23 years (1939-62) prior to regulation by Navarro Mills Lake, 404 cfs (292,700 acre-ft per year); 10 years (1962-72) regulated, 307 cfs (222,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 16,200 cfs Dec. 10 (gage height, 22.18 ft); no flow for many days.
Period of record: Maximum discharge, 58,900 cfs May 12, 1948 (gage height, 24.16 ft); no flow at times.
Maximum stage since at least 1899, 25.5 ft in December 1913 (discharge not determined), from information by Texas and New Orleans Railroad Co.

REMARKS.--Records good. Since October 1962, flow partly regulated by Navarro Mills Lake (station 08063050) located 25 miles upstream. At end of year, flow from 121 sq mi above this station was partly controlled by 63 floodwater-retarding structures with a total combined capacity of 42,920 acre-ft below the flood-spillway crests, of which 36,010 acre-ft is floodwater-retarding capacity and 6,910 acre-ft is sediment-pool capacity. Three structures were built during the current year and have a total combined capacity below flood-spillway crests of 4,080 acre-ft, of which 411 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	10	14	1,390	512	50	4.9	1.0	.36	42	7.9	0
2	1.4	7.2	55	3,550	459	43	4.0	.70	.36	20	8.0	0
3	1.2	5.7	939	2,950	374	22	3.4	.48	.38	6.6	6.8	5.1
4	1.5	4.8	402	4,270	324	8.0	2.2	.38	.34	2.9	5.6	7.3
5	1.0	3.6	449	3,010	192	6.0	1.9	.41	.28	189	3.6	7.6
6	.72	2.4	2,280	950	91	4.7	1.8	.65	.22	106	1.8	7.3
7	.45	1.5	1,820	676	42	4.6	1.6	.79	.14	35	.91	3.1
8	.46	1.3	631	696	39	4.3	1.3	.68	.06	15	.44	.90
9	.33	1.5	6,850	657	39	4.4	1.4	.57	0	7.9	.19	.18
10	.10	1.1	11,900	590	43	4.0	1.4	.47	0	4.2	.06	.02
11	.05	.87	5,780	551	44	3.5	1.5	.40	0	2.7	.03	.01
12	.03	.46	1,970	523	44	3.0	1.4	.65	0	2.1	.02	0
13	.04	.16	1,260	499	44	2.7	1.4	.57	0	1.5	.01	0
14	.04	.04	1,020	478	43	3.3	1.5	.55	.18	1.1	.01	0
15	.03	.02	918	684	42	4.0	1.6	.62	.27	.82	.03	0
16	.02	.01	751	828	41	4.4	1.7	3.1	.19	.49	.02	0
17	.01	4.4	819	818	41	4.0	1.1	52	19	.35	0	0
18	.01	2,230	904	811	40	6.0	1.2	26	15	.20	0	0
19	.02	1,590	809	802	40	8.0	1.5	9.1	29	.10	0	0
20	849	276	728	794	46	13	1.8	4.9	21	.06	0	0
21	414	143	666	787	50	19	2.7	3.2	10	.02	0	0
22	92	97	608	550	52	32	2.7	2.3	5.9	.08	0	0
23	55	328	563	183	53	35	2.7	1.7	3.7	.17	0	0
24	38	316	534	82	54	36	1.3	1.4	2.2	.06	0	0
25	32	113	510	31	56	37	.60	.95	1.4	.02	0	0
26	27	66	505	31	57	39	.62	.62	.90	.01	0	0
27	24	43	496	32	58	40	1.5	.38	.53	.01	0	0
28	21	31	486	38	58	28	1.3	.25	.20	0	0	0
29	17	21	478	416	56	12	.97	.34	.23	0	0	0
30	13	17	487	2,110	------	8.9	.88	.32	11	0	0	0
31	10	------	915	702	------	6.6	------	.46	------	0	0	------
TOTAL	1,601.11	5,316.06	46,547	30,489	3,034	496.4	53.87	115.94	122.84	438.39	35.42	31.51
MEAN	51.6	177	1,502	984	105	16.0	1.80	3.74	4.09	14.1	1.14	1.05
MAX	849	2,230	11,900	4,270	512	50	4.9	52	29	189	8.0	7.6
MIN	.01	.01	14	31	39	2.7	.60	.25	0	0	0	0
AC-FT	3,180	10,540	92,330	60,470	6,020	985	107	230	244	870	70	63

CAL YR 1971 TOTAL 56,260.16 MEAN 154 MAX 11,900 MIN 0 AC-FT 111,600
WTR YR 1972 TOTAL 88,281.54 MEAN 241 MAX 11,900 MIN 0 AC-FT 175,100

08063700 Bardwell Lake near Ennis, Tex.

LOCATION.--Lat 32°15'00", long 96°38'49", Ellis County, in intake structure of Bardwell Dam on Waxahachie Creek, 5 miles south of Ennis, and 5.6 miles upstream from mouth.

DRAINAGE AREA.--178 sq mi.

PERIOD OF RECORD.--November 1965 to current year. Prior to October 1970, published as Bardwell Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Prior to Apr. 25, 1966, nonrecording gage on intake structure at same datum.

EXTREMES.--Current year: Maximum contents, 76,760 acre-ft Dec. 16 (elevation, 426.60 ft); minimum, 48,740 acre-ft Sept. 15 (elevation, 419.23 ft).
Period of record: Maximum contents, 103,300 acre-ft May 19, 1969 (elevation, 432.35 ft); minimum since initial filling, 45,840 acre-ft Sept. 4, 1967 (elevation, 418.35 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 15,400 ft long including a 350-foot uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of a 10-foot-diameter concrete conduit with two 5- by 10-foot sluice gates. Lake built for flood control and water conservation. Deliberate impoundment of water began Nov. 20, 1965. Figures given herein represent total contents. Capacity curve based on survey completed in 1962. Flow from 81.4 sq mi above the lake modified by Lake Waxahachie (capacity, 13,500 acre-ft, at spillway elevation) on South Prong Creek. During the year, the city of Waxahachie diverted 1,510 acre-ft from Lake Waxahachie. At end of year, flow from 51.4 sq mi above this station was partly controlled by 22 floodwater-retarding structures with a total combined capacity of 18,040 acre-ft below the flood-spillway crests, of which 15,040 acre-ft is floodwater-retarding capacity and 3,000 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	460.0	-
Maximum design water surface	455.9	268,400
Top of flood-control pool (spillway crest)	439.0	140,000
Top of conservation pool	421.0	54,900
Invert of lowest intake	391.0	1,320

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

419.0	47,950	423.0	62,240
420.0	51,350	425.0	70,090
421.0	54,870	427.0	78,460
422.0	58,500		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51,490	67,420	55,850	63,670	55,230	55,080	54,620	54,720	54,130	53,390	51,520	49,620
2	51,450	66,580	56,060	62,590	55,010	55,050	54,580	54,720	54,060	53,320	51,380	49,550
3	51,840	65,480	55,920	65,290	54,720	54,940	54,550	54,650	53,990	53,350	51,280	49,480
4	52,020	64,400	55,630	68,410	54,510	54,900	54,550	54,580	53,950	53,670	51,250	49,450
5	52,020	63,090	56,790	69,050	54,550	54,870	54,440	54,550	53,920	53,600	51,140	49,350
6	51,980	61,870	57,880	69,810	54,650	54,830	54,440	54,720	53,810	53,490	51,080	49,280
7	51,950	60,590	58,420	69,730	54,720	54,800	54,440	54,830	53,740	53,390	51,010	49,210
8	51,980	58,980	59,320	69,010	54,760	54,900	54,440	54,800	53,670	53,320	50,910	49,180
9	51,910	57,700	62,740	68,380	54,870	54,900	54,370	54,760	53,600	53,280	50,840	49,110
10	51,840	56,320	69,410	67,580	54,970	54,870	54,340	54,760	53,530	53,250	50,910	49,040
11	51,770	55,300	71,200	66,780	55,120	54,870	54,300	54,720	53,490	53,140	50,910	48,970
12	51,770	54,970	72,510	65,870	55,190	54,870	54,300	54,940	53,560	53,070	50,870	48,900
13	51,740	54,970	73,780	64,940	55,230	54,900	54,300	54,940	53,630	53,000	50,770	48,840
14	51,740	55,050	75,090	63,750	55,370	54,870	54,340	54,900	53,700	52,900	50,740	48,770
15	51,700	55,050	76,200	61,900	55,410	54,940	54,300	54,830	53,950	52,830	50,670	49,650
16	51,670	55,120	76,760	60,180	55,450	54,900	54,270	54,830	54,020	52,720	50,600	49,850
17	51,770	55,590	76,240	58,390	55,450	54,900	54,160	54,800	54,130	52,650	50,530	49,820
18	52,830	55,590	75,650	56,860	55,340	54,900	54,060	54,800	54,230	52,610	50,470	49,790
19	56,210	55,560	75,090	55,520	55,190	54,870	54,060	54,760	54,200	52,580	50,400	49,750
20	64,400	55,560	74,490	55,050	55,080	54,900	53,990	54,720	54,090	52,510	50,330	49,680
21	65,520	55,590	73,780	55,190	55,080	54,940	54,130	54,650	54,060	52,470	50,260	49,720
22	66,660	55,880	73,050	55,340	55,010	54,940	54,090	54,580	54,020	52,400	50,190	49,720
23	67,460	55,850	72,270	55,480	54,940	54,900	54,060	54,510	53,950	52,330	50,230	49,650
24	68,060	55,850	71,610	55,630	54,870	54,900	54,020	54,510	53,850	52,260	50,090	49,620
25	68,610	55,810	70,790	55,700	54,870	54,870	53,990	54,440	53,780	52,190	50,130	49,580
26	68,970	55,920	69,930	55,880	54,830	54,870	53,810	54,370	53,630	52,120	50,090	49,580
27	69,530	55,920	69,490	56,100	54,800	54,870	54,580	54,340	53,460	51,980	50,060	49,520
28	69,890	55,990	68,690	56,100	54,720	54,870	54,620	54,230	53,460	51,910	49,960	49,450
29	69,690	56,030	67,900	56,030	54,650	54,830	54,650	54,300	53,460	51,840	49,850	49,410
30	69,010	56,030	66,500	55,700	54,690	54,650	54,300	53,460	51,770	49,750	49,350
31	68,220	------	64,330	55,410	------	54,650	------	54,160	------	51,630	49,680	------
(†)	424.53	421.32	423.54	421.15	420.94	420.94	420.94	420.80	420.60	420.08	419.51	419.41
(*)	+16,700	-12,190	+8,300	-8,920	-760	0	0	-550	-640	-1,830	-2,950	-330
(††)	130	102	119	126	112	121	130	128	156	167	183	166
MAX	69,890	67,420	76,760	69,810	55,450	55,080	54,650	54,940	54,230	53,670	51,520	49,850
MIN	51,450	54,970	55,630	55,050	54,510	54,650	53,810	54,160	53,460	51,630	49,680	48,770

CAL YR 1971..... * +9,390 †† 1,540 MAX 76,760 MIN 51,450
WTR YR 1972..... * -2,170 †† 1,640 MAX 76,760 MIN 48,770

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal supply by the city of Ennis.

08063800 Waxahachie Creek near Bardwell, Tex.

LOCATION.--Lat 32°14'28", long 96°38'20", Ellis County, on right bank 1.0 mile downstream from Bardwell Dam, 3.8 miles upstream from mouth, 3.8 miles southeast of Bardwell, and 4.0 miles downstream from bridge on State Highway 34.

DRAINAGE AREA.--178 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 370.18 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--9 years, 68.0 cfs (49,270 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 964 cfs Jan. 1 (gage height, 11.95 ft); maximum gage height, 13.00 ft Dec. 31; no flow at times.
Period of record: Maximum discharge, 2,960 cfs Feb. 9, 1965 (gage height, 17.55 ft); no flow at times each year.
Maximum stage since at least 1944, about 23 ft in 1944 and 1945, from information by Corps of Engineers.

REMARKS.--Records good. Flow regulated by Bardwell Lake (station 08063700) 1.0 mile upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	441	112	955	145	3.4	1.2	.22	.03	.01	0	1.4
2	0	440	290	555	145	3.0	1.4	.18	.02	.02	0	1.4
3	.01	441	282	8.0	145	2.5	1.4	.18	.03	.01	.27	1.5
4	.70	492	272	2.5	95	2.5	1.4	.18	.06	.02	.02	1.5
5	.53	556	270	.7	25	2.5	1.5	.22	.04	.09	.01	1.6
6	.18	615	260	.7	3.0	2.5	1.4	.32	.04	.04	.01	1.6
7	.09	605	255	256	2.1	2.5	1.4	.32	.06	.06	.01	1.6
8	.02	604	254	515	2.1	2.1	1.1	.27	.06	.07	0	1.6
9	.01	596	115	515	2.1	2.1	1.1	.27	.07	.01	0	1.6
10	0	590	3.2	513	2.1	2.1	1.1	.22	.07	.01	.01	1.6
11	0	471	.62	512	2.1	2.3	1.1	.27	.07	.01	.01	1.6
12	0	161	.53	510	2.1	2.5	1.1	.39	.06	.01	.01	1.1
13	0	2.1	.46	510	2.3	2.1	.80	.46	.07	.24	.01	.09
14	0	1.6	.70	599	2.3	2.1	.80	.46	.07	.07	.01	.01
15	0	1.5	.46	827	2.3	2.1	.80	.27	.07	.02	.01	0
16	0	1.5	221	818	2.5	2.1	.70	.22	.07	.01	.01	.32
17	0	1.8	485	812	24	2.3	.62	.22	.04	.02	.01	.15
18	1.9	3.0	476	809	53	2.5	.62	.22	.04	.02	.01	.01
19	1.7	1.6	459	694	53	2.1	.70	.22	.04	.03	.01	0
20	94	1.5	446	303	53	1.8	.70	.18	.03	.04	.01	0
21	50	1.4	444	6.7	53	1.8	.80	.15	.03	.07	.02	0
22	.90	1.5	442	4.5	53	1.8	.62	.03	.52	.09	.04	0
23	.99	2.0	442	4.1	52	2.0	.39	.02	.69	.12	.85	0
24	.99	1.2	441	3.8	52	2.0	.32	.02	.04	.09	1.8	0
25	.99	1.1	440	3.8	38	2.0	.32	.02	.01	.06	1.6	0
26	1.1	1.1	439	3.6	30	1.6	.32	.02	.01	.02	1.5	0
27	1.4	.99	437	3.6	30	1.5	1.1	.02	.01	.02	1.8	0
28	1.4	1.1	437	83	16	1.2	.53	.02	0	.01	1.5	0
29	215	1.2	436	147	3.4	1.2	.39	.03	0	0	.99	0
30	453	1.6	619	146	------	1.2	.32	.15	.02	0	1.1	0
31	445	------	873	145	------	1.2	------	.07	------	0	1.2	------
TOTAL	1,269.92	6,039.79	9,652.97	10,266.0	1,090.4	64.6	26.05	5.84	2.37	1.29	12.83	18.68
MEAN	41.0	201	311	331	37.6	2.08	.87	.19	.079	.042	.41	.62
MAX	453	615	873	955	145	3.4	1.5	.46	.69	.24	1.8	1.6
MIN	0	.99	.46	.70	2.1	1.2	.32	.02	0	0	0	0
AC-FT	2,520	11,980	19,150	20,360	2,160	128	52	12	4.7	2.6	25	37

CAL YR 1971 TOTAL 18,186.67 MEAN 49.8 MAX 873 MIN 0 AC-FT 36,070
WTR YR 1972 TOTAL 28,450.74 MEAN 77.7 MAX 955 MIN 0 AC-FT 56,430

08064500 Chambers Creek near Corsicana, Tex.

LOCATION.--Lat 32°06'29", long 96°22'14", Navarro County, near center of channel at downstream side of downstream bridge on State Highway 31, 430 ft upstream from St. Louis Southwestern Railway Lines bridge, 6,000 ft upstream from city of Corsicana diversion dam, 5.3 miles east of Corsicana, 17 miles upstream from Richland Creek, and at mile 23.0.

DRAINAGE AREA.--963 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 294.28 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 437 cfs (316,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,000 cfs Oct. 21 (gage height, 24.33 ft); no flow Oct. 1-4, July 21 to Aug. 25, Sept. 9-17.
Period of record: Maximum discharge, 48,000 cfs May 3, 1944; maximum gage height, 28.10 ft May 3, 1958; no flow at times. Maximum stage since at least 1870, 30 ft Aug. 27, 1887, from information by local residents. Flood in December 1913 reached a stage of 27.5 ft, from information by local residents.

REMARKS.--Records good. Flow partly regulated by Bardwell Lake (station 08063700) since November 1965. At end of year, flow from 267 sq mi above this station was partly controlled by 91 floodwater-retarding structures with a total combined capacity of 94,580 acre-ft below the flood-spillway crests, of which 77,400 acre-ft is floodwater-retarding capacity and 17,180 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 3,300 acre-ft, of which 200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Records of city of Corsicana show that they diverted 188 acre-ft of water for municipal supply from pool in which gage is located. Discharge given herein does not include that diverted by the city. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	630	29	1,430	370	58	22	116	.83	52	0	.23
2	0	613	237	2,380	332	60	21	72	3.8	23	0	.11
3	0	594	1,460	2,060	310	43	20	46	3.3	11	0	.06
4	0	580	1,370	4,230	286	29	19	27	4.8	5.9	0	.04
5	382	664	961	4,930	193	22	19	18	3.0	3.4	0	.05
6	197	736	2,860	3,690	122	30	19	15	1.6	29	0	.03
7	62	748	4,200	1,080	115	27	19	16	.93	21	0	.02
8	28	732	3,400	1,110	110	26	19	23	.61	11	0	.01
9	15	717	7,200	1,070	101	28	18	171	.44	6.0	0	0
10	8.7	711	9,270	989	95	25	17	79	.38	3.4	0	0
11	5.3	704	9,840	914	92	22	17	43	.35	2.1	0	0
12	2.7	458	7,820	855	91	19	17	56	.35	1.0	0	0
13	1.5	134	3,850	812	95	14	17	43	.35	.54	0	0
14	.8	37	1,880	778	98	18	15	47	4.0	.34	0	0
15	.5	38	1,290	960	95	22	12	31	3.6	.20	0	0
16	.4	36	1,180	1,070	90	21	13	28	5.6	.11	0	0
17	.4	35	1,170	1,050	84	18	13	20	7.9	.06	0	0
18	.4	1,070	1,060	1,040	114	22	13	16	8.2	.03	0	.97
19	497	312	930	1,030	134	28	12	14	4.9	.02	0	7.0
20	2,040	123	860	797	129	29	11	12	2.8	.01	0	3.1
21	7,720	74	807	256	128	21	12	10	3.2	0	0	1.2
22	8,130	55	751	159	128	43	13	12	2.5	0	0	.68
23	3,480	317	712	149	127	59	12	8.4	1.5	0	0	.56
24	1,510	256	693	142	127	51	8.2	5.8	1.1	0	0	44
25	954	120	678	133	125	53	8.8	4.3	1.9	0	0	26
26	752	79	664	122	99	54	7.7	6.6	1.4	0	8.8	15
27	533	61	656	117	91	46	8.9	2.6	.72	0	17	9.8
28	395	49	649	130	89	29	164	2.0	.37	0	8.2	6.2
29	293	39	644	550	68	29	320	1.5	.32	0	3.9	1.5
30	614	34	646	921	------	24	130	.82	38	0	1.6	.74
31	655	------	996	505	------	23	------	.64	------	0	.54	------
TOTAL	28,277.7	10,756	68,763	35,459	4,038	993	1,017.6	947.66	108.75	170.11	40.04	117.30
MEAN	912	359	2,218	1,144	139	32.0	33.9	30.6	3.63	5.49	1.29	3.91
MAX	8,130	1,070	9,840	4,930	370	60	320	171	38	52	17	44
MIN	0	34	29	117	68	14	7.7	.64	.32	0	0	0
AC-FT	56,090	21,330	136,400	70,330	8,010	1,970	2,020	1,880	216	337	79	233

CAL YR 1971 TOTAL 118,551.56 MEAN 325 MAX 9,840 MIN 0 AC-FT 235,100
WTR YR 1972 TOTAL 150,688.16 MEAN 412 MAX 9,840 MIN 0 AC-FT 298,900

PEAK DISCHARGE (BASE, 13,000 CFS).--Oct. 21 (1130) 13,000 cfs (24.33 ft).

08064600 Richland Creek near Fairfield, Tex.

LOCATION.--Lat 31°57'05", long 96°05'52", Freestone County, near center of channel on downstream side of bridge on Farm Road 488, 5.8 miles upstream from mouth, 9.0 miles downstream from Chambers Creek, and 16 miles north of Fairfield.

DRAINAGE AREA.--1,957 sq mi.

PERIOD OF RECORD.--March to September 1972.

GAGE.--Wire-weight gage. Datum of gage is 230.83 ft above mean sea level.

EXTREMES.--Maximum discharge during period, 270 cfs July 6 (gage height, 8.42 ft); minimum daily, 0.02 cfs July 26, Aug. 26 to Sept. 2.
Period of record: Maximum discharge, 270 cfs July 6, 1972 (gage height, 8.42 ft); minimum daily, 0.02 cfs July 26, Aug. 26 to Sept. 2, 1972.
Flood in December 1971 reached a stage of 31.5 ft, from floodmark.

REMARKS.--Records good. Flow partly regulated by Navarro Mills Lake (station 08063050) and Bardwell Lake (station 08063700) on Waxahachie Creek. At end of year, flow from 392 sq mi above this station was partly controlled by 157 floodwater-retarding structures with a total combined capacity of 139,200 acre-ft below the flood-spillway crests, of which 115,000 acre-ft is floodwater-retarding capacity and 24,200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						99	29	186	4.1	102	.04	.02
2						72	27	151	4.7	142	42	.02
3						73	30	105	4.0	84	50	.12
4						75	23	61	4.1	52	.75	.24
5						42	21	40	4.3	44	.18	.20
6						32	21	36	4.7	230	.23	.32
7						40	21	36	5.6	176	.77	.36
8						37	22	29	5.1	52	1.0	.30
9						34	20	20	4.4	16	.36	.46
10						37	18	136	3.6	6.9	.22	38
11						33	18	252	8.1	19	.24	54
12						30	16	179	4.1	2.5	.48	5.8
13						25	18	122	4.1	2.1	.30	3.7
14						20	18	81	15	1.9	.24	2.7
15						24	16	67	99	1.2	.24	1.7
16						30	12	49	199	1.2	.18	5.4
17						29	12	41	121	1.3	.14	33
18						29	11	36	59	.24	.18	11
19						32	9.7	55	36	.05	.16	2.2
20						42	10	71	29	.04	.12	1.8
21						48	13	35	55	.04	.08	1.6
22						46	16	21	41	.04	.18	3.2
23						86	15	16	27	.04	.10	5.1
24						108	12	15	23	.03	.05	9.1
25						100	9.7	11	12	.03	.03	21
26						104	10	8.8	8.6	.02	.02	33
27						107	33	8.6	6.3	.05	.02	152
28						110	29	9.1	4.9	.03	.02	86
29						86	29	8.1	4.7	.04	.02	33
30					------	34	205	5.8	8.3	.08	.02	46
31		------			------	32	------	4.7	------	.04	.02	------
TOTAL						1,696	744.4	1,896.1	809.7	934.87	98.39	551.34
MEAN						54.7	24.8	61.2	27.0	30.2	3.17	18.4
MAX						110	205	252	199	230	50	152
MIN						20	9.7	4.7	3.6	.02	.02	.02
CFSM						.03	.01	.03	.01	.02	.002	.009
IN.						.03	.01	.04	.02	.02	.001	.01
AC-FT						3,360	1,480	3,760	1,610	1,850	195	1,090

CAL YR 1971	TOTAL -	MEAN -	MAX -	CFSM -	IN -	AC-FT -	
WTR YR 1972	TOTAL -	MEAN -	MAX -	CFSM -	IN -	AC-FT -	

PEAK DISCHARGE (BASE, 20,000 CFS).--No peaks above base for period Mar. 1 to Sept. 30, 1972.

08064700 Tehuacana Creek near Streetman, Tex.

LOCATION.--Lat 31°50'54", long 96°17'23", Freestone County, on downstream side of bridge on U.S. Highway 75, 2.8 miles southeast of Streetman, 3.1 miles downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, and 3.8 miles upstream from Caney Creek.

DRAINAGE AREA.--142 sq mi.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 287.58 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,720 cfs Dec. 10 (gage height, 23.28 ft); no flow for many days.
Period of record: Maximum discharge, 23,100 cfs May 10, 1968 (gage height, 25.00 ft); no flow at times each year.
Maximum stage since at least 1932, that of May 10, 1968. Flood in September 1932 reached a stage of about 24 ft, from information by State Highway Department.

REMARKS.--Records good. At end of year, flow from 5.75 sq mi above this station was partly controlled by one floodwater-retarding structure with a capacity of 2,500 acre-ft below the flood-spillway crest, of which 2,300 acre-ft is floodwater-retarding capacity and 200 acre-ft is sediment-pool capacity. The capacity in this pool allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. No other known regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.8	.8	228	42	2.6	1.0	.24	.48	5.4	0	0
2	.73	2.2	86	1,100	28	2.3	.98	.24	.41	4.6	0	0
3	.50	2.0	686	1,040	20	2.1	.84	.21	.32	2.4	0	0
4	1.0	2.4	59	2,650	13	1.9	.82	.22	.28	49	0	0
5	1.7	2.6	856	268	10	1.9	.80	.20	.24	156	0	0
6	1.6	2.4	886	55	9.4	1.8	.72	.24	.17	9.6	0	0
7	1.8	2.3	537	31	8.9	1.7	.64	.15	.10	1.1	0	0
8	2.8	2.4	74	22	7.6	1.6	.56	.16	.07	.43	0	0
9	4.2	3.0	2,960	17	6.6	1.5	.48	.22	.05	.27	0	0
10	3.3	3.2	4,440	14	5.9	1.4	.41	.26	.03	.32	0	0
11	3.6	3.5	660	11	5.4	1.3	.35	.26	.01	.37	0	0
12	3.8	3.3	84	8.6	5.4	1.3	.30	.26	.01	.34	0	0
13	4.0	3.0	41	6.6	5.6	1.3	.28	.26	.02	.25	0	0
14	3.9	2.9	31	5.0	5.4	1.2	.26	.60	169	.12	0	0
15	3.9	2.8	39	3.7	5.1	1.2	.24	.41	37	.05	0	0
16	3.9	2.8	28	2.6	4.5	1.2	.22	.32	61	.03	0	0
17	4.0	4.2	19	2.5	4.4	2.0	.20	.28	9.0	.03	0	0
18	37	2,800	15	2.4	3.9	1.7	.18	.29	17	.03	0	0
19	168	806	11	2.4	3.5	1.4	.16	.31	7.1	.01	0	0
20	1,640	48	9.6	2.4	3.1	2.2	.14	.34	3.7	0	0	0
21	326	13	8.1	2.2	3.0	1.9	.10	.35	2.5	0	0	0
22	20	6.5	6.7	1.8	3.0	3.2	.14	.38	2.0	.47	0	0
23	6.7	31	6.1	1.7	3.0	2.7	.12	.45	1.9	.12	0	0
24	3.2	34	5.7	1.8	2.9	2.5	.12	.52	1.8	.02	.08	0
25	1.7	9.8	5.6	1.9	2.9	2.5	.12	.53	1.9	0	.72	0
26	.92	4.7	5.8	2.2	2.9	5.7	.12	.48	1.6	0	.41	0
27	.61	2.8	6.3	2.7	2.6	24	.32	.48	1.2	0	.18	.98
28	1.1	1.6	6.2	32	2.4	3.5	.43	.58	.99	0	.10	.41
29	1.9	1.1	6.5	1,360	2.3	1.3	.14	.61	.85	0	.06	.24
30	2.4	.78	8.5	1,230	------	1.2	.13	.52	.80	0	.02	.20
31	2.8	------	11	121	------	1.2	------	.48	------	0	.01	------
TOTAL	2,258.16	3,807.08	11,598.9	8,229.5	222.7	83.3	11.32	10.85	321.53	230.96	1.58	1.83
MEAN	72.8	127	374	265	7.68	2.69	.38	.35	10.7	7.45	.051	.061
MAX	1,640	2,800	4,440	2,650	42	24	1.0	.61	169	156	.72	.98
MIN	.50	.78	.80	1.7	2.3	1.2	.10	.15	.01	0	0	0
CFSM	.51	.89	2.63	1.87	.05	.02	.003	.003	.08	.05	.0004	.0004
IN.	.59	1.00	3.04	2.16	.06	.02	.002	.002	.08	.06	0	0
AC-FT	4,480	7,550	23,010	16,320	442	165	22	22	638	458	3.1	3.6

CAL YR 1971 TOTAL 19,267.61 MEAN 52.8 MAX 4,440 MIN 0 CFSM .37 IN 5.05 AC-FT 38,220
WTR YR 1972 TOTAL 26,777.71 MEAN 73.2 MAX 4,440 MIN 0 CFSM .52 IN 7.02 AC-FT 53,110

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1415	21.65	3,050	12-10	0645	23.28	5,720
11-18	1515	22.48	4,070	1- 4	0230	22.46	4,040
12- 5	2045	20.92	2,510	1-29	2000	21.68	3,080

08064800 Catfish Creek near Tennessee Colony, Tex.

LOCATION.--Lat 31°52'51", long 95°52'07", Anderson County, on left bank 47 ft downstream from bridge on U.S. Highway 287, 2 miles upstream from Beaver Creek, 3.5 miles northwest of Tennessee Colony, 12 miles downstream from Coon Creek Lake, and 12 miles upstream from mouth.

DRAINAGE AREA.--207 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 234.93 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 83.9 cfs (60,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,030 cfs Jan. 5 (gage height, 10.80 ft); minimum daily, 1.5 cfs Sept. 13.
Period of record: Maximum discharge, 7,550 cfs May 11, 1968 (gage height, 15.90 ft); minimum daily, 0.8 cfs Aug. 19-21, 1964.
Maximum stage since 1927, 22 ft in June 1944 as a result of dam failure at Coon Creek Lake, from information by local residents.

REMARKS.--Records fair except those below 10 cfs, which are poor. Some regulation upstream by Coon Creek Lake. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	38	69	99	388	81	58	37	13	16	14	2.7
2	24	38	75	136	345	81	49	33	13	15	13	2.5
3	22	35	97	289	275	79	42	30	12	14	12	2.3
4	22	34	111	776	224	76	44	27	12	13	12	2.2
5	23	33	165	970	198	69	48	24	11	12	11	2.1
6	26	33	240	659	167	66	43	22	9.9	11	11	2.0
7	27	32	320	460	145	64	39	21	11	11	11	2.0
8	25	32	400	330	148	62	35	20	12	10	10	2.0
9	23	32	440	255	149	60	33	21	12	9.8	10	2.0
10	21	32	475	210	136	61	32	20	13	22	9.2	2.0
11	19	31	520	180	128	59	31	19	13	19	8.7	1.8
12	19	32	550	160	125	58	30	17	14	15	8.3	1.7
13	19	32	476	150	124	56	29	19	15	13	9.5	1.5
14	19	36	400	140	124	56	28	25	16	12	9.8	1.7
15	19	37	300	130	119	54	28	26	21	11	9.5	1.7
16	20	38	245	120	105	54	26	26	41	10	9.8	14
17	22	38	224	111	98	53	25	26	37	9.8	9.3	11
18	27	101	200	100	92	52	24	22	40	9.7	8.6	8.6
19	32	119	180	95	89	51	24	19	35	8.3	7.5	7.3
20	45	148	154	89	87	50	26	18	30	7.9	6.5	6.5
21	80	198	122	89	81	49	25	16	37	7.8	5.5	6.0
22	90	220	98	90	76	48	24	14	60	8.6	5.0	5.7
23	89	188	88	92	76	50	24	13	60	9.5	6.0	5.3
24	95	146	84	91	75	53	22	12	59	10	5.5	5.6
25	81	124	80	86	74	93	21	11	47	12	5.0	7.5
26	65	107	79	86	73	104	19	11	33	12	4.5	10
27	57	89	79	88	73	137	21	9.5	24	12	4.0	12
28	50	77	79	91	76	127	36	9.3	19	12	3.7	12
29	46	74	80	141	79	94	44	9.8	16	13	3.4	11
30	43	72	84	250	------	81	44	11	15	17	3.1	11
31	41	------	84	328	------	72	------	13	------	17	2.9	------
TOTAL	1,219	2,246	6,598	6,891	3,949	2,150	974	601.6	750.9	380.4	249.3	163.7
MEAN	39.3	74.9	213	222	136	69.4	32.5	19.4	25.0	12.3	8.04	5.46
MAX	95	220	550	970	388	137	58	37	60	22	14	14
MIN	19	31	69	86	73	48	19	9.3	9.9	7.8	2.9	1.5
AC-FT	2,420	4,450	13,090	13,670	7,830	4,260	1,930	1,190	1,490	755	494	325

CAL YR 1971 TOTAL 18,722.2 MEAN 51.3 MAX 550 MIN 2.1 AC-FT 37,140
WTR YR 1972 TOTAL 26,172.9 MEAN 71.5 MAX 970 MIN 1.5 AC-FT 51,910

PEAK DISCHARGE (BASE, 1,400 CFS).--No peak above base.

08065000 Trinity River near Oakwood, Tex.

LOCATION.--Lat 31°38'54", long 95°47'21", Anderson-Freestone County line, on left bank at downstream side of bridge on U.S. Highways 79 and 84, 1.5 miles upstream from Missouri Pacific Railroad Co. bridge, 6 miles northeast of Oakwood, and at mile 313.4.

DRAINAGE AREA.--12,833 sq mi.

PERIOD OF RECORD.--October 1923 to September 1924 (monthly discharge only), October 1924 to current year. Records of January 1905 to September 1923, published in WSP 850 and 878, have been found unreliable and should not be used. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 175.06 ft above mean sea level. Prior to July 15, 1932, nonrecording gage at site 1.5 miles downstream at datum 1.06 ft lower. July 15, 1932, to Oct. 7, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--30 years (1923-53) unregulated, 5,045 cfs (3,655,000 acre-ft per year); 19 years (1953-72) regulated, 4,138 cfs (2,998,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 73,600 cfs Dec. 13 (gage height, 46.35 ft); minimum daily, 331 cfs Sept. 18.
Period of record: Maximum discharge, 153,000 cfs Apr. 29, 1942 (gage height, 51.64 ft); minimum observed, 28 cfs Aug. 24, 1925.
Flood in May 1890 reached a stage of 53 ft (discharge, about 180,000 cfs) and was the highest since that date, from information in local newspapers. Flood of June 4, 1908, reached a stage of 52.2 ft, present site and datum, from information by the National Weather Service (discharge, about 164,000 cfs).

REMARKS.--Records good. Twenty-one major reservoirs with a total capacity of 4,200,000 acre-ft (of which 1,362,000 acre-ft is flood control) partly regulate the flow. At end of year, flow from 568 sq mi above this station was partly controlled by 227 floodwater-retarding structures with a total combined capacity of 205,500 acre-ft below the flood-spillway crests, of which 171,900 acre-ft is floodwater-retarding capacity and 33,620 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 6,660 acre-ft, of which 200 acre-ft 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).--WSP 1442: 1934. See also PERIOD OF RECORD. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	892	15,300	2,410	12,400	9,440	983	1,010	3,590	423	470	418	501
2	655	8,740	2,380	13,600	7,510	968	864	3,950	458	466	399	402
3	560	4,830	2,770	14,200	5,360	906	803	3,030	490	680	384	342
4	512	3,790	3,950	16,300	3,580	893	764	2,150	450	878	382	364
5	481	3,080	8,660	17,500	2,700	908	670	1,510	425	661	373	414
6	2,480	2,210	11,400	19,100	2,370	866	602	1,180	410	535	354	429
7	5,980	1,780	13,100	22,600	2,240	823	589	953	404	601	368	410
8	6,960	1,710	13,900	28,100	1,880	796	593	762	387	654	368	351
9	5,420	1,680	14,500	30,500	1,670	777	610	670	383	604	368	366
10	3,020	1,620	15,600	29,600	1,510	771	615	888	392	566	342	512
11	1,440	1,630	17,900	27,600	1,440	765	664	2,460	400	467	339	442
12	1,020	1,810	26,700	25,200	1,390	741	645	3,450	419	437	339	398
13	872	1,870	63,600	23,100	1,320	725	613	2,330	427	428	649	369
14	731	1,740	63,000	20,900	1,270	715	618	1,190	460	405	858	358
15	637	1,490	52,600	19,000	1,330	713	650	935	516	394	617	349
16	593	1,450	49,500	17,100	1,330	710	649	979	967	496	463	351
17	568	1,680	46,500	15,500	1,260	708	584	1,010	1,100	932	431	340
18	543	4,250	40,800	14,200	1,180	706	562	829	1,220	718	492	331
19	517	8,370	36,100	13,300	1,100	697	719	697	1,250	542	520	344
20	987	11,300	31,900	12,700	1,090	678	709	759	1,110	444	471	365
21	5,860	12,900	28,800	12,300	1,170	673	661	931	851	406	419	425
22	10,700	13,400	26,600	12,000	1,340	651	700	1,090	875	404	404	387
23	12,300	12,400	24,400	11,700	1,220	628	786	909	1,020	409	418	337
24	13,600	10,100	22,200	11,200	1,060	632	826	737	875	417	398	335
25	14,900	8,050	20,100	10,100	1,040	817	933	574	1,250	411	403	395
26	16,600	6,950	18,400	6,780	1,050	897	856	516	1,300	404	397	608
27	18,900	5,430	16,600	4,270	1,060	1,190	695	496	932	393	372	713
28	21,600	4,390	14,700	3,030	1,050	1,430	702	480	647	384	370	735
29	23,800	3,250	13,300	2,550	1,000	1,330	800	475	534	390	399	693
30	24,100	2,660	12,400	4,900	------	1,210	1,390	472	486	399	463	555
31	22,200	------	12,000	8,190	------	1,170	------	444	------	422	525	------
TOTAL	219,428	159,860	726,770	479,520	60,960	26,477	21,882	40,446	20,861	15,817	13,503	12,921
MEAN	7,078	5,329	23,440	15,470	2,102	854	729	1,305	695	510	436	431
MAX	24,100	15,300	63,600	30,500	9,440	1,430	1,390	3,950	1,300	932	858	735
MIN	481	1,450	2,380	2,550	1,000	628	562	444	383	384	339	331
AC-FT	435,200	317,100	1,442M	951,100	120,900	52,520	43,400	80,220	41,380	31,370	26,780	25,630

CAL YR 1971 TOTAL 1,357,598 MEAN 3,719 MAX 63,600 MIN 318 AC-FT 2,693,000
WTR YR 1972 TOTAL 1,798,445 MEAN 4,914 MAX 63,600 MIN 331 AC-FT 3,567,000

08065200 Upper Keechi Creek near Oakwood, Tex.

LOCATION.--Lat 31°34'11", long 95°53'17", Leon County, at right bank 20 ft downstream from bridge on U.S. Highway 79, 1.9 miles upstream from Missouri Pacific Railroad Co. bridge, 2 miles southwest of Oakwood, 11 miles upstream from Buffalo Creek, and 21 miles upstream from mouth.

DRAINAGE AREA.--150 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 240.11 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 63.7 cfs (5.77 inches per year, 46,150 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,870 cfs Dec. 11 (gage height, 12.39 ft); no flow for many days.
Period of record: Maximum discharge, 24,000 cfs May 16, 1965, and Apr. 25, 1966; maximum gage height, 14.91 ft May 16, 1965, from rating curve extended above 5,800 cfs; no flow at times.
Maximum stage since 1900, about 21 ft in 1932, from information by local residents.

REMARKS.--Records good. No known diversions or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	4.0	5.3	244	120	17	8.2	8.2	.20	.11	.07	0
2	.09	4.3	12	842	47	18	7.6	6.0	.20	.07	.09	0
3	.05	1.7	77	724	34	17	6.6	4.7	.18	.04	.04	0
4	.69	1.7	113	1,160	27	15	25	3.6	.17	6.9	.03	0
5	1.7	2.0	340	1,860	22	13	22	2.7	.14	54	.02	0
6	3.6	2.6	570	562	22	12	17	2.2	.14	13	0	0
7	2.1	1.4	1,140	141	24	12	15	2.0	.14	5.5	0	0
8	.81	.77	800	76	22	12	11	2.0	.13	2.9	0	0
9	.47	.77	322	58	19	11	8.6	1.9	.12	1.5	0	0
10	.20	2.2	852	50	18	11	7.2	1.8	.12	.93	0	0
11	.08	1.1	2,310	43	16	10	7.0	1.5	.12	.64	0	0
12	0	.73	1,310	35	20	10	6.5	1.7	.10	.43	0	0
13	0	.77	402	30	22	11	5.8	1.7	.11	.30	0	0
14	0	.95	142	26	20	11	5.0	2.1	1.2	.23	0	0
15	0	.69	92	21	19	11	4.4	1.5	.58	.20	0	0
16	2.0	.81	78	20	17	11	4.2	1.2	.30	.17	0	0
17	.53	26	60	19	16	9.8	3.4	.98	.29	.15	0	0
18	.61	122	41	21	15	8.9	2.9	1.2	20	.15	0	0
19	1.5	205	33	22	13	8.1	2.7	1.3	11	.15	0	0
20	128	415	31	22	12	9.6	2.4	1.5	7.1	.37	0	0
21	127	174	31	20	12	10	6.4	1.6	11	.28	0	0
22	20	17	30	19	13	11	7.2	1.0	11	.21	1.6	0
23	11	29	29	18	13	11	5.9	.74	4.5	.18	.52	0
24	8.0	24	28	18	14	10	4.1	.60	2.3	.17	.18	0
25	5.4	17	28	16	14	12	3.2	.50	1.1	.12	.09	.14
26	3.9	14	28	15	13	14	2.3	.47	.55	.08	.07	.09
27	3.0	9.8	29	15	12	14	4.4	.46	.37	.05	.05	.05
28	2.5	8.5	29	17	11	14	32	.36	.26	.03	.04	.04
29	6.3	6.8	29	28	12	13	22	.33	.14	.06	.03	.09
30	7.3	5.9	30	83	------	11	13	.30	.12	.07	.02	.18
31	10	------	33	220	------	9.5	------	.21	------	.02	0	------
TOTAL	346.97	1,100.49	9,054.3	6,445	639	367.9	273.0	56.35	73.68	89.01	2.85	.59
MEAN	11.2	36.7	292	208	22.0	11.9	9.10	1.82	2.46	2.87	.092	.020
MAX	128	415	2,310	1,860	120	18	32	8.2	20	54	1.6	.18
MIN	0	.69	5.3	15	11	8.1	2.3	.21	.10	.02	0	0
CFSM	.07	.24	1.95	1.39	.15	.08	.06	.01	.02	.02	.0006	.0001
IN.	.09	.27	2.25	1.60	.16	.09	.07	.01	.02	.02	0	0
AC-FT	688	2,180	17,960	12,780	1,270	730	542	112	146	177	5.7	1.2

CAL YR 1971 TOTAL 13,296.57 MEAN 36.4 MAX 2,310 MIN 0 CFSM .24 IN 3.30 AC-FT 26,370
WTR YR 1972 TOTAL 18,449.14 MEAN 50.4 MAX 2,310 MIN 0 CFSM .34 IN 4.58 AC-FT 36,590

PEAK DISCHARGE (BASE, 2,000 CFS).--Dec. 11 (1000) 2,870 cfs (12.39 ft); Jan. 5 (0900) 2,300 cfs (12.20 ft).

08065350 Trinity River near Crockett, Tex.

LOCATION.--Lat 31°20'08", long 95°39'27", Houston-Leon County Line, on right bank 30 ft downstream from bridge on State Highway 7, 7.1 miles downstream from Upper Keechi Creek, 11.9 miles west of Crockett, and at mile 265.2.

DRAINAGE AREA.--13,911 sq mi.

PERIOD OF RECORD.--January 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 136.59 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 5,466 cfs (3,960,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 60,300 cfs Dec. 16 (gage height, 51.11 ft); minimum daily, 392 cfs Aug. 9.
Period of record: Maximum discharge, 78,000 cfs May 15, 1969 (gage height, 52.24 ft); minimum, 275 cfs Aug. 13, 1964.
Maximum stage since at least 1900, 56.1 ft Apr. 30 or May 1, 1942, from information by State Highway Department.

REMARKS.--Records good. For statement regarding regulation by upstream reservoirs and by Soil Conservation Service floodwater-retarding structures, see Trinity River near Oakwood (station 08065000). Also regulated by Houston County Lake near Crockett (capacity, 19,500 acre-ft). Diversions above station for irrigation, municipal, and industrial use. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,370	23,300	3,050	13,400	9,630	1,410	1,420	2,390	618	573	456	564
2	936	19,500	2,900	14,900	10,200	1,460	1,250	4,200	600	553	459	547
3	717	11,300	3,140	15,600	8,430	1,490	1,110	4,020	626	570	447	472
4	650	5,430	3,840	17,500	6,040	1,350	1,070	3,160	661	886	437	414
5	582	4,070	7,500	19,800	4,310	1,300	1,040	2,380	619	1,200	425	424
6	602	3,260	12,100	21,000	3,510	1,270	970	1,780	593	860	409	467
7	3,250	2,500	13,900	22,700	3,150	1,200	863	1,470	576	735	396	491
8	5,970	2,150	14,800	25,300	2,870	1,160	802	1,220	563	839	398	481
9	6,760	2,050	15,600	28,600	2,580	1,130	783	1,020	544	868	392	427
10	5,100	2,000	16,600	31,400	2,340	1,100	799	933	541	794	396	420
11	2,830	1,900	17,500	33,300	2,150	1,090	806	1,830	553	671	402	546
12	1,590	1,950	18,900	34,000	2,080	1,070	852	3,560	564	561	415	515
13	1,160	2,150	26,600	32,900	1,990	1,050	827	3,290	602	514	404	465
14	1,040	2,150	39,700	30,200	1,920	1,020	787	2,170	781	490	701	444
15	901	1,950	55,400	27,200	1,880	1,020	788	1,520	963	471	908	428
16	786	1,720	59,000	24,400	1,920	1,010	836	1,280	1,170	458	682	444
17	733	1,760	54,200	21,400	1,880	995	818	1,340	1,480	659	527	438
18	719	3,170	48,000	18,200	1,780	980	738	1,340	1,580	1,010	467	424
19	715	6,670	43,500	16,000	1,660	966	722	1,130	1,600	788	522	403
20	884	10,200	39,700	14,600	1,580	952	882	1,010	1,590	596	566	404
21	2,030	12,500	36,400	13,800	1,560	952	890	1,090	1,370	473	520	417
22	6,880	13,900	34,300	13,200	1,650	964	901	1,280	1,250	427	479	464
23	10,500	14,300	32,000	12,900	1,790	922	939	1,320	1,270	439	475	462
24	12,300	13,000	29,900	12,400	1,640	891	1,000	1,160	1,290	492	489	433
25	13,600	10,300	27,500	11,700	1,480	988	1,030	940	1,240	485	482	425
26	14,900	8,640	25,400	10,300	1,470	1,260	1,130	800	1,630	433	470	491
27	16,300	6,800	23,100	7,390	1,470	1,300	1,060	796	1,440	410	466	752
28	18,100	5,160	20,900	4,980	1,470	1,590	924	690	1,020	396	467	949
29	19,800	4,200	18,600	3,940	1,440	1,780	931	665	753	396	448	907
30	23,100	3,540	16,000	4,220	------	1,630	948	654	624	418	453	866
31	24,500	------	14,100	6,880	------	1,500	------	636	------	435	501	------
TOTAL	199,305	201,520	774,130	564,110	85,870	36,800	27,916	51,074	28,711	18,900	15,059	15,384
MEAN	6,429	6,717	24,970	18,200	2,961	1,187	931	1,648	957	610	486	513
MAX	24,500	23,300	59,000	34,000	10,200	1,780	1,420	4,200	1,630	1,200	908	949
MIN	582	1,720	2,900	3,940	1,440	891	722	636	541	396	392	403
AC-FT	395,300	399,700	1,535M	1,119M	170,300	72,990	55,370	101,300	56,950	37,490	29,870	30,510

CAL YR 1971 TOTAL 1,468,688 MEAN 4,024 MAX 59,000 MIN 374 AC-FT 2,913,000
WTR YR 1972 TOTAL 2,018,779 MEAN 5,516 MAX 59,000 MIN 392 AC-FT 4,004,000

08065700 Caney Creek near Madisonville, Tex.

LOCATION.--Lat 30°56'12", long 95°56'07", Madison County, near center of span at downstream side of pier of bridge on U.S. Highway 190, 0.2 mile downstream from Mustang Creek, 1.5 miles southwest of Madisonville, and 13.2 miles upstream from Bedias Creek.

DRAINAGE AREA.--112 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 213.74 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 47.9 cfs (5.81 inches per year, 34,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,500 cfs Jan. 29 (gage height, 15.50 ft); no flow at times.
Period of record: Maximum discharge, 15,000 cfs Apr. 12, 1969 (gage height, 17.76 ft); no flow at times each year.
Maximum stages since 1900, 22 ft in 1929, and 21.4 ft in November 1946, from information by local residents.

REMARKS.--Records fair. No diversion above station.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03	.11	.07	38	16	0		0	0	0	.01
2	0	.02	22	1.1	21	14	0		0	0	0	0
3	0	.01	57	.32	18	7.8	1.5		0	0	0	0
4	0	0	4.4	16	12	3.4	16		0	0	0	0
5	0	0	55	21	7.4	1.2	2.5		0	0	0	.02
6	0	0	357	4.6	4.7	.17	.36		0	0	0	0
7	0	0	313	2.0	3.3	.03	.09		0	0	0	0
8	0	0	75	1.0	2.0	.02	.06		0	0	0	0
9	0	0	13	.66	1.4	.01	.09		0	0	0	0
10	0	0	40	.26	.94	.01	.09		0	1.6	26	0
11	0	0	35	.20	1.1	.01	.08		0	1.9	94	0
12	0	0	20	.13	.88	.01	.02		0	1.1	336	0
13	0	0	7.5	.11	.82	.02	0		0	4.2	15	0
14	0	0	3.4	.05	.94	.01	0		0	.88	3.2	0
15	0	0	1.7	.04	.66	0	0		.03	.26	1.5	0
16	234	0	.88	.03	.48	0	0		.04	.07	.61	0
17	50	0	.48	.03	.40	0	0		0	.02	.23	0
18	2.5	9.9	.29	.03	.26	0	0		0	.01	.07	0
19	.11	4.0	.15	.03	.13	0	0		0	.03	.03	0
20	2.7	1.2	.11	.03	.13	0	0		0	.02	.02	0
21	1.3	.56	.06	.02	.11	.13	0		0	2.7	0	0
22	.94	.40	.06	.02	.11	.06	0		0	22	0	0
23	.82	20	.04	.02	.08	.04	0		0	23	.10	0
24	.61	4.5	.03	.02	.11	.05	0		0	3.8	69	0
25	.56	1.0	.03	.01	.09	.06	0		0	1.1	11	0
26	.56	.66	.03	.01	.09	.06	0		0	.29	2.3	0
27	.52	.40	.03	0	.08	.05	0		0	.06	.72	0
28	.36	.26	.05	0	.07	.03	0		0	.03	.21	0
29	.20	.20	.08	662	3.9	.02	0		0	.02	.08	0
30	.07	.13	.09	768	------	0	0		0	.01	.03	0
31	.05	------	.05	147	------	0	------		------	0	.01	------
TOTAL	295.30	43.27	1,006.57	1,624.79	119.18	43.19	20.79	0	.07	63.10	560.11	.03
MEAN	9.53	1.44	32.5	52.4	4.11	1.39	.69	0	.002	2.04	18.1	.001
MAX	234	20	357	768	38	16	16	0	.04	23	336	.02
MIN	0	0	.03	0	.07	0	0	0	0	0	0	0
CFSM	.09	.01	.29	.47	.04	.01	.006	0	0	.02	.16	0
IN.	.10	.01	.33	.54	.04	.01	.006	0	0	.02	.19	0
AC-FT	586	86	2,000	3,220	236	86	41	0	.1	125	1,110	.06

CAL YR 1971 TOTAL 1,382.89 MEAN 3.79 MAX 357 MIN 0 CFSM .03 IN .46 AC-FT 2,740
WTR YR 1972 TOTAL 3,776.40 MEAN 10.3 MAX 768 MIN 0 CFSM .09 IN 1.25 AC-FT 7,490

PEAK DISCHARGE (BASE, 1,400 CFS).--Jan. 29 (1930) 2,500 cfs (15.50 ft).

08065800 Bedias Creek near Madisonville, Tex.

LOCATION.--Lat 30°53'03", long 95°46'39", Madison-Walker County line, on right bank at downstream side of bridge on U.S. Highways 75 and 190, 0.5 mile upstream from Interstate Highway 45, 1.5 miles downstream from Caney Creek, and 9.5 miles southeast of Madisonville.

DRAINAGE AREA.--321 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 194 cfs (8.21 inches per year, 140,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,810 cfs Jan. 31 (gage height, 17.41 ft); no flow at times.
Period of record: Maximum discharge, 31,000 cfs Apr. 13, 1969 (gage height, 24.60 ft); no flow at times.
Maximum stage since at least 1910, 34 ft in May 1922 (discharge unknown), from information by local resident.

REMARKS.--Records fair. At end of year, flow from 1.32 sq mi above this station was partly controlled by two floodwater-retarding structures with a total combined capacity of 1,270 acre-ft below the flood-spillway crests, of which 834 acre-ft is floodwater-retarding capacity and 436 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.45	6.2	52	1,960	83	8.0	5.4	0	.18	.04	2.4
2	0	.45	9.9	306	872	115	7.8	2.6	0	.13	0	1.7
3	0	.44	216	251	215	78	9.1	.92	0	.11	0	1.1
4	0	.47	453	308	100	58	11	.46	0	.08	0	.75
5	0	.44	423	388	69	42	52	.33	0	.07	0	.53
6	0	.37	589	335	51	30	38	.20	0	.05	0	.51
7	0	.27	1,110	158	37	22	19	.15	0	.01	0	.49
8	0	.23	1,510	81	30	17	9.3	.14	0	0	0	.41
9	0	.18	1,030	50	24	13	4.4	.10	0	0	0	.88
10	0	.14	317	34	20	8.7	2.3	.07	0	0	0	1.7
11	0	.12	210	26	19	6.9	1.7	.11	0	0	0	1.0
12	0	.10	266	20	19	6.0	1.8	13	0	0	58	.65
13	0	.09	145	16	19	4.5	2.3	46	0	18	275	.45
14	0	.08	84	11	17	3.6	2.6	55	0	19	162	.35
15	0	.05	54	8.3	15	3.2	2.7	29	0	4.1	46	.31
16	0	.03	39	6.2	12	3.3	2.3	9.0	40	1.8	30	.37
17	341	.01	28	5.1	9.9	3.7	1.4	2.1	9.8	.63	65	.30
18	545	.09	23	3.4	7.4	4.4	.80	.69	1.9	.46	32	.27
19	358	.12	19	4.2	5.0	9.5	.59	.48	.51	.36	13	.19
20	106	47	16	4.8	3.7	20	.49	.36	.21	.21	4.3	.13
21	55	57	12	9.9	3.4	33	.45	27	.14	.26	1.4	.12
22	117	28	11	9.9	3.1	12	.40	13	.14	16	.92	.10
23	79	18	11	6.7	2.6	4.2	.22	2.1	.10	59	.75	.08
24	32	76	11	4.4	2.5	3.0	.13	.51	.07	71	30	.15
25	13	136	11	3.5	2.5	2.0	.10	.29	.07	55	192	.23
26	5.9	78	10	6.3	2.5	3.8	.05	.14	.10	19	112	1.5
27	2.7	39	9.2	8.6	2.4	5.0	.16	.06	.10	3.7	52	1.0
28	1.5	22	9.2	9.5	2.2	5.9	1.1	.02	.09	.76	28	.60
29	1.0	14	48	33	2.1	8.4	3.7	0	.06	.33	18	1.0
30	.68	9.1	60	1,060	------	8.2	8.3	0	.21	.16	10	.60
31	.52	------	36	2,300	------	8.0	------	0	------	.07	5.4	------
TOTAL	1,658.30	528.23	6,776.5	5,519.8	3,528.3	625.3	192.19	209.23	53.50	270.47	1,135.81	19.87
MEAN	53.5	17.6	219	178	122	20.2	6.41	6.75	1.78	8.72	36.6	.66
MAX	545	136	1,510	2,300	1,960	115	52	55	40	71	275	2.4
MIN	0	.01	6.2	3.4	2.1	2.0	.05	0	0	0	0	.08
CFSM	.17	.05	.68	.55	.38	.06	.02	.02	.006	.03	.11	.002
IN.	.19	.06	.79	.64	.41	.07	.02	.02	.006	.03	.13	.002
AC-FT	3,290	1,050	13,440	10,950	7,000	1,240	381	415	106	536	2,250	39

CAL YR 1971 TOTAL 12,761.56 MEAN 35.0 MAX 1,510 MIN 0 CFSM .11 IN 1.48 AC-FT 25,310
WTR YR 1972 TOTAL 20,517.50 MEAN 56.1 MAX 2,300 MIN 0 CFSM .17 IN 2.38 AC-FT 40,700

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

08066000 Trinity River at Riverside, Tex.

LOCATION.--Lat 30°51'35", long 95°23'54", Walker-Trinity County line, at upstream side of bridge on State Highway 19, 1,200 ft upstream from Missouri Pacific Railroad Co. bridge, 0.5 mile north of Riverside, 0.8 mile downstream from Harmon Creek, and at mile 182.7.

DRAINAGE AREA.--15,589 sq mi.

PERIOD OF RECORD.--Discharge record, January 1903 to December 1906 (monthly discharge only, published in WSP 1312), October 1923 to September 1968. Records of daily discharge for January 1903 to December 1906, published in WSP 99, 132, 174, and 210, have been found to be unreliable and should not be used. Gage-height record, October 1968 to September 1972 (discontinued). Gage-height records collected in this vicinity since 1903 are in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 89.86 ft above mean sea level. Prior to Jan. 23, 1969, various nonrecording gages as follows: Prior to July 1, 1903, at railroad bridge 1,200 ft downstream at datum 7.7 ft lower; July 1, 1903, to May 5, 1941, at above site at present datum; May 6, 1941, to Jan. 22, 1969, at present site and datum.

AVERAGE DISCHARGE.--48 years (1903-6, 1923-68), 6,395 cfs (4,630,000 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 45.17 ft Dec. 23; minimum, 35.97 ft Oct. 4.
Period of record: Maximum discharge, 121,000 cfs May 5, 1942 (gage height, 52.75 ft, from floodmark); minimum observed, 70 cfs Aug. 20-26, Sept. 8-13, 1925, Sept. 29 to Oct 4, 1931.
Maximum stage since at least 1866, that of May 5, 1942. From newspaper reports a flood in 1866 reached a stage of 50.5 ft, present site and datum. Flood of June 11, 1908, reached a stage of 50.1 ft, present site (discharge, 100,000 cfs). Flood of June 7, 1884, was about same as flood of June 11, 1908, from information by local resident.

REMARKS.--Station discontinued as a streamflow station Sept. 30, 1968, due to backwater from Livingston Reservoir (station 08066190). Midnight gage heights only since Oct. 1, 1968. At end of year, flow from 569 sq mi above this station was partly controlled by 229 floodwater-retarding structures with a total combined capacity of 206,770 acre-ft below the flood-spillway crests, of which 172,720 acre-ft is floodwater-retarding capacity and 34,060 acre-ft is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 7,390 acre-ft of which 611 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Upstream regulation same as that for Trinity River near Oakwood (station 08065000). Also regulated by Houston County Lake near Crockett (capacity, 19,500 acre-ft). Many diversions above station for municipal supplies, industrial use, and irrigation.

REVISIONS (WATER YEARS).--WSP 828: 1935 (yearly mean only). WSP 1312: 1926-27. WSP 1512: 1924, 1930, 1934. WSP 1922: Drainage area. See also PERIOD OF RECORD.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.05	41.35	40.90	41.82	41.58	40.77	41.11	41.18	40.63	40.43	40.03	40.05
2	36.00	41.70	40.92	41.70	41.45	40.94	41.15	41.44	40.64	40.42	40.04	40.03
3	36.00	41.72	40.94	41.71	41.37	41.04	41.14	41.43	40.57	40.38	40.00	40.03
4	36.00	41.50	40.97	41.74	41.27	40.93	41.14	41.42	40.56	40.45	39.99	39.96
5	36.05	41.30	41.10	41.86	41.22	40.97	41.18	41.40	40.52	40.43	40.00	40.07
6	36.10	41.10	41.60	41.89	40.97	41.01	41.19	41.29	40.50	40.42	40.00	40.08
7	36.15	40.95	41.87	41.88	40.95	40.99	41.13	41.22	40.48	40.40	39.98	40.06
8	36.25	40.87	42.02	41.95	40.89	40.97	41.12	41.12	40.45	40.42	39.97	40.02
9	36.45	40.93	42.10	42.05	40.88	40.96	41.10	41.06	40.44	40.38	39.41	40.00
10	36.55	40.93	41.99	42.17	40.85	40.90	41.07	41.04	40.41	40.42	39.93	39.98
11	36.60	40.95	41.97	42.38	40.80	40.90	41.07	41.01	40.41	40.45	39.94	39.97
12	36.60	40.98	41.89	42.62	40.83	40.88	41.05	41.38	40.42	40.34	39.99	39.95
13	36.60	41.01	41.92	42.72	40.83	40.83	41.08	41.32	40.46	40.37	40.01	39.95
14	36.60	41.10	42.20	42.85	40.86	40.84	41.06	41.29	40.48	40.41	40.01	39.92
15	36.65	41.10	42.51	42.91	40.82	40.79	40.94	41.22	40.46	40.35	40.06	39.88
16	36.80	41.10	42.88	42.91	40.81	40.83	40.92	41.10	40.48	40.35	40.04	39.91
17	36.85	41.10	43.24	42.83	40.71	40.87	40.93	41.02	40.47	40.30	40.05	39.92
18	36.90	41.12	43.62	42.59	40.79	40.80	40.93	40.95	40.46	40.26	40.07	39.91
19	36.90	41.10	44.06	40.33	40.83	40.82	40.92	40.90	40.49	40.26	40.05	39.90
20	36.90	41.25	44.46	42.15	40.84	41.06	40.90	40.87	40.47	40.28	40.02	39.87
21	36.90	41.44	44.87	41.86	40.81	41.07	40.87	40.84	40.55	40.22	40.04	39.85
22	37.00	41.65	45.08	41.66	40.82	41.05	40.88	40.88	40.53	40.20	39.95	39.88
23	37.35	41.68	45.15	41.42	40.82	41.10	40.87	40.85	40.56	40.18	40.13	39.91
24	37.75	41.80	45.05	41.23	40.79	41.12	40.87	40.81	40.52	40.18	40.18	39.93
25	38.15	41.74	44.88	41.24	40.85	41.04	40.88	40.78	40.53	40.16	40.18	39.90
26	38.50	41.56	44.68	41.24	40.85	41.12	40.95	40.77	40.53	40.15	40.15	39.91
27	38.86	41.40	44.38	41.15	40.87	41.05	41.25	40.78	40.52	40.15	40.14	39.92
28	39.34	41.20	43.93	41.13	40.91	41.09	41.12	40.73	40.51	40.11	40.10	39.95
29	39.85	41.05	43.37	41.36	40.93	41.08	41.08	40.69	40.45	40.14	40.08	39.88
30	40.35	40.92	42.61	41.57	-----	41.07	41.10	40.66	40.50	40.13	40.08	39.86
31	40.85	-----	42.17	41.55	-----	41.10	-----	40.66	-----	40.08	40.06	-------
MAX	40.85	41.80	45.15	42.91	41.58	41.12	41.25	41.44	40.64	40.45	40.18	40.08
MIN	36.00	40.87	40.90	40.33	40.71	40.77	40.87	40.66	40.41	40.08	39.93	39.85

CAL YR 1971..... MAX 45.15 MIN 35.05
WTR YR 1972..... MAX 45.15 MIN 36.00

08066130 White Rock Creek near Trinity, Tex.

LOCATION.--Lat 31°02'13", long 95°21'23", Trinity County, on right bank in Trin-Lady Park, 2.0 miles upstream from Little White Rock Creek, 2.2 miles upstream from Tantabogue Creek, 6.4 miles north of Trinity, and 14.2 miles above mouth.

DRAINAGE AREA.--228 sq mi.

PERIOD OF RECORD.--December 1965 to September 1971. Stage affected by storage in Livingston Reservoir beginning October 1971.

GAGE.--Water-stage recorder. Datum of gage is 124.30 ft above mean sea level.

AVERAGE DISCHARGE.--5 years (1966-71), 92.5 cfs (5.51 inches per year, 67,020 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 9.05 ft Dec. 26, 27 (backwater from Livingston Reservoir); minimum, 2.98 ft Oct. 11-15.
Period of record: Maximum discharge, 13,200 cfs Apr. 9, 1968 (gage height, 22.68 ft); no flow at times.

REMARKS.--Records for 1972 water year not computed due to backwater from Livingston Reservoir. Station is to be relocated upstream from backwater.

08066170 Kickapoo Creek near Onalaska, Tex.

LOCATION.--Lat 30°54'25", long 95°05'18", Polk County, on right bank 114 ft downstream from old bridge site, 1.2 miles downstream from Magnolia Creek, 6.2 miles upstream from Rocky Creek, 7.3 miles northeast of Onalaska, and 15.9 miles upstream from mouth.

DRAINAGE AREA.--57.0 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 139.85 ft above mean sea level.

AVERAGE DISCHARGE.--6 years (1966-72), 26.4 cfs (6.29 inches per year, 19,130 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,120 cfs May 2 (gage height, 16.38 ft); minimum daily, 0.02 cfs July 29, 30.
Period of record: Maximum discharge, 7,950 cfs Apr. 12, 1969 (gage height, 20.04 ft); minimum, 0.01 cfs July 19, 20, 1971.

REMARKS.--Records good except those below 1.0 cfs, which are fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	.63	4.4	53	42	2.4	6.4	6.4	.43	.12	2.5	.43
2	.61	.63	63	75	32	4.4	5.0	1,470	.42	.12	.63	.31
3	.55	.63	42	23	19	2.8	4.2	111	.42	.08	.33	.54
4	.55	.55	19	54	14	2.3	4.1	44	.40	21	.24	.40
5	.77	.55	53	64	11	2.0	3.5	26	.34	3.8	.18	6.1
6	2.0	.55	174	20	12	1.6	3.2	22	.29	.77	.14	2.0
7	1.2	.55	50	11	13	1.9	3.0	30	.25	.42	.10	.70
8	.89	.55	23	8.0	9.6	2.2	2.7	34	.26	.28	.07	.53
9	.78	.55	44	12	8.5	1.8	2.1	24	.26	25	.16	.35
10	.70	.55	47	12	7.4	1.5	1.8	17	.28	31	.43	.29
11	.63	.55	21	7.8	8.9	1.5	1.8	20	4.4	14	.84	.24
12	.63	.55	14	5.3	17	1.5	1.8	424	7.2	4.1	1.4	.21
13	.63	.55	12	4.6	14	1.3	1.5	89	7.2	.42	.70	.22
14	.63	.55	7.4	3.5	9.6	1.2	1.1	30	16	.22	17	.22
15	.63	.63	12	2.7	8.0	1.8	.92	14	22	2.5	29	.21
16	60	.63	9.6	2.4	7.1	3.9	.78	9.4	12	.36	3.1	.21
17	21	.63	7.7	2.1	5.4	1.7	.63	7.0	3.0	.15	1.3	.38
18	5.7	14	5.4	2.1	4.8	1.3	.63	5.3	1.5	.05	.90	.44
19	2.6	7.0	3.5	2.3	4.1	.93	.63	4.2	1.0	.03	.85	.29
20	2.9	4.3	2.5	418	3.7	566	.63	3.2	.72	.15	.49	.26
21	4.1	2.2	1.8	36	3.5	260	11	2.5	28	1.6	.35	2.6
22	3.1	1.6	1.5	17	3.5	34	7.0	2.1	11	7.7	.40	5.4
23	1.6	11	1.3	10	3.5	12	3.5	1.7	2.1	7.4	4.6	2.0
24	.92	4.0	1.2	7.4	3.2	7.7	2.3	1.6	.72	.72	21	3.4
25	.72	3.1	1.2	5.1	3.2	7.0	1.4	1.3	.36	.22	12	1.8
26	.72	2.0	1.2	4.0	2.9	5.3	1.1	.96	.22	.10	6.3	1.2
27	.72	1.4	1.2	3.7	2.6	103	325	.78	.22	.05	3.0	2.5
28	.72	1.2	1.0	3.5	2.3	297	201	.66	.18	.03	2.0	3.3
29	.63	1.2	1.0	740	2.3	40	27	.55	.22	.02	1.7	2.9
30	.63	.90	1.2	721	------	15	12	.55	.12	.02	1.1	3.5
31	.63	------	51	91	------	9.5	------	.61	------	.55	.76	------
TOTAL	118.52	63.73	678.1	2,421.5	278.1	1,394.53	637.72	2,403.81	121.51	122.98	113.57	42.93
MEAN	3.82	2.12	21.9	78.1	9.59	45.0	21.3	77.5	4.05	3.97	3.66	1.43
MAX	60	14	174	740	42	566	325	1,470	28	31	29	6.1
MIN	.55	.55	1.0	2.1	2.3	.93	.63	.55	.12	.02	.07	.21
CFSM	.07	.04	.38	1.37	.17	.79	.37	1.36	.07	.07	.06	.03
IN.	.08	.04	.44	1.58	.18	.91	.42	1.57	.08	.08	.07	.03
AC-FT	235	126	1,350	4,800	552	2,770	1,260	4,770	241	244	225	85

CAL YR 1971 TOTAL 1,415.93 MEAN 3.88 MAX 174 MIN .02 CFSM .07 IN .92 AC-FT 2,810
WTR YR 1972 TOTAL 8,397.00 MEAN 22.9 MAX 1,470 MIN .02 CFSM .40 IN 5.48 AC-FT 16,660

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
1-29	1930	12.45	2,580
3-20	2030	12.46	2,580
5- 2	0430	16.38	5,120

08066190 Livingston Reservoir near Goodrich, Tex.

LOCATION.--Lat 30°38'00", long 95°00'36", Polk-San Jacinto County line, on upstream wingwall at left end of gated spillway, 4.4 miles northwest of Goodrich, 7 miles southwest of Livingston, 11.7 miles upstream from Long King Creek, and at mile 129.2.

DRAINAGE AREA.--16,583 sq mi.

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Trinity River Authority). Prior to Feb. 26, 1969, temporary nonrecording gages at site about 200 ft upstream and at same datum.

EXTREMES.--Current year: Maximum contents, 1,882,000 acre-ft Dec. 27 (elevation, 132.12 ft); minimum, 1,406,000 acre-ft Oct. 3 (elevation, 126.07 ft).
Period of record: Maximum contents, 1,882,000 acre-ft Dec. 27, 1971 (elevation, 132.12 ft); minimum since deliberate impoundment began on June 26, 1969, 149,600 acre-ft Dec. 5, 1969 (elevation, 98.52 ft).

REMARKS.--Reservoir is formed by an earthfill dam 14,400 ft long including spillway. Closure of embankment was begun and completed Sept. 29, 1968. Deliberate impoundment began June 26, 1969. Reservoir is operated to supply municipal, industrial, and irrigation water for use in the Houston area. The spillway is a concrete gravity structure 646 ft long with twelve 40- by 35-foot tainter gates located near the left end of the embankment. The outlet works is a concrete multi-gated inlet tower located 1,700 ft to right of right spillway abutment. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Trinity River at Riverside (station 08066000). Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	145.0	-
Maximum design flood	135.0	2,136,000
Top of gates	134.0	2,046,000
Normal operating level	131.0	1,788,000
Invert of 4- by 5-foot gate	119.0	938,800
Do	112.0	571,300
Do	103.0	246,000
Spillway crest	99.0	157,900
Invert of 4- by 5-foot gate	93.0	81,200
Invert of 8- by 10-foot gate	58.0	335

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

123.0	1,192,000	129.0	1,627,000
125.0	1,329,000	131.0	1,788,000
127.0	1,474,000	133.0	1,958,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,409.00	1,753.00	1,792.00	1,826.00	1,833.00	1,819.00	1,808.00	1,805.00	1,775.00	1,748.00	1,725.00	1,726.00
2	1,409.00	1,797.00	1,807.00	1,817.00	1,832.00	1,795.00	1,807.00	1,837.00	1,770.00	1,746.00	1,722.00	1,727.00
3	1,413.00	1,822.00	1,797.00	1,829.00	1,827.00	1,792.00	1,813.00	1,837.00	1,769.00	1,744.00	1,724.00	1,725.00
4	1,414.00	1,826.00	1,795.00	1,820.00	1,820.00	1,802.00	1,812.00	1,832.00	1,768.00	1,762.00	1,718.00	1,725.00
5	1,420.00	1,817.00	1,809.00	1,807.00	1,813.00	1,795.00	1,811.00	1,824.00	1,768.00	1,758.00	1,717.00	1,727.00
6	1,420.00	1,815.00	1,822.00	1,800.00	1,816.00	1,797.00	1,809.00	1,822.00	1,766.00	1,756.00	1,715.00	1,725.00
7	1,420.00	1,794.00	1,831.00	1,795.00	1,804.00	1,801.00	1,815.00	1,824.00	1,764.00	1,755.00	1,716.00	1,723.00
8	1,427.00	1,792.00	1,832.00	1,793.00	1,797.00	1,798.00	1,811.00	1,817.00	1,760.00	1,751.00	1,714.00	1,724.00
9	1,439.00	1,797.00	1,816.00	1,797.00	1,794.00	1,795.00	1,803.00	1,806.00	1,759.00	1,752.00	1,716.00	1,724.00
10	1,443.00	1,795.00	1,839.00	1,797.00	1,787.00	1,792.00	1,803.00	1,787.00	1,758.00	1,751.00	1,716.00	1,721.00
11	1,448.00	1,796.00	1,827.00	1,804.00	1,791.00	1,788.00	1,801.00	1,797.00	1,756.00	1,753.00	1,719.00	1,719.00
12	1,453.00	1,798.00	1,820.00	1,810.00	1,787.00	1,788.00	1,799.00	1,827.00	1,754.00	1,752.00	1,720.00	1,712.00
13	1,453.00	1,797.00	1,803.00	1,824.00	1,784.00	1,788.00	1,797.00	1,829.00	1,758.00	1,750.00	1,721.00	1,712.00
14	1,450.00	1,800.00	1,786.00	1,833.00	1,786.00	1,786.00	1,795.00	1,826.00	1,755.00	1,749.00	1,723.00	1,711.00
15	1,451.00	1,802.00	1,789.00	1,837.00	1,788.00	1,792.00	1,798.00	1,818.00	1,762.00	1,750.00	1,724.00	1,712.00
16	1,465.00	1,806.00	1,795.00	1,842.00	1,786.00	1,787.00	1,797.00	1,811.00	1,762.00	1,746.00	1,723.00	1,708.00
17	1,471.00	1,807.00	1,798.00	1,851.00	1,790.00	1,783.00	1,790.00	1,804.00	1,760.00	1,747.00	1,724.00	1,709.00
18	1,472.00	1,822.00	1,798.00	1,855.00	1,786.00	1,786.00	1,788.00	1,800.00	1,764.00	1,744.00	1,721.00	1,707.00
19	1,476.00	1,811.00	1,807.00	1,851.00	1,779.00	1,782.00	1,786.00	1,796.00	1,762.00	1,745.00	1,723.00	1,706.00
20	1,482.00	1,811.00	1,817.00	1,850.00	1,781.00	1,802.00	1,786.00	1,792.00	1,760.00	1,743.00	1,722.00	1,705.00
21	1,482.00	1,814.00	1,832.00	1,837.00	1,783.00	1,808.00	1,797.00	1,788.00	1,765.00	1,742.00	1,721.00	1,706.00
22	1,485.00	1,826.00	1,844.00	1,820.00	1,782.00	1,806.00	1,792.00	1,784.00	1,765.00	1,741.00	1,723.00	1,707.00
23	1,498.00	1,835.00	1,857.00	1,802.00	1,783.00	1,802.00	1,792.00	1,783.00	1,761.00	1,737.00	1,728.00	1,707.00
24	1,513.00	1,835.00	1,868.00	1,798.00	1,786.00	1,811.00	1,791.00	1,784.00	1,762.00	1,736.00	1,729.00	1,709.00
25	1,533.00	1,832.00	1,874.00	1,797.00	1,787.00	1,802.00	1,785.00	1,786.00	1,760.00	1,733.00	1,733.00	1,707.00
26	1,559.00	1,832.00	1,879.00	1,803.00	1,789.00	1,802.00	1,779.00	1,785.00	1,760.00	1,729.00	1,733.00	1,708.00
27	1,586.00	1,818.00	1,877.00	1,815.00	1,792.00	1,794.00	1,802.00	1,784.00	1,757.00	1,726.00	1,731.00	1,712.00
28	1,611.00	1,816.00	1,869.00	1,817.00	1,792.00	1,817.00	1,812.00	1,785.00	1,759.00	1,724.00	1,733.00	1,709.00
29	1,642.00	1,800.00	1,852.00	1,827.00	1,794.00	1,812.00	1,808.00	1,785.00	1,765.00	1,725.00	1,732.00	1,716.00
30	1,679.00	1,797.00	1,839.00	1,841.00	------	1,812.00	1,800.00	1,783.00	1,752.00	1,725.00	1,729.00	1,712.00
31	1,716.00	------	1,832.00	1,836.00	------	1,811.00	------	1,778.00	------	1,723.00	1,728.00	------
(†)	130.11	131.10	131.52	131.57	131.07	131.27	131.14	130.88	130.56	130.20	130.26	130.07
(*)	+309,000	+81,000	+35,000	+4,000	-42,000	+17,000	-11,000	-22,000	-26,000	-29,000	+5,000	-16,000
MAX	1,716.00	1,835.00	1,879.00	1,855.00	1,833.00	1,819.00	1,815.00	1,837.00	1,775.00	1,762.00	1,733.00	1,727.00
MIN	1,409.00	1,753.00	1,786.00	1,793.00	1,779.00	1,782.00	1,779.00	1,778.00	1,752.00	1,723.00	1,714.00	1,705.00

CAL YR 1971..... * +472,000 MAX 1,879.00 MIN 1,342.00
WTR YR 1972..... * +305,000 MAX 1,879.00 MIN 1,409.00

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
NOTE.--All figures expressed in thousands.

08066191 Livingston Reservoir at Outflow Weir near Goodrich, Tex.

LOCATION.--Lat 30°37'55", long 95°01'11", San Jacinto County, at end of conduit into stilling basin, 1,700 ft to right of right spillway abutment, 4.8 miles northwest of Goodrich, 11.7 miles upstream from Long King Creek, and at mile 129.2.

DRAINAGE AREA.--16,583 sq mi.

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is at mean sea level (levels by Trinity River Authority).

EXTREMES.--Current year: Maximum daily discharge, 410 cfs Oct. 1-3; maximum elevation, 63.23 ft Oct. 1-4; no flow for many days. Period of record: Maximum daily discharge, 3,070 cfs Dec. 11, 12, 1969; maximum elevation, 76.62 ft Mar. 19, 1970 (backwater from Trinity River); no flow for many days.

REMARKS.--Records good. For details concerning outlet works, see station Livingston Reservoir (08066190). The purpose of this station is to record selective withdrawal releases at outflow weir (crest, 61.90 ft). These releases do not constitute the total flow from Livingston Reservoir since flow through tainter gates is not included in these totals.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410				0	1.0	4.0	4.8	10			
2	410				0	0	5.0	7.8	13			
3	410				0	0	6.0	7.1	34			
4	320				0	0	6.0	4.8	23			
5	257				0	2.0	6.0	4.8	18			
6	261				0	2.0	6.0	4.8	13			
7	261				0	2.0	7.0	4.8	8.5			
8	257				0	4.0	7.0	4.8	12			
9	253				0	2.9	7.0	5.7	8.7			
10	253				0	125	8.0	7.2	9.5			
11	113				0	6.0	10	7.2	8.5			
12	74				0	5.0	11	8.0	12			
13	257				0	2.3	20	8.7	9.7			
14	170				0	0	22	9.2	9.9			
15	0				0	0	16	9.7	13			
16	0				0	0	6.0	9.7	15			
17	0				0	0	6.0	10	16			
18	0				0	3.3	15	13	13			
19	0				0	6.9	12	19	11			
20	0				0	0	2.9	20	10			
21	0				0	0	3.6	26	2.7			
22	0				0	0	2.4	18	0			
23	0				0	0	2.4	17	0			
24	0				0	0	2.9	15	0			
25	0				0	0	3.6	15	0			
26	0				0	0	3.6	14	0			
27	0				7.4	0	4.8	14	0			
28	0				2.0	0	4.8	13	0			
29	0				2.0	0	4.8	15	0			
30	0				------	2.3	4.8	14	0			
31	0	------			------	4.0	------	13	------			------
TOTAL	3,706	0	0	0	11.4	168.7	220.6	345.1	270.5	0	0	0
MEAN	120	0	0	0	.39	5.44	7.35	11.1	9.02	0	0	0
MAX	410	0	0	0	7.4	125	22	26	34	0	0	0
MIN	0	0	0	0	0	0	2.4	4.8	0	0	0	0
AC-FT	7,350	0	0	0	23	335	438	685	537	0	0	0

CAL YR 1971 TOTAL 224,289.0 MEAN 614 MAX 2,460 MIN 0 AC-FT 444,900
WTR YR 1972 TOTAL 4,722.3 MEAN 12.9 MAX 410 MIN 0 AC-FT 9,370

08066200 Long King Creek at Livingston, Tex.

LOCATION.--Lat 30°42'58", long 94°57'31", Polk County, on right bank 64 ft downstream from centerline of bridge on U.S. Highway 190, 2 miles west of Livingston, 2 miles upstream from Choates Creek, and 14.8 miles from mouth.

DRAINAGE AREA.--141 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 100.12 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 57.7 cfs (5.56 inches per year, 41,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,780 cfs Apr. 27 (gage height, 12.48 ft); minimum daily, 0.24 cfs Sept. 12.
Period of record: Maximum discharge, 12,800 cfs May 7, 1969 (gage height, 22.91 ft); no flow at times.
Maximum stage since at least 1870, about 41 ft in May 1929.

REMARKS.--Records good except those for November, which are poor. No diversion above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	.90	2.0	174	98	9.8	28	30	5.3	1.6	1.5	.90
2	3.2	.90	112	447	67	70	25	1,510	4.4	1.5	1.2	.61
3	9.7	.85	280	97	47	31	20	918	4.3	1.4	1.5	.44
4	50	.80	49	321	32	19	14	104	3.9	8.6	2.0	1.2
5	24	.80	164	240	25	14	13	36	3.5	24	1.5	2.1
6	126	.80	714	72	27	11	12	25	3.1	6.3	1.1	2.0
7	30	.80	343	40	33	9.7	12	30	3.0	3.2	.82	.82
8	9.3	.80	44	26	24	10	9.8	77	2.6	2.4	.61	.44
9	5.2	1.0	38	36	20	8.6	9.2	41	2.1	1.8	.44	.36
10	4.0	1.5	83	59	17	7.7	8.4	20	2.5	1.5	.57	.70
11	4.1	1.2	64	39	18	7.5	8.1	18	5.2	1.4	1.2	.30
12	3.3	1.0	275	23	24	7.7	7.7	1,370	6.4	1.3	2.1	.24
13	3.3	.95	85	17	28	7.0	7.6	795	7.6	1.6	4.3	.30
14	3.4	.92	25	13	22	6.5	6.7	157	23	4.6	2.1	.30
15	3.3	.90	76	9.5	18	7.1	6.0	83	11	4.8	2.0	.44
16	55	.90	60	8.4	17	12	6.0	40	63	10	3.1	.49
17	301	5.0	119	7.9	13	12	5.6	28	25	7.6	3.9	.98
18	52	77	44	8.7	12	10	5.0	23	11	24	3.5	3.5
19	11	47	23	10	10	7.6	5.0	19	7.2	12	2.5	4.1
20	4.2	6.0	15	240	9.7	63	4.6	16	5.2	5.7	1.4	2.0
21	21	1.8	11	252	9.6	1,020	67	14	3.7	3.6	1.1	1.2
22	7.0	1.3	8.7	56	10	178	46	12	4.6	5.4	1.1	3.7
23	4.0	9.5	7.1	30	12	49	16	10	4.9	8.4	1.1	21
24	2.5	9.0	6.7	20	9.1	33	11	9.0	3.8	4.7	2.2	23
25	1.7	5.6	7.0	12	9.7	30	8.6	8.7	3.2	3.3	3.5	7.5
26	1.4	3.5	7.1	9.2	9.3	28	6.8	8.3	2.8	2.4	1.6	5.3
27	1.2	3.0	7.7	8.4	9.0	23	830	7.9	2.4	1.7	1.2	3.9
28	1.1	2.7	7.9	8.9	8.4	1,140	1,570	7.1	2.3	1.4	.64	23
29	1.0	2.4	8.1	9.2	8.6	372	209	6.7	1.9	1.1	.70	8.3
30	.95	2.1	8.3	496	------	67	75	6.8	1.8	1.1	1.1	5.4
31	.90	------	12	447	------	38	------	5.8	------	1.4	1.2	------
TOTAL	747.95	190.92	2,706.6	3,237.2	647.4	3,309.2	3,053.1	5,436.3	230.7	159.8	52.78	124.52
MEAN	24.1	6.36	87.3	104	22.3	107	102	175	7.69	5.15	1.70	4.15
MAX	301	77	714	496	98	1,140	1,570	1,510	63	24	4.3	23
MIN	.90	.80	2.0	7.9	8.4	6.5	4.6	5.8	1.8	1.1	.44	.24
CFSM	.17	.05	.62	.74	.16	.76	.72	1.24	.05	.04	.01	.03
IN.	.20	.05	.71	.85	.17	.87	.81	1.43	.06	.04	.01	.03
AC-FT	1,480	379	5,370	6,420	1,280	6,560	6,060	10,780	458	317	105	247

CAL YR 1971 TOTAL 4,695.03 MEAN 12.9 MAX 714 MIN 0 CFSM .09 IN 1.24 AC-FT 9,310
WTR YR 1972 TOTAL 19,896.47 MEAN 54.4 MAX 1,570 MIN .24 CFSM .39 IN 5.25 AC-FT 39,460

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G.HT.	DISCHARGE
4-27	2230	12.48	2,780
5- 2	1030	11.84	2,410
5-12	1300	12.16	2,650

08066250 Trinity River near Goodrich, Tex.

LOCATION.--Lat 30°34'19", long 94°56'55", Polk-San Jacinto County line, on left bank 40 ft downstream from downstream bridge on U.S. Highway 59, 0.2 mile downstream from Long King Creek, 3.0 miles southeast of Goodrich, and at mile 117.3.

DRAINAGE AREA.--16,844 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft above mean sea level.

AVERAGE DISCHARGE.--6 years (1966-72), 5,807 cfs (4,207,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 40,100 cfs Dec. 28 (gage height, 33.71 ft); minimum daily, 210 cfs Oct. 26 (regulation by Livingston Reservoir).
Period of record: Maximum discharge, 69,900 cfs May 14, 15, 1966 (gage height, 41.58 ft); minimum daily, 191 cfs Aug. 6, 1971 (regulation by Livingston Reservoir).
Maximum stage since at least 1929, 52.0 ft in May 1942, from information by State Highway Department and local residents.

REMARKS.--Records good. Regulated since Sept. 29, 1968, by Livingston Reservoir (station 08066190; capacity, 1,788,000 acre-ft) 11.9 miles upstream. No diversions between Livingston Reservoir and gaging station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	340	4,560	26,900	12,700	1,140	1,080	2,340	898	1,030	505	495
2	422	343	4,500	24,000	12,500	1,200	1,060	3,720	893	1,040	815	489
3	425	1,910	4,640	18,500	12,400	1,220	1,050	5,380	899	1,050	818	487
4	401	5,710	4,390	17,900	10,900	1,160	1,040	4,440	928	1,050	377	484
5	306	8,650	4,420	23,700	8,240	1,130	1,030	4,530	926	1,300	269	488
6	293	8,790	5,450	23,600	7,140	1,130	1,030	4,430	923	960	257	492
7	336	7,970	8,460	23,300	7,040	1,120	1,030	4,790	915	890	251	489
8	308	5,110	14,100	23,100	5,840	1,120	1,280	5,600	905	880	249	483
9	270	1,270	19,400	23,100	4,070	1,520	1,860	5,230	903	877	247	480
10	266	972	19,600	23,100	3,670	3,520	1,880	3,520	899	879	247	480
11	264	427	20,600	23,000	3,130	2,160	1,880	2,850	900	1,010	254	480
12	306	287	23,400	23,100	3,100	1,990	1,600	5,220	905	1,600	259	480
13	536	270	24,600	23,100	3,080	1,990	1,210	7,270	927	1,660	255	480
14	570	260	25,700	23,100	2,740	1,910	1,630	5,890	948	1,690	248	477
15	342	256	25,500	23,100	2,100	1,210	1,660	5,500	945	1,730	246	479
16	306	252	26,100	23,100	2,050	1,160	1,650	5,320	935	1,690	254	482
17	369	246	29,200	23,100	2,030	1,100	1,640	4,650	951	1,670	245	477
18	517	1,020	31,300	23,100	1,960	1,070	1,640	3,470	918	1,660	241	477
19	371	5,630	32,300	23,100	1,940	1,060	1,640	2,800	900	1,520	239	477
20	321	6,860	34,200	23,400	1,940	1,510	1,470	2,270	889	1,080	238	477
21	309	6,940	34,500	23,600	1,930	3,680	1,190	1,790	898	1,030	234	477
22	297	7,000	36,100	23,300	1,920	2,900	1,490	1,760	917	1,030	232	477
23	270	9,070	38,700	23,200	1,910	2,020	1,120	1,720	897	1,020	368	490
24	267	11,400	39,100	19,800	1,740	1,260	1,040	1,300	893	983	365	528
25	214	12,900	39,400	11,200	518	1,160	1,020	1,230	889	874	298	524
26	210	13,000	39,600	8,860	296	1,140	1,020	970	886	861	455	536
27	218	12,800	39,800	7,240	260	1,130	1,760	920	883	854	512	545
28	346	11,100	40,000	4,230	235	1,410	4,950	913	881	854	498	520
29	356	10,800	40,000	5,910	772	2,060	3,710	898	880	776	535	372
30	343	9,310	38,100	9,800	------	1,280	2,920	889	888	451	506	321
31	340	------	31,500	13,200	------	1,130	------	898	------	408	496	------
TOTAL	10,520	160,893	779,220	608,740	118,151	48,590	48,580	102,508	27,219	34,407	11,013	14,443
MEAN	339	5,363	25,140	19,640	4,074	1,567	1,619	3,307	907	1,110	355	481
MAX	570	13,000	40,000	26,900	12,700	3,680	4,950	7,270	951	1,730	818	545
MIN	210	246	4,390	4,230	235	1,060	1,020	889	880	408	232	321
AC-FT	20,870	319,100	1,546M	1,207M	234,400	96,380	96,360	203,300	53,990	68,250	21,840	28,650

CAL YR 1971 TOTAL 1,177,500 MEAN 3,226 MAX 40,000 MIN 191 AC-FT 2,336,000
WTR YR 1972 TOTAL 1,964,284 MEAN 5,367 MAX 40,000 MIN 210 AC-FT 3,896,000

08066300 Menard Creek near Rye, Tex.

LOCATION.--Lat 30°28'52", long 94°46'46", Liberty County, on left bank 20 ft downstream from bridge on State Highway 146, 2.3 miles northwest of Rye, and about 6 miles upstream from mouth.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 62.32 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 47.5 cfs (34,410 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,000 cfs May 15 (gage height, 18.30 ft); minimum daily, 6.9 cfs Aug. 9, 22, 23.
Period of record: Maximum discharge, 9,660 cfs May 8, 1969 (gage height, 30.33 ft), from rating curve extended above 5,600 cfs; minimum daily, 2.6 cfs Nov. 1, 1967.
Flood in September 1961 reached a stage of about 34 ft, from information by local resident.

REMARKS.--Records good. No known diversions above station.

REVISIONS (WATER YEAR).--WRD Texas 1969: 1966(P). WRD Texas 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	11	45	71	141	28	140	245	23	14	13	8.0
2	10	11	120	63	179	29	78	180	22	14	12	7.6
3	12	10	139	74	107	28	60	203	20	13	11	10
4	15	8.9	143	95	76	35	51	246	20	27	11	11
5	50	8.6	226	105	60	38	45	319	19	18	11	9.3
6	40	8.4	258	164	57	33	41	178	19	20	9.8	9.6
7	30	8.6	204	171	55	30	38	175	18	16	8.9	11
8	25	8.1	230	98	65	28	36	480	18	24	7.6	10
9	20	8.0	242	72	78	26	33	382	17	21	6.9	9.8
10	15	8.2	134	74	64	25	31	353	17	17	7.2	9.1
11	12	8.2	91	70	56	24	29	256	18	16	7.9	8.4
12	10	8.3	91	65	57	24	28	218	17	18	11	8.3
13	10	8.4	93	62	63	24	28	266	22	15	11	8.7
14	10	8.5	70	51	73	23	26	463	30	15	12	8.4
15	50	8.7	145	44	67	25	25	894	33	18	11	13
16	35	9.0	161	39	56	27	24	539	21	17	10	15
17	20	9.1	265	36	48	29	23	207	23	20	9.3	12
18	13	19	212	35	43	34	23	107	22	19	8.4	10
19	27	17	220	36	39	28	22	81	22	18	8.4	9.1
20	46	14	242	99	36	81	21	66	21	28	7.9	8.5
21	36	25	134	82	34	409	22	56	22	30	7.4	8.2
22	33	35	101	100	33	320	27	49	24	25	6.9	7.5
23	30	31	82	102	32	342	82	43	20	24	6.9	7.3
24	24	25	72	71	31	442	205	39	18	21	7.2	13
25	19	24	66	55	30	194	141	36	17	18	11	14
26	17	26	62	46	31	100	56	33	16	17	15	26
27	16	27	61	41	30	78	54	30	15	17	15	35
28	14	24	59	37	29	79	103	28	15	15	13	15
29	13	21	59	35	28	112	143	27	14	15	11	13
30	12	19	62	87	------	132	218	25	14	15	10	14
31	11	------	76	92	------	196	------	24	------	14	8.8	------
TOTAL	684.0	458.0	4,165	2,272	1,698	3,023	1,853	6,248	597	579	307.5	349.8
MEAN	22.1	15.3	134	73.3	58.6	97.5	61.8	202	19.9	18.7	9.92	11.7
MAX	50	35	265	171	179	442	218	894	33	30	15	35
MIN	9.0	8.0	45	35	28	23	21	24	14	13	6.9	7.3
AC-FT	1,360	908	8,260	4,510	3,370	6,000	3,680	12,390	1,180	1,150	610	694

CAL YR 1971 TOTAL 8,958.1 MEAN 24.5 MAX 265 MIN 3.5 AC-FT 17,770
WTR YR 1972 TOTAL 22,234.3 MEAN 60.7 MAX 894 MIN 6.9 AC-FT 44,100

PEAK DISCHARGE (BASE, 1,000 CFS).--May 15 (0500) 1,000 cfs (18.30 ft).

08066400 Big Creek near Shepherd, Tex.

LOCATION.--Lat 30°30'59", long 94°59"06', San Jacinto County, on left bank at downstream side of downstream bridge on U.S. Highway 59, 1.5 miles northeast of Shepherd, and 11.6 miles upstream from mouth.

DRAINAGE AREA.--38.8 sq mi.

PERIOD OF RECORD.--January 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 94.90 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 12.9 cfs (4.52 inches per year, 9,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 446 cfs May 7 (gage height, 12.33 ft); minimum, 2.0 cfs Nov. 17.
Period of record: Maximum discharge, 1,300 cfs May 7, 1969 (gage height, 15.04 ft); minimum daily, 1.0 cfs Aug. 7, 1967.
Maximum stage since at least 1949, 20.3 ft in 1957, from information by local resident.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No known regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.3	13	9.5	26	9.3	10	18	5.2	4.1	5.9	5.0
2	2.7	3.0	53	14	22	16	8.0	185	4.9	4.0	5.4	4.7
3	2.7	2.7	46	18	16	11	7.5	71	4.8	4.0	5.1	4.6
4	2.7	2.6	24	24	12	9.6	7.0	36	4.6	20	5.5	5.4
5	6.4	2.3	32	21	11	8.7	6.5	27	4.5	46	5.1	4.8
6	6.0	2.3	56	13	19	7.9	6.0	22	4.4	14	4.7	5.0
7	4.5	2.2	35	10	32	7.7	5.8	191	4.3	7.0	4.8	4.8
8	3.1	2.2	21	8.8	20	7.7	5.6	169	4.2	5.8	4.9	4.4
9	2.9	2.3	29	10	14	7.4	5.4	59	4.1	5.7	5.1	4.2
10	3.2	2.4	31	16	12	7.1	5.2	45	4.2	5.6	5.5	4.1
11	3.4	2.7	25	13	15	7.1	5.2	92	4.3	5.6	7.1	4.1
12	3.6	2.6	21	8.8	32	7.3	5.5	268	5.1	5.3	7.5	4.1
13	3.4	2.6	34	8.2	25	7.3	6.0	135	21	14	7.1	4.2
14	3.4	2.7	23	7.1	17	7.1	5.5	62	32	28	8.5	4.1
15	3.3	2.6	26	6.3	14	7.6	5.0	45	24	35	8.1	4.1
16	7.4	2.3	30	6.0	12	7.9	4.8	36	24	14	8.1	4.3
17	5.0	2.2	66	5.9	11	7.5	4.6	32	31	7.7	7.9	4.3
18	6.0	15	32	6.1	10	7.2	4.5	28	10	7.4	7.2	4.5
19	4.0	12	23	6.6	9.2	7.0	4.4	24	5.8	8.3	7.8	4.3
20	3.6	8.8	20	23	8.8	100	4.4	21	5.0	8.0	8.1	4.0
21	5.6	6.4	18	22	8.8	150	40	19	5.4	9.2	6.5	3.8
22	3.7	5.1	15	12	8.8	100	38	16	7.3	12	5.7	3.7
23	2.9	10	13	9.5	9.0	60	12	13	5.9	8.0	17	5.2
24	2.8	13	12	7.9	8.7	35	8.3	11	5.2	5.6	25	19
25	3.1	8.2	12	7.0	8.5	22	7.2	9.0	4.8	4.8	20	20
26	3.0	6.8	11	6.4	8.4	16	6.8	7.3	4.5	4.5	9.1	10
27	2.9	6.1	10	6.3	8.2	12	32	6.7	4.5	4.0	9.0	23
28	3.3	5.6	9.6	6.3	7.9	30	106	6.2	4.2	4.0	14	25
29	3.4	4.7	9.5	6.3	7.9	25	40	5.8	4.1	4.6	8.8	14
30	3.4	4.7	9.2	47	------	20	25	5.6	4.0	21	6.2	11
31	3.4	------	8.8	43	------	15	------	5.4	------	11	5.3	------
TOTAL	117.6	149.4	768.1	409.0	414.2	743.4	432.2	1,671.0	257.3	338.2	256.0	223.7
MEAN	3.79	4.98	24.8	13.2	14.3	24.0	14.4	53.9	8.58	10.9	8.26	7.46
MAX	7.4	15	66	47	32	150	106	268	32	46	25	25
MIN	2.7	2.2	8.8	5.9	7.9	7.0	4.4	5.4	4.0	4.0	4.7	3.7
CFSM	.10	.13	.64	.34	.37	.62	.37	1.39	.22	.28	.21	.19
IN.	.11	.14	.74	.39	.40	.71	.41	1.60	.25	.32	.25	.21
AC-FT	233	296	1,520	811	822	1,470	857	3,310	510	671	508	444

CAL YR 1971 TOTAL 2,602.4 MEAN 7.13 MAX 66 MIN 1.5 CFSM .18 IN 2.50 AC-FT 5,160
WTR YR 1972 TOTAL 5,780.1 MEAN 15.8 MAX 268 MIN 2.2 CFSM .41 IN 5.54 AC-FT 11,460

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-21	unknown	10.56	211	5- 7	2300	12.33	446
5- 2	1300	11.21	280	5-12	1800	12.15	412

NOTE.--No gage-height record Mar. 16 to Apr. 20.

08066500 Trinity River at Romayor, Tex.

LOCATION.--Lat 30°25'30", long 94°51'02", Liberty County, near right bank on downstream side of pier of bridge on State Highway 105, 1.9 miles south of Romayor, 1.9 miles downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.7 miles downstream from Big Creek, and at mile 94.3.

DRAINAGE AREA.--17,186 sq mi.

PERIOD OF RECORD.--May 1924 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 35.92 ft above mean sea level. Prior to September 1943, nonrecording gage at datum 53.57 ft higher at railroad bridge 1.9 miles upstream.

AVERAGE DISCHARGE.--44 years (1924-68) unregulated, 7,155 cfs (5,184,000 acre-ft per year); 4 years (1968-72) flow regulated by Livingston Reservoir, 5,288 cfs (3,831,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 38,800 cfs Dec. 30 (gage height, 23.61 ft); minimum daily, 324 cfs Aug. 19, 22.
Period of record: Maximum discharge, 111,000 cfs May 9, 1942 (gage height, 35.8 ft, from floodmarks, present site and datum); minimum, 102 cfs Aug. 24, 25, 1956.
Maximum stage since at least 1908, that of May 9, 1942.

REMARKS.--Records good. Regulated since Sept. 28, 1968, by Livingston Reservoir (station 08066190; capacity, 1,788,000 acre-ft) 35 miles upstream. No large diversions between Livingston Reservoir and gaging station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1392: 1932, 1935. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	434	5,700	28,100	12,900	1,170	1,350	3,150	951	956	466	474
2	438	432	4,610	24,700	12,500	1,300	1,240	3,300	938	1,050	648	473
3	444	680	4,840	20,400	12,300	1,350	1,180	6,410	925	1,060	779	475
4	453	3,810	4,510	17,000	11,500	1,300	1,150	5,420	949	1,110	625	478
5	434	7,860	4,510	22,400	8,790	1,270	1,120	5,340	959	1,460	387	474
6	407	8,820	5,310	23,400	7,170	1,240	1,100	5,070	954	1,170	347	476
7	382	8,490	7,500	23,100	6,950	1,230	1,090	5,360	948	1,110	337	479
8	411	6,600	11,900	22,700	6,430	1,210	1,100	7,230	939	1,070	331	480
9	395	2,290	17,800	22,600	4,240	1,200	1,730	6,830	930	1,070	328	480
10	381	1,080	18,200	22,600	3,870	2,770	1,910	5,230	930	1,050	334	478
11	367	785	18,800	22,600	3,300	2,650	1,910	3,810	933	1,050	335	481
12	371	482	21,500	22,500	3,250	2,050	1,880	4,460	937	1,530	339	485
13	443	442	23,200	22,600	3,250	2,000	1,330	8,640	973	1,790	339	484
14	572	424	24,500	22,500	3,190	1,980	1,510	7,520	1,040	1,820	334	477
15	548	413	24,800	22,500	2,600	1,560	1,670	7,050	1,060	1,900	333	478
16	477	406	25,000	22,500	2,420	1,250	1,670	6,600	1,070	1,870	335	481
17	477	402	25,500	22,400	2,330	1,220	1,650	5,740	1,050	1,840	334	477
18	544	451	30,400	22,400	2,210	1,140	1,640	3,950	1,010	1,820	329	470
19	535	3,490	31,600	22,500	2,120	1,120	1,630	3,180	965	1,820	324	464
20	491	6,400	33,400	22,900	2,090	1,290	1,600	2,640	945	1,370	326	459
21	482	6,720	33,700	23,100	2,060	3,990	1,280	2,010	943	1,130	329	455
22	446	6,760	34,600	22,800	2,020	3,940	1,540	1,850	968	1,100	324	456
23	430	7,230	37,000	22,600	1,990	2,940	1,350	1,810	942	1,080	337	453
24	401	10,500	37,700	21,100	1,960	2,150	1,300	1,560	928	1,070	435	490
25	373	12,500	38,000	12,900	1,240	1,660	1,270	1,360	917	949	385	499
26	358	12,800	38,300	9,640	646	1,390	1,140	1,210	905	871	379	486
27	350	12,800	38,500	8,020	511	1,290	1,180	1,030	895	861	481	515
28	380	11,600	38,600	5,420	468	1,250	3,920	996	891	855	475	490
29	446	10,800	38,700	5,210	535	2,200	4,750	981	883	844	489	441
30	438	10,300	38,100	8,390	------	1,720	3,540	956	877	649	489	360
31	434	------	32,900	12,500	------	1,430	------	957	------	498	479	------
TOTAL	13,546	156,201	749,680	604,080	124,840	54,260	50,730	121,650	28,555	37,823	12,512	14,168
MEAN	437	5,207	24,180	19,490	4,305	1,750	1,691	3,924	952	1,220	404	472
MAX	572	12,800	38,700	28,100	12,900	3,990	4,750	8,640	1,070	1,900	779	515
MIN	350	402	4,510	5,210	468	1,120	1,090	956	877	498	324	360
AC-FT	26,870	309,800	1,487M	1,198M	247,600	107,600	100,600	241,300	56,640	75,020	24,820	28,100

CAL YR 1971 TOTAL 1,138,451 MEAN 3,119 MAX 38,700 MIN 308 AC-FT 2,258,000
WTR YR 1972 TOTAL 1,968,045 MEAN 5,377 MAX 38,700 MIN 324 AC-FT 3,904,000

08067000 Trinity River at Liberty, Tex.

LOCATION.--Lat 30°03'27", long 94°49'05", Liberty County, near center of channel on upstream side of downstream bridge on U.S. Highway 90 in Liberty, 450 ft downstream from Texas and New Orleans Railroad Co. bridge, and at mile 40.3.

DRAINAGE AREA.--17,468 sq mi.

RECORDS AVAILABLE.--October 1938 to September 1940 (gage heights, discharge measurements, and some records of daily discharge), October 1940 to current year (high-water records only). Gage-height records collected in this vicinity since 1903 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Nonrecording gage. Datum of gage is 2.22 ft below mean sea level.

EXTREMES.--Current year: Maximum discharge, 39,300 cfs Dec. 31 (gage height, 27.40 ft); minimum not determined (affected by tides); minimum gage height observed, 3.20 ft Aug. 22.
Period of record: Maximum discharge, 114,000 cfs May 12, 1942 (gage height, 29.38 ft); minimum not determined (affected by tides); minimum gage height observed, 2.32 ft Nov. 24, 1970.
Maximum stage since at least 1903, that of May 12, 1942. Flood of May 8-11, 1922, reached a stage of 28.6 ft, present datum, from observation by U.S. Weather Bureau at nonrecording gage on railroad bridge upstream.

REMARKS.--Discharge is not computed below a gage height of 10 ft because tides affect the stage-discharge relation. Flow regulated by Livingston Reservoir (station 08066190) 88.9 miles upstream. Diversions above station for municipal supplies, industrial use, and irrigation.

COOPERATION.--Gage-height record furnished by the National Weather Service.

REVISIONS.--WSP 1922: Drainage area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.83	4.50	15.30	27.10	19.42	4.40	5.70	10.00	4.30	4.30	4.40	4.00
2	4.72	4.45	13.10	26.65	19.50	4.57	5.45	9.63	4.70	4.45	4.40	4.00
3	4.60	4.05	13.18	25.95	19.27	4.70	5.30	10.15	4.75	4.85	4.30	4.20
4	4.30	3.75	12.80	24.90	19.00	5.30	5.15	12.22	4.75	4.95	4.80	4.30
5	3.80	7.70	12.40	23.70	18.10	5.22	4.80	11.85	5.10	4.85	4.40	3.90
6	4.20	11.35	14.15	24.50	16.52	5.00	5.00	11.40	4.90	5.00	3.60	3.80
7	4.15	12.45	14.95	25.05	15.25	5.27	5.40	11.30	4.50	4.75	3.40	3.70
8	4.55	12.60	16.10	24.30	14.55	5.27	5.80	12.35	4.30	4.50	3.35	4.00
9	4.70	11.10	18.85	24.22	13.40	4.80	4.55	13.85	4.20	4.45	3.35	4.00
10	3.80	7.30	21.22	24.17	11.25	5.10	4.45	13.40	4.10	4.45	4.10	4.10
11	4.00	5.17	21.55	24.12	10.50	6.65	5.90	12.15	4.35	4.65	3.50	4.15
12	4.10	4.65	22.05	24.07	10.10	7.60	6.15	11.00	4.45	4.75	3.35	4.20
13	4.00	4.24	22.90	24.02	9.20	6.70	6.20	14.00	4.75	4.85	3.80	4.55
14	3.95	4.45	23.57	23.98	9.00	6.25	6.25	16.10	4.85	5.60	3.80	4.75
15	4.00	4.50	24.12	23.95	8.80	6.15	5.55	15.20	5.60	5.70	3.80	4.65
16	4.35	4.85	24.40	23.92	7.90	6.00	5.90	14.40	5.80	5.85	3.50	5.00
17	4.30	5.15	24.70	23.90	7.32	5.95	5.50	13.50	5.50	5.90	3.60	5.10
18	4.50	5.50	25.25	23.80	7.05	4.90	5.70	12.70	5.30	5.90	3.75	4.30
19	4.80	4.40	25.65	23.95	7.00	4.52	5.95	11.55	5.15	5.80	3.90	4.55
20	4.00	7.45	25.95	24.22	6.55	4.65	5.90	9.20	5.10	5.90	3.60	4.35
21	4.50	10.80	26.25	24.40	6.45	9.30	5.80	8.30	5.10	5.70	3.30	4.20
22	4.30	11.50	26.50	24.45	6.35	12.60	5.75	7.80	4.70	5.60	3.20	4.05
23	4.37	11.73	26.70	24.40	6.35	12.30	5.70	6.35	4.40	5.30	3.40	4.00
24	4.05	12.50	26.85	24.30	6.35	10.50	5.70	6.20	4.20	5.00	3.25	4.80
25	4.25	14.95	27.05	23.20	6.45	8.70	5.20	5.80	4.20	4.90	3.90	5.35
26	4.28	16.35	27.15	20.65	6.55	7.70	5.20	5.60	4.50	4.75	4.00	5.50
27	4.40	16.98	27.25	18.60	4.30	7.05	5.60	5.00	4.75	4.65	3.65	5.25
28	4.10	16.93	27.30	16.75	4.00	7.50	6.90	4.60	4.45	4.65	3.80	5.10
29	4.10	16.30	27.33	13.90	4.10	6.05	10.70	4.40	4.40	4.50	4.00	5.00
30	4.05	15.80	27.38	14.45	-------	6.60	11.10	4.40	4.35	4.50	4.10	4.90
31	3.97	-------	27.38	17.60	-------	6.70	-------	4.25	4.35	4.60	4.10	-------

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972
(FOR STAGES ABOVE 10.0 FEET)

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
NOV.		DEC.		JAN.		JAN.		MAR.	
6	7,220	9	16,000	1	35,600	24	22,600	23	6,100
7	8,300	10	20,200	2	32,000	25	21,900	24	4,790
8	8,400	11	20,800	3	28,200	26	15,100	APR.	
9	7,040	12	22,100	4	24,500	27	12,300	29	4,930
21	6,770	13	24,000	5	21,200	28	10,300	30	5,210
22	7,400	14	25,500	6	23,000	29	7,490	MAY	
23	7,580	15	26,400	7	24,500	30	7,940	1	4,440
24	8,300	16	27,300	8	22,600	31	11,100	3	4,580
25	10,700	17	27,900	9	22,300	FEB.		4	6,020
26	12,300	18	29,300	10	22,300	1	13,300	5	5,700
27	13,200	19	30,100	11	22,100	2	13,500	6	5,420
28	13,100	20	31,000	12	22,100	3	13,200	7	5,350
29	12,300	21	32,000	13	21,900	4	12,800	8	6,180
30	11,700	22	33,300	14	21,900	5	11,700	9	7,400
DEC.		23	34,300	15	21,700	6	10,000	10	7,040
1	11,100	24	35,100	16	21,700	7	8,700	11	6,020
2	8,900	25	36,500	17	21,700	8	8,120	12	5,140
3	9,000	26	37,600	18	21,500	9	7,040	13	7,580
4	8,600	27	38,300	19	21,700	10	5,280	14	9,600
5	8,210	28	38,700	20	22,300	11	4,790	15	8,700
6	9,900	29	38,700	21	22,800	12	4,510	16	7,940
7	10,700	30	39,100	22	23,000	MAR.		17	7,130
8	12,000	31	39,100	23	22,800	22	6,340	18	6,420
								19	5,560

08067500 Cedar Bayou near Crosby, Tex.

LOCATION.--Lat 29°58'21", long 94°59'08", Liberty County, on left bank at downstream side of bridge on U.S. Highway 90 and 6.6 miles northeast of Crosby.

DRAINAGE AREA.--64.9 sq mi.

PERIOD OF RECORD.--March to August 1946, March 1963 to February 1964, May to August 1971 (discharge measurements only), October 1971 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 31.31 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,500 cfs May 12 (gage height, 20.70 ft); minimum daily, 0.04 cfs June 5.
Period of record: Maximum discharge, 1,500 cfs May 12, 1971 (gage height, 20.70 ft); minimum daily, 0.04 cfs June 5, 1971.

REMARKS.--Records fair. Low flow from April to October is sustained by drainage from irrigated lands.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.5	3.5	14	237	3.3	2.9	44	1.7	.50	14	2.1
2	2.0	5.4	272	28	119	4.0	2.7	211	1.7	.50	6.6	4.7
3	2.0	4.3	559	18	66	3.8	1.8	216	.13	.50	6.3	9.2
4	2.0	2.0	237	19	37	2.2	4.1	75	.06	1.0	7.5	10
5	30	1.1	634	21	20	.95	1.1	46	.04	25	7.1	12
6	80	.88	1,220	14	18	1.4	1.7	21	.33	40	5.8	17
7	39	.74	698	9.7	19	2.2	7.4	163	.22	25	5.9	9.1
8	20	.48	327	7.2	14	2.1	16	494	.14	10	7.3	6.4
9	18	.44	223	6.5	9.9	1.8	15	251	.05	60	13	5.1
10	13	.44	174	6.2	7.7	1.4	16	136	.07	100	15	6.0
11	6.8	.40	120	6.0	13	.95	10	465	.28	50	15	3.0
12	5.6	.95	88	6.0	59	2.3	2.3	921	1.1	30	11	3.4
13	5.4	1.6	87	6.2	42	.74	5.0	1,090	5.5	15	5.9	4.6
14	8.0	.95	63	6.8	26	.88	9.0	407	20	80	3.2	2.1
15	12	.67	66	6.2	16	1.5	8.0	189	35	50	12	2.1
16	9.4	.67	71	4.7	11	1.3	11	76	247	35	14	7.0
17	6.5	.95	204	3.4	8.1	1.2	3.0	41	91	30	8.9	9.9
18	5.6	37	160	2.3	6.3	2.5	1.8	25	32	30	8.2	8.2
19	5.2	32	73	14	4.8	3.5	3.3	14	29	30	9.9	8.7
20	5.5	15	57	189	4.7	23	1.8	9.8	17	30	14	10
21	5.8	7.8	30	114	4.1	606	19	5.9	10	35	12	8.1
22	9.7	4.3	22	53	3.3	598	34	3.9	8.8	122	8.8	9.0
23	8.0	5.0	15	28	2.8	181	10	3.2	8.5	74	8.0	12
24	6.0	6.2	12	19	2.7	19	4.2	.88	9.1	40	11	105
25	4.7	5.0	10	11	2.6	6.1	18	.62	8.0	29	13	70
26	2.6	4.1	8.8	5.2	2.6	9.6	8.2	.52	6.5	20	10	97
27	1.5	2.5	7.0	3.5	2.6	13	18	.36	4.0	21	8.9	96
28	1.1	1.2	6.9	2.9	2.3	13	278	1.8	3.0	5.7	3.6	74
29	1.0	1.0	7.2	2.5	2.5	8.9	138	.40	2.0	15	.40	72
30	1.6	3.0	6.5	825	------	3.6	45	1.1	1.0	15	1.5	56
31	3.2	------	5.8	598	------	1.8	------	1.9	------	20	2.2	------
TOTAL	323.2	149.57	5,467.7	2,050.3	764.0	1,521.02	696.3	4,915.38	543.22	1,039.20	270.00	739.7
MEAN	10.4	4.99	176	66.1	26.3	49.1	23.2	159	18.1	33.5	8.71	24.7
MAX	80	37	1,220	825	237	606	278	1,090	247	122	15	105
MIN	1.0	.40	3.5	2.3	2.3	.74	1.1	.36	.04	.50	.40	2.1
AC-FT	641	297	10,850	4,070	1,520	3,020	1,380	9,750	1,080	2,060	536	1,470
(††)	2.15	3.22	8.24	6.16	0	3.00	3.54	8.74	4.08	5.95	2.17	6.94

CAL YR 1971 TOTAL - MEAN - MAX - MIN - AC-FT - †† -
WTR YR 1972 TOTAL 18,479.59 MEAN 50.5 MAX 1,220 MIN .04 AC-FT 36,650 †† 54.19

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12- 5	2300	19.40	1,340	3-21	1300	17.78	1,200
1-30	1600	17.73	1,190	5-12	2100	20.70	1,500

†† Rainfall, in inches, in the basin.

08068000 West Fork San Jacinto River near Conroe, Tex.

LOCATION.--Lat 30°14'41", long 95°27'26", Montgomery County, near right bank at downstream side of pier of bridge on Interstate Highway 45 and U.S. Highway 75, 281 ft upstream from Missouri Pacific Railroad Co. bridge, 3.5 miles downstream from Lake Creek, and 4.2 miles south of Conroe.

DRAINAGE AREA.--809 sq mi.

PERIOD OF RECORD.--May 1924 to September 1927, July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 95.03 ft above mean sea level, datum of 1929, adjustment of 1943. May 7, 1924, to Sept. 30, 1927, nonrecording gage at railroad bridge 285 ft downstream at datum 30.10 ft higher. July 13, 1939, to Sept. 30, 1963, water-stage recorder at datum 5.0 ft higher.

AVERAGE DISCHARGE.--36 years, 477 cfs (8.01 inches per year, 345,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,190 cfs May 12 (gage height, 16.91 ft); minimum daily, 8.4 cfs Nov. 13-17.
Period of record: Maximum discharge, 110,000 cfs Nov. 25, 1940 (gage height, 30.85 ft, present datum), from rating curve extended above 43,000 cfs on basis of velocity-area studies; no flow June 14, 1956, Sept. 19 to Oct. 1, 1965, result of temporary dams.
Maximum stage since at least December 1913, that of Nov. 25, 1940. Flood in December 1913 reached a stage of 30.2 ft, present site and datum, from information by Missouri Pacific Railroad Co. (discharge, 101,000 cfs, from rating curve explained above).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1058: 1926. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	11	13	64	342	37	98	132	53	17	17	18
2	10	11	42	61	284	37	81	350	47	17	18	16
3	11	11	82	53	344	39	66	303	42	20	22	15
4	11	10	36	131	390	37	58	249	40	22	21	13
5	12	10	48	446	326	33	57	233	40	23	19	13
6	16	10	154	412	243	33	54	324	44	22	17	12
7	14	10	187	382	201	34	50	1,770	45	21	16	12
8	12	10	221	344	144	33	47	3,420	46	20	16	36
9	11	10	192	330	106	33	44	1,840	52	20	14	33
10	12	9.6	228	264	93	33	44	771	53	21	14	27
11	10	9.2	236	198	87	31	39	1,540	54	21	16	20
12	10	8.8	188	144	103	30	37	3,160	53	20	16	17
13	9.9	8.4	396	114	102	29	35	3,450	59	27	29	15
14	9.5	8.4	267	98	97	29	33	2,130	63	30	20	13
15	12	8.4	226	86	90	28	32	2,770	53	32	26	16
16	27	8.4	201	71	84	29	31	2,540	195	23	20	15
17	15	8.4	179	58	81	29	29	1,660	202	20	16	15
18	15	10	132	52	73	29	28	1,340	180	20	14	14
19	44	12	96	49	66	27	28	1,160	135	20	14	14
20	43	10	79	55	58	33	27	995	113	23	13	13
21	34	9.6	114	55	52	298	47	1,010	76	24	12	12
22	26	9.2	114	52	49	650	76	965	53	21	12	12
23	64	22	63	52	47	617	46	225	43	20	12	15
24	34	16	59	48	46	320	37	106	36	18	13	17
25	23	12	48	46	43	218	31	310	31	17	13	20
26	19	11	45	48	41	145	31	108	28	17	13	16
27	18	10	44	42	40	103	321	78	25	17	13	35
28	17	10	43	38	40	92	,600	71	22	16	13	26
29	15	9.2	41	36	38	105	726	67	20	16	16	17
30	13	9.4	44	160	------	110	.260	64	18	16	27	30
31	12	------	56	322	------	87	------	58	------	20	22	------
TOTAL	589.1	313.0	3,874	4,311	3,710	3,388	4,093	33,199	1,921	641	524	547
MEAN	19.0	10.4	125	139	128	109	136	1,071	64.0	20.7	16.9	18.2
MAX	64	22	396	446	390	650	1,600	3,450	202	32	29	36
MIN	9.5	8.4	13	36	38	27	27	58	18	16	12	12
CFSM	.02	.01	.15	.17	.16	.13	.17	1.32	.08	.03	.02	.02
IN.	.03	.01	.18	.20	.17	.16	.19	1.53	.09	.03	.02	.03
AC-FT	1,170	621	7,680	8,550	7,360	6,720	8,120	65,850	3,810	1,270	1,040	1,080

CAL YR 1971 TOTAL 17,444.5 MEAN 47.8 MAX 1,410 MIN 6.5 CFSM .06 IN .80 AC-FT 34,600
WTR YR 1972 TOTAL 57,110.1 MEAN 156 MAX 3,450 MIN 8.4 CFSM .19 IN 2.63 AC-FT 113,300

PEAK DISCHARGE (BASE, 5,000 CFS).--May 12 (2100) 5,190 cfs (16.91 ft).

08068500 Spring Creek near Spring, Tex.

LOCATION.--Lat 30°06'37", long 95°26'10", Harris-Montgomery County line, near left bank at downstream side of bridge on Interstate Highway 45 and U.S. Highway 75, 4,500 ft upstream from Missouri Pacific Railroad Co. bridge, 2.4 miles northwest of Spring, and 4 miles downstream from Willow Creek.

DRAINAGE AREA.--409 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 73.10 ft above mean sea level. Prior to Jan. 5, 1946, nonrecording gage and Jan. 6, 1946, to Oct. 1, 1965, water-stage recorder at present site at datum 5.00 ft higher.

AVERAGE DISCHARGE.--33 years, 190 cfs (6.31 inches per year, 137,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,560 cfs May 9 (gage height, 24.75 ft); minimum daily, 3.0 cfs Nov. 7-15.
Period of record: Maximum discharge, 42,700 cfs Nov. 25, 1940 (gage height, 33.60 ft, present datum, from graph based on gage readings); minimum, 1.1 cfs Oct. 23, 24, 1956.
Maximum stage since at least 1879, 34.3 ft (present datum) May 30, 1929 (discharge, 48,300 cfs), from floodmarks identified by local residents.

REMARKS.--Records fair . No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	5.2	12	23	150	18	43	400	45	13	40	9.0
2	4.5	5.0	189	33	80	19	40	350	43	12	23	9.0
3	4.2	4.5	427	40	50	19	39	250	41	12	16	9.0
4	4.2	3.8	218	35	35	18	38	150	39	12	13	9.0
5	5.8	3.3	102	43	20	16	41	366	37	14	12	12
6	14	3.2	199	51	25	16	40	162	36	13	11	12
7	6.4	3.0	300	43	23	16	37	320	35	12	10	9.0
8	9.2	3.0	246	35	21	15	35	1,970	34	11	9.5	7.2
9	15	3.0	124	28	20	15	33	4,740	33	19	10	7.5
10	12	3.0	67	25	20	15	31	5,520	32	17	12	7.9
11	7.0	3.0	49	24	25	14	30	2,910	36	12	14	7.4
12	4.8	3.0	43	22	40	14	29	2,800	39	13	15	7.4
13	4.0	3.0	45	21	50	13	29	6,430	42	14	14	7.6
14	3.5	3.0	42	19	50	13	28	4,560	52	16	14	7.7
15	3.2	3.0	35	18	43	14	27	2,250	56	15	21	9.4
16	3.3	3.5	31	17	34	14	27	893	59	14	18	8.5
17	3.5	4.0	31	16	27	17	25	341	384	15	15	8.7
18	3.8	4.8	45	16	20	16	25	212	293	15	13	8.9
19	3.5	5.2	39	18	15	14	25	163	248	17	12	9.3
20	5.5	5.8	28	20	14	26	24	137	97	17	12	9.9
21	4.8	6.4	23	19	16	162	29	200	50	16	12	11
22	24	7.0	19	17	15	358	47	140	34	15	11	11
23	39	15	16	15	16	756	75	100	28	16	11	12
24	35	19	15	14	14	637	69	75	23	14	11	17
25	23	16	14	13	14	138	49	63	20	13	11	14
26	16	15	13	12	14	82	39	62	18	12	10	23
27	13	14	13	11	16	69	150	58	16	12	10	30
28	9.5	12	13	11	18	62	1,000	54	15	11	10	33
29	8.4	12	14	10	18	58	1,200	51	14	10	10	41
30	6.7	12	16	100	------	53	800	49	13	10	10	60
31	5.2	------	24	200	------	49	------	47	------	19	10	------
TOTAL	306.5	203.7	2,452	969	903	2,746	4,104	35,823	1,912	431	420.5	428.4
MEAN	9.89	6.79	79.1	31.3	31.1	88.6	137	1,156	63.7	13.9	13.6	14.3
MAX	39	19	427	200	150	756	1,200	6,430	384	19	40	60
MIN	3.2	3.0	12	10	14	13	24	47	13	10	9.5	7.2
CFSM	.02	.02	.19	.08	.08	.22	.34	2.83	.16	.03	.03	.04
IN.	.03	.02	.22	.09	.08	.25	.37	3.26	.17	.04	.04	.04
AC-FT	608	404	4,860	1,920	1,790	5,450	8,140	71,050	3,790	855	834	850

CAL YR 1971 TOTAL 6,616.5 MEAN 18.1 MAX 427 MIN 2.4 CFSM .04 IN .60 AC-FT 13,120
WTR YR 1972 TOTAL 50,699.1 MEAN 139 MAX 6,430 MIN 3.0 CFSM .34 IN 4.61 AC-FT 100,600

PEAK DISCHARGE (BASE, 2,200 CFS).--May 9 (2100) 7,560 cfs (24.75 ft); May 13 (1200) 7,320 cfs (24.55 ft).

08069000 Cypress Creek near Westfield, Tex.

LOCATION.--Lat 30°02'08", long 95°25'44", Harris County, near left bank at downstream side of bridge on U.S. Highway 75, 0.9 mile upstream from Senger Gully, 1.8 miles northwest of Westfield, 2.0 miles upstream from Missouri Pacific Railroad Co. bridge, and 11.0 miles upstream from mouth.

DRAINAGE AREA.--285 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 63.89 ft 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 12.0 ft higher.

AVERAGE DISCHARGE.--28 years, 135 cfs (6.43 inches per year, 97,810 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,030 cfs May 13 (gage height, 23.76 ft); minimum daily, 1.4 cfs Nov. 15, 17.
Period of record: Maximum discharge, 22,100 cfs Oct. 8, 1949 (gage height, 33.44 ft, present datum), from rating curve extended above 11,000 cfs; no flow at times.
Maximum stage since at least 1875, 34 ft (present datum) in May 1929 (discharge, 26,000 cfs), from information by local resident. Flood in November 1940 reached a stage of about 32 ft (present datum, discharge, 15,000 cfs), from information by State Highway Department.

REMARKS.--Records fair. No large diversion above station. Low flow is maintained by sewage effluent. Between July 1950 and March 1951 the channel below the gage was straightened and the streambed lowered about 3 ft at the gage and as much as 6 ft at some other places.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	5.6	1.5	278	639	8.9	11	65	18	17	25	7.7
2	16	4.9	50	159	366	7.5	8.5	296	17	21	20	6.2
3	15	4.1	1,900	114	198	5.7	6.7	690	16	23	15	4.8
4	19	2.7	1,190	120	101	4.7	11	1,120	15	30	13	4.5
5	27	2.0	634	169	58	4.5	6.6	1,190	14	20	12	133
6	41	2.1	892	151	41	3.6	5.0	1,040	14	18	12	38
7	66	3.6	868	94	31	3.4	4.2	994	25	32	14	22
8	80	5.7	606	60	26	3.2	4.4	1,520	27	30	14	9.6
9	60	5.8	377	45	21	3.3	3.5	1,800	25	81	10	5.6
10	46	3.8	298	38	18	3.0	3.0	2,040	44	49	17	20
11	33	2.3	219	33	50	2.8	2.7	2,860	35	36	12	25
12	28	1.8	165	29	174	2.9	2.5	3,450	27	47	9.6	10
13	24	1.6	112	25	257	3.1	2.8	3,980	127	42	23	8.0
14	20	1.5	85	24	159	2.7	3.4	3,770	60	49	24	10
15	18	1.4	80	19	83	3.0	2.8	3,370	112	38	48	25
16	16	1.5	62	13	53	6.3	1.8	2,590	206	37	61	25
17	16	1.4	53	11	37	5.3	2.1	1,750	784	42	16	15
18	14	3.0	73	10	29	2.5	2.2	740	1,210	35	14	10
19	13	2.8	55	11	23	2.2	2.0	447	908	51	11	8.0
20	34	2.4	39	16	18	81	1.9	698	483	46	9.4	7.0
21	251	2.4	31	14	15	484	3.5	610	258	35	8.4	10
22	108	2.3	26	13	13	643	8.0	280	143	20	8.6	12
23	56	25	24	11	11	837	14	173	88	16	41	15
24	39	15	21	11	9.0	548	18	113	61	14	33	25
25	28	11	18	9.2	7.3	148	13	77	44	13	11	20
26	21	9.0	16	8.2	6.8	64	8.3	57	34	12	7.1	30
27	15	7.3	13	8.1	6.1	37	73	41	29	11	5.6	60
28	12	5.2	13	7.3	5.5	27	98	33	25	11	5.8	40
29	9.2	3.5	293	6.2	15	25	221	29	22	10	4.5	30
30	7.0	2.0	384	400	------	18	216	26	19	10	4.8	80
31	6.2	------	393	728	------	14	------	23	------	15	10	------
TOTAL	1,155.4	142.7	8,991.5	2,635.0	2,470.7	3,004.6	760.9	35,872	4,890	911	519.8	716.4
MEAN	37.3	4.76	290	85.0	85.2	96.9	25.4	1,157	163	29.4	16.8	23.9
MAX	251	25	1,900	728	639	837	221	3,980	1,210	81	61	133
MIN	6.2	1.4	1.5	6.2	5.5	2.2	1.8	23	14	10	4.5	4.5
CFSM	.13	.02	1.02	.30	.30	.34	.09	4.06	.57	.10	.06	.08
IN.	.15	.02	1.17	.34	.32	.39	.10	4.68	.64	.12	.07	.09
AC-FT	2,290	283	17,830	5,230	4,900	5,960	1,510	71,150	9,700	1,810	1,030	1,420

CAL YR 1971 TOTAL 16,661.03 MEAN 45.6 MAX 1,900 MIN .32 CFSM .16 IN 2.17 AC-FT 33,050
WTR YR 1972 TOTAL 62,070.00 MEAN 170 MAX 3,980 MIN 1.4 CFSM .60 IN 8.10 AC-FT 123,100

PEAK DISCHARGE (BASE, 1,500 CFS).--Dec. 3 (1400) 2,080 cfs (18.41 ft); May 13 (0400) 4,030 cfs (23.76 ft).

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 upstream from Texas and New Orleans Railroad Co. bridge, 0.5 mile downstream from Spring Creek, and 2.5 miles north of Humble.

DRAINAGE AREA.--1,741 sq mi.

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.

GAGE.--Water-stage recorder. Datum of gage is 30.53 ft above mean sea level. Prior to July 17, 1933, nonrecording gage at site 1,800 ft 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 (794,200 acre-ft per year).

EXTREMES.--Current year: Maximum gage height, 18.26 ft May 13; minimum, 7.23 ft Nov. 15-17.
1928-54: Maximum discharge, 187,000 cfs May 31, 1929, Nov. 25, 26, 1940; maximum gage height, 32.7 ft May 31, 1929, Nov. 26, 1940, present site and datum, both affected by backwater from East Fork San Jacinto River; minimum discharge, 11 cfs Aug. 31, Sept. 1, 2, 1951.
1954-72: Maximum gage height since first appreciable storage at Lake Houston, 21.53 ft June 26, 1968; minimum since first appreciable storage at Lake Houston, 5.5 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.36	7.36	7.36	11.51	-	-	12.97	13.54	12.69	-	12.22	11.57
2	7.36	7.33	11.67	11.62	-	-	12.97	13.97	12.67	-	12.27	11.58
3	7.61	7.27	11.45	11.68	-	-	12.91	13.90	12.64	-	12.34	11.61
4	7.50	7.27	9.95	11.70	-	-	12.85	13.79	12.61	-	12.46	11.63
5	7.62	7.26	9.81	11.98	-	-	12.79	13.78	12.57	-	12.56	-
6	7.63	7.26	10.58	12.17	-	-	12.78	13.62	12.54	-	12.71	-
7	7.71	7.25	10.35	12.35	-	-	12.72	13.82	12.50	-	-	-
8	7.75	7.25	10.00	12.45	-	-	12.72	16.04	12.46	-	-	-
9	7.66	7.27	9.72	12.51	-	-	12.63	16.31	12.43	-	-	-
10	7.54	7.25	9.73	12.58	-	12.37	12.58	16.40	12.47	-	-	-
11	7.47	7.25	9.83	12.63	-	12.35	12.55	16.41	12.43	-	12.30	-
12	7.42	7.25	9.89	12.64	-	12.33	12.49	17.36	12.40	-	12.19	-
13	7.39	7.24	10.13	12.60	-	12.29	12.48	18.03	12.47	-	12.09	-
14	7.38	7.24	10.17	12.52	-	12.27	12.44	17.08	12.54	-	12.04	-
15	7.35	7.23	10.29	12.50	-	12.26	12.39	16.49	12.57	-	12.01	-
16	7.46	7.23	10.63	12.51	-	12.25	12.34	15.53	12.74	-	11.91	-
17	7.49	7.24	10.75	12.50	-	12.23	12.30	14.54	13.04	-	11.85	-
18	7.40	7.30	10.94	12.53	-	12.16	12.30	13.85	13.25	12.33	11.74	-
19	7.36	7.26	11.04	12.67	-	12.18	12.25	13.55	13.22	12.30	11.64	-
20	7.67	7.27	11.10	12.80	-	12.30	12.23	13.48	13.09	12.33	11.59	-
21	8.51	7.26	11.12	12.92	-	14.21	12.23	13.42	13.04	12.30	11.52	-
22	8.00	7.30	11.17	12.97	-	13.94	12.30	13.26	12.98	12.27	11.45	-
23	7.85	7.52	11.20	13.02	-	14.02	12.30	13.14	12.95	12.28	11.51	-
24	7.91	7.55	11.22	12.96	-	13.96	12.31	12.99	12.88	12.20	11.52	-
25	7.72	7.42	11.22	12.95	-	13.53	12.26	12.88	12.84	12.15	11.53	-
26	7.63	7.37	11.22	12.92	-	13.43	12.41	12.82	12.79	12.12	11.52	-
27	7.54	7.34	11.23	12.87	-	13.27	12.19	12.79	12.75	12.08	11.52	-
28	7.52	7.31	11.23	-	-	13.29	13.21	12.83	-	12.03	11.52	-
29	7.47	7.27	11.31	-	-	13.05	13.66	12.77	-	12.00	11.53	-
30	7.42	7.28	11.39	-	-------	13.04	13.68	12.74	-	12.09	11.51	-
31	7.40	-------	11.49	-	-------	13.01	-------	12.72	-------	12.17	11.54	-------
MAX	8.51	7.55	11.67	-	-	-	13.68	18.03	-	-	-	-
MIN	7.35	7.23	7.36	-	-	-	12.19	12.72	-	-	-	-

NOTE.--No gage-height record Jan. 28 to Mar. 9, Sept. 5-30.

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 downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles west of Cleveland, and 4.3 miles downstream from Winter Creek.

DRAINAGE AREA.--325 sq mi.

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

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

AVERAGE DISCHARGE.--33 years, 201 cfs (8.40 inches per year, 145,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,520 cfs May 13 (gage height, 12.73 ft); minimum daily, 8.0 cfs July 30, 31, Aug. 6, 7.
Period of record: Maximum discharge, 59,000 cfs Nov. 24, 1940 (gage height, 24.0 ft, present site and datum), from rating curve extended above 27,000 cfs; minimum daily, 3.0 cfs 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, present site and datum (discharge, 53,500 cfs), from information by local residents.

REMARKS.--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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	12	18	41	348	31	39	198	17	9.9	10	15
2	8.2	11	139	133	257	36	35	296	16	9.7	11	12
3	8.5	11	203	329	133	38	33	717	15	9.3	9.0	11
4	10	11	139	377	91	37	32	716	14	14	8.5	11
5	27	10	144	330	72	34	30	677	14	38	8.2	16
6	40	9.7	212	584	64	33	29	297	13	50	8.0	13
7	30	9.6	390	344	88	29	28	327	13	22	8.0	12
8	18	9.5	473	137	68	28	27	1,100	13	14	8.6	10
9	13	9.5	400	97	56	27	26	384	13	12	8.2	9.8
10	11	9.5	212	95	51	26	25	217	13	13	8.6	9.3
11	12	9.6	136	77	53	24	24	352	13	14	9.2	9.3
12	11	9.8	114	81	80	24	24	764	13	14	11	9.6
13	11	9.8	386	72	79	25	23	1,480	13	14	12	9.9
14	9.9	9.3	218	59	67	24	23	1,250	14	19	10	10
15	46	9.5	102	49	59	25	21	1,210	15	31	9.9	9.9
16	31	9.3	96	43	53	31	20	814	44	19	54	9.8
17	22	9.2	161	39	48	24	18	165	41	16	56	9.8
18	30	16	95	38	43	23	18	100	25	16	36	9.8
19	55	15	66	38	39	21	17	76	19	15	27	9.8
20	147	20	54	71	36	71	17	63	16	20	22	11
21	61	16	47	77	35	530	17	56	15	60	18	12
22	47	13	40	57	34	465	31	51	15	30	15	11
23	47	17	36	58	34	448	30	44	16	20	12	11
24	42	27	35	56	33	214	27	39	15	15	11	21
25	30	25	34	47	33	93	35	36	13	12	20	33
26	23	20	33	40	31	66	28	32	12	10	49	30
27	19	17	32	37	31	55	33	29	11	9.0	39	105
28	17	15	33	36	29	53	236	26	10	8.5	30	90
29	15	14	34	35	29	73	484	23	10	8.2	25	58
30	14	15	36	111	------	63	533	21	9.7	8.0	21	41
31	13	------	37	299	------	46	------	18	------	8.0	18	------
TOTAL	877.6	399.3	4,155	3,887	2,074	2,717	1,963	11,578	480.7	558.6	593.2	630.0
MEAN	28.3	13.3	134	125	71.5	87.6	65.4	373	16.0	18.0	19.1	21.0
MAX	147	27	473	584	348	530	533	1,480	44	60	56	105
MIN	8.2	9.2	18	35	29	21	17	18	9.7	8.0	8.0	9.3
CFSM	.09	.04	.41	.38	.22	.27	.20	1.15	.05	.06	.06	.06
IN.	.10	.05	.48	.44	.24	.31	.22	1.33	.06	.06	.07	.07
AC-FT	1,740	792	8,240	7,710	4,110	5,390	3,890	22,960	953	1,110	1,180	1,250

CAL YR 1971 TOTAL 11,599.2 MEAN 31.8 MAX 739 MIN 4.7 CFSM .10 IN 1.33 AC-FT 23,010
WTR YR 1972 TOTAL 29,913.4 MEAN 81.7 MAX 1,480 MIN 8.0 CFSM .25 IN 3.42 AC-FT 59,330

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

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 downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 8 miles west of Splendora.

DRAINAGE AREA.--105 sq mi.

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 118.44 ft above mean sea level, datum of 1929, adjustment of 1943. Prior to June 17, 1965, at site 170 ft upstream at datum 5.00 ft higher.

AVERAGE DISCHARGE.--29 years, 62.7 cfs (8.11 inches per year, 45,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 940 cfs May 12 (gage height, 9.82 ft); minimum daily, 7.2 cfs Nov. 5-9.
Period of record: Maximum discharge, 14,900 cfs Apr. 1, 1945 (gage height, 23.19 ft), from rating curve extended above 6,000 cfs; minimum, 4.1 cfs Oct. 26, 1956, caused by construction upstream.
Maximum stage since at least 1885, 27.0 ft in November 1940, present site and datum, from information by local resident. Flood in May 1935 reached a stage of 24.3 ft, present site and datum, from information by local resident.

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

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	8.2	12	37	73	16	18	105	18	9.9	10	8.5
2	8.4	8.4	29	41	45	18	16	258	17	9.8	9.9	8.4
3	8.4	8.0	77	54	34	19	15	242	17	9.5	9.9	8.0
4	8.4	7.7	57	53	27	17	15	59	17	10	9.8	8.0
5	9.5	7.2	29	299	23	16	16	32	16	11	10	8.1
6	11	7.2	119	82	21	16	15	24	15	10	9.6	8.5
7	11	7.2	225	40	26	15	14	237	15	10	9.2	8.7
8	9.3	7.2	67	30	24	15	13	484	14	9.8	8.9	8.2
9	8.7	7.2	37	28	21	15	13	117	14	9.8	8.9	7.9
10	8.2	7.4	32	29	20	15	12	63	14	10	9.4	7.7
11	8.2	7.4	66	25	21	14	12	239	15	12	10	7.9
12	8.2	7.4	38	22	31	14	12	554	15	10	10	8.2
13	8.0	7.4	146	21	31	14	12	656	15	12	10	8.5
14	8.0	7.4	50	20	25	14	12	148	15	14	19	8.2
15	8.4	7.4	34	18	22	14	11	77	17	15	31	8.2
16	11	7.4	33	17	21	14	11	57	21	13	15	9.2
17	13	7.4	34	17	20	14	11	49	19	12	12	9.1
18	14	8.2	30	17	19	14	10	41	17	12	11	9.0
19	14	11	24	17	18	13	10	36	15	13	10	8.5
20	16	13	21	20	17	36	10	32	14	12	9.5	8.3
21	21	11	20	21	17	268	27	29	13	12	9.2	8.4
22	17	9.8	18	20	17	134	18	27	13	12	8.9	8.1
23	13	12	17	17	17	44	14	25	13	13	8.7	9.6
24	11	15	17	16	17	29	11	24	12	12	9.5	19
25	10	14	17	15	17	24	10	23	11	11	15	14
26	9.3	11	16	14	16	26	9.6	23	11	10	11	14
27	9.0	10	16	13	16	23	82	22	11	10	9.8	15
28	8.7	10	19	13	16	22	194	20	11	9.5	15	16
29	8.4	9.3	19	13	16	28	74	20	11	9.3	11	15
30	8.2	9.3	20	42	------	33	34	19	10	9.6	9.6	13
31	8.2	------	24	216	------	22	------	19	------	10	8.9	------
TOTAL	323.7	271.1	1,363	1,287	688	976	731.6	3,761	436	343.2	349.7	299.2
MEAN	10.4	9.04	44.0	41.5	23.7	31.5	24.4	121	14.5	11.1	11.3	9.97
MAX	21	15	225	299	73	268	194	656	21	15	31	19
MIN	8.0	7.2	12	13	16	13	9.6	19	10	9.3	8.7	7.7
CFSM	.10	.09	.42	.40	.23	.30	.23	1.15	.14	.11	.11	.10
IN.	.11	.10	.48	.46	.24	.35	.26	1.33	.15	.12	.12	.11
AC-FT	642	538	2,700	2,550	1,360	1,940	1,450	7,460	865	681	694	593

CAL YR 1971 TOTAL 6,365.1 MEAN 17.4 MAX 720 MIN 6.2 CFSM .17 IN 2.26 AC-FT 12,630
WTR YR 1972 TOTAL 10,829.5 MEAN 29.6 MAX 656 MIN 7.2 CFSM .28 IN 3.84 AC-FT 21,480

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

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 west of depot at Splendora, 2.5 miles upstream from Texas and New Orleans Railroad Co. bridge, 2.5 miles upstream from bridge on U.S. Highway 59, and 9.7 miles upstream from Caney Creek.

DRAINAGE AREA.--117 sq mi.

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 above mean sea level, datum of 1929, adjustment of 1936. Prior to Oct. 1, 1965, at same site and 5.00 ft higher datum.

AVERAGE DISCHARGE.--29 years, 62.2 cfs (7.22 inches per year, 45,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs May 13 (gage height, 13.84 ft); minimum, 4.4 cfs Aug. 8, 9.
Period of record: Maximum discharge, 28,500 cfs Oct. 8, 1949 (gage height, 22.73 ft), from rating curve extended above 8,000 cfs on basis of slope-area measurement of peak flow; minimum, 1.1 cfs Sept. 28-30, 1956.
Maximum stage since at least 1895, that of Oct. 8, 1949. Flood in November 1940 reached a stage of 22.3 ft (discharge, 24,700 cfs), 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	7.4	10	50	76	15	21	34	10	6.4	6.4	5.5
2	6.4	7.2	137	60	45	16	18	91	10	6.3	7.3	5.0
3	6.4	6.8	116	70	36	18	17	165	9.7	6.3	6.4	5.0
4	6.4	6.6	72	100	30	21	16	102	9.4	7.3	5.9	6.9
5	8.2	6.4	58	120	25	18	15	44	8.8	9.7	5.6	23
6	27	6.3	76	70	24	16	14	28	8.5	9.2	5.7	7.7
7	12	6.2	76	40	26	16	14	156	8.2	11	5.6	5.8
8	11	5.8	68	29	28	15	13	585	7.7	9.4	5.1	5.7
9	8.3	6.0	66	26	26	14	12	605	7.5	8.4	4.5	5.4
10	7.1	6.0	60	26	22	14	12	161	7.4	9.4	4.5	5.0
11	6.8	6.0	52	31	23	14	11	266	7.7	16	4.7	4.9
12	6.9	6.0	44	27	32	14	22	529	12	11	4.8	5.0
13	7.1	6.2	42	24	36	14	14	1,030	10	9.1	5.0	5.1
14	6.4	6.2	50	22	31	13	11	560	9.5	11	5.0	5.2
15	6.9	6.2	51	20	26	14	9.9	174	9.9	11	18	6.3
16	9.9	6.2	39	18	24	14	9.4	79	12	15	77	6.8
17	9.5	6.2	86	18	22	13	9.1	54	22	16	42	6.1
18	10	9.9	62	18	20	13	9.0	42	19	15	17	6.1
19	15	8.6	45	18	19	13	8.9	35	15	11	11	6.0
20	12	9.0	35	62	18	72	8.5	30	11	12	8.6	5.8
21	10	15	30	41	17	179	43	26	9.7	32	7.4	5.6
22	10	10	25	34	17	193	36	23	9.1	17	6.7	5.3
23	13	10	23	28	17	92	26	21	8.8	16	6.4	9.5
24	9.7	11	21	24	17	41	17	19	10	13	6.2	13
25	8.3	18	20	21	16	31	12	17	10	9.9	6.3	16
26	7.9	17	19	20	16	27	10	16	8.5	7.9	8.2	13
27	8.6	12	18	19	16	28	20	15	7.7	6.7	10	15
28	8.8	10	20	18	15	27	140	14	7.1	6.0	8.2	19
29	7.6	9.9	22	18	15	45	155	13	6.8	5.7	6.7	18
30	7.6	9.5	22	74	------	32	64	12	6.6	5.7	6.3	22
31	7.4	------	35	101	------	27	------	11	------	5.7	5.9	------
TOTAL	288.8	257.6	1,500	1,247	735	1,079	787.8	4,957	299.6	336.1	328.4	268.7
MEAN	9.32	8.59	48.4	40.2	25.3	34.8	26.3	160	9.99	10.8	10.6	8.96
MAX	27	18	137	120	76	193	155	1,030	22	32	77	23
MIN	6.4	5.8	10	18	15	13	8.5	11	6.6	5.7	4.5	4.9
CFSM	.08	.07	.41	.34	.22	.30	.22	1.37	.09	.09	.09	.08
IN.	.09	.08	.48	.40	.23	.34	.25	1.58	.10	.11	.10	.09
AC-FT	573	511	2,980	2,470	1,460	2,140	1,560	9,830	594	667	651	533

CAL YR 1971 TOTAL 5,404.3 MEAN 14.8 MAX 300 MIN 2.6 CFSM .13 IN 1.72 AC-FT 10,720
WTR YR 1972 TOTAL 12,085.0 MEAN 33.0 MAX 1,030 MIN 4.5 CFSM .28 IN 3.84 AC-FT 23,970

PEAK DISCHARGE (BASE, 900 CFS).--May 8 (2300) 904 cfs (13.21 ft); May 13 (1500) 1,190 cfs (13.84 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 upstream from Lake Houston Dam, 4.0 miles north of Sheldon, 4.6 miles upstream from bridge on U.S. Highway 90, and 18 miles northeast of Houston. Upper gage published as station 08069500 (West Fork San Jacinto River near Humble, Tex.).

DRAINAGE AREA.--2,828 sq mi at dam.

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

GAGE.--Water-stage recorder. Datum of gage at dam is 0.70 ft below mean sea level, adjustment of 1959. Prior to Aug. 3, 1954, nonrecording gage read once daily.

EXTREMES.--Current year: Maximum contents, 171,000 acre-ft May 13, 14 (gage height, 46.38 ft); minimum, 53,380 acre-ft Dec. 1 (gage height, 34.08 ft).
Period of record: Maximum contents, 205,000 acre-ft Sept. 12, 1961 (gage height, 47.87 ft); minimum since first filling of lake in August 1954, 53,380 acre-ft Dec. 1, 1971 (gage height, 34.08 ft).

REMARKS.--Lake is formed by compacted earthfill embankment sections 4,000 and 4,600 ft long. Spillway is a slab-and-buttress (Ambursen type) structure 3,160 ft long, located near center of dam. Dam completed and storage began Apr. 9, 1954. Usable capacity, 140,500 acre-ft between gage heights 44.5 and 22.0 ft (bottom of 36-inch sluice gate). Capacity table furnished by city of Houston is based on 1965 sedimentation study. Water used for municipal supply for city of Houston, for industries in ship-channel area, and for irrigation. Records of diversions furnished by San Jacinto River Authority and city of Houston. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	63.0	-
Maximum design flood stage	57.0	-
Spillway crest	44.5	146,700
Sill of tainter gates	28.0	22,800
Invert of 72-inch conduits	24.0	9,830
Invert of 36-inch sluice gate	22.0	6,180

REVISIONS.--WSP 1732: Drainage area.

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

34.0	52,900	41.0	107,900	45.0	152,900
37.0	73,030	43.0	129,100	46.0	165,900
39.0	89,240	44.0	140,700	47.0	179,600

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71,030	63,820	53,980	132,300	153,400	147,000	148,000	153,200	146,400	143,900	139,000	128,800
2	70,590	63,620	61,340	132,800	152,900	144,800	147,800	156,100	146,100	143,600	138,600	128,200
3	70,520	62,940	69,570	133,700	149,800	143,900	147,800	155,700	145,800	142,700	138,700	127,700
4	70,300	62,270	75,160	135,400	150,300	144,900	147,200	154,700	145,300	142,700	138,100	127,700
5	70,080	61,800	82,880	136,100	150,400	143,600	146,900	154,300	144,800	142,300	137,600	127,100
6	69,930	61,470	89,330	138,300	150,900	143,100	146,100	153,600	144,200	141,800	137,200	127,100
7	69,640	60,890	95,580	140,600	149,000	143,000	146,300	156,600	143,700	141,200	136,500	126,600
8	69,500	60,280	100,700	142,100	149,100	142,600	145,900	162,600	143,200	141,100	136,100	126,100
9	69,430	60,020	104,700	143,300	149,200	142,100	145,200	162,300	142,700	140,900	135,700	125,400
10	68,630	59,500	108,900	144,300	149,200	141,700	144,900	163,900	143,600	141,200	135,400	125,200
11	68,130	59,000	110,800	144,900	149,700	141,300	144,400	163,500	143,300	140,900	135,100	124,900
12	67,710	58,600	112,800	145,200	149,600	141,100	143,900	167,100	142,900	140,400	134,500	124,500
13	67,350	58,220	113,700	145,600	149,900	140,700	143,600	171,000	143,300	140,400	134,300	123,900
14	67,000	57,830	116,500	145,800	150,100	140,400	142,700	167,000	144,200	141,300	134,800	123,400
15	66,790	57,450	117,400	144,100	149,800	140,700	143,000	163,500	145,200	141,100	135,100	123,300
16	66,650	57,010	119,900	143,700	149,400	139,800	142,600	161,500	147,100	141,500	135,200	122,800
17	66,650	56,380	122,800	143,600	148,700	138,900	142,000	158,300	149,700	141,500	135,200	122,700
18	66,580	57,520	124,700	143,800	148,300	138,900	141,300	155,500	151,300	141,700	134,800	122,400
19	66,650	56,880	126,100	145,200	148,100	138,300	140,900	154,100	151,400	141,300	134,500	122,000
20	66,720	56,510	126,900	146,500	148,000	152,700	140,400	153,300	150,700	141,300	134,000	121,600
21	66,720	56,200	127,400	147,700	147,800	153,800	141,100	153,100	149,900	142,000	133,300	121,000
22	66,860	57,260	127,800	148,700	147,600	157,500	141,400	152,600	149,200	142,100	132,900	120,500
23	66,650	55,760	128,000	149,300	147,500	156,500	141,400	151,700	148,700	141,800	132,500	120,000
24	66,510	55,450	128,100	150,800	147,400	155,500	141,200	151,100	148,100	141,400	132,500	122,000
25	66,300	55,140	128,200	148,500	147,200	152,800	140,900	150,200	147,500	140,900	132,400	122,700
26	65,950	54,960	128,200	148,100	146,900	151,200	140,000	149,600	146,900	140,500	132,000	123,800
27	65,810	54,590	128,300	148,200	146,700	150,700	142,100	149,100	146,400	139,900	131,600	125,900
28	65,300	54,470	128,500	147,700	146,400	150,400	149,900	148,800	145,900	139,600	131,100	126,300
29	64,910	54,100	128,600	148,100	146,600	148,700	153,600	148,300	145,200	139,000	130,600	127,000
30	64,570	53,920	129,800	151,800	------	148,500	153,800	147,800	144,600	139,500	130,000	127,200
31	64,230	------	130,600	153,400	------	148,100	------	147,100	------	139,200	129,400	------
(†)	35.77	34.17	43.13	45.04	44.49	44.61	45.07	44.53	44.32	43.87	43.02	42.83
(*)	-7,170	-10,310	+76,680	+22,800	-6,800	+1,500	+5,700	-6,700	-2,500	-5,400	-9,800	-2,200
(††)	15,400	15,040	12,650	14,200	12,930	15,810	15,830	16,030	16,780	16,100	15,940	16,110
MAX	71,030	63,820	130,600	153,400	153,400	157,500	153,800	171,000	151,400	143,900	139,000	128,800
MIN	64,230	53,920	53,980	132,300	146,400	138,300	140,000	147,100	142,700	139,000	129,400	120,000

CAL YR 1971..... * +2,100 †† 182,560 MAX 130,600 MIN 53,920
WTR YR 1972..... * +55,800 †† 182,820 MAX 171,000 MIN 53,920

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, by city of Houston and San Jacinto River Authority.

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 downstream from Southern Pacific Railway Company bridge, 1.5 miles east of Sheldon, 4.6 miles downstream from Lake Houston, and 21 miles northeast of Houston.

DRAINAGE AREA.--2,879 sq mi.

PERIOD OF RECORD.--February 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Harris County Flood Control District); unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum elevation, 7.92 ft May 13; minimum, -1.79 ft Jan. 5.
Period of record: Maximum elevation, 7.92 ft May 13, 1972; minimum, -2.36 ft Feb. 13, 1971.
Maximum elevation since at least 1875 occurred in November 1940 (stage unknown). Flood in May 1929 reached an elevation of 32.9 ft at site 0.3 mile upstream from gage, from information by Southern Pacific Railway Company.

REMARKS.--Maximum and minimum daily elevations only published for this station.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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	2.80	1.40	2.99	1.20	2.96	0.84	2.38	0.85	2.82	1.49	2.05	1.10	1.57	0.07	3.51	1.88	2.57	0.59	2.12	0.17	2.22	0.75	2.12	0.61
2	2.52	1.32	2.51	.59	3.26	.44	-	-	2.80	1.00	1.97	-.88	1.91	.00	3.24	1.58	3.04	1.05	2.32	.68	2.47	.70	2.27	.61
3	2.40	.98	2.32	-.75	1.75	-.87	2.43	1.05	1.80	-1.47	1.89	-.32	2.16	.33	2.53	1.40	2.77	.90	2.17	1.00	3.65	.72	2.30	.60
4	2.25	.83	2.21	.33	2.25	.32	2.52	-1.49	1.54	-.97	1.91	.63	2.03	-.21	2.47	.94	2.84	1.22	2.02	.08	2.60	.47	2.08	.27
5	2.23	.36	2.57	.88	3.54	2.13	.47	-1.79	2.52	.88	1.99	.00	2.07	.09	2.83	1.12	2.84	1.43	1.80	.08	1.94	.12	1.98	.47
6	2.14	.05	2.57	.50	3.37	.57	1.22	.47	2.56	1.25	2.28	.67	2.45	.43	3.02	1.46	2.30	.94	1.98	.15	1.62	-.16	2.42	.53
7	1.90	.54	1.67	-.35	1.87	.41	1.67	.36	1.50	-.73	2.25	.80	2.47	.90	2.76	1.87	2.14	.56	2.58	.53	1.67	-.21	2.32	1.14
8	2.45	.94	2.02	.70	2.04	1.50	2.17	1.05	1.47	-.10	1.86	.00	1.71	.12	3.00	1.96	2.11	.14	2.64	.79	1.66	-.15	2.10	1.10
9	2.43	.53	2.61	.59	2.51	1.75	2.30	.94	1.82	.15	2.03	.31	2.48	.66	3.69	3.28	2.28	.08	2.71	.65	1.66	.03	2.06	1.02
10	1.60	.00	2.05	.57	2.68	.63	2.04	.47	2.27	.45	2.05	.32	2.71	1.14	4.90	3.33	3.08	.48	3.00	.74	1.70	.20	1.97	.48
11	2.03	.12	1.87	.64	1.64	.13	1.87	.17	2.46	.92	1.58	.22	2.36	1.22	5.20	4.55	2.57	.28	2.78	1.03	1.67	.36	2.34	1.45
12	2.01	.64	2.04	.94	1.89	.54	2.24	.37	2.05	.99	1.71	.42	2.42	1.03	6.35	4.02	2.83	.48	2.93	.63	1.95	.74	2.83	1.58
13	1.99	.67	2.03	.77	1.88	.15	2.28	.12	1.57	-.53	1.47	.13	2.60	.70	7.92	6.21	3.74	1.33	2.49	.76	1.95	.67	2.31	1.81
14	1.82	.60	2.27	1.13	2.97	.87	1.32	-.63	2.14	.67	1.61	.17	3.11	1.18	7.90	6.50	3.54	1.98	2.51	.94	1.73	.27	-	-
15	2.05	.76	2.98	1.87	2.94	.50	1.27	-.98	2.40	.50	2.02	.12	3.43	1.33	6.50	4.77	3.25	1.61	2.59	1.07	1.67	.17	-	-
16	2.35	1.17	2.80	1.82	2.26	.59	2.16	.13	1.71	.00	1.22	.34	2.17	.40	4.77	3.61	2.83	1.17	2.44	1.32	1.62	.19	-	-
17	2.38	1.16	2.97	1.62	2.18	-.18	2.46	.70	2.38	.37	1.33	-.68	2.43	-.17	3.29	2.53	2.55	1.27	2.45	1.30	1.63	.21	-	-
18	2.64	1.57	3.36	1.00	2.34	.16	2.68	.75	1.12	1.02	1.47	-.22	2.98	.74	3.13	1.53	2.37	1.33	2.53	1.35	1.83	.21	-	-
19	2.92	1.22	1.96	-.58	2.80	1.03	1.99	.40	1.19	-.55	1.68	-.60	2.81	1.05	2.24	.97	2.54	1.25	2.86	1.26	2.47	.21	-	-
20	3.99	1.62	1.64	.08	2.57	.44	2.09	.75	1.37	.63	2.99	.31	2.75	.94	1.95	.75	2.40	1.37	3.30	1.51	1.79	.12	-	-
21	2.56	-	1.75	-.01	2.03	.15	2.25	1.33	1.54	-.12	3.61	2.83	2.36	1.03	1.73	.57	2.57	1.17	3.20	1.13	1.63	.05	-	-
22	-	.52	2.75	1.06	1.44	-.12	1.93	.46	1.33	-.53	2.83	1.35	1.80	.00	1.76	.69	2.20	.37	3.01	1.02	1.72	-.03	-	-
23	2.28	.63	2.98	.71	2.34	.95	2.16	.47	1.42	-.35	2.12	.86	2.01	.65	1.91	.46	1.87	.09	2.72	1.19	1.95	.29	-	-
24	1.96	.54	1.63	-.15	2.45	1.26	2.10	.40	1.74	.05	2.05	.82	1.77	.70	1.81	.45	2.27	.33	2.37	.84	2.31	.22	-	-
25	2.21	-	1.74	.65	2.33	.95	2.46	.23	1.85	.41	1.82	.08	2.44	.79	1.86	.22	2.02	.17	2.21	.55	2.24	.88	-	-
26	2.07	.84	2.36	.89	2.20	.59	2.63	.84	1.65	-.16	2.70	1.21	3.50	1.61	1.87	.08	2.01	.16	2.49	.54	1.87	.53	-	-
27	2.32	.57	2.02	.68	2.42	.64	2.51	.62	1.50	-.04	2.08	.98	3.98	2.21	2.00	-.05	2.02	.22	2.43	.78	1.96	.36	-	-
28	2.33	-	2.38	.95	2.28	.35	2.14	.01	1.59	.02	1.82	.83	2.84	1.71	1.90	.21	2.13	.12	2.18	.67	2.10	.43	-	-
29	2.37	.90	1.96	.15	2.27	.35	1.61	-.27	2.32	.94	.87	-.43	3.08	1.34	1.84	-.12	2.00	.05	1.86	.55	1.87	.57	-	-
30	2.51	.89	2.72	.67	2.25	.07	1.65	-	----	----	1.98	.14	3.58	1.68	1.81	-.17	1.71	.07	2.06	.40	1.93	.50	-	-
31	2.61	.85	----	----	2.14	-.03	2.11	.62	----	----	1.88	.58	----	----	1.87	-.12	----	----	.60	.45	2.08	.61	----	----

08072500 Barker Reservoir near Addicks, Tex.

LOCATION.--Lat 29°46'11", long 95°38'49", Harris County, at dam on Buffalo Bayou, 45 ft upstream from reservoir outlet works, 1,160 ft upstream from Addicks-Howell county road, 1.1 miles south of Addicks, and 1.2 miles upstream from South Mayde Creek; upper gage, lat 29°43'08", long 95°43'53", Fort Bend County, on Buffalo Bayou 2.8 miles west of Clodine, 4.8 miles (2.7 miles by reservoir) upstream from Mason Creek, and 9.0 miles (6.4 miles by reservoir) upstream from reservoir outlet works.

DRAINAGE AREA.--134 sq mi at outlet works; 89.2 sq mi at upper gage. During extreme floods when the capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 150 sq mi at lower gage and 105 sq mi at upper gage.

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

GAGE.--Water-stage recorders. Datum of both gages is 0.33 ft below mean sea level; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height at dam, 93.72 ft May 16 (contents, 30,510 acre-ft); maximum at upper gage, 97.25 ft May 11.
Period of record: Maximum gage height at dam, 94.60 ft May 15, 1968 (contents, 39,200 acre-ft); maximum at upper gage, 99.35 ft June 26, 1960.
Maximum stage near site of upper gage prior to construction of reservoir, 98.1 ft in December 1935, from floodmark about 1,100 ft to right of and 1,100 ft downstream from upper gage.

REMARKS.--Reservoir is formed by rolled-fill earthen dam 72,844 ft long. Dam completed Feb. 3, 1946, but was first used for flood control in spring of 1945. Reservoir is operated for flood protection of city of Houston. Outlet works consist of five concrete conduits. Originally the middle conduit was controlled by vertical-lift gates. In 1949 gates were installed on the two outside conduits, and in May 1962 gates were installed on the two remaining conduits. Capacity, 127,900 acre-ft between gage heights 75.0 (bottom of conduits) and 101.9 ft (top of design flood pool). Capacity curve furnished by the Corps of Engineers is based on survey made in 1940. No constructed emergency spillways; runoff considerably in excess of designed capacity will be discharged around ends of dam.

REVISIONS.--WSP 1922: Drainage area.

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

74.10	0	80.00	55	86.00	1,830
74.40	.2	81.00	79	87.50	3,850
75.00	1.7	82.00	129	89.00	7,040
76.00	6.3	82.60	190	90.30	10,890
76.50	9.5	83.40	344	92.00	17,920
77.50	19.0	84.20	582	93.70	30,320
78.50	31.0	85.00	999		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,060		4	14,760	9,440	-		-	20,820	-		-
2	5,670		447	14,470	9,620	-		-	19,980	-		-
3	5,330		4,310	14,260	9,500	-		-	20,040	-		-
4	5,100		6,860	14,340	9,130	-		-	19,980	6		-
5	5,100		8,890	14,390	8,510	-		-	19,190	7		-
6	5,260		12,010	14,180	8,000	-		-	17,370	17		-
7	5,050		14,140	13,890	7,330	-		286	15,410	18		-
8	4,670		15,450	13,570	6,760	-		2,570	13,570	19		-
9	4,220		16,550	13,290	6,180	-		5,390	11,700	29		-
10	3,710		16,930	12,950	5,600	-		7,460	12,240	37		-
11	3,190		17,130	12,610	6,830	-		12,760	13,530	46		-
12	2,670		17,180	12,240	8,920	-		19,360	13,330	46		-
13	2,080		17,180	11,800	9,590	-		24,650	12,200	64		-
14	1,580		17,180	11,310	9,750	-		28,370	10,790	84		-
15	1,160		17,080	10,890	9,750	-		29,940	9,310	104		-
16	808		17,030	10,560	9,340	-		30,420	8,170	141		-
17	549		16,790	10,260	8,510	-		30,320	8,030	128		-
18	312		16,650	9,590	7,590	-		29,940	7,750	100		-
19	123		16,510	9,370	6,660	-		29,470	6,510	87		-
20	171		16,320	9,160	5,720	419		29,200	5,010	73		-
21	578		16,080	8,860	4,850	2,510		29,200	3,460	150		-
22	1,030		15,860	8,510	3,800	3,780		28,640	1,840	286		-
23	1,080		15,630	8,170	2,550	3,700		28,010	787	284		8
24	899		15,410	7,780	1,100	3,310		27,290	528	186		18
25	686		15,190	7,400	171	2,820		26,670	262	131		31
26	462		15,060	7,010	43	2,310		25,970	72	78		33
27	229		14,850	6,680	3	1,610		25,300	10	24		64
28	59		14,680	6,290	1	494		24,560	8	10		100
29	5		14,810	5,990	-	36		23,850	7	10		120
30	-		14,810	7,460	-----	4		23,170	6	7		170
31	-	---	14,810	8,980	-----	-	---	22,450	------	-	---	---

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 upstream from reservoir outlet works, 2,700 ft upstream from U.S. Highway 90, 1.2 miles east of Addicks, and 1.4 miles upstream from mouth. Supplementary gages: lat 29°48'03", long 95°41'32", on South Mayde Creek at Groeschke Road bridge, 3.2 miles west of Addicks, 4.6 miles (3.5 miles by reservoir) upstream from Langham Creek, and 5.5 miles (4.2 miles by reservoir) upstream from reservoir outlet works; lat 29°50'08", long 95°37'30", on Langham Creek at Clay Road bridge, 3.6 miles north of Addicks, 4.4 miles (2.7 miles by reservoir) upstream from mouth, and 5.3 miles (3.1 miles by reservoir) upstream from reservoir outlet works.

DRAINAGE AREA.--133 sq mi at outlet works; 34.9 sq mi at gage on South Mayde Creek; and 45.1 sq mi at gage on Langham Creek. During extreme floods when the capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 129 sq mi at outlet works, 30 sq mi at South Mayde Creek gage and 49 sq mi at Langham Creek gage.

PERIOD OF RECORD.--June 1948 to current year.

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

EXTREMES.--Current year: Maximum elevation at dam, 97.10 ft May 16 (contents, 20,090 acre-ft); maximum at gage on South Mayde Creek, 106.44 ft Dec. 3; maximum at gage on Langham Creek, 101.13 ft Dec. 3.
Period of record: Maximum elevation at dam, 100.02 ft May 15, 1968 (contents, 37,460 acre-ft); maximum at gage on South Mayde Creek, 107.47 ft June 26, 1960; maximum at gage on Langham Creek, 102.8 ft July 30 or 31, 1954.
Flood in December 1935 reached a stage of 89.9 ft at bridge on U.S. Highway 90, 2,700 ft downstream from outlet works, from information by Corps of Engineers. This flood reached an elevation of 109.3 ft, 0.2 mile downstream and 0.1 mile to right of gage on South Mayde Creek, and an elevation of 104.5 ft, 1,900 ft to left and 700 ft upstream from gage on Langham Creek; from floodmarks, from information by local residents.

REMARKS.--Reservoir is formed by rolled-fill earthen dam 61,166 ft long. Dam completed in fall of 1948. Reservoir is operated for flood protection of city of Houston. Outlet works consist of five concrete conduits. Originally the middle conduit was controlled by vertical-lift gates. In 1949 gates were installed on the two outside conduits, and in June 1962 gates were installed on the two remaining conduits. Capacity, 188,030 acre-ft between elevations 73.0 (bottom of conduits) and 113.0 ft (top of design flood pool). Capacity curve furnished by Corps of Engineers is based on survey made in 1940. No constructed emergency spillways; runoff considerably in excess of design capacity will be discharged around ends of dam. Contents not published for floods that do not produce maximum contents of 30 acre-ft or more.

Capacity table (elevation, in feet, at total contents, in acre-feet)

73.7	0	84.0	135	91.5	3,570
76.0	7	85.0	189	93.0	6,000
78.0	22	86.5	385	95.0	11,380
80.0	46	88.5	1,020	97.1	20,090
82.0	82	90.0	2,020		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,420	9	0	15,680	9,350	-	34	-	813			-
2	2,090	0	406	15,510	9,470	-	0	17	696			-
3	1,780	-	4,520	15,220	9,300	-	-	53	699			-
4	1,500	-	7,560	15,140	8,730	-	-	28	706			-
5	1,500	-	9,830	15,020	8,110	-	-	4	585			-
6	1,620	-	12,840	14,700	7,500	-	-	2	402			-
7	1,620	-	15,260	14,450	6,600	-	-	148	258			-
8	1,570	-	16,620	14,060	5,310	-	-	1,010	163			-
9	1,510	-	17,540	13,740	4,070	-	-	1,880	112			-
10	1,420	-	18,090	13,400	3,280	-	-	2,720	123			-
11	1,300	-	18,320	12,990	3,860	-	-	6,170	134			-
12	1,170	-	18,370	12,550	5,060	-	-	10,330	110			-
13	1,000	-	18,180	12,120	5,550	-	-	14,370	68			-
14	910	-	18,180	11,660	5,400	-	-	17,810	26			-
15	755	-	18,040	11,220	4,840	-	-	19,500	1			-
16	542	-	17,900	10,750	4,220	-	-	19,940	81			-
17	359	-	17,680	10,330	3,540	-	-	18,980	131			-
18	226	-	17,450	10,020	2,900	-	-	18,040	200			-
19	149	-	17,180	9,800	2,300	-	-	16,700	226			-
20	252	-	16,920	9,440	1,710	231	-	15,720	200			-
21	752	-	16,700	9,060	1,140	2,590	-	15,760	155			-
22	1,080	-	16,360	8,670	663	3,440	-	15,390	118			-
23	1,080	-	16,100	8,270	317	3,110	-	14,020	83			1
24	965	-	15,800	7,880	131	2,400	-	12,440	44			4
25	797	-	15,550	7,400	57	1,690	-	10,790	3			10
26	625	-	15,260	7,000	12	1,000	-	9,090	1			22
27	451	-	15,020	6,600	0	602	-	7,460	1			35
28	271	-	14,770	6,230	-	374	-	5,860	0			48
29	141	-	14,980	5,860	-	182	-	4,340	-			64
30	99	-	15,390	7,240	-----	125	-	2,870	-			94
31	55	---	15,630	8,810	-----	80	---	1,460	---	---	---	---

08073500 Buffalo Bayou near Addicks, Tex.

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

DRAINAGE AREA.--293 sq mi. During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 310 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft below mean sea level, datum of 1929, adjustment of 1943; unadjusted for land-surface subsidence. Prior to Feb. 2, 1948, water-stage recorder at bridge on natural channel 1,200 ft to right at same datum. Feb. 2 to May 21, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--27 years, 186 cfs (134,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,970 cfs Mar. 20 (gage height, 68.44 ft); minimum daily, 7.4 cfs Nov. 16, 22, 29. Period of record: Maximum discharge, 11,200 cfs Aug. 29, 1945 (gage height, 81.23 ft, former site); no flow at times. Maximum stage since at least 1896, 85.6 ft in December 1935 (adjusted to former site from floodmark half a mile downstream, on basis of slope of flood of Aug. 29, 1945), from information by local resident.

REMARKS.--Records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 3.2 and 3.0 miles upstream, respectively (total capacity, 315,900 acre-ft). Extreme low flow sustained by drainage from irrigated lands.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	474	114	17	423	256	26	131	57	1,150	44	94	27
2	490	26	362	415	303	26	73	68	899	49	73	24
3	486	17	204	414	310	30	15	192	39	42	78	23
4	483	14	206	424	538	26	12	342	27	52	121	24
5	390	14	439	444	697	16	10	254	319	66	147	36
6	172	12	495	430	691	14	12	94	939	76	124	50
7	342	11	250	418	745	14	15	318	1,090	106	73	51
8	455	11	135	412	1,000	16	13	308	1,080	103	49	50
9	443	11	100	413	1,010	14	9.1	612	1,060	116	43	40
10	435	9.9	199	411	822	16	9.1	839	699	132	73	47
11	426	9.5	303	406	540	13	10	663	111	149	137	40
12	417	8.2	280	404	314	12	13	999	397	182	182	36
13	410	7.9	262	403	336	11	15	633	909	221	134	34
14	405	8.0	254	398	374	11	12	533	993	246	104	85
15	397	7.6	251	397	556	13	14	585	935	255	85	103
16	401	7.4	258	398	687	19	16	784	1,010	266	94	114
17	401	7.6	266	395	892	21	17	1,050	676	260	66	106
18	377	10	254	398	870	16	17	1,160	663	217	43	111
19	333	12	246	407	844	13	12	1,120	774	217	32	105
20	330	14	241	413	825	742	12	966	984	241	30	85
21	385	8.5	239	396	809	1,550	18	37	946	233	36	64
22	386	7.4	236	390	823	478	23	337	928	250	42	55
23	367	39	235	387	896	707	22	848	811	251	35	101
24	350	48	234	386	994	865	21	1,090	321	227	34	118
25	338	23	232	379	862	821	17	1,130	265	193	34	135
26	328	14	232	377	261	782	15	1,150	185	175	36	178
27	317	10	232	375	136	724	54	1,130	118	143	40	219
28	334	8.3	228	370	41	733	103	1,120	68	88	37	243
29	321	7.4	323	367	28	698	179	1,120	52	69	40	251
30	159	8.6	422	590	------	203	115	1,110	42	64	38	350
31	146	------	432	234	------	152	------	1,120	------	88	30	------
TOTAL	11,498	506.3	8,067	12,474	17,460	8,782	1,004.2	21,769	18,490	4,821	2,184	2,905
MEAN	371	16.9	260	402	602	283	33.5	702	616	156	70.5	96.8
MAX	490	114	495	590	1,010	1,550	179	1,160	1,150	266	182	350
MIN	146	7.4	17	234	28	11	9.1	37	27	42	30	23
AC-FT	22,810	1,000	16,000	24,740	34,630	17,420	1,990	43,180	36,670	9,560	4,330	5,760

CAL YR 1971 TOTAL 53,267.5 MEAN 146 MAX 1,090 MIN 4.4 AC-FT 105,700
WTR YR 1972 TOTAL 109,960.5 MEAN 300 MAX 1,550 MIN 7.4 AC-FT 218,100

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

LOCATION.--Lat 29°45'43", long 95°33'27", at downstream side of bridge on West Belt Drive in west Houston, 100 ft downstream from Rummel Creek, 3.7 miles upstream from the gage Buffalo Bayou at Piney Point, and 7.1 miles downstream from the gage Buffalo Bayou near Addicks.

DRAINAGE AREA.--307 sq mi.

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

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

EXTREMES.--Maximum daily discharge during period September 1971, 1,300 cfs Sept. 10 (gage height unknown); minimum daily, 80 cfs Sept. 9.
Water year 1972: Maximum discharge, 3,770 cfs Mar. 20 (gage height, 62.15 ft); minimum daily, 25 cfs Nov. 21.
Period of record: Maximum discharge, 3,770 cfs Mar. 20, 1972 (gage height, 62.15 ft); minimum daily, 25 cfs Nov. 21, 1971.

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

DISCHARGE, IN CUBIC FEET PER SECOND, SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												170
2												160
3												150
4												220
5												200
6												180
7												140
8												100
9												80
10												1,300
11												1,000
12												400
13												320
14												363
15												312
16												227
17												498
18												510
19												790
20												312
21												256
22												352
23												363
24												462
25												522
26												510
27												510
28												486
29					------							486
30					------							474
31		------			------		------		------			------
TOTAL												11,853
MEAN												395
MAX												1,300
MIN												80
AC-FT												23,510

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	474	145	33	434	254	44	135	75	1,120	71	106	42
2	485	57	500	431	325	46	90	83	1,000	74	87	41
3	498	40	320	429	320	47	34	203	70	68	92	39
4	509	36	250	435	370	41	31	333	50	113	125	41
5	449	35	650	430	690	34	29	319	468	94	150	56
6	208	33	730	430	700	33	30	125	928	95	127	63
7	343	32	360	430	707	33	31	587	1,090	120	104	63
8	449	33	194	430	934	34	29	360	1,090	117	79	59
9	437	33	144	429	952	31	27	586	1,070	126	65	51
10	429	32	241	428	862	32	28	949	1,040	143	84	56
11	424	31	343	422	754	31	27	954	171	163	172	50
12	414	29	313	422	371	32	29	1,350	363	195	220	48
13	409	27	294	419	382	31	31	849	929	253	150	44
14	402	26	284	420	368	30	28	677	1,030	274	156	136
15	398	26	281	425	558	36	32	628	993	268	123	115
16	404	26	291	425	653	35	33	809	1,240	274	108	120
17	420	26	333	420	854	35	32	1,010	813	284	72	114
18	388	30	282	421	855	31	31	1,120	772	239	51	115
19	353	28	275	440	833	29	28	1,110	803	248	41	112
20	345	29	272	449	819	429	28	1,030	1,010	273	39	93
21	394	25	268	419	814	2,320	36	132	989	257	45	75
22	396	26	267	411	810	577	36	297	967	270	48	69
23	381	91	265	408	853	682	34	823	915	265	48	111
24	367	71	264	409	933	856	35	1,050	364	241	53	198
25	357	43	260	401	887	836	31	1,090	292	205	51	126
26	348	32	254	395	279	799	30	1,110	199	187	52	193
27	338	29	255	394	115	757	120	1,100	144	156	54	224
28	342	27	251	389	41	727	150	1,090	93	104	50	225
29	364	27	313	390	46	769	200	1,090	78	86	52	230
30	191	26	432	900	------	248	130	1,090	69	85	49	423
31	174	------	444	330	------	160	------	1,100	------	108	44	------
TOTAL	11,890	1,151	9,663	13,415	17,339	9,825	1,565	23,129	20,160	5,456	2,697	3,332
MEAN	384	38.4	312	433	598	317	52.2	746	672	176	87.0	111
MAX	509	145	730	900	952	2,320	200	1,350	1,240	284	220	423
MIN	174	25	33	330	41	29	27	75	50	68	39	39
AC-FT	23,580	2,280	19,170	26,610	34,390	19,490	3,100	45,880	39,990	10,820	5,350	6,610

CAL YR 1971 TOTAL 22,704.00 MEAN 62.2 MAX 730 MIN 0 AC-FT 45,030
WTR YR 1972 TOTAL 119,622.00 MEAN 327 MAX 2,320 MIN 25 AC-FT 237,300

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 downstream from Rummel Creek, 10.8 miles downstream from gage, Buffalo Bayou near Addicks, and 12.5 miles upstream from gage, Buffalo Bayou at Houston.

DRAINAGE AREA.--317 sq mi.

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

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

AVERAGE DISCHARGE.--9 years, 219 cfs (158,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,760 cfs Mar. 21 (elevation, 53.47 ft); minimum daily, 23 cfs Nov. 30.
Period of record: Maximum discharge, 3,760 cfs Mar. 21, 1972 (elevation, 53.47 ft); minimum daily, 6.0 cfs Dec. 6, 7, 1964.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	149	32	460	270	59	158	107	1,060	79	110	38
2	490	70	577	457	364	55	120	92	1,050	81	90	36
3	504	41	396	453	329	59	41	194	171	72	85	33
4	530	35	210	464	481	51	35	322	78	134	125	35
5	508	35	773	480	692	38	31	369	208	125	156	48
6	234	30	842	474	707	35	31	137	798	90	132	62
7	339	30	443	460	698	34	34	633	1,030	116	127	60
8	467	33	205	452	933	37	31	412	1,050	128	110	62
9	459	32	158	453	990	32	26	534	1,040	128	65	53
10	448	30	228	453	922	34	27	873	1,240	141	80	59
11	445	30	369	446	900	30	26	1,140	276	170	188	56
12	432	29	347	443	449	30	29	1,550	306	200	274	58
13	430	27	323	442	425	31	32	1,030	821	260	210	51
14	425	30	311	439	387	29	29	677	972	270	220	200
15	424	30	312	436	561	41	33	579	949	270	140	161
16	429	36	329	437	637	39	36	721	1,410	290	90	153
17	455	35	403	437	848	38	35	918	797	290	76	150
18	422	43	311	442	868	32	34	1,080	736	250	57	154
19	393	48	296	456	847	27	30	1,090	715	260	45	155
20	375	45	291	477	828	586	29	1,030	942	280	40	130
21	433	40	286	439	817	2,940	44	255	936	260	46	106
22	433	41	284	431	809	748	44	235	908	280	52	101
23	415	230	282	428	853	606	38	723	886	270	55	110
24	400	85	281	427	944	780	43	983	410	250	66	279
25	389	35	277	422	949	778	41	1,040	309	220	62	151
26	382	30	276	419	363	737	46	1,080	212	190	52	205
27	364	28	276	419	154	701	175	1,070	160	160	54	258
28	347	25	269	415	54	650	164	1,060	105	100	51	243
29	395	26	324	410	70	735	227	1,050	88	90	51	245
30	200	23	453	1,180	------	307	196	1,050	79	85	51	484
31	175	------	467	492	------	184	------	1,040	------	110	42	------
TOTAL	12,626	1,401	10,631	14,543	18,149	10,483	1,865	23,074	19,742	5,649	3,002	3,936
MEAN	407	46.7	343	469	626	338	62.2	744	658	182	96.8	131
MAX	530	230	842	1,180	990	2,940	227	1,550	1,410	290	274	484
MIN	175	23	32	410	54	27	26	92	78	72	40	33
AC-FT	25,040	2,780	21,090	28,850	36,000	20,790	3,700	45,770	39,160	11,200	5,950	7,810

CAL YR 1971 TOTAL 64,595 MEAN 177 MAX 1,650 MIN 16 AC-FT 128,100
WTR YR 1972 TOTAL 125,101 MEAN 342 MAX 2,940 MIN 23 AC-FT 248,100

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 upstream from Waugh Drive.

DRAINAGE AREA.--358 sq mi, unadjusted for basin boundary changes.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1959. Prior to June 19, 1936, nonrecording gage and June 19, 1936, to Jan. 16, 1962, water-stage recorder at site 0.8 mile downstream at datum 4.08 ft below mean sea level. Since Jan. 17. 1962, auxilary water-stage recorder 0.8 mile downstream.

AVERAGE DISCHARGE.--8 years (1936-44) unregulated, 272 cfs (197,100 acre-ft per year); 23 years (1944-57, 1962-72) regulated, 243 cfs (176,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,200 cfs Mar. 21 (elevation, 20.39 ft); maximum elevation, 23.06 ft Mar. 21; minimum daily discharge, 34 cfs Nov. 13, 29.
Period of record: Maximum discharge, 10,900 cfs Aug. 30, 1945 (elevation, 28.82 ft), at site 0.8 mile downstream at present datum; minimum daily, 1.3 cfs May 24, 1939, Nov. 5, 1950.
All flood data at site 0.8 mile downstream at present datum. Maximum elevation since at least 1835, 49.0 ft Dec. 9, 1935 (discharge, 40,000 cfs; furnished by engineer for Harris County). Flood of May 31, 1929, reached an elevation of 43.5 ft (discharge, 19,000 cfs at bridge on Capitol Avenue 2.8 miles downstream, from rating curve extended above 15,300 cfs, stage-discharge relation materially affected by bridge; furnished by city of Houston).

REMARKS.--Records good. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 26.3 miles and 26.5 miles upstream, respectively. Flow affected by tides and backwater from Whiteoak Bayou. Low flow mostly maintained by sewage effluent from Houston suburbs.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	505	194	36	475	355	111	211	158	1,100	87	254	57
2	490	146	571	460	412	72	180	150	1,170	95	146	54
3	490	65	669	460	372	70	108	173	520	92	180	55
4	550	51	225	460	417	72	55	318	115	140	175	55
5	867	47	1,300	460	687	53	49	471	108	200	238	56
6	424	43	1,450	460	775	45	47	242	630	112	231	78
7	308	39	711	460	712	44	51	1,110	1,020	132	188	85
8	460	39	313	455	840	45	52	795	1,140	152	285	94
9	475	41	221	455	1,040	45	47	445	1,140	165	150	80
10	445	39	213	450	1,040	45	46	1,000	1,730	158	100	99
11	445	38	350	450	1,510	49	44	1,980	916	173	200	108
12	430	38	392	445	804	45	44	2,790	242	247	400	115
13	415	34	336	445	471	44	49	2,090	812	236	300	114
14	415	35	316	434	422	41	47	880	1,170	390	350	211
15	415	37	333	432	551	38	49	630	1,140	333	275	356
16	484	39	319	437	641	64	61	694	2,020	329	242	152
17	505	39	548	447	815	50	54	846	1,250	372	152	168
18	460	106	324	479	908	45	51	1,060	880	351	109	178
19	400	65	316	484	884	44	47	1,140	778	338	102	160
20	364	41	294	520	874	107	44	1,060	1,020	415	70	142
21	400	43	282	445	861	6,570	131	614	1,100	375	68	122
22	415	38	280	430	835	2,240	102	106	1,020	336	75	101
23	394	300	277	430	867	646	68	598	1,020	330	158	120
24	378	100	280	430	964	829	61	898	694	310	133	350
25	372	75	280	424	1,040	863	57	1,020	364	278	123	250
26	366	60	274	415	639	829	49	1,060	277	250	96	300
27	358	51	277	415	255	795	249	1,100	203	255	81	350
28	350	47	277	415	97	710	351	1,020	154	180	84	350
29	386	34	280	420	98	778	213	1,060	111	121	66	350
30	296	45	430	2,920	------	540	221	1,060	107	99	65	600
31	198	------	460	1,070	------	247	------	1,060	------	235	57	------
TOTAL	13,260	1,969	12,634	16,982	20,186	16,176	2,838	27,628	23,951	7,286	5,153	5,310
MEAN	428	65.6	408	548	696	522	94.6	891	798	235	166	177
MAX	867	300	1,450	2,920	1,510	6,570	351	2,790	2,020	415	400	600
MIN	198	34	36	415	97	38	44	106	107	87	57	54
AC-FT	26,300	3,910	25,060	33,680	40,040	32,090	5,630	54,800	47,510	14,450	10,220	10,530

CAL YR 1971 TOTAL 167,929 MEAN 460 MAX 5,390 MIN 25 AC-FT 333,100
WTR YR 1972 TOTAL 153,373 MEAN 419 MAX 6,570 MIN 34 AC-FT 304,200

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 upstream from mouth.

DRAINAGE AREA.--8.81 sq mi. Prior to Apr. 1, 1965, 10.0 sq mi. Apr. 1 to May 17, 1965, 8.81 sq mi. At Antoine Drive, May 18 to Aug. 1, 1965, 9.94 sq mi; Aug. 2, 1965, to Sept. 1, 1966, 10.2 sq mi. 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 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, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--8 years, 5.56 cfs (4,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,020 cfs Mar. 20 (elevation, 78.60 ft); no flow for many days.
Period of record: Maximum discharge, 2,020 cfs Mar. 20, 1972 (elevation, 78.60 ft); no flow at times.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.01	.10	2.8	14	2.0	.63	.17	.17	.03	.50	.04
2	.02	.01	188	1.9	6.6	1.9	.53	2.1	.18	0	.24	.04
3	.03	0	53	1.5	3.6	1.0	.49	.80	.18	.01	.22	.04
4	.82	.04	12	4.8	2.2	.91	2.6	.46	.18	.08	.06	.04
5	5.8	.01	87	4.4	1.7	.77	.82	.22	.17	.02	.03	.06
6	13	.03	119	2.5	2.0	.57	.50	.18	.14	0	.03	.03
7	3.9	.03	37	1.8	1.8	.61	.17	100	.11	0	2.9	.02
8	1.6	.01	14	1.3	1.4	.65	.14	27	.10	0	.90	.45
9	.87	0	11	1.5	1.0	.43	.10	4.9	.10	.01	.27	.63
10	.40	0	14	1.9	.91	.35	.10	27	2.2	.01	1.3	.73
11	.13	0	6.8	1.3	35	.34	.10	86	1.7	.28	13	.74
12	.11	0	4.1	.86	32	.37	.10	97	.31	.07	8.1	.87
13	.11	0	2.9	.65	11	.32	.17	41	.19	10	4.3	.92
14	.05	.01	2.4	.54	5.9	.26	.17	14	.24	4.2	6.0	.50
15	.34	.02	2.6	.40	4.3	.83	.20	6.2	5.2	.55	12	.15
16	.20	0	6.3	.33	3.5	.58	.10	2.9	7.7	.12	91	.04
17	1.2	0	6.2	.32	2.7	.35	.05	1.8	1.3	.51	2.6	.68
18	.78	.11	2.6	.62	1.9	.21	.04	1.2	.38	3.0	.91	3.9
19	.33	.01	2.0	1.4	1.3	.12	.04	1.0	.20	2.7	.44	5.6
20	8.6	0	1.5	5.0	1.0	442	.05	.73	.10	.60	.21	.70
21	8.8	0	1.2	2.5	.90	429	.28	.54	.05	1.2	.11	.18
22	2.8	0	.88	1.6	.88	37	.08	.43	.03	2.2	.11	3.6
23	1.1	2.9	.85	1.2	.87	9.3	.07	.34	.03	.88	1.1	1.6
24	.52	.74	.73	.96	.80	3.7	.03	.30	.02	.44	1.9	2.9
25	.43	.16	.46	.70	.73	3.0	.03	.29	.03	.21	1.3	3.4
26	.29	.04	.49	.62	.64	2.0	.02	.25	.05	.15	1.1	15
27	.18	.01	.45	.61	.52	1.6	1.1	.22	.04	.10	.22	14
28	.09	0	.37	.45	.48	1.7	1.5	.20	.02	.60	.10	1.5
29	.08	0	.49	.50	1.9	1.3	.67	.18	0	.36	.08	.88
30	.04	0	2.9	152	------	.89	.32	.18	0	.54	.07	37
31	.01	------	3.8	37	------	.74	------	.18	------	1.5	.04	------
TOTAL	52.71	4.14	585.12	233.96	141.53	944.80	11.20	417.77	21.12	30.37	151.14	96.24
MEAN	1.70	.14	18.9	7.55	4.88	30.5	.37	13.5	.70	.98	4.88	3.21
MAX	13	2.9	188	152	35	442	2.6	100	7.7	10	91	37
MIN	.01	0	.10	.32	.48	.12	.02	.17	0	0	.03	.02
AC-FT	105	8.2	1,160	464	281	1,870	22	829	42	60	300	191
(††)	3.00	.97	7.59	3.68	1.58	7.57	1.74	6.23	2.79	4.55	5.46	5.64

CAL YR 1971 TOTAL 1,651.59 MEAN 4.52 MAX 206 MIN 0 AC-FT 3,280 †† 40.56
WTR YR 1972 TOTAL 2,690.10 MEAN 7.35 MAX 442 MIN 0 AC-FT 5,340 †† 50.80

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12- 2	0730	73.51	346	5- 7	1630	72.53	264
1-30	0915	72.52	250	8-16	0200	73.54	336
3-20	1830	78.60	2,020				

†† Weighted-mean rainfall, in inches, based on three 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 upstream from Whiteoak Bayou.

DRAINAGE AREA (revised).--11.3 sq mi. Prior to May 1965, 10.5 sq mi; May to August 1965, 10.7 sq mi; August 1965 to September 1967, 10.5 sq mi; September 1967 to February 1969, 10.4 sq mi; February 1969 to October 1969, 10.7 sq mi; October 1969 to October 1971, 11.1 sq mi; drainage area changes caused by changes in storm sewers and drainage ditches.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--8 years, 10.2 cfs (7,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,800 cfs Mar. 20 (elevation, 69.20 ft); minimum daily, 0.09 cfs Nov. 18, 22.
Period of record: Maximum discharge, 5,800 cfs Mar. 20, 1972 (elevation, 79.20 ft); no flow at times.

REMARKS.--Records fair. Low flow is partially sustained by sewage effluent. No known diversions above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.56	3.5	1.9	24	6.4	2.6	1.5	2.0	2.9	1.7	2.6
2	.92	.31	203	.92	13	6.6	2.4	16	2.0	1.9	2.2	.63
3	1.3	.25	45	.74	6.8	2.7	2.4	1.9	2.1	1.3	2.7	.75
4	4.4	.40	20	2.5	4.4	4.5	11	1.6	.97	2.4	1.8	.29
5	56	.60	171	3.1	5.2	5.1	3.0	1.4	1.4	1.8	1.3	.89
6	30	.40	147	2.2	7.6	1.9	2.6	1.5	1.9	1.8	.50	.70
7	13	.30	55	1.6	4.4	2.9	2.2	176	.74	3.2	31	.87
8	6.8	.25	32	3.2	4.0	5.0	2.5	25	.98	3.0	9.8	.72
9	4.8	.22	28	3.5	5.4	2.7	1.9	5.6	.59	3.2	1.8	.52
10	3.6	.20	30	3.0	2.9	2.7	3.1	89	41	3.2	9.8	.52
11	2.8	.20	17	3.4	106	3.3	3.9	74	4.8	16	27	.44
12	2.5	.20	13	1.5	40	1.7	4.1	154	1.4	8.5	38	3.5
13	1.2	.15	8.3	2.0	23	1.3	4.5	44	2.0	8.0	29	1.3
14	1.0	.15	9.2	1.7	10	3.0	4.3	49	4.5	6.5	28	2.5
15	2.0	.15	7.6	1.5	7.0	4.1	3.3	18	6.9	4.0	36	1.9
16	4.0	.10	51	1.3	5.0	4.7	3.5	7.7	77	2.0	54	.49
17	10	.10	49	1.8	7.6	2.6	2.6	5.4	11	7.0	6.0	3.2
18	5.0	.09	16	1.5	4.8	2.5	3.7	8.6	5.6	6.0	4.2	48
19	2.0	.50	13	70	4.5	2.9	2.9	10	3.9	5.0	2.7	16
20	30	.40	6.3	40	3.7	1,280	2.8	3.8	3.7	2.0	1.7	4.2
21	15	.12	4.3	15	2.9	710	5.8	2.5	2.6	7.0	1.3	3.8
22	7.0	.09	2.3	6.0	3.1	63	3.2	2.3	3.3	15	2.4	9.2
23	3.0	15	1.2	3.0	3.5	26	2.2	1.8	2.2	5.0	26	6.4
24	1.5	.76	.80	2.0	1.8	15	3.1	1.9	2.4	3.0	14	25
25	1.0	.50	.60	1.5	1.8	8.9	1.9	1.6	2.3	2.0	4.7	11
26	.70	.35	.50	1.0	4.0	6.4	1.6	1.5	1.4	1.6	4.5	53
27	.50	.30	.40	1.1	2.0	4.4	37	1.6	1.8	1.8	.86	34
28	.40	.25	.31	1.1	1.8	6.0	7.1	2.0	2.4	3.4	.55	16
29	.35	.20	2.1	1.8	7.1	4.1	2.1	1.6	2.5	1.3	1.1	8.5
30	.30	.20	2.9	405	------	3.1	1.2	2.3	2.4	2.7	.96	75
31	.80	------	3.5	45	------	3.3	------	2.3	------	8.0	2.6	------
TOTAL	212.97	23.24	943.81	629.86	317.3	2,196.8	134.5	715.4	197.78	140.5	348.17	331.92
MEAN	6.87	.77	30.4	20.3	10.9	70.9	4.48	23.1	6.59	4.53	11.2	11.1
MAX	56	15	203	405	106	1,280	37	176	77	16	54	75
MIN	.30	.09	.31	.74	1.8	1.3	1.2	1.4	.59	1.3	.50	.29
AC-FT	422	46	1,870	1,250	629	4,360	267	1,420	392	279	691	658
(††)	2.77	.99	6.62	3.85	1.47	7.73	2.02	6.46	2.67	4.18	5.30	5.65

CAL YR 1971 TOTAL 3,507.15 MEAN 9.61 MAX 530 MIN .09 AC-FT 6,960 †† 39.74
WTR YR 1972 TOTAL 6,192.25 MEAN 16.9 MAX 1,280 MIN .09 AC-FT 12,280 †† 49.71

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12- 2	0430	58.22	654	3-20	1830	69.20	5,800
12-16	2130	58.15	640	5- 7	1045	58.07	624
1-30	0330	59.45	948				

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

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 downstream from Texas and New Orleans Railroad Co. bridge, 2.4 miles upstream from Little Whiteoak Bayou, and 4.0 miles upstream from mouth.

DRAINAGE AREA.--84.7 sq mi; 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 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 5.76 ft below mean sea level, datum of 1929, adjustments of 1957 and 1959; 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 upstream at same datum.

AVERAGE DISCHARGE.--36 years, 68.9 cfs (49,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,300 cfs Mar. 20 (gage height, 43.50 ft); minimum daily, 5.1 cfs Apr. 25.
Period of record: Maximum discharge, 17,300 cfs Mar. 20, 1972 (gage height, 43.50 ft); maximum gage height, 43.60 ft 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 Dec. 9, 1935, prior to channel rectification, present site and datum (discharge, 14,750 cfs, furnished by engineer for Harris County). Flood of May 31, 1929, reached a stage of 47.0 ± 0.5 ft, prior to channel rectification, present site and datum (discharge, 9,360 cfs), computed on basis of current-meter measurement at stage 1.0 ft below crest, furnished by city of Houston.

REMARKS.--Records fair. Low flow partly sustained by industrial waste. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	14	42	134	21	18	13	12	12	34	16
2	11	12	1,340	30	72	22	21	105	15	10	36	15
3	13	10	561	31	42	22	23	38	16	10	27	15
4	31	11	173	67	26	20	36	22	15	12	18	14
5	179	11	957	52	23	19	18	16	15	12	14	14
6	102	12	909	31	30	17	16	16	13	12	13	19
7	52	12	368	23	30	17	17	928	14	20	16	21
8	26	10	186	20	27	16	17	324	14	15	33	17
9	21	12	140	23	28	16	16	86	13	14	15	16
10	16	12	154	27	30	15	20	413	179	13	31	15
11	16	12	101	23	372	14	20	716	31	43	79	14
12	16	13	89	18	259	13	22	1,090	24	33	143	25
13	19	9.6	49	18	110	13	23	525	20	56	256	19
14	21	12	46	19	57	13	25	286	24	99	140	30
15	32	12	54	19	42	13	26	125	42	42	93	43
16	67	14	148	18	41	13	23	67	215	33	270	20
17	80	14	213	17	42	13	19	41	21	106	53	26
18	25	74	48	29	44	13	21	29	12	49	38	30
19	28	14	34	49	42	13	21	33	12	82	21	50
20	41	9.6	30	74	41	2,710	19	19	12	39	14	15
21	199	9.0	30	25	38	4,150	25	15	12	68	13	14
22	104	9.0	29	19	34	333	11	12	12	72	14	33
23	50	103	29	17	31	110	7.4	11	12	51	95	23
24	31	16	27	14	26	43	5.7	11	12	19	33	123
25	21	10	28	14	20	36	5.1	10	12	15	24	85
26	17	10	28	14	18	30	5.3	8.7	10	15	21	110
27	16	9.3	29	10	18	25	260	7.0	10	49	13	119
28	16	10	25	10	17	28	76	8.3	12	46	12	61
29	13	10	22	14	18	24	22	8.9	12	35	12	39
30	14	12	44	1,640	------	20	15	12	12	24	13	270
31	14	------	52	345	------	20	------	11	------	35	14	------
TOTAL	1,302	497.5	5,957	2,752	1,712	7,832	853.5	5,006.9	835	1,141	1,608	1,311
MEAN	42.0	16.6	192	88.8	59.0	253	28.5	162	27.8	36.8	51.9	43.7
MAX	199	103	1,340	1,640	372	4,150	260	1,090	215	106	270	270
MIN	11	9.0	14	10	17	13	5.1	7.0	10	10	12	14
AC-FT	2,580	987	11,820	5,460	3,400	15,530	1,690	9,930	1,660	2,260	3,190	2,600

CAL YR 1971 TOTAL 21,903.1 MEAN 60.0 MAX 2,800 MIN 4.0 AC-FT 43,440
WTR YR 1972 TOTAL 30,807.9 MEAN 84.2 MAX 4,150 MIN 5.1 AC-FT 61,110

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-30	0400	26.70	3,420	5- 7	1100	25.53	2,720
3-20	2145	43.50	17,300	5-12	0730	24.37	2,180

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 downstream from the gage Buffalo Bayou at Houston.

DRAINAGE AREA.--469 sq mi.

PERIOD OF RECORD.--January 1962 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1959.

EXTREMES.--Current year: Maximum elevation, 22.2 ft Mar. 20; minimum, -0.7 ft Feb. 3.
Period of record: Maximum elevation, 22.2 ft Mar. 20, 1972; minimum, -3.5 ft Jan. 13, 1964.
Maximum elevation since at least 1835, 38.5 ft Dec. 9, 1935, present site and datum, unadjusted for land-surface subsidence.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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	3.6	2.1	3.7	1.9	3.7	1.7	3.2	1.7	3.3	2.1	2.8	1.6	2.5	1.0	4.3	2.5	3.5	1.5	2.7	0.9	2.9	1.5	2.8	1.3
2	3.3	2.2	3.1	1.2	5.1	3.4	3.1	.9	-	-	-	-.1	2.7	.9	4.1	2.2	4.0	2.0	2.9	1.5	3.4	1.5	3.0	1.3
3	3.2	1.9	2.9	.1	4.1	.8	3.2	1.7	-	-.7	2.8	.3	3.0	1.1	-	-	3.5	1.8	2.8	1.5	4.3	1.7	3.1	1.3
4	3.1	1.7	3.0	1.1	3.1	1.1	3.3	-.1	-	-	2.7	1.5	2.9	.7	-	-	3.5	2.0	4.0	.8	3.5	1.3	3.2	1.3
5	3.5	2.1	3.3	1.6	7.1	3.1	1.3	-.6	-	-	2.8	.9	3.0	1.0	-	-	3.6	2.2	2.5	.7	2.7	1.0	3.0	1.5
6	3.1	.8	3.3	1.2	5.4	3.0	2.0	1.3	-	-	3.2	1.5	3.1	1.3	-	-	3.0	1.8	2.7	.9	2.4	.7	3.3	1.5
7	2.7	1.3	2.6	.3	3.4	1.6	2.5	1.2	-	.4	3.1	1.5	3.3	1.5	-	-	3.0	1.5	3.2	1.3	2.5	.7	3.2	2.0
8	3.2	1.8	2.8	1.7	2.9	2.4	3.0	1.9	2.5	-	3.1	1.1	2.6	.7	-	-	2.9	1.2	3.4	1.4	2.4	.9	3.0	1.8
9	3.3	1.3	3.2	1.3	3.3	2.6	3.0	1.6	2.8	1.4	2.9	1.2	3.3	1.4	-	-	3.2	1.2	3.3	1.2	2.6	1.0	2.8	1.7
10	2.5	.8	2.8	1.3	3.6	1.6	3.1	1.2	3.2	1.7	3.0	1.2	3.5	2.0	-	-	5.4	1.6	3.9	1.3	2.7	1.1	2.7	1.3
11	2.8	1.0	2.6	1.5	2.5	1.2	2.7	1.0	3.9	3.0	2.5	1.1	3.0	2.0	-	-	3.4	1.8	3.4	1.5	3.2	1.3	3.3	2.2
12	2.8	1.4	2.7	1.6	2.7	1.5	3.1	1.2	3.5	1.2	2.6	1.3	3.1	1.8	-	-	3.6	1.3	3.4	1.4	2.7	1.6	3.8	2.3
13	2.7	1.4	2.7	1.3	2.7	1.0	3.0	.9	2.1	.5	2.3	1.1	3.2	1.5	-	-	4.7	2.2	3.2	1.4	2.9	1.7	4.0	2.7
14	2.5	1.3	2.9	1.7	3.7	1.7	2.3	.3	3.0	1.3	2.5	1.1	3.8	1.8	-	-	4.4	2.9	3.2	1.7	3.4	1.3	3.9	2.2
15	2.7	1.5	3.7	2.6	3.6	1.3	2.2	.0	3.0	1.3	2.8	1.3	4.3	2.1	-	-	4.1	2.6	3.2	1.8	2.7	.8	3.6	2.0
16	3.1	1.8	3.6	2.0	4.0	1.4	2.9	1.1	-	-	2.0	.5	2.9	1.1	-	-	5.2	2.8	3.3	1.9	2.4	.9	3.5	1.8
17	3.1	2.0	3.7	2.3	3.9	1.0	3.4	1.6	2.6	1.4	2.2	.1	3.2	.6	-	-	3.5	2.4	3.3	2.2	2.5	1.1	3.6	1.8
18	3.2	2.3	4.2	1.8	3.1	.8	3.5	1.5	2.2	1.1	2.5	.6	3.8	1.5	-	-	3.1	2.1	3.4	2.0	2.7	1.1	3.2	1.8
19	3.6	2.0	2.4	.3	3.6	1.8	2.8	1.2	2.2	.8	2.7	.3	3.6	1.8	-	-	3.3	1.9	3.7	2.2	2.9	1.1	3.0	1.8
20	3.7	2.2	2.5	.9	3.3	1.2	2.9	1.7	2.3	1.0	22.2	1.1	3.5	1.8	-	-	3.2	2.1	4.2	2.3	2.6	1.0	3.0	1.6
21	3.1	1.3	2.6	.7	2.8	.9	3.1	2.0	2.4	1.0	22.1	5.7	3.8	1.8	-	-	3.3	1.7	4.3	2.2	2.5	.8	3.1	1.7
22	2.8	1.2	3.9	1.9	2.2	.7	2.7	1.3	2.2	.7	5.7	2.3	2.5	.8	-	-	3.0	1.2	3.9	2.0	2.4	.9	3.4	1.7
23	2.8	1.2	4.3	1.5	3.0	1.7	2.8	1.2	2.4	.8	2.7	1.2	2.8	1.5	-	-	2.8	1.0	3.5	2.1	3.6	.9	3.7	2.3
24	2.5	1.0	2.5	.7	3.2	2.0	2.9	1.0	2.7	1.1	2.9	1.4	2.5	1.6	-	-	3.0	1.2	3.3	1.7	3.4	1.0	4.7	2.8
25	2.6	1.3	2.6	1.5	3.0	1.8	3.5	1.1	2.8	1.5	2.7	1.1	3.3	1.6	-	-	2.6	.8	3.1	1.4	3.1	1.8	4.3	2.6
26	2.8	1.4	3.2	1.6	3.0	1.3	3.4	1.6	2.7	.7	3.6	2.2	4.5	2.4	-	-	2.7	.9	3.2	1.3	2.7	1.4	4.7	2.5
27	3.1	1.3	2.8	1.4	3.2	1.4	3.2	1.3	-	-	3.1	2.0	6.4	3.6	-	-	2.7	.9	3.1	1.6	3.0	1.1	4.0	2.0
28	3.0	1.4	3.2	1.4	3.0	1.2	2.9	.7	-	-	2.7	1.8	3.8	2.7	-	-	2.8	.8	3.0	1.5	3.0	1.2	4.1	2.1
29	3.0	1.6	2.8	.8	3.0	1.2	3.1	.5	3.0	1.8	2.1	.8	3.9	2.1	-	-	2.6	.7	2.6	1.4	2.8	1.4	3.6	1.9
30	3.1	1.6	3.6	1.4	3.1	1.0	8.4	3.1	---	---	2.8	1.3	4.3	2.3	-	-	2.5	.7	3.6	1.2	2.7	1.3	3.9	-
31	3.2	1.6	---	---	3.0	1.0	3.8	1.7	---	---	2.9	1.3	---	---	2.8	-	---	---	3.2	1.2	2.8	1.3	---	---

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 upstream from Turning Basin, 2.8 miles upstream from Brays Bayou, and 4.8 miles downstream from Whiteoak Bayou.

DRAINAGE AREA.--476 sq mi.

PERIOD OF RECORD.--April 1961 to current year (elevations only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1959.

EXTREMES.--Current year: Maximum elevation, 5.7 ft Mar. 20; minimum, -0.8 ft Jan. 5.
Period of record: Maximum elevation, 15.1 ft Sept. 11, 12, 1961, result of Hurricane Carla; minimum, -3.5 ft Jan. 13, 1964.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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	-	-	3.9	2.2	3.9	1.9	3.2	1.7	3.6	2.2	3.0	2.2	2.6	1.2	4.4	2.6	3.5	1.5	-	-	-	-	3.0	1.5
2	-	-	3.4	1.4	4.2	1.8	2.9	1.0	3.5	1.7	1.6	.1	2.9	1.2	4.14	2.51	3.9	2.0	-	-	3.5	1.8	3.1	1.5
3	-	-	3.3	.4	3.1	.1	3.3	1.8	1.8	-.7	3.1	.7	3.2	1.2	3.29	1.82	3.6	1.9	-	-	4.5	1.9	3.3	1.6
4	-	-	3.3	1.4	3.3	1.3	3.4	1.4	2.4	.0	3.0	1.9	3.1	.9	3.30	1.54	3.7	2.2	-	-	3.7	1.4	3.3	1.6
5	-	-	3.6	1.9	4.8	3.2	1.6	-.8	3.5	1.7	3.3	1.2	3.2	1.2	3.82	1.91	3.7	2.4	-	-	2.9	1.1	3.2	1.8
6	2.5	1.1	-	1.5	4.3	1.6	2.3	1.4	3.5	1.9	3.5	1.9	3.3	1.4	3.93	2.33	3.2	1.8	-	-	2.6	1.0	3.4	1.7
7	3.1	1.4	2.9	.6	2.8	1.4	2.7	1.3	2.0	.1	3.4	1.9	3.4	1.7	3.77	2.65	3.0	1.3	3.4	1.8	2.7	.9	3.3	2.2
8	3.5	1.8	3.0	1.9	3.0	2.3	3.1	2.0	2.5	.8	3.2	1.4	3.0	1.0	2.88	1.63	2.9	1.1	3.5	1.7	2.6	1.0	3.2	2.1
9	3.5	1.4	3.6	1.6	3.4	2.7	3.1	1.8	2.8	1.1	3.3	1.6	3.4	1.6	3.16	2.21	3.2	1.1	3.4	1.5	2.7	1.2	3.1	2.0
10	2.6	.9	3.1	1.6	3.6	1.7	2.9	1.4	3.2	1.5	3.2	1.6	3.6	2.2	4.12	2.42	4.2	1.5	3.9	1.5	2.6	1.3	2.9	1.5
11	3.0	1.4	2.9	2.0	2.8	1.3	-	-	3.3	1.9	2.8	1.5	3.2	2.2	4.41	3.09	3.5	1.3	3.5	1.8	2.7	1.5	3.4	2.5
12	3.0	1.5	3.3	1.8	3.0	1.6	-	-	2.9	.9	-	-	3.3	2.0	4.79	2.89	3.8	1.5	3.6	1.6	2.8	1.8	3.9	2.6
13	2.9	1.7	3.0	1.7	2.9	1.3	-	-	2.2	.3	-	1.3	3.4	1.7	4.15	2.73	4.7	2.4	3.3	1.6	2.8	1.7	4.2	2.9
14	2.7	1.6	3.3	2.1	4.0	2.0	-	-	3.1	1.5	-	-	4.0	2.1	4.34	2.27	4.5	3.0	3.3	1.8	2.6	1.0	4.1	2.3
15	2.9	1.8	4.0	2.8	3.9	1.5	-	-	3.2	1.4	2.9	1.9	4.4	2.3	4.85	2.03	4.2	2.7	3.3	2.1	2.8	1.0	3.7	2.2
16	3.3	2.1	3.9	2.3	3.4	1.7	-	-	2.6	1.2	2.2	.7	3.0	1.4	3.56	1.98	3.9	2.3	3.4	2.2	2.6	1.3	3.6	2.0
17	3.2	2.1	4.0	2.6	3.2	1.0	-	-	2.6	1.4	2.3	.3	3.4	.8	3.47	1.76	3.5	2.3	3.4	2.4	2.7	1.3	3.8	2.0
18	3.5	2.5	4.3	2.0	-	-	-	-	2.1	.9	2.6	.9	3.9	1.7	3.32	1.94	-	-	3.4	2.2	2.9	1.4	3.3	1.9
19	3.8	2.1	2.9	.5	-	-	-	-	2.2	.4	2.8	.6	3.6	2.0	3.17	1.78	3.4	2.2	3.8	2.5	3.0	1.4	3.1	1.8
20	3.9	2.5	2.7	1.1	-	-	2.2	1.9	2.3	.6	5.7	1.4	3.7	2.0	2.85	1.82	3.3	-	4.3	2.6	2.8	1.2	3.1	1.8
21	3.3	1.3	2.9	1.0	-	-	3.3	2.2	2.4	.8	5.3	2.7	3.4	2.0	2.61	1.64	-	-	4.4	2.2	2.7	1.0	3.2	1.9
22	2.9	1.3	4.0	2.1	-	-	2.9	1.5	2.2	.5	2.8	1.1	2.7	1.0	2.64	1.62	-	-	4.0	2.3	2.5	1.0	3.5	2.0
23	3.0	1.3	4.2	1.8	-	-	3.1	1.5	2.4	.6	2.8	1.2	3.0	1.6	2.78	1.63	-	-	3.7	2.0	3.0	1.2	3.9	2.5
24	2.7	1.0	2.7	.8	-	-	3.1	1.2	2.7	1.0	2.8	1.3	2.7	1.7	2.82	1.63	-	-	3.4	1.8	3.3	1.3	4.5	2.9
25	2.9	1.4	2.7	1.7	-	-	3.7	1.3	2.9	1.2	2.7	1.1	3.4	1.8	2.75	1.32	-	-	3.3	1.7	3.1	2.0	4.4	2.7
26	3.0	1.7	3.3	1.8	-	-	3.7	1.8	2.6	.7	3.6	2.2	4.6	2.6	2.73	1.03	-	-	3.4	1.7	2.6	1.7	4.3	2.2
27	3.3	1.6	3.0	2.7	-	-	3.4	1.5	2.5	1.0	3.1	2.1	5.2	3.2	3.05	1.10	-	-	3.3	1.8	3.1	1.3	4.0	2.2
28	3.1	1.7	3.3	1.6	-	-	3.2	1.0	2.5	1.4	2.7	1.9	3.8	2.8	2.83	1.09	-	-	3.2	1.6	2.6	1.5	3.8	2.1
29	3.3	1.8	3.0	1.0	3.2	1.4	2.7	.8	3.3	2.1	2.1	.7	4.0	2.3	2.75	1.84	-	-	2.7	1.5	2.8	1.4	3.7	2.1
30	3.3	1.8	3.7	1.7	3.3	1.0	2.9	1.0	---	---	3.0	1.3	4.4	2.6	2.64	.90	-	-	-	-	2.9	1.5	2.9	1.1
31	3.4	1.9	---	---	3.0	1.0	3.4	1.5	---	---	3.0	1.6	---	---	2.85	2.59	---	---	-	-	2.9	1.5	---	---

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 southwest of city limits of Houston.

DRAINAGE AREA.--9.64 sq mi. Prior to Jan. 1, 1967, 9.66 sq mi. Prior to Oct. 1, 1971, 9.28 sq mi. Drainage area changes due to drainage ditch relocation and construction.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--8 years, 7.36 cfs (5,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,060 cfs May 12 (elevation, 72.57 ft); minimum daily, 0.61 cfs Dec. 1.
Period of record: Maximum discharge, 1,060 cfs May 12, 1972 (elevation, 72.57 ft); no flow for many days.

REMARKS.--Records fair. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	.92	.61	1.0	57	1.5	2.3	.82	3.0	1.9	1.4	1.9
2	3.4	1.6	16	1.1	22	1.2	1.2	1.5	2.9	1.0	3.4	1.3
3	2.6	.89	5.3	1.7	10	2.6	1.0	.99	1.5	.95	3.4	1.0
4	25	1.4	2.8	1.3	4.7	1.6	1.6	2.0	1.2	1.2	2.0	.92
5	18	1.3	88	1.2	3.4	1.1	.96	2.5	1.2	1.2	.85	1.1
6	12	.83	118	1.1	4.3	.98	1.7	1.5	1.3	1.0	.75	1.1
7	7.5	1.4	82	1.6	2.6	1.1	.92	16	1.3	2.3	.82	2.2
8	3.3	.80	58	3.2	1.9	1.3	.84	6.5	2.1	1.6	1.1	1.1
9	2.2	.74	31	3.3	1.8	1.8	1.2	2.7	1.7	1.1	2.2	.79
10	1.3	1.5	19	3.4	2.2	2.0	.77	54	35	2.0	4.5	.87
11	.89	.74	12	1.9	106	1.1	.82	196	5.7	1.4	2.0	1.1
12	1.4	1.5	7.7	1.2	82	1.4	1.6	435	2.7	1.5	2.0	3.1
13	.83	1.7	6.8	2.0	43	.95	.92	227	3.3	1.8	1.7	1.5
14	1.6	1.2	5.4	1.7	13	.89	1.4	144	3.7	1.3	3.7	1.5
15	1.6	.83	6.2	1.7	7.6	3.1	.87	98	10	1.1	12	2.5
16	1.9	1.1	5.2	.98	5.0	1.7	.70	55	6.8	1.0	11	1.5
17	5.6	.86	24	.95	3.6	2.1	.70	19	2.4	2.1	3.7	1.2
18	2.9	1.7	12	2.8	2.8	1.8	1.8	16	1.7	1.3	3.3	1.0
19	2.8	.80	5.8	2.6	2.6	.99	1.3	8.6	1.4	3.3	16	.90
20	48	2.6	4.0	3.0	2.0	15	.72	4.9	2.3	3.0	11	.80
21	35	1.4	5.0	1.8	1.6	48	8.2	3.9	2.8	1.8	1.3	.85
22	14	.80	4.7	3.8	2.0	55	2.2	2.6	1.5	2.1	1.3	1.8
23	6.1	10	2.2	1.8	2.2	33	1.4	2.8	1.1	1.1	7.1	3.0
24	2.6	1.6	1.1	1.2	2.0	8.9	.90	3.2	1.1	.97	7.3	9.7
25	1.5	1.6	1.0	1.8	1.7	4.3	2.3	2.3	1.2	1.7	5.7	3.3
26	1.2	.74	1.0	1.8	1.2	2.8	1.4	1.7	.99	1.2	3.2	26
27	1.3	1.8	1.3	1.1	1.1	1.9	27	1.5	2.0	.88	2.1	14
28	1.5	1.2	1.3	1.6	1.2	1.8	7.9	1.6	2.3	2.4	1.7	5.1
29	1.8	.74	1.3	5.2	2.4	2.0	1.5	1.9	1.2	2.0	3.2	5.1
30	1.8	.63	3.1	180	------	1.8	.98	1.7	3.3	3.7	1.5	25
31	1.7	------	2.2	84	------	1.9	------	1.5	------	3.6	1.0	------
TOTAL	214.82	44.92	534.01	321.83	392.9	205.61	77.10	1,316.71	108.69	53.50	122.22	121.23
MEAN	6.93	1.50	17.2	10.4	13.5	6.63	2.57	42.5	3.62	1.73	3.94	4.04
MAX	48	10	118	180	106	55	27	435	35	3.7	16	26
MIN	.83	.63	.61	.95	1.1	.89	.70	.82	.99	.88	.75	.79
AC-FT	426	89	1,060	638	779	408	153	2,610	216	106	242	240
(††)	2.97	1.23	4.68	3.87	2.29	2.77	2.07	7.94	4.04	2.04	3.78	4.36

CAL YR 1971 TOTAL 2,339.45 MEAN 6.41 MAX 220 MIN .26 AC-FT 4,640 †† 37.60
WTR YR 1972 TOTAL 3,513.54 MEAN 9.60 MAX 435 MIN .61 AC-FT 6,970 †† 42.04

PEAK DISCHARGE (BASE, 200 CFS).--Jan. 30 (0430) 310 cfs (69.00 ft); May 12 (0800) 1,060 cfs (72.57 ft).

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

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 southwest section of Houston, 1.6 miles upstream from Harris Gully, and 11.6 miles upstream from Buffalo Bayou.

DRAINAGE AREA.--88.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 3.90 ft below mean sea level; 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 downstream at same datum.

AVERAGE DISCHARGE.--36 years, 95.8 cfs (69,410 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,700 cfs May 12 (gage height, 40.56 ft); minimum daily, 33 cfs Nov. 27.
Period of record: Maximum discharge, 15,500 cfs Oct. 11, 1970 (gage height, 43.54 ft); maximum gage height, 51.70 ft Aug. 28, 1945; minimum daily discharge, 0.1 cfs Oct. 11, 12, 1937, Mar. 14, Apr. 1, 1958.
Maximum stage since at least 1911, 56.0 ft in June 1919 before channel rectification, former site, from information by engineer for Houston. Flood of May 31, 1929, reached a stage of 50.4 ft before channel rectification, former site (discharge, 11,095 cfs), from current-meter measurement at Lawndale Avenue Bridge, about 8 miles downstream from former site; furnished by Houston.

REMARKS.--Records fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	40	34	67	364	68	42	42	42	50	60	45
2	45	41	505	49	219	53	41	103	75	45	50	45
3	55	38	172	49	145	56	44	42	60	46	80	45
4	183	34	64	56	87	52	46	38	55	111	60	45
5	160	38	1,930	49	67	46	44	38	55	153	50	45
6	123	40	1,380	47	134	48	46	38	59	80	50	80
7	69	36	526	45	72	48	47	802	58	60	50	60
8	55	42	310	44	61	50	46	194	58	50	45	50
9	55	40	253	46	58	49	45	72	59	50	45	52
10	48	42	230	47	62	50	48	585	2,050	110	45	207
11	49	40	127	48	1,590	49	47	2,010	302	60	50	92
12	48	39	219	44	751	50	46	4,460	98	50	50	55
13	46	40	117	42	278	49	45	1,650	65	73	60	55
14	46	38	74	42	166	48	44	820	78	140	50	241
15	55	40	106	41	114	92	45	417	82	102	50	120
16	148	39	76	40	75	63	42	240	265	70	50	46
17	208	41	253	41	61	46	45	142	158	119	45	43
18	86	237	98	87	54	45	46	107	151	70	45	44
19	59	49	55	117	49	43	49	167	83	50	45	45
20	274	39	52	94	48	876	48	73	55	50	300	44
21	149	39	51	45	49	1,280	230	52	80	50	100	42
22	80	39	49	42	50	609	87	80	70	112	70	61
23	52	305	51	41	50	288	43	60	65	65	100	44
24	45	45	50	44	49	140	43	50	50	50	80	331
25	47	37	44	40	48	75	44	45	45	48	60	227
26	45	35	40	40	46	56	46	45	47	45	50	424
27	45	33	43	44	46	54	512	42	47	80	60	250
28	48	36	46	44	49	56	199	44	46	150	50	93
29	44	35	46	56	128	52	54	49	45	100	50	81
30	43	35	71	3,210	------	47	43	44	60	140	50	630
31	39	------	49	715	------	44	------	41	------	70	45	------
TOTAL	2,496	1,632	7,121	5,416	4,970	4,582	2,207	12,592	4,463	2,449	1,995	3,642
MEAN	80.5	54.4	230	175	171	148	73.6	406	149	79.0	64.4	121
MAX	274	305	1,930	3,210	1,590	1,280	512	4,460	2,050	153	300	630
MIN	39	33	34	40	46	43	41	38	42	45	45	42
AC-FT	4,950	3,240	14,120	10,740	9,860	9,090	4,380	24,980	8,850	4,860	3,960	7,220

CAL YR 1971 TOTAL 38,516 MEAN 106 MAX 3,610 MIN 24 AC-FT 76,400
WTR YR 1972 TOTAL 53,565 MEAN 146 MAX 4,460 MIN 33 AC-FT 106,200

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-30	0515	35.70	6,430	5-12	0830	40.56	11,700
3-20	2115	34.04	5,030	6-10	1215	36.82	7,470

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 section of Houston, 12.7 miles upstream from gage, Sims Bayou at Houston, and 19.7 miles upstream from mouth.

DRAINAGE AREA.--20.2 sq mi.

PERIOD OF RECORD.--August 1964 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.--8 years, 22.2 cfs (16,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,020 cfs May 12 (elevation, 51.30 ft); minimum daily, 4.0 cfs July 7, 9.
Period of record: Maximum discharge, 2,320 cfs May 21, 1970; maximum elevation, 52.77 ft Oct. 11, 1970; minimum daily discharge, 1.5 cfs July 26, 1965.

REMARKS.--Records fair. No known diversion above station. Low flow partly sustained by sewage effluent from Houston suburbs. Records furnished by Houston Lighting and Power Company show that during the water year 1972, 439 acre-ft of ground water was used for cooling purposes and released to bayou about 300 ft above gage. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	9.2	8.5	8.4	26	10	5.9	7.5	8.0	5.1	7.3	6.6
2	6.2	9.2	55	9.3	16	7.9	5.8	65	10	4.7	5.9	6.5
3	5.2	8.6	40	7.6	13	5.8	6.2	16	7.0	5.1	6.7	6.2
4	13	7.7	19	7.2	11	5.8	6.8	8.4	6.5	12	5.8	6.5
5	15	8.4	388	9.8	8.8	6.2	7.2	6.8	6.0	9.8	5.8	6.9
6	23	8.2	289	10	11	6.4	6.8	6.1	5.7	5.3	5.6	14
7	17	7.8	123	8.4	10	6.4	6.3	52	5.4	4.0	5.4	9.8
8	10	6.8	55	7.8	8.0	8.9	6.3	28	5.1	4.1	5.3	12
9	7.8	7.8	36	8.0	7.0	10	6.3	13	4.9	4.0	5.5	7.8
10	6.8	7.8	29	7.3	7.2	10	6.3	87	563	26	6.0	6.7
11	7.0	7.3	20	6.6	227	9.9	6.3	503	203	10	7.7	7.5
12	7.0	8.0	19	6.6	146	9.2	6.3	937	38	11	8.8	7.3
13	6.1	9.0	18	7.2	53	7.0	7.2	295	14	10	7.6	7.0
14	6.1	7.5	13	6.8	24	6.4	7.6	100	9.0	11	7.9	7.2
15	6.6	8.2	12	6.7	17	58	7.3	50	7.2	6.4	7.9	7.6
16	11	9.4	11	7.2	11	153	6.8	25	30	4.6	7.7	6.4
17	21	9.0	11	7.4	9.6	34	6.8	22	16	6.4	7.6	6.6
18	17	28	11	10	8.8	13	6.8	15	8.0	7.1	7.5	6.7
19	12	12	9.7	9.0	7.5	8.2	6.8	10	6.5	9.1	6.5	6.7
20	18	8.0	9.1	8.7	7.2	16	6.8	8.0	5.5	9.6	38	6.8
21	17	7.0	7.0	7.7	7.5	56	15	7.0	5.9	9.4	29	7.3
22	11	6.0	6.7	7.4	7.5	21	13	6.5	6.3	8.6	9.2	9.0
23	8.8	15	5.8	7.6	8.5	14	7.0	6.5	6.1	6.8	19	12
24	8.0	7.0	5.7	7.4	7.0	13	6.5	6.2	6.1	6.5	8.9	28
25	7.8	6.0	6.0	7.1	6.6	12	6.0	6.0	5.7	7.2	8.7	23
26	7.2	5.5	5.9	6.8	6.6	9.8	6.5	6.0	5.9	5.3	7.7	37
27	7.5	5.5	6.6	7.0	6.3	6.4	70	5.7	5.3	15	7.5	38
28	7.5	5.4	7.3	7.4	6.5	8.1	57	5.5	5.1	15	7.7	16
29	7.7	6.8	7.1	6.2	11	10	15	5.5	5.7	7.5	7.0	9.4
30	9.2	7.2	6.9	112	------	10	8.4	5.5	5.9	12	6.7	69
31	9.2	------	6.9	62	------	7.8	------	5.5	------	13	6.3	------
TOTAL	322.2	259.3	1,248.2	398.6	696.6	560.2	337.0	2,320.7	1,016.8	271.6	284.2	401.5
MEAN	10.4	8.64	40.3	12.9	24.0	18.1	11.2	74.9	33.9	8.76	9.17	13.4
MAX	23	28	388	112	227	153	70	937	563	26	38	69
MIN	5.2	5.4	5.7	6.2	6.3	5.8	5.8	5.5	4.9	4.0	5.3	6.2
AC-FT	639	514	2,480	791	1,380	1,110	668	4,600	2,020	539	564	796
(††)	2.71	1.29	4.62	2.12	2.31	2.67	2.76	7.57	3.02	3.17	1.88	4.70

CAL YR 1971 TOTAL 6,587.8 MEAN 18.0 MAX 812 MIN 4.0 AC-FT 13,070 †† 32.39
WTR YR 1972 TOTAL 8,116.9 MEAN 22.2 MAX 937 MIN 4.0 AC-FT 16,100 †† 38.82

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	ELEV.	DISCHARGE
12- 5	1345	48.66	730
5-12	0830	51.30	2,020
6-10	1230	50.42	1,440

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

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 section of Houston and 7.0 miles upstream from mouth.

DRAINAGE AREA.--64.0 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 0.61 ft below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--20 years, 62.3 cfs (45,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,930 cfs May 12 (gage height, 23.38 ft); minimum daily, 18 cfs Nov. 15, Aug. 18, 19, 30, 31.
Period of record: Maximum discharge, 8,800 cfs May 21, 1970 (gage height, 30.22 ft); minimum daily, 0.9 cfs Aug. 7, 1955.

REMARKS.--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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	26	22	37	158	51	22	21	24	24	24	21
2	22	25	258	47	80	30	21	250	28	21	21	24
3	24	24	146	26	47	27	21	100	35	20	23	23
4	77	23	44	45	31	25	22	40	23	41	24	26
5	88	23	1,450	33	26	24	21	25	21	47	21	24
6	47	24	1,270	31	46	24	21	20	20	23	20	33
7	38	24	397	25	39	26	21	250	21	20	19	33
8	29	23	146	23	28	26	21	100	21	21	20	29
9	24	25	129	24	27	28	21	43	20	22	19	25
10	24	24	108	23	28	29	22	211	641	44	27	23
11	24	22	55	23	754	28	22	1,530	534	42	25	25
12	23	20	157	23	612	27	21	2,390	104	22	23	32
13	23	19	105	23	217	25	21	1,090	49	29	21	27
14	22	19	52	22	85	25	22	313	35	43	30	40
15	21	18	88	21	61	65	21	140	28	40	44	37
16	30	19	52	21	47	265	20	59	467	21	22	29
17	64	19	48	22	37	70	19	51	239	25	19	20
18	50	122	36	31	33	36	20	37	56	26	18	19
19	30	38	32	165	30	26	19	32	34	72	18	19
20	58	21	29	136	29	37	20	30	26	45	38	19
21	56	19	27	39	29	172	33	27	24	67	93	21
22	29	20	24	31	30	66	43	27	24	52	25	21
23	24	84	23	28	30	39	20	26	25	32	74	38
24	22	32	23	26	30	32	20	25	24	21	66	150
25	22	24	22	22	28	28	20	25	23	21	51	170
26	26	21	21	21	28	26	19	26	22	19	41	237
27	24	21	21	23	28	25	406	24	23	21	33	224
28	25	22	24	25	28	26	252	23	22	34	22	103
29	25	22	23	27	51	27	41	24	23	34	21	54
30	24	22	23	722	------	27	25	22	22	43	18	369
31	25	------	23	403	------	27	------	24	------	62	18	------
TOTAL	1,042	845	4,878	2,168	2,697	1,389	1,297	7,005	2,658	1,054	938	1,915
MEAN	33.6	28.2	157	69.9	93.0	44.8	43.2	226	88.6	34.0	30.3	63.8
MAX	88	122	1,450	722	754	265	406	2,390	641	72	93	369
MIN	21	18	21	21	26	24	19	20	20	19	18	19
AC-FT	2,070	1,680	9,680	4,300	5,350	2,760	2,570	13,890	5,270	2,090	1,860	3,800

CAL YR 1971 TOTAL 17,740 MEAN 48.6 MAX 1,450 MIN 15 AC-FT 35,190
WTR YR 1972 TOTAL 27,886 MEAN 76.2 MAX 2,390 MIN 18 AC-FT 55,310

PEAK DISCHARGE (BASE, 1,600 CFS).--Dec. 5 (1800) 2,840 cfs (21.38 ft); May 12 (1600) 3,930 cfs (23.38 ft).

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

LOCATION.--Lat 29°40'35", long 95°14'37", Harris County, near left bank at downstream side of Forest Oaks Street Bridge in southeast Houston, 0.8 mile upstream from auxiliary gage at mouth of Berry Creek, and 1.7 miles upstream from Sims Bayou.

DRAINAGE AREA.--11.1 sq mi.

PERIOD OF RECORD.--April 1964 to current year (gage heights only for some periods).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1959; unadjusted for land-surface subsidence. Auxiliary water-stage recorder 0.8 mile downstream at same datum. June 25, 1964, to Jan. 11, 1965, auxiliary nonrecording gage 0.8 mile downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 1,530 cfs Apr. 27; maximum elevation, 13.45 ft Apr. 27; minimum discharge not determined. Period of record: Maximum discharge, 3,110 cfs May 10, 1968; maximum elevation, 17.59 ft Feb. 21, 1969 (backwater from Sims Bayou); minimum discharge not determined.

REMARKS.--Records fair. Discharge during storm periods computed using fall as a factor. Flow affected by tides and backwater from Berry Creek and Sims Bayou. Discharge estimated for periods of indefinite stage-fall-discharge relationship following runoff periods. No diversions above station. Low flow sustained by sewage effluent from south Houston and Houston suburbs. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	-	-	-	-	-	-	-	-	-		-
2	-	-	123	-	-	-	-	97	-	-		-
3	-	-	33	-	-	-	-	20	-	-		-
4	30	-	-	-	-	-	-	-	-	29		-
5	80	-	750	9.2	-	-	-	-	-	13		-
6	20	-	300	-	-	-	-	-	-	-		-
7	-	-	38	-	-	-	-	85	-	-		-
8	-	-	-	-	-	-	-	20	-	-		-
9	-	-	-	-	-	-	-	-	-	-		-
10	-	-	-	-	-	-	-	33	91	-		-
11	-	-	-	-	100	-	-	334	66	-		-
12	-	-	68	-	30	-	-	603	-	-		-
13	-	-	31	-	10	-	-	83	-	-		-
14	-	-	12	-	-	-	-	15	-	-		-
15	-	-	-	-	-	-	-	-	-	-		-
16	-	-	-	-	-	-	-	-	227	-		-
17	-	-	-	-	-	-	-	-	48	-		-
18	-	99	-	-	-	-	-	-	-	-		-
19	-	19	-	-	-	-	-	-	-	-		-
20	-	-	-	-	-	80	-	-	-	-		-
21	-	-	-	-	-	70	-	-	-	-		-
22	-	-	-	-	-	10	-	-	-	-		-
23	-	-	-	-	-	-	-	-	-	-		-
24	-	-	-	-	-	-	-	-	-	-		81
25	-	-	-	-	-	-	-	-	-	-		62
26	-	-	-	-	-	-	-	-	-	-		-
27	-	-	-	-	-	-	330	-	-	-		-
28	-	-	-	-	-	-	77	-	-	-		67
29	-	-	-	46	-	-	-	-	-	-		35
30	-	-	-	332	-------	-	-	-	-	-		135
31	-	-------	-	50	-------	-	-------	-	-------	-		-------
MAX	80	99	750	332	100	80	330	603	227	29	-	135
(††)	3.13	2.18	5.81	3.15	1.43	1.11	4.18	6.85	4.43	3.48	2.37	6.47

CAL YR 1971 MAX 750 †† 33.04
WTR YR 1972 MAX 750 †† 44.59

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12-5	1600	13.00	about 1,480	4-27	1730	a13.45	1,530
				5-12	0800	13.08	1,500

†† Weighted-mean rainfall, in inches, based on two rain gages.
a Peak elevation did not occur at same time as peak discharge.

08075770 Hunting Bayou at U.S. Highway 90-A, Houston, Tex.

LOCATION.--Lat 29°47'43", long 95°16'21", Harris County, on right bank 100 ft downstream from bridge on U.S. Highway 90-A in northeast section of Houston and 9.2 miles upstream from mouth.

DRAINAGE AREA.--14.4 sq mi.

PERIOD OF RECORD.--April 1964 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.--8 years, 17.4 cfs (12,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,130 cfs Mar. 20 (elevation, 37.05 ft); minimum daily, 1.8 cfs July 3.
Period of record: Maximum discharge, 3,130 cfs Mar. 20, 1972 (elevation, 37.05 ft); minimum daily, 0.88 cfs Aug. 24, 1971.

REMARKS.--Records good except those for July through September, which are poor. Low flow is largely maintained by sewage and industrial effluent. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	6.4	7.0	23	30	14	7.5	7.6	4.8	2.0	4.0	3.5
2	3.0	6.4	105	31	17	8.7	6.9	73	4.7	1.9	3.0	3.0
3	10	6.1	45	14	13	6.7	7.7	15	4.9	1.8	2.6	3.0
4	20	6.1	15	15	10	6.2	9.5	8.1	4.5	2.0	2.4	10
5	120	6.3	389	14	10	5.9	8.0	7.4	4.2	4.0	2.2	8.0
6	55	5.6	215	12	13	5.9	7.1	8.1	4.2	3.0	2.1	15
7	14	5.1	47	10	11	6.3	6.4	524	3.8	2.4	2.0	8.0
8	8.5	5.0	22	9.7	9.1	6.0	5.8	188	2.4	3.6	2.0	5.0
9	7.6	5.0	39	14	8.6	5.8	7.6	27	2.2	11	3.0	4.0
10	7.7	4.7	25	17	8.2	5.8	6.7	171	249	12	50	3.5
11	7.5	4.5	15	12	70	5.7	6.4	588	55	4.0	60	4.0
12	8.9	4.5	39	9.7	54	5.9	6.2	470	5.8	3.4	30	5.0
13	8.0	4.4	27	9.1	16	6.0	6.1	187	6.3	3.6	15	6.3
14	7.1	4.4	18	7.5	12	5.9	6.4	54	12	4.8	40	4.7
15	22	5.0	21	7.3	12	33	6.0	25	7.5	4.2	15	5.1
16	15	5.2	23	7.0	9.5	47	6.0	13	19	3.5	10	5.4
17	20	5.3	55	7.0	8.9	7.5	6.2	11	8.9	7.0	7.0	4.2
18	13	48	17	8.7	8.4	5.9	6.7	9.7	5.1	5.0	5.0	16
19	11	16	13	40	7.7	5.6	6.4	8.5	4.6	7.0	7.0	27
20	11	6.2	12	50	7.6	464	5.6	8.7	4.6	5.0	4.0	4.9
21	9.2	5.3	11	16	7.6	931	21	8.1	3.1	4.0	3.0	3.6
22	8.0	5.2	10	12	7.3	103	12	7.6	2.9	3.0	2.9	3.8
23	7.6	33	9.3	10	7.0	30	5.7	7.1	2.8	2.6	20	11
24	7.7	7.1	9.2	8.6	7.0	16	5.5	6.6	2.5	2.4	10	49
25	7.7	6.5	9.4	7.4	6.8	12	5.4	6.3	2.2	2.2	8.0	44
26	7.4	6.0	9.0	8.5	6.8	9.6	5.3	5.8	2.1	2.0	7.0	68
27	7.1	5.5	9.4	8.2	6.6	9.1	196	5.8	2.0	2.0	6.0	120
28	6.8	5.0	15	7.3	6.4	8.4	211	5.6	1.9	8.0	5.5	59
29	6.8	4.5	11	7.3	17	8.1	14	5.7	2.0	3.0	5.0	89
30	6.4	8.0	11	520	------	8.4	7.8	5.4	2.0	10	4.5	104
31	6.3	------	9.8	92	------	11	------	5.2	------	5.0	4.0	------
TOTAL	453.3	246.3	1,263.1	1,015.3	408.5	1,804.4	618.9	2,473.3	437.0	135.4	342.2	697.0
MEAN	14.6	8.21	40.7	32.8	14.1	58.2	20.6	79.8	14.6	4.37	11.0	23.2
MAX	120	48	389	520	70	931	211	588	249	12	60	120
MIN	3.0	4.4	7.0	7.0	6.4	5.6	5.3	5.2	1.9	1.8	2.0	3.0
AC-FT	899	489	2,510	2,010	810	3,580	1,230	4,910	867	269	679	1,380
(††)	2.04	1.79	5.92	4.55	1.79	6.02	3.14	7.62	3.85	2.88	3.14	6.12

CAL YR 1971 TOTAL 5,493.88 MEAN 15.1 MAX 722 MIN .88 AC-FT 10,900 †† 35.18
WTR YR 1972 TOTAL 9,894.70 MEAN 27.0 MAX 931 MIN 1.8 AC-FT 19,630 †† 48.86

PEAK DISCHARGE (BASE, 700 CFS, REVISED)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12- 5	1430	29.88	705	4-27	2145	29.85	850
1-30	0730	30.53	946	5- 7	1500	31.22	1,160
3-20	2230	37.05	3,130	5-11	0130	31.23	1,160

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

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 miles upstream from station 08076000, and 21 miles upstream from Halls Bayou.

DRAINAGE AREA.--35.5 sq mi.

PERIOD OF RECORD.--August 1965 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.--7 years, 19.1 cfs (13,840 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,940 cfs Mar. 20 (elevation, 89.75 ft); minimum daily, 0.24 cfs Nov. 10-17.
Period of record: Maximum discharge, 2,940 cfs Mar. 20, 1972 (elevation, 89.75 ft); maximum elevation, 91.09 ft Feb. 21, 1969; minimum daily discharge, 0.16 cfs Oct. 21, 22, 1969.

REMARKS.--Records good. Records furnished by Houston Lighting and Power Company show that 2,200 acre-ft of ground water for cooling purposes was released to bayou about 8 miles upstream from gage during the current year. No known diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.1	3.4	4.5	33	6.3	3.7	4.6	3.4	3.9	5.6	4.1
2	3.4	2.9	374	4.0	18	6.8	3.8	28	2.9	4.1	4.2	3.9
3	3.7	3.4	222	3.5	11	5.5	3.6	15	3.3	3.1	3.8	3.9
4	3.2	2.6	44	4.0	7.8	4.8	4.2	6.7	3.1	3.6	3.7	3.9
5	7.9	1.9	87	4.5	6.6	4.4	4.5	4.4	3.0	5.8	3.9	16
6	4.5	1.7	211	4.0	6.1	4.3	3.7	3.3	3.4	3.4	3.7	13
7	3.1	1.4	105	3.5	6.6	5.3	3.6	300	3.0	3.4	4.1	6.6
8	3.0	.64	33	3.5	5.6	5.8	3.8	294	3.4	3.2	4.1	5.2
9	3.6	.28	21	4.0	5.5	4.9	3.4	62	4.2	6.0	4.1	4.7
10	5.2	.24	22	6.0	4.8	4.2	3.4	160	12	10	8.7	4.1
11	4.8	.24	16	4.3	17	4.1	3.2	614	8.6	4.1	9.5	4.0
12	4.1	.24	9.4	3.9	37	4.1	3.6	732	3.7	7.6	11	4.9
13	3.2	.24	7.0	3.8	19	4.5	3.6	527	22	9.1	8.8	7.5
14	2.6	.24	6.3	3.8	12	4.6	3.9	160	26	6.4	8.0	6.8
15	2.8	.24	5.8	3.7	9.2	8.7	3.8	59	21	4.6	11	9.2
16	3.7	.24	5.9	3.5	7.6	12	5.3	24	13	4.1	51	9.5
17	3.4	.24	5.3	4.0	6.7	5.2	3.9	16	7.3	9.2	15	7.9
18	2.8	.56	4.4	4.2	5.6	4.1	3.6	10	5.2	7.8	8.8	6.8
19	3.7	2.4	4.0	4.4	4.9	3.9	3.6	8.2	4.2	6.5	6.8	5.1
20	3.9	2.7	4.0	7.5	5.3	711	3.5	7.3	4.0	5.5	6.0	6.3
21	10	2.4	3.9	5.9	5.1	845	6.0	5.6	3.6	5.2	5.6	6.8
22	4.2	2.3	4.0	5.2	4.9	118	5.6	5.1	4.0	5.1	6.0	6.6
23	3.1	8.2	3.8	4.3	4.9	32	3.6	4.2	3.6	5.9	5.6	6.6
24	2.5	5.3	3.7	4.0	4.5	16	3.3	4.8	3.8	4.1	7.9	8.2
25	2.5	4.2	3.6	4.0	4.5	11	2.9	4.7	3.9	4.5	7.5	8.8
26	2.4	3.2	3.3	4.0	4.4	7.8	3.5	4.4	4.2	4.5	5.8	12
27	2.4	3.6	3.4	3.9	4.4	6.3	15	4.4	4.1	4.1	4.7	21
28	2.0	3.3	4.5	3.7	4.5	6.1	23	3.7	3.9	4.0	4.3	8.2
29	2.7	2.9	4.4	3.8	6.5	5.3	8.5	3.8	3.5	4.0	4.8	6.2
30	2.8	3.6	6.0	226	------	4.7	7.0	3.4	3.9	5.0	4.5	40
31	3.1	------	5.2	117	------	4.2	------	3.5	------	7.5	4.5	------
TOTAL	113.9	64.50	1,236.3	466.4	273.0	1,870.9	154.1	3,083.1	195.2	165.3	243.0	257.8
MEAN	3.67	2.15	39.9	15.0	9.41	60.4	5.14	99.5	6.51	5.33	7.84	8.59
MAX	10	8.2	374	226	37	845	23	732	26	10	51	40
MIN	2.0	.24	3.3	3.5	4.4	3.9	2.9	3.3	2.9	3.1	3.7	3.9
AC-FT	226	128	2,450	925	542	3,710	306	6,120	387	328	482	511
(††)	1.79	1.24	6.54	3.01	1.42	5.94	2.39	7.48	2.99	3.29	4.45	4.68

CAL YR 1971 TOTAL 3,463.56 MEAN 9.49 MAX 374 MIN .24 AC-FT 6,870 †† 33.50
WTR YR 1972 TOTAL 8,123.50 MEAN 22.2 MAX 845 MIN .24 AC-FT 16,110 †† 45.22

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12- 2	1900	83.98	566	5- 7	1930	84.76	880
3-20	1900	89.75	2,940	5-12	1645	86.76	1,450

†† Weighted-mean rainfall, in inches, based on two 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 northeast of Houston, 12.0 miles upstream from Halls Bayou, and 23.4 miles upstream from mouth.

DRAINAGE AREA.--72.7 sq mi, unadjusted for basin boundary changes.

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

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--20 years, 42.3 cfs (30,650 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,500 cfs Mar. 21 (gage height, 65.45 ft); minimum daily, 2.1 cfs Apr. 26.
Period of record: Maximum discharge, 7,000 cfs July 30, 1954 (gage height, 64.75 ft); maximum gage height, 65.75 ft Sept. 12, 1961; no flow at times.

REMARKS.--Records fair. No known diversion above station. Low flow 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	7.1	6.5	12	119	22	8.4	6.1	7.6	8.0	9.3	5.9
2	6.3	7.2	1,130	9.9	57	18	7.1	246	6.9	8.0	7.5	5.4
3	6.8	6.4	637	8.6	33	12	8.2	51	6.6	8.0	5.3	5.5
4	21	8.0	141	16	21	11	7.8	12	6.6	10	7.2	5.3
5	82	5.2	448	21	17	9.4	9.3	5.4	6.3	15	5.5	13
6	47	4.9	605	14	21	9.0	8.0	3.6	6.6	10	5.0	28
7	13	4.9	333	11	20	9.8	7.2	510	6.3	10	5.1	11
8	7.3	3.5	102	9.8	15	11	6.2	709	6.3	10	12	7.7
9	7.3	3.1	103	11	13	10	5.9	191	6.6	30	5.5	6.9
10	10	3.4	70	13	12	8.4	5.4	268	26	50	58	7.2
11	9.8	2.8	39	9.9	92	8.5	5.3	1,420	36	25	84	5.4
12	8.8	2.7	23	8.8	139	8.0	5.4	1,500	11	15	37	8.9
13	7.1	2.7	16	8.2	63	8.1	6.1	1,160	33	20	68	14
14	5.6	3.0	13	7.4	34	7.9	4.8	420	94	15	59	10
15	5.6	2.4	14	6.8	25	22	5.1	187	35	15	34	23
16	9.6	2.4	62	6.5	20	58	10	81	25	10	49	82
17	11	2.8	638	7.2	17	13	5.1	48	20	15	37	16
18	11	18	51	9.9	14	9.0	4.5	30	15	19	14	12
19	7.6	8.9	19	27	11	7.7	4.8	24	10	16	12	8.4
20	11	6.7	15	109	11	945	4.2	18	9.0	14	9.2	7.4
21	18	5.6	12	26	11	4,600	8.9	15	9.0	15	8.5	9.0
22	13	5.6	10	15	11	538	15	12	9.0	10	8.5	9.8
23	7.5	28	9.4	11	11	140	5.1	11	8.5	11	8.4	13
24	6.2	15	9.2	8.8	11	55	3.3	9.8	8.5	7.7	13	65
25	5.8	7.6	9.2	7.5	11	36	2.7	11	8.5	5.6	13	41
26	5.8	6.1	8.9	6.8	10	23	2.1	9.2	8.5	5.7	11	52
27	5.3	5.1	8.2	7.0	9.5	18	89	9.5	8.5	5.8	7.6	106
28	5.7	5.9	8.5	6.5	9.8	16	164	8.5	8.0	9.8	6.8	75
29	5.3	5.5	10	6.9	30	16	19	8.2	8.0	8.9	6.7	44
30	6.3	5.1	19	780	------	14	8.9	7.9	8.0	6.6	6.6	115
31	6.5	------	17	405	------	11	------	7.6	------	16	6.7	------
TOTAL	381.2	195.6	4,586.9	1,607.5	868.3	6,674.8	446.8	6,999.8	458.3	425.1	620.4	812.8
MEAN	12.3	6.52	148	51.9	29.9	215	14.9	226	15.3	13.7	20.0	27.1
MAX	82	28	1,130	780	139	4,600	164	1,500	94	50	84	115
MIN	5.3	2.4	6.5	6.5	9.5	7.7	2.1	3.6	6.3	5.6	5.0	5.3
AC-FT	756	388	9,100	3,190	1,720	13,240	886	13,880	909	843	1,230	1,610
(††)	1.45	1.55	7.12	3.10	1.13	6.30	2.20	7.86	1.15	3.69	2.78	6.84

CAL YR 1971 TOTAL 9,954.5 MEAN 27.3 MAX 1,130 MIN 1.5 AC-FT 19,740 †† 35.78
WTR YR 1972 TOTAL 24,077.5 MEAN 65.8 MAX 4,600 MIN 2.1 AC-FT 47,760 †† 45.17

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12- 2	1030	60.49	1,870	5- 7	2300	58.98	1,360
12-17	0230	58.58	1,280	5-12	1900	62.54	2,770
3-21	0700	65.45	6,500				

†† Rainfall, in inches.

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 upstream from mouth.

DRAINAGE AREA.--24.7 sq mi, unadjusted for basin boundary changes.

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

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--20 years, 21.1 cfs (15,290 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,780 cfs Mar. 21 (gage height, 60.70 ft); minimum daily, 4.0 cfs Nov. 5.
Period of record: Maximum discharge, 3,780 cfs Mar. 21, 1972 (gage height, 60.70 ft); no flow at times prior to 1956.

REMARKS.--Records fair. No known diversion above station. Low flow is partly sustained by sewage effluent from Houston suburbs.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.3	4.8	11	61	25	13	7.0	6.1	4.8	7.8	4.3
2	4.7	4.9	409	11	39	15	11	153	5.9	4.3	6.6	4.1
3	8.3	4.5	108	9.7	25	9.3	9.5	20	6.3	4.2	7.6	4.1
4	20	4.4	19	15	18	8.3	9.9	8.3	5.7	4.4	8.1	4.1
5	42	4.0	359	16	16	7.5	11	7.1	5.7	6.4	6.0	5.0
6	33	4.4	231	11	23	7.3	11	7.1	5.6	4.5	5.8	4.8
7	8.1	4.5	69	9.3	21	7.3	9.8	410	5.4	4.3	6.9	4.3
8	6.3	4.4	32	8.0	15	7.5	8.1	177	5.3	4.2	22	4.1
9	5.8	5.2	62	8.5	13	7.2	7.7	34	5.2	25	6.9	4.1
10	5.7	4.5	42	9.4	12	7.2	7.8	238	46	9.2	28	4.1
11	5.4	4.3	22	9.3	86	7.0	7.7	595	18	5.1	62	4.3
12	5.2	4.2	18	8.1	75	7.0	8.4	721	6.2	7.9	33	6.0
13	5.0	4.2	17	7.9	38	7.1	7.5	295	44	14	121	6.2
14	5.0	4.3	14	7.1	24	6.9	8.0	110	51	79	115	11
15	6.3	4.3	18	6.1	20	12	7.7	48	17	23	20	16
16	7.2	4.5	36	6.4	17	24	7.5	23	14	8.9	7.8	33
17	11	4.2	353	6.9	14	8.0	7.4	16	7.8	27	6.9	6.4
18	9.9	18	34	9.1	11	5.9	8.8	12	6.3	12	5.6	6.2
19	8.4	8.7	22	29	9.3	5.8	8.3	11	6.0	8.3	5.2	5.6
20	11	4.4	17	77	8.8	844	7.9	9.4	5.9	10	5.0	4.8
21	8.2	4.4	14	22	9.1	2,390	8.8	8.3	5.6	26	5.0	4.4
22	5.8	4.5	11	14	9.0	228	8.6	8.1	5.7	8.8	4.8	4.8
23	5.2	20	9.7	11	8.4	67	6.6	7.8	5.4	13	4.8	6.9
24	5.2	7.3	9.2	9.5	8.4	41	6.6	7.6	5.1	7.6	5.2	48
25	5.2	4.5	8.7	7.8	8.2	27	6.5	7.4	5.0	6.6	5.2	22
26	5.2	4.2	8.2	7.0	8.0	19	6.3	7.1	4.8	6.4	5.2	47
27	5.1	4.1	8.7	6.8	7.6	17	84	6.6	4.8	6.4	5.0	53
28	5.0	4.2	8.7	7.0	7.7	18	82	6.4	4.6	20	4.6	69
29	5.1	4.9	8.3	7.1	42	18	9.4	6.4	4.7	50	4.6	100
30	4.6	4.6	9.4	730	------	15	7.2	6.4	4.9	11	4.3	115
31	5.2	------	13	138	------	13	------	6.2	------	26	4.3	------
TOTAL	273.0	169.9	1,995.7	1,236.0	654.5	3,882.3	404.0	2,980.2	324.0	448.3	540.2	612.6
MEAN	8.81	5.66	64.4	39.9	22.6	125	13.5	96.1	10.8	14.5	17.4	20.4
MAX	42	20	409	730	86	2,390	84	721	51	79	121	115
MIN	4.6	4.0	4.8	6.1	7.6	5.8	6.3	6.2	4.6	4.2	4.3	4.1
AC-FT	542	337	3,960	2,450	1,300	7,700	801	5,910	643	889	1,070	1,220

CAL YR 1971 TOTAL 5,536.0 MEAN 15.2 MAX 409 MIN 3.1 AC-FT 10,980
WTR YR 1972 TOTAL 13,520.7 MEAN 36.9 MAX 2,390 MIN 4.0 AC-FT 26,820

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-17	0200	54.77	984	5- 7	1700	54.39	968
1-30	0730	55.68	1,380	5-12	1530	57.23	1,810
3-21	0200	60.70	3,780				

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 downstream from mouth of Halls Bayou, and in northeast section of Houston.

DRAINAGE AREA.--213 sq mi.

PERIOD OF RECORD.--November 1962 to December 1964, May to September 1971 (discharge measurements only), October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929 through 1964 adjustment; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum discharge, 14,100 cfs Mar. 21 (elevation, 31.54 ft); minimum discharge not determined (affected by tides).
Period of record: Maximum discharge, 14,100 cfs Mar. 21, 1972 (elevation, 31.54 ft); minimum discharge not determined (affected by tides).

REMARKS.--Records fair except those below 700 cfs, which are poor. Discharge computed for all storms which produce peak discharges over 700 cfs. Tidal influences on the stage-discharge relationship affects discharge below about 500 cfs. Discharge below 500 cfs are estimated following designated storm periods only.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			-	-	476	-	-	-	-			-
2			1,730	-	252	-	-	603	-			-
3			1,740	-	115	-	-	272	-			-
4			377	-	30	-	-	50	-			-
5			1,610	-	-	-	-	-	-			-
6			2,020	-	-	-	-	-	-			-
7			888	-	-	-	-	1,130	-			-
8			343	-	-	-	-	1,820	-			-
9			389	-	-	-	-	444	-			-
10			180	-	-	-	-	541	-			-
11			90	-	372	-	-	3,690	-			-
12			50	-	439	-	-	2,880	-			-
13			-	-	150	-	-	3,720	-			-
14			-	-	50	-	-	1,100	-			-
15			-	-	-	-	-	493	176			-
16			-	-	-	-	-	167	149			-
17			1,620	-	-	-	-	50	30			-
18			374	-	-	-	-	-	-			-
19			120	113	-	-	-	-	-			-
20			60	527	-	872	-	-	-			-
21			-	170	-	12,000	-	-	-			-
22			-	100	-	3,210	-	-	-			-
23			-	50	-	400	-	-	-			-
24			-	-	-	110	-	-	-			-
25			-	-	-	-	-	-	-			-
26			-	-	-	-	-	-	-			254
27			-	-	-	-	354	-	-			563
28			-	-	-	-	761	-	-			293
29			-	-	-	-	128	-	-			568
30			-	2,690	------	-	30	-	-			442
31		------	-	1,540	------	-	------	-	------			------
TOTAL			-	-	-	-	-	-	-			-
MEAN			-	-	-	-	-	-	-			-
MAX			-	-	-	-	-	-	-			-
MIN			-	-	-	-	-	-	-			-
AC-FT			-	-	-	-	-	-	-			-

WTR YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
12- 2	2100	19.80	4,200	3-21	1130	31.54	14,100
12- 5	2200	16.13	2,880	5- 8	0200	15.60	2,730
12-17	1000	14.68	2,460	5-12	2400	22.38	5,390
1-30	1700	19.17	3,980				

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 downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles upstream from Hickory Slough, 2.3 miles north of Pearland, and about 30 miles upstream from head of Clear Lake.

DRAINAGE AREA.--38.8 sq mi.

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 28.34 ft above mean sea level, 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 higher.

AVERAGE DISCHARGE.--21 years (1947-59, 1963-72), 31.1 cfs (22,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,220 cfs May 12 (gage height, 16.62 ft); minimum daily, 0.08 cfs Nov. 6-8.
Period of record: Maximum discharge, 2,170 cfs Mar. 18, 1957 (gage height, 16.80 ft); 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 fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.70	1.0	2.4	105	6.6	7.9	7.2	2.7	7.6	23	.65
2	.50	.32	10	4.2	70	6.2	9.0	26	4.1	5.7	20	.46
3	.32	.32	11	6.2	44	3.6	11	32	7.0	4.7	22	.62
4	2.1	.18	7.9	6.1	28	3.2	7.9	19	10	4.8	18	1.4
5	4.7	.11	237	5.0	18	3.4	9.5	11	9.2	8.4	14	.45
6	5.2	.08	454	3.8	15	3.4	8.4	9.0	8.8	12	10	.51
7	5.2	.08	204	2.5	14	2.0	6.2	19	10	15	7.5	.32
8	3.8	.08	87	2.3	13	1.4	8.8	43	15	14	6.2	2.2
9	1.9	.11	63	2.4	9.5	1.3	15	25	15	13	5.3	2.7
10	.90	.18	52	2.1	7.9	1.2	5.4	75	145	15	4.5	1.8
11	.70	.18	42	2.8	120	1.1	7.2	985	331	19	6.2	.64
12	.40	.70	49	3.5	218	1.0	15	1,010	142	26	12	1.7
13	.40	.32	72	5.1	117	.94	3.2	1,060	66	24	15	.53
14	.40	.11	55	3.7	60	.90	1.4	478	41	23	16	.65
15	.24	.70	42	2.7	41	2.0	4.2	235	26	23	16	.68
16	.32	.40	36	1.6	29	76	7.0	128	217	20	12	4.4
17	.80	.18	33	.86	20	40	6.9	79	420	15	12	2.2
18	.80	4.5	28	1.2	14	21	5.1	51	127	14	11	2.0
19	1.9	1.0	19	2.2	11	13	3.6	30	53	13	6.5	.66
20	1.9	.80	15	10	7.7	8.6	5.9	18	26	9.3	8.2	.46
21	1.6	.70	12	6.9	6.4	35	11	12	18	16	13	.48
22	.80	.80	9.8	4.2	5.6	33	31	9.1	13	15	7.9	.28
23	.70	2.8	7.5	3.5	5.6	19	34	8.8	4.7	13	5.9	.25
24	.60	1.9	6.3	2.2	4.3	11	18	11	3.6	12	9.7	6.4
25	.40	1.4	4.8	8.0	3.7	9.5	10	6.2	11	10	6.6	16
26	.24	.90	3.3	2.9	3.1	7.2	12	3.6	9.8	13	14	73
27	.60	.60	2.6	2.0	2.4	5.2	69	3.1	15	15	5.0	96
28	.50	.70	3.7	1.6	2.1	4.8	81	3.0	9.5	18	2.3	39
29	.24	.24	2.7	9.8	6.0	8.4	52	2.5	8.8	17	1.1	24
30	.70	.18	2.2	230	------	3.6	20	2.5	8.1	9.8	.81	76
31	.90	------	2.0	194	------	13	------	3.3	------	19	1.4	------
TOTAL	40.36	21.27	1,574.8	535.76	1,001.3	346.54	486.6	4,405.3	1,777.3	444.3	313.11	356.44
MEAN	1.30	.71	50.8	17.3	34.5	11.2	16.2	142	59.2	14.3	10.1	11.9
MAX	5.2	4.5	454	230	218	76	81	1,060	420	26	23	96
MIN	.24	.08	1.0	.86	2.1	.90	1.4	2.5	2.7	4.7	.81	.25
AC-FT	80	42	3,120	1,060	1,990	687	965	8,740	3,530	881	621	707

CAL YR 1971 TOTAL 4,688.55 MEAN 12.8 MAX 516 MIN .08 AC-FT 9,300
WTR YR 1972 TOTAL 11,303.08 MEAN 30.9 MAX 1,060 MIN .08 AC-FT 22,420

PEAK DISCHARGE (BASE, 600 CFS).--May 12 (2000) 1,220 cfs (16.62 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, one downstream, at mouth of Moses Lake, and 4.5 miles north of Texas City.

PERIOD OF RECORD.--May 1967 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 (Moses Lake), 3.0 ft Dec. 6; minimum, -1.0 ft Feb. 3. Maximum elevation (Galveston Bay), 3.1 ft Dec. 5; minimum, -1.6 ft Feb. 3.
Period of record: Maximum elevation (Moses Lake), 3.8 ft Sept. 9, 1971; minimum, -2.6 ft Mar. 12, 13, 1968. Maximum elevation (Galveston Bay), 4.7 ft Feb. 14, 1969; minimum not recorded but probably occurred Mar. 12 or 13, 1968.

REMARKS.--The purpose of this station is to record elevations of high tides in Galveston Bay and the corresponding elevation of the water surface in Moses Lake. Moses Lake is connected to Galveston Bay by gated opening through levee. No elevations are shown for Moses Lake until elevation in Galveston Bay exceeds 3.0 ft.

MAXIMUM DAILY ELEVATION, IN FEET, GALVESTON BAY AND MOSES LAKE
WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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	2.2	-	2.1	-	2.9	-	2.2	-	2.2	-	1.3	-	1.2	-	2.6	-	1.9	-	1.1	-	1.5	-	1.6	-
2	1.8	-	2.0	-	3.0	-	2.1	-	1.8	-	1.4	-	1.1	-	2.5	-	1.9	-	1.3	-	1.9	-	1.7	-
3	1.7	-	1.9	-	1.4	-	1.8	-	.6	-	1.1	-	1.7	-	1.8	-	1.9	-	1.2	-	2.4	-	1.9	-
4	1.5	-	1.8	-	2.2	-	2.0	-	.8	-	1.5	-	1.3	-	1.7	-	1.9	-	1.6	-	2.1	-	1.9	-
5	1.5	-	2.1	-	3.1	3.0	.3	-	2.0	-	1.4	-	1.6	-	1.9	-	2.0	-	1.0	-	1.5	-	1.7	-
6	1.4	-	2.2	-	3.0	-	.9	-	1.8	-	1.9	-	1.7	-	2.0	-	1.4	-	1.5	-	1.2	-	1.8	-
7	1.6	-	1.7	-	1.4	-	1.5	-	.5	-	1.7	-	1.6	-	1.9	-	1.5	-	2.0	-	1.2	-	1.7	-
8	2.1	-	1.5	-	1.9	-	1.8	-	1.0	-	1.6	-	1.6	-	1.4	-	1.4	-	2.0	-	1.1	-	1.5	-
9	2.2	-	2.1	-	2.2	-	1.8	-	1.3	-	-	-	1.8	-	1.5	-	1.7	-	1.9	-	1.2	-	1.4	-
10	1.5	-	1.5	-	2.3	-	1.6	-	1.7	-	1.4	-	1.9	-	2.5	-	2.1	-	2.3	-	1.3	-	1.4	-
11	1.5	-	1.3	-	1.6	-	1.5	-	1.9	-	1.3	-	1.5	-	2.6	-	1.9	-	2.1	-	1.1	-	2.1	-
12	1.6	-	1.5	-	1.6	-	1.9	-	1.8	-	1.2	-	1.7	-	2.6	-	2.2	-	1.7	-	1.2	-	2.5	-
13	1.4	-	1.5	-	1.7	-	1.8	-	.8	-	1.1	-	1.6	-	2.5	-	3.0	-	1.6	-	1.2	-	2.8	-
14	1.1	-	1.9	-	2.3	-	1.6	-	1.5	-	1.0	-	2.2	-	2.3	-	2.8	-	1.5	-	-	-	2.8	-
15	1.3	-	2.5	-	2.3	-	1.5	-	1.7	-	1.2	-	2.5	-	2.2	-	2.5	-	1.7	-	-	-	2.3	-
16	1.5	-	2.5	-	1.9	-	1.7	-	.9	-	.8	-	1.6	-	2.0	-	2.1	-	1.8	-	1.2	-	2.3	-
17	1.6	-	2.6	-	1.9	-	2.0	-	.9	-	-	-	1.7	-	1.9	-	2.0	-	2.0	-	1.3	-	2.3	-
18	1.7	-	2.7	-	2.1	-	2.2	-	.5	-	-	-	2.0	-	1.6	-	1.7	-	2.0	-	1.5	-	2.0	-
19	2.1	-	1.9	-	2.3	-	1.3	-	.3	-	-	-	1.8	-	1.6	-	1.9	-	2.3	-	1.6	-	1.8	-
20	2.3	-	1.4	-	2.1	-	1.5	-	.6	-	-	-	1.7	-	1.2	-	1.7	-	2.7	-	1.4	-	1.6	-
21	2.0	-	1.4	-	2.5	-	1.6	-	.7	-	-	-	1.8	-	.9	-	2.0	-	2.9	-	1.3	-	1.6	-
22	1.6	-	2.5	-	1.2	-	1.4	-	.5	-	1.2	-	1.1	-	1.0	-	1.4	-	2.7	-	1.1	-	1.8	-
23	1.7	-	2.9	-	1.8	-	1.5	-	.8	-	1.2	-	1.3	-	1.1	-	1.2	-	2.4	-	1.4	-	2.3	-
24	1.3	-	1.6	-	1.8	-	1.6	-	1.2	-	1.1	-	1.3	-	1.2	-	1.4	-	2.1	-	1.4	-	2.7	-
25	1.4	-	1.6	-	1.8	-	2.0	-	1.2	-	1.2	-	1.7	-	1.2	-	1.2	-	2.0	-	1.4	-	-	-
26	1.5	-	1.9	-	2.0	-	2.1	-	1.2	-	1.7	-	2.5	-	1.2	-	1.2	-	1.8	-	1.0	-	2.7	-
27	1.9	-	1.5	-	2.2	-	2.0	-	.9	-	1.7	-	3.0	-	1.2	-	1.2	-	1.7	-	1.2	-	2.7	-
28	1.6	-	1.8	-	1.7	-	1.8	-	.9	-	1.1	-	2.5	-	1.4	-	1.2	-	1.5	-	1.2	-	2.5	-
29	1.7	-	1.9	-	2.0	-	1.3	-	1.4	-	1.2	-	2.4	-	1.3	-	1.1	-	1.2	-	1.5	-	2.3	-
30	1.6	-	2.8	-	2.1	-	1.3	-	---	---	1.5	-	2.6	-	1.3	-	.9	-	1.3	-	1.6	-	1.8	-
31	1.7	-	---	---	2.0	-	1.7	-	---	---	1.6	-	---	---	1.4	-	---	---	1.3	-	1.6	-	---	---

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 west of Hitchcock, and 7 miles from mouth and Jones Bay.

DRAINAGE AREA.--15.6 sq mi.

PERIOD OF RECORD.--August 1963 to current year (elevations only).

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

EXTREMES.--Current year: Maximum elevation, 6.96 ft May 12; minimum, -0.66 ft Feb. 3.
Period of record: Maximum elevation, 8.15 ft June 21, 1968; minimum unknown.
Maximum elevation since at least 1930, 14.6 ft July 25, 1959, from information by local residents.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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	2.56	-	2.56	1.78	2.84	1.76	2.23	1.22	2.60	2.01	1.83	1.31	-	-	-	-	2.44	0.89	1.50	0.53	1.86	1.10	2.07	0.90
2	-	-	2.36	1.21	2.98	1.92	2.13	.58	2.32	1.36	1.57	.12	-	-	-	-	2.38	1.38	1.76	.93	2.37	1.20	2.19	1.08
3	-	-	2.21	.45	2.35	.37	2.17	1.36	1.41	-.66	1.67	.16	-	-	2.22	-	2.34	1.42	1.76	1.11	2.91	1.48	2.40	1.11
4	-	-	2.22	1.00	2.07	.67	2.08	-.09	1.22	-.43	1.86	1.17	-	-	2.11	1.04	2.35	1.71	1.55	.66	2.43	1.02	2.39	1.35
5	-	-	2.44	1.35	4.04	2.06	.55	-.65	2.42	.90	1.81	.76	-	-	2.40	1.07	2.39	1.84	1.47	.50	1.85	.66	2.18	1.31
6	-	-	2.50	1.16	4.05	1.87	1.24	.57	2.40	1.43	2.31	1.14	2.07	-	2.56	1.70	2.17	1.31	1.92	.51	1.63	.52	2.36	1.43
7	-	-	1.94	.52	1.99	.92	1.72	.68	1.43	-.07	2.08	1.21	1.96	1.19	2.63	1.78	1.87	.88	2.32	.93	1.64	.50	2.14	1.53
8	-	-	2.08	1.27	2.21	1.62	2.06	1.44	1.46	.40	1.83	.77	1.76	.63	1.98	1.07	1.84	.83	-	-	1.58	.51	1.97	1.45
9	-	-	2.46	1.18	2.43	1.97	2.10	1.27	1.67	.46	2.03	1.03	2.20	1.30	1.91	1.42	2.17	.70	-	-	1.61	.53	1.86	1.37
10	-	-	1.93	1.17	2.58	1.14	1.92	.96	2.08	.86	-	-	2.38	1.64	2.86	1.42	2.45	.98	2.59	-	1.63	.66	1.73	1.02
11	-	-	1.77	1.47	1.74	.72	1.80	.78	3.34	1.65	-	-	2.05	1.39	3.48	2.08	2.37	1.00	2.37	1.28	1.55	.85	2.39	1.67
12	-	-	1.87	1.25	1.85	.92	2.20	.91	3.79	1.59	-	-	1.97	1.24	6.96	1.86	2.59	1.01	2.18	1.13	1.56	1.07	2.71	1.91
13	-	-	1.78	1.13	1.87	.72	2.18	.92	1.59	.40	-	-	2.06	1.15	5.89	2.97	3.34	1.69	1.97	1.14	1.63	1.02	3.05	2.14
14	-	-	2.24	1.40	2.67	1.34	1.60	.35	1.76	.98	-	-	2.47	1.34	2.82	2.14	3.24	2.22	1.94	1.22	1.46	.86	2.94	1.73
15	-	-	2.78	2.05	2.54	1.14	1.79	.39	2.14	1.01	-	-	2.73	1.65	2.64	1.48	2.92	2.17	2.13	1.43	1.50	.43	2.56	1.59
16	-	-	2.79	1.90	2.28	1.12	2.00	.95	1.50	.62	-	-	2.02	1.18	2.37	1.37	2.57	1.85	2.21	1.36	1.59	.66	2.57	1.42
17	-	-	2.90	2.02	2.17	.84	2.39	1.23	1.50	.84	-	-	-	-	2.34	1.19	2.51	1.84	2.39	1.52	1.67	.76	2.61	1.38
18	-	-	3.02	1.82	2.24	.99	2.57	1.32	1.03	.29	-	-	-	-	2.12	1.24	2.28	1.77	2.40	1.52	1.87	.81	2.27	1.12
19	-	-	2.27	.61	2.68	1.53	1.76	.92	.93	-.12	-	-	-	-	2.04	1.04	2.40	1.85	2.70	1.73	2.01	.80	2.08	1.11
20	-	-	1.86	.69	2.38	1.06	1.88	1.28	1.14	.11	-	-	-	-	1.72	1.10	2.25	1.58	3.09	1.85	1.78	.76	2.15	1.15
21	-	-	1.84	.52	1.83	.54	2.05	1.65	1.18	.19	-	-	-	-	1.47	.86	2.37	1.28	3.25	1.94	1.71	.67	2.07	1.24
22	-	-	2.70	1.60	1.41	.42	1.81	1.07	1.01	-.09	-	-	-	-	1.47	.75	1.90	.76	3.04	1.75	1.55	.60	2.14	1.37
23	-	-	3.33	1.79	2.02	1.33	1.88	.95	1.35	.98	-	-	-	-	1.62	.72	1.63	.53	2.71	1.71	1.82	.63	2.62	1.72
24	-	-	2.06	.63	2.17	1.52	1.95	.73	1.56	.29	-	-	-	-	1.63	.70	1.94	.61	2.52	1.48	2.02	.80	3.06	2.33
25	-	-	1.89	1.35	1.97	1.36	2.33	.67	1.67	.66	-	-	-	-	1.69	.71	1.66	.67	2.36	1.23	1.92	1.20	3.04	2.20
26	-	1.05	2.18	1.55	1.94	1.09	2.42	1.42	1.61	.40	-	-	-	-	1.68	.71	1.70	.53	2.32	1.17	1.47	.98	3.04	2.13
27	2.16	.96	1.85	1.17	2.30	1.07	2.47	1.22	1.36	.57	-	-	-	-	1.79	.60	1.62	.44	2.24	1.24	1.64	.78	3.70	2.70
28	2.01	1.20	2.10	1.30	2.30	1.00	2.22	.72	1.39	.61	-	-	-	-	1.83	.72	1.71	.50	2.00	1.24	1.64	.86	2.93	1.87
29	2.12	1.24	2.08	.67	2.17	.87	1.73	.54	1.94	1.13	-	-	-	-	1.82	.48	1.56	.46	1.67	1.11	1.85	.92	2.67	1.48
30	2.13	1.35	2.18	1.24	2.27	.88	3.80	1.34	----	----	-	-	-	-	1.75	.51	1.84	.43	1.59	.89	1.98	.95	2.23	.83
31	2.14	1.30	----	----	2.14	.78	2.64	1.49	----	----	-	-	----	----	1.88	.62	----	----	1.87	1.14	1.97	.81	----	----

08078000 Chocolate Bayou near Alvin, Tex.

LOCATION.--Lat 29°22'09", long 95°19'14", Brazoria County, on right bank 800 ft downstream from bridge on Farm Road 1462, 5.9 miles southwest of Alvin, and 6.9 miles upstream from State Highway 35.

DRAINAGE AREA.--87.7 sq mi.

PERIOD OF RECORD.--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.

GAGE.--Water-stage recorder. Datum of gage is 10.31 ft 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 upstream and at datum 3.00 ft higher.

AVERAGE DISCHARGE.--23 years (1947-57, 1959-72), 97.6 cfs (70,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,700 cfs May 13 (gage height, 19.07 ft); minimum daily, 1.2 cfs Oct. 29.
Period of record: Maximum discharge, 7,400 cfs Oct. 8, 1949 (gage height, 21.80 ft, present datum, from floodmark before channel rectification), from rating curve extended above 3,800 cfs; no flow at times.
Maximum stage in recent years, 22.9 ft July 14, 1939, former site and present datum (adjusted from floodmark 1,700 ft to right and 550 ft upstream from present gage, on basis of slope of flood of Oct. 8, 1949), from information by local residents.

REMARKS.--Records good. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	3.8	2.1	19	420	11	41	33	26	75	36	2.2
2	8.0	2.3	2.8	158	230	11	29	28	26	70	29	1.8
3	7.2	1.7	13	89	122	8.8	20	27	40	70	30	3.7
4	9.3	7.0	15	61	67	7.4	11	21	41	70	33	2.1
5	18	9.0	332	45	50	6.8	14	16	39	75	26	9.8
6	15	9.3	1,190	33	52	6.0	23	16	30	80	19	53
7	13	6.0	989	25	67	5.5	30	65	29	80	17	52
8	9.6	3.0	451	19	51	5.6	30	237	25	80	19	30
9	7.2	2.2	300	17	40	5.0	25	140	28	75	23	18
10	6.0	4.6	236	17	35	4.8	35	160	703	75	22	10
11	4.8	6.2	159	16	477	4.8	47	1,880	2,300	80	21	7.8
12	4.0	3.3	171	14	1,090	4.8	32	2,450	1,900	74	21	6.7
13	3.5	2.2	577	13	516	4.8	32	2,560	1,000	80	19	4.7
14	3.2	1.8	328	12	220	4.9	21	1,530	500	74	15	6.4
15	3.0	1.6	221	9.3	122	5.4	27	538	100	62	16	13
16	3.2	1.5	158	7.5	80	9.4	22	227	2,500	58	16	11
17	5.8	1.5	202	7.2	57	27	19	117	2,500	52	12	7.0
18	9.6	2.1	176	7.2	40	16	18	68	1,800	72	10	5.6
19	8.0	4.6	96	7.8	29	21	17	60	1,200	74	9.2	9.4
20	5.8	3.7	67	8.5	22	16	23	43	500	60	22	8.8
21	17	2.4	48	12	18	16	22	33	200	113	13	4.5
22	18	1.9	37	12	16	12	42	27	100	213	5.8	2.4
23	9.9	3.2	31	9.6	14	8.7	39	18	75	144	3.4	2.3
24	5.8	4.6	26	8.2	12	33	25	16	75	86	3.6	22
25	3.7	3.8	22	7.0	11	28	23	18	90	64	3.6	83
26	1.7	2.8	19	6.2	9.9	17	16	15	90	49	4.4	432
27	2.0	2.6	18	6.2	8.7	23	22	17	90	45	7.0	1,780
28	1.3	2.3	15	5.8	7.9	29	83	20	75	35	4.7	1,170
29	1.2	2.3	14	6.0	8.0	42	63	25	75	36	3.9	484
30	2.0	2.2	12	640	------	31	40	27	75	40	3.9	247
31	4.4	------	12	874	------	23	------	25	------	40	3.9	------
TOTAL	220.5	105.5	5,939.9	2,172.5	3,892.5	448.7	891	10,457	16,232	2,301	472.4	4,490.2
MEAN	7.11	3.52	192	70.1	134	14.5	29.7	337	541	74.2	15.2	150
MAX	18	9.3	1,190	874	1,090	42	83	2,560	2,500	213	36	1,780
MIN	1.2	1.5	2.1	5.8	7.9	4.8	11	15	25	35	3.4	1.8
AC-FT	437	209	11,780	4,310	7,720	890	1,770	20,740	32,200	4,560	937	8,910

CAL YR 1971 TOTAL 29,667.9 MEAN 81.3 MAX 2,610 MIN 1.2 AC-FT 58,850
WTR YR 1972 TOTAL 47,623.2 MEAN 130 MAX 2,560 MIN 1.2 AC-FT 94,460

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12- 6	2100	13.35	1,280	6-11	1800	18.76	2,530
1-30	2400	12.39	1,130	6-16	unknown	unknown	about
2-12	0900	12.73	1,180	or 17			2,700
5-13	0100	19.07	2,700	9-27	1400	16.62	1,850

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 west of Angleton, 4.1 miles upstream from Missouri Pacific Railroad Co. bridge, 4.5 miles downstream from Styles Bayou, and about 45 miles upstream from Gulf of Mexico.

DRAINAGE AREA.--211 sq mi.

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 below mean sea level. Prior to Apr. 30, 1958, at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--28 years, 174 cfs (126,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs May 13 (gage height, 19.49 ft); minimum daily, 79 cfs Nov. 26, Mar. 12, 13.
Period of record: Maximum discharge, 10,600 cfs May 10, 1957 (gage height, 31.45 ft, present site, overflow from Brazos River); minimum daily, 0.3 cfs at times in 1955-56.
Maximum stage since about 1900, 32.2 ft in December 1913; flood of Dec. 5, 1940, reached a stage of 30.9 ft, 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) 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	124	82	107	600	117	128	152	141	125	127	149
2	146	124	88	106	430	116	128	150	141	122	127	150
3	146	119	88	106	290	119	132	149	139	121	131	152
4	146	119	86	110	210	119	128	141	137	123	132	151
5	132	119	213	110	168	118	132	129	138	123	134	150
6	155	124	620	108	150	114	128	129	134	127	133	150
7	137	119	730	105	146	90	128	132	131	151	133	151
8	128	119	640	103	137	85	137	131	130	160	134	150
9	132	119	510	101	132	80	132	132	133	160	133	150
10	132	119	390	100	128	80	132	154	151	158	133	149
11	128	119	290	100	228	80	128	363	185	152	134	150
12	128	119	260	99	660	79	128	452	221	151	134	151
13	128	119	440	99	660	79	130	979	243	159	133	151
14	128	119	470	97	510	82	132	992	222	157	134	154
15	128	119	390	96	330	85	151	856	199	146	133	154
16	128	124	310	96	178	88	151	659	179	143	133	155
17	128	124	320	96	128	118	151	483	213	144	133	154
18	128	128	310	102	137	119	149	359	199	146	133	154
19	128	124	290	105	128	128	150	332	179	144	133	153
20	150	128	235	100	119	128	152	235	166	140	134	155
21	196	128	191	98	112	124	152	202	161	141	135	158
22	178	124	168	96	114	115	156	236	155	141	133	157
23	146	128	150	96	146	118	149	216	150	140	133	155
24	132	90	142	96	137	124	146	191	148	139	135	186
25	128	82	132	94	132	137	142	177	145	139	148	195
26	124	79	128	94	128	137	140	170	145	140	151	203
27	124	82	119	94	124	142	145	163	142	128	151	551
28	124	82	116	95	119	137	150	162	140	126	151	776
29	124	82	114	106	117	137	155	153	139	127	150	733
30	124	81	110	521	------	132	153	150	135	127	149	606
31	124	------	110	730	------	132	------	142	------	127	149	------
TOTAL	4,208	3,386	8,242	4,166	6,598	3,459	4,215	9,071	4,841	4,327	4,236	6,753
MEAN	136	113	266	134	228	112	141	293	161	140	137	225
MAX	196	128	730	730	660	142	156	992	243	160	151	776
MIN	124	79	82	94	112	79	128	129	130	121	127	149
AC-FT	8,350	6,720	16,350	8,260	13,090	6,860	8,360	17,990	9,600	8,580	8,400	13,390
(†)	7,570	6,720	4,830	4,740	4,260	6,390	8,430	8,090	8,110	8,740	8,040	8,590

CAL YR 1971 TOTAL 58,291 MEAN 160 MAX 989 MIN 79 AC-FT 115,600 † 89,740
WTR YR 1972 TOTAL 63,502 MEAN 174 MAX 992 MIN 79 AC-FT 126,000 † 84,510

PEAK DISCHARGE (BASE, 800 CFS).--May 13 (2000) 1,020 cfs (19.49 ft).

† Water released from Harris Reservoir into Oyster Creek above gage (included in total flow past gage) in acre-feet.

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, one downstream from levee, 0.9 mile above Intracoastal Waterway, and 2.4 miles 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), 2.2 ft Dec. 6; minimum, -0.8 ft Feb. 23. Maximum elevation (Gulf of Mexico), 3.5 ft Nov. 22; minimum, -1.0 ft Feb. 23.
Period of record: Maximum elevation (East Levee Ditch), 2.2 ft Sept. 10, Dec. 6, 1971; minimum not determined. Maximum elevation (Gulf of Mexico), 5.5 ft Sept. 10, 1971; minimum, -2.2 ft Feb. 3, 1970.

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 East Levee Ditch until elevation in the Gulf of Mexico exceeds 3.0 ft. The levee is an earthen structure about 43 miles long with a maximum height of 22 ft 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 ELEVATION, IN FEET, GULF OF MEXICO AND EAST LEVEE DITCH
WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch
1	2.6	-	2.7	-	3.2	1.0	2.4	-	2.6	-	1.7	-	1.7	-	2.9	-	2.4	-	1.4	-	2.1	-	2.0	-
2	2.1	-	2.5	-	3.0	-	2.0	-	1.9	-	1.3	-	1.6	-	3.4	1.7	2.7	-	1.5	-	2.3	-	2.1	-
3	2.0	-	2.3	-	1.7	-	2.0	-	.6	-	1.3	-	1.7	-	2.0	-	2.4	-	1.2	-	2.6	-	2.4	-
4	2.1	-	2.6	-	2.9	-	1.5	-	1.1	-	1.6	-	1.4	-	2.1	-	2.4	-	1.2	-	2.4	-	2.3	-
5	2.2	-	2.5	-	3.2	2.0	.8	-	2.1	-	1.8	-	2.0	-	2.2	-	2.4	-	-	-	2.1	-	2.0	-
6	2.2	-	2.4	-	2.6	-	1.1	-	1.7	-	2.0	-	2.0	-	2.4	-	2.2	-	-	-	1.8	-	2.1	-
7	2.5	-	2.1	-	-	-	1.4	-	1.1	-	2.0	-	1.9	-	2.3	-	2.1	-	-	-	1.8	-	1.9	-
8	2.7	-	2.5	-	-	-	1.7	-	1.5	-	2.1	-	1.7	-	1.8	-	2.2	-	-	-	1.7	-	1.8	-
9	2.6	-	2.5	-	2.2	-	1.8	-	1.8	-	2.2	-	2.3	-	1.9	-	2.6	-	-	-	1.5	-	1.7	-
10	2.2	-	1.9	-	1.9	-	1.7	-	2.1	-	2.0	-	2.0	-	2.5	-	2.9	-	-	-	1.4	-	1.6	-
11	2.0	-	1.8	-	1.5	-	1.6	-	2.3	-	1.6	-	1.9	-	3.1	1.3	3.0	-	2.4	-	1.4	-	2.3	-
12	1.9	-	1.6	-	-	-	2.1	-	1.6	-	1.6	-	1.9	-	3.1	1.6	3.1	0.7	2.2	-	1.4	-	2.6	-
13	1.8	-	1.5	-	1.6	-	1.8	-	1.5	-	1.6	-	2.1	-	3.0	-	3.5	1.0	1.9	-	1.4	-	-	-
14	1.5	-	1.9	-	2.6	-	2.0	-	2.0	-	1.7	-	2.5	-	3.1	-	3.4	1.1	1.8	-	1.8	-	-	-
15	1.7	-	2.7	-	-	-	2.2	-	2.0	-	2.1	-	3.1	0.9	2.8	-	3.0	-	1.8	-	1.5	-	2.4	-
16	1.8	-	2.7	-	1.9	-	2.1	-	1.7	-	2.1	-	2.2	-	2.6	-	2.6	-	1.8	-	1.5	-	2.3	-
17	1.9	-	2.8	-	-	-	2.4	-	1.4	-	1.7	-	2.3	-	2.5	-	2.6	-	1.9	-	1.7	-	2.4	-
18	2.1	-	2.6	-	2.4	-	2.2	-	1.2	-	2.0	-	2.4	-	2.2	-	2.5	-	2.2	-	1.8	-	2.1	-
19	2.4	-	2.0	-	2.4	-	1.7	-	.8	-	2.2	-	2.1	-	1.9	-	2.6	-	2.4	-	2.0	-	-	-
20	2.4	-	2.0	-	1.9	-	1.9	-	1.0	-	2.5	-	2.3	-	1.6	-	2.4	-	2.7	-	1.8	-	-	-
21	2.1	-	1.9	-	1.3	-	1.8	-	1.1	-	2.3	-	2.3	-	1.2	-	2.4	-	3.0	-	1.9	-	-	-
22	2.1	-	3.5	0.7	1.4	-	1.4	-	.9	-	2.2	-	1.9	-	1.2	-	2.2	-	2.8	-	1.4	-	-	-
23	2.0	-	3.5	1.5	2.0	-	1.6	-	1.2	-	1.9	-	2.0	-	1.3	-	1.6	-	2.7	-	1.8	-	-	-
24	1.9	-	2.1	-	1.8	-	1.7	-	1.5	-	1.7	-	2.1	-	1.4	-	2.0	-	2.5	-	1.8	-	-	-
25	1.8	-	2.2	-	1.6	-	2.7	-	1.6	-	1.4	-	2.1	-	1.5	-	2.0	-	2.3	-	1.6	-	-	-
26	2.2	-	2.0	-	1.8	-	2.5	-	1.4	-	1.9	-	2.6	-	1.7	-	2.1	-	2.2	-	1.3	-	-	-
27	2.2	-	1.8	-	2.2	-	2.3	-	1.4	-	1.8	-	3.2	1.4	1.7	-	1.7	-	2.2	-	1.6	-	-	-
28	2.0	-	1.9	-	1.9	-	1.7	-	1.2	-	1.6	-	2.7	-	1.8	-	1.5	-	1.8	-	1.7	-	-	-
29	2.1	-	1.8	-	2.3	-	1.6	-	1.7	-	1.4	-	2.9	-	1.8	-	1.5	-	1.5	-	2.0	-	-	-
30	2.0	-	-	-	2.3	-	1.9	-	---	---	2.5	-	2.8	-	1.7	-	1.3	-	1.6	-	2.0	-	-	-
31	2.2	-	---	---	2.1	-	2.4	-	---	---	2.2	-	---	---	1.9	-	---	---	1.8	-	2.0	-	---	---

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, one downstream from levee, 0.6 mile upstream from Intracoastal Waterway, 0.7 mile west of State Highway 1495, and 1.7 miles 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), 2.1 ft Dec. 6; minimum not determined. Maximum elevation (Gulf of Mexico), 3.6 ft Nov. 22, 23; minimum, 0.0 ft June 30.
Period of record: Maximum elevation (South Levee Ditch), 2.4 ft Oct. 12, 1970; minimum not determined. Maximum elevation (Gulf of Mexico), 5.8 ft Sept. 10, 1971 (Hurricane Fern); minimum, -0.4 ft July 21, 22, 24, 30, 1971.

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 elevation in the Gulf of Mexico exceeds 3.0 ft. The levee is an earthen structure with a maximum elevation of 22 ft 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 ELEVATION, IN FEET, GULF OF MEXICO AND SOUTH LEVEE DITCH
WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

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	2.5	-	2.7	-	3.5	1.3	2.4	-	2.6	-	1.8	-	1.8	-	2.9	-	-	-	1.9	-	-	-	2.2	-
2	2.1	-	2.6	-	3.4	1.6	2.1	-	2.0	-	1.4	-	1.7	-	3.1	-	-	-	1.9	-	2.2	-	2.2	-
3	2.0	-	2.3	-	2.5	-	2.1	-	1.0	-	1.3	-	1.9	-	2.4	-	-	-	1.8	-	2.8	-	2.5	-
4	2.1	-	2.7	-	3.1	1.4	1.8	-	1.2	-	1.8	-	1.5	-	2.1	-	-	-	1.6	-	2.4	-	2.5	-
5	2.2	-	2.7	-	3.5	1.9	1.1	-	2.1	-	1.8	-	2.0	-	2.3	-	-	-	2.0	-	-	-	2.2	-
6	2.2	-	2.6	-	3.3	2.0	1.3	-	1.8	-	2.1	-	2.1	-	2.5	-	-	-	2.2	-	-	-	2.2	-
7	2.5	-	2.2	-	2.2	-	1.6	-	1.2	-	2.1	-	2.0	-	2.3	-	-	-	2.6	-	-	-	2.1	-
8	2.6	-	2.5	-	2.3	-	1.8	-	1.6	-	2.1	-	1.7	-	1.9	-	-	-	2.7	-	-	-	2.0	-
9	2.7	-	2.6	-	2.5	-	2.0	-	1.9	-	2.1	-	2.2	-	1.9	-	-	-	2.6	-	-	-	1.8	-
10	2.2	-	2.1	-	2.4	-	2.0	-	2.2	-	2.0	-	2.1	-	2.5	-	2.7	-	2.8	-	-	-	1.8	-
11	2.0	-	1.9	-	1.6	-	1.8	-	2.3	-	1.7	-	1.9	-	3.1	.6	2.7	-	-	-	-	-	2.3	-
12	2.2	-	1.9	-	1.6	-	2.2	-	2.0	-	1.6	-	2.0	-	3.2	1.0	2.7	-	-	-	-	-	2.6	-
13	2.2	-	1.8	-	1.9	-	2.0	-	1.7	-	1.6	-	2.2	-	3.1	1.1	3.4	.9	-	-	-	-	2.8	-
14	1.8	-	2.0	-	2.7	-	2.1	-	2.1	-	1.4	-	2.4	-	3.1	1.2	3.1	1.5	-	-	-	-	2.9	-
15	1.9	-	2.9	-	2.4	-	2.2	-	2.0	-	1.7	-	3.0	-	2.8	-	2.9	-	-	-	-	-	2.5	-
16	1.9	-	2.9	-	2.1	-	2.1	-	1.8	-	1.6	-	2.2	-	2.5	-	2.4	-	-	-	-	-	2.5	-
17	2.0	-	2.9	-	2.0	-	2.5	-	1.5	-	1.4	-	2.3	-	2.5	-	2.5	-	-	-	-	-	2.6	-
18	2.3	-	2.8	-	2.7	-	2.4	-	1.3	-	1.8	-	2.5	-	2.3	-	2.2	-	-	-	-	-	2.3	-
19	2.6	-	2.4	-	2.7	-	1.8	-	.9	-	1.8	-	2.2	-	-	-	2.3	-	-	-	-	-	2.0	-
20	2.6	-	2.2	-	2.3	-	1.9	-	1.1	-	2.1	-	2.2	-	-	-	2.2	-	-	-	-	-	2.1	-
21	2.4	-	2.1	-	1.7	-	1.9	-	1.4	-	2.1	-	2.0	-	-	-	2.4	-	-	-	-	-	2.0	-
22	2.4	-	3.6	1.2	1.7	-	1.5	-	1.2	-	1.7	-	1.8	-	-	-	2.2	-	-	-	-	-	2.1	-
23	2.3	-	3.6	1.5	2.1	-	1.8	-	1.5	-	1.8	-	1.8	-	-	-	1.8	-	-	-	-	-	2.5	-
24	2.2	-	2.1	-	2.0	-	1.9	-	1.7	-	1.6	-	1.9	-	-	-	2.2	-	-	-	1.5	-	2.8	-
25	2.2	-	2.3	-	1.7	-	2.6	-	1.8	-	1.4	-	2.1	-	-	-	2.0	-	-	-	1.7	-	2.8	-
26	2.1	-	2.3	-	2.0	-	2.5	-	1.6	-	1.9	-	2.7	-	-	-	2.1	-	-	-	1.3	-	2.8	-
27	2.3	-	1.9	-	2.3	-	2.3	-	1.6	-	1.9	-	3.3	-	-	-	2.0	-	-	-	1.7	-	2.8	-
28	2.1	-	2.2	-	2.1	-	1.9	-	1.4	-	1.7	-	2.6	-	-	-	2.0	-	-	-	1.8	-	2.8	-
29	2.2	-	2.2	-	2.4	-	1.8	-	1.8	-	1.6	-	2.9	-	-	-	1.8	-	-	-	2.1	-	2.6	-
30	2.1	-	3.2	1.3	2.4	-	1.9	-	---	---	2.2	-	2.9	-	-	-	1.8	-	-	-	2.1	-	2.4	-
31	2.3	-	---	---	2.2	-	2.3	-	---	---	2.2	-	---	---	-	-	---	---	-	-	2.2	-	---	---

08079550 Buffalo Springs Lake near Lubbock, Tex.

LOCATION.--Lat 33°32'02", long 101°41'41", Lubbock County, on left bank of spillway channel of dam on North Fork Double Mountain Fork Brazos River, 175 ft upstream from spillway crest, 9 miles southeast of Lubbock, and at mile 74.1.

DRAINAGE AREA.--286 sq mi.

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, 5,630 acre-ft Aug. 28 (elevation, 3,016.13 ft); minimum, 5,340 acre-ft Apr. 15 (elevation, 3,014.91 ft).
Period of record: Maximum contents, 6,120 acre-ft June 2, 1967 (elevation, 3,018.05 ft); minimum, 5,330 acre-ft Oct. 31, 1967, Dec. 15, 1970 (elevation, 3,014.88 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 1,600 ft long. Dam completed and storage began Sept. 15, 1959. Lake first filled to spillway elevation on July 6, 1960. Dam is property of Lubbock County Water Improvement District No. 1, and water is used for recreational purposes but may be sold to the cities of Lubbock and Slaton for municipal use. The uncontrolled service spillway is a concrete chute at right end of dam with a crest length of 138 ft and is designed to discharge 26,200 cfs at elevation 3,028.7 ft. Capacity table is based on data furnished by Lubbock County Water Improvement District No. 1 which was computed from their topographic surveys made in 1954. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	3,032.0	-
Crest of service spillway	3,015.0	5,360
Invert of 12-inch discharge conduit	2,980.0	510

REVISIONS.--WRD Texas 1968: Drainage area.

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

3,014.0	5,140	3,016.0	5,600
3,015.0	5,360	3,017.0	5,850

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,400	5,380	5,390	5,390	5,380	5,370	5,380	5,370	5,390	5,430	5,380	5,420
2	5,390	5,380	5,400	5,380	5,370	5,380	5,380	5,370	5,390	5,420	5,380	5,420
3	5,390	5,390	5,400	5,380	5,380	5,370	5,370	5,370	5,380	5,450	5,380	5,410
4	5,390	5,390	5,400	5,380	5,380	5,370	5,380	5,370	5,380	5,470	5,380	5,430
5	5,400	5,390	5,400	5,380	5,380	5,380	5,380	5,390	5,380	5,430	5,380	5,420
6	5,400	5,380	5,390	5,380	5,380	5,390	5,380	5,420	5,370	5,420	5,380	5,410
7	5,400	5,380	5,400	5,390	5,380	5,370	5,370	5,440	5,370	5,420	5,390	5,470
8	5,400	5,390	5,400	5,390	5,380	5,370	5,370	5,410	5,370	5,410	5,400	5,450
9	5,390	5,390	5,390	5,380	5,380	5,380	5,380	5,410	5,370	5,450	5,400	5,420
10	5,390	5,390	5,380	5,380	5,380	5,380	5,380	5,420	5,400	5,420	5,400	5,400
11	5,390	5,390	5,400	5,380	5,380	5,380	5,380	5,410	5,440	5,410	5,390	5,400
12	5,390	5,390	5,390	5,380	5,380	5,380	5,370	5,400	5,490	5,410	5,390	5,400
13	5,380	5,380	5,390	5,380	5,380	5,380	5,360	5,410	5,500	5,410	5,390	5,390
14	5,380	5,390	5,390	5,380	5,370	5,380	5,360	5,400	5,440	5,410	5,390	5,400
15	5,380	5,390	5,390	5,390	5,380	5,370	5,340	5,400	5,570	5,400	5,390	5,470
16	5,380	5,390	5,390	5,380	5,380	5,370	5,350	5,400	5,450	5,400	5,390	5,430
17	5,400	5,380	5,390	5,390	5,380	5,370	5,360	5,390	5,470	5,390	5,390	5,410
18	5,400	5,380	5,390	5,380	5,380	5,370	5,360	5,390	5,440	5,410	5,390	5,400
19	5,400	5,380	5,370	5,380	5,380	5,380	5,360	5,390	5,420	5,400	5,380	5,400
20	5,400	5,380	5,360	5,380	5,380	5,370	5,370	5,390	5,410	5,400	5,380	5,400
21	5,400	5,380	5,370	5,380	5,370	5,380	5,360	5,390	5,400	5,460	5,380	5,390
22	5,400	5,390	5,380	5,380	5,380	5,380	5,370	5,390	5,400	5,420	5,380	5,390
23	5,400	5,390	5,380	5,380	5,380	5,380	5,360	5,390	5,390	5,410	5,380	5,390
24	5,400	5,390	5,380	5,370	5,380	5,380	5,370	5,390	5,390	5,400	5,380	5,390
25	5,400	5,390	5,390	5,380	5,370	5,380	5,370	5,390	5,380	5,390	5,380	5,390
26	5,400	5,390	5,390	5,380	5,380	5,370	5,370	5,400	5,390	5,390	5,410	5,390
27	5,390	5,390	5,390	5,380	5,380	5,370	5,370	5,390	5,390	5,390	5,610	5,390
28	5,390	5,370	5,390	5,380	5,380	5,360	5,390	5,390	5,390	5,390	5,490	5,390
29	5,400	5,380	5,380	5,380	5,380	5,370	5,380	5,390	5,410	5,380	5,440	5,380
30	5,380	5,390	5,380	5,380	------	5,370	5,370	5,390	5,420	5,380	5,420	5,380
31	5,390	------	5,380	5,380	------	5,380	------	5,390	------	5,380	5,410	------
(†)	3,015.11	3,015.11	3,015.10	3,015.10	3,015.08	3,015.07	3,015.06	3,015.11	3,015.27	3,015.08	3,015.22	3,015.10
(*)	-10	0	-10	0	0	0	-10	+20	+30	-40	+30	-30
MAX	5,400	5,390	5,400	5,390	5,380	5,380	5,390	5,440	5,570	5,470	5,610	5,470
MIN	5,380	5,370	5,360	5,370	5,370	5,360	5,340	5,370	5,370	5,380	5,380	5,380

CAL YR 1971..... * +10 MAX 5,640 MIN 5,340
WTR YR 1972..... * -20 MAX 5,610 MIN 5,340

† 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 downstream from Panhandle and Santa Fe Railroad, and at mile 143.4 (measured from confluence with Salt Fork Brazos River at mile 923.2).

DRAINAGE AREA.--1,272 sq mi, of which 1,003 sq mi is probably noncontributing.

PERIOD OF RECORD.--November 1961 to current year. Prior to October 1963, published as Sand Creek or South Fork Double Mountain Fork Brazos River at Justiceburg.

GAGE.--Water-stage recorder. Datum of gage is 2,222.47 ft above mean sea level.

AVERAGE DISCHARGE.--10 years (1962-72), 35.2 cfs (25,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 33,200 cfs Aug. 13 (gage height, 16.42 ft, from floodmarks); no flow at times. Period of record: Maximum discharge, 49,600 cfs May 6, 1969 (gage height, 19.8 ft, from floodmarks); no flow at times. Maximum stages since at least 1895, 25.8 ft in 1914 and 22.2 ft in September 1955, from information by local resident. Flood of July 1961 reached a stage of 18.2 ft, from floodmark.

REMARKS.--Records poor. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	.99	.53	.44	.53	.08	.14	.01	0	1.6	0	198
2	1.6	.44	2.9	.24	.24	.10	.09	0	0	.31	0	40
3	74	.37	2.0	.24	.30	.08	.05	0	0	17	0	8.1
4	9.9	.37	2.9	.10	.18	.08	.06	0	0	357	157	304
5	4.1	.37	3.5	.10	.14	.08	.07	.11	0	59	6.2	155
6	2.7	.37	2.0	.24	.07	.10	.06	7.9	0	9.7	1.1	24
7	2.0	.37	1.3	.24	.07	.08	.03	204	0	104	1.8	6.8
8	1.8	.37	.99	.18	.10	.05	.03	3.7	0	4.4	1.1	171
9	1.8	.37	.44	.18	.10	.09	.04	.45	0	132	1.0	23
10	1.6	.30	.30	.18	.18	.10	.04	77	0	19	25	3.8
11	1.4	.30	.30	.18	.37	.12	.04	2.5	100	.86	1.6	2.0
12	1.4	.24	.30	.18	.14	.18	.02	215	84	.03	.9	1.4
13	1.4	.24	.30	.18	.10	.13	0	4.3	4.6	.03	9,920	1.3
14	1.3	.24	.30	.18	.05	.11	0	.48	.07	.01	1,130	55
15	1.1	.24	.30	.10	.07	.07	0	.12	1,310	.01	60	19
16	1.1	.24	.37	.10	.10	.08	0	.02	15	.03	22	9.4
17	1.1	.44	.44	.14	.07	.06	.01	.01	3.5	.03	12	2.2
18	102	.99	.53	.14	.05	.06	0	.01	.24	299	12	2.0
19	36	.99	.44	.14	.07	.05	.08	.01	.14	236	9.9	11
20	49	.74	.37	.14	.05	.05	0	.01	.10	2.8	9.9	2.4
21	5.2	.30	.30	.14	.02	.06	0	.01	.03	.07	9.4	1.8
22	2.9	.24	.53	.18	.03	.06	0	.01	.03	.01	9.4	1.6
23	2.0	.18	.44	.14	.07	.14	0	0	.03	0	8.8	1.6
24	1.4	.18	.53	.10	.14	.10	0	0	.03	0	8.3	1.4
25	1.4	.18	.53	.07	.14	.06	0	0	.03	0	8.3	1.3
26	4.4	.18	.44	.10	.12	.06	.04	0	.03	0	447	.99
27	1.6	.18	.37	.14	.13	.01	.06	0	.03	0	583	.99
28	.86	.18	.44	.18	.11	.03	.05	0	.03	0	156	.99
29	1.3	.18	.44	.18	.13	.01	.54	0	.03	0	35	11
30	8.3	.18	.30	.14	------	.79	.02	0	.03	0	14	2.7
31	3.5	------	.44	.30	------	.31	------	0	------	0	9.7	------
TOTAL	331.06	10.96	25.27	5.29	3.87	3.38	1.47	515.65	1,517.95	1,242.89	12,660.4	1,063.77
MEAN	10.7	.37	.82	.17	.13	.11	.049	16.6	50.6	40.1	408	35.5
MAX	102	.99	3.5	.44	.53	.79	.54	215	1,310	357	9,920	304
MIN	.86	.18	.30	.07	.02	.01	0	0	0	0	0	.99
AC-FT	657	22	50	10	7.7	6.7	2.9	1,020	3,010	2,470	25,110	2,110

CAL YR 1971 TOTAL 11,662.40 MEAN 32.0 MAX 2,620 MIN 0 AC-FT 23,130
WTR YR 1972 TOTAL 17,381.96 MEAN 47.5 MAX 9,920 MIN 0 AC-FT 34,480

PEAK DISCHARGE (BASE, 2,100 CFS).--June 15 (0430) 8,940 cfs (10.65 ft); Aug. 13 (about 1500) 33,200 cfs (16.42 ft, from floodmarks).

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.

LOCATION (revised).--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 downstream from Hitson Creek, 10 miles south of Aspermont, and at mile 34.5 measured from confluence with Salt Fork Brazos River which is at mile 923.2 on the Brazos River.

DRAINAGE AREA.--7,980 sq mi, approximately, of which 6,470 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1923 to September 1934, June 1939 to current year.

GAGE (revised).--Water-stage recorder. Datum of gage is 1,624.79 ft above mean sea level. Dec. 3, 1923, to Sept. 30, 1934, nonrecording gage at site 90 ft downstream at datum 2.0 ft higher and June 8, 1939, to Aug. 12, 1972, recording gage at present site and at datum 2.0 ft higher.

AVERAGE DISCHARGE.--43 years (1924-34, 1939-72), 177 cfs (128,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 69,600 cfs Aug. 14 (gage height, 28.76 ft); no flow Aug. 2-6.
Period of record: Maximum discharge, 91,400 cfs Sept. 26, 1955 (gage height, 29.5 ft, present datum); no flow at times.
Maximum stage since at least 1899, that of Sept. 26, 1955.

REMARKS.--Records fair. Small diversions above station for oilfield operations. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 733: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	200	19	16	6.8	4.0	.80	2.1	.13	.10	.1	386
2	234	106	39	14	6.8	3.3	.70	1.0	.08	45	0	254
3	2,660	84	45	14	5.0	2.9	.70	.84	.04	28	0	412
4	432	68	37	11	5.0	2.9	.60	.65	.06	13	0	515
5	236	59	35	11	5.6	2.7	.60	1.0	.06	6.4	0	602
6	143	46	36	14	5.6	2.5	.60	5.2	.03	155	0	1,070
7	102	38	43	14	4.7	2.3	.57	410	.08	120	7.7	540
8	66	37	45	14	5.0	1.8	.74	24	.08	80	22	339
9	51	35	45	14	5.2	1.8	.65	16	.08	50	18	276
10	38	32	51	12	8.0	2.0	.57	8.8	.08	37	107	806
11	32	31	49	12	10	2.0	.57	8.6	15	171	80	456
12	28	29	41	10	12	1.8	.57	20	57	184	229	315
13	24	27	37	8.4	13	1.8	.49	12	4.4	106	13,100	232
14	20	27	37	6.8	12	1.7	.49	383	3.7	52	48,500	190
15	17	25	34	6.0	10	1.4	.35	307	292	27	4,670	250
16	124	24	32	5.0	9.6	1.4	.35	109	2,010	14	1,680	136
17	281	27	29	8.4	9.2	1.3	.35	86	437	8.0	863	189
18	78	24	27	8.4	9.2	1.3	.35	52	151	5.0	545	347
19	332	23	27	8.8	8.0	1.3	1.3	38	61	4.7	402	240
20	241	22	23	7.6	7.6	1.2	.57	15	65	4.7	311	176
21	77	20	21	6.8	7.6	1.2	.35	9.6	41	125	307	190
22	292	23	20	6.8	6.4	1.2	.29	7.2	21	84	319	149
23	900	29	20	6.4	6.2	1.1	.24	5.6	10	43	236	112
24	245	27	19	5.6	6.2	1.1	.24	4.2	7.6	23	168	126
25	96	24	18	5.0	5.2	1.0	.24	2.9	3.5	12	134	112
26	195	23	18	5.0	4.4	1.0	.35	2.0	1.0	6.8	126	102
27	213	20	18	5.2	4.4	1.0	1.5	1.3	.24	3.7	9,210	97
28	80	20	16	5.2	4.4	.90	.65	.74	.06	2.0	5,130	89
29	461	18	17	6.2	4.2	.90	51	.20	.03	.84	1,280	80
30	456	18	16	6.2	------	.80	11	.13	.02	.35	510	73
31	216	------	16	6.2	------	.80	------	.13	------	.10	291	------
TOTAL	8,551	1,186	930	280.0	207.3	52.40	77.78	1,534.19	3,181.27	1,411.69	88,245.8	8,861
MEAN	276	39.5	30.0	9.03	7.15	1.69	2.59	49.5	106	45.5	2,847	295
MAX	2,660	200	51	16	13	4.0	51	410	2,010	184	48,500	1,070
MIN	17	18	16	5.0	4.2	.80	.24	.13	.02	.10	0	73
AC-FT	16,960	2,350	1,840	555	411	104	154	3,040	6,310	2,800	175,000	17,580

CAL YR 1971 TOTAL 87,650.45 MEAN 240 MAX 7,650 MIN 0 AC-FT 173,900
WTR YR 1972 TOTAL 114,518.43 MEAN 313 MAX 48,500 MIN 0 AC-FT 227,100

PEAK DISCHARGE (BASE, 8,800 CFS).--Aug. 14 (1230) 69,600 cfs (28.76 ft); Aug. 27 (about 1500) 22,100 cfs (16.38 ft, from high-water mark).

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 651, 2.6 miles downstream from Lake Creek, 4.1 miles upstream from mouth, and 14.4 miles northeast of Post.

DRAINAGE AREA.--112 sq mi, of which 39.9 sq mi is probably noncontributing.

PERIOD OF RECORD.--1959-61 (occasional low-flow measurements at road crossing 4 miles downstream), September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,301.6 ft above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--7 years, 2.09 cfs (1,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 496 cfs July 9 (gage height, 6.24 ft); no flow for many days.
Period of record: Maximum discharge, 15,300 cfs June 9, 1968 (gage height, 14.98 ft), from rating curve extended above 740 cfs on basis of slope-area measurements of 3,020 cfs and 15,300 cfs; no flow for many days.

REMARKS.--Records poor. No diversions above station. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	0	2.5	.10	0	0	0	0	0	1.3	0	.87
2	.16	0	6.0	.08	0	0	0	0	0	0	0	.08
3	.10	0	.38	.06	0	0	0	0	0	2.0	0	6.4
4	.08	0	.20	.03	0	0	0	0	0	17	.93	7.9
5	.08	0	2.0	0	0	0	0	3.3	0	.56	0	2.3
6	.07	0	.29	0	0	0	0	6.5	0	.01	0	.20
7	.05	0	.18	.02	0	0	0	5.4	0	1.4	8.6	2.5
8	.11	0	.18	.05	0	0	0	.13	0	0	0	57
9	.14	0	.16	0	0	0	0	1.4	0	42	0	0
10	.13	0	.14	0	0	0	0	6.2	.67	.08	2.8	0
11	.11	0	.12	0	0	0	0	1.9	.78	0	.03	0
12	.09	0	.10	0	0	0	0	3.2	.44	0	0	0
13	.07	.11	.10	0	0	0	0	7.6	.02	0	10	0
14	.08	0	.10	0	0	0	0	6.3	0	0	1.2	0
15	.08	0	.10	0	0	0	0	.30	.87	0	.01	4.8
16	.05	.01	.10	0	0	0	0	0	0	0	0	6.8
17	.05	3.4	.10	0	0	0	0	0	0	0	0	.09
18	3.4	.10	.10	0	0	.02	0	0	0	0	0	.02
19	5.4	.01	.10	0	0	0	0	0	0	0	0	0
20	.25	0	.10	0	0	0	0	0	0	0	0	0
21	.08	.04	.10	0	0	0	0	0	0	0	0	3.4
22	.11	2.8	.09	0	0	0	0	0	1.7	0	0	.08
23	.09	.11	.08	0	0	1.6	0	0	0	0	0	.08
24	.05	.09	.10	0	0	.09	0	0	0	0	0	.06
25	0	.08	.12	0	0	0	0	.82	0	0	0	.04
26	0	.11	.12	0	0	0	0	4.5	0	0	12	0
27	0	.09	.11	0	0	0	0	3.7	0	0	14	0
28	.03	.07	.10	0	.07	0	2.4	1.1	0	0	1.7	0
29	5.9	.06	.10	0	.01	0	.80	.55	0	0	.08	0
30	.12	2.6	.10	0	------	0	0	0	0	0	0	0
31	0	------	.10	0	------	0	------	0	------	0	0	------
TOTAL	17.08	9.68	14.17	.34	.08	1.71	3.20	52.90	4.48	64.35	51.35	92.62
MEAN	.55	.32	.46	.011	.003	.055	.11	1.71	.15	2.08	1.66	3.09
MAX	5.9	3.4	6.0	.10	.07	1.6	2.4	7.6	1.7	42	14	57
MIN	0	0	.08	0	0	0	0	0	0	0	0	0
AC-FT	34	19	28	.7	.2	3.4	6.4	105	8.9	128	102	184

CAL YR 1971 TOTAL 827.01 MEAN 2.27 MAX 192 MIN 0 AC-FT 1,640
WTR YR 1972 TOTAL 311.96 MEAN .85 MAX 57 MIN 0 AC-FT 619

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

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 upstream from Atchison, Topeka, and Santa Fe Railway Co. bridge, and at mile 28.1.

DRAINAGE AREA.--470 sq mi, approximately (contributing area).

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 above mean sea level.

AVERAGE DISCHARGE.--28 years (1939-53, 1956-59, 1961-72), 3.42 cfs (2,480 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 379 cfs May 6 (gage height, 3.58 ft); no flow most of year.
Period of record: Maximum discharge, 12,000 cfs June 6, 1941 (gage height, 8.75 ft), from rating curve extended above 800 cfs on basis of slope-area measurement of 12,000 cfs; no flow most of time.
Maximum discharge since at least 1880, that of June 6, 1941; maximum stage, 9.38 ft July 8, 1960 (discharge, 9,130 cfs, by contracted-opening measurement). A flood in 1890, stage not determined, was probably the second highest, from information by local residents.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0					0	0	.01	0	.02
2	0	0	0					0	0	0	0	0
3	0	0	.20					0	0	.78	0	0
4	0	0	.60					0	0	7.4	.01	11
5	0	0	2.1					.55	0	.25	0	.47
6	0	0	.52					65	0	0	.22	0
7	0	0	.21					14	0	0	3.2	5.9
8	0	0	0					8.0	0	.30	.08	2.2
9	0	0	0					4.1	0	55	0	.17
10	0	0	0					2.2	.03	2.5	0	0
11	0	0	0					22	0	.08	0	0
12	0	0	0					6.1	4.2	0	0	0
13	0	0	0					2.8	17	0	1.3	0
14	0	0	.11					1.1	1.7	0	1.1	0
15	0	0	.33					.08	6.1	0	.02	0
16	0	0	.01					0	3.1	0	0	0
17	0	.98	0					0	1.3	0	0	0
18	1.2	.02	0					0	.05	15	0	0
19	.63	0	0					0	0	.92	0	0
20	.60	0	0					0	0	.01	0	0
21	.01	0	0					0	0	13	0	0
22	0	0	0					0	0	1.0	4.5	0
23	0	0	0					0	0	.01	.93	0
24	0	0	0					0	0	0	.76	0
25	0	0	0					0	0	0	.01	0
26	.55	0	0					0	0	0	6.4	0
27	.18	0	0					0	0	0	11	0
28	0	0	0					0	0	0	1.2	0
29	.54	0	0					0	3.3	0	.03	0
30	.24	0	0		------			0	.42	0	0	0
31	0	------	0		------		------	0	------	0	0	------
TOTAL	3.95	1.00	4.08	0	0	0	0	125.93	37.20	96.26	30.76	19.76
MEAN	.13	.033	.13	0	0	0	0	4.06	1.24	3.11	.99	.66
MAX	1.2	.98	2.1	0	0	0	0	65	17	55	11	11
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	7.8	2.0	8.1	0	0	0	0	250	74	191	61	39

CAL YR 1971 TOTAL 852.44 MEAN 2.34 MAX 246 MIN 0 AC-FT 1,690
WTR YR 1972 TOTAL 318.94 MEAN .87 MAX 65 MIN 0 AC-FT 633

PEAK DISCHARGE (BASE, 100 CFS).--May 6 (1700) 379 cfs (3.58 ft); July 9 (0330) 282 cfs (3.27 ft).

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 downstream from Sand Creek, 1.7 miles upstream from Home Creek, 13 miles west of Spur, and 22.8 miles upstream from Salt Fork Brazos River.

DRAINAGE AREA.--775 sq mi, of which 603 sq mi is probably noncontributing.

PERIOD OF RECORD.--April 1964 to current year.

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

EXTREMES.--Current year: Maximum contents, 40,220 acre-ft Sept. 8 (elevation, 2,370.08 ft); minimum, 33,630 acre-ft Aug. 12 (elevation, 2,366.35 ft).
Period of record: Maximum contents, 41,280 acre-ft Oct. 27, 1969 (elevation, 2,370.64 ft); minimum since reaching normal operating level in June 1969, 27,290 acre-ft May 28, 1971 (elevation, 2,362.30 ft).

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 3,300 ft long. Dam completed and storage began in October 1963. Water is used for industrial and municipal supply for cities of Crosbyton, Post, Ralls, and Spur. The uncontrolled emergency spillway is an open cut about 1,100 ft wide, located at the right end of dam and will discharge 69,000 cfs at elevation 2,391.5 ft. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,395.0	-
Crest of emergency spillway	2,384.0	71,590
Crest of morning-glory spillway	2,369.2	38,600
Invert of lowest 48-inch outlet conduit	2,323.0	650

COOPERATION.--Records of diversion and capacity table (dated July 1960) furnished by the White River Municipal Water District.

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

2,366.0	33,040
2,368.0	36,450
2,370.0	40,070

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39,080	38,320	37,660	37,450	36,910	36,360	35,430	34,280	34,470	34,470	34,000	36,790
2	39,020	38,290	37,750	37,430	36,860	36,310	35,390	34,250	34,430	34,400	33,910	36,820
3	38,950	38,230	37,750	37,390	36,840	36,290	35,360	34,200	34,380	34,600	33,850	36,930
4	38,890	38,190	37,750	37,340	36,820	36,280	35,330	34,150	34,330	34,650	33,810	37,780
5	38,840	38,180	37,770	37,320	36,820	36,240	35,310	34,280	34,280	34,620	33,760	39,780
6	38,780	38,120	37,770	37,300	36,810	36,230	35,290	34,650	34,250	34,570	33,730	39,980
7	38,730	38,070	37,770	37,300	36,790	36,210	35,260	34,700	34,180	34,600	33,780	39,810
8	38,710	38,050	37,750	37,300	36,790	36,140	35,220	34,700	34,130	34,620	33,730	40,070
9	38,650	38,030	37,730	37,300	36,770	36,120	35,170	34,700	34,080	35,190	33,680	39,790
10	38,620	38,000	37,710	37,290	36,750	36,090	35,170	34,750	34,050	35,150	33,700	39,570
11	38,600	38,000	37,710	37,250	36,750	36,090	35,140	34,790	34,400	35,080	33,680	39,390
12	38,560	37,980	37,700	37,250	36,730	36,090	35,120	34,860	34,420	35,050	33,630	39,260
13	38,520	37,960	37,700	37,220	36,730	36,050	35,030	34,860	34,400	35,010	33,780	39,150
14	38,490	37,950	37,680	37,180	36,700	36,000	35,010	34,840	34,540	34,940	33,760	39,430
15	38,470	37,930	37,680	37,160	36,700	35,980	34,890	34,820	35,150	34,890	33,710	39,320
16	38,430	37,890	37,660	37,140	36,660	35,950	34,860	34,790	35,170	34,820	33,700	39,210
17	38,400	37,870	37,620	37,140	36,650	35,930	34,810	34,750	35,150	34,750	33,660	39,080
18	38,510	37,840	37,610	37,130	36,630	35,880	34,750	34,700	35,100	34,750	33,780	38,980
19	38,560	37,780	37,610	37,130	36,590	35,840	34,720	34,650	35,070	34,690	33,750	38,950
20	38,510	37,770	37,590	37,110	36,590	35,830	34,720	34,620	35,030	34,640	33,710	38,910
21	38,490	37,750	37,570	37,090	36,560	35,790	34,670	34,600	34,960	34,600	33,680	38,820
22	38,490	37,780	37,550	37,090	36,540	35,760	34,620	34,550	34,980	34,550	34,280	38,750
23	38,490	37,770	37,550	37,070	36,520	35,740	34,590	34,520	34,960	34,520	34,250	38,690
24	38,470	37,750	37,520	37,040	36,520	35,720	34,540	34,470	34,910	34,470	34,200	38,650
25	38,450	37,730	37,520	37,000	36,490	35,690	34,470	34,420	34,820	34,430	34,130	38,620
26	38,410	37,730	37,520	36,980	36,430	35,650	34,430	34,650	34,750	34,370	34,670	38,580
27	38,380	37,710	37,520	36,970	36,430	35,620	34,370	34,650	34,670	34,300	35,070	38,540
28	38,360	37,680	37,500	36,970	36,420	35,560	34,330	34,640	34,620	34,250	35,050	38,510
29	38,410	37,640	37,500	36,950	36,400	35,500	34,300	34,590	34,550	34,200	35,030	38,470
30	38,380	37,680	37,480	36,930	------	35,480	34,330	34,540	34,480	34,150	35,000	38,410
31	38,360	------	37,450	36,910	------	35,440	------	34,520	------	34,080	34,980	------
(†)	2,369.07	2,368.69	2,368.56	2,368.26	2,367.97	2,367.42	2,366.77	2,366.88	2,366.86	2,366.62	2,367.15	2,369.10
(*)	-770	-680	-230	-540	-510	-960	-1,110	+190	-40	-400	+900	+3,430
(††)	142	171	176	188	189	231	255	231	295	278	259	217
MAX	39,080	38,320	37,770	37,450	36,910	36,360	35,430	34,860	35,170	35,190	35,070	40,070
MIN	38,360	37,640	37,450	36,910	36,400	35,440	34,300	34,150	34,050	34,080	33,630	36,790

CAL YR 1971..... * +6,630 †† 2,300 MAX 39,320 MIN 27,290
WTR YR 1972..... * -720 †† 2,630 MAX 40,070 MIN 33,630

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use.

08080950 Duck Creek near Girard, Tex.

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 west of Girard, and 10.0 miles upstream from Salt Fork Brazos River.

DRAINAGE AREA.--294 sq mi, of which 17.3 sq mi is probably noncontributing.

PERIOD OF RECORD.--September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,006.08 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 5.34 cfs (3,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,360 cfs Aug. 13 (gage height, 12.46 ft); minimum, 0.16 cfs Aug. 2.
Period of record: Maximum discharge, 3,600 cfs Aug. 31, 1966 (gage height, 14.50 ft); no flow July 19 to Aug. 6, Aug. 18-21, 1966, Aug. 19, 1969, July 20, 1971.
Maximum stage since at least 1902 occurred in March or April 1918 (stage and discharge unknown); the second highest stage, 19.8 ft September 1955, from information by local residents.
REVISIONS.--The maximum discharge for the water year 1971 has been revised to 975 cfs Aug. 27, 1971 (gage height, 11.79 ft), superseding figures published in WRD Texas, 1971.

REMARKS.--Records good. Several small diversions upstream from gage. At end of year, flow from 108 sq mi above this station was partly controlled by 12 floodwater-retarding structures with a total combined capacity of 28,800 acre-ft below the flood-spillway crests, of which 24,710 acre-ft is floodwater-retarding capacity and 4,090 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1971, superseding those published in WRD Texas, 1971, are given herewith:

Aug. 27, 1971..... 180

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
August 1971.....	310.98	180	.01	10.0	617
WTR YR 1971.....	714.82	180	.01	1.96	1,420

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	2.5	1.6	1.7	2.0	1.2	1.3	.66	.40	.44	.21	40
2	.87	2.2	2.7	1.7	1.8	1.1	1.3	.64	.30	.44	.18	28
3	.82	2.1	2.3	1.7	1.4	1.2	1.3	.56	.25	.44	.18	26
4	.72	2.1	1.9	1.4	1.4	1.2	1.2	.51	.27	47	.19	116
5	.66	2.1	1.9	1.4	1.5	1.1	1.2	.47	.26	74	.18	56
6	.63	1.9	1.8	1.6	1.6	1.2	1.3	12	.23	6.0	.18	12
7	.60	1.8	1.7	1.6	1.4	1.2	1.2	3.7	.23	2.2	.23	5.8
8	.60	1.9	1.6	1.8	1.4	1.1	1.1	1.5	.21	1.5	.18	4.0
9	.59	1.8	1.7	1.8	1.5	1.1	.99	1.1	.21	3.8	.18	3.6
10	.58	1.8	1.9	1.7	1.5	1.2	.98	.91	.20	14	42	2.7
11	.60	1.9	1.6	1.6	1.8	1.2	.89	.84	.19	2.7	6.8	2.2
12	.61	2.0	1.6	1.5	1.8	1.2	.82	.89	.21	1.6	2.5	1.8
13	.62	2.0	1.6	1.4	1.7	1.3	.68	.75	.24	1.3	611	1.7
14	.60	1.9	2.0	1.2	1.7	1.2	.67	.66	.28	1.0	102	1.5
15	.61	1.8	2.0	1.2	1.6	1.1	.70	.62	.58	.79	9.2	1.6
16	.60	1.8	1.7	1.2	1.4	1.1	.76	.55	.49	.63	3.8	1.6
17	.62	2.4	1.5	1.5	1.4	1.1	.72	.52	.34	.54	1.8	1.5
18	1.7	2.2	1.6	1.7	1.3	1.1	.68	.47	.29	.52	1.1	1.4
19	1.6	1.3	1.9	1.5	1.2	1.1	.85	.42	.26	.54	1.7	1.3
20	1.4	1.3	1.9	1.5	1.3	1.1	.74	.38	.23	.48	.85	1.4
21	1.2	1.2	1.8	1.5	1.4	1.1	.64	.38	2.2	.43	.46	1.5
22	158	1.4	1.8	1.6	1.2	1.2	.66	.36	1.2	.36	32	1.3
23	122	1.4	1.9	1.6	1.3	1.4	.63	.38	.90	.32	8.9	1.3
24	6.3	1.3	2.0	1.5	1.4	1.5	.64	.38	.70	.29	4.6	1.4
25	2.8	1.3	2.0	1.4	1.3	1.3	.65	.35	.59	.26	3.1	1.3
26	9.9	1.3	2.0	1.4	1.1	1.3	.63	.35	.54	.24	258	1.2
27	4.1	1.3	1.9	1.6	1.2	1.3	.70	.48	.49	.23	25	1.2
28	2.4	1.2	1.6	1.6	1.2	1.2	.78	.88	.44	.23	10	1.2
29	11	1.2	1.7	1.6	1.3	1.2	.85	.91	.44	.21	6.1	1.1
30	4.6	1.6	1.7	1.5	------	1.2	.80	.53	.44	.21	4.5	1.0
31	2.8	------	1.6	1.5	------	1.3	------	.48	------	.21	3.7	------
TOTAL	340.98	52.0	56.5	47.5	42.1	37.1	26.36	33.63	13.61	162.91	1,140.82	322.6
MEAN	11.0	1.73	1.82	1.53	1.45	1.20	.88	1.08	.45	5.26	36.8	10.8
MAX	158	2.5	2.7	1.8	2.0	1.5	1.3	12	2.2	74	611	116
MIN	.58	1.2	1.5	1.2	1.1	1.1	.63	.35	.19	.21	.18	1.0
AC-FT	676	103	112	94	84	74	52	67	27	323	2,260	640

CAL YR 1971 TOTAL 1,107.20 MEAN 3.03 MAX 180 MIN .01 AC-FT 2,200
WTR YR 1972 TOTAL 2,276.11 MEAN 6.22 MAX 611 MIN .18 AC-FT 4,510

08081000 Salt Fork Brazos River near Peacock, Tex.

LOCATION.--Lat 33°12'44", long 100°25'57", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 380, 2.9 miles northwest of Peacock, 6.2 miles upstream from Croton Creek, 13.0 miles northwest of Aspermont, and at mile 54.3 (measured from confluence with Double Mountain Fork Brazos River at mile 897.8).

DRAINAGE AREA.--4,275 sq mi, of which 2,770 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1949 to September 1951, September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,724.32 ft above mean sea level. Prior to Sept. 19, 1964, nonrecording gage at site 2.9 miles upstream at datum 19.39 ft lower.

AVERAGE DISCHARGE.--9 years (1950-51, 1964-72), 44.8 cfs (32,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,000 cfs Aug. 13 (gage height, 13.75 ft); no flow for many days.
Period of record: Maximum discharge, 19,000 cfs Aug. 13, 1972 (gage height, 13.75 ft); no flow at times.
Maximum stage since at least 1939, Aug. 13, 1972 (gage height, 13.75 ft).

REMARKS.--Records poor. Some regulation by White River Reservoir (station 08080910). Several small diversions above station. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	53	8.6	6.2	9.0	3.3	3.4	.16	15	0	0	398
2	74	38	24	6.7	8.4	4.2	3.4	.12	9.0	0	0	459
3	114	30	24	6.1	7.8	5.2	3.4	0	6.8	0	0	243
4	67	23	18	5.4	4.3	3.4	3.0	0	3.8	0	0	234
5	60	17	19	5.8	4.3	3.6	3.0	.14	1.8	0	0	700
6	53	14	18	6.7	4.0	5.3	3.0	.82	.96	48	0	314
7	45	13	16	7.2	4.0	4.4	2.6	4.9	.58	43	.2	153
8	42	13	17	6.7	4.0	2.3	2.3	4.4	.32	30	0	131
9	36	13	18	6.7	4.0	3.3	2.0	2.3	.21	43	.6	362
10	29	12	19	7.2	4.0	5.0	1.8	1.1	.21	274	360	274
11	26	12	15	7.2	5.0	6.2	1.5	.82	.39	152	327	206
12	24	12	12	6.2	9.0	5.6	1.3	3.8	.39	70	155	165
13	21	11	11	5.8	6.7	4.2	.96	4.4	.39	43	9,220	119
14	18	10	17	5.0	5.8	5.0	.69	2.6	25	31	3,790	98
15	16	10	17	4.6	4.3	3.4	.69	8.2	139	20	594	78
16	13	9.9	13	5.0	4.0	2.6	.69	13	136	11	284	125
17	14	13	11	5.8	3.7	2.6	.58	17	20	4.4	297	85
18	19	13	10	5.8	4.0	3.4	.58	9.8	15	3.8	148	78
19	13	10	9.0	5.8	4.0	4.7	2.3	7.4	9.8	6.8	106	65
20	20	12	8.4	5.8	4.3	3.9	.96	3.4	7.4	4.9	99	55
21	17	11	7.2	5.4	4.3	3.5	.58	2.0	5.5	1.5	102	73
22	137	11	6.7	5.4	4.0	3.2	.39	.96	3.8	.48	315	83
23	327	12	7.2	5.4	3.7	26	.26	.39	2.0	.32	162	49
24	141	11	6.7	5.0	5.5	16	.16	.12	.96	.16	83	37
25	81	9.5	7.2	5.0	4.9	10	.04	.03	.58	.03	32	31
26	58	8.1	7.2	5.4	4.0	8.2	.03	0	.16	.03	2,020	22
27	56	7.7	7.2	5.8	5.1	7.4	.32	49	.03	.03	2,500	21
28	71	6.5	6.7	6.2	5.3	5.5	.39	184	.01	.04	1,090	35
29	130	6.4	6.7	6.2	4.8	3.8	.36	106	0	.01	285	22
30	124	7.6	6.7	6.2	------	3.4	.21	59	0	0	114	15
31	81	------	6.2	6.6	------	3.4	------	35	------	0	49	------
TOTAL	1,990	429.7	380.7	184.3	146.2	172.0	40.89	520.86	405.09	787.50	22,132.8	4,730
MEAN	64.2	14.3	12.3	5.95	5.04	5.55	1.36	16.8	13.5	25.4	714	158
MAX	327	53	24	7.2	9.0	26	3.4	184	139	274	9,220	700
MIN	13	6.4	6.2	4.6	3.7	2.3	.03	0	0	0	0	15
AC-FT	3,950	852	755	366	290	341	81	1,030	804	1,560	43,900	9,380

CAL YR 1971 TOTAL 21,785.14 MEAN 59.7 MAX 3,300 MIN 0 AC-FT 43,210
WTR YR 1972 TOTAL 31,920.04 MEAN 87.2 MAX 9,220 MIN 0 AC-FT 63,310

PEAK DISCHARGE (BASE, 5,000 CFS).--Aug. 13 (1430) 19,000 cfs (13.75 ft); Aug. 26 (1600) 6,100 cfs (9.40 ft).

08081200 Croton Creek near Jayton, Tex.

LOCATION.--Lat 33°17'21", long 100°26'00", Stonewall County, on left bank 460 ft upstream from county road, 1.1 miles upstream from mouth, and 8.6 miles northeast of Jayton.

DRAINAGE AREA.--302 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,694.45 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 16.6 cfs (12,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,880 cfs Aug. 13 (gage height, 9.92 ft), from rating curve extended above 1,400 cfs; maximum gage height, 11.08 ft Aug. 13 (backwater from Salt Fork Brazos River); no flow for many days.
Period of record: Maximum discharge, 10,600 cfs Oct. 18, 1960 (gage height, 12.40 ft), from rating curve extended above 3,100 cfs; no flow for many days.
Maximum stage since at least 1935, 13.5 ft in 1941 or 1942, present datum, from information by local residents.

REMARKS.--Records good. No diversion above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Texas 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	9.6	4.4	1.5	1.7	.03	4.3	30	.03	0	0	30
2	7.7	4.4	12	1.5	2.2	.01	1.1	20	0	0	0	57
3	16	2.6	12	1.4	1.0	.02	.06	9.0	0	0	0	26
4	6.3	2.0	7.2	1.3	.68	0	.01	4.5	0	28	0	176
5	4.9	1.4	8.8	1.1	.58	0	0	2.5	0	34	0	92
6	4.4	1.0	8.4	1.1	.58	0	0	14	0	13	0	38
7	4.0	.78	5.2	1.1	.40	0	0	30	0	5.5	0	21
8	3.6	.78	4.1	1.1	.40	0	0	11	0	2.0	0	15
9	3.2	.68	4.1	1.1	.34	0	0	6.4	0	2.6	0	11
10	2.8	.58	7.2	1.1	.40	0	0	4.8	0	36	13	10
11	2.5	.58	4.1	.93	2.2	0	0	1.6	1.2	12	18	8.1
12	2.2	.48	2.8	.71	3.2	0	0	3.8	1.5	3.6	4.9	14
13	1.9	.48	2.2	.59	1.4	0	0	2.9	0	1.8	1,580	7.5
14	1.6	.40	14	.55	.90	0	0	1.7	0	7.5	476	5.6
15	1.4	.40	12	.57	.68	0	0	.33	120	.73	82	9.1
16	1.2	.40	8.2	.60	.68	0	0	.09	42	.54	50	7.3
17	1.1	8.0	6.9	.58	.58	0	0	.01	17	.42	37	5.1
18	.98	6.7	5.9	.60	.40	0	0	0	11	5.2	29	8.9
19	1.1	3.4	5.2	.54	.35	0	.02	0	7.5	2.9	24	7.7
20	5.5	2.8	4.5	.49	.32	0	8.8	0	4.8	.89	20	5.8
21	3.3	2.6	3.9	.49	.28	0	2.2	0	2.9	.72	17	5.8
22	125	2.2	3.4	.68	.21	0	0	0	1.9	.50	144	5.2
23	142	2.0	3.1	.68	.23	109	0	0	1.2	.30	47	4.5
24	35	1.7	2.9	.64	.25	54	0	0	.82	.12	23	3.9
25	21	1.4	2.6	.49	.21	15	0	0	.51	.01	15	3.7
26	23	1.2	2.6	.53	.15	11	.01	0	.24	0	273	3.1
27	20	1.0	2.5	.53	.14	8.9	2.0	44	.07	0	151	3.0
28	15	.68	2.0	.57	.11	7.8	8.2	14	.01	0	34	2.7
29	50	.68	1.8	.58	.10	6.5	4.1	2.8	0	0	20	2.1
30	20	1.4	1.7	.63	------	6.0	0	.59	0	0	14	1.7
31	13	------	1.7	.66	------	6.1	------	.23	------	0	11	------
TOTAL	547.78	62.32	167.4	24.94	20.67	224.36	30.80	204.25	212.68	158.33	3,082.9	590.8
MEAN	17.7	2.08	5.40	.80	.71	7.24	1.03	6.59	7.09	5.11	99.4	19.7
MAX	142	9.6	14	1.5	3.2	109	8.8	44	120	36	1,580	176
MIN	.98	.40	1.7	.49	.10	0	0	0	0	0	0	1.7
AC-FT	1,090	124	332	49	41	445	61	405	422	314	6,110	1,170

CAL YR 1971 TOTAL 6,585.13 MEAN 18.0 MAX 874 MIN 0 AC-FT 13,060
WTR YR 1972 TOTAL 5,327.23 MEAN 14.6 MAX 1,580 MIN 0 AC-FT 10,570

PEAK DISCHARGE (BASE, 1,600 CFS).--Aug. 13 (1200) 3,880 cfs (9.92 ft); Aug. 26 (0645) 1,610 cfs (8.70 ft).

08081500 Salt Croton Creek near Aspermont, Tex.

LOCATION.--Lat 33°24'03", long 100°24'29", King County, on left bank 0.1 mile downstream from Haystack Creek, 2.4 miles downstream from Salt Flat Creek, 9.0 miles upstream from Salt Fork Brazos River, and 21 miles northwest of Aspermont.

DRAINAGE AREA.--64.3 sq mi.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1958, published as Dove Creek near Aspermont.

GAGE.--Water-stage recorder. Altitude of gage is 1,668 ft (from topographic map).

AVERAGE DISCHARGE.--16 years, 6.02 cfs (4,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,010 cfs Aug. 13 (gage height, 5.07 ft); minimum daily, 0.33 cfs Jan. 3, June 2, 3, 6, Aug. 25.
Period of record: Maximum discharge, 29,900 cfs Aug. 30, 1966 (gage height, 8.75 ft), from rating curve extended above 240 cfs on basis of slope-area measurements of 6,910, 11,400, and 29,500 cfs; minimum daily, 0.05 cfs June 17-22, 1967.
Flood in 1941 reached a stage of about 9 ft, from information by local residents.

REMARKS.--Records poor. Stage-discharge relation frequently affected by winds. Base flow maintained by springs. No diversion upstream from station. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1732: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.4	2.9	.60	2.5	.79	.66	.79	.45	1.2	.60	223
2	6.4	1.2	16	.79	.60	.79	.79	.79	.33	1.2	.60	3.2
3	10	1.0	5.9	.33	.45	.79	.72	.79	.33	1.2	.79	9.0
4	2.3	1.0	3.4	.45	.60	.79	3.3	.60	.45	3.5	1.4	80
5	1.4	1.0	5.7	1.0	.60	1.0	2.6	8.3	.45	1.2	1.0	7.0
6	1.0	.79	3.2	.79	.60	1.0	1.2	58	.33	1.2	.79	4.2
7	1.2	.79	2.4	.79	.45	.79	1.0	154	.45	1.4	2.8	3.8
8	1.2	1.0	2.0	1.0	.79	.79	1.0	1.4	.44	1.4	1.4	2.8
9	1.0	.79	3.4	.79	.79	1.0	1.2	1.2	.54	2.6	1.0	2.3
10	1.0	.79	4.3	.60	1.0	1.0	1.2	1.2	1.9	1.7	52	1.7
11	1.2	.79	2.1	.79	4.2	1.0	1.2	1.2	1.4	1.2	3.8	1.4
12	1.2	1.0	1.8	.79	2.0	1.8	1.2	31	.94	1.4	1.7	1.2
13	.79	1.0	1.8	.45	1.2	1.1	.79	7.3	1.0	1.4	634	1.2
14	1.0	1.0	25	.45	1.0	1.0	.79	2.8	1.7	2.3	9.9	1.2
15	1.0	1.2	2.0	.60	.79	.80	.60	1.0	16	.79	3.2	1.2
16	1.0	2.0	1.4	.79	.79	.79	.79	.79	1.0	1.2	2.6	1.2
17	1.0	7.5	1.0	.79	1.0	.79	1.0	.83	.79	1.4	1.7	1.2
18	3.8	2.0	.79	.79	1.0	.57	.79	.82	.79	2.8	1.4	1.2
19	2.6	.60	.93	.60	1.0	.60	16	.86	.79	1.2	2.6	1.2
20	1.4	.60	.64	.60	1.2	.49	1.0	.93	.79	1.0	2.0	1.2
21	.79	.60	.58	.79	1.2	.40	.45	1.0	1.0	1.2	1.4	1.2
22	15	3.5	.80	.79	1.4	.77	.45	.98	2.3	1.2	27	1.2
23	14	1.4	.79	.79	1.2	5.6	.45	.69	1.2	1.2	1.7	1.2
24	3.2	1.2	.74	.60	1.2	4.2	.45	.56	1.2	1.0	.54	1.2
25	1.7	1.1	.78	.60	1.0	1.0	.45	.69	1.0	1.0	.33	1.2
26	5.7	.89	.83	.60	1.0	.79	1.5	3.4	.45	1.0	343	1.2
27	1.7	.90	.75	.79	1.0	.66	9.4	9.4	.60	.79	80	1.2
28	1.0	.56	.60	.79	1.0	.61	2.5	.44	.60	.79	5.8	1.0
29	23	.45	.79	.60	1.0	.60	14	.37	1.0	1.0	4.6	.79
30	5.4	5.4	1.0	.60	------	.69	1.2	.45	1.4	.79	2.8	.60
31	2.0	------	.60	1.0	------	.74	------	.60	------	.70	1.2	------
TOTAL	114.98	43.45	94.92	21.74	32.56	33.74	68.68	293.18	41.62	41.96	1,193.65	359.99
MEAN	3.71	1.45	3.06	.70	1.12	1.09	2.29	9.46	1.39	1.35	38.5	12.0
MAX	23	7.5	25	1.0	4.2	5.6	16	154	16	3.5	634	223
MIN	.79	.45	.58	.33	.45	.40	.45	.37	.33	.70	.33	.60
AC-FT	228	86	188	43	65	67	136	582	83	83	2,370	714

CAL YR 1971 TOTAL 2,336.68 MEAN 6.40 MAX 344 MIN .23 AC-FT 4,630
WTR YR 1972 TOTAL 2,340.47 MEAN 6.39 MAX 634 MIN .33 AC-FT 4,640

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
8-13	1100	5.07	6,010
8-26	0530	4.38	3,680
9- 1	0200	4.44	3,870

08082000 Salt Fork Brazos River near Aspermont, Tex.

LOCATION (revised).--Lat 33°20'02", long 100°14'24", Stonewall County, on left bank 625 ft upstream from bridge on U.S. Highway 83, 5.4 miles downstream from Salt Croton Creek, 13.2 miles north of Aspermont, and 27.4 miles upstream from Double Mountain Fork Brazos River. Prior to July 13, 1972, at site 0.1 mile downstream.

DRAINAGE AREA.--4,830 sq mi, approximately, of which 2,770 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1923 to August 1925, June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,588.70 ft above mean sea level. Dec. 5, 1923, to Aug. 29, 1925, nonrecording gage at site 6.8 miles downstream at different datum. June 15, 1939, to July 13, 1972, water-stage recorder at site 0.1 mile downstream at same datum.

AVERAGE DISCHARGE.--33 years (1939-72), 127 cfs (92,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,300 cfs Aug. 14 (gage height, 12.11 ft); no flow July 31 to Aug. 5.
Period of record: Maximum discharge, 52,200 cfs Sept. 25, 1955 (gage height, 14.92 ft), from rating curve extended above 29,000 cfs; no flow at times.
Maximum stage since at least 1900, that of Sept. 25, 1955. Flood in December 1913 reached a stage of 14.4 ft, and flood in November 1934 reached a stage of 13.7 ft, from information by local residents.

REMARKS.--Records fair. No large diversion above station. Some regulation by White River Reservoir (station 08080910). For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	70	20	15	12	5.4	4.2	.90	22	3.0	0	670
2	88	54	32	14	11	5.0	4.2	4.9	12	2.5	0	542
3	228	43	46	14	10	5.0	3.6	6.0	6.6	2.0	0	434
4	108	34	34	13	11	4.6	3.0	2.0	3.6	1.5	0	1,020
5	80	31	30	13	9.7	4.6	3.0	1.1	2.5	1.0	0	629
6	64	27	32	13	9.7	4.6	3.0	30	1.4	100	.1	521
7	49	25	29	13	9.1	4.6	2.8	118	1.1	50	5.4	281
8	44	25	26	13	8.6	4.2	2.2	37	.78	30	.8	209
9	39	24	27	13	8.6	4.2	2.0	20	.44	50	.2	186
10	36	23	31	12	8.1	4.2	1.8	17	.27	433	327	344
11	32	23	30	12	12	4.6	1.6	18	.27	220	253	212
12	30	22	25	11	15	4.6	1.3	24	1.4	122	147	187
13	27	21	22	9.1	15	5.8	1.1	15	1.0	70	8,350	161
14	26	20	36	8.6	12	5.4	.90	13	11	46	11,300	180
15	24	20	59	8.1	9.7	3.9	.59	5.0	214	36	1,100	172
16	35	19	30	8.6	9.1	3.9	.44	9.7	104	15	623	157
17	31	24	22	10	8.6	3.9	.37	15	98	12	455	130
18	28	29	20	10	8.1	3.9	.27	15	41	12	316	197
19	30	21	20	10	7.1	3.9	15	11	24	17	239	169
20	36	18	19	10	7.1	3.6	6.9	6.2	18	17	196	99
21	28	17	18	9.7	7.1	3.6	1.6	5.0	13	14	232	91
22	30	18	16	9.7	6.2	3.6	.68	3.3	16	8.1	582	96
23	403	20	16	10	6.2	6.6	.32	3.3	14	5.0	379	94
24	234	18	16	9.7	6.2	103	.27	2.2	13	3.9	236	70
25	122	16	16	8.6	6.2	26	.27	1.0	13	3.6	172	60
26	101	15	16	8.6	5.8	13	.37	.80	10	3.3	2,350	53
27	98	13	16	8.6	5.8	8.6	2.9	77	8.0	2.2	3,570	48
28	93	13	16	9.1	5.8	6.2	3.7	254	6.0	.80	877	44
29	191	13	16	9.7	5.8	5.0	12	112	5.0	.20	482	40
30	147	16	15	9.7	------	4.2	3.3	66	4.0	.02	286	29
31	96	------	15	10	------	4.2	------	37	------	0	210	------
TOTAL	2,652	732	766	333.8	256.6	273.9	83.68	930.40	665.36	1,281.12	32,688.5	7,125
MEAN	85.5	24.4	24.7	10.8	8.85	8.84	2.79	30.0	22.2	41.3	1,054	238
MAX	403	70	59	15	15	103	15	254	214	433	11,300	1,020
MIN	24	13	15	8.1	5.8	3.6	.27	.80	.27	0	0	29
AC-FT	5,260	1,450	1,520	662	509	543	166	1,850	1,320	2,540	64,840	14,130

CAL YR 1971 TOTAL 30,069.92 MEAN 82.4 MAX 3,490 MIN .10 AC-FT 59,640
WTR YR 1972 TOTAL 47,788.36 MEAN 131 MAX 11,300 MIN 0 AC-FT 94,790

PEAK DISCHARGE (BASE, 12,000 CFS).--Aug. 14 (0500) 20,300 cfs (12.11 ft).

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 upstream from Salt Fork Brazos River, and 6.8 miles north of Aspermont.

DRAINAGE AREA.--92.4 sq mi.

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,601.5 ft above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--7 years, 4.22 cfs (3,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,620 cfs Aug. 13 (gage height, 9.85 ft); no flow at times.
Period of record: Maximum discharge, 1,620 cfs Aug. 13, 1972 (gage height, 9.85 ft); no flow for many days.
Maximum stage since at least 1925, 31 ft in September 1955, from information by local resident.

REMARKS.--Records good. No known diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	8.6	1.2	1.1	.95	.55	.60	.50	.14	11	0	7.0
2	1.9	4.7	2.7	1.1	.95	.54	.60	.42	.13	.80	0	12
3	27	3.2	4.5	1.2	.95	.69	.60	.38	.13	.19	0	3.9
4	17	2.5	2.9	1.2	.88	.68	.60	.35	.12	.13	0	48
5	10	2.1	2.4	1.2	.88	.56	.60	.33	.12	.11	0	49
6	5.6	1.9	2.3	1.1	.88	.53	.60	24	.12	.09	.28	14
7	2.8	1.6	1.9	1.1	.88	.55	.55	51	.12	.06	2.0	7.2
8	1.9	1.6	2.1	1.2	.88	.49	.50	3.3	.12	.04	1.7	5.4
9	1.2	1.6	2.0	1.2	.88	.48	.46	.95	.12	.02	.29	4.1
10	.95	1.6	2.4	1.2	.88	.45	.42	.84	.10	.02	32	3.3
11	.82	1.4	2.3	1.2	.95	.47	.38	.52	.11	.01	9.8	2.9
12	.70	1.4	2.0	1.1	1.1	.49	.38	10	1.2	0	5.4	2.6
13	.60	1.4	1.8	1.1	1.1	.47	.34	2.8	.80	0	571	2.3
14	.55	1.4	6.5	1.0	1.0	.47	.31	1.7	.45	0	728	2.2
15	.55	1.4	6.2	.95	.95	.48	.28	.80	15	0	117	2.1
16	7.2	1.4	2.5	.88	.87	.48	.25	.41	7.3	0	12	2.0
17	22	1.4	1.8	.88	.86	.44	.25	.30	.58	0	5.4	1.8
18	15	1.4	1.6	.95	.76	.44	.22	.25	.29	0	4.3	22
19	15	1.4	1.4	.95	.75	.44	.34	.21	.16	0	8.7	19
20	18	1.4	1.4	.95	.70	.42	.38	.22	.12	0	4.1	8.1
21	10	1.2	1.4	.95	.71	.44	.28	.19	.10	0	2.6	6.4
22	14	1.2	1.2	.95	.70	.42	.22	.20	.09	0	30	3.6
23	96	1.2	1.2	.95	.69	.49	.20	.20	.10	0	19	2.7
24	36	1.2	1.2	.95	.71	8.7	.20	.18	.07	0	7.4	2.2
25	16	1.2	1.2	.88	.76	4.8	.20	.16	.06	0	4.0	1.9
26	7.7	1.2	1.2	.82	.69	2.4	.46	.14	.04	0	6.4	2.0
27	4.9	1.2	1.2	.88	.57	1.2	3.4	.36	0	0	86	2.2
28	3.4	1.2	1.2	.88	.54	.88	.88	.22	0	0	65	2.0
29	36	1.2	1.2	.95	.52	.70	.65	.16	0	0	26	1.9
30	32	1.2	1.2	.95	------	.60	.65	.16	0	0	5.8	1.4
31	17	------	1.1	.95	------	.60	------	.15	------	0	4.1	------
TOTAL	422.77	55.4	65.2	31.67	23.94	31.35	15.80	101.40	27.69	12.47	1,758.27	245.2
MEAN	13.6	1.85	2.10	1.02	.83	1.01	.53	3.27	.92	.40	56.7	8.17
MAX	96	8.6	6.5	1.2	1.1	8.7	3.4	51	15	11	728	49
MIN	.55	1.2	1.1	.82	.52	.42	.20	.14	0	0	0	1.4
AC-FT	839	110	129	63	47	62	31	201	55	25	3,490	486

CAL YR 1971 TOTAL 1,803.84 MEAN 4.94 MAX 289 MIN 0 AC-FT 3,580
WTR YR 1972 TOTAL 2,791.16 MEAN 7.63 MAX 728 MIN 0 AC-FT 5,540

PEAK DISCHARGE (BASE, 300 CFS).--May 6 (2300) 344 cfs (6.15 ft); Aug. 13 (0945) 1,620 cfs (9.85 ft).

08082180 North Croton Creek near Knox City, Tex.

LOCATION.--Lat 33°22'59", long 100°04'51", Stonewall County, on left bank 600 ft downstream from Wedington Creek, 9.5 miles upstream from Brazos River, and 15 miles southwest of Knox City.

DRAINAGE AREA.--251 sq mi.

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,462.44 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 25.6 cfs (18,550 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,650 cfs Aug. 13 (gage height, 23.77 ft), from rating curve extended as explained below; minimum, 0.01 cfs July 30 to Aug. 10.
Period of record: Maximum discharge, 32,300 cfs Aug. 30, 1966 (gage height, 32.36 ft), from rating curve extended above 240 cfs on basis of slope-area measurements of 4,880 cfs, 6,530 cfs, and peak flow; no flow at times.
Maximum stage since at least 1921, that of Aug. 30, 1966. Flood in 1932 reached a stage of about 32 ft, from information by local residents.

REMARKS.--Records good except those above 50 cfs, which are poor. No diversion or regulation above station. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	13	2.0	2.7	1.6	.84	.49	.65	.16	809	.01	138
2	29	9.3	5.4	2.4	1.8	.71	.49	.45	.15	8.8	.01	93
3	191	6.8	5.8	2.2	1.7	.71	.43	.35	.12	8.7	.01	23
4	32	5.7	3.6	1.7	1.5	.71	.36	.30	.11	1.9	.01	205
5	11	5.3	3.5	1.5	1.3	.68	.36	.26	.09	1.3	.01	214
6	6.1	4.3	3.5	2.0	1.3	.65	.40	9.7	.09	.90	.01	35
7	4.8	3.3	2.9	1.9	1.3	.62	.38	31	.10	.71	.01	24
8	3.3	2.9	20	1.9	1.4	.63	.35	10	.07	.61	.01	21
9	2.9	2.7	7.3	2.0	1.3	.59	.32	3.5	.05	.47	.01	19
10	2.3	2.2	8.5	2.0	1.3	.59	.32	1.6	.02	.40	4.6	18
11	2.0	2.1	5.7	1.9	1.9	.59	.32	1.0	.02	.60	1.3	14
12	1.7	2.1	4.7	1.7	2.4	.62	.32	18	.19	1.1	.19	8.9
13	1.6	2.1	4.1	1.7	2.2	.58	.29	1.4	.18	.71	2,560	6.3
14	1.5	1.9	11	1.4	1.9	.54	.29	.90	.15	.59	2,610	5.1
15	1.5	1.7	10	1.3	1.6	.54	.28	.84	102	.42	126	13
16	211	1.7	9.9	1.4	1.5	.54	.26	.64	43	.35	44	6.0
17	378	1.8	6.0	1.3	1.4	.54	.26	.54	5.6	.31	18	5.3
18	24	1.6	4.4	1.7	1.3	.54	.26	.41	2.0	2.9	14	3.9
19	28	1.3	4.4	1.5	1.1	.49	.36	.34	1.1	1.0	10	5.3
20	22	1.3	4.0	1.4	1.1	.49	.32	.31	.69	.37	8.2	8.9
21	9.3	1.3	3.3	1.4	1.1	.49	.34	.28	.53	.30	6.9	7.5
22	68	1.6	2.9	1.5	.98	.49	.51	.26	.91	.25	8.8	4.1
23	77	1.9	2.9	1.5	.94	.90	.34	.24	18	.22	8.8	3.3
24	18	1.6	2.9	1.4	1.0	5.6	.34	.17	3.3	.20	8.7	3.1
25	11	1.5	2.9	1.3	.90	1.5	.33	.16	1.2	.19	6.9	2.7
26	10	1.4	2.9	1.3	.85	.82	.29	.16	.67	.18	221	2.1
27	9.8	1.3	2.9	1.3	.85	.69	.29	.40	.42	.14	908	2.4
28	10	1.3	2.5	1.4	.85	.54	.29	.71	.31	.10	60	2.4
29	82	1.3	2.5	1.4	.85	.51	5.5	.37	.28	.07	26	2.2
30	62	1.5	2.9	1.4	------	.49	1.3	.26	.24	.03	18	2.1
31	19	------	2.7	1.4	------	.49	------	.19	------	.02	15	------
TOTAL	1,332.5	87.8	158.0	50.9	39.22	24.72	16.39	85.39	181.75	842.84	6,684.48	898.6
MEAN	43.0	2.93	5.10	1.64	1.35	.80	.55	2.75	6.06	27.2	216	30.0
MAX	378	13	20	2.7	2.4	5.6	5.5	31	102	809	2,610	214
MIN	1.5	1.3	2.0	1.3	.85	.49	.26	.16	.02	.02	.01	2.1
AC-FT	2,640	174	313	101	78	49	33	169	361	1,670	13,260	1,780

CAL YR 1971 TOTAL 6,339.70 MEAN 17.4 MAX 1,750 MIN 0 AC-FT 12,570
WTR YR 1972 TOTAL 10,402.59 MEAN 28.4 MAX 2,610 MIN .01 AC-FT 20,630

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-16	2300	15.30	2,170	8-13	2230	23.77	6,650
7- 1	0730	17.13	2,910	8-27	0115	13.33	1,470

08082500 Brazos River at Seymour, Tex.

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 upstream from Wichita Valley Railway bridge, 1.0 mile southwest of courthouse in Seymour, and at mile 833.2.

DRAINAGE AREA.--14,490 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--November 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,238.97 ft above mean sea level. Prior to Apr. 6, 1972, at datum 2.00 ft higher.

AVERAGE DISCHARGE.--48 years (1924-72), 406 cfs (294,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42,700 cfs Aug. 16 (gage height, 18.35 ft); no flow at times.
Period of record: Maximum discharge, 95,400 cfs Oct. 16, 1926 (gage height, 17.16 ft, from floodmarks, present datum), from rating curve extended above 48,000 cfs on basis of slope-area measurement of 95,400 cfs; maximum gage height, 23.00 ft (present datum) Sept. 28, 1955 (discharge, 71,200 cfs); no flow at times.
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.

REMARKS.--Records fair. Small diversions above station for irrigation and oilfield operation. Flow slightly regulated by two major upstream reservoirs which have a combined capacity of 43,960 acre-ft. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 808: 1924-29. WSP 1312: 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	657	745	87	64	30	31	34	17	153	6.1	0	1,320
2	503	500	109	57	38	30	32	20	106	738	0	1,230
3	810	423	126	59	30	36	28	27	74	488	0	2,040
4	2,540	313	136	50	35	28	29	19	53	611	0	4,290
5	1,060	261	150	30	44	29	29	16	38	471	0	4,560
6	763	216	157	35	38	33	29	17	27	147	0	2,500
7	533	197	153	40	38	31	22	619	17	81	0	2,730
8	470	181	139	50	35	29	19	668	12	49	0	2,210
9	388	165	130	51	33	30	22	426	8.7	57	0	1,570
10	344	151	156	52	37	32	22	264	3.7	184	0	1,110
11	298	141	148	46	43	33	19	200	2.0	125	0	851
12	268	134	144	43	40	32	19	534	1.0	232	0	1,170
13	238	128	132	43	40	28	16	504	1.2	422	136	1,060
14	217	120	129	30	45	31	16	342	51	321	14,500	783
15	207	115	134	25	45	29	16	220	133	227	23,200	643
16	191	111	154	20	45	29	14	168	314	160	28,900	535
17	2,690	110	135	51	42	28	14	156	969	108	4,360	663
18	1,350	99	132	41	42	28	11	236	710	75	2,310	478
19	1,070	95	120	39	42	31	15	160	492	64	1,700	443
20	1,570	93	103	39	41	29	15	128	330	113	1,430	741
21	1,230	94	92	39	39	27	9.5	113	225	50	1,260	1,370
22	861	98	86	39	36	28	10	88	254	26	992	602
23	784	97	81	40	38	28	7.3	72	304	11	911	450
24	1,370	94	75	37	37	28	6.6	57	149	5.1	1,020	395
25	1,200	94	74	38	36	29	6.6	46	87	33	2,460	360
26	954	89	72	37	35	38	10	34	56	37	1,080	310
27	755	90	70	32	37	44	25	27	35	19	2,090	276
28	545	85	67	25	37	62	27	22	20	8.4	8,760	260
29	544	79	66	20	36	49	16	16	11	3.7	5,560	232
30	505	84	69	25	------	40	25	16	8.7	1.4	2,280	212
31	622	------	67	30	------	36	------	116	------	.66	1,600	------
TOTAL	25,537	5,202	3,493	1,227	1,114	1,016	564.0	5,348	4,645.3	4,874.36	104,549	35,394
MEAN	824	173	113	39.6	38.4	32.8	18.8	173	155	157	3,373	1,180
MAX	2,690	745	157	64	45	62	34	668	969	738	28,900	4,560
MIN	191	79	66	20	30	27	6.6	16	1.0	.66	0	212
AC-FT	50,650	10,320	6,930	2,430	2,210	2,020	1,120	10,610	9,210	9,670	207,400	70,200

CAL YR 1971 TOTAL 146,308.42 MEAN 401 MAX 11,200 MIN 0 AC-FT 290,200
WTR YR 1972 TOTAL 192,963.66 MEAN 527 MAX 28,900 MIN 0 AC-FT 382,700

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-17	1200	8.76	12,300
8-16	1015	18.35	42,700
8-28	0630	9.31	12,000

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 southeast of Munday, and 25 miles upstream from Brazos River.

DRAINAGE AREA.--113 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,350 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 4.57 cfs (3,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 538 cfs Sept. 5 (gage height, 11.22 ft); no flow for many days.
Period of record: Maximum discharge, 1,040 cfs Aug. 26, 1971 (gage height, 14.75 ft); no flow most of time.
Maximum stage since at least 1883 occurred June 13, 1930 (exceeded 18.0 ft); maximum stage since 1930, 18.0 ft in October 1962, from information by local resident.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	2.6	.06	.09	.06	.03	0	.06		0	0	0
2	.38	1.3	1.1	.08	.06	.01	0	0		0	0	12
3	53	.76	4.3	.06	.02	.01	0	0		0	0	.71
4	179	.44	3.7	.03	.06	0	0	0		0	0	218
5	42	.33	6.4	.03	.09	0	0	0		0	0	436
6	12	.20	2.8	.04	.11	0	0	.01		0	0	116
7	5.3	.12	1.2	.04	.11	0	0	5.2		0	0	22
8	3.0	.12	.84	.06	.11	0	0	17		0	0	5.8
9	1.7	.08	1.5	.08	.11	0	0	13		0	0	2.5
10	1.1	.08	43	.08	.12	0	0	3.8		0	0	1.2
11	.76	.06	13	.08	.14	0	0	1.9		0	0	.28
12	.56	.06	5.6	.06	.16	0	0	35		0	0	.09
13	.44	.04	2.3	.03	.16	0	0	3.5		0	0	.08
14	.33	.03	1.2	.02	.18	0	0	.16		0	0	.03
15	.33	.03	.84	.01	.14	0	0	.08		0	0	.01
16	.29	.03	.31	.01	.12	0	0	.02		0	0	0
17	3.8	.04	.27	.04	.12	0	0	0		0	0	0
18	103	.03	.31	.04	.11	0	0	0		.33	0	0
19	32	.01	.41	.03	.08	0	0	0		.05	0	7.1
20	65	.01	.31	.03	.08	0	0	0		0	0	40
21	89	.02	.24	.03	.06	0	0	0		0	0	27
22	22	.04	.16	.04	.06	0	0	0		0	0	46
23	10	.06	.14	.06	.06	0	0	0		0	0	28
24	5.9	.04	.14	.04	.06	0	0	0		0	0	5.9
25	4.9	.04	.12	.03	.08	0	0	0		0	246	1.5
26	5.6	.04	.12	.04	.06	1.2	0	0		0	28	.27
27	15	.04	.09	.03	.06	.43	.04	0		0	9.1	.14
28	15	.03	.08	.02	.08	.12	1.8	0		0	1.1	.12
29	15	.01	.08	.02	.06	.04	2.5	0		0	.03	.09
30	7.1	.04	.08	.03	------	.01	.52	0		0	0	.08
31	4.0	------	.09	.02	------	0	------	0	------	0	0	------
TOTAL	697.87	6.73	90.79	1.30	2.72	1.85	4.86	79.73	0	.38	284.23	970.90
MEAN	22.5	.22	2.93	.042	.094	.060	.16	2.57	0	.012	9.17	32.4
MAX	179	2.6	43	.09	.18	1.2	2.5	35	0	.33	246	436
MIN	.29	.01	.06	.01	.02	0	0	0	0	0	0	0
AC-FT	1,380	13	180	2.6	5.4	3.7	9.6	158	0	.8	564	1,930

CAL YR 1971 TOTAL 3,864.17 MEAN 10.6 MAX 973 MIN 0 AC-FT 7,660
WTR YR 1972 TOTAL 2,141.36 MEAN 5.85 MAX 436 MIN 0 AC-FT 4,250

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE
10- 4	1100	6.15	232
8-25	0500	7.41	334
9- 5	0400	11.22	538

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 north of Roby, 3.2 miles upstream from Cottonwood Creek, and at mile 255.7.

DRAINAGE AREA.--216 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,885.09 ft above mean sea level.

AVERAGE DISCHARGE.--10 years (1962-72), 10.8 cfs (7,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs Aug. 13 (gage height, 12.58 ft); minimum, 0.42 cfs July 19-22, 27, 28.
Period of record: Maximum discharge, 7,050 cfs Oct. 18, 1965 (gage height, 21.48 ft); maximum gage height, 21.52 ft Sept. 19, 1969; no flow at times in 1963-67.
Maximum stage since the 1890's, about 22 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.6	6.6	5.5	4.6	2.4	3.1	4.1	1.8	.73	.92	142
2	9.2	7.6	7.2	5.5	4.6	2.7	3.2	3.2	1.8	.88	.99	86
3	130	7.2	6.7	5.5	4.3	2.6	3.2	3.1	1.8	1.0	.92	21
4	35	7.1	6.6	5.3	4.2	2.4	3.1	3.0	1.7	1.1	.91	6.7
5	14	7.0	6.6	5.2	4.3	3.2	3.2	2.9	1.7	1.3	.92	48
6	11	6.9	6.4	5.3	4.4	2.6	3.1	3.5	1.7	1.4	.92	8.5
7	10	6.7	6.2	5.3	4.2	2.3	3.2	11	1.6	1.2	.89	4.1
8	9.9	6.8	6.1	5.5	4.1	3.2	3.0	28	1.6	1.2	.92	3.1
9	9.3	6.8	6.2	5.5	4.1	3.6	3.0	5.3	1.5	1.2	1.1	2.7
10	9.0	6.7	6.3	5.5	4.0	3.6	3.0	3.5	.94	1.2	1.9	2.6
11	8.8	6.7	6.1	5.4	4.1	3.7	3.0	2.9	.89	1.1	1.3	2.5
12	8.7	6.9	6.1	5.4	4.1	3.6	3.0	2.6	6.2	1.1	1.3	2.5
13	8.6	6.7	6.0	5.3	4.1	3.6	2.3	2.2	1.1	1.0	638	2.5
14	8.4	6.6	6.1	5.2	4.2	3.5	2.1	4.4	1.2	.69	491	2.4
15	8.2	6.4	5.9	5.1	3.9	3.4	1.9	3.0	7.6	.56	81	2.4
16	8.1	6.4	5.7	5.0	3.9	3.3	2.6	1.7	8.1	.52	13	2.4
17	7.9	6.6	5.7	5.3	3.8	3.2	2.6	1.9	2.5	.55	4.1	2.4
18	8.1	6.4	5.6	5.4	3.6	3.3	2.6	1.3	1.7	.48	2.1	2.4
19	9.6	6.3	5.7	5.3	3.7	3.4	3.1	3.6	1.5	.45	1.7	2.5
20	7.8	6.4	5.7	5.2	3.7	3.4	3.4	1.9	1.3	.43	1.7	5.6
21	7.6	6.4	5.7	5.0	3.8	3.3	2.7	1.9	1.1	.42	1.6	11
22	7.8	6.5	5.6	4.9	3.6	3.5	2.6	2.0	.93	.45	1.7	3.8
23	10	6.6	5.6	4.9	3.7	3.4	2.7	2.1	.95	.83	1.6	3.6
24	7.3	6.6	5.7	4.8	3.8	3.3	2.6	2.1	1.0	.96	1.6	3.5
25	7.3	6.4	5.7	4.7	3.7	3.3	2.5	2.1	1.1	.90	1.6	3.4
26	8.4	6.3	5.7	4.7	3.6	3.2	2.6	2.1	1.1	.63	3.0	3.3
27	11	6.2	5.8	4.6	3.6	3.1	2.9	2.1	.90	.47	34	3.3
28	7.3	6.3	5.7	4.6	3.4	3.1	4.9	2.1	.87	.46	25	3.2
29	20	6.2	5.6	4.5	2.6	3.0	7.0	1.9	.88	.80	4.7	3.0
30	52	6.2	5.6	4.4	------	3.1	12	1.9	.85	.85	4.6	2.9
31	12	------	5.6	4.4	------	3.2	------	1.9	------	.86	3.0	------
TOTAL	481.6	200.5	185.8	158.2	113.7	98.5	100.2	115.3	57.91	25.72	1,327.99	393.3
MEAN	15.5	6.68	5.99	5.10	3.92	3.18	3.34	3.72	1.93	.83	42.8	13.1
MAX	130	8.6	7.2	5.5	4.6	3.7	12	28	8.1	1.4	638	142
MIN	7.3	6.2	5.6	4.4	2.6	2.3	1.9	1.3	.85	.42	.89	2.4
AC-FT	955	398	369	314	226	195	199	229	115	51	2,630	780

CAL YR 1971 TOTAL 7,773.90 MEAN 21.3 MAX 1,700 MIN .03 AC-FT 15,420
WTR YR 1972 TOTAL 3,258.72 MEAN 8.90 MAX 638 MIN .42 AC-FT 6,460

PEAK DISCHARGE (BASE, 300 CFS).--Aug. 13 (1530) 1,130 cfs (12.58 ft).

08083200 Lake Sweetwater near Sweetwater, Tex.

LOCATION.--Lat 32°26'20", long 100°18'24", Nolan County, on downstream side of intake structure to pump station, near left end of dam on Bitter Creek, 6.5 miles southeast of Sweetwater, and 8.5 miles upstream from mouth.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--January 1936 to current year. Prior to October 1969, monthend contents only.

GAGE.--Nonrecording gage. Datum of gage is 0.53 ft above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 9,300 acre-ft Jan. 7 to Mar. 14 (gage height, 2,111.4 ft); minimum observed, 7,860 acre-ft Aug. 9-12 (gage height, 2,108.5 ft).
Period of record: Maximum contents observed, 12,360 acre-ft June 1, 1957 (gage height, 2,116.70 ft); minimum observed, 780 acre-ft Aug. 17, 1953 (gage height, 2,082.54 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 2,600 ft long. Dam was completed and storage began in 1930; lake first filled to spillway elevation in 1936. Dam is property of city of Sweetwater and was built to impound water for municipal use; however, none has been used since 1967. During the current year, 3.9 acre-ft was used for oil well drilling. Emergency spillway is located just to left end of dam and has a concrete ogee-type crest 607.5 ft long. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	2,128.3	-
Crest of emergency spillway	2,116.0	11,900

COOPERATION.--Record of gage heights and diversions furnished by city of Sweetwater. Capacity table furnished by Freese, Nichols, and Endress, Consulting Engineers was based on a survey in 1929.

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

2,107.0	7,160
2,111.0	9,100
2,112.0	9,600

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,800	9,050	9,100	9,250	9,300	9,300	9,250	8,900	8,600	8,250	7,960	8,300
2	8,800	9,050	9,100	9,250	9,300	9,300	9,250	8,850	8,600	8,250	7,960	8,300
3	8,850	9,050	9,100	9,250	9,300	9,300	9,250	8,850	8,600	8,250	7,960	8,300
4	8,850	9,050	9,100	9,250	9,300	9,300	9,250	8,850	8,600	8,250	7,960	8,300
5	8,850	9,050	9,150	9,250	9,300	9,300	9,250	8,850	8,600	8,250	7,960	8,300
6	8,850	9,050	9,150	9,250	9,300	9,300	9,250	8,850	8,500	8,200	7,960	8,300
7	8,900	9,050	9,150	9,300	9,300	9,300	9,250	8,850	8,500	8,200	7,960	8,300
8	8,900	9,050	9,150	9,300	9,300	9,300	9,250	8,850	8,500	8,200	7,960	8,300
9	8,900	9,050	9,200	9,300	9,300	9,300	9,250	8,850	8,450	8,200	7,860	8,300
10	8,900	9,050	9,200	9,300	9,300	9,300	9,250	8,850	8,450	8,100	7,860	8,300
11	8,900	9,050	9,150	9,300	9,300	9,300	9,250	8,850	8,450	8,100	7,860	8,250
12	8,900	9,050	9,200	9,300	9,300	9,300	9,250	8,850	8,450	8,100	7,860	8,250
13	8,900	9,050	9,200	9,300	9,300	9,300	9,250	8,850	8,400	8,100	8,450	8,250
14	8,900	9,050	9,200	9,300	9,300	9,300	9,250	8,850	8,450	8,100	8,450	8,250
15	8,900	9,050	9,200	9,300	9,300	9,250	9,250	8,850	8,450	8,100	8,450	8,250
16	8,900	9,050	9,200	9,300	9,300	9,250	9,250	8,800	8,450	8,100	8,450	8,250
17	8,900	9,100	9,200	9,300	9,300	9,250	9,250	8,800	8,450	8,100	8,450	8,250
18	8,900	9,100	9,200	9,300	9,300	9,250	9,250	8,800	8,450	7,960	8,450	8,250
19	9,000	9,100	9,200	9,300	9,300	9,250	9,000	8,800	8,450	7,960	8,450	8,250
20	9,000	9,100	9,200	9,300	9,300	9,250	9,000	8,800	8,450	7,960	8,450	8,250
21	9,000	9,100	9,200	9,300	9,300	9,250	9,000	8,800	8,400	7,960	8,450	8,350
22	9,000	9,100	9,200	9,300	9,300	9,250	9,000	8,800	8,400	7,960	8,450	8,350
23	9,000	9,100	9,200	9,300	9,300	9,250	9,000	8,800	8,400	7,960	8,450	8,350
24	9,000	9,100	9,200	9,300	9,300	9,250	9,000	8,700	8,400	7,960	8,450	8,350
25	9,000	9,100	9,200	9,300	9,300	9,250	8,900	8,700	8,400	7,960	8,450	8,350
26	9,000	9,100	9,200	9,300	9,300	9,250	8,900	8,700	8,400	7,960	8,450	8,350
27	9,000	9,100	9,200	9,300	9,300	9,250	8,900	8,700	8,400	7,960	8,450	8,350
28	9,000	9,100	9,250	9,300	9,300	9,250	8,900	8,700	8,350	7,960	8,450	8,350
29	9,000	9,100	9,250	9,300	9,300	9,250	8,900	8,700	8,350	7,960	8,450	8,350
30	9,000	9,100	9,250	9,300	------	9,250	8,900	8,600	8,250	7,960	8,450	8,350
31	9,000	------	9,250	9,300	------	9,250	------	8,600	------	7,960	8,300	------
(†)	2,110.8	2,111.0	2,111.3	2,111.4	2,111.4	2,111.3	2,110.6	2,110.0	2,109.3	2,108.7	2,109.4	2,109.5
(*)	+200	+100	+150	+50	0	-50	-350	-300	-350	-290	+340	+50
MAX	9,000	9,100	9,250	9,300	9,300	9,300	9,250	8,900	8,600	8,250	8,450	8,350
MIN	8,800	9,050	9,100	9,250	9,300	9,250	8,900	8,600	8,250	7,960	7,860	8,250

CAL YR 1971..... * +4,260 MAX 9,250 MIN 4,400
WTR YR 1972..... * -450 MAX 9,300 MIN 7,860

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

08083240 Clear Fork Brazos River at Hawley, Tex.

LOCATION.--Lat 32°35'53", long 99°48'53", Jones County, on right bank 90 ft upstream from upstream bridge on U.S. Highways 83 and 277, 0.8 mile south of Hawley, 7.4 miles upstream from Mulberry Creek, and at mile 188.6.

DRAINAGE AREA.--1,390 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,613.25 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 54.5 cfs (39,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,470 cfs July 1 (gage height, 11.69 ft); minimum, 0.60 cfs Aug. 3.
Period of record: Maximum discharge, 6,170 cfs Sept. 11, 1969 (gage height, 18.51 ft); minimum, 0.44 cfs May 27, 1971.
Maximum stage since at least 1915 occurred in 1932; second highest stage, 24.2 ft in 1957, from information by local residents.

REMARKS.--Records good. Lake Sweetwater (capacity, 11,900 acre-ft) is located upstream from gage. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	92	42	39	36	28	20	16	8.6	705	1.4	77
2	120	61	50	39	36	28	19	16	8.8	135	1.2	231
3	111	54	55	39	36	26	19	19	8.0	54	.99	506
4	224	50	53	40	35	26	18	16	7.7	18	1.1	257
5	384	48	53	39	35	24	17	14	7.5	11	1.3	65
6	122	48	51	39	35	24	18	16	7.0	8.7	1.9	34
7	76	47	48	39	35	24	18	24	7.0	7.7	3.7	44
8	68	46	48	38	34	23	18	72	6.4	7.7	1.7	27
9	63	46	49	38	34	23	16	38	6.1	7.1	1.3	18
10	58	46	54	38	34	23	17	32	6.1	6.5	2.3	15
11	56	45	52	38	34	23	16	24	17	5.9	16	14
12	54	44	52	38	35	23	16	18	9.0	5.3	25	13
13	52	44	50	37	35	23	16	16	7.7	8.0	510	29
14	49	43	46	36	35	23	16	82	12	4.5	746	16
15	48	43	46	36	34	22	14	40	22	3.4	470	20
16	46	43	44	37	34	22	14	19	34	3.7	476	49
17	47	44	46	37	34	21	13	18	22	3.5	72	15
18	47	44	44	37	33	21	13	15	20	3.0	26	12
19	56	44	42	36	33	20	14	13	18	6.1	13	11
20	132	42	41	36	32	20	20	12	15	12	7.9	10
21	164	42	41	36	32	20	26	12	13	8.9	6.1	50
22	113	43	40	36	32	19	20	11	11	4.6	4.8	37
23	284	44	40	36	31	18	19	10	11	3.7	4.3	77
24	116	44	40	35	31	18	16	10	9.5	3.3	4.3	25
25	72	43	40	34	30	18	14	10	9.1	1.9	4.0	16
26	59	42	39	34	30	18	14	9.1	8.3	1.7	4.1	16
27	84	41	39	34	30	18	14	8.8	6.8	1.5	5.5	57
28	89	40	40	34	29	17	15	9.1	4.9	1.8	16	19
29	70	41	39	34	29	17	16	9.4	5.0	1.5	69	16
30	60	41	40	34	------	18	16	8.1	43	1.2	43	14
31	66	------	40	34	------	19	------	8.2	------	1.5	15	------
TOTAL	3,123	1,395	1,404	1,137	963	667	502	625.7	371.5	1,047.7	2,554.89	1,790
MEAN	101	46.5	45.3	36.7	33.2	21.5	16.7	20.2	12.4	33.8	82.4	59.7
MAX	384	92	55	40	36	28	26	82	43	705	746	506
MIN	46	40	39	34	29	17	13	8.1	4.9	1.2	.99	10
AC-FT	6,190	2,770	2,780	2,260	1,910	1,320	996	1,240	737	2,080	5,070	3,550

CAL YR 1971 TOTAL 40,879.09 MEAN 112 MAX 2,550 MIN .61 AC-FT 81,080
WTR YR 1972 TOTAL 15,580.79 MEAN 42.6 MAX 746 MIN .99 AC-FT 30,900

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE
7- 1	0900	11.69	1,470
8-13	2030	10.28	928
9- 3	1100	8.95	548

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 south of Hawley, and 7.0 miles upstream from Clear Fork Brazos River.

DRAINAGE AREA.--205 sq mi.

PERIOD OF RECORD.--December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,615.98 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,560 cfs Aug. 14 (gage height, 13.61 ft); no flow for many days.
Period of record: Maximum discharge, 1,560 cfs Aug. 14, 1972 (gage height, 13.61 ft); no flow at times each year.
Maximum stage since at least 1932, about 16.0 ft in 1957, from floodmarks on right bank.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	.53	.16	.46	.16	.16	.05	11	0	0	0	14
2	3.4	.34	2.9	.46	.16	.16	.05	11	0	0	0	16
3	2.6	.24	6.5	.46	.13	.16	.05	11	0	0	0	6.5
4	2.2	.16	6.5	.46	.13	.13	.05	10	0	.06	0	2.2
5	1.8	.13	4.3	.46	.13	.13	.04	9.9	0	.01	0	1.2
6	1.5	.13	2.8	.49	.13	.16	.04	12	0	0	0	1.1
7	1.3	.13	2.3	.53	.13	.16	.04	47	0	0	0	1.2
8	1.2	.13	2.1	.53	.10	.13	.03	22	0	0	0	.26
9	1.1	.13	2.1	.56	.10	.16	.02	5.5	0	0	0	.09
10	1.1	.10	7.6	.60	.10	.20	.02	1.2	0	0	0	.06
11	1.2	.10	5.3	.60	.10	.29	.02	.40	2.7	0	0	.04
12	1.1	.10	4.2	.60	.10	.34	.02	.24	.12	0	.13	.03
13	.68	.10	2.7	.53	.09	.34	.02	.12	0	0	671	.03
14	.60	.10	3.5	.42	.19	.34	.01	44	0	0	1,270	.23
15	.53	.10	5.7	.29	.29	.46	.01	1.5	5.0	0	62	.46
16	.34	.10	2.4	.29	.17	.34	.01	.25	.38	0	9.4	.23
17	.29	.13	2.2	.29	.08	.24	.01	.07	1.0	0	2.7	.08
18	.24	.13	1.5	.24	.06	.10	.01	.03	.10	0	.84	.05
19	2.0	.13	.95	.24	.13	.10	.03	.01	.01	0	.38	.05
20	12	.13	.77	.24	.16	.13	2.3	0	0	0	.20	.04
21	7.9	.13	.65	.24	.10	.16	.29	0	0	0	.12	.04
22	3.7	.13	.57	.24	.10	.16	.52	0	0	0	.08	.04
23	14	.16	.53	.20	.16	.13	.26	0	0	0	.06	3.0
24	6.4	.20	.50	.20	.16	.10	.08	0	0	0	.06	.88
25	4.7	.20	.44	.20	.13	.10	.04	0	0	0	.06	.21
26	2.4	.20	.40	.20	.13	.10	.04	0	0	0	.06	.08
27	2.6	.20	.40	.20	.13	.08	.10	0	0	0	.06	.06
28	1.8	.20	.40	.20	.16	.08	3.0	0	0	0	.06	.04
29	1.3	.20	.43	.16	.16	.08	11	0	.74	0	.06	.03
30	1.1	.16	.46	.16	------	.08	12	0	0	0	.08	.03
31	.68	------	.46	.16	------	.08	------	0	------	0	.08	------
TOTAL	86.46	4.92	71.72	10.91	3.87	5.38	30.16	187.22	10.05	.07	2,017.43	48.26
MEAN	2.79	.16	2.31	.35	.13	.17	1.01	6.04	.34	.002	65.1	1.61
MAX	14	.53	7.6	.60	.29	.46	12	47	5.0	.06	1,270	16
MIN	.24	.10	.16	.16	.06	.08	.01	0	0	0	0	.03
AC-FT	171	9.8	142	22	7.7	11	60	371	20	.1	4,000	96

CAL YR 1971 TOTAL 5,658.97 MEAN 15.5 MAX 1,180 MIN 0 AC-FT 11,220
WTR YR 1972 TOTAL 2,476.45 MEAN 6.77 MAX 1,270 MIN 0 AC-FT 4,910

PEAK DISCHARGE (BASE, 300 CFS).--Aug. 14 (0400) 1,560 cfs (13.61 ft).

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 southeast of Caps, and 7.5 miles southwest of Abilene.

DRAINAGE AREA.--139 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,804.15 ft above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--9 years, 8.91 cfs (6,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 189 cfs Aug. 13 (gage height, 3.43 ft); minimum, 0.24 cfs Apr. 29, 30.
Period of record: Maximum discharge, 1,800 cfs June 22, 1965 (gage height, 14.24 ft); no flow at times.

REMARKS.--Records fair. Since 1921 flow largely regulated by Lake Abilene (capacity, 9,790 acre-ft) 12 miles upstream. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	10	6.8	6.5	3.2	6.8	3.3	.34	.42	3.0	3.4	.96
2	63	10	33	6.5	2.8	4.6	2.3	.34	.40	2.0	3.9	.96
3	73	8.6	14	6.6	2.6	2.4	2.1	.56	.41	2.0	4.3	.96
4	57	8.0	12	7.8	2.7	4.0	2.9	.35	.42	2.0	5.2	.96
5	45	7.6	22	6.7	3.5	5.8	3.7	.33	.49	1.5	4.3	.84
6	36	7.5	13	5.7	3.8	5.6	4.1	3.6	.52	1.0	4.1	.84
7	28	7.0	11	5.5	3.9	3.7	3.9	9.9	.52	.70	3.9	.84
8	25	6.5	9.9	4.9	3.9	2.3	3.7	1.7	.52	.50	3.3	.84
9	22	6.2	22	4.9	6.8	2.6	2.5	.99	.56	.44	3.2	.84
10	18	6.2	51	4.9	7.5	4.9	1.4	.91	.62	.36	5.8	.84
11	16	6.0	12	4.7	3.9	4.9	1.2	.85	2.8	.36	6.8	.84
12	14	5.8	11	4.5	2.8	4.7	1.2	2.7	28	.36	7.0	.84
13	12	6.1	9.9	4.6	3.2	4.7	1.2	3.7	4.9	.36	57	.72
14	11	6.4	10	4.1	3.8	3.8	1.2	1.3	3.2	.36	4.9	.72
15	11	6.2	11	3.6	3.7	2.3	2.5	.82	32	.36	3.9	.72
16	9.2	6.4	9.7	3.8	3.7	2.2	3.6	.68	4.3	.40	4.0	.72
17	9.2	5.1	9.0	4.1	2.7	2.7	3.3	.62	2.8	.52	4.3	.72
18	8.8	4.7	8.2	4.1	2.6	4.9	3.9	.62	2.4	2.7	4.1	.72
19	13	4.7	8.1	4.1	2.3	4.9	5.9	.56	2.2	3.3	4.1	.72
20	21	4.4	7.8	4.1	2.0	3.3	4.6	4.1	12	4.4	4.1	.62
21	16	4.4	7.6	4.1	8.2	2.7	3.3	.46	1.1	2.6	4.1	.62
22	14	7.9	6.9	4.1	5.4	2.8	2.1	.37	8.2	1.2	4.1	.62
23	25	9.4	6.8	4.1	3.1	3.5	.75	.30	.93	.97	4.1	.62
24	13	8.4	6.8	4.1	2.5	5.8	.40	.67	.37	1.6	3.7	.62
25	12	8.1	6.8	4.1	2.3	4.6	.33	1.6	1.6	1.5	1.5	.62
26	12	8.1	7.2	4.1	2.9	1.7	.33	1.3	1.6	8.3	1.1	.62
27	15	8.0	7.2	3.9	2.9	2.4	.60	1.1	1.0	3.7	1.1	.52
28	12	7.8	6.8	3.9	2.2	4.3	4.0	1.1	.60	1.3	1.1	.52
29	11	8.1	6.6	4.1	4.4	4.3	1.5	1.3	12	2.4	.96	.52
30	11	6.9	6.8	4.1	------	4.2	.24	2.2	5.0	4.4	.96	.52
31	11	------	6.8	4.1	------	4.4	------	1.4	------	4.4	.96	------
TOTAL	724.2	210.5	367.7	146.4	105.3	121.8	72.05	46.77	131.88	58.99	165.28	22.02
MEAN	23.4	7.02	11.9	4.72	3.63	3.93	2.40	1.51	4.40	1.90	5.33	.73
MAX	80	10	51	7.8	8.2	6.8	5.9	9.9	32	8.3	57	.96
MIN	8.8	4.4	6.6	3.6	2.0	1.7	.24	.30	.37	.36	.96	.52
AC-FT	1,440	418	729	290	209	242	143	93	262	117	328	44

CAL YR 1971 TOTAL 6,210.19 MEAN 17.0 MAX 889 MIN 0 AC-FT 12,320
WTR YR 1972 TOTAL 2,172.89 MEAN 5.94 MAX 80 MIN .24 AC-FT 4,310

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 north of Caps, and 7.2 miles southwest of Abilene.

DRAINAGE AREA.--39.1 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,786.12 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 2.06 cfs (1,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 18 cfs Oct. 23 (gage height, 1.85 ft); no flow at times.
Period of record: Maximum discharge, 1,380 cfs May 6, 1969 (gage height, 9.68 ft); no flow at times each year.
Maximum stage since 1903, about 15 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	1.8	1.0	.46	.52	.36	.16	0				
2	2.9	1.7	2.1	.51	.60	.22	.14	0				
3	2.6	1.5	2.0	.52	.39	.26	.13	0				
4	2.2	1.5	1.4	.51	.41	.25	.11	0				
5	2.0	1.9	1.5	.44	.61	.25	.10	0				
6	1.6	1.6	1.2	.49	.63	.32	.09	.51				
7	1.4	1.4	.73	.69	.44	.42	.08	2.4				
8	1.6	1.5	.69	.81	.40	.29	.07	.39				
9	1.4	1.8	.68	.82	.48	.23	.06	.02				
10	1.3	1.8	1.6	.72	.43	.32	.05	0				
11	1.1	1.9	.91	.46	.40	.37	.04	0				
12	1.1	2.0	.61	.48	.46	.33	.03	0				
13	1.0	1.9	.55	.40	.53	.27	.02	0				
14	1.1	1.9	.78	.36	.58	.33	.02	0				
15	1.3	1.6	5.5	.32	.41	.35	.02	0				
16	1.3	1.4	.84	.44	.41	.25	.01	0				
17	1.3	1.4	.46	.66	.37	.27	.01	0				
18	1.8	1.3	.38	.72	.33	.23	.01	0				
19	5.3	1.0	.48	.68	.29	.24	0	0				
20	6.6	1.1	.51	.52	.40	.27	0	0				
21	2.4	1.1	.38	.44	.53	.44	0	0				
22	1.8	1.5	.40	.44	.36	.44	0	0				
23	11	1.6	.44	.47	.32	.44	0	0				
24	3.7	1.2	.47	.43	.38	.51	0	0				
25	2.4	1.1	.51	.32	.32	.51	0	0				
26	1.8	1.0	.44	.47	.24	.38	0	0				
27	4.1	.97	.44	.39	.24	.30	0	0				
28	2.3	1.0	.44	.44	.34	.25	0	0				
29	1.8	1.0	.48	.44	.44	.22	0	0				
30	1.8	1.0	.51	.43	------	.20	0	0				
31	1.8	------	.47	.35	------	.18	------	0	------			------
TOTAL	77.2	43.47	28.90	15.63	12.26	9.70	1.15	3.32	0	0	0	0
MEAN	2.49	1.45	.93	.50	.42	.31	.038	.11	0	0	0	0
MAX	11	2.0	5.5	.82	.63	.51	.16	2.4	0	0	0	0
MIN	1.0	.97	.38	.32	.24	.18	0	0	0	0	0	0
AC-FT	153	86	57	31	24	19	2.3	6.6	0	0	0	0

CAL YR 1971 TOTAL 2,780.67 MEAN 7.62 MAX 948 MIN 0 AC-FT 5,520
WTR YR 1972 TOTAL 191.63 MEAN .52 MAX 11 MIN 0 AC-FT 380

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

08083420 Cat Claw Creek at Abilene, Tex.

LOCATION.--Lat 32°28'31", long 99°44'56", Taylor County, in Sears Park 320 ft downstream from bridge on Ambler Street in Abilene and 1.8 miles upstream from mouth.

DRAINAGE AREA.--13.0 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,682.32 ft (Corps of Engineers benchmark).

EXTREMES.--Water year 1971: Maximum discharge, 513 cfs Aug. 26 (gage height, 4.77 ft); no flow for many days.
Water year 1972: Maximum discharge, 577 cfs Aug. 13 (gage height, 5.01 ft); no flow for many days.
Period of record: Maximum discharge, 577 cfs Aug. 13, 1972 (gage height, 5.01 ft); no flow for many days each year.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	0	0		0	0	0	.02	41	.26
2	0		0	0	0		0	0	0	0	3.5	.02
3	0		0	0	0		0	0	0	0	.03	0
4	0		0	0	0		0	0	0	0	0	0
5	.64		0	0	0		0	0	0	0	0	0
6	.01		0	0	0		0	0	0	0	3.7	0
7	0		0	0	0		0	0	0	0	3.5	0
8	1.2		0	0	0		0	.04	0	0	10	0
9	.05		0	0	0		0	0	0	0	.04	.05
10	0		0	.05	0		0	0	0	0	0	0
11	0		0	.02	0		0	0	2.4	0	.10	0
12	0		0	0	0		0	0	3.8	0	19	0
13	0		0	0	0		0	0	.70	0	20	0
14	0		0	0	0		0	0	0	0	80	0
15	0		0	0	0		0	0	0	0	37	0
16	.02		0	0	0		47	0	0	0	14	0
17	.07		0	0	0		22	0	0	0	5.3	.04
18	.06		0	0	.01		1.5	0	0	0	1.8	12
19	.05		0	0	0		.02	0	0	0	.35	7.0
20	0		0	0	0		.03	0	5.6	0	.01	.46
21	0		0	0	6.6		0	0	7.3	0	0	0
22	0		0	0	.05		0	0	19	0	0	29
23	2.7		0	0	0		0	0	.11	16	0	79
24	.05		0	0	0		.02	0	0	1.7	16	151
25	.02		0	0	0		.18	0	0	0	.32	80
26	.06		0	0	0		.06	0	0	0	120	18
27	0		0	0	0		0	21	0	0	40	6.4
28	0		0	0	0		0	4.6	0	23	14	1.4
29	0		0	0	------		0	59	0	.15	7.8	.58
30	0		.04	0	------		0	2.4	0	16	2.7	.07
31	0	------	0	0	------		------	.01	------	.32	.73	------
TOTAL	4.93	0	.04	.07	6.66	0	70.81	87.05	38.91	57.19	440.88	385.28
MEAN	.16	0	.001	.002	.24	0	2.36	2.81	1.30	1.84	14.2	12.8
MAX	2.7	0	.04	.05	6.6	0	47	59	19	23	120	151
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	9.8	0	.08	.1	13	0	140	173	77	113	874	764

WTR YR 1971 TOTAL 1,091.82 MEAN 2.99 MAX 151 MIN 0 AC-FT 2,170

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0800	3.90	309	8-26	0800	4.77	513
5-29	1600	4.50	443	9-24	0030	4.70	495
8-14	0600	3.99	326				

08083420 Cat Claw Creek at Abilene, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.06	.10		0	0	0	0	0	11	0	11
2	0	.01	19		0	0	0	0	0	0	0	2.4
3	16	0	.22		0	0	0	0	0	0	0	.03
4	.26	0	.01		0	0	0	0	0	14	.06	0
5	.01	0	5.7		0	0	0	.05	0	.31	0	0
6	0	0	.12		0	0	0	28	0	0	0	0
7	0	0	.01		0	0	0	23	0	0	0	0
8	1.8	0	0		0	0	0	.13	0	0	0	0
9	.06	0	9.9		0	0	0	0	0	0	5.4	0
10	0	0	3.8		0	0	0	0	0	0	67	0
11	0	0	.06		.12	0	0	.84	36	0	7.7	0
12	0	0	0		.02	0	0	6.1	2.7	0	2.6	0
13	0	0	0		0	0	0	15	0	.85	94	0
14	0	0	6.2		0	0	2.0	5.0	0	.03	.98	12
15	0	0	.65		0	0	.01	.03	44	0	0	3.0
16	0	0	.02		0	0	0	0	.10	0	0	0
17	0	.04	0		0	0	0	0	0	0	0	0
18	2.8	0	0		0	0	0	0	0	0	0	0
19	29	0	0		0	0	21	0	0	0	0	0
20	1.6	0	0		0	0	32	0	0	0	0	4.6
21	.03	0	0		0	0	.03	0	0	0	0	38
22	21	4.2	0		0	0	0	0	0	0	20	.53
23	5.6	.22	0		0	0	0	0	0	0	.51	0
24	.13	0	0		0	0	0	0	0	.01	.20	0
25	.02	0	0		0	0	0	0	0	0	0	0
26	5.4	0	0		0	0	.01	0	0	0	0	0
27	2.6	0	0		0	0	1.0	0	0	0	0	0
28	.06	0	0		0	0	0	0	0	0	0	0
29	0	0	0		0	0	0	0	0	0	0	0
30	.01	0	0		------	.54	0	0	.10	0	0	0
31	.05	------	0		------	.52	------	0	------	0	0	------
TOTAL	86.44	4.53	45.79	0	.14	1.06	56.05	78.15	82.90	26.20	198.45	71.56
MEAN	2.79	.15	1.48	0	.005	.034	1.87	2.52	2.76	.85	6.40	2.39
MAX	29	4.2	19	0	.12	.54	32	28	44	14	94	38
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	171	9.0	91	0	.3	2.1	111	155	164	52	394	142

CAL YR 1971 TOTAL 1,223.61 MEAN 3.35 MAX 151 MIN 0 AC-FT 2,430
WTR YR 1972 TOTAL 651.27 MEAN 1.78 MAX 94 MIN 0 AC-FT 1,290

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.HT.	DISCHARGE
4-19	2400	4.21	376
6-11	1845	4.00	330
8-13	1030	5.01	577

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 downstream from Lytle Creek, 4.1 miles downstream from Buttonwillow Creek, 5.9 miles upstream from Rainy Creek, 7.2 miles downstream from Kirby Lake, and 8.1 miles upstream from mouth.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,676.66 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 335 cfs Aug. 13 (gage height, 5.11 ft); no flow at times.
Period of record: Maximum discharge, 335 cfs Aug. 13, 1972 (gage height, 5.11 ft); no flow at times.

REMARKS.--Records good above 1.0 cfs and fair below. Flow is partly regulated by Lytle Lake (capacity, 1,200 acre-ft) and Lake Kirby (capacity, 7,620 acre-ft). During water year 1972, the city of Abilene pumped 23.7 acre-ft from Lake Kirby.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.44	1.0	.75	.34	.28	.12	.04	.05	1.5	0	4.9
2	1.1	.43	20	.75	.28	.19	.07	.11	.04	.08	0	1.0
3	12	.37	3.8	.75	.19	.28	.07	.05	.04	.05	0	.51
4	2.3	.34	2.2	.75	.19	.23	.05	.04	.04	6.3	.24	.07
5	1.1	.34	8.0	.65	.19	.19	.05	.03	.04	.76	.01	.04
6	.86	.39	2.7	.65	.23	.23	.04	18	.04	.11	0	1.1
7	.75	.41	1.3	.65	.19	.23	.04	29	.04	.09	.01	.14
8	2.6	.38	1.0	.65	.19	.19	.02	1.2	.04	.09	.01	.01
9	.98	.37	6.7	.65	.19	.19	.02	.25	.04	.09	2.0	.01
10	.65	.40	9.0	.65	.23	.15	.02	.13	.05	.09	27	.01
11	.65	.40	3.1	.65	.86	.15	.02	2.3	38	.05	15	.02
12	.56	.34	2.0	.65	1.7	.12	.02	8.9	12	.03	.34	.01
13	.48	.34	1.6	.65	.48	.12	.02	10	.15	.26	85	.01
14	.48	.38	6.4	.65	.28	.12	.94	6.3	.01	.07	5.9	10
15	.56	.43	4.2	.65	.23	.12	.05	.56	34	.03	.26	.05
16	.48	.48	1.9	.65	.23	.12	.02	.20	1.5	.02	.07	.03
17	.48	.50	1.6	.65	.23	.09	.01	.11	.39	.01	.02	.02
18	2.7	.40	1.8	.75	.19	.09	.01	.10	.17	.01	.01	.01
19	17	.34	1.5	.86	.19	.09	13	.05	.10	.01	.01	.01
20	4.2	.35	1.4	.41	.23	.09	19	.05	.09	.01	.01	.01
21	.56	.42	1.3	.34	.23	.09	.59	.06	.08	.02	.01	30
22	19	5.3	1.3	.34	.19	.05	.21	.05	.08	.01	11	.10
23	12	2.9	1.3	.34	.23	.05	.14	.06	.07	0	1.7	.06
24	.98	.75	1.3	.28	.23	.03	.09	.11	.07	.01	.09	.04
25	.48	.60	1.2	.28	.28	.03	.07	.12	.06	0	.02	.02
26	5.1	.45	1.1	.48	.19	.04	.07	.10	.06	0	.34	.01
27	5.0	.45	1.1	.34	.19	.04	.31	.09	.05	0	.05	.01
28	1.0	.37	1.1	.23	.19	.04	.07	.08	.04	0	.01	.01
29	.63	.34	1.2	.19	.23	.04	.07	.06	.04	0	.01	0
30	.52	.89	1.4	.19	------	1.1	.05	.05	.07	0	.01	0
31	.41	------	1.3	.19	------	.57	------	.05	------	0	.02	------
TOTAL	97.21	20.30	94.8	16.67	8.80	5.35	35.26	78.25	87.45	9.70	149.15	48.21
MEAN	3.14	.68	3.06	.54	.30	.17	1.18	2.52	2.92	.31	4.81	1.61
MAX	19	5.3	20	.86	1.7	1.1	19	29	38	6.3	85	30
MIN	.41	.34	1.0	.19	.19	.03	.01	.03	.01	0	0	0
AC-FT	193	40	188	33	17	11	70	155	173	19	296	96

CAL YR 1971 TOTAL 1,271.77 MEAN 3.48 MAX 141 MIN 0 AC-FT 2,520
WTR YR 1972 TOTAL 651.15 MEAN 1.78 MAX 85 MIN 0 AC-FT 1,290

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 upstream from dam on Elm Creek, 4.3 miles upstream from Clear Fork Brazos River, and 5.4 miles south of Nugent.

DRAINAGE AREA.--478 sq mi.

PERIOD OF RECORD.--July 1940 to current year. Prior to October 1969, monthend contents only.

GAGE.--Nonrecording gage. Datum of gage is 1,580.78 ft above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 79,730 acre-ft Oct. 1, 2 (gage height, 56.4 ft); minimum, 57,860 acre-ft Aug. 10-12 (gage height, 50.7 ft).
Period of record: Maximum contents observed, 89,910 acre-ft May 25, 1957 (gage height, 58.7 ft); minimum observed, 19,040 acre-ft Apr. 23-25, 1953 (gage height, 34.5 ft).

REMARKS.--Reservoir is formed by rock-faced earthfill dam 3,200 ft long. Dam completed and storage began in October 1938. Dam is property of city of Abilene and was built to impound water for municipal use. During the year, the city of Abilene diverted 3,850 acre-ft from the Clear Fork Brazos River into Fort Phantom Hill Reservoir and pumped 15,780 acre-ft from the reservoir for municipal use. Pumpage records are furnished by the city of Abilene. An undetermined amount of floodflow is diverted by gravity ditch from Deadman Creek into reservoir. The emergency spillway, located 0.7 mile right of gage, is 900 ft long with levees on each side. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	69.2	-
Crest of emergency spillway	55.1	74,310
Invert of top outlet gate	28.0	10,330
Invert of center outlet gate	20.0	4,240
Invert of lower outlet gate	1.6	neglibible

COOPERATION.--Record of gage heights and diversions furnished by city of Abilene. Capacity table furnished by Soil Conservation Service from survey of Oct. 2, 1953.

REVISIONS (WATER YEARS).--WSP 1562: 1953-57 (figures of monthend contents).

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

50.0	55,480	56.0	78,020
52.0	62,420	58.0	86,710
54.0	69,930		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79,730	77,610	75,140	75,960	74,310	72,710	70,320	68,010	66,860	63,520	59,230	62,060
2	79,730	77,200	75,550	75,960	74,310	72,710	70,320	68,010	66,860	63,520	59,230	62,780
3	79,300	77,200	75,960	75,960	74,310	72,710	70,320	68,010	66,860	63,520	58,880	62,780
4	79,300	77,200	75,960	75,960	74,310	72,710	69,930	68,010	66,480	63,520	58,880	62,780
5	79,300	76,780	75,960	75,960	73,900	72,310	69,930	67,630	66,100	63,520	58,880	62,780
6	78,880	76,780	75,960	75,960	73,900	72,310	69,930	67,630	66,100	63,520	58,540	62,420
7	78,880	76,780	75,960	75,550	73,900	72,310	69,930	68,010	65,730	63,520	58,540	62,420
8	78,880	76,370	75,960	75,550	73,900	72,310	69,540	68,390	65,730	63,520	58,200	62,420
9	78,880	76,370	75,960	75,550	73,500	72,310	69,540	68,780	65,360	63,150	58,200	62,420
10	78,450	76,370	75,960	75,550	73,500	72,310	69,540	68,780	65,360	63,150	57,860	62,060
11	78,450	76,370	75,960	75,550	73,500	72,310	69,540	68,780	64,990	63,150	57,860	62,060
12	78,450	75,960	76,370	75,550	73,500	71,910	69,160	68,780	65,360	63,150	57,860	62,060
13	78,020	75,960	76,370	75,140	73,900	71,910	69,160	68,780	65,360	63,150	60,290	61,710
14	78,020	75,960	76,370	75,140	73,900	71,910	69,160	68,780	65,360	62,780	60,650	61,710
15	77,610	75,960	76,370	75,140	73,900	71,910	68,780	68,390	65,360	62,780	62,780	61,710
16	77,610	75,960	76,370	75,140	73,900	71,910	68,780	68,390	65,360	62,420	63,150	61,710
17	77,610	75,960	76,370	75,140	73,900	71,520	68,390	68,390	65,360	62,420	63,520	61,350
18	77,610	75,960	76,370	75,140	73,900	71,520	68,390	68,390	64,990	62,060	63,890	61,350
19	77,200	75,550	76,370	75,140	73,900	71,520	68,010	68,390	64,990	62,060	63,890	61,350
20	77,610	75,550	76,370	75,140	73,500	71,520	69,160	68,390	64,990	61,710	63,520	61,350
21	78,020	75,550	75,960	74,720	73,500	71,520	69,160	68,010	64,620	61,710	63,150	61,000
22	78,020	75,550	75,960	74,720	73,500	71,120	69,160	68,010	64,620	61,350	63,150	61,000
23	78,020	75,550	75,960	74,720	73,500	71,120	68,780	68,010	64,620	61,350	63,150	61,000
24	78,020	75,550	75,960	74,720	73,500	71,120	68,780	68,010	64,620	61,000	62,780	61,000
25	78,020	75,550	75,960	74,720	73,500	71,120	68,780	67,630	64,260	61,000	62,780	60,650
26	78,020	75,140	75,960	74,720	73,500	70,720	68,390	67,630	64,260	60,650	62,780	60,650
27	78,020	75,140	75,960	74,720	73,100	70,720	68,390	67,630	63,890	60,650	62,780	60,650
28	77,610	75,140	75,960	74,310	73,100	70,720	68,390	67,250	63,890	60,290	62,420	60,650
29	77,610	75,140	75,960	74,310	73,100	70,720	68,390	67,250	63,520	60,290	62,420	60,290
30	77,610	75,140	75,960	74,310	------	70,720	68,010	67,250	63,520	59,940	62,420	60,290
31	77,610	------	75,960	74,310	------	70,320	------	66,860	------	59,940	62,060	------
(†)	55.9	55.3	55.5	55.1	54.8	54.1	53.5	53.2	52.3	51.3	51.9	51.4
(*)	-2,550	-2,470	+820	-1,650	-1,210	-2,780	-2,310	-1,150	-3,340	-3,580	+2,210	-1,770
(††)	943	889	833	911	871	1,390	1,480	1,410	2,010	2,190	1,630	1,220
MAX	79,730	77,610	76,370	75,960	74,310	72,710	70,320	68,780	66,860	63,520	63,890	62,780
MIN	77,200	75,140	75,140	74,310	73,100	70,320	68,010	66,860	63,520	59,940	57,860	60,290

CAL YR 1971..... * +20,480 †† 15,240 MAX 82,730 MIN 46,160
WTR YR 1972..... * -19,870 †† 15,780 MAX 79,730 MIN 57,860

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use.

08084000 Clear Fork Brazos River at Nugent, Tex.

LOCATION.--Lat 32°41'24", long 99°40'09", Jones County, on right bank 33 ft downstream from bridge on Farm Road 600 at Nugent, 2 miles downstream from Elm Creek, 4 miles upstream from Deadman Creek, and at mile 167.8.

DRAINAGE AREA.--2,220 sq mi.

PERIOD OF RECORD.--February 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,531.91 ft above mean sea level (levels by Brazos River Authority). Prior to Dec. 12, 1933, nonrecording gage at site 575 ft downstream at same datum.

AVERAGE DISCHARGE.--14 years (1924-38) prior to completion of Fort Phantom Hill Reservoir, 186 cfs (134,800 acre-ft per year); 34 years (1938-72) regulated, 85.7 cfs (62,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,130 cfs Aug. 14 (gage height, 8.39 ft); minimum, 0.80 cfs July 19, 20.
Period of record: Maximum discharge observed, 47,000 cfs Sept. 8, 1932 (gage height, 27.05 ft, site then in use), from rating curve extended above 25,000 cfs; no flow at times.
Maximum stage, 30 ft in 1876; floods in 1900 and May 1923 reached stages of 24 and 24.5 ft, respectively, from information by local residents.

REMARKS.--Records good. Flow regulated by four major reservoirs with a total combined capacity of 103,600 acre-ft. Numerous diversions above station for municipal supply and oilfield operation will materially affect low flow. The city of Abilene reported that during year, 3,850 acre-ft was diverted into Fort Phantom Hill Reservoir (station 08083500) from the river above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	126	47	43	37	31	24	18	8.5	398	2.0	54
2	276	101	54	43	37	32	26	17	8.9	205	1.7	232
3	237	84	62	43	36	31	24	17	9.0	137	1.7	465
4	263	78	64	43	36	31	24	20	8.6	40	1.5	392
5	511	75	61	41	36	30	23	16	7.4	24	1.3	108
6	366	67	58	41	36	29	23	20	7.7	14	1.7	53
7	192	64	55	41	36	29	25	46	6.0	11	2.3	41
8	168	63	53	41	35	28	23	70	6.8	10	2.7	44
9	153	62	53	42	35	28	23	69	5.7	10	3.8	26
10	139	60	66	42	35	28	22	34	5.1	9.4	4.5	21
11	130	59	63	42	36	28	22	33	3.7	7.9	8.3	19
12	122	58	59	41	36	28	22	27	37	8.8	24	19
13	112	57	58	39	36	28	22	20	8.9	7.6	485	26
14	107	55	55	38	36	28	23	55	8.1	8.3	1,630	28
15	104	54	63	37	35	28	22	101	36	4.9	470	19
16	98	52	55	37	35	28	20	28	42	3.4	216	49
17	95	52	52	37	34	26	20	21	35	2.7	43	30
18	94	51	51	38	34	26	19	19	25	2.3	54	18
19	112	50	50	38	34	26	21	15	20	1.7	29	16
20	160	49	48	38	34	26	39	12	17	2.4	20	17
21	232	49	47	38	35	26	26	12	13	11	17	36
22	171	49	45	37	34	24	33	11	10	9.7	14	53
23	335	50	45	37	32	23	25	11	9.6	7.3	13	67
24	246	49	45	37	32	22	22	11	8.7	5.7	14	48
25	154	49	43	37	32	21	20	11	8.6	2.5	14	25
26	128	48	43	36	32	22	17	10	8.3	1.8	15	19
27	134	47	43	36	32	21	16	11	7.8	2.0	15	50
28	155	48	43	36	32	21	16	11	6.7	2.1	24	30
29	128	48	43	36	32	20	18	12	5.5	1.9	47	21
30	115	47	43	36	------	22	19	11	5.8	2.0	85	18
31	100	------	43	36	------	25	------	8.7	------	2.3	32	------
TOTAL	5,688	1,801	1,610	1,207	1,002	816	679	777.7	390.4	956.7	3,292.5	2,044
MEAN	183	60.0	51.9	38.9	34.6	26.3	22.6	25.1	13.0	30.9	106	68.1
MAX	511	126	66	43	37	32	39	101	42	398	1,630	465
MIN	94	47	43	36	32	20	16	8.7	3.7	1.7	1.3	16
AC-FT	11,280	3,570	3,190	2,390	1,990	1,620	1,350	1,540	774	1,900	6,530	4,050

CAL YR 1971 TOTAL 46,322.58 MEAN 127 MAX 4,520 MIN .10 AC-FT 91,880
WTR YR 1972 TOTAL 20,264.30 MEAN 55.4 MAX 1,630 MIN 1.3 AC-FT 40,190

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 Company steam powerplant at Lake Stamford on Paint Creek, 1.0 mile upstream from dam, 1.7 miles upstream from California Creek, and 10 miles southeast of Haskell.

DRAINAGE AREA.--360 sq mi.

PERIOD OF RECORD.--July 1953 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 2.77 ft above mean sea level (levels by Freese, Nichols and Endress, Consulting Engineers).

EXTREMES (at 0800).--Current year: Maximum contents, 57,920 acre-ft Oct. 1 (gage height, 1,415.0 ft); minimum, 40,720 acre-ft Aug. 31 (gage height, 1,411.1 ft).
Period of record: Maximum contents, 74,100 acre-ft Sept. 9, 10, 1962 (gage height, 1,416.6 ft); minimum since first appreciable storage in June 1954, 14,060 acre-ft Jan. 29-31, 1957 (gage height, 1,400.2 ft).

REMARKS.--Lake is formed by a rock-faced earthfill dam. The dam was completed in March 1953 and storage began in June 1953. Figures given herein represent total contents. Water is used for municipal supply for cities of Stamford and Hamlin with diversions during year totaling 1,590 acre-ft. Gage-height record was furnished by West Texas Utilities Company from their powerplant 1.0 mile upstream from dam. Diversions for municipal use were furnished by the city of Stamford. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	1,434.0	-
Crest of service spillway	1,414.0	53,070
Invert of 24-inch discharge conduit	1,380.0	358

COOPERATION.--The capacity table is based on Sedimentation Survey of 1966 and was furnished by the Soil Conservation Service.

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

1,411.0	40,330	1,414.0	53,070
1,412.0	44,280	1,415.0	57,920
1,413.0	48,530	1,416.4	65,230

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57,920	55,940	54,020	54,020	53,070	52,600	50,310	48,090	48,530	45,530	42,670	41,100
2	56,920	55,940	54,020	54,020	53,070	52,600	50,310	48,090	48,530	45,530	42,670	41,490
3	56,920	55,940	54,490	54,020	53,070	52,600	50,310	48,090	48,530	45,530	42,670	41,490
4	56,920	55,940	54,490	54,020	53,070	52,130	50,310	48,090	48,090	45,530	42,270	41,490
5	56,920	55,460	54,490	54,020	53,070	52,130	50,310	48,090	48,090	45,530	42,270	41,880
6	56,430	55,460	54,970	54,020	53,070	52,130	50,310	48,090	47,650	45,530	42,270	41,880
7	56,430	55,460	54,970	54,020	53,070	52,130	50,310	48,090	47,650	45,530	41,880	41,880
8	56,430	55,460	54,490	54,020	53,070	51,670	49,860	48,970	47,650	45,530	41,880	41,880
9	56,430	54,970	54,490	54,020	53,070	51,670	49,860	48,970	47,650	45,110	41,880	41,880
10	56,430	54,970	54,490	54,020	53,070	51,670	49,860	48,970	47,650	45,110	41,880	41,880
11	55,940	54,970	54,970	54,020	53,070	51,670	49,860	48,970	47,220	45,110	41,880	41,880
12	55,940	54,970	54,970	54,020	53,070	51,670	49,860	49,860	47,220	45,110	41,880	41,880
13	55,940	54,970	54,970	54,020	53,070	51,670	49,860	49,860	47,220	45,110	41,880	41,880
14	55,460	54,970	54,970	54,020	53,070	51,670	49,860	49,860	47,220	45,110	41,880	41,490
15	55,460	54,970	54,970	53,540	53,070	51,670	49,410	49,860	46,790	45,110	41,880	41,490
16	55,460	54,970	54,970	53,540	53,070	51,670	49,410	49,860	47,220	45,110	41,880	41,490
17	55,460	54,970	54,490	53,540	53,070	51,670	49,410	49,860	47,220	45,110	41,880	41,490
18	55,460	54,970	54,490	53,540	53,070	51,210	49,410	49,410	46,790	44,700	41,880	41,490
19	55,460	54,490	54,490	53,540	53,070	51,210	48,970	49,410	46,790	44,280	41,880	41,490
20	55,940	54,490	54,490	53,540	53,070	51,210	48,970	49,410	46,790	44,280	41,880	41,100
21	55,940	54,490	54,490	53,540	53,070	51,210	48,970	49,410	46,790	43,880	41,880	42,270
22	55,940	54,490	54,490	53,540	52,600	51,210	48,970	49,410	46,370	43,880	41,880	42,670
23	55,940	54,490	54,490	53,540	52,600	51,210	48,530	49,410	46,370	43,880	41,490	42,670
24	55,940	54,490	54,490	53,540	52,600	51,210	48,530	49,410	46,370	43,880	41,490	42,670
25	55,940	54,490	54,490	53,540	52,600	51,210	48,530	49,410	46,370	43,470	41,100	43,070
26	55,940	54,490	54,490	53,540	52,600	50,760	48,530	48,970	45,950	43,470	41,100	43,070
27	55,940	54,490	54,490	53,070	52,600	50,760	48,530	48,970	45,950	43,470	41,100	43,070
28	55,940	54,490	54,490	53,070	52,600	50,760	48,530	48,970	45,950	43,470	41,100	43,070
29	55,940	54,020	54,490	53,070	52,600	50,760	48,530	48,970	45,530	43,070	41,100	43,070
30	56,430	54,020	54,490	53,070	------	50,310	48,530	48,530	45,530	43,070	41,100	42,670
31	55,940	------	54,020	53,070	------	50,310	------	48,530	------	42,670	40,720	------
(†)	1,414.6	1,414.2	1,414.2	1,414.0	1,413.9	1,413.4	1,413.0	1,413.0	1,412.3	1,411.6	1,411.1	1,411.6
(*)	-1,980	-1,920	0	-950	-470	-2,290	-1,780	0	-3,000	-2,860	-1,950	+1,950
(††)	86.5	82.4	85.6	89.8	91.3	125	140	147	220	230	191	105
MAX	57,920	55,940	54,970	54,020	53,070	52,600	50,310	49,860	48,530	45,530	42,670	43,070
MIN	55,460	54,020	54,020	53,070	52,600	50,310	48,530	48,090	45,530	42,670	40,720	41,100

CAL YR 1971..... * +19,100 †† 1,508 MAX 65,230 MIN 26,630
WTR YR 1972..... * -15,250 †† 1,594 MAX 57,920 MIN 40,720

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet.

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 east of Stamford, and 17 miles upstream from Paint Creek.

DRAINAGE AREA.--465 sq mi.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,470 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 27.2 cfs (19,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,260 cfs Sept. 22 (gage height, 16.66 ft); minimum, 0.19 cfs June 27.
Period of record: Maximum discharge, 7,420 cfs May 6, 1969 (gage height, 27.12 ft); no flow at times.
Maximum stage since at least 1897, 29.6 ft 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, May 1957; flood of September 1962 reached a stage of 28.1 ft; from information by local residents.

REMARKS.--Records good. Three small diversions above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Texas 1971: 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	42	7.2	10	5.0	5.0	3.8	2.0	1.0	7.5	.50	280
2	44	36	12	8.9	5.0	5.0	3.6	2.0	.94	.50	.50	87
3	38	28	13	8.9	3.0	4.4	3.6	2.2	.94	7.3	.50	91
4	56	25	22	6.0	4.0	4.0	4.0	2.0	.84	25	.50	69
5	41	24	23	5.0	5.2	4.7	3.8	2.6	.74	6.7	.50	39
6	31	23	20	6.0	11	5.0	4.0	9.5	.74	2.8	.50	16
7	26	17	18	8.0	10	4.2	3.8	894	.74	1.7	.50	7.5
8	24	13	18	8.5	6.6	4.2	3.4	6.0	.65	1.4	.44	4.2
9	22	14	17	8.5	5.4	5.2	3.2	8.1	.57	1.3	.44	3.0
10	19	14	19	9.7	5.4	3.4	3.2	6.0	.57	1.0	.44	2.2
11	16	13	22	9.3	6.3	2.8	3.0	4.2	.65	.65	.38	1.9
12	16	12	22	8.5	6.9	3.0	3.0	33	.74	.50	.33	1.6
13	14	12	22	7.5	6.6	3.6	2.6	9.7	.74	.50	9.9	1.3
14	14	14	20	6.0	6.9	4.0	3.6	7.2	.65	.44	211	1.0
15	12	14	19	4.0	6.9	3.4	2.8	8.5	2.9	.38	178	.94
16	13	12	20	5.0	8.1	3.0	2.2	12	1.0	.38	26	.94
17	13	13	17	6.0	7.2	3.0	2.0	6.3	7.1	.38	7.5	10
18	14	13	15	6.6	6.3	2.8	2.0	3.8	8.5	.38	3.2	8.5
19	29	11	15	10	6.0	3.0	2.2	2.8	4.4	.44	2.2	4.2
20	34	10	14	9.3	6.0	3.4	19	2.6	2.4	.38	1.7	18
21	43	10	14	8.5	8.5	3.0	3.2	2.4	1.9	2.9	1.2	294
22	48	11	13	7.8	7.5	2.6	1.9	2.2	1.6	1.6	1.0	1,050
23	39	10	10	7.2	6.6	3.0	1.9	2.0	1.0	1.0	.74	382
24	210	9.7	9.7	6.9	6.3	3.0	1.7	1.9	.57	.84	.74	55
25	110	9.7	11	6.6	5.7	2.6	1.7	1.6	.50	.57	.84	26
26	58	8.9	10	6.6	5.7	2.4	1.6	1.4	.33	.50	3.0	23
27	52	10	10	5.0	6.0	2.8	17	1.7	.28	.44	2.6	280
28	107	8.9	11	3.0	5.4	3.6	3.2	1.9	.23	.44	1.9	193
29	100	9.3	11	4.0	5.2	3.2	2.0	1.3	.23	.38	1.7	34
30	63	8.5	9.3	4.0	------	3.8	2.0	1.3	.23	.44	3.6	14
31	50	------	10	4.0	------	4.2	------	1.2	------	.50	4.0	------
TOTAL	1,412	456.0	474.2	215.3	184.7	111.3	115.0	1,043.4	43.68	69.24	466.35	2,998.28
MEAN	45.5	15.2	15.3	6.95	6.37	3.59	3.83	33.7	1.46	2.23	15.0	99.9
MAX	210	42	23	10	11	5.2	19	894	8.5	25	211	1,050
MIN	12	8.5	7.2	3.0	3.0	2.4	1.6	1.2	.23	.38	.33	.94
AC-FT	2,800	904	941	427	366	221	228	2,070	87	137	925	5,950

CAL YR 1971 TOTAL 43,741.22 MEAN 120 MAX 5,820 MIN .04 AC-FT 86,760
WTR YR 1972 TOTAL 7,589.45 MEAN 20.7 MAX 1,050 MIN .23 AC-FT 15,050

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-24	1600	10.12	251	9- 1	0700	13.93	719
5- 7	0200	10.74	310	9-22	1300	16.66	1,260
8-15	0100	11.37	380	9-27	2400	11.76	426

08085500 Clear Fork Brazos River at Fort Griffin, Tex.

LOCATION.--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, 0.5 mile northeast of Fort Griffin, 5,100 ft upstream from bridge on U.S. Highway 283, and 1.3 miles upstream from Mill Creek.

DRAINAGE AREA.--3,974 sq mi.

PERIOD OF RECORD.--December 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,174.09 ft above mean sea level. Prior to June 23, 1932, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--48 years (1924-72), 227 cfs (164,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,840 cfs Aug. 15 (gage height, 7.78 ft); no flow Aug. 4-9.
Period of record: Maximum discharge, 33,600 cfs Sept. 10, 1932 (gage height, 35.09 ft); no flow at times.
Maximum stage since 1876, 38.0 ft in September 1900; flood in July 1876 was probably higher; from information by local residents.

REMARKS.--Records good. Some regulation by reservoirs (combined capacity of five major reservoirs is 156,700 acre-ft). Diversions above station for irrigation, municipal supply, and oilfield operations materially affect low flow. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1392: 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	763	198	89	93	70	70	26	32	12	56	.05	26
2	627	196	102	92	70	66	25	25	13	15	.03	137
3	573	196	109	88	70	59	25	24	13	320	.01	389
4	511	196	119	85	70	57	25	24	12	232	0	635
5	449	196	127	80	67	59	24	21	12	190	0	706
6	463	180	125	80	68	54	25	23	11	143	0	400
7	473	174	127	86	66	53	25	92	11	92	0	215
8	468	166	125	86	66	52	24	229	10	61	0	130
9	416	160	119	84	64	47	24	96	11	41	0	104
10	354	154	125	82	72	45	24	98	10	30	.13	66
11	316	150	118	84	71	48	23	105	8.8	21	.13	50
12	293	143	143	84	68	48	23	536	8.3	18	.07	35
13	275	143	138	82	66	47	23	246	6.9	16	6.5	27
14	257	139	132	70	69	44	23	129	12	13	7.3	22
15	240	132	131	60	65	40	23	85	10	10	1,340	18
16	229	121	130	60	64	41	22	61	15	7.7	958	14
17	221	106	126	68	64	40	22	113	30	6.5	343	105
18	210	112	123	70	63	40	24	83	20	5.4	202	62
19	198	102	114	71	67	40	24	56	36	4.4	108	295
20	196	98	111	77	70	39	42	40	40	3.5	91	166
21	196	98	109	73	80	38	25	34	32	2.8	84	86
22	196	98	104	72	80	37	22	29	25	2.0	55	298
23	198	100	100	74	80	54	58	25	19	1.8	44	988
24	198	100	96	74	79	289	56	21	15	1.3	37	499
25	201	100	97	71	80	54	42	20	13	1.2	71	226
26	201	100	96	70	80	43	37	37	10	1.0	49	184
27	201	97	92	71	76	37	226	26	7.8	.80	32	148
28	201	95	91	71	75	28	57	18	5.9	.60	26	196
29	201	90	88	70	74	27	98	16	6.3	.44	20	292
30	201	91	87	69	------	26	67	14	5.2	.25	18	182
31	201	------	92	69	------	26	------	12	------	.16	15	------
TOTAL	9,727	4,031	3,485	2,366	2,054	1,648	1,184	2,370	441.2	1,297.85	3,507.22	6,701
MEAN	314	134	112	76.3	70.8	53.2	39.5	76.5	14.7	41.9	113	223
MAX	763	198	143	93	80	289	226	536	40	320	1,340	988
MIN	196	90	87	60	63	26	22	12	5.2	.16	0	14
AC-FT	19,290	8,000	6,910	4,690	4,070	3,270	2,350	4,700	875	2,570	6,960	13,290

CAL YR 1971 TOTAL 116,971.40 MEAN 320 MAX 9,910 MIN 0 AC-FT 232,000
WTR YR 1972 TOTAL 38,812.27 MEAN 106 MAX 1,340 MIN 0 AC-FT 76,980

PEAK DISCHARGE (BASE, 3,900 CFS).--No peak above base.

08086050 Deep Creek at Moran, Tex.

LOCATION.--Lat 32°33'33", long 99°10'11", Shackelford County, at downstream side of bridge on U.S. Highway 380, 0.8 mile north of Moran, 2.3 miles upstream from Post Oak Creek, and 10.8 miles upstream from Hubbard Creek.

DRAINAGE AREA.--235 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,296.21 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1963-72), 20.5 cfs (14,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 613 cfs Apr. 27 (gage height, 4.76 ft); no flow at times.
Period of record: Maximum discharge, 9,800 cfs Jan. 21, 1968 (gage height, 18.86 ft); no flow at times.
Maximum stage since 1888, 25.6 ft June 6, 1961, from floodmark. Flood in 1888 reached about the same stage.

REMARKS.--Records good. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	2.6	4.1	1.7	.48	.16	.10	.51	.10	0		34
2	.54	2.1	5.0	1.7	.42	.14	.10	.28	.09	0		14
3	1.6	1.9	10	1.6	.41	.16	.08	.24	.07	0		2.5
4	1.7	1.8	11	1.5	.44	.13	.07	.28	.06	0		1.4
5	6.0	1.8	9.0	1.5	.40	.13	.07	.35	.05	15		1.1
6	3.9	1.5	8.7	1.4	.40	.15	.07	52	.04	10		.95
7	2.3	1.5	8.4	1.3	.36	.15	.06	77	.03	4.6		.82
8	1.5	1.6	9.0	1.4	.37	.14	.07	16	.03	2.7		.78
9	1.2	2.1	9.2	1.3	.34	.11	.07	4.0	.03	1.7		.64
10	1.3	2.0	14	1.2	.33	.12	.08	1.4	.02	1.1		.43
11	1.0	1.6	14	1.1	.38	.12	.07	.41	.02	.72		.21
12	.90	1.9	8.9	1.1	.43	.13	.07	21	.03	.52		.08
13	.85	2.0	7.4	.98	.38	.13	.07	18	.03	.37		.03
14	.83	2.4	6.7	.87	.37	.11	.07	4.1	.03	.32		0
15	.82	2.6	8.1	.82	.39	.10	.16	1.6	.05	2.1		0
16	.74	2.8	9.5	.82	.34	.10	.18	.94	.05	.80		0
17	.81	3.2	6.5	.82	.31	.10	.21	.67	.04	.35		0
18	1.4	3.2	5.5	.74	.29	.10	.16	.50	.03	.22		0
19	1.3	3.3	4.9	.72	.30	.09	.17	.46	.03	.15		0
20	24	3.3	4.3	.72	.29	.09	4.7	.48	.02	.12		0
21	10	3.3	4.0	.70	.28	.09	4.0	.46	.01	.09		1.5
22	5.5	3.5	3.7	.62	.27	.10	1.7	.31	0	.07		1.4
23	12	3.7	3.6	.62	.25	.09	1.4	.37	0	.04		.95
24	11	3.3	3.3	.60	.24	.09	1.3	.30	0	.01		.90
25	5.6	3.3	3.0	.60	.23	.09	1.1	.21	0	0		.90
26	4.3	3.5	2.8	.60	.19	.07	1.1	.19	0	0		.85
27	4.8	3.5	2.6	.51	.21	.06	84	.16	0	0		.79
28	9.6	3.5	2.4	.48	.18	.05	15	.19	0	0		.76
29	5.2	3.7	2.3	.48	.18	.08	4.3	.16	0	0		.90
30	3.9	3.9	2.0	.48	------	.11	1.4	.16	0	0		.71
31	3.0	------	1.9	.43	------	.12	------	.15	------	0		------
TOTAL	128.24	80.4	195.8	29.41	9.46	3.41	121.93	202.88	.86	40.98	0	66.60
MEAN	4.14	2.68	6.32	.95	.33	.11	4.06	6.54	.029	1.32	0	2.22
MAX	24	3.9	14	1.7	.48	.16	84	77	.10	15	0	34
MIN	.54	1.5	1.9	.43	.18	.05	.06	.15	0	0	0	0
AC-FT	254	159	388	58	19	6.8	242	402	1.7	81	0	132

CAL YR 1971 TOTAL 4,484.74 MEAN 12.3 MAX 1,790 MIN 0 AC-FT 8,900
WTR YR 1972 TOTAL 879.97 MEAN 2.40 MAX 84 MIN 0 AC-FT 1,750

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

08086100 Hubbard Creek near Albany, Tex.

LOCATION.--Lat 32°41'21", long 99°09'52", Shackelford County, on right bank 348 ft upstream from bridge on Farm Road 601, 1.8 miles downstream from Deep Creek, 5.1 miles upstream from Salt Prong Hubbard Creek, 8.1 miles southeast of Albany, 28.1 miles upstream from Hubbard Creek Dam, and at mile 40.7.

DRAINAGE AREA.--461 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,224.1 ft above mean sea level (Texas Highway Department survey). Prior to Mar. 20, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--10 years, 41.9 cfs (30,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,500 cfs Apr. 27 (gage height, 3.23 ft); no flow at times.
Period of record: Maximum discharge, 16,000 cfs May 13, 1965 (gage height, 16.17 ft); no flow at times.
Maximum stages since 1897, about 26 ft in 1899 and 20.3 ft in June 1961.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.8	0	1.1	.21	.01	0	2.8		0		59
2	1.1	1.0	12	1.1	.21	0	0	1.4		0		59
3	8.7	.48	14	1.1	.21	0	0	.65		0		16
4	14	.14	16	1.1	.21	0	0	.21		0		4.5
5	4.3	.05	16	1.1	.21	0	0	.06		0		2.6
6	15	.01	9.8	1.1	.29	0	0	134		0		1.6
7	6.9	0	7.9	1.1	.29	0	0	515		1.4		.65
8	3.6	0	7.4	1.1	.29	0	0	67		2.0		.29
9	2.4	0	12	1.1	.21	0	0	24		.50		.08
10	1.5	0	27	1.1	.21	0	0	8.7		.08		.02
11	.67	0	25	1.1	.38	0	0	3.9		.01		0
12	.20	0	20	1.2	.50	0	0	148		0		0
13	.11	0	14	1.1	.38	0	0	82		0		0
14	.05	0	10	.80	.50	0	0	24		0		0
15	.04	0	9.8	.80	.38	0	0	9.2		0		0
16	.02	0	14	.80	.10	0	0	5.5		0		0
17	.01	0	12	.65	.05	0	0	2.9		0		0
18	.02	0	9.1	.95	.04	0	0	2.0		0		0
19	4.1	0	6.4	.95	.04	0	0	1.4		0		0
20	14	0	4.5	.95	.04	0	.06	1.0		0		0
21	31	0	3.4	.95	.03	0	12	.65		0		32
22	9.2	0	2.6	.80	.02	0	1.7	.71		0		36
23	18	0	2.3	.65	.05	0	.17	2.4		0		3.4
24	29	0	2.3	.65	.06	0	.03	1.4		0		.65
25	13	0	2.2	.50	.04	0	0	.27		0		.16
26	6.4	0	2.0	.38	.01	0	0	.42		0		.06
27	8.8	0	2.0	.29	0	0	330	.89		0		.02
28	12	0	1.7	.29	0	0	40	.32		0		0
29	11	0	1.4	.29	.01	0	12	.01		0		0
30	4.6	0	1.1	.16	------	0	5.9	0		0		0
31	2.7	------	1.1	.16	------	0	------	0	------	0		------
TOTAL	224.22	3.48	269.0	25.42	4.97	.01	401.86	1,040.79	0	3.99	0	216.03
MEAN	7.23	.12	8.68	.82	.17	.0003	13.4	33.6	0	.13	0	7.20
MAX	31	1.8	27	1.2	.50	.01	330	515	0	2.0	0	59
MIN	.01	0	0	.16	0	0	0	0	0	0	0	0
AC-FT	445	6.9	534	50	9.9	.02	797	2,060	0	7.9	0	429

CAL YR 1971 TOTAL 7,436.64 MEAN 20.4 MAX 2,490 MIN 0 AC-FT 14,750
WTR YR 1972 TOTAL 2,189.77 MEAN 5.98 MAX 515 MIN 0 AC-FT 4,340

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

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 southeast of Albany, and 2.0 miles upstream from Salt Prong Hubbard Creek.

DRAINAGE AREA.--38.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,340.54 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1963-72), 4.14 cfs (3,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 228 cfs Apr. 27 (gage height, 3.75 ft); no flow at times.
Period of record: Maximum discharge, 9,520 cfs May 5, 1969 (gage height, 19.22 ft), from rating curve extended above 1,500 cfs on basis of slope-area measurement of 4,570 cfs and contracted-opening measurement of 9,520 cfs; no flow at times.
Historical flood information begins in 1940. Floods of June 10, 1940, and July 18, 1953, reached stages of about 21 ft, from information by local residents.

REMARKS.--Records good. No diversion above station. Water-quality records for the current year are published in Part 2 of this report. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.17	.27	.27	.12	.45	.25	.15	.36	.49	0	.49
2	.29	.15	6.4	.27	.11	.35	.21	.12	.35	.23	0	4.3
3	.48	.15	.69	.28	.08	.36	.21	.11	.33	.16	0	.67
4	.45	.15	.38	.24	.08	.32	.16	.11	.32	2.5	0	.15
5	.34	.16	.35	.24	.09	.33	.15	.10	.26	.78	0	.13
6	.31	.16	.33	.24	.27	.31	.17	.55	.19	.40	0	.09
7	.31	.15	.31	.21	1.6	.29	.16	6.3	.14	.27	0	.06
8	.42	.17	.31	.21	1.1	.25	.14	.90	.07	.25	0	.05
9	.37	.18	.39	.21	.82	.26	.14	.53	.05	.24	0	.05
10	.31	.18	1.6	.21	.76	.25	.17	.50	.04	.23	0	.04
11	.33	.18	.53	.17	.92	.25	.19	.49	.03	.18	0	.03
12	.35	.18	.37	.17	.81	.26	.23	1.6	.03	.15	0	.03
13	.44	.20	.33	.15	.74	.26	.22	.80	.03	.15	6.5	.03
14	.36	.21	.38	.15	.66	.22	.25	.59	.04	.12	.56	.02
15	.31	.21	.38	.14	.52	.21	.22	.51	.14	.09	.20	.02
16	.34	.22	.38	.15	.52	.20	.19	.50	.24	.06	.15	.02
17	.37	.22	.35	.16	.48	.19	.17	.50	.22	.06	.11	.02
18	.45	.18	.35	.17	.43	.16	.14	.47	.18	.05	.09	.02
19	3.4	.20	.31	.15	.42	.17	.12	.47	.15	.04	.06	.01
20	1.3	.21	.29	.15	.41	.18	2.5	.50	.11	.03	.06	.57
21	.17	.21	.29	.15	.49	.15	.31	.50	.07	.01	.05	16
22	.14	.33	.31	.15	.47	.15	.15	.58	.05	0	.04	1.6
23	1.1	.28	.31	.14	.46	.17	.10	2.6	.03	0	.04	.35
24	.24	.24	.33	.13	.49	.18	.07	1.1	.01	0	.03	.15
25	.15	.24	.35	.11	.46	.19	.06	.77	0	0	.02	.13
26	.19	.22	.31	.11	.45	.17	.06	.63	0	0	.02	.11
27	.53	.23	.31	.11	.42	.17	41	.57	0	0	.14	.12
28	.25	.21	.31	.11	.45	.18	1.5	.55	0	0	.79	.12
29	.18	.23	.33	.11	.49	.20	.40	.48	0	0	.09	.10
30	.15	.25	.33	.11	------	.28	.24	.43	0	0	.03	.07
31	.14	------	.31	.10	------	.35	------	.37	------	0	.01	------
TOTAL	14.45	6.07	18.19	5.27	15.12	7.46	49.88	24.38	3.44	6.49	8.99	25.55
MEAN	.47	.20	.59	.17	.52	.24	1.66	.79	.11	.21	.29	.85
MAX	3.4	.33	6.4	.28	1.6	.45	41	6.3	.36	2.5	6.5	16
MIN	.14	.15	.27	.10	.08	.15	.06	.10	0	0	0	.01
AC-FT	29	12	36	10	30	15	99	48	6.8	13	18	51

CAL YR 1971 TOTAL 503.48 MEAN 1.38 MAX 289 MIN 0 AC-FT 999
WTR YR 1972 TOTAL 185.29 MEAN .51 MAX 41 MIN 0 AC-FT 368

PEAK DISCHARGE (BASE, 100 CFS).--Apr. 27 (0600) 228 cfs (3.75 ft); Sept. 21 (1245) 119 cfs (3.31 ft).

08086212 Hubbard Creek below Albany, Tex.

LOCATION.--Lat 32°43'58", long 99°08'25", Shackelford County, on left bank 0.5 mile downstream from Salt Prong Hubbard Creek, 2.8 miles upstream from Newcomb Creek, 4.5 miles upstream from U.S. Highway 180, 9.1 miles east of Albany, and at mile 35.1.

DRAINAGE AREA.--621 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,184.99 ft above mean sea level. Prior to June 12, 1968, water-stage recorder at site 2.1 miles downstream at datum 7.63 ft lower.

AVERAGE DISCHARGE.--6 years, 60.6 cfs (43,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs Apr. 27 (gage height, 7.40 ft), from rating curve extended above 220 cfs on basis of step-backwater method; no flow for many days.
Period of record: Maximum discharge, 27,200 cfs Jan. 21, 1968 (gage height, 25.10 ft, at former site and datum), from rating curve extended above 150 cfs on basis of slope-area measurement of peak flow; no flow for many days.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	4.1	.55	2.3	.82	.18	.01	5.8	.10	3.0	0	13
2	3.1	3.2	12	2.2	.82	.11	.01	4.0	.05	6.8	0	62
3	3.2	2.6	27	2.0	.82	.10	.01	3.1	.01	3.2	0	19
4	9.4	2.2	11	2.0	.82	.07	0	2.3	0	2.1	0	6.5
5	7.7	1.8	13	1.8	.76	.06	0	1.6	0	1.8	0	4.0
6	5.8	1.4	8.8	1.8	.68	.04	0	97	0	1.2	0	2.9
7	6.6	1.2	5.7	1.8	.68	.04	0	488	0	.83	0	2.1
8	5.8	1.0	5.2	1.6	.68	.03	0	99	0	.50	0	1.4
9	4.7	.80	11	1.4	.68	.02	0	27	0	.32	0	.93
10	3.6	.68	27	1.4	.68	.01	0	9.5	0	.48	0	.48
11	3.0	.65	26	1.5	.68	.01	0	5.7	0	.63	0	.29
12	2.5	.52	24	1.5	.96	.02	0	116	0	.57	0	.14
13	1.8	.37	14	1.5	.97	.02	0	85	0	.32	0	.10
14	1.5	.32	10	1.5	1.0	.02	0	25	0	.18	0	.02
15	1.2	.31	8.4	1.4	1.1	.01	0	9.4	0	.07	0	.01
16	.95	.23	7.6	1.2	1.1	.01	0	5.7	0	.01	0	.02
17	.66	.23	11	1.1	1.1	.01	0	4.3	0	0	0	.05
18	.75	.23	8.5	1.1	1.0	0	0	3.2	0	0	0	.01
19	3.0	.21	6.3	1.1	.84	0	.02	2.7	0	0	0	0
20	15	.16	5.2	1.1	.63	0	.95	2.3	0	0	0	0
21	34	.16	4.5	1.1	.55	0	7.4	1.9	0	0	0	6.4
22	15	.27	3.8	1.1	.55	0	7.3	1.6	0	0	0	60
23	13	.43	3.5	1.1	.49	0	2.6	1.4	0	0	0	13
24	22	.43	3.2	1.1	.37	0	1.3	1.3	0	0	0	4.9
25	16	.43	3.2	1.1	.32	0	.55	1.5	0	0	0	2.8
26	8.5	.43	3.1	.97	.32	0	.21	.81	0	0	0	1.9
27	8.3	.44	2.8	.97	.32	0	288	.50	0	0	0	1.3
28	7.9	.67	2.6	.82	.28	0	75	.41	0	0	.22	.61
29	13	.63	2.5	.82	.23	0	21	.29	0	0	.05	.08
30	8.3	.55	2.4	.82	------	0	10	.22	0	0	0	.01
31	5.4	------	2.4	.82	------	0	------	.14	------	0	1.6	------
TOTAL	236.06	26.65	276.25	42.02	20.25	.76	414.36	1,006.67	.16	22.01	1.87	203.95
MEAN	7.61	.89	8.91	1.36	.70	.025	13.8	32.5	.005	.71	.060	6.80
MAX	34	4.1	27	2.3	1.1	.18	288	488	.10	6.8	1.6	62
MIN	.66	.16	.55	.82	.23	0	0	.14	0	0	0	0
AC-FT	468	53	548	83	40	1.5	822	2,000	.3	44	3.7	405

CAL YR 1971 TOTAL 9,646.32 MEAN 26.4 MAX 3,560 MIN 0 AC-FT 19,130
WTR YR 1972 TOTAL 2,251.01 MEAN 6.15 MAX 488 MIN 0 AC-FT 4,460

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

08086260 Pecan Creek near Eolian, Tex.

LOCATION.--Lat 32°35'01", long 99°01'57", Stephens County, at county road crossing 1.4 miles east of Farm Road 1853, 3.3 miles upstream from Battle Creek, and 5.8 miles south of Eolian.

DRAINAGE AREA.--25.4 sq mi.

PERIOD OF RECORD.--October 1962 to September 1966 (low-flow partial record only), October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,274 ft, from topographic map.

AVERAGE DISCHARGE.--6 years, 2.89 cfs (2,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 348 cfs May 7 (gage height, 6.06 ft); no flow at times.
Period of record: Maximum discharge, 648 cfs May 6, 1969 (gage height, 12.78 ft); no flow at times.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03	0				0	.27		0	0	2.9
2	0	0	0				0	.14		0	0	.18
3	0	0	0				0	.07		0	0	.02
4	0	0	0				0	.02		21	0	0
5	.07	0	0				0	0		3.6	0	0
6	.12	0	0				0	62		.07	0	0
7	.01	0	0				0	110		0	0	0
8	0	0	0				0	9.6		0	0	0
9	0	0	0				0	2.7		0	0	0
10	0	0	8.0				0	1.5		0	0	0
11	0	0	3.3				0	1.1		0	0	0
12	0	0	.19				0	68		0	0	0
13	0	0	.02				0	4.2		0	0	0
14	0	0	.21				0	.78		0	0	0
15	0	0	1.4				0	.46		0	55	0
16	0	0	.48				0	.33		0	8.6	0
17	0	0	.02				0	.24		0	.29	0
18	0	0	0				0	.17		0	.01	0
19	0	0	0				0	.09		0	0	0
20	0	0	0				0	.01		0	0	0
21	0	0	0				26	0		0	0	0
22	0	0	0				2.7	.02		0	0	0
23	0	0	0				.80	.09		0	0	0
24	0	0	0				.32	.01		0	0	0
25	0	0	0				.09	0		0	0	0
26	0	0	0				.01	0		0	0	0
27	.05	0	0				88	0		0	0	0
28	.37	0	0				5.4	0		0	.01	0
29	.12	0	0				3.2	0		0	.05	0
30	.11	0	0		------		.86	0		0	0	0
31	.07	------	0		------		------	0	------	0	0	------
TOTAL	.92	.03	13.62	0	0	0	127.38	261.80	0	24.67	63.96	3.10
MEAN	.030	.001	.44	0	0	0	4.25	8.45	0	.80	2.06	.10
MAX	.37	.03	8.0	0	0	0	88	110	0	21	55	2.9
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1.8	.06	27	0	0	0	253	519	0	49	127	6.2

CAL YR 1971 TOTAL 320.14 MEAN .88 MAX 142 MIN 0 AC-FT 635
WTR YR 1972 TOTAL 495.48 MEAN 1.35 MAX 110 MIN 0 AC-FT 983

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-27	0715	4.50	267	5-12	0600	3.65	216
5- 7	0600	6.06	348	8-15	1715	5.42	316

08086300 Big Sandy Creek near Breckenridge, Tex.

LOCATION.--Lat 32°39'52", long 99°00'01", Stephens County, on left bank at upstream side of bridge on Farm Road 576, 1.5 miles downstream from Battle Creek, 8.2 miles southwest of Breckenridge, and about 13 miles upstream from Hubbard Creek Reservoir.

DRAINAGE AREA.--298 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,178.42 ft above mean sea level. Prior to Mar. 19, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--10 years, 34.4 cfs (24,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,130 cfs May 7 (gage height, 11.05 ft); no flow for many days.
Period of record: Maximum discharge, 8,170 cfs May 13, 1965 (gage height, 23.30 ft); no flow at times each year.
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.

REMARKS.--Records good. Some regulation by Lake Cisco (capacity, 25,600 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	0	.06	.03			0	3.9	0	0	0	.55
2	.02	0	3.2	.02			0	1.5	0	0	0	.54
3	26	0	.74	.03			0	.72	0	0	0	.15
4	44	0	.44	.03			0	.37	0	0	0	.06
5	4.8	0	.49	.03			0	.23	0	12	0	.05
6	1.1	0	.38	.02			0	218	0	4.8	0	.06
7	.10	0	.32	.01			0	903	0	.66	0	.01
8	.08	0	.62	.01			0	86	0	.21	.45	0
9	.02	0	1.6	.01			0	21	0	.02	.32	0
10	.02	0	7.3	0			0	16	0	.01	.09	0
11	.02	0	9.6	0			0	4.0	0	0	.01	0
12	.02	0	4.2	0			0	396	0	0	0	0
13	.01	0	1.7	0			0	76	0	2.2	0	0
14	0	0	1.1	0			0	17	0	.21	.04	.27
15	0	0	.68	0			0	6.9	.12	.05	36	1.5
16	0	0	.39	0			0	3.1	.01	0	43	.07
17	0	0	.19	0			0	1.2	0	0	2.8	.02
18	.91	0	.12	0			0	.41	0	0	.66	0
19	3.4	0	.10	0			0	.13	0	0	.17	0
20	3.4	0	.10	0			4.4	.09	0	0	.05	.07
21	.03	0	.08	0			6.7	.05	0	0	.02	5.9
22	0	.01	.08	0			9.5	.03	0	0	0	.20
23	0	.02	.08	0			1.6	.02	0	0	0	.04
24	0	.02	.06	0			.15	.02	0	0	0	.03
25	0	.02	.06	0			.03	.02	0	0	0	.01
26	.03	.02	.06	0			.01	.01	0	0	0	0
27	.21	.02	.05	0			438	0	0	0	0	0
28	.05	.02	.05	0			78	0	0	0	3.7	0
29	.02	.02	.05	0			21	0	0	0	1.3	0
30	.01	.04	.03	0	------		15	0	0	0	.28	0
31	0	------	.03	0	------		------	0	------	0	.19	------
TOTAL	84.28	.19	33.96	.19	0	0	574.39	1,755.70	.13	20.16	89.08	9.53
MEAN	2.72	.006	1.10	.006	0	0	19.1	56.6	.004	.65	2.87	.32
MAX	44	.04	9.6	.03	0	0	438	903	.12	12	43	5.9
MIN	0	0	.03	0	0	0	0	0	0	0	0	0
AC-FT	167	.4	67	.4	0	0	1,140	3,480	.3	40	177	19

CAL YR 1971 TOTAL 3,936.01 MEAN 10.8 MAX 1,670 MIN 0 AC-FT 7,810
WTR YR 1972 TOTAL 2,567.61 MEAN 7.02 MAX 903 MIN 0 AC-FT 5,090

PEAK DISCHARGE (BASE, 2,000 CFS).--May 7 (1330) 2,130 cfs (11.05 ft).

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, 1.0 mile upstream from U.S. Highway 183, 6.5 miles northwest of Breckenridge, and at mile 12.6.

DRAINAGE AREA.--1,107 sq mi.

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

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

EXTREMES.--Current year: Maximum contents, 203,100 acre-ft Oct. 3-8, 19-30 (elevation, 1,174.3 ft); minimum, 174,200 acre-ft Sept. 29, 30 (elevation, 1,171.6 ft).
Period of record: Maximum contents, 320,800 acre-ft May 7, 1969 (elevation, 1,183.2 ft); minimum since normal operating level was reached in May 1969, 174,200 acre-ft Sept. 29, 30, 1972 (elevation, 1,171.6 ft).

REMARKS.--Reservoir is formed by rolled-fill earthen dam 5,630 ft long with rock riprap on the upstream slope. There are two additional levees, the north and south, making an overall length of 3.5 miles. Storage began September 1962; dam completed December 1962. Dam is property of West Central Texas Municipal Water District who has a permit to divert 56,000 acre-ft annually for municipal, mining, and industrial uses. Service spillway is a partially controlled morning-glory type with 12 lift gates designed to discharge 30,000 cfs with a 17.5-foot head through a 22-foot-diameter concrete conduit. Emergency spillway is a 2,000-foot wide cut through natural ground near left end of dam. Diversions during water year 1972 were as follows: 860 acre-ft for municipal use, 1,470 acre-ft for oilfield operation, and 2,520 acre-ft for irrigation and domestic use. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,208.0	-
Crest of emergency spillway	1,194.0	515,800
Top of gates on morning-glory spillway	1,185.0	349,200
Normal operating level	1,183.0	317,800
Crest of morning-glory spillway	1,176.5	228,900
Invert of 5- by 7-foot gate	1,138.0	5,580
Invert of gated 48-inch outlet pipe	1,133.8	1,720

COOPERATION.--Diversions and capacity table furnished by West Central Texas Municipal Water District.

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

1,171.0	168,180	1,174.0	199,700
1,173.0	188,800	1,175.0	211,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201,900	201,900	198,600	200,800	198,600	197,500	193,100	191,000	193,100	188,800	181,400	178,300
2	201,900	201,900	198,600	200,800	198,600	197,500	192,000	191,000	193,100	188,800	180,400	178,300
3	203,100	201,900	199,700	200,800	198,600	197,500	192,000	191,000	193,100	188,800	180,400	178,300
4	203,100	201,900	199,700	200,800	198,600	197,500	192,000	191,000	193,100	187,700	180,400	178,300
5	203,100	201,900	199,700	200,800	198,600	196,400	192,000	189,900	192,000	187,700	180,400	178,300
6	203,100	200,800	199,700	200,800	198,600	196,400	192,000	192,000	192,000	187,700	180,400	178,300
7	203,100	200,800	200,800	200,800	198,600	196,400	192,000	194,200	192,000	187,700	179,300	178,300
8	203,100	200,800	200,800	200,800	198,600	196,400	192,000	195,300	191,000	187,700	179,300	177,300
9	201,900	200,800	200,800	200,800	198,600	196,400	192,000	195,300	191,000	187,700	179,300	177,300
10	201,900	200,800	201,900	200,800	198,600	196,400	192,000	195,300	191,000	186,700	179,300	177,300
11	201,900	200,800	201,900	200,800	198,600	196,400	192,000	195,300	191,000	186,700	179,300	177,300
12	201,900	200,800	201,900	200,800	198,600	196,400	192,000	196,400	191,000	186,700	179,300	176,300
13	201,900	200,800	201,900	200,800	198,600	196,400	191,000	196,400	191,000	186,700	180,400	176,300
14	201,900	200,800	201,900	199,700	198,600	196,400	191,000	197,500	191,000	186,700	180,400	176,300
15	201,900	200,800	201,900	199,700	198,600	196,400	191,000	197,500	191,000	185,600	179,300	176,300
16	201,900	200,800	201,900	199,700	198,600	196,400	191,000	197,500	192,000	185,600	179,300	176,300
17	201,900	200,800	201,900	199,700	198,600	195,300	191,000	197,500	192,000	184,600	179,300	176,300
18	201,900	199,700	201,900	199,700	197,500	195,300	191,000	196,400	192,000	184,600	179,300	176,300
19	203,100	199,700	201,900	199,700	197,500	195,300	191,000	196,400	192,000	184,600	179,300	175,200
20	203,100	199,700	200,800	199,700	197,500	195,300	189,900	196,400	191,000	183,500	179,300	175,200
21	203,100	199,700	200,800	199,700	197,500	195,300	189,900	196,400	191,000	183,500	179,300	176,300
22	203,100	199,700	200,800	199,700	197,500	195,300	189,900	196,400	191,000	183,500	178,300	176,300
23	203,100	199,700	200,800	198,600	197,500	194,200	189,900	195,300	191,000	183,500	178,300	176,300
24	203,100	199,700	200,800	198,600	197,500	194,200	189,900	195,300	191,000	183,500	178,300	176,300
25	203,100	199,700	200,800	198,600	197,500	194,200	189,900	195,300	189,900	182,500	178,300	176,300
26	203,100	199,700	200,800	198,600	197,500	194,200	189,900	195,300	189,900	182,500	178,300	176,300
27	203,100	199,700	200,800	198,600	197,500	194,200	192,000	195,300	189,900	182,500	177,300	176,300
28	203,100	199,700	200,800	198,600	197,500	193,100	192,000	194,200	188,800	182,500	177,300	176,300
29	203,100	198,600	200,800	198,600	197,500	193,100	192,000	194,200	188,800	181,400	178,300	174,200
30	203,100	198,600	200,800	198,600	------	193,100	192,000	193,100	187,700	181,400	178,300	174,200
31	201,900	------	200,800	198,600	------	193,100	------	193,100	------	181,400	178,300	------
(†)	1,174.2	1,173.9	1,174.1	1,173.9	1,173.8	1,173.4	1,173.3	1,173.4	1,172.9	1,172.3	1,172.0	1,171.6
(*)	0	-3,300	+2,200	-2,200	-1,100	-4,400	-1,100	+1,100	-5,400	-6,300	-3,100	-4,100
MAX	203,100	201,900	201,900	200,800	198,600	197,500	193,100	197,500	193,100	188,800	181,400	178,300
MIN	201,900	198,600	198,600	198,600	197,500	193,100	189,900	189,900	187,700	181,400	177,300	174,200

CAL YR 1971..... * -12,400 MAX 213,200 MIN 193,100
WTR YR 1972..... * -27,700 MAX 203,100 MIN 174,200

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

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 downstream from Hubbard Creek Reservoir, 6.8 miles northwest of Breckenridge, 8.2 miles upstream from Gonzales Creek, and 11.2 miles upstream from Clear Fork Brazos River.

DRAINAGE AREA.--1,111 sq mi, of which 1,107 sq mi is above Hubbard Creek Dam.

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

GAGE.--Water-stage recorder. Datum of gage is 1,092.10 ft above mean sea level. Prior to July 16, 1959, at site 300 ft upstream at same datum.

AVERAGE DISCHARGE.--7 years (1955-62) prior to completion of Hubbard Creek Dam, 170 cfs (123,200 acre-ft per year); 10 years (1962-72) regulated, 30.4 cfs (22,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 88 cfs Oct. 19 (gage height, 5.49 ft); no flow at times.
Period of record: Maximum discharge, 34,500 cfs May 26, 1957 (gage height, 34.00 ft); no flow at times.
Maximum stage since at least 1925, 34.2 ft July 20, 1953, from information by local resident and State Highway Department.

REMARKS.--Records good. Flow regulated by Hubbard Creek Reservoir (see preceding page). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01	.01	0	.02	.10	.08	.10				
2	0	0	3.6	0	.03	.13	.05	.04				
3	.40	0	3.1	0	.01	.13	.04	.01				
4	1.2	0	.99	0	.02	.13	.03	0				
5	.51	0	.67	0	.01	.16	.03	0				
6	.16	0	.50	0	.03	.20	.03	.12				
7	.03	0	.16	0	.02	.23	.03	3.7				
8	.01	0	0	0	.03	.34	.02	.54				
9	0	0	.23	0	.03	.35	.02	.14				
10	0	0	11	0	.05	.33	.01	.06				
11	0	0	1.5	0	.15	.26	.01	.03				
12	0	0	.17	0	.23	.22	0	.93				
13	0	0	.02	0	.13	.14	0	.44				
14	0	0	0	0	.13	.11	0	.14				
15	0	0	0	0	.05	.08	.02	.05				
16	0	0	0	0	.11	.05	0	.02				
17	0	0	0	0	.11	.04	0	.01				
18	0	0	0	0	.07	.03	0	0				
19	12	0	0	0	.06	.01	0	0				
20	20	0	0	0	.06	.01	.19	0				
21	4.5	0	0	0	.06	.01	.11	0				
22	2.4	.02	0	0	.04	0	.02	0				
23	1.2	.08	0	0	.06	0	0	0				
24	.41	.07	0	0	.04	.07	0	0				
25	.18	.04	0	0	.05	.06	0	0				
26	.14	.03	0	0	.04	.05	0	0				
27	.41	.01	0	0	.03	.03	.95	0				
28	.27	.01	0	0	.03	.02	.39	0				
29	.14	0	0	0	.04	.01	1.3	0				
30	.07	0	0	0	------	.05	.32	0				
31	.02	------	0	.01	------	.10	------	0	------			------
TOTAL	44.05	.27	21.95	.01	1.74	3.45	3.65	6.33	0	0	0	0
MEAN	1.42	.009	.71	.0003	.060	.11	.12	.20	0	0	0	0
MAX	20	.08	11	.01	.23	.35	1.3	3.7	0	0	0	0
MIN	0	0	0	0	.01	0	0	0	0	0	0	0
AC-FT	87	.5	44	.02	3.5	6.8	7.2	13	0	0	0	0

CAL YR 1971 TOTAL 256.64 MEAN .70 MAX 42 MIN 0 AC-FT 509
WTR YR 1972 TOTAL 81.45 MEAN .22 MAX 20 MIN 0 AC-FT 162

08087300 Clear Fork Brazos River at Eliasville, Tex.

LOCATION.--Lat 32°57'36", long 98°45'59", Young County, on right bank 30 ft upstream from old mill dam, 180 ft upstream from bridge on Farm Road 1974, 400 ft northwest of Eliasville, and at mile 12.4.

DRAINAGE AREA.--5,721 sq mi.

PERIOD OF RECORD.--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".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,027.77 ft above mean sea level. See WSP 1922 for history of changes prior to Dec. 18, 1961.

AVERAGE DISCHARGE.--37 years (1916-19, 1928-51, 1961-72), 376 cfs (272,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,020 cfs Aug. 16 (gage height, 10.58 ft); 0.20 cfs Aug. 11-15.
Period of record: Maximum discharge, 35,800 cfs June 11, 1941 (gage height, 33.45 ft, site and datum then in use), from rating curve extended above 23,000 cfs; no flow at times.
Maximum stage since 1877, 35 ft 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.

REMARKS.--Records good. Regulation by eight major upstream reservoirs with a total capacity of 510,100 acre-ft. Many small diversions above station for municipal supply and oilfield operations. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,080	247	103	88	59	54	47	105	15	4.7	.25	36
2	807	221	180	90	57	51	46	60	13	157	.25	26
3	789	196	172	89	55	54	46	40	12	55	.25	74
4	720	217	128	86	57	53	46	31	9.8	212	.25	475
5	481	198	126	84	58	53	46	27	8.0	325	.25	988
6	445	174	141	84	57	51	51	47	8.4	184	.25	630
7	717	162	124	84	57	51	51	97	8.1	128	.25	318
8	650	154	152	84	55	56	51	153	8.0	89	.25	172
9	411	148	173	84	56	54	42	231	7.0	59	.25	112
10	347	144	264	84	57	52	42	116	5.8	41	.25	87
11	315	138	161	82	57	53	42	96	5.8	28	.20	72
12	285	135	122	78	61	50	41	322	6.7	21	.20	52
13	264	132	131	77	60	45	44	558	10	20	.20	47
14	249	132	140	75	57	47	47	273	78	9.7	.20	34
15	226	128	135	71	59	47	51	160	37	5.8	.20	26
16	169	124	130	70	60	45	42	106	19	3.5	1,440	19
17	160	124	129	65	55	37	40	80	16	2.1	905	16
18	160	120	120	66	55	36	35	100	13	1.2	307	35
19	287	118	118	65	52	35	30	105	14	.80	181	73
20	641	111	112	67	53	37	111	76	20	.51	116	218
21	200	111	111	69	53	43	119	55	21	.39	60	226
22	263	109	106	72	56	45	61	43	33	.25	62	357
23	274	116	104	69	62	49	36	38	27	.25	45	404
24	330	114	102	67	61	89	35	33	20	.25	32	1,040
25	395	112	96	63	60	67	57	27	14	.25	170	421
26	543	111	94	63	55	71	51	22	8.0	.25	44	186
27	376	110	96	63	56	63	280	20	4.3	.25	71	137
28	284	105	94	63	56	63	438	28	5.7	.25	52	94
29	248	103	90	61	54	55	820	28	22	.25	23	116
30	270	103	92	62	------	49	254	22	6.7	.25	10	232
31	302	------	86	62	------	47	------	16	------	.25	7.1	------
TOTAL	12,688	4,217	3,932	2,287	1,650	1,602	3,102	3,115	476.3	1,350.20	3,528.60	6,723
MEAN	409	141	127	73.8	56.9	51.7	103	100	15.9	43.6	114	224
MAX	1,080	247	264	90	62	89	820	558	78	325	1,440	1,040
MIN	160	103	86	61	52	35	30	16	4.3	.25	.20	16
AC-FT	25,170	8,360	7,800	4,540	3,270	3,180	6,150	6,180	945	2,680	7,000	13,340

CAL YR 1971 TOTAL 130,314.79 MEAN 357 MAX 9,340 MIN 0 AC-FT 258,500
WTR YR 1972 TOTAL 44,671.10 MEAN 122 MAX 1,440 MIN .20 AC-FT 88,610

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

08088000 Brazos River near South Bend, Tex.

LOCATION.--Lat 33°01'30", long 98°38'50", Young County, on left bank 265 ft downstream from bridge on State Highway 67, 1.6 miles downstream from Clear Fork Brazos River, 2.0 miles northeast of South Bend, and at mile 758.3.

DRAINAGE AREA.--21,600 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,002.98 ft above mean sea level. Prior to Feb. 23, 1939, nonrecording gage at site 265 ft upstream. Feb. 23, 1939, to Mar. 9, 1961, water-stage recorder at site 265 ft upstream.

AVERAGE DISCHARGE.--34 years, 893 cfs (647,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,100 cfs Aug. 18 (gage height, 17.45 ft); minimum, 5.8 cfs Aug. 10.
Period of record: Maximum discharge, 87,400 cfs May 4, 1941 (gage height, 27.35 ft); maximum gage height, 32.70 ft Aug. 29, 1957, no flow at times.
Maximum stage, 36.2 ft in 1876, from information by State Highway Department and Corps of Engineers. Flood of Sept. 24, 1900, reached a stage of 29.5 ft, and flood of June 16, 1930, reached a stage of 35.5 ft, from information by local residents.

REMARKS.--Records good. Flow partly regulated by 10 major upstream reservoirs (total capacity, 554,000 acre-ft). Many small diversions above station for municipal supply and oilfield operations. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,730	946	196	184	127	87	77	161	59	85	21	2,090
2	2,110	1,000	312	189	123	84	75	100	56	174	18	1,690
3	1,960	1,050	394	188	118	84	66	75	61	117	16	1,590
4	2,650	858	304	186	126	78	65	67	99	523	14	3,130
5	3,890	772	312	176	121	78	64	65	83	859	13	10,200
6	2,230	611	336	172	119	79	66	75	70	745	11	7,160
7	1,870	534	359	175	121	75	64	120	61	650	9.8	3,130
8	1,690	482	386	177	119	73	61	342	49	318	9.0	2,830
9	1,270	439	596	190	119	73	61	891	45	171	9.0	2,670
10	1,100	410	617	181	115	72	61	744	40	115	8.0	1,800
11	980	384	514	174	123	72	60	510	35	86	7.9	1,430
12	900	358	450	174	127	71	60	6,980	32	97	9.7	1,080
13	830	337	402	163	124	67	57	7,120	26	116	19	904
14	777	322	383	158	120	69	60	2,310	129	104	94	1,180
15	715	309	372	154	114	68	64	1,340	368	289	8,370	988
16	662	293	346	153	112	70	59	928	273	287	13,100	828
17	619	285	365	150	106	70	55	652	171	200	17,300	735
18	2,400	263	336	145	105	67	52	480	246	142	13,800	638
19	1,790	249	339	140	105	68	52	421	895	109	3,860	741
20	2,110	238	299	149	105	68	70	412	600	89	2,650	688
21	2,170	230	285	143	104	67	124	336	466	78	2,030	894
22	2,010	235	262	143	103	68	96	252	356	70	1,610	1,710
23	1,540	246	248	140	104	68	68	206	268	78	1,360	1,480
24	1,340	235	233	136	99	80	58	173	219	58	1,150	1,620
25	1,300	228	220	135	97	81	55	150	288	45	1,460	1,160
26	2,000	216	210	135	93	76	69	120	198	33	3,730	776
27	1,640	213	205	130	92	74	198	102	123	30	2,850	643
28	1,360	204	197	130	90	69	646	91	95	25	3,560	550
29	1,200	199	196	130	91	66	979	88	132	31	8,660	471
30	989	196	192	128	------	68	477	78	175	28	4,960	607
31	1,030	------	189	126	------	73	------	70	------	24	2,680	------
TOTAL	49,862	12,342	10,055	4,854	3,222	2,263	4,019	25,459	5,718	5,776	93,389.4	55,413
MEAN	1,608	411	324	157	111	73.0	134	821	191	186	3,013	1,847
MAX	3,890	1,050	617	190	127	87	979	7,120	895	859	17,300	10,200
MIN	619	196	189	126	90	66	52	65	26	24	7.9	471
AC-FT	98,900	24,480	19,940	9,630	6,390	4,490	7,970	50,500	11,340	11,460	185,200	109,900

CAL YR 1971 TOTAL 342,533.49 MEAN 938 MAX 18,300 MIN 0 AC-FT 679,400
WTR YR 1972 TOTAL 272,372.40 MEAN 744 MAX 17,300 MIN 7.9 AC-FT 540,300

PEAK DISCHARGE (BASE, 11,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
5-12	1800	14.88	12,500
8-18	0800	17.45	19,100
9- 5	1500	14.22	12,200

08088100 Salt Creek at Olney, Tex.

LOCATION.--Lat 33°22'13", long 98°44'40", Young County, on right bank 21 ft downstream from bridge on State Highway 199 and 0.5 mile east of Olney.

DRAINAGE AREA.--9.6 sq mi.

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,164.03 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 3.11 cfs (2,250 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,500 cfs May 12 (gage height, 12.25 ft); no flow for many days.
Period of record: Maximum discharge, 12,500 cfs May 12, 1972 (gage height, 12.25 ft), from rating curve extended above 1,020 cfs on basis of indirect measurement of 11,500 cfs; no flow at times each year.
Maximum stage since at least 1908, 16.7 ft in June 1915; flood in May or June 1941 reached a stage of 16 ft, from information by local residents.

REMARKS.--Records good. No diversion above station. Records furnished by the city of Olney show that during year 1,006 acre-ft was diverted from reservoirs in the Red River Basin for municipal and industrial use, of which 350 acre-ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.10	.10	.17	.05	.02	0	.05	.01	.05	0	0
2	0	.07	2.8	.14	.04	.02	0	.05	.01	.01	0	0
3	90	.06	4.0	.17	.01	.02	0	.04	.01	.01	0	0
4	3.2	.06	.99	.12	.01	.02	0	0	.01	.16	0	4.2
5	.82	.06	2.4	.10	.03	.02	0	0	.01	.06	0	.16
6	.31	.05	.55	.15	.04	.02	0	.14	0	.01	0	0
7	.12	.04	.08	.18	.02	.03	0	22	0	.01	0	0
8	.12	.04	2.8	.26	.02	.02	0	.33	0	0	0	0
9	.09	.05	3.1	.17	.02	.02	0	.05	0	0	6.3	0
10	.06	.05	65	.13	.02	.02	0	.02	0	0	3.1	0
11	.05	.05	5.2	.10	.01	.02	0	7.7	0	0	.02	0
12	.05	.05	1.8	.10	.02	.02	0	2,790	0	0	0	0
13	.04	.04	.83	.08	.10	.02	0	19	0	0	1.7	0
14	.04	.04	17	.05	.17	.02	.34	2.3	3.2	0	.17	0
15	.03	.04	12	.04	.10	.03	0	.87	105	0	.01	0
16	.03	.04	2.7	.07	.02	.02	0	.47	3.5	0	.01	.02
17	.01	.12	1.2	.11	.02	.02	0	.30	3.2	0	0	0
18	.07	.10	.79	.10	.02	.02	0	.24	.28	0	0	0
19	41	.03	.63	.06	.02	.02	.06	.19	.11	0	0	0
20	62	.02	.45	.05	.02	.02	30	.16	.06	0	0	0
21	2.3	.02	.36	.03	.02	.02	.59	.24	.05	0	0	.16
22	.88	.14	.31	.03	.03	.01	.01	.21	.24	0	0	0
23	.57	.32	.30	.03	.03	.27	0	.11	.06	0	.04	0
24	.33	.06	.29	.03	.03	.29	0	.09	.04	0	.01	0
25	.19	.04	.26	.02	.03	.03	0	.08	.03	0	.56	0
26	.39	.04	.26	.03	.03	.01	.21	.08	.03	0	0	0
27	1.5	.03	.78	.03	.02	.01	8.2	.09	.01	0	0	0
28	.36	.21	.27	.01	.02	0	.15	.06	1.5	0	0	0
29	.22	.04	.32	.02	.03	0	.06	.05	1.8	0	0	0
30	.16	.08	.51	.02	------	0	.05	.04	.04	0	0	0
31	.10	------	.22	.02	------	0	------	.02	------	0	0	------
TOTAL	205.04	2.09	128.30	2.62	1.00	1.06	39.67	2,844.98	119.20	.31	11.92	4.54
MEAN	6.61	.070	4.14	.085	.035	.034	1.32	91.8	3.97	.010	.38	.15
MAX	90	.32	65	.26	.17	.29	30	2,790	105	.16	6.3	4.2
MIN	0	.02	.08	.01	.01	0	0	0	0	0	0	0
AC-FT	407	4.2	254	5.2	2.0	2.1	79	5,640	236	.6	24	9.0

CAL YR 1971 TOTAL 960.12 MEAN 2.63 MAX 149 MIN 0 AC-FT 1,900
WTR YR 1972 TOTAL 3,360.73 MEAN 9.18 MAX 2,790 MIN 0 AC-FT 6,670

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-19	2330	8.59	274
5-12	0300	12.25	12,500
6-15	1030	8.41	256

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, 2.5 miles upstream from mouth, and 7.0 miles northwest of Graham.

DRAINAGE AREA.--19.7 sq mi.

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 1,094 ft, from topographic map.

AVERAGE DISCHARGE.--14 years, 4.01 cfs (2,910 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,420 cfs May 12 (gage height, 12.20 ft); no flow for long periods.
Period of record: Maximum discharge, 2,720 cfs Apr. 30, 1970 (gage height, 12.30 ft); no flow most of time.
Maximum stage since at least 1900, 15.2 ft in September 1955. Flood in May 1957 reached a stage of 15.0 ft, from information by local resident.

REMARKS.--Records good. No known diversion above station. Recording rain gage located near center of basin.

REVISIONS (WATER YEARS).--WRD 1970: 1962, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04		0				0	.02	0			
2	.02		0				0	0	0			
3	11		0				0	0	0			
4	13		0				0	0	0			
5	3.0		.02				0	0	0			
6	1.1		.02				0	0	0			
7	.47		.01				0	85	0			
8	.29		1.7				0	18	0			
9	.21		3.6				0	1.9	0			
10	.13		25				0	.42	0			
11	.07		11				0	12	0			
12	.03		2.1				0	1,030	0			
13	.01		.78				0	44	0			
14	0		.80				0	4.6	2.0			
15	0		4.6				0	1.5	105			
16	0		3.7				0	.64	27			
17	0		1.5				0	.29	2.1			
18	0		.58				0	.13	.21			
19	0		.25				0	.06	.03			
20	0		.13				0	.03	0			
21	0		.06				5.8	.03	0			
22	0		.02				1.6	.02	0			
23	0		.01				.15	.01	0			
24	0		.01				.01	0	0			
25	0		0				0	0	0			
26	0		0				0	0	0			
27	0		0				9.2	0	0			
28	0		0				3.9	0	0			
29	0		0				.52	0	0			
30	0		0		------		.11	0	0			
31	0	------	0		------		------	0	------			------
TOTAL	29.37	0	55.89	0	0	0	21.29	1,198.65	136.34	0	0	0
MEAN	.95	0	1.80	0	0	0	.71	38.7	4.54	0	0	0
MAX	13	0	25	0	0	0	9.2	1,030	105	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	58	0	111	0	0	0	42	2,380	270	0	0	0
(††)	2.13	.75	2.65	.45	.75	.12	2.53	5.55	3.24	1.47	1.42	3.23

CAL YR 1971 TOTAL 3,271.48 MEAN 8.96 MAX 970 MIN 0 AC-FT 6,490 †† 30.02
WTR YR 1972 TOTAL 1,441.54 MEAN 3.94 MAX 1,030 MIN 0 AC-FT 2,860 †† 24.29

PEAK DISCHARGE (BASE, 200 CFS).--May 12 (0400) 2,420 cfs (12.20 ft); June 15 (0700) 315 cfs (5.67 ft).

†† Weighted-mean rainfall, in inches.

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 northwest of Graham, and 5 miles downstream from Briar Creek.

DRAINAGE AREA.--205 sq mi.

PERIOD OF RECORD.--March 1958 to September 1963 (unpublished record), October 1963 to current year. Prior to October 1969, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage (Salt Creek datum) is 1.30 ft above mean sea level. Prior to October 1963, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 58,200 acre-ft May 13 (gage height, 1,076.71 ft); minimum, 40,010 acre-ft Apr. 26 (gage height, 1,069.37 ft).
Period of record: Maximum contents, 61,120 acre-ft Apr. 30, 1970 (gage height, 1,077.77 ft); minimum, 30,780 acre-ft Aug. 12, 1971 (gage height, 1,065.10 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 5,000 ft long. It is connected with Lake Eddleman on Flint Creek by a cut channel at 1,050.0 ft gage height. The uncontrolled emergency spillway is a 1,050-foot wide cut at the right end of dam, with a concrete cutoff wall, and will discharge 136,500 cfs at a lake level of 1,087.5 ft (12.5-foot head). Storage began Apr. 28, 1958, and dam was completed in July 1958. Total capacity of Lake Eddleman and Lake Graham is 53,680 acre-ft (gage height, 1,075.0 ft, crest of spillway). Dead storage is 8,670 acre-ft (gage height, 1,050.0 ft, invert of 24-inch discharge conduit). Dam is property of city of Graham and was built to impound water for municipal and industrial use. Water is used by Texas Electric Service Company for cooling purposes in their steam powerplant by pumping from Lake Graham and releasing into Lake Eddleman. Capacity table is based on an original Lake Eddleman survey of 1928 and Salt Creek survey of 1953. Figures given herein represent total contents of Lake Eddleman and Lake Graham. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	1,092.0	-
Crest of emergency spillway	1,075.0	53,680
Bottom of interconnecting channel	1,050.0	8,670
Invert of 24-inch grated outlet	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.

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

1,065.0	30,580	1,074.0	51,140
1,070.0	41,480	1,075.0	53,680
1,071.0	43,820	1,076.0	56,290
1,072.0	46,220	1,077.0	58,990
1,073.0	48,660	1,078.0	61,780

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43,560	43,400	42,220	43,750	42,950	42,430	41,100	40,290	53,210	53,240	50,660	48,580
2	43,540	43,330	42,410	43,730	42,950	42,360	41,060	40,220	53,110	53,190	50,530	48,530
3	43,710	43,210	42,380	43,710	42,920	42,310	40,990	40,170	53,080	53,060	50,410	48,480
4	43,920	43,140	42,380	43,640	42,900	42,310	40,900	40,080	53,010	53,160	50,330	48,900
5	43,870	43,090	42,450	43,590	42,850	42,220	40,870	40,040	52,930	53,080	50,260	48,880
6	43,820	43,000	42,430	43,590	42,830	42,170	40,830	40,170	52,850	52,980	50,210	48,830
7	43,780	42,950	42,450	43,560	42,810	42,130	40,800	40,610	52,800	52,900	50,080	48,780
8	43,760	42,880	42,520	43,540	42,780	42,100	40,730	40,750	52,700	52,830	49,910	48,730
9	43,680	42,850	43,040	43,540	42,760	42,030	40,660	40,730	52,570	52,780	49,760	48,660
10	43,660	42,780	43,370	43,560	42,760	42,010	40,660	40,700	52,490	52,670	49,680	48,610
11	43,610	42,780	43,610	43,520	42,810	42,010	40,630	40,920	52,440	52,570	49,590	48,580
12	43,590	42,760	43,710	43,470	42,810	42,010	40,590	56,170	52,340	52,520	49,540	48,510
13	43,540	42,710	43,660	43,450	42,780	41,960	40,590	56,560	52,260	52,470	49,540	48,410
14	43,470	42,710	43,730	43,350	42,730	41,920	40,590	55,250	52,830	52,290	49,490	48,360
15	43,450	42,690	43,870	43,260	42,760	41,890	40,560	54,750	54,780	52,140	49,640	48,290
16	43,400	42,640	43,970	43,280	42,760	41,850	40,470	54,500	54,780	52,040	49,590	48,290
17	43,350	42,640	43,940	43,280	42,710	41,820	40,380	54,320	54,520	51,940	49,540	48,290
18	43,350	42,550	43,900	43,260	42,690	41,730	40,310	54,160	54,320	51,910	49,410	48,210
19	43,350	42,480	43,920	43,230	42,640	41,680	40,310	54,060	54,140	51,840	49,340	48,290
20	43,560	42,450	43,870	43,230	42,640	41,710	40,420	53,980	54,060	51,790	49,270	48,040
21	43,780	42,430	43,870	43,210	42,640	41,640	40,420	53,910	53,960	51,710	49,220	47,920
22	43,730	42,500	43,820	43,210	42,590	41,590	40,330	53,830	53,910	51,610	49,140	47,900
23	43,680	42,480	43,820	43,160	42,590	41,570	40,310	53,800	53,800	51,560	49,020	47,800
24	43,640	42,380	43,820	43,110	42,570	41,540	40,240	53,730	53,750	51,490	48,920	47,750
25	43,590	42,360	43,820	43,070	42,550	41,450	40,130	53,650	56,680	51,390	49,020	47,700
26	43,590	42,310	43,820	43,070	42,500	41,400	40,010	53,570	53,570	51,260	49,000	47,650
27	43,590	42,270	43,820	43,070	42,480	41,360	40,310	53,520	53,470	51,210	48,900	47,600
28	43,590	42,240	43,820	43,020	42,450	41,330	40,360	53,470	53,420	51,140	48,880	47,550
29	43,520	42,220	43,820	43,020	42,430	41,220	40,330	53,420	53,320	50,980	48,780	47,410
30	43,470	42,220	43,820	42,970	------	41,170	40,330	53,340	53,240	50,860	48,660	47,310
31	43,450	------	43,750	42,970	------	41,100	------	53,290	------	50,760	48,580	------
(†)	1,070.84	1,070.32	1,070.97	1,070.64	1,070.41	1,069.84	1,069.51	1,074.85	1,074.83	1,073.85	1,072.97	1,072.45
(*)	-160	-1,230	+1,530	-780	-540	-1,330	-770	+12,960	-50	-2,480	-2,180	-1,270
(††)	353	364	358	307	364	431	402	399	558	604	597	463
MAX	43,920	43,400	43,970	43,750	42,950	42,430	41,100	58,170	56,680	53,240	50,660	48,900
MIN	43,350	42,220	42,220	42,970	42,430	41,100	40,010	40,040	52,260	50,760	48,580	47,310

CAL YR 1971..... * +4,100 †† 4,657 MAX 43,970 MIN 30,800
WTR YR 1972..... * +3,700 †† 5,200 MAX 58,170 MIN 40,010

† 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 Texas Electric Service Company.

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 south of Ivan, 8.2 miles northwest of Caddo, and 11.6 miles northeast of Breckenridge.

DRAINAGE AREA.--95.8 sq mi.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--7 years (1965-72), 13.1 cfs (9,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 173 cfs May 12 (gage height, 5.67 ft); no flow for long periods.
Period of record: Maximum discharge, 9,590 cfs July 8, 1968 (gage height, 22.39 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurement of 7,980 cfs; no flow at times each year.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01		0				0	2.7	0	0		
2	0		1.2				0	.66	0	0		
3	.47		5.0				0	.23	0	0		
4	6.1		.82				0	.08	0	.05		
5	1.3		.17				0	.03	0	.03		
6	.37		.04				0	.26	0	.01		
7	.16		.01				0	11	0	0		
8	.07		0				0	12	0	0		
9	.04		0				0	3.1	0	0		
10	.02		4.0				0	.85	0	0		
11	.02		3.0				0	.33	0	0		
12	.01		.55				0	70	0	0		
13	.01		.11				0	27	0	1.0		
14	.01		.03				0	6.1	0	1.1		
15	0		.03				0	1.7	2.0	.22		
16	0		.02				0	.61	11	.05		
17	0		.02				0	.23	1.2	.01		
18	0		.02				0	.08	.27	0		
19	.02		.01				0	.04	.08	0		
20	24		.01				.01	.02	.02	0		
21	1.8		.01				.08	.01	.01	0		
22	.38		0				.14	0	0	0		
23	.15		0				.05	0	0	0		
24	.06		0				.02	0	0	0		
25	.02		0				.01	0	0	0		
26	.02		0				0	0	0	0		
27	.03		0				1.2	0	0	0		
28	.02		0				8.5	0	0	0		
29	.02		0				8.8	0	.05	0		
30	.01		0		------		14	0	.01	0		
31	.01	------	0		------		------	0	------	0		------
TOTAL	35.13	0	15.05	0	0	0	32.81	137.03	14.64	2.47	0	0
MEAN	1.13	0	.49	0	0	0	1.09	4.42	.49	.080	0	0
MAX	24	0	5.0	0	0	0	14	70	11	1.1	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	70	0	30	0	0	0	65	272	29	4.9	0	0

CAL YR 1971 TOTAL 430.27 MEAN 1.18 MAX 110 MIN 0 AC-FT 853
WTR YR 1972 TOTAL 237.13 MEAN .65 MAX 70 MIN 0 AC-FT 470

PEAK DISCHARGE (BASE, 1,000 CFS).--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 upstream from Loving Creek, 11.3 miles southwest of Graford, and at mile 687.5.

DRAINAGE AREA.--22,550 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--March 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.10 ft 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, 718,600 acre-ft Sept. 9 (gage height, 999.68 ft); minimum, 662,900 acre-ft Aug. 16 (gage height, 996.66 ft).
Period of record: Maximum contents observed, 743,700 acre-ft Oct. 5, 1941 (gage height, 1,001.0 ft); minimum observed, 273,300 acre-ft Feb. 19 to Mar. 17, 1953 (gage height, 967.0 ft).

REMARKS.--Reservoir is formed by reinforced concrete dam, Ambursen-type, massive buttress with flat-slab deck, with nine roof-weir gates (modified bear-trap type), two bulkhead sections, and an earthen-dike section. Total length of dam is 2,740 ft. The gates are designed to carry 550,000 cfs at gage height of 1,000.0 ft. Powerhouse is designed for two units having a total output of 22,500 kilowatts. Usable capacity for power development, 698,900 acre-ft. Dam completed and storage began Mar. 21, 1941. Water used for power development, industry, and irrigation. Eleven major reservoirs above station (combined capacity 607,800 acre-ft) partly regulate the inflow. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Data regarding dam and reservoir are shown in the following table:

	Gage height (feet)	Capacity (acre-feet)
Maximum design level (crest of roof-weir gates, gates raised).....	1,000.00	724,700
Bottom of gates (crest of spillway).....	987.00	504,100
Invert of powerhouse penstock.....	911.5	25,810
Invert of 54-inch horizontal cylinder valve (high pressure outlet).....	874.8	236

COOPERATION.--Capacity table furnished by Brazos River Authority. Capacity curve based on surveys made 1935-38.

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

996.0	651,000
998.0	687,000
1,000.0	724,700

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	714,400	700,800	687,900	702,000	683,400	683,900	680,500	674,000	696,700	697,700	691,500	712,400
2	714,600	699,000	699,200	702,000	682,900	683,400	681,200	673,700	696,500	697,700	690,000	710,100
3	717,100	696,500	689,800	701,000	680,500	683,900	680,200	673,700	696,400	697,500	689,400	707,600
4	715,200	693,200	689,800	696,400	681,200	683,400	678,200	673,700	696,000	697,800	689,200	710,600
5	716,200	692,000	690,700	693,000	681,800	683,400	678,700	673,100	694,300	699,300	687,600	711,800
6	717,300	691,300	691,100	692,600	681,400	683,400	677,300	674,400	693,500	700,100	687,000	712,900
7	714,400	690,700	692,600	690,600	681,200	683,800	674,900	675,300	693,400	701,200	686,600	716,700
8	711,600	688,900	693,000	690,600	682,100	683,400	674,200	676,000	693,000	701,800	686,100	716,700
9	710,300	687,900	693,900	690,400	682,300	683,400	673,500	676,900	692,200	702,000	685,400	716,700
10	710,600	687,400	695,000	690,400	682,300	683,400	673,700	677,800	692,200	701,600	684,800	714,600
11	712,500	687,600	696,500	690,400	682,500	683,800	673,500	678,900	691,900	701,400	684,300	712,400
12	711,200	688,300	697,100	690,000	683,400	683,800	671,300	686,800	691,900	701,000	684,300	712,400
13	712,500	689,100	698,200	688,900	684,100	683,800	670,000	704,000	691,100	701,000	684,100	712,000
14	711,200	689,400	699,000	687,700	684,300	683,800	669,400	709,900	692,000	701,000	676,700	708,000
15	709,500	689,400	699,200	684,700	682,500	683,400	669,000	711,800	696,400	700,800	664,100	703,800
16	708,000	689,400	699,200	682,900	682,500	683,400	668,500	711,600	697,700	700,700	663,600	699,500
17	708,000	689,400	699,200	682,000	682,500	683,800	668,500	710,600	698,200	700,700	677,100	695,400
18	708,400	688,100	700,100	682,700	682,500	683,200	668,100	708,700	698,800	700,500	701,400	690,700
19	712,500	688,100	701,200	683,000	682,500	683,200	668,600	705,700	698,400	700,300	711,200	686,100
20	713,500	688,300	701,200	683,000	683,400	683,000	669,000	704,400	697,300	698,200	713,300	684,800
21	711,400	688,300	701,200	682,300	683,900	682,000	668,600	703,300	697,100	697,800	711,800	685,700
22	709,500	686,600	699,700	682,500	682,900	682,300	669,000	703,100	697,500	697,500	708,600	688,300
23	707,000	685,900	699,500	683,800	683,900	682,100	669,000	702,500	697,800	697,500	705,700	690,200
24	707,200	685,600	699,500	682,300	683,800	681,800	668,300	700,500	698,600	697,300	705,300	693,200
25	707,400	686,300	700,100	682,300	684,300	682,100	667,600	698,600	698,400	695,000	706,500	694,100
26	707,600	686,300	700,700	682,700	683,400	682,300	667,000	698,600	698,400	694,300	705,700	694,100
27	708,400	686,600	700,700	682,300	684,100	682,000	670,000	698,600	698,000	693,900	706,800	693,200
28	707,600	686,600	700,700	682,100	684,700	681,600	671,000	698,400	698,000	693,700	708,400	692,200
29	706,100	686,600	701,400	682,500	684,300	680,500	672,800	697,700	697,500	693,000	712,000	691,500
30	703,800	687,600	701,400	682,500	------	680,300	674,200	697,100	698,000	692,600	712,700	691,300
31	702,700	------	701,400	682,900	------	680,500	------	696,900	------	691,900	713,300	------
(†)	998.84	998.03	998.77	997.77	997.85	997.64	997.29	998.53	998.59	998.26	999.40	998.23
(+)	-8,300	-15,100	+13,800	-18,500	+1,400	-3,800	-6,300	+22,700	+1,100	-6,100	+21,400	-22,000
MAX	717,300	700,800	701,400	702,000	684,700	683,900	681,200	711,800	698,800	702,000	713,300	716,700
MIN	702,700	685,600	687,900	682,000	680,500	680,300	667,000	673,100	691,100	691,900	663,600	684,800

CAL YR 1971..... + +250,700 MAX 717,300 MIN 425,800
WTR YR 1972..... + -19,700 MAX 717,300 MIN 663,600

† Gage height, in feet, at end of month.
+ Change in contents, in acre-feet.

08089000 Brazos River near Palo Pinto, Tex.

LOCATION.--Lat 32°51'45", long 98°18'08", Palo Pinto County, on right bank 100 ft upstream from bridge on Farm Road 4, 300 ft downstream from Dark Valley Creek, 6.5 miles north of Palo Pinto, and at mile 667.3.

DRAINAGE AREA.--22,760 sq mi, approximately, of which 9,240 sq mi 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 above mean sea level. Prior to Nov. 15, 1933, nonrecording gage at site 19 miles downstream at datum 38.19 ft lower.

AVERAGE DISCHARGE.--16 years (1924-40) prior to completion of Possum Kingdom Reservoir, 1,262 cfs (914,300 acre-ft per year); 32 years (1940-72) after completion of Possum Kingdom Reservoir, 994 cfs (720,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,000 cfs Sept. 6 (gage height, 9.24 ft); minimum, 15 cfs July 16-18.
Period of record: Maximum discharge, 95,600 cfs June 16, 1930, at site 19 miles downstream near Mineral Wells (gage height, 30 ft, 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), which was the highest since at least 1876.

REMARKS.--Records good. Since 1941 flow largely regulated by Possum Kingdom Reservoir 20 miles upstream (see preceding page). Total capacity of 12 major upstream reservoirs is 1,332,000 acre-ft.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,040	1,480	60	60	48	104	28	53	33	22	23	2,830
2	1,250	1,360	70	60	46	84	29	232	32	20	22	2,780
3	818	1,140	91	58	331	46	25	79	32	20	22	2,770
4	2,730	1,550	274	676	642	35	503	46	32	24	22	1,000
5	2,780	1,370	331	1,660	96	34	399	35	29	25	23	3,920
6	1,120	681	308	1,440	55	31	78	41	595	24	640	9,910
7	2,750	518	123	375	44	28	839	61	472	20	94	4,820
8	2,760	256	167	909	40	26	968	76	97	18	45	2,590
9	2,040	1,100	150	138	36	29	100	63	57	18	33	2,780
10	231	665	348	79	36	30	49	47	42	20	26	2,770
11	498	114	162	67	42	57	301	38	33	19	24	2,790
12	245	155	123	60	44	60	309	66	29	18	22	2,080
13	506	91	106	57	43	42	1,210	1,320	29	18	21	218
14	207	62	202	55	38	38	879	2,750	39	19	392	2,540
15	876	55	123	643	72	32	100	1,270	560	17	11,100	2,760
16	1,090	165	305	1,500	598	28	55	910	185	16	10,900	2,960
17	514	292	274	932	90	24	40	983	85	16	9,030	2,770
18	286	371	119	613	48	44	32	1,170	52	16	2,840	2,760
19	703	245	80	108	35	39	32	1,710	42	18	2,750	2,750
20	896	99	73	65	31	32	203	1,000	1,040	242	2,220	1,420
21	2,730	62	70	57	30	204	84	915	1,050	720	2,360	1,030
22	2,750	150	190	54	50	109	48	649	102	90	2,670	108
23	2,730	779	928	52	68	62	35	99	48	46	2,670	55
24	640	413	134	49	46	49	30	967	34	33	1,120	618
25	811	215	80	291	38	46	28	744	28	27	1,420	94
26	987	102	70	100	34	38	25	738	25	848	2,690	800
27	1,320	67	63	60	38	30	58	92	22	95	2,710	742
28	1,310	58	63	54	39	29	66	53	20	45	1,240	909
29	1,310	55	62	50	36	29	81	43	25	31	3,380	1,010
30	1,430	57	62	49	------	30	72	35	23	28	6,800	483
31	1,230	------	60	48	------	28	------	34	------	25	5,050	------
TOTAL	41,588	13,727	5,271	10,419	2,794	1,497	6,706	16,319	4,892	2,598	72,359	65,067
MEAN	1,342	458	170	336	96.3	48.3	224	526	163	83.8	2,334	2,169
MAX	2,780	1,550	928	1,660	642	204	1,210	2,750	1,050	848	11,100	9,910
MIN	207	55	60	48	30	24	25	34	20	16	21	55
AC-FT	82,490	27,230	10,460	20,670	5,540	2,970	13,300	32,370	9,700	5,150	143,500	129,100

CAL YR 1971 TOTAL 173,184.2 MEAN 474 MAX 2,780 MIN 6.7 AC-FT 343,500
WTR YR 1972 TOTAL 243,237.0 MEAN 665 MAX 11,100 MIN 16 AC-FT 482,500

08090300 Lake Palo Pinto near Santo, Tex.

LOCATION.--Lat 32°38'53", long 98°15'56", Palo Pinto County, near left end of dam on Palo Pinto Creek, 4.0 miles upstream from bridge on Farm Road 4, 4.4 miles northwest of Santo, and 7.5 miles upstream from Big Sunday Creek.

DRAINAGE AREA.--471 sq mi.

PERIOD OF RECORD.--April 1964 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, 41,560 acre-ft Dec. 16 (elevation, 866.03 ft); minimum, 31,500 acre-ft Sept. 30 (elevation, 861.76 ft).
Period of record: Maximum contents, 53,750 acre-ft Mar. 20, 1968 (elevation, 870.40 ft); minimum since first initial filling to present spillway elevation, 22,150 acre-ft May 27, 1971 (elevation, 857.00 ft).

REMARKS.--Lake is formed by a rock-faced earthfill dam 1,300 ft long with a 550-foot uncontrolled ogee-crested concrete spillway at right end of dam. Dam was completed and storage began in April 1964. During the summer of 1965, the dam was raised 2 ft, the spillway crest 4 ft and lengthened from 500 to 550 ft. 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 flow about 15 miles downstream to a channel dam where it is pumped out by the city of Mineral Wells. Water for cooling purposes is circulated from the lake to a generating plant of the Brazos Electric Power Co-Operative, Incorporated. Capacity table is based on a survey completed in 1959. Figures given herein represent total contents. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	898.0	-
Maximum design water level	893.0	163,200
Crest of uncontrolled spillway	867.0	44,090
Invert of 30-inch outlet pipe	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 total contents, in acre-feet)

861.0	29,870	865.0	38,980
863.0	34,250	867.0	44,090

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,570	39,700	37,740	40,470	39,220	38,540	36,290	37,470	38,050	38,440	34,670	32,740
2	34,480	39,520	37,900	40,400	39,220	38,290	36,150	37,500	38,050	38,320	34,530	32,740
3	34,870	39,420	38,070	40,400	39,150	38,220	35,980	37,420	38,070	38,270	34,480	32,680
4	34,850	39,420	38,050	40,270	39,130	38,070	35,980	37,380	38,020	38,390	34,440	32,680
5	34,760	39,320	38,200	40,240	39,180	38,000	35,980	37,350	38,020	38,440	34,390	32,680
6	34,670	39,150	38,370	40,170	39,100	37,950	35,980	37,570	37,950	38,440	34,370	32,610
7	34,670	39,050	38,390	40,100	39,100	37,830	35,940	37,810	37,950	38,390	34,300	32,570
8	34,640	39,000	38,660	40,100	39,100	37,640	35,840	37,880	37,810	38,340	34,210	32,570
9	34,500	38,880	39,250	40,070	39,080	37,590	35,820	37,860	37,690	38,320	34,160	32,500
10	34,440	38,860	41,310	40,020	39,030	37,570	35,820	37,880	37,620	38,170	33,980	32,460
11	34,370	38,810	41,380	39,970	39,000	37,570	35,840	37,830	37,660	38,000	33,860	32,460
12	34,300	38,710	41,460	39,970	38,980	37,570	35,840	39,180	37,690	37,860	33,840	32,350
13	34,230	38,710	41,480	39,840	38,930	37,570	35,840	39,400	37,690	37,710	33,770	32,220
14	34,180	38,640	41,480	39,720	38,910	37,520	35,820	39,450	37,980	37,520	33,750	32,170
15	34,120	38,560	41,480	39,670	38,860	37,500	35,870	39,420	39,220	37,300	33,730	32,170
16	33,980	38,560	41,540	39,640	38,910	37,450	35,800	39,370	39,870	37,060	33,710	32,130
17	33,980	38,560	41,430	39,670	38,860	37,400	35,680	39,420	39,800	36,990	33,660	32,080
18	34,140	38,370	41,410	39,670	38,860	37,350	35,500	39,350	39,740	36,940	33,620	32,060
19	35,290	38,320	41,360	39,640	38,830	37,350	35,380	39,300	39,640	36,900	33,590	31,950
20	40,120	38,240	41,280	39,600	38,880	37,330	35,360	39,270	39,520	36,850	33,570	31,870
21	40,220	38,150	41,180	39,520	38,860	37,280	35,330	39,220	39,320	36,800	33,460	31,760
22	40,200	38,270	41,150	39,500	38,810	37,280	35,290	39,220	39,300	36,760	33,230	31,800
23	40,170	38,170	41,130	39,450	38,830	37,260	35,220	39,150	39,270	36,660	33,080	31,800
24	40,200	38,120	41,080	39,350	38,880	37,210	35,150	39,080	39,180	36,570	33,120	31,780
25	40,020	38,050	41,080	39,320	38,860	37,160	35,100	38,860	39,180	36,220	33,170	31,760
26	40,000	38,000	40,970	39,300	38,830	37,140	35,060	38,710	39,050	35,980	33,140	31,690
27	39,970	37,950	40,850	39,220	38,810	37,090	35,400	38,560	38,960	35,750	33,120	31,690
28	39,920	37,860	40,800	39,250	38,740	36,940	35,450	38,440	38,860	35,570	33,010	31,650
29	39,840	37,780	40,720	39,220	38,640	36,780	37,280	38,240	38,690	35,260	32,920	31,540
30	39,800	37,740	40,620	39,200	------	36,590	37,500	38,100	38,610	35,060	32,790	31,500
31	39,720	------	40,520	39,200	------	36,450	------	38,120	------	34,850	32,700	------
(†)	865.30	864.49	865.62	865.09	864.86	863.95	864.39	864.65	864.85	863.26	862.31	861.76
(*)	+5,120	-1,980	+2,780	-1,320	-560	-2,190	+1,050	+620	+490	-3,760	-2,150	-1,200
(††)	301	274	222	235	156	264	287	303	362	365	348	296
MAX	40,220	39,700	41,540	40,470	39,220	38,540	37,500	39,450	39,870	38,440	34,670	32,740
MIN	33,980	37,740	37,740	39,200	38,640	36,450	35,060	37,350	37,620	34,850	32,700	31,500

CAL YR 1971..... * +10,990 †† 3,287 MAX 41,540 MIN 22,150
WTR YR 1972..... * -3,100 †† 3,413 MAX 41,540 MIN 31,500

† 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.

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 upstream from the Texas and Pacific Railway Co. bridge, 2.4 miles downstream from Big Sunday Creek, 2.6 miles northeast of Santo, 2.8 miles upstream from Wusser Creek, and 7.9 miles upstream from mouth.

DRAINAGE AREA.--567 sq mi.

PERIOD OF RECORD.--October 1924 to September 1925, April 1951 to current year. Monthly discharge only for October 1924 to September 1925, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 762.63 ft 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 cfs (65,420 acre-ft per year); 9 years (1963-72) after regulation by Lake Palo Pinto, 71.9 cfs (52,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,660 cfs Oct. 20 (gage height, 6.40 ft); no flow at times.
Period of record: Maximum discharge, 45,100 cfs May 26, 1957 (gage height, 31.05 ft, from floodmark), from rating curve extended above 18,000 cfs on basis of slope-area measurement of 45,100 cfs; 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 9.5 miles upstream. At times water is released from Lake Palo Pinto and flows past station to channel dam where it is pumped to treatment plant of city of Mineral Wells.

REVISIONS.--WSP 1312: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	11	37	.39	37	64	2.1	.16	39	60	2.1
2	15	12	34	36	.35	36	63	.67	.06	38	50	.17
3	36	12	58	38	.29	37	56	.35	.01	43	1.6	.03
4	30	12	14	40	.29	36	1.0	.15	0	47	.10	0
5	18	13	16	39	.29	36	.18	.07	0	35	0	0
6	16	14	21	38	.31	38	.11	.10	0	1.6	0	0
7	15	14	21	37	.30	38	.06	50	0	.17	0	0
8	16	14	148	15	.24	37	.03	9.0	60	.02	0	0
9	15	15	195	13	.18	38	.02	2.3	63	0	12	0
10	15	15	327	12	16	26	.02	1.0	2.0	5.5	87	3.6
11	15	15	44	12	20	.87	.02	.58	.22	71	69	9.4
12	15	15	18	12	20	.20	.01	66	.06	73	2.7	10
13	15	16	12	12	20	.12	0	27	0	85	.28	47
14	15	16	11	12	16	.11	.01	2.8	0	73	.05	16
15	14	15	10	12	1.6	.09	.11	.70	23	73	0	.99
16	15	15	12	12	.37	.08	.14	.37	28	74	0	.02
17	15	16	21	12	.23	.06	12	.22	1.2	56	0	0
18	17	15	21	12	.14	.05	71	.12	.22	.93	0	0
19	220	15	21	12	.12	.06	51	.06	.06	.01	0	7.4
20	707	15	20	12	.12	.08	1.2	.02	0	0	0	20
21	32	15	20	12	.19	.09	.27	0	0	0	8.4	34
22	17	17	20	12	.19	.09	.20	0	0	0	97	29
23	14	19	20	12	.16	.09	.05	0	0	0	66	2.5
24	14	20	21	12	.16	.13	0	7.5	0	4.8	1.8	1.4
25	13	16	21	12	.26	.11	0	61	0	63	.40	1.5
26	13	16	34	12	.29	.11	0	64	0	67	.11	1.4
27	13	16	36	11	.35	.08	9.1	64	7.4	70	.02	2.2
28	13	18	36	1.8	5.6	.50	1.6	64	15	71	.79	5.5
29	13	20	36	.55	36	62	16	64	16	70	41	6.5
30	12	11	36	.40	------	64	14	47	23	70	43	1.8
31	12	------	36	.38	------	64	------	1.2	------	68	37	------
TOTAL	1,405	454	1,351	511.13	140.42	551.92	361.13	536.31	239.39	1,199.03	578.25	202.51
MEAN	45.3	15.1	43.6	16.5	4.84	17.8	12.0	17.3	7.98	38.7	18.7	6.75
MAX	707	20	327	40	36	64	71	66	63	85	97	47
MIN	12	11	10	.38	.12	.05	0	0	0	0	0	0
AC-FT	2,790	901	2,680	1,010	279	1,090	716	1,060	475	2,380	1,150	402

CAL YR 1971 TOTAL 9,014.55 MEAN 24.7 MAX 1,170 MIN .07 AC-FT 17,880
WTR YR 1972 TOTAL 7,530.09 MEAN 20.6 MAX 707 MIN 0 AC-FT 14,940

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 south of Dennis, 1.0 mile upstream from Patrick Creek, and at mile 589.8.

DRAINAGE AREA.--24,160 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 697.67 ft above mean sea level (State Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Aug. 17 (gage height, 12.70 ft); minimum, 6.7 cfs Mar. 2.
Period of record: Maximum discharge, 41,700 cfs May 8, 1969 (gage height, 19.37 ft, from floodmarks); minimum, 3.1 cfs July 19, 20, 1971.
Maximum stage since at least 1930, 31.8 ft in May 1957, from floodmark, from information by State Highway Department.

REMARKS.--Records good. Flow is largely regulated by 14 major upstream reservoirs that have a total combined capacity of 1,385,000 acre-ft. At end of year, flow from 46.5 sq mi above this station and below Possum Kingdom Reservoir was partly controlled by 10 floodwater-retarding structures with a total combined capacity of 13,510 acre-ft below the flood-spillway crests, of which 11,890 acre-ft is floodwater-retarding capacity and 1,620 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Many diversions above station for irrigation, municipal supply, and oilfield operations. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,740	1,970	154	143	53	21	40	286	111	35	113	4,620
2	3,320	1,850	220	140	47	10	52	184	78	25	94	3,130
3	2,100	1,890	498	137	41	10	64	113	54	32	74	3,030
4	2,410	1,800	293	143	42	21	61	66	66	46	54	2,830
5	2,130	1,670	246	126	68	37	54	121	54	47	36	2,190
6	3,230	2,090	338	1,480	500	66	41	126	41	50	30	1,300
7	2,560	1,780	504	2,240	221	65	287	113	36	42	25	6,880
8	2,410	881	510	1,040	121	50	233	155	146	19	84	4,860
9	3,180	771	1,360	1,520	78	39	772	101	410	22	188	2,830
10	3,060	1,030	2,900	797	55	39	913	106	250	28	89	2,630
11	1,580	1,550	1,370	380	42	40	353	124	146	23	94	2,730
12	749	783	968	233	38	37	194	209	96	25	101	2,730
13	828	442	535	167	35	26	121	272	66	36	81	2,630
14	879	332	397	124	34	19	320	215	115	72	52	1,130
15	815	310	321	101	34	16	1,210	1,940	66	70	41	1,060
16	821	269	275	94	30	13	954	2,340	206	61	4,840	2,730
17	1,520	289	335	811	23	23	276	1,190	777	61	10,200	2,730
18	1,580	336	360	1,610	135	22	146	941	470	59	8,580	2,830
19	948	317	410	1,040	221	17	103	1,090	241	50	4,060	2,630
20	2,770	498	335	735	126	17	94	1,460	143	31	3,230	2,630
21	1,480	386	217	372	76	14	83	1,640	106	21	2,830	2,280
22	2,150	350	174	219	54	20	66	989	963	18	2,110	1,340
23	3,000	423	152	151	35	17	99	915	717	328	3,030	630
24	3,010	652	846	123	35	20	106	694	315	241	3,030	330
25	2,190	735	832	84	25	63	70	339	164	140	2,300	225
26	1,210	588	400	67	17	73	48	896	116	94	1,480	425
27	1,300	386	258	63	20	59	76	871	85	83	2,040	415
28	1,650	306	191	212	31	54	137	711	63	481	2,930	564
29	1,870	212	164	140	27	36	191	350	50	310	2,300	540
30	1,870	171	149	85	------	31	315	225	41	198	1,950	380
31	1,860	------	137	60	------	31	------	174	------	140	5,290	------
TOTAL	63,220	25,067	15,849	14,637	2,264	1,006	7,479	18,956	6,192	2,888	61,356	65,259
MEAN	2,039	836	511	472	78.1	32.5	249	611	206	93.2	1,979	2,175
MAX	4,740	2,090	2,900	2,240	500	73	1,210	2,340	963	481	10,200	6,880
MIN	749	171	137	60	17	10	40	66	36	18	25	225
AC-FT	125,400	49,720	31,440	29,030	4,490	2,000	14,830	37,600	12,280	5,730	121,700	129,400

CAL YR 1971 TOTAL 210,180.4 MEAN 576 MAX 11,700 MIN 3.5 AC-FT 416,900
WTR YR 1972 TOTAL 284,173.0 MEAN 776 MAX 10,200 MIN 10 AC-FT 563,700

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 upstream from Fall Creek, 7.5 miles southeast of Granbury, and at mile 542.5.

DRAINAGE AREA.--24,690 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 153,100 acre-ft Jan. 10 (elevation, 692.95 ft); minimum, 129,100 acre-ft Aug. 16 (elevation, 689.98 ft).
Period of record: Maximum contents, 153,500 acre-ft Dec. 30, 1969, June 18, Oct. 8, 1970 (elevation, 693.00 ft); minimum since first filling in October 1969, 99,150 acre-ft July 22, 23, 1971 (elevation, 685.53 ft).

REMARKS.--Lake is formed by a rolled earthfill dam, 2,256 ft long, including a 932-foot concrete spillway. Lake built by Brazos River Authority for conservation of municipal, industrial, and irrigation water. Outlet works consist of 16 tainter gates (36- by 35-foot) and two 7- by 8-foot sluice gates with lowest invert at 640.0 ft. The flow from sluice gates goes into a bay whose outflow is controlled by two 4- by 4.5-foot sluice gates with inverts at 625.8 ft. Dam completed in September 1969; sluice gates were closed Sept. 15, 1969; and tainter gates were closed Sept. 22, 1969. At end of year, flow from 52.7 sq mi above this station was partly controlled by 11 floodwater-retarding structures with a total combined capacity of 15,110 acre-ft below the flood-spillway crests, of which 13,350 acre-ft is floodwater-retarding capacity and 1,760 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	711.6	-
Top of closed tainter gates (design pool)	693.0	153,500
Spillway crest (sill of tainter gates)	658.0	15,440
Invert of lowest sluice gate	640.0	2,200

COOPERATION.--For the period Oct. 1 to May 31, daily elevations were furnished by the Brazos River Authority and daily contents were furnished by the Corps of Engineers; both records were reviewed by the Geological Survey. Capacity curve was based on data prepared by the Ambursen Engineering Corporation.

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

689.0	121,900	692.0	145,000
690.0	129,200	693.0	153,500
691.0	136,900		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139,100	146,500	145,200	143,200	150,200	150,100	144,100	145,500	146,900	146,200	142,600	147,700
2	143,600	145,500	144,500	143,100	150,900	150,000	144,100	145,700	146,700	145,700	142,300	145,900
3	144,500	144,200	144,700	142,700	150,900	149,700	144,000	145,300	146,500	145,400	142,100	147,200
4	144,700	144,300	143,300	143,500	150,400	149,200	144,000	145,200	146,300	145,600	141,900	149,300
5	144,500	144,000	143,900	142,600	150,100	149,000	143,900	145,000	146,100	145,800	141,800	150,100
6	145,500	144,600	144,300	143,100	150,000	148,400	143,900	145,600	146,000	145,500	141,600	144,700
7	146,000	144,600	144,300	145,800	150,300	148,200	144,100	146,300	145,800	145,200	141,300	143,000
8	145,500	144,400	144,700	148,800	148,500	148,400	144,600	146,400	145,700	145,100	141,100	147,300
9	145,800	144,300	146,500	150,500	148,600	147,800	144,700	146,400	145,700	144,700	141,000	148,500
10	145,200	144,200	150,900	152,600	148,800	147,500	146,200	146,400	146,100	144,500	141,100	149,000
11	145,200	145,200	145,000	151,400	149,200	147,100	147,000	146,400	146,300	144,200	141,100	149,200
12	144,800	146,400	144,300	148,600	149,200	146,600	147,500	147,200	146,300	143,900	140,900	149,400
13	144,500	144,900	144,600	149,200	149,300	146,000	147,500	147,200	146,200	143,900	140,900	149,400
14	143,900	144,500	143,500	148,800	149,200	145,500	147,400	144,400	146,900	143,800	141,500	151,100
15	144,700	144,300	143,700	148,800	149,700	145,500	148,800	140,600	146,700	143,600	138,200	149,400
16	144,200	144,800	143,300	148,500	149,600	145,400	149,400	143,400	147,800	143,400	130,600	148,600
17	144,100	144,500	142,900	148,600	149,700	145,100	148,700	145,800	148,200	143,300	132,900	148,800
18	144,800	144,800	142,600	150,100	149,700	145,200	147,000	146,600	148,800	142,900	139,500	148,600
19	145,100	144,300	143,100	152,100	150,000	145,000	147,000	146,500	148,600	142,900	143,100	148,900
20	146,000	143,900	143,500	152,400	150,200	144,500	147,400	147,500	147,500	142,600	143,000	149,300
21	142,600	144,000	143,700	152,000	150,500	144,400	147,900	148,600	146,100	142,400	145,200	150,200
22	141,800	143,900	143,600	151,800	151,100	144,800	146,900	148,800	145,000	142,200	148,400	149,400
23	143,300	144,500	143,500	151,500	150,800	144,800	146,300	147,800	146,700	142,000	149,100	147,900
24	144,100	144,500	143,400	151,500	150,900	144,800	145,700	148,400	147,500	142,400	149,300	148,700
25	144,700	145,000	144,600	151,600	150,900	144,700	145,400	148,600	147,700	142,500	149,600	148,900
26	144,300	145,500	145,100	150,900	151,100	144,600	145,200	148,800	147,600	142,400	148,500	148,800
27	144,800	145,800	144,900	151,600	150,800	144,800	145,800	149,400	147,200	142,300	146,300	151,400
28	145,500	145,800	144,600	151,400	150,300	145,000	145,300	149,200	146,900	142,000	146,900	150,600
29	145,700	145,300	143,900	150,900	150,200	145,100	145,800	150,100	146,700	142,500	148,600	149,900
30	145,800	145,600	143,600	151,100	------	144,600	145,300	147,500	146,600	142,900	147,200	149,300
31	146,200	------	143,300	150,800	------	144,400	------	147,300	------	142,900	147,200	------
(†)	692.14	692.07	691.79	692.68	692.61	691.93	692.04	692.27	692.19	691.74	692.26	692.51
(*)	+10,600	-600	-2,300	+7,500	-600	-5,800	+900	+2,000	-700	-3,700	+4,300	+2,100
MAX	146,200	146,500	150,900	152,600	151,100	150,100	149,400	150,100	148,800	146,200	149,600	151,400
MIN	139,100	143,900	142,600	142,600	148,500	144,400	143,900	140,600	145,000	142,000	130,600	143,000

CAL YR 1971..... * -1,400 MAX 150,900 MIN 99,150
WTR YR 1972..... * +13,700 MAX 152,600 MIN 130,600

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

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 downstream from Georges Creek, 4.1 miles upstream from Paluxy Creek, 6 miles northeast of Glen Rose, and at mile 511.2.

DRAINAGE AREA.--24,830 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 567.82 ft above mean sea level. Prior to May 7, 1931, nonrecording gage at site 2.5 miles downstream at same datum. May 7, 1931, to Sept. 30, 1957, water-stage recorder at site 2.4 miles 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.--49 years, 1,517 cfs (1,099,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,200 cfs Oct. 20 (gage height, 13.05 ft); minimum, 7.5 cfs July 11.
Period of record: Maximum discharge, 97,600 cfs May 18, 1935 (gage height, 23.68 ft, site then in use, from floodmarks); maximum gage height, 33.89 ft, present site, May 27, 1957; no flow at times prior to construction of Possum Kingdom Reservoir dam.
Maximum stage since at least 1876, that of May 27, 1957. Flood in May 1908 reached a stage of 27 ft, and flood in May 1922 reached a stage of 29.5 ft (could have equaled or exceeded flood in 1957 at present site), each at site 2.4 miles downstream, from information by local residents.

REMARKS.--Records good. Flow is largely regulated by 15 major reservoirs with a combined capacity of 1,538,000 acre-ft. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,970	1,830	396	460	225	127	52	365	195	86	44	6,720
2	1,280	2,420	467	464	135	121	53	286	153	82	44	6,470
3	2,870	2,370	1,070	462	191	104	50	268	105	86	46	2,440
4	2,860	1,750	1,170	420	246	93	46	178	99	221	44	2,150
5	2,050	1,840	701	412	153	276	40	130	96	57	42	2,870
6	1,740	1,770	740	312	201	372	22	124	94	48	38	5,610
7	2,920	1,740	660	167	417	230	43	143	76	40	34	4,160
8	2,240	1,710	696	411	1,060	172	28	151	51	32	32	7,730
9	2,470	1,040	3,660	396	335	192	52	121	53	64	70	3,770
10	3,180	800	10,100	309	118	194	68	98	52	37	65	2,990
11	2,720	538	5,750	1,270	90	194	71	95	52	39	65	3,070
12	1,220	880	2,120	1,660	74	279	80	140	53	48	65	3,070
13	747	892	1,220	539	88	385	82	536	58	66	70	2,980
14	997	892	1,510	264	104	382	93	1,980	65	50	638	2,150
15	465	516	937	271	111	230	102	2,270	108	50	3,950	2,130
16	688	139	904	238	82	80	449	862	129	42	5,610	2,340
17	780	178	853	154	57	69	756	757	90	35	6,850	6,340
18	1,070	694	612	167	69	99	748	654	95	16	6,850	3,170
19	3,670	477	385	317	52	72	241	676	267	34	4,950	2,920
20	9,930	385	323	904	71	80	73	678	583	34	2,980	2,900
21	4,280	375	400	878	79	86	84	679	838	35	1,700	3,020
22	1,690	380	388	513	79	60	219	1,340	329	37	1,320	3,410
23	1,770	452	383	376	110	43	308	1,360	121	37	2,300	2,090
24	2,620	406	374	317	70	55	309	525	92	38	2,820	492
25	2,710	391	362	152	73	31	182	316	86	38	2,900	317
26	1,880	389	491	196	97	49	96	229	79	37	2,820	273
27	1,280	388	624	244	118	63	173	526	70	35	2,820	266
28	1,020	387	613	214	197	54	1,030	886	82	37	2,220	897
29	1,710	403	614	355	179	40	523	158	82	38	2,220	980
30	1,780	383	493	286	------	39	477	1,390	92	42	2,220	983
31	1,770	------	408	186	------	39	------	371	------	48	3,410	------
TOTAL	75,377	26,815	39,424	13,314	4,881	4,310	6,550	18,292	4,345	1,589	59,237	88,708
MEAN	2,432	894	1,272	429	168	139	218	590	145	51.3	1,911	2,957
MAX	9,930	2,420	10,100	1,660	1,060	385	1,030	2,270	838	221	6,850	7,730
MIN	465	139	323	152	52	31	22	95	51	16	32	266
AC-FT	149,500	53,190	78,200	26,410	9,680	8,550	12,990	36,280	8,620	3,150	117,500	176,000

CAL YR 1971 TOTAL 238,134.2 MEAN 652 MAX 10,700 MIN 4.2 AC-FT 472,300
WTR YR 1972 TOTAL 342,842.0 MEAN 937 MAX 10,100 MIN 16 AC-FT 680,000

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 upstream from bridge on U.S. Highway 67, 1.0 mile upstream from Cross Branch, 1.2 miles southwest of Glen Rose, and 5.1 miles upstream from mouth.

DRAINAGE AREA.--410 sq mi.

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 above mean sea level. Oct. 27, 1923, to Sept. 30, 1925, nonrecording gage at bridge 1.8 miles downstream at datum 13.62 ft lower.

AVERAGE DISCHARGE.--26 years (1924-25, 1947-72), 69.3 cfs (50,210 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,500 cfs Oct. 19 (gage height, 14.49 ft); minimum, 0.72 cfs Sept. 15.
Period of record: Maximum discharge, 50,000 cfs Oct. 4, 1959 (gage height, 25.4 ft), from rating curve extended above 32,000 cfs; no flow at times.
Maximum stage since at least 1877, 27.2 ft Apr. 17, 1908, present site and datum (discharge, 59,000 cfs, from rating curve extended as explained above). Flood of May 21, 1922, reached a stage of 26.0 ft, present site and datum (discharge, 53,000 cfs, 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. Occasional small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1392: 1949, 1952. WRD Texas 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	31	31	94	52	34	23	64	21	14	3.1	2.2
2	8.7	29	121	90	52	33	23	44	18	8.7	2.9	2.2
3	19	27	196	110	48	33	22	35	17	7.1	2.7	2.2
4	40	26	107	117	47	31	22	29	16	1,130	3.0	2.4
5	22	25	320	97	47	30	21	26	15	556	2.9	2.6
6	16	24	302	90	48	30	22	43	15	86	2.6	2.7
7	13	23	271	83	47	30	21	67	14	46	2.2	2.4
8	13	22	641	81	45	29	20	50	13	32	2.0	2.0
9	12	22	2,210	83	45	29	20	36	13	26	2.0	1.7
10	12	22	2,820	79	45	29	20	32	12	21	2.5	1.5
11	11	21	609	74	45	29	20	29	12	18	2.7	1.3
12	10	21	347	72	48	28	20	387	12	16	3.1	1.3
13	11	21	248	70	47	28	19	210	11	14	3.9	1.1
14	11	21	224	66	45	29	23	78	13	17	3.7	.87
15	10	20	199	62	43	29	22	52	14	19	5.1	.78
16	10	20	157	62	42	28	19	42	70	13	3.9	46
17	10	94	132	66	42	27	17	38	46	11	3.2	104
18	69	50	117	66	40	27	16	33	24	9.5	3.1	18
19	1,960	34	112	64	38	26	16	30	18	8.8	2.6	8.5
20	2,670	30	102	62	38	26	16	28	15	8.6	2.2	5.9
21	289	27	92	60	38	26	33	26	12	7.8	2.0	66
22	135	34	87	58	38	26	21	25	11	6.8	1.8	21
23	87	67	83	58	38	25	17	23	9.9	6.4	6.8	14
24	66	68	79	56	38	25	16	22	9.0	6.0	2.8	11
25	53	43	76	52	38	25	15	21	8.2	5.6	2.2	9.2
26	46	36	74	52	36	25	14	19	7.2	5.2	1.9	7.0
27	54	32	72	52	36	25	83	18	6.4	4.8	25	27
28	46	30	68	52	36	24	283	17	6.0	4.5	55	32
29	40	28	66	52	34	23	159	58	6.3	4.1	4.6	13
30	37	28	64	52	------	23	155	68	35	3.6	3.6	8.6
31	33	------	60	50	------	24	------	29	------	3.4	2.3	------
TOTAL	5,822.3	976	10,087	2,182	1,236	856	1,198	1,679	500.0	2,119.9	167.4	418.45
MEAN	188	32.5	325	70.4	42.6	27.6	39.9	54.2	16.7	68.4	5.40	13.9
MAX	2,670	94	2,820	117	52	34	283	387	70	1,130	55	104
MIN	8.6	20	31	50	34	23	14	17	6.0	3.4	1.8	.78
AC-FT	11,550	1,940	20,010	4,330	2,450	1,700	2,380	3,330	992	4,200	332	830

CAL YR 1971 TOTAL 25,554.47 MEAN 70.0 MAX 2,820 MIN 0 AC-FT 50,690
WTR YR 1972 TOTAL 27,242.05 MEAN 74.4 MAX 2,820 MIN .78 AC-FT 54,030

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-19	2130	14.49	12,500
12- 9	2200	12.50	9,000
7- 4	2030	8.94	4,540

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 upstream from Buffalo Creek, and 4.3 miles south of Cleburne.

DRAINAGE AREA.--100 sq mi.

PERIOD OF RECORD.--April 1965 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, 31,590 acre-ft Dec. 10 (elevation, 737.12 ft); minimum, 19,270 acre-ft Oct. 2 (elevation, 729.00 ft).
Period of record: Maximum contents, 37,200 acre-ft May 13, 1968 (elevation, 740.10 ft); minimum, 18,890 acre-ft Dec. 11-14, 1967 (elevation, 728.70 ft).

REMARKS.--Lake is formed by a rock-faced earthfill dam 5,050 ft long including a 150-foot uncontrolled concrete spillway at left 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 is based on survey of 1958 from U.S. Geological Survey topographic maps. Figures given herein represent total contents. Water-quality records for the current year are published in Part 2 of this report. Data regarding 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 emergency spillway	744.0	45,430
Crest of service spillway	733.5	25,560
Invert of top sluice gate	722.0	11,760
Invert of bottom sluice gate	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 total contents, in acre-feet)

729.0	19,270	734.0	26,340
730.0	20,560	736.0	29,630
732.0	23,320	737.0	31,370

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19,280	26,010	25,950	26,370	26,040	25,920	25,570	25,920	25,650	24,700	23,520	22,500
2	19,270	25,960	26,900	26,310	26,070	25,820	25,510	25,890	25,620	24,610	23,460	22,480
3	19,510	25,920	26,720	27,260	25,950	25,790	25,530	25,850	25,590	24,570	23,410	22,430
4	19,500	25,870	26,530	26,820	25,950	25,790	25,480	25,790	25,540	24,790	23,380	22,420
5	19,500	25,850	27,500	26,550	26,000	25,760	25,470	25,780	25,510	24,720	23,330	22,380
6	19,490	25,840	27,260	26,470	26,030	25,760	25,470	26,100	25,480	24,690	23,290	22,350
7	19,460	25,790	27,000	26,400	25,980	25,790	25,470	26,330	25,440	24,640	23,250	22,320
8	19,460	25,780	27,940	26,390	25,980	25,780	25,420	26,260	25,390	24,600	23,190	22,290
9	19,430	25,780	30,630	26,360	25,980	25,780	25,390	26,150	25,340	24,570	23,160	22,250
10	19,410	25,780	29,340	26,330	26,000	25,780	25,390	26,090	25,310	24,520	23,120	22,220
11	19,370	25,780	27,820	26,260	26,000	25,780	25,390	26,030	25,260	24,480	23,090	22,150
12	19,360	25,780	27,140	26,230	26,010	25,790	25,360	26,220	25,220	24,450	23,100	22,140
13	19,370	25,780	26,820	26,180	26,000	25,810	25,340	26,220	25,170	24,400	23,070	22,100
14	19,330	25,780	26,880	26,150	26,010	25,820	25,340	26,140	25,260	24,360	23,030	22,070
15	19,310	25,780	26,820	26,090	26,000	25,810	25,360	26,060	25,300	24,320	23,020	22,030
16	19,310	25,780	26,630	26,070	25,980	25,780	25,310	26,000	25,280	24,260	22,990	22,140
17	19,380	25,950	26,470	26,070	25,980	25,780	25,260	25,960	25,250	24,210	23,020	22,110
18	20,230	25,980	26,370	26,100	25,950	25,760	25,240	25,920	25,220	24,150	22,990	22,080
19	27,470	25,920	26,330	26,120	25,950	25,740	25,220	25,890	25,170	24,110	22,940	22,040
20	28,330	25,900	26,260	26,140	25,950	25,730	25,190	25,850	25,140	24,080	22,920	22,010
21	27,320	25,890	26,230	26,100	25,960	25,730	25,250	25,820	25,100	24,040	22,870	22,080
22	26,820	25,960	26,220	26,100	25,960	25,710	25,220	25,780	25,070	24,010	22,840	22,130
23	26,530	26,040	26,220	26,090	25,960	25,700	25,200	25,760	25,010	23,980	22,800	22,140
24	26,360	26,030	26,200	26,070	25,980	25,700	25,160	25,740	24,980	23,930	22,760	22,110
25	26,250	26,040	26,200	26,040	25,980	25,640	25,070	25,710	24,920	23,900	22,750	22,100
26	26,180	25,980	26,200	26,060	25,950	25,730	25,040	25,670	24,860	23,840	22,730	22,080
27	26,170	25,950	26,200	26,060	25,920	25,730	25,600	25,640	24,790	23,800	22,700	22,040
28	26,140	25,930	26,150	26,030	25,920	25,730	25,840	25,620	24,730	23,740	22,680	22,030
29	26,100	25,900	26,170	26,060	25,900	25,640	25,980	25,760	24,780	23,700	22,620	22,000
30	26,070	25,930	26,140	26,030	------	25,600	25,980	25,730	24,720	23,640	22,580	21,920
31	26,010	------	26,140	26,030	------	25,590	------	25,680	------	23,580	22,520	------
(†)	733.79	733.74	733.87	733.80	733.72	733.52	733.77	733.58	732.95	732.18	731.44	731.01
(*)	+6,700	-80	+210	-110	-130	-310	+390	-300	-960	-1,140	-1,060	-600
(††)	192	177	177	176	165	185	203	199	275	303	299	245
MAX	28,330	26,040	30,630	27,260	26,070	25,920	25,980	26,330	25,650	24,790	23,520	22,500
MIN	19,270	25,780	25,950	26,030	25,900	25,590	25,040	25,620	24,720	23,580	22,520	21,920

CAL YR 1971..... * +4,510 †† 2,240 MAX 30,630 MIN 19,200
WTR YR 1972..... * +2,610 †† 2,600 MAX 30,630 MIN 19,270

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Cleburne.

08092000 Nolan River at Blum, Tex.

LOCATION.--Lat 32°09'02", long 97°24'10", Hill County, on right bank 60 ft upstream from bridge on Farm Road 933, 0.6 mile northwest of Blum, 2.8 miles downstream from Mustang Creek, 3.0 miles downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 3.2 miles upstream from Rock Creek.

DRAINAGE AREA.--276 sq mi.

PERIOD OF RECORD.--July 1924 to September 1925, November 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.48 ft 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 upstream at datum 5.0 ft higher. May 29 to July 7, 1949, nonrecording gage at present site and datum then in use (5.0 ft higher than present datum).

AVERAGE DISCHARGE.--25 years (1924-25, 1948-72), 73.2 cfs (53,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,100 cfs Oct. 19 (gage height, 23.16 ft); minimum, 0.01 cfs June 29.
Period of record: Maximum discharge, 62,200 cfs May 7, 1969 (gage height, 31.23 ft), from rating curve extended above 22,200 cfs on basis of contracted-opening measurement of peak flow; no flow at times.
Maximum stage since at least 1887, 35.0 ft May 8, 1922, present site and datum, from information by local resident.

REMARKS.--Records good. Flow partly regulated since August 1964 by Lake Pat Cleburne (station 08091900) located 13 miles upstream.

REVISIONS (WATER YEARS).--WSP 1312: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	51	31	194	63	29	10	24	1.0	5.9	1.1	1.5
2	2.6	47	237	240	68	41	8.9	23	.54	1.5	1.2	2.3
3	17	40	511	851	76	24	7.8	19	.44	.76	1.3	4.1
4	86	32	190	933	47	20	9.3	13	.39	760	1.6	5.1
5	17	28	805	312	45	23	8.2	7.4	.30	50	1.6	4.1
6	7.2	26	739	243	51	19	7.8	22	.22	15	1.7	2.5
7	5.0	27	541	214	59	19	7.5	117	.19	8.9	1.3	1.6
8	3.7	21	426	186	45	21	6.4	93	.19	6.3	1.1	2.0
9	5.1	20	4,760	175	43	19	6.1	74	.15	5.0	1.2	2.5
10	6.1	21	4,440	157	43	17	5.8	51	.17	4.4	1.4	2.5
11	3.5	19	1,270	141	47	17	5.5	38	.19	4.0	1.4	2.1
12	2.8	19	696	127	50	18	5.8	103	.17	3.7	1.5	1.8
13	3.3	18	446	120	47	18	5.8	105	.14	3.5	1.8	1.9
14	3.5	18	373	102	45	18	5.2	65	.21	3.4	2.2	1.9
15	4.4	17	506	92	46	18	5.5	44	2.0	3.2	3.0	2.3
16	4.2	17	348	81	43	20	7.8	33	1.4	3.2	2.6	3.9
17	4.6	17	265	82	41	20	5.2	26	.57	2.8	1.7	17
18	1,230	49	209	85	40	15	4.0	22	.33	2.6	2.4	11
19	12,100	43	183	85	34	17	4.0	19	.18	2.5	2.5	4.6
20	4,850	30	165	86	32	14	4.6	14	.12	2.5	5.5	3.4
21	880	27	139	85	32	14	6.5	8.2	.09	2.4	3.4	41
22	433	26	119	79	33	14	13	3.8	.07	2.3	2.7	32
23	268	56	110	76	34	12	5.5	2.4	.06	2.2	2.3	40
24	179	52	102	74	34	12	4.6	1.8	.06	2.1	1.9	14
25	127	41	97	71	34	15	4.0	1.3	.05	2.0	7.9	14
26	102	37	94	64	37	12	3.4	1.0	.04	1.8	4.1	6.7
27	107	35	93	70	31	17	186	.73	.03	1.5	2.5	5.4
28	87	31	91	72	29	14	116	.65	.02	1.1	1.9	4.5
29	76	34	85	71	29	13	53	.75	34	1.0	1.3	4.4
30	68	26	82	69	------	12	32	4.0	20	1.1	1.1	3.8
31	62	------	74	63	------	9.2	------	4.7	------	1.2	1.1	------
TOTAL	20,747.6	925	18,227	5,300	1,258	551.2	555.2	941.73	63.32	907.86	68.3	243.9
MEAN	669	30.8	588	171	43.4	17.8	18.5	30.4	2.11	29.3	2.20	8.13
MAX	12,100	56	4,760	933	76	41	186	117	34	760	7.9	41
MIN	2.6	17	31	63	29	9.2	3.4	.65	.02	.76	1.1	1.5
AC-FT	41,150	1,830	36,150	10,510	2,500	1,090	1,100	1,870	126	1,800	135	484

CAL YR 1971 TOTAL 44,211.89 MEAN 121 MAX 12,100 MIN 0 AC-FT 87,690
WTR YR 1972 TOTAL 49,789.11 MEAN 136 MAX 12,100 MIN .02 AC-FT 98,760

PEAK DISCHARGE (BASE, 5,000 CFS).--Oct. 19 (1115) 25,100 cfs (23.16 ft); Dec. 9 (1700) 8,120 cfs (12.43 ft).

08092500 Whitney Lake near Whitney, Tex.

LOCATION.--Lat 31°51'55", long 97°22'18", Hill County, on State Highway 22, in intake structure of Whitney Dam on Brazos River, 2.1 miles upstream from Coon Creek, 3.5 miles upstream from Iron Creek, 6.6 miles southwest of Whitney, and at mile 442.3.

DRAINAGE AREA.--26,170 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--December 1951 to current year. Prior to October 1970, published as Whitney Reservoir.

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

EXTREMES.--Current year: Maximum contents, 571,100 acre-ft Oct. 21 (elevation, 530.54 ft); minimum, 278,800 acre-ft Aug. 14, 15 (elevation, 512.92 ft).
Period of record: Maximum contents, 1,980,000 acre-ft May 29, 1957 (elevation, 570.25 ft); minimum daily since power pool elevation first reached in April 1954, 250,200 acre-ft Nov. 1, 1956 (elevation, 509.52 ft).

REMARKS.--Lake is formed by concrete gravity and rolled earthfill dam 17,695 ft long including spillway. Main dam was completed in April 1951, and deliberate impoundment of water began Dec. 10, 1951. Capacity between elevations 522.0 and 571.0 ft is reserved for flood-control storage. Total spillway capacity, 684,000 cfs at elevation 573.0 ft, maximum design level. Capacity based on survey made in April and May 1959. Figures given herein represent total contents. Lake used for flood control and power development. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of seventeen 40- by 38-foot tainter gates	571.0	1,999,500
Crest of spillway	533.0	627,100
Top of designated power storage (top of conservation storage)	522.0	411,100
Invert of two 14-foot 8-inch diameter penstocks	476.0	39,570
Invert of sixteen 5- by 9-foot flood-control outlet conduits	448.83	4,270

COOPERATION.--Records furnished by the Corps of Engineers and reviewed by the Geological Survey.

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

512.0	267,800	522.0	411,100
514.0	292,300	524.0	444,000
516.0	319,100	526.0	478,800
518.0	348,200	528.0	517,100
520.0	379,100	531.0	581,300

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446,700	544,200	457,600	479,100	429,500	424,900	413,800	407,700	409,900	372,400	298,200	343,500
2	451,300	544,900	458,100	472,700	428,600	425,400	413,700	408,500	410,300	371,100	295,400	351,700
3	456,700	543,400	457,900	469,100	423,600	425,400	412,900	408,500	409,900	370,700	293,300	356,500
4	459,900	537,800	457,700	469,100	423,300	425,800	411,900	408,000	409,900	376,300	290,700	358,100
5	460,600	532,800	462,200	461,300	424,500	425,800	410,700	407,700	408,800	379,700	287,800	358,800
6	460,100	528,700	464,200	456,500	425,300	425,800	409,100	409,300	405,900	380,200	284,700	362,900
7	461,000	521,900	464,500	450,100	424,800	424,800	408,200	411,400	404,800	380,200	282,200	368,800
8	462,900	516,500	467,700	443,500	425,800	422,000	407,500	411,900	404,300	379,300	281,800	375,700
9	463,800	511,200	495,200	438,000	426,900	419,200	405,800	411,100	404,300	378,600	281,800	383,100
10	465,900	504,700	535,100	434,200	428,100	417,400	403,800	411,100	404,300	376,900	281,800	386,900
11	467,500	497,400	550,600	435,700	427,100	416,100	401,400	411,100	404,300	376,300	281,500	389,900
12	467,500	490,700	555,800	435,700	427,400	416,100	398,800	413,500	399,800	374,400	281,500	392,900
13	466,100	483,600	556,600	434,700	427,600	417,800	396,600	414,700	395,500	373,600	281,500	395,800
14	464,200	477,700	556,600	430,700	427,900	417,900	396,600	417,300	393,100	370,200	278,800	397,200
15	460,300	474,500	558,600	425,100	429,100	419,200	397,600	421,400	390,900	366,800	278,800	399,700
16	457,000	474,500	559,000	423,500	429,100	419,600	397,600	421,400	390,200	362,600	284,000	403,400
17	456,200	475,000	557,300	423,500	429,700	419,200	398,500	421,000	390,500	360,700	293,900	410,900
18	466,600	475,700	554,900	424,100	429,900	419,200	399,800	421,000	389,600	360,700	303,700	416,600
19	521,200	475,700	553,000	424,900	429,900	419,200	400,300	421,000	386,400	358,000	313,900	419,600
20	566,500	476,100	550,400	425,800	429,900	419,200	400,600	420,200	383,700	354,200	321,000	423,200
21	571,100	476,400	545,700	426,900	429,900	418,900	401,100	419,400	384,500	351,400	325,100	430,000
22	569,600	476,100	541,000	428,200	429,900	418,600	401,400	419,700	385,800	347,800	325,100	434,700
23	565,200	474,100	532,200	429,100	429,700	417,300	401,700	420,500	385,800	343,900	325,900	438,000
24	562,100	472,500	526,200	430,000	429,500	417,300	401,700	418,600	384,200	339,400	326,100	439,500
25	559,400	469,500	519,600	430,500	429,400	416,800	401,300	417,300	380,900	333,600	328,400	438,300
26	556,600	468,400	512,800	431,000	429,100	416,300	401,100	415,300	376,100	328,000	328,400	437,000
27	551,100	465,400	507,700	431,000	427,200	419,600	402,700	413,200	374,300	322,000	330,700	435,500
28	546,800	464,000	501,200	429,500	425,900	420,400	404,200	412,700	372,200	316,500	332,600	435,000
29	545,700	462,000	495,200	429,100	424,900	419,600	405,900	412,100	372,200	311,000	332,700	436,300
30	545,700	459,300	489,200	429,100	------	418,900	406,700	410,700	373,500	305,900	334,200	437,700
31	544,600	------	482,300	429,100	------	414,700	------	409,900	------	300,800	336,000	------
(†)	529.32	524.90	526.19	523.10	522.85	522.22	521.73	521.93	519.64	514.65	517.17	523.62
(*)	+111,400	-85,300	+23,000	-53,200	-4,200	-10,200	-8,000	+3,200	-36,400	-72,700	+35,200	+101,700
MAX	571,100	544,900	559,000	479,100	429,900	425,800	413,800	421,400	410,300	380,200	336,000	439,500
MIN	446,700	459,300	457,600	423,500	423,300	414,700	396,600	407,700	372,200	300,800	278,800	343,500

CAL YR 1971..... * +96,800 MAX 571,100 MIN 351,400
WTR YR 1972..... * +4,500 MAX 571,100 MIN 278,800

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

08093000 Brazos River near Whitney, Tex.

LOCATION.--Lat 31°50'29", long 97°19'33", Bosque-Hill County line, on right bank 3,000 ft upstream from Iron Creek, 1.0 mile downstream from Coon Creek, 3.4 miles downstream from Whitney Dam, 7.5 miles south of Whitney, and at mile 439.4.

DRAINAGE AREA.--26,190 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 417.39 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1948, nonrecording gage at site 8.3 miles upstream at datum 14.67 ft higher.

AVERAGE DISCHARGE.--34 years, 1,624 cfs (1,177,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,710 cfs Oct. 20 (gage height, 11.59 ft); minimum daily, 18 cfs June 2.
Period of record: Maximum discharge, 71,800 cfs May 18, 1949 (gage height, 31.03 ft); minimum daily, 0.4 cfs May 9, 1953.
Maximum discharge since construction of Whitney Dam in 1951, 58,200 cfs May 28, 1957 (gage height, 27.34 ft).
Maximum stage since at least 1853, 45 ft May 9, 1922, from information by local residents.

REMARKS.--Records good. Flow regulated by 17 major upstream reservoirs whose combined capacity is 3,564,000 acre-ft (1,620,000 acre-ft is flood control). Brazos River at Whitney Dam (station 08092600) uses discharge records for publication of water-quality records which are published for the current year in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	2,170	1,930	5,730	109	194	342	83	104	292	1,630	733
2	83	2,100	1,920	5,760	1,290	95	108	30	18	537	1,420	1,540
3	37	2,790	2,090	5,800	3,530	86	314	327	164	430	1,720	1,050
4	1,620	4,710	2,180	5,800	559	90	659	214	58	202	1,410	966
5	1,880	4,720	1,660	5,820	59	30	734	448	508	41	1,840	1,630
6	1,860	4,730	2,010	5,830	55	182	842	257	1,310	22	1,700	1,450
7	1,910	4,770	1,500	5,870	844	1,240	653	330	549	22	1,470	1,300
8	1,930	4,810	2,100	5,880	290	1,790	352	57	98	218	254	1,320
9	1,400	4,830	2,190	5,920	55	1,720	985	643	39	257	31	1,070
10	1,410	4,840	3,140	3,670	52	1,390	1,260	120	62	765	26	638
11	1,830	4,870	3,060	737	1,410	962	1,370	99	47	461	27	788
12	2,090	4,930	3,040	1,910	251	66	1,320	218	1,970	677	28	1,030
13	1,800	4,980	3,040	3,170	48	94	1,220	61	2,060	578	28	1,260
14	1,940	5,010	3,070	3,650	52	139	88	57	1,500	1,580	1,410	1,240
15	3,170	3,010	3,070	3,440	57	83	43	52	1,750	1,940	52	736
16	2,350	527	3,080	1,780	58	36	32	1,190	277	2,150	34	162
17	1,330	315	3,070	771	60	71	32	1,090	78	893	29	444
18	1,690	458	3,080	522	57	73	32	846	475	159	30	624
19	4,930	586	3,090	501	53	57	293	860	1,460	1,360	30	940
20	5,240	358	3,090	501	54	157	98	987	1,530	2,080	29	545
21	4,710	150	4,210	785	150	528	34	713	175	1,420	30	123
22	4,690	1,810	5,350	622	525	178	29	514	67	2,030	1,290	288
23	4,720	1,640	5,370	291	190	623	30	792	109	2,190	947	653
24	4,720	1,560	5,400	253	204	390	276	1,830	776	2,530	1,650	259
25	4,720	2,100	5,430	231	791	204	465	954	1,570	2,950	1,570	884
26	4,760	1,940	5,480	285	1,020	277	425	1,010	1,990	3,070	1,740	1,500
27	4,760	1,800	5,510	813	980	369	430	1,060	877	3,280	1,850	782
28	3,990	1,910	5,550	1,580	910	122	456	913	1,130	3,090	1,650	903
29	2,170	2,000	5,590	1,440	1,010	32	231	978	220	3,190	1,570	451
30	2,190	2,020	5,660	619	------	294	394	940	47	2,900	1,430	90
31	2,150	------	5,670	635	------	2,360	------	1,180	------	2,800	1,650	------
TOTAL	82,206	82,444	110,630	80,616	14,723	13,932	13,547	18,853	21,018	44,114	28,575	25,399
MEAN	2,652	2,748	3,569	2,601	508	449	452	608	701	1,423	922	847
MAX	5,240	5,010	5,670	5,920	3,530	2,360	1,370	1,830	2,060	3,280	1,850	1,630
MIN	37	150	1,500	231	48	30	29	30	18	22	26	90
AC-FT	163,100	163,500	219,400	159,900	29,200	27,630	26,870	37,390	41,690	87,500	56,680	50,380

CAL YR 1971 TOTAL 361,866 MEAN 991 MAX 5,670 MIN 16 AC-FT 717,800
WTR YR 1972 TOTAL 536,057 MEAN 1,465 MAX 5,920 MIN 18 AC-FT 1,063,000

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 downstream from Missouri, Kansas, and Texas Railroad Co. bridge, 2.8 miles northwest of Abbott, and 9 miles upstream from mouth.

DRAINAGE AREA.--11.7 sq mi.

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 7.06 cfs (8.19 inches per year, 5,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 780 cfs Dec. 9 (gage height, 7.49 ft); no flow at times.
Period of record: Maximum discharge, 2,720 cfs May 9, 1968 (gage height, 10.50 ft); no flow at times each year.
Maximum stage since at least 1932, 11.1 ft (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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.56	3.6	11	12	1.2	.19	.28		0		0
2	.03	.56	24	5.5	10	.98	.19	.25		0		0
3	.05	.36	12	44	7.7	.98	.16	.14		0		0
4	.06	.32	8.0	32	7.4	1.1	.14	.06		78		0
5	.01	.36	38	18	8.0	.98	.14	.04		1.3		0
6	0	.36	37	18	8.8	.98	.12	8.2		.02		0
7	0	.28	25	16	6.6	.98	.10	7.6		0		0
8	0	.28	38	15	6.3	.82	.09	2.1		0		0
9	0	.36	225	16	6.0	.75	.09	1.2		0		0
10	0	.32	161	14	5.8	.75	.08	1.1		0		0
11	0	.32	28	12	5.5	.82	.08	.98		0		0
12	0	.32	17	11	5.3	.82	.05	40		0		0
13	0	.32	12	10	4.6	.82	.04	4.8		0		0
14	0	.28	35	8.8	4.3	.82	.04	3.6		0		0
15	0	.28	33	8.2	4.1	.82	.03	1.8		0		0
16	0	.28	12	9.2	3.8	.75	.03	1.6		0		0
17	3.7	50	8.5	9.8	3.4	.68	.02	1.4		0		0
18	38	40	7.7	9.5	2.8	.62	.02	1.2		0		0
19	24	5.0	6.8	9.2	2.5	.56	.02	.98		0		0
20	115	3.4	5.8	8.8	2.5	.51	.01	.75		0		0
21	4.8	2.5	4.3	8.0	2.4	.51	.10	.62		0		.52
22	2.4	16	3.6	8.0	2.1	.46	.14	.46		0		0
23	1.9	24	3.8	7.4	3.0	.46	.03	.41		0		0
24	1.5	7.1	3.6	7.1	3.8	.36	0	.36		0		0
25	1.2	5.8	3.4	6.6	3.0	.36	0	.28		0		0
26	1.2	5.3	3.4	6.6	1.8	.32	0	.14		0		0
27	1.7	4.3	3.2	7.4	1.6	.32	6.8	.09		0		0
28	1.2	4.1	2.5	8.8	1.4	.28	.82	.08		0		0
29	.90	3.6	2.7	22	1.4	.25	.51	.05		0		0
30	.75	3.4	2.4	14	------	.22	.36	.06		0		0
31	.68	------	2.1	11	------	.22	------	.02	------	0		------
TOTAL	199.11	180.06	772.4	392.9	137.9	20.50	10.40	80.65	0	79.32	0	.52
MEAN	6.42	6.00	24.9	12.7	4.76	.66	.35	2.60	0	2.56	0	.017
MAX	115	50	225	44	12	1.2	6.8	40	0	78	0	.52
MIN	0	.28	2.1	5.5	1.4	.22	0	.02	0	0	0	0
CFSM	.55	.51	2.13	1.09	.41	.06	.03	.22	0	.22	0	.002
IN.	.63	.57	2.46	1.25	.44	.07	.03	.26	0	.25	0	.001
AC-FT	395	357	1,530	779	274	41	21	160	0	157	0	1.0

CAL YR 1971 TOTAL 2,047.63 MEAN 5.61 MAX 225 MIN 0 CFSM .48 IN 6.51 AC-FT 4,060
WTR YR 1972 TOTAL 1,873.76 MEAN 5.12 MAX 225 MIN 0 CFSM .44 IN 5.96 AC-FT 3,720

PEAK DISCHARGE (BASE, 600 CFS).--Oct. 20 (0200) 675 cfs (7.22 ft); Dec. 9 (2230) 780 cfs (7.49 ft).

08093500 Aquilla Creek near Aquilla, Tex.

LOCATION.--Lat 31°50'40", long 97°12'06", Hill County, on right bank 50 ft upstream from bridge on Farm Road 1304, 1.0 mile southeast of Aquilla, 1.2 miles downstream from Cobb Creek, and at mile 18.2.

DRAINAGE AREA.--306 sq mi.

PERIOD OF RECORD.--December 1938 to current year. Records of daily discharge for December 1924 to August 1925, published in WSP 608, are unreliable.

GAGE.--Water-stage recorder. Datum of gage is 451.48 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--33 years (1939-72), 114 cfs (5.06 inches per year, 82,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 16,800 cfs Oct. 20 (gage height, 28.81 ft); minimum, 0.10 cfs Oct. 7, 8.
Period of record: Maximum discharge, 40,200 cfs May 10, 1968 (gage height, 30.32 ft), from rating curve extended above 25,900 cfs on basis of slope-area measurement of 74,200 cfs (adjusted to gage site); no flow at times.
Flood of Aug. 31, 1887, reached a stage of 34 ft, from information by local resident. Flood of Sept. 27, 1936, was the highest since 1887 and reached a stage of 33 ft, from floodmark; discharge, 84,500 cfs by slope-area measurement at site 9 miles downstream and 74,200 cfs adjusted to gage site.

REMARKS.--Records good. Records furnished by the city of Hillsboro show that the city diverted about 30 acre-ft of water for municipal use and discharged 1,105 acre-ft of sewage effluent into a tributary above gage during year. Water-quality records for the current year are published in Part 2 of this report.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.4	8.0	30	203	48	46	19	41	2.9	6.0	5.2	3.2
2	.3	6.9	174	522	52	44	18	17	3.1	4.4	4.8	3.6
3	83	6.4	439	332	45	40	17	13	2.9	4.1	5.0	3.8
4	225	6.3	73	1,620	40	40	16	11	2.9	1,740	4.8	4.6
5	29	6.4	364	348	41	40	16	11	3.1	2,020	5.2	7.1
6	2.7	6.5	1,020	85	46	39	16	130	2.4	51	4.8	6.0
7	.2	7.0	437	74	46	39	16	1,040	2.4	22	4.8	4.9
8	.2	6.7	203	68	42	41	16	579	2.8	11	4.3	3.5
9	.3	6.6	2,450	71	42	37	15	40	2.9	7.9	3.3	2.6
10	.3	6.4	6,160	70	42	34	14	20	3.0	5.5	2.1	1.8
11	.4	6.7	1,480	66	44	34	14	14	3.5	4.6	1.4	1.9
12	.5	6.8	269	62	48	35	15	1,270	3.5	4.6	1.1	2.9
13	1.0	6.6	165	58	52	34	15	178	3.0	4.8	1.0	3.5
14	1.3	6.8	180	57	53	34	14	41	2.8	5.1	.95	3.8
15	1.8	6.9	585	61	52	33	15	11	3.5	4.9	1.0	4.3
16	2.1	7.0	253	57	52	31	14	6.3	2.8	5.1	1.3	61
17	9.8	27	112	58	50	30	12	5.3	2.5	5.3	1.5	11
18	566	436	84	58	49	28	12	4.6	6.1	5.3	1.6	3.9
19	7,400	18	74	59	47	28	12	3.9	3.2	5.4	1.9	2.8
20	12,300	15	70	59	46	27	12	3.4	2.8	5.5	2.0	2.8
21	2,270	15	70	59	48	27	15	2.9	2.5	5.6	2.1	31
22	86	21	63	57	49	28	15	2.5	2.2	5.6	2.3	179
23	42	272	64	57	49	28	13	2.0	2.9	5.5	2.4	15
24	26	33	65	56	50	28	11	2.8	3.2	5.4	2.3	5.2
25	24	24	64	55	50	28	9.9	3.1	3.1	5.5	2.5	3.2
26	19	24	64	48	49	29	10	2.6	3.0	5.3	2.8	2.0
27	19	24	64	51	45	247	45	2.2	2.5	5.3	2.8	1.7
28	19	27	61	59	44	53	187	2.2	2.1	5.4	3.1	1.8
29	14	28	59	111	45	28	46	2.9	2.0	5.1	3.2	2.2
30	11	29	60	91	------	22	28	4.3	9.5	4.9	3.6	3.1
31	8.9	------	54	54	------	20	------	2.8	------	5.1	3.5	------
TOTAL	23,163.2	1,101.0	15,310	4,686	1,366	1,252	677.9	3,469.8	95.1	3,981.2	88.65	383.2
MEAN	747	36.7	494	151	47.1	40.4	22.6	112	3.17	128	2.86	12.8
MAX	12,300	436	6,160	1,620	53	247	187	1,270	9.5	2,020	5.2	179
MIN	.20	6.3	30	48	40	20	9.9	2.0	2.0	4.1	.95	1.7
CFSM	2.44	.12	1.61	.49	.15	.13	.07	.37	.01	.42	.009	.04
IN.	2.82	.13	1.86	.57	.17	.15	.08	.42	.01	.48	.01	.05
AC-FT	45,940	2,180	30,370	9,290	2,710	2,480	1,340	6,880	189	7,900	176	760

CAL YR 1971 TOTAL 57,676.33 MEAN 158 MAX 12,300 MIN .20 CFSM .52 IN 7.01 AC-FT 114,400
WTR YR 1972 TOTAL 55,574.05 MEAN 152 MAX 12,300 MIN .20 CFSM .50 IN 6.76 AC-FT 110,200

PEAK DISCHARGE (BASE, 4,500 CFS).--Oct. 20 (0630) 16,800 cfs (28.81 ft); Dec. 10 (0630) 7,060 cfs (26.67 ft).

08093700 North Bosque River at Stephenville, Tex.

LOCATION.--Lat 32°12'56", long 98°11'55", Erath County, in center of stream at downstream side of bridge on U.S. Highway 67 at Stephenville, 0.5 mile southeast of Erath County Courthouse, 1.5 miles downstream from Gulf, Colorado, and Santa Fe Railway bridge, and at mile 120.3.

DRAINAGE AREA.--93.2 sq mi.

PERIOD OF RECORD.--March 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,223.60 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 15.2 cfs (11,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,200 cfs Oct. 20 (gage height, 14.02 ft); no flow at times.
Period of record: Maximum discharge, 12,100 cfs Oct. 4, 1959 (gage height, 19.90 ft, from floodmark), from rating curve extended above 4,250 cfs on basis of contracted-opening measurements of 40,000 and 49,000 cfs; no flow at times each year.
Maximum stage since at least 1854, 23.5 ft May 19, 1955, from floodmarks (discharge, 49,000 cfs, by contracted-opening measurement of peak flow). The flood of May 23, 1952, reached a stage of 22.2 ft, from floodmarks (discharge, 40,000 cfs, by contracted-opening measurement of peak flow).

REMARKS.--Records good. At end of year, flow from 59.8 sq mi above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 27,230 acre-ft below the flood-spillway crests, of which 25,250 acre-ft is floodwater-retarding capacity and 1,980 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 4,580 acre-ft, of which 200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. No diversion above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	6.7	1.7	4.3	1.9	3.3	.31	2.8	.24	0	0	
2	.04	5.4	29	2.6	1.9	2.7	.31	2.0	.14	0	0	
3	13	3.3	26	4.1	1.6	2.6	.31	.68	.08	0	0	
4	24	.94	15	5.0	1.5	2.4	.28	.34	.06	280	0	
5	5.4	.81	54	4.0	1.7	1.7	.28	.18	.03	224	0	
6	3.1	.68	29	2.3	1.7	1.6	.28	14	.02	79	0	
7	.08	.57	17	1.8	1.5	1.6	.25	37	.02	31	0	
8	.03	.57	134	1.7	1.5	1.5	.23	5.0	.02	16	0	
9	0	.52	556	1.8	1.6	1.4	.20	1.9	.02	8.8	0	
10	0	.47	538	2.2	1.5	1.4	.18	.42	.01	5.4	1.4	
11	0	.38	86	2.2	2.4	1.5	.25	.24	.02	3.1	2.3	
12	0	.34	29	1.9	2.7	1.8	.25	168	.01	1.4	.52	
13	0	.31	18	1.9	2.2	2.2	.20	52	.01	.78	.03	
14	0	.34	15	1.8	1.8	2.0	.18	24	.07	.48	0	
15	0	.57	12	1.5	1.5	1.9	.25	14	.08	.24	0	
16	0	1.6	8.3	1.4	1.5	1.8	.20	8.6	.07	.14	0	
17	0	3.2	7.4	1.5	1.5	1.7	.14	5.8	.06	.05	0	
18	9.1	.81	5.6	2.0	2.3	1.6	.11	4.0	.05	0	0	
19	425	.38	4.4	2.0	2.8	1.5	.09	2.0	.08	0	0	
20	837	.31	4.2	1.9	2.4	1.5	.09	1.4	.05	0	0	
21	316	.42	3.6	1.8	2.8	1.6	1.1	.96	.03	0	0	
22	130	6.0	2.6	1.8	2.2	1.6	.20	.67	0	0	0	
23	34	18	2.3	1.8	2.2	1.6	.09	.52	0	0	0	
24	20	9.0	3.1	2.6	2.0	1.6	.06	.36	0	0	0	
25	15	6.0	2.4	2.0	1.7	1.3	.06	.24	0	0	0	
26	13	4.0	2.7	1.6	2.0	.94	.05	.22	0	0	0	
27	12	2.6	2.8	1.8	1.7	.68	32	.16	0	0	0	
28	11	1.7	2.4	1.8	2.6	.47	12	.14	0	0	0	
29	10	1.2	2.3	1.8	3.0	.38	84	.12	0	0	0	
30	9.0	1.5	2.3	1.7	------	.34	7.4	2.0	0	0	0	
31	7.6	------	2.0	1.5	------	.34	------	.62	------	0	0	------
TOTAL	1,894.43	78.62	1,618.1	68.1	57.7	48.55	141.35	350.37	1.17	650.39	4.25	0
MEAN	61.1	2.62	52.2	2.20	1.99	1.57	4.71	11.3	.039	21.0	.14	0
MAX	837	18	556	5.0	3.0	3.3	84	168	.24	280	2.3	0
MIN	0	.31	1.7	1.4	1.5	.34	.05	.12	0	0	0	0
AC-FT	3,760	156	3,210	135	114	96	280	695	2.3	1,290	8.4	0

CAL YR 1971 TOTAL 6,283.16 MEAN 17.2 MAX 970 MIN 0 AC-FT 12,460
WTR YR 1972 TOTAL 4,913.03 MEAN 13.4 MAX 837 MIN 0 AC-FT 9,750

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	0200	14.02	2,200
12- 9	2200	11.43	1,100
7- 4	1500	11.10	1,000

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 downstream from county road, 1.3 miles east of Farm Road 219, and 5.5 miles north of Dublin.

DRAINAGE AREA.--3.34 sq mi.

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

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 1,408.00 ft above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--17 years, 552 acre-ft per year.

AVERAGE OUTFLOW.--17 years, 389 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 15 cfs Oct. 20 (gage height, 13.50 ft); no outflow most of time. Maximum inflow, 960 cfs (average for 5-minute interval) Oct. 19, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 709 cfs May 1, 1956 (gage height, 23.21 ft); no outflow for most of time each year. Maximum inflow, 11,500 cfs (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 good except those from Nov. 12 to Dec. 13, which are poor. The pool is formed by a rolled earthfill dam 3,000 ft long. The dam was completed Apr. 25, 1955, and storage began shortly thereafter. The outlet structure consists of a 30-inch square concrete drop inlet that is connected to a 14-inch concrete outlet pipe. The gage height at top of the drop inlet is 11.0 ft. The emergency spillway is a 250-foot wide cut in natural ground at the right end of dam. The gage height at crest of emergency spillway is 21.8 ft. There is a cleanout gate valve at the end of an 8-inch pipe which connects to the lower end of the drop-inlet box at a gage height of 3.76 ft. The pool capacity at the crest of emergency spillway is 1,097 acre-ft; at top of drop inlet, 223 acre-ft; and at controlled outlet pipe, 48.0 acre-ft. 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 per year for irrigation. 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 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	225	19.8	303	3.5	2.2	1.4	7.7	62.8	0.6	2.0	1.5	26.5
Outflow	149	.6	313	0	0	0	0	2.7	0	0	0	0
(†)	73.3	12.4	-10.9	-5.9	-7.3	-19.1	-9.0	42.4	-27.0	-29.6	-25.4	9.3
(††)	4.27	2.10	2.80	.60	.20	0	2.07	4.13	.88	1.03	1.44	3.79

CAL YR 1971: Inflow 848 Outflow 574 † 119 †† 25.35
WTR YR 1972: Inflow 656 Outflow 465 † 3.2 †† 23.31

PEAK INFLOW (BASE, 100 CFS)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
10-18	1730	*139	5-12	0555	*212
10-19	2010	*960	9- 4	2120	*208
12- 9	unknown	**480			

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches.
* Average for 5-minute interval.
** Estimated.

08094500 Green Creek near Alexander, Tex.

LOCATION.--Lat 32°04'26", long 98°13'46", Erath County, at downstream side of bridge on State Highway 6, 0.5 mile upstream from Cottonwood Creek, and 1.7 miles northwest of Alexander.

DRAINAGE AREA.--46.1 sq mi.

PERIOD OF RECORD.--October 1954 to April 1958 (annual maximums only), May 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,172.00 ft above mean sea level. Prior to May 27, 1958, nonrecording gage and crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 5.88 cfs (4,260 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,670 cfs Oct. 19 (gage height, 10.27 ft); no flow at times.
Period of record: Maximum discharge, 23,900 cfs Apr. 30, 1956 (gage height, 23.95 ft), from rating curve extended above 2,400 cfs on basis of contracted-opening measurement of 23,900 cfs; no flow at times each year.
Maximum discharge since at least 1910, 55,800 cfs May 23, 1952 (gage height, 28.0 ft), on basis of contracted-opening measurement of peak flow.

REMARKS.--Records good. At end of year, flow from 22.3 sq mi above this station was partly controlled by eight floodwater-retarding structures with a total combined capacity of 7,470 acre-ft below flood-spillway crests, of which 6,510 acre-ft is floodwater-retarding capacity and 960 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. The network of rain gages operated in the basin above this station in previous years was discontinued Sept. 30, 1971.

REVISIONS.--WRD Texas 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.06	.09	4.4	1.4	.60	.27	9.8	.32	0	0	
2	0	.05	11	2.6	1.4	.52	.32	5.2	.32	0	0	
3	0	.03	11	2.9	1.2	.45	.27	2.8	.32	0	0	
4	1.9	.02	4.2	4.0	1.0	.32	.23	1.4	.23	4.2	0	
5	.07	.02	32	3.4	1.0	.32	.23	.70	.20	.90	0	
6	0	.02	18	2.9	1.0	.32	.20	8.4	.17	.20	0	
7	0	.01	9.0	2.9	1.0	.45	.17	7.0	.17	.09	0	
8	0	.02	24	2.9	.90	.38	.13	3.2	.17	.06	0	
9	0	.03	159	2.9	.80	.38	.15	2.0	.17	.04	0	
10	0	.03	134	2.9	.80	.45	.15	1.4	.17	.03	0	
11	0	.03	41	2.8	.70	.38	.17	.90	.17	.02	0	
12	0	.03	28	2.8	1.0	.38	.15	37	.17	.02	0	
13	0	.03	17	2.6	.80	.38	.11	15	.15	.01	0	
14	0	.04	11	2.6	.80	.45	.11	7.4	.15	0	0	
15	0	.04	7.4	2.4	.70	.38	.11	5.2	.15	0	0	
16	0	.04	4.9	2.4	.70	.38	.09	3.8	.15	0	0	
17	0	.04	3.4	2.6	.45	.32	.07	3.4	.15	0	0	
18	13	.04	2.8	2.6	.45	.23	.06	2.8	.15	0	0	
19	177	.04	2.2	2.6	.38	.23	.04	2.8	.13	0	0	
20	97	.04	1.8	2.6	.45	.20	.04	2.2	.09	0	0	
21	25	.05	1.4	2.2	.90	.20	38	2.0	.06	0	0	
22	21	.05	1.2	2.0	.90	.20	5.9	1.8	.05	0	0	
23	18	.07	1.0	2.0	.90	.23	2.6	1.5	.03	0	0	
24	12	.06	1.0	1.8	.80	.20	.90	1.4	.02	0	0	
25	4.4	.06	1.2	1.6	.80	.17	.32	1.0	0	0	0	
26	2.2	.06	1.4	1.5	.60	.17	.15	.80	0	0	0	
27	1.2	.06	1.2	1.5	.52	.17	115	.60	0	0	0	
28	.52	.07	1.0	1.5	.45	.15	44	.52	0	0	0	
29	.32	.09	.90	1.5	.52	.17	22	.38	0	0	19	
30	.17	.09	.90	1.4	------	.23	16	.45	0	0	1.6	
31	.13	------	.70	1.4	------	.27	------	.38	------	0	0	------
TOTAL	373.91	1.32	533.69	76.2	23.32	9.68	247.94	133.23	3.86	5.57	20.6	0
MEAN	12.1	.044	17.2	2.46	.80	.31	8.26	4.30	.13	.18	.66	0
MAX	177	.09	159	4.4	1.4	.60	115	37	.32	4.2	19	0
MIN	0	.01	.09	1.4	.38	.15	.04	.38	0	0	0	0
CFSM	.26	.001	.37	.05	.02	.007	.18	.09	.003	.004	.01	0
IN.	.30	.001	.43	.06	.02	.007	.20	.11	.003	.004	.02	0
AC-FT	742	2.6	1,060	151	46	19	492	264	7.7	11	41	0

CAL YR 1971 TOTAL 1,317.03 MEAN 3.61 MAX 177 MIN 0 CFSM .08 IN 1.06 AC-FT 2,610
WTR YR 1972 TOTAL 1,429.32 MEAN 3.91 MAX 177 MIN 0 CFSM .08 IN 1.15 AC-FT 2,840

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 downstream from Gilmore Creek, 5.0 miles upstream from Honey Creek, and at mile 92.4.

DRAINAGE AREA.--357 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 982.46 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 49.0 cfs (35,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,160 cfs Oct. 19 (gage height, 13.30 ft); minimum, 0.38 cfs Aug. 9, 10.
Period of record: Maximum discharge, 16,800 cfs May 16, 1965 (gage height, 21.83 ft), from rating curve extended above 9,000 cfs; no flow at times in 1962-65, 1967-68, 1971.
Maximum stage since at least 1880, 27.6 ft May 23, 1952, from floodmarks (discharge, 87,800 cfs, by contracted-opening measurement).

REMARKS.--Records good. At end of year, flow from 163 sq mi above this station was partly controlled by 39 floodwater-retarding structures with a total combined capacity of 65,090 acre-ft below the flood-spillway crests, of which 59,560 acre-ft is floodwater-retarding capacity and 5,540 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 4,580 acre-ft, of which 200 acre-ft is sediment-pool capacity. The capacity in this pool allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	17	16	56	27	16	9.8	72	5.1	2.4	.68	1.1
2	2.2	14	43	60	26	16	9.8	51	4.7	2.4	.68	1.4
3	56	12	139	255	25	16	8.6	42	4.4	2.4	.68	1.4
4	117	10	77	211	20	16	8.0	34	4.1	358	.68	1.4
5	26	10	212	78	21	15	8.0	28	3.6	395	.68	1.4
6	8.6	11	248	63	21	15	8.0	53	3.4	157	.68	1.4
7	5.8	10	180	55	20	14	8.0	108	3.2	61	.68	1.4
8	5.4	8.0	95	52	20	14	8.0	79	2.8	34	.59	1.4
9	4.6	7.0	746	50	19	13	8.0	42	2.8	22	.39	1.3
10	6.0	7.0	1,670	47	19	12	8.0	30	2.8	14	2.1	1.2
11	4.1	7.0	481	44	19	12	8.0	24	2.8	9.2	56	.98
12	3.4	7.0	256	42	19	12	8.0	142	2.8	7.0	16	.98
13	4.0	7.0	153	42	19	12	8.0	176	2.8	5.1	7.9	.98
14	3.8	7.0	122	42	19	12	8.0	84	2.8	3.8	3.7	.95
15	3.8	7.0	99	42	19	12	8.0	51	2.8	3.2	2.6	.82
16	3.9	9.8	84	42	19	12	7.5	37	3.6	3.2	2.3	3.5
17	4.4	10	78	42	19	12	6.5	30	7.5	3.0	1.9	3.1
18	661	18	71	40	19	11	5.5	24	5.1	2.8	1.7	1.7
19	834	22	64	40	17	9.2	5.5	21	4.4	2.7	1.6	1.4
20	1,690	14	61	40	16	9.2	6.0	17	3.6	2.4	1.0	1.4
21	537	9.8	56	39	16	9.2	47	14	3.4	2.4	.65	84
22	350	9.8	52	39	16	9.2	30	13	3.4	2.4	.56	7.0
23	148	29	52	38	16	9.2	16	11	2.9	2.4	.56	4.2
24	69	43	52	35	16	9.2	11	8.6	2.4	2.2	.60	1.7
25	45	29	52	31	16	9.2	8.6	7.5	2.4	2.2	.68	1.7
26	36	23	51	30	16	9.2	7.5	6.5	2.4	1.6	1.3	1.7
27	43	20	49	30	16	9.2	43	6.5	2.4	1.2	1.8	1.7
28	33	17	45	30	16	9.8	378	6.0	2.4	1.1	1.2	1.7
29	26	17	44	30	16	9.8	349	5.5	2.4	.98	.98	1.7
30	22	16	41	30	------	9.8	132	23	2.4	.82	.92	1.7
31	18	------	39	28	------	9.8	------	6.0	------	.74	.68	------
TOTAL	4,773.2	428.4	5,428	1,703	547	364.0	1,177.3	1,252.6	101.6	1,108.64	112.47	136.31
MEAN	154	14.3	175	54.9	18.9	11.7	39.2	40.4	3.39	35.8	3.63	4.54
MAX	1,690	43	1,670	255	27	16	378	176	7.5	395	56	84
MIN	2.2	7.0	16	28	16	9.2	5.5	5.5	2.4	.74	.39	.82
AC-FT	9,470	850	10,770	3,380	1,080	722	2,340	2,480	202	2,200	223	270

CAL YR 1971 TOTAL 14,714.87 MEAN 40.3 MAX 1,690 MIN 0 AC-FT 29,190
WTR YR 1972 TOTAL 17,132.52 MEAN 46.8 MAX 1,690 MIN .39 AC-FT 33,980

PEAK DISCHARGE (BASE, 2,500 CFS).--Oct. 18 (1730) 4,860 cfs (12.87 ft); Oct. 19 (1830) 5,160 cfs (13.30 ft).

08095000 North Bosque River near Clifton, Tex.

LOCATION.--Lat 31°47'09", long 97°34'04", Bosque County, near left bank on downstream side of bridge on Farm Road 219, 0.5 mile northeast of Clifton, 2.5 miles (revised) downstream from Meridian Creek, and at mile 42.0

DRAINAGE AREA.--972 sq mi.

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 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 upstream at datum 17.02 ft higher; from Oct. 1, 1955, to Apr. 22, 1957, and from 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 cfs (141,300 acre-ft per year); 5 years (1967-72) regulated, 265 cfs (192,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 36,800 cfs Oct. 20 (gage height, 31.79 ft); minimum, 2.0 cfs Aug. 2.
Period of record: Maximum discharge, 92,800 cfs Oct. 4, 1959 (gage height, 34.88 ft), from rating curve extended above 34,000 cfs on basis of contracted-opening measurement of 92,800 cfs; 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, from information by local residents.

REMARKS.--Records good. The city of Clifton diverted 38 acre-ft of water from the river above the station for municipal use and returned 347 acre-ft of sewage effluent below station. The city of Meridian discharged 73 acre-ft of sewage effluent into the river at about mile 56. Since 1968, at least 10 percent of drainage area regulated by reservoirs. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	121	69	538	181	98	49	153	30	5.8	2.7	8.3
2	8.7	106	123	685	181	89	48	90	30	4.5	2.3	8.8
3	8.2	93	665	422	170	83	48	67	25	4.3	2.2	9.9
4	126	83	434	1,990	157	83	46	55	25	26	2.9	9.6
5	247	77	816	576	155	79	45	48	23	619	3.0	12
6	96	73	1,310	426	161	77	45	102	22	336	2.7	11
7	52	65	1,190	410	159	77	45	334	20	166	2.6	10
8	35	63	689	394	151	74	43	208	20	87	2.5	9.3
9	25	63	4,880	383	147	73	40	139	18	49	2.5	9.3
10	18	63	10,400	358	143	72	40	84	18	37	2.3	9.6
11	15	62	1,950	320	147	69	40	66	20	30	2.5	9.3
12	13	60	1,060	293	164	72	40	61	18	24	2.6	8.8
13	12	59	780	278	164	72	38	345	18	20	3.0	8.5
14	11	58	685	248	157	71	38	263	18	18	8.6	7.6
15	10	57	775	236	149	72	115	151	31	15	25	7.6
16	9.7	59	550	214	139	69	56	92	123	12	20	20
17	11	59	462	222	135	67	45	69	33	10	18	16
18	68	86	414	233	128	65	42	59	23	8.2	170	13
19	14,200	164	402	233	123	62	39	51	18	8.2	29	16
20	17,500	111	372	225	119	59	36	46	14	8.4	14	14
21	1,630	87	327	214	121	59	46	44	13	7.9	11	57
22	855	77	287	201	119	58	43	40	12	7.1	9.0	227
23	595	167	272	201	114	57	72	38	9.7	6.8	117	153
24	383	219	269	189	114	58	61	36	8.2	6.5	154	94
25	284	159	263	177	114	56	49	36	7.4	6.0	46	31
26	227	123	263	168	111	55	42	33	6.3	5.5	21	28
27	214	103	259	172	103	55	71	30	5.3	5.1	14	34
28	233	92	242	201	101	53	305	28	4.5	4.7	11	73
29	186	79	230	211	100	51	308	27	5.0	4.1	9.6	24
30	157	71	225	203	------	50	364	37	9.4	3.6	8.5	21
31	141	------	214	184	------	48	------	31	------	3.2	8.0	------
TOTAL	37,381.6	2,759	30,877	10,805	4,027	2,083	2,299	2,863	627.8	1,548.9	727.5	960.6
MEAN	1,206	92.0	996	349	139	67.2	76.6	92.4	20.9	50.0	23.5	32.0
MAX	17,500	219	10,400	1,990	181	98	364	345	123	619	170	227
MIN	8.2	57	69	168	100	48	36	27	4.5	3.2	2.2	7.6
AC-FT	74,150	5,470	61,240	21,430	7,990	4,130	4,560	5,680	1,250	3,070	1,440	1,910

CAL YR 1971 TOTAL 79,638.75 MEAN 218 MAX 17,500 MIN .11 AC-FT 158,000
WTR YR 1972 TOTAL 96,959.40 MEAN 265 MAX 17,500 MIN 2.2 AC-FT 192,300

PEAK DISCHARGE (BASE, 8,300 CFS).--Oct. 20 (0600) 36,800 cfs (31.79 ft); Dec. 10 (0900) 20,300 cfs (21.85 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 downstream from Thompson Hollow, 0.8 mile north of intersection of State Highway 6 and Farm Road 56 in Valley Mills, and at mile 28.0.

DRAINAGE AREA.--1,150 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 524.55 ft above mean sea level. Prior to Dec. 29, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years (1959-67) unregulated, 263 cfs (190,500 acre-ft per year); 5 years (1967-72) regulated, 306 cfs (221,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 36,700 cfs Oct. 20 (gage height, 36.67 ft); minimum, 4.5 cfs Aug. 14, 15.
Period of record: Maximum discharge, 107,000 cfs Oct. 4, 1959 (gage height, 40.22 ft, from floodmark), from rating curve extended above 28,200 cfs on basis of slope-area measurement of 107,000 cfs; no flow Oct. 5-12, 1965.
Maximum stage since at least 1868, 43 ft in May 1908. Floods in September 1936 and April 1945 reached a stage of about 38 ft, from information by local residents.

REMARKS.--Records good. Since 1968, at least 10 percent of drainage area regulated by reservoirs. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	164	93	512	224	126	66	217	37	14	6.6	9.6
2	8.2	150	112	784	227	118	65	142	41	10	6.0	9.2
3	8.2	134	576	512	217	109	66	109	35	8.8	5.9	8.4
4	11	122	432	2,010	198	109	63	90	32	261	6.5	8.0
5	270	114	477	677	193	106	61	80	30	471	6.4	7.2
6	96	110	1,470	496	202	102	61	93	28	363	5.6	6.9
7	44	98	1,090	476	202	102	61	340	27	192	5.6	7.2
8	26	93	681	456	188	101	59	248	24	117	5.3	7.2
9	19	92	4,560	443	180	98	57	195	23	71	5.0	6.5
10	14	92	11,400	423	177	96	55	126	22	52	4.8	6.2
11	11	90	2,490	386	173	96	55	102	22	42	4.8	5.9
12	9.3	89	1,210	352	195	96	53	107	22	35	5.3	5.6
13	8.7	87	871	335	198	97	52	270	20	29	5.0	5.6
14	8.5	86	777	306	190	97	50	310	21	25	4.8	5.6
15	7.6	82	885	278	183	96	101	193	22	22	6.9	5.3
16	7.5	85	653	263	172	95	76	136	118	20	18	11
17	7.3	85	556	268	166	91	56	105	63	18	15	43
18	27	91	493	283	158	90	50	89	44	16	125	20
19	12,700	177	478	287	149	85	45	77	38	14	53	10
20	22,400	149	456	279	146	83	42	69	27	13	21	10
21	2,320	122	411	265	146	84	46	62	21	13	13	8.0
22	960	106	373	253	148	81	49	57	20	12	10	175
23	702	196	361	249	145	78	57	52	18	12	41	169
24	463	238	356	243	145	77	72	50	14	11	233	97
25	323	181	350	226	142	77	59	47	13	10	92	60
26	257	159	344	212	136	76	49	44	12	9.9	40	30
27	237	136	338	214	129	76	60	40	11	9.3	24	20
28	257	121	327	236	126	74	173	38	10	8.8	18	165
29	224	109	312	266	126	70	408	36	11	8.3	13	33
30	191	97	310	258	------	68	352	45	30	7.7	11	20
31	178	------	295	232	------	66	------	42	------	7.2	10	------
TOTAL	41,805.1	3,655	33,537	12,480	4,981	2,820	2,519	3,611	856	1,903.0	821.5	975.4
MEAN	1,349	122	1,082	403	172	91.0	84.0	116	28.5	61.4	26.5	32.5
MAX	22,400	238	11,400	2,010	227	126	408	340	118	471	233	175
MIN	7.3	82	93	212	126	66	42	36	10	7.2	4.8	5.3
AC-FT	82,920	7,250	66,520	24,750	9,880	5,590	5,000	7,160	1,700	3,770	1,630	1,930

CAL YR 1971 TOTAL 88,681.67 MEAN 243 MAX 22,400 MIN .25 AC-FT 175,900
WTR YR 1972 TOTAL 109,964.00 MEAN 300 MAX 22,400 MIN 4.8 AC-FT 218,100

PEAK DISCHARGE (BASE, 8,500 CFS).--Oct. 20 (1000) 36,700 cfs (36.67 ft); Dec. 10 (1230) 19,400 cfs (29.12 ft).

08095300 Middle Bosque River near McGregor, Tex.

LOCATION.--Lat 31°30'33", long 97°21'56", McLennan County, on downstream side of bridge on county road, 1,100 ft downstream from Pecan Creek, 5.2 miles northeast of McGregor, and 8.2 miles upstream from South Bosque River.

DRAINAGE AREA.--182 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 530.51 ft above mean sea level. Prior to Oct. 27, 1959, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 87.9 cfs (63,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Oct. 19 (gage height, 12.15 ft); minimum, 0.01 cfs Sept. 30.
Period of record: Maximum discharge, 32,600 cfs June 16, 1964 (gage height, 24.30 ft); no flow at times in 1960-64, 1967, 1971.
Historical flood information begins with flood in 1889 which reached a stage of 28.5 ft; flood in 1957 reached a stage of 28.2 ft; and floods in 1913 and 1942 or 1943 reached a stage of about 28 ft, from information by local residents.

REMARKS.--Records excellent. No diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	64	38	131	96	39	13	6.8	9.6	.31	.20	.02
2	11	61	87	176	93	35	13	9.0	9.2	.19	.15	.03
3	11	54	130	287	76	33	12	6.9	8.5	.15	.12	.03
4	37	49	76	329	73	34	12	4.8	7.1	1,020	.20	.12
5	31	50	122	158	76	32	11	4.3	6.0	194	.20	.11
6	21	49	175	165	85	32	11	5.4	4.5	39	.14	.07
7	17	43	203	162	72	34	11	506	4.1	25	.11	.05
8	15	42	137	152	68	32	9.2	73	3.7	20	.09	.04
9	15	44	744	155	68	29	8.1	31	3.3	15	.08	.03
10	14	42	1,070	141	66	29	7.4	24	3.0	11	.09	.03
11	12	41	324	125	65	29	7.8	24	3.7	11	.08	.03
12	12	40	270	119	69	30	7.2	64	3.0	9.2	.08	.02
13	12	38	233	112	65	29	6.6	67	2.7	9.2	.08	.02
14	12	37	265	99	62	29	5.8	268	14	24	.07	.02
15	11	35	298	89	59	27	5.4	54	5.5	8.5	.07	.03
16	10	34	199	91	55	26	4.7	38	56	6.0	.07	.03
17	10	36	180	99	54	25	3.7	36	17	4.5	.08	.03
18	17	59	165	100	50	25	3.2	30	74	4.1	.10	.03
19	2,060	39	164	93	46	22	3.1	27	13	3.7	.08	.03
20	1,060	36	154	90	46	23	2.9	23	7.1	3.3	.08	.02
21	173	34	136	83	48	23	4.2	22	5.4	2.7	.08	.02
22	132	34	125	82	45	22	4.0	21	4.1	16	.07	.03
23	116	212	126	78	43	21	3.7	20	3.1	7.1	.07	.02
24	101	70	124	75	43	20	3.1	20	2.3	3.7	.05	.03
25	93	56	119	67	43	20	2.4	19	1.7	3.1	.05	.02
26	87	52	115	66	40	18	1.9	16	1.2	2.3	.05	.02
27	109	46	112	72	38	18	5.6	14	.75	1.6	.05	.02
28	88	45	105	85	38	16	11	13	.49	1.1	.05	.02
29	77	42	105	157	38	15	11	12	.37	.81	.05	.02
30	73	40	104	129	------	14	7.2	13	.36	.58	.03	.02
31	67	------	93	96	------	14	------	11	------	.33	.02	------
TOTAL	4,515	1,524	6,298	3,863	1,720	795	212.2	1,483.2	274.77	1,447.47	2.74	1.01
MEAN	146	50.8	203	125	59.3	25.6	7.07	47.8	9.16	46.7	.088	.034
MAX	2,060	212	1,070	329	96	39	13	506	74	1,020	.20	.12
MIN	10	34	38	66	38	14	1.9	4.3	.36	.15	.02	.02
AC-FT	8,960	3,020	12,490	7,660	3,410	1,580	421	2,940	545	2,870	5.4	2.0

CAL YR 1971 TOTAL 22,836.96 MEAN 62.6 MAX 2,060 MIN 0 AC-FT 45,300
WTR YR 1972 TOTAL 22,136.39 MEAN 60.5 MAX 2,060 MIN .02 AC-FT 43,910

PEAK DISCHARGE (BASE, 8,000 CFS).--Oct. 19 (0430) 10,400 cfs (12.15 ft).

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 east of Crawford, and 9.8 miles upstream from South Bosque River.

DRAINAGE AREA.--78.2 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 560.54 ft above mean sea level. Prior to Oct. 27, 1959, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 37.3 cfs (27,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,350 cfs Oct. 20 (gage height, 9.02 ft); minimum, 0.06 cfs Sept. 14.
Period of record: Maximum discharge, 15,400 cfs Oct. 4, 1959 (gage height, 14.31 ft); no flow at times in 1959, 1963-64, and 1971.
Maximum stage since 1900, 17.5 ft Sept. 26, 1936. Flood in April or May 1957 reached a stage of 15.7 ft, from information by local residents.

REMARKS.--Records excellent. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	19	12	44	33	14	5.8	78	1.5	8.0	.66	.21
2	1.1	18	22	49	31	13	5.9	9.4	1.4	2.7	.59	.20
3	1.1	16	46	78	28	13	5.8	3.3	1.3	1.4	.59	.20
4	3.7	15	31	82	26	12	5.5	2.7	1.2	1,160	1.2	.26
5	14	15	37	55	27	12	5.3	2.5	1.1	138	1.0	.22
6	5.9	14	83	52	29	12	5.5	3.4	.98	30	.61	.19
7	3.4	13	73	51	26	12	5.1	9.2	.92	18	.52	.17
8	2.7	13	56	48	24	11	4.8	6.6	.82	13	.49	.16
9	2.5	13	335	48	24	11	4.7	4.9	.80	11	.49	.16
10	2.2	13	555	45	24	11	5.0	4.5	.71	9.0	.49	.15
11	1.7	13	140	40	23	11	5.0	4.4	.73	9.8	.49	.13
12	1.7	12	103	38	24	11	4.7	6.0	.68	9.0	.49	.12
13	1.7	12	84	36	23	11	4.3	8.3	.64	14	.49	.11
14	1.5	12	89	33	22	11	4.0	142	2.4	21	.46	.10
15	1.5	11	92	30	21	11	3.7	16	.97	6.3	.40	.11
16	1.5	10	69	30	20	9.8	3.3	7.3	.82	5.4	.40	.14
17	1.5	11	61	32	20	9.5	2.8	6.4	14	4.9	.54	.15
18	2.2	13	55	33	19	9.3	2.6	5.6	139	4.5	.47	.12
19	585	13	53	31	18	9.0	2.5	4.9	14	4.1	.45	.11
20	1,520	10	50	30	18	9.2	2.6	4.4	6.1	4.0	.40	.09
21	86	9.2	45	28	18	8.7	3.1	4.1	3.4	3.5	.40	.11
22	53	9.8	42	28	18	8.7	2.8	3.6	2.4	3.9	.40	.14
23	43	47	42	27	18	8.6	2.3	3.3	1.8	4.8	.40	.14
24	36	27	41	26	17	8.3	2.0	3.1	1.4	3.2	.40	.17
25	31	19	39	24	17	7.6	1.9	2.7	1.2	2.3	.40	.12
26	29	17	38	24	15	7.7	1.9	2.6	.93	1.9	.37	.11
27	30	15	37	25	14	7.3	3.1	2.2	.75	1.6	.33	.11
28	29	14	35	28	14	7.1	4.1	1.9	.63	1.4	.95	.11
29	25	13	34	56	14	6.8	4.8	1.7	.59	1.0	.46	.10
30	23	12	34	37	------	6.2	4.6	1.6	2.1	.86	.22	.12
31	20	------	32	33	------	5.9	------	1.6	------	.76	.21	------
TOTAL	2,561.2	449.0	2,465	1,221	625	305.7	119.5	358.2	205.27	1,499.32	15.77	4.33
MEAN	82.6	15.0	79.5	39.4	21.6	9.86	3.98	11.6	6.84	48.4	.51	.14
MAX	1,520	47	555	82	33	14	5.9	142	139	1,160	1.2	.26
MIN	1.1	9.2	12	24	14	5.9	1.9	1.6	.59	.76	.21	.09
AC-FT	5,080	891	4,890	2,420	1,240	606	237	710	407	2,970	31	8.6

CAL YR 1971 TOTAL 6,983.44 MEAN 19.1 MAX 1,520 MIN 0 AC-FT 13,850
WTR YR 1972 TOTAL 9,829.29 MEAN 26.9 MAX 1,520 MIN .09 AC-FT 19,500

PEAK DISCHARGE (BASE, 3,000 CFS).--Oct. 20 (0630) 6,350 cfs (9.02 ft); July 4 (1845) 5,750 cfs (8.63 ft).

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 upstream from Brazos River.

DRAINAGE AREA.--1,652 sq mi.

PERIOD OF RECORD.--February 1965 to current year. Prior to October 1970, published as Waco Reservoir.

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

EXTREMES.--Current year: Maximum contents, 224,400 acre-ft Oct. 22 (elevation, 463.99 ft); minimum, 142,500 acre-ft Sept. 22 (elevation, 453.60 ft).
Period of record: Maximum contents, 292,100 acre-ft May 15, 1968 (elevation, 470.86 ft); minimum since initial filling, 134,300 acre-ft Sept. 20, 1965 (elevation, 452.43 ft).

REMARKS.--Lake is formed by a rolled earthfill dam, 24,618 ft long, including spillway. Lake was built for flood control and water conservation. Outlet works consist of three gate-controlled outlets (6 by 20 ft) opening into one 20-foot-diameter concrete conduit and two 54-inch concrete pipes. Emergency spillway controlled by 14 (40 by 35 ft) tainter gates. Low-flow releases are made through two 54-inch valves. The water supply releases are controlled by four 54-inch butterfly valves. Flow into two wet wells is controlled by four (5 by 6 ft) slide gates with lowest invert at 408.0 ft, used by city of Waco to obtain municipal water supply. Oct. 1, 1964, to Feb. 26, 1965, lake operated as a detention basin only. Old Lake Waco was breached Feb. 26, 1965, and deliberate impoundment was started. Capacity is based on maps prepared in 1956, and resurvey of old Lake Waco in 1964. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see North Bosque River near Hico (station 08094800). Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	510.0	-
Top of gates	500.0	726,400
Crest of spillway	465.0	233,500
Top of conservation pool	455.0	152,500
Invert of lowest intake	400.0	580

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

453.0	138,300	459.0	182,600
454.0	145,300	460.0	190,600
455.0	152,500	461.0	198,700
456.0	159,800	462.0	207,100
457.0	167,300	463.0	215,700
458.0	174,800	464.0	224,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146,700	156,700	152,600	158,400	155,800	152,800	152,300	154,000	150,800	147,200	150,400	146,000
2	147,000	155,800	153,400	159,500	155,600	152,700	152,200	154,300	150,600	146,900	150,100	145,800
3	147,300	154,800	154,200	161,300	155,200	151,600	152,200	153,400	150,500	146,700	150,000	145,600
4	147,500	153,700	154,900	165,300	154,900	151,600	152,100	152,700	150,300	154,000	150,000	145,700
5	147,900	153,100	156,200	165,000	154,600	151,400	152,100	152,500	150,100	155,400	149,800	145,600
6	148,100	152,900	159,100	162,100	154,300	151,300	152,100	152,800	149,800	155,600	149,600	145,400
7	148,200	152,800	161,000	159,100	154,000	151,200	152,100	154,600	149,600	155,600	149,300	145,200
8	148,300	152,700	162,500	157,300	153,600	151,300	151,900	154,900	149,400	155,700	149,000	145,000
9	148,200	152,700	172,600	154,800	153,200	151,500	151,900	155,100	149,200	155,200	148,900	144,700
10	148,200	152,700	196,500	154,300	152,700	151,600	151,800	154,800	149,000	154,300	148,800	144,600
11	148,100	152,700	199,800	154,600	152,600	151,800	151,900	154,600	148,900	154,000	148,700	144,300
12	148,000	152,700	198,300	154,600	152,700	152,100	151,900	154,500	148,600	153,700	148,500	144,100
13	147,900	152,700	193,000	154,600	152,900	152,300	151,800	154,500	148,400	154,000	148,300	143,900
14	147,800	152,700	185,500	154,500	153,100	152,500	151,800	155,700	148,800	153,900	148,100	143,700
15	147,800	152,600	178,800	154,300	153,100	152,700	151,700	155,400	148,800	153,600	147,800	143,500
16	147,700	152,700	171,100	154,000	153,200	152,900	151,600	154,700	148,900	153,400	147,600	143,500
17	147,800	153,600	165,300	153,700	153,100	152,900	151,500	154,000	149,300	153,100	147,400	143,300
18	148,000	154,000	161,700	153,700	153,100	153,100	151,400	153,100	149,700	153,300	147,200	143,100
19	169,000	154,300	158,100	153,600	152,900	153,100	151,200	152,700	149,700	153,200	147,200	143,000
20	218,300	154,500	156,600	153,500	152,900	153,300	151,100	152,500	149,500	153,100	147,100	142,800
21	223,300	154,800	156,900	153,400	152,900	153,400	151,400	152,400	149,300	152,900	146,900	142,600
22	221,300	155,400	157,100	153,200	152,900	153,200	151,300	152,100	149,100	152,800	146,800	142,500
23	212,800	155,800	157,300	152,800	152,800	152,900	151,100	152,100	148,800	152,700	147,000	142,800
24	204,300	155,400	157,400	152,700	152,800	152,600	151,100	152,100	148,500	152,500	147,100	143,200
25	194,600	154,900	157,600	152,900	152,700	152,600	150,900	152,000	148,300	152,300	147,200	143,200
26	185,600	154,400	157,600	153,000	152,600	152,500	150,800	151,900	148,000	152,100	147,100	143,500
27	176,600	153,700	157,800	153,200	152,500	152,600	151,400	151,800	147,700	151,800	147,000	143,300
28	167,800	153,100	157,800	153,900	152,400	152,600	151,600	151,500	147,500	151,400	146,900	143,400
29	161,700	152,700	157,800	155,400	152,600	152,400	152,300	151,400	147,300	151,300	146,700	143,100
30	160,200	152,600	157,800	155,800	------	152,400	152,900	151,300	147,400	151,000	146,500	143,300
31	158,000	------	157,700	155,900	------	152,300	------	151,100	------	150,700	146,200	------
(†)	455.75	455.01	455.71	455.47	455.02	454.97	455.05	454.80	454.29	454.75	454.13	453.72
(*)	+11,100	-5,400	+5,100	-1,800	-3,300	-300	+600	-1,800	-3,700	+3,300	-4,500	-2,900
(††)	1,810	1,550	1,500	1,560	1,500	1,940	2,260	2,050	2,780	2,380	2,860	2,450
MAX	223,300	156,700	199,800	165,300	155,800	153,400	152,900	155,700	150,800	155,700	150,400	146,000
MIN	146,700	152,600	152,600	152,700	152,400	151,200	150,800	151,100	147,300	146,700	146,200	142,500

CAL YR 1971..... * +3,900 †† 22,950 MAX 223,300 MIN 137,200
WTR YR 1972..... * -3,600 †† 24,640 MAX 223,300 MIN 142,500

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Waco.

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 downstream from Waco Lake dam, 2.8 miles upstream from mouth, and 4.7 miles northwest of courthouse in Waco.

DRAINAGE AREA.--1,655 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 365.44 ft 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 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 downstream at datum 4.66 ft lower. Since Aug. 30, 1967, auxiliary water-stage recorder 0.7 mile downstream at datum 4.66 ft lower.

AVERAGE DISCHARGE.--13 years, 473 cfs (342,700 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 5,550 cfs Dec. 14 (gage height, 9.96 ft); maximum gage height, 11.35 ft May 7 (backwater from Brazos Lake); no flow at times.

Period of record: Maximum discharge, 69,000 cfs Oct. 4, 1959 (gage height, 39.8 ft, from floodmark), from rating curve extended above 51,000 cfs 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.

Maximum stage since at least 1880, 44.5 ft Sept. 27, 1936, from information by local resident (discharge, 96,000 cfs). Maximum stage may be the result of backwater from Brazos River because the discharge on Apr. 22, 1945 (140,000 cfs), and Apr. 20, 1957 (103,000 cfs), exceeded the discharge corresponding to the maximum stage. The discharge for the 1936, 1945, and 1957 floods obtained from rating curve for tainter gates at old Lake Waco.

REMARKS.--Records fair. Backwater at times from the Brazos River and Brazos Lake. Discharge Mar. 2 to May 20 are releases from Waco Lake. Flow regulated by Waco Lake (see preceding page). Records furnished by the city of Waco show that they diverted 24,630 acre-ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	750	56	370	608	90		0	28	3.0	1.1	.75
2	5.5	500	80	359	617	80		379	30	2.4	1.1	.80
3	6.3	500	227	374	504	600		600	31	2.0	1.1	.82
4	7.1	500	238	434	482	600		412	31	46	1.3	.94
5	6.3	350	243	1,010	580	258		112	33	222	1.3	1.0
6	2.4	117	351	2,420	588	216		0	33	378	1.1	.81
7	1.4	117	525	2,140	573	125		0	34	164	.94	.75
8	1.3	117	596	1,880	550	0		0	35	79	.94	.69
9	1.3	117	509	1,880	552	0		188	35	240	1.1	.63
10	1.1	117	476	994	548	0		300	35	389	1.6	.63
11	1.1	117	2,040	608	428	0		300	35	151	1.5	.66
12	1.1	117	3,060	699	267	0		300	35	79	1.4	.64
13	1.1	117	4,320	654	284	0		300	35	59	1.3	.61
14	1.1	117	5,550	553	293	0		300	34	44	1.0	.63
15	1.0	117	5,360	521	289	0		488	33	78	1.0	1.1
16	.9	86	4,940	521	282	0		600	31	78	1.0	1.7
17	1.1	9.5	4,170	638	278	0		600	36	54	1.0	1.0
18	1.5	16	3,010	676	272	0		600	33	4.3	1.0	.93
19	3.0	10	2,940	699	268	0		264	29	3.7	1.0	1.7
20	5.0	9.5	1,450	707	264	0		100	28	3.2	1.0	2.0
21	10	9.0	524	684	258	0		99	27	3.0	1.0	2.1
22	2,000	16	394	676	254	188		61	27	3.0	.96	2.0
23	5,000	160	369	667	250	300		24	25	3.0	2.1	2.0
24	5,000	604	374	542	250	167		24	25	2.8	2.6	3.5
25	5,000	596	374	404	250	80		24	24	2.4	1.0	2.5
26	5,000	582	374	400	250	80		25	24	1.8	.92	2.5
27	5,000	589	374	396	250	31		27	23	1.4	.84	3.1
28	5,000	596	357	368	180	0		28	17	1.4	.76	2.0
29	3,000	363	357	328	90	0		28	3.4	1.4	.73	2.5
30	1,000	116	357	319	------	0		27	4.9	1.4	.71	2.5
31	1,000	------	357	489	------	0	------	28	------	1.3	.71	------
TOTAL	37,063.6	7,532.0	44,352	23,410	10,559	2,815	0	6,238	854.3	2,102.5	35.11	43.49
MEAN	1,196	251	1,431	755	364	90.8	0	201	28.5	67.8	1.13	1.45
MAX	5,000	750	5,550	2,420	617	600	0	600	36	389	2.6	3.5
MIN	.90	9.0	56	319	90	0	0	0	3.4	1.3	.71	.61
AC-FT	73,520	14,940	87,970	46,430	20,940	5,580	0	12,370	1,690	4,170	70	86

CAL YR 1971 TOTAL 122,670.73 MEAN 336 MAX 5,550 MIN .22 AC-FT 243,300
WTR YR 1972 TOTAL 135,005.00 MEAN 369 MAX 5,550 MIN 0 AC-FT 267,800

08096500 Brazos River at Waco, Tex.

LOCATION.--Lat 31°32'06", long 97°04'22", McLennan County, on left bank, 2.2 miles downstream from bridge on U.S. Highways 77 and 81 in Waco, and at mile 400.7.

DRAINAGE AREA.--28,530 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--September 1898 to current year (January 1912 to September 1914 monthly records only, published in WSP 1312).

GAGE.--Water-stage recorder. Datum of gage is 349.34 ft 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 upstream at datum 7.46 ft higher.

AVERAGE DISCHARGE.--42 years (1898-1940) unregulated, 2,560 cfs (1,855,000 acre-ft per year); 32 years (1940-72) regulated, 2,351 cfs (1,703,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,500 cfs Oct. 20 (gage height, 17.56 ft); minimum daily, 87 cfs Aug. 21.
Period of record: Maximum discharge, 246,000 cfs Sept. 27, 1936 (gage height, 40.90 ft, at former site and datum, levee on left bank was overtopped and broken by flood); minimum for periods of daily record 1898-1911, 1914-69, 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 May 28, 1885, from floodmark at site 3.9 miles upstream.

REMARKS.--Records good. Flow is largely regulated by Whitney Lake (station 08092500) and Waco Lake (station 08095550). Total combined capacity of 18 major reservoirs above station, 4,290,000 acre-ft, of which 2,194,000 acre-ft is flood-control storage in Whitney and Waco Lakes. Records furnished by city of Waco show that during year they diverted 24,630 acre-ft for municipal use above station, and records furnished by the Brazos River Authority show that during year they returned 15,510 acre-ft of treated sewage effluent above station. Many other small diversions above station for municipal supply, irrigation, and oilfield operation will not appreciably affect flow. Water-quality records for the current year are published in Part 2 of this report. Since 1941, at least 10 percent of drainage area regulated by reservoirs.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	3,290	1,890	5,190	1,380	755	2,110	1,070	1,290	268	2,460	1,290
2	210	2,830	1,990	5,710	1,020	104	385	1,050	459	194	1,390	619
3	200	2,770	2,680	6,080	2,230	104	275	553	231	468	1,210	1,170
4	250	4,220	2,380	7,760	2,890	92	306	533	179	1,490	1,450	806
5	500	4,820	2,450	6,990	1,340	89	590	359	278	3,860	1,210	729
6	900	4,410	3,020	7,410	897	94	700	532	371	1,810	1,470	1,250
7	1,300	4,380	3,280	7,190	794	198	795	1,670	1,270	434	1,400	1,110
8	1,400	4,410	2,410	6,840	1,270	1,430	620	2,410	632	245	1,220	1,010
9	1,400	4,450	3,640	6,860	985	1,570	396	521	372	284	473	1,010
10	1,100	4,430	11,100	6,330	828	1,480	985	902	228	658	221	789
11	1,100	4,440	11,400	2,870	708	1,130	1,260	507	176	772	155	530
12	1,300	4,520	6,160	1,620	1,400	859	1,310	1,460	169	529	127	550
13	1,600	4,530	6,970	2,600	823	303	1,300	1,390	1,660	647	110	709
14	1,400	4,580	8,480	3,590	554	221	1,160	605	2,090	551	102	891
15	1,790	4,580	8,700	3,640	482	247	299	525	1,640	1,390	722	897
16	2,800	1,990	8,420	3,660	461	239	217	642	1,710	1,800	448	573
17	2,220	765	7,310	2,300	453	195	172	1,640	523	1,960	171	429
18	1,410	1,250	5,450	1,510	442	169	157	1,670	393	832	114	186
19	6,740	770	5,430	1,280	438	171	142	2,250	365	443	99	370
20	15,300	700	4,670	1,210	433	189	178	2,250	1,390	939	90	680
21	14,500	543	3,270	1,170	433	176	348	1,440	1,510	1,790	87	402
22	7,180	489	4,650	1,390	423	606	178	946	459	1,160	89	332
23	10,100	2,290	4,920	1,250	618	453	151	711	253	1,750	642	401
24	9,990	2,270	4,940	1,010	623	705	133	973	190	1,900	724	456
25	9,910	2,070	4,960	670	485	461	145	2,080	551	2,220	1,250	386
26	9,860	2,370	4,990	693	854	348	452	1,180	1,500	2,680	1,230	534
27	9,880	2,240	5,020	676	1,190	435	620	1,220	1,920	2,740	1,400	1,230
28	9,730	2,140	5,020	1,160	1,160	499	875	1,250	904	2,870	1,490	556
29	7,110	2,110	5,070	2,110	979	272	655	1,120	1,060	2,740	1,320	688
30	3,540	1,950	5,110	2,030	------	185	372	1,140	594	2,820	1,250	465
31	3,450	------	5,070	1,260	------	235	------	1,100	------	2,460	1,120	------
TOTAL	138,400	86,607	160,850	104,059	26,593	14,014	17,286	35,699	24,367	44,704	25,244	21,048
MEAN	4,465	2,887	5,189	3,357	917	452	576	1,152	812	1,442	814	702
MAX	15,300	4,820	11,400	7,760	2,890	1,570	2,110	2,410	2,090	3,860	2,460	1,290
MIN	200	489	1,890	670	423	89	133	359	169	194	87	186
AC-FT	274,500	171,800	319,000	206,400	52,750	27,800	34,290	70,810	48,330	88,670	50,070	41,750

CAL YR 1971 TOTAL 525,792 MEAN 1,441 MAX 15,300 MIN 61 AC-FT 1,043,000
WTR YR 1972 TOTAL 698,871 MEAN 1,909 MAX 15,300 MIN 87 AC-FT 1,386,000

08096800 Cow Bayou subwatershed No. 4 near Bruceville, Tex.

LOCATION.--Lat 31°19'59", long 97°16'02", McLennan County, near center of dam on Foster Branch, 1.0 mile upstream from South Fork Cow Bayou, and 2.1 miles west of Bruceville.

DRAINAGE AREA.--5.25 sq mi.

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

GAGE.--Water-stage recorder with drop-inlet structure as control. Datum of gage is 574.46 ft above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--16 years, 1,500 acre-ft per year (adjusted for rainfall on pool and pool losses).

AVERAGE OUTFLOW.--16 years, 1,390 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 6.4 cfs Jan. 29 (gage height, 18.01 ft); seepage outflow Oct. 1 to Nov. 1. Maximum inflow, 742 cfs (average for 5-minute interval) Nov. 17, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow for many days.
Period of record: Maximum outflow, 2,290 cfs May 11, 1957 (gage height, 40.16 ft), from rating curve extended above 35 cfs on basis of slope-area measurement of peak outflow measured below dam during time when emergency spillway was partially washed out; no outflow for many days each year. Maximum inflow, 6,900 cfs (average for 15-minute interval) May 11, 1957, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow at times.

REMARKS.--Records good. The pool is formed by a rolled earthfill dam, 1,285 ft long with grass sodded emergency spillway section located at left end of dam. The gage height at crest of emergency spillway is 38.1 ft; prior to May 11, 1957, gage height was 37.7 ft after spillway was repaired. The dam was completed in August 1956, but no appreciable storage began before Mar. 20, 1957. The outlet structure consists of a 2.5-foot square uncontrolled drop-inlet structure covered with an antivortex baffle and two 8-inch square uncontrolled portholes on the downstream face. The gage height at crest of the drop inlet is 18.0 ft and at the bottom of the portholes, 14.76 ft. The drop-inlet structure is connected to a 17-inch-diameter outlet pipe at the base of dam. There is also an 8-inch controlled water-supply outlet at a gage height of 6.07 ft. The pool capacity is 1,740 acre-ft at the spillway crest, 241 acre-ft at the crest of the drop inlet, 145 acre-ft at the bottom of 8-inch portholes, and 13 acre-ft at the controlled outlet pipe. The area and capacity tables are based on a sediment survey made Sept. 24, 1969. The dam was built by the Soil Conservation Service for flood control and conservation. Three rain gages (two recording and one nonrecording) are located in the watershed, one at station and two in the watershed above station to compute the weighted-mean rainfall for hydrologic studies.

REVISIONS (WATER YEARS).--WSP 1922: 1957-60. WRD Texas 1968: 1967. WRD Texas 1970: 1969.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	7.8	125	237	194	111	20.7	6.9	13.5	4.1	6.5	3.0	5.1
Outflow	.2	81.3	217	112	178	18.6	.9	.1	0	0	0	0
(†)	-5.0	32.1	10.0	72.3	-77.4	-11.1	-7.1	-4.2	-15.7	-12.0	-13.2	-9.1
(††)	3.11	4.23	3.37	2.88	.34	.16	1.57	2.79	2.51	3.39	3.92	2.57

CAL YR 1971: INFLOW 743 OUTFLOW 533 † 67.9 †† 34.48
WTR YR 1972: INFLOW 735 OUTFLOW 608 † -40.4 †† 30.84

PEAK INFLOW (BASE, 200 CFS).--Nov. 17 (2200) 742 cfs (average for 5-minute interval).

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Weighted-mean rainfall, in inches.

08097000 Cow Bayou at Mooreville, Tex.

LOCATION.--Lat 31°18'45", long 97°08'16", Falls County, on right bank at downstream side of county bridge, 500 ft downstream from confluence of North Cow Bayou and South Cow Bayou, 0.8 mile north of Mooreville, and 5.0 miles northwest of Chilton.

DRAINAGE AREA.--85.0 sq mi.

PERIOD OF RECORD.--September 1954 to May 1958 (annual maximum only), and June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 399.58 ft above mean sea level (levels by Soil Conservation Service). Prior to June 10, 1958, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--14 years (1958-72), 35.2 cfs (25,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,000 cfs Nov. 18 (gage height, 19.00 ft); no flow for many days.
Period of record: Maximum discharge, 7,960 cfs May 11, 1957 (gage height, 23.88 ft), and Oct. 4, 1959 (gage height, 23.86 ft), from rating curve extended above 4,500 cfs; no flow at times.
Maximum stage since at least 1900, 31 ft about May 1, 1944, from information by local resident.

REMARKS.--Records good. At end of year, flow from 42.7 sq mi above this station was partly controlled by 26 floodwater-retarding structures with a total combined capacity of 15,510 acre-ft below the flood-spillway crests, of which 12,450 acre-ft is floodwater-retarding capacity and 3,060 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Ten rain gages (seven standard and three recording) are operating in the basin above this station. Small diversion for irrigation above station.

REVISIONS.--WRD Texas 1967. Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	5.0	13	40	112	20	4.4	5.2	1.4	.97	.05	0
2	.10	4.1	44	66	99	18	4.4	36	1.4	.80	0	0
3	4.8	3.0	51	60	82	16	4.4	13	1.3	.60	0	0
4	13	2.3	37	76	71	16	3.8	8.0	1.2	58	.09	0
5	5.0	2.3	63	51	67	15	3.5	6.1	1.1	10	.01	0
6	3.2	2.5	79	48	67	14	3.5	9.3	1.0	2.1	0	0
7	1.9	2.5	68	45	57	15	3.4	8.9	1.0	1.9	0	0
8	2.3	2.3	61	43	50	14	3.3	8.4	.99	.99	0	0
9	3.2	2.3	114	43	46	13	2.5	6.4	.99	.77	0	0
10	1.9	2.8	445	42	44	13	2.5	5.7	.99	.40	0	0
11	1.7	3.2	159	37	43	13	2.5	6.1	1.1	.51	0	0
12	1.4	3.8	122	34	44	13	2.3	31	.99	2.1	0	0
13	1.1	3.0	104	32	40	13	1.7	47	.99	.44	0	0
14	.77	2.8	99	28	37	13	1.3	47	2.2	.32	0	0
15	.77	2.1	89	25	34	13	1.1	22	1.3	.19	0	0
16	.88	2.1	72	23	31	12	.84	16	4.5	.19	0	0
17	1.1	75	61	25	29	11	.67	12	2.4	.32	0	0
18	4.2	593	53	26	27	9.8	.67	8.9	2.0	.32	0	.01
19	12	71	51	26	25	8.9	.73	7.2	1.2	.51	0	0
20	100	58	50	26	25	9.8	.61	5.7	.91	.19	0	0
21	28	49	44	24	25	11	2.0	5.0	.78	.04	0	0
22	19	49	38	22	25	9.8	1.9	4.1	.77	.38	0	0
23	15	58	37	21	24	8.9	1.8	3.5	.77	.23	0	0
24	9.3	40	35	20	24	8.9	1.5	3.2	1.5	.05	0	3.5
25	6.4	32	34	21	23	8.0	1.2	3.8	2.5	.08	0	.77
26	5.7	27	33	20	21	7.6	1.0	3.0	1.3	.23	0	.38
27	7.6	21	32	21	20	7.6	5.0	2.3	1.1	.16	0	.32
28	6.4	18	31	40	19	6.9	10	1.9	1.1	.10	0	.27
29	5.7	16	29	305	19	5.6	9.0	1.8	1.1	.99	0	.06
30	5.0	13	29	161	------	5.0	7.0	1.7	1.0	.44	0	1.2
31	5.0	------	27	121	------	4.9	------	1.4	------	.10	0	------
TOTAL	272.49	1,166.1	2,204	1,572	1,230	354.7	88.52	341.6	40.88	84.42	.15	6.51
MEAN	8.79	38.9	71.1	50.7	42.4	11.4	2.95	11.0	1.36	2.72	.005	.22
MAX	100	593	445	305	112	20	10	47	4.5	58	.09	3.5
MIN	.07	2.1	13	20	19	4.9	.61	1.4	.77	.04	0	0
AC-FT	540	2,310	4,370	3,120	2,440	704	176	678	81	167	.3	13

CAL YR 1971 TOTAL 7,670.04 MEAN 21.0 MAX 671 MIN 0 AC-FT 15,210
WTR YR 1972 TOTAL 7,361.37 MEAN 20.1 MAX 593 MIN 0 AC-FT 14,600

08098290 Brazos River near Highbank, Tex.

LOCATION.--Lat 31°08'02", long 96°49'29", Falls County, near right bank 45 ft downstream from bridge on Farm Road 413, 1.4 miles downstream from Highbank Slough and Spring Branch, 2.6 miles south of Highbank, and at mile 346.6.

DRAINAGE AREA.--29,421 sq mi, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 279.29 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 2,583 cfs (1,871,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,200 cfs Dec. 11 (gage height, 13.04 ft); minimum daily, 119 cfs Aug. 23.
Period of record: Maximum discharge, 57,900 cfs May 11, 1968 (gage height, 21.88 ft); minimum daily, 71 cfs Mar. 10, 19, 20, 26, 27, 30, 1971.
Maximum stages since at least 1909, 42 ft in December 1913 and 40 ft in September 1936, from information by local residents.

REMARKS.--Records good. Many diversions for municipal supply, irrigation, and industrial uses above gage, amount unknown. Flow regulated by 20 major reservoirs with a combined capacity of 4,338,000 acre-ft, of which 2,194,000 acre-ft is for flood control. During the year, Texas Power and Light Co. diverted 7,940 acre-ft to Tradinghouse Reservoir above this station. At end of year, flow from 189 sq mi above this station was partly controlled by 55 floodwater-retarding structures with a total combined capacity of 75,690 acre-ft below the flood-spillway crests, of which 67,520 acre-ft is floodwater-retarding capacity and 8,180 acre-ft is sediment-pool capacity. Three structures were built during the current year and have a total combined capacity below flood-spillway crests of 6,120 acre-ft, of which 600 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	3,980	2,020	5,410	2,560	1,050	253	749	1,140	912	2,400	1,150
2	283	3,640	2,040	5,960	2,030	972	1,610	1,520	1,220	517	2,370	1,320
3	261	3,170	2,930	7,390	1,610	634	651	1,470	811	345	1,430	868
4	226	3,060	3,870	8,930	2,660	346	421	815	430	447	1,190	1,090
5	272	4,660	3,760	11,100	2,740	243	327	705	306	1,710	1,370	960
6	763	5,020	4,350	9,050	1,630	218	505	645	264	4,560	1,150	868
7	1,390	4,620	5,880	8,130	1,220	209	696	693	303	2,370	1,390	1,180
8	1,420	4,570	5,600	7,480	1,060	208	805	1,580	1,040	771	1,330	1,180
9	1,510	4,610	8,650	7,250	1,360	460	726	2,240	753	451	1,270	1,080
10	1,520	4,640	14,900	7,250	1,220	1,310	522	860	609	403	871	1,070
11	1,130	4,620	20,600	6,170	1,090	1,420	846	908	364	656	478	941
12	1,070	4,630	14,800	2,800	974	1,200	1,190	800	278	834	325	736
13	1,430	4,700	10,200	1,840	1,290	1,020	1,250	1,340	233	747	267	626
14	1,710	4,730	9,910	2,910	1,080	691	1,230	1,620	1,080	709	214	747
15	1,490	4,760	10,200	3,980	782	449	1,170	926	1,920	691	179	932
16	1,670	4,620	10,000	3,650	694	367	552	703	1,560	1,240	272	1,010
17	2,700	2,540	9,330	3,360	644	346	333	832	1,850	1,690	725	800
18	2,150	6,610	7,360	2,230	615	341	274	1,510	939	1,860	371	658
19	1,500	4,960	6,030	1,650	597	294	231	1,590	650	1,070	244	439
20	11,300	3,730	5,980	1,460	582	278	203	2,140	418	781	182	281
21	19,200	2,810	4,740	1,360	574	307	205	2,110	1,130	781	146	532
22	13,200	1,440	3,730	1,300	574	316	301	1,510	1,470	1,780	123	659
23	8,610	934	5,050	1,450	574	408	301	1,120	815	1,390	119	442
24	10,900	2,420	5,240	1,350	573	556	238	896	410	1,630	189	429
25	10,500	2,680	5,230	1,200	815	621	206	1,100	305	1,800	798	443
26	10,100	2,240	5,220	871	691	557	190	1,890	303	2,100	1,130	588
27	9,920	2,510	5,270	826	706	495	320	1,120	1,250	2,530	1,250	487
28	9,840	2,380	5,270	806	1,140	582	710	1,150	1,660	2,630	1,380	1,100
29	9,730	2,230	5,330	1,280	1,150	611	903	1,180	1,060	2,770	1,450	654
30	6,300	2,210	5,580	3,390	------	492	761	1,110	1,020	2,700	1,340	625
31	3,970	------	5,500	3,310	------	314	------	1,150	------	2,750	1,260	------
TOTAL	146,355	109,724	214,570	125,143	33,235	17,315	17,930	37,982	25,591	45,625	27,213	23,895
MEAN	4,721	3,657	6,922	4,037	1,146	559	598	1,225	853	1,472	878	797
MAX	19,200	6,610	20,600	11,100	2,740	1,420	1,610	2,240	1,920	4,560	2,400	1,320
MIN	226	934	2,020	806	573	208	190	645	233	345	119	281
AC-FT	290,300	217,600	425,600	248,200	65,920	34,340	35,560	75,340	50,760	90,500	53,980	47,400

CAL YR 1971 TOTAL 632,295 MEAN 1,732 MAX 20,600 MIN 71 AC-FT 1,254,000
WTR YR 1972 TOTAL 824,578 MEAN 2,253 MAX 20,600 MIN 119 AC-FT 1,636,000

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 north of Burlington, and 2.5 miles downstream from Keys Creek.

DRAINAGE AREA.--22.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 388.51 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 10.0 cfs (6.12 inches per year, 7,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 800 cfs Dec. 9 (gage height, 10.00 ft); no flow for many days.
Period of record: Maximum discharge, 5,280 cfs May 16, 1965 (gage height, 15.61 ft); no flow for many days each year.
Maximum stage since at least 1938, 17.5 ft in 1950, from information by local residents.

REMARKS.--Records good. No diversions above station. Three recording rain gages are located in this watershed, one at station and two above station to compute the average rainfall for hydrologic studies. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.02	11	.44	0	0	1.6		0		0
2		0	10	10	.37	0	0	153		0		0
3		0	30	36	.30	0	0	5.8		0		0
4		0	5.0	32	.18	0	0	.91		8.5		0
5		0	100	3.5	.08	0	0	.25		.06		0
6		0	50	1.3	.06	0	0	.19		0		0
7		0	20	.79	.04	0	0	1.7		0		0
8		0	3.3	.56	.02	0	0	6.0		0		0
9		0	462	.46	.02	0	0	1.3		0		0
10		0	245	.71	.02	0	0	.41		0		0
11		0	10	1.1	.02	0	0	.22		0		0
12		0	2.2	.78	.10	0	0	.13		0		0
13		0	.89	.47	.12	0	0	.07		17		0
14		0	.60	.26	.10	0	0	.02		.73		0
15		0	1.5	.16	.07	0	0	0		.01		0
16		0	1.2	.09	.06	0	0	0		0		0
17		10	.55	.07	.05	0	0	0		0		0
18		400	.27	.06	.02	0	0	0		0		0
19		10	.17	.03	.01	0	0	0		0		0
20		2.0	.10	.03	.01	1.4	0	0		0		0
21		.60	.06	.01	.01	.05	0	0		0		0
22		.50	.04	.06	0	0	0	0		0		0
23		30	.03	.03	0	0	0	0		0		0
24		2.0	.02	.02	0	0	0	0		0		0
25		.50	.02	.01	0	0	0	0		0		0
26		.15	.03	.01	0	0	0	0		0		0
27		.10	.02	.01	0	0	0	0		0		49
28		.05	.03	.01	0	0	0	0		0		2.5
29		.03	.02	.03	0	0	3.5	0		0		.34
30		.02	.02	.43	------	0	.01	0		0		13
31		------	.09	.68	------	0	------	0	------	0		------
TOTAL	0	455.95	943.18	100.67	2.10	1.45	3.51	171.60	0	26.30	0	64.84
MEAN	0	15.2	30.4	3.25	.072	.047	.12	5.54	0	.85	0	2.16
MAX	0	400	462	36	.44	1.4	3.5	153	0	17	0	49
MIN	0	0	.02	.01	0	0	0	0	0	0	0	0
CFSM	0	.68	1.37	.15	.003	.002	.005	.25	0	.04	0	.10
IN.	0	.76	1.58	.17	.003	.002	.005	.29	0	.04	0	.11
AC-FT	0	904	1,870	200	4.2	2.9	7.0	340	0	52	0	129
(††)	2.34	3.44	4.81	1.54	.34	.90	1.91	2.67	1.01	3.97	2.45	4.79

CAL YR 1971 TOTAL 2,383.40 MEAN 6.53 MAX 682 MIN 0 CFSM .29 IN 3.99 AC-FT 4,730 †† 30.02
WTR YR 1972 TOTAL 1,769.60 MEAN 4.84 MAX 462 MIN 0 CFSM .22 IN 2.97 AC-FT 3,510 †† 30.17

PEAK DISCHARGE (BASE, 700 CFS).--Dec. 9 (1600) 800 cfs (10.00 ft).

†† Average rainfall, in inches.

08099000 Leon Reservoir near Ranger, Tex.

LOCATION.--Lat 32°21'46", long 98°40'32", Eastland County, at outlet works near center of dam on Leon River, 7.4 miles south of Ranger, and 8.7 miles southeast of Eastland.

DRAINAGE AREA.--252 sq mi.

PERIOD OF RECORD.--January 1955 to current year. Prior to October 1969, monthend contents only.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level.

EXTREMES (at 1000).--Current year: Maximum contents observed, 27,940 acre-ft Oct. 21 (elevation, 1,375.4 ft); minimum, 22,050 acre-ft Sept. 28-30 (elevation, 1,371.4 ft).
Period of record: Maximum contents observed, 40,640 acre-ft June 13, 1967 (elevation, 1,382.2 ft); minimum observed since first appreciable storage, 15,880 acre-ft Jan. 11-21, Feb. 5-7, Apr. 29, 30, 1956 (elevation, 1,366.2 ft).

REMARKS.--Reservoir is formed by rolled-fill earthen dam 3,700 ft long. Storage began in April 1954 and dam completed in June 1954. Dam is property of Eastland County Water Supply District and was built to impound water for municipal use by cities of Ranger, Olden, and Eastland (see table below for diversions). The service spillway is an uncontrolled circular drop inlet designed for a maximum discharge of 5,000 cfs through an 11-foot-diameter concrete conduit. The emergency spillway is a 1,200-foot-wide cut through natural ground near left end of dam. Capacity table based on a survey made in 1952. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,398.0	-
Crest of emergency spillway	1,382.0	40,210
Crest of service spillway	1,375.0	27,290
Invert of lowest outlet 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 total contents, in acre-feet)

1,369.0	19,030	1,375.0	27,290
1,372.0	22,850	1,377.0	30,620

CONTENTS, IN ACRE-FEET, AT 1000, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27,290	27,290	26,670	27,140	26,820	26,520	26,050	26,050	25,740	25,000	23,410	22,580
2	27,290	27,290	26,670	27,140	26,820	26,520	26,050	26,050	25,740	24,850	23,410	22,580
3	27,290	27,290	26,820	27,140	26,820	26,520	26,050	25,900	25,740	24,850	23,410	22,580
4	27,290	27,290	26,820	27,140	26,820	26,520	26,050	25,900	25,590	24,850	23,410	22,580
5	27,290	27,290	26,820	27,140	26,820	26,520	25,900	25,900	25,590	24,700	23,410	22,580
6	27,140	27,140	26,820	27,290	26,820	26,520	25,900	25,900	25,590	24,700	23,270	22,580
7	27,140	27,140	26,820	27,290	26,820	26,520	25,900	26,050	25,590	24,560	23,270	22,580
8	27,140	27,140	26,820	27,290	26,820	26,520	25,900	26,050	25,440	24,560	23,270	22,580
9	27,290	27,140	27,140	27,290	26,820	26,520	25,900	26,050	25,440	24,410	23,270	22,580
10	27,290	26,980	27,140	27,290	26,820	26,360	25,900	26,200	25,440	24,410	23,130	22,450
11	27,140	26,980	27,290	27,290	26,820	26,360	25,900	26,200	25,440	24,260	23,130	22,450
12	27,140	26,980	27,290	27,290	26,820	26,360	25,900	26,200	25,440	24,260	23,130	22,450
13	27,140	26,980	27,290	27,290	26,820	26,360	25,900	26,360	25,440	24,120	22,990	22,450
14	27,140	26,980	27,290	27,140	26,670	26,360	25,900	26,360	25,440	24,120	22,990	22,450
15	27,140	26,980	27,290	27,140	26,670	26,360	25,900	26,360	25,440	24,120	22,990	22,310
16	27,140	26,980	27,290	27,140	26,670	26,360	25,900	26,360	25,440	24,120	22,990	22,310
17	27,140	26,980	27,290	27,140	26,670	26,360	25,900	26,360	25,440	24,120	22,990	22,310
18	27,140	26,980	27,290	27,140	26,670	26,360	25,900	26,200	25,440	23,980	22,990	22,310
19	27,290	26,980	27,290	26,980	26,670	26,360	25,740	26,200	25,440	23,980	22,990	22,180
20	27,780	26,980	27,290	26,980	26,670	26,360	25,740	26,200	25,440	23,980	22,990	22,180
21	27,940	26,820	27,140	26,980	26,670	26,360	25,740	26,050	25,300	23,980	22,850	22,180
22	27,780	26,820	27,140	26,980	26,670	26,360	25,740	26,050	25,300	23,840	22,850	22,180
23	27,620	26,820	27,140	26,980	26,670	26,200	25,740	26,050	25,300	23,840	22,850	22,180
24	27,450	26,820	27,140	26,980	26,670	26,200	25,740	25,900	25,150	23,840	22,850	22,180
25	27,450	26,820	27,140	26,980	26,670	26,200	25,590	25,900	25,150	23,700	22,850	22,180
26	27,290	26,820	27,140	26,980	26,670	26,200	25,590	25,900	25,150	23,700	22,850	22,180
27	27,290	26,670	27,140	26,980	26,670	26,200	25,900	25,900	25,000	23,700	22,720	22,180
28	27,290	26,670	27,140	26,980	26,670	26,200	26,050	25,900	25,000	23,560	22,720	22,050
29	27,290	26,670	27,140	26,820	26,520	26,050	26,050	25,900	25,000	23,560	22,720	22,050
30	27,290	26,670	27,140	26,820	------	26,050	26,050	25,900	25,000	23,560	22,720	22,050
31	27,290	------	27,140	26,820	------	26,050	------	25,740	------	23,560	22,580	------
(†)	1,375.0	1,374.6	1,374.9	1,374.7	1,374.5	1,374.2	1,374.2	1,374.0	1,373.5	1,372.5	1,371.8	1,371.4
(*)	0	-620	+470	-320	-300	-470	0	-310	-740	-1,440	-980	-530
(††)	144	136	138	134	131	153	156	172	238	246	221	186
MAX	27,940	27,290	27,290	27,290	26,820	26,520	26,050	26,360	25,740	25,000	23,410	22,580
MIN	27,140	26,670	26,670	26,820	26,520	26,050	25,590	25,740	25,000	23,560	22,580	22,050

CAL YR 1971..... * +4,830 †† 1,970 MAX 29,770 MIN 19,880
WTR YR 1972..... * -5,240 †† 2,060 MAX 27,940 MIN 22,050

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use.

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 upstream from Flat Creek, 4.4 miles northeast of De Leon, and 6 miles downstream from Hog Creek.

DRAINAGE AREA.--463 sq mi.

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,209.93 ft above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 60.0 cfs (43,470 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,590 cfs Oct. 20 (gage height, 10.95 ft); no flow at times.
Period of record: Maximum discharge, 7,540 cfs Jan. 21, 1968 (gage height, 15.50 ft); no flow at times.
A stage of 19.3 ft occurred in May 1908 at a point 2,000 ft downstream from gage site and is the highest since that time, from information by local resident.

REMARKS.--Records good except those below 5 cfs, which are fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	16	8.7	13	14	12	4.2	12	.91	0	0	
2	9.0	15	27	14	14	12	4.3	7.6	.80	0	0	
3	10	13	62	15	13	11	4.0	5.8	.80	0	0	
4	20	11	25	49	13	11	3.8	4.5	.70	46	0	
5	11	11	31	24	12	10	3.5	3.8	.58	41	0	
6	8.4	10	41	20	12	9.9	3.5	5.6	.50	2.8	0	
7	6.8	9.9	26	19	12	10	3.4	32	.43	.89	0	
8	7.3	9.8	20	18	10	10	3.1	54	.33	.29	0	
9	8.1	9.8	92	18	9.8	9.5	2.7	13	.24	.08	0	
10	6.8	9.5	424	16	10	9.5	2.6	8.7	.24	.01	0	
11	6.0	9.5	127	16	11	9.6	2.8	6.2	.24	0	0	
12	5.5	9.5	55	15	12	9.8	2.5	160	.18	0	0	
13	5.5	9.2	36	15	12	9.5	2.4	131	.15	0	0	
14	5.5	9.1	30	14	12	9.2	3.0	26	.13	0	0	
15	5.2	8.9	30	12	11	8.6	5.4	14	.46	0	0	
16	7.2	8.7	25	12	11	7.5	7.0	9.5	10	0	9.3	
17	7.8	8.7	21	13	10	7.3	4.5	19	2.7	0	.78	
18	12	8.7	19	13	10	6.8	3.6	8.1	.97	0	.16	
19	92	8.3	18	13	9.8	6.3	3.1	5.5	.46	0	.25	
20	1,320	8.1	17	13	9.8	6.0	2.8	4.5	.15	0	.01	
21	416	8.1	16	13	10	6.2	6.3	4.0	.05	0	0	
22	189	9.1	14	13	10	5.8	3.7	3.3	.01	0	0	
23	130	13	14	13	11	5.8	2.8	2.8	0	0	0	
24	89	11	14	13	11	5.6	2.3	2.4	0	0	.74	
25	60	9.5	14	12	11	5.0	2.1	1.9	0	0	.46	
26	44	9.2	14	12	11	4.8	1.9	1.6	0	0	.03	
27	44	8.8	14	12	10	4.7	150	1.2	0	0	0	
28	39	8.7	14	12	11	4.3	73	1.2	0	0	0	
29	28	8.5	13	12	11	3.8	20	3.1	0	0	0	
30	23	8.8	13	12	------	3.3	29	4.2	0	0	0	
31	19	------	13	12	------	3.8	------	1.1	------	0	0	------
TOTAL	2,646.1	298.4	1,287.7	478	324.4	238.6	363.3	557.6	21.03	91.07	11.73	0
MEAN	85.4	9.95	41.5	15.4	11.2	7.70	12.1	18.0	.70	2.94	.38	0
MAX	1,320	16	424	49	14	12	150	160	10	46	9.3	0
MIN	5.2	8.1	8.7	12	9.8	3.3	1.9	1.1	0	0	0	0
AC-FT	5,250	592	2,550	948	643	473	721	1,110	42	181	23	0

CAL YR 1971 TOTAL 15,257.20 MEAN 41.8 MAX 1,870 MIN 0 AC-FT 30,260
WTR YR 1972 TOTAL 6,317.93 MEAN 17.3 MAX 1,320 MIN 0 AC-FT 12,530

08099300 Sabana River near De Leon, Tex.

LOCATION.--Lat 32°06'50", long 98°36'19", Comanche County, on left bank 5 ft downstream from bridge on Farm Road 587, 0.6 mile downstream from Spring Branch, 4.0 miles west of De Leon, and 4.2 miles upstream from Turkey Creek.

DRAINAGE AREA.--263 sq mi.

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,209.59 ft above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--12 years, 42.2 cfs (30,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,080 cfs Oct. 20 (gage height, 19.88 ft); no flow at times.
Period of record: Maximum discharge, 10,800 cfs June 12, 1967 (gage height, 22.05 ft); no flow at times.
Maximum stage since at least 1890, 24 ft in May 1908, from information by local resident.

REMARKS.--Records fair. Flow partly regulated by Nabors Lake (capacity unknown) on Spring Branch. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	12	5.7	9.5	7.3	4.7	2.1	12	6.8	.15	0	.04
2	5.4	11	11	9.7	7.8	4.3	2.2	6.2	4.8	.15	0	.07
3	6.2	9.9	33	10	7.8	4.0	2.1	4.3	2.7	.11	0	.18
4	36	8.7	21	20	7.9	3.4	2.0	3.4	1.9	.20	.02	1.1
5	18	7.9	17	18	7.6	3.4	1.8	3.1	2.0	.37	.06	.40
6	13	7.4	27	13	7.3	3.7	3.4	6.0	1.7	.38	.06	.06
7	7.9	7.6	22	12	7.1	3.9	2.1	2.8	1.5	.33	.05	.02
8	7.0	7.8	16	11	6.8	3.7	1.7	6.7	1.4	.29	.02	0
9	8.5	7.6	53	12	7.0	3.6	1.6	4.8	1.3	.29	.20	0
10	7.2	7.3	288	11	7.0	3.4	1.6	3.5	1.3	.26	.31	0
11	5.0	7.0	66	10	7.2	3.4	1.6	3.0	1.2	.19	2.0	0
12	3.8	7.0	31	9.6	7.6	3.2	1.5	2.8	1.2	.19	.49	0
13	4.0	6.7	22	8.8	7.7	3.0	1.5	75	1.1	.19	.20	0
14	4.6	6.6	19	8.0	8.3	3.1	1.8	41	1.1	.19	.13	0
15	4.9	6.5	19	7.2	8.8	2.9	2.6	19	1.3	.17	7.0	0
16	4.7	6.5	18	6.7	7.8	2.8	1.6	10	6.7	.11	9.7	0
17	4.5	6.5	16	6.7	6.9	2.8	1.4	10	8.8	.11	.74	.02
18	7.2	6.4	14	6.9	6.7	2.8	1.3	8.4	3.7	.15	.19	.01
19	43	6.1	12	7.3	5.9	2.6	1.2	7.0	2.2	.15	.04	0
20	2,150	5.7	12	7.9	5.8	2.6	1.3	5.8	1.5	.15	.04	0
21	165	5.5	11	7.6	5.8	2.8	3.7	5.0	.92	.15	0	0
22	63	6.3	10	5.5	5.5	2.8	3.4	4.3	.66	.15	0	1.8
23	60	9.3	9.8	8.1	5.4	2.8	1.6	3.8	.46	.15	0	.25
24	74	8.3	9.2	6.6	5.4	2.8	1.2	3.0	.40	.14	.02	.09
25	38	7.2	9.3	6.2	5.4	2.3	1.4	2.6	.38	.09	.02	.02
26	25	6.5	9.2	5.4	5.3	2.1	1.4	2.3	.32	.06	.03	.01
27	26	6.1	9.3	6.0	4.1	1.9	557	2.1	.22	.08	.01	8.4
28	28	5.9	8.9	5.4	4.5	2.2	112	2.1	.15	.06	0	.81
29	23	5.9	8.6	5.5	4.7	2.1	30	2.0	.15	.05	.01	.07
30	18	5.9	8.4	6.4	------	1.8	17	2.0	.14	.03	.01	0
31	14	------	8.0	6.7	------	2.0	------	4.5	------	.01	.04	------
TOTAL	2,880.9	219.1	824.4	274.7	192.4	92.9	765.1	268.5	58.00	5.10	21.39	13.35
MEAN	92.9	7.30	26.6	8.86	6.63	3.00	25.5	8.66	1.93	.16	.69	.45
MAX	2,150	12	288	20	8.8	4.7	557	75	8.8	.38	9.7	8.4
MIN	3.8	5.5	5.7	5.4	4.1	1.8	1.2	2.0	.14	.01	0	0
AC-FT	5,710	435	1,640	545	382	184	1,520	533	115	10	42	26

CAL YR 1971 TOTAL 8,059.87 MEAN 22.1 MAX 2,150 MIN 0 AC-FT 15,990
WTR YR 1972 TOTAL 5,615.84 MEAN 15.3 MAX 2,150 MIN 0 AC-FT 11,140

PEAK DISCHARGE (BASE, 1,500 CFS).--Oct. 20 (1045) 4,080 cfs (19.88 ft).

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 upstream from U.S. Highways 67 and 377, and 3.5 miles west of Proctor.

DRAINAGE AREA.--1,265 sq mi.

PERIOD OF RECORD.--January 1963 to current year. Prior to October 1970, published as Proctor Reservoir.

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, 68,760 acre-ft Oct. 23 (elevation, 1,163.94 ft); minimum, 46,210 acre-ft Sept. 30 (elevation, 1,158.90 ft).
Period of record: Maximum contents, 137,500 acre-ft Jan. 26, 1968 (elevation, 1,174.84 ft); minimum since first filling of lake, 26,620 acre-ft Sept. 14, 1967 (elevation, 1,152.82 ft).

REMARKS.--Lake is formed by reinforced concrete gated structure and rolled earthfill section, total length 13,460 ft. Lake operated as a detention basin Jan. 30 to July 5, 1963. Gates closed July 6, 1963, and lake operated to elevation 1,156.0 ft for construction purposes. Deliberate impoundment began Sept. 30, 1963. Lake is operated for flood control and water conservation. One major reservoir partly regulates the inflow (see station 08099000). At end of year, flow from 103 sq mi above this station was partly controlled by 18 floodwater-retarding structures with a total combined capacity of 28,730 acre-ft below the flood-spillway crests, of which 25,640 acre-ft is floodwater-retarding capacity and 3,090 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 4,820 acre-ft, of which 1,020 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Outlet works consist of two 36-inch-diameter sluices. The spillway is a gated concrete gravity structure located on the left bank, with an ogee weir section and stilling basin, and is controlled by eleven 40- by 35-foot tainter gates. Spillway is designed to discharge 431,800 cfs at maximum design level (elevation, 1,201.0 ft). Capacity based on survey made in 1946; borrow is not included in capacities shown. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,206.0	-
Top of gates	1,197.0	374,200
Crest of spillway (top of conservation storage)	1,162.0	59,400
Invert of two 36-inch-diameter slide gate-controlled outlets	1,128.0	68

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

1,158.0	42,790	1,162.0	59,390
1,159.0	46,590	1,163.0	64,110
1,160.0	50,620	1,164.0	69,060
1,161.0	54,890		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61,800	66,590	58,940	60,570	59,820	59,680	58,310	61,990	59,260	56,420	52,890	49,580
2	61,750	66,540	59,440	60,290	59,860	59,630	58,220	61,520	59,170	56,200	52,590	49,450
3	62,180	66,040	59,530	60,290	59,770	59,580	58,220	61,000	59,120	56,380	52,370	49,410
4	62,460	65,500	59,630	59,960	59,770	59,390	58,130	60,380	58,990	57,010	52,250	49,130
5	62,560	65,100	60,290	59,580	59,770	59,300	58,090	60,050	58,900	57,500	52,070	48,970
6	62,460	64,660	60,530	59,580	59,860	59,260	58,090	60,380	58,810	57,500	51,820	48,770
7	62,230	64,070	60,670	59,580	59,770	59,260	58,040	60,430	58,670	57,410	51,610	48,650
8	62,180	63,690	61,000	59,630	59,770	59,210	57,910	60,480	58,540	57,320	51,480	48,490
9	61,890	63,410	61,610	59,770	59,720	59,170	57,770	60,430	58,450	57,230	51,690	48,290
10	61,660	63,030	63,030	59,820	59,820	59,120	57,770	60,480	58,360	57,050	51,990	48,120
11	61,380	62,740	64,310	59,820	59,860	59,120	57,770	60,480	58,360	56,960	51,900	48,000
12	61,140	62,320	64,710	59,770	59,860	59,170	57,770	61,280	58,270	56,780	51,950	47,800
13	61,040	61,990	64,810	59,860	59,910	59,260	57,730	62,740	58,220	56,690	51,860	47,680
14	60,810	61,660	65,250	59,910	59,910	59,210	57,860	62,980	58,220	56,470	51,730	47,560
15	60,570	61,280	65,150	59,720	59,910	59,210	57,820	62,790	58,270	56,240	51,690	47,320
16	60,290	61,000	65,000	59,680	59,960	59,170	57,730	62,410	58,180	56,020	51,610	47,240
17	60,010	60,900	64,710	59,630	59,960	59,170	57,590	62,130	58,180	55,790	51,560	47,080
18	60,340	60,670	64,410	59,720	59,860	59,080	57,500	61,660	58,130	55,660	51,480	47,000
19	60,710	60,150	64,070	59,820	59,820	58,990	57,410	61,140	58,040	55,480	51,350	46,710
20	64,260	59,770	63,880	59,820	59,820	58,990	57,370	60,670	57,950	55,390	51,260	46,590
21	67,920	59,440	63,500	59,860	59,860	58,990	58,270	60,050	57,910	55,210	51,140	46,590
22	68,570	59,210	63,170	59,860	59,860	58,900	58,220	59,720	57,730	55,120	51,010	46,590
23	68,720	59,080	62,980	59,860	59,820	58,900	58,220	59,680	57,590	54,940	50,920	46,520
24	68,620	58,940	62,700	59,860	59,860	58,900	58,090	59,580	57,460	54,720	50,750	46,480
25	68,470	58,940	62,410	59,770	59,860	58,810	57,950	59,490	57,320	54,590	50,670	46,440
26	68,270	58,940	62,080	59,820	59,770	58,760	57,950	59,390	57,190	54,340	50,540	46,440
27	68,070	58,900	61,890	59,860	59,770	58,720	60,480	59,260	57,010	54,080	50,380	46,400
28	67,780	58,850	61,660	59,820	59,720	58,670	62,460	59,210	56,870	53,870	50,260	46,330
29	67,430	58,850	61,330	59,860	59,720	58,580	62,370	59,350	56,690	53,650	50,100	46,290
30	67,180	58,900	61,040	59,770	------	58,450	62,130	59,440	56,600	53,400	49,860	46,210
31	66,790	------	60,710	59,820	------	58,400	------	59,390	------	53,140	49,700	------
(†)	1,163.54	1,161.89	1,162.28	1,162.09	1,162.07	1,161.78	1,162.58	1,162.00	1,161.38	1,160.59	1,159.77	1,158.90
(*)	+4,940	-7,890	+1,810	-890	-100	-1,320	+3,730	-2,740	-2,790	-3,460	-3,440	-3,490
MAX	68,720	66,590	65,250	60,570	59,960	59,680	62,130	62,980	59,260	57,500	52,890	49,580
MIN	60,010	58,850	58,940	59,580	59,720	58,400	57,370	59,210	56,600	53,140	49,700	46,210

CAL YR 1971..... * +10,210 MAX 68,720 MIN 46,830
WTR YR 1972..... * -15,640 MAX 68,720 MIN 46,210

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

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 upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 0.3 mile upstream from Walnut Creek, 2.0 miles downstream from Proctor Lake, 2.1 miles northeast of Hasse, and at mile 236.0.

DRAINAGE AREA.--1,268 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,115.01 ft above mean sea level.

AVERAGE DISCHARGE.--24 years (1939-63) prior to completion of Proctor Lake, 151 cfs (109,400 acre-ft per year); 9 years (1963-72) regulated, 142 cfs (102,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 251 cfs May 20, 21 (gage height, 4.63 ft); no flow at times.
Period of record: Maximum discharge, 38,500 cfs May 24, 1952 (gage height, 21.49 ft); maximum gage height, 21.72 ft 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 upstream, flood of May 1908 was 9.1 ft 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. WRD Texas 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	145	7.2	168	19	17	2.7	244	1.2	23	41	44
2	3.8	47	10	168	19	17	2.0	239	.97	22	40	44
3	6.5	207	7.9	168	19	18	2.1	236	.63	22	41	44
4	7.8	208	6.9	168	19	17	1.8	236	.86	24	41	44
5	4.2	210	12	132	19	17	1.7	147	.71	4.9	41	44
6	41	209	8.1	20	19	14	1.7	38	.51	3.5	41	44
7	117	209	7.1	18	19	5.1	1.2	35	0	2.9	40	43
8	119	188	8.2	19	19	3.1	1.5	34	0	3.0	37	43
9	119	172	17	18	19	3.4	1.3	34	0	3.0	42	42
10	118	172	18	18	19	3.1	1.5	35	.12	2.6	47	43
11	118	174	8.2	18	19	3.1	1.1	35	.23	4.9	38	43
12	119	175	7.7	18	19	3.1	.80	35	.83	29	14	41
13	120	174	7.6	18	19	3.4	.35	34	.15	31	9.5	34
14	119	174	8.1	19	19	3.1	.15	35	.49	34	8.8	29
15	119	175	63	18	19	2.8	3.4	129	.79	34	8.7	31
16	118	175	164	19	19	2.9	1.9	248	1.1	36	8.3	31
17	118	175	162	19	19	2.8	2.0	248	.72	37	7.6	32
18	129	174	163	19	19	2.7	1.0	246	1.5	33	8.4	26
19	125	175	165	18	19	2.4	1.2	247	.81	21	8.0	17
20	123	176	165	19	19	2.8	1.3	248	.40	21	6.4	17
21	123	177	165	19	19	3.0	5.0	248	.11	20	7.5	18
22	163	160	165	19	19	2.6	2.7	128	.06	21	6.5	15
23	214	122	165	19	19	2.7	2.6	9.0	.10	20	6.6	5.6
24	214	74	165	19	19	2.9	2.3	13	0	20	7.7	2.4
25	214	19	165	19	19	3.0	1.6	3.2	0	28	7.3	1.7
26	214	18	166	19	19	3.1	1.9	2.7	0	46	6.9	1.2
27	216	17	165	19	19	3.3	12	1.3	0	44	6.8	1.0
28	214	18	167	19	19	2.8	9.6	1.4	21	41	7.0	.88
29	214	16	168	19	18	3.1	117	1.8	88	41	22	.80
30	213	9.8	166	19	------	3.3	244	2.4	20	41	47	.48
31	213	------	165	19	------	3.6	------	1.8	------	41	43	------
TOTAL	3,960.1	4,144.8	2,838.0	1,291	550	177.2	429.40	3,195.6	141.29	754.8	697.0	783.06
MEAN	128	138	91.5	41.6	19.0	5.72	14.3	103	4.71	24.3	22.5	26.1
MAX	216	210	168	168	19	18	244	248	88	46	47	44
MIN	3.8	9.8	6.9	18	18	2.4	.15	1.3	0	2.6	6.4	.48
AC-FT	7,850	8,220	5,630	2,560	1,090	351	852	6,340	280	1,500	1,380	1,550

CAL YR 1971 TOTAL 15,473.86 MEAN 42.4 MAX 271 MIN 0 AC-FT 30,690
WTR YR 1972 TOTAL 18,962.25 MEAN 51.8 MAX 248 MIN 0 AC-FT 37,610

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 upstream from Mesquite Creek, 3.6 miles downstream from Bear Creek, 5.9 miles north of Hamilton, and at mile 181.8.

DRAINAGE AREA.--1,914 sq mi.

PERIOD OF RECORD.--January 1925 to September 1931, September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 960.38 ft above mean sea level. Jan. 7, 1925, to Sept. 30, 1931, nonrecording gage 1.4 miles downstream at datum 3.13 ft lower. Sept. 1, 1960, to Nov. 22, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--6 years (1925-31) unregulated, 130 cfs (94,180 acre-ft per year); 12 years (1960-72) regulated, 199 cfs (144,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,900 cfs Oct. 19 (gage height, 19.02 ft); minimum daily, 0.52 cfs July 29.
Period of record: Maximum discharge, 18,600 cfs Sept. 9, 1962 (gage height, 26.93 ft); no flow at times.
Maximum stage since at least 1858, 33.4 ft in May 1908 and December 1913; flood in September 1911 reached a stage of 32.0 ft. from information by local residents. The flood in October 1959 reached a stage of 29.1 ft.

REMARKS.--Records good. Since 1960, at least 10 percent of drainage area 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 sq mi above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 12,810 acre-ft below the flood-spillway crests, of which 11,610 acre-ft is floodwater-retarding capacity and 1,200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	322	44	369	100	60	19	666	12	39	2.0	1.7
2	9.8	311	69	406	99	58	19	535	10	19	3.9	5.7
3	13	166	257	392	93	57	19	276	7.0	7.8	2.5	20
4	118	171	186	525	87	57	19	254	5.8	38	2.0	22
5	83	288	289	392	85	57	19	246	5.1	260	2.1	20
6	60	284	438	357	87	55	19	277	4.0	91	2.7	21
7	30	278	402	267	87	56	17	190	2.9	25	3.5	24
8	45	276	229	186	83	56	15	96	2.7	11	3.3	19
9	124	272	401	175	81	47	12	57	2.5	6.6	2.1	17
10	124	233	1,340	170	80	42	11	45	2.5	4.9	1.8	15
11	123	223	951	157	80	38	9.2	42	2.3	3.8	6.3	17
12	120	223	433	147	87	37	10	47	2.0	2.1	58	17
13	124	223	305	140	90	36	10	68	2.0	1.7	42	15
14	173	221	278	129	86	38	9.4	131	2.0	1.7	14	15
15	133	220	268	119	81	38	8.9	48	2.0	1.6	5.2	8.6
16	120	217	237	114	77	40	6.8	39	18	9.1	3.1	6.7
17	111	245	323	117	73	44	4.9	268	8.8	9.8	2.7	15
18	407	288	374	123	70	41	4.7	275	7.3	11	3.5	16
19	3,710	235	369	124	65	39	4.7	264	6.1	9.0	8.7	18
20	1,860	224	367	122	64	38	4.5	261	4.1	7.4	6.6	17
21	609	221	353	115	63	40	6.6	262	2.8	4.7	3.3	13
22	350	223	337	113	63	37	6.1	261	2.7	1.8	2.9	9.4
23	295	285	330	109	62	37	21	243	2.6	1.0	2.4	8.4
24	351	225	330	105	62	34	23	103	2.5	.91	2.0	10
25	343	174	326	97	60	32	15	41	.74	.74	3.0	11
26	334	106	323	95	58	31	11	39	2.1	.74	5.0	4.4
27	394	62	319	95	54	30	14	25	2.1	.66	6.0	3.6
28	371	53	311	98	54	27	191	19	2.0	.59	4.0	3.2
29	346	48	306	103	56	23	217	17	16	.52	4.0	2.5
30	336	45	308	105	------	20	89	15	27	1.8	3.0	2.7
31	328	------	300	100	------	21	------	13	------	2.9	2.0	------
TOTAL	11,555.8	6,362	11,103	5,666	2,187	1,266	835.8	5,123	169.64	575.86	213.6	378.9
MEAN	373	212	358	183	75.4	40.8	27.9	165	5.65	18.6	6.89	12.6
MAX	3,710	322	1,340	525	100	60	217	666	27	260	58	24
MIN	9.8	45	44	95	54	20	4.5	13	.74	.52	1.8	1.7
AC-FT	22,920	12,620	22,020	11,240	4,340	2,510	1,660	10,160	336	1,140	424	752

CAL YR 1971 TOTAL 34,814.24 MEAN 95.4 MAX 3,710 MIN 0 AC-FT 69,050
WTR YR 1972 TOTAL 45,436.60 MEAN 124 MAX 3,710 MIN .52 AC-FT 90,120

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 downstream from U.S. Highway 84 bridge in Gatesville, 0.3 mile downstream from Dodds Creek, 5.2 miles upstream from Cottonwood Creek, and at mile 104.8.

DRAINAGE AREA.--2,365 sq mi.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 723.85 ft 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 upstream at same datum.

AVERAGE DISCHARGE.--22 years, 286 cfs (207,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,680 cfs Oct. 21 (gage height, 24.12 ft); minimum daily, 2.8 cfs Aug. 14.
Period of record: Maximum discharge, 51,200 cfs Oct. 4, 1959 (gage height, 34.14 ft), from rating curve extended above 41,000 cfs; no flow at times in 1951-52, 1954-55, 1971.
Maximum stage since at least 1854, 35 ft in May 1908, from information by local residents.

REMARKS.--Records good. Some upstream regulation by two major reservoirs; for statement regarding upstream reservoirs and regulation by Soil Conservation Service floodwater-retarding structures, see Leon River near Hamilton (station 08100000). Numerous diversions above station for irrigation, municipal supply, and oilfield operation. The city of Hamilton reported that 496 acre-ft was diverted above station during the water year for municipal use and 366 acre-ft was returned to the Leon River as sewage effluent. The city of Gatesville reported that 53 acre-ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	367	130	458	214	110	51	175	35	5.2	4.4	3.8
2	11	355	135	690	208	106	50	217	31	19	4.5	23
3	12	345	334	680	203	105	50	781	28	24	4.1	17
4	28	313	401	539	189	103	47	333	24	79	6.7	31
5	24	214	357	602	176	100	46	272	21	47	4.9	25
6	122	273	509	516	176	98	46	271	17	35	4.4	5.6
7	80	309	592	470	177	100	47	354	13	182	4.2	4.3
8	66	307	666	445	169	99	45	319	11	99	3.6	3.8
9	47	305	823	361	162	98	43	225	9.3	58	3.5	11
10	32	305	2,630	335	157	96	40	153	9.4	39	3.6	22
11	86	298	3,470	320	154	93	38	124	9.4	26	3.1	21
12	103	277	2,160	298	158	90	36	145	8.7	18	3.0	17
13	104	271	895	278	173	87	35	144	8.0	15	2.9	16
14	107	271	666	271	173	85	32	420	8.6	13	2.8	15
15	118	269	677	252	165	84	28	220	83	10	13	16
16	168	267	622	237	156	82	26	176	163	9.1	32	17
17	132	264	511	222	147	82	25	126	98	8.0	19	121
18	130	288	488	230	140	79	23	143	32	7.5	11	84
19	1,150	369	548	238	133	75	21	278	80	7.1	7.5	23
20	4,390	307	544	239	127	74	18	268	40	6.5	5.9	13
21	6,140	275	528	232	126	74	21	262	22	6.3	4.9	14
22	2,230	275	502	225	126	73	19	257	15	9.8	4.4	18
23	576	349	484	217	124	72	18	255	12	16	4.5	26
24	447	378	477	210	123	73	19	255	9.6	14	4.6	37
25	424	338	477	201	122	70	17	224	8.5	13	4.4	24
26	429	273	470	190	118	70	21	124	7.4	9.8	4.5	21
27	415	239	468	185	113	67	50	78	6.5	7.3	4.9	15
28	465	184	461	189	112	63	74	62	5.3	5.8	5.1	13
29	459	150	452	239	109	61	65	57	4.9	5.3	4.6	13
30	408	138	447	250	------	56	180	47	5.4	5.1	4.1	11
31	383	------	442	233	------	53	------	40	------	4.7	3.9	------
TOTAL	19,302	8,573	22,366	10,052	4,430	2,578	1,231	6,805	826.0	804.5	194.0	681.5
MEAN	623	286	721	324	153	83.2	41.0	220	27.5	26.0	6.26	22.7
MAX	6,140	378	3,470	690	214	110	180	781	163	182	32	121
MIN	11	138	130	185	109	53	17	40	4.9	4.7	2.8	3.8
AC-FT	38,290	17,000	44,360	19,940	8,790	5,110	2,440	13,500	1,640	1,600	385	1,350

CAL YR 1971 TOTAL 69,326.90 MEAN 190 MAX 6,140 MIN 0 AC-FT 137,500
WTR YR 1972 TOTAL 77,843.00 MEAN 213 MAX 6,140 MIN 2.8 AC-FT 154,400

08101000 Cowhouse Creek at Pidcoke, Tex.

LOCATION.--Lat 31°17'05", long 97°53'05", Coryell County, on left bank 125 ft downstream from bridge on Farm Road 116, 0.1 mile downstream from Beehouse Creek, 0.6 mile northeast of Pidcoke, and 4.9 miles upstream from Table Rock Creek.

DRAINAGE AREA.--455 sq mi.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.7 ft above mean sea level.

AVERAGE DISCHARGE.--22 years, 95.9 cfs (69,480 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs Oct. 19 (gage height, 20.76 ft); no flow at times.
Period of record: Maximum discharge, 66,200 cfs Oct. 4, 1959 (gage height, 40.1 ft, from floodmark), from rating curve extended above 30,000 cfs on basis of slope-area measurement of 55,800 cfs; 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	113	42	215	98	46	24	21	7.1	1.6	0	.12
2	5.7	107	60	454	103	44	24	18	6.5	1.1	0	.06
3	6.3	98	390	212	93	42	23	15	6.0	1.0	0	.04
4	226	88	184	225	79	40	23	13	5.4	5.8	0	.02
5	214	80	209	184	76	39	23	11	4.8	6.6	0	.05
6	98	78	365	146	82	37	23	13	4.1	5.5	0	.91
7	65	72	320	161	85	37	23	87	3.7	3.5	0	.51
8	48	66	219	159	74	37	21	77	3.3	2.3	0	.28
9	43	63	665	156	69	36	20	50	3.1	1.8	0	.15
10	44	63	2,590	154	69	36	19	31	3.2	1.5	0	.09
11	36	59	454	138	71	35	19	25	2.9	1.2	0	.06
12	32	56	297	118	87	36	19	960	2.6	.88	0	.04
13	29	51	244	109	92	37	17	210	2.0	.80	0	.02
14	38	49	240	98	80	37	16	660	2.4	.88	0	.01
15	51	44	265	90	72	35	16	112	224	.74	.01	0
16	39	41	207	85	66	34	15	60	148	.46	.85	7.6
17	32	41	178	90	63	33	14	172	39	.34	.36	.85
18	30	75	162	101	60	32	14	68	78	.22	.20	.36
19	4,360	73	153	103	55	30	13	40	53	.14	.20	.22
20	1,210	48	150	96	53	32	13	30	22	.10	.18	.15
21	430	42	137	92	55	31	14	23	12	.05	.08	.13
22	290	42	122	87	55	30	14	20	7.8	.04	.04	.13
23	238	99	115	85	53	29	13	17	5.5	.03	.03	.12
24	216	113	116	80	53	29	11	15	4.1	.02	.02	.14
25	175	74	112	74	52	29	11	13	3.2	.01	0	.99
26	147	60	109	69	50	29	10	11	2.5	0	3.2	3.7
27	176	54	106	72	46	28	17	9.8	1.9	0	1.5	2.1
28	217	49	103	90	44	26	44	4.2	1.1	0	.79	1.4
29	156	46	100	170	46	24	29	7.6	1.2	0	.63	1.2
30	135	43	104	150	------	23	20	8.4	1.6	0	.56	1.3
31	124	------	101	112	------	23	------	8.7	------	0	.26	------
TOTAL	8,917.4	1,987	8,619	4,175	1,981	1,036	562	2,810.7	662.0	36.61	8.91	22.75
MEAN	288	66.2	278	135	68.3	33.4	18.7	90.7	22.1	1.18	.29	.76
MAX	4,360	113	2,590	454	103	46	44	960	224	6.6	3.2	7.6
MIN	5.7	41	42	69	44	23	10	4.2	1.1	0	0	0
AC-FT	17,690	3,940	17,100	8,280	3,930	2,050	1,110	5,580	1,310	73	18	45

CAL YR 1971 TOTAL 33,786.43 MEAN 92.6 MAX 4,360 MIN 0 AC-FT 67,020
WTR YR 1972 TOTAL 30,818.37 MEAN 84.2 MAX 4,360 MIN 0 AC-FT 61,130

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-19	1930	20.76	12,000
12-10	0515	15.71	7,180
5-12	0515	15.57	7,090

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 upstream from bridge on State Highway 317, 3.5 miles north of Belton, 8.9 miles upstream from Nolan Creek, and at mile 16.8.

DRAINAGE AREA.--3,560 sq mi.

PERIOD OF RECORD.--March 1954 to current year. Prior to October 1970, published as Belton Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Feb. 20, 1955, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 330,800 acre-ft July 6 (elevation, 582.70 ft); minimum, 238,500 acre-ft Oct. 2 (elevation, 572.60 ft).
Period of record: Maximum contents, 870,300 acre-ft June 6, 1957 (elevation, 620.45 ft); minimum since initial filling, 113,400 acre-ft Dec. 16, 1956 (elevation, 553.06 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 5,524 ft long including a 1,300-foot uncontrolled broad-crested spillway in saddle on left bank and a 418-foot dike. Flood-control outlet works consist of a 22-foot-diameter conduit controlled by three 7.0- by 22.0-foot electrically driven broome-type gates (elevation of invert, 483.0 ft). Low-flow outlet works consist of one 36- by 36-inch gated outlet discharging into flood-control conduit (elevation of invert at intake to wet well, 540.0 ft). Deliberate impoundment of water began Mar. 8, 1954, and main dam was completed in December 1954. Lake built for flood control and conservation. Contents based on surveys dated 1936, 1937, and 1948. Fort Hood and adjacent military installations have been allocated 12,000 acre-ft of storage in the lake. Small diversions above the lake for irrigation, municipal supply, and oilfield operation. During the year, the city of Temple diverted 7,090 acre-ft for municipal use. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Leon River near Hamilton (station 08100000). Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	662.0	-
Crest of spillway	631.0	1,097,600
Top of conservation storage	569.0	210,600
Invert of lowest intake	483.0	278

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

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

571.0	225,800	580.0	304,100
574.0	250,100	583.0	333,800
577.0	276,200		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238,600	261,100	266,400	309,500	311,700	326,100	324,600	320,900	328,000	326,700	326,200	320,400
2	238,500	261,100	267,000	310,400	312,800	326,400	324,700	322,000	327,900	326,300	325,900	320,200
3	238,900	260,800	267,300	311,100	313,100	326,300	324,600	322,300	327,900	326,200	325,900	319,900
4	239,100	260,700	267,500	309,900	313,400	327,000	324,400	323,500	327,800	330,100	326,200	319,700
5	239,800	260,400	268,300	308,200	314,300	327,000	324,200	324,000	327,600	330,700	325,900	319,600
6	239,900	260,300	269,500	306,600	315,400	326,400	324,200	324,900	327,400	330,800	325,500	319,200
7	240,100	259,500	270,500	306,100	316,000	326,000	324,100	327,200	327,300	330,500	325,400	319,000
8	240,200	259,300	273,200	306,600	316,300	325,400	324,100	327,600	326,800	330,500	325,200	318,800
9	240,300	259,200	277,500	306,900	316,800	325,000	324,000	327,200	326,700	330,500	324,800	318,800
10	240,200	258,800	286,400	307,100	317,600	324,200	323,900	326,200	326,800	330,400	324,600	318,400
11	240,200	258,800	292,600	306,700	318,000	324,000	324,000	324,200	326,700	330,300	324,500	318,200
12	240,200	258,900	298,100	306,000	318,700	323,900	323,700	325,300	326,300	330,600	324,300	317,900
13	240,300	259,000	301,900	305,300	319,200	324,000	323,700	326,500	326,200	330,700	324,100	317,700
14	240,300	259,300	302,200	304,500	319,900	324,100	323,400	327,900	327,200	330,500	323,600	317,500
15	240,400	259,300	303,400	303,900	320,500	324,400	323,500	328,800	327,800	330,500	323,900	317,300
16	240,600	259,500	303,900	303,300	320,700	324,500	323,200	330,000	328,700	330,200	323,700	317,400
17	241,100	262,100	303,600	303,200	321,300	324,300	322,600	329,900	329,500	330,000	323,500	317,300
18	243,100	263,700	302,800	303,700	321,800	324,600	322,400	329,200	329,900	329,700	323,300	317,300
19	252,300	263,800	302,500	304,000	322,100	324,500	322,100	328,500	330,000	329,600	323,000	317,200
20	261,200	264,100	302,700	304,500	322,300	324,800	322,200	328,400	329,900	329,500	322,800	317,000
21	268,200	264,300	303,500	304,800	322,800	325,100	322,200	328,200	329,900	329,300	322,500	316,900
22	274,300	264,700	304,300	304,900	323,300	325,100	322,000	328,000	329,400	329,000	322,300	316,600
23	277,800	265,100	304,700	304,900	323,800	325,000	321,700	328,000	329,300	328,900	322,100	316,800
24	275,600	265,500	305,200	305,000	324,300	325,300	321,200	328,200	329,000	328,600	322,200	317,100
25	272,600	265,900	305,700	305,200	324,700	325,100	320,400	328,600	328,700	328,400	321,900	316,900
26	269,900	266,300	306,200	305,200	325,200	325,000	320,000	328,900	328,300	328,000	321,700	316,800
27	267,200	266,400	306,900	306,000	325,400	325,300	320,700	328,900	328,000	327,700	321,500	316,700
28	264,400	266,700	307,400	306,200	325,700	325,400	320,600	328,900	327,700	327,500	321,400	316,400
29	262,600	266,800	307,800	308,600	325,900	325,100	320,700	328,800	327,500	327,500	321,200	316,100
30	262,200	266,600	308,300	309,800	------	325,000	320,700	328,700	327,200	327,000	320,900	315,800
31	261,200	------	308,500	310,700	------	324,800	------	328,200	------	326,500	320,700	------
(†)	575.30	575.92	580.45	580.68	582.22	582.11	581.70	582.45	582.35	582.28	581.70	581.20
(*)	+2,260	+5,400	+41,900	+2,200	+15,200	-1,100	-4,100	+7,500	-1,000	-700	-5,800	-4,900
(††)	1,090	1,010	934	1,020	973	1,350	1,610	1,310	1,680	1,670	1,650	1,520
MAX	277,800	266,800	308,500	311,100	325,900	327,000	324,700	330,000	330,000	330,800	326,200	320,400
MIN	238,500	258,800	266,400	303,200	311,700	323,900	320,000	320,900	326,200	326,200	320,700	315,800

CAL YR 1971..... * +98,600 †† 14,480 MAX 308,500 MIN 134,000
WTR YR 1972..... * +77,200 †† 15,820 MAX 330,800 MIN 238,500

† 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.

08102500 Leon River near Belton, Tex.

LOCATION.--Lat 31°04'12", long 97°26'28", Bell County, on left bank 1,400 ft upstream from bridge on Farm Road 817, 2,000 ft upstream from concrete dam, 1.0 mile upstream from bridge on U.S. Highway 81, 2.0 miles northeast of Belton, 3.2 miles downstream from Belton Dam, 5.0 miles upstream from Nolan Creek, and at mile 13.0.

DRAINAGE AREA.--3,572 sq mi.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 476.68 ft above mean sea level. Prior to May 21, 1931, nonrecording gage.

AVERAGE DISCHARGE.--30 years (1923-53) unregulated, 659 cfs (477,400 acre-ft per year); 19 years (1953-72) regulated, 595 cfs (431,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,960 cfs Oct. 22, 23 (gage height, 6.45 ft); minimum daily, 6.8 cfs June 5.
Period of record: Maximum discharge, 56,500 cfs Apr. 22, 1945 (gage height, 24.41 ft); no flow at times.
Flood in December 1913 reached a stage of 25 ft, and flood in September 1921 reached a stage of 21 ft, from information by local residents.

REMARKS.--Records good. The city of Temple reported that during the year 7,090 acre-ft was diverted from gage pool for municipal use, 1,920 acre-ft of treated sewage effluent was returned to Little Elm Creek, and 1,280 acre-ft of treated sewage effluent was returned to the Leon River below station. Flow regulated by Belton Lake (station 08102000) since Mar. 8, 1954. Water-quality records for the current year are published in Part 2 of this report.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	755	267	480	76	39	45	42	15	15	12	12
2	35	448	274	476	77	38	48	46	14	12	13	13
3	48	449	339	1,120	80	38	50	44	9.4	14	15	12
4	50	450	485	1,940	81	38	48	46	11	14	19	14
5	44	450	483	1,840	82	37	49	49	6.8	20	18	11
6	39	450	481	1,740	83	245	47	55	11	18	18	13
7	45	450	361	1,180	81	470	53	53	11	17	16	12
8	48	451	76	641	83	469	65	304	11	17	15	10
9	44	450	78	641	83	470	64	654	16	19	14	11
10	47	450	77	640	80	369	59	888	17	18	15	9.3
11	49	361	75	864	77	247	42	1,180	21	15	16	11
12	46	242	718	1,030	75	247	47	659	18	16	15	11
13	47	244	1,200	1,030	75	145	71	48	19	21	16	11
14	47	248	1,190	925	75	57	72	51	18	21	14	10
15	46	253	1,180	657	68	54	74	56	21	18	12	9.0
16	50	253	1,180	598	185	55	71	,193	21	18	10	12
17	54	271	1,170	412	53	55	66	449	30	17	13	14
18	82	302	1,160	286	56	55	64	550	26	16	12	14
19	58	272	1,160	284	41	56	70	379	26	16	11	12
20	48	273	792	283	42	56	68	237	22	16	11	12
21	43	273	470	287	41	54	74	241	24	18	8.0	12
22	1,300	280	473	287	39	57	73	243	23	20	9.2	14
23	2,580	280	474	287	40	55	74	241	21	20	16	16
24	2,240	276	474	288	41	53	198	135	15	19	16	19
25	2,230	280	480	288	40	59	325	34	16	16	15	17
26	2,220	280	480	288	43	62	130	33	14	13	14	16
27	2,210	281	480	288	52	60	100	31	12	12	15	17
28	2,200	288	478	193	53	61	46	33	11	12	15	18
29	1,760	288	480	86	46	59	48	33	12	15	13	17
30	952	286	478	82	------	53	43	32	13	17	15	17
31	949	------	480	77	------	46	------	28	------	13	13	------
TOTAL	19,647	10,334	17,993	19,518	1,948	3,859	2,284	7,067	505.2	513	434.2	396.3
MEAN	634	344	580	630	67.2	124	76.1	228	16.8	16.5	14.0	13.2
MAX	2,580	755	1,200	1,940	185	470	325	1,180	30	21	19	19
MIN	35	242	75	77	39	37	42	28	6.8	12	8.0	9.0
AC-FT	38,970	20,500	35,690	38,710	3,860	7,650	4,530	14,020	1,000	1,020	861	786

CAL YR 1971 TOTAL 99,090.0 MEAN 271 MAX 2,580 MIN 10 AC-FT 196,500
WTR YR 1972 TOTAL 84,498.7 MEAN 231 MAX 2,580 MIN 6.8 AC-FT 167,600

08103800 Lampasas River near Kempner, Tex.

LOCATION.--Lat 32°04'54", long 98°00'59", Lampasas County, on left bank 800 ft upstream from centerline of U.S. Highway 190, 0.6 mile upstream from Mesquite Creek, 0.8 mile west of Kempner, 0.9 mile downstream from Sulphur Creek, and at mile 76.7.

DRAINAGE AREA.--817 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 828.38 ft above mean sea level. Prior to Aug. 4, 1967 (revised), at site 800 ft downstream.

AVERAGE DISCHARGE.--10 years, 161 cfs (116,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,900 cfs May 12 (gage height, 17.53 ft); minimum daily, 7.0 cfs Sept. 10.
Period of record: Maximum discharge, 71,000 cfs May 16, 1965 (gage height, 32.98 ft); minimum daily, 1.4 cfs 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, and flood of Oct. 4, 1959, reached a stage of 34 ft, from information by local residents.

REMARKS.--Records good. Records furnished by city of Lampasas show that 1,570 acre-ft of water was diverted from Sulphur Creek and 19 acre-ft of sewage effluent was returned to the creek above station. At end of year, flow from 74.8 sq mi above this station was partly controlled by nine floodwater-retarding structures with a total combined capacity of 26,090 acre-ft below the flood-spillway crests, of which 24,700 acre-ft is floodwater-retarding capacity and 1,390 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. All of these structures were built during the period February 1959 to June 1961. Many small diversions above station for irrigation and municipal supply, amount unknown. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WRD Texas 1969: 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	103	72	223	154	103	44	56	61	13	10	15
2	23	100	82	382	154	96	44	59	55	16	9.1	13
3	21	92	317	248	141	90	41	44	50	15	10	13
4	84	87	178	253	125	89	42	38	47	271	15	13
5	156	79	160	226	123	88	45	36	44	308	15	13
6	82	79	354	200	128	87	44	90	40	63	12	15
7	61	79	253	208	132	88	45	1,330	37	45	11	14
8	52	74	208	204	120	82	43	264	36	50	12	12
9	48	74	482	200	117	80	41	104	35	40	11	17
10	42	74	2,340	200	117	77	41	79	36	32	12	7.0
11	42	74	603	189	117	77	42	85	48	26	13	9.8
12	40	74	437	175	133	77	40	4,970	44	22	16	10
13	42	74	359	175	147	77	38	1,740	36	18	15	9.6
14	40	72	350	160	131	77	39	439	36	30	14	9.3
15	46	72	432	146	126	76	39	324	56	36	17	8.8
16	48	69	308	143	122	73	38	255	65	25	18	9.5
17	44	69	271	149	119	71	36	351	46	19	14	9.3
18	42	89	244	160	114	62	35	230	52	17	13	10
19	3,310	100	235	163	111	60	36	170	54	17	14	10
20	1,050	77	235	160	106	60	36	142	38	16	12	9.7
21	373	69	215	153	109	58	42	123	33	15	12	9.7
22	239	67	197	149	109	56	41	109	28	14	12	10
23	197	143	189	149	109	56	38	100	25	13	25	13
24	193	167	189	143	110	55	36	94	21	14	66	13
25	149	106	189	133	111	54	31	89	19	14	39	13
26	133	92	189	126	107	52	26	77	19	11	26	12
27	156	84	186	130	103	53	138	69	17	9.6	21	11
28	215	79	182	149	103	51	258	64	15	9.6	17	11
29	140	77	167	193	103	47	359	59	15	9.6	14	11
30	120	74	178	214	------	46	94	57	16	9.6	13	14
31	114	------	163	177	------	44	------	60	------	10	15	------
TOTAL	7,326	2,569	9,964	5,680	3,501	2,162	1,872	11,707	1,124	1,208.4	523.1	345.7
MEAN	236	85.6	321	183	121	69.7	62.4	378	37.5	39.0	16.9	11.5
MAX	3,310	167	2,340	382	154	103	359	4,970	65	308	66	17
MIN	21	67	72	126	103	44	26	36	15	9.6	9.1	7.0
AC-FT	14,530	5,100	19,760	11,270	6,940	4,290	3,710	23,220	2,230	2,400	1,040	686

CAL YR 1971 TOTAL 35,389.1 MEAN 97.0 MAX 3,310 MIN 1.4 AC-FT 70,190
WTR YR 1972 TOTAL 47,982.2 MEAN 131 MAX 4,970 MIN 7.0 AC-FT 95,170

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	1830	11.96	9,490	5- 7	1130	9.10	4,790
12-10	0430	9.60	5,490	5-12	0715	17.53	21,900

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 above confluence with North Fork Rocky Creek, and 7 miles west of Briggs.

DRAINAGE AREA.--34.2 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 955.8 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 9.57 cfs (3.80 inches per year, 6,930 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,020 cfs June 14 (gage height, 8.42 ft); no flow for many days.
Period of record: Maximum discharge, 11,900 cfs May 16, 1965 (gage height, 13.82 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurement of 3,580 cfs and area-velocity study; no flow for many days each year.
Maximum stage since at least 1904, 18 ft in September 1921, from information by local residents.

REMARKS.--Records good. Three recording rain gages located in watershed, one at station and two above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.40	1.0	.43	0	103	3.5	.70	0	
2			0	.43	1.1	.41	0	26	3.1	.50	0	
3			0	.63	.87	.37	0	2.5	2.8	.37	0	
4			0	.77	.86	.36	0	1.3	2.5	1.1	0	
5			0	.55	.86	.32	0	1.0	2.2	3.2	0	
6			.34	.50	.84	.32	0	37	2.1	1.7	0	
7			.72	.49	.71	.32	0	28	1.9	1.1	0	
8			.60	.49	.70	.30	0	13	1.7	.82	0	
9			.92	.49	.70	.27	0	7.8	1.6	.64	0	
10			1.6	.49	.70	.27	0	11	1.7	.47	0	
11			1.1	.49	.70	.27	0	14	1.9	.39	.73	
12			.85	.49	.70	.27	0	49	1.9	.29	.60	
13			.70	.49	.70	.27	0	20	1.7	.98	.21	
14			.67	.49	.70	.27	0	19	199	14	0	
15			.44	.49	.70	.26	0	15	8.0	1.8	.28	
16			.43	.49	.70	.21	0	17	5.3	.81	2.7	
17			.43	.59	.68	.18	0	23	17	.52	.33	
18			.43	.80	.62	.17	0	14	22	.42	.01	
19			.43	.78	.62	.15	0	11	7.5	.38	0	
20			.43	.68	.62	.38	0	10	5.0	.35	0	
21			.38	.55	.62	.40	0	9.1	4.2	.14	0	
22			.37	.55	.62	.27	0	8.0	3.4	.03	0	
23			.37	.55	.62	.24	0	7.5	2.9	0	0	
24			.37	.53	.57	.18	0	9.7	2.4	0	0	
25			.37	.43	.55	.12	0	7.0	2.1	0	0	
26			.37	.43	.48	.10	0	5.6	1.6	0	0	
27			.37	.47	.43	.08	0	4.9	1.4	0	0	
28			.37	.49	.43	.05	3.0	4.3	1.2	0	0	
29			.37	.82	.43	0	15	3.9	1.0	0	0	
30			.37	.95	------	0	1.9	3.8	.80	0	0	
31		------	.37	.76	------	0	------	3.7	------	0	0	------
TOTAL	0	0	14.17	17.56	19.83	7.24	19.9	490.1	313.40	30.71	4.86	0
MEAN	0	0	.46	.57	.68	.23	.66	15.8	10.4	.99	.16	0
MAX	0	0	1.6	.95	1.1	.43	15	103	199	14	2.7	0
MIN	0	0	0	.40	.43	0	0	1.0	.80	0	0	0
CFSM	0	0	.01	.02	.02	.007	.02	.46	.30	.03	.005	0
IN.	0	0	.02	.02	.02	.007	.02	.53	.34	.03	.005	0
AC-FT	0	0	28	35	39	14	39	972	622	61	9.6	0

CAL YR 1971 TOTAL 161.66 MEAN .44 MAX 57 MIN 0 CFSM .01 IN .18 AC-FT 321
WTR YR 1972 TOTAL 917.77 MEAN 2.51 MAX 199 MIN 0 CFSM .07 IN 1.00 AC-FT 1,820

PEAK DISCHARGE (BASE, 1,000 CFS).--May 1 (2200) 2,700 cfs (8.03 ft); June 14 (0045) 3,020 cfs (8.42 ft).

08104000 Lampasas River at Youngsport, Tex.

LOCATION.--Lat 30°57'26", long 97°42'30", Bell County, on left bank 600 ft downstream from county road low-water crossing, 2,000 ft downstream from bridge on county road, 0.7 mile east of Youngsport, 4.5 miles downstream from Rocky Creek, and at mile 40.8.

DRAINAGE AREA.--1,244 sq mi.

PERIOD OF RECORD.--February 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 630.88 ft 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 upstream at datum 2.58 ft higher.

AVERAGE DISCHARGE.--48 years, 279 cfs (202,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,100 cfs May 12 (gage height, 15.04 ft); minimum, 5.4 cfs Sept. 16.
Period of record: Maximum discharge, 87,900 cfs May 17, 1965 (gage height, 37.7 ft, from floodmarks), from rating curve extended above 40,000 cfs on basis of maximum discharge of May 13, 1957, measured at highway bridge 22 miles downstream; no flow at times in 1925, 1934, 1950-52, 1954, 1956, 1963-67, 1971.
Maximum stage since at least 1873, 45.2 ft Sept. 8, 1873, from information by local residents at time the former gage was established 1,000 ft upstream, adjusted to present site and datum.

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Lampasas River near Kempner (station 08103800).

REVISIONS (WATER YEARS).--WSP 788: 1926, 1928, 1931. WSP 1632: 1957. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	124	88	213	191	98	41	122	90	27	13	13
2	26	116	104	331	179	97	39	802	86	23	9.6	12
3	24	109	155	342	174	94	38	160	79	20	9.4	12
4	27	103	284	286	157	92	36	73	73	168	14	12
5	75	95	201	279	143	87	34	53	68	637	15	12
6	128	91	276	241	143	85	34	85	63	177	13	11
7	78	89	308	228	144	86	32	1,170	58	78	12	11
8	60	87	281	229	144	83	30	930	53	55	11	10
9	54	86	360	223	136	85	28	272	51	53	9.2	9.7
10	45	85	1,860	226	133	83	27	180	51	45	8.8	8.7
11	41	85	866	220	136	83	26	194	52	38	9.6	9.0
12	39	85	544	206	138	81	26	4,050	58	32	9.7	11
13	38	83	463	194	152	83	25	1,680	56	28	10	7.8
14	35	82	425	187	158	83	25	649	375	26	11	6.2
15	34	83	448	172	144	82	24	439	125	45	14	5.8
16	34	83	428	163	135	80	23	347	272	43	51	6.1
17	42	99	351	160	128	75	23	399	347	31	18	9.6
18	108	275	322	169	123	74	23	379	190	25	18	6.9
19	541	128	308	175	119	68	23	274	97	22	12	6.7
20	2,800	122	299	176	114	68	23	227	83	19	10	7.0
21	501	98	284	167	111	72	22	206	63	17	9.2	6.8
22	299	89	260	161	113	66	22	182	57	15	13	7.0
23	233	85	244	155	114	62	25	165	50	15	535	7.7
24	209	174	240	154	110	60	23	154	42	14	120	14
25	191	165	240	148	109	57	21	152	38	14	45	16
26	166	123	237	139	106	57	20	134	38	12	40	14
27	167	109	237	137	102	56	23	116	32	12	27	11
28	200	101	231	146	96	54	150	105	30	12	21	10
29	194	94	225	178	95	51	637	97	27	12	19	9.6
30	151	91	222	234	------	48	264	94	24	36	16	8.5
31	136	------	221	218	------	45	------	90	------	23	14	------
TOTAL	6,705	3,239	11,012	6,257	3,847	2,295	1,787	13,980	2,728	1,774	1,137.5	292.1
MEAN	216	108	355	202	133	74.0	59.6	451	90.9	57.2	36.7	9.74
MAX	2,800	275	1,860	342	191	98	637	4,050	375	637	535	16
MIN	24	82	88	137	95	45	20	53	24	12	8.8	5.8
AC-FT	13,300	6,420	21,840	12,410	7,630	4,550	3,540	27,730	5,410	3,520	2,260	579

CAL YR 1971 TOTAL 38,138.13 MEAN 104 MAX 2,800 MIN 0 AC-FT 75,650
WTR YR 1972 TOTAL 55,053.60 MEAN 150 MAX 4,050 MIN 5.8 AC-FT 109,200

PEAK DISCHARGE (BASE, 5,800 CFS).--Oct. 20 (0200) 7,890 cfs (10.69 ft); May 12 (1545) 14,100 cfs (15.04 ft).

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 southwest of Belton, and at mile 16.

DRAINAGE AREA.--1,318 sq mi.

PERIOD OF RECORD.--September 1966 to current year. Prior to October 1970, published as Stillhouse Hollow Reservoir.

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

EXTREMES.--Current year: Maximum contents, 255,200 acre-ft May 14 (elevation, 624.95 ft); minimum, 226,700 acre-ft Oct. 2 (elevation, 620.58 ft).
Period of record: Maximum contents, 329,100 acre-ft Mar. 25, 1970 (elevation, 635.01 ft); minimum since conservation storage was reached in Apr. 12, 1969, 196,600 acre-ft July 23, 1971 (elevation, 615.55 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 15,624 ft long, including a 1,650-foot spillway and a 5,894-foot dike. Lake operated as a temporary detention basin from Sept. 2, 1966, to Feb. 19, 1968. Deliberate impoundment began Feb. 19, 1968. Lake built for flood control and water conservation. Outlet works consist of one 12-foot-diameter conduit controlled by two 5-foot 8-inch by 12-foot hydraulically operated slide gates, with invert at elevation 515.0 ft. Emergency spillway is an uncontrolled broad-crested weir 1,650 ft long at crest elevation of 666.0 ft. Capacity table based on maps prepared by Brazos River Authority in 1927, supplemented by contour maps prepared by Corps of Engineers in 1958. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08103800. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	698.0	-
Maximum design water surface	693.2	1,013,300
Top of flood-control storage (spillway crest)	666.0	630,400
Top of conservation storage	622.0	235,700
Invert at lowest outlet	515.0	775
Streambed	498.0	-

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

620.0	223,100	623.0	242,200
621.0	229,300	624.0	248,800
622.0	235,700	625.0	255,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226,800	242,200	236,000	235,600	237,700	236,500	235,100	238,100	235,700	235,300	235,600	235,000
2	226,700	241,900	236,500	235,600	237,500	236,400	235,100	240,000	235,800	235,000	235,600	234,900
3	227,000	241,300	236,300	235,900	237,000	236,400	235,100	240,400	235,800	234,900	236,000	234,800
4	227,100	241,000	236,500	235,600	236,500	236,400	235,100	240,600	235,900	236,000	236,300	234,900
5	227,200	240,500	237,100	235,400	236,300	236,400	235,200	240,400	236,000	237,100	236,200	234,900
6	227,300	240,000	237,500	235,600	236,000	236,500	235,300	240,600	236,000	237,500	236,000	234,700
7	227,400	239,500	237,900	235,900	235,700	236,500	235,200	242,700	236,000	237,600	236,000	234,700
8	227,600	239,100	238,400	236,500	235,900	236,500	235,200	244,700	236,000	237,600	235,800	234,600
9	227,700	238,800	239,600	236,900	236,000	236,500	235,200	244,600	236,000	237,600	235,700	234,500
10	227,600	238,300	243,300	237,500	236,200	236,500	235,300	244,400	236,100	237,700	236,000	234,700
11	227,600	237,900	245,000	237,900	236,300	236,600	235,300	244,600	236,200	237,600	236,000	234,600
12	227,600	237,600	245,900	238,200	236,400	236,700	235,400	252,100	236,200	237,600	236,000	234,500
13	227,600	237,300	246,600	238,100	236,600	236,800	235,400	254,800	236,300	237,500	235,900	234,400
14	227,500	236,800	247,600	238,000	236,900	236,900	235,400	254,800	236,300	237,300	235,800	234,300
15	227,600	236,600	247,800	237,800	236,900	236,900	235,400	253,900	237,500	237,200	235,800	234,200
16	227,500	236,500	247,500	237,800	236,700	236,900	235,300	252,200	238,000	237,000	235,800	234,500
17	227,800	237,600	246,800	237,800	236,500	236,900	235,200	250,500	238,900	236,700	235,700	234,500
18	230,000	238,000	246,100	237,900	236,300	236,700	235,300	248,100	239,400	236,600	235,600	234,400
19	232,800	237,800	245,500	238,000	236,000	236,700	235,200	246,100	239,200	236,600	235,600	234,200
20	238,800	237,800	244,800	238,000	235,900	237,000	235,100	244,000	238,300	236,600	235,400	234,100
21	239,800	237,200	244,000	237,900	235,800	237,100	235,200	241,800	237,700	236,500	235,400	234,000
22	240,400	237,100	243,200	237,900	235,800	236,900	235,100	239,500	237,400	236,500	235,400	233,900
23	240,800	236,900	242,500	237,900	236,000	236,600	235,200	238,000	237,100	236,500	236,900	234,000
24	241,200	236,900	241,600	237,800	236,100	236,300	235,100	236,900	236,800	236,400	237,000	234,400
25	241,500	237,000	240,900	237,600	236,200	235,900	234,700	236,200	236,500	236,400	236,700	234,400
26	241,900	236,900	240,200	237,500	236,300	235,700	234,500	235,700	236,200	236,200	236,300	234,400
27	242,400	236,800	239,500	237,400	236,300	235,500	234,900	235,500	236,000	236,100	235,900	234,300
28	242,700	236,600	238,600	237,300	236,400	235,300	235,300	235,600	235,800	236,000	235,600	234,200
29	242,800	236,500	237,800	237,400	236,500	235,200	236,700	235,600	235,500	236,000	235,400	234,100
30	242,700	236,300	237,000	237,500	------	235,100	237,300	235,700	235,400	236,000	235,300	233,800
31	242,500	------	236,100	237,600	------	235,100	------	235,700	------	235,800	235,200	------
(†)	623.04	622.09	622.06	622.29	622.12	621.91	622.24	622.00	621.96	622.02	621.92	621.70
(‡)	+15,700	-6,200	-200	+1,500	-1,100	-1,400	+2,200	-1,600	-300	+400	-600	-1,400
MAX	242,800	242,200	247,800	238,200	237,700	237,100	237,300	254,800	239,400	237,700	237,000	235,000
MIN	226,700	236,300	236,000	235,400	235,700	235,100	234,500	235,500	235,400	234,900	235,200	233,800

CAL YR 1971..... ‡ -1,000 MAX 247,800 MIN 196,600
WTR YR 1972..... ‡ +7,000 MAX 254,800 MIN 226,700

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

08104100 Lampasas River near Belton, Tex.

LOCATION.--Lat 31°00'06", long 97°29'32", Bell County, on left bank 22 ft upstream from upstream bridge of three bridges on Interstate Highway 35 and U.S. Highway 81, 3.5 miles downstream from Stillhouse Hollow Dam, 4.1 miles southwest of Belton, and at mile 12.7.

DRAINAGE AREA.--1,325 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 476.58 ft above mean sea level, adjustment unknown (Texas Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 254 cfs (184,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,500 cfs May 15 (gage height, 10.01 ft); minimum daily, 3.0 cfs Apr. 30, May 1.
Period of record: Maximum discharge, 77,900 cfs May 17, 1965 (gage height, 43.58 ft); no flow Aug. 9, 10, 12-15, Sept. 5, 6, 1967.
Maximum stage since at least 1877, 45 ft September 1921, from information by local residents. Flood of May 1957 reached a stage of 44.4 ft (discharge, 83,500 cfs).

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply. Since Sept. 2, 1966, flow regulated by Stillhouse Hollow Lake (see preceding page).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	303	154	628	224	63	7.6	3.0	6.9	5.2	3.6	5.7
2	4.4	303	158	416	308	64	7.5	4.1	7.0	4.9	3.6	5.7
3	4.6	302	154	419	464	63	7.2	3.2	7.0	4.8	3.8	5.5
4	5.7	300	154	416	464	63	7.4	3.2	6.8	6.3	5.5	5.2
5	4.7	300	157	330	461	63	6.8	80	6.6	5.1	4.1	5.4
6	4.7	300	155	200	461	63	6.8	164	6.6	4.6	3.8	4.8
7	4.7	300	155	100	238	64	6.5	162	6.6	4.7	3.8	4.4
8	4.5	302	155	6.5	36	66	6.4	162	6.6	4.4	4.0	4.1
9	4.4	301	160	6.2	83	66	6.2	268	6.6	4.4	3.9	4.1
10	4.6	300	166	6.2	84	64	6.2	375	7.1	4.4	10	4.0
11	4.4	300	160	6.2	84	64	5.9	86	6.7	21	4.9	4.1
12	4.4	300	160	112	84	64	5.6	67	6.3	63	4.3	3.8
13	4.4	300	160	206	86	64	5.6	530	6.3	62	4.2	4.0
14	4.6	300	162	204	89	64	5.6	936	7.6	62	4.3	4.1
15	4.9	244	405	202	118	66	5.5	1,250	16	62	4.3	4.3
16	5.2	156	841	204	200	66	5.0	1,490	7.3	62	4.4	4.4
17	6.0	161	837	204	202	66	5.0	1,490	8.3	62	4.5	4.6
18	14	181	831	206	202	66	5.0	1,490	7.2	49	4.7	4.1
19	15	158	828	208	202	66	4.6	1,480	216	5.0	4.7	4.1
20	13	158	833	210	204	66	4.4	1,480	609	4.5	4.7	4.1
21	4.8	158	836	210	204	64	4.5	1,480	404	4.7	4.8	4.1
22	4.6	158	838	210	145	140	4.1	1,470	220	4.4	5.1	4.6
23	4.4	158	840	212	57	208	4.2	1,230	169	4.1	5.3	5.0
24	4.4	158	844	214	57	204	16	735	121	4.0	52	6.0
25	4.4	158	844	214	59	200	64	628	121	4.0	228	4.8
26	4.8	158	848	216	62	200	73	384	121	4.0	228	4.4
27	5.8	158	848	216	60	144	49	216	80	4.0	228	4.1
28	5.4	158	848	220	60	49	3.2	90	41	3.9	178	4.1
29	129	158	852	220	63	39	14	7.1	24	4.4	5.2	4.1
30	303	154	856	220	------	8.9	3.0	7.0	5.3	4.3	4.1	4.1
31	303	------	856	222	------	7.9	------	6.9	------	3.8	4.4	------
TOTAL	895.9	6,845	16,095	6,664.1	5,061	2,555.8	355.8	17,777.5	2,264.8	546.9	1,034.0	135.8
MEAN	28.9	228	519	215	175	82.4	11.9	573	75.5	17.6	33.4	4.53
MAX	303	303	856	628	464	208	73	1,490	609	63	228	6.0
MIN	4.1	154	154	6.2	36	7.9	3.0	3.0	5.3	3.8	3.6	3.8
AC-FT	1,780	13,580	31,920	13,220	10,040	5,070	706	35,260	4,490	1,080	2,050	269

CAL YR 1971 TOTAL 45,536.9 MEAN 125 MAX 856 MIN 2.0 AC-FT 90,320
WTR YR 1972 TOTAL 60,231.6 MEAN 165 MAX 1,490 MIN 3.0 AC-FT 119,500

08104500 Little River near Little River, Tex.

LOCATION.--Lat 30°57'59", long 97°20'45", Bell County, on right bank 25 ft downstream from State Highway 95, 2.4 miles southeast of Little River, 5 miles downstream from confluence of Leon and Lampasas Rivers, and at mile 95.8.

DRAINAGE AREA.--5,274 sq mi.

PERIOD OF RECORD.--October 1923 to May 1929, August 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.11 ft above mean sea level. Oct. 5, 1923, to May 27, 1929, nonrecording gage on railroad bridge 0.5 mile upstream at same datum.

AVERAGE DISCHARGE.--5 years (1923-28) unregulated, 709 cfs (513,700 acre-ft per year); 10 years (1962-72) regulated, 917 cfs (664,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,120 cfs Oct. 23 (gage height, 11.91 ft); minimum daily, 29 cfs Sept. 16, 20-22.
Period of record: Maximum discharge, 79,600 cfs May 17, 1965 (gage height, 42.85 ft); minimum daily, 8.2 cfs Aug. 6, 19, 1963.
Maximum stage since at least 1900, 46.8 ft in September 1921, from information by local residents.

REMARKS.--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. At end of year, flow from 47.4 sq mi above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 16,850 acre-ft below the flood-spillway crests, of which 15,430 acre-ft is floodwater-retarding capacity and 1,420 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,360 acre-ft, of which 225 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	1,190	440	1,220	353	158	95	102	81	62	42	40
2	55	742	501	974	364	151	94	613	63	53	38	41
3	52	731	631	1,190	486	148	100	209	59	36	43	41
4	122	725	680	2,320	483	149	104	119	56	62	67	39
5	91	730	754	2,330	482	145	105	105	51	370	96	46
6	67	733	789	2,020	494	284	105	352	39	108	56	42
7	59	727	782	1,700	476	551	101	562	45	75	49	42
8	58	725	377	783	207	548	80	608	38	66	45	38
9	61	727	446	720	207	547	71	975	46	60	46	35
10	59	724	1,020	714	232	514	76	1,500	54	60	67	33
11	55	699	497	832	232	350	80	1,110	67	55	93	35
12	54	524	728	1,100	233	351	76	1,270	67	90	57	46
13	56	520	1,520	1,370	227	311	74	372	51	132	52	37
14	55	520	1,510	1,270	223	166	74	875	163	142	50	35
15	55	516	1,530	893	224	158	76	1,000	332	128	47	33
16	55	414	2,050	860	386	156	78	1,500	780	131	72	29
17	59	425	2,060	744	321	153	80	1,830	342	134	63	40
18	76	1,150	2,040	566	296	151	88	2,010	320	128	47	39
19	912	526	2,050	564	295	150	94	1,910	158	96	46	32
20	756	474	1,840	560	294	155	96	1,630	503	65	43	29
21	202	460	1,300	555	295	187	100	1,620	484	62	40	29
22	588	454	1,290	553	285	171	111	1,620	270	77	39	29
23	2,900	482	1,290	549	167	292	99	1,490	262	67	92	35
24	2,350	459	1,290	547	161	292	97	942	198	60	170	67
25	2,330	452	1,290	542	159	290	492	599	190	51	193	87
26	2,300	453	1,290	541	151	289	268	506	186	43	231	48
27	2,380	448	1,290	545	152	289	289	287	174	44	215	61
28	2,340	447	1,300	525	154	168	173	256	117	43	219	49
29	2,190	443	1,300	388	158	149	420	109	106	42	111	43
30	1,250	442	1,310	458	------	121	149	94	71	51	48	40
31	1,240	------	1,310	372	------	101	------	95	------	48	44	------
TOTAL	22,881	18,062	36,505	28,305	8,197	7,645	3,945	26,270	5,373	2,641	2,521	1,240
MEAN	738	602	1,178	913	283	247	132	847	179	85.2	81.3	41.3
MAX	2,900	1,190	2,060	2,330	494	551	492	2,010	780	370	231	87
MIN	52	414	377	372	151	101	71	94	38	36	38	29
AC-FT	45,380	35,830	72,410	56,140	16,260	15,160	7,820	52,110	10,660	5,240	5,000	2,460

CAL YR 1971 TOTAL 166,532 MEAN 456 MAX 2,900 MIN 52 AC-FT 330,300
WTR YR 1972 TOTAL 163,585 MEAN 447 MAX 2,900 MIN 29 AC-FT 324,500

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 upstream from Middle Fork San Gabriel River, 2.7 miles upstream from Interstate Highway 35, 2.7 miles northwest of Georgetown, and at mile 3.3.

DRAINAGE AREA.--249 sq mi.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 689.06 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,560 cfs Oct. 20 (gage height, 8.83 ft); minimum, 0.09 cfs Sept. 14, 15, 21, 22.
Period of record: Maximum discharge, 11,700 cfs Apr. 12, 1969 (gage height, 14.84 ft); no flow July 23-25, 1971.
Maximum stage since at least 1875, 39.5 ft in September 1921. Flood in April 1957 reached a stage of 34.5 ft, from information by local residents.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	17	15	33	25	14	7.0	6.5	3.7	5.5	3.4	.68
2	.76	16	22	33	24	13	7.0	98	3.4	4.7	3.3	.80
3	1.1	15	50	33	22	13	6.5	26	3.4	4.3	3.8	.68
4	3.9	14	31	33	20	13	6.5	12	3.1	7.1	14	.56
5	1.9	13	34	32	19	13	6.5	8.1	2.9	151	4.7	.80
6	1.3	13	41	29	19	11	6.5	23	2.6	29	3.4	2.7
7	1.1	12	57	29	20	11	6.5	63	2.2	15	3.0	1.3
8	1.0	12	43	29	19	11	5.4	24	1.9	11	2.7	.56
9	1.3	12	88	27	19	11	5.0	16	1.9	9.1	2.4	.24
10	1.3	12	133	27	18	11	5.0	14	1.9	7.5	1.9	.24
11	.96	12	79	26	19	11	5.0	14	2.5	6.6	2.0	.17
12	.96	12	65	26	20	11	4.7	45	2.9	8.5	2.4	.17
13	.70	12	57	25	20	11	4.3	52	3.8	6.5	1.8	.12
14	.68	12	56	25	19	11	4.3	24	3.2	35	1.6	.12
15	.73	11	54	23	19	11	3.7	17	346	32	1.2	.56
16	.80	11	47	22	18	10	3.2	14	164	14	.94	.68
17	.87	14	45	22	17	9.5	2.9	14	83	8.9	.80	.68
18	1.0	226	44	23	16	9.0	2.7	15	96	6.8	3.6	.17
19	74	45	44	23	15	9.5	2.7	12	41	5.4	4.2	.17
20	620	27	43	23	15	11	2.4	10	26	4.9	2.4	.12
21	64	23	39	22	15	13	2.9	9.6	20	6.2	1.5	.12
22	36	22	36	21	15	13	2.7	8.1	16	7.7	1.1	.12
23	30	23	35	21	15	11	2.4	7.9	14	5.9	.97	.34
24	25	21	34	20	15	10	1.7	7.5	12	4.2	20	4.3
25	23	20	34	20	15	9.5	1.5	7.5	11	3.3	6.9	1.9
26	22	20	34	19	14	8.5	1.3	7.3	9.9	2.9	4.0	4.6
27	24	18	34	19	14	8.0	4.0	6.4	9.1	2.4	2.7	3.6
28	32	16	34	19	14	8.0	5.4	5.6	7.9	1.9	1.7	1.8
29	23	16	34	22	14	7.5	4.0	5.0	7.3	1.8	1.3	1.3
30	21	15	35	28	------	7.0	5.7	4.4	6.4	2.6	1.1	1.2
31	19	------	34	28	------	7.0	------	3.9	------	1.7	.96	------
TOTAL	1,034.30	712	1,431	782	514	327.5	129.4	580.8	909.0	413.4	105.77	30.80
MEAN	33.4	23.7	46.2	25.2	17.7	10.6	4.31	18.7	30.3	13.3	3.41	1.03
MAX	620	226	133	33	25	14	7.0	98	346	151	20	4.6
MIN	.68	11	15	19	14	7.0	1.3	3.9	1.9	1.7	.80	.12
AC-FT	2,050	1,410	2,840	1,550	1,020	650	257	1,150	1,800	820	210	61

CAL YR 1971 TOTAL 5,435.50 MEAN 14.9 MAX 1,430 MIN 0 AC-FT 10,780
WTR YR 1972 TOTAL 6,969.97 MEAN 19.0 MAX 620 MIN .12 AC-FT 13,820

PEAK DISCHARGE (BASE, 3,000 CFS).--Oct. 20 (0500) 3,560 cfs (8.83 ft).

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 southwest of the courthouse at Georgetown, and at mile 2.2.

DRAINAGE AREA.--127 sq mi

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 above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,600 cfs May 2 (gage height, 8.38 ft); minimum, 0.06 cfs Aug. 2, 3.
Period of record: Maximum discharge, 17,400 cfs June 2, 1968 (gage height, 15.15 ft); no flow July 3-25, 1971.
Maximum stage since at least 1887, about 41 ft on April 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	2.9	2.7	12	10	6.6	3.1	3.7	5.7	1.8	.20	.38
2	.25	2.5	8.6	11	9.3	6.0	2.9	462	5.5	1.3	.10	.38
3	.46	1.9	11	11	8.6	6.0	2.9	31	5.0	1.2	.13	.31
4	1.8	1.6	11	12	8.2	5.7	2.7	13	5.0	2.5	17	.31
5	2.1	1.6	28	11	7.5	5.7	2.3	8.2	4.5	12	2.1	3.1
6	1.3	1.6	19	10	8.2	5.7	2.5	27	4.0	11	.74	4.7
7	.85	1.6	17	9.7	7.9	5.5	2.5	48	3.7	6.3	.46	1.2
8	.55	1.5	18	9.7	7.9	5.0	1.9	24	3.5	4.5	.38	.64
9	.55	1.6	22	11	7.5	5.0	1.8	15	3.3	3.5	.31	.46
10	.46	1.8	32	11	7.2	5.0	1.8	15	3.5	2.9	.38	.38
11	.31	1.8	31	11	8.6	5.2	2.1	22	4.7	2.9	.31	.38
12	.31	1.9	22	10	9.3	5.5	2.1	21	5.2	4.7	.38	.31
13	.31	2.3	19	9.7	8.6	5.5	1.8	18	4.0	3.5	.46	.25
14	.31	2.1	18	9.3	8.2	5.5	1.5	22	3.7	2.7	.38	.25
15	.31	2.1	17	8.6	7.9	5.5	1.5	16	46	2.1	.25	.20
16	.31	2.5	15	8.2	7.5	5.2	1.2	16	37	1.9	.25	.20
17	.31	8.9	14	8.2	7.2	4.7	1.1	21	85	1.5	.46	.20
18	.25	68	13	8.6	6.9	4.5	.85	20	91	1.5	30	.20
19	14	18	13	8.9	6.6	4.2	.85	14	16	1.3	8.2	.20
20	340	8.2	13	9.3	6.9	6.6	.85	13	11	1.2	4.0	.16
21	30	5.5	13	8.6	6.9	6.6	.85	12	7.9	2.1	1.5	.16
22	12	5.0	12	8.6	6.9	8.6	.74	11	6.6	3.3	.74	.16
23	7.9	9.3	12	8.2	7.2	7.5	.74	11	5.7	1.6	.74	.16
24	5.2	5.5	12	7.9	7.2	6.3	.55	11	5.2	1.2	43	3.7
25	3.1	4.5	12	7.5	7.2	5.2	.38	9.7	4.7	.85	6.9	2.9
26	2.3	4.2	11	7.5	6.9	4.7	.31	9.3	4.0	.64	2.9	3.3
27	5.0	3.5	11	7.5	6.6	4.7	1.5	8.9	3.3	.38	1.6	7.5
28	4.5	3.3	11	7.2	6.6	4.2	6.9	7.5	2.9	.25	.97	2.1
29	4.7	2.9	11	10	6.6	3.7	6.6	7.2	2.7	.16	.74	.97
30	4.2	2.7	12	12	------	3.1	4.0	6.6	2.1	.16	.55	.64
31	3.5	------	11	11	------	3.1	------	5.7	------	.16	.46	------
TOTAL	447.45	180.8	472.3	296.2	222.1	166.3	60.82	929.8	392.4	81.10	126.59	35.80
MEAN	14.4	6.03	15.2	9.55	7.66	5.36	2.03	30.0	13.1	2.62	4.08	1.19
MAX	340	68	32	12	10	8.6	6.9	462	91	12	43	7.5
MIN	.25	1.5	2.7	7.2	6.6	3.1	.31	3.7	2.1	.16	.10	.16
AC-FT	888	359	937	588	441	330	121	1,840	778	161	251	71

CAL YR 1971 TOTAL 2,877.53 MEAN 7.88 MAX 535 MIN 0 AC-FT 5,710
WTR YR 1972 TOTAL 3,411.66 MEAN 9.32 MAX 462 MIN .10 AC-FT 6,770

PEAK DISCHARGE (BASE, 2,000 CFS).--Oct. 20 (0515) 2,270 cfs (7.09 ft); May 2 (0430) 3,600 cfs (8.38 ft).

08105000 San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°39'13", long 97°39'19", Williamson County, on left bank 100 ft downstream from Missouri-Kansas-Texas Railroad Co. bridge, 1.2 miles downstream from confluence of North and South Forks, 1.8 miles northeast of Georgetown, and at mile 61.3.

DRAINAGE AREA.--399 sq mi.

PERIOD OF RECORD.--February 1924 to August 1925, July 1934 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 643.24 ft above mean sea level. Feb. 27, 1924, to Aug. 31, 1925, nonrecording gage at site 1.0 mile upstream at different datum.

AVERAGE DISCHARGE.--38 years (1934-72), 134 cfs (97,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,790 cfs Oct. 20 (gage height, 6.72 ft); minimum daily, 3.3 cfs Aug. 2.
Period of record: Maximum discharge, 155,000 cfs Apr. 24, 1957 (gage height, 31.89 ft in gage well, 34.10 ft from floodmarks), from rating curve extended above 24,000 cfs on basis of contracted-opening measurement of 155,000 cfs; no flow at times in 1954-57.
Maximum stage since at least 1852, 36.1 ft Sept. 10, 1921, present site and datum (discharge, 160,000 cfs, by slope-area measurement of peak flow); flood of Apr. 24, 1957, second highest.

REMARKS.--Records good. Small diversions have some effect on low flow which is also regulated at times by gates in recreation dam 3,000 ft upstream. Low flow partly sustained by sewage effluent from city of Georgetown, which released 470 acre-ft of treated sewage effluent into the river above gage during the year.

REVISIONS (WATER YEARS).--WSP 1312: 1935(M). WSP 1732: 1943(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	27	33	64	50	31	21	19	17	15	3.4	7.4
2	7.4	25	56	62	48	30	20	527	18	14	3.3	7.0
3	7.7	24	79	63	45	29	20	80	17	14	4.9	6.9
4	18	21	63	64	42	29	21	39	16	19	85	7.1
5	11	20	99	61	41	29	20	29	14	159	23	7.4
6	8.5	20	88	58	41	28	19	50	14	59	16	14
7	7.1	20	98	57	41	28	20	147	16	37	13	13
8	6.7	19	88	57	40	27	19	64	14	28	11	8.3
9	7.2	19	134	57	39	27	18	46	15	24	9.3	7.3
10	6.6	19	211	57	39	27	19	48	15	21	11	6.2
11	6.4	19	152	57	43	27	18	52	13	18	12	6.2
12	5.9	18	117	54	44	27	19	67	12	21	12	5.9
13	6.0	18	103	52	42	27	18	94	13	24	12	5.8
14	6.1	17	99	50	41	26	16	63	15	34	11	5.6
15	6.3	17	95	48	40	25	15	48	360	55	9.5	5.8
16	5.9	17	85	47	39	25	13	48	254	31	7.8	8.0
17	6.0	40	82	46	38	24	12	51	130	21	6.7	9.8
18	6.7	333	78	47	37	23	11	50	272	16	39	8.4
19	74	91	76	48	37	23	11	43	77	15	25	7.1
20	1,020	53	75	47	36	36	10	39	55	16	16	6.0
21	117	45	71	47	36	32	11	36	44	15	11	6.1
22	59	45	68	46	35	33	11	33	37	21	8.2	7.5
23	46	53	66	44	35	32	9.7	32	32	23	10	7.9
24	39	44	66	43	35	29	9.1	19	29	17	70	18
25	34	41	65	42	34	27	8.0	23	27	13	29	19
26	31	39	64	41	34	25	7.3	28	24	9.6	18	17
27	37	37	64	41	33	25	18	27	22	7.3	14	31
28	46	36	63	41	32	25	24	26	20	5.9	11	17
29	36	35	64	50	32	24	24	22	18	5.2	11	12
30	32	34	66	55	------	24	19	19	17	4.7	8.9	13
31	29	------	65	54	------	23	------	18	------	4.3	7.8	------
TOTAL	1,737.7	1,246	2,633	1,600	1,129	847	481.1	1,887	1,627	767.0	529.8	301.7
MEAN	56.1	41.5	84.9	51.6	38.9	27.3	16.0	60.9	54.2	24.7	17.1	10.1
MAX	1,020	333	211	64	50	36	24	527	360	159	85	31
MIN	5.9	17	33	41	32	23	7.3	18	12	4.3	3.3	5.6
AC-FT	3,450	2,470	5,220	3,170	2,240	1,680	954	3,740	3,230	1,520	1,050	598

CAL YR 1971 TOTAL 12,237.9 MEAN 33.5 MAX 1,830 MIN 2.5 AC-FT 24,270
WTR YR 1972 TOTAL 14,786.3 MEAN 40.4 MAX 1,020 MIN 3.3 AC-FT 29,330

PEAK DISCHARGE (BASE, 4,000 CFS).--Oct. 20 (0615) 4,790 cfs (6.72 ft).

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 north of the county courthouse at Georgetown.

DRAINAGE AREA.--81.8 sq mi.

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 659.97 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 21.4 cfs (15,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,380 cfs June 16 (gage height, 9.89 ft); no flow Oct. 1-3, 6-18.
Period of record: Maximum discharge, 6,370 cfs Jan. 21, 1968 (gage height, 13.85 ft); no flow at times in 1967, 1971-72.
Maximum stages since at least 1921 occurred September 1921 (stage, 25 ft), from information from Texas Highway Department and local residents. Discharge not determined.

REMARKS.--Records good. No regulation or diversion. Recording rain gage at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.3	9.2	5.7	6.4	3.5	1.5	.57	1.4	5.8	1.8	1.6
2	0	1.3	13	5.5	6.6	3.0	1.4	25	1.4	4.8	1.7	1.5
3	0	1.1	13	5.9	6.6	3.0	1.4	12	1.3	4.1	2.3	1.5
4	.04	.81	12	6.2	6.6	3.0	1.3	3.9	1.2	4.3	5.6	1.5
5	.04	.69	19	6.3	6.6	2.7	1.3	3.2	1.2	5.5	1.7	1.7
6	0	.69	18	6.3	6.5	2.5	1.4	3.5	1.1	16	1.6	1.5
7	0	.63	20	6.3	6.3	2.2	1.3	3.0	1.1	13	1.6	1.5
8	0	.63	29	6.0	6.3	2.1	1.1	2.3	.96	12	1.6	1.3
9	0	.60	24	6.0	5.9	1.9	.96	2.5	.95	11	1.6	.88
10	0	.44	53	5.9	5.5	1.8	1.1	3.4	.99	9.1	1.7	.75
11	0	.30	26	6.0	5.4	1.8	.96	3.0	.86	7.5	1.8	.57
12	0	.18	10	5.8	5.3	1.8	1.1	2.3	.76	6.6	1.8	.63
13	0	.12	8.9	5.8	5.5	1.6	.96	2.0	.83	6.0	1.7	.45
14	0	.08	8.4	5.5	5.8	1.6	.88	2.0	.90	5.8	1.7	.40
15	0	.07	9.9	6.0	5.8	1.5	.88	1.8	1.0	5.0	1.6	.37
16	0	.04	10	5.8	5.3	1.4	.75	2.0	737	4.5	1.6	.34
17	0	1.0	8.4	6.4	5.3	1.4	.75	2.3	252	4.3	1.3	.36
18	0	4.3	7.5	5.4	5.3	1.4	.81	2.2	194	4.0	1.4	.19
19	1.1	.96	7.5	5.6	5.0	1.3	.81	2.1	25	3.7	1.6	.15
20	8.2	.92	7.4	5.8	5.0	1.7	.76	2.2	15	3.5	1.5	.14
21	12	1.7	7.5	5.8	5.0	1.5	.85	2.2	11	3.2	1.3	.10
22	1.6	3.1	7.2	5.8	4.5	1.4	.66	1.9	8.8	3.0	1.3	.20
23	.95	6.8	7.2	5.8	4.3	1.4	.60	1.7	8.5	2.9	1.5	.28
24	1.1	6.0	6.9	5.7	4.3	1.3	.55	1.7	8.2	2.8	1.6	2.1
25	1.2	6.4	6.9	5.5	4.1	1.4	.50	1.7	7.8	2.7	1.5	1.3
26	1.2	6.8	6.6	5.5	4.1	1.4	.49	1.6	7.5	2.4	1.5	1.0
27	1.8	7.2	6.6	5.4	3.9	1.4	1.2	1.5	6.9	2.0	1.4	.99
28	1.8	8.0	6.0	5.3	3.5	1.5	.88	1.5	6.9	1.7	1.3	.87
29	1.7	8.4	6.0	5.7	3.5	1.5	.80	1.4	7.2	1.7	1.6	.70
30	1.7	8.6	5.8	5.4	------	1.5	.66	1.4	6.9	1.6	1.6	.63
31	1.4	------	5.8	5.6	------	1.6	------	1.4	------	1.9	1.6	------
TOTAL	35.83	79.16	386.7	179.7	154.2	57.1	28.61	99.27	1,318.65	162.4	53.4	25.50
MEAN	1.16	2.64	12.5	5.80	5.32	1.84	.95	3.20	44.0	5.24	1.72	.85
MAX	12	8.6	53	6.4	6.6	3.5	1.5	25	737	16	5.6	2.1
MIN	0	.04	5.8	5.3	3.5	1.3	.49	.57	.76	1.6	1.3	.10
AC-FT	71	157	767	356	306	113	57	197	2,620	322	106	51

CAL YR 1971 TOTAL 1,529.08 MEAN 4.19 MAX 897 MIN 0 AC-FT 3,030
WTR YR 1972 TOTAL 2,580.52 MEAN 7.05 MAX 737 MIN 0 AC-FT 5,120

PEAK DISCHARGE (BASE, 1,000 CFS).--June 16 (0200) 2,380 cfs (9.89 ft).

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 west of Circleville, 3.1 miles upstream from bridge on State Highway 95, and at mile 47.4.

DRAINAGE AREA.--591 sq mi. Area at site used prior,to July 13, 1967, 602 sq mi.

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 above mean sea level. Feb. 1, 1924, to Sept. 30, 1934, water-stage recorder at site 3.1 miles downstream and at 15.35 ft lower datum.

AVERAGE DISCHARGE.--15 years (1924-34, 1967-72), 161 cfs (116,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,220 cfs June 16 (gage height, 22.85 ft); minimum daily, 5.1 cfs Sept. 13.
Period of record: Maximum discharge, 53,400 cfs May 29, 1929 (gage height, 34.20 ft, 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 (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, from information by local residents.

REMARKS.--Records good except during period of no gage-height record. Recording rain gage located at station. For statement regarding regulation and diversions, see San Gabriel River at Georgetown (station 08105000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	33	35	98	86	55	35	74	30	31	10	10
2	8.5	31	100	99	84	55	35	649	30	30	8.4	10
3	8.5	28	130	98	79	52	33	184	29	29	10	10
4	27	25	90	101	75	52	32	76	30	37	79	10
5	24	23	500	97	73	51	31	52	28	142	49	13
6	16	22	300	94	74	51	33	107	24	98	25	8.8
7	12	21	200	92	72	51	34	186	25	63	19	13
8	9.1	21	140	91	70	50	33	116	25	48	16	11
9	9.1	21	300	91	68	48	29	79	25	41	15	8.1
10	9.1	21	450	90	67	48	29	76	28	38	16	8.2
11	8.5	21	250	90	71	48	29	99	27	33	20	9.1
12	7.9	20	170	86	77	48	28	85	24	29	19	5.9
13	7.9	19	150	84	74	48	30	136	20	34	21	5.1
14	7.9	18	140	80	71	48	24	106	23	29	17	6.2
15	7.9	18	130	76	69	47	24	80	237	66	14	6.4
16	7.9	18	120	74	67	47	21	136	2,960	48	12	7.9
17	8.5	18	120	74	65	45	21	102	395	34	15	9.8
18	9.1	250	110	74	62	44	18	80	819	26	28	11
19	32	173	110	75	60	43	18	73	155	24	34	8.3
20	922	90	110	76	60	59	16	65	111	24	23	7.4
21	234	70	110	75	60	85	17	60	86	24	19	6.1
22	97	55	104	74	60	54	17	53	73	26	12	5.7
23	63	220	102	72	59	53	16	48	62	30	38	9.3
24	52	100	102	70	57	50	16	113	56	29	66	20
25	44	70	99	68	57	45	12	83	54	21	46	22
26	39	50	98	65	57	42	11	45	48	18	24	16
27	45	45	97	66	56	40	25	45	43	15	18	27
28	51	40	97	67	55	38	57	43	40	13	18	22
29	48	40	96	79	54	36	61	39	36	13	14	14
30	40	35	103	101	------	34	36	34	34	12	13	13
31	36	------	99	89	------	33	------	31	------	12	11	------
TOTAL	1,901.6	1,616	4,762	2,566	1,939	1,500	821	3,155	5,577	1,117	729.4	334.3
MEAN	61.3	53.9	154	82.8	66.9	48.4	27.4	102	186	36.0	23.5	11.1
MAX	922	250	500	101	86	85	61	649	2,960	142	79	27
MIN	7.9	18	35	65	54	33	11	31	20	12	8.4	5.1
AC-FT	3,770	3,210	9,450	5,090	3,850	2,980	1,630	6,260	11,060	2,220	1,450	663

CAL YR 1971 TOTAL 17,839.72 MEAN 48.9 MAX 1,760 MIN .25 AC-FT 35,390
WTR YR 1972 TOTAL 26,018.30 MEAN 71.1 MAX 2,960 MIN 5.1 AC-FT 51,610

PEAK DISCHARGE (BASE, 4,000 CFS).--June 16 (0845) 9,220 cfs (22.85 ft).

NOTE.--No gage-height record Nov. 18 to Dec. 21.

08105700 San Gabriel River at Laneport, Tex.

LOCATION.--Lat 30°41'40", long 97°16'43", Williamson County, on right bank 22 ft downstream from county bridge, 0.2 mile north of Laneport, 3.4 miles downstream from Willis Creek, 7.5 miles northwest of Thrall, and at mile 26.2.

DRAINAGE AREA.--729 sq mi.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 412.60 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 251 cfs (181,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,360 cfs June 16 (gage height, 23.24 ft); minimum daily, 5.0 cfs Sept. 23.
Period of record: Maximum discharge, 16,200 cfs Jan. 21, 1968 (gage height, 30.45 ft); minimum daily, 0.35 cfs July 19-26, 1971.
Maximum stages since 1910 occurred September 1921 (stage, 39.6 ft), April 1957 (stage, 34.6 ft), and October 1959 (stage, 33.8 ft), from floodmarks at present site and datum. Discharge not determined.

REMARKS.--Records good. For statement regarding regulation and diversions, see San Gabriel River at Georgetown (station 08105000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	37	42	114	104	65	35	36	40	36	16	11
2	9.2	35	167	117	102	63	36	1,030	40	34	14	10
3	9.4	32	218	135	93	61	35	310	40	30	12	10
4	33	30	112	131	86	59	33	111	40	30	42	11
5	27	29	962	116	84	60	31	72	39	70	116	11
6	20	28	345	108	86	58	32	119	37	190	36	13
7	14	27	222	106	86	58	33	201	34	140	25	10
8	12	27	164	105	83	59	32	176	34	100	20	12
9	12	27	310	106	80	56	30	103	33	60	18	11
10	11	27	716	107	79	56	28	84	54	50	18	9.4
11	10	26	347	110	82	58	28	132	53	40	22	9.7
12	9.9	26	220	104	91	60	27	105	38	40	25	9.7
13	9.4	26	180	100	92	61	26	160	35	35	23	7.6
14	9.1	26	169	95	86	61	26	131	33	40	22	5.2
15	8.7	25	170	89	83	59	24	103	36	35	19	5.1
16	8.5	25	154	86	79	57	22	126	4,050	90	16	5.8
17	9.1	76	142	86	77	55	21	224	857	70	14	8.3
18	9.8	2,730	134	89	74	54	22	96	1,350	50	17	7.0
19	11	271	129	90	72	51	20	87	361	35	31	9.4
20	648	103	128	90	72	56	20	76	164	32	27	8.6
21	345	66	122	86	71	154	20	69	115	31	21	5.7
22	117	58	115	91	71	65	20	64	92	31	18	6.3
23	72	781	112	85	71	55	20	59	77	33	13	5.0
24	58	94	111	81	69	52	20	57	67	38	191	13
25	50	61	111	79	69	47	18	173	63	35	72	20
26	44	53	111	75	68	44	15	59	57	30	35	21
27	46	50	110	76	65	43	17	55	50	25	23	16
28	47	48	109	78	65	41	61	53	45	22	19	26
29	54	45	107	86	64	38	404	51	42	20	18	21
30	44	43	117	133	------	35	77	47	39	18	14	16
31	40	------	113	111	------	34	------	42	------	17	13	------
TOTAL	1,808.1	4,932	6,269	3,065	2,304	1,775	1,233	4,211	8,015	1,507	970	334.8
MEAN	58.3	164	202	98.9	79.4	57.3	41.1	136	267	48.6	31.3	11.2
MAX	648	2,730	962	135	104	154	404	1,030	4,050	190	191	26
MIN	8.5	25	42	75	64	34	15	36	33	17	12	5.0
AC-FT	3,590	9,780	12,430	6,080	4,570	3,520	2,450	8,350	15,900	2,990	1,920	664

CAL YR 1971 TOTAL 23,753.72 MEAN 65.1 MAX 2,730 MIN .35 AC-FT 47,120
WTR YR 1972 TOTAL 36,423.90 MEAN 99.5 MAX 4,050 MIN 5.0 AC-FT 72,250

PEAK DISCHARGE (BASE, 4,000 CFS).--Nov. 18 (1030) 6,130 cfs (19.83 ft); June 16 (1730) 8,360 cfs (23.24 ft).

08106300 Brushy Creek near Rockdale, Tex.

LOCATION.--Lat 30°41'38", long 97°04'42", Milam County, on left bank 36 ft upstream from bridge on Farm Road 908, 2.8 miles upstream from mouth, and 5.3 miles northwest of Rockdale.

DRAINAGE AREA.--504 sq mi.

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 325.56 ft above mean sea level. Prior to Feb. 4, 1970, water-stage recorder at site 150 ft downstream at datum 5.00 ft higher. Feb. 5 to Sept. 3, 1970, nonrecording gage at site 150 ft downstream at present datum.

AVERAGE DISCHARGE.--5 years, 184 cfs (133,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,350 cfs Dec. 6 (gage height, 13.70 ft); maximum gage height, 16.33 ft June 18 (backwater from San Gabriel River); minimum discharge, 0.43 cfs Nov. 5, 6.
Period of record: Maximum discharge, 8,350 cfs Dec. 6, 1971 (gage height, 13.70 ft); maximum gage height, 21.09 ft Jan. 20, 1968 (present datum, from floodmark); minimum discharge, 0.04 cfs Sept. 4, 1967.
Maximum stage since at least 1903, 54.5 ft, present datum, in September 1921, from information by local residents.

REMARKS.--Records good except during periods of backwater, doubtful, or no gage-height record, which are poor. At the end of year, flow from 132 sq mi above this station was partly controlled by 43 floodwater-retarding structures with a total combined capacity of 48,000 acre-ft below the flood-spillway crests, of which 41,860 acre-ft is floodwater-retarding capacity and 6,140 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. In 1970, the channel was rectified in the vicinity of the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.89	5.7	81	112	31	9.7	9.0	10	13	2.6	1.0
2	1.1	.78	24	108	97	23	9.8	1,690	9.5	12	2.5	.95
3	1.0	.60	842	64	75	21	9.4	3,010	9.5	11	2.4	.92
4	59	.54	226	51	56	20	8.7	297	8.9	10	2.3	.77
5	129	.49	2,130	51	43	15	10	107	9.0	9.0	10	316
6	19	.65	6,990	50	39	16	7.3	84	9.4	8.0	20	185
7	4.6	.79	1,410	41	37	15	6.2	508	9.5	7.0	10	15
8	2.3	.72	405	36	36	14	6.1	275	9.5	4.4	5.0	4.2
9	1.5	.68	454	34	33	14	6.3	103	9.9	2.0	3.5	2.5
10	1.2	.66	1,260	34	28	14	6.4	63	12	2.4	3.0	2.0
11	1.1	.74	629	35	27	14	5.5	252	73	19	2.8	1.8
12	1.1	.76	184	35	35	10	4.8	347	13	59	2.6	1.7
13	.98	.71	126	29	41	10	4.5	263	9.2	13	2.4	1.6
14	.79	.73	96	25	39	10	4.1	126	21	9.0	2.2	1.5
15	.68	.70	81	22	35	10	3.1	94	15	4.9	2.1	1.4
16	.67	.69	70	19	32	10	2.7	78	1,130	3.5	2.0	1.3
17	.67	.68	55	17	29	11	2.3	64	3,500	3.0	1.9	2.1
18	.60	480	47	15	26	15	2.1	58	1,000	2.8	1.8	2.3
19	.59	1,600	41	15	23	13	2.0	56	750	2.6	1.7	1.8
20	.79	120	37	17	20	14	1.4	49	150	2.5	1.6	1.4
21	.89	43	37	19	20	14	1.4	42	100	6.8	.69	1.4
22	1.3	21	34	20	21	23	1.5	35	80	9.9	1.6	20
23	.97	48	29	19	21	30	1.5	28	60	16	3.1	16
24	.94	266	26	17	22	21	1.7	25	50	9.6	86	15
25	.77	68	25	15	22	18	1.8	22	40	5.4	9.4	62
26	.60	37	24	14	22	17	1.5	28	30	4.5	12	14
27	.65	20	24	13	21	15	1.8	27	25	4.0	3.8	8.2
28	.65	12	24	12	31	12	2.0	19	20	3.5	2.6	3.8
29	2.4	8.1	26	36	18	13	15	15	18	3.0	2.0	2.8
30	1.6	6.9	28	389	------	11	13	13	15	2.8	1.5	2.7
31	1.1	------	28	228	------	10	------	12	------	2.7	1.3	------
TOTAL	239.84	2,741.81	15,417.7	1,561	1,061	484	153.6	7,799.0	7,196.4	266.3	206.39	691.14
MEAN	7.74	91.4	497	50.4	36.6	15.6	5.12	252	240	8.59	6.66	23.0
MAX	129	1,600	6,990	389	112	31	15	3,010	3,500	59	86	316
MIN	.59	.49	5.7	12	18	10	1.4	9.0	8.9	2.0	.69	.77
AC-FT	476	5,440	30,580	3,100	2,100	960	305	15,470	14,270	528	409	1,370

CAL YR 1971 TOTAL 24,737.99 MEAN 67.8 MAX 6,990 MIN .27 AC-FT 49,070
WTR YR 1972 TOTAL 37,818.18 MEAN 103 MAX 6,990 MIN .49 AC-FT 75,010

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	2400	10.46	3,210	5- 3	1600	13.97	4,410
12- 6	0600	13.70	8,350	6-18	0500	16.33	a unknown

a Backwater from San Gabriel River.
NOTE.--Backwater, doubtful, or no gage-height record June 17 to Sept. 12.

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 upstream from bridge on U.S. Highway 77, 1.1 miles upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2 miles southeast of Cameron, and at mile 33.6.

DRAINAGE AREA.--7,088 sq mi.

PERIOD OF RECORD.--November 1916 to current year.

GAGE.--Water-stage recorder. Datum of gage is 281.89 ft above mean sea level (levels by Corps of Engineers). Nov. 2, 1916, to Sept. 30, 1922, nonrecording gage at site 1.8 miles upstream at different datum. Oct. 1, 1922, to Apr. 8, 1926, nonrecording gage at McCowan Bridge 30 ft downstream at same datum. Apr. 9, 1926, to Oct. 9, 1933, nonrecording gage at bridge on U.S. Highway 77, 2,020 ft downstream at datum 1.58 ft lower.

AVERAGE DISCHARGE.--36 years (1917-53) unregulated, 1,807 cfs (1,309,000 acre-ft per year); 19 years (1953-72) regulated, 1,654 cfs (1,198,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,300 cfs Dec. 6 (gage height, 17.04 ft); minimum daily, 37 cfs Sept. 17, 18.
Period of record: Maximum discharge, 647,000 cfs Sept. 10, 1921 (gage height, 53.2 ft, present datum, from floodmark), from rating curve extended above 110,000 cfs on basis of slope-area measurement of 647,000 cfs; no flow July 12-27, 1956.
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. Stages based on information by local resident.

REMARKS.--Records good. Many small diversions for irrigation and municipal supply affect very low flows. Since 1954, at least 10 percent of drainage area regulated by reservoirs. Some regulation by Belton Lake (station 08102000) on Leon River beginning Mar. 8, 1954, and by Stillhouse Hollow Lake on Lampasas River (station 08104050) beginning Sept. 2, 1966. Records of the Aluminum Co. of America show they diverted 9,016 acre-ft of water from river above gage during the year for use at their Rockdale plant. At end of year, flow from 185 sq mi above this station was partly controlled by 59 floodwater-retarding structures with a total combined capacity of 67,480 acre-ft below the flood-spillway crests, of which 59,530 acre-ft is floodwater-retarding capacity and 7,940 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,360 acre-ft, of which 225 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	1,220	532	1,530	741	255	138	447	152	124	53	78
2	42	1,170	591	1,470	659	258	128	1,440	142	92	50	68
3	39	850	1,630	1,200	633	236	118	3,950	123	79	45	61
4	46	800	1,380	1,460	692	232	117	1,670	107	83	46	59
5	214	788	1,710	2,360	689	228	116	406	100	226	85	173
6	170	789	5,370	2,330	685	221	115	267	92	591	161	410
7	99	786	3,200	2,060	688	219	115	753	85	306	114	116
8	66	781	1,510	1,760	677	592	113	1,110	77	200	75	73
9	54	781	1,300	989	460	666	110	907	76	135	58	61
10	48	782	2,870	951	356	668	105	1,070	78	117	52	61
11	46	779	3,110	952	396	663	101	1,490	136	108	52	54
12	45	764	1,290	1,020	402	499	107	1,570	117	164	83	50
13	41	614	1,100	1,230	416	471	106	1,770	94	108	82	47
14	39	594	1,690	1,350	409	462	98	763	92	141	68	57
15	38	589	1,670	1,340	396	299	109	1,090	98	163	60	52
16	38	586	1,720	1,090	386	237	106	1,180	1,100	185	52	38
17	39	509	2,080	1,030	470	223	91	1,700	5,120	178	47	37
18	40	1,990	2,080	945	532	214	76	1,820	5,270	163	61	37
19	43	4,810	2,050	768	448	208	76	1,930	2,140	147	58	40
20	652	1,330	2,030	765	444	211	69	1,840	736	138	54	45
21	1,420	717	1,870	752	439	251	74	1,610	742	104	54	42
22	545	622	1,420	747	439	454	82	1,590	760	106	47	39
23	573	1,120	1,380	740	439	321	108	1,570	501	121	46	62
24	2,390	1,410	1,380	733	344	374	105	1,500	430	117	172	62
25	2,140	780	1,370	723	284	432	72	1,120	335	90	317	128
26	2,090	635	1,370	714	275	400	333	851	287	77	282	131
27	2,120	593	1,370	712	263	384	320	710	261	66	301	199
28	2,150	565	1,370	713	258	381	303	452	238	58	280	75
29	2,140	548	1,360	738	253	280	355	407	191	51	275	75
30	1,980	537	1,370	996	------	194	1,020	266	140	49	231	68
31	1,280	------	1,380	1,020	------	175	------	174	------	47	110	------
TOTAL	20,671	28,839	54,553	35,188	13,573	10,708	4,886	37,423	19,820	4,334	3,471	2,498
MEAN	667	961	1,760	1,135	468	345	163	1,207	661	140	112	83.3
MAX	2,390	4,810	5,370	2,360	741	668	1,020	3,950	5,270	591	317	410
MIN	38	509	532	712	253	175	69	174	76	47	45	37
AC-FT	41,000	57,200	108,200	69,800	26,920	21,240	9,690	74,230	39,310	8,600	6,880	4,950

CAL YR 1971 TOTAL 215,719 MEAN 591 MAX 5,370 MIN 38 AC-FT 427,900
WTR YR 1972 TOTAL 235,964 MEAN 645 MAX 5,370 MIN 37 AC-FT 468,000

08108200 North Elm Creek near Cameron, Tex.

LOCATION.--Lat 30°55'52", long 97°01'13", Milam County, on right bank downstream from bridge on Farm Road 485, 2 miles upstream from mouth, 3 miles southwest of Ben Arnold, and 6 miles northwest of Cameron.

DRAINAGE AREA.--48.6 sq mi.

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

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 325.1 ft above mean sea level (from Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--10 years, 20.2 cfs (5.64 inches per year, 14,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,910 cfs Nov. 18 (gage height, 8.21 ft); no flow for many days.
Period of record: Maximum discharge, 7,170 cfs June 21, 1968 (gage height, 9.45 ft); no flow for many days.
Maximum stage since at least 1913, 13.5 ft in October 1957, from information by local residents.

REMARKS.--Records good. No known diversion above station. Three recording rain gages are located in this watershed, one at station and two above station to compute average rainfall for hydrologic studies.

REVISIONS (WATER YEARS).--WRD Texas 1969: 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.03	10	1.6		0	3.1		0		0
2		0	38	27	1.1		0	252		0		0
3		0	62	50	1.0		0	18		0		0
4		0	10	62	1.0		0	2.9		12		0
5		0	253	12	.80		0	.96		14		0
6		0	176	4.3	.63		0	.69		.49		0
7		0	56	2.4	.30		0	1.5		.15		0
8		0	12	1.7	.22		0	8.3		.05		0
9		0	1,380	1.4	.17		0	2.8		.01		0
10		0	849	1.6	.15		0	1.6		7.1		0
11		0	35	3.2	.19		0	.74		21		0
12		0	9.9	2.3	.49		0	.46		1.0		0
13		0	4.2	1.3	1.0		0	.22		6.0		0
14		0	2.3	.74	.56		0	.10		23		0
15		0	1.6	.37	.30		0	.05		1.1		0
16		0	2.6	.24	.25		0	.02		.26		0
17		20	1.4	.26	.16		0	.01		.07		0
18		942	.81	.24	.09		0	.01		6.1		0
19		25	.51	.19	.06		0	0		3.3		0
20		4.5	.37	.49	.05		0	0		.66		0
21		1.2	.29	.15	.04		0	0		.17		0
22		1.0	.19	.06	.04		0	0		8.8		0
23		75	.13	.03	.03		0	0		1.4		0
24		5.3	.11	.02	.02		0	0		.39		0
25		1.2	.09	0	.02		0	0		.08		0
26		.27	.09	0	.01		0	0		.03		0
27		.21	.09	.07	0		0	0		0		43
28		.16	.09	.09	0		0	0		0		5.3
29		.02	.10	.17	0		204	0		0		1.1
30		.02	.09	.65	------		7.4	0		0		.22
31		------	.10	1.7	------		------	0	------	0		------
TOTAL	0	1,075.88	2,896.09	184.67	10.28	0	211.4	293.46	0	107.16	0	49.62
MEAN	0	35.9	93.4	5.96	.35	0	7.05	9.47	0	3.46	0	1.65
MAX	0	942	1,380	62	1.6	0	204	252	0	23	0	43
MIN	0	0	.03	0	0	0	0	0	0	0	0	0
CFSM	0	.74	1.92	.12	.007	0	.15	.19	0	.07	0	.03
IN.	0	.82	2.22	.14	.007	0	.16	.22	0	.08	0	.04
AC-FT	0	2,130	5,740	366	20	0	419	582	0	213	0	98
(††)	2.03	3.91	4.39	1.50	.31	1.27	2.26	2.11	1.55	3.58	2.26	3.42

CAL YR 1971 TOTAL 6,542.70 MEAN 17.9 MAX 1,620 MIN 0 CFSM .37 IN 5.01 AC-FT 12,980 †† 27.57
WTR YR 1972 TOTAL 4,828.56 MEAN 13.2 MAX 1,380 MIN 0 CFSM .27 IN 3.70 AC-FT 9,580 †† 28.59

PEAK DISCHARGE (BASE, 2,000 CFS).--Nov. 18 (0600) 2,910 cfs (8.21 ft); Dec. 9 (1630) 2,640 cfs (8.10 ft).

†† Average rainfall, in inches.

08109000 Brazos River near Bryan, Tex.

LOCATION.--Lat 30°36'52", long 96°29'20", Brazos-Burleson County line, on left bank 2.4 miles downstream from Little Brazos River, 5 miles downstream from Texas and New Orleans Railroad Co. bridge, 9 miles southwest of Bryan, and at mile 281.1.

DRAINAGE AREA.--38,400 sq mi, approximately, of which 9,240 sq mi 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 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 downstream at different datum. Sept. 11, 1925, to Oct. 24, 1932, nonrecording gage at site 3,000 ft upstream at present datum.

AVERAGE DISCHARGE.--24 years (1899-1902, 1918-25, 1926-40) unregulated, 5,652 cfs (4,095,000 acre-ft per year); 32 years (1940-72) regulated, 5,012 cfs (3,631,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,100 cfs Dec. 11 (gage height, 15.86 ft); minimum daily, 238 cfs Aug. 25.
Period of record: Maximum gage height, 54 ft Sept. 12, 1921, present site and datum (discharge not determined); minimum daily discharge, 89 cfs 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, present site and datum, from information by Texas and New Orleans Railroad Co. at their bridge 5 miles 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 regulated by 24 major reservoirs with a combined capacity of 6,467,000 acre-ft (of which 3,791,000 acre-ft is for flood control). Many small diversions above station for irrigation, municipal and industrial use, and oilfield operation. At end of year, flow from 374 sq mi above this station and below the major reservoirs was partly controlled by 114 floodwater-retarding structures with a total combined capacity of 143,170 acre-ft below the flood-spillway crests, of which 127,050 acre-ft is floodwater-retarding capacity and 16,120 acre-ft is sediment-pool capacity. Five structures were built during the current year and have a total combined capacity below flood-spillway crests of 7,480 acre-ft, of which 825 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Since 1941, at least 10 percent of drainage area regulated by reservoirs.

REVISIONS (WATER YEARS).--WSP 1442: Drainage area. WRD Texas 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	704	5,410	2,870	6,880	4,690	1,570	632	1,790	1,370	1,080	2,850	1,520
2	542	4,960	2,820	6,940	3,890	1,490	497	6,700	1,300	1,160	2,690	1,390
3	460	4,680	3,070	7,430	3,160	1,390	1,070	6,400	1,370	829	2,600	1,410
4	440	3,890	5,560	8,590	2,700	1,080	1,100	6,190	1,230	560	2,020	1,290
5	425	3,770	6,370	10,400	3,290	728	680	3,050	761	545	1,610	1,040
6	395	5,130	11,000	13,500	3,880	602	544	1,540	544	1,230	1,590	1,270
7	704	5,680	13,500	11,400	2,810	542	471	1,290	430	4,110	1,590	1,330
8	1,410	5,320	10,200	10,200	2,270	515	669	1,460	364	3,500	1,640	1,210
9	1,580	5,270	8,120	9,240	2,010	662	798	2,440	1,120	1,700	1,630	1,400
10	1,620	5,270	17,900	8,240	1,990	1,060	868	3,520	830	1,110	1,540	1,280
11	1,670	5,300	23,900	8,160	1,870	1,940	761	2,440	690	843	1,420	1,230
12	1,510	5,280	22,600	6,750	1,710	2,090	671	2,810	500	779	893	1,190
13	1,310	5,280	15,600	4,340	1,600	1,780	1,140	2,890	400	1,020	637	1,020
14	1,440	5,180	13,000	3,650	1,710	1,580	1,250	2,910	330	1,140	537	784
15	1,750	5,170	12,700	4,560	1,920	1,240	1,240	2,790	1,170	988	544	722
16	2,000	5,200	12,200	5,480	1,450	858	1,250	2,300	2,020	1,030	413	862
17	1,760	5,060	11,900	5,040	1,260	668	976	2,200	2,660	1,150	324	1,030
18	2,480	3,900	11,200	4,590	1,210	590	603	2,680	6,970	1,840	502	1,010
19	2,290	13,200	9,310	3,620	1,270	566	433	3,400	6,210	2,130	661	800
20	1,950	11,100	8,360	2,880	1,170	542	358	3,730	2,790	1,710	481	662
21	12,900	6,020	8,010	2,600	1,140	525	307	3,810	1,150	1,260	366	505
22	17,800	4,270	6,610	2,460	1,100	548	274	4,240	1,870	938	289	390
23	10,600	3,150	5,150	2,360	1,090	644	263	3,290	2,230	1,590	259	683
24	9,820	3,420	6,430	2,390	1,080	644	325	2,980	1,320	1,740	275	634
25	13,000	4,020	6,620	2,360	1,030	830	355	2,610	840	1,760	238	551
26	12,500	3,680	6,600	2,240	1,160	921	291	2,170	770	2,000	566	578
27	12,300	3,090	6,590	1,900	1,070	1,030	266	2,570	562	2,210	1,120	671
28	12,300	3,210	6,640	1,730	1,010	907	563	2,080	776	2,550	1,490	833
29	12,200	3,060	6,640	1,810	1,450	851	732	1,720	1,750	2,720	1,610	1,020
30	11,800	2,900	6,990	2,910	------	900	1,190	1,650	1,530	2,890	1,670	1,180
31	7,850	------	6,950	4,450	------	800	------	1,500	------	2,830	1,650	------
TOTAL	159,510	150,870	295,410	169,100	55,990	30,093	20,577	91,150	45,857	50,942	35,705	29,495
MEAN	5,145	5,029	9,529	5,455	1,931	971	686	2,940	1,529	1,643	1,152	983
MAX	17,800	13,200	23,900	13,500	4,690	2,090	1,250	6,700	6,970	4,110	2,850	1,520
MIN	395	2,900	2,820	1,730	1,010	515	263	1,290	330	545	238	390
AC-FT	316,400	299,300	585,900	335,400	111,100	59,690	40,810	180,800	90,960	101,000	70,820	58,500

CAL YR 1971 TOTAL 895,967 MEAN 2,455 MAX 23,900 MIN 218 AC-FT 1,777,000
WTR YR 1972 TOTAL 1,134,699 MEAN 3,100 MAX 23,900 MIN 238 AC-FT 2,251,000

08109700 Middle Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°20'21", long 96°54'16", Lee County, on right bank 25 ft upstream from centerline of State Highway 21, 4.5 miles upstream from West Yegua Creek, 5.0 miles southwest of Dime Box, and at mile 17.5 (revised).

DRAINAGE AREA.--236 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 295.4 ft 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.--10 years, 45.1 cfs (32,670 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 620 cfs May 12 (gage height, 9.57 ft); no flow for many days.
Period of record: Maximum discharge, 4,210 cfs Jan. 22, 1968 (gage height, 12.45 ft); from rating curve extended above 2,460 cfs on basis of area-velocity study; no flow at times each year.
Maximum stage since at least 1851, 16 ft 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	3.3	3.3	7.6	26	4.4	1.8	.20	1.7	.74		
2	9.4	2.9	2.8	7.6	23	4.4	1.7	1.5	1.6	.47		
3	7.9	2.5	4.9	8.3	15	4.3	1.7	2.3	1.4	.28		
4	7.0	2.3	11	8.8	11	4.0	1.9	11	1.3	.17		
5	9.1	2.0	37	8.7	9.2	4.0	1.7	9.0	.96	.14		
6	11	1.8	84	8.5	8.2	3.6	1.7	5.0	.78	.06		
7	6.1	1.6	92	8.1	7.6	3.4	1.7	6.7	.57	.01		
8	4.2	1.4	160	7.6	6.8	3.4	1.7	9.1	.31	0		
9	3.2	1.4	209	7.4	6.5	3.3	1.5	12	.31	0		
10	2.4	1.3	236	7.3	6.2	3.2	1.3	9.1	1.2	0		
11	1.8	1.2	209	7.0	6.3	3.2	1.2	7.4	1.4	.02		
12	1.4	1.1	158	6.8	7.1	3.2	1.3	530	.62	0		
13	1.2	1.0	178	6.6	8.4	3.3	1.1	331	2.3	.03		
14	.90	.94	176	6.3	8.6	3.3	.92	109	2.8	.02		
15	.70	.87	70	5.8	8.1	3.3	1.3	64	1.7	0		
16	.88	.82	32	5.3	7.5	3.3	.92	39	19	0		
17	4.5	.75	19	5.1	7.0	3.3	.85	22	95	0		
18	9.0	1.8	13	5.0	6.4	3.0	.73	14	191	0		
19	23	1.7	11	4.9	5.9	2.9	.62	11	191	0		
20	20	1.5	10	4.9	5.5	2.8	.61	8.8	205	0		
21	12	4.3	9.0	4.9	5.2	2.7	.58	6.8	207	0		
22	31	10	8.4	5.0	5.0	2.7	.54	5.8	104	0		
23	41	9.1	7.8	5.2	5.0	2.5	.37	5.0	43	0		
24	18	7.7	7.3	5.1	4.8	2.5	.28	4.4	24	0		
25	11	12	6.7	4.8	4.8	2.6	.20	4.0	9.5	0		
26	7.1	14	6.7	4.6	4.8	2.9	.10	3.8	6.1	0		
27	5.6	8.8	6.7	4.6	4.7	2.7	.17	3.5	4.0	0		
28	4.6	5.7	6.7	4.5	4.5	2.5	.41	3.1	2.6	0		
29	4.2	3.9	6.7	4.4	4.4	2.2	.45	2.7	1.8	0		
30	3.8	2.9	6.7	5.4	------	2.0	.31	2.3	1.2	0		
31	3.6	------	6.7	14	------	1.9	------	1.9	------	0		------
TOTAL	276.58	110.58	1,795.4	200.1	233.5	96.8	29.66	1,245.40	1,123.15	1.94	0	0
MEAN	8.92	3.69	57.9	6.45	8.05	3.12	.99	40.2	37.4	.063	0	0
MAX	41	14	236	14	26	4.4	1.9	530	207	.74	0	0
MIN	.70	.75	2.8	4.4	4.4	1.9	.10	.20	.31	0	0	0
AC-FT	549	219	3,560	397	463	192	59	2,470	2,230	3.9	0	0

CAL YR 1971 TOTAL 2,343.16 MEAN 6.42 MAX 236 MIN 0 AC-FT 4,650
WTR YR 1972 TOTAL 5,113.11 MEAN 14.0 MAX 530 MIN 0 AC-FT 10,140

PEAK DISCHARGE (BASE, 500 CFS).--May 12 (0800) 620 cfs (9.57 ft).

08109800 East Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°24'26", long 96°49'02", Burleson County, on left bank 49 ft upstream from centerline of State Highway 21, 0.8 mile downstream from Buffalo Creek, 3.5 miles north of Dime Box, and at mile 12.2 (revised).

DRAINAGE AREA.--243 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 284.00 ft above mean sea level (State Highway Department bench mark). Nov. 6 to Dec. 10, 1970, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--10 years, 47.2 cfs (34,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 825 cfs June 18 (gage height, 9.32 ft); no flow for many days.
Period of record: Maximum discharge, 6,600 cfs June 24, 1968 (gage height, 12.04 ft); no flow at times.
Maximum stage since at least 1886, 17 ft in 1899 and 1957, from information by local residents.

REMARKS.--Records good. Diversions above station for irrigation. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Texas 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.18	1.6	8.8	41	2.5	2.1	8.6	1.1	.79	0	0
2	.18	.18	3.7	7.8	23	2.3	2.0	10	1.1	.47	0	0
3	.10	.21	13	8.6	17	2.1	3.3	36	1.0	.32	0	0
4	.08	.14	14	9.2	13	2.4	2.1	45	1.0	.26	0	0
5	.54	.08	36	7.6	9.9	5.8	1.5	17	.98	.26	0	2.5
6	.64	.10	111	6.7	8.8	5.1	.98	6.5	.92	.21	0	8.4
7	.27	.10	157	6.7	6.9	4.0	1.5	15	.80	.16	0	37
8	.14	.09	133	6.1	6.7	3.7	1.8	13	.64	.89	0	22
9	.18	.09	52	5.8	6.7	3.3	1.4	11	.54	.79	0	7.1
10	.10	.09	50	6.1	4.9	2.9	1.1	8.6	.46	.49	0	2.8
11	.06	.09	95	5.2	6.5	3.0	1.0	13	.46	.33	.16	1.3
12	.04	.09	143	5.4	7.5	2.9	1.0	226	.42	.45	.14	.80
13	.03	.08	58	5.1	8.0	2.6	1.9	246	.50	.47	.29	.45
14	.03	.08	23	3.7	8.2	2.6	1.2	122	.69	.37	.16	.21
15	.03	.08	15	3.9	7.6	2.6	.80	97	1.0	.22	.05	.15
16	.09	.08	9.7	4.3	6.1	3.0	.69	38	281	.14	.03	.35
17	2.6	.08	7.6	4.0	5.2	2.8	.64	18	445	.11	.02	.20
18	8.0	.80	5.6	3.5	4.1	2.5	.46	11	624	.09	.01	.09
19	2.6	1.1	4.3	3.3	4.0	2.4	.59	7.3	720	.09	0	.07
20	5.2	4.4	4.0	3.2	3.7	2.3	.64	5.1	271	.08	0	.03
21	2.1	6.3	3.7	3.0	3.6	2.4	.51	3.7	57	.07	0	.03
22	4.7	3.1	2.9	3.5	3.1	2.4	.46	2.6	12	.07	0	.02
23	3.1	11	3.1	3.6	3.5	2.2	.33	2.2	6.2	.07	.01	.02
24	1.4	9.7	3.1	3.6	3.3	2.3	.23	2.4	3.9	.06	.93	.05
25	.59	8.4	2.9	2.8	3.3	9.9	.16	2.3	2.4	.06	.18	.30
26	.42	7.6	3.2	2.4	2.9	13	.13	2.2	1.5	.05	.06	.25
27	.42	5.2	4.1	2.9	2.7	13	.24	1.9	1.1	.03	.03	.47
28	.46	4.0	3.9	2.5	2.5	6.9	.50	1.8	.79	.01	.01	.89
29	.36	2.9	3.2	4.0	2.6	3.3	.36	2.7	.50	0	.01	.75
30	.27	2.3	3.5	20	------	2.4	.30	1.8	.33	0	.01	.61
31	.21	------	6.3	53	------	2.0	------	1.3	------	0	0	------
TOTAL	35.30	68.64	976.4	216.3	226.3	120.6	29.92	979.0	2,438.33	7.41	2.10	86.84
MEAN	1.14	2.29	31.5	6.98	7.80	3.89	1.00	31.6	81.3	.24	.068	2.89
MAX	8.0	11	157	53	41	13	3.3	246	720	.89	.93	37
MIN	.03	.08	1.6	2.4	2.5	2.0	.13	1.3	.33	0	0	0
AC-FT	70	136	1,940	429	449	239	59	1,940	4,840	15	4.2	172

CAL YR 1971 TOTAL 92,313.34 MEAN 253 MAX 157 MIN 0 AC-FT 183,100
WTR YR 1972 TOTAL 5,187.14 MEAN 14.2 MAX 720 MIN 0 AC-FT 10,290

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

08109900 Somerville Lake near Somerville, Tex.

LOCATION.--Lat 30°19'06", long 96°31'24", Burleson County, in intake structure of Somerville Dam on Yegua Creek, at the southwest edge of the city limits of Somerville, and at mile 20.0.

DRAINAGE AREA.--1,006 sq mi.

PERIOD OF RECORD.--February 1966 to current year. Prior to October 1970, published as Somerville Reservoir.

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

EXTREMES.--Current year: Maximum contents, 163,200 acre-ft June 23 (elevation, 238.26 ft); minimum, 117,000 acre-ft Nov. 16 (elevation, 233.88 ft).
Period of record: Maximum contents, 294,200 acre-ft June 28, 1968 (elevation, 247.56 ft); minimum, 117,000 acre-ft Nov. 16, 1971 (elevation, 233.88 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 20,210 ft long with a 4,715-foot dike, which includes a 1,250-foot spillway with an uncontrolled ogee weir. The low-flow outlet consists of one 10-foot-diameter conduit controlled by two 5- by 10-foot tractor type gates. Deliberate impoundment began Jan. 3, 1967, and from Feb. 3, 1966, to Jan. 2, 1967, lake was operated as a detention basin. Capacity table based on survey made in 1959. Lake is designed for flood control and water conservation. There are no known diversions above lake. Water-quality records for the current year are published in Part 2 of this report.
Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	280.0	-
Maximum design water surface	274.5	1,028,800
Spillway crest	258.0	507,500
Ultimate conservation pool	238.0	160,100
Interim conservation pool	230.0	83,100
Invert of lowest intake	206.0	200

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

233.0	108,800	237.0	148,900
234.0	118,100	238.0	160,100
235.0	127,900	239.0	171,800
236.0	138,200		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119,500	119,200	119,100	135,900	135,100	135,400	132,900	131,600	151,100	160,000	159,200	158,000
2	119,500	119,000	121,000	135,900	135,100	135,200	132,200	132,000	150,900	159,500	159,100	157,900
3	119,300	118,700	121,500	136,100	135,100	135,000	132,100	132,300	150,700	159,300	159,200	157,600
4	119,700	118,400	121,700	135,900	135,100	134,800	131,900	132,300	150,500	159,000	159,200	157,300
5	119,100	118,200	123,900	135,600	135,200	134,500	132,100	132,200	150,200	159,000	159,100	157,800
6	119,100	117,800	126,500	135,500	135,200	134,500	132,100	132,500	150,100	158,700	158,900	157,600
7	119,100	117,400	128,300	135,500	135,100	134,500	131,800	134,100	150,000	158,400	158,700	157,500
8	119,100	117,500	129,300	135,500	135,100	134,400	131,500	135,100	149,800	158,300	158,400	157,100
9	119,400	117,600	131,000	135,700	135,100	134,300	131,500	135,700	149,700	159,000	158,200	156,900
10	119,200	117,600	131,500	135,700	135,200	134,300	131,500	137,200	149,500	158,800	158,100	156,700
11	119,000	117,500	132,400	135,700	135,500	134,200	131,500	138,200	149,500	158,800	158,300	156,300
12	118,800	117,300	133,100	135,700	135,400	134,200	131,400	142,700	149,200	159,300	158,100	156,200
13	118,700	117,200	133,900	135,600	135,500	134,200	131,300	144,900	149,300	159,700	157,900	156,200
14	118,600	117,200	134,400	135,400	135,500	134,200	131,200	149,500	149,300	159,800	157,800	156,000
15	118,600	117,200	134,700	135,000	135,600	134,200	131,200	152,000	150,700	159,700	157,500	156,000
16	118,600	117,000	135,000	134,800	135,600	134,000	131,000	153,400	153,600	159,500	157,400	155,800
17	118,600	117,200	134,900	134,900	135,500	134,000	130,800	153,500	156,400	160,000	157,300	155,600
18	118,600	118,200	134,900	135,000	135,300	133,600	130,600	153,500	157,300	160,200	157,100	155,500
19	118,600	118,100	134,900	135,100	135,200	133,500	130,500	153,500	159,900	160,100	156,900	155,300
20	119,400	118,100	134,900	135,100	135,200	133,700	130,100	153,500	161,400	160,100	156,700	155,200
21	119,400	117,700	134,900	135,100	135,300	133,600	130,800	153,400	162,100	160,100	156,500	154,800
22	119,400	118,600	134,900	135,100	135,300	133,600	130,700	153,200	163,000	161,200	157,300	154,700
23	119,400	119,000	134,800	135,100	135,300	133,600	130,500	153,000	163,200	161,400	158,400	154,700
24	119,300	118,900	134,800	135,000	135,300	133,600	130,200	152,800	162,900	161,300	158,900	154,700
25	119,200	119,100	134,800	135,000	135,400	133,600	129,700	152,800	162,400	161,200	158,800	155,100
26	119,100	119,100	134,800	135,000	135,300	133,500	129,400	152,600	162,100	160,800	158,700	155,100
27	119,100	119,100	134,900	135,000	135,200	133,600	131,100	152,500	161,500	160,500	158,500	155,100
28	119,200	119,000	135,000	134,800	135,200	133,500	131,300	152,300	160,700	160,500	158,900	155,100
29	119,200	118,900	135,100	135,100	135,500	133,500	131,400	152,000	160,800	160,200	158,700	155,000
30	119,200	118,800	135,200	135,100	------	132,800	131,300	151,700	160,500	159,800	158,500	154,700
31	119,200	------	135,600	135,100	------	133,100	------	151,400	------	159,500	158,300	------
(†)	234.11	234.07	235.75	235.70	235.74	235.50	235.33	237.22	238.03	237.95	237.84	237.52
(*)	-500	-400	+16,800	-500	+400	-2,400	-1,800	+20,100	+9,100	-1,000	-1,200	-3,600
MAX	119,500	119,200	135,600	136,100	135,600	135,400	132,900	153,500	163,200	161,400	159,200	158,000
MIN	118,600	117,000	119,100	134,800	135,100	132,800	129,400	131,600	149,200	158,300	156,500	154,700

CAL YR 1971..... * -10,500 MAX 145,900 MIN 117,000
WTR YR 1972..... * +35,000 MAX 163,200 MIN 117,000

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

08110000 Yegua Creek near Somerville, Tex.

LOCATION.--Lat 30°19'18", long 96°30'26", Burleson County, on left bank 40 ft downstream from centerline of bridge on State Highway 36, 860 ft downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.0 mile downstream from Somerville Lake, 2.0 miles south of Somerville, 5.0 miles upstream from Davidson Creek, and at mile 18.4.

DRAINAGE AREA.--1,008 sq mi.

PERIOD OF RECORD.--May 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 199.21 ft above mean sea level. Prior to Jan. 30, 1934, nonrecording gage at railway bridge 860 ft (revised) upstream, at datum 34.30 ft higher. Jan. 30, 1934, to Nov. 30, 1970, water-stage recorder at highway bridge 100 ft upstream at same datum.

AVERAGE DISCHARGE.--41 years (1924-65) unregulated, 290 cfs (210,100 acre-ft per year); 7 years (1965-72) regulated, 239 cfs (173,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 318 cfs Sept. 8 (gage height, 5.45 ft); no flow at times.
Period of record: Maximum discharge, 56,800 cfs July 1, 1940 (gage height, 19.27 ft); no flow at times.
Maximum stage since at least 1875, 22 ft Dec. 5, 1913, present site and datum, from information by Gulf, Colorado, and Santa Fe Railway Co.

REMARKS.--Records fair. Flow regulated by Somerville Lake since Feb. 3, 1966. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1512: 1926(M), 1929, 1935. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	0	.01	2.2	.19	.37	.32	.20	.07	67	.04	.15
2	0	0	.46	1.9	.22	.38	.35	.23	.06	32	.04	.10
3	0	0	.70	1.4	.20	.34	.34	.22	.06	.36	.06	.01
4	0	0	.16	1.1	.18	.37	.35	.21	.05	.08	.09	0
5	0	0	.88	.88	.18	.32	.32	.16	.04	.06	.09	.13
6	.01	0	2.2	.70	.21	.30	.36	.16	.04	.05	.06	.19
7	.01	0	.66	.70	.21	.33	.40	.46	.03	.05	.04	.13
8	.01	0	.26	.62	.20	.32	.38	.54	.03	.06	.03	105
9	.01	0	.30	.62	.20	.32	.32	.44	.03	.08	.28	16
10	.02	0	1.3	.88	.20	.32	.35	.57	.03	.08	.66	2.4
11	.01	0	.58	.27	.27	.33	.35	1.5	.03	.10	.67	2.4
12	.01	0	.30	.23	.30	.35	.40	11	.03	.21	.59	2.5
13	0	0	.22	.21	.29	.35	.38	1.6	.03	.26	.49	2.6
14	0	0	.22	.16	.29	.37	.37	1.4	.04	.26	.37	2.7
15	0	0	.24	.13	.28	.36	.40	.83	.06	.24	.28	2.7
16	0	0	.20	.11	.27	.36	.39	.57	.38	.24	.23	2.8
17	0	0	.24	.10	.37	.35	.29	.42	10	.23	.17	3.0
18	0	0	.20	.10	.27	.32	.28	.35	1.9	.28	.12	2.9
19	0	0	.20	.11	.24	.32	.28	.28	.69	.26	.04	2.9
20	0	0	.22	.11	.22	.31	.88	.24	.42	.26	.03	2.8
21	0	0	.18	.11	.22	.36	.94	.22	.30	.25	.01	2.6
22	0	0	.18	.13	.21	.37	1.1	.17	.27	.36	.01	2.5
23	0	.02	.15	.13	.22	.38	.25	.16	13	.42	.02	2.8
24	0	.02	.15	.13	.24	.38	.22	.15	72	.24	.66	3.0
25	0	.02	.15	.11	.25	.42	.17	.15	74	.18	.57	2.9
26	0	.02	.18	.10	.24	.39	.15	.14	68	.13	.32	2.6
27	0	.02	.18	.11	.25	.42	.18	.12	67	.10	.22	2.6
28	0	.01	.18	.10	.25	.43	.25	.11	67	.08	.16	2.6
29	0	.01	.22	.11	.30	.41	.24	.10	68	.08	.15	2.9
30	0	.01	.22	.14	------	.34	.23	.09	67	.06	.18	3.3
31	0	------	.54	.16	------	.35	------	.08	------	.04	.20	------
TOTAL	.09	.13	11.88	13.86	6.97	11.04	11.24	22.87	510.59	104.10	6.88	179.21
MEAN	.003	.004	.38	.45	.24	.36	.37	.74	17.0	3.36	.22	5.97
MAX	.02	.02	2.2	2.2	.37	.43	1.1	11	74	67	.67	105
MIN	0	0	.01	.10	.18	.30	.15	.08	.03	.04	.01	0
AC-FT	.2	.3	24	27	14	22	22	45	1,010	206	14	355

CAL YR 1971 TOTAL 220.14 MEAN .60 MAX 42 MIN 0 AC-FT 437
WTR YR 1972 TOTAL 878.86 MEAN 2.40 MAX 105 MIN 0 AC-FT 1,740

08110100 Davidson Creek near Lyons, Tex.

LOCATION (revised).--Lat 30°25'10", long 96°32'24", Burleson County, on left bank 83 ft downstream from Farm Road 60, 1.2 miles downstream from Berry Creek, 2.8 miles northeast of Lyons, and at mile 10.7.

DRAINAGE AREA.--195 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 220.26 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 51.5 cfs (37,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 850 cfs May 13 (gage height, 13.23 ft); no flow at times.
Period of record: Maximum discharge, 23,200 cfs June 24, 1968 (gage height, 18.67 ft); 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, from information by local resident.

REMARKS.--Records good. During year the city of Caldwell discharged 196 acre-ft of sewage effluent into creek above station. Recording rain gage located at station until Mar. 2, 1972. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	1.6	.57	1.6	25	1.1	.72	0	.52	0	0	0
2	0	1.2	1.1	5.0	14	.81	.41	.37	.45	0	0	1.8
3	0	.80	32	4.8	10	.71	.81	27	.35	0	0	1.5
4	0	.62	32	4.2	7.1	.84	.72	12	.17	0	0	0
5	0	.45	102	3.4	4.9	.89	.51	7.3	.10	0	0	16
6	7.7	.29	587	3.2	3.6	.89	.42	3.0	.09	0	0	.38
7	6.7	.17	423	4.0	2.6	.83	.38	9.4	.05	0	0	0
8	1.2	.10	70	3.4	2.3	.76	.29	64	.03	0	0	0
9	.47	.08	34	2.7	2.3	.71	.29	12	.02	0	0	0
10	.12	.06	170	2.3	2.1	.54	.29	4.3	.11	0	0	0
11	.02	.04	186	2.0	1.9	.45	.29	41	.05	0	0	0
12	0	.02	35	1.9	1.9	.48	.29	482	.03	.01	0	0
13	0	0	15	2.0	2.6	.58	.22	803	.01	.09	0	0
14	0	0	9.3	2.0	3.2	.62	.22	254	.33	.16	0	.61
15	0	0	6.3	1.6	2.9	.72	.22	125	41	.18	0	.40
16	0	0	4.4	1.6	2.3	.62	.22	33	218	.07	0	.03
17	11	0	3.6	1.5	2.0	.57	.17	14	199	2.6	0	0
18	27	1.4	2.9	1.5	2.0	.53	.13	8.4	67	35	0	0
19	6.0	.89	2.5	1.5	1.7	.70	.10	5.6	54	9.6	0	0
20	73	3.8	2.2	1.5	1.6	.66	.14	3.6	18	1.1	0	0
21	169	5.6	1.6	1.4	1.4	.70	.09	2.6	6.5	.25	0	0
22	20	4.2	1.5	1.4	1.2	.45	.04	1.9	2.7	.51	0	0
23	8.3	10	1.3	1.4	1.2	.33	.01	1.7	1.5	35	0	0
24	5.2	39	1.2	1.4	1.2	.50	0	1.6	1.0	4.8	9.5	0
25	4.0	10	1.2	1.4	1.2	.71	0	1.3	.70	.92	17	0
26	3.4	5.0	1.3	1.4	1.2	2.0	0	1.3	.32	.31	2.1	0
27	2.9	2.9	1.3	1.4	1.1	2.9	0	1.3	.26	.08	.45	0
28	2.7	1.7	1.3	1.4	1.0	2.1	0	1.2	.17	.02	.06	0
29	2.7	1.1	1.3	1.4	1.1	1.7	0	.84	.09	0	.02	0
30	2.5	.71	1.4	18	------	2.0	0	.69	.02	0	0	0
31	2.3	------	1.5	76	------	.62	------	.56	------	0	0	------
TOTAL	356.36	91.73	1,733.77	158.3	106.6	28.02	6.98	1,923.96	612.57	90.70	29.13	20.72
MEAN	11.5	3.06	55.9	5.11	3.68	.90	.23	62.1	20.4	2.93	.94	.69
MAX	169	39	587	76	25	2.9	.81	803	218	35	17	16
MIN	0	0	.57	1.4	1.0	.33	0	0	.01	0	0	0
AC-FT	707	182	3,440	314	211	56	14	3,820	1,220	180	58	41

CAL YR 1971 TOTAL 2,690.79 MEAN 7.37 MAX 587 MIN 0 AC-FT 5,340
WTR YR 1972 TOTAL 5,158.84 MEAN 14.1 MAX 803 MIN 0 AC-FT 10,230

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

08110200 Brazos River at Washington, Tex.

LOCATION (revised).--Lat 30°21'40", long 96°09'18", Washington County, near right bank beneath floor of bridge on State Highway 90, 2.4 miles upstream from Navasota River, 2.5 miles north of Washington, and at mile 228.8.

DRAINAGE AREA.--39,740 sq mi, approximately, of which 9,240 sq mi 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 (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 140.13 ft above mean sea level. Auxiliary water-stage recorder 1.8 miles downstream at same datum.

AVERAGE DISCHARGE.--6 years, 4,600 cfs (3,333,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 26,500 cfs Dec. 12 (gage height, 20.07 ft); maximum gage height, 20.14 ft Dec. 12 (backwater from Navasota River); minimum daily discharge, 426 cfs Aug. 25.
Period of record: Maximum discharge, 82,500 cfs Jan. 24, 1968 (gage height, 33.60 ft); minimum daily, 276 cfs Feb. 17, 19, 1971.
Maximum stage since at least 1856, 62.0 ft 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 operation. Flow is regulated by 26 major reservoirs with a total combined capacity of 6,985,000 acre-ft, of which 4,138,000 acre-ft is for flood control. At end of year, flow from 374 sq mi above this station was partly controlled by 115 floodwater-retarding structures with a total combined capacity of 143,360 acre-ft below the flood-spillway crests, of which 127,210 acre-ft is floodwater-retarding capacity and 16,150 acre-ft is sediment-pool capacity. Five structures were built during the current year and have a total combined capacity below flood-spillway crests of 7,480 acre-ft, of which 825 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Recording rain gage located at auxiliary gage 1.8 miles downstream.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,020	6,040	1,950	6,780	5,310	1,750	1,030	1,400	1,980	1,340	2,760	1,670
2	1,040	4,680	2,140	6,780	4,800	1,820	929	2,610	1,870	1,100	2,570	1,550
3	921	4,320	2,040	7,330	3,420	1,750	817	8,340	1,820	1,110	2,520	1,440
4	840	3,820	2,770	8,250	2,770	1,630	1,280	7,510	1,900	870	2,390	1,490
5	814	3,160	5,050	10,400	2,580	1,350	1,280	6,020	1,710	664	1,790	1,400
6	776	3,310	8,150	14,200	4,270	1,110	978	2,680	1,340	607	1,610	1,270
7	761	4,870	14,800	12,500	3,730	1,030	859	1,750	1,140	1,250	1,650	1,350
8	1,010	4,930	12,100	10,500	2,660	956	771	1,500	1,020	3,790	1,630	1,400
9	1,640	4,600	7,850	9,420	2,310	920	927	1,850	947	3,130	1,720	1,340
10	1,750	4,550	11,000	7,880	2,130	1,020	1,040	2,980	1,240	1,570	1,680	1,490
11	1,830	4,560	23,100	7,580	2,240	1,400	1,100	3,360	1,430	1,170	1,610	1,310
12	1,880	4,580	25,100	7,110	2,070	2,160	1,010	4,400	1,310	972	1,540	1,280
13	1,740	4,540	18,600	4,670	2,050	2,200	940	4,170	1,190	940	1,070	1,240
14	1,610	4,490	13,100	3,140	1,970	1,960	1,300	4,000	875	1,150	853	1,060
15	1,760	4,360	11,900	3,050	2,270	1,740	1,440	3,370	959	1,120	819	891
16	2,090	4,390	11,600	4,370	2,200	1,440	1,410	2,830	1,420	1,030	810	861
17	2,410	4,500	10,700	4,750	1,780	1,150	1,400	2,510	3,050	1,060	716	985
18	2,060	4,120	9,420	4,560	1,680	1,000	1,170	2,700	5,500	1,310	630	1,110
19	2,470	6,410	8,180	3,990	1,650	946	894	3,420	9,410	1,840	672	1,070
20	2,360	13,400	6,970	3,190	1,690	928	744	4,230	6,480	2,010	931	878
21	3,700	7,280	6,590	2,600	1,600	908	765	4,420	2,830	1,600	733	764
22	16,900	4,240	6,370	2,500	1,570	876	638	4,740	1,690	1,360	667	661
23	14,600	3,290	5,180	2,460	1,560	888	593	4,700	1,750	1,170	667	569
24	7,980	2,450	4,820	2,450	1,520	952	567	3,800	2,090	1,760	526	765
25	11,000	2,720	5,770	2,540	1,520	949	581	3,400	1,510	1,690	426	758
26	12,200	3,090	6,210	2,480	1,450	1,090	628	2,990	1,130	1,870	449	733
27	11,500	2,440	6,450	2,400	1,550	1,190	611	2,700	907	2,020	621	715
28	11,600	2,200	6,520	2,100	1,440	1,300	621	3,090	730	2,320	1,260	731
29	11,700	2,270	6,620	2,040	1,440	1,150	794	2,540	901	2,470	1,600	893
30	11,600	2,050	6,600	2,590	------	1,070	966	2,230	1,530	2,620	1,660	1,060
31	9,960	------	6,820	4,130	------	1,100	------	2,160	------	2,790	1,700	------
TOTAL	153,522	131,660	274,470	168,740	67,230	39,733	28,083	108,400	61,659	49,703	40,280	32,734
MEAN	4,952	4,389	8,854	5,443	2,318	1,282	936	3,497	2,055	1,603	1,299	1,091
MAX	16,900	13,400	25,100	14,200	5,310	2,200	1,440	8,340	9,410	3,790	2,760	1,670
MIN	761	2,050	1,950	2,040	1,440	876	567	1,400	730	607	426	569
AC-FT	304,500	261,100	544,400	334,700	133,400	78,810	55,700	215,000	122,300	98,590	79,900	64,930

CAL YR 1971 TOTAL 870,548 MEAN 2,385 MAX 25,100 MIN 276 AC-FT 1,727,000
WTR YR 1972 TOTAL 1,156,214 MEAN 3,159 MAX 25,100 MIN 426 AC-FT 2,293,000

08110300 Lake Mexia near Mexia, Tex.

LOCATION.--Lat 31°38'45", long 96°34'39", Limestone County, 550 ft downstream from Cedar Creek, 610 ft upstream from spillway of dam on Navasota River, 1.0 mile upstream from Echo Dam, 1.6 miles upstream from Jacks Creek, and 6 miles southwest of Mexia.

DRAINAGE AREA.--198 sq mi.

PERIOD OF RECORD.--July 1961 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 420.0 ft above mean sea level.

EXTREMES.--Current year: Maximum gage height, 32.30 ft Dec. 9; minimum, 26.05 ft Oct. 16.
Period of record: Maximum gage height, 32.62 ft Apr. 24, 1966; minimum, 21.40 ft Jan. 15, 1964.

REMARKS.--Lake is formed by a 1,645-foot earthfill dam. The 520-foot uncontrolled concrete spillway is near left end of dam. Dam was completed and deliberate impoundment of water began June 5, 1961. The Bistone Municipal Water Supply District reported a diversion of 1,460 acre-ft for municipal use during water year 1972. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam is shown in the following table:

	Gage height (feet)
Crest of dam	42.3
Crest of spillway	28.3
Invert of 20-inch outlet conduit	2.1

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.27	28.15	28.31	29.27	28.58	28.29	27.90	27.54	26.84	26.95	27.96	27.42
2	26.24	28.14	28.30	28.93	28.50	28.22	27.86	27.50	26.82	26.94	27.95	27.39
3	26.32	28.13	28.36	29.42	28.42	28.19	27.87	27.47	26.79	26.92	27.93	27.37
4	26.28	28.09	28.65	29.52	28.38	28.20	27.84	27.44	26.76	28.25	27.93	27.35
5	26.27	28.08	28.52	28.85	28.36	28.18	27.83	27.42	26.74	29.66	27.90	27.33
6	26.25	28.04	28.28	28.61	28.38	28.16	27.83	27.45	26.70	28.65	27.87	27.30
7	26.23	28.01	28.74	28.42	28.36	28.17	27.82	27.48	26.68	28.46	27.83	27.28
8	26.21	28.00	30.47	28.40	28.35	28.14	27.78	27.45	26.65	28.45	27.80	27.26
9	26.19	27.99	31.45	28.41	28.34	28.14	27.76	27.41	26.63	28.41	27.80	27.23
10	26.16	27.98	29.75	28.40	28.34	28.12	27.75	27.40	26.60	28.47	27.82	27.21
11	26.14	27.96	29.40	28.38	28.35	28.12	27.75	27.39	26.57	28.40	27.87	27.16
12	26.12	27.95	28.92	28.37	28.34	28.12	27.72	27.39	26.54	28.37	27.85	27.14
13	26.12	27.94	28.52	28.36	28.33	28.12	27.70	27.38	26.54	28.35	27.84	27.13
14	26.09	27.93	28.44	28.34	28.35	28.10	27.70	27.35	26.64	28.33	27.83	27.11
15	26.08	27.91	28.49	28.32	28.33	28.10	27.68	27.33	26.63	28.31	27.80	27.08
16	26.08	27.88	28.46	28.34	28.33	28.07	27.65	27.31	26.62	28.28	27.77	27.07
17	26.07	28.29	28.40	28.33	28.32	28.05	27.62	27.30	26.63	28.26	27.74	27.05
18	26.13	30.28	28.40	28.32	28.30	28.04	27.60	27.27	26.62	28.24	27.72	27.03
19	26.20	28.86	28.39	28.31	28.28	28.02	27.58	27.25	26.58	28.26	27.70	27.00
20	28.23	28.52	28.39	28.33	28.28	28.02	27.55	27.23	26.55	28.25	27.67	26.97
21	28.29	28.43	28.38	28.34	28.29	28.02	27.58	27.20	26.53	28.22	27.64	26.95
22	28.29	28.43	28.36	28.34	28.28	28.02	27.55	27.17	26.50	28.22	27.65	26.93
23	28.28	28.53	28.35	28.33	28.28	28.00	27.53	27.16	26.47	28.22	27.65	26.91
24	28.24	28.47	28.35	28.32	28.28	28.00	27.50	27.14	26.44	28.20	27.62	26.93
25	28.21	28.42	28.35	28.32	28.28	27.98	27.45	27.11	26.40	28.18	27.60	26.93
26	28.29	28.39	28.35	28.31	28.26	27.97	27.41	27.08	26.35	28.15	27.58	26.91
27	28.24	28.35	28.35	28.32	28.25	28.00	27.57	27.04	26.31	28.12	27.56	26.90
28	28.20	28.33	28.33	28.33	28.24	28.00	27.55	27.00	26.28	28.09	27.53	26.88
29	28.18	28.32	28.36	28.34	28.25	27.95	27.55	26.98	26.38	28.07	27.50	26.90
30	28.18	28.31	28.35	29.68	------	27.93	27.53	26.93	26.87	28.03	27.47	26.89
31	28.16	------	28.48	28.58	------	27.91	------	26.87	------	28.00	27.44	------
MAX	28.29	30.28	31.45	29.68	28.58	28.29	27.90	27.54	26.87	29.66	27.96	27.42
MIN	26.07	27.88	28.28	28.31	28.24	27.91	27.41	26.87	26.28	26.92	27.44	26.88

CAL YR 1971 MAX 31.45 MIN 24.37
WTR YR 1972 MAX 31.45 MIN 26.07

08110400 Navasota River near Groesbeck, Tex.

LOCATION.--Lat 31°30'45", long 96°27'03", Limestone County, on left bank 43 ft downstream from State Highway 164, 0.4 mile downstream from Pin Oak Creek, 5 miles east of Groesbeck, and at mile 154.6.

DRAINAGE AREA.--313 sq mi.

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 358.84 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 150 cfs (108,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,000 cfs Dec. 10 (gage height, 18.99 ft); no flow part of each day Sept. 23, 24.
Period of record: Maximum discharge, 21,500 cfs Apr. 25, 1966 (gage height, 20.00 ft); no flow at times in 1967, 1969, 1971-72.
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 23.7 ft, from information by Texas Highway Department.

REMARKS.--Records good. Flow partly regulated by Lake Mexia (station 08110300) 14.4 miles upstream, approximate capacity 10,000 acre-ft. Several diversions above station for irrigation, municipal supply, and oilfield operation, total amount unknown. The city of Mexia discharged 357 acre-ft of sewage effluent during year into river above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.1	15	72	421	3.9	1.8	2.4	.29	126	.65	.12
2	1.4	1.0	60	532	162	4.9	1.6	1.8	.25	13	.65	.10
3	1.2	.91	658	1,530	125	8.2	1.8	1.3	.22	4.5	.65	.14
4	1.2	.85	418	2,760	62	4.7	2.0	1.1	.18	288	.65	.14
5	1.2	.80	742	1,530	45	3.4	1.8	.94	.15	1,350	.70	.12
6	2.7	.71	1,690	409	35	3.4	1.8	.98	.15	1,940	.44	.15
7	2.3	.66	1,660	140	39	2.9	1.7	1.1	.15	864	.33	.13
8	1.5	.55	1,030	101	29	2.5	1.5	1.3	.13	145	.21	.15
9	1.1	.50	3,300	74	22	2.7	1.4	1.3	.12	69	.14	.15
10	.82	.45	11,800	60	18	3.0	1.3	1.5	.12	48	17	.14
11	.70	.40	4,210	48	16	2.6	1.2	1.7	.12	54	16	.14
12	.55	.35	1,430	38	17	2.5	1.2	1.8	.12	55	1.3	.13
13	.54	.30	260	32	16	2.5	1.5	1.9	.22	42	.89	.12
14	.50	.35	108	29	15	2.5	1.4	1.6	5.3	29	.76	.10
15	.58	.40	84	22	12	2.4	1.3	1.3	51	20	.60	.08
16	.73	.40	62	17	12	2.2	1.3	1.1	181	13	.46	.08
17	.79	9.1	51	13	11	2.1	1.1	.98	23	9.3	.38	.08
18	.92	2,030	40	12	10	3.1	1.1	.89	6.4	6.6	.35	.07
19	20	3,530	30	12	8.4	2.3	1.1	.83	3.2	4.1	.34	.07
20	237	1,430	25	12	6.6	2.1	1.0	.74	1.8	2.9	.33	.07
21	121	244	22	11	5.8	2.6	1.4	.73	1.2	2.1	.31	.04
22	11	82	18	11	5.7	2.8	1.4	.67	1.0	1.9	.49	.02
23	4.7	88	14	9.6	5.4	2.8	1.3	.57	.90	1.6	13	.01
24	2.9	90	11	8.6	5.3	2.6	1.3	.52	.84	1.4	6.5	.09
25	1.9	81	9.8	7.7	5.2	2.5	1.2	.50	.85	1.4	1.8	.27
26	1.4	65	8.6	7.0	5.0	2.6	1.1	.48	.81	1.2	.95	.50
27	1.3	52	7.5	5.2	5.1	2.7	2.4	.48	.69	1.1	.46	.61
28	1.1	34	6.7	8.2	4.5	2.9	7.2	.40	.65	.91	.31	.98
29	1.1	33	6.5	258	3.7	2.9	8.2	.28	.65	.82	.24	1.1
30	1.1	21	7.2	1,790	------	2.4	3.6	.35	150	.84	.20	.99
31	1.2	------	9.4	1,580	------	2.0	------	.33	------	.74	.15	------
TOTAL	426.13	7,798.83	27,793.7	11,139.3	1,127.7	92.7	58.0	31.87	431.51	5,097.41	67.24	6.89
MEAN	13.7	260	897	359	38.9	2.99	1.93	1.03	14.4	164	2.17	.23
MAX	237	3,530	11,800	2,760	421	8.2	8.2	2.4	181	1,940	17	1.1
MIN	.50	.30	6.5	5.2	3.7	2.0	1.0	.28	.12	.74	.14	.01
AC-FT	845	15,470	55,130	22,090	2,240	184	115	63	856	10,110	133	14

CAL YR 1971 TOTAL 36,945.47 MEAN 101 MAX 11,800 MIN 0 AC-FT 73,280
WTR YR 1972 TOTAL 54,071.28 MEAN 148 MAX 11,800 MIN .01 AC-FT 107,300

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 upstream from Missouri Pacific Railroad Co. bridge, 7 miles northeast of Easterly, and at mile 105.7.

DRAINAGE AREA.--940 sq mi.

PERIOD OF RECORD.--March 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 276.46 ft above mean sea level. Prior to June 11, 1932, nonrecording gage at railroad bridge 1.0 mile downstream at datum 24.86 ft higher.

AVERAGE DISCHARGE.--36 years (1924-60) unregulated, 406 cfs (294,100 acre-ft per year); 12 years (1960-72) regulated, 391 cfs (283,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,000 cfs Dec. 12 (gage height, 17.38 ft); minimum daily, 0.54 cfs Oct. 12.
Period of record: Maximum discharge, 60,300 cfs May 2, 1944 (gage height, 22.13 ft); no flow at times.
Maximum stage since about 1845, 24 ft in June 1899, from information by local residents (discharge, 90,000 cfs, from rating curve extended above 60,000 cfs).

REMARKS.--Records fair. Since 1961, at least 10 percent of drainage area regulated by reservoirs. Numerous diversions above station for irrigation, municipal supply, and oilfield operation. Water-quality records for the current year are published in Part 2 of this report.

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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	5.6	43	70	1,070	23	15	12	1.7	1.8	3.2	2.3
2	5.7	4.8	42	587	1,700	24	13	19	1.6	123	2.6	1.9
3	3.4	4.1	162	1,370	1,060	23	12	16	1.5	110	2.6	1.7
4	2.6	3.6	590	1,900	242	22	12	12	1.5	58	2.4	1.5
5	2.1	3.4	1,240	2,400	157	22	11	9.8	1.5	81	2.2	1.5
6	1.7	3.3	1,780	4,310	108	24	11	8.2	1.4	419	2.0	1.7
7	1.4	3.1	1,930	3,900	87	23	11	7.6	1.3	666	1.8	1.5
8	1.2	2.9	2,370	1,980	75	20	10	7.1	1.2	868	1.6	1.3
9	1.3	2.9	2,890	356	74	19	9.6	6.4	1.1	1,040	1.6	1.1
10	1.1	2.8	2,580	208	62	19	9.0	5.7	1.2	371	1.8	1.0
11	.74	2.7	5,160	181	53	18	8.8	5.4	1.2	103	2.6	.98
12	.54	2.6	11,700	146	63	17	8.6	5.2	1.3	80	3.0	1.0
13	.75	2.5	6,190	118	58	17	8.0	5.2	1.3	165	42	.94
14	.82	2.4	3,800	96	50	17	7.5	13	1.3	86	28	.83
15	1.0	2.4	1,650	83	48	17	6.9	15	1.8	53	16	.78
16	1.2	2.5	303	71	45	16	6.4	8.2	2.1	36	11	.79
17	1.1	2.7	192	58	40	16	5.6	6.7	137	29	7.3	.75
18	1.4	16	144	52	37	16	5.2	6.4	218	21	5.4	.72
19	1.4	373	113	45	34	15	5.1	6.4	102	17	4.2	.72
20	4.3	1,030	93	43	32	15	5.2	5.9	42	14	3.1	.72
21	16	2,310	77	42	31	16	5.6	5.2	25	11	2.5	.66
22	320	3,450	64	40	29	18	5.7	4.8	16	10	2.2	.66
23	161	1,850	55	38	28	16	6.0	4.2	11	8.8	2.4	.68
24	60	291	46	37	27	15	6.2	3.5	7.5	9.8	9.4	.91
25	33	188	40	34	26	15	6.0	2.9	5.4	6.6	19	1.1
26	21	167	36	32	26	15	5.6	2.3	4.5	4.9	12	1.3
27	16	124	34	30	25	15	5.9	2.0	3.5	4.0	14	1.3
28	15	93	32	29	24	15	9.0	1.7	2.7	3.5	10	2.2
29	10	71	30	33	24	14	10	1.8	2.3	3.1	6.9	1.9
30	7.9	50	30	88	------	14	10	1.9	1.9	3.1	4.5	1.5
31	6.5	------	35	558	------	16	------	1.8	------	3.3	3.1	------
TOTAL	709.85	10,067.3	43,451	18,935	5,335	552	250.9	213.3	601.8	4,409.9	230.4	35.94
MEAN	22.9	336	1,402	611	184	17.8	8.36	6.88	20.1	142	7.43	1.20
MAX	320	3,450	11,700	4,310	1,700	24	15	19	218	1,040	42	2.3
MIN	.54	2.4	30	29	24	14	5.1	1.7	1.1	1.8	1.6	.66
AC-FT	1,410	19,970	86,190	37,560	10,580	1,090	498	423	1,190	8,750	457	71

CAL YR 1971 TOTAL 62,053.11 MEAN 170 MAX 11,700 MIN .40 AC-FT 123,100
WTR YR 1972 TOTAL 84,792.39 MEAN 232 MAX 11,700 MIN .54 AC-FT 168,200

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE
11-22	0700	14.75	3,670
12-12	0100	17.38	15,000
1- 6	1700	15.58	5,050

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 upstream from Shepherd Creek, 17 miles northeast of Bryan, and at mile 68.4.

DRAINAGE AREA.--1,429 sq mi.

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.64 ft above mean sea level.

AVERAGE DISCHARGE.--9 years (1951-60) unregulated, 437 cfs (316,600 acre-ft per year); 12 years (1960-72) regulated, 506 cfs (366,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Dec. 14 (gage height, 14.05 ft); minimum daily, 1.1 cfs Sept. 22.
Period of record: Maximum discharge, 38,200 cfs Apr. 29, 1966 (gage height, 16.57 ft); no flow at times.
Maximum stage since about 1840, 19.5 ft in June 1899, from information by local residents.

REMARKS.--Records good. Since 1961, at least 10 percent of drainage area regulated by reservoirs. Numerous diversions above station for irrigation, municipal, and oilfield operation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	17	84	47	456	35	29	19	5.2	6.2	4.9	10
2	44	14	64	58	833	35	28	21	4.8	5.5	4.5	8.2
3	31	12	70	182	1,310	35	29	21	4.5	4.9	4.1	6.6
4	25	9.7	93	701	1,620	38	29	21	4.2	17	3.9	6.0
5	20	8.9	302	1,380	1,570	39	26	23	4.1	75	3.8	5.0
6	16	8.6	1,130	1,800	1,070	38	25	22	4.0	60	3.8	4.3
7	13	7.9	1,780	2,160	535	37	25	21	3.9	78	3.7	3.8
8	11	6.9	2,040	2,920	203	38	24	18	3.8	289	3.5	3.7
9	10	6.3	2,310	4,120	111	40	23	16	3.7	535	3.3	3.3
10	9.1	6.0	2,890	3,470	83	40	22	15	3.9	840	3.2	2.7
11	7.7	5.6	3,450	1,980	74	40	21	14	3.7	1,130	3.7	2.2
12	6.6	5.5	3,510	1,170	63	39	20	14	3.6	985	4.7	1.9
13	6.1	5.3	5,130	782	58	38	19	13	3.8	447	4.2	1.7
14	6.1	5.1	9,900	424	62	38	19	13	3.9	157	3.9	1.6
15	5.9	4.9	7,550	223	64	37	18	12	6.4	141	5.3	1.6
16	48	5.1	5,410	137	60	36	16	12	24	93	29	1.6
17	21	5.3	3,640	103	54	35	15	13	15	57	29	1.7
18	11	12	2,020	84	48	35	15	17	13	41	22	1.6
19	8.5	19	1,180	71	44	33	14	30	48	32	16	1.4
20	8.1	43	762	65	40	32	13	26	149	32	13	1.2
21	8.7	327	392	58	37	32	13	18	103	27	10	1.2
22	11	780	194	54	36	31	12	15	57	22	8.0	1.1
23	25	1,340	119	51	36	32	11	13	35	25	6.5	1.2
24	209	1,760	91	48	35	34	11	11	27	21	6.5	1.7
25	203	2,120	76	44	34	34	11	10	21	16	5.8	2.0
26	101	1,700	65	42	34	33	11	9.0	16	13	4.6	2.4
27	54	1,100	58	39	34	33	12	7.9	12	11	8.7	24
28	36	690	52	36	34	33	14	7.3	9.8	9.5	21	14
29	27	332	48	126	35	32	15	6.7	8.2	7.8	19	7.4
30	22	146	45	626	------	33	18	6.2	7.2	6.5	16	12
31	19	------	44	558	------	32	------	5.6	------	5.7	13	------
TOTAL	1,094.8	10,503.1	54,499	23,559	8,673	1,097	558	470.7	608.7	5,190.1	288.6	137.1
MEAN	35.3	350	1,758	760	299	35.4	18.6	15.2	20.3	167	9.31	4.57
MAX	209	2,120	9,900	4,120	1,620	40	29	30	149	1,130	29	24
MIN	5.9	4.9	44	36	34	31	11	5.6	3.6	4.9	3.2	1.1
AC-FT	2,170	20,830	108,100	46,730	17,200	2,180	1,110	934	1,210	10,290	572	272

CAL YR 1971 TOTAL 80,762.88 MEAN 221 MAX 9,900 MIN .98 AC-FT 160,200
WTR YR 1972 TOTAL 106,679.10 MEAN 291 MAX 9,900 MIN 1.1 AC-FT 211,600

PEAK DISCHARGE (BASE, 3,000 CFS).--Dec. 14 (0500) 10,400 cfs (14.05 ft); Jan. 9 (1300) 4,280 cfs (13.17 ft).

08111500 Brazos River near Hempstead, Tex.

LOCATION.--Lat 30°07'34", long 96°11'05", Washington-Waller County line, on right bank near downstream side of bridge on U.S. Highway 290, 4,500 ft upstream from Texas and New Orleans Railroad Co. bridge, 6.5 miles northwest of Hempstead, 8 miles upstream from Caney Creek, and at mile 193.8.

DRAINAGE AREA.--42,640 sq mi, approximately, of which 9,240 sq mi 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 (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 117.90 ft above mean sea level. Prior to Nov. 1, 1940, nonrecording gage at railroad bridge 4,500 ft downstream at datum 5.80 ft lower. Nov. 1, 1940, to Sept. 30, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years, 6,527 cfs (4,729,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,800 cfs Dec. 12 (gage height, 18.41 ft); minimum daily, 415 cfs Apr. 26.
Period of record: Maximum discharge, 143,000 cfs May 2, 1957 (gage height, 44.21 ft); minimum daily, 137 cfs Nov. 6, 1952. Maximum stage since at least 1899, 56.1 ft Dec. 8, 1913, present site and datum, from information by Texas and New Orleans Railroad Co., obtained at bridge 4,500 ft downstream. Flood of July 4, 1899, reached a stage of 53.6 ft, present site and datum, from information by Texas and New Orleans Railroad Co.

REMARKS.--Records fair. Many small diversions above station for irrigation, municipal and industrial use, and oilfield operations. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Brazos River at Washington (station 08110200). Flow regulated by 28 major upstream reservoirs having a combined capacity of 7,002,000 acre-ft (4,138,000 acre-ft for flood control).

REVISIONS (WATER YEARS).--WSP 1442: Drainage area. WSP 1512: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	696	9,710	4,230	7,740	4,590	1,300	1,140	1,250	1,890	1,810	2,560	1,470
2	729	6,930	4,480	8,080	5,630	1,500	1,030	3,010	1,730	1,560	2,680	1,450
3	766	5,580	5,110	8,080	5,690	1,700	861	4,470	1,610	1,330	2,630	1,360
4	690	5,200	4,570	8,530	5,190	1,800	716	6,620	1,540	1,270	2,500	1,310
5	653	4,670	5,110	9,560	4,510	1,600	1,190	6,540	1,580	1,010	2,320	1,320
6	712	4,160	8,630	11,900	4,070	1,310	1,220	5,070	1,380	783	1,850	1,270
7	714	4,480	13,000	13,400	4,610	1,100	889	6,530	1,030	716	1,560	1,170
8	584	5,540	14,700	12,500	4,200	965	726	8,560	831	1,840	1,530	1,230
9	748	5,690	12,900	11,500	3,650	871	635	2,670	715	3,510	1,500	1,210
10	1,320	5,490	11,500	10,500	3,370	847	749	2,440	693	2,710	1,550	1,190
11	1,470	5,430	18,300	9,720	3,180	914	892	7,010	1,510	1,770	1,530	1,260
12	1,540	5,440	24,000	9,830	2,950	1,390	951	6,080	1,530	1,370	1,470	1,150
13	1,590	5,460	22,700	9,670	2,510	2,100	861	7,770	1,080	1,190	1,420	1,100
14	1,450	5,430	17,300	8,270	2,220	2,210	796	8,020	1,090	1,200	1,080	1,040
15	1,320	5,380	15,000	7,170	2,050	2,020	1,150	8,580	1,220	1,380	811	919
16	2,740	5,290	14,600	7,050	2,200	1,780	1,300	6,790	1,270	1,460	687	805
17	3,430	5,310	14,600	7,500	2,070	1,440	1,320	4,890	2,590	1,420	658	712
18	2,570	5,400	15,500	7,010	1,790	1,120	1,310	3,560	4,130	1,390	572	772
19	2,440	4,940	15,800	6,070	1,660	929	1,060	3,110	5,500	1,530	476	882
20	2,970	9,040	14,500	4,930	1,600	1,270	748	3,400	7,100	1,960	478	867
21	3,470	11,500	13,000	3,940	1,600	1,780	734	3,810	5,410	2,050	641	739
22	6,800	8,360	12,300	3,400	1,520	1,020	849	3,910	2,830	1,670	563	640
23	14,400	5,830	11,000	3,130	1,500	836	625	4,200	1,770	1,370	504	536
24	11,900	4,510	9,090	2,940	1,450	808	496	3,960	1,930	1,160	504	472
25	9,190	3,970	8,430	2,810	1,400	847	427	3,430	2,220	1,610	702	564
26	11,000	4,450	8,240	2,800	1,350	858	415	3,080	1,790	1,610	684	617
27	11,900	4,790	7,860	2,720	1,300	1,000	1,750	2,680	1,360	1,720	610	614
28	11,800	4,340	7,500	2,530	1,300	1,140	5,390	2,530	1,100	1,880	613	789
29	11,700	4,180	7,390	2,290	1,300	1,220	1,380	2,650	920	2,070	1,050	652
30	11,700	4,240	7,350	2,660	------	1,130	864	2,230	1,180	2,310	1,320	822
31	11,400	------	7,340	3,260	------	1,120	------	1,980	------	2,460	1,420	------
TOTAL	144,392	170,740	356,030	211,490	80,460	39,925	32,474	140,830	60,529	51,119	38,473	28,932
MEAN	4,658	5,691	11,480	6,822	2,774	1,288	1,082	4,543	2,018	1,649	1,241	964
MAX	14,400	11,500	24,000	13,400	5,690	2,210	5,390	8,580	7,100	3,510	2,680	1,470
MIN	584	3,970	4,230	2,290	1,300	808	415	1,250	693	716	476	472
AC-FT	286,400	338,700	706,200	419,500	159,600	79,190	64,410	279,300	120,100	101,400	76,310	57,390

CAL YR 1971 TOTAL 1,029,867 MEAN 2,822 MAX 24,000 MIN 421 AC-FT 2,043,000
WTR YR 1972 TOTAL 1,355,394 MEAN 3,703 MAX 24,000 MIN 415 AC-FT 2,688,000

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 downstream from State Highway 36, 5 miles southeast of Bellville, and 6 miles upstream from Brazos River.

DRAINAGE AREA.--377 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 122.82 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 165 cfs (119,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,800 cfs May 8 (gage height, 14.38 ft); minimum daily, 3.6 cfs Oct. 15.
Period of record: Maximum discharge, 34,000 cfs June 25, 1968 (gage height, 15.98 ft, from floodmark), from rating curve extended above 14,000 cfs; minimum daily, 0.08 cfs July 22, 23, 1971.
Maximum stage since 1899, 22.8 ft in 1940, from information by local residents and the Texas Highway Department.

REMARKS.--Records poor. During the year, the city of Bellville discharged about 246 acre-ft of sewage effluent into a tributary of Mill Creek above gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	7.4	20	45	150	22	65	200	20	8.0	26	4.4
2	4.0	7.4	450	84	60	22	65	140	19	7.5	7.9	4.3
3	3.9	7.0	400	330	38	18	65	120	17	7.0	13	4.3
4	4.7	6.4	200	104	30	16	59	102	15	10	25	4.1
5	103	6.2	200	74	27	14	56	90	14	8.5	31	4.1
6	162	6.0	350	54	24	13	62	85	12	8.0	15	4.1
7	25	6.0	250	44	23	13	65	3,380	11	7.5	8.8	4.1
8	10	6.0	150	38	22	13	56	10,400	9.5	7.0	6.8	4.0
9	7.0	5.8	100	35	21	13	41	4,330	9.5	7.0	6.4	4.0
10	6.6	5.8	70	32	20	12	38	2,430	130	9.0	8.7	3.8
11	5.0	5.8	50	30	169	12	45	8,710	254	11	47	3.8
12	4.2	5.7	60	28	230	12	46	6,710	85	8.1	43	3.8
13	4.0	5.6	80	27	130	12	42	3,440	100	80	32	3.8
14	3.8	5.5	68	25	70	12	27	882	250	50	12	5.3
15	3.6	5.5	55	23	45	13	23	388	150	21	23	5.6
16	18	5.5	48	20	32	13	22	235	1,200	9.3	21	5.6
17	38	7.0	42	18	27	13	18	170	550	7.6	8.7	5.1
18	14	9.5	36	20	24	12	15	130	250	8.1	7.5	5.3
19	12	7.0	34	21	23	12	19	128	150	55	7.0	4.8
20	88	6.5	33	23	22	1,750	16	82	100	46	6.7	4.1
21	210	6.0	30	24	21	5,820	18	68	65	29	6.3	4.2
22	102	20	29	23	21	656	67	60	45	93	5.8	4.1
23	28	100	28	22	20	210	50	53	35	88	5.5	3.8
24	17	57	27	20	20	122	25	48	27	180	5.2	4.6
25	12	40	28	20	19	110	15	44	22	37	4.9	5.8
26	10	25	28	18	18	100	11	41	17	17	5.3	7.6
27	9.8	20	28	16	18	101	18	34	14	12	5.4	34
28	9.8	15	30	16	17	100	248	28	12	8.3	5.3	8.6
29	8.9	12	46	16	20	85	1,060	25	9.5	6.8	5.4	8.1
30	8.0	10	42	513	------	70	400	23	8.5	5.9	5.3	7.2
31	7.6	------	42	400	------	68	------	20	------	35	4.5	------
TOTAL	944.4	432.6	3,054	2,163	1,361	9,459	2,757	42,596	3,601.0	887.6	415.4	176.4
MEAN	30.5	14.4	98.5	69.8	46.9	305	91.9	1,374	120	28.6	13.4	5.88
MAX	210	100	450	513	230	5,820	1,060	10,400	1,200	180	47	34
MIN	3.6	5.5	20	16	17	12	11	20	8.5	5.9	4.5	3.8
AC-FT	1,870	858	6,060	4,290	2,700	18,760	5,470	84,490	7,140	1,760	824	350

CAL YR 1971 TOTAL 10,148.79 MEAN 27.8 MAX 450 MIN .08 AC-FT 20,130
WTR YR 1972 TOTAL 67,847.40 MEAN 185 MAX 10,400 MIN 3.6 AC-FT 134,600

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-20 or 21	unknown	14.25	11,700	5-11	0300	14.09	10,600
				6-16	unknown	12.40	2,470
5- 8	1000	14.38	12,800				

08112500 Brazos River Authority's Canal A near Fulshear, Tex.

LOCATION.--Lat 29°38'28", long 95°53'06", Fort Bend County, on right bank of canal, 1.2 miles downstream from point of diversion, and 3.4 miles south of Fulshear.

PERIOD OF RECORD.--October 1930 to September 1954, October 1957 to current year. Records for water year 1931 incomplete, yearly estimate only published in WSP 1312. Published as Brazos Valley Irrigation Co.'s canal 1930-44 and as American Canal Co.'s canal 1944-54, 1957-66.

GAGE.--Duplex water-stage recorder and Parshall flume. Prior to Apr. 24, 1968, water-stage recorder at site 300 ft downstream at different datum.

AVERAGE DISCHARGE.--39 years, 90.2 cfs (65,350 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 466 cfs May 22, 23, Aug. 1, 1954; no flow for several months in each year.

REMARKS.--Records good. Station is above all diversions from canal. Flow controlled by pumping plant located on left bank of Brazos River 21.7 miles upstream from Richmond. Figures of discharge represent water pumped from river for irrigation in the vicinity of Sugarland.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95					0	98	78	212	163	173	0
2	95					0	134	98	211	165	142	0
3	158					0	170	103	178	177	140	0
4	164					0	169	103	165	227	151	103
5	93					0	168	60	128	165	150	176
6	90					0	136	59	95	179	151	147
7	95					0	95	22	127	192	128	146
8	93					0	97	0	141	191	140	144
9	91					0	97	0	125	103	92	142
10	89					38	95	0	92	111	134	143
11	70					88	95	0	0	193	139	118
12	.04					90	95	0	33	187	148	124
13	0					90	95	0	61	187	142	124
14	0					106	106	0	0	63	99	83
15	0					62	94	0	67	0	142	103
16	0					61	94	0	97	129	139	102
17	0					82	108	0	36	218	34	91
18	0					66	117	0	50	219	0	101
19	0					96	106	0	63	216	0	100
20	0					107	151	0	170	150	0	98
21	0					0	153	56	217	63	0	127
22	0					0	90	104	196	0	0	126
23	0					30	91	142	207	0	0	53
24	0					62	95	194	197	74	0	0
25	0					0	95	176	192	120	21	0
26	0					21	108	224	225	119	95	0
27	0					92	109	220	243	120	95	0
28	0					138	66	218	209	118	95	0
29	0					153	86	217	216	47	102	0
30	0				------	54	79	226	208	0	103	0
31	0	------			------	59	------	250	------	77	89	------
TOTAL	1,133.04	0	0	0	0	1,495	3,292	2,550	4,161	3,973	2,844	2,351
MEAN	36.5	0	0	0	0	48.2	110	82.3	139	128	91.7	78.4
MAX	164	0	0	0	0	153	170	250	243	227	173	176
MIN	0	0	0	0	0	0	66	0	0	0	0	0
AC-FT	2,250	0	0	0	0	2,970	6,530	5,060	8,250	7,880	5,640	4,660

CAL YR 1971 TOTAL 22,545.04 MEAN 61.8 MAX 362 MIN 0 AC-FT 44,720
WTR YR 1972 TOTAL 21,799.04 MEAN 59.6 MAX 250 MIN 0 AC-FT 43,240

08113500 Richmond Irrigation Co.'s canal near Richmond, Tex.

LOCATION.--Lat 29°34'00", long 95°47'00", Fort Bend County, on right downstream wingwall of first bridge downstream from pump plant, about 0.5 mile upstream from previous gage, 1.2 miles downstream from pump plant, and 1.7 miles 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 (from topographic map).

AVERAGE DISCHARGE.--45 years, 43.2 cfs (31,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 267 cfs Nov. 15, 28, 1957; no flow for several months each year.

REMARKS.--Records poor. Water for irrigation is diverted by pumping from right bank of Brazos River 6 miles upstream from Richmond. Figures of discharge represent water pumped from river.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	56	59	176	176	92	52
2						0	56	56	179	175	91	0
3						0	55	54	177	180	95	0
4						0	60	141	177	180	95	0
5						2.8	108	186	177	173	94	39
6						6.3	137	184	177	184	94	82
7						4.2	147	183	174	185	63	81
8						0	150	203	173	180	41	81
9						0	157	202	166	176	87	121
10						0	156	144	74	182	88	133
11						0	151	0	0	193	87	126
12						0	151	0	59	195	87	102
13						0	97	0	167	188	88	106
14						28	58	0	174	145	87	103
15						58	55	47	176	0	88	68
16						56	54	82	174	0	89	0
17						55	55	147	182	47	88	0
18						59	108	205	197	102	87	0
19						65	164	200	200	98	87	27
20						55	159	192	202	99	89	66
21						29	101	191	201	102	96	90
22						62	0	187	191	103	102	135
23						57	8.7	188	197	103	103	176
24						59	59	186	184	93	100	63
25						59	66	191	174	0	93	0
26						57	110	192	173	0	78	0
27						56	68	190	179	0	79	0
28						59	0	184	179	29	79	0
29						59	0	182	177	88	80	0
30					------	57	13	178	176	89	81	0
31		------			------	57	------	178	------	92	82	------
TOTAL	0	0	0	0	0	1,000.3	2,559.7	4,332	5,012	3,557	2,690	1,651
MEAN	0	0	0	0	0	32.3	85.3	140	167	115	86.8	55.0
MAX	0	0	0	0	0	65	164	205	202	195	103	176
MIN	0	0	0	0	0	0	0	0	0	0	41	0
AC-FT	0	0	0	0	0	1,980	5,080	8,590	9,940	7,060	5,340	3,270

CAL YR 1971 TOTAL 21,035.20 MEAN 57.6 MAX 202 MIN 0 AC-FT 41,720
WTR YR 1972 TOTAL 20,802.00 MEAN 56.8 MAX 205 MIN 0 AC-FT 41,260

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 downstream from Texas and New Orleans Railroad Co. bridge, and at mile 92.0.

DRAINAGE AREA.--44,020 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--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 (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 40.94 ft above mean sea level. Prior to Oct. 1, 1922, various types of nonrecording gages at railroad bridge 925 ft upstream at different datums. Oct. 1 to Sept. 30, 1922, nonrecording chain gage at Rosenberg 7.6 miles upstream at datum about 4 ft higher.

AVERAGE DISCHARGE.--20 years (1903-5, 1922-40) unregulated, 7,209 cfs (5,223,000 acre-ft per year); 32 years (1940-72) regulated, 7,173 cfs (5,197,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,400 cfs May 12 (gage height, 14.14 ft); minimum daily, 525 cfs Oct. 4.
Period of record: Maximum discharge, 123,000 cfs June 6, 1929 (gage height, 40.6 ft, from floodmarks), present site and datum; minimum daily, 35 cfs Aug. 23, 1934.
Maximum stage since at least 1852, 48.2 ft Dec. 10, 1913, present datum, from floodmarks on right bank 1,000 ft upstream from gage. From information by Southern Pacific Railroad, stages of other floods at railroad bridge, present datum, are as follows: May 1884, 43.7 ft; June 13, 1885, 44.7 ft; July 1899, 45.6 ft; May 2, 1915, 43.3 ft; May 9, 1922, 40.9 ft.

REMARKS.--Records good. Considerable water diverted above station for irrigation and municipal supply (see stations 08112500 and 08113500). For statement regarding regulation by reservoirs and by Soil Conservation Service floodwater-retarding structures, see Brazos River at Washington (station 08110200) and Brazos River near Hempstead (station 08111500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1392: 1933. WSP 1442: Drainage area. WSP 1632: 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	952	11,300	4,530	8,590	6,160	1,820	1,270	2,700	2,060	1,100	2,380	1,190
2	923	10,500	5,270	8,500	5,510	1,790	1,200	1,390	1,840	1,110	2,590	1,530
3	741	8,480	8,840	8,720	6,180	1,810	1,130	1,750	1,730	1,630	2,780	1,620
4	525	6,740	8,540	9,060	6,650	2,090	1,040	4,270	1,540	1,540	2,960	1,620
5	744	5,830	7,670	9,360	6,370	2,180	905	6,000	1,420	1,340	2,830	1,350
6	1,200	5,400	8,420	9,690	5,820	2,110	731	7,020	1,390	1,280	2,610	1,190
7	1,570	4,890	11,100	11,600	5,170	1,980	900	7,010	1,370	1,090	2,390	1,190
8	1,210	4,520	14,400	13,400	5,020	1,770	1,190	16,400	1,210	905	2,050	1,110
9	1,100	4,950	15,100	12,700	5,220	1,520	997	20,800	1,050	812	1,660	1,030
10	896	5,750	13,600	11,600	5,000	1,350	793	12,000	1,670	1,920	1,630	1,030
11	738	5,870	12,300	10,700	5,200	1,170	681	13,600	2,010	3,470	1,640	1,030
12	1,120	5,740	17,300	10,100	5,500	1,090	633	23,100	1,770	2,870	1,590	1,030
13	1,480	5,670	22,600	10,000	5,340	1,070	766	20,300	1,430	2,050	1,600	1,110
14	1,580	5,700	21,500	10,200	4,440	1,340	866	15,100	1,660	1,660	1,530	1,110
15	1,630	5,720	17,000	9,460	3,690	2,030	847	12,000	1,420	1,730	1,550	1,030
16	1,570	5,710	15,200	8,270	3,190	2,320	772	10,700	1,220	1,610	1,300	1,190
17	1,540	5,650	14,700	7,820	2,950	2,080	911	9,140	2,160	1,470	971	1,110
18	2,690	5,640	14,800	7,990	2,910	1,910	1,090	7,340	4,450	1,480	912	950
19	3,460	5,720	15,600	8,030	2,720	1,600	1,110	5,710	5,000	1,460	820	740
20	3,140	5,660	15,900	7,460	2,420	1,650	1,090	4,490	4,910	1,460	760	620
21	3,550	6,570	14,900	6,590	2,240	4,580	951	3,940	6,300	1,710	674	680
22	3,830	11,200	13,600	5,500	2,170	10,700	929	3,990	6,820	2,160	614	680
23	4,180	10,100	12,900	4,610	2,130	5,640	841	4,190	5,110	2,350	654	620
24	11,500	7,390	12,000	4,210	2,030	2,890	876	4,160	3,160	2,070	707	680
25	12,700	5,700	10,300	3,950	1,960	1,990	772	4,370	2,090	1,800	650	810
26	9,540	4,680	9,390	3,750	1,900	1,570	601	3,870	2,030	1,580	576	680
27	9,800	4,450	9,080	3,650	1,870	1,280	641	3,360	2,150	1,750	589	740
28	11,400	4,860	8,800	3,570	1,840	1,160	808	2,950	1,840	1,890	691	810
29	11,600	4,950	8,930	3,520	1,790	1,080	3,790	2,540	1,460	1,860	668	880
30	11,500	4,630	8,810	4,420	------	1,260	5,100	2,410	1,170	2,120	605	880
31	11,500	------	8,680	6,380	------	1,410	------	2,340	------	2,300	771	------
TOTAL	129,909	189,970	381,760	243,400	113,390	68,240	34,231	238,940	73,440	53,577	43,752	30,240
MEAN	4,191	6,332	12,310	7,852	3,910	2,201	1,141	7,708	2,448	1,728	1,411	1,008
MAX	12,700	11,300	22,600	13,400	6,650	10,700	5,100	23,100	6,820	3,470	2,960	1,620
MIN	525	4,450	4,530	3,520	1,790	1,070	601	1,390	1,050	812	576	620
AC-FT	257,700	376,800	757,200	482,800	224,900	135,400	67,900	473,900	145,700	106,300	86,780	59,980

CAL YR 1971 TOTAL 1,045,313 MEAN 2,864 MAX 22,600 MIN 330 AC-FT 2,073,000
WTR YR 1972 TOTAL 1,600,849 MEAN 4,374 MAX 23,100 MIN 525 AC-FT 3,175,000

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 downstream from Coon Creek, 5.5 miles north of Needville, and 10.5 miles upstream from Fairchild Creek.

DRAINAGE AREA.--42.3 sq mi.

PERIOD OF RECORD.--May 1947 to June 1950, March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 59.39 ft above mean sea level, adjustment of 1943. Prior to June 30, 1950, and May 29, 1959, to Mar. 29, 1960, nonrecording gage at 10 ft higher datum. March 1952 to May 28, 1959, and Mar. 30, 1960, to Sept. 30, 1967, water-stage recorder at 10 ft higher datum.

AVERAGE DISCHARGE.--22 years (1947-49, 1952-72), 30.2 cfs (21,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,700 cfs May 12 (gage height, 20.36 ft); minimum daily, 0.16 cfs Feb. 28.
Period of record: Maximum discharge, 10,400 cfs June 26, 1960 (gage height, 23.81 ft); maximum gage height, 24.03 ft Oct. 31, 1959; no flow at times.
Maximum stage since 1913, 24.4 ft in August 1945 before channel rectification, from information by local resident.

REMARKS.--Records fair. 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.62	.51	2.2	98	.54	.35	1.7	1.4	1.9	8.7	.37
2	1.2	.61	.81	1.3	58	.40	.39	55	1.3	1.9	1.2	.40
3	.94	.60	2.8	.85	34	.48	.40	15	2.1	1.5	1.4	.46
4	99	.52	1.6	1.3	14	.49	.46	2.7	2.1	28	13	.41
5	92	.55	179	5.4	6.1	.48	.84	1.8	1.8	33	3.7	.37
6	86	.55	577	3.2	3.1	.36	1.5	1.7	2.3	2.6	.56	.36
7	34	.52	192	1.7	2.1	.44	.96	167	1.8	1.8	.29	.38
8	12	.53	91	1.0	1.5	.47	.84	112	1.1	35	.25	.45
9	4.6	.54	61	1.0	1.2	.31	1.4	19	1.3	40	.27	.46
10	2.0	.53	67	1.0	.86	.34	1.8	449	42	7.7	.18	.42
11	1.2	.53	52	.73	1,030	.43	1.6	995	115	2.2	1.9	.36
12	.95	.46	28	.70	333	.44	2.3	1,600	42	6.2	34	.39
13	.89	.49	16	.67	113	.39	2.7	386	17	7.2	4.4	.56
14	.80	.49	8.4	.60	64	.43	3.0	141	12	1.6	.41	.67
15	.72	.47	4.9	.53	40	.41	2.0	81	8.0	1.4	.22	.86
16	.75	.49	51	.45	21	.42	1.8	41	117	1.6	.19	18
17	23	.52	169	.43	9.1	.34	3.2	24	124	1.2	.32	3.2
18	37	.59	22	.51	3.5	.31	2.2	14	28	1.1	5.3	3.0
19	9.6	.50	4.8	.54	1.8	.32	1.8	7.5	7.9	.99	128	1.8
20	121	.52	2.1	11	1.3	110	2.4	4.4	3.1	1.3	111	1.2
21	129	.55	1.5	4.0	1.0	180	7.2	3.2	2.1	2.2	24	.93
22	49	.55	1.2	1.5	.84	23	13	2.4	1.8	1.9	2.4	1.0
23	24	.85	1.0	1.1	.71	2.8	2.6	2.0	1.9	2.0	.49	1.0
24	11	.64	.90	.77	.57	.91	2.1	1.7	1.9	1.3	.46	1.8
25	4.7	.57	.64	.51	.43	.56	1.7	1.6	1.9	.91	.55	3.6
26	2.2	.60	.54	.39	.32	.33	1.5	1.4	2.2	2.6	.56	1.9
27	1.2	.54	.47	.27	.20	.26	103	1.8	2.3	1.5	.47	6.1
28	.93	.55	.61	.32	.16	.26	111	2.6	2.0	1.6	.45	26
29	.82	.56	.72	.44	.35	.22	21	1.9	1.8	1.1	.36	12
30	.75	.49	.80	823	------	.19	3.0	1.8	1.8	1.4	.36	47
31	.67	------	1.2	207	------	.28	------	1.6	------	17	.34	------
TOTAL	753.52	16.53	1,540.50	1,074.41	1,840.14	326.61	298.04	4,140.8	550.9	211.70	345.73	135.45
MEAN	24.3	.55	49.7	34.7	63.5	10.5	9.93	134	18.4	6.83	11.2	4.52
MAX	129	.85	577	823	1,030	180	111	1,600	124	40	128	47
MIN	.67	.46	.47	.27	.16	.19	.35	1.4	1.1	.91	.18	.36
AC-FT	1,490	33	3,060	2,130	3,650	648	591	8,210	1,090	420	686	269

CAL YR 1971 TOTAL 12,786.22 MEAN 35.0 MAX 2,250 MIN .01 AC-FT 25,360
WTR YR 1972 TOTAL 11,234.33 MEAN 30.7 MAX 1,600 MIN .16 AC-FT 22,280

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
1-30	1230	16.93	1,300
2-11	1200	18.41	1,820
5-12	1200	20.36	2,700

08116400 Dry Creek near Rosenberg, Tex.

LOCATION.--Lat 29°30'42", long 95°44'45", Fort Bend County, on right bank 38 ft downstream from county road bridge, 5.0 miles southeast of Rosenberg, and 8.2 miles upstream from Smither's Lake (Lake George) spillway.

DRAINAGE AREA.--8.53 sq mi. See REMARKS.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 71.90 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 10.6 cfs (7,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 766 cfs May 10 (gage height, 10.12 ft); no flow for many days.
Period of record: Maximum discharge, 2,410 cfs Oct. 31, 1959 (gage height, 12.66 ft); 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 an unknown amount of irrigation return flow originally diverted from the Brazos River through the Richmond Irrigation Co.'s Canal (see station 08113500). Recording rain gage located in basin since January 1969.

REVISIONS (WATER YEARS).--WSP 1732: Drainage area. WSP 1922: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36		0	.17	13	0	10	.08	2.2	.62	.40	.52
2	.21		0	.10	5.2	0	11	3.9	2.2	.86	.54	.13
3	.13		0	.06	2.1	0	10	.55	2.3	1.1	.58	.01
4	.25		0	.02	.66	0	7.6	15	2.1	4.2	.50	.01
5	57		72	0	.36	0	14	25	1.5	1.7	.48	.09
6	58		138	0	.30	.11	23	19	1.9	.87	.45	.66
7	13		27	0	.21	.50	24	41	1.7	.62	1.1	.59
8	7.2		17	0	.13	.10	25	33	1.5	.51	2.1	.51
9	4.2		12	0	.07	.04	24	33	.93	.37	2.0	2.8
10	2.0		11	0	.06	.02	28	185	59	.34	1.0	5.1
11	.75		6.2	0	215	.01	31	196	21	.48	1.0	1.9
12	1.6		3.1	0	64	0	37	307	4.8	.75	1.3	.71
13	1.5		1.5	0	15	0	28	48	2.8	.72	.97	.68
14	.58		.75	0	5.2	4.6	10	11	3.8	.74	.92	.56
15	.30		.50	0	2.3	20	3.3	6.5	3.4	.32	.80	.45
16	.25		7.0	0	1.1	20	2.0	6.6	1.4	.12	.73	.08
17	3.4		45	0	.42	18	.70	14	11	.10	.66	0
18	7.9		9.5	0	.21	23	12	34	7.1	.27	.66	0
19	5.4		4.9	0	.07	26	35	36	7.5	.36	.64	.02
20	26		2.1	0	.04	32	26	31	8.1	.38	.71	.54
21	19		.75	0	.02	39	15	28	6.5	.63	.83	.72
22	7.2		.25	0	.01	31	.09	22	4.7	1.9	.85	.82
23	3.8		.10	0	0	19	.01	15	5.3	3.9	.85	.96
24	1.5		.04	0	0	14	.03	9.1	3.4	2.8	.85	2.0
25	.50		.01	0	0	11	1.2	2.5	1.5	.23	.88	.09
26	.17		0	0	0	8.9	7.5	3.1	.93	.02	.75	.03
27	.10		0	0	0	9.9	74	3.5	.97	0	.66	1.8
28	.01		0	0	0	11	21	2.2	1.3	.02	.64	1.8
29	0		0	0	0	13	2.9	1.9	.60	.27	.58	.55
30	0		.25	254	------	14	.45	2.2	.57	.22	.58	3.6
31	0	------	.30	44	------	11	------	2.0	------	.22	.51	------
TOTAL	222.31	0	359.25	298.35	325.46	326.18	483.78	1,137.13	172.00	25.64	25.52	27.73
MEAN	7.17	0	11.6	9.62	11.2	10.5	16.1	36.7	5.73	.83	.82	.92
MAX	58	0	138	254	215	39	74	307	59	4.2	2.1	5.1
MIN	0	0	0	0	0	0	.01	.08	.57	0	.40	0
AC-FT	441	0	713	592	646	647	960	2,260	341	51	51	55

CAL YR 1971 TOTAL 5,053.66 MEAN 13.8 MAX 352 MIN 0 AC-FT 10,020
WTR YR 1972 TOTAL 3,403.35 MEAN 9.30 MAX 307 MIN 0 AC-FT 6,750

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-30	0700	8.50	508	5-10	2300	10.12	766
2-11	0800	7.96	438	5-12	0900	9.91	720

08116650 Brazos River near Rosharon, Tex.

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 downstream from Big Creek, 2.1 miles upstream from Cow Creek, and 7.3 miles west of Rosharon.

DRAINAGE AREA.--44,340 sq mi, approximately, of which 9,240 sq mi is probably noncontributing.

PERIOD OF RECORD.--April 1967 to current year.

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

AVERAGE DISCHARGE.--5 years, 7,017 cfs (5,084,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 32,400 cfs May 13 (elevation, 31.86 ft); minimum daily, 197 cfs Apr. 27.
Period of record: Maximum discharge, 79,900 cfs May 14, 1968 (elevation, 50.74 ft); minimum daily, 40 cfs Apr. 7-10, 1967.
Maximum elevation since at least 1884, 56.4 ft about Dec. 11, 1913, from information by Texas Highway Department.

REMARKS.--Records good. Water diverted above station for irrigation, industrial, and municipal supply materially affect low flow. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Brazos River at Washington (station 08110200). Flow is partly regulated by 29 major upstream reservoirs having a combined capacity of 7,020,000 acre-ft (4,138,000 acre-ft for flood control). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	10,700	3,960	7,850	7,210	1,500	897	3,230	1,700	605	1,890	771
2	990	10,100	4,040	7,740	5,840	1,550	825	1,580	1,470	520	1,960	1,210
3	950	8,540	5,940	7,940	5,450	1,660	777	961	1,360	575	2,140	1,470
4	810	6,710	8,140	8,200	6,070	1,770	723	1,740	1,190	942	2,310	1,610
5	794	5,530	8,910	8,530	6,220	1,960	639	3,400	1,040	1,030	2,470	1,540
6	1,090	5,200	11,400	8,940	5,870	1,960	519	4,750	949	930	2,370	1,260
7	1,520	4,760	12,500	9,930	5,220	1,680	435	5,470	912	834	2,230	1,180
8	1,420	4,210	14,100	12,800	4,670	1,580	557	8,850	891	689	2,100	1,180
9	1,170	3,900	16,200	13,500	4,700	1,510	674	21,000	733	651	1,780	1,150
10	1,040	4,430	15,600	12,400	4,420	1,170	534	16,800	833	591	1,560	1,050
11	862	4,870	13,600	11,000	5,760	1,160	420	15,300	3,300	1,690	1,520	1,060
12	816	4,980	14,800	9,940	11,800	1,050	303	25,400	2,700	2,480	1,520	1,070
13	1,200	5,090	22,100	9,440	8,850	1,040	289	31,100	1,800	2,020	1,480	1,070
14	1,380	5,200	24,100	9,370	5,850	775	371	23,000	1,580	1,640	1,460	1,240
15	1,450	5,090	20,400	9,060	4,210	1,060	457	15,900	1,540	1,410	1,400	1,280
16	1,480	5,200	16,500	8,060	3,470	1,790	482	12,100	1,200	1,400	1,380	1,240
17	1,420	5,200	15,600	7,230	2,990	1,810	439	10,300	1,280	1,290	1,160	1,350
18	1,720	5,200	15,300	7,100	2,730	1,490	507	8,350	2,600	1,180	1,030	1,250
19	2,790	5,090	15,300	7,320	2,810	1,330	525	6,480	4,100	1,160	954	1,100
20	2,910	5,200	15,900	7,300	2,590	1,080	515	4,960	4,160	1,130	995	935
21	3,250	5,090	15,500	6,630	2,370	1,740	494	4,000	4,300	1,160	904	807
22	3,420	7,910	14,000	5,710	2,150	7,650	456	3,590	5,510	1,630	743	862
23	3,430	10,200	13,000	4,830	1,890	7,680	427	3,460	5,190	2,050	653	819
24	5,890	8,280	12,200	4,170	1,820	3,810	363	3,360	3,390	2,100	678	796
25	11,800	6,230	10,700	3,720	1,840	2,010	374	3,310	2,020	1,820	719	958
26	10,400	4,980	9,140	3,460	1,910	1,380	281	3,340	1,370	1,500	664	1,050
27	8,410	4,320	8,410	3,290	1,860	1,090	197	2,900	1,360	1,180	602	1,130
28	9,580	4,320	7,940	3,180	1,750	895	945	2,560	1,360	1,400	605	1,030
29	10,500	4,650	7,860	3,100	1,530	798	1,020	2,230	1,080	1,320	658	1,070
30	10,700	4,210	8,030	4,050	------	727	3,790	1,910	792	1,400	634	1,080
31	10,700	------	7,830	7,670	------	831	------	1,840	------	1,780	574	------
TOTAL	114,932	175,390	389,000	233,460	123,850	57,536	19,235	253,171	61,710	40,107	41,143	33,618
MEAN	3,707	5,846	12,550	7,531	4,271	1,856	641	8,167	2,057	1,294	1,327	1,121
MAX	11,800	10,700	24,100	13,500	11,800	7,680	3,790	31,100	5,510	2,480	2,470	1,610
MIN	794	3,900	3,960	3,100	1,530	727	197	961	733	520	574	771
AC-FT	228,000	347,900	771,600	463,100	245,700	114,100	38,150	502,200	122,400	79,550	81,610	66,680

CAL YR 1971 TOTAL 1,006,105 MEAN 2,756 MAX 24,100 MIN 67 AC-FT 1,996,000
WTR YR 1972 TOTAL 1,543,152 MEAN 4,216 MAX 31,100 MIN 197 AC-FT 3,061,000

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 downstream from Snake Creek, and 4.5 miles northeast of Boling.

DRAINAGE AREA.--727 sq mi.

PERIOD OF RECORD.--May 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 30.81 ft above mean sea level.

AVERAGE DISCHARGE.--18 years, 448 cfs (324,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,200 cfs May 14 (gage height, 35.14 ft); minimum daily, 25 cfs Nov. 17.
Period of record: Maximum discharge, 21,200 cfs June 28, 1960 (gage height, 42.41 ft); minimum daily, 2.4 cfs Nov. 27-30, 1956.
Maximum stage since at least 1900, 43.5 ft in 1913 (probably December). Flood in September 1938 reached a stage of 43.3 ft, 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 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	370	127	34	314	1,900	54	88	209	103	105	99	131
2	313	107	32	508	2,060	51	71	185	101	102	90	123
3	287	92	40	566	2,450	49	61	216	98	97	84	165
4	260	76	90	523	1,870	47	54	180	106	95	81	243
5	288	65	770	553	1,120	46	50	181	105	116	79	191
6	366	58	2,920	528	728	44	46	182	102	160	79	165
7	455	49	3,590	505	494	43	45	264	102	198	72	142
8	607	43	3,230	465	342	42	43	613	101	221	66	138
9	679	39	3,310	453	233	40	42	584	99	224	64	132
10	791	37	3,280	388	168	40	42	764	157	244	63	124
11	774	34	2,780	300	1,120	39	41	5,140	510	300	62	116
12	613	32	1,930	218	2,920	38	45	7,730	411	325	68	112
13	449	30	1,250	164	2,900	38	47	10,900	376	357	66	111
14	321	29	890	126	2,900	38	45	12,000	573	390	68	117
15	238	28	678	103	3,030	37	56	12,000	540	452	76	142
16	186	26	494	85	2,610	37	53	10,400	620	531	127	184
17	201	25	1,370	71	1,470	37	53	8,020	805	530	114	227
18	378	27	582	64	764	36	62	6,080	618	461	163	239
19	474	30	342	58	508	35	58	4,550	596	415	153	231
20	529	29	248	58	343	36	62	3,300	574	373	135	229
21	975	28	184	57	228	213	74	1,870	606	363	127	227
22	785	28	142	55	154	97	98	771	575	330	134	209
23	690	31	109	53	112	1,090	106	496	448	303	128	187
24	787	36	94	51	94	2,280	102	358	325	311	110	186
25	924	35	79	49	82	1,640	79	259	220	278	102	189
26	769	46	71	47	74	854	64	189	158	264	98	248
27	541	48	66	46	66	536	55	148	131	236	93	292
28	386	48	62	48	61	366	73	123	115	196	97	367
29	278	45	58	46	57	238	133	108	107	154	105	433
30	195	39	65	818	------	156	227	101	105	114	110	421
31	152	------	148	2,160	------	112	------	104	------	97	129	------
TOTAL	15,061	1,367	28,938	9,480	30,858	8,409	2,075	88,025	9,487	8,342	3,042	6,021
MEAN	486	45.6	933	306	1,064	271	69.2	2,840	316	269	98.1	201
MAX	975	127	3,590	2,160	3,030	2,280	227	12,000	805	531	163	433
MIN	152	25	32	46	57	35	41	101	98	95	62	111
AC-FT	29,870	2,710	57,400	18,800	61,210	16,680	4,120	174,600	18,820	16,550	6,030	11,940

CAL YR 1971 TOTAL 161,006.7 MEAN 441 MAX 8,590 MIN 7.8 AC-FT 319,400
WTR YR 1972 TOTAL 211,105.0 MEAN 577 MAX 12,000 MIN 25 AC-FT 418,700

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
12- 7	0300	21.09	3,720
2-12	2000	19.27	3,070
5-14	2200	35.14	12,200

08117900 Big Boggy Creek near Wadsworth, Tex.

LOCATION.--Lat 28°48'46", long 95°57'02", Matagorda County, on right bank at downstream end of bridge on Farm Road 521, 1.3 miles upstream from State Highway 60, 2.0 miles southwest of Wadsworth, and 13.1 miles upstream from mouth (Big Boggy Cut).

DRAINAGE AREA.--10.3 sq mi.

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.36 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 432 cfs May 7 (gage height, 10.36 ft); maximum gage height, 10.42 ft Dec. 5; no flow at times.
Period of record: Maximum discharge, 436 cfs Oct. 11, 1970 (gage height, 10.18 ft); maximum gage height, 10.42 ft Dec. 5, 1971; no flow at times.
Maximum stages since 1901, 11.4 ft May 31, 1970, and 10.9 ft in September 1961, from information by local residents.

REMARKS.--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. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.29	0	16	28	1.0	1.2	19	4.3	7.3	.10	6.7
2	1.7	.20	.03	61	18	.84	1.2	11	6.3	3.6	.10	6.8
3	2.0	.14	.02	37	11	.59	2.0	4.6	9.5	2.2	.53	9.2
4	11	.03	0	24	6.5	.49	2.1	2.3	11	1.9	2.6	11
5	50	0	271	14	3.1	.45	1.2	1.6	10	2.4	4.8	11
6	125	0	270	8.5	2.0	.30	1.4	19	8.7	2.7	4.9	18
7	52	0	137	4.9	1.5	.23	5.5	243	6.9	3.0	4.2	22
8	27	0	59	2.7	1.1	.30	7.4	306	5.9	4.9	3.0	17
9	15	0	35	1.8	.84	.22	7.1	203	5.4	8.6	2.1	13
10	9.6	0	23	1.4	.77	.14	6.1	99	6.1	10	2.0	9.9
11	6.1	0	15	1.1	2.4	.14	7.9	91	7.7	8.5	2.1	8.5
12	2.8	0	12	.80	11	.11	14	133	9.0	7.3	4.2	8.8
13	1.8	0	30	.66	10	.10	7.7	189	9.7	8.8	6.4	11
14	1.4	0	27	.59	6.9	.10	2.6	93	11	9.0	6.7	13
15	1.2	0	19	.47	3.9	.06	3.2	62	11	7.2	7.5	19
16	1.3	0	13	.34	2.3	.06	4.0	36	12	4.9	8.5	19
17	7.7	0	31	.31	1.4	.03	2.0	21	12	3.4	7.8	17
18	21	0	23	5.6	1.1	.03	2.0	13	11	2.5	6.7	13
19	13	0	14	7.4	.74	.01	1.8	7.2	10	1.3	7.8	11
20	14	0	9.3	2.7	.61	.16	1.7	3.9	9.2	.21	9.1	15
21	14	0	6.2	1.2	.52	.73	3.5	2.7	7.5	.10	9.0	12
22	6.9	0	3.4	.79	.48	.31	11	8.4	6.2	.98	11	7.7
23	2.9	8.1	1.8	.60	.45	.10	11	6.8	5.2	3.5	12	5.3
24	1.4	2.2	1.2	.53	.42	.06	8.7	3.2	4.5	5.3	11	65
25	1.0	.13	.91	.46	.44	.08	9.5	4.0	5.6	4.2	9.8	103
26	.83	0	.71	.34	.43	.03	11	6.4	4.9	3.2	8.5	57
27	.65	0	.61	.33	.30	1.6	25	3.4	6.1	1.8	7.5	46
28	.58	0	.54	.29	.29	.44	46	4.0	7.8	.53	6.9	33
29	.48	0	.48	.36	.84	2.2	42	4.1	16	.40	6.6	21
30	.39	0	.44	56	------	1.9	29	3.6	17	.30	7.1	78
31	.34	------	.50	45	------	2.1	------	3.9	------	.20	7.4	------
TOTAL	395.67	11.09	1,005.14	297.17	117.33	14.91	278.8	1,608.1	257.5	120.22	187.93	687.9
MEAN	12.8	.37	32.4	9.59	4.05	.48	9.29	51.9	8.58	3.88	6.06	22.9
MAX	125	8.1	271	61	28	2.2	46	306	17	10	12	103
MIN	.34	0	0	.29	.29	.01	1.2	1.6	4.3	.10	.10	5.3
CFSM	1.24	.04	3.15	.93	.39	.05	.90	5.04	.83	.38	.59	2.22
IN.	1.43	.04	3.63	1.07	.42	.05	1.01	5.81	.93	.43	.68	2.48
AC-FT	785	22	1,990	589	233	30	553	3,190	511	238	373	1,360

CAL YR 1971 TOTAL 4,055.29 MEAN 11.1 MAX 318 MIN 0 CFSM 1.08 IN 14.65 AC-FT 8,040
WTR YR 1972 TOTAL 4,981.76 MEAN 13.6 MAX 306 MIN 0 CFSM 1.32 IN 17.99 AC-FT 9,880

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE
12- 5	1700	10.42	384
5- 7	2000	10.36	432
5-13	0100	9.18	298

08118000 Lake J. B. Thomas near Vincent, Tex.

LOCATION.--Lat 32°35'09", long 101°12'18", Borden County, at Big Spring pump station on south side of lake, 4.0 miles upstream from dam on Colorado River, 7.3 miles north of Vincent, 12.5 miles west of Ira, and at mile 841.0.

DRAINAGE AREA.--3,524 sq mi, of which 2,590 sq mi is probably noncontributing. Drainage area includes 426 sq mi above Bull Creek diversion dam, of which 32 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Nov. 4, 1953, to Feb. 7, 1955, Colorado River Municipal Water District nonrecording gage located 4.0 miles downstream at same datum.

EXTREMES.--Current year: Maximum contents, 92,490 acre-ft Sept. 5 (elevation, 2,239.93 ft); minimum, 47,860 acre-ft Aug. 9, 10 (elevation, 2,227.99 ft).
Period of record: Maximum contents, 218,600 acre-ft Sept. 8, 1962 (elevation, 2,259.85 ft); minimum since first appreciable storage, 4,960 acre-ft May 28, 1971 (elevation, 2,206.43 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam, 14,500 ft long; storage began in July 1952; dam completed in September 1952. No appreciable storage prior to July 1953. Dam built by Colorado River Municipal Water District to impound water for municipal and industrial use for the cities of Big Spring, Odessa, and Snyder. A diversion dam on Bull Creek and a 213,000-foot-long gravity canal divert Bull Creek water to Lake J. B. Thomas, diversion of water began in November 1953. The service spillway is a rectangular reinforced concrete 38- by 53-foot structure at top and decreasing to two 14- by 14-foot uncontrolled openings designed to discharge a total of 10,000 cfs at a head of 17 ft. Two emergency spillways, one 500-foot wide located at left end of dam and one 1,600-foot wide located at right end of dam, are designed to discharge 161,000 cfs at elevation 2,275.0 ft (maximum design level). Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,280.0	-
Crest of south emergency spillway	2,267.0	283,600
Crest of north emergency spillway	2,264.0	255,000
Crest of service spillway (top of conservation storage)	2,258.0	203,600
Invert of intake to service outlet	2,200.0	1,300

COOPERATION.--Capacity curve, based on surveys made in 1948 and 1950. Record of diversion and daily lake elevations, from Oct. 1 to Aug. 13, furnished by Colorado River Municipal Water District.

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

2,228.0	47,890	2,237.0	79,900
2,233.0	64,480	2,241.0	97,380

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70,010	68,610	66,060	64,160	62,100	60,210	56,940	53,550	53,740	52,110	48,660	88,160
2	69,940	68,530	65,980	64,120	61,960	60,070	56,840	53,420	53,610	52,050	48,510	90,900
3	70,160	68,340	65,950	64,050	61,890	59,900	56,710	53,290	53,520	51,950	48,360	92,220
4	70,160	68,230	65,910	63,910	61,820	59,900	56,610	53,130	53,360	52,140	48,360	92,450
5	70,130	68,110	65,840	63,840	61,780	59,730	56,510	53,130	53,230	52,110	48,260	92,490
6	70,010	67,970	65,800	63,810	61,750	59,660	56,370	53,330	53,100	52,080	48,110	92,450
7	69,940	67,780	65,800	63,770	61,640	59,630	56,310	54,420	52,940	52,010	48,010	92,400
8	69,860	67,750	65,690	63,730	61,640	59,460	56,210	54,750	52,810	51,920	47,890	92,360
9	69,780	67,670	65,580	63,650	61,570	59,350	56,080	54,980	52,720	51,790	47,860	92,310
10	69,670	67,600	65,580	63,590	61,530	59,250	55,980	55,940	52,690	51,660	47,860	92,140
11	69,560	67,490	65,510	63,560	61,460	59,150	55,880	56,010	52,720	51,530	47,920	92,050
12	69,440	67,420	65,430	63,340	61,460	59,080	55,750	56,010	52,650	51,410	48,200	91,910
13	69,330	67,310	65,400	63,340	61,390	59,010	55,610	55,980	52,780	51,250	52,140	91,740
14	69,210	67,270	65,210	63,240	61,320	58,940	55,480	55,840	52,880	51,090	69,590	91,600
15	69,100	67,230	65,250	63,170	61,280	58,800	55,250	55,780	53,840	50,930	73,510	91,520
16	69,020	67,200	65,180	63,100	61,250	58,700	55,150	55,680	54,090	50,800	73,790	91,470
17	68,910	67,090	65,100	63,060	61,180	58,600	54,950	55,580	54,030	50,620	73,830	91,340
18	69,060	67,050	65,030	63,020	61,110	58,490	54,820	55,510	53,970	50,560	73,710	91,290
19	68,910	66,940	64,920	62,950	61,070	58,360	54,820	55,380	53,840	50,490	73,630	91,160
20	68,830	66,900	64,880	62,880	60,970	58,220	54,720	55,250	53,810	50,370	73,830	91,070
21	68,760	66,870	64,810	62,810	60,930	58,150	54,620	55,150	53,650	50,250	73,830	90,850
22	68,680	66,720	64,770	62,740	60,790	58,050	54,490	55,020	53,450	50,120	73,710	90,670
23	68,570	66,650	64,700	62,700	60,720	57,980	54,390	54,920	53,330	49,970	73,630	90,500
24	68,490	66,570	64,660	62,600	60,690	57,840	54,290	54,820	53,100	49,870	73,470	90,410
25	68,380	66,500	64,630	62,530	60,660	57,670	54,060	54,650	52,940	49,750	73,470	90,230
26	68,340	66,460	64,590	62,530	60,520	57,530	54,030	54,550	52,810	49,600	75,160	90,140
27	68,300	66,350	64,550	62,390	60,450	57,500	53,930	54,320	52,590	49,440	81,440	90,050
28	68,260	66,240	64,480	62,310	60,380	57,330	53,900	54,190	52,430	49,280	86,780	90,010
29	68,720	66,200	64,370	62,280	60,240	57,200	53,770	54,060	52,330	49,190	87,420	89,790
30	68,680	66,090	64,300	62,210	------	57,040	53,650	53,930	52,210	49,040	87,470	89,700
31	68,640	------	64,270	62,170	------	56,970	------	53,840	------	48,910	87,380	------
(†)	2,234.13	2,233.44	2,232.94	2,232.35	2,231.80	2,230.84	2,229.83	2,229.89	2,229.38	2,228.33	2,238.77	2,239.30
(*)	-1,450	-2,550	-1,820	-2,100	-1,930	-3,270	-3,320	+190	-1,630	-3,300	+38,470	+2,320
(††)	1,760	1,140	1,100	1,210	1,590	2,330	1,940	1,780	1,850	2,240	1,880	2,020
MAX	70,160	68,610	66,060	64,160	62,100	60,210	56,940	56,010	54,090	52,110	87,470	92,490
MIN	68,260	66,090	64,270	62,170	60,240	56,970	53,650	53,130	52,210	48,910	47,860	88,160

CAL YR 1971..... * +51,620 †† 12,170 MAX 70,160 MIN 4,970
WTR YR 1972..... * +19,610 †† 20,840 MAX 92,490 MIN 47,860

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal, industrial, and mining use.

08119500 Colorado River near Ira, Tex.

LOCATION.--Lat 32°32'18", long 101°03'12", Scurry County, on right bank 530 ft downstream from bridge on State Highway 350, 3.8 miles downstream from Bluff Creek, 4 miles upstream from Willow Creek, 4.5 miles southwest of Ira, and at mile 826.3.

DRAINAGE AREA.--3,617 sq mi, of which 2,590 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1947 to September 1952 (monthly records only 1950-52), October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,134.15 ft above mean sea level. Oct. 1-30, 1947, nonrecording gage at site 75 ft upstream at same datum.

AVERAGE DISCHARGE.--5 years (1947-52) prior to completion of Colorado River Dam, 50.5 cfs (36,590 acre-ft per year); 14 years (1958-72) regulated, 12.5 cfs (9,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,920 cfs Aug. 14 (gage height, 16.39 ft); no flow at times.
Period of record: Maximum discharge, 20,500 cfs July 6, 1948 (gage height, 21.35 ft), from rating curve extended above 9,600 cfs by conveyance-slope method; no flow at times.
Flood of June 16, 1913 (gage height, 32 ft), was the greatest since at least that date, from information by local resident. Flood in May 1947 reached a stage of 25.1 ft, from floodmark at site of former bridge 269 ft upstream from gage.

REMARKS.--Records good. Since July 1952 flow largely regulated by Lake J. B. Thomas (station 08118000) 11 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	7.0	.47	.48	.54	.27	.11	.08	0	0	0	272
2	.39	3.8	1.5	.42	.57	.23	.13	.06	0	0	0	531
3	7.2	2.4	1.4	.47	.45	.22	.13	.04	0	0	0	298
4	10	1.8	.88	.37	.41	.22	.10	.02	0	19	2.3	24
5	2.7	1.4	.84	.37	.36	.21	.09	.04	0	4.7	.06	6.3
6	1.0	1.0	.72	.41	.42	.19	.08	17	0	.61	0	3.5
7	.74	.62	.64	.42	.36	.21	.06	28	0	.22	0	2.5
8	.74	.62	.65	.45	.37	.18	.05	2.7	0	.12	0	1.7
9	.62	.67	.88	.50	.37	.18	.04	.64	0	.04	.67	1.3
10	.44	.58	1.2	.49	.41	.17	.04	.39	0	0	.37	.98
11	.44	.58	.81	.44	.44	.16	.04	.48	0	0	.99	.74
12	.44	.54	.58	.37	.48	.17	.05	.35	0	0	.35	.58
13	.44	.51	.51	.39	.48	.20	.03	.23	0	0	578	.48
14	.44	.52	.48	.34	.42	.18	.01	.23	0	0	2,170	5.9
15	.39	.42	.50	.29	.41	.18	0	.16	.16	0	45	.47
16	.52	.43	.46	.32	.36	.16	0	.13	.03	0	22	.34
17	.52	2.8	.38	.35	.36	.16	0	.11	0	0	13	.33
18	30	1.3	.39	.52	.33	.16	0	.10	0	.59	7.0	.29
19	5.8	.75	.40	.43	.30	.12	5.4	.09	0	1.6	4.7	.31
20	2.4	.56	.40	.43	.34	.14	.93	.08	0	.27	3.0	.46
21	1.0	.51	.45	.43	.33	.11	.27	.07	0	.12	2.1	.34
22	.74	.49	.39	.46	.31	.10	.13	.06	0	.04	1.8	.24
23	.62	.50	.41	.40	.31	.12	.09	.05	0	0	1.5	.22
24	.52	.48	.48	.41	.35	.11	.04	.05	0	0	1.2	.22
25	.52	.48	.52	.32	.34	.09	.01	.04	0	0	6.1	.28
26	1.4	.50	.50	.33	.34	.08	.01	.02	0	0	455	.26
27	1.8	.42	.46	.37	.29	.08	4.8	.02	0	0	1,710	.20
28	1.0	.42	.18	.36	.31	.09	.20	.01	0	0	58	.10
29	228	.47	.23	.39	.31	.06	.15	0	0	0	18	.09
30	56	.40	.36	.43	------	.13	.08	0	0	0	10	.08
31	13	------	.46	.45	------	.12	------	0	------	0	6.0	------
TOTAL	370.34	32.97	18.53	12.61	11.07	4.80	13.07	51.25	.19	27.31	5,117.14	1,153.21
MEAN	11.9	1.10	.60	.41	.38	.15	.44	1.65	.006	.88	165	38.4
MAX	228	7.0	1.5	.52	.57	.27	5.4	28	.16	19	2,170	531
MIN	.39	.40	.18	.29	.29	.06	0	0	0	0	0	.08
AC-FT	735	65	37	25	22	9.5	26	102	.4	54	10,150	2,290

CAL YR 1971 TOTAL 6,842.60 MEAN 18.7 MAX 1,720 MIN 0 AC-FT 13,570
WTR YR 1972 TOTAL 6,812.49 MEAN 18.6 MAX 2,170 MIN 0 AC-FT 13,510

08120500 Deep Creek near Dunn, Tex.

LOCATION.--Lat 32°34'25", long 100°54'27", Scurry County, at center of downstream side of bridge on Farm Road 1606, 1.5 miles northwest of Dunn, 2.7 miles upstream from Sulphur Draw, and 8.6 miles upstream from mouth.

DRAINAGE AREA.--198 sq mi, of which 10 sq mi is probably noncontributing.

PERIOD OF RECORD.--April 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,172.17 ft above mean sea level. Prior to Apr. 21, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--19 years, 13.2 cfs (9,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,700 cfs Aug. 14 (gage height, 31.28 ft, from floodmarks), from rating curve extended above 12,000 cfs by velocity-area study; no flow for many days.
Period of record: Maximum discharge, 20,700 cfs Aug. 14, 1972 (gage height, 31.28 ft, from floodmarks), from rating curve extended above 12,000 cfs by velocity-area study; no flow for many days each year.
Maximum discharge since at least 1881, 36,400 cfs June 19, 1939, by slope-area measurement at site 8.0 miles upstream from gage. Flood in 1892 reached about same stage as that of June 19, 1939, from information by local residents.

REMARKS.--Records good.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	6.4	3.2	1.8	3.0	.61	.24	241	.40	70	0	197
2	3.6	4.0	3.7	2.7	3.3	.42	.35	7.2	.26	7.5	0	1,120
3	47	2.7	6.2	2.6	2.6	.35	.80	4.2	.21	1.5	0	215
4	14	2.4	3.0	2.2	2.4	.71	1.3	3.3	.16	1.7	0	48
5	6.4	2.4	2.6	1.8	2.8	.59	.49	2.8	.13	4.1	0	29
6	5.0	2.4	2.4	2.3	3.5	.43	.32	32	.12	1.2	0	20
7	4.0	2.0	2.2	2.6	3.2	.53	.33	59	.10	.64	0	14
8	3.8	2.0	2.0	2.8	3.1	.60	.69	9.7	.10	.39	0	11
9	3.4	2.3	2.2	3.0	2.9	.36	.31	3.6	.10	.18	0	9.0
10	2.9	2.2	2.9	2.7	2.7	.35	.17	2.8	.10	.33	0	8.0
11	2.9	2.5	3.2	2.5	3.3	.33	.13	2.2	8.6	.35	0	7.0
12	2.9	2.2	2.3	2.0	3.4	.24	.13	3.1	.69	.25	0	6.0
13	2.5	2.1	2.0	2.2	3.2	.27	.11	3.8	.25	.11	1,270	5.5
14	2.9	2.1	2.0	1.9	2.8	.40	.09	2.3	.15	.27	6,990	5.0
15	2.5	2.0	2.1	1.9	2.6	.24	.05	1.7	12	.21	330	23
16	2.5	2.2	2.3	1.8	2.3	.20	.02	1.6	4.5	.14	116	35
17	16	2.6	2.0	2.4	2.2	1.3	0	1.4	1.4	.10	61	13
18	21	4.2	1.7	2.3	1.9	.97	0	1.3	.67	.08	38	8.4
19	8.5	2.2	1.9	2.1	2.0	.50	.06	1.3	.47	.57	23	7.0
20	5.0	1.9	2.0	1.9	2.4	.38	.02	1.2	.30	.71	13	6.0
21	3.6	1.7	1.8	2.3	2.4	.42	0	1.4	.20	.31	7.9	5.0
22	2.9	1.6	2.0	2.3	2.0	.42	0	1.4	.12	.21	5.8	4.5
23	.90	1.7	1.9	2.8	1.6	.31	0	1.3	.06	.11	4.4	4.0
24	.56	1.6	2.2	2.8	1.6	.41	0	1.2	.02	0	3.2	4.0
25	.56	1.7	1.9	2.4	1.5	.51	0	1.1	0	0	302	3.5
26	.62	1.9	1.8	2.5	1.2	.99	0	.95	0	0	119	3.5
27	.56	1.8	1.7	3.1	1.1	1.5	0	.86	0	0	438	3.0
28	.56	2.0	1.5	2.5	1.1	.91	0	.79	.11	0	50	3.0
29	52	2.5	1.5	2.9	.92	.30	0	.72	.09	0	17	2.5
30	68	2.6	1.5	2.7	------	.29	35	.64	.20	0	8.3	2.5
31	18	------	1.4	2.7	------	.37	------	.53	------	0	5.7	------
TOTAL	308.86	71.9	71.1	74.5	69.02	16.21	40.61	396.39	31.51	90.96	9,802.3	1,822.4
MEAN	9.96	2.40	2.29	2.40	2.38	.52	1.35	12.8	1.05	2.93	316	60.7
MAX	68	6.4	6.2	3.1	3.5	1.5	35	241	12	70	6,990	1,120
MIN	.56	1.6	1.4	1.8	.92	.20	0	.53	0	0	0	2.5
AC-FT	613	143	141	148	137	32	81	786	63	180	19,440	3,610

CAL YR 1971 TOTAL 11,832.14 MEAN 32.4 MAX 2,280 MIN 0 AC-FT 23,470
WTR YR 1972 TOTAL 12,795.76 MEAN 35.0 MAX 6,990 MIN 0 AC-FT 25,380

PEAK DISCHARGE (BASE, 850 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5- 1	0130	13.35	1,400	8-25	1400	12.32	1,220
8-14	about 0100	a31.28	20,700	9- 2	1845	20.41	2,970

a From floodmarks.

08120700 Colorado River near Cuthbert, Tex.

LOCATION.--Lat 32°28'41", long 100°56'54", Mitchell County, on left bank at downstream side of bridge on Farm Road 1808, 4.0 miles downstream from Deep Creek, 4.8 miles east of Cuthbert, 8.0 miles northwest of Colorado City, and at mile 810.6.

DRAINAGE AREA.--4,028 sq mi, of which 2,600 sq mi is probably noncontributing.

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,073.49 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 37.3 cfs (27,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs Aug. 14 (gage height, 25.99 ft); no flow at times.
Period of record: Maximum discharge, 11,500 cfs Aug. 14, 1972 (gage height, 25.99 ft); no flow at times.
Floods in 1941 and 1946 reached a stage of 36.1 ft from Texas Highway Department bridge plans.

REMARKS.--Records good. Flow partly regulated by Lake J. B. Thomas (station 08118000). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	5.3	5.2	4.9	2.9	1.4	368	0	49	0	139
2	11	17	6.6	5.2	4.9	2.5	.50	19	0	13	0	744
3	27	12	7.8	5.3	4.8	2.2	.40	6.2	0	5.1	0	1,510
4	51	9.8	8.9	5.2	4.5	2.6	.14	4.8	0	72	4.4	164
5	23	8.4	7.3	4.9	4.4	2.3	.38	4.3	0	27	4.1	68
6	13	7.6	6.9	4.7	4.5	2.1	.55	45	0	9.1	.7	47
7	9.8	6.8	6.6	4.5	4.5	2.6	.98	79	0	4.6	.2	35
8	8.5	6.7	6.5	4.5	4.6	2.4	.69	38	0	2.5	0	28
9	8.1	6.4	6.2	4.9	4.3	2.3	.41	8.0	0	1.5	0	24
10	7.3	6.4	6.4	4.9	4.3	2.3	.40	4.3	0	.77	11	21
11	6.7	6.2	6.3	4.9	4.5	2.0	.40	3.5	.45	.49	19	19
12	6.5	6.2	6.5	4.8	4.6	1.8	.37	3.3	10	.37	16	18
13	6.4	6.2	6.2	5.2	4.8	1.7	.34	3.0	2.7	.98	49	16
14	6.1	6.2	5.9	5.2	5.1	2.2	.30	2.8	1.0	1.8	7,960	15
15	5.9	6.2	6.2	4.9	4.9	2.2	.35	1.9	36	1.1	2,090	33
16	5.6	6.1	6.0	4.6	4.6	2.6	.29	1.4	9.5	.22	287	35
17	11	6.0	6.0	4.5	4.4	2.4	.30	1.3	4.3	.04	114	21
18	13	7.2	5.8	4.7	4.5	2.2	.23	1.1	1.7	16	80	16
19	50	8.4	5.4	4.7	4.2	2.9	.64	.92	.67	12	70	14
20	14	6.9	5.4	4.7	3.7	3.2	3.4	.79	.20	2.5	50	12
21	9.7	6.4	5.4	4.7	4.3	2.4	3.4	.69	.04	.93	40	19
22	7.3	6.0	5.4	4.7	4.6	2.1	1.5	.79	0	.40	33	16
23	6.2	5.8	5.4	4.7	3.9	1.7	.62	.60	0	.09	30	12
24	4.9	5.7	5.1	4.4	3.9	1.7	.16	.51	0	.01	27	11
25	4.1	5.7	5.1	4.3	3.5	1.4	.06	.39	0	0	233	10
26	5.0	5.7	5.2	4.2	3.2	1.2	.01	.16	0	0	219	10
27	8.5	5.7	5.4	4.4	2.9	1.4	31	.09	0	0	1,820	10
28	5.6	5.4	5.4	4.5	2.7	1.4	7.7	.05	0	0	1,110	9.5
29	115	5.4	5.3	4.6	2.8	1.8	3.3	.04	0	0	110	9.0
30	372	5.4	5.7	4.7	------	2.2	2.1	.01	0	0	58	7.9
31	68	------	5.6	4.8	------	1.8	------	0	------	0	40	------
TOTAL	902.2	234.9	187.2	147.5	122.8	66.5	62.32	599.94	66.56	221.50	14,475.4	3,093.4
MEAN	29.1	7.83	6.04	4.76	4.23	2.15	2.08	19.4	2.22	7.15	467	103
MAX	372	31	8.9	5.3	5.1	3.2	31	368	36	72	7,960	1,510
MIN	4.1	5.4	5.1	4.2	2.7	1.2	.01	0	0	0	0	7.9
AC-FT	1,790	466	371	293	244	132	124	1,190	132	439	28,710	6,140

CAL YR 1971 TOTAL 30,034.90 MEAN 82.3 MAX 5,930 MIN 0 AC-FT 59,570
WTR YR 1972 TOTAL 20,180.22 MEAN 55.1 MAX 7,960 MIN 0 AC-FT 40,030

08121000 Colorado River at Colorado City, Tex.

LOCATION.--Lat 32°23'33", long 100°52'42", Mitchell County, on right bank at Colorado City, 3,517 ft upstream from bridge on State Highway 377, 4,100 ft upstream from The Texas and Pacific Railroad Co. bridge, 1.3 miles downstream from bridge on Interstate Highway 20 and U.S. Highway 80, 1.6 miles upstream from Lone Wolf Creek, and at mile 796.3.

DRAINAGE AREA.--4,082 sq mi, approximately, of which 2,600 sq mi is probably noncontributing.

PERIOD OF RECORD.--November 1923 to August 1925 (published as "at Colorado"), May 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,030.16 ft above mean sea level. Nov. 28, 1923, to Aug. 31, 1925, nonrecording gage at site 1.4 miles downstream at different datum. May 9 to Aug. 5, 1946, nonrecording gage at site 185 ft upstream at present datum.

AVERAGE DISCHARGE.--6 years (1946-52) prior to completion of Lake J. B. Thomas, 85.4 cfs (61,870 acre-ft per year); 20 years (1952-72) after completion of Lake J. B. Thomas, 41.3 cfs (29,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,980 cfs Aug. 14 (gage height, 24.89 ft); no flow at times.
Period of record: Maximum discharge, 24,900 cfs July 6, 1948 (gage height, 22.37 ft, from floodmark); maximum gage height, 24.89 ft Aug. 14, 1972; no flow at times.
Maximum stage since at least 1910, 35.9 ft June 20, 1939, present site and datum, based on floodmarks 1,000 ft upstream and 3,740 ft downstream from gage (discharge, 66,000 cfs by slope-area measurement of peak flow at site 2.5 miles upstream from gage).

REMARKS.--Records good. Some regulation since 1952 by Lake J. B. Thomas (station 08118000). Numerous diversions from Lake J. B. Thomas for municipal use and oilfield operation. Record of diversion from river, 3 miles upstream from gage, furnished by Colorado River Municipal Water District. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1118: Drainage area. WSP 1512: 1946(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	57	.44	.36	.59	.29	.25	197	0	.72	0	5.3
2	1.5	32	1.0	.29	.53	.28	.16	64	0	.04	0	468
3	1.2	23	.50	.32	.30	.20	.14	19	0	.02	0	1,780
4	22	18	.34	.36	.23	.18	.09	11	0	3.4	0	551
5	6.5	15	.47	.27	.22	.18	.12	11	0	.12	.2	132
6	.92	9.1	.36	.29	.30	.17	.14	93	0	.04	.1	98
7	.45	6.0	.29	.30	.29	.19	.09	91	0	.03	0	56
8	.46	3.5	.30	.31	.25	.19	.08	101	0	.02	0	6.0
9	.51	1.3	.50	.36	.29	.17	.06	13	0	.01	0	3.0
10	.45	.51	.51	.30	.28	.19	.05	2.6	0	.01	4.8	2.6
11	.45	.45	.30	.29	.40	.18	.04	3.0	.79	.01	16	2.5
12	.45	.38	.28	.22	.35	.19	.04	.47	.26	0	5.9	2.2
13	.44	.31	.31	.18	.29	.24	.04	.26	.09	0	.7	1.3
14	.38	.29	.34	.17	.28	.29	.03	.40	.10	0	3,970	.75
15	.30	.32	.18	.17	.26	.25	.02	.08	8.6	0	5,390	.67
16	.29	.36	.23	.19	.28	.29	0	.06	.05	0	650	.67
17	.40	.74	.28	.24	.30	.28	0	.04	.04	0	169	.58
18	.58	.45	.28	.30	.24	.19	0	.04	.04	0	33	6.9
19	2.5	.29	.20	.29	.19	.13	3.7	.02	.02	0	8.5	29
20	1.3	.36	.20	.29	.22	.10	3.5	.01	0	0	6.7	26
21	.51	.38	.27	.29	.29	.11	.29	.01	0	0	6.8	57
22	.45	.42	.29	.29	.29	.14	.23	.02	0	0	5.8	36
23	.39	.45	.29	.29	.29	.13	.08	.03	0	0	5.3	21
24	.29	.42	.29	.29	.30	.17	.04	.02	0	0	5.3	18
25	.30	.39	.37	.20	.29	.16	.03	.01	0	0	29	17
26	1.0	.30	.31	.19	.28	.08	.02	.01	0	0	346	17
27	.84	.30	.35	.27	.29	.07	.47	.01	0	0	1,290	17
28	.45	.31	.29	.29	.28	.08	.18	.01	0	0	2,040	10
29	29	.29	.48	.37	.29	.08	.09	.01	0	0	280	4.0
30	361	.30	.56	.34	------	.11	.05	0	.57	0	136	1.0
31	151	------	.35	.40	------	.36	------	0	------	0	17	------
TOTAL	587.23	172.92	11.16	8.72	8.69	5.67	10.03	607.11	10.56	4.42	14,416.1	3,370.47
MEAN	18.9	5.76	.36	.28	.30	.18	.33	19.6	.35	.14	465	112
MAX	361	57	1.0	.40	.59	.36	3.7	197	8.6	3.4	5,390	1,780
MIN	.29	.29	.18	.17	.19	.07	0	0	0	0	0	.58
AC-FT	1,160	343	22	17	17	11	20	1,200	21	8.8	28,590	6,690
(†)	380	369	370	374	344	356	366	391	360	397	385	354

CAL YR 1971 TOTAL 25,027.22 MEAN 68.6 MAX 5,500 MIN 0 AC-FT 49,640 † 6,840
WTR YR 1972 TOTAL 19,213.08 MEAN 52.5 MAX 5,390 MIN 0 AC-FT 38,110 † 4,450

† Diversions, in acre-feet, from river for brine disposal by Colorado River Municipal Water District.

08123000 Lake Colorado City near Colorado City, Tex.

LOCATION.--Lat 32°20'41", long 100°55'10", Mitchell County, on left bank at municipal water-intake structure, 1.7 miles upstream from Colorado City Dam on Morgan Creek, 2.2 miles downstream from the Texas and Pacific Railway Co. bridge, 2.5 miles upstream from mouth, and 4.0 miles southwest of Colorado City.

DRAINAGE AREA.--322 sq mi, of which 32 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Aug. 23, 1950, nonrecording gages at or near powerplant about 0.7 mile downstream at same datum.

EXTREMES.--Current year: Maximum contents, 17,730 acre-ft Oct. 1 (elevation, 2,059.78 ft); minimum, 14,370 acre-ft Aug. 3 (elevation, 2,056.57 ft).
Period of record: Maximum contents, 40,280 acre-ft Sept. 7, 1962 (elevation, 2,075.10 ft); minimum since first appreciable storage, 5,800 acre-ft Apr. 11-13, 1950 (elevation, 2,045.72 ft).

REMARKS.--Lake is formed by a rolled-fill earthen dam 4,800 ft long. Storage began April 1949, and dam completed in September 1949. Lake is operated by Texas Electric Service Co. for cooling purposes in operation of steam powerplant. Texas Electric Service Co. pumped 4,570 acre-ft from Champion Creek Reservoir (station 08123600) into the lake during year. Service spillway is a double-rectangular drop inlet, located 100 ft upstream from dam, having two uncontrolled openings 10 by 12 ft designed to discharge a total of 5,000 cfs. An emergency spillway 1,200 ft wide and designed to discharge 150,000 cfs directly into the Colorado River is located 600 ft upstream and to left of dam. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,091.0	-
Maximum design flood stage	2,086.7	70,700
Emergency spillway crest	2,073.7	37,850
Service spillway crest	2,070.2	31,640
Invert of lowest municipal supply inlet	2,045.0	5,530
Invert of 30-inch service outlet conduit	2,024.3	316

COOPERATION.--Capacity curve furnished by Texas Electric Service Co. Records of diversions for municipal use furnished by city of Colorado City.

REVISIONS.--WSP 1922: Drainage area.

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

2,056.0	13,820
2,059.0	16,880
2,061.0	19,120

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,730	17,140	16,390	15,940	15,290	14,690	14,600	14,570	15,070	14,530	14,440	15,580
2	17,710	17,100	16,390	15,920	15,230	14,660	14,620	14,570	15,010	14,470	14,410	15,660
3	17,690	17,080	16,380	15,850	15,220	14,640	14,600	14,570	14,960	14,470	14,370	16,130
4	17,650	17,060	16,360	15,830	15,210	14,570	14,630	14,560	14,920	14,570	14,490	16,240
5	17,610	17,030	16,360	15,800	15,200	14,550	14,620	14,550	14,880	14,650	14,500	16,240
6	17,590	16,970	16,350	15,780	15,160	14,540	14,650	14,850	14,820	14,670	14,490	16,200
7	17,560	16,950	16,320	15,760	15,160	14,510	14,640	15,220	14,770	14,690	14,490	16,160
8	17,540	16,910	16,310	15,770	15,140	14,510	14,640	15,770	14,710	14,690	14,490	16,110
9	17,500	16,900	16,320	15,740	15,130	14,530	14,660	15,770	14,660	14,690	14,500	16,090
10	17,480	16,890	16,280	15,720	15,100	14,560	14,650	15,750	14,650	14,690	14,560	16,050
11	17,440	16,880	16,270	15,710	15,100	14,570	14,670	15,910	14,650	14,690	14,660	16,000
12	17,400	16,850	16,250	15,680	15,080	14,580	14,670	15,910	14,660	14,670	14,760	15,950
13	17,380	16,840	16,240	15,630	15,070	14,620	14,690	15,920	14,660	14,650	14,760	15,910
14	17,330	16,820	16,210	15,590	15,040	14,620	14,690	15,900	14,650	14,600	14,760	15,900
15	17,280	16,800	16,170	15,590	15,040	14,630	14,660	15,880	14,740	14,570	14,790	15,870
16	17,270	16,790	16,150	15,580	15,040	14,640	14,660	15,840	14,810	14,560	14,790	15,830
17	17,230	16,730	16,140	15,570	15,020	14,650	14,640	15,830	14,810	14,540	14,790	15,760
18	17,210	16,680	16,140	15,530	15,000	14,650	14,640	15,750	14,780	14,530	14,790	15,810
19	17,260	16,660	16,120	15,530	14,990	14,660	14,740	15,700	14,720	14,520	14,790	15,780
20	17,220	16,640	16,090	15,490	14,960	14,660	14,770	15,680	14,680	14,520	14,790	15,890
21	17,200	16,620	16,060	15,490	14,930	14,660	14,770	15,620	14,660	14,530	14,790	16,420
22	17,170	16,600	16,060	15,460	14,920	14,680	14,710	15,570	14,640	14,530	14,800	16,910
23	17,150	16,560	16,050	15,440	14,920	14,690	14,670	15,510	14,620	14,530	14,800	16,950
24	17,110	16,550	16,040	15,400	14,880	14,660	14,620	15,450	14,620	14,530	14,780	16,940
25	17,090	16,540	16,020	15,380	14,840	14,630	14,590	15,400	14,600	14,530	14,750	16,930
26	17,090	16,510	16,010	15,370	14,810	14,570	14,570	15,340	14,590	14,540	14,980	16,920
27	17,040	16,490	15,990	15,340	14,790	14,550	14,570	15,280	14,570	14,510	15,160	16,910
28	17,030	16,470	15,980	15,330	14,770	14,540	14,580	15,240	14,540	14,510	15,530	16,880
29	17,220	16,430	15,980	15,300	14,750	14,540	14,590	15,210	14,550	14,490	15,660	16,810
30	17,180	16,400	15,960	15,280	------	14,560	14,580	15,160	14,570	14,480	15,610	16,790
31	17,180	------	15,950	15,290	------	14,590	------	15,120	------	14,440	15,580	------
(†)	2,059.28	2,058.56	2,058.24	2,057.49	2,056.95	2,056.79	2,056.78	2,057.32	2,056.77	2,056.64	2,057.77	2,058.92
(*)	-600	-780	-450	-660	-540	-160	-10	+540	-550	-130	+1,140	+1,210
(††)	42	61	56	65	70	73	119	121	146	161	117	86
MAX	17,730	17,140	16,390	15,940	15,290	14,690	14,770	15,920	15,070	14,690	15,660	16,950
MIN	17,030	16,400	15,950	15,280	14,750	14,510	14,570	14,550	14,540	14,440	14,370	15,580

CAL YR 1971..... * +1,380 †† 1,220 MAX 18,210 MIN 11,690
WTR YR 1972..... * -990 †† 1,120 MAX 17,730 MIN 14,370

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use.

08123600 Champion Creek Reservoir near Colorado City, Tex.

LOCATION.--Lat 32°16'53", long 100°51'30", Mitchell County, in service outlet structure at Champion Creek Dam on Champion Creek, 0.9 mile upstream from mouth, 4.8 miles downstream from State Highway 208, and 7.2 miles south of Colorado City.

DRAINAGE AREA.--203 sq mi.

PERIOD OF RECORD.--April 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 29, 1959, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 12,620 acre-ft Nov. 1, 2 (elevation, 2,054.65 ft); minimum, 6,710 acre-ft Sept. 20 (elevation, 2,044.08 ft).
Period of record: Maximum contents, 27,910 acre-ft June 19, 1966 (elevation, 2,071.98 ft); minimum, 1,600 acre-ft Oct. 1, 1959 (elevation, 2,025.90 ft).

REMARKS.--Reservoir is formed by a rolled earthfill dam about 6,800 ft long. Dam completed on Apr. 30, 1959; closure and storage began in February 1959. Reservoir is operated by Texas Electric Service Co. Water can be pumped from the reservoir to Lake Colorado City (station 08123000) for municipal use and cooling purposes in operation of steam powerplant. Service spillway is a cut channel 50 ft wide and about 1,800 ft long cut in the emergency spillway, which is 450 ft wide and about 1,800 ft long. The service spillway is cut 8 ft deeper than the emergency spillway. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,109.0	-
Maximum design flood stage	2,104.1	90,020
Emergency spillway crest	2,091.0	56,800
Service spillway crest (top of conservation storage)	2,083.0	42,500
Invert of 1.5- by 3-foot opening in inlet structure	2,020.0	880

COOPERATION.--Capacity curve based on Geological Survey topographic map surveyed in 1950, excavation for borrow, estimated not to exceed 1,000 acre-ft, is not included. Record of diversions into Lake Colorado City furnished by Texas Electric Service Co.

REVISIONS.--WSP 1922: Drainage area.

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

2,044.0	6,670	2,050.0	9,740
2,046.0	7,660	2,055.0	12,860

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,300	12,610	12,440	12,450	12,350	12,290	11,000	9,770	9,570	9,120	7,520	6,780
2	12,300	12,610	12,440	12,440	12,340	12,270	10,950	9,720	9,560	9,130	7,460	6,820
3	12,300	12,580	12,440	12,450	12,340	12,260	10,900	9,660	9,550	9,070	7,400	6,810
4	12,290	12,570	12,440	12,420	12,320	12,260	10,850	9,600	9,540	9,000	7,360	6,810
5	12,290	12,560	12,440	12,410	12,330	12,240	10,830	9,580	9,530	8,950	7,300	6,810
6	12,280	12,550	12,440	12,410	12,340	12,230	10,760	9,700	9,510	8,900	7,250	6,800
7	12,260	12,530	12,450	12,400	12,330	12,220	10,710	9,750	9,500	8,850	7,200	6,790
8	12,260	12,520	12,450	12,410	12,320	12,140	10,650	9,750	9,490	8,790	7,150	6,780
9	12,250	12,530	12,450	12,420	12,320	12,090	10,600	9,750	9,480	8,740	7,100	6,780
10	12,240	12,520	12,450	12,420	12,330	12,050	10,550	9,730	9,460	8,690	7,090	6,770
11	12,230	12,520	12,440	12,410	12,320	12,000	10,500	9,730	9,550	8,640	7,090	6,760
12	12,230	12,520	12,450	12,410	12,320	11,960	10,460	9,730	9,550	8,590	7,090	6,750
13	12,230	12,520	12,450	12,400	12,320	11,900	10,400	9,760	9,510	8,540	7,060	6,750
14	12,220	12,520	12,440	12,400	12,320	11,860	10,350	9,760	9,480	8,490	7,000	6,750
15	12,220	12,520	12,440	12,380	12,320	11,800	10,280	9,760	9,480	8,440	6,950	6,740
16	12,210	12,520	12,440	12,370	12,310	11,740	10,230	9,750	9,490	8,380	6,900	6,740
17	12,210	12,520	12,440	12,370	12,310	11,680	10,170	9,750	9,500	8,330	6,870	6,730
18	12,220	12,510	12,430	12,380	12,310	11,630	10,120	9,730	9,510	8,280	6,870	6,730
19	12,340	12,490	12,430	12,370	12,300	11,570	10,130	9,720	9,520	8,230	6,860	6,720
20	12,410	12,480	12,430	12,380	12,300	11,510	10,090	9,710	9,520	8,180	6,850	6,740
21	12,420	12,480	12,430	12,380	12,320	11,460	10,050	9,700	9,500	8,130	6,840	7,450
22	12,430	12,480	12,430	12,380	12,300	11,410	10,040	9,690	9,440	8,080	6,840	7,600
23	12,430	12,480	12,430	12,370	12,300	11,360	10,040	9,680	9,380	8,020	6,830	7,620
24	12,420	12,470	12,440	12,380	12,310	11,330	10,010	9,670	9,320	7,960	6,810	7,620
25	12,410	12,460	12,440	12,360	12,310	11,320	9,990	9,650	9,280	7,900	6,810	7,620
26	12,430	12,460	12,440	12,360	12,300	11,310	9,930	9,640	9,220	7,860	6,820	7,660
27	12,420	12,450	12,450	12,360	12,290	11,280	9,950	9,620	9,170	7,800	6,800	7,660
28	12,410	12,450	12,450	12,350	12,290	11,230	9,920	9,600	9,110	7,740	6,800	7,660
29	12,590	12,450	12,450	12,350	12,290	11,170	9,870	9,600	9,050	7,700	6,800	7,660
30	12,600	12,440	12,450	12,340	------	11,110	9,820	9,590	9,000	7,640	6,790	7,660
31	12,610	------	12,450	12,350	------	11,070	------	9,580	------	7,580	6,780	------
(†)	2,054.64	2,054.40	2,054.42	2,054.27	2,054.19	2,052.30	2,050.15	2,049.71	2,048.62	2,045.83	2,044.23	2,046.01
(*)	+300	-170	+10	-100	-60	-1,220	-1,250	-240	-580	-1,420	-800	+880
(††)	0	0	0	0	0	864	1,030	287	554	1,160	677	0
MAX	12,610	12,610	12,450	12,450	12,350	12,290	11,000	9,770	9,570	9,130	7,520	7,660
MIN	12,210	12,440	12,430	12,350	12,290	11,070	9,820	9,580	9,000	7,580	6,780	6,720

CAL YR 1971..... * +8,870 †† 5,010 MAX 12,610 MIN 1,720
WTR YR 1972..... * -4,650 †† 4,570 MAX 12,610 MIN 6,720

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, into Lake Colorado City.

08123650 Beals Creek above Big Spring, Tex.

LOCATION.--Lat 32°15'01", long 101°29'26", Howard County, on left bank at end of Channing Street in Big Spring, just downstream from One Mile Lake, 2.9 miles upstream from Little Sandy Creek, 7.5 miles downstream from confluence of Sulphur Springs Creek and Mustang Draw, and at mile 71.1.

DRAINAGE AREA.--9,409 sq mi, of which 8,915 sq mi is probably noncontributing.

PERIOD OF RECORD.--January 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,400.02 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 0.82 cfs (594 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 32 cfs Aug. 27 (gage height, 2.65 ft); no flow most of time.
Period of record: Maximum discharge, 255 cfs Sept. 6, 1962 (gage height, 5.95 ft); no flow most of time.
Flood of May 10, 1957, was highest known since 1932, from comparison of floods at a point 4 miles downstream, from information by City Engineering Department. Flood of June 12, 1938, reached a stage of about 7.6 ft at present site and datum, from information by Texas and Pacific Railway Co.

REMARKS.--Records good. No diversion above station. Runoff from contributing drainage area is largely regulated by several natural salt lakes.

REVISIONS (WATER YEARS).--WSP 1732: 1959(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17		0						0	.13	0	9.0
2	.17		0						0	.11	0	19
3	.17		0						0	.06	0	19
4	.16		0						0	.41	0	17
5	.14		0						0	.59	0	17
6	.13		0						0	.53	0	16
7	.12		0						0	.39	0	15
8	.11		0						0	.32	0	14
9	.10		0						0	.26	0	13
10	.08		0						0	.21	0	11
11	.06		0						0	.17	0	9.3
12	.04		0						0	.12	0	8.5
13	.01		0						0	.11	0	7.4
14	0		.01						0	.06	0	6.2
15	0		0						6.8	0	0	5.8
16	0		0						7.0	0	0	5.4
17	0		0						4.1	0	0	4.1
18	0		0						2.8	0	0	3.2
19	0		0						2.0	0	0	2.8
20	0		0						1.4	0	0	2.4
21	0		0						.97	0	0	2.8
22	0		0						.71	0	0	2.7
23	0		0						.50	0	0	2.4
24	0		0						.37	0	0	2.2
25	0		0						.30	0	0	2.0
26	0		0						.21	0	.03	2.0
27	0		0						.16	0	21	1.9
28	0		0						.11	0	14	1.7
29	0		0						.16	0	9.3	1.5
30	.01		0		------				.14	0	5.8	1.3
31	0	------	0		------		------		------	0	5.4	------
TOTAL	1.47	0	.01	0	0	0	0	0	27.73	3.47	55.53	225.6
MEAN	.047	0	.0003	0	0	0	0	0	.92	.11	1.79	7.52
MAX	.17	0	.01	0	0	0	0	0	7.0	.59	21	19
MIN	0	0	0	0	0	0	0	0	0	0	0	1.3
AC-FT	2.9	0	.02	0	0	0	0	0	55	6.9	110	447

CAL YR 1971 TOTAL 128.94 MEAN .35 MAX 18 MIN 0 AC-FT 256
WTR YR 1972 TOTAL 313.81 MEAN .86 MAX 21 MIN 0 AC-FT 622

08123800 Beals Creek near Westbrook, Tex.

LOCATION.--Lat 32°11'57", long 101°00'49", Mitchell County, near left bank on downstream side of pier of bridge on State Highway 163, 1.5 miles downstream from Crystal Creek, 11 miles south of Westbrook, 16 miles southwest of Colorado City, and at mile 19.9.

DRAINAGE AREA.--9,903 sq mi, of which 8,930 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,048.7 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 23.3 cfs (16,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,500 cfs Sept. 3 (gage height, 15.53 ft); minimum, 0.02 cfs July 31 to Aug. 4.
Period of record: Maximum discharge, 8,780 cfs May 19, 1961 (gage height, 21.65 ft); no flow at times.
REVISIONS.--The maximum discharge for the water year 1971 has been revised to 1,810 cfs Sept. 24, 1971 (gage height, 13.04 ft), superseding figure published in WRD Texas, 1971.
Maximum stage since 1908, about 24.5 ft in 1922, from information by local resident.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for high-water periods in water year 1971, superseding figures published in WRD Texas, 1971, are given herwith:

Date	Discharge	Date	Discharge	Date	Discharge
1971		1971-Con.		1971-Con.	
May 29	321	Aug. 2	163	Aug. 14	106
30	621	8	157	24	298
31	346	9	257	25	150
July 24	219	10	681	Sept. 23	302
30	332	11	790	24	1,150
31	94	12	589	25	432
Aug. 1	425	13	1,180		

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
May 1971.....	1,288.67	621	0	41.6	2,560
July.....	655.48	332	0	21.1	1,300
August.....	5,222.90	1,180	1.0	168.0	10,360
September.....	1,981.86	1,150	.36	66.1	3,930
WTR YR 1971...	9,881.55	1,180	0	27.1	19,600

REVISED PEAK DISCHARGE.--1971: May 30 (0315) 1,120 cfs (9.97 ft); July 24 (1030) 709 cfs (7.83 ft); Aug. 1 (2200) 816 cfs (8.40 ft); Aug. 10 (2400) 1,410 cfs (11.30 ft); Aug. 13 (1430) 1,720 cfs (12.66 ft); Aug. 24 (1900) 930 cfs (9.00 ft); Sept. 24 (1915) 1,810 cfs (13.04 ft).

08123800 Beals Creek near Westbrook, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	6.7	1.7	2.2	2.6	1.8	.75	.78	3.3	50	.02	8.9
2	2.9	3.5	2.2	1.8	2.6	1.3	.51	.72	2.9	12	.02	690
3	2.6	2.7	2.3	1.9	2.1	.90	.54	.52	1.3	6.2	.02	1,280
4	2.7	2.3	2.5	2.1	3.0	1.1	1.2	.46	.63	73	2.9	567
5	2.7	2.4	5.5	2.0	2.6	1.1	1.4	.38	.36	115	.90	80
6	2.6	2.0	3.0	2.0	1.7	.89	1.5	224	.22	54	.23	33
7	2.2	1.8	2.4	2.2	1.7	.90	.86	786	.12	9.8	.08	27
8	2.1	2.0	2.6	2.4	2.4	1.3	.52	36	.10	5.3	.04	22
9	1.8	2.3	2.6	2.5	2.5	1.3	.34	19	.06	3.5	.06	20
10	1.5	2.0	3.1	2.7	2.2	.93	.22	6.8	.06	1.8	13	18
11	1.8	1.8	2.5	2.6	1.9	1.2	.13	3.8	47	1.7	80	16
12	1.8	2.2	2.6	2.4	2.5	.90	.17	2.9	14	1.1	64	14
13	1.9	2.3	3.0	2.0	2.6	.89	.14	2.5	79	1.2	33	12
14	1.5	2.1	2.5	1.8	2.9	1.6	.33	3.5	57	1.3	13	11
15	1.3	2.2	2.3	1.8	2.5	1.8	.34	3.5	43	1.2	4.5	9.5
16	1.6	2.1	1.9	1.8	2.5	1.4	.20	2.6	429	1.0	6.8	9.5
17	1.5	1.8	1.9	1.9	2.3	.99	.13	2.1	344	1.1	2.9	8.5
18	1.6	1.3	2.1	2.0	1.6	.94	.03	1.7	23	1.8	1.3	13
19	2.1	.82	2.0	2.1	1.9	.86	.81	.80	12	16	1.3	25
20	2.8	2.9	2.0	1.9	1.8	.63	144	.63	9.0	26	2.6	40
21	1.5	2.4	2.1	2.2	1.4	.40	18	.42	6.2	9.3	1.2	343
22	1.7	1.9	2.1	2.2	1.6	1.0	8.0	.31	5.3	4.0	.46	614
23	2.7	1.9	2.3	2.0	2.0	1.2	3.2	.26	4.7	1.7	.38	53
24	2.0	1.7	2.2	1.7	1.7	.73	1.4	.22	4.2	.80	.50	13
25	1.9	1.4	2.1	1.7	1.1	.48	1.0	.22	3.6	.51	.33	8.2
26	2.2	1.6	2.1	2.0	1.1	.64	.68	.15	3.5	.57	1.0	21
27	2.9	1.7	2.0	2.0	1.4	.53	48	.12	3.3	.30	342	8.0
28	2.2	1.9	2.2	2.0	1.8	.60	16	.10	3.1	.15	58	12
29	22	1.5	2.3	1.9	1.9	.88	3.6	.15	25	.09	101	6.6
30	23	1.3	2.2	1.9	------	.88	1.5	46	26	.04	22	4.5
31	28	------	2.1	2.4	------	.96	------	7.8	------	.02	11	------
TOTAL	132.4	64.52	74.4	64.1	59.9	31.03	255.50	1,154.44	1,150.95	400.48	764.54	3,987.7
MEAN	4.27	2.15	2.40	2.07	2.07	1.00	8.52	37.2	38.4	12.9	24.7	133
MAX	28	6.7	5.5	2.7	3.0	1.8	144	786	429	115	342	1,280
MIN	1.3	.82	1.7	1.7	1.1	.40	.03	.10	.06	.02	.02	4.5
AC-FT	263	128	148	127	119	62	507	2,290	2,280	794	1,520	7,910

CAL YR 1971 TOTAL 9,996.58 MEAN 27.4 MAX 1,180 MIN 0 AC-FT 19,830
WTR YR 1972 TOTAL 8,139.96 MEAN 22.2 MAX 1,280 MIN .02 AC-FT 16,150

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.HT.	DISCHARGE
5- 6	2300	11.94	1,550
9- 3	0400	15.53	2,500
9-22	0300	10.95	1,330

08123850 Colorado River above Silver, Tex.

LOCATION.--Lat 32°03'13", long 100°45'42", Coke County, on right bank 0.5 mile downstream from a Pan American Oil Company bridge, 4.6 miles west of Silver, and at mile 756.1.

DRAINAGE AREA.--15,407 sq mi, of which 11,600 sq mi is probably noncontributing.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,907.66 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 69.0 cfs (49,990 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,330 cfs Aug. 16 (gage height, 12.61 ft); no flow at times.
Period of record: Maximum discharge, 12,900 cfs May 29, 1971 (gage height, 17.68 ft); no flow at times.

REMARKS.--Records good. Some regulation by Lake J. B. Thomas, Lake Colorado City, and Champion Creek Reservoir (see stations 08118000, 08123000, and 08123600). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	192	5.1	5.7	5.0	2.7	.67	25	7.2	22	0	81
2	32	76	7.0	5.5	5.5	2.4	.49	17	2.8	26	0	99
3	26	49	7.6	5.2	5.5	2.3	.40	208	1.5	21	0	1,680
4	26	37	7.6	5.5	5.0	3.2	.40	84	.86	26	0	2,180
5	24	30	8.1	4.9	4.6	2.6	.26	52	.57	93	0	888
6	26	25	8.8	5.1	6.0	2.6	.27	19	.48	61	0	220
7	23	20	11	4.8	5.0	2.3	.35	1,850	.36	46	0	145
8	21	20	9.9	4.6	5.0	1.6	.39	439	.28	16	3.6	108
9	16	19	8.6	5.1	4.2	1.8	.15	103	.20	7.8	1.7	66
10	12	18	8.8	5.3	3.4	1.8	.10	48	.14	4.1	.9	46
11	10	16	7.9	5.1	4.6	1.6	.14	21	.54	2.5	42	38
12	8.8	12	7.5	4.6	5.0	1.3	.16	11	11	1.6	409	33
13	9.5	9.5	6.5	5.2	5.0	2.1	.07	8.1	9.5	1.4	122	28
14	11	8.2	7.3	5.1	4.2	2.2	.30	14	39	1.1	45	26
15	11	7.1	6.5	4.2	4.2	1.8	.06	12	29	.77	2,740	23
16	8.8	7.0	6.3	3.9	4.2	1.5	.03	7.4	53	.60	4,450	45
17	6.5	7.4	5.9	4.2	5.0	1.6	0	5.1	473	.44	878	26
18	10	7.1	5.0	5.4	4.2	1.4	0	3.6	125	.36	256	20
19	36	6.5	4.6	5.2	3.8	.99	0	2.7	25	.29	110	37
20	140	6.1	4.4	4.9	3.8	1.4	0	2.1	14	.20	57	110
21	23	5.1	4.4	4.6	3.8	1.5	157	1.8	8.6	5.5	39	377
22	12	4.6	4.2	4.6	3.0	1.3	65	1.6	5.2	10	30	1,030
23	8.8	5.5	4.2	4.6	3.0	1.1	34	1.3	3.2	3.9	32	280
24	6.5	6.0	4.2	5.0	3.0	1.0	21	1.0	2.3	2.0	22	90
25	5.5	6.0	4.2	4.6	3.0	.78	11	.75	1.7	1.2	19	53
26	9.5	6.0	4.7	4.6	3.0	.57	5.7	.54	1.2	.71	39	43
27	8.2	5.1	4.7	5.0	3.3	.71	95	.46	.83	.42	296	52
28	5.5	4.7	4.6	4.2	3.4	.63	214	.36	.72	.27	1,420	39
29	37	4.2	4.6	3.4	3.5	.29	77	.36	2.9	.20	1,940	33
30	188	4.6	5.5	4.6	------	.40	39	.53	10	.10	435	29
31	295	------	5.5	4.6	------	.49	------	4.1	------	.03	164	------
TOTAL	1,098.6	624.7	195.2	149.3	122.2	47.96	722.94	2,944.80	830.08	356.49	13,551.2	7,925
MEAN	35.4	20.8	6.30	4.82	4.21	1.55	24.1	95.0	27.7	11.5	437	264
MAX	295	192	11	5.7	6.0	3.2	214	1,850	473	93	4,450	2,180
MIN	5.5	4.2	4.2	3.4	3.0	.29	0	.36	.14	.03	0	20
AC-FT	2,180	1,240	387	296	242	95	1,430	5,840	1,650	707	26,880	15,720

CAL YR 1971 TOTAL 60,179.51 MEAN 165 MAX 5,210 MIN 0 AC-FT 119,400
WTR YR 1972 TOTAL 28,568.47 MEAN 78.1 MAX 4,450 MIN 0 AC-FT 56,670

08123950 E. V. Spence Reservoir near Robert Lee, Tex.

LOCATION.--Lat 31°52'46", long 100°31'01", Coke County, in outlet works of Robert Lee Dam on the Colorado River, 2.2 miles west of Robert Lee, and at mile 715.

DRAINAGE AREA.--15,740 sq mi, approximately, of which 11,600 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to June 24, 1969, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 123,700 acre-ft Sept. 25 (elevation, 1,858.69 ft); minimum, 83,020 acre-ft Aug. 9 (elevation, 1,850.03 ft).
Period of record: Maximum contents, 123,700 acre-ft Sept. 25, 1972 (elevation, 1,858.69 ft); minimum since first appreciable storage in June 1969, not recorded but about 330 acre-ft May 29, 1971.

REMARKS.--Some regulation by Lake J. B. Thomas, Lake Colorado City, and Champion Creek Reservoir (see stations 08118000, 08123000, and 08123600). Reservoir is formed by a rolled-fill earthen dam 22,000 ft long with rock riprap on the upstream slope. Closure of the dam was made Dec. 30, 1968, and dam was completed in June 1969. The dam is the property of the Colorado River Municipal Water District. The Water District has a permit to divert a total of 50,000 acre-ft annually for municipal, mining, and industrial uses. Service spillway is a partially controlled morning-glory type spillway with 12 lift gates which discharge through a 28-foot-diameter concrete conduit. The emergency spillway is a 3,200-foot-wide cut through natural ground near the right end of dam. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,928.0	-
Crest of emergency spillway	1,908.0	653,400
Top of gates on morning-glory spillway	1,900.0	519,300
Normal operating level	1,898.0	488,800
Crest of morning-glory spillway	1,878.0	263,900
Invert of 5-foot conduit	1,815.85	4,000

COOPERATION.--The Colorado River Municipal Water District furnished the capacity table (dated March 1972). Record of diversions by city of San Angelo and Colorado River Municipal Water District.

REVISIONS (WATER YEARS).--WRD Texas 1971: 1969-70.

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

1,850.0	82,900	1,856.0	109,900
1,853.0	95,900	1,859.0	125,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105,800	104,700	101,500	99,460	96,080	93,380	88,880	84,980	88,560	87,940	84,100	109,400
2	105,800	104,800	101,600	99,320	95,810	93,060	88,840	84,740	88,480	87,800	83,780	109,800
3	105,700	104,600	101,400	99,100	95,760	93,060	88,520	84,620	88,340	87,660	83,740	111,400
4	105,600	104,600	101,300	98,820	95,680	92,700	88,480	84,420	88,120	87,760	83,580	115,400
5	105,600	104,700	101,300	98,780	95,680	92,520	88,380	84,300	87,940	87,710	83,460	118,200
6	105,600	104,400	101,300	98,640	95,630	92,570	88,430	85,260	87,760	87,760	83,340	118,600
7	105,400	104,100	101,200	98,560	95,450	92,210	88,200	89,240	87,580	87,840	83,180	119,000
8	105,400	104,000	101,200	98,640	95,400	91,940	87,940	91,490	87,400	87,940	83,060	119,200
9	105,200	104,000	101,100	98,510	95,320	91,980	87,760	91,720	87,170	87,940	83,060	119,200
10	105,200	104,200	101,000	98,380	95,270	91,850	87,760	91,760	87,040	87,760	83,300	119,200
11	105,200	104,000	100,900	98,240	95,140	91,850	87,660	91,760	87,120	87,530	84,020	119,200
12	105,000	103,900	100,800	98,150	95,140	91,760	87,620	91,720	87,040	87,350	85,420	119,000
13	105,000	103,700	100,700	97,970	95,090	91,720	87,480	91,490	86,900	87,300	88,160	119,000
14	104,900	103,600	100,800	97,700	95,960	91,620	87,440	91,400	86,950	87,170	88,380	118,800
15	104,900	103,500	100,600	97,560	94,730	91,400	86,990	91,360	87,170	86,820	89,960	118,800
16	104,800	103,400	100,500	97,480	94,730	91,400	86,780	91,220	87,080	86,580	99,410	118,600
17	104,700	103,300	100,500	97,480	94,640	91,260	86,660	91,130	88,250	86,420	102,200	118,400
18	104,800	103,100	100,300	97,480	94,500	91,000	86,660	91,000	88,970	86,340	102,700	118,300
19	104,600	103,100	100,400	97,430	94,460	90,860	86,620	90,770	89,150	86,180	103,100	118,200
20	104,400	102,900	100,300	97,300	94,420	90,770	86,500	90,640	89,200	85,940	103,000	119,900
21	104,400	102,700	100,100	97,200	94,370	90,640	86,300	90,640	89,150	85,900	103,000	120,800
22	104,400	102,600	100,000	97,160	94,320	90,500	86,100	90,410	88,880	85,700	103,000	122,300
23	104,300	102,500	100,000	97,120	94,280	90,500	85,940	90,320	88,740	85,540	103,000	123,400
24	104,200	102,400	99,950	96,840	94,240	90,230	85,700	90,140	88,610	85,500	102,900	123,600
25	104,200	102,300	99,950	96,660	94,140	90,050	85,500	89,820	88,430	85,380	102,800	123,600
26	104,200	102,200	99,900	96,580	93,830	90,000	85,380	89,690	88,160	85,220	102,700	123,600
27	103,900	102,100	99,950	96,480	93,740	89,780	85,380	89,510	87,980	85,060	102,780	123,600
28	103,900	101,900	99,720	96,400	93,740	89,560	85,300	89,280	87,890	84,900	104,100	123,500
29	103,800	101,800	99,770	96,300	93,700	89,240	85,140	89,100	87,840	84,620	107,800	123,300
30	103,600	101,700	99,590	96,170	------	88,920	85,100	88,880	87,940	84,500	109,300	122,900
31	103,800	------	99,500	96,080	------	88,880	------	88,700	------	84,300	109,600	------
(†)	1,854.76	1,854.28	1,853.80	1,853.04	1,852.51	1,851.44	1,850.55	1,851.40	1,851.23	1,850.35	1,855.93	1,858.55
(*)	-2,000	-2,100	-2,200	-3,420	-2,380	-4,820	-3,780	+3,600	-760	-3,640	+25,300	+13,300
(††)	1,450	1,700	1,500	1,950	1,450	1,960	2,500	2,320	1,890	2,410	2,030	1,930
MAX	105,800	104,800	101,600	99,460	96,080	93,380	88,880	91,760	89,200	87,940	109,600	123,600
MIN	103,600	101,700	99,500	96,080	93,700	88,880	85,100	84,300	86,900	84,300	83,060	109,400

CAL YR 1971..... * +89,670 †† 15,770 MAX 105,800 MIN 332
WTR YR 1972..... * +17,100 †† 23,090 MAX 123,600 MIN 83,060

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal, mining, and industrial use.

08124000 Colorado River at Robert Lee, Tex.

LOCATION.--Lat 31°53'07", long 100°28'49", Coke County, on left bank 190 ft upstream from bridge on State Highway 208 in Robert Lee, 0.4 mile upstream from Mountain Creek, 2.7 miles downstream from Messbox Creek, 3.7 miles downstream from Robert Lee Dam, and at mile 712.

DRAINAGE AREA.--15,770 sq mi, of which 11,600 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1923 to December 1927, April 1939 to May 1956, October 1968 to current year. Prior to December 1927, published as Colorado River near Robert Lee.

GAGE.--Water-stage recorder. Datum of gage is 1,771.70 ft above mean sea level. Prior to Dec. 31, 1927, nonrecording gage at site 9 miles downstream at different datum. Apr. 18, 1939, to Sept. 26, 1939, nonrecording gage and Sept. 27, 1939, to May 9, 1956, water-stage recorder at site 200 ft downstream at same datum.

AVERAGE DISCHARGE.--23 years (1924-27, 1939-55, 1968-72), 172 cfs (124,600 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,060 cfs Aug. 13 (gage height, 4.74 ft); no flow for many days.
Period of record: Maximum discharge, 32,500 cfs Sept. 6, 1926 (gage height, 20.20 ft, site and datum then in use), from rating curve extended above 15,000 cfs; no flow at times.
Maximum stage since at least 1907, 26.7 ft Oct. 13, 1957, from floodmarks. Flood in April 1922 reached a stage of 25.5 ft, present datum, from information by local resident.

REMARKS.--Records good. Flow slightly regulated since April 1949 by Lake Colorado City and since July 1952 by Lake J. B. Thomas. Flow regulated since December 1968 by E. V. Spence Reservoir (see station 08123950). Diversions above station for municipal, cooling, mining, and industrial use.

REVISIONS (WATER YEARS).--WSP 1732: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.15	.25	.39	.19	.03	.02	.01	0	.01	0	.05
2	.34	.07	.89	.25	.11	.02	.03	0	0	0	0	5.5
3	14	.07	.56	.21	.07	.08	.03	0	0	0	0	1.3
4	3.6	.07	.39	.18	.11	.08	.02	0	0	6.6	0	1.7
5	.76	.07	.27	.14	.14	.07	.02	0	0	2.2	0	.28
6	.25	.10	.30	.16	.15	.14	.03	1.7	0	.20	0	.08
7	.25	.10	.23	.25	.03	.15	.05	40	0	.04	0	.02
8	.25	.12	.14	.22	.05	.10	.01	3.8	0	.01	0	.01
9	.14	.14	.26	.19	.06	.10	.01	.38	0	.01	0	0
10	.05	.14	.58	.17	.04	.08	.01	.16	0	0	.14	0
11	.05	.10	.34	.13	.07	.10	.01	.14	21	0	5.5	0
12	.06	.08	.21	.09	.15	.14	.01	.11	3.9	0	3.6	0
13	.10	.09	.19	.04	.19	.11	.01	.10	.29	0	189	0
14	.10	.10	.20	.06	.09	.10	.03	.10	.15	0	21	0
15	.10	.10	.19	.08	.05	.10	.01	.06	8.5	0	7.6	0
16	.10	.16	.19	.14	.07	.04	.01	.02	1.2	0	2.3	0
17	.10	.19	.19	.19	.04	.05	0	.01	.07	0	1.2	0
18	3.5	.10	.19	.34	.04	.03	0	0	.01	0	.76	0
19	.87	.04	.19	.25	.06	.05	0	0	.02	0	.76	0
20	.24	.04	.16	.19	.05	.03	0	.01	.01	0	.58	146
21	.11	.05	.15	.13	.09	0	0	0	0	0	.59	107
22	.05	.09	.19	.12	.10	.02	0	0	0	0	.59	12
23	.07	.08	.18	.13	.12	.03	0	0	0	0	.53	1.6
24	.07	.06	.14	.12	.09	.02	0	0	0	0	.45	.59
25	.13	.07	.17	.17	.09	.02	0	0	0	0	.45	.34
26	.26	.10	.22	.14	.08	.02	0	0	0	0	.45	.25
27	.23	.08	.25	.22	.14	.01	.22	0	0	0	.25	.45
28	.10	.10	.25	.25	.10	0	.03	0	0	0	.22	.25
29	.26	.10	.47	.25	.05	.01	.02	0	0	0	.12	.19
30	.31	.20	.45	.25	------	.01	.02	0	.01	0	.09	.14
31	.19	------	.45	.16	------	.02	------	0	------	0	.07	------
TOTAL	26.89	2.96	8.84	5.61	2.62	1.76	.60	46.60	35.16	9.07	236.25	277.75
MEAN	.87	.099	.29	.18	.090	.057	.020	1.50	1.17	.29	7.62	9.26
MAX	14	.20	.89	.39	.19	.15	.22	40	21	6.6	189	146
MIN	.05	.04	.14	.04	.03	0	0	0	0	0	0	0
AC-FT	53	5.9	18	11	5.2	3.5	1.2	92	70	18	469	551

CAL YR 1971 TOTAL 1,348.45 MEAN 3.69 MAX 557 MIN 0 AC-FT 2,670
WTR YR 1972 TOTAL 654.11 MEAN 1.79 MAX 189 MIN 0 AC-FT 1,300

08125500 Oak Creek Reservoir near Blackwell, Tex.

LOCATION.--Lat 32°03'25", long 100°17'37", Coke County, on left bank at municipal pump station, 1.9 miles upstream from dam on Oak Creek, 2.5 miles southeast of Blackwell, 14 miles north of Bronte, and 20 miles upstream from mouth.

DRAINAGE AREA.--244 sq mi.

PERIOD OF RECORD.--May 1953 to current year. Prior to October 1969, monthend contents only.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents, 26,310 acre-ft Oct. 27 to Nov. 4 (elevation, 1,993.6 ft); minimum, 22,180 acre-ft Aug. 9 (elevation, 1,991.1 ft).
Period of record: Maximum contents observed, 49,100 acre-ft Oct. 13, 1957 (elevation, 2,003.80 ft); minimum observed, 7,060 acre-ft Aug. 1, 1953 (elevation, 1,976.2 ft).

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 3,800 ft long. Uncontrolled service spillway is a cut channel 300 ft wide located to right of dam. Emergency spillway is channel 800 ft wide located between dam and service spillway. Dam was completed in May 1952; no appreciable storage prior to May 12, 1953. Reservoir is property of city of Sweetwater and was built to impound water for industrial and municipal use by cities of Sweetwater, Blackwell, and Bronte. Service outlet can release water to Oak Creek through 24-inch pipeline. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,014.0	-
Emergency spillway	2,005.0	52,490
Service spillway	2,000.0	39,360
Invert of service outlet	1,951.0	100

COOPERATION.--Capacity curve based on 1950 survey, record of lake elevations, and diversions furnished by city of Sweetwater.

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

1,991.0	22,020
1,993.0	25,260
1,994.0	27,010

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,930	26,310	25,960	26,140	25,960	25,780	24,760	23,930	24,930	24,100	22,650	23,440
2	25,090	26,310	25,960	26,140	25,960	25,780	24,760	23,930	24,930	24,100	22,650	23,440
3	25,090	26,310	25,960	26,140	25,960	25,780	24,760	23,930	24,930	24,100	22,490	23,600
4	25,440	26,310	25,960	26,140	25,960	25,780	24,760	23,770	24,930	24,100	22,490	23,600
5	25,610	26,140	25,960	26,140	25,960	25,610	24,600	23,770	24,760	24,100	22,490	23,770
6	25,610	26,140	25,960	26,140	25,960	25,610	24,600	23,930	24,760	23,930	22,340	23,770
7	25,610	26,140	25,960	26,140	25,960	25,610	24,600	25,780	24,600	23,930	22,340	23,770
8	25,780	26,140	25,960	26,140	25,960	25,610	24,600	25,780	24,600	23,930	22,340	23,600
9	25,780	26,140	25,960	26,140	25,960	25,610	24,600	25,780	24,600	23,770	22,180	23,600
10	25,780	26,140	26,140	26,140	25,960	25,440	24,430	25,780	24,430	23,770	22,340	23,600
11	25,780	26,140	26,140	26,140	25,960	25,440	24,430	25,780	24,430	23,770	22,340	23,600
12	25,780	26,140	26,140	26,140	25,960	25,440	24,430	25,610	24,430	23,600	22,810	23,440
13	25,780	26,140	26,140	26,140	25,960	25,440	24,430	25,610	24,430	23,600	22,970	23,440
14	25,780	25,960	26,140	26,140	25,960	25,440	24,430	25,960	24,430	23,770	24,100	23,440
15	25,960	25,960	26,140	26,140	25,960	25,440	24,430	25,960	24,600	23,600	24,100	23,440
16	25,960	25,960	26,140	26,140	25,960	25,440	24,260	25,780	24,600	23,600	24,100	23,440
17	25,960	25,960	26,140	26,140	25,960	25,440	24,260	25,780	24,600	23,600	24,100	23,280
18	25,960	26,140	26,140	26,140	25,960	25,260	24,260	25,780	24,600	23,440	24,100	23,280
19	25,960	25,960	26,140	26,140	25,960	25,260	24,100	25,780	24,430	23,440	23,930	23,280
20	25,960	25,960	26,140	26,140	25,960	25,260	24,100	25,610	24,430	23,440	23,930	23,280
21	26,140	25,960	26,140	26,140	25,960	25,260	24,100	25,610	24,430	23,280	23,930	23,440
22	26,140	25,960	26,140	26,140	25,960	25,260	24,100	25,610	24,260	23,280	23,930	23,600
23	26,140	25,960	26,140	26,140	25,960	25,260	23,930	25,610	24,260	23,280	23,930	23,600
24	26,140	25,960	26,140	26,140	25,960	25,090	23,930	25,440	24,260	23,130	23,770	23,440
25	26,140	25,960	26,140	26,140	25,960	25,090	23,930	25,440	24,100	23,130	23,770	23,440
26	26,140	25,960	26,140	25,960	25,780	25,090	23,770	25,440	24,100	22,970	23,770	23,440
27	26,310	25,960	26,140	25,960	25,780	25,090	23,930	25,260	23,930	22,970	23,600	23,440
28	26,310	25,960	26,140	25,960	25,780	24,930	24,100	25,260	23,930	22,970	23,600	23,440
29	26,310	25,960	26,140	25,960	25,780	24,930	24,100	25,090	24,100	22,810	23,600	23,440
30	26,310	25,960	26,140	25,960	------	24,930	23,930	25,090	24,100	22,810	23,600	23,280
31	26,310	------	26,140	25,960	------	24,930	------	25,090	------	22,810	23,440	------
(†)	1,993.6	1,993.4	1,993.5	1,993.4	1,993.3	1,992.8	1,992.2	1,992.9	1,992.3	1,991.5	1,991.9	1,991.8
(*)	+1,380	-350	+180	-180	-180	-850	-1,000	+1,160	-990	-1,290	+630	-160
(††)	383	346	41	54	87	384	535	607	569	595	547	418
MAX	26,310	26,310	26,140	26,140	25,960	25,780	24,760	25,960	24,930	24,100	24,100	23,770
MIN	24,930	25,960	25,960	25,960	25,780	24,930	23,770	23,770	23,930	22,810	22,180	23,280

CAL YR 1971..... * +4,120 †† 4,200 MAX 26,310 MIN 17,690
WTR YR 1972..... * -1,650 †† 4,570 MAX 26,310 MIN 22,180

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use.

08126500 Colorado River at Ballinger, Tex.

LOCATION.--Lat 31°43'48", long 99°56'30", Runnels County, on left bank at downstream end of pier of bridge on U.S. Highway 83 in Ballinger, 2,000 ft upstream from Elm Creek, and at mile 659.4.

DRAINAGE AREA.--16,840 sq mi, approximately, of which 11,600 sq mi is probably noncontributing.

PERIOD OF RECORD.--June 1907 to current year. Monthly discharge only for some periods published in WSP 1312. Gage-height records collected in this vicinity from 1903-29 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 1,593.74 ft above mean sea level. Prior to Nov. 29, 1930, nonrecording gages at several sites upstream within 1.0 mile of present site at various datums.

AVERAGE DISCHARGE.--65 years, 318 cfs (230,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,460 cfs May 7 (gage height, 5.78 ft); no flow Aug. 2-4.
Period of record: Maximum discharge, 75,400 cfs Sept. 18, 1936 (gage height, 28.6 ft); no flow at times.
Maximum stage since at least 1882, about 36 ft sometime in 1884, present site and datum, from information by local residents.
Flood of Aug. 6, 1906, reached a stage of about 32.0 ft, present site and datum, from floodmarks (backwater from Elm Creek).

REMARKS.--Records good. Diversions above station for irrigation, municipal supplies, and oilfield operation. Flow partly regulated by five major upstream reservoirs (combined capacity, 1,056,000 acre-ft). At end of year, flow from 123 sq mi above this station was partly controlled by 23 floodwater-retarding structures with a total combined capacity of 27,470 acre-ft below the flood-spillway crests, of which 24,760 acre-ft is floodwater-retarding capacity and 2,720 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 3,420 acre-ft, of which 253 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1118: Drainage area. WSP 1512: 1916-17, 1919-20, 1921(M), 1922-25, 1928(M), 1930(M). WSP 1712: 1935, 1954(M), 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	36	29	26	24	17	6.0	6.8	6.3	6.9	.01	6.9
2	65	30	37	26	24	16	5.6	6.9	12	7.1	0	9.8
3	60	33	37	27	24	14	5.6	7.8	8.6	10	0	7.4
4	333	29	37	29	24	13	5.5	7.5	6.1	16	0	8.6
5	148	27	39	27	24	12	4.3	4.3	4.9	13	.48	7.4
6	89	27	38	26	24	11	2.6	14	3.5	10	1.8	12
7	65	26	37	26	24	11	1.9	1,480	3.7	9.7	1.9	32
8	63	24	35	27	24	11	2.8	217	3.5	9.0	1.9	18
9	60	26	39	26	24	11	5.4	84	3.0	8.0	57	13
10	53	26	37	27	24	11	5.5	56	2.5	7.1	57	10
11	48	26	37	26	25	10	4.7	40	2.3	6.2	49	9.0
12	46	26	37	26	26	10	3.0	40	9.4	5.3	457	7.0
13	44	26	33	24	26	9.7	2.1	33	16	4.3	140	6.3
14	44	26	33	24	25	10	1.8	28	9.0	3.0	48	6.1
15	39	26	31	24	24	9.4	5.6	22	30	4.0	77	5.6
16	37	27	29	22	23	9.6	6.8	19	21	4.0	38	4.7
17	37	29	29	22	23	9.0	5.4	39	13	4.0	26	4.8
18	37	27	29	22	22	9.2	4.1	29	10	4.1	44	4.8
19	40	26	29	24	21	8.9	5.2	19	8.1	4.1	40	4.5
20	90	26	27	24	20	8.7	6.1	15	7.3	3.3	49	4.6
21	86	28	27	24	20	7.7	6.3	10	6.3	2.9	26	345
22	56	30	27	24	20	7.3	4.7	10	5.7	2.8	19	279
23	53	30	27	24	20	7.1	5.3	9.0	5.2	2.7	16	77
24	49	31	27	24	20	7.6	5.7	8.7	4.3	2.6	14	36
25	42	32	27	22	19	8.0	6.8	8.5	3.6	3.2	12	22
26	44	30	27	22	19	7.2	6.9	7.9	3.1	1.6	16	16
27	54	30	27	21	18	6.8	12	6.8	1.9	1.8	15	13
28	47	29	27	21	18	6.4	9.3	6.1	1.6	2.1	13	10
29	44	28	27	22	17	6.5	7.1	6.0	2.3	1.1	10	8.1
30	42	28	27	22	------	6.8	6.6	7.3	20	.62	9.1	6.8
31	40	------	27	22	------	5.9	------	6.6	------	.56	7.5	------
TOTAL	2,028	845	976	753	646	298.8	160.7	2,255.2	234.2	161.08	1,245.69	995.4
MEAN	65.4	28.2	31.5	24.3	22.3	9.64	5.36	72.7	7.81	5.20	40.2	33.2
MAX	333	36	39	29	26	17	12	1,480	30	16	457	345
MIN	37	24	27	21	17	5.9	1.8	4.3	1.6	.56	0	4.5
AC-FT	4,020	1,680	1,940	1,490	1,280	593	319	4,470	465	320	2,470	1,970

CAL YR 1971 TOTAL 22,469.43 MEAN 61.6 MAX 3,450 MIN 0 AC-FT 44,570
WTR YR 1972 TOTAL 10,599.07 MEAN 29.0 MAX 1,480 MIN 0 AC-FT 21,020

08127000 Elm Creek at Ballinger, Tex.

LOCATION.--Lat 31°44'57", long 99°56'51", Runnels County, on right bank 1,000 ft upstream from storage dam at Ballinger and 1.2 miles upstream from mouth.

DRAINAGE AREA.--471 sq mi.

PERIOD OF RECORD.--April 1932 to current year.

GAGE.--Water-stage recorder and masonry dam control. Datum of gage is 1,617.72 ft above mean sea level.

AVERAGE DISCHARGE.--40 years, 47.2 cfs (34,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,880 cfs May 7 (gage height, 5.23 ft); minimum, 0.05 cfs Aug. 3, 4.
Period of record: Maximum discharge, 50,000 cfs Oct. 13, 1957 (gage height, 14.20 ft, from floodmark); no flow at times. Flood in August 1906 reached a stage of 14.5 ft, affected by backwater from Colorado River; highest stage not affected by backwater from Colorado River since at least 1904 was that of Oct. 13, 1957, from information by local residents.

REMARKS.--Records good except those below 100 cfs, which are fair. Stage-discharge relation during period of low flow affected by wind action and occasional accumulation of drift on dam. During year the city of Winters diverted 506 acre-ft from Lake Winters (capacity, 3,060 acre-ft), and the city of Ballinger diverted about 4 acre-ft 1.0 mile upstream from gage. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1442: 1935, 1946, 1954.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	59	35	35	35	17	8.4	8.4	8.2	5.6	.20	.39
2	126	50	50	35	35	17	8.4	6.7	7.6	4.5	.13	.99
3	410	59	86	35	35	17	6.7	5.4	7.2	10	.07	1.6
4	1,040	50	77	28	35	17	6.7	4.4	6.7	12	.07	2.0
5	446	50	59	42	35	17	8.4	4.4	6.2	81	.11	1.8
6	268	50	77	35	35	17	8.4	15	5.2	50	.14	1.7
7	189	42	68	35	35	17	8.4	834	5.0	32	.16	1.3
8	156	42	59	35	35	17	8.4	144	4.2	20	.16	1.1
9	146	42	59	35	35	17	8.4	42	3.8	15	5.8	.95
10	126	42	77	35	35	17	8.4	28	3.4	12	7.8	.93
11	106	42	116	35	35	17	8.4	24	3.2	9.8	5.9	.91
12	86	50	86	35	35	17	6.7	20	159	7.5	4.5	.83
13	77	42	68	35	35	17	6.7	18	38	6.1	3.5	.73
14	77	42	68	35	35	17	6.7	34	18	5.0	3.2	.71
15	68	42	68	35	35	17	6.7	22	36	4.0	4.3	.76
16	68	42	59	35	22	13	5.4	21	60	3.8	7.2	.60
17	68	42	50	35	22	13	5.4	18	23	3.0	15	.52
18	68	42	50	35	22	13	5.4	16	12	2.8	7.6	.48
19	77	35	50	35	22	13	5.4	15	9.7	2.5	2.9	.47
20	185	35	50	35	22	13	5.4	13	9.7	2.1	1.7	.45
21	156	35	50	35	22	13	6.7	13	8.2	1.3	1.3	12
22	96	35	42	35	22	11	6.7	11	7.0	.86	.96	89
23	126	42	42	28	22	11	5.4	11	6.0	.77	.81	48
24	86	59	42	28	22	11	5.4	10	5.4	.74	.69	31
25	77	42	42	28	17	11	5.4	9.7	4.9	.64	.62	24
26	68	50	42	28	17	8.4	5.4	9.0	3.0	.54	.56	19
27	106	42	42	28	17	8.4	5.4	8.5	2.1	.45	.62	17
28	106	35	35	32	17	6.7	6.7	8.2	1.8	.38	.69	12
29	86	35	35	35	17	8.4	11	8.2	2.4	.36	.56	6.2
30	77	35	35	35	------	8.4	8.4	11	10	.30	.47	2.4
31	68	------	35	35	------	8.4	------	10	------	.26	.43	------
TOTAL	4,985	1,310	1,754	1,047	808	425.7	209.3	1,402.9	476.9	295.30	78.15	279.82
MEAN	161	43.7	56.6	33.8	27.9	13.7	6.98	45.3	15.9	9.53	2.52	9.33
MAX	1,040	59	116	42	35	17	11	834	159	81	15	89
MIN	68	35	35	28	17	6.7	5.4	4.4	1.8	.26	.07	.39
AC-FT	9,890	2,600	3,480	2,080	1,600	844	415	2,780	946	586	155	555

CAL YR 1971 TOTAL 32,319.13 MEAN 88.5 MAX 4,310 MIN .02 AC-FT 64,100
WTR YR 1972 TOTAL 13,072.07 MEAN 35.7 MAX 1,040 MIN .07 AC-FT 25,930

PEAK DISCHARGE (BASE, 2,100 CFS).--No peak above base.

08127500 South Concho Irrigation Co.'s canal at Christoval, Tex.

LOCATION.--Lat 31°11'24", long 100°30'00", Tom Green County, on right bank at Christoval, 85 ft downstream from point of diversion, and 100 ft downstream from bridge on U.S. Highway 277.

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

GAGE.--Water-stage recorder. Datum of gage is 2,017.02 ft above mean sea level.

AVERAGE DISCHARGE.--32 years (1940-72), 6.96 cfs (5,040 acre-ft per year).

EXTREMES.--Period of record: Maximum daily diversion for irrigation (excluding floodflow), 21 cfs June 27, 28, 1941, Sept. 18, 21, 1942; no flow Apr. 26 to July 9, 1957, Mar. 18 to Apr. 10, 1958, Oct. 19 to Nov. 2, 1966.

REMARKS.--Records good. The following table lists only irrigation water diverted from right bank of South Concho River 600 ft upstream from station at Christoval (station 08128000).

REVISIONS (WATER YEARS).--WSP 1312: 1940-46.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	13	12	13	12	7.4	3.8	4.5	5.1	5.0	4.6
2	15	14	13	12	13	12	7.2	3.8	4.6	5.0	4.5	4.5
3	15	15	13	12	12	13	7.1	3.8	5.6	4.4	4.0	4.4
4	14	15	13	12	13	13	7.0	3.9	6.5	3.8	3.9	4.0
5	14	15	13	12	13	13	6.6	4.5	4.5	3.6	3.9	3.8
6	14	15	13	12	12	12	6.6	4.4	4.2	3.8	3.7	3.6
7	14	15	13	12	12	13	7.0	4.7	4.0	3.3	3.8	3.4
8	14	14	13	12	12	13	7.1	4.6	7.9	4.0	3.4	3.4
9	14	14	13	12	12	13	7.1	4.2	12	4.9	3.2	3.1
10	14	14	13	12	12	13	7.1	3.6	12	5.4	3.1	3.0
11	14	14	12	12	12	13	6.8	3.5	12	5.1	3.0	3.0
12	14	14	12	12	12	13	6.8	3.4	9.8	4.9	3.1	3.0
13	14	14	12	12	12	13	6.6	3.5	7.1	4.9	3.2	2.6
14	14	14	13	12	12	12	6.8	4.9	7.1	4.4	3.0	2.6
15	14	14	13	12	12	7.2	6.8	8.7	7.0	4.0	3.0	2.4
16	14	14	13	12	12	7.2	7.0	8.7	6.4	4.3	2.7	1.9
17	14	14	13	12	12	7.2	6.8	8.7	5.9	5.8	2.6	3.3
18	15	14	13	12	12	7.1	7.1	8.4	5.4	5.5	2.8	3.7
19	15	14	13	12	12	7.0	8.0	7.7	5.2	5.1	2.9	3.5
20	15	14	12	12	12	7.0	6.6	7.6	5.2	5.5	3.1	3.5
21	15	14	12	12	12	7.0	6.8	6.8	5.0	5.1	2.8	3.8
22	15	14	12	12	12	6.8	6.6	7.2	5.1	4.9	2.5	3.7
23	15	14	12	12	12	6.6	6.4	9.8	5.9	4.7	2.5	3.7
24	15	14	12	12	12	6.6	6.0	9.7	5.1	4.6	2.3	3.4
25	15	14	12	12	12	6.8	5.6	9.5	5.0	4.3	2.1	3.4
26	15	13	12	12	12	6.8	5.0	9.5	4.5	4.2	2.2	3.1
27	14	13	12	12	12	7.1	4.5	6.4	5.0	3.9	2.3	3.1
28	15	14	12	12	12	7.2	4.4	4.3	6.2	3.8	5.0	3.0
29	14	14	12	12	12	7.4	4.3	5.5	5.8	3.6	4.9	3.0
30	14	13	12	12	------	7.4	3.9	4.7	5.2	3.5	4.7	3.1
31	14	------	12	12	------	7.4	------	6.2	------	5.0	4.4	------
TOTAL	447	422	388	372	352	297.8	193.0	186.0	189.7	140.4	103.6	100.6
MEAN	14.4	14.1	12.5	12.0	12.1	9.61	6.43	6.00	6.32	4.53	3.34	3.35
MAX	15	15	13	12	13	13	8.0	9.8	12	5.8	5.0	4.6
MIN	14	13	12	12	12	6.6	3.9	3.4	4.0	3.3	2.1	1.9
AC-FT	887	837	770	738	698	591	383	369	376	278	205	200

CAL YR 1971 TOTAL 2,382.05 MEAN 6.53 MAX 15 MIN .28 AC-FT 4,720
WTR YR 1972 TOTAL 3,192.10 MEAN 8.72 MAX 15 MIN 1.9 AC-FT 6,330

08128000 South Concho River at Christoval, Tex.

LOCATION.--Lat 31°11'21", long 100°30'08", Tom Green County, near center of stream on downstream side of center pier of Panhandle and Santa Fe Railway Co. bridge at Christoval, 9.5 miles upstream from Twin Buttes Dam, and at mile 23.7.

DRAINAGE AREA.--409 sq mi, of which 65 sq mi is probably noncontributing.

PERIOD OF RECORD.--February 1930 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,010.22 ft above mean sea level. Prior to July 17, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 31.5 cfs (22,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 97 cfs Oct. 19 (gage height, 2.31 ft); minimum, 12 cfs June 8-10.
Period of record: Maximum discharge, 100,000 cfs July 23, 1938 (gage height, 21.95 ft, from floodmarks), from rating curve extended above 15,100 cfs on basis of slope-area measurement of 80,100 cfs; no flow Feb. 28, Mar. 1, 1955.
Maximum stage since 1882, about 23 ft Aug. 6, 1906 (discharge, 115,000 cfs, from rating curve as noted above), from information by local residents.

REMARKS.--Records good. Low flow materially affected by diversion to South Concho Irrigation Co.'s canal (station 08127500) 600 ft upstream from station.

REVISIONS (WATER YEARS).--WSP 1118: 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	43	31	28	25	19	23	24	19	14	13	18
2	42	43	31	28	24	19	23	24	19	15	13	21
3	33	42	31	28	22	19	23	23	19	16	14	18
4	24	40	31	27	22	20	23	22	16	17	15	18
5	24	40	31	26	22	19	24	22	17	18	16	18
6	25	40	30	27	22	19	23	23	17	17	14	19
7	25	40	29	27	22	19	23	22	17	16	15	19
8	30	40	29	26	22	19	22	22	15	16	14	19
9	28	40	30	26	22	20	21	21	13	15	18	19
10	29	37	29	26	21	19	22	25	12	15	18	19
11	29	37	29	27	22	19	22	22	17	15	17	19
12	32	36	29	26	21	19	22	24	16	15	19	19
13	33	36	28	26	21	19	23	23	16	19	18	19
14	35	36	28	25	21	20	23	23	16	17	16	19
15	35	36	29	25	21	24	22	19	20	16	16	19
16	36	36	29	25	21	23	22	19	18	16	17	20
17	36	36	28	25	21	23	22	19	18	15	17	19
18	38	35	28	25	21	22	21	19	18	15	18	18
19	51	35	28	25	21	22	20	19	18	15	17	18
20	43	35	28	25	20	23	22	19	18	14	16	18
21	41	35	28	25	20	23	22	19	17	14	17	25
22	44	35	28	25	20	22	21	19	17	14	17	21
23	45	33	28	25	20	22	22	17	16	15	17	21
24	45	33	27	25	19	23	22	17	17	15	17	22
25	45	33	27	25	19	23	23	17	17	15	17	22
26	47	33	27	25	19	23	23	16	17	15	17	22
27	45	33	27	25	18	24	25	17	17	15	17	22
28	45	32	26	25	19	23	25	19	16	15	15	22
29	45	31	28	25	19	23	24	21	16	14	15	22
30	44	31	28	24	------	23	24	21	16	15	15	22
31	43	------	27	25	------	24	------	18	------	13	16	------
TOTAL	1,157	1,092	887	797	607	659	677	635	505	476	501	597
MEAN	37.3	36.4	28.6	25.7	20.9	21.3	22.6	20.5	16.8	15.4	16.2	19.9
MAX	51	43	31	28	25	24	25	25	20	19	19	25
MIN	24	31	26	24	18	19	20	16	12	13	13	18
AC-FT	2,290	2,170	1,760	1,580	1,200	1,310	1,340	1,260	1,000	944	994	1,180

CAL YR 1971 TOTAL 13,325.8 MEAN 36.5 MAX 2,030 MIN 2.0 AC-FT 26,430
WTR YR 1972 TOTAL 8,590.0 MEAN 23.5 MAX 51 MIN 12 AC-FT 17,040

PEAK DISCHARGE (BASE, 160 CFS).--No peak above base.

08128400 Middle Concho River above Tankersley, Tex.

LOCATION.--Lat 31°25'38", long 100°42'39", Irion County, on left bank 0.3 mile upstream from East Rocky Creek, 0.5 mile southwest of Tullos Ranch headquarters, 6.7 miles northwest of Tankersley, and at mile 20.9.

DRAINAGE AREA.--2,436 sq mi, of which 1,055 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,986.47 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 7.76 cfs (5,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,470 cfs Sept. 21 (gage height, 10.69 ft); no flow for many days.
Period of record: Maximum discharge, 9,300 cfs May 1, 1966 (gage height, 19.46 ft), from rating curve extended above 4,000 cfs; no flow at times.
Maximum stage since 1900, 29.5 ft Sept. 26, 1936. A flood in 1900 reached the same stage, from information by local resident.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	7.4	8.4	7.5	6.6	6.0	4.0	2.4	2.0	.16		0
2	8.4	7.0	8.4	7.1	6.6	6.2	3.8	2.4	1.9	.12		5.2
3	8.5	7.1	8.4	7.2	7.0	6.2	4.3	2.2	1.7	.09		3.1
4	9.9	7.0	8.4	7.5	7.0	5.8	3.9	2.0	1.4	.15		1.2
5	11	7.0	8.8	7.0	7.4	5.8	3.7	1.8	1.2	.19		1.1
6	10	7.3	8.4	5.8	7.4	5.8	3.9	2.2	1.0	.21		1.1
7	10	7.5	8.3	5.4	7.4	6.0	4.0	2.4	.81	.18		.88
8	10	7.5	7.5	5.4	7.4	5.6	3.4	2.5	.78	.16		.90
9	11	7.5	7.5	5.5	7.4	5.0	3.4	2.6	.68	.13		.80
10	9.8	7.5	7.5	6.2	7.4	5.3	3.4	5.4	.53	.08		.78
11	9.4	7.5	7.5	6.6	7.9	6.3	3.4	2.9	.60	.05		.69
12	9.4	7.5	7.4	6.6	7.4	6.2	3.4	2.4	2.0	.02		.62
13	9.5	7.5	7.0	6.6	7.0	6.2	3.3	2.5	3.6	.10		.61
14	9.0	7.5	7.1	6.6	6.6	5.8	2.7	3.1	3.5	.16		.54
15	8.9	7.7	7.9	5.8	6.6	5.9	3.0	3.1	3.8	.04		.54
16	8.9	8.4	7.9	5.8	6.6	5.8	2.9	3.4	4.6	.02		.53
17	8.6	8.9	7.4	6.2	6.6	5.8	2.5	3.4	5.0	.01		.47
18	8.4	8.9	7.0	6.6	6.2	5.8	2.2	3.0	4.6	.01		.46
19	10	8.4	7.0	7.0	5.8	5.8	2.2	2.5	4.1	.01		.38
20	12	8.4	7.0	7.0	5.8	5.9	2.2	1.8	3.5	0		.39
21	10	8.4	7.0	6.6	5.4	6.1	2.4	1.8	2.6	0		305
22	8.4	9.1	7.0	6.6	5.4	5.4	2.5	1.6	1.7	0		242
23	7.7	9.2	7.0	6.6	5.8	5.4	2.6	1.4	1.1	0		37
24	7.5	8.9	7.0	7.0	6.5	5.0	2.4	1.1	.77	0		12
25	7.1	8.4	7.2	6.6	5.8	4.6	2.2	.78	.48	0		6.0
26	7.8	8.4	7.7	6.6	5.4	5.0	1.8	.65	.30	0		3.8
27	9.1	9.1	7.9	6.6	5.4	5.4	2.0	.50	.18	0		3.0
28	7.5	9.4	7.9	6.6	5.6	4.9	2.2	.39	.11	0		2.6
29	7.7	9.4	7.6	6.2	5.6	4.4	2.3	.47	.09	0		2.2
30	7.9	8.7	7.5	6.6	------	4.0	2.4	2.4	.24	0		1.9
31	7.8	------	7.5	6.6	------	4.0	------	2.4	------	0		------
TOTAL	280.6	242.5	236.1	202.0	189.0	171.4	88.4	67.49	54.87	1.89	0	635.79
MEAN	9.05	8.08	7.62	6.52	6.52	5.53	2.95	2.18	1.83	.061	0	21.2
MAX	12	9.4	8.8	7.5	7.9	6.3	4.3	5.4	5.0	.21	0	305
MIN	7.1	7.0	7.0	5.4	5.4	4.0	1.8	.39	.09	0	0	0
AC-FT	557	481	468	401	375	340	175	134	109	3.8	0	1,260

CAL YR 1971 TOTAL 3,092.93 MEAN 8.47 MAX 699 MIN 0 AC-FT 6,130
WTR YR 1972 TOTAL 2,170.04 MEAN 5.93 MAX 305 MIN 0 AC-FT 4,300

PEAK DISCHARGE (BASE, 1,700 CFS).--No peak above base.

08129300 Spring Creek above Tankersley, Tex.

LOCATION.--Lat 31°19'48", long 100°38'24", Tom Green County, on right bank at downstream side of bridge on Farm Road 2335, 1.4 miles south of Tankersley, and 2.5 miles upstream from Dove Creek.

DRAINAGE AREA.--424 sq mi, of which 28 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,964.72 ft above mean sea level. Prior to Nov. 10, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 10.8 cfs (7,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 45 cfs Oct. 3 (gage height, 4.37 ft); maximum gage height, 4.39 ft May 16; minimum discharge, 0.45 cfs Aug. 2-4.
Period of record: Maximum discharge, 30,400 cfs Aug. 12, 1971 (gage height, 16.57 ft); no flow at times.
Maximum stages since at least 1853 occurred in 1882 and 1884 (stages unknown) and on Oct. 3, 1959 (18.4 ft). At former gage (Spring Creek near Tankersley) 8 miles downstream, the flood of Oct. 3, 1959 (82,100 cfs), was found to be about 3 ft lower than the 1882 flood, the greatest at that location since at least 1853.

REMARKS.--Records good. Many small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WRD Texas 1967: 1961(M), 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	23	23	13	20	16	8.8	5.8	11	.92	.65	7.3
2	41	23	26	12	19	18	11	5.5	11	.75	.57	17
3	42	23	26	14	17	17	11	4.0	12	.72	.45	17
4	37	23	26	14	17	14	8.2	4.2	11	1.2	.55	14
5	35	23	27	14	19	12	7.1	4.3	12	1.4	.60	18
6	35	23	27	15	20	13	8.7	6.9	11	1.3	.60	13
7	35	23	26	15	17	15	10	7.5	10	1.2	.60	10
8	36	23	26	15	17	10	7.6	8.2	8.4	1.1	1.2	9.7
9	36	23	24	15	17	12	6.6	8.1	7.1	2.4	1.7	9.5
10	35	23	24	16	18	15	6.5	11	6.7	4.2	4.6	9.5
11	35	23	23	16	19	16	6.6	11	11	2.0	12	9.0
12	34	23	23	16	20	17	4.4	15	10	1.5	15	8.8
13	34	23	20	16	20	15	3.5	15	15	2.5	15	9.0
14	34	23	22	15	20	15	3.2	15	15	4.2	12	9.0
15	31	23	19	17	18	14	3.3	15	18	1.8	11	9.0
16	31	23	20	17	19	14	1.8	18	17	1.2	11	9.4
17	31	23	21	18	15	15	2.9	12	16	1.1	11	9.8
18	31	23	20	16	15	16	1.8	10	16	.91	12	7.9
19	32	23	20	15	17	16	2.0	9.1	14	.81	15	8.2
20	30	23	17	15	19	13	2.8	7.6	14	.60	9.0	9.1
21	30	23	17	14	18	8.8	4.9	6.3	13	.60	9.3	32
22	28	24	17	17	15	7.9	5.3	5.4	13	.60	10	20
23	27	24	17	17	15	10	5.7	5.2	12	.56	10	15
24	27	23	17	13	14	13	5.6	7.3	11	.53	10	11
25	27	23	18	12	11	14	6.2	7.9	11	.55	9.4	10
26	29	23	18	12	12	12	7.0	8.4	10	.55	9.5	10
27	29	23	18	12	12	7.8	5.4	7.6	6.8	.64	9.4	11
28	26	19	16	12	13	9.2	3.7	5.8	3.0	.91	8.5	11
29	27	23	18	13	17	5.5	6.3	6.1	1.7	1.0	8.5	12
30	26	24	18	17	------	5.2	6.4	17	1.2	.92	8.5	11
31	23	------	17	18	------	4.2	------	12	------	.80	7.1	------
TOTAL	995	689	651	461	490	390.6	174.3	282.2	328.9	39.47	234.72	357.2
MEAN	32.1	23.0	21.0	14.9	16.9	12.6	5.81	9.10	11.0	1.27	7.57	11.9
MAX	42	24	27	18	20	18	11	18	18	4.2	15	32
MIN	23	19	16	12	11	4.2	1.8	4.0	1.2	.53	.45	7.3
AC-FT	1,970	1,370	1,290	914	972	775	346	560	652	78	466	709

CAL YR 1971 TOTAL 33,959.65 MEAN 93.0 MAX 11,500 MIN 0 AC-FT 67,360
WTR YR 1972 TOTAL 5,093.39 MEAN 13.9 MAX 42 MIN .45 AC-FT 10,100

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

08130500 Dove Creek at Knickerbocker, Tex.

LOCATION.--Lat 31°16'24", long 100°37'45", Tom Green County, on right bank at right end of bridge on Farm Road 2335, 0.4 mile west of Knickerbocker, and 5.4 miles upstream from mouth.

DRAINAGE AREA.--229 sq mi, of which 31 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,001.45 ft above mean sea level. Prior to Nov. 10, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--12 years, 10.7 cfs (7,750 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs June 12 (gage height, 8.43 ft); minimum, 0.31 cfs July 30.
Period of record: Maximum discharge, 17,500 cfs Aug. 12, 1971 (gage height, 20.66 ft); no flow at times.
Maximum stage since at least 1882, 30.4 ft in 1906 and Oct. 3, 1959; floods in 1882 and 1884 reached about the same stage, from information by local resident.

REMARKS.--Records good. Flow is partly regulated by storage and diversion from two small channel dams upstream and by many small diversions upstream for irrigation.

REVISIONS (WATER YEARS).--WRD Texas 1967: 1961, 1965-66.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	30	21	22	20	15	10	12	11	8.9	1.6	6.5
2	33	30	23	22	17	14	9.0	13	11	8.7	.91	8.5
3	34	29	21	22	17	12	8.0	13	10	8.0	1.1	10
4	35	29	21	22	16	8.8	7.0	12	10	6.6	1.5	9.2
5	33	29	22	21	16	10	10	10	10	5.7	2.4	8.5
6	32	29	21	21	13	12	8.4	12	10	6.9	3.1	8.5
7	32	29	20	20	8.8	9.0	5.5	15	10	6.3	2.9	8.1
8	37	29	20	17	7.2	10	4.7	13	10	4.8	3.1	7.4
9	33	28	20	15	11	9.6	3.9	11	10	4.0	4.1	7.6
10	31	27	21	18	8.8	9.0	6.3	16	10	2.4	6.0	8.0
11	31	27	20	17	8.3	11	4.2	13	12	1.6	4.7	8.3
12	30	28	19	17	12	12	4.1	12	184	1.8	5.4	8.1
13	30	27	19	19	14	14	5.8	12	20	5.6	6.7	8.1
14	30	26	20	20	11	13	4.3	12	13	6.8	6.3	8.1
15	29	27	21	20	13	8.6	2.7	12	13	6.0	5.4	8.4
16	29	22	22	21	13	11	3.0	12	12	3.1	6.0	8.1
17	29	20	23	21	13	9.0	4.0	12	13	3.4	5.8	7.8
18	30	20	22	20	12	10	5.0	11	13	3.4	5.6	7.6
19	33	20	23	20	12	12	6.0	11	13	3.6	6.5	7.2
20	31	20	24	20	13	11	7.0	11	12	3.1	5.9	6.7
21	30	20	24	19	13	14	8.0	10	12	2.6	6.5	18
22	29	22	23	19	12	12	8.4	9.3	11	2.4	6.7	10
23	29	22	22	19	11	12	8.1	8.3	11	2.2	6.9	8.5
24	29	20	22	18	12	13	13	8.7	11	2.2	6.7	11
25	29	20	22	17	12	12	11	8.9	10	2.6	6.9	10
26	31	20	22	18	12	12	12	6.2	9.2	2.6	6.9	9.8
27	33	20	22	19	12	11	14	4.9	7.8	3.0	7.2	11
28	30	21	22	20	12	11	13	5.2	6.9	2.5	7.4	12
29	30	20	23	19	13	11	12	5.7	7.6	1.4	7.4	12
30	30	20	22	20	------	11	13	15	8.5	.74	6.9	11
31	30	------	21	20	------	10	------	12	------	2.2	5.8	------
TOTAL	965	731	668	603	365.1	350.0	231.4	339.2	502.0	125.14	160.31	274.0
MEAN	31.1	24.4	21.5	19.5	12.6	11.3	7.71	10.9	16.7	4.04	5.17	9.13
MAX	37	30	24	22	20	15	14	16	184	8.9	7.4	18
MIN	29	20	19	15	7.2	8.6	2.7	4.9	6.9	.74	.91	6.5
AC-FT	1,910	1,450	1,320	1,200	724	694	459	673	996	248	318	543

CAL YR 1971 TOTAL 19,138.70 MEAN 52.4 MAX 6,920 MIN .33 AC-FT 37,960
WTR YR 1972 TOTAL 5,314.15 MEAN 14.5 MAX 184 MIN .74 AC-FT 10,540

PEAK DISCHARGE (BASE, 100 CFS).--June 12 (0515) 1,020 cfs (8.43 ft).

08131200 Twin Buttes Reservoir near San Angelo, Tex.

LOCATION.--Lat 31°22'59", long 100°32'11", Tom Green County, in outlet control tower at Twin Buttes Dam on Middle Concho River, Spring Creek, and South Concho River, 3.8 miles upstream from Lake Nasworthy Dam, 8.1 miles southwest of San Angelo, and at mile 75.0.

DRAINAGE AREA.--3,724 sq mi, of which 1,178 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder on Middle Concho-Spring Creek pool and nonrecording gage on South Concho pool. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 101,100 acre-ft Feb. 29 (elevation, 1,928.28 ft); minimum, 78,490 acre-ft Aug. 8 (elevation, 1,923.30 ft).
Period of record: Maximum contents, 101,100 acre-ft Feb. 29, 1972 (elevation, 1,928.28 ft); minimum since first appreciable storage, 2,120 acre-ft Apr. 15, 1971.

REMARKS.--Reservoir is formed by a rolled earthfill dam, 8.1 miles long including a 200-foot uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of three 15.5-foot concrete conduits, each is controlled by a 12- by 15-foot fixed wheel gate and a 12- by 15-foot radial gate, located in Middle Concho-Spring Creek pool. Low-flow releases will be made through 2- by 2-foot regulating gates located in the center of each of three fixed wheel gates. The South Concho and Middle Concho-Spring Creek pools are connected by a 3.22-mile equalizing channel. At a lake elevation of 1,925 ft the two pools join to form one lake. Deliberate impoundment of water began on Dec. 1, 1962; dam was completed Feb. 13, 1963. The U.S. Bureau of Reclamation furnished the capacity curve, which is based on a survey made in 1958. Reservoir built for flood control, irrigation and municipal use. Data regarding dam and reservoir are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,991.0	-
Crest of spillway	1,969.1	640,600
Top of conservation storage	1,940.2	186,200
Bottom of equalizing channel	1,925.0	84,760
Dead storage in South Concho pool	1,925.0	4,600
Invert to outlet works (Middle Concho-Spring Creek pool)	1,885.0	3,750

COOPERATION.--Record of elevations furnished by city of San Angelo.

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

1,925.0	84,760	1,927.0	94,390
1,926.0	89,450	1,928.3	101,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92,120	95,330	96,990	99,700	100,500	101,100	95,230	89,030	88,840	87,830	80,570	79,700
2	92,220	95,430	97,150	99,760	100,300	100,800	95,070	88,840	88,840	87,540	80,160	79,880
3	92,320	95,430	97,250	99,700	100,500	100,800	94,710	88,610	88,750	87,330	79,780	79,960
4	92,470	95,540	97,360	99,700	100,500	100,600	94,550	88,280	88,750	87,120	79,550	79,960
5	92,560	95,480	97,510	99,920	100,700	100,500	94,390	88,040	88,610	86,920	79,220	79,960
6	92,660	95,380	97,670	99,860	100,500	100,600	94,300	88,000	88,510	86,790	78,920	79,930
7	92,810	95,430	97,720	99,810	100,600	100,300	93,950	87,950	88,420	86,630	78,650	79,880
8	93,010	95,590	97,770	99,810	100,600	100,200	93,700	87,900	88,280	86,540	79,200	79,790
9	93,060	95,540	98,140	99,860	100,700	100,100	93,500	87,760	88,040	86,420	79,370	79,780
10	93,060	95,590	98,080	99,860	100,700	100,000	93,310	88,420	87,860	86,290	79,710	79,750
11	93,160	95,690	98,240	99,920	100,800	100,000	93,060	88,510	88,750	86,000	79,870	79,660
12	93,210	95,850	98,290	99,970	100,700	100,000	92,860	88,560	89,220	85,750	79,950	79,660
13	93,260	95,950	98,400	99,860	100,800	99,860	92,660	88,890	89,310	85,550	80,060	79,580
14	93,360	96,000	98,500	99,760	100,800	99,810	92,270	88,980	89,310	85,260	80,040	79,550
15	93,410	96,110	98,500	99,810	100,800	99,540	91,820	88,980	89,800	84,970	80,010	79,460
16	93,460	96,260	98,550	99,970	100,800	99,380	91,480	89,080	89,800	84,740	79,970	79,390
17	93,600	96,320	98,600	99,970	100,800	99,230	91,080	89,080	89,850	84,500	79,950	79,270
18	93,650	96,260	98,710	99,860	100,900	99,230	91,030	89,080	89,850	84,260	80,170	79,190
19	93,950	96,320	98,810	99,920	101,000	99,120	90,790	89,030	89,850	83,940	80,160	79,070
20	93,950	96,320	98,810	99,920	100,900	98,970	90,590	89,030	89,850	83,670	80,120	79,370
21	94,050	96,260	98,810	100,100	100,900	98,760	90,440	88,980	89,850	83,430	80,080	80,440
22	94,150	96,470	98,920	100,100	100,900	98,500	90,390	88,940	89,700	83,190	80,060	81,110
23	94,200	96,520	98,970	100,100	101,000	98,290	90,190	88,890	89,650	82,950	79,980	81,220
24	94,250	96,630	99,070	100,000	101,000	97,880	90,290	88,840	89,450	82,750	79,940	81,250
25	94,350	96,730	99,180	100,000	100,900	97,670	90,290	88,700	89,220	82,560	79,890	81,270
26	94,810	96,730	99,280	100,100	100,900	97,410	89,900	88,610	88,980	82,320	79,860	81,230
27	94,860	96,890	99,330	100,100	101,000	96,990	89,550	88,470	88,700	82,040	79,820	81,270
28	94,970	96,780	99,440	100,200	101,000	96,520	89,400	88,370	88,370	81,800	79,740	81,270
29	95,120	96,840	99,540	100,200	101,100	96,210	89,260	88,560	88,280	81,570	79,700	81,190
30	95,230	96,890	99,590	100,200	------	95,800	89,170	88,840	88,040	81,280	79,620	81,150
31	95,280	------	99,650	100,400	------	95,430	------	88,840	------	80,920	79,580	------
(†)	1,927.17	1,927.48	1,928.01	1,928.15	1,928.28	1,927.20	1,925.94	1,925.87	1,925.70	1,925.65	1,925.96	1,926.25
(*)	1,927.17	1,927.48	1,928.01	1,928.15	1,928.28	1,927.20	1,925.94	1,925.87	1,925.70	1,923.94	1,923.54	1,923.91
(††)	+3,260	+1,610	+2,760	+750	+700	-5,670	-6,260	-330	-800	-7,120	-1,340	+1,570
MAX	95,280	96,890	99,650	100,400	101,100	101,100	95,230	89,080	89,850	87,830	80,570	81,270
MIN	92,120	95,330	96,990	99,700	100,300	95,430	89,170	87,760	87,860	80,920	78,650	79,070

CAL YR 1971..... †† +96,500 MAX 99,650 MIN 2,120
WTR YR 1972..... †† -10,870 MAX 101,100 MIN 78,650

† Elevation, in feet, at end of month, in South Concho pool.
* Elevation, in feet, at end of month, in Middle Concho-Spring Creek pool.
†† Change in contents, in acre-feet.

08131400 Pecan Creek near San Angelo, Tex.

LOCATION.--Lat 31°18'32", long 100°26'44", Tom Green County, on left bank 200 ft upstream from U.S. Highway 277, 3.6 miles upstream from mouth, and 10.5 miles south of San Angelo.

DRAINAGE AREA.--83.2 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,930.72 ft above mean sea level. Prior to Apr. 30, 1968, at site 1.2 miles downstream at datum 20.21 ft lower.

AVERAGE DISCHARGE.--11 years, 0.83 cfs (601 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 404 cfs May 13 (gage height, 1.61 ft); no flow for many days.
Period of record: Maximum discharge, 6,780 cfs Sept. 24, 1964 (gage height, 11.15 ft, site and datum then in use), from rating curve extended above 2,100 cfs on basis of slope-area measurement of 30,500 cfs; no flow most of time each year.
Maximum stage since at least 1908, 14.36 ft, former site and datum, Sept. 15, 1936 (discharge, 30,500 cfs by slope-area measurement).

REMARKS.--Records good. No known diversions above station.

REVISIONS (WATER YEARS).--WRD Texas 1971: 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.97	.80	.13	.02			0	0			0
2	0	.97	.80	.09	.05			0	0			0
3	0	.97	.97	.13	.07			0	0			0
4	0	.97	.97	.13	.06			0	0			0
5	0	.97	.97	.09	.05			0	0			0
6	0	1.2	.97	.09	.05			0	0			0
7	0	.97	.97	.09	.05			0	0			0
8	0	1.2	.80	.18	.04			0	0			0
9	0	1.4	.80	.18	.03			0	0			0
10	0	1.4	.80	.18	.03			0	0			0
11	0	1.4	.80	.13	.03			0	0			0
12	0	1.4	.80	.13	.03			0	1.1			0
13	0	1.4	.80	.07	.03			68	.13			0
14	0	1.4	.66	.06	.04			8.6	.02			0
15	0	1.2	.66	.05	.02			.52	33			0
16	0	1.2	.66	.05	.02			.15	1.7			0
17	0	1.2	.43	.05	.02			.36	.54			0
18	0	1.2	.33	.05	.02			.01	.05			0
19	38	1.2	.43	.04	.02			0	.02			0
20	11	1.2	.43	.04	.02			0	.01			0
21	2.1	1.2	.33	.03	.02			0	0			60
22	1.4	1.2	.18	.03	.02			0	0			2.1
23	1.2	1.7	.18	.03	.03			0	0			.27
24	1.2	1.4	.18	.03	.03			0	0			0
25	.80	1.2	.25	.02	.03			0	0			0
26	.97	1.2	.25	.03	.02			0	0			0
27	1.4	.97	.33	.03	.01			0	0			0
28	1.2	.80	.33	.02	.01			0	0			0
29	1.2	.80	.25	.02	0			0	0			0
30	1.2	.80	.25	.02	------			0	0			0
31	1.2	------	.18	.02	------		------	0	------			------
TOTAL	62.87	35.09	17.56	2.24	.87	0	0	77.64	36.57	0	0	62.37
MEAN	2.03	1.17	.57	.072	.030	0	0	2.50	1.22	0	0	2.08
MAX	38	1.7	.97	.18	.07	0	0	68	33	0	0	60
MIN	0	.80	.18	.02	0	0	0	0	0	0	0	0
AC-FT	125	70	35	4.4	1.7	0	0	154	73	0	0	124

CAL YR 1971 TOTAL 396.27 MEAN 1.09 MAX 79 MIN 0 AC-FT 786
WTR YR 1972 TOTAL 295.21 MEAN .81 MAX 68 MIN 0 AC-FT 586

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	1700	1.21	198	6-15	1000	1.14	169
5-13	1700	1.61	404	9-21	0700	1.22	203

08131600 Tom Green County Water Control and Improvement District No. 1 canal near San Angelo, Tex.

LOCATION.--Lat 31°24'58", long 100°23'23", Tom Green County, on left bank 1,900 ft downstream from U.S. Highway 87, 4.3 miles south of San Angelo, and 7.0 miles downstream from Lake Nasworthy.

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

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 1,855.33 ft above mean sea level (Bureau of Reclamation reference mark).

EXTREMES.--Period of record: Maximum daily discharge, 101 cfs Mar. 28, 1972; no flow for long periods.

REMARKS.--Records represent water release from Lake Nasworthy for irrigation. Local flood excluded.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	78	35	.17	50	57	1.1
2					0	10	79	39	0	38	66	1.1
3					0	15	69	40	0	41	66	.63
4					0	12	68	40	0	41	63	.50
5					0	12	70	40	0	38	53	.63
6					0	13	66	38	0	30	44	.78
7					0	15	66	32	6.2	25	42	.78
8					0	19	60	29	14	19	30	1.1
9					0	19	54	30	15	14	15	1.1
10					0	19	54	13	21	27	1.7	2.9
11					0	19	57	.63	20	33	1.5	2.4
12					0	20	62	.63	2.2	35	1.1	.63
13					0	24	64	.50	9.3	41	.94	.38
14					0	34	65	.50	21	46	.78	.38
15					0	45	64	.50	13	35	.63	.17
16					0	13	59	2.5	1.2	35	.63	.17
17					0	.50	53	13	9.4	41	.63	.17
18					4.0	.17	41	8.0	15	43	.63	.03
19					2.0	.69	41	8.0	33	48	.63	.03
20					.27	52	40	8.4	38	39	.63	0
21					.17	61	10	8.0	46	34	.63	0
22					.17	74	.63	9.4	41	23	.63	0
23					.27	87	.38	8.7	41	22	.78	0
24					.27	93	9.0	4.0	41	26	1.5	0
25					.48	91	30	4.3	42	27	1.9	0
26					.17	88	34	.38	42	40	1.3	0
27					.17	86	35	.17	47	43	.80	0
28					.08	101	34	.17	52	54	5.2	0
29					.03	95	28	.27	67	61	5.7	0
30					------	99	30	.63	66	57	5.7	0
31		------			------	94	------	.38	------	55	5.0	------
TOTAL	0	0	0	0	8.08	1,311.36	1,421.01	415.06	703.47	1,161	474.94	14.98
MEAN	0	0	0	0	.28	42.3	47.4	13.4	23.4	37.5	15.3	.50
MAX	0	0	0	0	4.0	101	79	40	67	61	66	2.9
MIN	0	0	0	0	0	0	.38	.17	0	14	.63	0
AC-FT	0	0	0	0	16	2,600	2,820	823	1,400	2,300	942	30

CAL YR 1971 TOTAL 0.00 MEAN .00 MAX 0 MIN 0 AC-FT 0
WTR YR 1972 TOTAL 5,509.90 MEAN 15.1 MAX 101 MIN 0 AC-FT 10,930

08132000 Lake Nasworthy near San Angelo, Tex.

LOCATION.--Lat 31°23'17", long 100°28'39", Tom Green County, on left bank 250 ft upstream from Nasworthy Dam on South Concho River, 3.8 miles downstream from Twin Buttes Dam, 6 miles southwest of San Angelo, and at mile 68.9.

DRAINAGE AREA.--3,833 sq mi, of which 3,724 sq mi is above Twin Buttes Reservoir and 1,178 sq mi is probably noncontributing.

PERIOD OF RECORD.--March 1930 to current year. Prior to October 1969, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is 1,840.00 ft above mean sea level.

EXTREMES.--Current year: Maximum contents, 11,430 acre-ft June 16 (gage height, 31.60 ft); minimum, 10,330 acre-ft July 31 (gage height, 30.90 ft).
Period of record: Maximum contents, 26,900 acre-ft Sept. 15, 1936 (gage height, 38.36 ft); minimum, 209 acre-ft Aug. 22, 1964 (gage height, 13.21 ft).

REMARKS.--Lake is formed by 5,480-foot dam having a 3,780-foot earthen section, two emergency spillways 300 and 600 ft long, and a concrete service spillway with a bank of fifteen 18- by 25-foot tainter gates, and one collapsible floodgate. Dam completed and storage began Mar. 28, 1930. Contents since September 1962 controlled by releases or pumpage from Twin Buttes Reservoir (station 08131200). Beginning in 1955 figures of contents and capacities shown herein have been adjusted for sedimentation. Siltation surveys made by Soil Conservation Service in December 1938 and May 1953 show that 1,191 acre-ft of silt was deposited from March 1930 to December 1938 and an additional 1,023 acre-ft was deposited from December 1938 to May 1953, making a total siltation of 2,214 acre-ft (gage height, 32.2 ft). Water is used for part of San Angelo municipal supply and irrigation. Capacity curve based on survey by Soil Conservation Service in 1953. Data regarding dam and lake are shown in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of 600-foot emergency spillway	40.1	-
Crest of 300-foot emergency spillway	39.0	27,470
Top of tainter gates	33.2	13,990
Top of collapsible floodgate	32.2	12,390
Invert of outlet to canal	27.5	6,370
Invert of two 24-inch sluice gates	20.0	1,580
Crest of tainter gate sill	15.3	435
Invert of two 36-inch sluice gates	-4.0	-

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

30.9	10,330	31.3	10,950
31.1	10,630	31.6	11,430

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,770	10,530	10,490	10,500	10,580	10,460	10,580	10,530	10,680	10,570	10,340	10,850
2	10,760	10,500	10,520	10,520	10,530	10,460	10,530	10,520	10,650	10,610	10,340	10,870
3	10,760	10,470	10,500	10,490	10,530	10,490	10,460	10,530	10,600	10,630	10,390	10,870
4	10,740	10,500	10,520	10,470	10,500	10,440	10,470	10,520	10,550	10,680	10,500	10,870
5	10,710	10,500	10,550	10,520	10,500	10,460	10,490	10,530	10,520	10,730	10,570	10,840
6	10,690	10,470	10,550	10,460	10,470	10,500	10,470	10,520	10,500	10,740	10,650	10,820
7	10,680	10,490	10,550	10,460	10,470	10,460	10,460	10,470	10,470	10,710	10,710	10,790
8	10,740	10,530	10,550	10,490	10,470	10,430	10,500	10,530	10,440	10,680	11,170	10,740
9	10,710	10,530	10,580	10,490	10,490	10,430	10,570	10,570	10,410	10,630	11,160	10,710
10	10,680	10,530	10,580	10,460	10,460	10,410	10,600	10,770	10,440	10,550	11,270	10,660
11	10,660	10,530	10,580	10,460	10,470	10,440	10,610	10,760	11,270	10,500	11,290	10,630
12	10,630	10,520	10,580	10,490	10,470	10,430	10,530	10,730	11,290	10,520	11,300	10,600
13	10,610	10,520	10,600	10,440	10,490	10,430	10,530	11,090	11,240	10,520	11,320	10,570
14	10,600	10,500	10,600	10,410	10,460	10,460	10,500	11,250	11,160	10,500	11,290	10,580
15	10,570	10,500	10,580	10,430	10,460	10,460	10,490	11,240	11,400	10,490	11,250	10,580
16	10,550	10,490	10,570	10,460	10,460	10,570	10,500	11,240	11,400	10,500	11,240	10,580
17	10,530	10,490	10,550	10,500	10,440	10,610	10,550	11,190	11,370	10,520	11,190	10,570
18	10,500	10,440	10,550	10,470	10,430	10,580	10,580	11,140	11,320	10,550	11,240	10,550
19	10,580	10,470	10,570	10,520	10,460	10,550	10,600	11,080	11,220	10,550	11,220	10,520
20	10,630	10,500	10,550	10,520	10,490	10,470	10,650	11,080	11,090	10,580	11,190	10,710
21	10,610	10,500	10,520	10,520	10,500	10,460	10,580	10,980	10,980	10,600	11,160	11,140
22	10,580	10,570	10,520	10,550	10,530	10,490	10,530	11,010	10,770	10,630	11,110	11,140
23	10,570	10,570	10,530	10,550	10,550	10,520	10,440	10,870	10,630	10,660	11,090	11,140
24	10,550	10,550	10,530	10,550	10,570	10,490	10,410	10,810	10,610	10,680	11,060	11,140
25	10,520	10,550	10,530	10,550	10,530	10,500	10,410	10,710	10,610	10,680	11,030	11,110
26	10,630	10,550	10,550	10,600	10,500	10,520	10,500	10,650	10,610	10,630	11,010	11,140
27	10,600	10,570	10,530	10,600	10,500	10,490	10,550	10,610	10,580	10,530	10,980	11,140
28	10,580	10,520	10,530	10,580	10,490	10,440	10,600	10,570	10,520	10,460	10,930	11,140
29	10,580	10,490	10,550	10,570	10,520	10,490	10,630	10,630	10,520	10,400	10,890	11,060
30	10,570	10,470	10,520	10,550	------	10,550	10,600	10,710	10,550	10,340	10,840	11,060
31	10,550	------	10,520	10,570	------	10,570	------	10,710	------	10,330	10,790	------
(†)	1,871.05	1,871.00	1,871.03	1,871.06	1,871.03	1,871.06	1,871.08	1,871.15	1,871.05	1,870.90	1,871.20	1,871.37
(*)	-260	-80	+50	+50	-50	+50	+30	+110	-160	-220	+460	+270
MAX	10,770	10,570	10,600	10,600	10,580	10,610	10,650	11,250	11,400	10,740	11,320	11,140
MIN	10,500	10,440	10,490	10,410	10,430	10,410	10,410	10,470	10,410	10,330	10,340	10,520

CAL YR 1971..... * +1,890 MAX 12,050 MIN 7,560
WTR YR 1972..... * +250 MAX 11,400 MIN 10,330

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

08133500 North Concho River at Sterling City, Tex.

LOCATION.--Lat 31°49'58", long 100°59'38", Sterling County, on right bank 100 ft upstream from bridge on State Highway 163, 0.3 mile south of Sterling City, 3.5 miles downstream from Lacy Creek, 4 miles upstream from Sterling Creek, and at mile 55.3.

DRAINAGE AREA.--605 sq mi, of which 66 sq mi is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,242.36 ft above mean sea level. Prior to Dec. 6, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 9.54 cfs (6,910 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 311 cfs Sept. 3 (gage height, 7.50 ft); no flow most of time.
Period of record: Maximum discharge, 16,300 cfs July 6, 1948 (gage height, 23.70 ft); no flow at times each year.
Maximum stage since at least 1891, that of July 6, 1948.

REMARKS.--Records good. Small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1512: 1945, 1948. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	0		0	0
2								0	0		0	.01
3								0	0		0	131
4								0	0		0	21
5								0	0		0	3.2
6								2.0	0		0	.39
7								.49	0		0	0
8								0	0		0	0
9								0	0		0	0
10								0	0		0	0
11								0	0		0	0
12								0	70		0	0
13								0	3.0		0	0
14								0	.11		0	0
15								0	0		0	0
16								0	0		0	0
17								0	0		0	0
18								0	0		0	0
19								0	0		0	0
20								0	0		0	0
21								0	0		0	0
22								0	0		0	0
23								0	0		0	0
24								0	0		0	0
25								0	0		0	0
26								0	0		0	0
27								0	0		0	0
28								0	0		52	0
29								.02	0		4.6	0
30					------			0	.04		.12	0
31		------			------		------	0	------		0	------
TOTAL	0	0	0	0	0	0	0	2.51	73.15	0	56.72	155.60
MEAN	0	0	0	0	0	0	0	.081	2.44	0	1.83	5.19
MAX	0	0	0	0	0	0	0	2.0	70	0	52	131
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	5.0	145	0	113	309

CAL YR 1971 TOTAL 2,875.51 MEAN 7.88 MAX 799 MIN 0 AC-FT 5,700
WTR YR 1972 TOTAL 287.98 MEAN .79 MAX 131 MIN 0 AC-FT 571

PEAK DISCHARGE (BASE, 300 CFS).--Sept. 3 (0200) 311 cfs (7.50 ft).

08134000 North Concho River near Carlsbad, Tex.

LOCATION (revised).--Lat 31°35'33", long 100°38'12", Tom Green County, near left bank on downstream side of bridge on county road, 1.3 miles southeast of Carlsbad, 1.7 miles upstream from Mule Creek, 4.7 miles upstream from Grape Creek, 12 miles northeast of San Angelo Dam, and at mile 22.9.

DRAINAGE AREA.--1,249 sq mi, of which 105 sq mi is probably noncontributing.

PERIOD OF RECORD.--March 1924 to current year

GAGE.--Water-stage recorder. Datum of gage is 1,968.02 ft above mean sea level. Prior to Feb. 4, 1925, and Sept. 27, 1936, to Feb. 7, 1937, nonrecording gage; Feb. 4, 1925, to Sept. 26, 1936, and Feb. 8, 1937, to Nov. 6, 1955, water-stage recorder, all at site 2.5 miles upstream at datum 32.76 ft higher.

AVERAGE DISCHARGE.--48 years, 38.4 cfs (27,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,190 cfs Sept. 21 (gage height, 11.06 ft); no flow at times.
Period of record: Maximum discharge, 94,600 cfs Sept. 26, 1936 (gage height, 16.0 ft at former site, 29.1 ft at present site, from floodmarks), on basis of slope-area measurement of peak flow at former site; no flow at times.
Maximum stage since 1853, that of Sept. 26, 1936. Stage not known for major flood in June 1853.

REMARKS.--Records good. Diversions by pumping above station.

REVISIONS (WATER YEARS).--WSP 1512: 1924(M), 1925, 1926(M), 1928, 1930, 1932(M), 1935, 1937-38(M), 1941(M), 1945(M), 1947-49(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.03						0	0	.17		0
2	.48	.03						0	0	.04		0
3	17	.03						0	0	0		0
4	5.6	.03						0	0	0		0
5	1.2	.03						0	0	0		0
6	.27	.03						0	0	0		0
7	.08	.03						66	0	0		0
8	.11	.03						24	0	0		0
9	.08	.03						4.8	0	0		0
10	.07	.03						.65	0	0		0
11	.07	.03						.09	0	0		0
12	.06	.03						0	0	0		0
13	.06	.03						.02	0	0		0
14	.06	.03						.03	0	0		0
15	.06	.03						0	0	0		0
16	.05	.02						0	0	0		0
17	.05	.02						0	0	0		0
18	.06	.01						0	0	0		0
19	.08	0						0	0	0		0
20	.07	0						0	0	0		0
21	.06	0						0	0	0		798
22	.05	0						0	0	0		134
23	.05	0						0	0	0		20
24	.04	0						0	0	0		6.2
25	.04	0						0	0	0		1.8
26	.03	0						0	0	0		.54
27	.03	0						0	0	0		.20
28	.03	0						0	0	0		.11
29	.03	0						0	57	0		.08
30	.03	0			------			0	.62	0		.05
31	.03	------			------		------	0	------	0		------
TOTAL	26.67	.50	0	0	0	0	0	95.59	57.62	.21	0	960.98
MEAN	.86	.017	0	0	0	0	0	3.08	1.92	.007	0	32.0
MAX	17	.03	0	0	0	0	0	66	57	.17	0	798
MIN	.03	0	0	0	0	0	0	0	0	0	0	0
AC-FT	53	1.0	0	0	0	0	0	190	114	.4	0	1,910

CAL YR 1971 TOTAL 3,539.99 MEAN 9.70 MAX 884 MIN 0 AC-FT 7,020
WTR YR 1972 TOTAL 1,141.57 MEAN 3.12 MAX 798 MIN 0 AC-FT 2,260

PEAK DISCHARGE (BASE, 1,550 CFS).--Sept. 21 (1200) 3,190 cfs (11.06 ft).

08134500 San Angelo Lake at San Angelo, Tex.

LOCATION.--Lat 31°29'04", long 100°28'53", Tom Green County, in intake structure of San Angelo Dam on North Concho River, 3.1 miles northwest of San Angelo, and at mile 6.6.

DRAINAGE AREA.--1,488 sq mi, of which 105 sq mi is probably noncontributing.

PERIOD OF RECORD.--February 1952 to current year. Prior to October 1970, published as San Angelo Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 12, 1953, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 11,040 acre-ft Oct. 1 (elevation, 1,869.33 ft); minimum, 7,090 acre-ft Sept. 19 (elevation, 1,864.60 ft).
Period of record: Maximum contents, 174,100 acre-ft Oct. 14, 1957 (elevation, 1,916.47 ft); minimum since first appreciable storage, lake dry July 16, 1970, to Apr. 15, 1971.

REMARKS.--Lake is formed by a rolled earthfill dam 40,885 ft long including spillway. Closure was completed Mar. 7, 1951. Deliberate impoundment of water began Feb. 1, 1952. Lake is operated for flood control and part of municipal supply for city of San Angelo. Outlet works consist of six gate-controlled outlets (7.5 by 14.5 ft) opening into two 18-foot-diameter concrete conduits and two 30-inch gate-controlled outlets for water-supply outlet. The emergency spillway to the right of the dam is an uncontrolled off-channel concrete gravity dam with ogee weir section 1,150 ft long designed to discharge 356,000 cfs at maximum design level (elevation, 1,958.0 ft). Capacity based on survey made in 1944. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,964.0	-
Crest of emergency spillway	1,938.5	396,400
Top of conservation storage	1,908.0	119,200
Inverts to wet well for 30-inch outlets	1,878.5	22,970
Inverts of six gate-controlled outlets	1,840.0	5

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

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

1,864.0	6,680	1,868.0	9,810
1,865.0	7,370	1,869.0	10,730
1,866.0	8,130	1,870.0	11,690
1,867.0	8,950		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,020	10,560	10,110	9,900	9,620	9,370	8,870	8,320	8,090	8,020	7,360	7,340
2	10,980	10,530	10,120	9,890	9,610	9,350	8,860	8,300	8,070	7,990	7,330	7,340
3	11,000	10,500	10,100	9,890	9,600	9,340	8,830	8,280	8,050	7,960	7,320	7,320
4	11,020	10,480	10,090	9,880	9,580	9,310	8,820	8,260	8,030	7,950	7,330	7,340
5	11,000	10,460	10,090	9,850	9,580	9,280	8,820	8,240	8,020	7,930	7,320	7,330
6	10,970	10,450	10,080	9,840	9,570	9,280	8,810	8,250	7,990	7,920	7,290	7,300
7	10,940	10,410	10,070	9,830	9,560	9,270	8,800	8,240	7,980	7,890	7,270	7,300
8	10,950	10,410	10,070	9,820	9,550	9,250	8,770	8,230	7,960	7,880	7,340	7,280
9	10,930	10,380	10,090	9,810	9,540	9,230	8,750	8,230	7,960	7,870	7,390	7,270
10	10,890	10,370	10,060	9,810	9,540	9,220	8,740	8,260	7,930	7,840	7,450	7,250
11	10,870	10,360	10,050	9,810	9,530	9,210	8,740	8,260	8,010	7,820	7,500	7,240
12	10,840	10,340	10,040	9,790	9,530	9,210	8,720	8,260	8,020	7,800	7,520	7,230
13	10,830	10,340	10,040	9,770	9,530	9,210	8,690	8,330	8,020	7,790	7,520	7,210
14	10,810	10,330	10,030	9,760	9,510	9,210	8,680	8,330	8,000	7,770	7,530	7,200
15	10,780	10,310	10,020	9,740	9,500	9,180	8,640	8,310	8,050	7,730	7,530	7,190
16	10,750	10,300	10,020	9,730	9,490	9,160	8,630	8,330	8,040	7,710	7,510	7,190
17	10,730	10,300	10,000	9,730	9,480	9,150	8,590	8,320	8,030	7,690	7,500	7,150
18	10,720	10,270	9,990	9,730	9,470	9,120	8,560	8,290	8,020	7,670	7,510	7,140
19	10,730	10,250	9,980	9,720	9,460	9,100	8,550	8,270	8,010	7,660	7,490	7,110
20	10,710	10,230	9,980	9,710	9,450	9,090	8,550	8,250	7,990	7,620	7,490	7,200
21	10,680	10,220	9,950	9,710	9,450	9,070	8,510	8,240	7,940	7,600	7,460	8,280
22	10,670	10,230	9,950	9,710	9,440	9,060	8,490	8,230	7,950	7,580	7,450	8,830
23	10,650	10,220	9,940	9,690	9,430	9,050	8,460	8,210	7,920	7,570	7,450	8,890
24	10,620	10,200	9,940	9,670	9,430	9,030	8,440	8,190	7,900	7,550	7,420	8,910
25	10,610	10,190	9,930	9,670	9,410	9,020	8,420	8,170	7,880	7,540	7,430	8,910
26	10,640	10,160	9,930	9,660	9,400	9,000	8,400	8,150	7,850	7,520	7,420	8,910
27	10,620	10,150	9,920	9,650	9,390	8,980	8,370	8,120	7,830	7,490	7,400	8,890
28	10,610	10,130	9,910	9,640	9,380	8,950	8,370	8,110	7,800	7,460	7,390	8,880
29	10,600	10,120	9,910	9,640	9,380	8,920	8,350	8,110	8,010	7,450	7,370	8,860
30	10,590	10,110	9,910	9,620	------	8,910	8,340	8,110	8,020	7,420	7,350	8,830
31	10,570	------	9,910	9,610	------	8,880	------	8,100	------	7,390	7,340	------
(†)	1,868.83	1,868.32	1,868.10	1,867.77	1,867.50	1,866.92	1,866.26	1,865.96	1,865.86	1,865.03	1,864.95	1,866.86
(*)	-480	-460	-200	-300	-230	-500	-540	-240	-80	-630	-50	+490
MAX	11,020	10,560	10,120	9,900	9,620	9,370	8,870	8,330	8,090	8,020	7,530	8,910
MIN	10,570	10,110	9,910	9,610	9,380	8,880	8,340	8,100	7,800	7,390	7,270	7,110

CAL YR 1971..... * +9,910 MAX 11,120 MIN 0
WTR YR 1972..... * -2,220 MAX 11,020 MIN 7,110

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

08135000 North Concho River at San Angelo, Tex.

LOCATION.--Lat 31°27'57", long 100°26'51", Tom Green County, near left bank on downstream side of pier of Sixth Street Bridge in San Angelo, 3.2 miles upstream from confluence with South Concho River, and 3.4 miles downstream from San Angelo Dam.

DRAINAGE AREA.--1,507 sq mi, of which 105 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1915 to June 1928, February 1929 to September 1931, July 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,813.42 ft above mean sea level. Prior to Sept. 1, 1920, nonrecording gage and Sept. 1, 1920, to Feb. 11, 1929, water-stage recorder at site 1.6 miles downstream at datum 11.02 ft lower. Feb. 12, 1929, to Sept. 30, 1931, water-stage recorder at site 1.6 miles downstream at datum 13.02 ft lower.

AVERAGE DISCHARGE.-17 years (1916-27, 1929-31, 1947-51) prior to completion of San Angelo Lake, 54.5 cfs (39,490 acre-ft per year); 21 years (1951-72) after completion of San Angelo Lake, 11.0 cfs (7,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 268 cfs May 13 (gage height, 2.62 ft); no flow May 5.
Period of record: Maximum discharge, about 47,000 cfs June 13, 1930 (gage height, 22.52 ft, site and datum then in use); no flow at times.
Flood of Sept. 17, 1936, reached a stage of 34.6 ft, from floodmarks (discharge, 184,000 cfs by slope-area measurement). The flood in 1936 was the greatest since flood in June 1853 (stage unknown).

REMARKS.--Records good. Since October 1951, flow regulated by San Angelo Lake (see preceding page).

REVISIONS (WATER YEARS).--WSP 568: 1916, 1918-22. WSP 1512: 1916(M), 1917-18, 1919-21(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.21	.40	.65	1.4	.12	.06	.01	.11	1.2	.04	2.1
2	.49	.17	6.2	.68	.86	.10	.07	.01	.07	.33	.03	7.5
3	.79	.13	2.0	1.2	.56	.11	.06	.01	.05	.20	.01	6.0
4	1.8	.13	1.6	1.1	.49	.11	.04	.01	.04	.49	.52	2.8
5	.69	.10	2.8	.91	.49	.15	.06	0	.03	.27	.28	2.9
6	.40	.10	1.6	.88	.44	.27	.07	.17	.02	.16	.18	1.3
7	.26	.10	1.4	.88	.46	.25	.05	.09	.01	.13	.17	1.1
8	5.5	.13	1.4	.96	.50	.20	.04	.11	.01	.10	26	1.6
9	2.2	.13	3.2	.93	.40	.23	.03	.07	.01	.10	49	.83
10	.73	.17	4.2	1.1	.38	.21	.04	6.3	.01	.09	18	.55
11	.40	.17	1.6	1.0	.30	.20	.04	.50	30	.08	25	.38
12	.32	.21	1.6	.98	.25	.17	.02	.17	6.6	.06	9.8	.32
13	.32	.13	1.5	.91	.18	.17	1.2	26	.93	.05	4.3	.32
14	.26	.13	1.6	.88	.17	.20	3.2	7.3	.30	.05	2.2	.26
15	.26	.13	1.2	.76	.13	.20	.80	.91	9.6	.04	2.5	.30
16	.26	.13	.68	.73	.15	.16	.20	5.5	1.7	.03	1.5	.22
17	.21	.13	.49	1.2	.18	.13	.10	2.4	.44	.03	1.0	.16
18	.21	.10	.60	1.3	.17	.09	.06	.34	.23	.04	2.0	.13
19	6.8	.13	.49	1.1	.17	.08	.04	.15	.16	.04	2.0	.11
20	3.5	.13	.58	.99	.17	.08	.03	.10	.16	.04	1.1	5.0
21	.60	.17	.56	.87	.18	.07	.04	.09	.13	.03	.72	39
22	.32	.73	.49	.78	.20	.08	.03	.08	.09	.03	.58	4.3
23	.32	.73	.55	.82	.23	.08	.03	.08	.09	.06	.62	1.1
24	.26	.32	.60	.80	.19	.08	.01	.06	.07	.08	.60	.62
25	.26	.32	.60	.73	.16	.07	.01	.05	.05	.05	.76	.49
26	4.5	.21	.63	.67	.15	.07	.01	.04	.04	.03	6.3	.54
27	4.8	.26	.60	.73	.20	.06	.01	.03	.03	.06	1.8	.48
28	.88	.32	.60	.72	.18	.05	.01	.02	.03	.08	.96	.45
29	1.0	.26	.60	.81	.14	.03	.01	.75	.69	.10	.70	.40
30	.49	.26	.69	.91	------	.04	.01	.92	29	.09	.58	.29
31	.21	------	.62	1.4	------	.06	------	.21	------	.06	.46	------
TOTAL	39.53	6.34	41.68	28.38	9.48	3.92	6.38	52.48	80.70	4.20	159.71	81.55
MEAN	1.28	.21	1.34	.92	.33	.13	.21	1.69	2.69	.14	5.15	2.72
MAX	6.8	.73	6.2	1.4	1.4	.27	3.2	26	30	1.2	49	39
MIN	.21	.10	.40	.65	.13	.03	.01	0	.01	.03	.01	.11
AC-FT	78	13	83	56	19	7.8	13	104	160	8.3	317	162

CAL YR 1971 TOTAL 518.84 MEAN 1.42 MAX 54 MIN 0 AC-FT 1,030
WTR YR 1972 TOTAL 514.35 MEAN 1.41 MAX 49 MIN 0 AC-FT 1,020

08136000 Concho River at San Angelo, Tex.

LOCATION (revised).--Lat 31°27'16", long 100°24'37", Tom Green County, on left bank 0.4 mile downstream from confluence of North Concho and South Concho Rivers, 1.8 miles southeast of Tom Green County Courthouse, and at mile 60.9.

DRAINAGE AREA.--5,380 sq mi, of which 1,283 sq mi is probably noncontributing.

PERIOD OF RECORD.--September 1915 to current year. Prior to October 1969, published as "near San Angelo".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,776.79 ft above mean sea level. Prior to Aug. 11, 1917, nonrecording gage at same site and datum. Aug. 11, 1917, to May 15, 1963, water-stage recorder on right bank to same datum.

AVERAGE DISCHARGE.--47 (1915-62) prior to construction of Twin Buttes Reservoir, 158 cfs (114,500 acre-ft per year); 10 years (1962-72) regulated, 3.85 cfs (2,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 794 cfs May 13 (gage height, 3.92 ft); minimum, 0.01 cfs June 10, 11.
Period of record: Maximum discharge, 230,000 cfs Sept. 17, 1936 (gage height, 46.6 ft, from floodmarks), from rating curve extended above 105,000 cfs on basis of slope-area measurements of 167,000 and 230,000 cfs; no flow at times in 1921, 1952-53, 1965, 1971.
Maximum stage since 1853, 47.5 ft Aug. 6, 1906 (discharge, about 246,000 cfs), from information by local resident. Other large floods are known to have occurred in June 1853, August 1882, and April 1900.

REMARKS.--Records good. Many diversions upstream from station for irrigation, industrial, and municipal supply. The city of San Angelo diverted 10,940 acre-ft (of which 2,480 acre-ft was diverted from E. V. Spence Reservoir) for municipal use during the current year. All of the sewage effluent is used for irrigation about 6 miles downstream from gage, and none is returned directly to the stream. Flow is regulated by Twin Buttes Reservoir (station 08131200), Lake Nasworthy (station 08132000) on South Concho River, and San Angelo Lake (station 08134500) on North Concho River.

REVISIONS (WATER YEARS).--WSP 568: 1915-16, 1919-22. WSP 1148: 1916-22(M), 1924(M), 1925-26, 1929(M), 1930-32, 1935-37. WSP 1512: 1917-18. WSP 1712: 1936. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	7.9	.22	.14	.10	.07	.12	.06	.05	2.6	.10	1.6
2	.14	4.0	.39	.14	.08	.08	.07	.06	.04	2.2	.11	15
3	.61	2.9	.30	.14	.08	.08	.08	.05	.04	2.2	.10	15
4	.26	3.7	.26	.14	.08	.08	.10	.04	.04	13	.40	18
5	.34	3.5	.71	.14	.08	.08	.10	.05	.04	5.6	.24	15
6	.39	2.3	1.4	.12	.08	.08	.08	.06	.04	1.4	.21	8.3
7	.21	1.7	.26	.12	.08	.08	.08	.06	.03	.20	.15	5.1
8	9.0	1.9	.26	.12	.08	.08	.07	.07	.03	.18	50	3.4
9	7.1	3.9	.90	.12	.08	.08	.07	.07	.03	.18	87	2.0
10	2.8	4.6	8.1	.12	.08	.08	.07	18	.03	.18	55	4.0
11	1.5	4.2	3.4	.12	.08	.08	.06	9.8	152	.18	81	5.6
12	1.9	4.9	.34	.12	.08	.10	.06	3.6	71	.19	45	2.3
13	1.6	4.6	1.0	.12	.08	.10	.06	91	17	.18	27	1.5
14	1.2	4.2	1.1	.12	.08	.10	.06	75	6.0	.14	18	.68
15	.25	3.9	.39	.12	.08	.10	.06	13	33	.12	8.9	.12
16	.43	3.6	.30	.12	.08	.12	.06	8.9	20	.11	4.7	.09
17	.14	3.3	.26	.12	.08	.10	.06	10	7.1	.12	4.2	.07
18	.12	3.3	.22	.12	.08	.12	.07	5.3	4.7	.21	5.1	.07
19	17	3.0	.20	.12	.08	.10	.06	3.1	2.9	.18	4.6	.07
20	19	3.0	.18	.12	.08	.10	.06	1.9	1.7	.10	4.7	2.1
21	13	2.8	.16	.12	.08	.08	.07	.10	.95	.07	6.0	111
22	10	6.7	.14	.10	.08	.10	.06	.06	.67	.08	2.9	23
23	11	7.1	.14	.10	.08	.10	.05	.06	.80	.08	1.9	6.4
24	8.1	3.7	.14	.10	.08	.10	.05	.06	.32	.12	.17	3.2
25	8.1	1.8	.14	.10	.08	.14	.05	.06	.13	.18	.20	2.3
26	25	.24	.14	.10	.08	.08	.05	.06	.19	.11	.53	2.3
27	27	.23	.14	.10	.08	.07	.06	.04	.12	.18	2.6	2.1
28	16	.30	.14	.10	.08	.07	.06	.04	.14	.12	3.5	1.9
29	12	.26	.14	.10	.07	.08	.06	.12	.13	.12	1.7	1.8
30	11	.22	.14	.10	------	.10	.06	.08	20	.12	1.4	1.1
31	8.6	------	.14	.10	------	.10	------	.06	------	.12	.94	------
TOTAL	213.93	97.75	21.75	3.62	2.33	2.83	2.02	240.86	339.22	30.57	418.35	255.10
MEAN	6.90	3.26	.70	.12	.080	.091	.067	7.77	11.3	.99	13.5	8.50
MAX	27	7.9	8.1	.14	.10	.14	.12	91	152	13	87	111
MIN	.12	.22	.14	.10	.07	.07	.05	.04	.03	.07	.10	.07
AC-FT	424	194	43	7.2	4.6	5.6	4.0	478	673	61	830	506

CAL YR 1971 TOTAL 2,043.46 MEAN 5.60 MAX 292 MIN .01 AC-FT 4,050
WTR YR 1972 TOTAL 1,628.33 MEAN 4.45 MAX 152 MIN .03 AC-FT 3,230

08136500 Concho River at Paint Rock, Tex.

LOCATION.--Lat 31°30'57", long 99°55'09", Concho County, near left bank on downstream end of pier of bridge on U.S. Highway 83, 0.5 mile north of Concho County Courthouse in Paint Rock, 2.7 miles downstream from Kickapoo Creek, and at mile 19.6.

DRAINAGE AREA.--6,415 sq mi, of which 1,283 sq mi is probably noncontributing.

PERIOD OF RECORD.--September 1915 to current year. Prior to October 1970, published as "near Paint Rock".

GAGE.--Water-stage recorder with masonry dam control. Datum of gage is 1,574.36 ft above mean sea level. See WSP 1922 for history of changes prior to Jan. 15, 1940.

AVERAGE DISCHARGE.--47 years (1915-62) prior to construction of Twin Buttes Reservoir, 210 cfs (152,100 acre-ft per year); 10 years (1962-72) regulated, 27.6 cfs (20,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 363 cfs Oct. 19 (gage height, 13.48 ft); minimum, 1.5 cfs July 16.
Period of record: Maximum discharge, 301,000 cfs Sept. 17, 1936 (gage height, 43.4 ft, from floodmarks), from rating curve extended above 98,000 cfs on basis of slope-area measurements of 144,000 and 301,000 cfs; no flow at times.
Maximum stage since at least 1853, that of Sept. 17, 1936. Flood in August 1882 reached a stage of about 39.9 ft, and flood in August 1906 reached a stage of 39.5 ft, from information by local resident.

REMARKS.--Records good above 10 cfs and fair below. Many diversions above station for irrigation and municipal supply. Regulation same as that for Concho River at San Angelo (see preceding page). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 458: 1915-16. WSP 568: 1919-20. WSP 1712: 1922(M). WSP 1732: 1918(M), 1923(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	60	50	46	49	33	11	16	24	11	7.0	27
2	40	57	57	46	49	30	13	13	23	10	5.7	27
3	45	54	58	46	46	28	12	11	21	10	5.2	26
4	66	52	56	47	44	25	11	10	19	10	5.6	28
5	59	50	58	46	44	23	12	9.5	18	13	9.6	30
6	47	48	60	46	45	23	12	11	18	15	11	39
7	43	46	60	46	44	23	12	11	18	16	10	42
8	54	48	58	49	43	21	11	12	18	15	10	40
9	63	50	59	49	44	19	16	15	18	13	37	35
10	58	52	63	47	44	19	14	31	19	11	238	32
11	51	52	58	46	45	22	13	39	18	9.4	177	30
12	52	53	53	46	46	23	12	47	20	8.9	170	29
13	52	51	52	44	45	21	12	63	139	9.3	150	27
14	47	51	56	43	44	22	11	39	70	8.2	89	27
15	43	52	51	41	43	24	8.7	94	78	10	64	28
16	41	53	49	43	43	21	7.4	72	69	4.0	52	28
17	41	55	49	44	43	17	8.7	45	54	4.4	44	28
18	55	55	49	45	42	16	8.0	35	50	6.0	44	26
19	124	52	49	45	42	16	9.1	30	37	6.4	38	24
20	224	52	48	46	42	17	10	29	29	8.6	36	22
21	116	52	46	42	41	17	14	27	25	8.8	35	29
22	82	53	46	43	42	16	13	26	25	6.8	32	81
23	70	56	46	43	41	14	11	24	25	7.1	31	134
24	61	56	46	43	40	14	9.8	23	20	9.5	31	77
25	56	56	46	42	40	12	8.8	20	17	6.8	32	55
26	57	56	46	42	39	12	8.7	19	15	8.7	30	43
27	67	54	47	43	38	11	10	18	13	9.8	31	38
28	70	52	46	43	36	10	9.6	16	12	9.0	29	36
29	81	52	48	44	37	10	14	17	11	8.0	27	36
30	69	51	48	44	------	10	17	23	11	7.4	28	33
31	62	------	46	46	------	11	------	27	------	7.4	27	------
TOTAL	2,038	1,581	1,604	1,386	1,241	580	339.8	872.5	934	288.5	1,536.1	1,157
MEAN	65.7	52.7	51.7	44.7	42.8	18.7	11.3	28.1	31.1	9.31	49.6	38.6
MAX	224	60	63	49	49	33	17	94	139	16	238	134
MIN	40	46	46	41	36	10	7.4	9.5	11	4.0	5.2	22
AC-FT	4,040	3,140	3,180	2,750	2,460	1,150	674	1,730	1,850	572	3,050	2,290

CAL YR 1971 TOTAL 20,025.75 MEAN 54.9 MAX 2,650 MIN 0 AC-FT 39,720
WTR YR 1972 TOTAL 13,557.90 MEAN 37.0 MAX 238 MIN 4.0 AC-FT 26,890

08136700 Colorado River near Stacy, Tex.

LOCATION.--Lat 31°29'37", long 99°34'25", Coleman-McCulloch County line, on left bank at downstream side of bridge on Farm Road 503, 1.2 miles upstream from Bois d'Arc Creek, 1.8 miles northeast of Stacy, 24 miles downstream from Concho River, and at mile 604.8.

DRAINAGE AREA.--24,040 sq mi, of which 12,880 sq mi is probably noncontributing.

PERIOD OF RECORD.--March 1968 to current year. Prior to October 1970, published as "at Stacy".

GAGE.--Water-stage recorder. Datum of gage is 1,394.66 ft above mean sea level (State Highway Department bridge plans).

EXTREMES.--Current year: Maximum discharge, 4,150 cfs Oct. 20 (gage height, 9.03 ft); minimum, 2.0 cfs Aug. 8.
Period of record: Maximum discharge, 12,200 cfs May 10, 1968 (gage height, 13.14 ft); minimum, 0.55 cfs May 29, 1971.
Maximum discharge since at least 1882, 356,000 cfs Sept. 18, 1936 (gage height, 64.59 ft), on basis of slope-area measurement of peak flow. The flood of Sept. 18, 1936, was 4 ft higher than the 1906 flood and 7 to 8 ft higher than the 1882 flood, from information by local resident.

REMARKS.--Records good. Many diversions above this station for municipal, irrigation, and oilfield operation uses. Effluent from numerous sewage plants is returned to the river. Flow slightly regulated by eight major upstream reservoirs (see stations 08118000, 08123000, 08123600, 08123950, 08125500, 08131200, 08132000, and 08134500). At end of year, flow from 251 sq mi above this station was partly controlled by 38 floodwater-retarding structures with a total combined capacity of 56,480 acre-ft below the flood-spillway crests, of which 52,150 acre-ft is floodwater-retarding capacity and 4,330 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 3,420 acre-ft, of which 253 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	306	127	135	142	96	44	35	44	98	4.4	18
2	292	277	141	135	142	99	48	44	47	65	2.9	17
3	326	247	153	137	136	93	43	51	47	55	2.5	22
4	1,390	221	185	144	137	88	47	51	43	45	2.5	30
5	1,710	204	222	144	135	88	49	44	40	34	2.8	21
6	910	192	210	146	131	83	53	49	40	26	2.9	17
7	554	187	202	150	130	77	50	337	37	39	2.5	18
8	448	178	201	144	127	80	48	1,730	34	101	2.2	24
9	422	169	188	142	123	77	45	456	30	77	3.7	29
10	383	167	186	144	120	76	44	222	29	58	152	36
11	316	163	204	142	123	74	43	149	29	48	446	37
12	258	160	232	143	124	71	43	123	28	39	294	29
13	233	154	221	138	125	70	49	173	27	32	746	22
14	212	149	187	135	126	78	45	207	177	26	422	20
15	193	150	175	126	127	81	45	119	288	21	223	18
16	177	150	169	126	123	74	41	111	249	17	276	18
17	160	144	166	124	117	75	38	169	236	14	186	16
18	258	143	157	126	117	76	30	112	189	14	98	14
19	437	142	146	127	113	72	27	100	151	18	96	15
20	2,630	138	140	129	110	66	22	89	121	19	72	15
21	1,320	135	144	130	108	64	45	69	93	15	55	17
22	840	144	140	129	109	62	37	59	73	11	57	43
23	619	152	135	127	106	62	31	51	59	9.0	47	387
24	595	146	135	125	107	64	31	45	53	7.6	46	283
25	455	153	133	124	103	64	37	41	49	6.6	33	174
26	374	155	133	124	102	55	35	37	46	6.5	26	105
27	418	149	131	124	102	56	36	34	38	8.1	23	70
28	519	138	134	124	106	52	37	31	32	7.7	23	49
29	454	136	136	124	104	48	35	29	28	5.9	22	36
30	395	131	132	124	------	50	35	53	60	5.8	23	29
31	347	------	135	129	------	46	------	47	------	5.4	22	------
TOTAL	18,001	5,080	5,100	4,121	3,475	2,217	1,213	4,867	2,417	934.6	3,414.4	1,629
MEAN	581	169	165	133	120	71.5	40.4	157	80.6	30.1	110	54.3
MAX	2,630	306	232	150	142	99	53	1,730	288	101	746	387
MIN	160	131	127	124	102	46	22	29	27	5.4	2.2	14
AC-FT	35,700	10,080	10,120	8,170	6,890	4,400	2,410	9,650	4,790	1,850	6,770	3,230

CAL YR 1971 TOTAL 104,096.56 MEAN 285 MAX 10,000 MIN .63 AC-FT 206,500
WTR YR 1972 TOTAL 52,469.00 MEAN 143 MAX 2,630 MIN 2.2 AC-FT 104,100

08136900 Mukewater Creek subwatershed No. 10A near Trickham, Tex.

LOCATION.--Lat 31°39'01", long 99°13'30", Coleman County, near center of dam on Mukewater Creek, 1.8 miles upstream from East Fork, and 4.3 miles north of Trickham.

DRAINAGE AREA.--21.8 sq mi, of which 6.5 sq mi is above sites 5, 5-A, and 6.

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,462.00 ft above mean sea level.

AVERAGE INFLOW.--7 years, 2,650 acre-ft per year.

AVERAGE OUTFLOW.--7 years, 2,500 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 125 cfs Oct. 20 (gage height, 8.40 ft); no outflow for many days. Maximum inflow, 511 cfs (average for 5-minute interval) Oct. 18, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 230 cfs Sept. 24, 1971 (gage height, 13.58 ft); no outflow for many days. Maximum inflow, 1,540 cfs (average for 5-minute interval) Mar. 20, 1968, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow most of time each year.

REMARKS.--Records fair. The dam was completed in March 1965, and storage began in April 1965. The pool is formed by a rolled-fill earthen dam 3,190 ft long, including a 400-foot wide emergency spillway. The outlet structure is a 3.5- by 11.0-foot concrete drop inlet connected to a 42-inch concrete outlet pipe. The top of the structure is open and at 12.68 ft gage height. There are four 5.25-foot rectangular notches in the drop inlet, two on each side divided by a 6-inch concrete web, with crests at 8.68 ft gage height. In addition, there are six portholes in the drop inlet (2 ft wide by 1 ft high), the bottoms being at 5.02 ft gage height. A 12-inch controlled water-supply outlet pipe (invert at gage height, 1.18 ft) is connected to the drop inlet. Pool capacity is 3,019 acre-ft at the emergency spillway crest, 559 acre-ft at the crest of drop inlet, 244 acre-ft at the bottom of portholes, and 92.0 acre-ft at invert of 8-inch controlled outlet pipe. The area and capacity tables are based on a Soil Conservation Service survey of Aug. 1, 1966. At end of year, flow from 6.52 sq mi above this station was partly controlled by three floodwater-retarding structures (built in 1961) with a total combined capacity of 1,660 acre-ft below the flood-spillway crests, of which 1,460 acre-ft is floodwater-retarding capacity and 200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. There are eight rain gages (two recording and six nonrecording) located in the watershed.

REVISIONS (WATER YEARS).--WRD Texas 1968: 1965-66(M).

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	1,440	0.7	21.2	6.0	4.4	0	172	50.7	6.3	0.2	0.1	0.3
Outflow	1,370	107	12.9	1.4	0	0	35.9	83.3	15.7	0	0	0
(†)	53.4	-124	-.8	-4.2	-4.6	-10.5	127	-58.6	-36.7	-22.4	-14.9	-8.9
(††)	5.21	.64	2.04	.45	.68	0	3.82	2.33	1.46	2.36	2.81	2.58

CAL YR 1971: Inflow 4,890 Outflow 4,620 † 142 †† 32.63
WTR YR 1972: Inflow 1,700 Outflow 1,630 † 105 †† 24.38

PEAK INFLOW (BASE, 500 CFS).--Sept. 18 (1730) 511 cfs (average for 5-minute interval).

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Weighted-mean rainfall, in inches.

08137000 Mukewater Creek subwatershed No. 9 near Trickham, Tex.

LOCATION.--Lat 31°41'40", long 99°12'18", Coleman County, near center of dam on tributary to East Fork Mukewater Creek, 1.5 miles upstream from mouth, 4.5 miles southwest of Bangs, and 7.1 miles north of Trickham.

DRAINAGE AREA.--4.02 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,500.01 ft above mean sea level.

AVERAGE INFLOW.--11 years, 556 acre-ft per year.

AVERAGE OUTFLOW.--11 years, 444 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 31.9 cfs Oct. 20 (gage height, 19.87 ft); no outflow for many days. Maximum inflow, 203 cfs (average for 5-minute interval) Apr. 21, computed and adjusted as explained below; no inflow most of time.
Period of record: Maximum outflow, 39.9 cfs Sept. 24, 1971 (gage height, 25.04 ft); no outflow most of time each year. Maximum inflow, 1,630 cfs (average for 5-minute interval) June 3, 1961, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow most of time each year.

REMARKS.--Records good. The pool is formed by a rolled earthfill dam 2,070 ft long with a 150-foot wide earthen spillway at the right end of dam. The crest of emergency spillway is at gage height 27.1 ft. The dam was completed in November 1960. The outlet structure consists of a 2- by 4-foot uncontrolled concrete drop-inlet structure that is connected to a 19-inch concrete outlet pipe. There are four openings in the top of the drop inlet; the dimensions are 1 by 2 ft at the upstream and downstream sides, and 1 by 4 ft on the right and left sides; the crest of these openings is at gage height 18.2 ft. There is also a sluice gate at the end of an 8-inch pipe that is connected to the upstream side of the drop-inlet structure. Gage height at invert of 8-inch pipe is 10.7 ft. The area and capacity tables are based on a sedimentation survey by the Soil Conservation Service made Dec. 1, 1961. There are five rain gages (one recording and four nonrecording) located in watershed.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	201	3.1	16.1	3.1	2.4	0	60.1	34.5	1.7	2.7	18.4	6.5
Outflow	202	0	4.4	e57.5	0	0	0	9.9	0	0	0	0
(†)	-4.7	-7.4	5.5	-61.8	-1.3	-7.2	54.8	7.9	-19.5	-14.9	7.2	-2.3
(††)	5.63	.80	2.32	.48	.62	0	3.83	2.60	1.22	2.78	3.36	3.27

CAL YR 1971:	Inflow 895	Outflow 775	† 59.0	†† 33.01		
WTR YR 1972:	Inflow 350	Outflow 274	† -43.7	†† 26.91		

PEAK INFLOW (BASE, 150 CFS)

DATE	TIME	DISCHARGE
10- 3	1840	*156
10-19	2255	*182
4-21	0040	*203

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Weighted-mean rainfall, in inches.
* Average for 5-minute interval.
e Releases through 8-inch controlled valve.

08137500 Mukewater Creek at Trickham, Tex.

LOCATION.--Lat 31°35'24", long 99°13'36", Coleman County, on left bank at Trickham, 750 ft upstream from bridge on Farm Road 1176, 2.9 miles upstream from Hay Creek, 6.9 miles upstream from mouth, and 11.8 miles southeast (revised) of Santa Anna.

DRAINAGE AREA.--70.0 sq mi.

PERIOD OF RECORD.--August 1951 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,394.54 ft above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--21 years, 10.6 cfs (7,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 644 cfs Oct. 20 (gage height, 5.92 ft); no flow for many days.
Period of record: Maximum discharge, 15,000 cfs May 1, 1956 (gage height, 15.83 ft), from rating curve extended above 5,600 cfs on basis of contracted-opening measurement of peak flow; no flow at times.
Maximum stage since at least 1919, 18 ft in 1927, from information by local resident.

REMARKS.--Records good. At end of year, flow from 27.6 sq mi above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 5,790 acre-ft below the flood-spillway crests, of which 5,180 acre-ft is floodwater-retarding capacity and 607 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Station is operated as part of the Mukewater Creek hydrologic program to determine the effect of floodwater-retarding structures on the downstream regimen of streamflow. Twenty-one rain gages (15 standard and six recording) are operated in the watershed above station. Small, undetermined amount of diversions upstream from station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	4.8	.17	2.3	1.1		0	1.5	.12			
2	16	6.8	2.1	2.4	.74		0	1.1	.06			
3	14	7.8	2.4	.90	.74		0	1.1	.04			
4	138	7.3	.73	.74	.48		0	1.1	.03			
5	53	6.7	3.3	.74	.50		0	.78	.02			
6	23	5.7	3.8	.74	.25		0	2.3	0			
7	15	4.7	3.2	.74	.16		0	1.0	0			
8	22	4.7	2.0	.74	.16		0	.64	0			
9	29	5.1	2.2	.74	.16		0	.48	0			
10	16	4.1	6.7	.74	.16		0	1.3	0			
11	10	4.0	10	.74	.22		0	1.7	0			
12	9.1	4.3	5.4	.74	.29		0	38	0			
13	9.9	3.3	3.5	.74	.45		0	14	0			
14	9.0	2.7	3.0	.66	.38		0	5.6	0			
15	8.8	2.2	2.5	.74	.18		0	4.1	0			
16	8.8	1.6	2.2	.74	.18		0	3.2	0			
17	7.6	1.3	2.5	.74	.18		0	3.2	0			
18	93	1.1	3.2	.74	.08		0	2.5	0			
19	193	.74	2.7	.74	.08		0	2.0	0			
20	350	.48	2.5	.74	.08		0	3.1	0			
21	123	.46	2.8	.66	.08		220	2.4	0			
22	83	.46	2.7	.74	.05		10	1.4	0			
23	48	.68	2.0	.74	.04		2.2	1.4	0			
24	25	.52	1.1	.48	.04		2.2	.85	0			
25	17	.50	1.1	.48	.04		1.4	.87	0			
26	13	.29	1.1	.48	.01		1.1	.56	0			
27	11	.21	1.1	.48	0		48	.17	0			
28	10	.27	1.1	.48	0		20	.11	0			
29	6.7	.48	1.2	.48	0		5.5	.05	0			
30	5.6	.33	2.0	.48	-------		2.0	.16	0			-------
31	5.6	-------	2.0	.74	-------		-------	.29	-------			
TOTAL	1,393.1	83.62	82.30	24.34	6.83	0	312.4	96.96	.27	0	0	0
MEAN	44.9	2.79	2.65	.79	.24	0	10.4	3.13	.009	0	0	0
MAX	350	7.8	10	2.4	1.1	0	220	38	.12	0	0	0
MIN	5.6	.21	.17	.48	0	0	0	.05	0	0	0	0
AC-FT	2,760	166	163	48	14	0	620	192	.5	0	0	0

CAL YR 1971 TOTAL 5,351.57 MEAN 14.7 MAX 1,150 MIN 0 AC-FT 10,610
WTR YR 1972 TOTAL 1,999.82 MEAN 5.46 MAX 350 MIN 0 AC-FT 3,970

08138000 Colorado River at Winchell, Tex.

LOCATION.--Lat 31°28'04", long 99°09'43", McCulloch-Brown County line, near left bank on downstream end of pier of bridge on U.S. Highway 377, 0.3 mile south of Winchell, 6.2 miles downstream from Home Creek, and at mile 560.7.

DRAINAGE AREA.--24,580 sq mi, approximately, of which 12,880 sq mi is probably noncontributing.

PERIOD OF RECORD.--November 1923 to September 1934 (published as "near Milburn"), January 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,264.86 ft above mean sea level. November 1923 to September 1934, nonrecording gage at site 4.2 miles downstream at datum 10.14 ft lower. Jan. 13, 1939, to Mar. 24, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years (1924-34, 1939-72), 591 cfs (428,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,780 cfs Oct. 20 (gage height, 13.84 ft); no flow Aug. 6-9.
Period of record: Maximum discharge, 76,100 cfs Oct. 15, 1930 (gage height, 51.8 ft, present site and datum); no flow at times.
Highest stages since 1882 were 62.2 ft Sept. 19, 1936, and 56.2 ft Aug. 8, 1906, at railway bridge 1,000 ft upstream and converted to present site and datum, from information by Gulf, Colorado, and Santa Fe Railway Co.

REMARKS.--Records good. Many diversions above station for irrigation, municipal supply, and oilfield operation. Flow partly regulated by eight major reservoirs (total combined capacity, 2,120,000 acre-ft). At end of year, flow from 446 sq mi above this station was partly controlled by 79 floodwater-retarding structures with a total combined capacity of 100,540 acre-ft below the flood-spillway crests, of which 92,380 acre-ft is floodwater-retarding capacity and 8,160 acre-ft is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 3,420 acre-ft, of which 253 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1118: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	562	431	168	158	125	84	25	26	51	16	.15	32
2	430	386	194	158	136	79	25	22	44	36	.10	32
3	406	349	241	160	136	76	23	19	39	50	.05	27
4	1,020	312	237	170	136	72	22	18	38	39	.02	24
5	1,870	284	275	172	132	70	24	20	38	30	.01	41
6	1,190	265	333	170	128	66	23	31	34	26	0	52
7	756	248	303	172	125	64	23	38	30	21	0	31
8	603	237	282	172	121	60	22	830	27	16	0	24
9	631	230	282	172	119	56	23	870	26	13	0	21
10	539	223	300	166	116	53	22	411	25	35	15	24
11	449	218	298	166	116	55	22	256	24	41	24	32
12	371	215	292	164	118	54	22	210	21	32	263	37
13	346	209	300	157	119	51	21	187	18	27	266	41
14	327	205	290	149	119	51	20	227	18	37	470	35
15	295	200	259	141	119	51	21	227	26	22	346	28
16	267	197	237	136	118	52	21	156	231	15	241	26
17	242	195	228	130	114	51	23	121	188	12	255	31
18	532	190	220	128	109	49	21	164	173	11	259	26
19	1,630	184	207	128	105	47	20	137	154	10	139	23
20	5,880	182	198	130	104	46	17	106	114	6.8	111	19
21	2,680	179	188	128	102	43	226	101	95	5.7	84	19
22	1,670	173	182	128	100	40	115	83	72	5.8	76	23
23	1,220	191	176	128	97	38	38	67	54	5.8	69	25
24	951	209	172	125	94	37	27	60	44	12	132	281
25	758	198	170	119	92	37	23	53	36	9.2	64	275
26	602	197	166	117	88	37	18	45	29	6.1	55	203
27	611	200	164	119	86	35	21	39	25	4.3	42	144
28	695	189	164	121	87	33	71	34	20	2.6	35	104
29	658	181	162	121	87	29	39	31	18	1.6	35	80
30	562	172	162	119	------	27	31	34	15	.80	33	63
31	495	------	160	119	------	25	------	38	------	.20	28	------
TOTAL	29,248	6,849	7,010	4,443	3,248	1,568	1,049	4,661	1,727	549.90	3,042.33	1,823
MEAN	943	228	226	143	112	50.6	35.0	150	57.6	17.7	98.1	60.8
MAX	5,880	431	333	172	136	84	226	870	231	50	470	281
MIN	242	172	160	117	86	25	17	18	15	.20	0	19
AC-FT	58,010	13,580	13,900	8,810	6,440	3,110	2,080	9,250	3,430	1,090	6,030	3,620

CAL YR 1971 TOTAL 147,861.58 MEAN 405 MAX 17,100 MIN .06 AC-FT 293,300
WTR YR 1972 TOTAL 65,218.23 MEAN 178 MAX 5,880 MIN 0 AC-FT 129,400

PEAK DISCHARGE (BASE, 12,000 CFS).--No peak above base.

08139000 Deep Creek subwatershed No. 3 near Placid, Tex.

LOCATION.--Lat 31°17'25", long 99°09'22", McCulloch County, near right end of dam on tributary to Deep Creek and 2.8 miles southeast of Placid.

DRAINAGE AREA.--3.42 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,500.00 ft above mean sea level. Prior to Dec. 1, 1953, nonrecording gage at same site and datum.

AVERAGE INFLOW.--19 years, 434 acre-ft per year.

AVERAGE OUTFLOW.--19 years, 284 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 25.9 cfs Oct. 19 (gage height, 14.60 ft); no outflow for many days. Maximum inflow, 464 cfs (average for 5-minute interval) Oct. 19, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow for many days.
Period of record: Maximum outflow, 30 cfs May 19, 1955 (gage height, 20.79 ft); no outflow most of time each year. Maximum inflow, 3,060 cfs (average for 5-minute interval) July 26, 1971, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow for most of time each year.

REMARKS.--Records good. The pool is formed by an earthfill dam comprised of two sections; the main section is 2,600 ft long and the second section is 2,400 ft long. An emergency spillway 250 ft wide is located at the left end of the main section of dam; crest of the emergency spillway is at gage height 22.0 ft. The dam was completed and storage began in October 1953. The outlet works consist of an uncontrolled 2.5-foot square concrete drop-inlet structure (gage height at crest, 13.0 ft) connected to a 17-inch concrete outlet pipe. Invert at bottom of outlet pipe is at gage height 5.5 ft. There is also an 8-inch controlled water-supply outlet pipe connected to the drop inlet at a gage height of 5.5 ft. Pool capacity is 886 acre-ft at the crest of emergency spillway, 125 acre-ft at crest of drop inlet, and 7.1 acre-ft at controlled outlet pipe. The area and capacity tables are based on a Soil Conservation Service survey dated Aug. 27, 1960. The dam was built by the Soil Conservation Service for flood control. A recording rain gage is located at station.

REVISIONS (WATER YEARS).--WSP 1922: 1954-60.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	142	4.7	13.0	2.7	3.7	0	1.6	10.4	0.1	0.1	1.4	2.3
Outflow	140	.2	1.0	0	0	0	0	0	0	0	0	0
(†)	-1.4	-9.1	5.0	-6.0	-9.5	-17.3	-14.4	-2.3	-17.2	-13.2	-5.8	-1.6
(††)	4.29	.59	1.71	.40	.27	.05	.94	3.37	.10	1.27	1.90	2.76

CAL YR 1971: Inflow 1,330 Outflow 1,200 † 91.4 †† 37.91
WTR YR 1972: Inflow 182 Outflow 141 † -92.8 †† 17.65

PEAK INFLOW (BASE, 100 CFS).--Oct. 19 (1940) 464 cfs (average for 5-minute interval).

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall at subwatershed, in inches.

08139500 Deep Creek near Mercury, Tex.

LOCATION.--Lat 31°24'08", long 99°07'17", McCulloch County, near left bank on downstream side of bridge on Farm Road 502, 1.5 miles upstream from Dry Prong Deep Creek, and 2.3 miles southeast of Mercury.

DRAINAGE AREA.--43.9 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,325.64 ft above mean sea level. Prior to Nov. 25, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--19 years, 6.35 cfs (4,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 683 cfs Oct. 19 (gage height, 7.44 ft); no flow for many days.
Period of record: Maximum discharge, 5,500 cfs Oct. 4, 1953 (gage height, 18.27 ft, from floodmarks); no flow most of time.
Maximum stage since at least 1890, 21.3 ft July 23, 1938 (discharge, 33,600 cfs), by slope-area measurement of peak flow.
Flood in 1906 reached a stage of 21 ft, from information by local resident.

REMARKS.--Records good. At end of year, flow from 19.9 sq mi above this station was partly controlled by five floodwater-retarding structures with a total combined capacity of 5,660 acre-ft below the flood-spillway crests, of which 5,050 acre-ft is floodwater-retarding capacity and 610 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Station is operated as part of Deep Creek hydrologic program to determine the effect of floodwater-retarding structures on the downstream regimen of streamflow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	6.1	1.8	1.1	.90	1.1		0				
2	2.8	6.1	3.1	1.4	1.1	.50		0				
3	4.5	5.7	4.2	1.6	.62	.30		0				
4	30	4.6	3.3	1.4	.50	.22		0				
5	14	4.2	4.2	1.2	.50	.09		0				
6	9.3	3.6	5.7	1.2	.39	.09		.23				
7	6.1	3.6	4.9	1.4	.39	.22		.13				
8	4.9	3.3	3.9	1.4	.39	.12		0				
9	4.9	3.6	6.9	1.4	.30	.03		0				
10	6.5	3.6	10	1.4	.22	0		0				
11	3.9	3.6	6.1	1.2	.22	0		.02				
12	3.3	3.3	4.6	1.2	.39	0		0				
13	9.3	3.3	6.1	1.1	.50	0		.67				
14	12	2.6	5.7	.75	.62	.02		7.0				
15	7.7	1.6	4.6	.62	.50	.07		0				
16	6.1	1.4	3.3	.50	.39	.07		0				
17	4.2	1.2	3.1	.75	.39	.02		0				
18	15	1.1	3.1	.90	.30	0		0				
19	114	.90	3.1	1.1	.30	0		0				
20	237	.75	3.1	1.2	.30	0		0				
21	52	.62	2.6	1.2	.22	0		0				
22	25	.90	2.4	1.4	.30	0		0				
23	17	1.6	2.4	1.1	.39	0		0				
24	13	1.4	2.6	.90	.39	0		0				
25	9.9	1.1	2.6	.62	.39	0		0				
26	8.8	.75	2.6	.50	.12	0		0				
27	16	.62	2.6	.50	.09	0		0				
28	13	.62	1.6	.50	2.3	0		0				
29	9.9	.62	1.4	.50	2.0	0		4.4				
30	7.7	.90	1.1	.62	------	0		2.0				
31	6.5	------	.90	.62	------	0	------	.07	------			------
TOTAL	677.9	73.28	113.60	31.28	15.42	2.85	0	14.52	0	0	0	0
MEAN	21.9	2.44	3.66	1.01	.53	.092	0	.47	0	0	0	0
MAX	237	6.1	10	1.6	2.3	1.1	0	7.0	0	0	0	0
MIN	2.8	.62	.90	.50	.09	0	0	0	0	0	0	0
AC-FT	1,340	145	225	62	31	5.7	0	29	0	0	0	0

CAL YR 1971 TOTAL 7,057.54 MEAN 19.3 MAX 1,050 MIN 0 AC-FT 14,000
WTR YR 1972 TOTAL 928.85 MEAN 2.54 MAX 237 MIN 0 AC-FT 1,840

08140600 Lake Clyde near Clyde, Tex.

LOCATION.--Lat 32°19'05", long 99°28'43", Callahan County, at Clyde pump station, 0.6 mile west of dam on North Prong Pecan Bayou, 2.1 miles downstream from bridge on Farm Road 604, and 7.0 miles southeast of Clyde.

DRAINAGE AREA.--37.9 sq mi.

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level.

EXTREMES (at 0900).--Current year: Maximum contents, 3,650 acre-ft Dec. 10 to Feb. 7, Feb. 12-18 (elevation, 1,866.8 ft); minimum, 2,710 acre-ft Sept. 12-14, 29, 30 (elevation, 1,863.9 ft).
Period of record: Maximum contents, about 4,200 acre-ft May 31, 1970 (elevation, 1,868.3 ft); minimum, 2,590 acre-ft May 24-28, Aug. 6-13, 1971 (elevation, 1,863.5 ft).

REMARKS.--Records good. Appreciable storage began in April 1970 and dam was completed in May 1970. The pool is formed by a rolled-fill earthen dam 4,000 ft long. The service spillway is an uncontrolled 3.5- by 10.5-foot reinforced concrete drop inlet connected to a 42-inch concrete outlet pipe. A 14-inch controlled drain pipe is connected to the drop inlet. There are four 4.83- by 3.50-foot rectangular slots, two on each side divided by a 10-inch concrete web. The emergency spillway, located at left end of dam, has two 200-foot-wide excavated channels separated by a dike. During the 1972 water year, the city of Clyde did not divert water for municipal use. Data regarding dam and lake are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Crest of dam	1,888.9	16,530
Crest of emergency spillway	1,881.4	10,840
Crest of service spillway (top of conservation storage)	1,872.03	5,730
Invert of lowest outlet for water supply	1,852.0	523
Invert of drain pipe	1,842.23	60

COOPERATION.--Record of daily elevation furnished by city of Clyde. Capacity table furnished by the Soil Conservation Service.

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

1,863.0	2,450
1,865.0	3,040
1,867.0	3,720

CONTENTS, IN ACRE-FEET, AT 0900, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,470	3,580	3,510	3,650	3,650	3,580	3,440	3,270	3,200	3,010	2,860	2,800
2	3,470	3,580	3,510	3,650	3,650	3,580	3,440	3,270	3,200	3,010	2,860	2,770
3	3,470	3,580	3,510	3,650	3,650	3,580	3,440	3,270	3,170	3,010	2,860	2,770
4	3,540	3,580	3,510	3,650	3,650	3,580	3,400	3,240	3,170	3,040	2,830	2,770
5	3,540	3,580	3,510	3,650	3,650	3,580	3,400	3,240	3,170	3,040	2,830	2,770
6	3,540	3,580	3,510	3,650	3,650	3,580	3,400	3,270	3,170	3,040	2,830	2,770
7	3,510	3,540	3,510	3,650	3,650	3,580	3,400	3,300	3,140	3,040	2,800	2,770
8	3,540	3,540	3,510	3,650	3,610	3,580	3,370	3,340	3,140	3,040	2,800	2,770
9	3,540	3,540	3,510	3,650	3,610	3,540	3,370	3,340	3,140	3,010	2,800	2,770
10	3,540	3,540	3,650	3,650	3,610	3,540	3,370	3,300	3,140	3,010	2,830	2,740
11	3,540	3,540	3,650	3,650	3,610	3,540	3,370	3,300	3,140	3,010	2,830	2,740
12	3,540	3,540	3,650	3,650	3,650	3,540	3,370	3,300	3,110	3,010	2,800	2,710
13	3,510	3,540	3,650	3,650	3,650	3,540	3,370	3,300	3,110	2,980	2,860	2,710
14	3,510	3,510	3,650	3,650	3,650	3,540	3,370	3,300	3,110	3,010	2,860	2,710
15	3,510	3,510	3,650	3,650	3,650	3,540	3,370	3,300	3,110	2,980	2,860	2,800
16	3,510	3,510	3,650	3,650	3,650	3,510	3,370	3,300	3,140	2,980	2,860	2,800
17	3,510	3,510	3,650	3,650	3,650	3,510	3,340	3,300	3,140	2,980	2,860	2,800
18	3,510	3,510	3,650	3,650	3,650	3,510	3,340	3,300	3,140	2,950	2,830	2,770
19	3,510	3,510	3,650	3,650	3,610	3,510	3,340	3,300	3,110	2,950	2,830	2,770
20	3,510	3,510	3,650	3,650	3,610	3,510	3,340	3,300	3,110	2,950	2,830	2,770
21	3,540	3,510	3,650	3,650	3,610	3,510	3,340	3,270	3,110	2,950	2,830	2,770
22	3,540	3,510	3,650	3,650	3,610	3,510	3,340	3,270	3,080	2,950	2,830	2,770
23	3,540	3,510	3,650	3,650	3,610	3,510	3,340	3,270	3,080	2,920	2,830	2,770
24	3,540	3,510	3,650	3,650	3,610	3,470	3,340	3,270	3,080	2,920	2,830	2,770
25	3,540	3,510	3,650	3,650	3,610	3,470	3,340	3,240	3,080	2,920	2,830	2,740
26	3,540	3,510	3,650	3,650	3,610	3,470	3,340	3,240	3,040	2,920	2,800	2,740
27	3,540	3,510	3,650	3,650	3,610	3,470	3,300	3,240	3,040	2,890	2,800	2,740
28	3,580	3,510	3,650	3,650	3,610	3,440	3,300	3,240	3,040	2,890	2,800	2,740
29	3,580	3,510	3,650	3,650	3,580	3,440	3,300	3,240	3,040	2,890	2,800	2,710
30	3,580	3,510	3,650	3,650	------	3,440	3,300	3,200	3,040	2,890	2,800	2,710
31	3,580	------	3,650	3,650	------	3,440	------	3,200	------	2,860	2,800	------
(†)	1,866.6	1,866.4	1,866.8	1,866.8	1,866.6	1,866.2	1,865.8	1,865.5	1,865.0	1,864.4	1,864.2	1,863.9
(*)	+140	-70	+140	0	-70	-140	-140	-100	-160	-180	-60	-90
MAX	3,580	3,580	3,650	3,650	3,650	3,580	3,440	3,340	3,200	3,040	2,860	2,800
MIN	3,470	3,510	3,510	3,650	3,580	3,440	3,300	3,200	3,040	2,860	2,800	2,710

CAL YR 1971..... * +480 MAX 3,650 MIN 2,590
WTR YR 1972..... * -730 MAX 3,650 MIN 2,710

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

08140700 Pecan Bayou near Cross Cut, Tex.

LOCATION.--Lat 31°58'24", long 99°07'45", Brown County, on right bank at downstream side of bridge on State Highway 279, 1.0 mile downstream from Turkey Creek, and 4.3 miles south of Cross Cut.

DRAINAGE AREA.--532 sq mi.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,453.35 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 7,330 cfs Oct. 19 (gage height, 19.68 ft); no flow at times.
Period of record: Maximum discharge, 7,330 cfs Oct. 19, 1971 (gage height, 19.68 ft); no flow at times.
Flood in 1908 reached a stage of 26.5 ft and was exceeded by a flood in 1900, from information by local resident.

REMARKS.--Records good. Several small diversions above station. At end of year, flow from 196 sq mi above this station was partly controlled by 31 floodwater-retarding structures with a total combined capacity of 41,350 acre-ft below the flood-spillway crests, of which 38,370 acre-ft is floodwater-retarding capacity and 2,990 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 3,420 acre-ft, of which 200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	15	1.7	6.3	3.6	2.1	.06	.35	0	31	0	2.4
2	18	13	3.0	6.3	3.6	1.9	.06	.22	0	9.2	0	3.9
3	36	11	6.0	7.0	3.6	1.6	.06	.16	0	12	0	.40
4	153	9.6	8.9	7.9	3.6	1.4	.06	.11	0	184	0	18
5	115	8.4	25	7.9	3.1	1.1	.06	.06	0	94	0	12
6	54	7.4	19	7.9	2.8	.82	.04	1.4	0	16	0	1.4
7	34	6.2	16	7.9	2.8	.80	.04	1.2	0	7.3	0	.09
8	26	5.9	16	7.9	2.8	1.1	.04	.24	0	4.0	0	.04
9	23	5.4	14	7.9	2.8	1.1	.04	.06	0	2.4	0	.01
10	21	4.3	17	7.9	2.4	1.1	.02	.09	0	1.6	0	0
11	19	4.0	17	7.9	2.4	1.1	.02	.38	0	.97	0	0
12	16	3.9	25	7.5	2.4	1.1	.02	.92	0	.68	0	0
13	14	3.9	20	7.1	2.8	1.1	.02	3.4	0	.43	0	0
14	12	3.9	16	7.1	2.8	.99	.02	.74	0	.32	0	0
15	10	3.8	15	6.6	2.8	.81	.07	.12	0	.17	0	0
16	9.2	3.6	15	6.2	2.4	.58	.12	.02	0	.09	0	0
17	8.3	3.6	14	5.8	2.4	.58	.07	.01	0	.05	0	0
18	26	3.4	14	5.5	2.4	.58	.01	.01	0	.03	0	0
19	1,450	3.0	13	5.5	2.4	.58	.01	.01	0	.11	0	0
20	1,850	2.6	12	5.1	2.4	.40	.01	0	0	.34	0	0
21	120	2.3	10	5.4	2.4	.40	.08	0	0	.11	0	0
22	74	2.3	9.5	5.1	2.4	.40	.06	0	0	.04	0	.69
23	60	2.8	9.0	5.0	2.4	.40	.08	0	0	.01	9.5	.40
24	41	2.8	8.6	4.7	2.4	.27	.09	0	0	.01	4.1	.19
25	36	2.8	8.2	4.4	2.8	.27	.09	0	0	0	.40	.06
26	37	2.9	7.8	4.3	2.6	.26	.14	0	0	0	.09	.02
27	59	4.8	7.5	4.2	2.4	.19	.74	0	0	0	.04	.01
28	46	3.5	7.5	3.6	2.3	.12	.70	0	0	0	.01	0
29	43	2.2	7.1	3.6	2.1	.09	.50	0	0	0	2.9	0
30	32	1.7	7.0	3.6	------	.09	.40	0	295	0	.77	0
31	20	------	6.7	3.6	------	.09	------	0	------	0	.09	------
TOTAL	4,484.5	150.0	376.5	186.7	78.1	23.42	3.73	9.50	295	364.86	17.90	39.61
MEAN	145	5.00	12.1	6.02	2.69	.76	.12	.31	9.83	11.8	.58	1.32
MAX	1,850	15	25	7.9	3.6	2.1	.74	3.4	295	184	9.5	18
MIN	8.3	1.7	1.7	3.6	2.1	.09	.01	0	0	0	0	0
AC-FT	8,900	298	747	370	155	46	7.4	19	585	724	36	79

CAL YR 1971 TOTAL 12,600.68 MEAN 34.5 MAX 2,340 MIN 0 AC-FT 24,990
WTR YR 1972 TOTAL 6,029.82 MEAN 16.5 MAX 1,850 MIN 0 AC-FT 11,960

PEAK DISCHARGE (BASE, 1,000 CFS).--Oct. 19 (2300) 7,330 cfs (19.68 ft).

08140800 Jim Ned Creek near Coleman, Tex.

LOCATION.--Lat 31°58'59", long 99°24'52", Coleman County, on right bank at downstream side of bridge on U.S. Highway 283, 1.4 miles downstream from Turtle Bayou, 7.4 miles downstream from Lake Coleman, and 10.8 miles north of Coleman.

DRAINAGE AREA.--333 sq mi, of which 299 sq mi is above Lake Coleman.

PERIOD OF RECORD.--October 1961 to September 1964 (miscellaneous measurements only), March 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,592.31 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 26.8 cfs (19,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 321 cfs Oct. 4 (gage height, 2.90 ft); no flow for many days.
Period of record: Maximum discharge, 5,020 cfs May 6, 1969 (gage height, 9.08 ft); no flow at times each year.

REMARKS.--Records good. Since March 1966, when deliberate impoundment began, flow largely controlled by Lake Coleman (capacity, 40,000 acre-ft at service spillway; elevation, 1,717.5 ft). The city of Coleman has a permit to divert 11,200 acre-ft per year for municipal use from Lake Coleman; no diversions during year. At end of year, flow from 22.0 sq mi above this station and below Lake Coleman was partly controlled by two floodwater-retarding structures with a total combined capacity of 6,820 acre-ft below flood-spillway crests, of which 6,560 acre-ft is floodwater-retarding capacity and 260 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	37	2.2	12	2.9	1.5	1.3	.08				
2	164	34	4.2	13	2.3	2.7	1.0	0				
3	195	29	11	12	8.4	5.1	.76	0				
4	300	24	9.1	20	5.2	2.7	.58	0				
5	247	19	9.8	14	2.7	3.1	.57	0				
6	199	18	15	9.3	2.0	3.0	.54	0				
7	162	13	13	8.6	3.1	1.8	.45	25				
8	145	8.6	14	7.9	3.9	1.2	.45	15				
9	130	8.1	18	8.0	2.5	1.7	.45	3.7				
10	109	7.8	34	8.5	1.8	1.9	.43	2.1				
11	92	6.8	26	9.8	1.8	1.4	.35	1.4				
12	80	6.7	25	8.1	2.9	1.1	.32	1.5				
13	69	6.4	22	12	3.0	1.0	.23	1.7				
14	60	6.0	23	6.9	2.8	.97	.18	1.4				
15	54	5.6	32	6.8	4.2	1.0	.40	.98				
16	48	5.7	23	5.1	4.0	.99	.20	.66				
17	43	5.6	22	3.0	2.5	.97	.13	.51				
18	103	6.8	19	3.3	6.6	1.1	.10	.51				
19	87	6.5	18	3.5	3.8	1.4	.03	.50				
20	117	4.3	18	4.4	2.0	1.2	0	.43				
21	76	4.7	17	5.2	1.5	1.1	1.9	.35				
22	67	3.2	13	4.1	1.4	.93	3.1	.25				
23	78	3.0	12	4.2	2.8	.78	1.1	.15				
24	60	2.9	12	4.6	3.2	.77	.58	.04				
25	52	3.0	12	5.7	4.2	.86	.37	0				
26	47	2.6	12	3.6	5.1	.76	.28	0				
27	65	4.6	13	2.8	6.7	.63	.23	0				
28	54	2.8	13	2.9	3.4	.75	.24	0				
29	49	7.0	12	3.1	2.0	1.4	.24	0				
30	45	2.5	14	2.5	------	.98	.18	0				
31	41	------	13	2.9	------	1.3	------	0	------			------
TOTAL	3,245	295.2	501.3	217.8	98.7	46.09	16.69	56.26	0	0	0	0
MEAN	105	9.84	16.2	7.03	3.40	1.49	.56	1.81	0	0	0	0
MAX	300	37	34	20	8.4	5.1	3.1	25	0	0	0	0
MIN	41	2.5	2.2	2.5	1.4	.63	0	0	0	0	0	0
AC-FT	6,440	586	994	432	196	91	33	112	0	0	0	0

CAL YR 1971 TOTAL 12,224.25 MEAN 33.5 MAX 1,900 MIN 0 AC-FT 24,250
WTR YR 1972 TOTAL 4,477.04 MEAN 12.2 MAX 300 MIN 0 AC-FT 8,880

08141000 Hords Creek Lake near Valera, Tex.

LOCATION.--Lat 31°49'58", long 99°33'38", Coleman County, at outlet-works structure near right end of dam on Hords Creek, 5.6 miles north of Valera, and 8.8 miles west of Coleman.

DRAINAGE AREA.--48 sq mi, approximately.

PERIOD OF RECORD.--April 1948 to current year. Prior to October 1970, published as Hords Creek Reservoir.

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

EXTREMES.--Current year: Maximum contents, 9,200 acre-ft Oct. 20 (elevation, 1,901.07 ft); minimum, 6,700 acre-ft Sept. 30 (elevation, 1,895.80 ft).
Period of record: Maximum contents, 12,790 acre-ft May 1, 1956 (elevation, 1,906.86 ft); minimum since first appreciable storage in June 1951, 2,910 acre-ft Sept. 19, 1964 (elevation, 1,883.26 ft).

REMARKS.--Lake is formed by a rolled earthfill dam 6,800 ft long, including spillway. Deliberate impoundment of water began Apr. 7, 1948, and dam was completed in June 1948. Lake is operated for flood control and part of municipal water supply for city of Coleman. The city of Coleman diverted 583 acre-ft during year for part of its municipal supply. Outlet works consist of three concrete conduits, two of which are controlled by slide gates. The third conduit (service spillway) is uncontrolled. In addition, there is a 500-foot uncontrolled broad-crested emergency spillway located in a saddle on the right bank. Capacity based on survey made in 1946. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,939.0	-
Crest of emergency spillway	1,920.0	25,310
Crest of service spillway (top of conservation storage)	1,900.0	8,640
Invert of lowest outlet for water supply	1,876.5	1,690
Invert of slide gates	1,856.0	-

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

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

1,895.0	6,380	1,898.0	7,660
1,896.0	6,780	1,899.0	8,140
1,897.0	7,210	1,901.0	9,160

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,790	8,960	8,670	8,660	8,560	8,450	8,160	7,910	7,910	7,720	7,290	6,980
2	8,260	8,940	8,680	8,650	8,550	8,440	8,150	7,910	7,900	7,710	7,270	6,960
3	8,740	8,910	8,670	8,640	8,550	8,440	8,140	7,890	7,880	7,710	7,250	6,950
4	8,880	8,900	8,690	8,630	8,530	8,430	8,120	7,870	7,870	7,700	7,250	6,950
5	8,930	8,870	8,690	8,630	8,530	8,420	8,120	7,870	7,850	7,690	7,230	6,940
6	8,950	8,850	8,690	8,630	8,530	8,410	8,110	7,950	7,840	7,670	7,210	6,930
7	8,950	8,830	8,680	8,630	8,530	8,400	8,100	8,110	7,820	7,660	7,200	6,920
8	9,010	8,820	8,670	8,630	8,520	8,390	8,090	8,110	7,810	7,640	7,210	6,900
9	9,010	8,810	8,720	8,630	8,510	8,390	8,080	8,100	7,790	7,630	7,230	6,900
10	9,000	8,790	8,720	8,630	8,510	8,380	8,070	8,120	7,780	7,610	7,230	6,880
11	8,990	8,790	8,700	8,630	8,510	8,380	8,070	8,120	7,770	7,590	7,220	6,870
12	8,980	8,780	8,700	8,620	8,510	8,370	8,060	8,120	7,750	7,580	7,220	6,860
13	8,960	8,780	8,700	8,610	8,510	8,370	8,050	8,120	7,740	7,570	7,210	6,850
14	8,950	8,770	8,700	8,610	8,510	8,360	8,100	8,110	7,730	7,550	7,200	6,840
15	8,940	8,760	8,700	8,610	8,510	8,360	8,070	8,100	7,760	7,530	7,190	6,840
16	8,920	8,760	8,700	8,590	8,510	8,350	8,060	8,100	7,740	7,510	7,180	6,830
17	8,920	8,750	8,690	8,590	8,510	8,340	8,050	8,090	7,730	7,500	7,180	6,810
18	8,990	8,740	8,690	8,590	8,510	8,330	8,030	8,080	7,720	7,500	7,170	6,800
19	9,180	8,730	8,680	8,590	8,500	8,310	8,020	8,070	7,710	7,490	7,150	6,780
20	9,180	8,720	8,680	8,580	8,500	8,300	8,020	8,070	7,700	7,470	7,140	6,780
21	9,150	8,710	8,680	8,580	8,500	8,290	8,010	8,050	7,680	7,460	7,120	6,790
22	9,140	8,710	8,670	8,580	8,500	8,290	7,990	8,040	7,670	7,450	7,110	6,780
23	9,130	8,700	8,670	8,570	8,500	8,280	7,980	8,030	7,650	7,440	7,100	6,780
24	9,090	8,690	8,670	8,570	8,490	8,270	7,960	8,010	7,640	7,430	7,080	6,760
25	9,050	8,690	8,660	8,560	8,490	8,260	7,940	8,000	7,630	7,410	7,070	6,760
26	9,070	8,680	8,660	8,550	8,480	8,240	7,930	7,980	7,600	7,400	7,060	6,750
27	9,050	8,670	8,660	8,550	8,470	8,230	7,950	7,970	7,580	7,380	7,050	6,740
28	9,030	8,670	8,660	8,550	8,470	8,210	7,940	7,950	7,570	7,360	7,030	6,730
29	9,020	8,660	8,660	8,550	8,470	8,190	7,930	7,940	7,590	7,350	7,030	6,720
30	8,990	8,650	8,660	8,540	------	8,190	7,930	7,940	7,740	7,330	7,010	6,700
31	8,980	------	8,660	8,540	------	8,170	------	7,930	------	7,320	7,000	------
(†)	1,900.66	1,900.03	1,900.04	1,899.82	1,899.66	1,899.07	1,898.56	1,898.56	1,898.16	1,897.24	1,896.50	1,895.80
(*)	+1,200	-330	+10	-120	-70	-300	-240	0	-190	-420	-320	-300
(††)	26	25	26	32	35	57	61	53	72	66	70	60
MAX	9,180	8,960	8,720	8,660	8,560	8,450	8,160	8,120	7,910	7,720	7,290	6,980
MIN	7,790	8,650	8,660	8,540	8,470	8,170	7,930	7,870	7,570	7,320	7,000	6,700

CAL YR 1971..... * +1,870 †† 741 MAX 9,180 MIN 5,370
WTR YR 1972..... * -1,080 †† 583 MAX 9,180 MIN 6,700

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Coleman.

08141500 Hords Creek near Valera, Tex.

LOCATION.--Lat 31°50'03", long 99°32'04", Coleman County, on left bank 2,500 ft downstream from Farm Road 503, 1.6 miles downstream from Hords Creek Dam, 5.7 miles north of Valera, 7.0 miles west of Coleman, and at mile 21.8.

DRAINAGE AREA.--53 sq mi, approximately, of which 48 sq mi is above Hords Creek Dam.

PERIOD OF RECORD.--April 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,819.88 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--25 years, 1.81 cfs (1,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 174 cfs Oct. 19 (gage height, 3.77 ft); no flow for many days.
Period of record: Maximum discharge, 3,860 cfs Apr. 30, 1956 (gage height, 14.73 ft), from rating curve extended above 1,900 cfs; no flow at times each year.
Maximum stage since 1900, 23.0 ft July 3, 1932, from information by local residents (discharge not determined). Flood in July or September 1900 reached a stage 3.7 ft higher than that of July 1932, 12 miles downstream from station, from information by local residents.

REMARKS.--Records fair. Flow regulated by Hords Creek Lake (station 08141000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	21	2.9	2.8	.71	.24	.09	.23	.06	0		0
2	16	20	4.5	2.7	1.6	.23	.12	.20	.04	0		0
3	12	19	4.9	2.7	1.2	.20	.11	.12	.05	0		0
4	15	17	4.3	3.4	.64	.17	.09	.44	.04	0		0
5	15	17	4.7	2.5	.57	.17	.13	.38	.02	0		0
6	16	17	4.3	2.1	.57	.19	.10	.93	.01	0		0
7	18	15	4.0	1.7	.56	.18	.08	1.3	.01	0		0
8	22	14	3.9	1.8	.51	.19	.07	.39	0	0		0
9	22	14	4.7	1.6	.45	.22	.09	.27	0	0		0
10	20	13	7.2	1.2	.49	.22	.09	.66	0	0		0
11	19	13	5.3	1.1	.60	.26	.11	.38	0	0		0
12	19	13	5.1	1.3	.55	.22	.08	.36	0	0		0
13	18	13	4.0	1.4	.46	.21	.07	.29	0	0		0
14	18	12	5.1	1.1	.50	.19	.12	.26	0	0		0
15	17	11	5.1	.89	.55	.20	.12	.21	0	0		0
16	16	11	3.5	.72	.44	.20	.10	.21	0	0		0
17	16	11	3.5	.64	.36	.21	.09	.21	0	0		0
18	29	10	3.2	.71	.43	.20	.09	.20	0	.43		0
19	46	8.5	3.1	.71	.45	.15	.09	.15	0	.20		0
20	40	7.7	3.3	.70	.42	.12	.09	.15	0	.02		0
21	32	6.1	2.9	.74	.44	.14	.10	.13	0	0		0
22	30	6.4	2.5	.71	.45	.11	.07	.11	0	0		0
23	31	6.4	2.5	.72	.52	.12	.08	.10	0	0		0
24	32	5.9	2.7	.64	.49	.06	.05	.09	0	0		.09
25	28	5.5	2.8	.49	.33	.05	.04	.08	0	0		.18
26	25	5.3	3.0	.45	.41	.08	.05	.06	0	0		.21
27	25	4.5	3.2	.54	.41	.12	.73	.06	0	0		.25
28	27	5.5	2.9	.55	.36	.17	.43	.04	0	0		.22
29	24	4.0	2.8	.54	.29	.10	.28	.04	0	0		.19
30	23	3.2	3.0	.55	------	.11	.27	.08	.28	0		.15
31	22	------	2.6	.58	------	.11	------	.06	------	0		------
TOTAL	694.1	330.0	117.5	38.28	15.76	5.14	4.03	8.19	.51	.65	0	1.29
MEAN	22.4	11.0	3.79	1.23	.54	.17	.13	.26	.017	.021	0	.043
MAX	46	21	7.2	3.4	1.6	.26	.73	1.3	.28	.43	0	.25
MIN	1.1	3.2	2.5	.45	.29	.05	.04	.04	0	0	0	0
AC-FT	1,380	655	233	76	31	10	8.0	16	1.0	1.3	0	2.6

CAL YR 1971 TOTAL 1,258.02 MEAN 3.45 MAX 46 MIN 0 AC-FT 2,500
WTR YR 1972 TOTAL 1,215.45 MEAN 3.32 MAX 46 MIN 0 AC-FT 2,410

08142500 Brown County Water Improvement District No. 1 canal near Brownwood, Tex.

LOCATION.--Lat 31°49'43", long 98°59'53", Brown County, on right bank 100 ft upstream from bridge on Farm Road 2125, 6,000 ft downstream from Brownwood Dam, and 7 miles north of Brownwood.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,403.96 ft above mean sea level.

AVERAGE DISCHARGE.--22 years, 26.8 cfs (19,420 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 77 cfs July 17, 1957; minimum daily, 0.40 cfs Feb. 10, 1955, Apr. 2, 1970.

REMARKS.--Records good. Canal receives water from Lake Brownwood (station 08143000) at the dam on Pecan Bayou. Diversions began Apr. 9, 1939. Small amount of water is pumped from canal upstream from gage for domestic use. Records furnished by Brown County Water Improvement District No. 1 show that of the total flow from canal passing gage during year, 9,410 acre-ft was used for municipal and industrial supply and 4,850 acre-ft was used for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	12	12	13	22	34	16	37	56	54	22
2	16	9.5	12	12	12	22	30	7.9	47	56	55	22
3	16	4.3	12	12	12	22	35	11	43	55	55	20
4	16	12	12	12	12	22	45	21	37	53	54	18
5	16	17	12	12	12	22	47	16	45	39	45	18
6	16	18	12	12	12	25	50	14	51	32	37	17
7	16	18	12	12	12	28	48	14	50	31	36	16
8	16	18	12	12	12	26	35	14	39	31	39	16
9	16	18	12	12	12	22	32	14	15	24	43	16
10	16	18	12	12	15	23	44	15	36	27	24	15
11	16	18	12	12	19	23	51	14	32	29	21	19
12	16	18	12	4.2	19	23	53	15	30	33	18	26
13	16	18	11	2.5	19	16	56	15	32	42	18	26
14	16	18	12	13	19	40	56	14	30	42	8.2	29
15	16	19	11	13	19	27	55	15	26	40	16	29
16	17	19	11	13	19	16	52	10	22	40	15	28
17	17	19	11	11	19	34	58	11	27	40	15	25
18	17	19	11	12	19	31	58	11	29	44	15	25
19	17	18	11	12	20	23	57	13	27	49	16	25
20	19	18	11	12	20	32	51	16	31	49	19	29
21	19	19	11	12	20	38	28	15	34	44	20	29
22	19	19	11	12	20	29	20	15	32	39	22	20
23	19	18	11	12	21	29	20	15	37	39	21	16
24	19	18	11	12	21	33	12	12	43	42	21	16
25	20	18	11	13	21	39	12	21	43	46	21	15
26	20	18	11	13	21	34	26	23	54	47	21	15
27	20	16	11	13	21	30	16	24	59	51	33	12
28	19	13	11	13	22	32	16	24	59	49	33	11
29	19	13	11	13	22	40	16	29	56	46	30	15
30	19	12	12	13	------	33	16	35	58	43	23	21
31	19	------	12	13	------	34	------	29	------	46	22	------
TOTAL	539	499.8	356	363.7	505	870	1,129	518.9	1,161	1,304	870.2	611
MEAN	17.4	16.7	11.5	11.7	17.4	28.1	37.6	16.7	38.7	42.1	28.1	20.4
MAX	20	19	12	13	22	40	58	35	59	56	55	29
MIN	16	4.3	11	2.5	12	16	12	7.9	15	24	8.2	11
AC-FT	1,070	991	706	721	1,000	1,730	2,240	1,030	2,300	2,590	1,730	1,210

CAL YR 1971 TOTAL 8,967.3 MEAN 24.6 MAX 56 MIN 4.3 AC-FT 17,790
WTR YR 1972 TOTAL 8,727.6 MEAN 23.8 MAX 59 MIN 2.5 AC-FT 17,310

08143000 Lake Brownwood near Brownwood, Tex.

LOCATION.--Lat 31°50'13", long 99°00'13", Brown County, at outlet structure for irrigation canal just upstream from right end of dam on Pecan Bayou a quarter of a mile downstream from Jim Ned Creek, 8 miles north of Brownwood, and at mile 57.1.

DRAINAGE AREA.--1,535 sq mi.

PERIOD OF RECORD.--July 1933 to May 1941, November 1944 to current year. Prior to October 1970, published as Brownwood Reservoir.

GAGE.--Nonrecording gage read once daily. Datum of gage is 0.50 ft below mean sea level. July 1933 to May 31, 1941, and Nov. 21, 1944, to Sept. 30, 1949, nonrecording gages or water-stage recorder at various sites at dam at same datum.

EXTREMES (at 1800).--Current year: Maximum contents observed, 163,800 acre-ft Oct. 20 (gage height, 1,427.7 ft); minimum, 112,700 acre-ft Sept. 28-30 (gage height, 1,420.5 ft).
Period of record: Maximum contents, 192,300 acre-ft May 2, 1956 (gage height, 1,431.4 ft); minimum, 11,900 acre-ft July 15, 1934 (gage height, 1,389.5 ft).

REMARKS.--Lake first filled during flood of July 3, 4, 1932. Dam completed in 1933 and operation began July 1933. Lake is formed by earthfill dam, 1,580 ft long. The uncontrolled emergency spillway is a broad-crested weir 479 ft long, located 800 ft to left of dam. Lake can be drained by two 12-foot (horseshoe-shaped) reinforced concrete conduits. Water is withdrawn for irrigation through a 5-foot circular concrete conduit. Figures given herein represent total contents. Water is used for irrigation, municipal, and industrial supply for city of Brownwood (see station 08142500). At end of year, flow from 340 sq mi above this station and below Lake Coleman (conservative capacity, 40,000 acre-ft) was partly controlled by 55 floodwater-retarding structures with a total combined capacity of 75,960 acre-ft below the flood-spillway crests, of which 70,720 acre-ft is floodwater-retarding capacity and 5,240 acre-ft is sediment-pool capacity. Three structures were built during the current year and have a total combined capacity below flood-spillway crests of 4,440 acre-ft, of which 382 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and lake are shown in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of dam	1,450.0	-
Crest of spillway	1,425.1	143,400
Invert to irrigation canal	1,406.0	46,510
Invert to 12-foot outlet conduits	1,330.0	-

COOPERATION.--Record of daily gage height furnished by Brown County Water Improvement District No. 1. Capacity table, from survey made in 1959, furnished by Corps of Engineers and Soil Conservation Service.

REVISIONS (WATER YEARS).--WSP 1212: 1948-50.

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

1,420.0	109,700	1,426.0	150,200
1,423.0	128,700	1,428.0	166,200

CONTENTS, IN ACRE-FEET, AT 1800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147,800	145,500	143,400	144,100	143,400	139,200	133,600	131,500	130,100	125,200	119,300	116,300
2	147,000	144,800	143,400	144,100	143,400	139,200	133,600	131,500	130,100	125,200	119,300	116,300
3	148,600	144,800	143,400	144,100	143,400	139,200	133,600	130,800	130,100	124,500	118,700	115,700
4	150,200	144,800	143,400	144,100	143,400	138,500	132,900	130,800	129,400	124,500	118,700	115,700
5	149,400	144,800	144,100	144,100	142,700	138,500	132,900	130,800	129,400	124,500	118,700	115,700
6	148,600	144,100	144,100	144,100	142,700	137,800	132,900	131,500	129,400	124,500	118,100	115,700
7	147,800	144,100	144,100	144,100	142,700	137,800	132,200	131,500	128,700	124,500	118,100	115,100
8	147,000	144,100	144,100	144,100	142,700	137,800	132,200	131,500	128,700	124,500	117,500	115,100
9	146,200	144,100	144,100	144,100	142,700	137,100	132,200	131,500	128,700	124,500	118,700	115,100
10	146,200	144,100	144,800	144,100	142,700	137,100	132,200	131,500	128,000	124,500	118,700	115,100
11	145,500	144,100	144,800	144,100	142,700	136,400	131,500	132,200	128,000	123,800	118,700	114,500
12	145,500	144,100	144,800	144,100	142,700	136,400	131,500	132,900	128,000	123,800	118,100	114,500
13	145,500	143,400	144,100	144,100	142,700	136,400	131,500	132,900	128,000	123,800	118,100	114,500
14	145,500	143,400	144,100	144,100	142,700	136,400	131,500	132,900	128,000	123,100	118,100	114,500
15	144,800	143,400	144,100	143,400	142,700	135,700	130,800	132,900	128,000	123,100	117,500	113,900
16	144,800	143,400	144,100	143,400	142,000	135,700	130,800	132,900	127,300	122,400	117,500	113,900
17	144,800	143,400	144,100	143,400	142,000	135,700	130,800	132,900	127,300	122,400	117,500	113,900
18	145,500	143,400	144,100	143,400	142,000	135,700	130,800	132,900	127,300	122,400	117,500	113,900
19	147,000	143,400	144,100	143,400	142,000	135,700	130,800	132,200	127,300	122,400	117,500	113,300
20	163,800	143,400	144,100	143,400	141,300	135,000	130,800	132,200	126,600	121,700	116,900	113,300
21	156,600	143,400	144,100	143,400	141,300	135,000	130,800	132,200	126,600	121,700	116,900	113,300
22	153,400	143,400	144,100	143,400	141,300	135,000	131,500	132,200	125,900	121,700	116,900	113,900
23	150,200	143,400	144,100	143,400	141,300	135,000	131,500	132,200	125,900	121,700	116,900	113,900
24	148,600	143,400	144,100	143,400	140,600	134,300	131,500	131,500	125,900	121,100	116,900	113,300
25	147,800	143,400	144,100	143,400	140,600	134,300	131,500	131,500	125,200	121,100	116,900	113,300
26	147,000	143,400	144,100	143,400	140,600	134,300	131,500	131,500	125,200	121,100	116,900	113,300
27	147,000	143,400	144,100	143,400	139,900	134,300	131,500	131,500	125,200	120,500	116,900	113,300
28	146,200	143,400	144,100	143,400	139,900	134,300	131,500	130,800	124,500	120,500	116,900	112,700
29	146,200	143,400	144,100	143,400	139,900	134,300	131,500	130,800	124,500	120,500	116,300	112,700
30	146,200	143,400	144,100	143,400	------	133,600	131,500	130,800	124,500	119,900	116,300	112,700
31	145,500	------	144,100	143,400	------	133,600	------	130,800	------	119,900	116,300	------
(†)	1,425.4	1,425.1	1,425.2	1,425.1	1,424.6	1,423.7	1,423.4	1,423.3	1,422.4	1,421.7	1,421.1	1,420.5
(♦)	-3,100	-2,100	+700	-700	-3,500	-6,300	-2,100	-700	-6,300	-4,600	-3,600	-3,600
MAX	163,800	145,500	144,800	144,100	143,400	139,200	133,600	132,900	130,100	125,200	119,300	116,300
MIN	144,800	143,400	143,400	143,400	139,900	133,600	130,800	130,800	124,500	119,900	116,300	112,700

CAL YR 1971..... ♦ +37,400 MAX 163,800 MIN 80,830
WTR YR 1972..... ♦ -35,900 MAX 163,800 MIN 112,700

† Gage height, in feet, at end of month.
♦ Change in contents, in acre-feet.

08143500 Pecan Bayou at Brownwood, Tex.

LOCATION.--Lat 31°43'54", long 98°58'25", Brown County, on right bank at Brownwood, 502 ft upstream from city dam, 6.3 miles downstream from Salt Creek, 10 miles downstream from Lake Brownwood, and at mile 47.5.

DRAINAGE AREA.--1,614 sq mi.

PERIOD OF RECORD.--May 1917 to June 1918, October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,318.58 ft above mean sea level. See WSP 1922 for history of changes prior to Apr. 2, 1962.

AVERAGE DISCHARGE.--7 years (1924-28, 1929-32) prior to completion of Lake Brownwood, 251 cfs (181,800 acre-ft per year); 40 years (1932-72) regulated, 134 cfs (97,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,990 cfs Oct. 20 (gage height, 7.70 ft); minimum, 0.02 cfs Aug. 2-4.
Period of record: Maximum discharge, 31,600 cfs Oct. 14, 1930 (gage height, 16.92 ft); no flow at times.
Maximum stage, 21.7 ft in September 1900, from information by Gulf, Colorado, and Santa Fe Railway Co. Flood of July 3, 1932, probably the greatest, reached a discharge of about 235,000 cfs as it entered Lake Brownwood (computed from rate of change of contents in lake; data furnished by engineers of Brown County Water Improvement District No. 1).

REMARKS.--Records good. Flow regulated by Lake Brownwood (station 08143000). Brown County Water Improvement District No. 1 canal (station 08142500) diverts water from Lake Brownwood 10 miles upstream. At end of year, flow from 20.8 sq mi above this station and below Lake Brownwood was partly controlled by nine floodwater-retarding structures with a total combined capacity of 5,270 acre-ft below the flood-spillway crests, of which 4,720 acre-ft is floodwater-retarding capacity and 549 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 334 acre-ft, of which 46 acre-ft 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).--WSP 1312: 1928. WSP 1512: 1924(M), 1926-27, 1928(M), 1930-32, 1935(M), 1936, 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	235	9.2	36	10	109	2.4	7.3	.76	.26	.10	1.5
2	606	199	15	49	15	105	2.6	6.3	.44	.17	.03	3.0
3	630	161	36	43	49	106	3.9	4.8	.31	.13	.02	2.9
4	1,330	136	15	115	12	110	3.0	4.8	.23	.60	.02	3.4
5	1,210	116	16	47	8.7	112	2.2	4.2	.24	1.3	.07	4.2
6	959	101	29	20	8.0	112	3.0	23	.27	1.0	.18	3.1
7	740	73	24	20	13	115	4.8	18	.20	.57	.17	2.2
8	633	59	42	18	11	112	4.2	11	.17	.41	.17	1.8
9	553	54	84	18	8.4	112	4.0	8.2	.10	.41	.20	1.5
10	439	52	126	26	7.7	114	4.2	7.3	.10	.73	.27	1.8
11	349	47	84	30	8.2	108	4.2	8.8	.14	1.0	.22	1.9
12	296	40	87	21	9.2	108	3.6	8.8	.25	1.3	.16	1.5
13	259	37	84	34	7.7	109	2.8	7.6	.66	1.6	.16	1.2
14	220	39	87	25	6.9	95	2.3	7.6	1.6	1.8	.12	1.7
15	191	36	98	28	6.7	58	3.4	8.8	3.3	1.9	.11	2.0
16	168	32	73	13	18	9.0	3.4	9.2	3.7	1.7	.10	2.7
17	157	26	84	11	91	6.8	2.8	7.6	3.0	1.6	.07	4.9
18	930	55	73	11	98	7.0	2.2	6.6	2.6	1.1	.06	2.9
19	819	38	66	12	98	6.0	1.0	5.3	2.5	.89	.11	2.0
20	5,570	17	59	12	99	5.8	.79	4.8	2.8	.69	.42	1.6
21	4,350	14	56	14	101	6.2	207	4.6	1.7	.88	.79	9.3
22	2,640	12	52	14	100	5.9	19	4.4	.62	.57	.62	9.4
23	1,820	17	39	12	99	6.2	8.8	4.4	.32	.34	.38	4.9
24	1,240	18	36	11	101	6.6	6.6	4.0	.22	.26	2.3	3.6
25	866	15	39	13	99	6.2	5.6	3.2	.17	.25	2.9	3.1
26	642	14	39	9.8	97	6.3	5.0	2.6	.11	.69	2.1	2.6
27	568	17	39	10	99	7.1	25	2.3	.08	1.1	.93	2.1
28	483	18	42	14	103	5.3	26	2.6	.11	.92	.31	1.9
29	405	20	42	10	107	2.8	12	2.8	.26	.48	.21	2.0
30	336	9.2	49	9.8	------	1.9	8.8	1.9	.31	.30	.64	2.1
31	282	------	39	10	------	2.1	------	1.4	------	.18	.92	------
TOTAL	30,501	1,707.2	1,663.2	716.6	1,491.5	1,676.2	384.59	204.2	27.27	25.13	14.86	88.8
MEAN	984	56.9	53.7	23.1	51.4	54.1	12.8	6.59	.91	.81	.48	2.96
MAX	5,570	235	126	115	107	115	207	23	3.7	1.9	2.9	9.4
MIN	157	9.2	9.2	9.8	6.7	1.9	.79	1.4	.08	.13	.02	1.2
AC-FT	60,500	3,390	3,300	1,420	2,960	3,320	763	405	54	50	29	176

CAL YR 1971 TOTAL 46,843.30 MEAN 128 MAX 5,570 MIN 0 AC-FT 92,910
WTR YR 1972 TOTAL 38,500.55 MEAN 105 MAX 5,570 MIN .02 AC-FT 76,370

08143600 Pecan Bayou near Mullin, Tex.

LOCATION.--Lat 31°31'02", long 98°44'25", Mills County, on right bank 44 ft downstream from bridge on Farm Road 573, 0.6 mile downstream from Blanket Creek, 5.5 miles southwest of Mullin, and 10 miles upstream from Colorado River.

DRAINAGE AREA.--2,034 sq mi.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,202.93 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 206 cfs (149,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,820 cfs Oct. 21 (gage height, 16.79 ft); minimum, 0.30 cfs Aug. 25.
Period of record: Maximum discharge, 13,700 cfs Jan. 23, 1968 (gage height, 29.26 ft); minimum, 0.03 cfs July 16, 1971.

REMARKS.--Records good. Flow regulated by Lake Brownwood 47 miles upstream (see station 08143000). At end of year, flow from 123 sq mi above this station and below Lake Brownwood was partly controlled by 33 floodwater-retarding structures with a total combined capacity of 27,560 acre-ft below the flood-spillway crests, of which 25,080 acre-ft is floodwater-retarding capacity and 2,480 acre-ft is sediment-pool capacity. Five structures were built during the current year and have a capacity below flood-spillway crests of 2,220 acre-ft, of which 223 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	840	270	36	62	36	116	20	37	9.4	3.0	2.9	6.8
2	629	238	42	58	38	116	18	33	15	1.5	1.8	7.9
3	1,220	203	63	69	36	113	21	30	13	1.1	.86	15
4	1,340	170	66	75	62	115	20	28	11	12	.93	16
5	1,120	140	191	131	44	116	18	28	13	46	2.0	12
6	708	116	89	90	34	116	15	100	14	34	4.4	26
7	595	102	89	65	32	117	13	163	9.4	18	5.3	17
8	465	77	73	62	32	117	15	108	5.8	14	3.9	8.9
9	369	69	181	59	35	115	20	74	4.0	13	3.2	6.8
10	301	62	278	58	33	110	25	66	3.0	9.4	18	4.8
11	278	58	209	58	33	110	19	61	4.5	9.4	42	4.4
12	237	52	146	58	33	104	14	56	10	7.4	20	5.8
13	188	51	134	54	35	102	13	52	9.4	8.4	14	4.1
14	146	47	122	51	34	103	11	47	14	12	12	2.0
15	136	45	124	51	33	104	16	44	16	11	11	.77
16	140	42	129	48	33	91	17	40	30	8.4	12	46
17	140	40	109	47	35	41	19	36	35	8.4	11	5.6
18	1,200	50	106	40	104	29	17	33	26	8.4	6.3	3.6
19	1,000	60	93	38	107	22	17	29	22	9.4	3.7	3.8
20	2,000	45	83	42	107	21	17	26	17	17	2.1	3.6
21	5,490	40	82	40	109	24	143	25	17	14	1.3	8.2
22	3,910	40	80	39	109	24	166	23	14	14	.87	29
23	2,080	40	70	41	108	24	46	19	11	12	.53	20
24	1,360	40	63	40	110	25	28	18	8.9	9.2	.45	19
25	944	50	60	36	110	24	20	17	9.4	9.8	6.4	19
26	700	40	58	37	110	21	18	17	9.4	13	17	18
27	640	40	58	38	110	19	102	17	4.4	10	15	18
28	550	40	60	35	111	21	140	17	5.3	8.1	10	17
29	460	50	60	36	114	24	75	17	6.8	7.3	6.3	16
30	382	42	59	37	------	19	46	14	4.8	5.0	3.7	14
31	328	------	59	36	------	19	------	11	------	3.4	5.3	------
TOTAL	29,896	2,359	3,072	1,631	1,927	2,122	1,129	1,286	372.5	357.6	244.24	379.07
MEAN	964	78.6	99.1	52.6	66.4	68.5	37.6	41.5	12.4	11.5	7.88	12.6
MAX	5,490	270	278	131	114	117	166	163	35	46	42	46
MIN	136	40	36	35	32	19	11	11	3.0	1.1	.45	.77
AC-FT	59,300	4,680	6,090	3,240	3,820	4,210	2,240	2,550	739	709	484	752

CAL YR 1971 TOTAL 55,856.97 MEAN 153 MAX 5,490 MIN .05 AC-FT 110,800
WTR YR 1972 TOTAL 44,775.41 MEAN 122 MAX 5,490 MIN .45 AC-FT 88,810

08144000 Noyes Canal at Menard, Tex.

LOCATION.--Lat 30°54'57", long 99°47'02", Menard County, on right bank at intersection of Canal and Gay Streets in Menard and 4.7 miles (revised) downstream from headgates.

PERIOD OF RECORD.--March 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,878.06 ft above mean sea level. Prior to July 23, 1940, nonrecording gage at site 2,000 ft upstream at datum 4.99 ft higher.

AVERAGE DISCHARGE.--48 years, 13.5 cfs (9,780 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge (exclusive of times canal submerged by water of San Saba River), 50 cfs Apr. 15, 1925 (probably affected by local runoff between point of diversion and station); no flow at times.

REMARKS.--Records good. Discharge represents flow diverted from San Saba River; local runoff between diversion point and gage is excluded. Canal diverts water from right bank of San Saba River 4.7 miles (revised) upstream from Menard for irrigation near Menard. Ten acres are irrigated from canal above station. First diversion was about 1890.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	17	19	17	11	19	18	21	0	17	14	19
2	19	15	16	12	10	19	18	21	0	18	13	14
3	15	13	15	12	16	19	12	22	0	18	14	21
4	15	13	16	12	22	19	20	21	0	18	16	22
5	15	13	16	12	21	18	20	21	0	19	18	23
6	15	13	15	12	20	19	20	22	0	19	18	24
7	15	13	15	12	20	19	19	23	0	19	17	23
8	15	13	16	12	20	18	19	24	0	19	17	22
9	15	13	15	12	20	18	18	23	0	19	17	22
10	16	13	15	12	20	19	19	24	0	18	19	21
11	16	13	15	12	21	18	18	24	.60	17	19	21
12	16	13	15	12	21	18	19	24	14	17	14	21
13	16	13	15	12	21	18	19	16	13	19	5.9	21
14	16	13	15	12	20	18	19	0	19	20	4.5	21
15	16	13	15	12	20	18	19	0	24	23	1.4	21
16	15	13	15	12	20	18	19	0	25	21	1.3	22
17	15	13	15	12	20	14	18	0	25	13	1.0	26
18	17	13	15	12	20	20	18	0	24	19	.92	26
19	17	13	15	12	20	20	18	0	23	19	.76	24
20	16	13	15	12	20	20	12	0	23	20	.76	23
21	16	15	15	12	20	21	18	0	22	18	.68	22
22	16	19	15	12	20	21	18	0	21	17	.54	16
23	15	19	16	12	20	21	19	0	21	17	.64	12
24	15	19	16	11	20	20	19	0	21	19	14	11
25	15	19	16	11	19	20	19	0	21	19	19	11
26	15	19	16	11	19	20	19	0	21	17	19	10
27	15	19	16	11	19	20	20	0	20	17	19	9.9
28	14	19	16	11	20	18	21	0	20	16	19	9.7
29	15	20	17	11	19	18	21	0	18	16	19	9.5
30	14	20	17	11	------	18	21	0	12	16	20	9.1
31	15	------	16	11	------	18	------	0	------	15	20	------
TOTAL	488	454	484	369	559	584	557	286	387.60	559	363.40	557.2
MEAN	15.7	15.1	15.6	11.9	19.3	18.8	18.6	9.23	12.9	18.0	11.7	18.6
MAX	23	20	19	17	22	21	21	24	25	23	20	26
MIN	14	13	15	11	10	14	12	0	0	13	.54	9.1
AC-FT	968	901	960	732	1,110	1,160	1,100	567	769	1,110	721	1,110

CAL YR 1971 TOTAL 4,298.33 MEAN 11.8 MAX 25 MIN 0 AC-FT 8,530
WTR YR 1972 TOTAL 5,648.20 MEAN 15.4 MAX 26 MIN 0 AC-FT 11,200

08144500 San Saba River at Menard, Tex.

LOCATION (revised).--Lat 30°55'08", long 99°47'07", Menard County, on downstream side of bridge on U.S. Highway 83 in Menard, 1.1 miles downstream from Las Moras Creek, 1.9 miles upstream from Volkmann Draw, and at mile 110.4.

DRAINAGE AREA.--1,151 sq mi.

PERIOD OF RECORD.--September 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,863.05 ft above mean sea level. Sept. 14, 1915, to Mar. 12, 1924, nonrecording gage at site 635 ft downstream at datum 2.20 ft lower. Mar. 13, 1924, to Feb. 21, 1939, nonrecording gage at site 1,000 ft upstream at datum 2.00 ft higher. Feb. 22, 1939, to Jan. 25, 1940, nonrecording gage at present site and datum. Jan. 26, 1940, to Sept. 19, 1957, water-stage recorder at site 240 ft to right at present datum. Feb. 8, 1962, to Jan. 22, 1963, nonrecording gage at site 600 ft downstream at present datum.

AVERAGE DISCHARGE.--57 years, 61.1 cfs (44,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 580 cfs Sept. 21 (gage height, 7.12 ft); minimum, 0.09 cfs Aug. 2.
Period of record: Maximum discharge, 130,000 cfs July 23, 1938 (gage height, 22.2 ft, present site and datum, from floodmark), from rating curve extended above 60,000 cfs on basis of slope-area measurements of 68,600 and 130,000 cfs; no flow at times caused by upstream diversion to Noyes Canal (station 08144000).
Maximum stage since at least 1880, 23.3 ft June 6, 1899, present site and datum, from information by local resident.

REMARKS.--Records good. Since about 1890, low flow during irrigation season regulated by diversions to Noyes Canal 4 miles upstream and diversions by pumping at several locations upstream. Records of the Texas Water Rights Commission show permits have been granted to irrigate 3,338 acres above station. See record of Noyes Canal on preceding page.

REVISIONS (WATER YEARS).--WSP 568: Drainage area. WSP 1512: 1918-20, 1922-25, 1926(M), 1927-32, 1934(M), 1936, 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	24	19	26	26	15	10	9.9	33	2.7	.21	1.9
2	5.8	24	25	27	28	13	11	11	33	2.3	.12	1.8
3	13	23	30	27	24	12	12	10	33	2.3	.18	2.7
4	32	21	28	28	13	15	11	9.5	32	2.3	.62	6.0
5	30	22	28	28	14	13	9.8	7.7	30	2.5	1.5	8.3
6	27	22	28	28	15	13	11	11	29	2.7	1.8	4.9
7	24	22	26	28	16	16	13	20	28	2.5	1.6	4.9
8	30	22	25	28	15	15	12	21	28	2.3	.86	3.9
9	36	23	24	29	16	15	10	19	26	2.1	.96	3.3
10	31	22	26	28	15	17	11	28	28	2.3	3.8	3.5
11	26	22	25	28	16	18	13	29	28	2.7	14	4.1
12	33	22	24	27	17	15	12	65	29	2.9	40	4.0
13	40	22	23	27	17	14	10	130	22	3.1	45	4.1
14	32	22	23	26	17	14	9.3	144	15	3.9	44	3.8
15	26	21	23	24	17	16	9.7	102	33	15	45	3.9
16	24	21	23	25	18	17	10	92	30	12	42	3.8
17	22	21	22	26	17	16	10	88	22	4.4	41	5.1
18	95	20	22	27	16	11	9.7	68	19	1.6	40	6.4
19	94	20	23	27	17	8.0	8.5	59	17	.69	40	1.2
20	50	20	22	27	18	9.8	8.3	55	14	.49	40	2.4
21	46	19	22	26	18	12	12	53	10	.34	40	160
22	40	17	22	25	18	11	11	52	9.4	.55	39	206
23	33	22	22	25	18	9.8	11	53	7.8	1.2	39	102
24	30	22	22	25	17	6.8	9.8	53	7.2	2.3	30	61
25	27	23	22	24	15	5.5	8.0	49	6.2	1.2	9.5	38
26	26	21	24	22	13	5.4	7.5	49	5.3	.77	3.8	28
27	31	21	23	24	12	7.7	8.5	44	5.3	.62	3.0	24
28	30	20	23	26	16	6.2	9.9	38	3.5	.34	2.3	22
29	31	20	22	25	17	5.9	12	37	1.5	.14	2.0	21
30	30	19	23	25	------	5.0	12	37	1.8	.27	1.8	22
31	27	------	26	25	------	8.3	------	35	------	.43	2.0	------
TOTAL	1,028.0	640	740	813	496	366.4	313.0	1,479.1	587.0	78.94	575.05	764.0
MEAN	33.2	21.3	23.9	26.2	17.1	11.8	10.4	47.7	19.6	2.55	18.6	25.5
MAX	95	24	30	29	28	18	13	144	33	15	45	206
MIN	5.8	17	19	22	12	5.0	7.5	7.7	1.5	.14	.12	1.2
AC-FT	2,040	1,270	1,470	1,610	984	727	621	2,930	1,160	157	1,140	1,520

CAL YR 1971 TOTAL 9,784.28 MEAN 26.8 MAX 1,390 MIN 0 AC-FT 19,410
WTR YR 1972 TOTAL 7,880.49 MEAN 21.5 MAX 206 MIN .12 AC-FT 15,630

PEAK DISCHARGE (BASE, 670 CFS).--No peak above base.

08144800 Brady Creek near Eden, Tex.

LOCATION (revised).--Lat 31°11'05", long 99°50'29", Concho County, on right bank at upstream side of bridge on U.S. Highway 83, 0.8 mile downstream from Fitzgerald Creek, 2.2 miles south of Eden, 2.4 miles upstream from Hardin Branch, and at mile 69.3.

DRAINAGE AREA.--97 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 2,000.95 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 0.70 cfs (507 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 375 cfs June 15 (gage height, 3.00 ft); no flow at times.
Period of record: Maximum discharge, 5,110 cfs Apr. 28, 1966 (gage height, 7.08 ft); no flow for many days each year.
Maximum stage since at least 1884, 15.8 ft in July 1938, from information by local resident.

REMARKS.--Records good above 1.0 cfs and fair below. At end of year, flow from 65.0 sq mi above this station was partly controlled by five floodwater-retarding structures with a total combined capacity of 22,900 acre-ft below the flood-spillway crests, of which 22,190 acre-ft is floodwater-retarding capacity and 715 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	1.6	1.4	1.2	1.7	.92	.44	.68	.56	.31	0	.04
2	.68	1.6	2.0	1.2	1.7	.84	.44	.56	.39	.24	0	1.1
3	.76	1.6	2.0	1.2	1.4	.76	.44	.50	.35	.16	0	2.0
4	1.2	1.6	1.8	1.4	1.0	.76	.44	.44	.27	.14	.12	9.2
5	1.2	1.6	1.8	1.4	1.1	.68	.50	.39	.21	.18	.14	5.3
6	1.1	1.6	1.7	1.4	1.1	.68	.62	.39	.18	.24	.06	.68
7	1.0	1.4	1.7	1.4	1.0	.68	.62	.62	.18	.31	.02	.39
8	1.6	1.4	1.4	1.4	.84	.68	.56	.76	.18	.24	.01	.21
9	2.0	1.4	1.4	1.4	.92	.68	.50	.62	.18	.21	.05	.16
10	1.3	1.4	1.4	1.4	.92	.62	.50	.62	.16	.16	.21	.12
11	1.2	1.4	1.4	1.4	1.0	.56	.56	.62	.16	.14	.21	.10
12	1.1	1.4	1.4	1.4	1.0	.56	.68	.76	.18	.12	.62	.08
13	1.1	1.4	1.4	1.4	1.1	.56	.62	1.3	.18	.18	.39	.08
14	1.1	1.4	1.4	1.4	1.1	.62	.50	1.2	.16	.24	.21	.08
15	1.1	1.4	1.3	1.4	1.0	.62	.56	.84	105	.21	.10	.08
16	1.1	1.4	1.3	1.4	.92	.62	.62	7.4	15	.12	.06	.10
17	1.1	1.4	1.3	1.4	.76	.56	.62	4.7	3.8	.10	.08	.14
18	1.3	1.4	1.3	1.4	.62	.56	.50	1.4	2.4	.08	.10	.14
19	2.2	1.4	1.3	1.4	.92	.50	.44	.84	1.4	.21	.08	.14
20	3.2	1.4	1.3	1.6	.92	.56	.83	.68	1.1	.21	.08	.14
21	1.8	1.4	1.3	1.6	.84	.56	2.0	.56	.84	.14	.05	.69
22	1.6	1.4	1.2	1.6	.92	.56	1.3	.44	.68	.12	.07	1.2
23	1.6	1.6	1.2	1.6	.92	.56	.84	.44	.50	.13	.06	.70
24	1.6	1.6	1.2	1.6	.92	.56	.84	.39	.44	.18	.06	.57
25	1.6	1.6	1.2	1.6	.92	.56	.76	.35	.39	.14	.06	.48
26	1.6	1.6	1.2	1.6	.92	.56	.76	.31	.31	.07	.06	.39
27	2.2	1.6	1.2	1.6	.92	.44	.84	.27	.24	.03	.04	.43
28	1.6	1.6	1.2	1.7	.84	.39	1.0	.24	.21	0	.02	.44
29	1.6	1.6	1.2	1.7	.84	.39	1.0	.24	.35	0	.05	.44
30	1.6	1.4	1.2	1.6	------	.39	.92	.50	.44	0	.14	.34
31	1.6	------	1.2	1.6	------	.44	------	.62	------	0	.06	------
TOTAL	44.42	44.6	43.3	45.4	29.06	18.43	21.25	29.68	136.44	4.61	3.21	25.96
MEAN	1.43	1.49	1.40	1.46	1.00	.59	.71	.96	4.55	.15	.10	.87
MAX	3.2	1.6	2.0	1.7	1.7	.92	2.0	7.4	105	.31	.62	9.2
MIN	.68	1.4	1.2	1.2	.62	.39	.44	.24	.16	0	0	.04
AC-FT	88	88	86	90	58	37	42	59	271	9.1	6.4	51

CAL YR 1971 TOTAL 661.42 MEAN 1.81 MAX 226 MIN 0 AC-FT 1,310
WTR YR 1972 TOTAL 446.36 MEAN 1.22 MAX 105 MIN 0 AC-FT 885

08144900 Brady Creek Reservoir near Brady, Tex.

LOCATION.--Lat 31°08'17", long 99°23'07", McCulloch County, at mouth of Bear Creek, 280 ft upstream from Farm Road 3022 over Brady Creek Dam on Brady Creek, 3.0 miles west of Brady, and at mile 34.1.

DRAINAGE AREA.--513 sq mi.

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

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

EXTREMES.--Current year: Maximum contents, 32,860 acre-ft Oct. 1 (elevation, 1,744.17 ft); minimum, 27,010 acre-ft Sept. 30 (elevation, 1,741.24 ft).
Period of record: Maximum contents, 40,880 acre-ft Sept. 24, 1971 (elevation, 1,747.70 ft); minimum since first appreciable storage, 1,030 acre-ft Sept. 18, 1964 (elevation, 1,710.4 ft).

REMARKS.--Reservoir is formed by a compacted earthfill dam 8,400 ft long. Dam was completed and storage began in May 1963. Dam was built by the city of Brady in cooperation with the Soil Conservation Service and Farmers Home Administration for flood control and municipal and industrial water supply. The service spillway is an uncontrolled concrete drop-inlet structure which discharges through a 7- by 7-foot concrete box conduit through the dam. Service spillway is designed to discharge 4,000 cfs with a 19.4-foot head. The emergency spillway is a cut channel 1,000 ft wide located at right end of dam. Service outlet is a 36-inch cast-iron pipe extending through the embankment, and is equipped with three sluice gates with 3- by 3-foot openings at elevations 1,712.0 ft, 1,727.0 ft, and 1,733.0 ft. At end of year, flow from 263 sq mi above this station was partly controlled by 35 floodwater-retarding structures with a total combined capacity of 82,180 acre-ft below the flood-spillway crests, of which 77,950 acre-ft is floodwater-retarding capacity and 4,230 acre-ft is sediment-pool capacity. These structures were built during the period February 1955 to July 1962. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. The city of Brady furnished the capacity curve which was based on Geological Survey topographic map, edition of 1960. Capacity curve was not adjusted for borrow; borrow pits were below 1,743-foot elevation. Water-quality records for the current year are published in Part 2 of this report. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,783.0	-
Crest of emergency spillway	1,762.4	90,310
Crest of service spillway (conservation storage)	1,743.0	30,430
Invert of lowest intake to service outlet	1,712.0	1,320

COOPERATION.--Records furnished by city of Brady show no water diverted during year for municipal or industrial use.

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

1,741.0	26,550	1,743.0	30,430
1,742.0	28,450	1,745.0	34,640

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32,450	30,900	30,470	30,570	30,470	30,290	29,560	28,850	30,190	29,320	28,010	27,560
2	32,120	30,880	30,590	30,530	30,470	30,270	29,500	28,810	30,150	29,260	27,940	27,600
3	32,020	30,820	30,570	30,570	30,410	30,210	29,460	28,770	30,110	29,220	27,980	27,580
4	31,890	30,760	30,590	30,550	30,390	30,190	29,440	28,710	30,070	29,180	28,030	27,580
5	31,750	30,720	30,640	30,510	30,390	30,170	29,420	28,670	30,010	29,140	27,990	27,560
6	31,620	30,680	30,660	30,490	30,390	30,150	29,420	28,750	29,990	29,100	27,940	27,520
7	31,460	30,640	30,680	30,490	30,390	30,150	29,380	28,770	29,940	29,040	27,900	27,480
8	31,460	30,590	30,720	30,510	30,390	30,070	29,340	28,750	29,920	29,000	27,860	27,440
9	31,360	30,590	30,760	30,510	30,390	30,070	29,320	28,710	29,860	28,960	27,940	27,410
10	31,250	30,590	30,720	30,510	30,410	30,070	29,320	28,830	29,840	28,910	27,900	27,390
11	31,190	30,570	30,720	30,490	30,430	30,050	29,300	28,950	29,820	28,850	27,880	27,350
12	31,130	30,550	30,720	30,470	30,450	30,050	29,300	29,000	29,780	28,790	27,940	27,310
13	31,150	30,550	30,720	30,430	30,450	30,050	29,280	29,000	29,740	28,790	27,900	27,250
14	31,110	30,550	30,700	30,430	30,430	30,050	29,260	28,980	29,720	28,730	27,880	27,230
15	31,070	30,550	30,680	30,410	30,430	30,030	29,240	28,960	29,760	28,670	27,820	27,220
16	31,030	30,550	30,680	30,390	30,430	30,050	29,180	29,820	29,720	28,610	27,800	27,220
17	30,990	30,590	30,640	30,410	30,410	30,010	29,100	30,190	29,760	28,570	27,790	27,200
18	31,320	30,530	30,590	30,410	30,390	29,970	29,080	30,270	29,760	28,530	27,770	27,160
19	31,480	30,490	30,590	30,430	30,370	29,940	29,040	30,270	29,740	28,490	27,750	27,120
20	31,400	30,490	30,590	30,430	30,370	29,950	29,040	30,270	29,720	28,450	27,710	27,080
21	31,360	30,470	30,570	30,410	30,370	29,940	29,080	30,250	29,680	28,430	27,670	27,250
22	31,300	30,510	30,550	30,410	30,370	29,920	29,040	30,230	29,620	28,390	27,650	27,250
23	31,230	30,510	30,550	30,390	30,370	29,900	28,980	30,250	29,580	28,390	27,840	27,220
24	31,170	30,510	30,550	30,370	30,370	29,880	28,950	30,230	29,520	28,370	27,820	27,200
25	31,070	30,510	30,550	30,350	30,350	29,860	28,890	30,210	29,460	28,340	27,790	27,180
26	31,090	30,510	30,550	30,350	30,330	29,820	28,850	30,150	29,400	28,280	27,750	27,140
27	31,050	30,490	30,550	30,370	30,330	29,780	28,870	30,130	29,340	28,240	27,730	27,120
28	31,030	30,470	30,570	30,470	30,330	29,740	28,890	30,090	29,280	28,180	27,690	27,100
29	30,990	30,470	30,570	30,470	30,330	29,680	28,870	30,170	29,420	28,150	27,670	27,040
30	30,970	30,470	30,550	30,450	------	29,640	28,850	30,250	29,380	28,090	27,650	27,010
31	30,950	------	30,550	30,470	------	29,600	------	30,210	------	28,050	27,600	------
(†)	1,743.25	1,743.02	1,743.06	1,743.02	1,742.95	1,742.58	1,742.20	1,742.89	1,742.47	1,741.79	1,741.55	1,741.24
(*)	-1,910	-480	+80	-80	-140	-730	-750	+1,360	-830	-1,330	-450	-590
MAX	32,450	30,900	30,760	30,570	30,470	30,290	29,560	30,270	30,190	29,320	28,010	27,600
MIN	30,950	30,470	30,470	30,350	30,330	29,600	28,850	28,670	29,280	28,050	27,600	27,010

CAL YR 1971..... * +16,610 MAX 40,440 MIN 11,960
WTR YR 1972..... * -5,850 MAX 32,450 MIN 27,010

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

08145000 Brady Creek at Brady, Tex.

LOCATION.--Lat 31°08'17", long 99°29'05", McCulloch County, on left bank just upstream from bridge on U.S. Highway 377 on North Bridge Street in Brady, 0.4 mile downstream from Live Oak Creek, and at mile 29.5.

DRAINAGE AREA.--575 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,646.50 ft above mean sea level. Prior to July 9, 1940, nonrecording gage at site 3,600 ft upstream at datum 8.24 ft higher.

AVERAGE DISCHARGE.--23 years (1939-62) prior to completion of Brady Creek Reservoir, 25.2 cfs (18,240 acre-ft per year); 10 years (1962-72) regulated, 12.5 cfs (9,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 370 cfs Oct. 1 (gage height, 8.20 ft), occurred on recession following peak of Sept. 24, 1971; maximum independent peak discharge, 180 cfs May 16 (gage height, 7.64 ft); minimum daily discharge, 0.03 cfs Sept. 12-15.
Period of record: Maximum discharge, 39,100 cfs Sept. 10, 1952 (gage height, 24.80 ft); no flow at times.
Maximum stage since at least 1882, 29.1 ft July 23, 1938, present site and datum (discharge at site 5 miles downstream, 86,000 cfs by slope-area measurement). Flood of Oct. 6, 1930 (second highest since 1882), reached a stage of 25.9 ft (discharge, 50,300 cfs), present site and datum, from information by local residents.

REMARKS.--Records good. The city of Brady, which obtains its water supply from ground-water sources, reported that 284 acre-ft of sewage effluent was returned to Brady Creek downstream from the gage during the water year 1972. Flow largely controlled since May 22, 1963, by Brady Creek Reservoir (station 08144900). At end of year, flow from 24.2 sq mi above this station and below Brady Creek Reservoir was partly controlled by six floodwater-retarding structures with a total combined capacity of 7,160 acre-ft below flood-spillway crests, of which 6,440 acre-ft is floodwater-retarding capacity and 720 acre-ft 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).--WSP 1512: 1941(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	334	52	7.1	12	4.4	3.4	.78	.90	1.8	.68	.09	.04
2	275	46	17	11	5.4	2.8	.78	.79	1.2	.41	.09	.04
3	240	38	19	13	5.3	1.7	.90	.71	.83	.31	.22	.13
4	272	31	14	14	3.4	3.2	.79	.61	.57	.35	.86	.53
5	219	30	18	11	3.6	1.7	.75	.55	.39	.28	.21	.31
6	187	28	23	9.8	5.8	1.3	.65	1.2	.34	.19	.11	.10
7	169	23	23	8.1	5.2	2.2	.64	2.8	.33	.16	.07	.06
8	171	21	22	8.6	4.0	2.3	.77	2.0	.30	.14	.06	.04
9	164	24	27	8.6	3.8	1.4	.80	1.4	.30	.13	.33	.04
10	136	21	37	9.2	4.9	.78	.79	3.3	.29	.11	.27	.04
11	118	22	25	8.6	4.9	.77	.75	2.2	.27	.10	.15	.04
12	102	24	23	11	5.8	1.4	.73	11	.30	.09	1.2	.03
13	124	25	20	8.8	5.6	2.1	.63	9.1	.32	.09	.37	.03
14	99	25	27	6.5	6.2	1.8	.44	2.9	.31	.10	.21	.03
15	75	24	24	5.9	6.2	1.6	.47	1.8	.67	.11	.15	.03
16	65	24	17	5.5	4.8	1.7	.36	54	.43	.12	.14	.04
17	55	26	16	7.3	5.6	1.6	.34	17	.35	.11	.16	.04
18	87	27	13	7.5	5.5	1.5	.32	3.3	.34	.14	.15	.04
19	134	22	15	6.5	4.3	1.6	.30	2.0	.29	.16	.12	.04
20	132	20	18	6.6	5.3	1.4	.31	1.6	.26	.12	.10	.04
21	107	19	12	7.1	5.1	1.3	1.3	1.7	.26	.11	.09	.56
22	100	19	9.0	6.9	2.6	1.4	.46	1.5	.23	.10	.08	.76
23	105	28	8.9	7.4	2.7	1.3	.43	1.8	.21	.11	6.0	.17
24	89	25	9.0	7.5	3.2	.56	.51	1.6	.19	.11	.54	.10
25	81	20	10	7.0	2.6	.51	.45	1.1	.18	.11	.16	.08
26	80	16	11	5.9	2.4	.54	.41	.75	.18	.10	.09	.06
27	94	12	11	6.1	1.4	.67	.71	.75	.18	.09	.06	.05
28	82	18	10	8.7	1.1	.78	.64	.64	.18	.09	.04	.05
29	78	8.3	12	5.4	1.3	.62	1.2	2.7	1.5	.09	.04	.04
30	74	7.4	12	4.6	------	.63	.89	7.1	1.4	.08	.04	.04
31	59	------	10	3.8	------	.68	------	3.9	------	.08	.04	------
TOTAL	4,107	725.7	520.0	249.9	122.4	45.24	19.30	142.70	14.40	4.97	12.24	3.60
MEAN	132	24.2	16.8	8.06	4.22	1.46	.64	4.60	.48	.16	.39	.12
MAX	334	52	37	14	6.2	3.4	1.3	54	1.8	.68	6.0	.76
MIN	55	7.4	7.1	3.8	1.1	.51	.30	.55	.18	.08	.04	.03
AC-FT	8,150	1,440	1,030	496	243	90	38	283	29	9.9	24	7.1

CAL YR 1971 TOTAL 37,609.90 MEAN 103 MAX 4,580 MIN 0 AC-FT 74,600
WTR YR 1972 TOTAL 5,967.45 MEAN 16.3 MAX 334 MIN .03 AC-FT 11,840

08146000 San Saba River at San Saba, Tex.

LOCATION.--Lat 31°12'47", long 98°43'09", San Saba County, on right bank at downstream side of bridge on State Highway 16, 1.2 miles north of San Saba, 2.7 miles upstream from Mill Creek, 4.8 miles downstream from China Creek, and at mile 16.6.

DRAINAGE AREA.--3,042 sq mi.

PERIOD OF RECORD.--December 1904 to December 1906 (gage heights only), September 1915 to current year. Published as "near San Saba" December 1904 to December 1906 and September 1915 to August 1930.

GAGE.--Water-stage recorder. Datum of gage is 1,162.16 ft above mean sea level. See WSP 1922 for history of changes prior to July 8, 1953. Since Oct. 1, 1956, supplementary water-stage recorder 2,780 ft to right of main-channel gage used for floodflows.

AVERAGE DISCHARGE.--57 years, 240 cfs (173,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,990 cfs Oct. 4 (gage height, 19.22 ft); minimum, 40 cfs Aug. 3.
Period of record: Maximum discharge, 203,000 cfs July 23, 1938 (gage height, 39.3 ft, corrected to present site and datum), from rating curve extended above 41,000 cfs on basis of slope-area measurement of 203,000 cfs; no flow at times in 1918, 1930, 1954-56, 1963-64.
Maximum stage since at least 1899, that of July 23, 1938. Flood of June 6, 1899, reached a stage of 36.7 ft, corrected to present site and datum, from information by local resident.

REMARKS.--Records good. Many diversions above station for irrigation and municipal use affect low flow. Flow partly regulated by Brady Creek Reservoir (see station 08144900), capacity 90,300 acre-ft. At end of year, flow from 71.4 sq mi above this station and below Brady Creek Reservoir was partly controlled by 16 floodwater-retarding structures with a total combined capacity of 17,340 acre-ft below flood-spillway crests, of which 15,700 acre-ft is floodwater-retarding capacity and 1,640 acre-ft 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).--WSP 458: 1915-16. WSP 1282: Drainage area. WSP 1512: 1918-19(M), 1922, 1931(M), 1935-36. WSP 1922: 1917.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010	556	320	289	221	191	126	126	151	103	47	80
2	860	541	369	289	221	189	123	127	143	95	45	75
3	783	511	447	286	218	191	116	123	145	89	42	73
4	3,760	481	423	284	218	191	109	118	140	407	56	76
5	1,990	461	486	282	214	191	100	115	132	263	70	151
6	1,170	448	615	282	214	189	109	132	125	121	73	115
7	987	432	540	282	214	186	115	171	123	96	78	112
8	854	416	435	282	213	186	111	172	118	89	57	91
9	913	412	441	279	212	181	111	160	118	87	55	81
10	950	411	617	279	206	178	114	153	118	85	67	78
11	762	406	646	277	233	175	109	157	119	81	102	75
12	686	401	514	275	239	175	110	293	123	79	105	72
13	732	400	433	274	215	175	108	218	120	78	188	69
14	1,080	400	416	265	205	171	106	254	122	74	187	69
15	842	400	407	252	198	156	103	248	121	70	115	67
16	725	400	388	242	196	151	102	363	131	70	100	72
17	648	403	369	237	193	146	102	1,190	121	69	96	92
18	1,050	404	353	231	186	145	104	503	116	64	110	77
19	3,040	404	344	228	181	146	105	346	114	68	97	71
20	2,780	404	334	227	180	142	109	251	114	71	87	70
21	1,320	400	330	225	184	145	113	205	107	70	84	79
22	1,190	415	322	224	183	134	115	184	101	70	81	331
23	949	505	309	224	183	134	111	172	97	70	79	670
24	829	411	301	224	187	133	110	167	93	78	205	426
25	718	393	296	221	188	130	104	167	93	76	240	240
26	653	366	296	221	188	132	101	157	92	70	121	200
27	740	353	294	218	188	130	157	148	80	64	101	172
28	894	352	296	222	188	133	205	145	75	56	94	145
29	696	342	296	224	191	129	168	142	106	51	92	128
30	616	324	293	224	------	123	138	144	147	57	102	114
31	575	------	289	221	------	123	------	148	------	55	87	------
TOTAL	34,802	12,552	12,219	7,790	5,857	4,901	3,514	6,999	3,505	2,876	3,063	4,171
MEAN	1,123	418	394	251	202	158	117	226	117	92.8	98.8	139
MAX	3,760	556	646	289	239	191	205	1,190	151	407	240	670
MIN	575	324	289	218	180	123	100	115	75	51	42	67
AC-FT	69,030	24,900	24,240	15,450	11,620	9,720	6,970	13,880	6,950	5,700	6,080	8,270

CAL YR 1971 TOTAL 199,828.4 MEAN 547 MAX 12,600 MIN 8.4 AC-FT 396,400
WTR YR 1972 TOTAL 102,249.0 MEAN 279 MAX 3,760 MIN 42 AC-FT 202,800

PEAK DISCHARGE (BASE, 3,000 CFS).--Oct. 4 (1730) 5,990 cfs (19.22 ft); Oct. 19 (1900) 4,660 cfs (16.91 ft).

08147000 Colorado River near San Saba, Tex.

LOCATION.--Lat 31°13'04", long 98°33'51", San Saba County, near left bank at downstream side of pier of bridge on U.S. Highway 190, 5.2 miles downstream from San Saba River, 9.2 miles east of San Saba, and at mile 474.3.

DRAINAGE AREA.--30,600 sq mi, approximately, of which 12,880 sq mi is probably noncontributing.

PERIOD OF RECORD.--October 1915 to October 1922 (published as "near Chadwick"), October 1923 to August 1930 (published as "near Tow"), September 1930 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 1,096.22 ft above mean sea level. See WSP 1922 for history of changes prior to May 23, 1940.

AVERAGE DISCHARGE.--54 years (1916-19, 1920-22, 1923-72), 1,296 cfs (939,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs Oct. 21 (gage height, 12.33 ft); minimum, 32 cfs Aug. 3.
Period of record: Maximum discharge, 224,000 cfs July 23, 1938 (gage height, 63.2 ft, present site, based on floodmarks at site then in use); no flow Aug. 27-31, 1954; Aug. 3-13, 1963; July 20 to Aug. 8, Aug. 11-14, 1964.
Maximum stage during period 1878 to July 22, 1938, 58.4 ft Sept. 25, 1900 (discharge, 184,000 cfs), present site, from floodmarks at former site.

REMARKS.--Records good. Many diversions above station for irrigation, municipal use, and oilfield operation. Flow partly regulated by eight reservoirs in the Colorado and Concho Rivers and Oak Creek Basins above Winchell, and by four reservoirs in the San Saba River and Pecan Bayou Basins; combined capacity, 2,438,000 acre-ft. At end of year, flow from 787 sq mi above this station was partly controlled by 160 floodwater-retarding structures with a total combined capacity of 187,250 acre-ft below the flood-spillway crests, of which 171,440 acre-ft is floodwater-retarding capacity and 15,810 acre-ft is sediment-pool capacity. Twelve of these structures were built during the current year and have a total combined capacity below flood-spillway crests of 9,570 acre-ft, of which 909 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 458: 1916. WSP 858: 1900(M), 1936(M). WSP 1118: Drainage area. WSP 1512: 1916-18(M), 1936. WSP 1732: 1925-26(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,630	1,450	593	517	427	410	176	289	211	139	44	137
2	2,110	1,340	623	545	417	392	176	240	204	114	36	161
3	1,770	1,250	730	527	409	387	173	219	194	105	33	175
4	5,190	1,160	783	523	415	379	161	201	195	112	39	141
5	6,390	1,080	982	532	424	369	148	187	203	586	56	157
6	4,130	997	1,320	584	433	369	155	225	184	196	64	211
7	3,010	931	1,050	553	409	370	156	660	167	184	71	213
8	2,220	889	927	512	400	359	149	632	139	159	68	189
9	1,950	852	1,060	507	385	350	133	527	140	130	49	172
10	2,040	826	1,830	509	382	344	142	1,190	143	116	55	149
11	1,690	797	1,480	495	390	341	138	783	143	108	69	130
12	1,480	773	1,100	481	399	354	141	1,740	145	98	114	121
13	1,390	757	926	476	400	356	146	1,490	160	91	103	111
14	1,740	741	884	458	400	355	152	712	218	89	249	97
15	1,500	729	856	435	389	343	134	647	158	77	455	94
16	1,280	716	807	424	382	335	120	733	154	75	592	110
17	1,150	703	771	416	375	322	126	1,340	164	90	501	189
18	1,330	692	718	421	367	283	131	926	217	90	516	193
19	8,240	671	688	413	414	249	143	629	338	83	385	153
20	9,320	643	665	402	454	245	146	518	302	75	368	127
21	10,700	645	631	409	452	236	162	444	276	68	266	128
22	10,000	640	610	407	451	227	160	371	225	64	213	315
23	6,110	684	595	400	456	214	464	333	190	65	327	854
24	4,080	713	569	402	449	208	365	311	164	70	350	752
25	3,000	708	555	392	448	203	243	288	141	80	424	453
26	2,340	671	547	379	439	203	186	265	135	83	294	442
27	2,130	642	534	377	424	202	366	243	117	71	237	541
28	2,280	629	528	394	417	201	686	227	93	62	192	441
29	2,000	617	517	413	413	193	544	214	108	50	205	354
30	1,800	597	511	427	------	184	382	209	208	41	174	291
31	1,620	------	505	437	------	179	------	208	------	47	172	------
TOTAL	106,620	24,543	24,895	14,167	12,020	9,162	6,504	17,001	5,436	3,418	6,721	7,601
MEAN	3,439	818	803	457	414	296	217	548	181	110	217	253
MAX	10,700	1,450	1,830	584	456	410	686	1,740	338	586	592	854
MIN	1,150	597	505	377	367	179	120	187	93	41	33	94
AC-FT	211,500	48,680	49,380	28,100	23,840	18,170	12,900	33,720	10,780	6,780	13,330	15,080

CAL YR 1971 TOTAL 457,457.8 MEAN 1,253 MAX 21,600 MIN 5.3 AC-FT 907,400
WTR YR 1972 TOTAL 238,088.0 MEAN 651 MAX 10,700 MIN 33 AC-FT 472,200

08148000 Lake Buchanan near Burnet, Tex.

LOCATION.--Lat 30°45'04", long 98°25'06", Burnet County, in powerhouse at Buchanan Dam on Colorado River, 1.3 miles upstream from bridge on State Highway 29, 11 miles west of Burnet, and at mile 413.6.

DRAINAGE AREA.--31,250 sq mi, approximately, of which 12,880 sq mi (revised) is probably noncontributing.

PERIOD OF RECORD.--May 1937 to current year. Prior to October 1, 1968, published as Buchanan Reservoir.

GAGE.--Nonrecording gage. Datum of gage is 0.48 ft above mean sea level, levels by Lower Colorado River Authority. Prior to July 1938, temporary staff and float gages at same site and datum.

EXTREMES (at 2400).--Current year: Maximum contents observed, 1,001,000 acre-ft Oct. 21 (gage height, 1,020.4 ft); minimum, 811,800 acre-ft Sept. 20, 22, 23 (gage height, 1,011.8 ft).
Period of record: Maximum contents, 1,010,000 acre-ft Jan. 24, 1968 (gage height, 1,020.8 ft); minimum after initial filling of lake in July 1938, 340,800 acre-ft Sept. 8-10, 1952 (gage height, 983.4 ft).

REMARKS.--Lake is formed by two reinforced concrete multiple-arch sections, three banks of tainter gates, and a 1,100-foot reinforced concrete spillway section. Dam completed and storage began May 20, 1937. Figures given herein represent total contents. Capacities based on 1925 survey. Water used for power development and irrigation of rice in several districts below Columbus. Power unit consists of three 11,250-kilowatt generators. There is also a 14,500-horsepower pumpback unit designed to pump back 840 cfs at a head of 120 ft. Twelve major reservoirs, with a combined capacity of 2,438,000 acre-ft of which 1,091,000 acre-ft is for flood control, largely regulate the inflow. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Colorado River near San Saba (station 08147000). Data regarding dam and lake are shown in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of 1,100-foot gravity overflow spillway (top of conservation storage)...	1,020.0	992,000
Bottom of 30-33 ft wide by 15 ft high tainter gates.....	1,005.0	678,000
Bottom of 7-40 ft wide by 25 ft high tainter gates.....	995.0	505,000
Invert of penstocks.....	937.0	36,800

COOPERATION.--Gage-height record furnished by Lower Colorado River Authority.

REVISIONS.--WSP 1118: Drainage area.

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

1,011.0	795,000	1,018.0	946,000
1,014.0	858,000	1,021.0	1,015,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	998.90	989.70	939.40	973.60	946.00	946.00	957.50	952.90	939.40	899.80	853.80	839.10
2	996.60	987.40	937.20	973.60	948.30	946.00	957.50	952.90	937.20	897.60	853.80	837.00
3	989.70	982.80	935.00	975.90	943.80	943.80	957.50	955.20	935.00	897.60	853.80	837.00
4	989.70	980.50	935.00	971.30	941.60	946.00	957.50	952.90	935.00	897.60	853.80	837.00
5	996.60	975.90	935.00	966.70	941.60	946.00	957.50	952.90	932.80	897.60	853.80	834.90
6	996.60	973.60	937.20	964.40	943.80	946.00	957.50	955.20	930.60	895.40	853.80	832.80
7	996.60	969.00	937.20	962.10	941.60	948.30	957.50	962.10	930.60	895.40	853.80	830.70
8	994.30	964.40	939.40	959.80	939.40	948.30	957.50	962.10	930.60	893.20	851.70	828.60
9	989.70	962.10	941.60	962.10	939.40	948.30	955.20	964.40	930.60	893.20	851.70	828.60
10	987.40	959.80	943.80	962.10	941.60	948.30	955.20	966.70	930.60	893.20	849.60	828.60
11	987.40	957.50	948.30	959.80	939.40	950.60	955.20	969.00	932.80	893.20	851.70	826.50
12	987.40	955.20	950.60	959.80	939.40	950.60	955.20	971.30	930.60	893.20	851.70	826.50
13	987.40	955.20	950.60	959.80	941.60	950.60	952.90	971.30	928.40	888.80	851.70	824.40
14	987.40	952.90	952.90	957.50	941.60	950.60	950.60	969.00	926.20	886.60	849.60	824.40
15	987.40	950.60	952.90	952.90	939.40	952.90	948.30	966.70	930.60	884.40	849.60	822.30
16	987.40	952.90	955.20	952.90	937.20	952.90	948.30	966.70	928.40	882.20	849.60	822.30
17	987.40	950.60	955.20	950.60	937.20	952.90	946.00	966.70	930.60	877.80	851.70	820.20
18	987.40	950.60	957.50	952.90	937.20	955.20	946.00	966.70	930.60	875.60	849.60	818.10
19	996.60	948.30	959.80	952.90	937.20	955.20	943.80	964.40	930.60	871.20	851.70	816.00
20	994.30	943.80	959.80	955.20	939.40	955.20	943.80	962.10	928.40	871.20	851.70	811.80
21	1,001.00	946.00	959.80	955.20	939.40	955.20	943.80	959.80	926.20	871.20	849.60	813.90
22	994.30	946.00	959.80	955.20	939.40	955.20	943.80	957.50	924.00	871.20	849.60	811.80
23	994.30	943.80	959.80	955.20	941.60	957.50	943.80	955.20	919.60	871.20	849.60	811.80
24	996.60	941.60	962.10	957.50	941.60	957.50	943.80	952.90	917.40	869.00	847.50	813.90
25	996.60	941.60	964.40	955.20	943.80	957.50	943.80	950.60	915.20	864.60	847.50	816.00
26	996.60	943.80	964.40	955.20	943.80	957.50	943.80	948.30	913.00	862.40	845.40	816.00
27	996.60	941.60	966.70	955.20	943.80	957.50	950.60	946.00	910.80	862.40	845.40	816.00
28	994.30	941.60	966.70	952.90	943.80	959.80	950.60	943.80	906.40	858.00	843.30	816.00
29	992.00	941.60	969.00	952.90	946.00	957.50	950.60	941.60	902.00	858.00	843.30	816.00
30	992.00	941.60	971.30	950.60	------	957.50	952.90	941.60	899.80	858.00	841.20	816.00
31	989.70	------	971.30	946.00	------	957.50	------	941.60	------	855.90	841.20	------
(†)	1,019.9	1,017.8	1,019.1	1,018.0	1,018.0	1,018.5	1,018.3	1,017.8	1,015.9	1,013.9	1,013.2	1,012.0
(*)	-9,200	-48,100	+29,700	-25,300	0	+11,500	-4,600	-11,300	-41,800	-43,900	-14,700	-25,200
MAX	1,001,000	989,700	971,300	975,900	948,300	959,800	957,500	971,300	939,400	899,800	853,800	839,100
MIN	987,400	941,600	935,000	946,000	937,200	943,800	943,800	941,600	899,800	855,900	841,200	811,800

CAL YR 1971..... * +128,000 MAX 1,001,000 MIN 597,800
WTR YR 1972..... * -182,900 MAX 1,001,000 MIN 811,800

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
NOTE.--All figures expressed in thousands.

08148500 North Llano River near Junction, Tex.

LOCATION (revised).--Lat 30°31'06", long 99°48'39", Kimble County, on left bank 1,000 ft upstream from remains of old Wilson Dam, 2.1 miles northwest of Junction, and 4 miles upstream from confluence with South Llano River.

DRAINAGE AREA.--914 sq mi.

PERIOD OF RECORD.--September 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,699.92 ft above mean sea level. Prior to Aug. 1, 1925, nonrecording gage at site 550 ft downstream at same datum. Aug. 1, 1925, to Sept. 15, 1936, water-stage recorder 520 ft downstream at same datum. Sept. 16, 1936, to June 22, 1940, nonrecording gages at various sites at same datum.

AVERAGE DISCHARGE.--57 years, 65.0 cfs (47,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,050 cfs Sept. 21 (gage height, 5.86 ft); minimum, 3.2 cfs July 16, 17.
Period of record: Maximum discharge, 94,800 cfs Sept. 16, 1936 (gage height, 29.2 ft, present site, based on gage height relation curve), from rating curve extended above 68,000 cfs on basis of slope-area measurement of 94,800 cfs; no flow at times.
Maximum stage since at least 1875, that of Sept. 16, 1936; maximum stage during period 1875 to Sept. 15, 1936, 27 ft in 1889, from information by local resident.

REMARKS.--Records good. Diversions for irrigation of about 500 acres will materially affect low flow.

REVISIONS (WATER YEARS).--WSP 568: 1920, 1922. WSP 1512: 1915, 1918-19, 1923(M), 1924-26, 1928, 1930(M), 1931-33, 1934(M), 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	57	48	38	36	31	25	20	23	8.6	5.3	18
2	72	56	49	38	35	30	24	21	22	8.4	5.0	17
3	74	55	52	40	34	30	25	18	20	8.2	4.5	19
4	102	55	49	40	34	30	24	18	18	8.3	5.7	19
5	91	54	49	40	36	30	24	18	18	8.2	6.0	19
6	81	55	49	37	37	30	24	27	17	8.2	6.9	18
7	75	53	47	37	37	31	24	46	16	8.2	7.9	19
8	75	54	47	37	36	30	23	37	16	7.7	7.6	22
9	76	54	47	37	36	29	22	32	16	7.0	8.6	24
10	72	53	48	36	36	29	23	36	17	7.0	27	23
11	71	53	47	35	38	29	23	32	17	7.2	40	22
12	68	52	46	35	40	29	22	30	16	7.4	40	21
13	69	52	44	34	38	30	21	30	15	7.0	608	19
14	68	52	44	34	37	29	20	37	14	6.7	188	18
15	66	49	43	34	37	28	19	34	26	6.1	72	19
16	64	49	42	36	37	28	18	34	21	4.3	51	20
17	62	49	42	36	36	28	18	34	28	4.2	42	19
18	65	48	42	35	36	26	17	31	28	5.4	35	18
19	68	48	42	35	36	26	21	30	24	6.7	32	17
20	67	48	42	34	35	33	22	29	21	6.4	30	16
21	64	48	41	33	34	31	24	28	18	6.3	27	1,180
22	62	50	41	34	34	30	22	27	16	6.4	21	807
23	60	51	41	35	34	29	21	27	14	6.3	19	136
24	58	50	41	35	34	28	19	26	13	8.1	20	91
25	58	49	39	35	33	27	18	25	12	9.1	20	75
26	59	48	39	36	33	28	18	25	11	8.5	20	66
27	63	48	39	36	33	27	20	24	10	8.2	19	60
28	60	47	39	37	33	26	21	23	10	7.6	23	57
29	59	46	39	37	32	25	21	22	9.7	7.2	22	54
30	58	46	38	35	------	25	19	22	8.8	7.1	20	50
31	58	------	38	35	------	25	------	23	------	6.3	19	------
TOTAL	2,118	1,529	1,354	1,116	1,027	887	642	866	515.5	222.3	1,452.5	2,963
MEAN	68.3	51.0	43.7	36.0	35.4	28.6	21.4	27.9	17.2	7.17	46.9	98.8
MAX	102	57	52	40	40	33	25	46	28	9.1	608	1,180
MIN	58	46	38	33	32	25	17	18	8.8	4.2	4.5	16
AC-FT	4,200	3,030	2,690	2,210	2,040	1,760	1,270	1,720	1,020	441	2,880	5,880

CAL YR 1971 TOTAL 30,815.5 MEAN 84.4 MAX 5,180 MIN 1.2 AC-FT 61,120
WTR YR 1972 TOTAL 14,692.3 MEAN 40.1 MAX 1,180 MIN 4.2 AC-FT 29,140

PEAK DISCHARGE (BASE, 1,200 CFS).--Aug. 13 (0845) 1,930 cfs (4.46 ft); Sept. 21 (2000) 4,050 cfs (5.86 ft).

08150000 Llano River near Junction, Tex.

LOCATION.--Lat 30°29'51", long 99°43'24", Kimble County, on right bank 600 ft north of Farm Road 2169, 0.5 mile downstream from point where slough diverts floodwater from main channel, 3 miles east of Junction, 3.8 miles downstream from confluence of North Llano and South Llano Rivers, 4.3 miles upstream from Johnson Fork, and at mile 106.7.

DRAINAGE AREA.--1,874 sq mi.

PERIOD OF RECORD.--September 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,630.32 ft above mean sea level. Prior to Aug. 14, 1925, nonrecording gage, and Aug. 14, 1925, to May 17, 1940, water-stage recorder at present site and datum. May 18, 1940, to Aug. 17, 1944, water-stage recorder at site 5,330 ft upstream at datum 6.0 ft higher. Since Aug. 18, 1944, gage at site 5,330 ft upstream has been used as a supplementary gage for stages above 5 ft.

AVERAGE DISCHARGE.--57 years, 184 cfs (133,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,750 cfs Oct. 20 (gage height, 7.22 ft); minimum, 72 cfs July 28, Aug. 1-3.
Period of record: Maximum discharge, 319,000 cfs June 14, 1935 (gage height, 41.4 ft at supplementary gage, from floodmarks), from rating curve extended above 54,000 cfs on basis of slope-area measurements of 154,000 and 319,000 cfs; minimum, 3.1 cfs Aug. 16, 17, 1956.
Maximum stage since at least 1875, that of June 14, 1935. There was a major flood in 1889 which was the highest known until 1935.

REMARKS.--Records good. Small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 568: 1915-16, 1918-20, 1922. WSP 1342: Drainage area. WSP 1922: 1920, 1923. WRD 1971: 1970(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	203	163	147	142	123	110	104	126	89	74	135
2	205	199	173	146	140	119	111	111	125	88	73	134
3	207	194	172	148	136	120	109	98	121	89	78	352
4	268	189	166	149	135	122	107	94	121	89	100	221
5	244	188	170	149	138	120	109	94	116	96	98	180
6	225	186	166	149	138	120	110	130	112	95	88	166
7	213	184	164	148	135	121	108	173	110	93	84	156
8	212	184	163	147	135	118	105	453	108	92	85	149
9	215	183	165	146	135	116	103	273	109	90	91	148
10	208	180	167	146	135	116	104	221	111	89	106	145
11	202	180	162	146	138	117	104	193	114	85	104	141
12	199	178	159	144	137	119	102	178	112	77	157	137
13	202	175	157	143	135	119	98	170	109	82	3,600	134
14	199	175	158	142	134	118	97	180	107	85	1,020	133
15	196	174	155	142	132	116	94	206	127	83	426	132
16	193	173	154	142	131	115	93	188	133	85	306	132
17	193	171	153	142	130	114	93	178	123	84	258	130
18	194	169	153	144	127	113	93	169	126	85	231	127
19	204	166	153	142	127	113	101	164	122	83	213	126
20	3,660	166	153	141	127	125	103	168	116	81	198	123
21	690	166	152	138	128	127	106	164	112	78	187	785
22	371	169	149	138	127	119	103	160	109	78	179	1,190
23	299	174	149	138	126	117	99	156	106	82	173	301
24	266	169	149	138	125	116	98	152	105	84	166	227
25	247	166	149	135	124	115	95	148	104	82	160	198
26	237	166	149	136	123	115	92	143	101	81	156	183
27	240	166	149	138	123	114	94	137	98	80	152	175
28	226	164	149	138	123	112	98	135	95	75	148	169
29	219	162	149	138	123	110	98	133	92	75	143	164
30	212	162	147	144	------	109	95	131	91	76	144	156
31	207	------	146	142	------	110	------	129	------	76	137	------
TOTAL	10,860	5,281	4,863	4,426	3,809	3,628	3,032	5,133	3,361	2,607	9,135	6,649
MEAN	350	176	157	143	131	117	101	166	112	84.1	295	222
MAX	3,660	203	173	149	142	127	111	453	133	96	3,600	1,190
MIN	193	162	146	135	123	109	92	94	91	75	73	123
AC-FT	21,540	10,470	9,650	8,780	7,560	7,200	6,010	10,180	6,670	5,170	18,120	13,190

CAL YR 1971 TOTAL 81,080 MEAN 222 MAX 5,990 MIN 44 AC-FT 160,800
WTR YR 1972 TOTAL 62,784 MEAN 172 MAX 3,660 MIN 73 AC-FT 124,500

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	0730	7.22	8,750
8-13	1730	5.48	5,450
9-21	2230	4.59	3,610

08150700 Llano River near Mason, Tex.

LOCATION (revised).--Lat 30°39'35", long 99°06'29", Mason County, on right bank 98 ft downstream from bridge on U.S. Highway 87, 1.0 mile upstream from Beaver Creek, 9.1 miles southeast of Mason, 10 miles downstream from James River, and at mile 54.5.

DRAINAGE AREA.--3,280 sq mi.

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,230.36 ft above mean sea level. Prior to Jan. 19, 1971, at site 190 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 23,200 cfs Oct. 20 (gage height, 11.40 ft); minimum, 66 cfs July 2.
Period of record: Maximum discharge, 55,700 cfs Oct. 5, 1969 (gage height, 18.53 ft), from slope-area measurement of peak flow with backwater from Beaver Creek as indicated from rating curve extended above 15,000 cfs on basis of step-backwater analysis at gage heights 14.34 ft and 22.16 ft; minimum, 16 cfs July 23, 1971.
Maximum flood since at least 1875 occurred June 14, 1935 (about 350,000 cfs), based on flood histories of gaging stations near Junction and Llano.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	335	231	250	201	160	128	119	162	84	72	168
2	224	325	258	252	199	154	129	140	157	70	70	165
3	237	309	291	241	192	153	129	148	151	72	71	163
4	2,850	295	274	242	187	154	127	130	148	84	123	247
5	795	290	323	237	184	149	127	118	144	82	204	354
6	466	287	322	217	188	152	126	156	143	79	198	266
7	395	280	294	220	184	153	125	339	137	82	160	224
8	365	278	296	220	183	149	121	324	132	89	139	194
9	492	280	310	220	183	148	118	407	132	82	116	172
10	375	276	358	220	182	148	114	360	138	76	162	159
11	316	271	344	226	190	151	115	317	137	71	172	154
12	311	266	319	206	192	152	115	411	139	74	198	152
13	372	261	315	202	188	153	113	453	139	101	521	148
14	319	256	311	196	186	152	106	671	140	94	3,190	146
15	291	253	310	192	183	149	100	404	132	82	1,140	140
16	266	253	308	191	178	144	92	761	132	79	741	141
17	250	251	311	195	173	142	87	751	150	75	420	174
18	239	247	304	199	167	141	87	356	166	79	661	147
19	4,400	238	299	197	165	140	93	280	143	102	308	143
20	8,120	237	299	196	164	149	119	276	131	101	266	137
21	3,430	237	304	192	165	157	128	240	126	91	244	874
22	1,130	241	298	188	165	157	121	222	126	84	229	2,220
23	800	361	274	185	164	154	119	213	127	80	242	1,390
24	570	298	258	185	163	148	114	212	112	81	322	534
25	472	266	244	184	162	142	106	202	111	81	216	349
26	427	254	240	183	159	138	103	185	105	81	194	285
27	530	245	240	189	156	137	115	174	99	77	179	250
28	448	240	251	191	159	135	118	166	92	74	179	230
29	400	237	249	193	161	129	116	160	93	72	177	216
30	368	234	241	193	------	126	119	164	92	69	170	209
31	349	------	237	194	------	128	------	163	------	68	168	------
TOTAL	30,238	8,101	8,913	6,396	5,123	4,544	3,430	9,022	3,936	2,516	11,252	10,151
MEAN	975	270	288	206	177	147	114	291	131	81.2	363	338
MAX	8,120	361	358	252	201	160	129	761	166	102	3,190	2,220
MIN	224	234	231	183	156	126	87	118	92	68	70	137
AC-FT	59,980	16,070	17,680	12,690	10,160	9,010	6,800	17,900	7,810	4,990	22,320	20,130

CAL YR 1971 TOTAL 138,081 MEAN 378 MAX 12,900 MIN 17 AC-FT 273,900
WTR YR 1972 TOTAL 103,622 MEAN 283 MAX 8,120 MIN 68 AC-FT 205,500

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	0500	6.52	4,810	8-14	0830	6.60	4,880
10-20	0030	11.40	23,200	9-22	1630	6.22	3,960

08150800 Beaver Creek near Mason, Tex.

LOCATION.--Lat 30°38'36", long 99°05'44", Mason County, on left bank at upstream side of bridge on U.S. Highway 87, 1.4 miles upstream from Llano River, 6.4 miles downstream from Spring Creek, and 11.1 miles southeast of Mason.

DRAINAGE AREA.--218 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,253.24 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 19.6 cfs (14,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,200 cfs Oct. 19 (gage height, 10.04 ft); minimum daily, 0.10 cfs July 14-28.
Period of record: Maximum discharge, 23,200 cfs May 16, 1965 (gage height, 13.58 ft), from rating curve extended above 7,400 cfs on basis of slope-area measurement at gage height 12.50 ft; no flow at times.

REMARKS.--Records fair. No known regulation or diversion above station.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1964-65, 1966(M), 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	33	11	11	12	7.0	3.4	3.0	4.0	.35	.20	2.8
2	3.2	29	11	11	12	6.3	3.6	3.1	3.9	.30	.20	2.1
3	3.3	26	11	11	9.6	6.2	3.4	2.8	3.3	.29	.30	2.0
4	157	23	11	11	8.8	6.2	3.1	2.6	3.0	.28	24	2.4
5	51	22	11	11	8.7	6.2	3.1	2.4	2.6	.29	34	7.4
6	27	21	11	11	9.2	6.2	3.4	18	2.5	.26	5.9	9.0
7	16	20	11	11	8.8	6.2	3.6	38	2.4	.23	3.4	3.6
8	12	20	11	11	8.2	6.2	3.3	20	2.4	.21	2.6	2.4
9	16	20	11	11	8.4	6.0	2.9	9.9	2.6	.20	1.8	2.0
10	11	17	11	12	8.5	5.9	2.8	7.7	2.9	.20	1.8	1.6
11	8.0	16	11	11	11	5.9	2.8	9.0	3.4	.20	4.6	1.5
12	6.5	16	11	11	12	5.9	2.9	10	3.1	.20	17	1.4
13	7.9	15	11	10	10	5.9	2.8	14	2.9	.20	10	1.4
14	10	14	11	9.8	9.6	5.9	2.6	150	2.5	.10	5.6	1.3
15	6.9	14	11	9.4	9.0	5.7	2.4	29	2.3	.10	3.6	1.1
16	5.3	14	11	9.4	8.7	5.3	2.1	181	3.2	.10	3.0	1.3
17	4.4	14	11	9.5	8.5	5.0	2.0	138	2.8	.10	2.9	1.6
18	4.3	14	11	10	8.0	4.8	2.0	34	2.1	.10	2.6	1.4
19	2,390	13	11	10	7.7	4.5	2.1	23	2.2	.10	2.4	1.0
20	1,240	13	11	10	7.7	5.4	2.3	17	1.9	.10	2.2	.91
21	124	13	11	9.5	7.7	6.7	3.6	13	1.3	.10	2.1	.90
22	64	14	11	9.4	7.7	6.3	4.4	10	.91	.10	2.0	1.0
23	55	22	11	8.7	7.7	5.1	3.6	9.2	.76	.10	16	4.5
24	36	17	11	8.4	7.7	4.8	2.6	9.2	.63	.10	16	4.5
25	29	15	11	8.1	7.6	4.5	2.4	7.9	.57	.10	6.2	3.6
26	36	14	11	7.6	7.0	4.3	2.2	6.7	.52	.10	3.2	2.8
27	107	13	11	8.5	6.8	4.0	2.6	5.7	.46	.10	2.0	2.2
28	57	13	11	10	6.8	3.8	4.4	5.1	.46	.10	1.6	1.8
29	46	12	11	12	6.9	3.4	4.2	4.4	.42	.20	1.5	1.5
30	40	12	11	15	------	3.2	3.7	4.4	.39	.20	3.2	1.4
31	36	------	11	13	------	3.2	------	4.1	------	.30	5.6	------
TOTAL	4,613.5	519	341	321.3	252.3	166.0	90.3	792.2	62.42	5.41	187.50	72.41
MEAN	149	17.3	11.0	10.4	8.70	5.35	3.01	25.6	2.08	.17	6.05	2.41
MAX	2,390	33	11	15	12	7.0	4.4	181	4.0	.35	34	9.0
MIN	3.2	12	11	7.6	6.8	3.2	2.0	2.4	.39	.10	.20	.90
AC-FT	9,150	1,030	676	637	500	329	179	1,570	124	11	372	144

CAL YR 1971 TOTAL 8,286.31 MEAN 22.7 MAX 2,390 MIN .04 AC-FT 16,440
WTR YR 1972 TOTAL 7,423.34 MEAN 20.3 MAX 2,390 MIN .10 AC-FT 14,720

PEAK DISCHARGE (BASE, 1,000 CFS).--Oct. 19 (2230) 13,200 cfs (10.04 ft).

08151500 Llano River at Llano, Tex.

LOCATION.--Lat 30°45'04", long 98°40'10", Llano County, on right bank in Llano, 0.4 mile downstream from bridge on State Highway 16, 7 miles upstream from Little Llano River, and at mile 24.2.

DRAINAGE AREA.--4,233 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 970.01 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 329 cfs (238,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,500 cfs Oct. 20 (gage height, 13.37 ft); minimum, 56 cfs Aug. 2, 3.
Period of record: Maximum discharge, 232,000 cfs Sept. 10, 1952 (gage height, 32.6 ft), from rating curve extended above 129,000 cfs on basis of slope-area measurement of 232,000 cfs; no flow at times in 1952-56, 1964.
Maximum stage since at least 1879, 41.5 ft June 14, 1935 (discharge, 380,000 cfs), from information by local resident.

REMARKS.--Records good. Many small diversions above station. Part of low flow of Llano River disappears into various formations, many of which are faulted, between stations near Junction and Llano.

REVISIONS.--WSP 1342: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	566	306	409	300	200	125	143	189	75	61	162
2	304	544	343	448	301	189	126	310	180	75	58	158
3	299	507	462	395	286	180	125	230	170	75	61	155
4	4,050	471	449	361	271	177	123	178	159	74	87	156
5	1,900	437	481	337	257	172	129	171	152	74	81	218
6	944	439	601	326	264	169	129	245	148	72	183	352
7	687	417	516	326	271	175	125	634	143	76	210	273
8	569	381	454	329	271	172	120	692	138	75	162	218
9	627	381	522	332	271	166	116	559	143	78	122	193
10	659	411	785	338	267	161	118	653	143	81	115	174
11	520	393	626	329	294	159	117	668	143	75	147	159
12	469	389	502	319	299	161	114	638	153	70	189	151
13	449	359	451	312	294	161	113	896	161	73	207	143
14	558	359	438	301	289	169	112	988	161	89	1,460	139
15	503	352	429	283	274	164	107	996	164	93	1,730	135
16	441	347	401	278	267	157	98	1,370	153	82	860	125
17	408	354	381	280	254	149	92	2,660	153	77	699	159
18	490	354	371	299	245	141	85	1,100	159	78	603	189
19	7,350	336	369	307	234	140	86	689	164	87	571	161
20	12,200	310	364	306	229	153	90	529	164	87	383	141
21	6,080	311	352	297	225	167	120	444	151	97	322	132
22	2,130	333	342	293	224	179	136	373	138	97	284	1,230
23	1,540	445	327	311	223	180	133	323	125	90	293	2,110
24	1,170	538	330	300	223	178	124	292	112	81	409	981
25	883	425	336	290	218	165	115	281	104	77	408	553
26	787	365	340	280	218	158	110	260	94	73	282	415
27	1,310	364	339	274	206	153	131	234	86	71	235	330
28	1,040	334	338	305	200	148	130	210	80	68	210	281
29	762	316	340	323	200	141	149	205	79	70	195	250
30	676	310	338	331	------	134	142	197	77	69	184	227
31	629	------	328	313	------	125	------	194	------	64	172	------
TOTAL	50,749	11,848	12,961	9,932	7,375	5,043	3,540	17,362	4,186	2,423	10,983	10,070
MEAN	1,637	395	418	320	254	163	118	560	140	78.2	354	336
MAX	12,200	566	785	448	301	200	149	2,660	189	97	1,730	2,110
MIN	299	310	306	274	200	125	85	143	77	64	58	125
AC-FT	100,700	23,500	25,710	19,700	14,630	10,000	7,020	34,440	8,300	4,810	21,780	19,970

CAL YR 1971 TOTAL 182,189.0 MEAN 499 MAX 12,200 MIN 4.0 AC-FT 361,400
WTR YR 1972 TOTAL 146,472.0 MEAN 400 MAX 12,200 MIN 58 AC-FT 290,500

PEAK DISCHARGE (BASE, 7,500 CFS).--Oct. 4 (1230) 7,750 cfs (7.78 ft); Oct. 20 (0630) 24,500 cfs (13.37 ft).

08152000 Sandy Creek near Kingsland, Tex.

LOCATION.--Lat 30°33'30", long 98°28'19", Llano County, on left bank at downstream side of bridge on State Highway 71, 3.9 miles upstream from Lake Lyndon B. Johnson, and 7.3 miles south of Kingsland.

DRAINAGE AREA.--327 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 862.31 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 61.9 cfs (44,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,800 cfs Oct. 19 (gage height, 13.50 ft); minimum daily, 0.90 cfs Apr. 25.
Period of record: Maximum discharge, 13,800 cfs Oct. 19, 1971 (gage height, 13.50 ft); no flow at times.
The flood of Sept. 11, 1952, which was the highest since at least 1881, reached a stage of 34.2 ft, discharge 163,000 cfs, from slope-area measurement at gage site.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	54	18	21	23	8.9	5.5	75	34	19	5.1	10
2	6.1	50	29	20	22	8.4	4.7	79	31	17	3.4	9.4
3	6.3	44	32	22	18	8.4	4.1	87	29	16	3.1	8.9
4	166	40	30	22	17	8.4	4.1	73	28	17	14	9.1
5	305	38	35	18	16	7.9	4.4	67	26	30	28	10
6	79	36	49	18	16	7.9	5.1	502	26	27	15	14
7	47	34	42	18	15	7.9	4.4	474	24	20	6.7	12
8	37	33	38	18	15	8.4	4.1	234	23	16	4.3	12
9	34	33	45	19	14	8.4	3.8	125	26	15	3.9	11
10	29	32	75	20	14	8.4	4.1	169	28	12	3.2	11
11	23	30	64	20	18	8.4	4.1	234	28	9.9	18	11
12	20	29	48	18	18	8.9	4.1	509	29	9.3	41	9.7
13	18	27	41	17	17	9.4	4.1	189	31	8.9	20	8.4
14	22	25	36	15	15	9.4	3.5	1,170	31	8.6	11	7.9
15	17	24	35	15	15	8.9	3.2	268	1,080	6.8	5.3	8.3
16	16	24	31	15	13	7.9	3.2	634	120	5.5	3.8	12
17	13	25	29	15	12	7.4	3.0	910	1,740	5.5	12	18
18	277	27	27	16	12	7.0	2.8	295	356	6.0	8.3	16
19	3,090	28	25	17	11	7.0	2.8	175	120	5.0	4.2	14
20	3,600	24	24	16	11	12	2.4	120	56	6.1	3.5	12
21	530	22	23	15	11	13	2.0	85	42	6.3	3.2	11
22	210	21	21	15	11	11	1.8	59	34	7.4	3.1	9.9
23	137	22	20	15	11	8.9	1.5	53	35	6.0	27	9.8
24	100	22	20	15	11	8.4	1.1	50	35	4.6	20	14
25	72	22	20	13	9.9	7.9	.90	48	34	4.3	19	13
26	61	22	20	14	9.4	7.0	1.0	46	33	3.8	11	8.2
27	221	21	21	15	9.4	6.6	1,450	43	28	2.7	7.3	6.3
28	147	19	22	15	9.4	6.2	378	42	26	2.2	11	5.5
29	85	18	22	18	8.9	5.5	135	42	22	2.7	24	5.3
30	64	18	21	22	------	5.5	91	41	19	11	10	4.7
31	57	------	21	22	------	5.5	------	39	------	8.9	12	------
TOTAL	9,496.6	864	984	539	403.0	254.8	2,139.80	6,937	4,174	320.5	361.4	312.4
MEAN	306	28.8	31.7	17.4	13.9	8.22	71.3	224	139	10.3	11.7	10.4
MAX	3,600	54	75	22	23	13	1,450	1,170	1,740	30	41	18
MIN	6.1	18	18	13	8.9	5.5	.90	39	19	2.2	3.1	4.7
AC-FT	18,840	1,710	1,950	1,070	799	505	4,240	13,760	8,280	636	717	620

CAL YR 1971 TOTAL 14,961.54 MEAN 41.0 MAX 3,600 MIN 0 AC-FT 29,680
WTR YR 1972 TOTAL 26,786.50 MEAN 73.2 MAX 3,600 MIN .90 AC-FT 53,130

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2330	13.50	13,800	5-14	0500	8.27	2,610
4-27	1530	10.40	6,310	5-17	0030	7.94	2,160
5- 6	1330	7.67	1,700	6-15	0700	10.00	5,490
5-12	0500	7.21	1,100	6-17	1230	10.42	6,310

08153500 Pedernales River near Johnson City, Tex.

LOCATION.--Lat 30°17'27", long 98°24'01", Blanco County, near center of span at downstream side of bridge on U.S. Highway 281, 0.2 mile downstream from Towhead Creek, 1.1 miles northeast of Johnson City, 3.4 miles downstream from Buffalo Creek, and at mile 48.2.

DRAINAGE AREA.--947 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,096.70 ft above mean sea level. May 4 to Sept. 13, 1939, nonrecording gage and Sept. 14, 1939, to Sept. 10, 1952, water-stage recorder at upstream side of bridge at same datum. Sept. 11, 1952, to June 29, 1953, nonrecording gage and June 30, 1953, to Oct. 7, 1954, water-stage recorder at site 360 ft downstream at same datum.

AVERAGE DISCHARGE.--33 years, 157 cfs (113,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 35,700 cfs Oct. 19 (gage height, 17.15 ft); minimum daily, 20 cfs Sept. 21.
Period of record: Maximum discharge, 441,000 cfs Sept. 11, 1952 (gage height, 42.5 ft, from floodmark), from rating curve extended above 116,000 cfs on basis of slope-area measurement of 441,000 cfs; no flow at times in 1951-52, 1954, 1956-57, 1963-64, 1967-68, 1971.
Maximum stage since at least 1859, 42.5 ft Sept. 11, 1952; flood of July 1869 reached a stage of 33 ft, from information by local residents.

REMARKS.--Records good. Some diversions above station for irrigation. At end of year, flow from 15.6 sq mi above this station was partly controlled by four floodwater-retarding structures with a total combined capacity of 5,160 acre-ft below the flood-spillway crests, of which 4,590 acre-ft is floodwater-retarding capacity and 570 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. During year the city of Fredericksburg discharged 967 acre-ft of sewage effluent into the river. Records furnished by the city of Johnson City show that 133 acre-ft of water was diverted from pool at gage and no treated sewage effluent was returned to the river below gage. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1632: 1953(M), 1957, 1958(M). WRD Texas 1969: 1967, 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	170	80	98	170	63	48	75	116	67	35	34
2	28	159	106	98	125	62	46	358	108	58	36	33
3	27	148	135	97	116	60	46	303	114	56	35	29
4	50	138	123	93	104	59	45	121	108	62	37	32
5	242	130	139	88	98	57	46	75	100	81	58	36
6	162	124	163	88	101	60	46	447	89	108	79	64
7	102	120	155	88	94	63	46	1,680	80	77	53	53
8	79	116	145	89	93	60	45	629	77	64	43	41
9	68	114	171	89	88	61	43	279	90	63	37	35
10	59	116	305	91	87	61	44	162	110	56	34	32
11	56	108	200	91	91	59	40	720	326	51	77	29
12	50	107	159	89	104	61	34	1,060	696	47	397	30
13	49	104	145	81	95	65	33	765	211	56	127	28
14	54	99	140	79	92	65	32	2,210	138	56	88	26
15	54	97	135	73	86	60	29	897	1,720	47	70	27
16	50	95	127	71	82	59	26	382	608	42	68	28
17	47	117	123	72	79	57	28	3,470	1,840	39	102	26
18	103	225	120	80	76	53	27	1,030	800	39	177	25
19	10,600	127	116	80	71	50	26	463	259	39	76	24
20	7,060	105	114	80	70	67	26	314	181	54	51	24
21	1,000	99	109	80	71	93	27	263	150	53	44	20
22	461	100	107	80	71	88	28	232	132	50	42	36
23	333	114	104	71	72	72	28	215	122	85	39	30
24	281	117	99	62	70	66	31	203	113	65	62	48
25	216	104	99	62	71	59	28	185	104	44	66	59
26	188	95	101	62	66	58	27	167	97	38	52	46
27	1,150	93	105	71	67	57	28	154	88	34	44	41
28	482	90	106	71	65	53	945	144	80	33	39	34
29	257	88	107	146	64	50	261	135	78	28	39	33
30	209	80	109	391	------	50	112	128	71	28	41	30
31	187	------	100	206	------	49	------	122	------	33	36	------
TOTAL	23,733	3,499	4,047	3,017	2,539	1,897	2,271	17,388	8,806	1,653	2,184	1,033
MEAN	766	117	131	97.3	87.6	61.2	75.7	561	294	53.3	70.5	34.4
MAX	10,600	225	305	391	170	93	945	3,470	1,840	108	397	64
MIN	27	80	80	62	64	49	26	75	71	28	34	20
AC-FT	47,070	6,940	8,030	5,980	5,040	3,760	4,500	34,490	17,470	3,280	4,330	2,050

CAL YR 1971 TOTAL 44,787.14 MEAN 123 MAX 10,600 MIN 0 AC-FT 88,840
WTR YR 1972 TOTAL 72,067.00 MEAN 197 MAX 10,600 MIN 20 AC-FT 142,900

PEAK DISCHARGE (BASE, 4,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	0815	17.15	35,700	5-17	0945	13.47	10,000
5- 6	2315	12.32	5,120	6-15	1000	12.32	5,120
5-14	1400	12.37	5,450	6-17	1615	12.48	5,780

08154500 Lake Travis near Austin, Tex.

LOCATION.--Lat 30°23'29", long 97°54'24", Travis County, in powerhouse at Mansfield Dam on Colorado River, 7.3 miles downstream from Sandy Creek, 12 miles northwest of Austin, and at mile 318.0.

DRAINAGE AREA.--38,130 sq mi, approximately, of which 12,880 sq mi (revised) is probably noncontributing.

PERIOD OF RECORD.--September 1940 to current year. Prior to October 1948, published as Marshall Ford Reservoir near Austin.

GAGE.--Nonrecording gage. Datum of gage is 0.12 ft above mean sea level (levels by Bureau of Reclamation). Prior to Dec. 26, 1940, staff gages on left bank near dam, datum at mean sea level, unadjusted. Dec. 26, 1940, to February 1942, mercury manometer in powerhouse, datum at mean sea level, unadjusted.

EXTREMES (at 2400).--Current year: Maximum contents, 1,214,000 acre-ft Oct. 23 (gage height, 683.11 ft); minimum, 932,000 acre-ft Sept. 1 (gage height, 667.08 ft).
Period of record: Maximum contents, 1,770,000 acre-ft May 18, 1957 (gage height, 707.4 ft); minimum, 332,600 acre-ft Aug. 13, 14, 1951, (gage height, 614.2 ft).

REMARKS.--Lake is formed by concrete gravity-type dam. Storage began Sept. 9, 1940; dam completed early in 1942. Capacity between gage heights 681.0 and 714.0 ft is 778,000 acre-ft and is reserved for flood control. Figures given herein represent total contents. Water used for power development and for irrigation below Columbus. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Pedernales River near Johnson City (station 08153500). Data regarding dam and lake are shown in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of spillway	714.0	1,950,000
Top of designated power storage	681.0	1,172,000
Invert of penstocks	552.0	54,800
Invert of twenty-four 8.5-foot-diameter paradox gates	535.8	27,900

COOPERATION.--Records of daily gage heights and capacity curve based on October 1939 survey furnished by Lower Colorado River Authority.

REVISIONS.--WSP 1342: Drainage area.

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

667.0	930,400	678.0	1,116,000
669.0	961,400	680.0	1,152,000
672.0	1,009,500	682.0	1,192,000
674.0	1,044,000	683.11	1,214,000
676.0	1,080,000	684.0	1,232,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	932.00	1,196.00	1,148.00	1,064.00	1,116.00	1,116.00	1,087.00	1,026.00	1,105.00	1,091.00	1,058.00	1,006.00
2	939.70	1,188.00	1,150.00	1,064.00	1,116.00	1,116.00	1,085.00	1,032.00	1,107.00	1,087.00	1,057.00	1,005.00
3	945.90	1,186.00	1,148.00	1,066.00	1,116.00	1,116.00	1,084.00	1,030.00	1,105.00	1,085.00	1,057.00	1,001.00
4	955.20	1,182.00	1,145.00	1,067.00	1,114.00	1,116.00	1,082.00	1,026.00	1,102.00	1,087.00	1,055.00	998.00
5	969.20	1,180.00	1,145.00	1,062.00	1,114.00	1,116.00	1,098.00	1,023.00	1,102.00	1,084.00	1,051.00	996.30
6	980.10	1,180.00	1,141.00	1,058.00	1,116.00	1,116.00	1,078.00	1,023.00	1,100.00	1,085.00	1,049.00	996.30
7	988.20	1,178.00	1,138.00	1,062.00	1,116.00	1,116.00	1,076.00	1,032.00	1,098.00	1,082.00	1,046.00	994.60
8	996.30	1,178.00	1,136.00	1,064.00	1,112.00	1,116.00	1,073.00	1,034.00	1,096.00	1,078.00	1,044.00	994.60
9	1,005.00	1,176.00	1,134.00	1,064.00	1,109.00	1,116.00	1,067.00	1,032.00	1,093.00	1,076.00	1,042.00	991.40
10	1,013.00	1,174.00	1,130.00	1,069.00	1,105.00	1,112.00	1,064.00	1,037.00	1,091.00	1,075.00	1,040.00	988.20
11	1,020.00	1,168.00	1,127.00	1,073.00	1,107.00	1,112.00	1,062.00	1,042.00	1,087.00	1,073.00	1,039.00	986.60
12	1,023.00	1,170.00	1,123.00	1,073.00	1,109.00	1,112.00	1,062.00	1,049.00	1,085.00	1,071.00	1,035.00	985.00
13	1,025.00	1,168.00	1,121.00	1,076.00	1,109.00	1,109.00	1,060.00	1,060.00	1,085.00	1,071.00	1,032.00	983.30
14	1,028.00	1,166.00	1,120.00	1,080.00	1,107.00	1,109.00	1,060.00	1,073.00	1,084.00	1,071.00	1,032.00	981.70
15	1,034.00	1,164.00	1,116.00	1,084.00	1,109.00	1,107.00	1,060.00	1,082.00	1,085.00	1,071.00	1,034.00	978.50
16	1,035.00	1,164.00	1,114.00	1,085.00	1,109.00	1,105.00	1,058.00	1,091.00	1,089.00	1,073.00	1,032.00	976.90
17	1,039.00	1,168.00	1,107.00	1,085.00	1,109.00	1,103.00	1,055.00	1,107.00	1,098.00	1,073.00	1,032.00	975.40
18	1,044.00	1,170.00	1,102.00	1,087.00	1,109.00	1,103.00	1,051.00	1,112.00	1,084.00	1,073.00	1,026.00	975.40
19	1,076.00	1,166.00	1,094.00	1,089.00	1,109.00	1,102.00	1,049.00	1,116.00	1,102.00	1,075.00	1,026.00	975.40
20	1,156.00	1,164.00	1,091.00	1,091.00	1,109.00	1,102.00	1,046.00	1,120.00	1,105.00	1,073.00	1,023.00	976.90
21	1,184.00	1,164.00	1,087.00	1,091.00	1,111.00	1,102.00	1,044.00	1,121.00	1,103.00	1,071.00	1,021.00	973.80
22	1,200.00	1,162.00	1,082.00	1,091.00	1,111.00	1,100.00	1,039.00	1,121.00	1,103.00	1,071.00	1,020.00	973.80
23	1,214.00	1,164.00	1,080.00	1,091.00	1,111.00	1,098.00	1,026.00	1,120.00	1,102.00	1,069.00	1,020.00	976.90
24	1,212.00	1,160.00	1,076.00	1,091.00	1,112.00	1,096.00	1,030.00	1,120.00	1,102.00	1,069.00	1,018.00	978.50
25	1,210.00	1,158.00	1,076.00	1,096.00	1,112.00	1,094.00	1,025.00	1,120.00	1,098.00	1,069.00	1,016.00	976.90
26	1,210.00	1,158.00	1,076.00	1,096.00	1,112.00	1,093.00	1,023.00	1,120.00	1,100.00	1,069.00	1,015.00	980.10
27	1,208.00	1,156.00	1,075.00	1,098.00	1,112.00	1,096.00	1,030.00	1,120.00	1,098.00	1,069.00	1,013.00	978.50
28	1,208.00	1,154.00	1,071.00	1,102.00	1,112.00	1,094.00	1,035.00	1,118.00	1,098.00	1,069.00	1,013.00	976.90
29	1,206.00	1,150.00	1,069.00	1,109.00	1,114.00	1,093.00	1,032.00	1,116.00	1,096.00	1,067.00	1,011.00	978.50
30	1,204.00	1,148.00	1,066.00	1,112.00	------	1,091.00	1,028.00	1,112.00	1,096.00	1,064.00	1,009.00	976.90
31	1,200.00	------	1,066.00	1,120.00	------	1,089.00	------	1,109.00	------	1,062.00	1,008.00	------
(†)	682.38	679.82	675.21	678.15	677.91	676.52	673.13	677.63	676.87	675.05	671.86	670.05
(*)	+275.6	-52.0	-82.0	+54.0	-6.0	-25.0	-61.0	+81.0	-13.0	-34.0	-54.0	-31.1
MAX	1,214.00	1,196.00	1,150.00	1,120.00	1,116.00	1,116.00	1,098.00	1,121.00	1,107.00	1,091.00	1,058.00	1,006.00
MIN	932.00	1,148.00	1,066.00	1,058.00	1,105.00	1,089.00	1,023.00	1,023.00	1,084.00	1,062.00	1,008.00	973.80

CAL YR 1971..... * -48.0 MAX 1,214.00 MIN 757.50
WTR YR 1972..... * +52.5 MAX 1,214.00 MIN 932.00

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
NOTE.--All figures expressed in thousands.

08157000 Waller Creek at 38th Street, Austin, Tex.

LOCATION.--Lat 30°17'49", long 97°43'36", Travis County, on right bank 200 ft upstream from bridge at East 38th Street in Austin, 1.1 miles upstream from West Branch of Waller Creek, and 3.3 miles upstream from Colorado River.

DRAINAGE AREA.--2.31 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 555.44 ft above mean sea level.

AVERAGE DISCHARGE.--17 years, 1.66 cfs (9.76 inches per year, 1,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs May 2 (gage height, 7.09 ft); minimum daily, 0.08 cfs Sept. 16, 18, 20.
Period of record: Maximum discharge, 1,970 cfs Oct. 29, 1960 (gage height, 7.77 ft); no flow for many days in 1955-57, 1964.

REMARKS.--Records good. Flow slightly regulated at times by a small reservoir at Holy Cross High School (formerly St. Mary's Academy) on East 41st Street and a small swimming pool at the school which is drained into the creek every week or two during the summer. Water from other swimming pools also drain into the creek. Station is part of hydrologic research project to study rainfall-runoff relation for small urban areas. Two recording and three nonrecording rain gages are distributed in the area so that rainfall on the watershed can be determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.13	2.2	.79	.94	.25	.25	11	.60	.42	.40	.13
2	.10	.12	18	.25	.38	.20	.23	57	.22	.42	.53	.45
3	2.3	.10	.61	.26	.26	.19	.19	.35	.60	.20	5.4	.45
4	4.5	.11	.36	1.5	.29	.20	.17	.29	.49	5.6	11	.53
5	.16	.12	35	.28	.43	.19	.18	7.5	.24	.53	.57	.13
6	.15	.13	3.0	.30	.44	.20	.19	7.5	.67	.46	.49	.10
7	.13	.12	.80	.25	.23	.23	.18	9.0	.44	.67	.20	.10
8	.18	.12	3.1	.24	.22	.21	.18	.73	.49	1.9	.48	.10
9	1.9	.13	3.4	.24	.25	.21	.18	.35	.75	.71	.44	.09
10	.15	.13	2.3	.22	.25	.21	.18	20	.51	2.5	.25	.10
11	.13	.14	.60	.21	2.0	.22	.17	1.2	.51	.44	.43	.09
12	.12	.17	.42	.20	.26	.22	.17	1.5	.25	.45	.53	.09
13	.12	.14	.51	.23	.19	.22	.17	6.7	.54	.43	.46	.09
14	.14	.11	.31	.21	.19	.22	.17	2.5	.48	.44	.21	.09
15	.12	.12	.27	.18	.20	.22	.14	.53	16	.42	.21	.09
16	.09	.16	.28	.19	.20	.22	.15	2.7	82	.43	.66	.08
17	.17	16	.24	.19	.22	.29	.16	.55	3.9	.31	.56	.12
18	.52	41	.22	.20	.21	.27	.14	.37	.82	2.7	.48	.08
19	.43	.23	.22	.20	.20	.22	.15	.32	.29	9.1	.41	.09
20	10	.18	.22	.20	.21	.42	.14	.29	.47	.54	.39	.08
21	.16	.16	.22	.20	.21	.23	4.1	.28	.51	.96	.19	.11
22	.15	4.4	.24	.20	.20	.19	.16	.29	.51	.75	7.7	.11
23	.22	1.4	.28	.20	.21	.17	.14	.31	.56	.48	2.8	.21
24	.13	.17	.31	.19	.20	.19	.14	.26	.48	.21	.71	1.2
25	.11	.17	.28	.21	.21	.20	.14	.23	.46	.43	.46	.12
26	.11	.15	.26	.19	.21	.20	.32	.21	.24	.41	4.8	11
27	5.9	.14	.25	.19	.21	.20	18	.21	.45	.45	.46	.40
28	.15	.13	.25	.19	.23	.19	2.1	.19	.47	.42	.17	.12
29	.15	.13	.26	9.7	.22	.19	.23	.20	.44	.41	.13	1.2
30	.14	.13	.27	5.4	------	.17	.22	.19	.46	.56	.13	1.2
31	.13	------	2.0	1.3	------	.17	------	.20	------	.16	.14	------
TOTAL	28.86	66.44	76.68	24.31	9.47	6.71	29.04	132.95	114.85	33.91	41.79	18.75
MEAN	.93	2.21	2.47	.78	.33	.22	.97	4.29	3.83	1.09	1.35	.63
MAX	10	41	35	9.7	2.0	.42	18	57	82	9.1	11	11
MIN	.09	.10	.22	.18	.19	.17	.14	.19	.22	.16	.13	.08
CFSM	.40	.96	1.07	.34	.14	.10	.42	1.86	1.66	.47	.58	.27
IN.	.46	1.07	1.23	.39	.15	.11	.47	2.14	1.85	.55	.67	.30
AC-FT	57	132	152	48	19	13	58	264	228	67	83	37
(††)	2.81	4.44	4.24	1.64	.35	.11	2.29	6.86	4.96	2.64	3.35	1.72

CAL YR 1971 TOTAL 431.21 MEAN 1.18 MAX 46 MIN .06 CFSM .51 IN 6.94 AC-FT 855 †† 29.12
WTR YR 1972 TOTAL 583.76 MEAN 1.60 MAX 82 MIN .08 CFSM .69 IN 9.40 AC-FT 1,160 †† 35.41

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	0015	5.15	388	5- 2	0030	7.09	1,400
12- 5	0445	5.13	380	6-16	1630	6.12	790

†† Weighted-mean rainfall, in inches.

08157500 Waller Creek at 23d Street, Austin, Tex.

LOCATION.--Lat 30°17'08", long 97°44'01", Travis County, on San Jacinto Boulevard, 50 ft upstream from bridge on East 23d Street in Austin, and 2.1 miles upstream from Colorado River.

DRAINAGE AREA.--4.13 sq mi.

PERIOD OF RECORD.--December 1954 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 509.95 ft above mean sea level.

AVERAGE DISCHARGE.--17 years, 3.58 cfs (11.77 inches per year, 2,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,160 cfs May 2 (gage height, 6.91 ft); minimum daily, 0.42 cfs Nov. 7.
Period of record: Maximum discharge, 3,710 cfs Oct. 29, 1960 (gage height, 7.96 ft); minimum daily, 0.2 cfs at times in 1955-57.
Maximum flood since 1885 occurred Apr. 22, 1915, stage unknown.

REMARKS.--Records good. Some regulation by small dam upstream. Diversion of city water into channel during the summer months from municipal and private swimming pools. Some diversions into and out of drainage area by storm sewers. Station is part of a hydrologic research project to study rainfall-runoff relation for small urban areas. Three recording and three nonrecording rain gages located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	.56	4.3	1.6	2.2	1.0	.70	17	1.4	1.2	.95	.86
2	.77	.59	33	.69	1.1	.81	.72	101	1.1	1.2	1.6	1.0
3	4.5	.54	1.3	.90	.89	.85	.86	1.4	1.2	1.2	9.6	1.1
4	7.9	.58	.86	3.0	.99	.86	.80	1.2	1.2	11	27	1.2
5	.87	.58	62	.82	1.3	.71	.94	14	1.1	1.4	1.3	.99
6	.82	.63	5.5	.88	1.3	1.1	1.0	14	1.3	1.3	1.2	.85
7	.77	.42	1.6	.87	1.1	1.2	1.0	20	1.3	1.5	1.1	.89
8	1.2	.58	6.1	.84	1.1	1.1	.91	2.1	1.5	2.4	1.1	.88
9	5.0	.72	6.7	.96	1.1	1.0	.92	1.4	2.5	1.6	1.2	.85
10	.74	.76	3.8	1.1	1.3	.96	1.0	37	1.6	3.3	1.2	.85
11	.72	.62	1.3	.90	4.0	.97	1.0	3.3	1.4	1.1	1.2	.93
12	.75	.73	1.2	.93	1.2	.90	1.1	3.8	1.3	1.3	1.3	.93
13	.72	.64	1.4	.92	.93	.95	.99	17	1.6	1.2	1.1	1.2
14	.94	.60	1.3	.77	1.0	.99	.98	5.9	1.4	1.2	1.1	.98
15	.83	.76	1.2	.68	1.0	1.0	.87	1.9	17	1.1	.95	1.0
16	.74	.70	1.0	.67	1.0	.92	.86	6.3	132	1.0	1.3	.91
17	1.1	31	.83	.85	.98	.99	.83	1.9	6.6	1.8	1.2	.90
18	1.4	80	.74	.99	.96	.96	.91	1.5	2.2	3.3	1.4	.99
19	1.7	.88	.84	1.1	.85	.81	.93	1.3	1.5	14	2.5	.93
20	21	.76	.93	1.1	.89	1.5	.88	1.2	1.3	1.4	1.1	.98
21	.82	.84	.98	.99	1.1	1.1	8.5	1.1	1.5	2.6	1.2	1.0
22	.84	7.8	.88	.93	1.1	1.7	.89	1.2	1.4	4.2	25	.98
23	.93	2.8	.91	.97	1.1	1.7	.86	1.3	1.4	1.2	6.2	2.0
24	.77	.60	.94	1.1	1.1	1.1	.97	1.5	1.3	1.2	1.9	4.2
25	.56	.54	.85	.90	1.1	.98	.97	1.2	1.2	1.0	1.2	1.0
26	.69	.64	.81	.86	1.0	.93	2.1	1.1	1.3	1.2	9.4	24
27	12	.65	.98	1.0	.90	1.1	35	1.0	1.2	1.2	1.3	1.8
28	.61	.66	1.0	.80	1.1	1.1	6.5	.98	1.3	1.2	1.0	.93
29	.58	.67	1.2	17	1.0	.84	1.0	1.0	1.3	1.1	.87	1.5
30	.54	.66	1.1	9.6	------	.59	.94	.99	1.3	1.2	.84	2.4
31	.51	------	4.6	3.2	------	.67	------	.98	------	1.1	.82	------
TOTAL	72.13	138.51	150.15	57.92	34.69	31.39	75.93	265.55	193.7	70.7	109.13	59.03
MEAN	2.33	4.62	4.84	1.87	1.20	1.01	2.53	8.57	6.46	2.28	3.52	1.97
MAX	21	80	62	17	4.0	1.7	35	101	132	14	27	24
MIN	.51	.42	.74	.67	.85	.59	.70	.98	1.1	1.0	.82	.85
CFSM	.56	1.12	1.17	.45	.29	.24	.61	2.08	1.56	.55	.85	.48
IN.	.65	1.25	1.35	.52	.31	.28	.68	2.39	1.74	.64	.98	.53
AC-FT	143	275	298	115	69	62	151	527	384	140	216	117
(††)	2.78	4.21	4.24	1.64	.33	.09	2.36	7.11	4.37	2.38	3.64	1.79

CAL YR 1971 TOTAL 1,040.22 MEAN 2.85 MAX 80 MIN .42 CFSM .69 IN 9.37 AC-FT 2,060 †† 28.92
WTR YR 1972 TOTAL 1,258.83 MEAN 3.44 MAX 132 MIN .42 CFSM .83 IN 11.34 AC-FT 2,500 †† 34.94

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.HT.	DISCHARGE
5- 2	0030	6.91	2,160
6-16	1600	5.10	975
8-22	1800	4.88	860

†† Weighted-mean rainfall, in inches.

08158000 Colorado River at Austin, Tex.

LOCATION.--Lat 30°14'40", long 97°41'39", Travis County, on right bank 1,000 ft upstream from upstream bridge on U.S. Highway 183 in Austin, 1.4 miles downstream from Town Lake Dam, and at mile 290.3.

DRAINAGE AREA.--38,400 sq mi, approximately, of which 12,880 sq mi is probably noncontributing.

PERIOD OF RECORD.--February 1898 to current year. Records of daily discharge for Dec. 13-26, 1914, and Feb. 9-17, 1915, published in WSP 408, have been found unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 402.27 ft above mean sea level. Prior to June 19, 1939, all records collected at or near Congress Avenue Bridge 3.9 miles upstream at datum 19.6 ft higher; prior to June 18, 1915, nonrecording gages, recording gages thereafter; June 20, 1939, to Oct. 16, 1963, at site 1,000 ft downstream from present site at datum 5.0 ft higher.

AVERAGE DISCHARGE.--38 years (1898-1936) unregulated, 2,711 cfs (1,964,000 acre-ft per year); 36 years (1936-72) regulated, 2,036 cfs (1,475,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,310 cfs June 16 (gage height, 9.89 ft); minimum daily, 33 cfs Oct. 11.
Period of record: Maximum discharge, 481,000 cfs June 15, 1935 (gage height, 50 ft, present site and datum, from floodmark); minimum unregulated, 13 cfs Aug. 18, 1918.
Maximum stage since at least 1833, 51 ft July 7, 1869, present site and datum (adjusted to present site on basis of record for flood of June 15, 1935), determined from information concerning stage at former site furnished by Dean T. U. Taylor.

REMARKS.--Records good. Since 1937, at least 10 percent of drainage area regulated by reservoirs. Flow largely regulated by Lake Travis (station 08154500). There are 16 major reservoirs above the station with a total combined capacity of 4,642,000 acre-ft. The city of Austin reported that 60,190 acre-ft was diverted for municipal use above station and 27,800 acre-ft of treated sewage returned below station. Many other diversions above Lake Buchanan for irrigation, municipal supplies, and oilfield operations. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 508: 1915(m). WSP 528: 1900(M), 1918(m). WSP 548: 1901-16. WSP 1342: Drainage area. WSP 1562: 1908, 1929(M), 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	4,930	2,830	1,570	2,000	110	784	1,730	1,950	1,980	1,740	1,670
2	589	4,940	2,540	500	2,040	206	762	1,520	1,960	1,990	1,240	1,700
3	620	5,080	2,340	1,630	2,000	134	806	1,120	1,840	1,970	665	1,650
4	686	4,500	3,010	2,600	1,980	82	1,430	1,850	1,810	2,130	961	1,610
5	583	3,370	3,950	3,670	1,340	156	1,400	1,820	1,810	1,670	1,410	1,710
6	574	3,210	3,300	3,720	464	76	1,330	1,720	1,870	1,630	1,410	1,620
7	599	3,210	3,090	3,360	676	145	1,550	978	1,700	1,700	1,410	1,620
8	611	2,900	3,350	2,520	82	620	1,870	627	1,930	1,470	1,410	1,640
9	87	3,240	3,340	2,220	575	655	1,940	1,560	2,060	1,490	1,390	1,610
10	76	3,240	3,370	1,250	304	655	1,700	876	2,010	1,360	1,410	1,610
11	33	3,250	3,350	132	1,030	650	1,600	194	2,000	1,160	1,410	1,590
12	74	2,020	3,360	87	441	675	1,460	219	1,990	1,120	1,590	1,590
13	35	1,800	3,280	124	132	806	1,410	595	1,990	1,090	1,600	1,370
14	45	2,250	3,290	132	650	842	1,420	824	1,820	1,070	1,750	1,400
15	48	2,220	3,240	80	454	920	1,260	765	1,860	1,090	1,740	1,460
16	48	2,250	3,260	87	368	914	1,230	1,190	2,930	1,080	1,810	1,330
17	62	2,360	3,290	117	236	920	1,410	1,670	1,650	1,140	1,920	1,290
18	418	3,190	3,240	80	273	902	1,730	1,630	1,590	1,090	1,670	1,300
19	60	2,160	3,250	114	112	908	2,150	1,680	1,580	1,150	1,870	1,030
20	1,750	1,960	3,260	110	110	914	2,090	1,620	1,580	1,100	1,730	968
21	1,780	742	3,230	265	212	740	2,000	1,190	1,670	629	1,700	925
22	4,530	2,140	3,270	85	87	707	2,080	1,990	1,660	675	1,710	1,030
23	5,590	2,190	2,330	140	134	718	2,020	1,950	1,820	645	1,790	971
24	5,610	2,080	1,890	91	145	707	1,960	2,160	1,820	1,060	1,740	1,020
25	5,180	1,810	1,300	233	102	707	1,860	2,080	1,840	1,080	1,900	1,060
26	4,690	2,050	105	80	134	729	1,630	2,070	1,960	1,100	1,630	899
27	5,210	1,750	1,970	87	76	778	2,210	2,150	2,390	1,080	1,600	730
28	5,030	2,160	2,000	89	87	712	1,760	2,140	1,680	1,060	1,570	677
29	5,090	2,450	2,030	206	158	734	1,590	2,110	1,870	1,490	1,610	748
30	5,100	2,140	1,820	190	------	718	1,680	2,130	1,980	1,610	1,650	594
31	5,070	------	1,890	1,010	------	751	------	1,930	------	1,580	1,610	------
TOTAL	60,433	81,592	85,775	26,579	16,402	19,291	48,122	46,088	56,620	40,489	48,646	38,422
MEAN	1,949	2,720	2,767	857	566	622	1,604	1,487	1,887	1,306	1,569	1,281
MAX	5,610	5,080	3,950	3,720	2,040	920	2,210	2,160	2,930	2,130	1,920	1,710
MIN	33	742	105	80	76	76	762	194	1,580	629	665	594
AC-FT	119,900	161,800	170,100	52,720	32,530	38,260	95,450	91,420	112,300	80,310	96,490	76,210

CAL YR 1971 TOTAL 558,856 MEAN 1,531 MAX 5,610 MIN 31 AC-FT 1,108,000
WTR YR 1972 TOTAL 568,459 MEAN 1,553 MAX 5,610 MIN 33 AC-FT 1,128,000

COLORADO RIVER BASIN

08158600 Walnut Creek at Webberville Road, Austin, Tex.

LOCATION.--Lat 30°16'59", long 97°39'17", Travis County, on left bank 190 ft downstream from bridge on Farm Road 969, 0.8 mile downstream from Little Walnut Creek, 2.8 miles upstream from Colorado River, and 5.2 miles east of the Capitol at Austin.

DRAINAGE AREA.--51.3 sq mi.

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 425.96 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 18.2 cfs (13,190 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,580 cfs June 16 (gage height, 20.12 ft); minimum, 0.63 cfs Sept. 7.
Period of record: Maximum discharge, 6,020 cfs May 15, 1970 (gage height, 23.69 ft); no flow at times in 1967, 1971.
Maximum stage since at least 1891, 24 ft June 15, 1935 (backwater from Colorado River); a flood in 1919 reached a stage of 22 ft, from information by local residents.

REMARKS.--Records good. No known regulation or diversion. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.5	4.5	13	14	7.8	3.2	32	3.1	5.0	1.9	.78
2	1.1	1.5	99	9.7	11	6.8	2.9	324	2.9	4.8	2.4	.77
3	1.2	1.4	29	9.7	8.2	6.4	3.1	12	4.8	4.0	20	.74
4	12	1.4	15	13	7.5	6.8	2.9	7.8	3.1	42	30	.80
5	1.6	1.4	296	9.3	7.8	6.1	2.9	29	2.7	20	8.5	.97
6	1.5	1.4	54	8.9	9.7	6.1	3.2	55	2.2	6.8	4.0	.99
7	1.3	1.4	36	8.5	7.8	6.8	2.7	71	2.2	4.8	2.9	.76
8	1.4	1.4	30	8.2	10	5.5	2.2	27	2.2	103	2.3	.74
9	3.1	1.4	41	8.9	8.5	5.0	1.9	21	3.5	64	2.4	.77
10	1.4	1.4	57	9.3	7.5	5.0	1.9	110	3.2	14	16	.70
11	1.3	1.4	29	8.5	14	5.3	2.4	38	2.7	12	9.4	.74
12	1.3	1.4	26	8.2	9.3	5.8	2.2	35	12	12	4.8	.84
13	1.3	1.4	22	7.8	8.2	5.3	1.9	33	7.0	7.5	4.2	.82
14	1.4	1.4	21	7.1	7.8	5.3	1.6	32	8.0	6.4	2.7	.86
15	1.3	1.5	17	6.1	8.2	5.0	1.2	17	86	5.8	2.6	1.0
16	1.3	1.6	15	5.8	8.2	5.0	1.4	21	845	5.8	2.0	1.0
17	1.6	44	14	6.1	8.2	4.8	1.2	17	108	5.8	2.0	.86
18	1.4	362	13	6.4	7.1	4.5	1.2	12	38	9.2	4.3	.75
19	2.6	13	13	6.8	7.5	4.3	1.3	10	23	6.9	2.2	.78
20	19	6.4	12	6.8	7.5	6.0	1.2	8.9	17	7.4	2.0	.70
21	1.6	4.5	11	6.4	7.8	5.8	8.8	7.8	14	12	1.4	.70
22	1.5	6.3	9.7	6.1	8.2	5.0	1.9	7.1	12	12	26	2.6
23	1.5	23	9.7	6.1	8.5	5.5	1.8	7.1	10	7.3	16	1.3
24	1.4	6.1	9.7	5.8	8.5	4.3	.95	7.5	9.3	4.8	9.2	3.2
25	1.4	4.8	9.3	5.8	8.5	4.0	.95	6.1	8.9	3.8	1.9	1.3
26	1.4	4.0	9.3	6.1	7.8	3.8	1.1	5.3	7.5	3.5	1.7	6.2
27	12	3.5	9.3	5.3	7.5	4.0	36	4.5	6.8	3.1	1.8	4.5
28	1.9	3.2	8.9	5.0	7.5	3.5	22	4.3	6.1	2.7	1.2	1.2
29	1.5	2.9	8.9	28	7.8	3.1	4.3	4.0	5.8	2.9	3.5	.94
30	1.5	2.9	8.9	32	------	3.2	2.4	3.8	5.5	3.4	3.4	4.2
31	1.5	------	15	14	------	3.1	------	3.2	------	2.4	.97	------
TOTAL	85.3	509.5	953.2	288.7	250.1	158.9	122.70	973.4	1,262.5	405.1	193.67	42.51
MEAN	2.75	17.0	30.7	9.31	8.62	5.13	4.09	31.4	42.1	13.1	6.25	1.42
MAX	19	362	296	32	14	7.8	36	324	845	103	30	6.2
MIN	1.0	1.4	4.5	5.0	7.1	3.1	.95	3.2	2.2	2.4	.97	.70
AC-FT	169	1,010	1,890	573	496	315	243	1,930	2,500	804	384	84

CAL YR 1971 TOTAL 73,511.00 MEAN 201 MAX 362 MIN 0 AC-FT 145,800
WTR YR 1972 TOTAL 5,245.58 MEAN 14.3 MAX 845 MIN .70 AC-FT 10,400

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	0400	12.61	1,720	6-16	1745	20.12	4,580
12- 5	0700	11.24	1,280	7- 8	2245	11.99	1,520
5- 2	0115	15.40	2,700				

08159150 Wilbarger Creek near Pflugerville, Tex.

LOCATION.--Lat 30°27'16", long 97°36'02", Travis County, on left bank downstream from county road (Pfluger Lane), 800 ft downstream from Farm Road 685, 1.6 miles northeast of Pflugerville, and 1.9 miles downstream from Missouri-Kansas-Texas Railroad.

DRAINAGE AREA.--4.61 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 670.61 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 1.84 cfs (5.42 inches per year, 1,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 563 cfs Nov. 18 (gage height, 4.28 ft); no flow for many days.
Period of record: Maximum discharge, 1,760 cfs June 16, 1964 (gage height, 6.92 ft); no flow at times each year.
Maximum stage since at least 1894, occurred in September 1921, stage unknown, from information by local residents.

REMARKS.--Records good. Station is part of a hydrologic research project to study rainfall-runoff relations for small urban-rural areas. Three recording rain gages located in watershed above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.11	2.3	2.1	.33	.13	.02	.21	.07	.02	
2		0	4.8	1.8	1.8	.33	.12	40	.21	.06	.03	
3		0	.81	1.8	.99	.30	.11	.55	.21	.04	.05	
4		0	.52	2.0	.88	.25	.09	.38	.20	.32	.05	
5		0	31	1.2	.91	.25	.11	.33	.17	.17	.03	
6		0	9.0	1.7	1.3	.25	.11	13	.15	.10	.03	
7		0	5.1	1.5	.96	.25	.10	3.1	.15	.09	.02	
8		0	3.7	1.5	.88	.25	.07	2.2	.15	.08	.02	
9		0	8.3	1.5	.88	.25	.06	1.2	.19	.08	.02	
10		0	8.2	1.5	.88	.25	.06	7.5	.21	.08	.03	
11		0	3.6	1.4	1.4	.25	.08	5.1	.21	.08	.04	
12		0	2.9	1.2	1.4	.25	.07	5.4	.21	.08	.04	
13		0	2.6	1.0	1.0	.25	.05	3.6	.21	.07	.03	
14		0	2.7	.91	.89	.24	.04	3.1	.21	.05	.02	
15		0	2.0	.69	.84	.21	.04	2.4	.24	.04	.02	
16		0	1.8	.62	.72	.20	.03	2.0	8.4	.04	.02	
17		1.1	1.6	.62	.65	.18	.02	2.7	1.7	.04	.02	
18		50	1.5	.83	.53	.17	.02	1.8	.68	.04	.03	
19		.10	1.5	.88	.49	.15	.02	1.4	.45	.06	.01	
20		.07	1.4	.88	.49	.20	.02	1.1	.34	.08	.01	
21		.06	1.2	.88	.49	.25	.02	.98	.25	.03	0	
22		.10	.98	.87	.49	.21	.02	.79	.23	.06	0	
23		.96	.98	.64	.49	.21	.02	.55	.18	.07	0	
24		.15	.98	.55	.49	.20	.02	.55	.18	.04	.02	
25		.15	.98	.55	.46	.18	.02	.53	.17	.03	.01	
26		.14	.98	.52	.43	.18	.03	.37	.13	.02	0	
27		.13	.98	.49	.41	.17	.06	.33	.13	.02	0	
28		.12	.98	.49	.33	.14	.11	.32	.12	.02	0	
29		.09	.98	3.5	.33	.13	.07	.28	.10	.02	0	
30		.09	1.8	2.9	------	.13	.04	.25	.08	.02	0	
31		------	1.3	1.7	------	.13	------	.24	------	.02	0	------
TOTAL	0	53.26	105.28	38.92	23.91	6.74	1.76	102.07	16.07	2.02	.57	0
MEAN	0	1.78	3.40	1.26	.82	.22	.059	3.29	.54	.065	.018	0
MAX	0	50	31	3.5	2.1	.33	.13	40	8.4	.32	.05	0
MIN	0	0	.11	.49	.33	.13	.02	.02	.08	.02	0	0
CFSM	0	.39	.74	.27	.18	.05	.01	.71	.12	.01	.004	0
IN.	0	.43	.85	.31	.19	.05	.01	.82	.13	.02	.004	0
AC-FT	0	106	209	77	47	13	3.5	202	32	4.0	1.1	0
(††)	2.68	4.84	3.82	1.34	.45	.44	.87	5.86	2.62	2.02	3.85	1.56

CAL YR 1971 TOTAL 166.15 MEAN .46 MAX 50 MIN 0 CFSM .10 IN 1.34 AC-FT 330 †† 24.27
WTR YR 1972 TOTAL 350.60 MEAN .96 MAX 50 MIN 0 CFSM .21 IN 2.83 AC-FT 695 †† 30.35

PEAK DISCHARGE (BASE, 400 CFS).--Nov. 18 (0030) 563 cfs (4.28 ft); May 2 (0145) 464 cfs (3.94 ft).

†† Weighted-mean rainfall, in inches.

08159200 Colorado River at Bastrop, Tex.

LOCATION.--Lat 30°06'20", long 97°19'08", Bastrop County, on left bank in City Park in Bastrop, 400 ft upstream from bridge on State Highway 71, 0.3 mile upstream from Gills Creek, 1.1 miles downstream from Piney Creek, and at mile 236.8.

DRAINAGE AREA.--39,400 sq mi, approximately, of which 12,880 sq mi is probably noncontributing.

PERIOD OF RECORD.--March 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 307.38 ft above mean sea level. Prior to May 10, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--12 years, 2,023 cfs (1,466,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,900 cfs Dec. 6 (gage height, 13.03 ft); minimum daily, 156 cfs Oct. 15. Period of record: Maximum discharge, 79,600 cfs Oct. 29, 1960 (gage height, 34.45 ft); minimum daily, 75 cfs Apr. 1, 1964. Maximum stage since at least 1845, 60.3 ft July 7 or 8, 1869. Flood of June 16, 1935, reached a stage of 57.0 ft, and flood of Dec. 4, 1913, reached a stage of 53.3 ft, from information by local residents.

REMARKS.--Records good. Many diversions above station for irrigation and municipal supply. Regulation same as that for Colorado River at Austin (station 08158000). The city of Austin reported that during the water year, 677 acre-ft was diverted above this station by pumping into Decker Lake. The Lower Colorado River Authority reported that during the water year, 5,205 acre-ft was diverted above this station by pumping into Lake Bastrop. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	627	5,500	2,410	2,240	965	253	896	1,900	2,040	2,050	1,630	1,760
2	610	5,330	2,490	1,930	2,100	254	918	4,670	2,090	2,080	1,750	1,810
3	623	5,380	3,830	985	2,170	273	911	3,130	2,090	2,100	1,430	1,830
4	684	5,490	3,230	1,760	2,180	327	949	1,540	2,000	2,090	1,110	1,850
5	790	4,840	6,790	3,090	2,140	261	1,450	2,050	1,940	2,290	972	1,770
6	691	3,830	8,950	4,050	1,560	244	1,580	2,120	1,930	1,940	1,370	1,880
7	646	3,690	4,730	4,030	911	249	1,540	2,760	1,980	1,770	1,470	1,830
8	642	3,640	3,980	3,540	759	247	1,650	1,830	1,820	1,830	1,470	1,770
9	680	3,330	4,100	2,920	579	317	2,020	1,030	1,990	1,720	1,510	1,750
10	631	3,650	4,640	2,630	647	701	2,140	1,720	2,200	1,760	1,420	1,760
11	300	3,640	4,380	1,870	532	719	1,930	2,410	2,140	1,610	1,520	1,740
12	217	3,550	4,090	730	964	742	1,790	1,370	2,130	1,380	1,560	1,730
13	185	2,320	4,000	499	899	762	1,700	1,000	2,120	1,300	1,670	1,720
14	181	2,170	3,900	419	489	869	1,580	2,010	2,120	1,260	1,690	1,510
15	156	2,450	3,870	382	561	978	1,560	1,900	1,980	1,230	1,800	1,480
16	317	2,490	3,800	355	770	1,030	1,460	1,060	2,630	1,210	1,830	1,630
17	403	2,510	3,820	330	556	1,030	1,340	1,360	4,370	1,210	1,940	1,510
18	197	3,330	3,780	324	420	1,020	1,480	1,890	2,680	1,230	2,060	1,430
19	171	4,830	3,760	317	403	1,030	1,790	1,870	2,080	1,220	1,920	1,390
20	466	2,790	3,760	309	439	1,030	2,260	1,870	1,900	1,310	2,040	1,220
21	1,170	2,350	3,760	300	326	1,050	2,290	1,840	1,820	1,250	1,830	1,040
22	2,060	1,350	3,730	349	306	911	2,200	1,380	1,840	1,040	1,780	1,000
23	4,670	2,260	3,500	377	335	860	2,260	2,090	1,840	779	2,110	1,280
24	5,740	2,620	2,730	292	293	878	2,260	2,140	1,940	772	2,230	900
25	5,890	2,430	2,350	281	298	848	2,100	2,370	1,980	1,030	1,940	1,080
26	5,450	2,120	1,790	269	276	867	2,080	2,290	2,000	1,170	1,980	1,140
27	5,210	2,280	787	368	275	882	1,850	2,250	2,130	1,180	1,840	1,250
28	5,600	2,090	1,820	266	275	915	2,480	2,310	2,430	1,170	1,780	935
29	5,440	2,370	2,240	266	257	860	1,980	2,260	1,950	1,150	1,740	816
30	5,510	2,620	2,320	337	------	858	1,830	2,260	1,870	1,460	1,760	822
31	5,530	------	2,160	683	------	848	------	2,200	------	1,670	1,790	------
TOTAL	61,487	97,250	111,497	36,498	22,685	22,113	52,274	62,880	64,030	45,261	52,942	43,633
MEAN	1,983	3,242	3,597	1,177	782	713	1,742	2,028	2,134	1,460	1,708	1,454
MAX	5,890	5,500	8,950	4,050	2,180	1,050	2,480	4,670	4,370	2,290	2,230	1,880
MIN	156	1,350	787	266	257	244	896	1,000	1,820	772	972	816
AC-FT	122,000	192,900	221,200	72,390	45,000	43,860	103,700	124,700	127,000	89,780	105,000	86,550

CAL YR 1971 TOTAL 624,240 MEAN 1,710 MAX 8,950 MIN 127 AC-FT 1,238,000
WTR YR 1972 TOTAL 672,550 MEAN 1,838 MAX 8,950 MIN 156 AC-FT 1,334,000

081595000 Colorado River at Smithville, Tex.

LOCATION (revised).--Lat 30°00'43", long 97°09'43", Bastrop County, on right bank 28 ft downstream from bridge on State Highway 71 in Smithville, 500 ft downstream from Gazley Creek, 3.9 miles downstream from Alum Creek, and at mile 212.1.

DRAINAGE AREA.--39,880 sq mi, approximately, of which 12,880 sq mi is probably noncontributing.

PERIOD OF RECORD.--July 1930 to current year. Gage-height records collected in this vicinity since 1920 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE (revised).--Water-stage recorder. Datum of gage is 270.14 ft above mean sea level. Prior to Apr. 9, 1931, nonrecording gage at same site and datum. Apr. 9, 1931, to Sept. 2, 1971, water-stage recorder at site 360 ft downstream at same datum.

AVERAGE DISCHARGE.--6 years (1930-36) unregulated, 3,968 cfs (2,875,000 acre-ft per year); 36 years (1936-72) regulated, 2,468 cfs (1,788,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,980 cfs Dec. 6 (gage height, 10.90 ft); minimum daily, 215 cfs Oct. 16.
Period of record: Maximum discharge, 305,000 cfs June 16, 1935 (gage height, 42.5 ft, from floodmarks), from rating curve extended above 209,000 cfs on basis of slope-area measurement of 305,000 cfs; minimum, 76 cfs Nov. 2, 1934.
Maximum stage since at least 1860 occurred July 8, 1869, and was several feet higher than flood of Dec. 4, 1913, which reached a stage of 47.4 ft and was the highest since 1869, from information by local residents.

REMARKS.--Records good. Many diversions above station for irrigation and municipal supply. Since 1937, at least 10 percent of drainage area regulated by reservoirs. For upstream regulation, see Colorado River at Austin (station 08158000).

REVISIONS (WATER YEARS).--WSP 1342: Drainage area. WSP 1562: 1934. WSP 1712: 1953, 1954(M), 1957-58.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	725	5,610	2,490	2,230	607	249	1,010	2,450	1,970	2,120	1,660	1,840
2	763	5,500	2,550	2,110	1,530	239	1,060	3,180	2,040	2,240	1,670	1,810
3	746	5,340	3,570	1,640	1,920	235	1,110	6,950	1,990	2,260	1,750	1,870
4	807	5,510	3,240	1,370	1,850	286	1,090	1,390	2,050	2,260	1,410	1,920
5	896	5,340	4,240	2,330	1,920	302	1,190	2,160	1,870	2,340	938	1,850
6	950	4,120	12,600	3,740	1,720	247	1,730	2,350	1,760	2,450	1,050	1,860
7	829	3,730	5,820	3,880	1,050	234	1,800	3,420	1,750	1,960	1,440	1,950
8	805	3,700	4,050	3,630	692	238	1,680	2,990	1,740	1,870	1,480	1,870
9	831	3,410	3,960	2,980	780	232	2,030	1,500	1,670	1,850	1,500	1,830
10	858	3,560	4,250	2,700	501	529	2,230	1,320	2,140	1,930	1,470	1,840
11	641	3,670	4,590	2,340	706	813	2,170	3,320	2,210	1,810	1,490	1,820
12	387	3,640	4,010	1,310	541	838	1,970	2,820	2,130	1,620	1,560	1,810
13	291	2,640	3,850	725	1,010	851	1,960	3,340	2,140	1,400	1,610	1,810
14	243	2,280	3,800	578	704	873	1,830	2,350	2,160	1,240	1,780	1,780
15	229	2,540	3,730	503	455	1,030	1,770	3,040	2,130	1,190	1,810	1,540
16	215	2,560	3,660	453	663	1,070	1,780	1,110	2,580	1,150	1,950	1,570
17	877	2,620	3,660	421	660	1,150	1,600	1,040	4,580	1,140	1,980	1,640
18	490	2,750	3,670	402	539	1,150	1,640	1,480	4,440	1,140	2,140	1,530
19	304	5,170	3,600	386	409	1,140	1,870	1,710	2,550	1,180	2,120	1,480
20	459	3,100	3,630	372	439	1,150	2,410	1,680	2,160	1,160	2,300	1,470
21	734	2,520	3,620	346	420	1,160	2,770	1,670	2,000	1,260	1,830	1,250
22	1,670	2,000	3,590	336	323	1,170	2,570	1,450	1,920	1,200	1,710	1,130
23	3,580	1,840	3,570	449	323	1,010	2,630	1,510	1,970	858	1,830	1,100
24	5,550	2,680	2,830	385	323	977	2,660	2,080	1,980	723	2,300	1,370
25	5,920	2,510	2,500	310	288	994	2,700	2,270	2,090	690	2,060	1,090
26	5,810	2,340	2,140	291	294	966	2,630	2,260	2,130	1,040	1,680	1,180
27	5,130	2,150	1,410	322	265	986	2,450	2,180	2,150	1,120	2,030	1,330
28	5,640	2,310	1,220	352	274	1,020	2,680	2,240	2,620	1,140	1,890	1,330
29	5,580	2,210	2,180	268	265	1,040	2,890	2,220	2,400	1,130	1,820	967
30	5,600	2,690	2,340	287	------	989	2,330	2,200	1,930	1,130	1,800	881
31	5,650	------	2,230	497	------	989	------	2,190	------	1,560	1,820	------
TOTAL	63,210	100,040	112,600	37,943	21,471	24,157	60,240	71,870	67,250	46,161	53,878	46,718
MEAN	2,039	3,335	3,632	1,224	740	779	2,008	2,318	2,242	1,489	1,738	1,557
MAX	5,920	5,610	12,600	3,880	1,920	1,170	2,890	6,950	4,580	2,450	2,300	1,950
MIN	215	1,840	1,220	268	265	232	1,010	1,040	1,670	690	938	881
AC-FT	125,400	198,400	223,300	75,260	42,590	47,920	119,500	142,600	133,400	91,560	106,900	92,670

CAL YR 1971 TOTAL 650,140 MEAN 1,781 MAX 12,600 MIN 131 AC-FT 1,290,000
WTR YR 1972 TOTAL 705,538 MEAN 1,928 MAX 12,600 MIN 215 AC-FT 1,399,000

08160800 Redgate Creek near Columbus, Tex.

LOCATION.--Lat 29°47'56", long 96°31'55", Colorado County, on left bank 68 ft downstream from bridge on Farm Road 109, 1.8 miles upstream from Cummins Creek, and 7 miles north of Columbus.

DRAINAGE AREA.--17.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 210.82 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 4.47 cfs (3.51 inches per year, 3,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,490 cfs Mar. 20 (gage height, 13.21 ft); no flow for many days.
Period of record: Maximum discharge, 4,200 cfs Oct. 23, 1971 (gage height, 14.60 ft), from rating curve extended above 2,170 cfs (revised) on basis of slope-area measurement of peak flow of Jan. 22, 1965; no flow for many days.
Maximum stage since at least 1860, about 23.4 ft in late June or early July 1940, from information by Texas Highway Department and local resident.

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

REVISIONS.--WRD Texas 1969: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.30	.86	5.4	4.5	1.0	1.6	.36	.97	.09	.06	0
2	.13	.30	130	2.8	3.0	.78	1.6	20	1.1	.08	.10	0
3	.08	.22	6.5	1.7	2.0	.73	1.5	.82	.87	.07	.42	0
4	.12	.16	2.1	4.0	1.7	.79	1.3	.42	.72	.09	.38	.01
5	198	.17	18	2.0	1.7	.70	1.2	.28	.64	.12	.13	.01
6	9.6	.18	114	1.4	2.2	.64	1.3	.45	.58	.10	.09	.01
7	1.6	.18	6.4	1.2	1.7	.79	1.3	427	.53	.07	.07	0
8	.75	.16	3.3	1.1	1.4	.80	.93	12	.52	.06	.07	0
9	.79	.27	4.2	1.2	1.3	.65	.74	3.8	.57	.07	.14	0
10	.47	.24	7.4	1.2	1.3	.65	.80	480	3.3	.06	.16	0
11	.28	.18	2.1	1.0	39	.68	.81	49	1.1	.31	.14	0
12	.24	.18	5.2	.92	7.6	.65	.71	280	.63	.53	.11	0
13	.22	.18	12	.93	3.1	.64	.62	29	.77	.28	.09	0
14	.19	.18	3.1	.77	2.2	.62	.53	23	1.1	.16	.08	0
15	.16	.17	2.7	.66	1.9	.62	.60	10	.97	.12	.10	.15
16	.21	.16	2.0	.68	1.5	.55	.53	7.3	1.6	.09	.07	.39
17	.28	.21	1.7	.75	1.4	.75	.41	6.6	.87	.33	.07	.16
18	.22	4.5	1.4	.81	1.1	.37	.45	4.5	.54	.41	.08	.16
19	.16	1.1	1.4	.82	1.0	.30	.48	3.7	.41	.22	.10	.06
20	144	.46	1.4	.79	1.0	464	.45	3.1	.31	.26	.09	.04
21	3.5	.38	1.2	.73	1.1	20	1.1	2.7	.27	.61	.05	.03
22	1.6	.59	1.0	.72	1.1	6.4	.82	2.4	.23	2.6	.04	.02
23	1.1	8.1	1.0	.73	1.0	4.6	.39	2.1	.18	.57	.03	.03
24	.87	1.2	1.0	.66	.88	4.2	.36	1.8	.17	.25	.04	.28
25	.78	.77	1.0	.55	.90	3.7	.30	1.6	.15	.20	.03	.33
26	.71	.74	1.0	.53	.92	3.3	.28	1.4	.13	.15	.02	.28
27	.77	.63	.98	.65	.86	3.3	1.4	1.3	.12	.14	.02	.39
28	.62	.59	1.5	.59	.82	3.0	2.1	1.1	.11	.15	.02	.26
29	.56	.51	1.1	.64	.97	2.2	.62	1.1	.10	.15	.01	.20
30	.50	.49	1.1	135	------	2.0	.42	.99	.10	.11	0	.45
31	.35	------	12	7.7	------	1.8	------	.92	------	.09	0	------
TOTAL	368.97	23.50	348.64	178.63	89.15	531.21	25.65	1,378.74	19.66	8.54	2.81	3.26
MEAN	11.9	.78	11.2	5.76	3.07	17.1	.86	44.5	.66	.28	.091	.11
MAX	198	8.1	130	135	39	464	2.1	480	3.3	2.6	.42	.45
MIN	.08	.16	.86	.53	.82	.30	.28	.28	.10	.06	0	0
CFSM	.69	.05	.65	.33	.18	.99	.05	2.57	.04	.02	.005	.006
IN.	.79	.05	.75	.38	.19	1.14	.06	2.96	.04	.02	.006	.007
AC-FT	732	47	692	354	177	1,050	51	2,730	39	17	5.6	6.5

CAL YR 1971 TOTAL 845.50 MEAN 2.32 MAX 198 MIN 0 CFSM .13 IN 1.82 AC-FT 1,680
WTR YR 1972 TOTAL 2,978.76 MEAN 8.14 MAX 480 MIN 0 CFSM .47 IN 6.41 AC-FT 5,910

PEAK DISCHARGE (BASE, 600 CFS, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 5	1730	8.78	1,720	5- 7	about 0800	9.93	2,170
10-20	0730	8.20	1,520				
3-20	1600	13.21	3,490	5-10	1930	10.09	2,240
				5-12	0530	7.96	1,440

08161000 Colorado River at Columbus, Tex.

LOCATION.--Lat 29°42'22", long 96°32'12", Colorado County, near right bank at downstream side of pier of bridge on U.S. Highway 90 at eastern edge of Columbus, 340 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.6 miles downstream from Cummins Creek, and at mile 135.1.

DRAINAGE AREA.--41,070 sq mi, approximately, of which 12,880 sq mi is probably noncontributing; 41,170 sq mi, approximately, at site "near Eagle Lake."

PERIOD OF RECORD.--January 1903 to December 1911 (gage heights only), May 1916 to current year. Discharge records for 1902-11, published in WSP 84, 99, 132, 174, 210, 288, and 308, have been found to be unreliable and should not be used. Records collected at site 23 miles downstream October 1930 to May 1939, published as "near Eagle Lake." Gage-height records collected in this vicinity since 1903 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 155.52 ft above mean sea level. Prior to May 1, 1919, various nonrecording gages at sites in the immediate vicinity at datum 3.00 ft lower. May 1, 1919, to Nov. 23, 1930, water-stage recorder at site about 300 ft downstream at datum 3.00 ft lower. Sept. 17, 1930, to June 12, 1939 (Oct. 1, 1930, to May 31, 1939, used herein), water-stage recorder at site 23 miles downstream at different datum. May 17 to Nov. 14, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--20 years (1916-36) unregulated, 3,809 cfs (2,760,000 acre-ft per year); 36 years (1936-72) regulated, 2,903 cfs (2,103,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 22,500 cfs May 11 (gage height, 15.54 ft); minimum daily, 339 cfs Mar. 10.
Period of record: Maximum discharge, 190,000 cfs June 18, 1935 (gage height, 38.5 ft, present site and datum), computed on basis of records for station near Eagle Lake; minimum, 93 cfs Sept. 1, 1918.
Maximum stage since at least 1852, 41.6 ft, present datum, in July 1869 and on Dec. 6, 1913, from information by local resident. River divided each time and left Columbus on an island.

REMARKS.--Records good. Many diversions above station for irrigation and municipal supply. At end of year, flow from 73.1 sq mi above this station was partly controlled by 20 floodwater-retarding structures with a total combined capacity of 28,290 acre-ft below the flood-spillway crests, of which 25,570 acre-ft is floodwater-retarding capacity and 2,720 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Upstream regulation same as that for Colorado River at Austin (station 08158000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1342: Drainage area. WSP 1562: 1920-21(M), 1922. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	603	4,960	2,400	2,770	799	434	924	1,980	2,170	2,120	1,370	1,770
2	466	4,970	4,870	3,700	733	411	927	2,060	2,100	1,980	1,630	1,780
3	611	4,920	5,170	3,060	907	377	938	2,600	1,990	2,120	1,690	1,770
4	659	4,790	4,300	2,210	1,830	364	962	4,790	2,000	2,170	1,810	1,790
5	1,120	4,900	4,290	1,470	2,030	356	979	2,530	1,990	2,210	1,630	1,810
6	2,810	4,890	7,990	2,040	2,130	361	978	1,730	1,910	2,200	1,370	1,830
7	1,110	4,090	12,800	3,380	2,040	414	1,310	10,000	1,850	2,320	1,110	1,770
8	846	3,570	8,130	3,820	1,530	372	1,480	14,400	1,830	2,100	1,280	1,820
9	744	3,500	4,910	3,720	1,180	349	1,470	6,580	1,860	1,900	1,480	1,810
10	715	3,360	4,490	3,190	1,030	339	1,570	5,490	1,780	1,920	1,520	1,760
11	705	3,260	4,600	2,860	1,220	341	1,900	17,800	1,930	2,030	1,560	1,730
12	712	3,420	4,840	2,600	1,280	491	2,010	15,900	2,000	2,040	1,540	1,740
13	602	3,410	4,370	1,950	1,110	731	1,860	8,680	2,100	2,010	1,580	1,710
14	458	2,980	4,100	1,210	1,020	762	1,750	6,180	2,100	1,650	1,600	1,710
15	372	2,320	4,000	968	1,090	780	1,660	4,250	2,070	1,500	1,710	1,720
16	345	2,290	3,880	861	962	823	1,560	3,510	4,200	1,420	1,780	1,660
17	593	2,420	3,800	812	852	898	1,510	2,540	4,840	1,400	1,810	1,520
18	615	2,600	3,740	786	787	948	1,440	1,780	3,680	1,360	1,850	1,580
19	710	2,690	3,750	751	724	971	1,340	1,790	4,240	1,350	1,930	1,540
20	3,190	4,050	3,690	693	679	4,290	1,430	2,080	3,020	1,360	2,060	1,460
21	2,980	3,510	3,670	661	602	4,920	1,700	2,030	2,420	1,360	2,000	1,430
22	1,080	2,650	3,650	625	555	1,550	2,190	1,980	2,180	1,430	2,050	1,360
23	1,080	2,380	3,640	598	523	1,320	2,160	1,900	2,060	1,500	1,890	1,220
24	2,260	2,150	3,630	563	498	1,150	2,100	1,590	2,020	1,320	1,920	1,180
25	4,300	2,520	3,190	523	448	1,050	2,150	2,060	2,010	1,090	2,310	1,280
26	4,880	2,530	2,750	569	462	1,020	2,160	2,170	2,070	986	2,310	1,260
27	5,000	2,380	2,460	539	457	988	2,050	2,300	2,100	976	2,060	1,160
28	4,640	2,090	1,990	499	447	966	2,140	2,230	2,110	1,180	1,990	1,210
29	4,780	2,250	1,310	498	441	948	1,970	2,200	2,230	1,230	1,910	1,290
30	4,900	2,060	1,930	1,820	------	944	2,380	2,230	2,440	1,230	1,830	1,220
31	4,890	------	2,520	1,120	------	939	------	2,180	------	1,230	1,780	------
TOTAL	58,776	97,910	130,860	50,866	28,366	30,607	48,998	139,540	71,300	50,692	54,360	46,890
MEAN	1,896	3,264	4,221	1,641	978	987	1,633	4,501	2,377	1,635	1,754	1,563
MAX	5,000	4,970	12,800	3,820	2,130	4,920	2,380	17,800	4,840	2,320	2,310	1,830
MIN	345	2,060	1,310	498	441	339	924	1,590	1,780	976	1,110	1,160
AC-FT	116,600	194,200	259,600	100,900	56,260	60,710	97,190	276,800	141,400	100,500	107,800	93,010

CAL YR 1971 TOTAL 655,411 MEAN 1,796 MAX 12,800 MIN 250 AC-FT 1,300,000
WTR YR 1972 TOTAL 809,165 MEAN 2,211 MAX 17,800 MIN 339 AC-FT 1,605,000

08162000 Colorado River at Wharton, Tex.

LOCATION.--Lat 29°18'32", long 96°06'13", Wharton County, near left bank at downstream side of downstream bridge on U.S. Highway 59 in Wharton, 1,100 ft downstream from Texas and New Orleans Railroad Co. bridge, 12 miles upstream from Jones Creek, and at mile 66.6.

DRAINAGE AREA.--41,380 sq mi, approximately, of which 12,880 sq mi (revised) is probably noncontributing.

PERIOD OF RECORD.--July 1916 to August 1918 (intermittent periods), March 1919 to September 1925, July and August 1938 (flood discharge measurements only), October 1938 to current year. June to November 1901 and May to September 1902, daily records published in U.S. Department of Agriculture, Office of Experiment Stations, Bulletin Nos. 119 and 133. Gage-height records collected in this vicinity since 1935 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 65.42 ft above mean sea level. Prior to Oct. 1, 1938, various types of recording and nonrecording gages 800 ft upstream at different datum. Oct. 1, 1938, to June 1, 1966, nonrecording gage 100 ft upstream at present datum.

AVERAGE DISCHARGE.--5 years (1919-21, 1922-25) unregulated, 3,680 cfs (2,666,000 acre-ft per year); 34 years (1938-72) regulated, 2,648 cfs (1,918,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,500 cfs May 13 (gage height, 16.96 ft); minimum daily, 366 cfs Oct. 16.
Period of record: Maximum discharge observed, 100,000 cfs July 3, 1940 (gage height, 35.99 ft); no flow Aug. 6, 1925 (result of pumping).
Maximum stage since at least 1869, 38.9 ft Dec. 8, 1913, present datum, from information by local residents; below Wharton floodwater combined with floodwater of Brazos River. Flood of about July 12, 1869, reached about same height. Flood of June 20, 1935, reached a stage of 38.2 ft, present datum, furnished by National Weather Service (discharge, 159,000 cfs, from rating curve defined by current-meter measurements below 145,000 cfs). Flood of July 30, 1938, reached a stage of 37.4 ft, present datum, observed by Geological Survey engineers (discharge, 145,000 cfs).

REMARKS.--Records good. Many diversions above station for irrigation, municipal supply, and oilfield operation. Upstream regulation same as that for Colorado River at Austin (station 08158000). For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08161000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 878: 1938(M). WSP 1342: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571	4,970	2,370	2,560	2,650	601	812	1,670	1,250	1,220	868	783
2	518	5,040	2,980	3,070	1,130	575	776	1,410	1,190	1,040	817	780
3	482	5,050	6,740	3,700	725	567	756	1,370	1,230	890	1,080	780
4	450	5,010	6,310	3,380	725	550	696	1,690	1,100	1,040	1,270	788
5	501	4,960	5,260	2,630	1,750	542	646	3,340	1,100	1,320	1,300	776
6	811	5,080	5,820	1,910	2,050	537	661	2,350	1,120	1,320	1,240	777
7	2,480	5,050	9,980	2,010	2,160	529	662	1,530	1,110	1,380	1,060	785
8	1,520	4,400	12,600	3,280	2,120	525	716	10,700	963	1,520	769	785
9	1,070	3,800	8,500	3,920	1,760	536	937	12,800	925	1,520	565	799
10	862	3,650	5,720	3,380	1,370	522	838	7,630	975	1,350	732	852
11	700	3,500	5,170	3,420	1,710	512	843	11,800	1,330	1,350	895	819
12	595	3,460	5,100	3,050	1,780	503	1,080	21,600	1,270	1,450	786	781
13	565	3,570	5,270	2,760	1,920	497	1,210	22,900	1,540	1,580	698	823
14	498	3,550	4,820	2,250	1,610	672	1,100	12,600	1,600	1,690	743	880
15	462	3,110	4,500	1,570	1,210	800	908	8,490	1,740	1,420	726	891
16	366	2,530	4,330	1,210	1,390	774	1,020	5,920	1,960	1,160	764	918
17	560	2,440	4,170	1,060	1,190	777	1,050	4,350	4,370	1,130	780	1,050
18	670	2,580	4,060	969	968	872	850	3,240	5,000	1,220	790	895
19	780	2,680	3,990	909	938	952	658	2,100	3,650	1,260	810	767
20	725	2,810	3,980	868	1,010	1,020	512	1,620	3,580	1,220	845	837
21	2,760	4,120	3,900	821	914	4,220	530	1,590	2,320	1,190	923	808
22	3,710	3,970	3,850	785	838	6,950	683	1,500	1,580	1,190	892	650
23	1,690	3,140	3,850	752	752	2,040	1,120	1,390	1,290	1,220	917	594
24	1,160	2,770	3,820	728	771	1,380	1,350	1,280	1,100	1,320	830	569
25	1,800	2,500	3,800	698	735	1,210	1,260	1,060	1,010	1,220	779	635
26	3,780	2,790	3,450	677	680	1,060	1,260	1,090	980	890	1,000	766
27	4,750	2,840	3,010	670	668	983	1,170	1,240	1,010	780	1,160	892
28	4,900	2,690	2,700	668	659	954	1,400	1,310	1,010	712	1,050	762
29	4,730	2,450	2,320	642	635	895	1,590	1,290	1,040	780	900	751
30	4,850	2,490	1,730	1,420	------	835	1,500	1,340	1,130	835	915	800
31	4,980	------	1,890	3,600	------	808	------	1,320	------	950	883	------
TOTAL	54,296	107,000	145,990	59,867	36,818	34,198	28,594	153,520	49,473	37,167	27,787	23,793
MEAN	1,751	3,567	4,709	1,931	1,270	1,103	953	4,952	1,649	1,199	896	793
MAX	4,980	5,080	12,600	3,920	2,650	6,950	1,590	22,900	5,000	1,690	1,300	1,050
MIN	366	2,440	1,730	642	635	497	512	1,060	925	712	565	569
AC-FT	107,700	212,200	289,600	118,700	73,030	67,830	56,720	304,500	98,130	73,720	55,120	47,190

CAL YR 1971 TOTAL 570,783 MEAN 1,564 MAX 12,600 MIN 277 AC-FT 1,132,000
WTR YR 1972 TOTAL 758,503 MEAN 2,072 MAX 22,900 MIN 366 AC-FT 1,504,000

08162500 Colorado River near Bay City, Tex.

LOCATION.--Lat 28°58'26", long 96°00'44", Matagorda County, on right bank 6,300 ft downstream from bridge on State Highway 35, 7,100 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.8 miles west of Bay City, and at mile 32.5.

DRAINAGE AREA.--41,650 sq mi, approximately, of which 12,880 sq mi (revised) is probably noncontributing.

PERIOD OF RECORD.--July 1940 (in WSP 1046), April 1948 to current year. Records of elevation collected in this vicinity since 1946 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. July 2-6, 1940, nonrecording gage at highway bridge, 6,300 ft upstream at datum 30.60 ft lower.

AVERAGE DISCHARGE.--24 years (1948-72), 2,271 cfs (1,645,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,600 cfs May 13 (elevation, 27.34 ft); minimum daily, 2.0 cfs Apr. 22.
Period of record: Maximum discharge, 84,100 cfs June 26, 1960; maximum elevation, 48.2 ft, present datum, July 4, 1940, at site 6,300 ft upstream at bridge on State Highway 35, observed by Corps of Engineers (elevation, 46.6 ft, adjusted to present site); no flow at times in 1951-53, 1956.
Maximum elevation since 1869, 56.1 ft Dec. 10, 1913. Flood in July 1869 probably reached about same elevation. Elevation of other floods are as follows: May 8, 1922, 55.4 ft; June 1929, 55.0 ft; June 22, 1935, 54.6 ft; Oct. 5, 1936, 52.2 ft; Aug. 2, 1938, 53.4 ft; Nov. 27, 1940, 47.6 ft. All above flood data from information by Texas and New Orleans Railroad Co. and adjusted to present site.

REMARKS.--Records good except those below 100 cfs, which are fair. Diversions above station for irrigation and municipal supply. Upstream regulation same as that for Colorado River at Austin (station 08158000). For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Colorado River at Columbus (station 08161000).

REVISIONS.--WSP 1342: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	4,840	2,200	2,140	4,070	615	345	1,140	357	192	553	38
2	59	4,890	2,160	2,890	2,120	533	207	1,220	336	326	272	8.3
3	40	4,920	4,060	3,220	1,330	514	158	679	386	239	466	8.7
4	50	4,910	6,060	3,630	1,070	525	325	913	446	96	1,060	15
5	105	4,860	6,120	2,970	1,200	511	116	1,370	229	595	1,210	86
6	609	4,850	6,940	2,330	1,920	474	7.0	1,140	320	922	1,180	146
7	1,520	4,930	8,840	1,790	2,000	471	5.7	997	348	974	887	140
8	2,120	4,680	12,100	2,350	2,060	427	13	4,150	140	1,050	398	53
9	1,340	3,880	10,300	3,570	1,950	188	188	13,400	12	2,090	236	86
10	1,070	3,620	6,470	3,840	1,590	120	325	8,770	109	1,650	4.1	141
11	637	3,550	5,310	3,640	1,380	275	353	14,600	506	1,100	90	170
12	347	3,380	5,220	3,150	3,140	448	412	21,300	781	1,050	243	59
13	456	3,440	5,620	2,870	3,820	142	621	23,400	768	1,230	28	120
14	396	3,520	5,220	2,520	2,280	10	735	17,400	1,070	1,300	3.1	256
15	378	3,360	4,760	1,970	1,630	165	565	9,340	1,270	1,390	2.9	495
16	502	2,860	4,510	1,460	1,400	415	404	6,880	1,270	1,100	2.9	434
17	607	2,410	6,130	1,180	1,400	325	313	4,720	2,380	1,020	2.9	584
18	1,860	2,440	5,270	1,050	1,150	275	210	3,300	4,250	1,050	2.9	655
19	1,550	2,500	4,490	936	950	355	73	1,850	3,400	1,000	90	465
20	1,210	2,640	4,170	871	982	465	6.6	887	2,870	1,150	192	350
21	1,340	2,910	4,040	818	1,120	909	2.9	623	2,100	1,100	275	423
22	4,220	4,140	3,880	802	861	6,550	2.0	415	932	1,100	337	243
23	2,810	3,320	3,860	767	693	3,400	22	457	581	1,150	135	190
24	1,570	2,710	3,830	735	754	1,310	561	385	340	815	296	437
25	1,360	2,400	3,800	694	744	924	651	107	126	1,220	222	852
26	2,620	2,310	3,710	637	728	765	381	9	9.6	989	84	1,080
27	4,290	2,590	3,220	626	673	312	514	29	6.3	721	425	1,460
28	4,760	2,520	2,820	640	698	521	780	232	6.3	598	465	1,460
29	4,750	2,330	2,510	640	645	477	1,070	338	14	282	296	1,150
30	4,590	2,150	2,080	1,430	------	414	1,230	191	155	522	26	1,160
31	4,820	------	1,670	2,940	------	350	------	414	------	620	146	------
TOTAL	52,200	103,860	151,370	59,106	44,358	23,185	10,596.2	140,656	25,518.2	28,641	9,630.8	12,765.0
MEAN	1,684	3,462	4,883	1,907	1,530	748	353	4,537	851	924	311	426
MAX	4,820	4,930	12,100	3,840	4,070	6,550	1,230	23,400	4,250	2,090	1,210	1,460
MIN	40	2,150	1,670	626	645	10	2.0	9.0	6.3	96	2.9	8.3
AC-FT	103,500	206,000	300,200	117,200	87,980	45,990	21,020	279,000	50,620	56,810	19,100	25,320

CAL YR 1971 TOTAL 493,222.74 MEAN 1,351 MAX 13,900 MIN .67 AC-FT 978,300
WTR YR 1972 TOTAL 661,886.20 MEAN 1,808 MAX 23,400 MIN 2.0 AC-FT 1,313,000

08162600 Tres Palacios Creek near Midfield, Tex.

LOCATION.--Lat 28°55'40", long 96°10'15", Matagorda County, at left downstream end of bridge on Farm Road 456, 1.0 mile downstream from Juanita Creek, and 2.4 miles southeast of Midfield.

DRAINAGE AREA.--145 sq mi.

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.38 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,580 cfs May 8 (gage height, 27.85 ft); minimum, 4.0 cfs Mar. 16.
Period of record: Maximum discharge, 6,340 cfs Oct. 12, 1970 (gage height, 30.38 ft); minimum, 2.2 cfs Feb. 1, 2, 1971.
Maximum stages since 1885, 37 ft in September 1960 and 35 ft in June 1945, from information by local residents.

REMARKS.--Records good. Ten known diversions above stations; amounts unknown. An undetermined amount of water from irrigated ricefields enters stream upstream at various points. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	7.8	6.1	20	343	5.4	22	53	47	22	40	21
2	42	7.3	10	93	174	8.5	26	39	177	20	52	24
3	32	7.6	12	74	94	6.8	38	29	132	20	62	23
4	28	7.3	17	43	51	8.8	31	21	73	30	68	23
5	51	6.9	1,350	41	32	7.1	20	18	58	60	68	26
6	166	6.4	2,410	37	28	5.4	25	180	48	150	53	31
7	182	6.1	1,580	20	26	20	12	1,860	40	120	42	33
8	105	6.0	666	16	19	8.7	14	2,810	38	100	37	32
9	71	6.1	327	14	15	9.3	25	940	38	90	34	40
10	72	5.1	204	13	12	8.6	38	340	153	90	38	42
11	53	5.3	131	12	28	6.8	36	1,430	283	80	37	38
12	42	6.9	454	11	234	7.6	35	1,820	163	75	55	37
13	38	5.8	884	11	155	5.5	21	3,200	151	70	59	38
14	35	5.8	319	10	81	4.8	23	1,560	176	100	49	56
15	29	5.8	162	9.1	48	4.4	19	654	139	90	60	75
16	28	5.5	103	8.7	33	7.3	34	336	114	80	51	66
17	195	5.3	742	8.8	23	9.4	23	191	158	70	42	54
18	666	6.4	627	9.6	17	6.9	9.6	138	151	90	38	45
19	446	6.2	246	9.4	13	12	11	95	104	80	45	46
20	214	11	134	9.3	11	16	24	63	76	70	45	37
21	278	7.1	92	9.7	11	169	28	47	47	60	48	30
22	178	5.6	62	11	12	97	34	40	37	80	48	26
23	100	174	47	11	9.4	46	55	34	32	60	48	28
24	64	96	38	11	8.7	26	44	31	32	45	49	68
25	41	50	29	9.7	8.2	23	40	29	32	50	41	201
26	28	23	22	8.8	7.5	24	41	27	27	69	30	375
27	21	14	18	11	6.8	22	20	22	25	46	32	447
28	16	9.8	15	11	5.6	13	62	19	25	31	34	358
29	12	8.1	13	11	5.7	14	126	22	25	27	28	201
30	10	7.2	14	567	------	20	62	21	25	32	23	166
31	8.8	------	13	804	------	30	------	24	------	35	21	------
TOTAL	3,304.8	525.4	10,747.1	1,935.1	1,511.9	653.3	998.6	16,093	2,626	2,042	1,377	2,687
MEAN	107	17.5	347	62.4	52.1	21.1	33.3	519	87.5	65.9	44.4	89.6
MAX	666	174	2,410	804	343	169	126	3,200	283	150	68	447
MIN	8.8	5.1	6.1	8.7	5.6	4.4	9.6	18	25	20	21	21
CFSM	.74	.12	2.39	.43	.36	.15	.23	3.58	.60	.45	.31	.62
IN.	.85	.13	2.76	.50	.39	.17	.26	4.13	.67	.52	.35	.69
AC-FT	6,560	1,040	21,320	3,840	3,000	1,300	1,980	31,920	5,210	4,050	2,730	5,330

CAL YR 1971 TOTAL 39,602.2 MEAN 108 MAX 2,500 MIN 2.3 CFSM .74 IN 10.16 AC-FT 78,550
WTR YR 1972 TOTAL 44,501.2 MEAN 122 MAX 3,200 MIN 4.4 CFSM .84 IN 11.42 AC-FT 88,270

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	1000	15.84	696	1-30	2400	19.96	1,120
12- 5	2400	25.87	2,520	5- 8	0200	27.85	3,580
12-13	0100	20.29	1,160	5-13	0600	27.79	3,540
12-17	1700	19.64	1,080				

08163500 Lavaca River at Hallettsville, Tex.

LOCATION.--Lat 29°26'35", long 96°56'38", Lavaca County, on left bank 75 ft downstream from bridge on U.S. Highway 77 in Hallettsville and 0.7 mile downstream from Campbell Branch.

DRAINAGE AREA.--108 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 186.72 ft above mean sea level. Prior to Apr. 19, 1960, water-stage recorder for high stages and movable nonrecording gage for stages below about 6.2 ft. Apr. 20, 1960, to June 2, 1961, movable nonrecording gage. All gages at same site and datum.

AVERAGE DISCHARGE.--33 years, 43.9 cfs (31,810 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 18,900 cfs May 12 (gage height, 28.78 ft); minimum, 1.8 cfs Sept. 9.
Period of record: Maximum discharge, 93,100 cfs June 30, 1940 (gage height, 40.60 ft, from floodmarks), from rating curve extended above 23,000 cfs on basis of slope-area measurement of peak flow; no flow at times in 1953, 1956.
Maximum stage since at least 1840, that of June 30, 1940; maximum stage from about 1870 to 1940, 32.8 ft July 16, 1936, from information by local resident.

REMARKS.--Records good. No diversion above station. The Corps of Engineers began channel rectification 1.6 miles downstream from gage in April 1959. This rectification reached the gage Sept. 21, 1959, and was completed in February 1960.

REVISIONS (WATER YEARS).--WSP 1312: 1942(M), 1944(M). WSP 1732: 1952(M). WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	5.6	5.4	20	36	10	10	20	14	3.7	2.7	2.4
2	6.6	5.5	403	29	25	9.9	9.9	139	13	3.4	2.8	2.5
3	5.8	5.2	155	19	19	9.2	9.7	22	13	3.5	14	2.6
4	93	4.7	29	16	15	9.2	9.1	9.4	11	6.2	26	2.5
5	21	4.7	114	13	14	8.8	8.6	7.2	9.1	5.8	8.7	2.3
6	47	4.9	411	12	14	8.4	9.1	8.4	7.9	7.6	5.2	2.2
7	17	4.7	89	12	14	8.5	8.9	1,080	7.7	5.4	4.0	2.1
8	10	4.9	36	12	14	8.7	8.0	193	7.2	4.7	3.8	2.0
9	9.2	5.4	28	12	13	8.4	7.5	33	7.1	4.8	3.8	2.0
10	8.6	5.7	30	12	14	8.2	7.4	1,620	8.5	6.5	4.9	2.2
11	7.0	5.4	24	12	201	8.7	7.4	2,080	67	9.3	8.1	2.3
12	6.2	5.4	19	12	82	8.9	7.5	7,270	37	6.8	15	2.2
13	5.8	5.7	17	11	39	9.1	7.1	293	22	8.1	7.2	2.7
14	5.4	5.4	16	9.9	28	8.6	6.7	1,840	110	6.2	4.3	2.9
15	5.2	5.4	16	9.2	22	8.4	6.9	180	25	5.3	3.7	3.2
16	63	5.4	14	8.4	19	8.0	6.4	79	308	4.8	3.2	3.1
17	59	5.7	13	8.4	17	7.3	6.1	60	328	5.7	3.1	3.3
18	24	24	13	9.2	14	7.1	6.4	43	42	8.1	3.0	3.2
19	14	16	12	9.5	13	6.6	6.5	36	26	7.5	2.9	3.1
20	33	9.5	12	9.9	12	1,110	6.5	32	20	12	2.8	2.8
21	19	6.8	12	9.5	13	449	6.5	29	16	15	2.7	2.8
22	11	6.8	11	8.8	12	52	6.2	26	12	23	2.5	5.0
23	8.8	8.4	11	8.1	12	26	6.1	26	8.9	27	2.5	3.2
24	8.4	8.8	11	8.1	12	21	5.8	25	7.2	26	2.4	11
25	8.1	7.3	11	6.8	12	21	5.7	23	5.9	7.6	2.4	13
26	7.5	6.1	11	6.5	11	19	5.6	21	4.8	5.2	2.8	5.0
27	7.1	5.5	12	6.5	9.9	17	6.0	19	4.0	4.2	2.6	9.1
28	6.8	5.1	12	6.8	9.9	16	6.2	17	3.9	3.9	2.5	4.5
29	6.5	4.8	12	7.1	9.9	13	6.3	17	3.8	3.3	2.7	3.0
30	6.3	4.7	11	611	------	11	5.8	16	3.9	4.1	2.9	2.8
31	5.8	------	17	105	------	11	------	14	------	3.0	2.6	------
TOTAL	543.2	203.5	1,587.4	1,040.7	726.7	1,928.0	215.9	15,278.0	1,153.9	247.7	157.8	111.0
MEAN	17.5	6.78	51.2	33.6	25.1	62.2	7.20	493	38.5	7.99	5.09	3.70
MAX	93	24	411	611	201	1,110	10	7,270	328	27	26	13
MIN	5.2	4.7	5.4	6.5	9.9	6.6	5.6	7.2	3.8	3.0	2.4	2.0
AC-FT	1,080	404	3,150	2,060	1,440	3,820	428	30,300	2,290	491	313	220

CAL YR 1971 TOTAL 12,545.95 MEAN 34.4 MAX 2,770 MIN .38 AC-FT 24,880
WTR YR 1972 TOTAL 23,193.80 MEAN 63.4 MAX 7,270 MIN 2.0 AC-FT 46,000

PEAK DISCHARGE (BASE, 2,300 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-20	1915	20.50	4,170	5-12	1100	28.78	18,900
5-10	2400	23.69	8,380	5-14	1200	21.34	4,590

08164000 Lavaca River near Edna, Tex.

LOCATION.--Lat 28°57'34", long 96°41'10", Jackson County, at downstream side near center of upstream bridge of two bridges on U.S. Highway 59, 660 ft upstream from Texas and New Orleans Railroad Co. bridge, and 2.8 miles southwest of Edna.

DRAINAGE AREA.--826 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 13.88 ft above mean sea level. Prior to June 6, 1939, nonrecording gage (property of Corps of Engineers); June 6, 1939, to Apr. 3, 1957, nonrecording gage at site 110 ft downstream; Apr. 4, 1957, to Mar. 21, 1961, nonrecording gage; all at same datum.

AVERAGE DISCHARGE.--34 years, 286 cfs (207,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,700 cfs May 8 (gage height, 26.27 ft); minimum, 36 cfs Sept. 21-23.
Period of record: Maximum discharge, 73,000 cfs July 1, 1940 (gage height, 32.51 ft); no flow at times.
Maximum stage since at least 1880, 33.8 ft May 25, 1936 (discharge, 83,400 cfs), from information by local resident.

REMARKS.--Records good. Small diversions above station for irrigation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1923: 1955. WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	104	61	1,510	4,450	107	93	49	166	103	120	46
2	135	99	506	422	919	103	89	48	190	98	90	44
3	121	93	2,780	234	436	101	85	47	202	90	138	42
4	119	87	1,400	324	306	99	82	124	187	84	783	42
5	147	84	609	495	245	96	81	72	150	83	332	44
6	242	82	2,580	199	217	94	79	133	141	83	182	46
7	350	80	3,440	150	197	93	82	3,240	135	87	126	48
8	219	76	1,400	132	176	93	75	13,700	130	91	97	44
9	137	75	524	122	161	93	70	12,900	127	96	82	42
10	111	74	473	117	150	91	68	4,300	127	88	76	42
11	96	73	388	108	425	90	68	5,000	254	82	85	41
12	87	70	278	102	2,050	89	71	11,700	243	87	95	40
13	81	70	226	99	986	90	65	8,830	195	99	75	41
14	78	70	193	93	401	89	62	10,100	281	109	75	43
15	76	70	172	88	279	89	61	6,100	261	92	72	46
16	76	69	156	83	227	89	59	3,150	270	81	66	44
17	521	68	143	81	196	88	59	3,250	2,380	122	63	43
18	1,760	70	130	81	173	87	54	7,470	3,550	121	61	45
19	822	72	122	81	156	82	53	2,460	1,020	115	57	42
20	1,080	86	117	81	144	81	56	646	348	111	55	39
21	2,490	98	112	81	137	461	52	485	260	116	57	37
22	674	78	106	78	134	2,550	51	401	214	119	56	37
23	354	140	102	78	131	960	50	346	184	135	53	37
24	243	105	98	76	126	266	51	304	163	252	51	43
25	191	90	96	73	122	193	49	272	147	225	49	60
26	164	77	95	70	119	160	47	248	135	148	49	78
27	145	70	93	70	116	146	52	226	130	105	48	104
28	134	66	91	70	111	133	53	208	120	87	51	73
29	126	65	90	76	109	123	53	194	109	77	63	60
30	118	62	90	1,160	------	107	50	182	104	71	51	53
31	110	------	524	4,640	------	98	------	173	------	71	47	------
TOTAL	11,168	2,423	17,195	11,074	13,399	7,041	1,920	96,358	11,923	3,328	3,305	1,446
MEAN	360	80.8	555	357	462	227	64.0	3,108	397	107	107	48.2
MAX	2,490	140	3,440	4,640	4,450	2,550	93	13,700	3,550	252	783	104
MIN	76	62	61	70	109	81	47	47	104	71	47	37
AC-FT	22,150	4,810	34,110	21,970	26,580	13,970	3,810	191,100	23,650	6,600	6,560	2,870

CAL YR 1971 TOTAL 100,880.5 MEAN 276 MAX 11,800 MIN 8.0 AC-FT 200,100
WTR YR 1972 TOTAL 180,580.0 MEAN 493 MAX 13,700 MIN 37 AC-FT 358,200

PEAK DISCHARGE (BASE, 4,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-31	2300	a22.74	5,650	5-12	0800	24.98	13,100
5- 8	2100	26.27	19,700	5-18	1000	24.07	8,680

a From floodmark.

08164300 Navidad River near Hallettsville, Tex.

LOCATION.--Lat 29°28'01", long 96°48'44", Lavaca County, on right bank 28 ft downstream from bridge on U.S. Highway 90-A, 0.8 mile downstream from Mixons Creek, 1.2 miles southwest of Sublime, and 8 miles northeast of Hallettsville.

DRAINAGE AREA.--332 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 159.28 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 125 cfs (90,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,400 cfs May 12 (gage height, 28.82 ft); minimum, 7.3 cfs Sept. 21-23.
Period of record: Maximum discharge, 19,500 cfs Sept. 22, 1967 (gage height, 30.34 ft); no flow Aug. 5-7, 22, Sept. 2-16, 1964.
Maximum stage since at least 1860, 40 ft in June 1940; flood in July 1936 reached a stage of 39 ft, from information by local residents and Southern Pacific Railroad Co.

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

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	20	18	135	103	40	47	20	36	15	13	9.8
2	27	20	1,080	193	72	38	45	320	34	14	13	9.6
3	49	20	1,440	94	60	36	44	85	33	13	72	9.3
4	369	18	151	55	54	36	41	33	30	14	83	9.2
5	80	18	407	45	53	36	39	24	27	16	36	9.7
6	102	18	1,680	41	53	34	38	24	26	16	23	9.2
7	48	18	646	39	52	35	37	1,090	24	13	19	9.1
8	34	18	152	38	48	35	36	7,220	23	12	16	8.8
9	30	18	100	39	47	33	33	1,070	23	12	16	8.3
10	28	18	85	38	46	32	32	676	24	15	17	8.3
11	26	18	72	35	749	33	31	7,080	467	219	75	8.1
12	25	18	62	34	320	33	30	11,800	96	42	92	8.2
13	24	18	56	33	107	32	28	9,820	45	60	36	8.0
14	24	18	53	30	70	35	27	3,330	50	32	22	8.3
15	23	18	50	28	61	33	25	2,380	38	24	20	9.8
16	25	17	48	27	55	31	24	287	710	22	19	10
17	197	17	45	28	52	29	23	222	1,880	22	16	11
18	60	26	42	30	49	28	23	173	242	26	15	9.9
19	49	64	41	31	45	27	22	136	102	26	17	8.7
20	315	32	41	31	45	623	22	112	59	26	15	8.2
21	154	24	40	30	45	5,470	22	95	44	32	14	7.7
22	49	21	37	29	45	329	22	83	37	78	12	7.4
23	35	41	36	29	44	122	20	74	32	54	12	7.7
24	29	36	36	28	44	96	19	68	28	30	12	13
25	26	23	36	26	42	85	18	62	26	22	11	28
26	24	22	36	25	41	76	18	56	23	19	11	19
27	24	21	36	26	39	68	18	50	21	17	10	14
28	24	20	36	26	38	63	22	47	18	16	11	13
29	23	19	36	25	39	56	24	43	16	15	11	12
30	22	19	35	1,530	------	50	22	41	16	14	11	11
31	21	------	75	359	------	49	------	37	------	14	10	------
TOTAL	1,993	678	6,708	3,157	2,518	7,723	852	46,558	4,230	950	760	314.3
MEAN	64.3	22.6	216	102	86.8	249	28.4	1,502	141	30.6	24.5	10.5
MAX	369	64	1,680	1,530	749	5,470	47	11,800	1,880	219	92	28
MIN	21	17	18	25	38	27	18	20	16	12	10	7.4
AC-FT	3,950	1,340	13,310	6,260	4,990	15,320	1,690	92,350	8,390	1,880	1,510	623

CAL YR 1971 TOTAL 32,599.07 MEAN 89.3 MAX 6,120 MIN .55 AC-FT 64,660
WTR YR 1972 TOTAL 76,441.30 MEAN 209 MAX 11,800 MIN 7.4 AC-FT 151,600

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-30	1500	19.16	2,630	5-12	1100	28.82	14,400
3-21	0630	25.08	8,010	6-17	0300	19.30	2,700
5- 8	0900	26.20	9.230				

08164500 Navidad River near Ganado, Tex.

LOCATION.--Lat 29°01'32", long 96°33'08", Jackson County, at downstream side near center of upstream bridge of two bridges on U.S. Highway 59, 170 ft upstream from Texas and New Orleans Railroad Co. bridge, 0.2 mile downstream from Sandy Creek, and 2.5 miles southwest of Ganado.

DRAINAGE AREA.--1,063 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 13.62 ft above mean sea level (levels by Corps of Engineers). Prior to May 7, 1958, nonrecording gage at site 70 ft downstream at same datum. Mar. 7, 1958, to Mar. 22, 1961, nonrecording gages at same site and datum.

AVERAGE DISCHARGE.--33 years, 510 cfs (369,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,100 cfs May 14 (gage height, 30.12 ft); minimum, 27 cfs Dec. 1.
Period of record: Maximum discharge, 64,500 cfs July 2, Nov. 26, 1940; maximum gage height, 36.54 ft July 2, 1940, from floodmark; no flow at times in 1955-56, 1967.
Maximum stage since at least 1876, 39.8 ft May 27, 1936, from information by local resident and Texas and New Orleans Railroad Co. (discharge, 94,000 cfs, from rating curve extended above 57,000 cfs).

REMARKS.--Records good. Numerous diversions for irrigation above station. Much of low flow during the April to September irrigation season comes from Sandy Creek. This low flow is drainage from ricefields irrigated by water originally diverted from the Colorado River. Water-quality records for the current year are published in Part 2 of this report.

Listed below are discharge measurements, in cubic feet per second, of Sandy Creek near mouth, 0.2 mile upstream from gaging station, during water year 1972:

Nov. 30	0.80	Apr. 13	30.7
Dec. 31	7.92	June 22	148
Mar. 9	2.36	Aug. 29	226

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	95	28	1,410	7,380	69	85	45	132	114	133	137
2	268	80	246	804	2,920	67	89	40	126	123	157	120
3	219	70	3,080	477	1,170	65	87	173	132	133	535	119
4	213	65	2,680	470	650	62	88	216	194	136	1,440	117
5	759	55	1,300	918	420	57	82	76	180	219	1,010	133
6	885	50	3,060	513	320	54	90	120	150	355	561	175
7	1,020	45	5,710	253	210	55	93	2,720	128	453	293	140
8	610	45	4,880	162	160	50	94	6,480	116	415	171	120
9	359	45	1,850	128	145	50	101	5,300	115	401	118	100
10	238	45	1,310	109	130	49	89	5,330	131	331	99	90
11	185	35	1,010	95	690	45	79	10,300	365	295	91	75
12	153	35	580	80	4,960	45	79	14,900	735	464	85	85
13	135	35	402	71	4,800	45	86	16,200	658	545	226	95
14	121	35	297	65	1,890	45	75	19,900	745	553	155	130
15	112	30	225	58	821	46	71	18,500	923	551	105	170
16	109	30	185	51	478	47	65	11,800	906	413	82	195
17	1,140	30	157	46	305	43	62	7,780	2,840	293	64	200
18	2,290	40	131	44	212	41	63	4,220	5,430	345	61	205
19	1,530	35	112	45	163	40	63	1,400	3,090	391	58	200
20	1,660	40	99	55	135	43	67	828	1,030	385	57	200
21	5,390	45	91	62	117	365	78	558	521	319	74	190
22	4,720	40	84	52	106	2,600	72	393	286	517	94	180
23	2,400	150	77	46	99	2,810	56	302	202	923	72	170
24	1,290	70	72	41	93	348	60	255	165	1,080	63	195
25	720	70	67	37	91	194	62	219	141	873	56	250
26	460	70	65	34	85	162	51	197	124	483	61	415
27	300	65	63	33	80	146	57	181	118	300	65	535
28	230	50	62	31	74	132	51	166	117	200	61	405
29	180	40	61	30	71	118	46	154	111	154	175	318
30	150	31	60	1,590	------	107	41	150	107	124	143	251
31	120	------	84	6,950	------	94	------	138	------	131	150	------
TOTAL	28,313	1,571	28,128	14,760	28,775	8,094	2,182	129,041	20,018	12,019	6,515	5,715
MEAN	913	52.4	907	476	992	261	72.7	4,163	667	388	210	191
MAX	5,390	150	5,710	6,950	7,380	2,810	101	19,900	5,430	1,080	1,440	535
MIN	109	30	28	30	71	40	41	40	107	114	56	75
AC-FT	56,160	3,120	55,790	29,280	57,080	16,050	4,330	256,000	39,710	23,840	12,920	11,340

CAL YR 1971 TOTAL 148,484.0 MEAN 407 MAX 9,990 MIN 4.4 AC-FT 294,500
WTR YR 1972 TOTAL 285,131.0 MEAN 779 MAX 19,900 MIN 28 AC-FT 565,600

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	1900	24.06	6,060	5- 8	0700	25.20	6,750
12- 7	2000	24.27	6,190	5-14	1700	30.12	21,100
2- 1	0400	26.60	8,380	6-18	1400	23.88	5,730
2-12	2400	24.12	6,090				

08164600 Garcitas Creek near Inez, Tex.

LOCATION.--Lat 28°53'28", long 96°49'08", Victoria County, at right downstream end of bridge on U.S. Highway 59 access road, 0.3 mile upstream from Southern Pacific Railroad bridge, 2.0 miles southwest of Inez, and 3.6 miles upstream from Casa Blanca Creek.

DRAINAGE AREA.--91.7 sq mi.

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 29.16 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,100 cfs May 8 (gage height, 19.90 ft); minimum, 0.15 cfs May 6.
Period of record: Maximum discharge, 5,100 cfs May 8, 1972 (gage height, 19.90 ft); no flow May 22, 23, May 26 to June 17, 1971.
Maximum stage since 1903, 24.5 ft Oct. 26, 1960. In 1929, a flood nearly as high as the 1960 flood occurred, and a flood in September 1967 reached a stage of 23.4 ft, from information by local resident.

REMARKS.--Records good. No known diversion above station. An undetermined amount of return water from irrigation enters stream above station. Recording rain gage at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	7.3	3.6	30	229	1.7	1.3	.50	4.8	.78	7.3	1.6
2	11	6.3	4.0	29	114	1.7	1.3	.55	4.8	.64	8.2	1.7
3	11	5.5	3.8	18	67	1.6	1.3	.45	4.7	.53	264	1.6
4	12	4.8	3.5	15	38	1.6	1.3	.33	4.3	.48	539	1.6
5	13	4.4	26	75	23	1.6	1.3	.26	4.1	.53	131	1.9
6	13	4.1	430	39	15	1.6	1.2	3.9	3.8	.48	67	1.8
7	15	3.8	413	24	11	1.6	1.2	1,430	3.7	.40	39	1.4
8	23	3.5	138	17	8.7	1.5	1.1	3,610	3.6	.45	30	1.2
9	15	3.4	90	14	7.0	1.4	1.0	457	3.7	.49	19	1.2
10	10	3.3	77	11	6.1	1.4	.97	340	3.8	.45	13	1.2
11	8.0	3.2	59	9.9	7.2	1.4	1.1	1,930	4.7	.60	11	1.2
12	6.4	3.0	41	8.6	38	1.3	1.1	565	4.4	1.2	9.3	1.4
13	5.1	3.0	31	8.1	32	1.3	1.1	226	16	7.3	9.1	1.3
14	4.0	3.0	25	7.3	19	1.2	.91	129	6.9	6.4	9.2	1.3
15	3.3	2.8	20	6.4	11	1.8	.89	81	4.7	4.5	7.2	1.5
16	4.8	2.7	17	5.6	7.6	1.7	.80	57	12	4.1	5.9	1.4
17	1,030	2.7	15	5.6	6.0	1.3	.70	41	24	110	4.7	1.7
18	1,460	5.1	13	5.6	5.0	1.2	.62	31	11	88	3.8	1.7
19	321	3.0	11	5.6	4.0	.93	.59	24	6.9	44	3.3	1.3
20	488	3.1	10	5.6	3.4	1.3	.58	19	4.7	31	3.0	1.4
21	799	3.0	9.2	5.5	2.9	2.2	.67	15	3.6	80	2.7	1.3
22	184	3.4	8.3	5.4	2.5	4.7	.62	12	2.8	72	2.5	1.4
23	99	67	8.1	5.3	2.2	3.2	.52	10	2.3	80	2.3	1.5
24	62	85	7.7	5.0	2.0	2.7	.46	9.2	1.9	54	2.3	3.8
25	40	40	7.4	4.8	1.9	2.3	.40	8.2	1.7	38	2.2	8.0
26	28	21	7.2	4.6	1.8	2.1	.36	7.4	1.5	27	2.1	8.1
27	20	13	7.2	4.7	1.8	1.9	.61	6.8	1.3	20	2.6	9.3
28	15	8.9	7.0	4.7	1.7	1.8	.66	6.4	1.1	16	2.7	10
29	12	6.4	6.8	4.6	1.7	1.6	.58	6.1	1.0	12	2.8	10
30	10	4.8	6.6	300	------	1.4	.53	5.5	.86	10	2.6	8.9
31	8.5	------	7.6	1,340	------	1.4	------	5.0	------	8.7	2.0	------
TOTAL	4,747.1	330.5	1,514.0	2,024.9	670.5	54.43	25.77	9,037.59	154.66	720.03	1,210.8	91.7
MEAN	153	11.0	48.8	65.3	23.1	1.76	.86	292	5.16	23.2	39.1	3.06
MAX	1,460	85	430	1,340	229	4.7	1.3	3,610	24	110	539	10
MIN	3.3	2.7	3.5	4.6	1.7	.93	.36	.26	.86	.40	2.0	1.2
CFSM	1.67	.12	.53	.71	.25	.02	.009	3.18	.06	.25	.43	.03
IN.	1.93	.13	.61	.82	.27	.02	.01	3.67	.06	.29	.49	.04
AC-FT	9,420	656	3,000	4,020	1,330	108	51	17,930	307	1,430	2,400	182

CAL YR 1971 TOTAL 14,873.89 MEAN 40.8 MAX 1,770 MIN 0 CFSM .44 IN 6.03 AC-FT 29,500
WTR YR 1972 TOTAL 20,581.98 MEAN 56.2 MAX 3,610 MIN .26 CFSM .61 IN 8.35 AC-FT 40,820

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-17	2300	16.13	2,380	5- 8	0700	19.90	5,100
10-21	0200	13.67	1,260	5-11	1000	15.91	2,260
12- 6	2300	11.86	700	8- 4	0400	12.58	894
1-31	0600	a15.24	1,930				

a From floodmark.

08164800 Placedo Creek near Placedo, Tex.

LOCATION.--Lat 28°43'30", long 96°46'07", Victoria County, on right bank at downstream end of bridge on Farm Road 616, 0.1 mile downstream from confluence of Lone Tree Creek and Arroyo Palo Alto, 1.2 miles upstream from Ninemile Creek, and 4.4 miles northeast of Placedo.

DRAINAGE AREA.--68.3 sq mi.

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.58 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,860 cfs May 7 (gage height, 24.05 ft); minimum, 0.12 cfs Sept. 21.
Period of record: Maximum discharge, 5,860 cfs Sept. 11, 1971, May 7, 1972 (gage height, 24.05 ft); no flow Sept. 8, 9, 1971.
Maximum stage since 1930, 31.9 ft in September 1967 and 30.4 ft in 1960 (probably October), from information by local resident.

REMARKS.--Records good. No known diversion above station. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	2.1	.96	57	68	.84	1.1	3.2	2.6	.48	.59	.79
2	5.1	2.1	.96	17	37	.72	1.2	1.7	2.5	.44	13	.55
3	3.4	1.9	.96	7.7	20	.60	1.3	.8	2.5	.38	1,050	.41
4	4.3	1.8	.96	5.3	9.1	.60	1.2	.5	2.6	.44	1,670	1.9
5	33	1.8	108	9.1	5.0	.60	1.2	.3	2.5	.42	279	2.5
6	116	1.8	591	5.0	3.2	.60	1.1	.4	5.3	.38	75	.90
7	33	1.8	304	3.1	2.1	.84	1.1	2,740	2.4	.38	33	.45
8	18	1.8	95	2.4	1.4	.88	1.1	4,200	2.1	.99	17	.29
9	20	1.8	51	2.2	1.1	.73	1.0	1,090	2.1	.75	8.6	.24
10	15	1.8	33	2.2	.88	.60	1.0	347	2.8	.70	25	.21
11	9.7	1.8	21	2.1	4.3	.64	1.0	1,230	6.1	.56	95	.18
12	8.9	1.8	13	2.1	28	.66	.83	314	5.3	.52	22	.15
13	6.7	1.9	9.4	2.5	14	199	1.5	347	23	.98	7.6	.18
14	5.7	1.9	7.0	2.5	8.3	118	2.0	283	94	.54	3.9	.19
15	3.8	1.7	5.3	2.6	4.5	38	1.0	212	38	2.3	2.3	.22
16	3.9	1.6	4.1	2.8	2.6	43	.60	91	267	2.8	1.8	.33
17	2,070	1.6	3.5	3.1	1.6	13	.45	34	348	12	1.7	.19
18	3,340	8.5	2.9	3.3	1.0	4.2	.38	18	75	42	1.5	3.3
19	643	3.6	2.6	3.5	.79	2.5	.43	10	20	29	1.7	.93
20	261	1.9	2.5	3.6	.72	2.0	.48	6.5	6.3	16	1.5	.23
21	420	1.4	2.4	3.8	.72	5.6	.53	5.1	2.9	88	1.2	.17
22	96	1.0	2.2	4.0	.68	25	.60	4.2	1.6	73	1.1	.79
23	44	9.9	2.2	3.9	.60	4.2	.46	3.9	1.2	58	.95	1.3
24	24	18	2.2	3.7	.60	2.7	.41	3.9	.96	33	.84	30
25	14	10	2.2	4.0	.60	1.8	.38	3.6	.79	45	1.2	626
26	8.2	3.8	2.2	4.2	.60	1.5	.38	3.3	.63	32	.88	254
27	5.4	2.1	2.1	4.4	.68	1.3	.61	3.0	.58	8.6	.74	1,000
28	3.7	1.4	2.1	4.5	.77	1.3	.72	2.8	.48	3.2	.91	281
29	2.9	1.2	2.1	4.5	.92	1.2	.64	2.8	.48	2.1	7.6	79
30	2.6	1.0	2.1	107	------	1.1	2.7	2.8	.48	1.3	3.6	38
31	2.2	------	32	163	------	1.0	------	2.6	------	1.1	1.6	------
TOTAL	7,232.5	94.8	1,310.94	446.1	219.76	474.71	27.40	10,967.4	920.20	457.36	3,330.81	2,324.40
MEAN	233	3.16	42.3	14.4	7.58	15.3	.91	354	30.7	14.8	107	77.5
MAX	3,340	18	591	163	68	199	2.7	4,200	348	88	1,670	1,000
MIN	2.2	1.0	.96	2.1	.60	.60	.38	.30	.48	.38	.59	.15
CFSM	3.41	.05	.62	.21	.11	.22	.01	5.18	.45	.22	1.57	1.13
IN.	3.94	.05	.71	.24	.12	.26	.01	5.97	.50	.25	1.81	1.27
AC-FT	14,350	188	2,600	885	436	942	54	21,750	1,830	907	6,610	4,610

CAL YR 1971 TOTAL 26,781.00 MEAN 73.4 MAX 5,210 MIN 0 CFSM 1.07 IN 14.59 AC-FT 53,120
WTR YR 1972 TOTAL 27,806.38 MEAN 76.0 MAX 4,200 MIN .15 CFSM 1.11 IN 15.14 AC-FT 55,150

PEAK DISCHARGE (BASE, 1,000 CFS, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-17	1900	22.62	4,410	8- 3	2400	20.42	2,760
5- 7	1900	24.05	5,860	9-25	1500	17.04	1,120
5-11	0300	19.48	2,200	9-27	1200	17.58	1,280

08165300 North Fork Guadalupe River near Hunt, Tex.

LOCATION.--Lat 30°03'36", long 99°23'40", Kerr County, on right bank 410 ft downstream from Ranch Road 1340, 1.3 miles downstream from Bear Creek, 3.7 miles west of Hunt, and 4.1 miles upstream from Honey Creek.

DRAINAGE AREA.--168 sq mi.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,800.10 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 31.7 cfs (22,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,230 cfs Oct. 19 (gage height, 7.89 ft); minimum, 10 cfs May 5.
Period of record: Maximum discharge, 17,800 cfs Aug. 13, 1971 (gage height, 22.86 ft), from rating curve extended above 170 cfs on basis of slope-area measurements of 7,460 and 17,800 cfs; minimum, 0.68 cfs May 30, 1969.
Maximum stage since at least 1900 occurred July 1, 1932, gage height 37.3 ft (discharge, 140,000 cfs, by slope-area measurements, combined flow of North Fork Guadalupe River 5 miles upstream and Bear Creek 2 miles upstream from mouth, and adjusted for difference in drainage area).

REMARKS.--Records good. There is one permit upstream from station issued by the Texas Water Rights Commission that permits the impounding and use of 20.33 acre-ft per year on a game preserve.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	42	29	28	24	20	16	15	29	22	21	28
2	23	40	29	28	24	19	16	16	29	22	20	28
3	23	39	30	27	23	19	16	20	28	21	19	28
4	29	38	30	27	23	19	16	21	26	23	34	27
5	30	37	30	25	23	19	16	12	26	24	38	27
6	30	36	30	24	23	19	16	18	26	24	35	30
7	28	35	30	24	23	19	16	405	26	23	31	29
8	27	34	30	24	22	19	16	138	26	24	30	27
9	27	33	30	25	21	19	16	279	27	23	31	26
10	26	32	30	26	21	19	15	118	27	23	31	26
11	25	35	29	26	22	19	15	71	27	22	39	26
12	25	35	28	25	22	19	16	69	28	22	42	26
13	25	33	28	25	22	19	16	64	26	22	52	25
14	26	32	28	24	22	19	16	65	26	22	50	25
15	25	31	28	24	22	19	16	57	26	22	45	24
16	24	31	28	24	21	19	15	53	26	21	42	24
17	24	31	28	24	21	18	15	48	25	22	38	24
18	24	31	28	24	21	16	14	47	25	23	35	24
19	395	30	27	24	20	17	17	45	24	25	33	24
20	378	29	27	24	20	20	18	44	24	24	31	23
21	86	29	27	24	20	22	19	42	23	23	30	23
22	73	29	27	24	20	19	17	40	23	23	29	28
23	64	29	27	24	20	19	16	39	23	22	32	32
24	58	29	27	24	20	18	19	39	23	22	35	34
25	56	29	27	24	20	18	16	37	23	22	32	31
26	53	29	26	24	20	18	15	38	22	21	34	28
27	60	28	26	23	20	18	16	34	23	21	35	27
28	52	27	26	23	19	18	16	25	22	21	32	27
29	48	28	26	23	19	18	16	28	22	21	31	26
30	46	31	26	24	------	18	15	30	22	20	29	24
31	43	------	26	24	------	17	------	30	------	20	29	------
TOTAL	1,877	972	868	763	618	579	482	1,987	753	690	1,045	801
MEAN	60.5	32.4	28.0	24.6	21.3	18.7	16.1	64.1	25.1	22.3	33.7	26.7
MAX	395	42	30	28	24	22	19	405	29	25	52	34
MIN	23	27	26	23	19	16	14	12	22	20	19	23
AC-FT	3,720	1,930	1,720	1,510	1,230	1,150	956	3,940	1,490	1,370	2,070	1,590

CAL YR 1971 TOTAL 16,733.6 MEAN 45.8 MAX 4,970 MIN 6.8 AC-FT 33,190
WTR YR 1972 TOTAL 11,435.0 MEAN 31.2 MAX 405 MIN 12 AC-FT 22,680

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	1630	7.89	1,230	5-7	1845	7.77	1,150
10-20	0430	7.54	1,000	5-9	0730	7.44	974

08165500 Guadalupe River at Hunt, Tex.

LOCATION.--Lat 30°04'08", long 99°19'23", Kerr County, on right bank 44 ft downstream from State Highway 39, 0.6 mile downstream from confluence of North and South Forks of Guadalupe River, 0.8 mile east of Hunt, and at mile 430.9.

DRAINAGE AREA.--288 sq mi.

PERIOD OF RECORD.--October 1941 to September 1949 (discharge not computed above 600 cfs), and April 1965 to current year. Occasional discharge measurements made 1950 to 1964.

GAGE.--Water-stage recorder. Datum of gage is 1,722.7 ft above mean sea level.

AVERAGE DISCHARGE.--7 years (1965-72), 60.5 cfs (43,830 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,910 cfs Aug. 26 (gage height, 10.01 ft); minimum, 25 cfs Apr. 25, 26, July 13-15.
Period of record: Maximum discharge, 47,000 cfs Aug. 13, 1966 (gage height, 21.4 ft, from floodmark), from rating curve extended above 3,700 cfs on basis of channel geometry and flow-over-dam measurement of peak flow; minimum, 6.9 cfs June 17, 1948.
Maximum stage since 1900, 36.6 ft July 2, 1932, from information by local residents, discharge 206,000 cfs, determined by slope-area measurement 4.5 miles downstream from gage.

REMARKS.--Records good. Numerous diversions for irrigation above station, amounts unknown.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	70	53	50	45	36	32	42	54	29	29	55
2	41	68	53	51	45	36	31	45	53	27	28	53
3	40	67	56	50	43	35	31	39	52	28	30	53
4	69	64	54	48	39	35	32	39	47	31	52	51
5	58	64	55	45	39	33	36	33	44	35	63	53
6	56	64	59	44	41	28	38	40	46	34	56	55
7	52	63	57	45	43	28	35	616	45	33	49	52
8	51	62	57	45	40	33	33	314	44	33	46	50
9	55	62	58	46	41	34	31	270	46	31	45	48
10	52	61	56	47	54	34	34	151	49	29	51	48
11	48	60	53	48	49	35	32	153	50	28	82	47
12	49	62	52	45	41	36	30	127	54	27	88	46
13	50	61	51	45	40	36	30	107	49	26	74	46
14	51	61	51	44	40	36	29	316	47	27	74	45
15	50	60	51	42	40	36	29	158	48	26	67	46
16	48	59	50	42	41	36	28	120	46	27	65	48
17	47	59	50	42	38	35	27	106	46	29	61	47
18	50	58	49	44	37	34	26	92	47	37	58	47
19	270	56	49	45	37	32	31	77	42	43	54	44
20	432	55	49	45	37	40	35	83	39	36	52	42
21	146	55	48	44	40	46	36	78	39	39	50	43
22	112	55	47	43	38	40	32	72	38	34	48	49
23	99	56	49	43	38	37	29	75	35	33	51	55
24	90	57	50	43	38	36	28	78	35	34	65	60
25	84	55	49	42	36	39	30	69	34	32	56	55
26	81	55	49	42	35	38	26	65	32	30	850	51
27	99	54	50	42	36	33	31	61	31	29	119	50
28	84	53	50	43	36	34	34	47	31	27	79	49
29	80	51	50	44	36	32	32	53	31	28	66	48
30	75	56	50	50	------	31	29	54	31	32	60	45
31	72	------	48	47	------	31	------	54	------	29	57	------
TOTAL	2,633	1,783	1,603	1,396	1,163	1,085	937	3,634	1,285	963	2,625	1,481
MEAN	84.9	59.4	51.7	45.0	40.1	35.0	31.2	117	42.8	31.1	84.7	49.4
MAX	432	70	59	51	54	46	38	616	54	43	850	60
MIN	40	51	47	42	35	28	26	33	31	26	28	42
AC-FT	5,220	3,540	3,180	2,770	2,310	2,150	1,860	7,210	2,550	1,910	5,210	2,940

CAL YR 1971 TOTAL 24,239 MEAN 66.4 MAX 4,730 MIN 12 AC-FT 48,080
WTR YR 1972 TOTAL 20,588 MEAN 56.3 MAX 850 MIN 26 AC-FT 40,840

PEAK DISCHARGE (BASE, 1,000 CFS).--May 7 (1445) 1,790 cfs (6.98 ft); Aug. 26 (0745) 3,910 cfs (10.01 ft).

08166000 Johnson Creek near Ingram, Tex.

LOCATION.--Lat 30°06'00", long 99°16'58", Kerr County, on right bank 1.6 miles upstream from Henderson Branch, 3.4 miles northwest of Ingram, 3.8 miles upstream from mouth, and 9.2 miles northwest of Kerrville.

DRAINAGE AREA.--114 sq mi.

PERIOD OF RECORD.--September 1941 to November 1959, October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,721.30 ft above mean sea level.

AVERAGE DISCHARGE.--29 years, 14.4 cfs (10,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 905 cfs Oct. 20 (gage height, 3.98 ft); minimum, 7.2 cfs July 1, 16.
Period of record: Maximum discharge, 95,900 cfs Oct. 4, 1959 (gage height, 24.25 ft), from rating curve extended above 4,400 cfs on basis of slope-area measurements of 9,100 and 16,000 cfs and conveyance study; minimum daily, 0.4 cfs July 26, 27, 1956.
Maximum stage since at least 1852, 35 ft July 2, 1932, from information by local resident; discharge 138,000 cfs by slope-area measurement at point half a mile downstream from State fish hatchery and 6 or 7 miles upstream from gage. Flood of June 14, 1935, reached a stage of 31 or 32 ft, from information by local resident.

REMARKS.--Records good. Numerous small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1058: 1942-45. WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	28	20	20	18	17	13	12	14	7.7	12	16
2	11	30	21	19	20	15	13	18	14	8.5	11	15
3	15	27	21	20	16	15	13	13	14	10	12	15
4	37	25	21	19	15	15	13	12	13	11	20	15
5	25	26	23	17	15	15	14	11	13	13	17	16
6	22	25	23	17	16	15	15	15	12	12	13	16
7	18	24	21	18	15	16	14	24	13	11	13	15
8	18	24	22	19	15	15	12	20	12	11	13	13
9	19	24	25	19	15	15	12	16	13	10	13	12
10	17	22	23	19	15	14	13	23	15	13	16	13
11	16	23	20	19	17	17	13	21	14	10	85	13
12	16	22	20	19	16	17	12	19	17	9.0	39	13
13	19	22	20	19	15	17	13	19	15	11	25	13
14	19	22	20	18	16	16	13	28	14	12	20	14
15	18	23	21	18	16	15	16	24	17	8.8	29	13
16	18	26	20	18	16	15	12	24	14	7.9	37	12
17	18	24	21	18	18	15	12	22	16	9.9	26	12
18	19	23	20	19	17	14	9.9	20	13	17	25	13
19	144	22	20	18	17	13	12	19	12	18	21	15
20	267	21	20	18	17	18	13	18	14	13	20	16
21	63	21	20	17	18	17	15	18	12	12	19	15
22	49	22	19	18	18	16	11	18	10	11	18	17
23	41	23	19	17	18	17	12	18	10	14	22	17
24	36	21	19	17	17	16	12	17	10	20	20	20
25	34	21	19	17	17	15	11	17	9.7	14	19	16
26	33	22	19	17	17	14	11	16	10	13	17	15
27	41	21	20	19	16	14	15	14	9.5	11	17	15
28	32	20	20	18	17	13	14	15	9.3	11	17	15
29	30	22	20	17	17	16	12	15	9.3	9.5	15	15
30	29	22	20	18	------	15	12	13	8.6	11	15	14
31	28	------	19	18	------	13	------	15	------	12	16	------
TOTAL	1,167	698	636	564	480	475	382.9	554	377.4	362.3	662	439
MEAN	37.6	23.3	20.5	18.2	16.6	15.3	12.8	17.9	12.6	11.7	21.4	14.6
MAX	267	30	25	20	20	18	16	28	17	20	85	20
MIN	11	20	19	17	15	13	9.9	11	8.6	7.7	11	12
AC-FT	2,310	1,380	1,260	1,120	952	942	759	1,100	749	719	1,310	871

CAL YR 1971 TOTAL 9,600.3 MEAN 26.3 MAX 1,890 MIN 4.1 AC-FT 19,040
WTR YR 1972 TOTAL 6,797.6 MEAN 18.6 MAX 267 MIN 7.7 AC-FT 13,480

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	1415	3.33	480	8-11	1315	2.71	198
10-20	0130	3.98	905	8-15	2045	2.50	148

08167000 Guadalupe River at Comfort, Tex.

LOCATION.--Lat 29°57'55", long 98°53'49", Kendall County, on left bank at downstream side of pier of bridge on U.S. Highway 87, 0.1 mile downstream from Cypress Creek, and at mile 396.6.

DRAINAGE AREA.--838 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,372.05 ft above mean sea level. Prior to Nov. 27, 1939, nonrecording gage.

AVERAGE DISCHARGE.--33 years, 149 cfs (108,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,460 cfs Oct. 19 (gage height, 14.64 ft); minimum, 73 cfs Apr. 26.
Period of record: Maximum discharge, 111,000 cfs Oct. 4, 1959 (gage height, 33.15 ft), from rating curve extended above 65,000 cfs on basis of slope-area measurement (made at former gaging station "near Comfort," 5 miles upstream) of 182,000 cfs (gage height, 38.4 ft); no flow at times in 1952-57, 1963-64.
Maximum stage since at least 1848, 40.3 ft in July 1869, from report by Corps of Engineers. Flood of July 1, 1932, reached a stage of 38.4 ft (from floodmark), from information by State Highway Department, and flood of July 16, 1900, reached about the same stage as that of July 1, 1932, from information by local residents.

REMARKS.--Records good. Many small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1632: 1958. WSP 1732: 1939(M). WRD Texas 1968: Drainage area. WRD Texas 1971: 1944(M), 1952(M), 1957(M), 1960(M), 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	482	234	210	198	138	108	118	275	143	126	168
2	146	452	265	218	194	132	108	158	270	136	112	164
3	143	428	260	214	178	132	108	152	250	134	121	165
4	709	398	242	214	170	130	106	132	242	132	155	152
5	520	386	280	198	170	130	106	126	230	158	155	141
6	392	380	300	194	178	130	108	572	218	152	150	253
7	325	368	275	186	167	128	112	3,440	210	149	137	162
8	315	368	260	182	161	126	106	1,510	206	138	129	148
9	362	368	275	198	161	124	100	801	230	134	124	137
10	320	345	285	202	158	128	98	2,040	238	130	128	135
11	285	335	255	198	170	130	100	1,250	310	128	433	131
12	265	325	246	194	178	132	100	1,060	335	124	624	132
13	270	325	242	190	170	134	96	1,110	246	118	379	130
14	285	315	246	182	164	134	94	2,260	226	114	279	124
15	265	300	242	182	161	132	91	1,170	451	112	244	121
16	265	305	234	178	155	128	86	925	270	112	353	126
17	270	320	234	182	152	116	84	855	357	114	268	125
18	449	310	230	178	140	122	80	694	310	136	232	119
19	2,140	275	226	178	140	120	80	607	255	248	207	117
20	2,370	270	226	178	146	132	84	537	230	190	190	116
21	1,170	260	218	170	143	143	91	512	218	149	180	115
22	905	270	214	164	143	136	92	476	206	138	169	117
23	754	340	214	167	143	132	86	452	190	143	216	127
24	656	275	214	170	143	126	80	434	182	136	248	182
25	586	265	214	161	143	122	76	404	178	136	224	173
26	544	255	218	161	140	120	74	350	170	124	592	142
27	1,080	246	218	164	132	122	401	330	161	120	666	130
28	718	246	218	164	136	116	243	305	155	112	284	121
29	607	238	218	212	138	110	140	285	149	108	227	118
30	579	234	218	255	------	110	126	280	146	138	212	113
31	518	------	214	214	------	108	------	280	------	131	185	------
TOTAL	18,374	9,684	7,435	5,858	4,572	3,923	3,364	23,625	7,114	4,237	7,749	4,204
MEAN	593	323	240	189	158	127	112	762	237	137	250	140
MAX	2,370	482	300	255	198	143	401	3,440	451	248	666	253
MIN	143	234	214	161	132	108	74	118	146	108	112	113
AC-FT	36,440	19,210	14,750	11,620	9,070	7,780	6,670	46,860	14,110	8,400	15,370	8,340

CAL YR 1971 TOTAL 105,513.6 MEAN 289 MAX 27,300 MIN 5.8 AC-FT 209,300
WTR YR 1972 TOTAL 100,139.0 MEAN 274 MAX 3,440 MIN 74 AC-FT 198,600

PEAK DISCHARGE (BASE, 2,600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2300	14.64	7,460	5-10	1400	13.50	5,850
4-27	1900	10.49	2,750	5-14	0600	13.43	5,760
5- 7	1500	13.78	6,210				

08167500 Guadalupe River near Spring Branch, Tex.

LOCATION.--Lat 29°51'38", long 98°22'58", Comal County, on right bank at downstream side of bridge on county road, 82 ft downstream from bridge on Ranch Road 311, 1.9 miles southeast of Spring Branch Post Office, 7.5 miles downstream from Curry Creek, and at mile 334.4.

DRAINAGE AREA.--1,315 sq mi.

PERIOD OF RECORD.--June 1922 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 948.10 ft above mean sea level.

AVERAGE DISCHARGE.--50 years, 268 cfs (194,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14,900 cfs May 12 (gage height, 18.13 ft); minimum, 127 cfs Apr. 26, 27
Period of record: Maximum discharge, 121,000 cfs July 3, 1932 (gage height, 42.10 ft), from rating curve extended above 70,000 cfs; no flow at times in 1951-52, 1954-56, 1963-64.
Maximum stage since at least 1859, about 53 ft in 1869; flood in July 1900 reached a stage of about 49 ft, from information by local resident.

REMARKS.--Records good. Several small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1562: 1923-24, 1926, 1927-28(M), 1929, 1930(M). WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	850	430	398	340	228	172	192	560	262	183	248
2	326	825	458	394	329	224	172	183	546	256	207	231
3	308	775	551	394	312	220	172	198	528	245	180	220
4	385	725	510	390	298	220	169	204	510	238	201	214
5	875	700	727	375	287	217	166	180	484	228	259	210
6	700	675	628	360	290	217	166	210	458	245	224	204
7	582	675	628	350	294	214	166	2,900	430	242	217	287
8	524	650	587	343	287	214	169	4,400	410	238	201	234
9	551	650	587	343	276	207	166	1,500	410	245	192	214
10	574	628	628	346	276	204	161	4,110	442	220	183	201
11	528	605	605	346	273	204	158	5,400	458	214	420	189
12	502	596	578	343	276	204	158	4,050	600	204	931	186
13	484	596	556	340	280	207	158	1,960	564	201	665	183
14	470	582	556	329	280	207	156	2,350	466	285	470	180
15	458	578	542	315	276	220	148	2,390	430	207	370	175
16	458	564	524	308	266	245	143	1,640	672	189	358	172
17	510	582	502	304	262	220	139	1,520	1,350	192	418	169
18	688	1,170	484	315	252	198	136	1,290	945	195	346	166
19	2,260	675	479	312	242	192	134	1,150	592	217	315	164
20	6,050	578	474	312	242	198	131	1,050	506	294	284	161
21	2,900	556	466	301	242	220	134	972	454	280	256	166
22	1,740	564	442	298	242	228	134	918	410	234	245	169
23	1,410	628	426	287	238	214	141	875	382	210	256	172
24	1,230	628	430	284	238	210	139	840	358	210	318	180
25	1,110	542	434	284	238	204	134	790	340	201	308	220
26	1,050	524	430	276	238	198	129	750	318	198	287	228
27	1,210	497	430	280	231	195	228	695	308	189	593	195
28	1,350	474	430	280	228	189	1,700	655	294	175	558	177
29	1,050	458	426	280	224	186	430	623	284	169	354	172
30	990	450	422	335	------	175	234	596	273	161	301	169
31	900	------	418	386	------	172	------	569	------	172	276	------
TOTAL	32,502	19,000	15,788	10,208	7,757	6,451	6,543	45,160	14,782	6,816	10,376	5,856
MEAN	1,048	633	509	329	267	208	218	1,457	493	220	335	195
MAX	6,050	1,170	727	398	340	245	1,700	5,400	1,350	294	931	287
MIN	308	450	418	276	224	172	129	180	273	161	180	161
AC-FT	64,470	37,690	31,320	20,250	15,390	12,800	12,980	89,570	29,320	13,520	20,580	11,620

CAL YR 1971 TOTAL 156,562.3 MEAN 429 MAX 29,700 MIN 5.8 AC-FT 310,500
WTR YR 1972 TOTAL 181,239.0 MEAN 495 MAX 6,050 MIN 129 AC-FT 359,500

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1700	12.50	7,750	5-10	1900	15.49	11,300
4-28	about 1600	9.34	4,510	5-12	0130	18.13	14,900
				5-14	2300	9.70	4,830
5- 8	unknown	11.27	6,400	6-17	1230	10.50	5,600

08167600 Rebecca Creek near Spring Branch, Tex.

LOCATION.--Lat 29°55'06", long 98°22'10", Comal County, on right bank 72 ft upstream from private road crossing, 2.9 miles upstream from mouth, 3.7 miles northeast of Spring Branch Post Office, and 6.3 miles south of Twin Sisters.

DRAINAGE AREA.--10.9 sq mi.

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 985.55 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--12 years, 5.00 cfs (3,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,890 cfs June 17 (gage height, 5.38 ft); minimum, 0.40 cfs Apr. 25, 26.
Period of record: Maximum discharge, 9,300 cfs Oct. 18, 1965 (gage height, 7.97 ft), from rating curve extended above 420 cfs on basis of critical-depth measurement of 4,340 cfs; no flow in 1963-65, 1967, 1971.
Maximum stage since at least 1885, 25.5 ft in September 1952. Flood in 1947 or 1948 reached a stage of 4 or 5 ft lower than flood in 1952, from information by local residents.

REMARKS.--Records good. Six dams forming recreational lakes at housing developments upstream control runoff from 3.13 sq mi drainage area. Amount of impoundment unknown. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 1923: Drainage area. WRD Texas 1968: 1966-67.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	2.1	2.9	4.3	2.5	2.1	1.5	.95	7.4	7.4	2.9	1.5
2	.74	2.1	3.3	4.3	2.5	1.8	1.5	1.5	6.7	6.7	2.9	1.5
3	.74	1.8	2.9	4.3	2.1	1.8	1.2	1.2	6.7	6.7	3.3	1.5
4	.56	1.8	2.9	4.3	2.1	1.5	1.2	.95	6.7	8.6	3.8	1.5
5	.56	1.8	35	4.3	1.8	1.5	1.2	.95	6.0	8.1	3.8	1.5
6	.56	1.8	13	4.3	1.8	1.5	1.5	2.5	6.0	6.7	2.9	1.5
7	.56	1.8	12	4.3	1.8	1.8	1.5	7.2	5.4	6.0	2.5	1.5
8	.56	1.8	11	4.3	1.8	1.8	1.2	6.0	5.4	6.0	2.5	1.5
9	.56	1.8	11	4.3	2.1	1.5	1.2	4.3	6.7	5.4	2.5	1.5
10	.56	1.8	12	4.3	2.1	1.5	1.2	27	6.7	5.4	2.5	1.5
11	.56	1.8	11	4.3	2.9	1.5	1.2	26	6.0	5.4	2.5	1.5
12	.56	1.5	8.9	4.3	2.9	1.8	1.2	49	5.4	5.4	2.5	1.5
13	.56	1.5	7.4	3.8	2.9	1.8	1.2	21	4.8	4.8	2.5	1.5
14	.74	1.5	7.4	3.3	3.3	1.8	1.2	41	4.3	4.3	2.5	1.5
15	.95	1.5	6.7	3.3	3.3	1.8	1.2	22	4.3	4.3	2.1	1.5
16	.95	1.5	6.7	3.3	3.3	1.5	.95	116	4.3	4.3	2.1	1.5
17	.95	1.7	6.0	3.3	3.3	1.5	.74	51	378	4.3	2.1	1.5
18	1.4	9.4	5.4	3.3	3.3	1.5	.74	30	40	4.3	2.5	1.5
19	2.3	3.9	5.4	2.5	2.9	1.5	.74	22	25	4.8	2.5	1.5
20	7.8	3.3	5.4	2.9	2.9	1.5	.74	19	19	4.3	2.5	1.5
21	3.3	3.3	4.8	2.9	2.9	1.5	.74	17	18	4.3	2.1	1.5
22	2.9	3.3	4.8	2.9	2.9	1.5	.56	16	16	4.8	2.1	1.8
23	2.9	3.3	4.3	2.9	2.9	1.5	.56	16	15	4.3	2.1	1.8
24	2.5	3.3	4.3	2.5	2.5	1.5	.56	15	13	3.8	2.5	2.1
25	2.5	3.3	4.3	1.8	2.5	1.5	.56	15	12	3.3	2.1	1.8
26	2.5	3.3	4.3	1.8	2.1	1.5	.40	13	11	3.3	2.1	1.5
27	2.5	3.3	4.3	2.1	2.1	1.5	1.5	12	9.7	3.3	1.8	1.2
28	2.5	2.9	4.3	2.1	2.1	1.5	1.5	9.7	9.7	3.3	1.8	1.2
29	2.1	2.9	4.3	2.1	2.1	1.5	1.5	8.9	8.9	3.3	1.5	1.2
30	2.1	2.9	4.3	2.1	------	1.5	1.2	8.1	8.9	3.3	1.5	.95
31	2.1	------	4.3	2.5	------	1.5	------	7.4	------	3.3	1.5	------
TOTAL	51.02	78.0	224.6	103.0	73.7	49.5	32.19	587.65	677.0	153.5	74.5	45.05
MEAN	1.65	2.60	7.25	3.32	2.54	1.60	1.07	19.0	22.6	4.95	2.40	1.50
MAX	7.8	9.4	35	4.3	3.3	2.1	1.5	116	378	8.6	3.8	2.1
MIN	.56	1.5	2.9	1.8	1.8	1.5	.40	.95	4.3	3.3	1.5	.95
AC-FT	101	155	445	204	146	98	64	1,170	1,340	304	148	89

CAL YR 1971 TOTAL 526.91 MEAN 1.44 MAX 35 MIN .04 AC-FT 1,050
WTR YR 1972 TOTAL 2,149.71 MEAN 5.87 MAX 378 MIN .40 AC-FT 4,260

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12- 5	0500	2.72	117	5-16	1700	4.02	1,060
5-11	2400	2.74	129	6-17	1000	5.38	2,890
5-14	0300	2.70	113				

08167700 Canyon Lake near New Braunfels, Tex.

LOCATION.--Lat 29°52'07", long 98°11'55", Comal County, in intake structure of Canyon Dam on Guadalupe River, 12 miles northwest of New Braunfels, and at mile 303.0.

DRAINAGE AREA.--1,432 sq mi.

PERIOD OF RECORD.--July 1962 to current year. Prior to October 1970, published as "Canyon Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Sept. 24, 1964, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 432,000 acre-ft May 22 (elevation, 914.36 ft); minimum, 345,300 acre-ft Apr. 25, 26 (elevation, 903.85 ft).
Period of record: Maximum contents, 432,500 acre-ft Aug. 17, 1971 (elevation, 914.41 ft); minimum observed since conservation pool first reached in April 1968, 343,700 acre-ft Aug. 1, 1971 (elevation, 903.64 ft).

REMARKS.--Small diversions above the lake for irrigation. Lake is formed by a rolled earthfill dam 6,830 ft long, consisting of the main dam 4,410 ft long, an earthen dike 210 ft long, a 1,260-foot long uncontrolled broad-crested type spillway, and a 950-foot concrete and earthen nonoverflow section. Flood-control outlet works consist of a 10-foot-diameter conduit controlled by two 5-foot 8-inches by 10-foot hydraulically-operated slide gates (elevation of invert, 775.0 ft). Deliberate impoundment of water began June 16, 1964, and main dam was completed in August 1964. Lake built for flood control and water conservation. Contents based on maps prepared in 1947. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	974.0	-
Crest of emergency spillway	943.0	740,900
Top of conservation pool	909.0	386,200
Invert of gate sill, flood-control outlet works	775.0	640

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WRD Texas 1968: Drainage area.

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

903.0	338,800	911.0	403,000
905.0	354,200	913.0	420,100
907.0	370,000	915.0	437,700
909.0	386,200		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365,800	390,700	383,600	384,600	378,800	354,700	349,400	347,100	393,700	387,400	361,100	355,800
2	364,700	390,400	384,000	384,300	378,300	354,500	349,100	347,700	391,900	386,400	360,200	355,700
3	363,800	389,700	383,400	384,200	377,000	354,300	349,100	347,700	390,900	385,600	359,700	355,600
4	362,700	389,000	383,200	383,900	376,100	354,200	348,700	347,500	389,700	385,300	358,700	355,300
5	363,000	388,300	385,400	383,400	375,400	353,900	348,500	347,700	388,500	384,700	357,900	355,300
6	363,000	387,600	385,800	383,100	374,700	353,800	348,400	348,300	386,000	383,800	356,900	355,000
7	363,100	386,700	386,000	382,800	373,800	353,700	348,200	355,000	386,900	382,900	356,100	354,900
8	363,200	386,000	386,400	382,600	372,900	353,500	347,800	361,000	386,000	382,200	355,200	354,700
9	363,300	385,400	387,000	382,400	372,100	353,200	347,600	363,900	386,200	381,300	354,200	354,600
10	363,300	385,100	387,100	382,400	371,300	353,200	347,300	373,200	385,700	380,500	353,600	354,400
11	363,300	384,900	387,200	382,000	370,600	353,000	347,200	390,400	385,600	379,700	352,900	354,200
12	363,300	384,500	387,200	381,800	369,800	353,000	347,000	400,600	385,200	378,900	353,800	353,900
13	363,200	384,200	387,200	381,700	369,000	352,900	346,700	405,300	385,100	378,000	353,800	353,700
14	363,200	383,900	387,200	381,700	368,300	352,800	346,700	410,600	384,700	377,100	354,200	353,500
15	363,500	383,500	387,000	381,500	367,500	352,900	346,500	415,300	384,300	376,300	353,400	353,200
16	364,300	383,300	386,900	381,500	366,600	352,700	346,300	421,300	384,900	375,400	352,900	353,000
17	365,000	384,200	386,500	381,700	365,800	352,600	346,100	425,100	392,500	374,500	352,900	352,600
18	366,700	386,900	386,000	382,000	364,800	352,300	346,000	428,200	395,200	373,500	352,900	352,300
19	372,400	386,500	385,800	382,200	363,800	352,000	345,900	430,500	396,300	373,000	352,900	352,100
20	382,100	386,200	385,600	382,400	363,000	352,000	346,300	431,400	396,000	372,200	352,900	351,800
21	386,200	385,900	385,100	382,500	362,200	351,900	346,000	431,900	395,200	371,500	352,900	351,500
22	388,000	386,400	384,900	382,700	361,300	351,800	345,800	430,300	394,200	370,900	353,000	351,200
23	389,000	386,300	384,900	382,800	360,500	351,700	345,700	425,800	393,300	369,900	354,400	351,100
24	389,400	386,000	384,800	382,900	359,700	351,600	345,500	420,700	392,500	369,000	354,600	351,100
25	389,600	385,900	384,700	382,900	358,900	351,400	345,300	415,500	391,900	368,200	354,700	351,100
26	389,800	385,600	384,700	382,900	357,900	351,200	345,300	410,300	391,400	367,200	354,700	351,100
27	390,300	385,400	384,700	382,600	357,000	351,100	345,500	405,100	390,700	366,300	355,100	351,000
28	391,200	385,000	384,700	381,600	356,100	351,000	346,500	401,900	389,900	365,300	355,800	350,800
29	391,200	384,600	384,700	381,000	355,200	350,500	346,800	399,800	389,300	364,300	355,900	350,600
30	391,200	384,100	384,600	380,200	------	350,100	347,000	397,900	388,300	363,300	356,000	350,100
31	391,000	------	384,700	379,600	------	349,800	------	395,800	------	362,300	355,900	------
(†)	909.58	908.74	908.81	908.19	905.13	904.43	904.07	910.15	909.25	906.04	905.22	904.48
(*)	+24,100	-6,900	+600	-5,100	-24,400	-5,400	-2,800	+48,800	-7,500	-26,000	-6,400	-5,800
MAX	391,200	390,700	387,200	384,600	378,800	354,700	349,400	431,900	396,300	387,400	361,100	355,800
MIN	362,700	383,300	383,200	379,600	355,200	349,800	345,300	347,100	384,300	362,300	352,900	350,100

CAL YR 1971..... * +26,400 MAX 432,200 MIN 343,800
WTR YR 1972..... * -16,800 MAX 431,900 MIN 345,300

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

08167800 Guadalupe River at Sattler, Tex.

LOCATION.--Lat 29°51'32", long 98°10'47", Comal County, on right bank 200 ft upstream from Horseshoe Falls, 0.8 mile north of Sattler, 1.8 miles downstream from Canyon Dam, 2.3 miles upstream from Heiser Hollow, 11.2 miles north of New Braunfels, and at mile 301.2.

DRAINAGE AREA.--1,436 sq mi (1,432 sq mi is above Canyon Dam).

PERIOD OF RECORD.--March 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 742.24 ft above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--10 years (1962-72), 255 cfs (184,700 acre-ft per year) since regulation began at Canyon Lake.

EXTREMES.--Current year: Maximum discharge, 3,550 cfs May 23 (gage height, 7.60 ft); minimum, 5.4 cfs Aug. 14.
Period of record: Maximum discharge, 20,800 cfs Oct. 29, 1960 (gage height, 12.20 ft). Maximum discharge since closure of Canyon Dam on July 21, 1962, 3,800 cfs Aug. 23, 1971 (gage height, 7.69 ft); no flow July 31 to Aug. 6, 1962 (result of closure of Canyon Dam), and part of Jan. 29, 30, Feb. 1, 1965 (result of closure while constructing control).
Flood in July 1869 (stage unknown) has not been exceeded since that date; flood in July 1900 (stage unknown) exceeded 39 ft; maximum stage since at least 1904, 39 ft in July 1932 and June 1935, from information by local residents.

REMARKS.--Records good. Flow completely regulated since July 21, 1962, by Canyon Lake (station 08167700) 1.8 miles upstream. Small diversions above station for irrigation.

Discharge measurements of unnamed tributary near mouth, 1.5 miles upstream from gaging station, in cubic feet per second, October 1971 to April 1972 (discontinued).

Nov. 1	0.60
Feb. 1	.71
Apr. 3	.42

Discharge measurements of emergency spillway channel below Canyon Dam, in cubic feet per second, October 1971 to April 1972 (discontinued).

Nov. 1	0.64
Feb. 1	.33
Apr. 3	.29

Discharge of seepage from left abutment of Canyon Dam, in cubic feet per second, October 1971 to April 1972 (discontinued).

Nov. 1	a0.09
Feb. 1	a.15
Apr. 3	a.11

a Estimated.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	830	980	699	505	735	498	259	152	1,550	650	626	230
2	830	980	699	505	744	259	259	155	1,400	650	618	230
3	830	980	699	505	675	259	259	152	1,040	650	618	227
4	830	980	699	505	699	259	262	152	1,040	650	618	227
5	830	980	717	498	699	259	259	152	1,040	511	618	227
6	635	980	699	505	699	259	259	152	870	578	618	227
7	390	980	699	512	699	259	259	155	762	642	610	227
8	410	980	699	512	699	259	259	152	762	642	610	227
9	410	900	699	512	699	259	259	152	708	642	610	227
10	410	708	699	512	690	259	259	162	650	642	610	227
11	410	666	699	512	690	259	259	249	642	571	618	227
12	410	666	699	512	690	259	259	140	642	642	618	227
13	410	666	699	380	699	259	259	28	642	642	600	227
14	410	666	699	248	699	259	213	21	642	634	303	230
15	312	666	699	248	699	259	155	16	642	634	603	230
16	195	666	699	248	699	259	152	26	642	642	610	230
17	195	666	699	248	699	259	152	23	380	642	405	230
18	195	699	699	248	699	259	152	18	76	642	208	230
19	195	650	699	248	699	259	152	180	376	642	227	230
20	593	650	699	248	699	259	152	575	830	642	227	230
21	900	650	699	248	699	259	152	762	970	642	227	236
22	910	658	563	248	699	259	152	1,650	980	642	227	236
23	980	658	477	248	699	259	152	3,350	980	642	252	236
24	980	650	505	245	699	259	152	3,500	762	642	233	236
25	980	650	505	242	699	259	152	3,500	650	642	233	236
26	980	650	505	242	699	259	152	3,520	650	642	233	236
27	980	650	505	479	699	259	152	3,500	650	634	233	236
28	980	650	505	690	699	259	152	2,320	650	634	233	236
29	980	650	505	717	699	259	152	1,490	650	634	230	233
30	980	603	505	735	------	259	152	1,550	650	634	230	233
31	980	------	505	735	------	259	------	1,550	------	634	230	------
TOTAL	20,360	22,578	19,777	13,040	20,301	8,268	6,018	29,504	22,928	19,612	13,136	6,921
MEAN	657	753	638	421	700	267	201	952	764	633	424	231
MAX	980	980	717	735	744	498	262	3,520	1,550	650	626	236
MIN	195	603	477	242	675	259	152	16	76	511	208	227
AC-FT	40,380	44,780	39,230	25,860	40,270	16,400	11,940	58,520	45,480	38,900	26,060	13,730

CAL YR 1971 TOTAL 136,661 MEAN 374 MAX 3,680 MIN 44 AC-FT 271,100
WTR YR 1972 TOTAL 202,443 MEAN 553 MAX 3,520 MIN 16 AC-FT 401,500

08168500 Guadalupe River above Comal River at New Braunfels, Tex.

LOCATION.--Lat 29°42'53", long 98°06'35", Comal County, on right bank at New Braunfels, 1.1 miles upstream from Comal River, 21.9 miles downstream from Canyon Lake, and at mile 281.1.

DRAINAGE AREA.--1,518 sq mi.

PERIOD OF RECORD.--December 1927 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 586.65 ft above mean sea level.

AVERAGE DISCHARGE.--34 years (1928-62) prior to regulation by Canyon Lake, 372 cfs (269,700 acre-ft per year); 10 years (1962-72) since regulation began at Canyon Lake, 333 cfs (241,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 92,600 cfs May 12 (gage height, 31.65 ft); minimum, 146 cfs Aug. 14.
Period of record: Maximum discharge, 101,000 cfs June 15, 1935 (gage height, 32.95 ft); no flow July 8, 9, July 17 to Aug. 20, 1956.
Maximum stage since at least 1845, 38 ft July 8, 1869, and in December 1913, from information by local residents.

REMARKS.--Records good. Small diversions for irrigation below station 08167800 and above this station. Since July 21, 1962 (corrected), flow largely regulated by Canyon Lake (station 08167700) 21.9 miles upstream.

REVISIONS.--WSP 898: 1935. WSP 1562: 1932. WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	920	1,120	840	676	880	746	323	212	1,510	746	693	323
2	910	1,120	910	668	880	374	323	217	1,500	737	693	323
3	910	1,120	900	668	800	361	323	201	1,110	737	702	317
4	920	1,120	890	668	830	361	323	190	1,100	755	693	317
5	910	1,120	1,080	659	830	354	317	190	1,090	644	693	311
6	860	1,120	1,040	659	830	354	317	217	1,020	646	693	311
7	478	1,120	1,010	659	830	354	317	311	850	728	693	305
8	515	1,120	990	659	830	348	311	317	850	728	702	305
9	515	1,070	990	659	820	348	311	293	850	728	702	305
10	515	860	980	659	820	348	311	361	773	728	710	305
11	515	800	960	650	830	348	305	3,430	782	693	710	305
12	515	800	950	650	820	348	305	13,300	764	693	702	305
13	515	800	950	601	820	348	305	562	755	710	702	305
14	515	800	940	387	820	342	293	421	755	710	400	311
15	485	800	930	380	820	348	180	348	755	710	693	305
16	293	800	910	380	810	348	175	329	773	719	693	305
17	287	820	910	380	810	342	169	380	857	710	621	305
18	293	1,060	900	380	810	335	169	305	442	710	305	299
19	305	920	900	380	810	335	175	304	453	710	323	299
20	580	890	890	380	810	335	175	684	930	710	329	299
21	1,100	870	890	380	810	335	180	920	1,120	702	329	305
22	1,060	870	820	380	810	335	175	1,240	1,100	702	323	305
23	1,130	890	642	380	810	335	175	3,050	1,080	702	348	305
24	1,130	870	676	374	810	335	175	3,390	980	702	435	311
25	1,120	860	676	368	810	329	175	3,380	782	702	348	299
26	1,120	850	676	368	810	329	180	3,370	773	702	342	299
27	1,130	850	676	451	810	329	201	3,340	764	693	335	299
28	1,120	850	676	800	810	329	223	2,670	755	693	335	293
29	1,120	840	676	840	810	323	217	1,450	755	693	335	293
30	1,120	791	676	880	------	323	212	1,510	746	693	329	287
31	1,120	------	676	880	------	323	------	1,510	------	693	329	------
TOTAL	24,026	27,921	26,630	17,303	23,800	11,002	7,340	48,402	26,774	21,929	16,240	9,156
MEAN	775	931	859	558	821	355	245	1,561	892	707	524	305
MAX	1,130	1,120	1,080	880	880	746	323	13,300	1,510	755	710	323
MIN	287	791	642	368	800	323	169	190	442	644	305	287
AC-FT	47,660	55,380	52,820	34,320	47,210	21,820	14,560	96,010	53,110	43,500	32,210	18,160

CAL YR 1971 TOTAL 160,214 MEAN 439 MAX 3,800 MIN 52 AC-FT 317,800
WTR YR 1972 TOTAL 260,523 MEAN 712 MAX 13,300 MIN 169 AC-FT 516,700

08169000 Comal River at New Braunfels, Tex.

LOCATION.--Lat 29°42'21", long 98°07'20", Comal County, on right bank 200 ft upstream from San Antonio Street viaduct in New Braunfels and 1.1 miles upstream from mouth.

DRAINAGE AREA.--130 sq mi. Normal flow of river comes from springs; drainage area not applicable.

PERIOD OF RECORD.--1882 to current year (1882 to November 1927, discharge measurements only).

GAGE.--Water-stage recorder. Concrete control since Oct. 1, 1955. Datum of gage is 582.80 ft above mean sea level.

AVERAGE DISCHARGE.--40 years (1932-72), 283 cfs (205,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 60,800 cfs May 11 (gage height, 36.55 ft, from floodmark), from rating curve extended above 13,000 cfs as explained below; minimum daily, 242 cfs Oct. 1-3, Apr. 26, May 5.
Period of record: Maximum discharge, 60,800 cfs May 11, 1972 (gage height, 36.55 ft, from floodmark), from rating curve extended above 13,000 cfs on basis of contracted-opening measurements on Blieders Creek and Dry Comal Creek and unit rainfall-runoff studies; no flow from Comal Springs from June 13 to Nov. 3, 1956.
Flood information begins with flood of July 8, 1869, which reached a stage of 36.91 ft, from painted and dated marks in old Remmert Brewery half a mile downstream; the flood of Oct. 17, 1870, reached a stage of 37.65 ft at same site (probably some backwater from Guadalupe River).

REMARKS.--Records good except those for May 11 and 12, which are fair. The flow from Comal Springs emerges from the Edwards and associated limestones in the Balcones Fault Zone. Flow of river is primarily from Comal Springs about 1.0 mile upstream, except during periods of local rain. Diurnal fluctuations from steam powerplant half a mile upstream.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	282	304	330	322	308	282	254	350	317	304	304
2	242	282	322	326	322	308	282	258	345	322	304	304
3	242	282	312	322	322	308	282	250	340	317	308	304
4	246	286	304	322	322	308	278	250	335	322	308	304
5	246	286	360	317	322	308	282	242	335	317	308	304
6	246	282	326	317	322	308	278	284	335	312	308	299
7	246	282	317	317	322	308	278	1,410	335	308	312	294
8	250	290	312	322	322	308	270	577	330	317	312	294
9	250	286	317	322	322	308	270	286	345	317	312	294
10	254	290	317	322	322	308	270	800	335	326	312	299
11	250	286	312	317	322	304	266	2,430	335	312	308	294
12	254	290	312	322	322	304	262	14,400	335	312	308	294
13	254	290	312	322	322	304	262	595	330	308	312	290
14	254	290	312	322	322	304	258	534	330	312	308	308
15	254	290	312	317	322	308	254	484	335	308	308	299
16	254	290	317	322	322	308	254	458	345	312	304	294
17	258	290	317	322	322	308	250	407	931	308	299	294
18	258	304	317	322	322	304	250	370	405	308	299	290
19	258	294	317	322	317	304	250	365	355	308	304	290
20	266	299	317	322	322	299	246	365	340	308	304	290
21	278	299	322	322	304	299	246	360	340	308	299	290
22	270	304	317	322	308	294	246	360	340	304	299	290
23	270	304	322	322	322	290	254	375	335	308	299	299
24	274	299	322	326	308	290	246	390	335	308	308	304
25	278	299	322	322	317	294	246	385	335	312	299	299
26	274	304	326	322	312	290	242	390	330	308	299	304
27	278	304	326	322	317	290	258	385	330	299	304	308
28	278	304	326	322	312	290	246	375	317	312	304	304
29	278	304	326	322	312	286	250	355	317	308	304	294
30	282	299	326	326	------	282	254	355	326	308	304	304
31	282	------	326	322	------	282	------	360	------	299	304	------
TOTAL	8,066	8,791	9,897	9,977	9,247	9,314	7,812	29,109	10,731	9,645	9,465	8,939
MEAN	260	293	319	322	319	300	260	939	358	311	305	298
MAX	282	304	360	330	322	308	282	14,400	931	326	312	308
MIN	242	282	304	317	304	282	242	242	317	299	299	290
AC-FT	16,000	17,440	19,630	19,790	18,340	18,470	15,500	57,740	21,280	19,130	18,770	17,730

CAL YR 1971 TOTAL 80,565 MEAN 221 MAX 360 MIN 92 AC-FT 159,800
WTR YR 1972 TOTAL 130,993 MEAN 358 MAX 14,400 MIN 242 AC-FT 259,800

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5- 7	0700	10.40	4,170	5-11	2345	a36.55	60,800
5- 8	0200	5.95	1,260	5-12	0530	a35.45	55,800
5-10	1830	7.79	2,380	6-17	1500	9.17	3,310

a From floodmark.

08170000 San Marcos River spring flow at San Marcos, Tex.

LOCATION.--Lat 29°52'06", long 97°55'38", Hays County, on left bank 0.7 mile downstream from bridge on Interstate Highway 35 and U.S. Highway 81, 1.2 miles southeast of courthouse in San Marcos, and 2.1 miles upstream from Blanco River.

DRAINAGE AREA.--93.0 sq mi. Normal flow of river comes from springs, drainage area of stream not applicable.

PERIOD OF RECORD.--May 1956 to current year. June 1915 to January 1916, March 1916 to September 1921, and May to September 1956, published as San Marcos River at San Marcos; records include some surface runoff. Periodic measurements of spring flow were made at this location outside periods of record since Nov. 14, 1894, and are published as miscellaneous measurements.

GAGE.--Water-stage recorder. Datum of gage is 536.82 ft above mean sea level. June 10, 1915, to Jan. 19, 1916, nonrecording gage at site 1.2 miles upstream, and Mar. 13, 1916, to Sept. 7, 1921, water-stage recorder near present site, datum relations unknown.

AVERAGE DISCHARGE.--16 years (1956-72), 157 cfs (113,700 acre-ft per year).

EXTREMES.--Current year: Maximum daily spring discharge, 206 cfs Dec. 13, 14; maximum gage height, 26.06 ft May 12 (flood runoff); minimum daily spring discharge, 104 cfs Oct. 1-3, 7-12, 15.
Period of record: Maximum daily spring discharge, 298 cfs Jan. 22-24, 1968; maximum discharge, 76,600 cfs May 15, 1970 (gage height, 35.12 ft); minimum daily spring discharge, 46 cfs Aug. 15, 16, 1956.
Maximum stage since at least 1913, 38.6 ft Sept. 10, 1921 (from floodmark), present datum (backwater from Blanco River).

REMARKS.--Records good. Flow slightly regulated by utilities dam about 1.5 miles upstream. Entire flow of river is from San Marcos Springs, about 1.8 miles upstream, except during periods of local runoff. Springs emerge from the Edwards and associated limestones in the Balcones Fault Zone. Small diversion for operation of State fish hatchery, some of which is returned above gage.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	113	132	200	178	167	152	152	167	172	162	152
2	104	110	137	200	178	167	157	152	167	172	157	157
3	104	109	147	200	172	167	157	152	167	172	162	157
4	108	112	147	194	172	167	157	152	167	172	162	157
5	107	111	152	194	172	162	157	152	167	172	162	152
6	105	112	162	194	178	162	152	157	167	172	157	152
7	104	113	167	194	172	162	152	157	167	172	157	152
8	104	114	189	194	178	162	152	157	167	172	157	152
9	104	114	200	194	172	157	152	152	172	172	152	152
10	104	113	200	194	172	157	157	157	172	172	152	152
11	104	113	200	194	172	157	152	167	172	172	152	152
12	104	112	200	189	172	162	152	178	172	172	157	147
13	106	114	206	189	172	157	152	178	167	172	157	147
14	107	114	206	189	172	157	152	178	167	172	157	147
15	104	114	200	189	172	157	157	172	167	167	157	147
16	106	111	200	189	178	157	152	172	172	172	157	147
17	107	112	200	189	178	157	152	184	172	167	157	147
18	108	118	200	189	172	152	152	178	178	167	157	142
19	106	127	200	189	178	152	152	172	178	162	157	142
20	108	127	200	184	178	157	152	172	172	162	157	142
21	114	127	200	184	178	157	152	178	172	162	157	142
22	114	127	200	184	178	152	152	178	172	162	157	142
23	114	132	200	184	178	152	152	184	172	162	157	147
24	109	132	200	178	178	152	152	178	172	162	157	147
25	109	132	200	178	178	152	152	178	172	162	157	142
26	114	132	200	178	172	152	152	172	172	162	157	142
27	114	132	200	178	172	152	152	172	172	162	152	147
28	113	132	200	178	167	152	157	172	172	162	152	142
29	112	132	200	178	167	157	157	172	172	162	152	142
30	111	132	200	178	------	157	157	172	172	162	152	142
31	114	------	200	184	------	152	------	172	------	162	152	------
TOTAL	3,346	3,593	5,845	5,830	5,056	4,882	4,605	5,219	5,117	5,187	4,847	4,430
MEAN	108	120	189	188	174	157	154	168	171	167	156	148
MAX	114	132	206	200	178	167	157	184	178	172	162	157
MIN	104	109	132	178	167	152	152	152	167	162	152	142
AC-FT	6,640	7,130	11,590	11,560	10,030	9,680	9,130	10,350	10,150	10,290	9,610	8,790

CAL YR 1971 TOTAL 46,296 MEAN 127 MAX 206 MIN 94 AC-FT 91,830
WTR YR 1972 TOTAL 57,957 MEAN 158 MAX 206 MIN 104 AC-FT 115,000

08171000 Blanco River at Wimberley, Tex.

LOCATION.--Lat 29°59'33", long 98°05'28", Hays County, on left bank 1,000 ft upstream from bridge on State Highway 12, 1,200 ft downstream from Cypress Creek, 0.3 mile southeast of Wimberley, and at mile 29.4.

DRAINAGE AREA.--355 sq mi.

PERIOD OF RECORD.--August 1924 to September 1926, June 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 802.23 ft above mean sea level. Aug. 6, 1924, to Sept. 30, 1926, nonrecording gage at site 30 ft upstream at same datum.

AVERAGE DISCHARGE.--46 years, 112 cfs (81,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, occurred May 16 or 17 (discharge not determined); minimum, 15 cfs Oct. 3.
Period of record: Maximum discharge, 113,000 cfs May 28, 1929 (gage height, 31.10 ft, from floodmarks), from rating curve extended above 30,000 cfs on basis of slope-area measurements of 95,000 and 113,000 cfs; minimum, 0.6 cfs Aug. 16, 1956.
Maximum stage since at least 1869, that of May 28, 1929; flood in July 1869 reached a stage of 23 ft, from information by local residents.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Numerous small diversions above station. At end of year, flow from 0.61 sq mi above this station was partly controlled by one floodwater-retarding structure with a capacity of 201 acre-ft below the flood-spillway crest, of which 185 acre-ft is floodwater-retarding capacity and 16 acre-ft is sediment-pool capacity. The capacity in this pool allocated to sediment storage and will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WSP 1562: 1929, 1930-31(M), 1935-36(M), 1938(M), 1941-42(M), 1947(M), 1949(M). WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	58	72	120	76	54	44	34	140	95	58	51
2	20	56	108	120	76	52	44	33	135	95	58	50
3	18	54	116	120	72	52	44	28	130	90	63	48
4	23	54	113	115	72	52	44	27	128	98	60	47
5	23	54	384	115	72	56	42	27	125	95	58	47
6	23	54	294	115	72	56	42	40	119	90	56	47
7	21	52	235	110	72	56	42	60	116	88	56	45
8	21	52	217	110	69	54	42	60	113	83	54	43
9	23	52	220	110	69	50	40	60	116	78	54	43
10	23	50	246	105	69	50	40	65	119	78	55	42
11	23	50	246	103	69	52	40	180	125	74	59	41
12	21	48	235	103	69	52	38	450	116	72	55	41
13	23	48	213	103	67	52	37	400	113	72	52	40
14	23	48	206	98	67	54	36	450	113	72	52	40
15	23	48	196	93	67	54	35	400	111	72	54	39
16	36	48	185	90	67	50	35	1,000	116	78	58	38
17	40	52	175	88	65	50	34	1,200	441	74	53	38
18	30	414	170	88	63	50	33	600	421	69	54	37
19	70	139	165	88	60	48	34	410	217	69	53	36
20	505	108	160	85	60	48	35	350	165	69	51	35
21	234	88	155	85	60	50	34	300	152	69	49	35
22	111	83	150	83	60	50	33	270	139	69	51	35
23	88	90	150	81	58	50	31	250	128	67	76	36
24	76	95	145	81	58	50	30	230	119	63	171	40
25	69	88	140	78	58	50	30	210	116	63	114	38
26	65	83	140	76	56	48	30	200	113	63	79	39
27	63	78	135	76	56	48	32	190	111	63	69	37
28	63	76	130	74	54	48	45	180	106	60	63	37
29	65	74	130	74	54	46	38	170	100	60	60	37
30	63	74	125	76	------	46	32	160	98	58	58	35
31	60	------	125	78	------	46	------	150	------	58	54	------
TOTAL	1,966	2,368	5,481	2,941	1,887	1,574	1,116	8,184	4,361	2,304	1,957	1,217
MEAN	63.4	78.9	177	94.9	65.1	50.8	37.2	264	145	74.3	63.1	40.6
MAX	505	414	384	120	76	56	45	1,200	441	98	171	51
MIN	18	48	72	74	54	46	30	27	98	58	49	35
AC-FT	3,900	4,700	10,870	5,830	3,740	3,120	2,210	16,230	8,650	4,570	3,880	2,410

CAL YR 1971 TOTAL 15,333.9 MEAN 42.0 MAX 505 MIN 9.1 AC-FT 30,410
WTR YR 1972 TOTAL 35,356.0 MEAN 96.6 MAX 1,200 MIN 18 AC-FT 70,130

NOTE.--No gage-height record Apr. 13 to June 2.

08171300 Blanco River near Kyle, Tex.

LOCATION.--Lat 29°58'45", long 97°54'35", Hays County, on left bank 800 ft downstream from Tarbutton Ranch House (Hatchett Ranch), 2.2 miles southwest of Kyle, 4.2 miles downstream from Halifax Creek, and 6.3 miles upstream from bridge on U.S. Highway 81.

DRAINAGE AREA.--412 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 620.12 ft above mean sea level, Corps of Engineers bench mark.

AVERAGE DISCHARGE.--16 years, 136 cfs (98,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,300 cfs May 17 (gage height, 14.00 ft); minimum, 0.30 cfs Oct. 3.
Period of record: Maximum discharge, 98,000 cfs May 2, 1958 (gage height, 36.3 ft, from floodmark), from rating curve extended above 37,000 cfs on basis of slope-area measurement of 139,000 cfs and slope-conveyance study; no flow at times in 1956-57, 1963-65, 1967, 1971.
Maximum stage since at least 1882, about 40 ft in May 1929, from information by local residents (discharge, 139,000 cfs). Flood of Sept. 11, 1952, reached a stage of 38.0 ft (discharge, 115,000 cfs).

REMARKS.--Records good. Small diversions above station for irrigation. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08171000. Most of the low flow of the Blanco River enters the Edwards and associated limestones in the Balcones Fault Zone which crosses the basin upstream from this station and below the station at Wimberley.

REVISIONS (WATER YEARS).--WSP 1923: 1957-58, 1960(M). WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	33	63	121	74	42	31	18	127	73	32	28
2	.46	31	112	116	74	40	30	31	121	70	32	27
3	.34	29	137	113	72	39	31	23	116	69	36	25
4	.61	26	121	114	68	39	37	17	112	73	46	24
5	.94	26	447	107	68	38	30	16	107	84	36	23
6	2.5	26	428	104	68	41	30	28	100	72	30	23
7	1.9	24	305	101	65	39	29	60	94	68	30	22
8	1.2	23	262	100	64	38	26	62	90	64	30	20
9	.80	23	265	101	62	36	25	57	103	62	28	20
10	.67	23	285	100	60	35	26	65	103	59	27	19
11	.80	22	272	97	64	37	26	179	104	56	31	19
12	1.0	22	265	93	63	37	25	450	98	54	33	18
13	.94	21	240	93	59	38	22	407	91	51	28	19
14	1.2	20	228	89	58	37	21	449	91	50	25	19
15	2.0	20	208	85	58	39	21	417	89	48	25	19
16	4.1	21	193	82	57	38	20	295	93	45	29	17
17	5.6	25	183	82	56	34	18	1,930	176	59	29	16
18	14	839	172	84	54	33	17	608	654	51	26	16
19	8.1	213	168	82	52	34	18	428	235	51	26	16
20	293	132	165	81	51	34	18	344	168	48	24	15
21	321	101	156	80	51	36	19	295	144	45	24	14
22	124	84	149	77	50	35	18	262	129	52	22	16
23	76	105	144	76	48	34	15	240	116	50	30	15
24	58	97	138	73	46	36	14	222	110	43	132	18
25	48	90	130	70	46	35	15	206	103	39	134	21
26	43	84	129	69	44	34	15	183	96	38	69	17
27	46	77	127	69	42	36	22	168	89	37	49	18
28	40	72	127	67	42	34	36	156	84	37	41	16
29	39	65	124	69	42	30	22	147	80	36	37	16
30	39	63	119	76	------	29	19	142	76	36	33	17
31	35	------	118	76	------	31	------	133	------	33	30	------
TOTAL	1,209.71	2,437	5,980	2,747	1,658	1,118	696	8,038	3,899	1,653	1,204	573
MEAN	39.0	81.2	193	88.6	57.2	36.1	23.2	259	130	53.3	38.8	19.1
MAX	321	839	447	121	74	42	37	1,930	654	84	134	28
MIN	.34	20	63	67	42	29	14	16	76	33	22	14
AC-FT	2,400	4,830	11,860	5,450	3,290	2,220	1,380	15,940	7,730	3,280	2,390	1,140

CAL YR 1971 TOTAL 11,931.64 MEAN 32.7 MAX 839 MIN 0 AC-FT 23,670
WTR YR 1972 TOTAL 31,212.71 MEAN 85.3 MAX 1,930 MIN .34 AC-FT 61,910

PEAK DISCHARGE (BASE, 1,500 CFS).--Nov. 18 (0700) 2,500 cfs (10.43 ft); May 17 (0500) 6,300 cfs (14.00 ft).

08172000 San Marcos River at Luling, Tex.

LOCATION.--Lat 29°39'54", long 97°38'59", Caldwell-Guadalupe County line, on left bank 390 ft downstream from bridge on State Highway 80, 1.0 mile south of Luling, and 9.4 miles upstream from Plum Creek.

DRAINAGE AREA.--838 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 322.05 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 334 cfs (242,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 44,100 cfs May 12 (gage height, 34.11 ft); minimum, 101 cfs Oct. 1, 2.
Period of record: Maximum discharge, 57,000 cfs Sept. 12, 1952 (gage height, 34.95 ft); minimum daily, 43 cfs Aug. 12, 1951. Maximum stage since at least 1859, 40.4 ft in 1869 or 1870, from information by State Highway Department. Flood of May 29, 1929, reached a stage of 37.1 ft and is the second highest known.

REMARKS.--Records good. At end of year, flow from 71.3 sq mi above this station was partly controlled by 17 floodwater-retarding structures with a total combined capacity of 20,930 acre-ft below the flood-spillway crests, of which 18,250 acre-ft is floodwater-retarding capacity and 2,680 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Base flow is largely maintained by spring flow near San Marcos. Several diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 958: 1940. WSP 1312: 1940(M), 1945(M), 1947(M). WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	148	197	319	234	199	166	161	418	263	223	190
2	103	142	223	317	233	196	168	174	402	257	202	183
3	106	137	254	312	230	194	173	168	388	254	212	184
4	111	132	262	303	229	195	172	156	379	256	218	180
5	117	133	474	303	227	194	172	161	367	276	217	178
6	110	132	926	297	228	192	175	177	352	270	213	170
7	107	133	594	286	228	192	170	2,820	340	260	204	160
8	103	135	478	284	225	196	168	420	328	252	196	158
9	106	132	485	287	223	191	164	247	323	250	192	157
10	106	127	461	286	224	191	164	1,760	345	255	193	155
11	105	123	460	280	232	190	163	3,250	461	256	193	155
12	104	123	450	276	229	191	162	23,700	347	253	194	153
13	105	123	440	274	226	194	159	3,170	328	279	199	151
14	107	131	428	263	222	193	158	1,440	313	547	196	150
15	109	132	424	259	220	194	155	1,350	307	245	190	157
16	109	130	404	257	218	192	156	1,340	509	235	214	155
17	118	130	388	256	219	190	153	1,440	1,800	236	196	156
18	112	163	377	255	216	186	148	2,180	957	245	200	153
19	110	551	370	255	212	181	147	1,270	915	230	196	149
20	125	338	365	257	211	182	146	1,050	642	225	189	144
21	139	265	357	254	212	182	153	929	514	221	186	143
22	331	232	349	251	214	180	151	827	437	218	182	145
23	235	225	343	249	213	179	149	755	392	224	195	146
24	199	221	338	246	210	179	150	701	361	226	258	155
25	175	214	336	233	209	176	143	652	341	214	265	159
26	156	212	331	228	206	176	138	611	323	208	283	160
27	158	207	328	228	203	177	151	563	303	201	258	187
28	158	205	323	227	202	174	172	513	288	198	224	164
29	152	203	322	225	200	170	162	485	277	193	214	156
30	146	198	317	233	------	173	164	458	269	194	204	155
31	147	------	316	236	------	170	------	435	------	199	195	------
TOTAL	4,172	5,477	12,120	8,236	6,355	5,769	4,772	53,363	13,726	7,640	6,501	4,808
MEAN	135	183	391	266	219	186	159	1,721	458	246	210	160
MAX	331	551	926	319	234	199	175	23,700	1,800	547	283	190
MIN	103	123	197	225	200	170	138	156	269	193	182	143
AC-FT	8,280	10,860	24,040	16,340	12,610	11,440	9,470	105,800	27,230	15,150	12,890	9,540

CAL YR 1971 TOTAL 57,504 MEAN 158 MAX 1,110 MIN 81 AC-FT 114,100
WTR YR 1972 TOTAL 132,939 MEAN 363 MAX 23,700 MIN 103 AC-FT 263,700

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G.HT.	DISCHARGE
5- 7	1100	24.87	5,320
5-11	0130	25.99	6,190
5-12	0630	34.11	44,100

08172400 Plum Creek at Lockhart, Tex.

LOCATION.--Lat 29°55'22", long 97°40'44", Caldwell County, on right bank 548 ft upstream from bridge on U.S. Highway 183, 2.7 miles north of Lockhart, 3.7 miles upstream from Town Creek, 4.5 miles downstream from Brushy Creek, and at mile 30.4.

DRAINAGE AREA.--112 sq mi.

PERIOD OF RECORD.--April 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 431.19 ft above mean sea level. Apr. 30, 1959, to July 25, 1968, at site 548 ft downstream at present datum.

AVERAGE DISCHARGE.--13 years, 37.8 cfs (27,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,100 cfs May 12 (gage height, 15.35 ft); no flow most of time.
Period of record: Maximum discharge, 26,600 cfs Oct. 29, 1960 (gage height, 20.62 ft); no flow for several days each year. Maximum stage since at least 1905, 22 ft in June 1936 at present site; flood in 1951 reached a stage of 20 ft at present site, from information by local resident.

REMARKS.--Records good except those below 4 cfs, which are fair. No known diversion above station. At end of year, flow from 59.9 sq mi above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 23,980 acre-ft below the flood-spillway crests, of which 21,690 acre-ft is floodwater-retarding capacity and 2,290 acre-ft 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 1968: Drainage area. WRD Texas 1970: 1969(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	5.8	4.2	.29		0	.09			
2			8.8	6.0	4.5	.24		0	.07			
3			17	6.3	4.4	.20		0	.06			
4			1.6	6.3	3.9	.16		0	.01			
5			319	6.5	2.9	.12		0	0			
6			133	6.6	2.4	.10		0	0			
7			62	6.2	2.4	.08		0	0			
8			32	6.0	1.9	.05		0	0			
9			33	5.6	2.1	.03		0	0			
10			54	5.5	1.8	.03		0	0			
11			29	5.8	1.8	.03		35	0			
12			18	5.5	2.1	.03		1,130	0			
13			13	5.1	2.5	.03		94	0			
14			10	4.5	2.5	.03		48	0			
15			9.5	3.9	2.4	.02		28	0			
16			7.4	3.0	2.0	.01		17	0			
17			6.8	3.0	1.8	0		11	0			
18			6.3	3.0	1.3	0		6.2	0			
19			5.8	3.1	1.1	0		3.9	0			
20			5.6	3.1	.90	0		2.9	.22			
21			5.5	2.9	.75	0		2.1	.16			
22			5.2	1.6	.67	0		1.5	.05			
23			4.5	1.6	.51	0		1.1	0			
24			4.4	1.5	.51	0		.90	0			
25			4.4	1.6	.51	0		.67	0			
26			4.5	2.0	.51	0		.47	0			
27			4.8	2.0	.47	0		.29	0			
28			4.8	2.0	.35	0		.18	0			
29			5.0	1.8	.29	0		.12	0			
30			5.6	1.8	------	0		.09	0			
31		------	5.5	2.5	------	0	------	.09	------			------
TOTAL	0	0	826.0	122.1	53.47	1.45	0	1,383.51	.66	0	0	0
MEAN	0	0	26.6	3.94	1.84	.047	0	44.6	.022	0	0	0
MAX	0	0	319	6.6	4.5	.29	0	1,130	.22	0	0	0
MIN	0	0	0	1.5	.29	0	0	0	0	0	0	0
AC-FT	0	0	1,640	242	106	2.9	0	2,740	1.3	0	0	0

CAL YR 1971 TOTAL 1,017.94 MEAN 2.79 MAX 319 MIN 0 AC-FT 2,020
WTR YR 1972 TOTAL 2,387.19 MEAN 6.52 MAX 1,130 MIN 0 AC-FT 4,730

PEAK DISCHARGE (BASE, 2,000 CFS).--May 12 (0500) 3,100 cfs (15.35 ft).

GUADALUPE RIVER BASIN

08173000 Plum Creek near Luling, Tex.

LOCATION.--Lat 29°41'58", long 97°36'12", Caldwell County, near left bank on downstream side of pier of bridge on county road, 1.2 miles upstream from West Fork, 1.9 miles upstream from Southern Pacific Railroad Co. bridge, 2.2 miles upstream from McNeil Creek, 3.0 miles northeast of Luling, and at mile 7.3.

DRAINAGE AREA.--309 sq mi.

PERIOD OF RECORD.--March 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 326.57 ft above mean sea level.

AVERAGE DISCHARGE.--42 years, 92.6 cfs (67,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,400 cfs May 12 (gage height, 19.55 ft); minimum, 0.96 cfs Apr. 22.
Period of record: Maximum discharge, 78,500 cfs July 1, 1936 (gage height, 25.7 ft, from floodmarks), from rating curve extended above 37,500 cfs; no flow at times.
Maximum stage since at least 1868, that of July 1, 1936; flood in December 1913 reached about same stage, from information by local residents.

REMARKS.--Records good except those for May 26 to June 25, which are poor. Low flow slightly regulated by oilfield operation above station. At end of year, flow from 97.7 sq mi above this station was partly controlled by 21 floodwater-retarding structures with a total combined capacity of 38,160 acre-ft below the flood-spillway crests, of which 34,770 acre-ft is floodwater-retarding capacity and 3,390 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. No known diversion above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1923: 1933. WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.5	4.4	16	10	4.7	3.8	2.7	14	3.5	3.5	2.2
2	3.0	3.5	7.8	16	10	4.7	3.8	2.4	13	3.5	3.5	2.0
3	2.7	3.2	60	13	10	4.7	3.8	3.9	12	3.2	3.8	1.8
4	3.0	3.2	40	13	9.2	5.0	3.8	4.1	11	3.2	3.5	2.0
5	4.1	3.2	62	14	9.2	4.7	3.8	2.7	10	3.0	4.7	2.0
6	4.1	3.2	592	13	9.7	4.7	3.5	2.2	9.0	5.0	3.8	2.0
7	3.5	3.0	218	13	9.7	5.0	3.5	1,040	8.0	4.7	3.5	2.0
8	3.5	3.2	104	13	8.4	5.3	3.5	88	7.5	3.5	3.2	2.0
9	3.2	3.2	64	13	8.4	5.3	3.2	16	7.0	3.2	2.7	2.0
10	3.0	3.5	70	13	8.4	5.3	3.0	571	6.5	3.0	2.4	2.0
11	3.0	3.8	82	12	9.7	5.9	3.0	1,110	13	4.1	3.2	1.8
12	2.7	3.8	50	12	13	5.6	2.7	12,200	8.0	5.0	5.0	1.8
13	2.0	3.5	31	12	11	5.6	2.4	2,520	7.0	5.3	4.4	2.0
14	1.8	3.8	24	11	11	5.6	2.2	266	6.0	21	3.8	2.0
15	2.3	3.8	20	10	11	5.0	2.2	123	20	4.9	3.5	2.0
16	4.0	4.1	19	9.7	9.2	4.7	2.0	98	450	2.7	3.2	2.2
17	4.9	4.1	16	9.2	9.2	4.1	1.6	98	920	2.5	3.0	2.4
18	6.8	6.8	14	8.7	9.2	4.4	1.6	78	120	5.5	3.2	2.7
19	7.4	15	13	9.2	7.9	3.8	1.4	65	60	4.1	3.0	2.7
20	5.3	7.4	12	9.2	8.4	4.1	1.4	54	30	4.1	3.0	2.4
21	4.1	5.0	12	8.8	7.9	4.1	1.2	45	20	3.5	2.7	2.2
22	3.8	4.1	11	8.4	6.6	4.4	1.4	39	15	3.5	2.7	2.2
23	3.2	4.4	11	7.9	4.7	4.4	3.2	35	10	3.5	2.7	3.2
24	3.0	15	10	6.2	4.7	4.4	2.2	32	8.0	3.2	2.7	3.8
25	3.0	8.4	10	6.2	10	4.4	1.8	28	6.0	3.2	2.4	4.7
26	3.2	6.2	10	6.6	8.2	4.4	1.6	25	5.3	2.7	2.7	5.3
27	3.2	5.3	10	7.0	7.0	4.4	1.4	23	5.0	2.4	3.2	4.7
28	3.5	4.7	10	7.4	6.6	4.4	1.1	21	5.0	2.2	2.7	5.3
29	3.8	4.4	11	7.4	6.6	4.1	3.0	19	5.0	2.2	3.9	4.7
30	3.5	3.8	11	7.9	------	3.8	3.5	17	4.1	2.2	5.0	3.0
31	3.5	------	12	9.7	------	3.8	------	15	------	2.4	2.7	------
TOTAL	111.3	150.1	1,621.2	323.5	254.9	144.8	76.6	18,644.0	1,815.4	126.0	103.3	81.1
MEAN	3.59	5.00	52.3	10.4	8.79	4.67	2.55	601	60.5	4.06	3.33	2.70
MAX	7.4	15	592	16	13	5.9	3.8	12,200	920	21	5.0	5.3
MIN	1.8	3.0	4.4	6.2	4.7	3.8	1.1	2.2	4.1	2.2	2.4	1.8
AC-FT	221	298	3,220	642	506	287	152	36,980	3,600	250	205	161

CAL YR 1971 TOTAL 5,979.35 MEAN 16.4 MAX 592 MIN .32 AC-FT 11,860
WTR YR 1972 TOTAL 23,452.20 MEAN 64.1 MAX 12,200 MIN 1.1 AC-FT 46,520

PEAK DISCHARGE (BASE, 2,300 CFS).--May 11 (0200) 2,440 cfs (13.68 ft); May 12 (0500) 20,400 cfs (19.55 ft).

08174600 Peach Creek below Dilworth, Tex.

LOCATION.--Lat 29°28'26", long 97°18'59", Gonzales County, on right bank at downstream side of bridge on U.S. Highway 90-A, 1.3 miles downstream from Mitchell Creek, 3.1 miles southwest of Dilworth, 6.4 miles upstream from mouth, and 8.5 miles southeast of Gonzales.

DRAINAGE AREA.--460 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Prior to Feb. 11, 1960, nonrecording gage at same site and datum. Datum of gage is 213.53 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 135 cfs (97,810 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 28,000 cfs May 12 (gage height, 32.00 ft); no flow at times.
Period of record: Maximum discharge, 28,000 cfs May 12, 1972 (gage height, 32.00 ft); no flow at times in 1959-67, 1969-72.
Maximum stage since at least 1840, 35.3 ft in June 1940. A stage of 32.8 ft was reached June 30, 1936, but may have been affected by backwater from Guadalupe River, from information by local residents.

REMARKS.--Records good. Recording rain gage located at station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	2.7	3.2	61	70	4.8	2.2	0	12	.58	.90	.11
2	8.9	2.7	77	542	33	4.5	2.1	14	12	.54	1.0	.02
3	6.6	2.7	563	601	17	4.3	1.9	58	11	.48	1.9	.01
4	5.0	2.6	803	120	11	4.3	1.9	17	9.5	.58	2.4	0
5	27	2.4	280	43	8.1	4.2	1.9	5.4	8.4	.54	2.3	0
6	24	2.4	635	23	6.9	4.1	2.0	3.9	7.8	.54	3.2	0
7	8.6	2.4	1,070	15	6.2	4.1	1.8	620	6.9	.78	4.4	0
8	6.5	2.4	769	12	5.8	4.2	1.8	1,740	6.5	.95	3.2	0
9	5.0	2.4	123	10	5.3	4.0	1.9	2,550	6.2	.86	2.2	0
10	3.8	2.4	55	8.9	5.3	3.9	1.9	1,800	6.8	1.1	2.0	0
11	3.3	2.4	36	8.1	122	3.6	1.9	3,860	97	1.4	1.9	0
12	3.1	2.4	28	7.0	360	3.2	1.7	18,100	69	1.4	1.9	0
13	2.9	2.3	21	6.5	121	2.9	1.7	13,800	41	1.0	2.0	0
14	2.8	2.3	16	5.9	51	2.9	1.5	5,000	107	.90	9.2	0
15	2.6	2.2	13	5.5	26	2.7	1.2	3,000	107	1.0	7.8	0
16	2.2	2.2	11	5.1	17	2.6	.86	932	794	.95	22	0
17	6.1	2.1	9.2	4.8	12	2.5	.62	399	1,220	1.8	25	0
18	39	35	8.2	4.8	9.0	2.6	.42	115	1,060	3.2	18	0
19	13	25	7.5	5.1	7.5	2.4	.23	63	196	2.5	4.3	0
20	9.0	12	6.6	5.3	6.6	12	.11	50	37	2.6	2.9	0
21	10	8.0	6.2	4.8	6.1	111	.07	42	14	2.7	2.2	0
22	20	7.3	5.8	4.7	5.8	44	.06	35	6.2	6.7	1.6	0
23	8.7	5.5	5.5	4.5	5.5	14	.21	30	3.0	5.8	.95	0
24	4.8	4.4	5.3	4.5	5.5	8.4	.14	28	1.9	6.1	.51	0
25	4.0	3.8	5.1	4.4	5.4	6.5	.05	25	1.6	5.1	.42	0
26	3.6	3.5	4.9	4.3	5.3	5.5	.04	23	1.2	3.7	8.5	0
27	3.3	3.3	4.8	4.4	5.1	4.8	.03	20	.90	2.5	3.8	0
28	3.2	3.2	4.8	4.2	5.0	4.4	.03	18	.82	1.9	2.0	1.1
29	3.0	3.1	4.8	4.0	4.9	3.9	.02	16	.70	1.4	1.4	2.9
30	2.9	3.1	4.7	108	------	3.4	.02	15	.62	1.2	.86	1.9
31	2.7	------	8.4	181	------	2.7	------	13	------	1.0	.33	------
TOTAL	262.6	158.2	4,595.0	1,822.8	949.3	288.4	30.31	52,392.3	3,846.04	61.80	141.07	6.04
MEAN	8.47	5.27	148	58.8	32.7	9.30	1.01	1,690	128	1.99	4.55	.20
MAX	39	35	1,070	601	360	111	2.2	18,100	1,220	6.7	25	2.9
MIN	2.2	2.1	3.2	4.0	4.9	2.4	.02	0	.62	.48	.33	0
AC-FT	521	314	9,110	3,620	1,880	572	60	103,900	7,630	123	280	12

CAL YR 1971 TOTAL 14,049.42 MEAN 38.5 MAX 1,630 MIN 0 AC-FT 27,870
WTR YR 1972 TOTAL 64,553.86 MEAN 176 MAX 18,100 MIN 0 AC-FT 128,000

PEAK DISCHARGE (BASE, 1,800 CFS).--May 9 (1500) 2,680 cfs (24.96 ft); May 12 (2300) 28,000 cfs (32.00 ft).

08175000 Sandies Creek near Westhoff, Tex.

LOCATION.--Lat 29°12'54", long 97°26'57", De Witt County, on left bank 100 ft downstream from bridge on county highway, 1.9 miles upstream from Birds Creek, 2.0 miles northeast of Westhoff, and at mile 20.4.

DRAINAGE AREA.--549 sq mi.

PERIOD OF RECORD.--March 1930 to November 1934, August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 178.27 ft above mean sea level. Prior to Nov. 9, 1934, water-stage recorder at site 150 ft upstream at datum 0.86 ft higher. Aug. 10, 1959, to Feb. 2, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--17 years, 115 cfs (83,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,000 cfs May 8 (gage height, 26.47 ft); minimum, 1.2 cfs Apr. 30.
Period of record: Maximum discharge, 79,700 cfs Sept. 22, 1967 (gage height, 32.34 ft), from rating curve extended above 21,000 cfs on basis of slope-area measurement of 92,700 cfs; no flow at times.
Maximum discharge since at least 1864, 92,700 cfs July 2, 1936 (gage height, 33.1 ft, from floodmarks), on basis of computation of peak flow, at present site and datum. Flood in October 1913 reached a stage of 26.0 ft, present site and datum, from information by local residents.

REMARKS.--Records good. No diversions above station. Recording rain gage located at station.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.8	6.7	20	361	8.5	6.6	2.4	17	7.0	3.1	2.1
2	9.8	6.4	17	11	179	7.5	6.6	3.5	17	6.6	3.3	1.7
3	9.3	6.5	32	10	65	7.2	6.7	196	17	6.3	10	1.6
4	10	6.1	33	10	29	7.2	6.6	77	17	6.2	12	2.6
5	9.7	5.9	28	9.6	20	7.2	6.4	16	17	6.3	24	3.6
6	42	5.4	129	9.5	15	7.2	6.3	14	17	5.7	18	4.8
7	131	5.4	302	9.0	13	7.2	5.7	3,210	16	5.7	13	4.1
8	328	5.6	225	9.2	12	7.5	5.7	16,900	15	5.9	9.4	3.7
9	254	5.6	146	10	10	7.4	5.8	9,070	14	6.1	7.0	3.0
10	62	5.8	62	11	9.7	7.2	6.1	3,580	16	5.7	5.3	2.7
11	27	5.6	29	10	12	7.1	6.0	6,220	15	6.3	4.6	3.3
12	19	5.4	21	9.7	13	7.2	5.8	9,790	15	5.8	4.0	3.5
13	13	5.2	16	9.6	15	7.4	5.5	4,120	15	5.0	4.1	3.6
14	11	5.3	14	9.0	13	7.6	5.2	2,050	14	3.7	4.8	4.0
15	9.4	5.8	12	8.6	12	8.2	4.9	2,110	13	4.2	5.6	3.3
16	9.0	7.1	11	8.8	12	7.7	4.6	2,090	545	5.7	6.0	2.8
17	12	6.7	10	8.8	11	7.5	3.0	1,390	805	5.2	5.7	3.2
18	11	7.9	10	8.8	9.8	10	3.8	1,480	575	4.5	5.3	4.4
19	9.3	8.5	10	8.8	9.7	10	4.0	905	379	6.3	5.8	4.8
20	8.9	8.3	9.8	8.8	9.4	13	2.7	320	128	6.9	9.5	4.6
21	8.1	7.4	9.6	8.5	9.4	14	2.1	99	45	6.9	13	4.2
22	7.2	8.6	9.6	9.1	9.3	42	1.6	54	25	8.6	8.2	4.5
23	12	9.2	9.5	9.6	9.2	28	1.4	39	19	8.3	5.2	4.4
24	13	8.0	9.0	9.4	9.0	18	1.4	31	15	7.6	3.5	5.1
25	11	7.6	9.1	9.3	8.4	14	1.7	27	13	7.6	3.1	7.9
26	9.9	7.3	9.4	9.4	8.3	11	2.5	25	11	7.4	2.7	14
27	8.4	7.1	9.6	9.2	8.3	9.7	2.7	23	9.9	6.4	2.4	16
28	7.7	7.3	9.4	8.5	8.4	9.2	2.2	21	8.6	5.5	4.0	13
29	7.2	7.2	8.9	8.4	8.6	8.4	1.8	20	7.6	5.1	3.6	11
30	7.0	6.9	8.6	361	------	7.6	1.4	18	6.8	4.9	2.7	19
31	7.1	------	12	622	------	7.0	------	18	------	3.8	2.3	------
TOTAL	1,096.0	201.9	1,228.2	1,264.6	909.5	328.7	126.8	63,918.9	2,827.9	187.2	211.2	166.5
MEAN	35.4	6.73	39.6	40.8	31.4	10.6	4.23	2,062	94.3	6.04	6.81	5.55
MAX	328	9.2	302	622	361	42	6.7	16,900	805	8.6	24	19
MIN	7.0	5.2	6.7	8.4	8.3	7.0	1.4	2.4	6.8	3.7	2.3	1.6
AC-FT	2,170	400	2,440	2,510	1,800	652	252	126,800	5,610	371	419	330

CAL YR 1971 TOTAL 18,309.67 MEAN 50.2 MAX 3,360 MIN .12 AC-FT 36,320
WTR YR 1972 TOTAL 72,467.40 MEAN 198 MAX 16,900 MIN 1.4 AC-FT 143,700

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
5- 8	1500	26.47	20,000
5-12	0200	24.91	12,500
5-16	0100	19.54	3,090

08175800 Guadalupe River at Cuero, Tex.

LOCATION.--Lat 29°03'57", long 97°19'16", De Witt County, on left bank at downstream side of bridge on U.S. Highways 77-A, 87, and 183, 2.1 miles upstream from Gohlke Creek, 2.4 miles southwest of Cuero, 4.2 miles downstream from Sandies Creek, and at mile 100.6.

DRAINAGE AREA.--4,934 sq mi.

PERIOD OF RECORD.--December 1902 to December 1906, August 1916 to December 1935, January 1964 to current year. Published as "near Cuero" 1902-6, and as "below Cuero" 1916-35. Gage-height records collected at site 7.1 miles upstream, upstream from Sandies Creek, from 1941 to 1966 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau) and at present site since June 12, 1968.

GAGE.--Water-stage recorder. Datum of gage is 128.64 ft above mean sea level. Dec. 26, 1902, to June 1903, nonrecording gage at site 7.1 miles upstream at different datum (gage heights moved to the site 3.3 miles upstream from present site before computation); July 1903 to December 1906 nonrecording gage 3.3 miles upstream at different datum; Aug. 19, 1916, to Dec. 16, 1935, water-stage recorder at site 5.0 miles downstream at datum 3.19 ft lower.

AVERAGE DISCHARGE.--28 years (1903-6, 1916-18, 1920-35, 1964-72), 1,418 cfs (1,027,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 64,200 cfs May 14 (gage height, 36.90 ft); minimum, 596 cfs Apr. 22, 27-29.
Period of record: Maximum discharge, 101,000 cfs May 30, 1929 (gage height, 35.2 ft, site and datum then in use), from rating curve extended above 45,000 cfs; maximum gage height, 36.90 ft May 14, 1972; minimum daily discharge, 79 cfs Aug. 13, 14, 1967.
Maximum stage since at least 1900, probably occurred July 2, 1936 (44.33 ft, present site and datum), from information furnished by Texas Highway Department. Other floods at this station occurred Mar. 1, 1903 (43.0 ft, at different site and datum); Oct. 4, 1913 (37.57 ft, at different site and datum); Dec. 6, 1913 (34.57 ft, at different site and datum); Oct. 20, 1919 (32.2 ft, site and datum then in use); May 30, 1929 (35.2 ft, site and datum then in use); June 21, 1961 (37.0 ft, present site and datum); all from information by local residents.

REMARKS.--Records good. Flow below New Braunfels is partly regulated by a series of small power dams (combined capacity of six largest dams 33,550 acre-ft). At end of year, flow from 171 sq mi above this station was partly controlled by 40 floodwater-retarding structures with a total combined capacity of 60,200 acre-ft below the flood-spillway crests, of which 53,970 acre-ft is floodwater-retarding capacity and 6,230 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Many small diversions above station. Upstream regulation above New Braunfels, same as that for Guadalupe River at Sattler (station 08167800).

REVISIONS.--WRD Texas 1968-69: Drainage areas at all sites.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,380	1,450	1,310	1,400	2,350	1,370	812	652	2,800	1,560	1,310	882
2	1,350	1,450	1,880	1,530	1,830	1,350	792	660	2,770	1,540	1,310	869
3	1,330	1,440	1,730	1,850	1,620	1,300	790	712	2,710	1,500	1,390	869
4	1,310	1,430	2,100	1,820	1,540	1,150	808	887	2,620	1,510	1,410	853
5	1,330	1,440	2,330	1,460	1,470	1,000	818	781	2,410	1,540	1,420	844
6	1,750	1,430	2,160	1,380	1,420	953	812	911	2,270	1,480	1,390	845
7	1,680	1,430	3,760	1,360	1,440	950	823	7,520	2,170	1,490	1,330	839
8	1,530	1,430	4,770	1,340	1,470	950	821	16,500	2,130	1,470	1,350	827
9	1,390	1,440	3,430	1,330	1,410	947	787	23,600	2,100	1,430	1,320	822
10	1,140	1,460	2,330	1,350	1,420	928	797	28,100	2,060	1,530	1,310	811
11	1,020	1,440	2,120	1,340	1,480	901	790	24,000	2,020	1,510	1,310	805
12	979	1,440	1,970	1,340	1,790	857	753	19,100	2,050	1,540	1,330	804
13	988	1,380	1,950	1,320	1,830	927	769	25,600	2,100	1,320	1,330	796
14	1,060	1,200	1,900	1,320	1,600	973	771	56,800	1,850	1,510	1,350	796
15	871	1,170	1,850	1,280	1,490	926	762	52,200	1,780	1,520	1,320	826
16	833	1,170	1,810	1,120	1,470	881	744	31,800	2,160	1,660	1,170	770
17	957	1,170	1,570	1,050	1,430	903	687	22,900	4,060	1,460	1,140	795
18	886	1,230	1,660	1,040	1,420	872	683	13,700	4,420	1,480	1,290	786
19	857	1,310	1,650	1,040	1,420	862	651	6,970	5,800	1,480	1,290	832
20	786	1,480	1,630	1,040	1,390	946	628	5,150	4,290	1,480	1,100	787
21	808	1,800	1,660	1,040	1,410	1,510	620	3,410	2,610	1,410	1,000	778
22	1,140	1,630	1,660	1,040	1,380	1,140	605	2,890	2,150	1,390	949	768
23	1,340	1,440	1,580	1,030	1,390	1,040	614	2,730	1,980	1,450	922	778
24	1,490	1,370	1,540	1,020	1,390	1,010	624	2,790	1,890	1,440	944	810
25	1,480	1,300	1,380	1,000	1,390	835	606	3,800	1,840	1,420	953	847
26	1,460	1,380	1,410	985	1,400	815	612	4,520	1,890	1,390	1,130	850
27	1,430	1,390	1,410	980	1,390	867	607	4,760	1,970	1,380	1,050	885
28	1,440	1,350	1,390	959	1,380	861	596	4,760	1,780	1,350	991	895
29	1,440	1,380	1,380	961	1,370	831	604	4,670	1,690	1,320	961	970
30	1,430	1,310	1,370	2,620	------	830	641	4,260	1,610	1,340	921	882
31	1,450	------	1,330	3,010	------	816	------	3,170	------	1,300	904	------
TOTAL	38,335	41,740	60,020	41,355	43,790	30,501	21,427	380,303	73,980	45,200	36,895	24,921
MEAN	1,237	1,391	1,936	1,334	1,510	984	714	12,270	2,466	1,458	1,190	831
MAX	1,750	1,800	4,770	3,010	2,350	1,510	823	56,800	5,800	1,660	1,420	970
MIN	786	1,170	1,310	959	1,370	815	596	652	1,610	1,300	904	768
AC-FT	76,040	82,790	119,000	82,030	86,860	60,500	42,500	754,300	146,700	89,650	73,180	49,430

CAL YR 1971 TOTAL 358,529 MEAN 982 MAX 7,390 MIN 151 AC-FT 711,100
WTR YR 1972 TOTAL 838,467 MEAN 2,291 MAX 56,800 MIN 596 AC-FT 1,663,000

PEAK DISCHARGE (BASE, 7,500 CFS).--May 10 (0300) 30,600 cfs (30.30 ft, from floodmark); May 14 (1900) 64,200 cfs (36.90 ft).

08176500 Guadalupe River at Victoria, Tex.

LOCATION.--Lat 28°47'35", long 97°00'45", Victoria County, on left bank just upstream from pier of upstream bridge of two bridges on U.S. Highway 59 in Victoria, 1,300 ft upstream from Southern Pacific Railroad Co. bridge, 15 miles upstream from Coleto Creek, and at mile 50.7.

DRAINAGE AREA.--5,198 sq mi.

PERIOD OF RECORD.--November 1934 to current year. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 29.15 ft above mean sea level.

AVERAGE DISCHARGE.--37 years (1935-72), 1,607 cfs (1,164,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 58,500 cfs May 16 (gage height, 30.37 ft); minimum, 627 cfs Apr. 29.
Period of record: Maximum discharge, 179,000 cfs July 3, 1936 (gage height, 31.22 ft); minimum daily, 14 cfs Aug. 20, 1956. Maximum stage since at least 1833, that of July 3, 1936. Flood of June 1, 1929, reached a stage of 30.2 ft, present site and datum.

REMARKS.--Records good. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures and upstream regulation, see Guadalupe River at Cuero (station 08175800). Many diversions above station. Records furnished by city of Victoria show that they have discontinued diversion for municipal use above station but discharged 5,640 acre-ft of sewage effluent below station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,490	1,490	1,360	1,420	3,110	1,370	859	669	3,470	1,770	1,430	989
2	1,430	1,490	1,550	1,460	2,270	1,360	849	685	3,350	1,740	1,490	969
3	1,390	1,490	1,980	1,660	1,800	1,350	835	694	3,300	1,700	1,910	960
4	1,380	1,480	1,820	1,890	1,640	1,280	841	747	3,190	1,690	1,870	953
5	1,370	1,480	2,500	1,730	1,550	1,150	854	905	3,090	1,720	1,690	936
6	1,430	1,470	3,050	1,460	1,490	1,040	866	852	2,710	1,690	1,600	938
7	1,820	1,470	2,910	1,410	1,460	1,030	850	6,140	2,540	1,650	1,510	931
8	1,590	1,470	4,440	1,390	1,470	1,020	865	16,400	2,470	1,650	1,460	921
9	1,490	1,480	4,520	1,360	1,470	1,010	847	16,100	2,420	1,640	1,460	913
10	1,330	1,490	3,110	1,370	1,430	1,010	832	18,500	2,430	1,600	1,440	902
11	1,160	1,500	2,280	1,390	1,520	990	832	24,100	2,360	1,730	1,430	896
12	1,070	1,480	2,120	1,370	1,670	957	818	23,000	2,280	1,700	1,450	885
13	1,050	1,470	2,010	1,360	1,870	1,010	790	20,600	2,350	1,670	1,440	888
14	1,060	1,370	1,980	1,340	1,740	1,100	805	21,400	2,320	1,520	1,480	885
15	1,070	1,270	1,910	1,320	1,560	1,060	803	44,900	2,070	1,680	1,440	907
16	976	1,250	1,860	1,270	1,490	1,010	789	52,200	2,130	1,760	1,420	888
17	2,550	1,250	1,810	1,150	1,470	955	763	35,400	3,060	1,780	1,210	878
18	2,690	1,320	1,550	1,120	1,430	960	720	23,900	4,370	1,630	1,290	873
19	1,320	1,320	1,710	1,100	1,440	937	710	15,400	5,010	1,670	1,410	886
20	1,470	1,410	1,650	1,120	1,410	956	679	7,840	5,690	1,720	1,350	891
21	1,480	1,570	1,660	1,100	1,410	1,280	661	5,360	3,820	1,760	1,180	864
22	1,100	1,770	1,680	1,100	1,410	1,430	647	3,960	2,650	1,660	1,090	859
23	1,350	1,690	1,650	1,100	1,400	1,100	641	3,560	2,300	1,630	1,040	899
24	1,470	1,480	1,590	1,090	1,400	1,070	652	3,340	2,160	1,660	1,030	1,110
25	1,560	1,420	1,530	1,070	1,400	1,010	648	3,610	2,090	1,610	1,030	1,070
26	1,530	1,400	1,420	1,060	1,410	843	639	4,530	2,050	1,570	1,080	1,140
27	1,500	1,440	1,450	1,050	1,400	901	673	4,960	2,130	1,530	1,200	1,720
28	1,480	1,430	1,440	1,040	1,400	906	647	5,060	2,080	1,510	1,100	1,070
29	1,480	1,400	1,430	1,030	1,390	898	630	5,040	1,940	1,490	1,060	1,060
30	1,480	1,400	1,410	2,840	------	875	641	4,950	1,840	1,470	1,040	1,060
31	1,480	------	1,420	4,650	------	870	------	4,310	------	1,490	999	------
TOTAL	45,046	43,450	62,800	44,820	45,910	32,738	22,686	379,112	83,670	51,090	41,629	29,141
MEAN	1,453	1,448	2,026	1,446	1,583	1,056	756	12,230	2,789	1,648	1,343	971
MAX	2,690	1,770	4,520	4,650	3,110	1,430	866	52,200	5,690	1,780	1,910	1,720
MIN	976	1,250	1,360	1,030	1,390	843	630	669	1,840	1,470	999	859
AC-FT	89,350	86,180	124,600	88,900	91,060	64,940	45,000	752,000	166,000	101,300	82,570	57,800

CAL YR 1971 TOTAL 389,029 MEAN 1,066 MAX 9,240 MIN 169 AC-FT 771,600
WTR YR 1972 TOTAL 882,092 MEAN 2,410 MAX 52,200 MIN 630 AC-FT 1,750,000

PEAK DISCHARGE (BASE, 7,800 CFS).--May 16 (0400) 58,500 cfs (30.37 ft).

08177000 Coleto Creek near Schroeder, Tex.

LOCATION.--Lat 28°49'53", long 97°11'10", Goliad-Victoria County line, on left bank 373 ft downstream from bridge on Farm Road 622, 2.5 miles northeast of Schroeder, 4.2 miles downstream from confluence of Twelvemile and Fifteenmile Creeks, 9.1 miles upstream from Perdido Creek, 11.1 miles west of Victoria, and at mile 21.8.

DRAINAGE AREA.--369 sq mi.

PERIOD OF RECORD.--January 1930 to December 1933, October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 87.59 ft above mean sea level. Prior to Dec. 31, 1933, nonrecording gage at site 0.7 mile downstream at same datum; Oct. 20, 1952, to Jan. 17, 1955, and Sept. 22 to Nov. 8, 1967, nonrecording gage at site 0.6 mile downstream at same datum. Jan. 18, 1955, to Sept. 21, 1967, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--23 years, 88.2 cfs (63,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,000 cfs May 7 (gage height, 15.25 ft, from floodmark); minimum, 3.8 cfs Sept. 8, 11-13.

Period of record: Maximum discharge, 122,000 cfs Sept. 21, 1967 (gage height, 33.47 ft, from floodmark), from rating curve extended above 28,000 cfs on basis of slope-area measurement of peak flow; no flow for many days in 1956, 1963-65, 1971.

Maximum stages since at least 1872 at present site and datum, that of Sept. 21, 1967, Oct. 16, 1946, 26.0 ft (discharge, 63,700 cfs), and October 1925, 23.0 ft (discharge, 46,700 cfs), from information by local resident.

REMARKS.--Records good. No known diversions above station.

REVISIONS (WATER YEARS).--WSP 1312: 1930(M). WRD Texas 1968: 1967, drainage area. WRD Texas 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	33	17	25	165	22	22	14	29	14	12	5.9
2	34	32	22	33	113	20	22	15	30	14	11	6.4
3	29	29	136	28	71	18	21	13	30	13	58	6.6
4	29	26	76	22	53	20	20	11	29	12	110	5.7
5	29	26	115	20	46	17	20	11	28	12	31	5.0
6	33	25	233	19	44	17	20	20	25	12	20	5.2
7	31	24	155	18	37	20	20	9,190	24	12	15	4.8
8	27	23	104	19	35	20	18	4,560	23	12	14	4.3
9	24	25	65	20	32	17	17	408	25	12	11	4.4
10	23	24	46	20	31	18	18	1,210	52	12	13	4.3
11	20	22	36	18	36	18	18	1,690	43	17	18	4.3
12	20	22	32	17	46	19	17	1,100	29	15	61	4.1
13	19	22	29	17	41	20	17	1,020	33	14	23	5.7
14	19	22	28	15	35	30	16	346	36	12	14	6.3
15	18	21	25	14	31	31	16	187	26	10	11	7.8
16	24	21	24	14	29	303	15	140	52	24	10	10
17	4,470	21	22	14	28	97	14	116	599	28	14	12
18	763	30	20	16	25	45	14	92	136	21	32	9.8
19	175	29	20	17	24	31	14	76	72	17	19	7.2
20	188	25	21	17	24	92	13	65	46	19	16	5.6
21	202	22	20	16	24	844	14	54	36	18	13	6.0
22	121	20	19	15	24	108	13	49	29	22	10	6.7
23	78	29	18	15	24	58	12	47	25	26	9.1	126
24	62	29	18	15	24	44	11	46	23	18	8.3	92
25	52	25	19	13	23	36	11	42	21	15	7.7	63
26	48	23	19	13	23	32	11	38	19	13	7.5	247
27	45	21	20	15	22	31	45	36	18	11	7.8	717
28	41	20	20	14	22	29	40	34	17	10	7.1	104
29	38	19	20	13	22	25	20	31	16	9.7	6.7	47
30	36	17	20	2,190	------	23	17	29	15	9.3	6.4	30
31	35	------	28	868	------	23	------	29	------	16	5.8	------
TOTAL	6,772	727	1,447	3,570	1,154	2,128	546	20,719	1,586	470.0	602.4	1,564.1
MEAN	218	24.2	46.7	115	39.8	68.6	18.2	668	52.9	15.2	19.4	52.1
MAX	4,470	33	233	2,190	165	844	45	9,190	599	28	110	717
MIN	18	17	17	13	22	17	11	11	15	9.3	5.8	4.1
AC-FT	13,430	1,440	2,870	7,080	2,290	4,220	1,080	41,100	3,150	932	1,190	3,100

CAL YR 1971 TOTAL 31,043.69 MEAN 85.1 MAX 6,200 MIN 0 AC-FT 61,580
WTR YR 1972 TOTAL 41,285.50 MEAN 113 MAX 9,190 MIN 4.1 AC-FT 81,890

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-17	1100	13.80	15,200	5- 7	1900	a15.25	20,000
1-30	1600	9.29	5,020	5-10	1800	9.75	5,900
3-21	0100	8.35	3,100				

a From floodmark.

08177700 Olmos Creek at Dresden Drive, San Antonio, Tex.

LOCATION.--Lat 29°29'56", long 98°30'36", Bexar County, on right bank 30 ft downstream from low-water bridge on Dresden Drive at San Antonio, 0.15 mile west of intersection of Blanco Road and Dresden Drive, and 4.0 miles upstream from Olmos Dam.

DRAINAGE AREA.--21.2 sq mi.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 726.10 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,420 cfs May 7 (gage height, 13.20 ft, from floodmark); minimum, 0.01 cfs Apr. 15, 16.
Period of record: Maximum discharge, 5,420 cfs May 7, 1972 (gage height, 13.20 ft, from floodmark); no flow at times. Maximum stage since 1935, that of May 7, 1972; floods in September and November 1947 reached a stage of 8.5 ft, from information by local resident.

REMARKS.--Records good. Recording rain gage located at station, with three additional recording rain gages located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.50	1.4	.66	.66	.22	.07	.13	.57	.10	.10	.04
2	.13	.50	13	.66	.35	.22	.07	11	.45	.07	.10	.05
3	.13	.50	1.8	.95	.50	.13	.07	.35	.45	.07	27	.05
4	15	.50	1.0	6.3	.50	.22	.07	.13	.45	.17	2.7	.07
5	2.9	.35	71	1.2	.66	.22	.07	.89	.45	.10	.85	.13
6	1.8	.50	6.3	.66	.82	.22	.07	54	.36	.13	.20	.10
7	.35	.92	1.5	.50	.66	.22	.07	1,350	.40	.10	.07	.10
8	.87	.66	3.3	.50	.66	.22	.07	14	.40	.07	.05	.10
9	.35	.50	4.0	.50	.66	.22	.07	4.0	14	.07	.07	.19
10	.22	.50	1.8	.50	1.1	.22	.07	138	1.1	.14	.05	.13
11	.13	.50	1.2	.50	3.6	.22	.07	16	5.0	.19	9.4	.10
12	.52	.35	1.2	.50	.66	.22	.07	10	.85	.17	2.1	.25
13	.35	.35	1.2	.50	.50	.50	.07	2.0	.40	.13	.45	.32
14	1.4	.35	1.2	.35	.50	.35	.07	1.0	1.0	.07	.13	.16
15	.35	.35	1.0	.35	.22	.35	.07	1.0	1.7	.13	.07	.35
16	3.9	.35	.82	.35	.22	.22	.03	20	17	.13	.07	.24
17	5.5	.35	.82	.35	.22	.22	.07	4.0	32	.21	.07	.04
18	22	32	.50	.35	.22	.13	.07	1.0	1.4	3.5	.07	.18
19	14	1.2	.50	.35	.13	.22	.07	.78	.28	3.4	.05	.16
20	133	1.0	.50	.35	.13	.22	.07	.71	.20	.69	.05	.13
21	1.2	.82	.66	.35	.35	.13	7.7	.71	.24	.22	.04	.16
22	.82	.82	.50	.35	.35	.07	.35	.71	.13	18	.04	.16
23	.66	.82	.50	.35	.50	.07	.22	.57	.24	3.1	1.2	2.3
24	.66	.50	.50	.35	.50	.07	.13	.57	.28	.40	21	12
25	.66	.66	.50	.35	.35	.07	.13	.57	.20	.20	.40	.64
26	.66	.66	.50	.35	.22	.07	.13	.57	.10	.13	.20	3.7
27	2.4	.66	.50	.35	.22	.07	39	.64	.10	.07	.10	2.9
28	.82	.66	.50	.35	.22	.07	2.4	.64	.10	.07	.04	.36
29	.66	.66	.50	.35	.22	.07	.22	.64	.07	.07	.03	.13
30	.66	.66	.50	11	------	.07	.13	.71	.10	.10	.04	.10
31	.50	------	.50	.82	------	.07	------	.64	------	.16	.03	------
TOTAL	212.82	49.15	119.70	31.35	15.90	5.59	51.77	1,635.96	80.02	32.16	66.77	25.34
MEAN	6.87	1.64	3.86	1.01	.55	.18	1.73	52.8	2.67	1.04	2.15	.84
MAX	133	32	71	11	3.6	.50	39	1,350	32	18	27	12
MIN	.13	.35	.50	.35	.13	.07	.03	.13	.07	.07	.03	.04
CFSM	.32	.08	.18	.05	.03	.009	.08	2.49	.13	.05	.10	.04
IN.	.37	.09	.21	.06	.03	.009	.09	2.87	.14	.06	.12	.04
AC-FT	422	97	237	62	32	11	103	3,240	159	64	132	50
(††)	5.16	1.60	3.14	1.14	.27	.30	2.02	11.22	3.09	2.04	4.28	1.91

CAL YR 1971 TOTAL 743.20 MEAN 2.04 MAX 133 MIN .01 CFSM .10 IN 1.30 AC-FT 1,470 †† 30.16
WTR YR 1972 TOTAL 2,326.53 MEAN 6.36 MAX 1,350 MIN .03 CFSM .30 IN 4.08 AC-FT 4,610 †† 36.17

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	0300	7.50	755	5- 6	1230	6.15	277
11-18	0115	5.83	210	5- 7	1030	a13.20	5,420
12- 5	0430	6.65	423	5-10	1500	7.63	1,020

a From floodmark.

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

08178000 San Antonio River at San Antonio, Tex.

LOCATION.--Lat 29°24'34", long 98°29'41", Bexar County, on left bank 143 ft downstream from South Alamo Street Bridge in San Antonio, 2.1 miles upstream from San Pedro Creek, and at mile 232.0.

DRAINAGE AREA.--41.8 sq mi. Flow of river comes from intermittent spring flow and from artesian wells; drainage area of stream not applicable.

PERIOD OF RECORD.--January 1915 to November 1929, February 1939 to current year. Ground-water discharge into river is discussed by Petit and George, Texas Board of Water Engineers Bull. 5608, vol. 1 (1956, p. 45). December 1895 to June 1906, periodic discharge measurements only.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 605.26 ft above mean sea level. Jan. 26, 1915, to Feb. 27, 1916, nonrecording gage at site 2.2 miles upstream at different datum. Feb. 28, 1916, to Apr. 7, 1920, nonrecording gage at site 1.9 miles upstream at different datum. Apr. 8, 1920, to Nov. 16, 1929, and Feb. 15, 1939, to Apr. 25, 1967, water-stage recorder in vicinity of South Alamo Street Bridge at 7.00 ft higher datum. Apr. 25, 1967, to May 13, 1969, water-stage recorder at site 307 ft downstream at same datum.

AVERAGE DISCHARGE.--47 years, 49.6 cfs (35,940 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,860 cfs May 7 (gage height, 12.36 ft), from rating curve extended above 1,900 cfs on basis of computed discharge of 14,400 cfs by Corps of Engineers; minimum, 0.04 cfs Apr. 28, 29.
Period of record: Maximum discharge, 15,300 cfs Sept. 10, 1921 (gage height, 20.14 ft, from floodmark at former site and datum), from rating curve extended above 2,000 cfs on basis of slope-area measurement of peak flow; no flow at times due to regulation.
Maximum stage since 1819, that of Sept. 10, 1921; flood of July 5, 1819, equaled or exceeded that of Sept. 10, 1921.
REVISIONS.--The minimum discharge for the water year 1971 has been revised to 0.02 cfs Aug. 8, 9, 19, 20, superseding figures published in WRD Texas, 1971.

REMARKS.--Records good. Floodflow is regulated by Olmos flood-control reservoir (capacity, 15,500 acre-ft) about 8.5 miles upstream. Dam completed in 1926. Springs emerge intermittently from Edwards and associated limestones in Balcones Fault Zone.

REVISIONS (WATER YEARS).--WSP 1312: 1917. WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	101	25	35	17	12	17	35	13	18	16
2	7.9	16	198	27	45	15	9.3	64	31	11	15	18
3	7.6	15	34	35	25	15	13	13	28	14	260	15
4	50	15	19	83	23	14	11	9.8	25	11	159	19
5	59	15	382	33	25	11	12	35	23	13	70	18
6	51	15	38	25	26	14	13	313	18	12	50	16
7	23	14	15	24	25	13	12	1,510	16	13	30	17
8	10	23	25	26	24	12	11	997	16	17	26	16
9	13	13	34	28	21	12	8.8	31	119	11	23	22
10	7.5	16	32	29	27	12	12	262	32	18	20	14
11	18	16	26	26	59	12	12	199	46	14	45	16
12	15	15	22	25	28	9.9	11	288	29	13	35	18
13	15	15	25	25	23	17	12	65	20	14	25	15
14	32	13	27	22	25	9.4	11	58	20	13	22	17
15	18	16	25	20	23	21	11	52	24	14	20	17
16	19	16	25	24	21	16	7.5	158	171	12	19	16
17	79	18	25	23	21	14	11	136	261	16	18	14
18	98	757	25	24	18	13	11	48	39	42	17	17
19	61	24	25	24	18	9.5	11	52	36	29	17	16
20	704	17	27	26	18	14	11	51	29	16	16	16
21	38	16	26	23	24	13	121	50	25	50	16	18
22	9.5	18	25	22	21	13	11	49	21	113	16	15
23	16	15	25	21	20	13	11	49	19	27	18	50
24	14	14	26	22	21	13	12	48	20	44	61	69
25	16	12	25	20	19	12	11	47	19	30	21	12
26	15	17	27	20	18	10	11	43	18	14	14	39
27	23	18	30	21	15	14	245	41	16	16	15	23
28	18	17	28	19	19	14	57	38	15	17	18	15
29	16	19	29	20	19	12	12	36	14	16	21	17
30	15	18	27	116	------	12	10	32	13	12	17	14
31	13	------	29	30	------	12	------	31	------	58	17	------
TOTAL	1,493.5	1,229	1,427	908	706	408.8	723.6	4,822.8	1,198	713	1,139	605
MEAN	48.2	41.0	46.0	29.3	24.3	13.2	24.1	156	39.9	23.0	36.7	20.2
MAX	704	757	382	116	59	21	245	1,510	261	113	260	69
MIN	7.5	12	15	19	15	9.4	7.5	9.8	13	11	14	12
AC-FT	2,960	2,440	2,830	1,800	1,400	811	1,440	9,570	2,380	1,410	2,260	1,200

CAL YR 1971 TOTAL 10,915.76 MEAN 29.9 MAX 757 MIN .06 AC-FT 21,650
WTR YR 1972 TOTAL 15,373.70 MEAN 42.0 MAX 1,510 MIN 7.5 AC-FT 30,490

08178700 Salado Creek (upper station) at San Antonio, Tex.

LOCATION.--Lat 29°30'57", long 98°25'51", Bexar County, on upstream side of upstream bridge of two bridges on Interstate Highway 410 in San Antonio, 1.0 mile west of Northeast School, 1.2 miles upstream from Perrin-Beitel Creek, and 2.7 miles east of San Antonio International Airport.

DRAINAGE AREA.--137 sq mi.

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder with concrete control. Datum of gage is 684.60 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 7.21 cfs (5,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 24,900 cfs May 12 (gage height, 15.22 ft), from rating curve extended above 8,000 cfs as explained below; minimum, 0.09 cfs July 21.
Period of record: Maximum discharge, 24,900 cfs May 12, 1972 (gage height, 15.22 ft), from rating curve extended above 8,000 cfs on basis of slope-area measurement of peak flow; no flow at times.
Maximum stage since at least 1853, 23 to 24 ft in October 1913. Flood in September 1921 reached a stage of 18 ft, and flood of Sept. 27, 1946, reached a stage of 18.2 ft, and are the highest since 1899.

REMARKS.--Records good. No known diversion above station. Recording rain gage located at station. At end of year, flow from 11.2 sq mi above this station was partly controlled by two floodwater-retarding structure with a total combined capacity of 4,280 acre-ft below the flood-spillway crests, of which 3,990 acre-ft is floodwater-retarding capacity and 284 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 1,980 acre-ft, of which 85 acre-ft is sediment-pool capacity. The capacity in this pool is allocated to sediment storage and will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	2.4	1.2	.90	2.1	1.3	1.5	.90	1.3	.90	.75	.65
2	.28	1.5	7.6	.90	2.0	1.1	1.3	1.1	1.1	.90	.75	.65
3	.19	2.4	2.6	.90	1.2	1.1	1.3	1.1	.90	1.1	3.0	.65
4	.59	2.1	1.1	2.8	.99	1.1	.90	.90	.75	.90	2.1	.65
5	1.5	2.1	22	1.4	3.1	1.1	.90	1.2	.75	.90	.90	.65
6	1.8	1.1	5.0	3.5	.90	1.5	1.1	3.3	.75	1.1	.75	.80
7	.75	1.8	2.7	3.4	1.8	2.3	1.1	2,890	.75	.90	.90	.60
8	.75	1.3	3.7	.90	2.4	2.0	1.1	194	.75	.90	.90	.60
9	1.1	1.8	5.8	.90	2.0	1.3	1.1	13	1.6	.90	1.1	.66
10	1.1	1.1	4.7	1.1	2.1	1.3	1.1	247	1.0	.90	.90	.65
11	.90	.75	1.3	1.6	2.3	1.3	1.3	126	.90	.90	1.1	.63
12	.75	.75	1.1	1.6	1.3	1.1	1.3	4,140	.65	.57	.90	.64
13	.75	1.3	1.7	1.6	1.1	1.5	1.5	83	.90	.28	.75	.65
14	.90	.65	2.3	1.7	2.2	1.5	1.5	20	1.2	.41	.65	.66
15	.90	.41	1.3	1.0	2.4	1.5	1.8	11	.57	.23	.75	.66
16	.90	.28	1.6	.75	1.6	1.8	1.8	16	.74	.23	.75	.66
17	1.1	.28	2.1	1.6	1.3	2.1	1.3	7.0	.49	.19	.75	.64
18	1.3	31	1.6	2.3	1.3	2.1	1.5	3.8	.49	.34	.75	.62
19	1.8	3.0	1.4	1.9	1.7	2.1	1.8	3.0	.57	.74	.75	.62
20	22	1.5	2.7	2.0	1.5	2.4	2.1	2.7	.65	.19	.90	.62
21	5.4	1.3	2.0	1.6	.90	2.1	2.0	2.1	.65	.43	.75	.63
22	4.9	1.1	2.0	.95	1.1	1.5	1.3	1.8	.65	1.0	.82	.49
23	3.9	1.1	1.9	.57	1.1	1.5	1.1	2.7	.65	.41	.78	.47
24	2.1	.90	1.1	1.1	1.2	1.5	1.3	2.7	.75	.41	1.2	.99
25	2.1	1.1	.90	1.5	2.1	1.5	1.3	2.1	.75	.90	.76	.75
26	2.7	1.1	1.1	1.2	1.1	1.5	1.5	2.1	.75	1.1	.75	.72
27	2.1	1.1	2.6	1.6	.65	1.5	1.5	1.8	.90	.90	.75	.75
28	2.4	.90	1.7	2.1	1.1	1.3	1.1	1.8	.90	.90	.90	.73
29	2.4	.90	4.2	1.5	1.1	1.5	.90	1.8	.90	.75	.75	.74
30	1.8	.90	3.1	2.8	------	1.8	.75	1.5	.75	.75	.65	.71
31	1.5	------	.90	1.9	------	1.8	------	1.3	------	.75	.65	------
TOTAL	71.07	67.92	95.00	49.57	45.64	49.0	40.05	7,786.70	24.46	21.78	28.86	19.94
MEAN	2.29	2.26	3.06	1.60	1.57	1.58	1.34	251	.82	.70	.93	.66
MAX	22	31	22	3.5	3.1	2.4	2.1	4,140	1.6	1.1	3.0	.99
MIN	.19	.28	.90	.57	.65	1.1	.75	.90	.49	.19	.65	.47
CFSM	.02	.02	.02	.01	.01	.01	.010	1.83	.006	.005	.007	.005
IN.	.02	.02	.03	.01	.01	.01	.01	2.11	.006	.005	.007	.005
AC-FT	141	135	188	98	91	97	79	15,440	49	43	57	40

CAL YR 1971 TOTAL 573.28 MEAN 1.57 MAX 64 MIN .19 CFSM .01 IN .16 AC-FT 1,140
WTR YR 1972 TOTAL 8,299.99 MEAN 22.7 MAX 4,140 MIN .19 CFSM .17 IN 2.25 AC-FT 16,460

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.HT.	DISCHARGE
5- 7	1000	10.95	9,750
5-10	1600	6.80	860
5-12	0400	15.22	24,900

08178800 Salado Creek (lower station) at San Antonio, Tex.

LOCATION.--Lat 29°21'25", long 98°24'45", Bexar County, on right bank at upstream side of bridge on Loop 13 at San Antonio, 1.4 miles east of Brooks Air Force Base, and 3.3 miles upstream from Rosillo Creek.

DRAINAGE AREA.--189 sq mi.

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 526.95 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 30.6 cfs (22,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,120 cfs May 12 (gage height, 24.53 ft); minimum, 10 cfs Apr. 19.
Period of record: Maximum discharge, 7,120 cfs May 12, 1972 (gage height, 24.53 ft); no flow Aug. 13, 1967.
Floods of Sept. 27, 1946, and Aug. 15, 1960, were about equal magnitude and are the highest since at least 1941. Flood of Aug. 15, 1960, reached a stage of 26.8 ft, from floodmarks.

REMARKS.--Records good. Small diversions above station. Most of low flow comes from artesian wells and springs in city of San Antonio. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08178700. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	31	23	26	19	15	14	28	16	19	18
2	15	18	236	21	22	19	16	38	25	16	16	18
3	14	18	75	20	20	19	15	23	21	16	147	18
4	17	18	30	36	20	19	15	15	21	16	176	17
5	26	18	248	34	20	19	15	14	20	16	55	17
6	43	18	108	25	21	18	15	410	20	17	24	17
7	23	18	39	22	21	19	15	3,470	19	16	20	17
8	17	18	33	22	21	19	14	1,570	18	16	25	16
9	19	18	38	22	20	19	13	144	52	16	26	16
10	16	18	31	22	20	19	13	318	51	16	20	20
11	15	17	28	21	38	19	13	785	32	20	31	16
12	15	17	25	20	28	18	13	2,730	29	18	36	16
13	18	17	24	21	22	19	13	493	25	17	25	16
14	23	17	23	22	21	21	13	181	31	17	21	17
15	23	17	23	20	21	19	12	76	44	17	18	23
16	21	17	23	20	20	21	12	70	72	17	18	17
17	22	17	23	20	20	18	11	232	35	17	17	17
18	36	443	22	20	20	18	11	63	27	19	17	17
19	27	94	22	20	19	17	11	50	23	20	17	16
20	326	32	23	20	19	18	11	42	21	29	17	16
21	78	25	23	21	19	18	49	39	20	29	17	16
22	32	23	22	20	19	17	22	38	18	29	16	16
23	24	23	22	20	19	17	14	36	18	93	16	18
24	22	22	22	20	19	17	12	35	18	24	78	43
25	21	22	22	19	19	17	11	34	17	19	32	28
26	20	21	23	19	19	16	12	31	17	18	21	31
27	20	21	23	20	19	17	30	31	17	17	19	34
28	19	20	23	20	19	17	123	29	17	17	19	19
29	18	20	22	20	19	15	21	28	16	17	18	18
30	17	20	22	59	------	15	16	29	16	17	19	18
31	17	------	22	52	------	15	------	29	------	16	18	------
TOTAL	1,022	1,085	1,351	741	610	558	576	11,097	788	648	1,018	586
MEAN	33.0	36.2	43.6	23.9	21.0	18.0	19.2	358	26.3	20.9	32.8	19.5
MAX	326	443	248	59	38	21	123	3,470	72	93	176	43
MIN	14	17	22	19	19	15	11	14	16	16	16	16
AC-FT	2,030	2,150	2,680	1,470	1,210	1,110	1,140	22,010	1,560	1,290	2,020	1,160

CAL YR 1971 TOTAL 8,425.8 MEAN 23.1 MAX 503 MIN 1.4 AC-FT 16,710
WTR YR 1972 TOTAL 20,080.0 MEAN 54.9 MAX 3,470 MIN 11 AC-FT 39,830

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1430	11.76	630	5- 7	2000	23.85	6,620
11-18	1230	12.42	796	5-11	0400	14.34	1,440
5- 6	1000	12.87	931	5-12	1500	24.53	7,120

08179000 Medina River near Pipe Creek, Tex.

LOCATION (revised).--Lat 29°40'33", long 98°58'34", Bandera County, on left bank 600 ft upstream from Bandera Falls, 0.6 mile upstream from Red Bluff Creek, and 4.1 miles southwest of Pipe Creek.

DRAINAGE AREA.--474 sq mi.

PERIOD OF RECORD.--October 1922 to June 1935, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1312 and 1732.

GAGE.--Water-stage recorder. Datum of gage is 1,067.37 ft above mean sea level, unadjusted. December 1922 to June 1935, water-stage recorder at site 1.9 miles (revised) upstream at different datum.

AVERAGE DISCHARGE.--32 years (1922-34, 1952-72), 116 cfs (84,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,280 cfs May 7 (gage height, 13.13 ft); minimum, 43 cfs Apr. 26.
Period of record: Maximum discharge, 64,000 cfs July 1, 1932 (gage height, 35.2 ft, from floodmarks, present site and datum), from rating curve extended above 32,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.2 cfs July 14-16, 1956. Maximum stage since at least 1880, about 43 ft in 1919, present site and datum, from information by local resident.

REMARKS.--Records good. Small diversion above station.

REVISIONS (WATER YEARS).--WSP 1312: 1925(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	567	234	163	145	102	75	71	283	131	86	168
2	176	540	263	163	140	96	75	73	266	126	88	155
3	173	509	253	160	131	96	75	73	253	122	94	158
4	1,060	483	234	158	126	96	71	68	237	119	113	150
5	727	475	250	153	126	94	68	66	228	124	102	145
6	585	458	253	153	128	92	70	426	222	122	108	173
7	492	438	240	153	124	94	68	2,920	207	119	102	158
8	490	430	234	153	119	92	64	1,460	201	117	94	143
9	527	426	234	155	119	90	61	818	210	113	90	136
10	458	402	231	153	117	90	63	1,950	219	106	94	131
11	430	390	222	150	122	92	64	1,330	246	104	313	128
12	410	382	216	148	119	92	64	1,030	260	102	340	128
13	406	374	210	148	119	90	61	1,120	225	100	256	124
14	398	366	213	140	117	92	60	1,560	207	98	207	117
15	382	355	207	136	115	90	56	1,060	198	96	182	117
16	442	351	198	133	113	88	53	862	196	92	179	140
17	438	355	198	136	111	86	52	784	258	96	168	153
18	669	340	193	138	106	86	50	680	274	105	155	128
19	1,110	314	193	136	104	84	50	605	219	229	148	119
20	2,200	307	190	133	106	98	52	549	198	136	140	115
21	1,120	300	184	131	106	102	53	509	187	117	133	111
22	990	293	182	128	108	94	52	479	179	111	128	108
23	894	322	179	126	108	90	50	454	173	115	131	117
24	834	290	176	126	106	88	49	438	168	106	204	171
25	768	283	173	124	102	86	46	402	166	106	247	155
26	730	273	173	122	100	82	44	374	158	102	344	133
27	818	260	173	126	98	84	56	351	153	96	444	126
28	752	250	171	122	98	82	232	329	148	90	263	119
29	675	244	168	124	98	79	96	314	143	86	210	117
30	630	237	168	145	------	77	79	293	138	86	190	108
31	595	------	163	153	------	75	------	283	------	84	179	------
TOTAL	20,580	11,014	6,376	4,389	3,331	2,779	2,009	21,731	6,220	3,456	5,532	4,051
MEAN	664	367	206	142	115	89.6	67.0	701	207	111	178	135
MAX	2,200	567	263	163	145	102	232	2,920	283	229	444	173
MIN	173	237	163	122	98	75	44	66	138	84	86	108
AC-FT	40,820	21,850	12,650	8,710	6,610	5,510	3,980	43,100	12,340	6,850	10,970	8,040

CAL YR 1971 TOTAL 115,333.1 MEAN 316 MAX 20,000 MIN 7.8 AC-FT 228,800
WTR YR 1972 TOTAL 91,468.0 MEAN 250 MAX 2,920 MIN 44 AC-FT 181,400

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-20	0200	12.21	6,100	5-10	1800	11.13	4,840
5- 6	1400	7.79	1,670	5-14	1100	8.70	2,390
5- 7	1300	13.13	7,280				

08179100 Red Bluff Creek near Pipe Creek, Tex.

LOCATION (revised).--Lat 29°40'51", long 98°57'19", Bandera County, on left bank 0.8 mile upstream from bridge on Farm Road 1283, 1.8 miles downstream from Pipe Creek, 1.9 miles upstream from mouth, and 3.2 miles south of town of Pipe Creek.

DRAINAGE AREA.--56.3 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,107.2 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--16 years, 10.0 cfs (7,240 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,910 cfs May 7 (gage height, 7.71 ft); no flow for many days.
Period of record: Maximum discharge, 46,900 cfs Sept. 27, 1964 (gage height, 22.64 ft), from rating curve extended above 2,000 cfs on basis of slope-area measurement of peak flow; no flow for many days in each year.
Maximum stage since at least 1905, that of Sept. 27, 1964. A stage of about 17 ft was reached in July 1937. Flood in October 1953 reached a stage of 13.8 ft.

REMARKS.--Records good. Small dams on upstream tributaries affect flow during time of storm runoff. No known diversion.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	37	5.8	3.7	.42			0	5.5			
2	1.7	34	11	3.7	.33			0	5.0			
3	1.4	30	8.7	4.0	.20			0	4.5			
4	58	27	6.9	4.0	.05			0	4.0			
5	54	25	8.0	3.7	0			0	3.3			
6	48	23	6.9	3.5	0			21	2.8			
7	42	21	6.4	3.3	0			258	2.3			
8	41	20	6.1	3.3	0			38	2.3			
9	39	18	7.5	3.0	0			24	3.3			
10	32	17	7.2	2.8	0			144	3.0			
11	30	15	6.7	2.1	0			82	16			
12	25	14	6.7	1.9	0			86	10			
13	23	13	6.9	1.7	0			73	5.5			
14	21	12	8.0	1.2	0			62	4.7			
15	18	11	7.2	.79	0			52	4.7			
16	21	10	6.9	.93	0			46	6.4			
17	18	11	6.9	1.1	0			41	5.5			
18	31	16	6.7	1.1	0			35	5.5			
19	102	10	6.9	.93	0			30	3.5			
20	273	9.8	6.7	.42	0			25	2.5			
21	162	9.3	6.1	.33	0			21	4.2			
22	129	9.8	5.8	.33	0			18	1.9			
23	107	12	5.8	.20	0			16	.93			
24	93	8.8	5.5	.15	0			14	.65			
25	83	7.5	5.5	.08	0			11	.34			
26	74	7.2	5.3	.02	0			9.8	.04			
27	69	6.7	5.0	0	0			8.0	0			
28	59	6.4	4.7	0	0			7.2	0			
29	52	6.1	4.5	0	0			6.7	0			
30	46	5.8	4.2	.60	------			5.8	0			
31	41	------	3.7	1.3	------		------	5.8	------			------
TOTAL	1,797.2	453.4	200.2	50.18	1.00	0	0	1,140.3	108.36	0	0	0
MEAN	58.0	15.1	6.46	1.62	.035	0	0	36.8	3.61	0	0	0
MAX	273	37	11	4.0	.42	0	0	258	16	0	0	0
MIN	1.4	5.8	3.7	0	0	0	0	0	0	0	0	0
AC-FT	3,560	899	397	100	2.0	0	0	2,260	215	0	0	0

CAL YR 1971 TOTAL 8,309.39 MEAN 22.8 MAX 2,640 MIN 0 AC-FT 16,480
WTR YR 1972 TOTAL 3,750.64 MEAN 10.2 MAX 273 MIN 0 AC-FT 7,440

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-19	2400	6.60	1,090
5- 7	0900	7.71	1,910
5-10	1300	6.07	775

08179500 Medina Lake near San Antonio, Tex.

LOCATION.--Lat 29°32'24", long 98°56'01", Medina County, at gate operating platform, 576 ft from left end of Medina Dam on Medina River, 4.2 miles upstream from Medina diversion dam, 13 miles north of Castroville, 28 miles west of San Antonio, and at mile 70.4.

DRAINAGE AREA.--634 sq mi.

PERIOD OF RECORD.--May 1913 to current year. Prior to October 1967, monthend contents only.

GAGE.--Nonrecording gage read once daily if stage changing materially, otherwise intermittently. Datum of gage is 7.80 ft below mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 265,000 acre-ft Oct. 20 (gage height, 1,073.9 ft); minimum observed, 235,900 acre-ft Apr. 26, 27 (gage height, 1,068.7 ft).
Period of record: Maximum contents observed, 288,800 acre-ft Sept. 16, 1919 (gage height, 1,078.0 ft); minimum observed since lake first filled, 780 acre-ft about Apr. 11, 1948 (gage height, 944.0 ft).

REMARKS.--Lake is formed by gravity-type concrete dam. Dam completed and storage began May 7, 1913. Spillway section is located near right end of dam and is of natural rock, 880 ft long with a 3-foot-wide cut-off wall. Water used for irrigation by Bexar-Medina-Atascosa Counties Water Improvement District No. 1, which has Certified Filing No. 18 from the Texas Water Rights Commission to irrigate 150,000 acres. Maximum irrigated, 35,200 acres in 1946; 22,356 acres irrigated in 1972. Some water from the lake enters the Edwards and associated limestones in Balcones Fault Zone, part of which is above and part below the dam. Data regarding dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	1,084.0	-
Crest of spillway	1,072.0	254,000
Invert of 60-inch water-supply outlet pipes	966.5	4,780
Invert of 30-inch sluice pipes	920.0	0

COOPERATION.--Capacity table, based on survey made prior to June 1912, and gage-height record furnished by Bexar-Medina-Atascosa Counties Water Improvement District No. 1.

REVISIONS.--WSP 1923: Drainage area.

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

1,060.0	192,000
1,070.0	242,400
1,080.0	300,300

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255,200	257,500	255,200	254,600	252,900	250,500	245,900	236,400	255,200	253,400	248,200	252,900
2	255,200	256,900	255,200	254,600	252,900	250,000	245,300	237,400	255,200	252,900	247,600	252,900
3	255,200	256,900	255,200	254,600	252,900	250,000	244,700	236,900	255,200	252,900	248,200	252,900
4	256,300	256,900	255,200	254,600	252,900	250,000	244,200	236,400	255,200	252,900	248,200	252,900
5	258,100	256,300	255,200	254,000	252,900	250,000	244,200	236,400	255,200	252,300	248,200	252,900
6	257,500	256,300	255,200	254,000	252,900	249,400	243,600	236,400	255,200	252,300	248,200	252,900
7	257,500	256,300	255,200	254,000	252,300	249,400	243,600	245,300	255,200	252,300	247,600	252,900
8	257,500	256,300	255,200	254,000	252,300	249,400	243,000	249,400	255,200	252,300	247,600	252,900
9	257,500	255,700	255,200	254,000	252,300	249,400	243,000	250,500	255,200	251,700	247,100	252,900
10	257,500	256,300	255,200	254,000	252,300	249,400	242,400	252,300	255,200	251,700	247,100	252,900
11	256,900	255,700	255,200	254,000	252,300	248,800	241,900	258,600	255,200	251,700	247,600	252,300
12	256,900	255,700	255,200	254,000	252,300	248,800	241,400	259,800	255,200	251,100	248,800	252,900
13	256,900	255,700	255,200	254,000	252,300	248,800	241,400	259,800	255,200	251,100	249,400	252,300
14	256,300	255,700	254,600	254,000	252,300	248,800	240,900	259,800	255,200	250,500	249,400	252,300
15	256,300	255,700	254,600	254,000	251,700	248,800	240,400	259,800	255,200	250,500	249,400	252,300
16	256,300	255,700	254,600	253,400	251,700	248,800	239,900	258,600	255,200	250,000	249,400	252,300
17	256,300	255,700	254,600	253,400	251,700	248,800	239,400	258,600	255,200	250,000	249,400	252,300
18	256,900	255,700	254,600	253,400	251,700	248,200	238,900	258,100	255,200	249,400	249,400	251,700
19	257,500	255,700	254,600	253,400	251,700	248,200	238,400	257,500	255,200	250,000	249,400	251,700
20	265,000	255,700	254,600	253,400	251,700	248,200	238,400	257,500	254,600	250,000	249,400	251,700
21	262,100	255,700	254,600	253,400	251,700	248,200	237,900	256,900	254,600	250,000	249,400	251,700
22	260,400	255,700	254,600	253,400	251,100	248,200	237,900	256,900	254,600	249,400	248,800	251,100
23	259,800	255,700	254,600	253,400	251,100	247,600	237,400	256,900	254,600	249,400	248,800	251,100
24	258,600	255,700	254,600	252,900	251,100	247,600	236,900	256,300	254,600	249,400	250,500	252,300
25	258,600	255,700	254,600	252,900	251,100	247,600	236,400	256,300	254,600	249,400	251,100	252,300
26	258,600	255,200	254,600	252,900	251,100	247,100	235,900	256,300	254,600	249,400	251,700	252,300
27	258,100	255,200	254,600	252,900	250,500	247,100	235,900	255,700	254,000	249,400	252,300	252,300
28	258,100	255,200	254,600	252,900	250,500	247,100	236,900	255,700	254,000	248,800	252,900	251,700
29	258,100	255,200	254,600	252,900	250,500	246,500	236,900	255,700	254,000	248,800	252,900	251,700
30	257,500	255,200	254,600	252,900	------	246,500	236,900	255,700	253,400	248,200	252,900	251,700
31	257,500	------	254,600	252,900	------	245,900	------	255,200	------	248,200	252,900	------
(†)	1,072.6	1,072.2	1,072.1	1,071.8	1,071.4	1,070.6	1,068.9	1,072.2	1,071.9	1,071.0	1,071.8	1,071.6
(*)	+2,300	-2,300	-600	-1,700	-2,400	-4,600	-9,000	+18,300	-1,800	-5,200	+4,700	-1,200
MAX	265,000	257,500	255,200	254,600	252,900	250,500	245,900	259,800	255,200	253,400	252,900	252,900
MIN	255,200	255,200	254,600	252,900	250,500	245,900	235,900	236,400	253,400	248,200	247,100	251,100

CAL YR 1971..... * +87,800 MAX 265,000 MIN 100,200
WTR YR 1972..... * -3,500 MAX 265,000 MIN 235,900

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

08180000 Medina Canal near Riomedina, Tex.

LOCATION.--Lat 29°30'19", long 98°54'11", Medina County, in center of canal, 54 ft upstream from center pier of double-barrel flume, 350 ft downstream from county highway bridge, 1,900 ft downstream from head of canal and diversion dam, 4.6 miles downstream from Medina Dam, 4.7 miles north of Riomedina, and 25 miles northwest of San Antonio.

PERIOD OF RECORD.--March 1922 to May 1934, July 1957 to current year.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--26 years (1922-33, 1957-72), 40.3 cfs (29,200 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 216 cfs May 6, 1971; no flow at times.

REMARKS.--Records good. Station is above all diversions from canal. Canal diverts from right end of Medina Diversion Dam 1,900 ft upstream from gage for irrigation downstream near Lacoste and Natalia.

REVISIONS (WATER YEARS).--WSP 568: 1922. WSP 1712: 1922(M), 1924, 1926.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	40	18	.08	.11	36	104	77	51	123	96	63
2	0	28	.14	.05	.11	35	102	72	55	122	89	64
3	0	.08	.11	.05	.14	46	111	48	46	126	37	59
4	.08	6.0	.11	.11	5.6	46	124	56	41	124	.01	38
5	.01	30	.08	.11	21	46	127	73	52	123	0	58
6	0	30	.08	.11	8.9	57	133	28	88	123	0	91
7	0	28	.05	.11	.14	72	146	.74	106	116	20	103
8	0	15	.05	.14	.11	62	146	.05	62	114	67	103
9	0	.11	.08	.14	.11	51	146	.01	30	104	71	103
10	0	9.4	.08	.14	.11	62	146	.27	7.1	94	59	92
11	0	36	.05	10	.11	62	149	.08	41	84	40	88
12	0	32	.08	38	.08	52	168	.08	28	86	.08	74
13	0	19	.14	39	.08	61	175	.06	28	97	.05	58
14	0	21	.17	39	.05	72	187	.08	28	97	10	59
15	0	23	.14	40	8.1	62	190	0	47	97	36	58
16	0	17	.14	40	25	70	192	.04	74	97	44	58
17	0	.27	.14	26	28	96	192	0	72	83	44	58
18	0	.14	.14	.17	40	105	196	0	42	63	44	60
19	.29	.08	.14	5.9	29	106	106	4.9	17	51	43	65
20	.12	.03	22	25	20	92	89	20	10	50	43	74
21	.01	.01	39	28	20	83	160	20	31	61	53	73
22	0	.01	29	28	21	95	134	15	31	61	74	71
23	0	.01	15	28	28	106	131	.01	33	62	65	55
24	0	.01	.39	33	42	113	134	0	40	62	19	.09
25	0	.01	.14	45	46	124	118	0	40	62	.05	20
26	0	.01	.14	40	35	89	80	23	54	62	.11	51
27	0	0	.11	30	26	84	58	32	84	62	.14	18
28	0	0	.11	32	26	108	57	45	84	62	16	.11
29	11	27	.11	32	34	113	69	53	90	62	54	.08
30	40	44	.08	11	------	123	74	53	113	62	64	.21
31	40	------	.08	.11	------	116	------	49	------	76	64	------
TOTAL	91.52	406.17	126.08	571.22	464.75	2,445	3,944	670.32	1,525.1	2,668	1,152.44	1,714.49
MEAN	2.95	13.5	4.07	18.4	16.0	78.9	131	21.6	50.8	86.1	37.2	57.1
MAX	40	44	39	45	46	124	196	77	113	126	96	103
MIN	0	0	.05	.05	.05	35	57	0	7.1	50	0	.08
AC-FT	182	806	250	1,130	922	4,850	7,820	1,330	3,030	5,290	2,290	3,400

CAL YR 1971 TOTAL 24,327.99 MEAN 66.7 MAX 216 MIN 0 AC-FT 48,250
WTR YR 1972 TOTAL 15,779.09 MEAN 43.1 MAX 196 MIN 0 AC-FT 31,300

08180500 Medina River near Riomedina, Tex.

LOCATION.--Lat 29°29'53", long 98°54'16", Medina County, on left bank 233 ft upstream from bridge at Haby's Crossing, 0.9 mile downstream from Bexar, Medina, and Atascosa Counties Water Control and Improvement District No. 1 diversion dam, 4.2 miles northwest of Riomedina, 10.0 miles north of Castroville, 10.4 miles upstream from San Geronimo Creek, and at mile 66.4.

DRAINAGE AREA.--650 sq mi.

PERIOD OF RECORD.--January 1922 to September 1934 (daily record of flow over dam and monthly or annual record of seepage under or around dam), January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 857.6 ft above mean sea level (river-profile survey). Jan. 21, 1922, to Sept. 30, 1934, water-stage recorder on upstream side of diversion dam 0.9 mile upstream at different datum.

AVERAGE DISCHARGE.--31 years, 37.5 cfs (27,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,260 cfs Oct. 20 (gage height, 10.66 ft, from floodmark); minimum daily, 26 cfs Mar. 26 to Apr. 4, Apr. 6-10.
Period of record: Maximum discharge, about 11,800 cfs Apr. 21, 1926; no flow at times.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by Medina Lake (station 08179500) 5 miles upstream and diversion dam 0.9 mile upstream. See Medina Canal (station 08180000) for diversion canal records. A large part of the streamflow is lost into the Edwards and associated limestones in the Balcones Fault Zone which crosses basin upstream from station and below upstream end of Medina Lake. All flow is seepage under and around dam except for occasional flow over spillway of dam and local runoff downstream from diversion dam. Diversion for irrigation above station.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	625	180	133	86	48	26	27	245	32	32	45
2	178	608	160	130	92	45	26	27	222	32	32	43
3	168	590	160	130	80	30	26	27	220	31	32	41
4	444	502	160	145	80	31	26	27	210	31	32	49
5	760	450	180	109	69	31	27	27	192	32	32	57
6	800	450	200	101	76	28	26	31	143	31	32	40
7	720	450	220	99	81	27	26	183	109	30	32	37
8	680	450	220	101	82	27	26	182	137	29	32	37
9	680	450	220	103	82	27	26	165	185	28	32	35
10	608	300	220	107	84	27	26	336	220	28	34	35
11	555	280	220	98	84	27	27	810	180	29	37	34
12	520	280	190	66	81	27	27	1,250	198	29	35	34
13	502	280	185	66	81	27	27	1,400	195	29	35	33
14	485	280	190	64	82	27	27	1,500	190	30	37	34
15	450	280	200	59	80	27	27	1,500	170	30	37	35
16	450	280	175	54	61	27	27	1,250	137	31	40	34
17	468	280	178	59	59	27	27	1,080	124	31	40	34
18	572	280	158	87	46	27	27	960	160	31	40	34
19	883	280	155	86	50	27	27	840	182	31	40	34
20	3,690	280	136	69	61	27	27	720	185	31	40	34
21	2,470	280	110	62	62	27	27	625	142	31	40	33
22	1,700	280	110	62	61	27	27	555	135	31	37	33
23	1,400	280	120	61	59	27	27	555	120	31	40	35
24	1,300	280	135	61	41	27	27	520	103	31	68	35
25	1,200	280	135	49	32	27	27	485	94	31	137	35
26	1,200	280	135	49	40	26	27	422	81	31	135	35
27	1,000	280	137	59	51	26	27	370	40	31	126	35
28	900	280	139	59	56	26	27	334	34	31	112	35
29	820	280	139	59	51	26	27	301	32	31	69	37
30	720	200	141	75	------	26	27	280	32	31	51	40
31	680	------	137	86	------	26	------	262	------	31	48	------
TOTAL	27,195	10,395	5,145	2,548	1,950	882	801	17,051	4,417	947	1,566	1,112
MEAN	877	347	166	82.2	67.2	28.5	26.7	550	147	30.5	50.5	37.1
MAX	3,690	625	220	145	92	48	27	1,500	245	32	137	57
MIN	168	200	110	49	32	26	26	27	32	28	32	33
AC-FT	53,940	20,620	10,210	5,050	3,870	1,750	1,590	33,820	8,760	1,880	3,110	2,210

CAL YR 1971 TOTAL 60,509 MEAN 166 MAX 3,690 MIN 15 AC-FT 120,000
WTR YR 1972 TOTAL 74,009 MEAN 202 MAX 3,690 MIN 26 AC-FT 146,800

NOTE.--No gage-height record Nov. 5 to Dec. 12.

08180800 Medina River near Somerset, Tex.

LOCATION.--Lat 29°15'45", long 98°34'56", Bexar County, on left bank 300 ft upstream from bridge on State Highway 16, 4.9 miles downstream from Medio Creek, 2.1 miles upstream from Elm Creek, 5.2 miles northeast of Somerset, and at mile 14.1.

DRAINAGE AREA.--967 sq mi (634 sq mi above dam forming Medina Lake).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 493.56 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,640 cfs Oct. 22 (gage height, 16.16 ft); minimum, 56 cfs Sept. 21, 22.
Period of record: Maximum discharge, 2,840 cfs Aug. 15, 1971 (gage height, 16.50 ft); minimum, 21 cfs July 23, 24, 1971.
Maximum stage since about 1890, 25.0 ft Aug. 29, 1946, from information by the Texas Highway Department.

REMARKS.--Records good. Flow regulated by Medina Lake (station 08179500) 56 miles upstream and by Medina Diversion Lake (capacity, 4,500 acre-ft). For diversion of canal records, see Medina Canal near Riomedina (station 08180000). For statement regarding losses into the Edwards and associated limestones formation, see Medina River near Riomedina (station 08180500). There are several small diversions below Medina Diversion Dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	814	300	218	146	103	67	67	406	121	76	87
2	190	767	305	217	148	100	67	64	384	118	73	83
3	182	726	352	214	149	95	68	64	357	112	100	80
4	195	708	367	235	149	97	67	64	343	106	120	74
5	293	657	535	240	137	88	69	62	329	104	100	73
6	529	597	460	223	137	85	71	73	313	102	90	74
7	629	578	370	199	128	86	71	378	285	101	85	84
8	626	562	335	186	136	85	69	1,360	248	99	78	74
9	612	537	324	182	138	85	67	527	252	94	74	70
10	605	541	326	182	136	82	67	346	283	91	75	69
11	581	525	331	182	137	83	67	899	315	89	82	66
12	541	486	314	183	141	85	67	948	294	87	83	65
13	520	471	303	169	137	86	67	1,810	284	84	83	66
14	504	463	298	151	135	88	63	1,350	288	83	78	66
15	486	451	288	150	134	86	63	1,380	281	80	75	64
16	471	442	284	151	134	83	64	1,430	387	80	74	65
17	460	433	275	136	125	83	64	1,300	303	83	74	64
18	468	526	272	131	114	83	64	1,220	328	100	73	63
19	507	538	264	140	109	86	65	1,030	261	94	70	62
20	1,270	511	255	156	101	83	66	917	262	90	69	60
21	1,800	453	252	151	102	84	70	825	276	87	70	57
22	2,430	422	226	137	109	82	74	744	250	89	67	58
23	1,910	408	210	131	110	81	72	681	236	96	74	61
24	1,610	419	212	129	109	81	70	660	222	100	133	79
25	1,390	413	214	128	107	80	70	634	204	88	175	91
26	1,230	387	220	124	99	78	65	597	190	84	127	77
27	1,110	378	220	118	92	76	70	549	178	81	144	124
28	1,030	363	220	115	92	72	70	502	159	76	140	102
29	993	353	219	122	99	68	74	466	136	75	136	83
30	945	331	218	130	------	66	69	430	128	74	122	73
31	864	------	218	139	------	66	------	424	------	73	100	------
TOTAL	25,169	15,260	8,987	5,069	3,590	2,586	2,037	21,801	8,182	2,841	2,920	2,214
MEAN	812	509	290	164	124	83.4	67.9	703	273	91.6	94.2	73.8
MAX	2,430	814	535	240	149	103	74	1,810	406	121	175	124
MIN	182	331	210	115	92	66	63	62	128	73	67	57
AC-FT	49,920	30,270	17,830	10,050	7,120	5,130	4,040	43,240	16,230	5,640	5,790	4,390

CAL YR 1971 TOTAL 73,113 MEAN 200 MAX 2,430 MIN 22 AC-FT 145,000
WTR YR 1972 TOTAL 100,656 MEAN 275 MAX 2,430 MIN 57 AC-FT 199,700

08181400 Helotes Creek at Helotes, Tex.

LOCATION.--Lat 29°34'42", long 98°41'29", Bexar County, 42 ft left of and 44 ft downstream from centerline of bridge on State Highway 16, 0.1 mile northwest of Helotes, and 8.6 miles upstream from mouth.

DRAINAGE AREA.--15.0 sq mi.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,014.82 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,350 cfs May 7 (gage height, 5.10 ft); no flow for many days.
Period of record: Maximum discharge, 3,180 cfs May 26, 1970 (gage height, 5.43 ft), from rating curve extended above 1,400 cfs; no flow most of time.
Maximum stage since 1923, 13.7 ft in 1927, from information by local resident.

REMARKS.--Records good. An undetermined amount of flow is diverted for domestic use above the station, and some flow enters the Edwards and associated limestones through the Balcones Fault Zone which is in the vicinity of the gage. Recording rain gage located at station, with two additional recording rain gages located in watershed.

REVISIONS (WATER YEARS).--WRD Texas 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	3.9	1.1	2.7	.07		0	0	1.0	.24	0	0
2	0	3.3	5.0	2.4	.01		0	0	1.0	.03	0	0
3	0	2.7	3.3	2.4	0		0	0	.72	0	.58	0
4	1.5	2.2	3.0	3.3	0		0	0	.40	0	.11	0
5	2.0	1.8	7.6	2.4	0		0	0	.19	0	0	0
6	1.6	1.4	6.5	2.2	0		0	.24	.09	0	0	0
7	1.2	1.2	6.5	2.0	0		0	179	.06	0	0	0
8	.86	1.2	6.5	2.0	0		0	36	.03	0	0	0
9	.90	1.0	8.0	1.8	0		0	16	.79	0	0	0
10	.85	.50	9.0	1.2	0		0	63	.19	0	0	0
11	.80	.30	9.7	.86	0		0	81	.92	0	.16	0
12	.90	.19	9.7	.86	0		0	113	.29	0	0	0
13	.72	.09	9.7	.72	0		0	74	.03	0	0	0
14	.50	0	9.0	.40	0		0	52	0	0	0	0
15	.07	0	8.0	.40	0		0	38	.22	0	0	0
16	.02	0	7.5	.60	0		0	28	.40	0	0	0
17	.16	0	7.5	.60	0		0	21	8.8	0	0	0
18	.56	8.3	7.0	.40	0		0	16	4.5	0	0	0
19	3.4	3.9	6.5	.15	0		0	12	4.2	0	0	0
20	50	3.3	6.0	.01	0		0	8.0	3.9	0	0	0
21	23	2.7	6.0	0	0		0	6.5	3.9	0	0	0
22	16	2.7	5.6	0	0		0	5.2	3.3	0	0	0
23	12	4.5	5.6	0	0		0	4.8	3.3	.02	.42	.06
24	10	2.4	5.2	0	0		0	4.5	3.3	0	2.2	.39
25	9.7	2.2	4.5	0	0		0	3.6	3.0	0	.35	0
26	8.5	2.0	4.5	0	0		0	3.3	2.0	0	0	6.0
27	7.5	1.6	4.2	0	0		.05	2.2	1.4	0	0	2.1
28	6.5	1.4	3.9	0	0		0	2.0	1.0	0	0	.06
29	5.2	1.2	3.6	0	0		0	1.8	.86	0	0	0
30	4.8	1.0	3.3	.62	------		0	1.4	.26	0	0	0
31	4.2	------	2.7	.07	------		------	.72	------	0	0	------
TOTAL	173.44	56.98	186.2	28.09	.08	0	.05	773.26	50.05	.29	3.82	8.61
MEAN	5.59	1.90	6.01	.91	.003	0	.002	24.9	1.67	.009	.12	.29
MAX	50	8.3	9.7	3.3	.07	0	.05	179	8.8	.24	2.2	6.0
MIN	0	0	1.1	0	0	0	0	0	0	0	0	0
CFSM	.37	.13	.40	.06	.0002	0	.0001	1.66	.11	.0006	.008	.02
IN.	.43	.14	.46	.07	0	0	0	1.92	.12	0	.009	.02
AC-FT	344	113	369	56	.2	0	.1	1,530	99	.6	7.6	17
(††)	4.57	2.21	2.77	1.53	.44	.61	1.92	10.79	2.76	2.68	5.36	4.48

CAL YR 1971 TOTAL 850.11 MEAN 2.33 MAX 81 MIN 0 CFSM .16 IN 2.11 AC-FT 1,690 †† 33.98
WTR YR 1972 TOTAL 1,280.87 MEAN 3.50 MAX 179 MIN 0 CFSM .23 IN 3.18 AC-FT 2,540 †† 40.12

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	0100	2.86	208	5-11	2230	3.23	358
5- 7	1100	5.10	2,350	6-17	1130	2.22	64
5-10	1530	3.28	378				

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

08181450 Leon Creek tributary at Kelly Air Force Base, Tex.

LOCATION.--Lat 29°23'12", long 98°36'00", Bexar County, on left bank 128 ft downstream from centerline of bridge on Billy Mitchell Road at Kelly Air Force Base, 0.15 mile upstream from mouth, and 2.0 miles southeast of intersection of U.S. Highway 90 West and Loop 13.

DRAINAGE AREA.--1.19 sq mi.

PERIOD OF RECORD.--March 1969 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 657.57 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 173 cfs Sept. 26 (gage height, 2.72 ft); no flow at times.
Period of record: Maximum discharge, 555 cfs May 14, 1970 (gage height, 4.44 ft), from rating curve extended above 100 cfs on basis of formula, $Q=CLH^{3/2}$; no flow at times each year.
No historical flood information is available.

REMARKS.--Records good below 80 cfs, fair above. Recording rain gage located at station with one additional rain gage located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	1.1	.02	.02		0	0	0	0	.33	.02
2	0	.02	2.5	.02	.02		0	.34	0	0	0	.02
3	0	.02	.02	.06	.02		0	0	0	0	21	.03
4	5.2	.02	.02	.41	.02		0	0	0	0	.42	.06
5	.96	.02	7.6	.02	.02		0	.25	0	0	0	.11
6	.71	.06	.14	.02	.02		0	9.8	0	0	0	.02
7	0	.14	.06	.02	.02		0	22	0	0	0	.02
8	.02	.02	.27	.02	.02		0	.02	0	0	0	.02
9	.02	.02	.06	.02	.02		0	.02	2.0	0	0	.02
10	0	.02	.02	.02	.02		0	12	.02	0	0	.02
11	0	.02	.02	.02	.90		0	.14	.38	0	1.6	.02
12	0	.02	.02	.02	0		0	9.4	.02	0	.09	.02
13	.02	.02	.02	.02	0		0	.27	.02	0	0	.02
14	0	.02	.02	.02	0		0	.06	.02	0	0	.02
15	0	.02	.02	.02	0		0	.02	.06	0	0	.02
16	.02	.02	.02	.02	0		0	.02	1.3	0	0	.02
17	.06	.02	.02	.02	0		0	.02	.06	0	0	.02
18	.96	16	.02	.02	0		0	.02	.06	9.8	0	.02
19	3.1	.06	.02	.02	0		0	.02	.02	.02	0	.02
20	14	.02	.02	.02	0		0	.02	.02	0	0	.02
21	.06	.02	.02	.02	0		2.3	.02	.02	0	0	.02
22	.02	.02	.02	.02	0		0	.02	0	0	0	.02
23	.02	.02	.02	.02	0		0	.02	0	0	.73	.05
24	.02	.02	.02	.02	0		0	.02	0	0	6.3	1.3
25	.02	.02	.02	.02	0		0	.02	0	0	.06	.02
26	.02	.02	.02	.02	0		0	.02	0	0	.02	11
27	.02	.02	.02	.02	0		3.1	.02	0	0	.02	1.8
28	.02	.02	.02	.02	0		.15	.02	0	0	.02	.03
29	.02	.02	.02	.02	0		0	0	0	0	.02	.02
30	.02	.02	.02	4.2	------		0	0	0	0	.02	.02
31	.02	------	.02	.02	------		------	.02	------	.44	.02	------
TOTAL	25.33	16.78	12.21	5.23	1.10	0	5.55	54.60	4.00	10.26	30.65	14.82
MEAN	.82	.56	.39	.17	.038	0	.19	1.76	.13	.33	.99	.49
MAX	14	16	7.6	4.2	.90	0	3.1	22	2.0	9.8	21	11
MIN	0	.02	.02	.02	0	0	0	0	0	0	0	.02
CFSM	.69	.47	.33	.14	.03	0	.16	1.48	.11	.28	.83	.41
IN.	.79	.52	.38	.16	.03	0	.17	1.71	.13	.32	.96	.46
AC-FT	50	33	24	10	2.2	0	11	108	7.9	20	61	29
(††)	4.78	2.36	2.35	1.28	.32	.35	1.56	7.49	2.22	2.71	4.96	3.01

CAL YR 1971 TOTAL 134.94 MEAN .37 MAX 16 MIN 0 CFSM .31 IN 4.22 AC-FT 268 †† 28.09
WTR YR 1972 TOTAL 180.53 MEAN .49 MAX 22 MIN 0 CFSM .41 IN 5.64 AC-FT 358 †† 33.39

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	0100	2.37	118	5-12	1630	2.23	98
11-18	0300	2.44	128	7-18	1230	2.29	106
5- 7	1030	2.54	144	8- 3	1100	2.55	145
5-10	1430	2.30	108	9-26	2000	2.72	173

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

08181500 Medina River at San Antonio, Tex.

LOCATION.--Lat 29°15'14", long 98°28'20", Bexar County, near left bank on downstream side of pier of upstream bridge of two bridges on U.S. Highway 281 in San Antonio and 6.8 miles upstream from mouth.

DRAINAGE AREA.--1,317 sq mi (634 sq mi is above dam forming Medina Lake).

PERIOD OF RECORD.--October 1929 to December 1930, July 1939 to current year. October 1929 to December 1930 records below about 50 cfs in connection with seepage investigation (published as "at Losoya"). Published as "near San Antonio" July 1939 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 439.0 ft above mean sea level (levels by Corps of Engineers). October 1929 to December 1930 nonrecording gage at Losoya 1.5 miles downstream at different datum.

AVERAGE DISCHARGE.--33 years (1939-72), 114 cfs (82,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,360 cfs May 8 (gage height, 23.15 ft); minimum, 75 cfs Apr. 1.
Period of record: Maximum discharge, 31,800 cfs Aug. 29, 1946; maximum gage height, 41.57 ft Sept. 27, 1946 (backwater from San Antonio River); minimum daily discharge, 3.3 cfs Apr. 18, Nov. 1, 1956, Jan. 24, 1957.
Maximum stage 55 ft sometime prior to construction of Medina Dam in 1913, from information by State Highway Department.

REMARKS.--Records good. Flow slightly regulated by Medina Lake (station 08179500), 60 miles upstream, and diversion dam reservoir (capacity, 4,500 acre-ft). For diversion of canal records, see Medina Canal near Riomedina (station 08180000). For statement concerning losses into the Edwards and associated limestones formation, see Medina River near Riomedina (station 08180500). Several small diversions below diversion dam reservoir. Records furnished by city of San Antonio show that during the water year 1972 the city released approximately 2,540 acre-ft of sewage effluent from Mitchell Lake into river above gage during periods of high water, and 11,160 acre-feet of sewage effluent into the river just above the Mitchell Lake discharge point from the Leon Creek plant. A considerable part of the low flow is waste water from Kelly Field Air Force Base which enters via Leon Creek.

REVISIONS (WATER YEARS).--WSP 1562: 1957. WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	937	349	269	194	152	82	90	481	161	116	122
2	266	879	407	266	194	150	88	93	454	153	107	112
3	257	831	437	262	190	145	90	89	422	148	243	109
4	292	807	416	277	188	148	95	91	398	142	320	102
5	405	766	794	271	184	135	96	85	385	140	170	102
6	596	706	823	264	185	130	92	166	364	137	131	109
7	715	665	494	241	175	130	97	766	335	135	118	113
8	714	647	430	236	177	132	98	4,170	299	134	115	103
9	703	605	424	233	181	129	97	1,690	313	129	113	98
10	685	605	406	230	181	129	96	684	352	127	112	96
11	667	594	404	228	192	130	99	1,710	366	124	124	95
12	626	555	386	228	186	130	101	1,910	364	122	135	95
13	604	528	371	221	182	130	100	3,030	335	122	125	95
14	587	517	362	195	182	136	92	2,050	341	121	116	98
15	563	508	350	187	180	129	93	1,790	334	116	113	96
16	546	497	344	186	180	123	87	1,720	603	112	111	95
17	550	487	333	185	176	125	85	1,670	583	115	109	90
18	545	998	327	182	164	120	87	1,640	717	199	109	87
19	598	680	322	185	160	122	92	1,360	354	169	104	86
20	1,350	596	310	197	153	118	91	1,170	335	130	103	86
21	2,150	524	304	196	153	116	121	1,040	342	126	104	84
22	3,090	489	281	182	158	112	99	926	322	130	102	83
23	2,380	470	264	177	158	109	99	842	292	134	105	86
24	1,940	462	262	177	159	114	99	800	273	171	259	143
25	1,660	462	267	173	161	113	94	768	254	132	269	146
26	1,450	439	272	176	152	111	91	724	239	122	176	150
27	1,300	421	271	169	143	111	111	672	224	117	180	307
28	1,200	412	272	167	142	103	134	603	204	113	178	183
29	1,150	394	272	169	149	98	106	560	180	109	173	135
30	1,100	386	271	202	------	93	100	518	168	106	160	118
31	1,010	------	269	202	------	90	------	527	------	103	135	------
TOTAL	29,981	17,867	11,494	6,533	4,979	3,813	2,912	33,954	10,633	4,099	4,535	3,424
MEAN	967	596	371	211	172	123	97.1	1,095	354	132	146	114
MAX	3,090	998	823	277	194	152	134	4,170	717	199	320	307
MIN	257	386	262	167	142	90	82	85	168	103	102	83
AC-FT	59,470	35,440	22,800	12,960	9,880	7,560	5,780	67,350	21,090	8,130	9,000	6,790

CAL YR 1971 TOTAL 98,282 MEAN 269 MAX 3,090 MIN 42 AC-FT 194,900
WTR YR 1972 TOTAL 134,224 MEAN 367 MAX 4,170 MIN 82 AC-FT 266,200

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0600	19.60	3,300	5-11	1600	16.63	2,200
5- 8	0800	23.15	6,360	5-13	0500	19.65	3,320

08181800 San Antonio River near Elmendorf, Tex.

LOCATION.--Lat 29°14'15", long 98°21'43", Bexar County, on left bank 2,000 ft downstream from Braunig Plant Lake and 2.2 miles southwest of Elmendorf

DRAINAGE AREA.--1,743 sq mi.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 392.50 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 328 cfs (237,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,200 cfs May 8 (gage height, 33.15 ft); minimum, 120 cfs Apr. 20.
Period of record: Maximum discharge, 29,800 cfs Jan. 18, 1968 (gage height, 40.15 ft, from floodmark); minimum, 12 cfs Aug. 24-26, 1963.
Maximum stage since at least 1900, 61 ft in 1946. Second highest was 53 ft in 1913, from information by local residents.

REMARKS.--Records good. Flow slightly regulated by Medina Lake (station 08179500) and Olmos flood-control reservoir (combined capacity, 269,500 acre-ft). Storage began in Medina Reservoir in 1913, and Olmos Dam was completed in 1926. Water is diverted above station from Medina River for irrigation in the vicinity of Devine and Lytle with some water diverted for irrigation near San Antonio. Records furnished by city of San Antonio show that during year 8,850 acre-ft of sewage effluent was discharged into the San Antonio River from the Salado Creek Plant and 86,340 acre-ft from the Rilling Road Plant, about 7.5 and 15.5 miles, respectively, upstream from this station; records furnished by the San Antonio City Public Service Board show that at pump plant 1,700 ft upstream from this station, 7,350 acre-ft was pumped into Braunig Plant Lake and 1,130 acre-ft was pumped into Calaveras Lake. During May, 1,270 acre-ft was released into the San Antonio River from Braunig Lake. For additional information relative to sewage effluent, see station Medina River at San Antonio (08181500). Water-quality records for the current year are published in Part 2 of this report. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08178700.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	477	1,060	555	443	424	343	269	223	714	378	310	293
2	415	1,020	1,150	430	393	337	273	365	672	363	290	233
3	391	974	905	440	361	339	271	324	629	358	953	215
4	526	908	663	578	366	337	302	256	588	361	1,270	201
5	688	846	1,400	525	386	318	304	234	586	350	563	219
6	882	783	1,570	469	389	315	287	1,240	571	341	365	235
7	893	733	805	432	356	327	297	5,700	532	332	328	237
8	860	740	677	412	331	329	288	9,460	484	330	312	247
9	868	697	676	404	338	323	274	3,230	557	323	323	279
10	821	686	648	410	335	323	286	2,130	748	311	311	281
11	798	676	620	411	448	318	277	4,140	664	314	335	274
12	774	644	589	406	426	312	273	3,940	596	317	435	271
13	756	607	571	401	391	330	264	5,730	481	315	383	268
14	782	587	567	376	390	351	260	2,650	479	319	331	266
15	761	631	555	350	391	332	258	1,910	473	315	320	282
16	710	654	542	344	389	306	244	1,740	999	301	309	246
17	774	649	523	353	385	236	235	2,210	1,430	320	306	256
18	821	2,420	465	357	377	213	174	1,760	1,280	359	308	258
19	888	1,380	483	359	361	196	152	1,530	596	530	292	252
20	2,490	804	501	372	352	196	140	1,350	553	402	280	250
21	2,530	702	498	372	358	221	414	1,220	544	352	290	244
22	2,830	659	476	352	368	245	290	1,130	525	460	304	229
23	2,550	643	446	334	368	306	167	1,040	497	669	293	250
24	1,940	627	436	338	364	316	194	1,000	473	450	811	597
25	1,680	620	430	341	368	309	211	966	445	370	633	441
26	1,510	592	428	338	356	298	266	925	431	350	387	331
27	1,390	581	448	335	336	309	294	841	422	330	363	897
28	1,280	566	461	335	340	315	955	805	403	320	357	454
29	1,250	554	458	323	351	306	325	767	394	310	365	332
30	1,200	554	456	571	------	291	292	724	382	300	368	289
31	1,130	------	447	541	------	287	------	758	------	290	343	------
TOTAL	35,665	23,597	19,449	12,452	10,798	9,284	8,536	60,298	18,148	11,140	12,838	9,127
MEAN	1,150	787	627	402	372	299	285	1,945	605	359	414	304
MAX	2,830	2,420	1,570	578	448	351	955	9,460	1,430	669	1,270	897
MIN	391	554	428	323	331	196	140	223	382	290	280	201
AC-FT	70,740	46,800	38,580	24,700	21,420	18,410	16,930	119,600	36,000	22,100	25,460	18,100

CAL YR 1971 TOTAL 158,945 MEAN 435 MAX 4,350 MIN 56 AC-FT 315,300
WTR YR 1972 TOTAL 231,332 MEAN 632 MAX 9,460 MIN 140 AC-FT 458,800

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1130	21.64	3,570	5-11	0100	27.08	5,550
11-18	1300	22.85	4,040	5-13	0100	31.23	9,030
5- 8	0200	33.15	12,200				

08182400 Calaveras Creek subwatershed No. 6 near Elmendorf, Tex.

LOCATION.--Lat 29°22'49", long 98°17'33", Bexar County, near center of dam on Chupaderas Creek, a tributary to Calaveras Creek, 0.5 mile north of Sayer, 9.1 miles north of Elmendorf, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--7.01 sq mi.

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

GAGE.--Water-stage recorder and concrete drop-inlet control. Datum of gage is 516.06 ft above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--15 years (1957-72), 810 acre-ft per year.

AVERAGE OUTFLOW.--15 years (1957-72), 780 acre-ft per year.

EXTREMES.--Current year: Maximum outflow, 47.1 cfs May 10 (gage height, 31.50 ft); no outflow most of year. Maximum inflow, 3,520 cfs (average for 5-minute interval) May 10, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 47.2 cfs Jan. 21, 1968 (gage height, 31.59 ft); no outflow for many days each year. Maximum inflow, 4,270 cfs (average for 5-minute interval) Jan. 18, 1968, computed from change in reservoir contents and adjusted for outflow and rainfall on pool surface; no inflow at times.

REMARKS.--Records good. Pool is formed by an earthfill dam that was completed Dec. 15, 1956. The outlet structure is a 36-inch square concrete drop inlet connected to a 17-inch concrete outlet pipe. The top of the drop inlet is at a gage height of 18.0 ft; the bottom of four 8- by 8-inch uncontrolled openings are at a gage height of 14.80 ft; the right emergency spillway is at a gage height of 34.3 ft; the left emergency spillway is at a gage height of 34.5 ft. A controlled 8-inch sluice gate is located in the upstream face of the drop-inlet structure at a gage height of 8.52 ft. Pool capacity, 1,640 acre-ft at spillway crest, 107 acre-ft at top of the drop inlet, and 4.2 acre-ft at bottom of sluice gate. The capacity table is based on a survey made Mar. 12, 1968. One recording rain gage is located in the watershed at the station.

REVISIONS (WATER YEARS).--WSP 2123: 1957-65.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	48.1	2.4	40.0	0	0	0	0.9	1,610	1.9	0	0	2.8
Outflow	27.5	0	29.6	0	0	0	0	1,580	.7	0	0	0
(†)	13.3	-7.3	6.4	-5.3	-5.4	-8.3	-6.7	29.9	-8.9	-12.8	-9.4	-3.5
(††)	3.60	1.48	3.27	.80	.42	0	1.54	8.42	1.69	.75	1.87	3.81

CAL YR 1971	INFLOW	315	OUTFLOW	219	†	41.5	††	23.72
WTR YR 1972	INFLOW	1,710	OUTFLOW	1,640	†	-18.0	††	27.65

PEAK INFLOW (BASE, 100 CFS)

DATE	TIME	DISCHARGE
10-20	0245	*324
5- 7	1035	*2,960
5-10	1345	*3,520
5-14	0340	*196

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches, based on rain gage at station.
* Average for 5-minute interval.

08183500 San Antonio River near Falls City, Tex.

LOCATION.--Lat 28°57'05", long 98°03'50", Karnes County, on left bank 23 ft downstream from bridge on Farm Road 791, 0.9 mile upstream from Scared Dog Creek, 3.6 miles southwest of Falls City, and at mile 150.5.

DRAINAGE AREA.--2,113 sq mi.

PERIOD OF RECORD.--April 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 285.49 ft above mean sea level.

AVERAGE DISCHARGE.--47 years, 320 cfs (231,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,560 cfs May 10 (gage height, 12.52 ft); minimum, 144 cfs Apr. 22.
Period of record: Maximum discharge, 47,400 cfs Sept. 29, 1946 (gage height, 33.80 ft, from floodmark); minimum, 15 cfs June 27, 28, 1956.
Maximum stage since at least 1875, that of Sept. 29, 1946. Flood in October 1913 reached a stage of 28.4 ft, from floodmark, from information by local residents.

REMARKS.--Records good. Diversion and regulation above station, see REMARKS for Salado Creek (upper station) at San Antonio (station 08178700), Medina River at San Antonio (station 08181500), and San Antonio River near Elmendorf (station 08181800). Flow slightly regulated by Calaveras Lake on Calaveras Creek which enters San Antonio River downstream from San Antonio River near Elmendorf. Records furnished by San Antonio City Public Service Board show that during May and June 109 acre-ft was released into Calaveras Creek from Calaveras Lake. At end of year, flow from 17.4 sq mi above this station was partly controlled by three floodwater-retarding structures with a total combined capacity of 6,140 acre-ft below the flood-spillway crests, of which 5,660 acre-ft is floodwater-retarding capacity and 483 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 1,980 acre-ft, of which 85 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1732: 1947(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	1,250	553	466	645	315	266	286	832	372	304	356
2	470	1,140	567	467	439	317	261	222	819	366	350	323
3	402	1,090	910	449	397	318	232	246	755	348	440	264
4	364	1,020	1,130	446	337	311	233	340	708	329	549	233
5	531	954	763	508	311	309	241	278	658	332	1,470	220
6	1,950	876	1,020	586	355	299	251	250	634	322	889	219
7	968	812	1,850	507	357	281	250	739	625	311	446	228
8	919	755	1,250	470	346	291	246	1,890	587	302	348	239
9	944	753	747	448	293	298	253	4,150	549	305	317	238
10	978	726	689	432	291	296	241	7,310	535	302	312	267
11	870	693	671	429	291	292	235	6,420	833	293	318	278
12	810	682	635	436	340	293	244	3,670	685	286	311	272
13	794	661	607	430	451	286	238	3,970	744	292	389	267
14	765	619	578	429	388	278	234	5,370	558	282	431	265
15	762	591	573	409	364	312	235	5,710	519	282	343	271
16	784	590	564	391	372	312	237	3,590	533	296	318	282
17	733	645	550	381	370	296	232	2,340	824	284	307	264
18	730	660	538	382	364	230	224	2,200	1,330	273	302	257
19	830	1,180	498	391	355	208	216	2,230	1,590	308	303	254
20	834	2,190	482	388	336	204	171	1,910	941	474	298	249
21	1,320	1,270	498	391	322	184	156	1,620	633	448	283	248
22	2,330	781	504	398	313	193	185	1,430	599	359	274	252
23	2,500	693	493	393	329	200	406	1,300	577	426	295	243
24	2,630	671	469	370	333	232	204	1,200	541	646	290	268
25	2,500	643	457	354	333	276	165	1,140	510	486	582	447
26	2,100	638	450	365	332	291	204	1,110	479	380	815	578
27	1,820	605	447	365	330	276	226	1,060	447	328	477	386
28	1,630	595	453	360	310	269	274	979	433	306	375	819
29	1,480	577	477	359	300	289	746	926	409	293	360	648
30	1,370	558	478	362	------	285	504	876	396	309	364	380
31	1,320	------	474	423	------	273	------	831	------	314	363	------
TOTAL	36,975	24,918	20,375	12,985	10,304	8,514	7,810	65,593	20,283	10,654	13,223	9,515
MEAN	1,193	831	657	419	355	275	260	2,116	676	344	427	317
MAX	2,630	2,190	1,850	586	645	318	746	7,310	1,590	646	1,470	819
MIN	364	558	447	354	291	184	156	222	396	273	274	219
AC-FT	73,340	49,420	40,410	25,760	20,440	16,890	15,490	130,100	40,230	21,130	26,230	18,870

CAL YR 1971 TOTAL 160,210 MEAN 439 MAX 3,980 MIN 55 AC-FT 317,800
WTR YR 1972 TOTAL 241,149 MEAN 659 MAX 7,310 MIN 156 AC-FT 478,300

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 6	1000	4.42	2,290	12- 7	1300	3.93	1,940
10-24	1700	4.91	2,660	5-10	1600	12.52	7,560
11-20	1100	4.44	2,310	5-14	2400	10.54	6,250

08183900 Cibolo Creek near Boerne, Tex.

LOCATION.--Lat 29°46'26", long 98°41'50", Kendall County, on left bank 0.6 mile upstream from Southern Pacific Lines bridge, 0.9 mile downstream from Menger Creek, and 2.5 miles southeast of Boerne.

DRAINAGE AREA.--68.4 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,339.61 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 20.0 cfs (14,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,020 cfs May 10 (gage height, 6.78 ft, from floodmark), from rating curve extended as explained below; minimum, 4.2 cfs May 5, 6.
Period of record: Maximum discharge, 36,400 cfs Sept. 27, 1964 (gage height, 19.15 ft, from floodmark), from rating curve extended above 570 cfs on basis of slope-area measurement at 12,000 cfs and contracted-opening measurement of 36,400 cfs; no flow at times in 1962-64, 1966-67, 1971.
Maximum stage since at least 1892, that of Sept. 27, 1964. Second highest flood reached a stage of 16.3 ft (discharge, 25,600 cfs) in 1952, from information by local residents.

REMARKS.--Records good except those for Nov. 4 to Apr. 18, which are poor. No known diversion above station.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1965(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	61	33	36	25	15	7.1	4.8	34	17	9.4	11
2	18	56	74	35	25	13	8.1	8.2	33	17	6.7	11
3	16	51	39	34	20	12	8.9	7.1	33	14	28	15
4	206	48	38	32	20	12	10	5.4	34	13	21	12
5	104	47	62	31	20	11	10	4.3	33	12	13	11
6	80	46	56	31	23	10	10	51	31	11	9.9	10
7	65	44	47	28	21	10	11	464	32	11	9.5	9.7
8	64	42	46	28	20	10	10	91	32	11	9.9	9.5
9	76	41	82	28	20	9.6	9.1	33	40	12	10	9.3
10	57	39	66	28	20	9.2	9.5	489	42	12	9.9	9.4
11	50	38	58	27	20	9.2	9.2	273	82	11	35	9.2
12	46	38	56	24	20	8.7	8.9	264	64	8.8	50	8.8
13	47	37	55	24	19	8.8	8.3	186	35	7.9	35	8.8
14	49	36	56	23	19	9.2	7.2	187	29	7.5	20	8.4
15	43	35	52	20	19	11	8.4	138	25	7.3	18	8.8
16	61	34	50	20	19	12	6.8	119	24	9.0	17	8.0
17	52	34	50	20	17	11	6.2	113	112	9.7	16	7.4
18	150	94	48	21	17	9.9	6.1	94	34	13	15	6.8
19	240	47	48	21	17	9.3	5.8	83	19	10	15	5.7
20	403	36	47	21	16	32	5.5	77	16	9.9	14	6.0
21	203	35	43	21	16	15	8.6	68	15	8.6	14	6.8
22	168	34	40	21	16	8.4	7.1	64	14	9.5	13	9.4
23	143	62	40	20	16	7.2	5.5	63	15	20	13	10
24	125	44	40	20	16	7.0	4.7	61	18	15	30	14
25	112	38	40	20	16	6.6	4.5	53	20	13	25	11
26	103	37	40	20	15	6.1	4.5	49	21	12	16	8.0
27	108	36	40	21	13	5.9	13	44	21	10	15	7.6
28	87	35	40	23	13	6.8	22	43	19	9.3	14	6.9
29	77	34	39	23	13	6.8	7.6	41	19	7.8	13	6.8
30	71	33	36	40	------	6.6	6.0	39	19	7.8	12	6.2
31	66	------	36	29	------	6.3	------	36	------	12	12	------
TOTAL	3,111	1,292	1,497	790	531	315.6	249.6	3,252.8	965	349.1	539.3	272.5
MEAN	100	43.1	48.3	25.5	18.3	10.2	8.32	105	32.2	11.3	17.4	9.08
MAX	403	94	82	40	25	32	22	489	112	20	50	15
MIN	16	33	33	20	13	5.9	4.5	4.3	14	7.3	6.7	5.7
AC-FT	6,170	2,560	2,970	1,570	1,050	626	495	6,450	1,910	692	1,070	541

CAL YR 1971 TOTAL 10,645.49 MEAN 29.2 MAX 1,000 MIN 0 AC-FT 21,120
WTR YR 1972 TOTAL 13,164.90 MEAN 36.0 MAX 489 MIN 4.3 AC-FT 26,110

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	0730	3.79	475	5- 7	1030	4.87	979
10-19	2345	4.64	858	5-10	1400	6.78	2,020
				6-17	1330	3.69	466

08185000 Cibolo Creek at Selma, Tex.

LOCATION.--Lat 29°35'38", long 98°18'39", Bexar-Guadalupe County line, on right bank 0.6 mile downstream from Missouri-Kansas-Texas Railroad Co. bridge and 0.9 mile upstream from bridge on Interstate Highway 35 at Selma.

DRAINAGE AREA.--274 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 728.34 ft above mean sea level.

AVERAGE DISCHARGE.--26 years, 12.1 cfs (8,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 54,000 cfs May 12 (gage height, 24.34 ft, from floodmark), from rating curve extended above 16,000 cfs as explained below; no flow most of time.
Period of record: Maximum discharge, 54,000 cfs May 12, 1972 (gage height, 24.34 ft, from floodmark), from rating curve extended above 16,000 cfs on basis of field estimate of 54,000 cfs; no flow most of time.
Maximum stage since at least 1869, 26 ft in 1889, stage of flood in 1913 unknown, from information by local residents.

REMARKS.--Records good. Small diversion above station. Considerable flow of Cibolo Creek enters the Edwards and associated limestones in the Balcones Fault Zone which crosses basin between this station and station near Boerne (station 08183900).

REVISIONS.--WSP 1923: Drainage area. Figures for water year 1960 in WSP 1813 are in error and should be disregarded.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.04						0	.28			
2	0	.01						0	.24			
3	0	0						0	.20			
4	0	0						0	.20			
5	0	0						0	.17			
6	0	0						0	.14			
7	0	0						1,120	.12			
8	0	0						775	.09			
9	0	0						112	.14			
10	0	0						344	.10			
11	0	0						1,620	.05			
12	0	0						13,300	.02			
13	0	0						670	0			
14	0	0						362	0			
15	0	0						276	0			
16	0	0						207	0			
17	0	0						164	0			
18	0	0						120	0			
19	140	0						77	0			
20	321	0						55	0			
21	263	0						34	0			
22	64	0						22	0			
23	21	0						12	0			
24	3.0	0						7.4	0			
25	.64	0						3.9	0			
26	.28	0						2.3	0			
27	.24	0						1.3	0			
28	.24	0						.8	0			
29	.20	0						.5	0			
30	.14	0			------			.4	0			
31	.07	------			------		------	.3	------			------
TOTAL	813.81	.05	0	0	0	0	0	19,286.9	1.75	0	0	0
MEAN	26.3	.002	0	0	0	0	0	622	.058	0	0	0
MAX	321	.04	0	0	0	0	0	13,300	.28	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1,610	.1	0	0	0	0	0	38,260	3.5	0	0	0

CAL YR 1971 TOTAL 3,313.74 MEAN 9.08 MAX 1,670 MIN 0 AC-FT 6,570
WTR YR 1972 TOTAL 20,102.51 MEAN 54.9 MAX 13,300 MIN 0 AC-FT 39,870

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-20	1900	5.70	1,030
5- 7	1800	7.87	3,280
5-12	0300	a24.34	54,000

a From floodmark.

08186000 Cibolo Creek near Falls City, Tex.

LOCATION.--Lat 29°00'50", long 97°55'48", Karnes County, on right bank at downstream side of pier of bridge on State Highway 123, 5.7 miles northeast of Falls City, and 10.4 miles upstream from mouth.

DRAINAGE AREA.--827 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 264.28 ft above mean sea level. Nov. 4, 1930, to Aug. 4, 1940, water-stage recorder at site 1,600 ft upstream at datum 0.56 ft higher. Aug. 5 to Sept. 13, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 111 cfs (80,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,600 cfs May 8 (gage height, 29.55 ft); minimum, 10 cfs Apr. 16, 17.
Period of record: Maximum discharge, 33,600 cfs July 6, 1942 (gage height, 34.45 ft); no flow July 30, 31, Aug. 4-22, 1956, Aug. 1, 1971.
Maximum stage since at least 1890, 35 ft in October 1913 (discharge, about 35,000 cfs).

REMARKS.--Records good. Diversions for irrigation above station. Much of the base flow is effluent from the Carrizo Sands in the vicinity of Sutherland Springs. At end of year, flow from 28.9 sq mi above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 8,920 acre-ft below the flood-spillway crests, of which 7,760 acre-ft is floodwater-retarding capacity and 1,160 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 733: 1931. WSP 1058: 1935. WSP 1562: 1931(M), 1933. WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	32	25	29	30	26	13	19	105	53	36	26
2	24	31	30	29	30	26	13	22	99	52	36	26
3	22	29	99	28	29	25	14	38	96	51	45	26
4	21	27	184	30	27	25	13	55	91	51	44	25
5	33	27	89	31	26	24	13	24	86	53	42	24
6	609	26	1,020	31	26	24	13	27	84	49	44	29
7	69	26	711	33	24	24	14	833	81	47	44	26
8	35	25	183	33	24	24	13	15,300	77	46	46	25
9	38	25	148	33	24	23	14	7,450	80	47	36	24
10	53	25	153	32	25	22	14	1,660	86	48	38	24
11	24	25	82	31	26	21	13	12,000	87	49	42	23
12	23	24	70	30	26	20	12	10,000	90	51	36	23
13	23	24	54	31	28	22	11	10,400	82	51	34	24
14	23	24	46	30	28	21	12	4,620	100	52	34	24
15	23	24	42	29	28	22	14	1,150	86	48	35	28
16	22	23	39	27	27	23	11	769	185	47	34	30
17	28	22	38	27	25	21	11	1,100	568	53	32	27
18	26	29	37	29	24	20	11	805	877	78	32	26
19	24	68	34	30	24	17	12	433	785	56	32	26
20	129	79	33	30	23	36	13	356	175	58	40	25
21	1,540	50	32	29	23	30	15	313	120	51	38	25
22	446	43	31	29	24	19	17	272	97	71	38	26
23	222	39	30	29	25	17	19	241	85	88	34	26
24	114	32	30	29	25	17	18	217	77	54	32	31
25	79	30	30	28	24	16	17	196	70	47	31	29
26	65	29	31	28	24	15	17	175	66	47	30	29
27	55	28	31	28	24	14	16	158	63	42	30	31
28	46	27	31	28	24	15	22	145	61	40	40	50
29	40	27	31	28	25	13	26	133	57	39	51	39
30	37	26	30	36	------	12	20	122	54	38	30	30
31	34	------	30	37	------	14	------	111	------	41	27	------
TOTAL	3,959	946	3,454	932	742	648	441	69,144	4,670	1,598	1,143	827
MEAN	128	31.5	111	30.1	25.6	20.9	14.7	2,230	156	51.5	36.9	27.6
MAX	1,540	79	1,020	37	30	36	26	15,300	877	88	51	50
MIN	21	22	25	27	23	12	11	19	54	38	27	23
AC-FT	7,850	1,880	6,850	1,850	1,470	1,290	875	137,100	9,260	3,170	2,270	1,640

CAL YR 1971 TOTAL 25,582.36 MEAN 70.1 MAX 4,250 MIN 0 AC-FT 50,740
WTR YR 1972 TOTAL 88,504.00 MEAN 242 MAX 15,300 MIN 11 AC-FT 175,500

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G.HT.	DISCHARGE
5- 8	2000	29.55	21,600
5-11	2400	28.48	19,400
5-13	1800	26.52	15,500

08186500 Ecleto Creek near Runge, Tex.

LOCATION.--Lat 28°55'12", long 97°46'19", Karnes County, on left bank 55 ft downstream from Farm Road 81, 215 ft left of left end of bridge, 2.6 miles upstream from Salt Branch, 4.5 miles northwest of Runge, and 5.2 miles upstream from mouth.

DRAINAGE AREA.--239 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 215.03 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 34.4 cfs (24,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,840 cfs May 12 (gage height, 16.10 ft, backwater from San Antonio River); no flow at times.
Period of record: Maximum discharge, 58,400 cfs Sept. 22, 1967 (gage height, 33.3 ft, from floodmark), from rating curve extended above 7,300 cfs on basis of slope-area measurement of peak flow; no flow at times 1962-67, 1969-72.
Flood information begins with the flood in June 1903 which reached a stage of 34 ft (discharge, 71,000 cfs). A stage of 32 ft (discharge, 39,000 cfs) occurred in September 1952, from information by local residents.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	.30	.08	.25	3.8	.13	.20	0	6.1	.90	0	0
2	8.9	.16	.80	.10	5.3	.16	.20	0	5.9	.50	0	0
3	6.2	.13	.25	.08	4.3	.16	.16	0	6.1	.40	.10	0
4	3.1	.13	.20	.08	2.7	.20	.13	0	5.3	.30	.10	0
5	1.8	.13	.40	.08	1.9	.20	.13	0	4.9	.50	.02	0
6	8.2	.13	.80	.10	1.3	.20	.16	2.6	4.3	.40	0	0
7	244	.13	13	.10	.80	.20	.16	199	4.1	.50	0	0
8	41	.13	18	.15	.40	.20	.10	403	3.5	.50	0	0
9	14	.13	12	.12	.30	.20	.06	1,160	4.1	.50	0	0
10	7.5	.13	6.8	.10	.25	.20	.06	328	5.1	.40	0	0
11	5.0	.10	4.3	.10	.25	.16	.08	980	4.3	.25	.02	0
12	5.0	.08	2.7	.10	.20	.16	.06	2,390	3.5	.20	.10	0
13	6.0	.08	1.8	.10	.16	.25	.06	701	3.9	.16	.04	0
14	5.0	.08	.90	.08	.13	.25	.04	294	25	.13	.01	0
15	4.0	.08	.60	.08	.13	.20	.03	123	26	.13	.40	0
16	3.5	.08	.40	.08	.13	.20	.01	108	313	.13	.52	0
17	2.9	.08	.30	.08	.13	.16	.01	78	529	.25	.13	0
18	2.2	.13	.25	.08	.13	.16	.01	254	127	.30	.10	0
19	1.4	.08	.20	.08	.13	.10	0	63	28	.16	.06	0
20	1.9	.06	.20	.08	.13	.11	0	31	17	.16	.04	0
21	6.2	.03	.16	.08	.16	.16	0	22	13	.20	.03	0
22	37	.03	.16	.08	.13	.13	0	18	9.0	.20	.02	0
23	19	.04	.16	.08	.13	.10	0	15	5.9	.40	.02	0
24	8.0	.04	.13	.08	.13	.10	0	15	4.3	.25	.01	.22
25	4.7	.04	.10	.08	.13	.13	0	14	3.1	.13	.01	.05
26	3.3	.06	.10	.35	.08	.13	0	12	2.5	.04	0	3.7
27	2.0	.06	.10	.30	.08	.20	0	10	2.0	.01	0	3.7
28	1.3	.08	.10	.30	.08	.20	0	9.6	1.6	0	0	1.4
29	.90	.08	.10	.30	.13	.20	0	8.5	1.3	0	0	1.2
30	.60	.08	.10	33	------	.16	0	7.5	1.0	0	0	.90
31	.40	------	.71	8.6	------	.20	------	6.8	------	0	0	------
TOTAL	458.10	2.89	65.90	45.27	23.62	5.31	1.66	7,253.0	1,169.8	8.00	1.73	11.17
MEAN	14.8	.096	2.13	1.46	.81	.17	.055	234	39.0	.26	.056	.37
MAX	244	.30	18	33	5.3	.25	.20	2,390	529	.90	.52	3.7
MIN	.40	.03	.08	.08	.08	.10	0	0	1.0	0	0	0
AC-FT	909	5.7	131	90	47	11	3.3	14,390	2,320	16	3.4	22

CAL YR 1971 TOTAL 2,278.11 MEAN 6.24 MAX 542 MIN 0 AC-FT 4,520
WTR YR 1972 TOTAL 9,046.45 MEAN 24.7 MAX 2,390 MIN 0 AC-FT 17,940

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-7	2200	7.27	571	5-12	1400	16.10	2,840
5-9	1300	11.17	1,390	6-17	0100	12.50	1,750

08187000 Escondido Creek subwatershed No. 1 near Kenedy, Tex.

LOCATION.--Lat 28°46'41", long 97°53'41", Karnes County, near center of dam on an unnamed fork of Panther Creek, 900 ft upstream from State Highway 72, and 3.9 miles southwest of Kenedy.

DRAINAGE AREA.--3.29 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete drop-inlet control. Datum of gage is 350.00 ft above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--18 years, 427 acre-ft per year.

AVERAGE OUTFLOW.--18 years, 195 acre-ft per year.

EXTREMES.--Current year: No outflow during year. Maximum inflow, 428 cfs (average for 5-minute interval) Sept. 26, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 2,360 cfs Sept. 21, 1967 (gage height, 30.06 ft; 31.0 ft from floodmarks at spillway), from rating curves extended above 200 cfs on basis of flow-through-culvert measurement; no outflow for most of time each year. Maximum inflow, 5,260 cfs (average for 5-minute interval) Oct. 25, 1960, computed from change in reservoir contents and adjusted for outflow and rainfall on pool surface; no inflow at times.

REMARKS.--Records good. Dam was completed Sept. 21, 1954, but no appreciable storage began until July 1955. The first outflow occurred on Apr. 27, 1957. The pool is formed by a rolled-fill earthen dam about 2,300 ft long, with an earthen spillway at left end of dam at gage height 27.7 ft. The outlet structure is a 2.5-foot square concrete drop inlet connected to a 12-inch concrete outlet pipe. The top of the drop inlet is at gage height 18.0 ft; the 12-inch outlet pipe is at gage height 9.2 ft. There is a 10-inch auxiliary pipe opening into the upstream face of the drop inlet at gage height 16.0 ft. There is also an 8-inch controlled emergency outlet pipe opening into the upstream face of the drop inlet at gage height 9.2 ft. Pool capacity is 905 acre-ft at the spillway crest, 220 acre-ft at top of the drop inlet, 150 acre-ft at bottom of the 10-inch uncontrolled pipe, and 23.2 acre-ft at bottom of the 8-inch controlled outlet. The dam was built by the Soil Conser-vation Service for flood control. The capacity table is based on a survey made June 21, 1964. Sediment survey dated July 21, 1969, indicated insignificant changes. Rainfall records are collected from a recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 1923: 1955-60.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	24.8	0	17.4	45.8	0	0	0	9.5	6.9	0	0	39.0
Outflow	0	0	0	0	0	0	0	0	0	0	0	0
(†)	3.6	-18.8	1.3	36.2	-20.7	-18.6	-11.4	2.9	-.7	-5.3	0	31.5
(††)	3.76	.70	2.75	2.55	.30	.34	.30	2.41	2.00	2.33	2.05	5.12

CAL YR 1971: Inflow 81.5 Outflow 0 † -5.6 †† 26.84
WTR YR 1972: Inflow 143 Outflow 0 † 0 †† 24.61

PEAK INFLOW (BASE, 100 CFS)

DATE	TIME	DISCHARGE
1-30	0200	*123
6-13	2040	*100
9-26	1910	*428

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches at gage.
* Average for 5-minute interval.
NOTE.--Lake dry or water below intakes July 9 to Sept. 25.

08187500 Escondido Creek at Kenedy, Tex.

LOCATION.--Lat 28°49'11", long 97°51'32", Karnes County, near center of channel at downstream side of bridge on U.S. Highway 181 at northwest edge of Kenedy, 4.6 miles upstream from Dry Escondido Creek, and 9.6 miles upstream from mouth.

DRAINAGE AREA.--72.4 sq mi.

PERIOD OF RECORD.--July 1954 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir installed Nov. 11, 1971. Datum of gage is 246.40 ft above mean sea level.

AVERAGE DISCHARGE.--18 years, 12.7 cfs (2.38 inches per year, 9,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 391 cfs Sept. 27 (gage height, 14.44 ft); no flow for many days.
Period of record: Maximum discharge, 37,000 cfs Sept. 22, 1967 (gage height, 25.48 ft, from floodmark), from rating curve extended above 4,400 cfs on basis of contracted-opening, flow-over-road, and flow-through-culverts measurement of peak flow; no flow for many days in 1954-67, 1969-72.
Maximum stage since at least 1887, that of Sept. 22, 1967. Flood of Aug. 29, 1946, reached a stage of 24.2 ft (21,500 cfs), from information by local residents.

REMARKS.--Records good. At end of year, flow from 36.5 sq mi above this station was partly controlled by 10 floodwater-retarding structures with a total combined capacity of 14,080 acre-ft below flood-spillway crests, of which 11,880 acre-ft is floodwater-retarding capacity and 2,200 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. One recording rain gage is located in the watershed above this station at Escondido Creek subwatershed No. 1 near Kenedy (station 08187000).

REVISIONS (WATER YEARS).--WSP 1923: 1959, 1960, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	.28	.16	.13	10	.19	.11	.08	.07	.06	1.1	0
2	3.8	.28	11	.13	4.5	.19	.13	.08	.07	.04	.13	0
3	1.9	.28	.67	.13	1.8	.19	.13	.08	.07	.06	.13	0
4	.88	.24	.30	.11	1.0	.19	.11	.09	.06	.06	9.0	0
5	.56	.24	.30	.09	.67	.19	.13	.09	.06	.04	6.4	0
6	1.8	.21	4.9	.11	.33	.19	.13	.72	.06	.05	1.6	0
7	.62	.21	.97	.11	.77	.19	.16	.41	.05	.05	.45	0
8	.36	.21	.30	.13	.25	.19	.24	1.9	.06	.05	.12	0
9	.36	.21	.30	.11	.42	.19	.22	.90	.07	.05	.04	0
10	.36	.21	.27	.11	.50	.16	.16	.60	.07	.04	.03	0
11	.28	.21	.24	.11	.55	.16	.13	.81	.07	.03	.03	0
12	.28	.20	.22	.11	.50	.16	.13	.37	.08	.03	.03	0
13	.28	.20	.20	.11	.41	.13	.11	.25	11	.04	.03	0
14	.28	.19	.20	.09	.37	.13	.11	.16	142	.03	.02	0
15	.28	.18	.19	.08	.37	.13	.09	.11	56	.03	.02	0
16	.28	.17	.18	.08	.22	.48	.08	.32	88	.06	.02	0
17	27	.16	.17	.09	.16	.41	.09	.32	37	.09	.02	0
18	19	.16	.16	.09	.16	.22	.09	.14	15	.07	.02	0
19	6.3	.16	.15	.09	.16	.13	.11	.09	7.8	.06	.02	0
20	3.1	.13	.14	.09	.19	.16	.11	.08	4.2	.05	.02	0
21	1.7	.16	.13	.09	.19	.19	.09	.08	2.2	.04	.01	0
22	.62	.19	.13	.09	.19	.16	.08	.08	1.3	.05	.01	0
23	.32	.22	.13	.09	.19	.16	.08	.08	.95	.06	0	0
24	.28	.19	.13	.09	.22	.16	.08	.09	.33	.05	0	.15
25	.24	.16	.13	.09	.22	.13	.08	.09	.16	.04	0	.08
26	.24	.16	.13	.11	.22	.16	.07	.08	.09	.03	0	18
27	.24	.16	.13	.11	.19	.19	.09	.08	.07	.02	0	148
28	.24	.16	.13	.11	.19	.16	.09	.07	.06	.02	0	21
29	.24	.13	.13	.16	.19	.13	.09	.07	.06	.02	0	9.9
30	.28	.16	.13	109	------	.11	.08	.07	.06	.02	0	4.5
31	.28	------	.13	33	------	.11	------	.07	------	.15	0	------
TOTAL	80.30	5.82	22.45	145.04	25.13	5.64	3.40	8.46	367.07	1.49	19.25	201.63
MEAN	2.59	.19	.72	4.68	.87	.18	.11	.27	12.2	.048	.62	6.72
MAX	27	.28	11	109	10	.48	.24	1.9	142	.15	9.0	148
MIN	.24	.13	.13	.08	.16	.11	.07	.07	.05	.02	0	0
CFSM	.04	.003	.010	.06	.01	.003	.002	.004	.17	.0007	.009	.09
IN.	.04	.002	.01	.07	.01	.002	.001	.004	.19	0	.009	.10
AC-FT	159	12	45	288	50	11	6.7	17	728	3.0	38	400

CAL YR 1971 TOTAL 1,167.67 MEAN 3.20 MAX 301 MIN 0 CFSM .04 IN .60 AC-FT 2,320
WTR YR 1972 TOTAL 885.68 MEAN 2.42 MAX 148 MIN 0 CFSM .03 IN .46 AC-FT 1,760

08187900 Escondido Creek subwatershed No. 11 (Dry Escondido Creek) near Kenedy, Tex.

LOCATION.--Lat 28°51'39", long 97°50'39", Karnes County, near center of dam on Dry Escondido Creek, 0.5 mile upstream from bridge on Farm Road 792, 3 miles north of Kenedy, and 5.0 miles upstream from Escondido Creek.

DRAINAGE AREA.--8.43 sq mi.

PERIOD OF RECORD.--January to August 1958 (outflow, annual maximum only; inflow, peaks above base only), September 1958 to current year.

GAGE.--Water-stage recorder with concrete drop-inlet control. Datum of gage is 285.12 ft above mean sea level.

AVERAGE INFLOW.--14 years, 933 acre-ft per year.

AVERAGE OUTFLOW.--14 years, 808 acre-ft per year.

EXTREMES.--Current year: No outflow during year. Maximum inflow, 77.0 cfs (average for 5-minute interval) May 14 computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 8,030 cfs Sept. 21, 1967 (gage height, 36.36 ft, from floodmark at gage; 36.3 ft, from floodmarks at spillways), from rating curve extended above 100 cfs on basis of flow-over-spillway measurement (includes two spillways) of 7,900 cfs plus flow through the drop inlet; no outflow for most of time each year. Maximum inflow, 18,000 cfs (average for 5-minute interval) Sept. 21, 1967, computed from change in reservoir contents and adjusted for outflow and rainfall on pool surface; no inflow at times.

REMARKS.--Records good. The dam was completed Jan. 31, 1958, but the lower drain valve in the drop-inlet structure remained open until Sept. 15, 1958. The first outflow (since lower drain valve was closed) occurred Sept. 22, 1958. The pool is formed by a rolled-fill earthen dam about 2,600 ft long with emergency spillways at both the left and right end of the dam. The outlet structure is a 3-foot square concrete drop inlet connected to a 28-inch concrete outlet pipe. Four 10-inch square portholes are set in the sides of the drop inlet, two on the upstream side and two on the downstream side. Bottom of portholes are at gage height 15.67 ft. The top of the drop inlet is at gage height 18.00 ft. The two emergency spillways (both left and right) are at gage height 32.8 ft. The lower drain valve is an 8-inch-diameter cleanout gate at the bottom of the drop-inlet structure at a gage height of 9.4 ft. The pool capacity is 2,670 acre-ft at the spillway crests, 236 acre-ft at top of the drop inlet, 140 acre-ft at the bottom of portholes, and 29.9 acre-ft at the 8-inch controlled outlet. The dam was built by the Soil Conservation Service for flood control. The capacity table is based on a survey made Sept. 11, 1965. Rainfall records are collected from one recording rain gage.

REVISIONS (WATER YEARS).--WSP 1923: 1958-60.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	10.4	0	4.1	23.2	0	0	0	33.2	3.3	1.6	0.9	8.1
Outflow	0	0	0	0	0	0	0	0	0	0	0	0
(†)	3.6	-8.7	.4	20.3	-9.2	-9.2	-11.5	26.7	-9.6	-11.8	-9.3	-.2
(††)	3.00	.42	2.15	2.90	.20	.37	0	5.08	1.43	1.90	2.56	3.62

CAL YR 1971: Inflow 91.7 Outflow 0 † 18.0 †† 23.21
WTR YR 1972: Inflow 84.8 Outflow 0 † -18.5 †† 23.63

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

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches at station.

08188500 San Antonio River at Goliad, Tex.

LOCATION.--Lat 28°38'58", long 97°23'04", Goliad County, on right bank at upstream side of bridge on U.S. Highway 183, 1.2 miles southeast of courthouse in Goliad, 11.7 miles upstream from Manahuilla Creek, and at mile 66.5.

DRAINAGE AREA.--3,921 sq mi.

PERIOD OF RECORD.--June 1924 to March 1929, February 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 91.08 ft above mean sea level. Prior to Mar. 31, 1929, nonrecording gage at Texas and New Orleans Railroad Co. bridge 0.9 mile upstream at same datum.

AVERAGE DISCHARGE.--37 years (1924-28, 1939-72), 559 cfs (405,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,800 cfs May 15 (gage height, 34.16 ft); minimum, 194 cfs Apr. 24.
Period of record: Maximum discharge, 138,000 cfs Sept. 23, 1967 (gage height, 53.7 ft, from floodmark), from rating curve extended above 26,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 1.2 cfs June 16, 1956.
Maximum stage since 1869, that of Sept. 23, 1967. Flood of July 9, 1942, reached a stage of 44.9 ft; floods in October 1913 and June 15, 1935, reached about the same stage. Maximum stage since about 1800 occurred in 1869 and was several feet higher than flood of Sept. 23, 1967.

REMARKS.--Records good. Many diversions and regulations above station (see stations 08181800 and 08187500). At end of year, flow from 111 sq mi above this station was partly controlled by 23 floodwater-retarding structures with a total combined capacity of 38,020 acre-ft below the flood-spillway crests, of which 33,520 acre-ft is floodwater-retarding capacity and 4,500 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 1,980 acre-ft, of which 85 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	598	1,330	630	545	669	383	322	669	1,130	602	445	432
2	685	1,280	632	544	614	379	315	523	1,090	584	430	427
3	638	1,210	694	522	661	388	307	369	1,090	559	430	417
4	630	1,140	684	517	522	391	302	334	1,050	555	476	381
5	574	1,080	1,170	499	483	391	290	349	992	535	680	323
6	526	1,040	1,130	500	440	384	286	1,030	936	521	834	293
7	1,320	972	1,210	574	420	382	286	3,920	892	512	1,340	283
8	2,230	904	2,080	615	446	375	299	1,470	874	498	860	280
9	1,170	850	2,080	568	445	358	300	2,720	859	485	571	284
10	999	810	1,210	537	427	364	292	5,350	858	471	477	293
11	1,100	802	957	515	391	371	296	7,980	1,150	475	429	293
12	1,010	770	839	501	387	370	289	9,130	901	468	438	307
13	891	749	786	498	384	365	283	9,650	991	461	430	320
14	840	736	740	503	440	366	284	11,000	926	449	411	318
15	812	710	696	495	496	363	277	12,500	994	452	484	315
16	816	678	667	487	458	358	271	12,700	909	456	534	322
17	2,200	657	652	472	442	388	270	11,600	1,310	463	530	342
18	2,110	679	637	456	443	383	273	9,540	1,820	461	415	335
19	961	714	619	445	439	363	271	6,520	1,880	451	393	317
20	904	759	603	446	433	324	267	4,230	2,460	455	396	302
21	993	1,490	563	452	425	305	259	3,170	2,040	473	385	302
22	1,580	1,880	554	453	409	348	230	2,560	1,110	634	381	299
23	2,440	1,120	565	456	397	323	201	2,140	883	617	361	296
24	2,670	826	565	459	390	290	210	1,880	830	588	351	327
25	2,690	757	552	451	404	291	374	1,710	791	617	363	321
26	2,700	727	530	427	408	310	277	1,580	749	738	362	335
27	2,560	706	517	418	405	336	5,510	1,490	715	607	680	3,340
28	2,090	694	516	426	403	344	3,040	1,410	686	515	775	2,040
29	1,740	666	509	425	403	332	437	1,330	653	466	545	717
30	1,550	651	516	664	------	321	349	1,240	633	437	496	950
31	1,420	------	531	1,760	------	326	------	1,190	------	420	453	------
TOTAL	43,447	27,387	24,634	16,630	13,084	10,972	16,667	131,284	32,202	16,025	16,155	15,511
MEAN	1,402	913	795	536	451	354	556	4,235	1,073	517	521	517
MAX	2,700	1,880	2,080	1,760	669	391	5,510	12,700	2,460	738	1,340	3,340
MIN	526	651	509	418	384	290	201	334	633	420	351	280
AC-FT	86,180	54,320	48,860	32,990	25,950	21,760	33,060	260,400	63,870	31,790	32,040	30,770

CAL YR 1971 TOTAL 203,976 MEAN 559 MAX 4,910 MIN 53 AC-FT 404,600
WTR YR 1972 TOTAL 363,998 MEAN 995 MAX 12,700 MIN 201 AC-FT 722,000

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-17	2000	15.57	3,040	5-15	2400	34.16	12,800
4-27	2000	28.95	9,660	9-27	1700	21.16	4,780
5- 7	0800	20.29	4,470				

08188600 Guadalupe-Blanco River Authority Calhoun Canal Flume No. 1 near Long Mott, Tex.

LOCATION.--Lat 28°29'44", long 96°46'18", Calhoun County, on right bank at concrete Parshall flume No. 1, 518 ft upstream from State Highway 185, 1,900 ft downstream from pumping station on Goff Bayou, and 1.1 miles northwest of Long Mott.

PERIOD OF RECORD.--March 1968 to February 1970 (monthly discharge only). March 1970 to current year.

GAGE.--Deflection-vane recorder, duplex water-stage recorder and Parshall flume. Datum of gage is 23.53 ft above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 311 cfs July 7, 1968; no flow at times in 1968-72.

REMARKS.--Records fair. Flow diverted from Guadalupe River 550 ft upstream from Guadalupe River near Tivoli (station 08188800), and thence through a system of canals, Hog Bayou, and Goff Bayou, a distance of 8.9 miles to the pumping station on Goff Bayou 1,900 ft upstream from flume No. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	24	15	34	30	42	44	47	151	223	97	199
2	88	19	21	32	30	49	52	85	155	220	113	166
3	78	23	26	32	30	37	101	115	165	219	101	126
4	83	25	30	32	30	37	107	162	165	218	65	175
5	63	26	31	26	30	30	103	192	165	204	66	229
6	63	29	61	30	30	32	93	189	165	190	70	249
7	62	34	43	27	10	34	115	131	165	182	86	224
8	68	34	31	33	0	39	143	69	165	177	65	194
9	70	31	28	39	0	9.5	132	46	165	177	59	196
10	63	20	18	41	0	25	124	54	165	177	52	214
11	71	27	28	38	14	23	124	32	165	179	52	206
12	78	33	44	37	30	15	101	39	165	182	50	197
13	68	51	33	38	21	41	106	6.5	165	180	50	189
14	63	21	29	39	23	55	111	.10	164	169	82	180
15	54	21	41	24	43	54	115	11	175	180	110	172
16	40	32	32	6.9	45	54	99	55	171	199	119	171
17	28	36	20	31	39	54	85	119	178	173	115	172
18	26	34	29	38	33	54	175	125	160	167	114	147
19	36	35	31	22	20	54	179	167	182	147	110	144
20	36	6.6	38	30	30	42	193	171	200	133	70	158
21	34	12	31	35	30	23	190	166	202	130	69	169
22	40	24	44	38	30	51	169	192	234	123	96	166
23	29	30	30	44	30	57	169	200	268	109	101	170
24	28	21	38	48	24	68	168	205	269	103	92	164
25	50	10	37	48	36	67	182	208	266	128	90	134
26	43	36	31	48	39	69	151	197	253	146	112	119
27	28	25	36	48	39	51	62	167	253	143	142	117
28	25	29	34	40	41	48	20	162	219	128	177	138
29	23	29	28	30	31	55	40	155	238	104	198	148
30	25	19	25	30	------	72	38	162	229	89	200	129
31	25	------	16	30	------	58	------	153	------	87	213	------
TOTAL	1,597	796.6	979	1,068.9	788	1,399.5	3,491	3,782.60	5,782	4,986	3,136	5,162
MEAN	51.5	26.6	31.6	34.5	27.2	45.1	116	122	193	161	101	172
MAX	109	51	61	48	45	72	193	208	269	223	213	249
MIN	23	6.6	15	6.9	0	9.5	20	.10	151	87	50	117
AC-FT	3,170	1,580	1,940	2,120	1,560	2,780	6,920	7,500	11,470	9,890	6,220	10,240

CAL YR 1971 TOTAL 36,385.90 MEAN 99.7 MAX 287 MIN 0 AC-FT 72,170
WTR YR 1972 TOTAL 32,968.60 MEAN 90.1 MAX 269 MIN 0 AC-FT 65,390

08188750 Guadalupe-Blanco River Authority Calhoun Canal Flume No. 2 near Long Mott, Tex.

LOCATION.--Lat 28°30'09", long 96°45'40", Calhoun County, on left bank at concrete Parshall flume No. 2, 3,700 ft downstream from State Highway 185, 4,200 ft downstream from streamflow station 08188600, and 1.4 miles north of Long Mott.

PERIOD OF RECORD.--October 1971 to June 1972 (monthly discharge only), July to September 1972.

GAGE.--Deflection-vane recorder, water-stage recorder, and Parshall flume. Datum of gage is 22.37 ft above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 211 cfs June 23, 1972; no flow at times.

REMARKS.--Records poor prior to June 15 and fair thereafter. Flow diverted from Guadalupe River 550 ft upstream from Guadalupe River near Tivoli (station 08188800), and then through a system of canals, Hog Bayou, and Goff Bayou, a distance of 8.9 miles to the pumping station on Goff Bayou 1,900 ft upstream from flume No. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										206	88	150
2										206	111	116
3										207	75	84
4										206	49	129
5										191	50	180
6										179	54	209
7										169	70	210
8										160	65	182
9										164	50	180
10										164	36	198
11										162	34	189
12										164	32	179
13										164	32	172
14										143	64	158
15										158	92	150
16										177	101	150
17										150	102	148
18										143	100	125
19										121	70	123
20										110	30	135
21										111	29	145
22										107	56	141
23										96	85	143
24										99	86	142
25										115	70	118
26										115	92	107
27										114	117	107
28										103	147	117
29										89	150	128
30					------					79	152	129
31		------			------		------		------	77	165	------
TOTAL	1,256	232	131	146	70	791	2,921	3,541	4,996	4,449	2,454	4,444
MEAN	40.5	7.73	4.23	4.71	2.41	25.5	97.4	114	167	144	79.2	148
MAX	-	-	-	-	-	-	-	-	-	207	165	210
MIN	-	-	-	-	-	-	-	-	-	77	29	84
AC-FT	2,490	460	260	290	139	1,570	5,790	7,020	9,910	8,820	4,870	8,810

WTR YR 1972 TOTAL 25,431 MEAN 69.5 MAX 211 MIN 0 AC-FT 50,440

NOTE.--Accuracy of records prior to July 1, 1972 does not warrant publication of daily discharges.

08188800 Guadalupe River near Tivoli, Tex.

LOCATION.--Lat 28°30'20", long 96°53'04", Calhoun-Refugio County line, on right bank at diversion dam and salt-water barrier, 550 ft downstream from Calhoun County Irrigation Canal intake, 0.4 mile downstream from San Antonio River, 3.5 miles north of Tivoli, and 10.2 miles upstream from mouth.

DRAINAGE AREA.--10,128 sq mi.

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is 0.04 ft above mean sea level.

EXTREMES: above Barrier.--Current year: Maximum gage height, 10.1 ft May 17; minimum, 3.0 ft Sept. 11.
Period of record: Maximum gage height, 13.7 ft Sept. 22, 1967; minimum, 1.5 ft Mar. 16, 1967.
below Barrier.--Current year: Maximum gage height, 10.0 ft May 16, 17; minimum, 2.4 ft Apr. 23, 24.
Period of record: Maximum gage height, 13.6 ft Sept. 22, 1967; minimum, 0.5 ft July 12, 14, 1967.
Maximum stage since at least 1936, that of Sept. 22, 1967. Flood in July 1936 reached a stage of 11 ft, present site and datum. Levees along the Navigation Canal from San Antonio Bay to Victoria were built in 1961 and decreased the flood plain materially.

REMARKS.--Many small diversions above station. Some regulation by powerplants. Upstream regulation same as that for Guadalupe River at Cuero (station 08175800) and San Antonio River at Goliad (station 08188500). At end of year, flow from 282 sq mi above this station was partly controlled by 63 floodwater-retarding structures with a total combined capacity of 98,230 acre-ft below the flood-spillway crests, of which 87,500 acre-ft is floodwater-retarding capacity and 10,730 acre-ft is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crests of 1,980 acre-ft, of which 85 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Texas 1968: Drainage area.

CORRECTION.--Measurements shown in WRD Texas, 1971, were made in the 1971 water year not the 1970 water year.

MAXIMUM DAILY GAGE HEIGHT, IN FEET, UPSTREAM AND DOWNSTREAM FROM SALT-WATER BARRIER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	up	down	up	down	up	down	up	down	up	down	up	down	up	down	up	down	up	down	up	down	up	down	up	down
1	7.0	6.9	7.3	7.3	5.9	5.9	5.6	5.5	7.0	6.9	5.2	5.1	3.7	3.6	7.8	7.7	7.1	7.1	6.0	5.9	5.1	5.0	4.1	3.7
2	6.8	6.8	7.3	7.3	6.0	5.9	5.5	5.4	7.1	7.0	5.1	5.0	3.7	3.7	7.5	7.4	7.1	7.0	6.0	5.9	5.1	5.0	3.8	3.6
3	6.8	6.7	7.2	7.2	5.8	5.8	5.6	5.5	6.9	6.8	5.0	4.9	3.6	3.5	6.8	6.7	7.1	7.0	5.9	5.8	6.2	6.0	3.8	3.6
4	6.7	6.6	7.1	7.1	6.0	6.0	5.6	5.5	6.6	6.5	5.0	4.9	3.3	3.2	5.9	5.9	7.0	7.0	5.8	5.7	6.1	5.9	3.8	3.6
5	6.5	6.4	7.0	7.0	6.4	6.4	5.6	5.5	6.5	6.4	4.9	4.8	3.1	3.1	4.5	4.5	7.0	6.9	5.6	5.5	6.1	5.9	3.7	3.5
6	6.4	6.3	6.9	6.9	7.1	7.1	5.6	5.5	6.3	6.2	4.9	4.8	3.3	3.3	4.3	4.2	6.9	6.9	5.5	5.4	6.1	5.9	3.5	3.4
7	6.2	6.1	6.8	6.8	7.2	7.2	5.6	5.5	6.1	6.0	4.9	4.8	3.5	3.4	6.5	6.4	6.8	6.8	5.5	5.4	6.1	5.9	3.6	3.4
8	6.6	6.5	6.7	6.7	7.2	7.2	5.6	5.5	5.8	5.7	4.8	4.7	3.2	3.1	7.5	7.4	6.7	6.7	5.5	5.4	6.5	6.4	3.4	3.3
9	7.0	7.0	6.7	6.7	7.4	7.4	5.7	5.6	5.6	5.5	4.5	4.5	3.3	3.3	7.7	7.7	6.7	6.7	5.5	5.4	6.5	6.4	3.2	3.1
10	7.1	7.1	6.5	6.5	7.4	7.4	5.7	5.6	5.5	5.4	4.4	4.4	4.5	3.3	8.0	7.9	6.7	6.6	5.5	5.4	6.2	6.1	3.1	2.9
11	7.0	7.0	6.4	6.4	7.5	7.5	5.6	5.5	5.5	5.4	4.3	4.2	3.9	3.4	8.2	8.1	7.0	6.9	5.5	5.4	5.7	5.6	3.0	2.8
12	6.8	6.8	6.3	6.3	7.3	7.3	5.4	5.3	5.4	5.3	4.3	4.2	4.0	3.6	8.6	8.6	7.1	7.0	5.5	5.4	5.5	5.4	4.9	2.9
13	6.7	6.6	6.2	6.2	7.1	7.1	5.4	5.4	5.4	5.3	4.1	4.0	4.0	3.6	8.8	8.8	7.2	7.0	5.5	5.4	5.4	5.3	4.9	3.0
14	6.5	6.5	6.2	6.2	6.9	6.9	5.3	5.2	5.5	5.4	4.1	4.0	4.0	3.7	8.8	8.8	7.1	7.0	5.5	5.4	5.3	5.3	4.6	3.4
15	6.3	6.2	6.2	6.2	6.8	6.8	5.2	5.1	5.5	5.4	4.1	4.0	4.0	3.6	8.9	8.9	7.1	7.0	5.4	5.3	5.3	5.2	4.0	3.5
16	6.1	6.1	6.2	6.2	6.7	6.7	5.2	5.1	5.6	5.5	4.0	3.9	4.5	3.4	10.0	10.0	7.3	7.2	5.5	5.4	5.2	5.1	4.3	3.4
17	7.7	7.7	6.1	6.1	6.6	6.6	5.2	5.1	5.6	5.5	4.2	4.0	4.6	3.4	10.1	10.0	7.4	7.3	5.8	5.7	5.2	5.1	4.2	3.5
18	7.8	7.8	6.2	6.2	6.4	6.4	5.2	5.1	5.5	5.4	4.2	4.1	4.2	3.4	9.9	9.9	7.4	7.3	5.9	5.7	5.2	5.1	4.3	3.4
19	7.9	7.8	6.0	6.0	6.3	6.3	5.1	5.0	5.4	5.3	4.0	3.9	4.0	3.4	9.5	9.5	7.4	7.3	5.9	5.8	5.1	5.0	4.3	3.2
20	7.8	7.8	5.8	5.8	6.3	6.3	4.9	4.8	5.3	5.2	4.1	4.0	4.0	3.4	9.1	9.1	7.5	7.3	5.9	5.8	5.0	4.9	4.4	3.2
21	7.7	7.7	5.8	5.8	6.2	6.2	4.8	4.7	5.3	5.2	4.3	4.2	4.3	3.4	8.7	8.7	7.5	7.4	5.9	5.8	4.8	4.8	4.3	3.0
22	7.5	7.5	6.6	6.6	6.1	6.0	4.8	4.7	5.2	5.1	4.8	4.7	4.4	2.6	8.2	8.2	7.6	7.4	5.9	5.7	4.8	4.8	4.4	2.9
23	7.4	7.4	7.0	7.0	6.0	5.9	4.7	4.6	5.2	5.1	4.9	4.7	4.2	2.4	8.0	7.9	7.5	7.4	6.0	5.9	4.7	4.6	4.4	3.0
24	7.5	7.4	7.1	7.1	6.0	5.9	4.7	4.6	5.1	5.0	4.8	4.7	4.0	2.4	7.8	7.7	7.3	7.2	6.0	5.9	4.5	4.4	4.0	3.7
25	7.5	7.5	7.0	7.0	5.9	5.9	4.5	4.4	5.1	5.0	4.6	4.5	3.8	2.7	7.7	7.6	7.0	6.9	5.9	5.8	4.4	4.3	4.6	4.4
26	7.6	7.6	6.7	6.7	5.9	5.9	4.6	4.5	5.0	4.9	4.5	4.3	4.0	3.3	7.6	7.5	6.8	6.7	5.8	5.7	4.2	4.1	5.1	4.9
27	7.6	7.6	6.5	6.5	5.9	5.8	4.6	4.5	5.0	4.9	4.4	4.3	7.0	6.9	7.4	7.4	6.6	6.5	5.8	5.7	3.8	3.7	5.5	5.3
28	7.6	7.6	6.3	6.3	5.8	5.8	4.5	4.4	5.0	4.9	4.1	3.9	7.7	7.6	7.3	7.3	6.5	6.3	5.9	5.8	3.7	3.6	7.2	7.0
29	7.6	7.5	6.2	6.1	5.7	5.6	4.3	4.2	5.1	5.0	3.8	3.7	7.8	7.7	7.3	7.3	6.3	6.2	5.7	5.6	4.2	4.1	7.6	7.4
30	7.5	7.5	6.0	6.0	5.7	5.7	4.4	4.3	-------		3.6	3.5	7.8	7.7	7.3	7.2	6.2	6.1	5.4	5.4	4.2	4.1	7.6	7.4
31	7.4	7.4	-------		5.6	5.5	6.4	6.3	-------		3.6	3.6	-------		7.2	7.2	-------		5.2	5.2	4.0	3.8	-------	

08189200 Copano Creek near Refugio, Tex.

LOCATION.--Lat 28°18'12", long 97°06'44", Refugio County, on right bank at bridge on Farm Road 774, 3.6 miles upstream from Alameda Creek, 8.1 miles east of Refugio, and 11.9 miles upstream from mouth.

DRAINAGE AREA.--87.8 sq mi.

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 17.25 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,770 cfs Apr. 29 (gage height, 14.18 ft); no flow for many days.
Period of record: Maximum discharge, 6,300 cfs Sept. 12, 1971 (gage height, 21.00 ft), from rating curve extended above 3,800 cfs; no flow at times each year.
Maximum stage since early 1920's, 22 ft in September 1967, from information by local residents.

REMARKS.--Records good. No known diversion above station. Recording rain gage is located at station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	9.3	.27	.29	37	2.3	0	810	9.7	9.1	1.1	0
2	174	7.2	.20	.22	27	.96	0	507	5.0	8.1	.92	0
3	147	5.8	.16	.31	25	.46	0	379	3.1	7.3	1.9	0
4	126	6.8	.11	.27	20	.23	0	279	2.3	6.9	2.4	0
5	111	13	5.5	.16	14	.12	0	197	1.9	6.3	2.0	0
6	97	8.4	54	.27	8.8	.08	0	164	1.8	6.3	1.6	0
7	63	3.7	106	.29	5.1	.06	0	247	1.4	6.2	1.3	0
8	43	2.4	59	.20	3.3	.05	0	312	1.4	5.5	.97	0
9	45	1.9	33	.15	2.5	.04	0	261	1.9	5.3	.62	0
10	41	1.5	21	.13	2.0	.03	0	317	3.4	6.4	.38	0
11	37	1.2	17	.12	1.7	.03	0	829	43	5.4	.26	0
12	29	.95	14	16	1.6	.03	0	835	278	5.0	.17	0
13	24	.77	12	55	1.9	.04	0	899	268	5.2	.10	0
14	18	.61	8.5	64	1.9	.08	0	970	257	4.8	.06	0
15	10	.47	6.5	55	1.7	.08	0	1,230	236	3.3	.04	0
16	17	.34	5.0	21	1.5	.10	0	1,030	279	29	.02	0
17	509	.30	4.1	3.9	1.2	.10	0	867	735	127	.01	0
18	1,090	.64	3.2	1.9	.93	.07	0	718	613	85	0	0
19	1,100	.74	2.5	1.3	.70	.04	0	542	326	38	0	0
20	1,130	.87	2.1	1.0	.52	.04	0	406	165	29	0	0
21	1,020	.53	1.8	.82	.35	.04	0	298	89	60	0	0
22	700	.33	1.5	.66	.24	.03	0	208	59	272	0	0
23	471	1.0	1.3	.57	.17	.02	0	134	45	179	0	0
24	330	1.4	1.0	.49	.13	.02	0	83	35	32	0	2.1
25	220	1.1	.92	.32	.11	.01	0	61	25	14	0	56
26	130	.78	.80	.26	.09	.01	0	49	19	8.2	0	59
27	71	.64	.66	.24	.06	0	190,	41	16	5.2	0	115
28	54	.59	.57	.20	.06	0	1,290	34	13	3.4	0	252
29	43	.43	.49	.15	1.7	0	1,710	28	12	2.5	0	293
30	24	.36	.38	1.6	------	0	1,320	22	10	2.0	0	257
31	13	------	.31	23	------	0	------	16	------	1.5	0	------
TOTAL	8,091	74.05	363.87	249.82	161.26	5.07	4,510	12,773	3,554.9	978.9	13.85	1,034.1
MEAN	261	2.47	11.7	8.06	5.56	.16	150	412	118	31.6	.45	34.5
MAX	1,130	13	106	64	37	2.3	1,710	1,230	735	272	2.4	293
MIN	10	.30	.11	.12	.06	0	0	16	1.4	1.5	0	0
CFSM	2.97	.03	.13	.09	.06	.002	1.71	4.69	1.34	.36	.005	.39
IN.	3.43	.03	.15	.11	.07	.002	1.91	5.41	1.51	.41	.005	.44
AC-FT	16,050	147	722	496	320	10	8,950	25,340	7,050	1,940	27	2,050

CAL YR 1971 TOTAL 39,785.12 MEAN 109 MAX 5,960 MIN 0 CFSM 1.24 IN 16.86 AC-FT 78,910
WTR YR 1972 TOTAL 31,809.82 MEAN 86.9 MAX 1,710 MIN 0 CFSM .99 IN 13.48 AC-FT 63,090

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1500	12.60	1,200	6-17	1800	11.09	768
4-29	0600	14.18	1,770	7-22	1700	10.80	700
5-15	1100	12.82	1,270				

08189300 Medio Creek near Beeville, Tex.

LOCATION.--Lat 28°28'58", long 97°39'23", Bee County, on left bank at downstream side of bridge on U.S. Highway 59, 8 miles northeast of Beeville, and 9 miles upstream from Parker Hollow Creek.

DRAINAGE AREA.--204 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 163.00 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 24.9 cfs (18,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,040 cfs Oct. 17 (gage height, 10.72 ft); no flow at times.
Period of record: Maximum discharge, 105,000 cfs Sept. 22, 1967 (gage height, 38.68 ft, from floodmark), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow; no flow at times each year.
Maximum stage since at least 1914, that of Sept. 22, 1967. A stage of about 31 ft (discharge, 25,500 cfs) occurred in September 1919, from information by local resident.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	.61	.24	.35	41	1.3	.03	0	.05	.03	0	0
2	9.4	.61	.24	.35	18	.76	.01	0	1.6	.01	0	0
3	5.4	.46	.35	.24	13	.76	.01	0	.67	.01	27	0
4	3.9	.46	.46	.24	8.9	.46	.01	0	.24	0	40	0
5	2.9	.46	.46	.24	6.5	.35	.01	0	.15	0	53	0
6	2.2	.46	.76	.15	5.1	.35	.01	.23	.10	0	22	0
7	.61	.35	1.0	.10	3.9	.24	.01	.10	.10	0	11	0
8	.46	.35	7.9	.10	2.9	.35	.01	.01	.10	0	7.3	0
9	.46	.35	10	.05	2.2	.24	.01	0	.10	0	4.6	0
10	.46	.35	6.8	.10	1.8	.24	.01	.19	.15	0	2.2	0
11	.35	.35	4.8	.05	1.8	.24	.01	.10	.24	0	1.5	0
12	.24	.35	3.5	.05	1.5	.24	0	110	.24	0	1.0	0
13	.24	.35	2.2	.03	1.0	.35	0	316	.24	0	1.0	0
14	.24	.35	2.2	.03	1.0	.35	0	34	.15	0	.61	0
15	.15	.35	1.3	.01	1.0	.35	0	99	.15	0	.35	0
16	.95	.24	.76	0	.76	.35	0	18	9.6	.03	.15	0
17	386	.24	.61	0	.76	.35	0	7.3	30	.10	.10	0
18	233	.46	.35	0	.46	.35	0	3.5	7.2	.10	.05	0
19	37	.46	.35	.01	.46	.24	0	1.3	2.9	.05	.03	0
20	51	.46	.35	.01	.35	.24	0	.46	.46	.05	.01	0
21	17	.46	.24	.03	.35	.24	0	.46	.35	.05	.01	0
22	8.3	.46	.15	.03	.35	.15	0	.35	.35	.05	0	0
23	6.0	.46	.10	.03	.35	.15	0	.35	.24	.10	0	0
24	4.1	.46	.10	.03	.35	.15	0	.24	.15	.05	0	.10
25	2.9	.46	.10	.01	.35	.10	0	.24	.10	.05	0	.10
26	2.2	.46	.10	.01	.35	.10	0	.24	.10	.05	0	1.6
27	1.5	.46	.10	.01	.35	.10	0	.15	.05	.03	0	181
28	1.0	.46	.10	0	.35	.10	0	.15	.05	.03	0	429
29	.76	.35	.10	0	1.0	.05	0	.10	.03	.03	0	53
30	.61	.35	.10	7.9	------	.05	0	.10	.03	.01	0	23
31	.61	------	.15	288	------	.03	------	.05	------	.01	0	------
TOTAL	800.94	12.45	45.97	298.16	116.19	9.33	.13	592.62	55.89	.84	171.91	687.80
MEAN	25.8	.42	1.48	9.62	4.01	.30	.004	19.1	1.86	.027	5.55	22.9
MAX	386	.61	10	288	41	1.3	.03	316	30	.10	53	429
MIN	.15	.24	.10	0	.35	.03	0	0	.03	0	0	0
AC-FT	1,590	25	91	591	230	19	.3	1,180	111	1.7	341	1,360

CAL YR 1971 TOTAL 4,584.84 MEAN 12.6 MAX 2,250 MIN 0 AC-FT 9,090
WTR YR 1972 TOTAL 2,792.23 MEAN 7.63 MAX 429 MIN 0 AC-FT 5,540

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-17	1700	10.72	1,040
5-13	0200	10.13	819
9-28	0400	9.67	681

08189500 Mission River at Refugio, Tex.

LOCATION.--Lat 28°17'30", long 97°16'44", Refugio County, on left bank at upstream side of upstream bridge of two bridges on U.S. Highway 77, 560 ft upstream from Missouri Pacific Railroad Co. bridge, and 0.2 mile southwest of Refugio.

DRAINAGE AREA.--690 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1.00 ft above mean sea level. Prior to Nov. 25, 1958, nonrecording gage at site 59 ft downstream at same datum. Nov. 26, 1958, to Apr. 18, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--33 years, 104 cfs (75,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,600 cfs May 13 (gage height, 28.25 ft); minimum, 10 cfs Apr. 26.
Period of record: Maximum discharge, 79,000 cfs Sept. 12, 1971 (gage height, 38.25 ft); minimum observed, 0.7 cfs Oct. 7, 9, 1940, Aug. 18-20, Sept. 5, 1945, Dec. 29, 31, 1949, Jan. 1, 1950, July 13, Aug. 28, 1963, July 18, 19, 22-26, 31, Aug. 1, 2, 1971.
Maximum stage since about 1899, that of Sept. 12, 1971. Flood of Sept. 21, 1967, reached a stage of 36.5 ft (discharge, 60,200 cfs). Flood of July 7, 1942, reached a stage of 33.3 ft (discharge, 41,700 cfs). Floods in August 1914 and May 17, 1938, reached a stage of 32.3 ft, from information by local residents.

REMARKS.--Records good. Several small diversions above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1923: Drainage area. WRD Texas 1971: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	81	38	37	376	31	13	77	67	31	27	21
2	162	78	39	37	177	39	12	51	69	30	31	23
3	142	73	39	37	99	33	13	37	68	29	375	21
4	126	68	39	37	65	26	13	29	96	28	1,460	20
5	193	65	46	36	48	23	13	26	70	28	814	20
6	189	63	59	35	41	22	13	234	65	28	297	20
7	165	60	242	35	36	21	13	2,760	59	27	129	21
8	133	58	136	36	31	20	13	3,870	59	27	89	21
9	108	57	85	36	29	20	12	1,530	66	27	63	20
10	98	56	66	36	28	20	13	470	65	27	49	20
11	91	54	53	36	27	20	13	3,990	316	26	47	22
12	86	52	48	35	27	18	13	5,580	923	31	41	21
13	82	51	45	34	27	18	13	7,330	313	39	37	21
14	79	50	43	33	27	18	12	7,950	177	32	33	24
15	76	49	40	32	26	22	12	3,450	191	26	31	22
16	109	48	39	31	25	22	12	1,150	151	42	29	23
17	2,680	48	37	30	24	21	11	1,860	156	515	28	28
18	5,290	49	36	29	23	19	11	857	123	469	28	25
19	4,080	48	35	28	22	18	11	356	97	186	27	22
20	851	47	35	27	22	17	11	233	71	93	26	22
21	439	45	35	26	22	17	11	178	59	89	25	22
22	343	44	34	25	22	17	11	150	51	131	25	21
23	240	45	34	25	22	16	11	128	47	296	24	20
24	176	47	34	24	22	16	11	115	43	258	24	41
25	145	45	34	24	22	15	11	104	41	194	23	36
26	127	43	35	23	22	15	11	94	38	144	23	46
27	114	42	35	23	22	15	88	89	37	70	23	633
28	104	41	36	23	22	15	1,450	82	35	46	22	2,790
29	97	41	36	23	27	14	824	76	33	38	21	1,220
30	91	40	37	43	------	13	155	71	32	33	21	315
31	86	------	38	198	------	13	------	70	------	29	21	------
TOTAL	16,911	1,588	1,588	1,134	1,383	614	2,830	42,997	3,618	3,069	3,913	5,581
MEAN	546	52.9	51.2	36.6	47.7	19.8	94.3	1,387	121	99.0	126	186
MAX	5,290	81	242	198	376	39	1,450	7,950	923	515	1,460	2,790
MIN	76	40	34	23	22	13	11	26	32	26	21	20
AC-FT	33,540	3,150	3,150	2,250	2,740	1,220	5,610	85,280	7,180	6,090	7,760	11,070

CAL YR 1971 TOTAL 154,923.10 MEAN 424 MAX 67,200 MIN .71 AC-FT 307,300
WTR YR 1972 TOTAL 85,226.00 MEAN 233 MAX 7,950 MIN 11 AC-FT 169,000

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-18	2130	24.84	6,090	5-17	1000	15.36	2,110
4-28	1700	15.07	2,020	6-12	0900	11.44	1,100
5- 8	0600	21.54	4,190	8- 4	1400	13.73	1,650
5-13	2300	28.25	10,600	9-28	1100	19.43	3,060

08189700 Aransas River near Skidmore, Tex.

LOCATION.--Lat 28°16'56", long 97°37'14", Bee County, on right bank 160 ft downstream from centerline of county road bridge, 3.8 miles downstream from confluence of West Aransas and Poesta Creeks, and 4.4 miles northeast of Skidmore.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 72.37 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 58.6 cfs (42,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,900 cfs May 10 (gage height, 28.80 ft); minimum daily, 1.6 cfs Aug. 25.
Period of record: Maximum discharge, 82,800 cfs Sept. 22, 1967 (gage height, 42.22 ft, from floodmark), from rating curve extended above 14,000 cfs on basis of slope-area measurement of peak flow; no flow at times in 1964-67, 1971.
Maximum stage since at least 1914, that of Sept. 22, 1967. Flood of September 1954 reached a stage of 33 ft (discharge, 19,600 cfs), from information by local resident.

REMARKS.--Records good. No known diversion. Chase Field Naval Air Station and city of Beeville discharge sewage effluent into the stream via Poesta Creek.

REVISIONS (WATER YEARS).--WRD Texas 1969: 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	6.9	5.5	5.5	21	5.3	1.8	3.7	5.9	4.4	2.6	2.1
2	22	6.8	5.7	5.1	9.5	6.0	1.8	3.4	5.9	4.4	1.8	2.0
3	55	6.5	5.7	5.0	6.7	4.7	1.9	3.0	6.5	4.5	1.9	2.0
4	69	6.0	5.7	4.8	5.4	4.2	2.0	2.8	6.0	4.6	6.1	1.9
5	31	6.0	6.8	4.4	4.9	3.8	2.0	2.6	5.6	4.7	6.7	1.8
6	36	6.1	7.5	4.4	4.9	3.6	2.1	5.7	5.6	4.7	4.5	1.7
7	24	6.0	8.9	4.7	4.8	3.7	2.5	34	5.5	5.6	4.2	1.7
8	18	6.0	9.1	4.7	4.5	3.6	2.6	26	5.4	6.1	4.0	1.7
9	41	6.1	6.8	4.6	4.5	3.5	2.6	9.3	5.7	5.4	3.7	1.8
10	20	5.9	6.0	4.6	4.5	3.5	2.6	2,890	6.2	4.9	3.9	1.9
11	14	5.6	5.5	4.5	4.6	3.5	2.6	4,010	7.5	4.8	2.4	2.0
12	13	5.6	5.3	4.4	4.7	3.4	2.7	1,430	6.5	5.4	2.4	1.9
13	12	5.7	5.0	4.2	4.8	3.5	2.6	1,630	6.2	5.3	2.6	1.8
14	11	5.9	4.9	4.1	4.9	3.4	2.5	174	10	5.3	2.6	2.3
15	11	5.9	5.0	3.8	4.7	3.5	2.4	77	14	5.0	2.6	2.7
16	274	5.7	5.1	3.7	4.5	3.4	2.3	34	77	6.7	2.2	3.1
17	799	5.7	5.0	3.9	4.4	3.2	2.2	322	51	11	2.1	2.6
18	488	6.2	4.8	4.0	4.1	3.0	2.1	50	17	15	2.0	2.3
19	61	5.9	4.7	4.1	4.1	2.9	2.0	22	9.4	9.6	2.1	2.0
20	32	6.1	4.7	4.2	4.2	2.8	1.8	15	6.2	8.3	1.9	1.8
21	24	6.0	4.7	4.2	4.2	2.9	2.4	10	5.6	7.7	1.8	2.9
22	17	5.7	4.7	4.2	4.2	2.8	5.9	9.6	5.3	8.0	1.7	3.5
23	13	6.2	4.6	4.1	4.2	2.7	6.2	8.8	4.8	9.6	1.7	5.8
24	10	6.0	4.5	4.1	4.4	2.8	6.0	8.1	4.8	7.4	1.7	5.9
25	9.1	5.9	4.6	4.0	4.4	2.7	5.8	7.8	4.7	7.4	1.6	40
26	8.6	5.7	4.8	3.7	4.2	2.6	5.5	7.2	4.7	2.6	1.7	18
27	8.3	5.9	4.8	3.4	3.9	2.3	4.9	6.9	4.6	3.2	1.7	1,360
28	7.8	5.7	4.9	3.4	3.9	2.2	4.9	6.8	4.6	5.9	2.0	305
29	7.4	5.6	4.8	3.4	4.8	2.2	5.5	6.5	4.4	5.4	2.2	50
30	7.2	5.6	4.8	56	------	2.0	5.0	6.2	4.2	5.0	2.2	19
31	7.1	------	5.1	121	------	1.8	------	6.1	------	3.9	2.1	------
TOTAL	2,173.5	178.9	170.0	300.2	153.9	101.5	97.2	10,828.5	310.8	191.8	82.7	1,851.2
MEAN	70.1	5.96	5.48	9.68	5.31	3.27	3.24	349	10.4	6.19	2.67	61.7
MAX	799	6.9	9.1	121	21	6.0	6.2	4,010	77	15	6.7	1,360
MIN	7.1	5.6	4.5	3.4	3.9	1.8	1.8	2.6	4.2	2.6	1.6	1.7
AC-FT	4,310	355	337	595	305	201	193	21,480	616	380	164	3,670

CAL YR 1971 TOTAL 47,205.85 MEAN 129 MAX 25,000 MIN 0 AC-FT 93,630
WTR YR 1972 TOTAL 16,440.20 MEAN 44.9 MAX 4,010 MIN 1.6 AC-FT 32,610

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-17	2400	13.60	1,500	5-17	1300	10.37	754
5-10	2300	28.80	12,900	9-27	1300	16.68	2,610
5-12	2300	20.14	4,340				

08189800 Chiltipin Creek at Sinton, Tex.

LOCATION.--Lat 28°02'48", long 97°30'13", San Patricio County, on left bank at upstream end of bridge on U.S. Highway 77, 0.2 mile upstream from Missouri Pacific Railroad bridge, and 0.8 mile northeast of Sinton.

DRAINAGE AREA.--128 sq mi.

PERIOD OF RECORD.--July 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 18.74 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,600 cfs May 13 (gage height, 19.07 ft); minimum, 0.12 cfs Apr. 23.
Period of record: Maximum discharge, 22,300 cfs Sept. 12, 1971 (gage height, 29.10 ft), from rating curve extended above 13,400 cfs; minimum, 0.12 cfs Apr. 23, 1972.
Maximum stages since about 1910, 30.27 ft Sept. 22, 1967, and 28.8 ft in April 1930, from information by local residents.

REMARKS.--Records good. No known diversions above station. An undetermined amount of water from oilfield operations enters stream upstream at various points. A recording rain gage is located at station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--The figure of peak discharge for water year 1971 has been revised as shown in the following table. It supersedes the figure published in WRD Texas, 1971.

REVISED PEAK DISCHARGE.--Sept. 19 (2200) 837 cfs (11.09 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	3.5	2.3	1.8	23	39	1.2	3.9	3.4	2.2	1.4	1.0
2	12	3.8	1.8	1.8	20	13	1.4	3.1	4.2	2.3	3.9	1.3
3	15	3.5	1.3	2.0	9.7	6.9	1.8	3.8	4.1	2.3	480	1.2
4	33	3.0	1.8	2.0	4.7	4.4	1.4	2.5	4.0	1.9	732	1.2
5	362	2.8	6.2	.90	3.0	2.8	1.1	1.4	3.7	6.0	352	1.5
6	509	2.1	4.2	1.1	2.8	2.1	1.4	27	3.4	2.3	132	1.3
7	287	2.8	2.1	.99	2.5	3.2	1.1	299	3.9	2.5	69	1.2
8	95	2.8	2.3	1.3	1.9	3.3	1.2	126	7.3	2.1	41	1.2
9	48	2.6	1.9	1.3	1.8	3.0	1.8	39	5.9	1.7	24	1.8
10	28	2.4	1.9	1.1	1.5	2.5	.94	366	4.0	2.1	14	1.2
11	15	3.0	1.9	1.7	1.8	2.7	.88	1,430	4.2	3.0	8.5	1.1
12	10	2.8	2.5	1.6	2.3	2.1	1.3	880	4.5	4.1	5.9	1.7
13	6.9	2.6	2.0	1.5	1.7	2.4	1.7	2,140	4.7	2.7	3.5	1.6
14	5.0	1.9	2.1	1.3	1.9	2.5	1.4	930	5.0	2.3	2.8	2.3
15	3.6	2.1	1.7	1.1	1.8	2.5	.87	589	9.8	2.2	2.8	2.0
16	322	2.4	2.2	1.6	1.3	1.5	.59	378	92	6.2	2.3	1.2
17	909	2.4	2.3	1.1	1.6	1.3	1.3	479	97	8.3	2.0	.89
18	733	3.3	1.9	1.3	1.6	1.4	1.3	415	46	11	5.0	1.2
19	344	2.4	1.8	1.8	2.0	1.6	.87	168	31	15	5.0	1.2
20	294	2.6	2.0	1.9	1.7	1.4	.89	76	30	11	3.0	1.8
21	372	3.3	1.9	1.6	2.0	1.0	.56	43	19	7.9	1.9	2.5
22	137	2.8	2.2	1.5	1.8	.90	.53	26	12	84	1.4	1.2
23	64	2.4	1.8	1.1	1.7	1.0	.60	16	7.7	97	1.5	1.0
24	36	2.1	1.7	2.1	1.5	1.2	.82	11	5.0	76	1.6	370
25	21	1.7	2.0	1.3	1.6	1.5	1.5	8.5	3.4	58	2.1	722
26	13	1.3	1.8	1.6	1.1	1.5	1.5	6.8	2.8	39	1.7	354
27	9.8	1.4	2.1	2.0	1.0	1.3	111	4.9	2.3	22	8.0	398
28	7.7	2.4	2.1	1.5	1.5	1.4	115	3.9	2.5	12	2.0	328
29	6.0	1.7	2.4	1.3	46	.99	21	3.5	2.2	7.1	1.2	106
30	4.5	1.8	2.1	14	------	1.1	7.8	4.0	1.9	3.7	1.3	53
31	3.6	------	2.3	6.3	------	1.2	------	3.8	------	2.0	1.6	------
TOTAL	4,727.1	75.7	68.4	63.49	146.8	112.69	284.75	8,488.1	426.9	499.9	1,914.4	2,363.59
MEAN	152	2.52	2.21	2.05	5.06	3.64	9.49	274	14.2	16.1	61.8	78.8
MAX	909	3.8	6.2	14	46	39	115	2,140	97	97	732	722
MIN	3.6	1.3	1.3	.90	1.0	.90	.53	1.4	1.9	1.7	1.2	.89
CFSM	1.19	.02	.02	.02	.04	.03	.07	2.14	.11	.13	.48	.62
IN.	1.37	.02	.02	.02	.04	.03	.08	2.47	.12	.15	.56	.69
AC-FT	9,380	150	136	126	291	224	565	16,840	847	992	3,800	4,690

CAL YR 1971 TOTAL 48,090.56 MEAN 132 MAX 18,900 MIN .44 CFSM 1.03 IN 13.98 AC-FT 95,390
WTR YR 1972 TOTAL 19,171.82 MEAN 52.4 MAX 2,140 MIN .53 CFSM .41 IN 5.57 AC-FT 38,030

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-17	0100	12.76	972	5-17	2000	8.56	617
5-11	0600	17.22	1,850	8- 4	0600	10.96	813
5-13	0600	19.07	2.600	9-25	0100	12.18	915

08190000 Nueces River at Laguna, Tex.

LOCATION.--Lat 29°25'41", long 99°59'46", Uvalde County, on right bank 0.5 mile downstream from Sycamore Creek, 1.0 mile northeast of Laguna, and at mile 395.4.

DRAINAGE AREA.--764 sq mi.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,119.72 ft above mean sea level. Prior to Jan. 26, 1925, nonrecording gage at site 2 miles downstream at different datum.

AVERAGE DISCHARGE.--49 years, 145 cfs (105,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,070 cfs Aug. 12 (gage height, 7.76 ft); minimum, 64 cfs July 13, 15, 16.
Period of record: Maximum discharge, 307,000 cfs Sept. 24, 1955 (gage height, 29.95 ft in gage well, 32.7 ft from floodmarks), from rating curve extended above 40,000 cfs on basis of float measurement of 110,000 cfs and slope-area measurements of 213,000 and 307,000 cfs; minimum, 2.6 cfs Mar. 14-16, 1957.
Maximum stage since at least 1866, that of Sept. 24, 1955. Flood in June 1913 reached a stage of about 29 ft (discharge, 210,000 cfs); flood of Sept. 21, 1923, reached a stage of about 26.5 ft (discharge, 160,000 cfs); from information by local residents. Discharge based on rating curve mentioned above.

REMARKS.--Records good. Many small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1562: 1930, 1931(M), 1932, 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	292	430	265	204	169	136	108	101	156	87	73	241
2	288	418	263	201	163	132	107	103	152	83	71	234
3	287	401	260	200	161	132	106	106	148	82	73	221
4	530	382	258	198	160	131	105	103	141	81	82	210
5	491	374	260	197	161	130	106	102	138	81	83	235
6	478	368	256	197	158	130	105	105	134	82	79	221
7	431	363	251	196	155	130	105	110	132	81	76	207
8	425	359	251	196	155	130	103	662	128	79	73	200
9	414	357	251	196	154	130	102	390	128	77	79	195
10	389	344	248	195	153	130	104	319	129	75	1,480	190
11	366	340	244	194	154	130	103	284	129	70	719	182
12	352	336	241	193	150	128	102	268	125	70	2,530	176
13	352	332	239	192	148	125	101	256	119	70	3,370	169
14	343	325	238	190	146	125	100	244	118	69	2,000	165
15	330	316	237	189	146	125	98	240	119	68	1,080	165
16	319	314	236	189	145	124	97	222	126	71	795	167
17	315	308	234	188	144	124	96	214	123	72	643	166
18	321	296	228	188	143	121	95	207	131	110	544	162
19	967	288	227	188	142	121	99	267	128	130	479	155
20	3,350	281	226	188	139	123	118	241	124	116	434	150
21	1,560	278	223	187	139	115	116	221	117	108	389	160
22	949	274	221	186	138	112	107	209	114	97	356	237
23	740	288	219	185	137	111	104	199	112	91	336	202
24	620	288	219	184	137	112	103	192	110	87	313	200
25	552	279	217	182	139	111	101	185	105	84	292	195
26	514	274	211	182	137	111	101	180	103	83	281	191
27	542	269	212	182	136	111	102	171	101	80	266	188
28	506	269	211	182	136	110	103	165	94	78	271	183
29	484	264	212	180	137	109	101	161	93	76	269	181
30	471	264	209	183	------	108	100	158	90	76	264	173
31	450	------	208	175	------	108	------	158	------	74	252	------
TOTAL	18,428	9,679	7,275	5,887	4,282	3,775	3,098	6,543	3,667	2,588	18,052	5,721
MEAN	594	323	235	190	148	122	103	211	122	83.5	582	191
MAX	3,350	430	265	204	169	136	118	662	156	130	3,370	241
MIN	287	264	208	175	136	108	95	101	90	68	71	150
AC-FT	36,550	19,200	14,430	11,680	8,490	7,490	6,140	12,980	7,270	5,130	35,810	11,350

CAL YR 1971 TOTAL 138,161 MEAN 379 MAX 24,000 MIN 32 AC-FT 274,000
WTR YR 1972 TOTAL 88,995 MEAN 243 MAX 3,370 MIN 68 AC-FT 176,500

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	0200	5.88	4,120	8-10	0300	4.92	2,450
5- 8	0400	4.40	1,010	8-12	1730	7.76	7,070

08190500 West Nueces River near Brackettville, Tex.

LOCATION.--Lat 29°28'55", long 100°14'20", Kinney County, at Wilson Ranch, 9 miles downstream from Loss Creek, 11 miles upstream from Liveoak Creek, 15.8 miles northeast of Brackettville, and at mile 40.2.

DRAINAGE AREA.--700 sq mi.

PERIOD OF RECORD.--September 1939 to September 1950, April 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,326.79 ft above mean sea level. Prior to Mar. 14, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--27 years, 37.8 cfs (27,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 69,700 cfs Aug. 12 (gage height, 22.58 ft, from floodmark); no flow at times.
Period of record: Maximum discharge, 246,000 cfs Sept. 20, 1964 (gage height, 31.3 ft, from floodmark), from rating curve extended above 4,500 cfs on basis of slope-area measurements of 10,000, 51,000, 150,000 and 246,000 cfs; no flow most of time.
Maximum stage since at least 1879, about 40 ft June 14, 1935 (discharge, 550,000 cfs, based on slope-area measurements of 580,000 cfs at site 33 miles upstream from gage and 536,000 cfs at site 24 miles downstream from gage), present site and datum, from gage-height relation of 1935 and 1955 flood peaks at site 0.6 mile upstream. Flood in 1900 reached a stage of about 34 ft, and flood of Sept. 24, 1955, reached a stage of 27.1 ft; from floodmark at present site (discharge, 150,000 cfs, by slope-area measurement).

REMARKS.--Records good. In ordinary years a large part of streamflow from basin is lost by seepage into the Balcones Fault Zone of the Edwards and associated limestones above station. No known diversion above station.

REVISIONS (WATER YEARS).--WSP 1312: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	18	4.9	.95	.11	0		0	.19		0	3.9
2	37	16	4.7	.88	.10	0		0	.53		0	3.7
3	36	14	4.2	.81	.10	0		0	.30		0	3.5
4	44	14	4.7	.63	.10	0		0	.11		0	3.4
5	42	13	4.2	.63	.11	0		0	.06		0	3.0
6	44	12	4.0	.63	.11	0		0	.02		0	2.8
7	39	11	4.0	.53	.10	0		0	.01		0	2.8
8	37	11	3.9	.48	.10	0		0	0		0	2.4
9	37	9.8	3.7	.40	.10	0		0	0		0	2.1
10	32	9.5	3.7	.36	.10	0		0	0		0	2.0
11	29	9.1	3.7	.33	.11	.01		0	0		0	1.8
12	29	8.8	3.4	.30	.10	.01		0	0		16,200	1.7
13	27	8.0	3.2	.30	.10	0		0	0		3,430	1.5
14	26	8.0	3.2	.27	.08	0		0	0		372	1.3
15	24	7.7	3.0	.27	.07	0		0	0		137	1.3
16	22	7.7	3.0	.24	.06	0		.11	0		70	1.2
17	23	7.0	2.8	.24	.04	0		.53	0		42	1.1
18	22	6.4	2.8	.24	.03	0		.44	0		26	.88
19	23	6.4	2.5	.24	.03	0		.16	.04		18	.81
25	40	5.6	1.8	.12	.01	0		0	.04		6.1	.48
26	34	5.4	1.7	.12	.01	0		0	.02		5.9	.44
27	31	5.4	1.5	.12	.01	0		0	0		5.4	.36
28	28	4.9	1.3	.12	.01	0		0	0		4.9	.33
29	24	4.9	1.2	.11	.01	0		0	0		4.4	.27
30	22	4.9	1.1	.14	------	0		0	0		4.2	.21
31	20	------	1.0	.12	------	0	------	0	------		4.0	------
TOTAL	4,145	258.9	89.4	10.47	1.80	.02	0	1.39	1.85	0	20,379.1	46.55
MEAN	134	8.63	2.88	.34	.062	.0006	0	.045	.062	0	657	1.55
MAX	2,600	18	4.9	.95	.11	.01	0	.53	.53	0	16,200	3.9
MIN	20	4.9	1.0	.11	.01	0	0	0	0	0	0	.21
AC-FT	8,220	514	177	21	3.6	.04	0	2.8	3.7	0	40,420	92

CAL YR 1971 TOTAL 59,568.40 MEAN 163 MAX 13,600 MIN 0 AC-FT 118,200
WTR YR 1972 TOTAL 24,934.48 MEAN 68.1 MAX 16,200 MIN 0 AC-FT 49,460

PEAK DISCHARGE (BASE, 1,000 CFS).--Oct. 20 (0730) 9,200 cfs (10.80 ft); Aug. 12 (1500) 69,700 cfs (22.58 ft).

08192000 Nueces River below Uvalde, Tex.

LOCATION.--Lat 29°07'25", long 99°53'40", Uvalde County, on right bank at McDaniel Ranch, 5.7 miles upstream from bridge on U.S. Highway 83, 8.8 miles southwest of Uvalde, 18.2 miles downstream from West Nueces River, and at mile 366.0.

DRAINAGE AREA.--1,947 sq mi.

PERIOD OF RECORD.--April 1939 to current year. October 1927 to April 1939 published as "near Uvalde"; records equivalent except during periods of low flow when seepage inflow between sites is a material factor.

GAGE.--Water-stage recorder. Datum of gage is 796.12 ft above mean sea level. Oct. 4, 1927, to Apr. 30, 1939, water-stage recorder at site 6.2 miles upstream at different datum.

AVERAGE DISCHARGE.--33 years, 103 cfs (74,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 44,100 cfs Aug. 13 (gage height, 13.83 ft); minimum, 31 cfs Aug. 6-9.
Period of record: Maximum discharge, 189,000 cfs Sept. 24, 1955 (gage height, 24.61 ft, from floodmark), from rating curve extended above 34,000 cfs on basis of conveyance study and slope-area measurement of peak flow; no flow at times in 1951-57.
Maximum stage since at least 1836, 40.4 ft June 14, 1935, from floodmarks (discharge at former site, 616,000 cfs, by slope-area measurement). Large floods occurred in 1901 and 1913, stages unknown.

REMARKS.--Records good. Part of flow of Nueces River enters Edwards and associated limestones in Balcones Fault Zone which crosses basin just north of Uvalde. At low stage most of headwater flow enters this formation. Many small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1732: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	464	232	175	133	83	61	55	74	48	34	175
2	218	441	233	174	130	82	61	48	72	47	34	165
3	216	419	231	172	122	82	60	47	70	47	35	157
4	1,310	404	230	172	119	80	58	45	67	49	35	149
5	538	393	237	174	119	79	56	46	65	49	33	145
6	463	377	245	173	119	78	56	49	63	48	33	147
7	414	371	233	169	116	79	59	45	61	48	32	147
8	406	369	226	162	113	77	57	43	60	46	32	138
9	387	350	224	161	111	76	57	122	61	46	35	135
10	353	355	217	161	110	75	57	189	59	45	40	137
11	324	350	214	159	110	75	56	175	58	44	224	126
12	313	340	212	158	110	75	55	161	58	43	439	118
13	308	330	210	156	108	74	55	148	56	42	18,500	116
14	305	321	209	152	107	73	54	140	55	41	3,550	113
15	280	321	202	144	105	73	52	137	55	41	1,530	111
16	264	312	200	143	103	72	52	138	53	41	985	112
17	260	312	199	142	101	71	53	130	56	41	756	106
18	258	303	196	142	100	70	52	123	52	43	601	105
19	260	294	195	139	98	70	51	119	50	42	503	103
20	1,790	285	189	138	97	74	51	137	50	40	439	99
21	2,160	285	185	136	97	69	48	147	50	39	390	96
22	1,310	281	182	136	96	71	48	135	52	38	343	111
23	885	281	181	131	95	72	48	126	53	38	314	131
24	743	281	175	131	91	71	47	117	54	38	288	136
25	656	273	175	129	90	68	48	108	54	37	268	136
26	613	265	175	129	89	68	48	101	53	36	255	146
27	557	257	174	128	87	65	48	93	52	36	240	159
28	570	242	174	127	85	63	47	88	50	36	224	138
29	530	242	182	127	85	64	46	82	49	35	212	132
30	507	242	181	133	------	63	46	79	48	34	198	125
31	488	------	175	134	------	62	------	76	------	34	186	------
TOTAL	17,909	9,760	6,293	4,607	3,046	2,254	1,587	3,249	1,710	1,292	30,788	3,914
MEAN	578	325	203	149	105	72.7	52.9	105	57.0	41.7	993	130
MAX	2,160	464	245	175	133	83	61	189	74	49	18,500	175
MIN	216	242	174	127	85	62	46	43	48	34	32	96
AC-FT	35,520	19,360	12,480	9,140	6,040	4,470	3,150	6,440	3,390	2,560	61,070	7,760

CAL YR 1971 TOTAL 167,583.4 MEAN 459 MAX 30,300 MIN 8.1 AC-FT 332,400
WTR YR 1972 TOTAL 86,409.0 MEAN 236 MAX 18,500 MIN 32 AC-FT 171,400

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.HT.	DISCHARGE
10- 4	0800	5.68	2,630
10-20	2100	5.70	2,660
8-13	0600	13.83	44,100

08193000 Nueces River near Asherton, Tex.

LOCATION.--Lat 28°30'00", long 99°40'55", Dimmit County, on right bank 28 ft downstream from bridge on Farm Road 190, 0.1 mile downstream from El Moro Creek, 5.5 miles northeast of Asherton, and at mile 288.3.

DRAINAGE AREA.--4,082 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 470.92 ft above mean sea level. Prior to Feb. 2, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 183 cfs (132,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,970 cfs Aug. 15 (gage height, 25.44 ft); no flow at times.
Period of record: Maximum discharge, 28,500 cfs Oct. 6, 1959 (gage height, 30.88 ft); no flow for many days each year. Maximum stage since at least 1900, 33 ft June 17, 1935; flood of June 30, 1913, reached about same stage, from information by local residents.

REMARKS.--Records good. Part of flow of the Nueces River and its headwater tributaries enters the Edwards and associated limestones in the Balcones Fault Zone which crosses basin just north of Uvalde. At low stages, most of headwater flow enters this formation. Considerable losses of floodflows into various permeable formations occur downstream from the Balcones Fault Zone. Flow slightly regulated by Upper Nueces Reservoir (capacity, 7,590 acre-ft) 13 miles upstream since March 1948. Many small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1118: 1944.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	542	253	183	134	74	7.8	0	35	.60	.6	197
2	267	521	252	183	136	68	5.8	.02	30	.30	1.3	184
3	252	502	253	180	130	64	4.0	.02	22	.50	1.5	167
4	380	473	252	182	123	71	3.8	.01	22	.16	1.7	155
5	1,760	454	252	176	120	75	2.3	0	24	.12	.5	144
6	3,110	438	263	172	123	75	1.9	.06	17	.06	0	135
7	3,030	420	264	169	123	73	1.4	.40	10	0	0	135
8	2,280	402	263	171	120	74	.80	.50	6.4	0	0	128
9	2,330	394	251	172	117	73	.60	.35	6.7	0	1.6	124
10	2,530	384	242	168	114	69	.50	.40	17	0	10	115
11	1,990	369	236	161	114	66	.50	2.0	38	0	26	103
12	1,340	358	231	154	113	60	.50	4.0	47	0	23	99
13	994	350	228	149	110	55	.40	1.7	50	0	16	89
14	720	344	224	144	110	56	.35	1.5	47	0	2,760	76
15	573	339	218	137	115	52	.35	.95	36	0	4,870	69
16	500	333	209	130	110	50	.30	16	36	0	3,930	71
17	451	328	208	133	102	48	.20	117	39	0	2,090	76
18	420	322	209	134	100	49	.16	120	42	0	993	81
19	402	313	208	132	99	46	.20	112	48	0	762	77
20	1,170	305	208	129	100	45	.20	102	48	0	587	68
21	3,280	302	203	127	99	48	.16	97	41	0	500	61
22	4,240	299	194	126	97	42	.09	95	32	0	447	65
23	3,310	295	189	119	93	33	.04	101	20	3.8	395	78
24	1,930	286	187	112	86	29	.01	108	15	9.6	358	87
25	1,180	277	190	104	86	26	0	102	13	9.2	326	86
26	922	273	192	94	83	24	0	90	12	7.2	292	89
27	776	270	190	91	76	25	0	80	10	5.3	269	98
28	683	266	187	90	76	29	0	65	8.6	3.2	259	103
29	633	265	185	94	76	24	0	55	5.5	1.6	241	102
30	604	257	184	109	------	15	0	47	1.9	1.1	226	96
31	569	------	182	128	------	10	------	40	------	.31	208	------
TOTAL	42,893	10,681	6,807	4,353	3,085	1,548	32.36	1,358.91	780.1	43.05	19,595.2	3,158
MEAN	1,384	356	220	140	106	49.9	1.08	43.8	26.0	1.39	632	105
MAX	4,240	542	264	183	136	75	7.8	120	50	9.6	4,870	197
MIN	252	257	182	90	76	10	0	0	1.9	0	0	61
AC-FT	85,080	21,190	13,500	8,630	6,120	3,070	64	2,700	1,550	85	38,870	6,260

CAL YR 1971 TOTAL 312,600.10 MEAN 856 MAX 18,100 MIN 0 AC-FT 620,000
WTR YR 1972 TOTAL 94,334.62 MEAN 258 MAX 4,870 MIN 0 AC-FT 187,100

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10- 6	2300	19.46	3,340
10-22	0800	22.36	4,340
8-15	1700	25.44	4,970

08194000 Nueces River at Cotulla, Tex.

LOCATION.--Lat 28°25'32", long 99°14'26", La Salle County, on left bank at downstream side of bridge on U.S. Highway 81, 0.3 mile upstream from Missouri Pacific Railroad Co. bridge, 0.8 mile south of Cotulla, 1.2 miles upstream from Lind Dam, and at mile 235.7.

DRAINAGE AREA.--5,260 sq mi.

PERIOD OF RECORD.--November 1923 to current year. November 1923 to September 1926 monthly discharge only, published in WSP 1312; figures of daily discharge for Oct. 31, 1923, to Sept. 30, 1926, published in WSP 588, 608, and 628, have been found to be unreliable and should not be used. Gage-height records collected in this vicinity 1914-17 and since 1922 are contained in reports of the National Weather Service (formerly U.S. Weather Bureau).

GAGE.--Water-stage recorder. Datum of gage is 368.08 ft above mean sea level. Oct. 31, 1923, to Aug. 3, 1924, nonrecording gage at approximate site of present gage at datum 7.28 ft higher. Aug. 4, 1924, to Nov. 19, 1934, nonrecording gage at site 5,000 ft downstream at datum 8.42 ft higher. Nov. 20, 1934, to July 14, 1938, water-stage recorder, and July 15, 1938, to Apr. 30, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--48 years (1924-72), 283 cfs (205,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Oct. 8 (gage height, 18.12 ft); no flow for many days.
Period of record: Maximum discharge, 82,600 cfs June 18, 1935 (gage height, 32.4 ft, from floodmarks), from rating curve extended above 43,000 cfs on basis of slope-area measurement of peak flow; no flow at times.
Maximum stage since at least 1879, that of June 18, 1935. Flood of June 19, 1899, reached a stage of 29.7 ft, from information by local residents.

REMARKS.--Records good. Part of flow of Nueces River and its headwater tributaries enter the Edwards and associated limestones in the Balcones Fault Zone just north of Uvalde. At low stages, most of the headwater flow enters this formation. Considerable losses of floodflows into various permeable formations occur downstream from the Balcones Fault Zone. Low flow slightly regulated by small storage reservoirs above station, most of which is diverted above station by pumping (see REMARKS for Nueces River near Asherton, station 08193000).

REVISIONS (WATER YEARS).--WSP 1732: 1957(M). See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	838	239	169	94	58	18	120	43	3.2	0	200
2	281	755	236	169	112	55	17	1,710	36	1.8	0	187
3	284	685	236	169	120	55	13	148	29	1.1	0	177
4	456	635	230	174	120	53	10	18	24	.62	0	167
5	3,470	588	227	172	120	49	7.4	6.2	23	.36	0	154
6	3,810	547	227	167	117	45	4.8	3.6	21	.23	0	141
7	4,530	508	230	164	112	49	3.2	2.6	18	.01	0	133
8	9,650	484	230	161	112	55	2.1	2.1	18	0	0	125
9	8,620	460	230	161	112	55	1.3	1.4	20	0	0	128
10	6,130	440	230	159	112	55	1.1	2.1	14	0	0	122
11	4,740	424	230	159	109	55	.84	2.6	13	0	0	115
12	4,340	412	230	154	109	58	.84	2.3	15	0	0	109
13	4,120	388	225	148	107	53	.96	2.1	11	0	0	96
14	3,400	372	219	143	104	49	.96	3.8	14	0	0	94
15	2,650	368	214	138	102	45	.84	12	29	0	0	91
16	2,050	360	211	133	96	41	.84	16	36	0	359	78
17	1,510	357	206	128	96	41	.62	17	36	0	1,140	62
18	1,130	350	198	122	96	39	.52	8.7	33	0	2,820	58
19	908	343	195	125	91	36	.36	3.6	30	0	3,590	62
20	1,860	332	195	128	89	36	.29	62	30	0	2,500	66
21	1,980	318	195	128	89	38	.17	104	29	0	1,730	71
22	3,120	308	195	125	86	36	.02	96	33	0	1,190	73
23	4,230	304	190	122	86	35	0	89	33	0	730	81
24	5,160	301	185	120	81	35	0	86	27	0	547	73
25	4,900	290	177	117	81	33	0	89	23	0	448	66
26	3,770	278	174	109	73	33	0	96	18	0	376	94
27	2,790	260	177	107	69	26	.81	99	13	0	329	107
28	2,100	251	182	96	66	23	2.7	89	10	0	290	78
29	1,610	248	182	86	62	21	1.1	78	6.8	0	257	81
30	1,240	239	174	83	------	18	.62	62	4.4	0	242	89
31	986	------	172	86	------	18	------	51	------	0	227	------
TOTAL	96,119	12,443	6,441	4,222	2,823	1,298	90.39	3,083.1	690.2	7.32	16,775	3,178
MEAN	3,101	415	208	136	97.3	41.9	3.01	99.5	23.0	.24	541	106
MAX	9,650	838	239	174	120	58	18	1,710	43	3.2	3,590	200
MIN	281	239	172	83	62	18	0	1.4	4.4	0	0	58
AC-FT	190,700	24,680	12,780	8,370	5,600	2,570	179	6,120	1,370	15	33,270	6,300

CAL YR 1971 TOTAL 472,042.00 MEAN 1,293 MAX 31,300 MIN 0 AC-FT 936,300
WTR YR 1972 TOTAL 147,170.01 MEAN 402 MAX 9,650 MIN 0 AC-FT 291,900

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 5	1900	14.84	5,040	5- 2	0700	12.82	2,740
10- 8	1800	18.12	10,400	8-19	0200	13.93	3,920
10-24	1600	15.00	5,250				

08194200 San Casimiro Creek near Freer, Tex.

LOCATION.--Lat 27°57'47", long 98°58'05", Webb County, at downstream side of bridge on State Highway 44, 11 miles upstream from Nueces River, and 22 miles northwest of Freer.

DRAINAGE AREA.--469 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 298 ft above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--10 years, 84.3 cfs (61,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 82,000 cfs Oct. 17 (gage height, 26.87 ft), from rating curve extended as explained below; no flow for many days.
Period of record: Maximum discharge, 82,000 cfs Oct. 17, 1971 (gage height, 26.87 ft), from rating curve extended above 21,000 cfs on basis of flow-through-culverts, contracted-opening, and flow-over-road determination of 82,000 cfs; no flow for many days each year.
Maximum stage since at least 1946 that of Oct. 17, 1971. Second highest stage, 26 ft (discharge, 65,200 cfs) occurred in 1954, from information by State Highway Department.

REMARKS.--Records good except those for periods of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	1.2	0	.80	.30	.10	1.3	3.3	.14	.04	0
2	11	11	1.8	0	.60	.30	.10	730	3.3	.09	.03	0
3	9.6	10	2.6	0	.60	.30	.10	396	3.0	.07	.03	0
4	9.4	9.0	4.8	0	.60	.30	.10	123	3.0	.07	.03	0
5	255	8.4	6.9	0	.60	.30	.10	58	2.8	.05	.03	0
6	4,800	7.8	5.5	0	.60	.20	.10	18	2.0	.05	.05	0
7	12,300	7.2	4.2	0	.50	.20	6.0	4.0	1.7	.05	.04	0
8	4,920	6.6	4.8	0	.50	.20	.25	11	155	.05	.03	0
9	2,030	6.2	4.4	0	.50	.20	.11	35	566	.05	.02	0
10	911	5.9	3.5	0	.50	.20	.11	548	68	.05	.01	4.0
11	394	5.5	2.9	0	.50	.10	.11	2,260	107	.04	.01	2.0
12	115	4.4	2.2	0	.50	.10	.09	5,410	124	.04	.01	1.0
13	65	4.2	1.6	0	.50	10	.09	2,360	574	.04	0	.40
14	48	3.3	1.6	0	.50	5.0	.09	904	49	.04	0	.20
15	38	3.3	1.4	0	.50	3.0	.07	1,840	15	.04	0	.10
16	37	2.9	1.3	0	.40	2.0	.05	4,570	6.4	.04	0	.05
17	36,600	2.7	1.2	0	.40	1.0	.04	1,940	4.5	.04	0	.01
18	15,700	2.6	1.1	0	.40	.80	.18	673	69	.04	0	0
19	8,000	2.4	1.0	0	.40	.60	.14	223	26	.04	0	0
20	4,000	2.0	1.0	0	.40	.50	.11	71	6.4	.04	0	0
21	2,000	2.0	.88	0	.40	.40	.09	42	5.1	.03	0	0
22	800	2.0	.88	0	.40	.30	.07	33	3.5	.03	0	0
23	300	1.8	.82	0	.40	.20	.05	23	2.0	.03	0	0
24	100	1.6	.82	0	.40	.20	.04	13	1.1	.03	0	0
25	50	1.4	.82	0	.40	.10	.03	8.4	.70	.07	0	150
26	35	1.6	.82	0	.40	.10	.03	5.8	.47	.07	0	50
27	30	1.6	.56	0	.40	.10	.02	4.8	.35	.05	0	10
28	25	1.4	0	0	.40	.10	.02	4.3	.25	.05	0	100
29	20	1.3	0	0	.40	.10	.01	4.3	.21	.05	0	40
30	17	1.2	0	2.0	------	.10	.01	4.0	.17	.04	0	10
31	14	------	0	1.0	------	.10	------	3.8	------	.04	0	------
TOTAL	93,649.0	133.3	60.60	3.0	13.90	27.40	8.41	22,321.7	1,803.25	1.56	.33	367.76
MEAN	3,021	4.44	1.95	.097	.48	.88	.28	720	60.1	.050	.011	12.3
MAX	36,600	12	6.9	2.0	.80	10	6.0	5,410	574	.14	.05	150
MIN	9.4	1.2	0	0	.40	.10	.01	1.3	.17	.03	0	0
AC-FT	185,800	264	120	6.0	28	54	17	44,280	3,580	3.1	.7	729

CAL YR 1971 TOTAL 132,412.10 MEAN 363 MAX 36,600 MIN 0 AC-FT 262,600
WTR YR 1972 TOTAL 118,390.21 MEAN 323 MAX 36,600 MIN 0 AC-FT 234,800

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 7	0500	22.60	15,800	5-16	0500	20.84	5,550
10-17	1200	26.87	82,000	6- 9	0100	15.58	975
5- 2	0600	16.22	1,150	6-13	1000	14.83	796
5-12	0500	21.35	6,850				

NOTE.--No gage-height record Dec. 28 to Apr. 6, July 27 to Sept. 30.

08194500 Nueces River near Tilden, Tex.

LOCATION.--Lat 28°18'31", long 98°33'25", McMullen County, on right bank at downstream side of pier of bridge on State Highway 16, 1.8 miles upstream from Kings Branch, 10.5 miles south of Tilden, and at mile 141.2.

DRAINAGE AREA.--8,192 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 183.5 ft above mean sea level.

AVERAGE DISCHARGE.--29 years (1943-72), 461 cfs (334,000 acre-ft per year).

EXTREMES.--Current year: Maximum peak discharge, 47,900 cfs Oct. 19 (gage height, 24.54 ft); minimum, 0.04 cfs Apr. 25, 26. Period of record: Maximum discharge, 76,500 cfs Sept. 24, 1967 (gage height, 26.57 ft); no flow at times. Maximum stage since about 1902, that of Sept. 24, 1967. Flood of Oct. 11, 1946, reached a stage of 26.46 ft (discharge, 70,000 cfs). Floods in June 1935 reached a stage of 23.7 ft and in July 1942 about 22 ft, from information by local residents.

REMARKS.--Records good. Part of flow of Nueces River and its headwater tributaries enters Edwards and associated limestones in the Balcones Fault Zone which crosses basin just north of Uvalde and upstream from this station. At low stage most of headwater flow enters this formation. Some losses of floodflows into various permeable formations occur downstream from the Balcones Fault Zone. Some diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1512: 1947. WSP 1732: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,060	2,630	313	200	178	226	21	.4	85	18	.26	278
2	493	2,200	415	193	149	536	20	.5	79	14	.20	260
3	404	1,820	358	189	117	299	19	94	71	12	.40	239
4	377	1,430	370	195	110	123	17	650	59	9.4	.44	217
5	608	967	394	190	116	85	16	837	55	11	.34	197
6	1,100	695	366	192	125	76	15	1,060	64	16	.33	179
7	2,230	620	352	194	129	70	15	1,470	50	7.4	.29	159
8	14,000	582	342	187	128	63	13	1,810	39	5.0	.34	138
9	34,700	552	333	185	122	57	11	1,080	38	3.8	.47	126
10	25,300	528	324	182	116	56	13	553	250	3.0	.51	119
11	17,000	510	319	177	115	58	11	321	648	2.2	.61	113
12	14,500	493	316	172	115	60	6.9	631	496	1.6	.69	117
13	13,600	477	312	171	115	61	4.9	928	263	1.2	.80	114
14	10,700	464	306	169	113	62	4.5	1,300	307	.91	103	106
15	7,610	451	297	163	110	80	4.1	2,470	593	.69	454	102
16	5,580	436	286	153	107	175	3.2	4,410	326	.60	142	93
17	6,670	423	276	145	106	104	2.0	4,510	90	.73	44	89
18	15,500	417	266	140	103	69	1.4	3,180	67	.73	26	89
19	42,700	407	261	137	99	58	.82	3,150	58	.72	101	89
20	31,600	401	255	132	98	51	.47	4,500	106	.64	534	70
21	25,500	392	245	127	98	46	.30	4,160	90	.60	667	63
22	17,300	379	239	124	95	43	.12	2,730	57	.80	759	61
23	14,800	370	235	124	90	40	.06	1,590	47	1.0	837	159
24	12,500	359	232	121	87	40	.06	365	41	.99	907	327
25	8,280	351	231	119	86	38	.05	185	36	.83	1,020	618
26	5,100	346	229	117	85	37	.05	134	34	.73	1,180	566
27	3,830	343	220	115	83	37	.10	114	34	.61	1,240	657
28	3,960	339	210	111	81	36	.16	102	31	.55	688	621
29	4,400	331	204	107	84	37	.20	97	27	.39	409	715
30	4,050	321	202	195	------	36	.36	97	22	.34	346	806
31	3,220	------	202	179	------	30	------	97	------	.34	306	------
TOTAL	348,672	20,034	8,910	4,905	3,160	2,789	200.75	42,625.9	4,163	116.80	9,768.68	7,487
MEAN	11,250	668	287	158	109	90.0	6.69	1,375	139	3.77	315	250
MAX	42,700	2,630	415	200	178	536	21	4,510	648	18	1,240	806
MIN	377	321	202	107	81	30	.05	.40	22	.34	.20	61
AC-FT	691,600	39,740	17,670	9,730	6,270	5,530	398	84,550	8,260	232	19,380	14,850

CAL YR 1971 TOTAL 999,102.22 MEAN 2,737 MAX 42,700 MIN 0 AC-FT 1,982,000
WTR YR 1972 TOTAL 452,832.13 MEAN 1,237 MAX 42,700 MIN .05 AC-FT 898,200

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 9	0800	23.59	36,900	5-16	2400	18.21	4,980
10-19	0600	24.54	47,900	5-20	1900	18.14	4,800
5- 8	0900	16.11	1,920				

08194600 Nueces River at Simmons, Tex.

LOCATION.--Lat 28°25'16", long 98°17'03", Live Oak County, on right bank 58 ft upstream from centerline of county road, 714 ft to right of right abutment of county road bridge, 1.1 miles north of Simmons, 1.5 miles upstream from Lang Creek, 10.1 miles upstream from Frio River, and at mile 113.7.

DRAINAGE AREA.--8,561 sq mi.

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 119.63 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 696 cfs (504,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 35,600 cfs Oct. 20 (gage height, 38.53 ft); minimum, 1.0 cfs Aug. 1-3.
Period of record: Maximum discharge, 72,000 cfs Sept. 25, 1967 (gage height, 43.21 ft); no flow at times.
Maximum stage since at least 1875, 43.5 ft (discharge, 75,800 cfs) in September 1919; floods in June 1935 and July 1942 reached a stage of 42.0 ft (discharge, 58,500 cfs), from information by local residents.

REMARKS.--Records good. Part of flow of the Nueces River and its headwater tributaries enters the Edwards and associated limestones in the Balcones Fault Zone which crosses the basin just north of Uvalde and upstream from this station. At low stage most of headwater flow enters this formation. Some losses of floodflows into various permeable formations occur downstream from the Balcones Fault Zone. Some diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,540	3,800	294	191	207	105	30	2.5	104	20	1.3	253
2	1,270	3,210	316	190	188	332	24	2.6	89	16	1.0	234
3	529	2,610	414	186	152	419	21	2.7	82	14	2.7	217
4	448	2,020	327	184	129	211	20	190	72	12	3.4	202
5	465	1,510	357	186	123	116	18	614	62	20	2.7	188
6	774	948	357	183	131	88	17	789	57	19	2.1	172
7	1,210	691	339	184	135	80	16	967	62	15	1.7	158
8	1,790	611	325	184	136	72	15	1,200	52	11	1.5	146
9	7,150	570	313	181	136	65	14	1,540	57	8.1	1.8	132
10	25,400	534	298	180	130	60	13	1,210	42	7.0	1.7	123
11	25,800	513	289	176	125	58	12	465	338	6.5	1.6	115
12	18,500	492	287	174	123	60	12	573	546	6.0	2.4	112
13	13,400	471	282	171	123	62	9.4	793	340	5.7	2.7	114
14	11,600	454	279	170	124	62	7.4	976	193	5.2	2.2	110
15	10,400	442	272	168	120	65	6.1	1,250	333	4.5	133	102
16	7,780	425	265	164	117	96	4.9	1,730	457	8.2	282	98
17	6,510	414	252	159	113	149	4.6	2,690	188	13	88	88
18	9,020	405	242	155	111	96	4.4	3,870	85	7.5	41	84
19	12,300	391	236	151	108	72	4.3	3,830	65	5.8	24	84
20	33,200	382	233	148	104	60	4.0	3,280	56	4.7	182	82
21	31,700	380	225	144	104	52	3.7	3,500	100	4.2	467	67
22	26,100	370	216	139	101	48	3.3	4,000	74	3.5	581	64
23	18,800	358	213	136	99	45	3.0	3,550	51	6.0	672	68
24	13,900	348	212	136	93	41	2.9	2,270	43	4.9	762	166
25	11,400	338	210	132	91	40	2.8	350	37	3.7	819	394
26	8,670	334	209	131	89	38	2.7	192	33	3.2	908	571
27	5,590	327	209	129	88	38	15	152	31	2.7	1,020	891
28	4,300	325	202	125	86	36	4.5	127	30	2.3	1,030	1,150
29	4,150	318	196	120	86	34	2.9	113	27	2.0	505	667
30	4,410	306	192	524	------	34	2.7	107	24	1.9	328	661
31	4,260	------	191	365	------	34	------	107,	------	1.6	283	------
TOTAL	322,366	24,297	8,252	5,566	3,472	2,768	300.6	40,442.8	3,730	245.2	8,153.8	7,513
MEAN	10,400	810	266	180	120	89.3	10.0	1,305	124	7.91	263	250
MAX	33,200	3,800	414	524	207	419	30	4,000	546	20	1,030	1,150
MIN	448	306	191	120	86	34	2.7	2.5	24	1.6	1.0	64
AC-FT	639,400	48,190	16,370	11,040	6,890	5,490	596	80,220	7,400	486	16,170	14,900

CAL YR 1971 TOTAL 936,618.16 MEAN 2,566 MAX 33,200 MIN 0 AC-FT 1,858,000
WTR YR 1972 TOTAL 427,106.40 MEAN 1,167 MAX 33,200 MIN 1.0 AC-FT 847,200

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-10	1800	37.00	29,000
10-20	1600	38.53	35,600
5-18	1830	24.31	4,090

08195000 Frio River at Concan, Tex.

LOCATION.--Lat 29°29'18", long 99°42'16", Uvalde County, on left bank 0.7 mile southeast of Concan Post Office, 15 miles upstream from Dry Frio River, and at mile 224.1.

DRAINAGE AREA.--405 sq mi.

PERIOD OF RECORD.--October 1923 to September 1929, October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,203.71 ft above mean sea level. Oct. 26, 1923, to July 28, 1924, nonrecording gage at site 86 ft upstream at datum 5.08 ft lower. July 29, 1924, to Oct. 3, 1930, nonrecording gage and Oct. 4, 1930, to May 18, 1939, water-stage recorder, at site 130 ft downstream at present datum.

AVERAGE DISCHARGE.--47 years (1924-29, 1930-72), 103 cfs (74,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,000 cfs May 7 (gage height, 9.60 ft); minimum, 62 cfs Apr. 25, 26.
Period of record: Maximum discharge, 162,000 cfs July 1, 1932 (gage height, 34.44 ft, from floodmarks), from rating curve extended above 44,000 cfs on basis of flow-over-dam measurement of 56,600 cfs and slope-area measurement of 162,000 cfs; no flow Aug. 5, 1956, to Jan. 6, 1957.
Maximum stage since at least 1869, that of July 1, 1932.

REMARKS.--Records good. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1342: Drainage area. WSP 1512: 1926, 1931-32, 1934(M), 1935-36. WSP 1712: 1958. WSP 1923: 1954(M), 1957(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	406	225	159	121	94	78	66	155	102	74	210
2	170	394	224	157	117	94	78	72	149	99	71	200
3	174	381	223	154	115	94	78	100	146	100	72	195
4	635	372	220	142	115	93	77	100	141	101	182	185
5	493	361	220	145	115	92	76	91	140	103	470	195
6	428	355	222	142	113	92	76	97	135	104	190	195
7	380	345	214	141	111	91	75	1,480	131	104	137	190
8	386	338	210	140	111	90	72	872	128	99	117	180
9	392	332	204	137	111	90	72	394	129	98	111	180
10	368	321	203	137	110	91	73	311	131	95	125	175
11	350	314	200	137	109	91	72	331	134	92	175	170
12	338	308	195	134	110	91	72	295	135	91	258	170
13	338	302	194	133	110	91	71	269	130	90	408	165
14	332	297	193	131	108	91	69	279	126	90	278	161
15	320	287	188	129	108	91	65	345	157	88	235	161
16	309	282	185	129	106	90	66	287	189	87	215	200
17	304	282	183	126	105	88	66	263	299	90	198	165
18	309	270	181	125	104	87	65	247	187	92	186	161
19	1,220	265	177	125	103	88	65	239	164	89	178	157
20	1,780	260	174	125	102	98	71	229	150	90	169	153
21	750	255	171	125	101	90	69	217	140	87	161	157
22	596	250	170	123	101	88	66	207	135	85	155	326
23	538	250	168	122	101	85	65	202	129	85	153	230
24	496	250	165	122	97	83	65	200	124	83	1,250	250
25	475	240	164	121	95	83	64	193,	120	81	194	240
26	461	235	161	120	97	83	64	185	119	78	1,330	230
27	531	230	161	119	95	82	72	177	118	75	434	225
28	489	225	161	118	98	80	71	168	112	73	304	215
29	451	220	161	120	98	82	67	162	110	72	255	210
30	432	226	158	133	------	81	67	169	110	72	230	200
31	418	------	158	124	------	79	------	165	------	74	220	------
TOTAL	14,843	8,853	5,833	4,095	3,087	2,743	2,107	8,412	4,273	2,769	8,535	5,851
MEAN	479	295	188	132	106	88.5	70.2	271	142	89.3	275	195
MAX	1,780	406	225	159	121	98	78	1,480	299	104	1,330	326
MIN	170	220	158	118	95	79	64	66	110	72	71	153
AC-FT	29,440	17,560	11,570	8,120	6,120	5,440	4,180	16,690	8,480	5,490	16,930	11,610

CAL YR 1971 TOTAL 78,534 MEAN 215 MAX 7,660 MIN 21 AC-FT 155,800
WTR YR 1972 TOTAL 71,401 MEAN 195 MAX 1,780 MIN 64 AC-FT 141,600

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	1000	5.14	880	8- 4	2300	5.56	1,360
10-19	1700	7.60	4,660	8-13	0100	4.74	538
10-20	0700	7.55	4,560	8-24	0230	9.40	8,500
5- 7	1830	9.60	9,000	8-26	1100	6.75	3,100
6-17	1000	5.63	1,450	9-22	0900	5.25	995

08196000 Dry Frio River near Reagan Wells, Tex.

LOCATION.--Lat 29°30'05", long 99°46'55", Uvalde County, on right bank 2.1 miles upstream from bridge on U.S. Highway 83, 3.5 miles upstream from Rock Creek, and 4.6 miles southeast of Reagan Wells.

DRAINAGE AREA.--117 sq mi.

PERIOD OF RECORD.--September 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,335.2 ft above mean sea level, adjustment unknown.

AVERAGE DISCHARGE.--20 years, 31.9 cfs (23,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,180 cfs June 17 (gage height, 7.67 ft); minimum, 6.0 cfs July 31, Aug. 2, 3.
Period of record: Maximum discharge, 123,000 cfs Aug. 13, 1966 (gage height, 27.6 ft, from floodmark), from rating curve extended above 900 cfs on basis of slope-area measurements of 11,400, 30,700, 64,700, and 123,000 cfs; no flow at times.
Maximum stage since at least 1875 occurred in 1880 (about 33 ft). Flood of June 14, 1935, reached a stage of 26.0 ft (discharge at site 2.6 miles upstream, 64,700 cfs) and that of July 1, 1932, reached a stage of 23 ft (discharge at site 2.0 miles upstream, 30,700 cfs), from information by local residents.

REMARKS.--Records good. Several small diversions above station.

REVISIONS (WATER YEARS).--WSP 1712: 1953. WSP 1923: 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	125	51	32	30	20	14	12	17	20	6.8	21
2	45	120	51	31	29	20	14	12	15	18	6.0	20
3	47	115	50	30	27	19	14	16	14	16	6.8	19
4	305	111	48	30	26	19	14	13	13	16	10	18
5	240	107	51	29	26	19	14	12	12	16	11	17
6	244	101	51	28	27	18	15	20	12	15	9.5	19
7	188	97	46	28	25	19	15	25	11	14	8.0	17
8	188	97	46	28	25	19	13	24	11	13	7.2	16
9	188	95	46	28	24	18	13	20	12	13	7.2	16
10	161	91	45	28	24	18	14	20	12	12	11	15
11	143	87	44	27	24	19	14	20	16	12	71	14
12	135	85	42	27	24	19	14	20	24	11	82	14
13	130	81	41	26	24	19	13	23	18	11	72	14
14	125	79	42	25	23	19	13	21	16	10	58	13
15	115	75	41	24	23	19	12	20	56	9.5	50	13
16	111	74	40	24	22	18	11	20	52	9.5	42	20
17	109	74	40	24	21	17	10	20	456	10	37	16
18	113	70	38	25	20	16	10	21	125	11	35	15
19	277	68	36	25	20	16	10	19	78	10	33	14
20	402	66	36	25	20	26	13	17	62	10	31	13
21	248	64	35	25	21	24	13	16	51	10	29	21
22	205	63	33	24	20	20	11	16	42	9.5	28	100
23	180	64	32	24	20	20	10	16	37	9.5	26	98
24	164	62	32	23	20	19	10	16	33	9.0	37	70
25	155	60	32	22	20	17	10	14	30	8.0	33	60
26	146	58	32	22	20	16	10	13	29	7.6	31	52
27	167	56	32	24	19	16	16	13	26	7.2	28	50
28	155	56	32	24	19	16	17	12	24	6.8	26	45
29	143	52	33	25	20	15	13	12	22	6.8	25	42
30	138	52	32	30	------	14	12	12	21	6.4	23	38
31	130	------	31	31	------	14	------	25	------	6.4	22	------
TOTAL	5,148	2,405	1,241	818	663	568	382	540	1,347	344.2	902.5	900
MEAN	166	80.2	40.0	26.4	22.9	18.3	12.7	17.4	44.9	11.1	29.1	30.0
MAX	402	125	51	32	30	26	17	25	456	20	82	100
MIN	45	52	31	22	19	14	10	12	11	6.4	6.0	13
AC-FT	10,210	4,770	2,460	1,620	1,320	1,130	758	1,070	2,670	683	1,790	1,790

CAL YR 1971 TOTAL 22,190.6 MEAN 60.8 MAX 1,980 MIN 3.8 AC-FT 44,020
WTR YR 1972 TOTAL 15,258.7 MEAN 41.7 MAX 456 MIN 6.0 AC-FT 30,270

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.HT.	DISCHARGE
10- 4	1200	3.20	423
10-19	1330	3.89	725
6-17	0800	7.67	3,180

08197500 Frio River below Dry Frio River near Uvalde, Tex.

LOCATION.--Lat 29°14'35", long 99°40'30", Uvalde County, on right bank 1.0 mile upstream from crossing of old Uvalde-Sabinal road, 5.0 miles downstream from Dry Frio River, 5.7 miles downstream from bridge on U.S. Highway 90, and 7.4 miles northeast of Uvalde.

DRAINAGE AREA.--661 sq mi.

PERIOD OF RECORD.--September 1952 to current year. Sum of records published as Frio River at Knippa and Dry Frio River at Knippa for period September 1952 to September 1953 is equivalent to record for this station.

GAGE.--Water-stage recorder. Datum of gage is 882.47 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 23.5 cfs (17,030 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,120 cfs Aug. 24 (gage height, 10.45 ft); no flow most of time.
Period of record: Maximum discharge, 88,500 cfs, Aug. 13, 1966 (gage height, 23.88 ft, from floodmark), from rating curve extended above 12,000 cfs on basis of slope-area measurements of 24,400, 53,000, and 88,500 cfs; no flow most of time.
Maximum stage since at least 1887, about 35 ft in 1894. Flood of July 1, 1932, reached a stage of about 30 ft. A higher flood than that of 1894 occurred prior to 1887. Above information by local residents.

REMARKS.--Records good. Part of flow of Frio River enters the Edwards and associated limestones in the Balcones Fault Zone which crosses basin just north of Uvalde and above this station. Most of low flow enters this formation. Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	88						0	0		0	.30
2	0	73						0	0		0	.08
3	0	58						0	0		0	0
4	94	45						0	0		0	0
5	257	39						0	0		0	0
6	177	33						0	0		0	0
7	117	25						0	0		0	0
8	94	20						901	0		0	0
9	115	18						202	0		0	0
10	90	11						82	0		0	0
11	71	4.0						34	0		0	0
12	58	2.0						30	0		0	0
13	57	1.5						19	0		0	0
14	60	1.2						1.6	0		0	0
15	48	.92						.37	0		0	0
16	36	.82						.07	0		0	0
17	25	.72						0	51		0	0
18	20	.53						0	57		0	0
19	34	.25						0	.38		0	0
20	1,460	.09						0	.01		0	0
21	564	.01						0	0		0	0
22	326	.01						0	0		0	0
23	250	.01						0	0		0	0
24	210	0						0	0		1,410	0
25	181	0						0	0		59	0
26	161	0						0	0		380	0
27	171	0						0	0		323	0
28	193	0						0	0		91	0
29	147	0						0	0		24	0
30	119	0			------			0	0		2.6	0
31	105	------			------		------	0	------		.62	------
TOTAL	5,240	422.06	0	0	0	0	0	1,270.04	108.39	0	2,290.22	.38
MEAN	169	14.1	0	0	0	0	0	41.0	3.61	0	73.9	.013
MAX	1,460	88	0	0	0	0	0	901	57	0	1,410	.30
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	10,390	837	0	0	0	0	0	2,520	215	0	4,540	.8

CAL YR 1971 TOTAL 33,504.18 MEAN 91.8 MAX 8,080 MIN 0 AC-FT 66,460
WTR YR 1972 TOTAL 9,331.09 MEAN 25.5 MAX 1,460 MIN 0 AC-FT 18,510

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1400	7.10	2,460	8-24	0930	10.45	8,120
5- 8	0300	7.34	2,690	8-26	1800	6.15	1,520

08198000 Sabinal River near Sabinal, Tex.

LOCATION.--Lat 29°29'35", long 99°29'49", Uvalde County, on right bank 108 ft upstream from concrete dam, 2.3 miles downstream from mouth of Onion Creek, and 12.5 miles north of Sabinal.

DRAINAGE AREA.--206 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 1,131.20 ft above mean sea level. Prior to Apr. 9, 1971, at site 0.3 mile downstream at same datum.

AVERAGE DISCHARGE.--30 years, 43.5 cfs (31,520 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,120 cfs Aug. 24 (gage height, 11.45 ft); minimum, 20 cfs Apr. 25-27.
Period of record: Maximum discharge, 55,200 cfs June 17, 1958 (gage height, 28.3 ft, from floodmark at present site), from rating curve extended above 6,900 cfs on basis of slope-area measurement of 55,200 cfs; no flow at times.
Maximum stage since at least 1892, about 33 ft July 2, 1932, from information by local residents. There is a legend that a flood in the middle 1800's reached a stage of nearly 63 ft, see flood history for station 08198500.

REMARKS.--Records good. Several small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1312: 1943(M), 1944(M), 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	264	115	76	60	42	34	24	70	37	24	139
2	86	256	115	76	58	38	27	36	68	34	22	130
3	86	252	115	76	56	40	29	46	66	32	24	121
4	874	246	112	72	54	40	29	32	64	32	32	115
5	424	246	112	72	56	40	30	27	62	32	60	109
6	376	230	121	72	58	38	30	37	60	32	42	103
7	340	225	112	72	56	38	30	324	58	32	34	96
8	364	220	112	72	54	38	30	212	58	32	30	92
9	364	215	109	72	52	37	29	109	58	32	30	90
10	328	210	103	70	54	37	30	125	60	30	37	90
11	316	205	98	68	54	37	30	133	62	29	58	90
12	310	200	98	66	54	37	29	115	64	29	112	86
13	304	195	94	66	52	37	29	103	64	27	90	82
14	298	190	96	64	52	37	29	92	62	26	76	80
15	276	185	92	62	52	37	27	90	58	26	66	80
16	276	185	90	62	50	37	23	88	60	26	62	96
17	272	180	90	62	50	37	23	86	64	27	58	86
18	272	165	88	62	48	37	23	84	70	32	56	82
19	292	155	88	62	48	37	23	80	62	35	56	80
20	415	150	88	62	48	46	23	80	58	34	52	78
21	376	145	86	62	48	48	24	76	52	32	50	76
22	352	150	82	60	46	44	23	76	48	32	48	92
23	334	150	82	58	46	42	23	76	48	30	48	92
24	322	145	82	56	46	42	23	76	46	30	1,740	112
25	310	135	82	56	44	38	22	74	42	30	160	109
26	304	135	82	56	42	37	20	74	40	30	582	98
27	328	130	82	56	42	37	23	72	40	29	264	96
28	316	125	82	56	42	35	45	70	38	27	200	94
29	292	120	80	52	42	34	29	70	37	26	176	92
30	280	120	78	60	------	34	27	70	37	24	157	84
31	272	------	78	64	------	34	------	70	------	24	148	------
TOTAL	9,851	5,529	2,944	2,002	1,464	1,192	816	2,727	1,676	930	4,594	2,870
MEAN	318	184	95.0	64.6	50.5	38.5	27.2	88.0	55.9	30.0	148	95.7
MAX	874	264	121	76	60	48	45	324	70	37	1,740	139
MIN	86	120	78	52	42	34	20	24	37	24	22	76
AC-FT	19,540	10,970	5,840	3,970	2,900	2,360	1,620	5,410	3,320	1,840	9,110	5,690

CAL YR 1971 TOTAL 43,904.75 MEAN 120 MAX 8,070 MIN .04 AC-FT 87,090
WTR YR 1972 TOTAL 36,595.00 MEAN 100 MAX 1,740 MIN 20 AC-FT 72,590

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	0300	6.97	1,360	8-24	0500	11.45	9,120
10-20	1000	6.06	448	8-26	0300	7.12	1,570
5- 7	1900	6.35	690				

08198500 Sabinal River at Sabinal, Tex.

LOCATION.--Lat 29°18'47", long 99°28'46", Uvalde County, on left bank 80 ft downstream from bridge on U.S. Highway 90, 1,100 ft downstream from Southern Pacific Lines railroad bridge, 0.8 mile west of Sabinal, and 5.8 miles upstream from Ranchero Creek.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--September 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.17 ft above mean sea level. Prior to July 29, 1958, nonrecording gage and July 29, 1958, to Mar. 19, 1964, water-stage recorder at site 80 ft upstream at same datum.

AVERAGE DISCHARGE.--20 years, 25.0 cfs (18,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,260 cfs Aug. 24 (gage height, 15.35 ft, from floodmark); minimum, 1.2 cfs July 18.
Period of record: Maximum discharge, 73,300 cfs June 17, 1958 (gage height, 33.3 ft); no flow at times.
Maximum stage since at least 1890, 40 ft Aug. 24, 1919, from information by local residents. Flood of July 2, 1932, reached a stage of 31 ft (discharge, 60,000 cfs), from information by Southern Pacific Lines. There is a legend that a flood in 1858 covered the townsite of Sabinal. This would call for a stage of 70 to 80 ft which seems unlikely. However, it is possible that a flood occurred in 1858 that covered part of the townsite and was higher than any flood since that date.

REMARKS.--Records good. Several small diversions for irrigation above station. Most of low flow of the Sabinal River enters the Edwards and associated limestones in the Balcones Fault Zone which crosses basin upstream from this station and below the next upstream station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	164	35	6.6	3.8	2.4	1.9	1.7	2.9	1.6	1.5	33
2	13	155	37	6.2	3.7	2.4	1.9	1.7	2.8	1.6	1.5	27
3	8.9	144	37	6.0	3.4	2.4	1.9	1.6	2.6	1.6	1.6	22
4	674	131	35	5.8	3.6	2.4	1.9	1.5	2.6	1.5	1.6	17
5	435	130	36	5.8	3.4	2.4	2.1	1.6	2.6	1.7	1.5	12
6	327	128	42	5.8	3.4	2.4	2.1	2.1	2.6	1.6	1.4	9.8
7	276	120	41	5.7	3.3	2.4	2.1	2.0	2.6	1.6	1.3	8.6
8	282	114	35	5.5	3.3	2.4	2.1	1.8	2.8	1.6	1.3	7.6
9	312	113	31	5.7	3.3	2.4	2.0	14	2.9	1.6	1.5	6.4
10	266	104	29	5.7	3.3	2.4	2.0	53	2.9	1.6	2.8	5.7
11	250	95	26	5.4	3.1	2.4	1.9	31	2.6	1.5	7.6	5.0
12	242	91	24	5.4	3.1	2.2	1.8	22	2.6	1.4	5.7	4.6
13	238	88	22	5.4	3.0	2.2	1.8	14	2.6	1.4	2.4	4.1
14	230	85	20	5.0	3.0	2.4	1.8	10	2.4	1.4	2.2	4.0
15	212	78	20	4.9	2.9	2.4	1.8	6.0	2.4	1.3	2.2	3.8
16	200	72	18	4.9	2.9	2.4	1.8	4.7	2.2	1.3	2.2	3.8
17	192	69	17	4.9	2.9	2.4	1.8	4.4	2.4	1.4	2.2	3.6
18	194	65	16	4.9	2.8	2.2	1.9	4.1	2.4	1.4	2.0	3.4
19	192	59	15	4.9	2.8	2.2	1.9	4.0	2.2	1.4	1.9	3.4
20	266	58	13	4.7	2.8	2.4	1.9	4.0	2.2	1.3	1.9	3.4
21	307	58	13	4.6	2.8	2.4	1.9	3.8	2.1	1.4	1.8	3.8
22	270	54	11	4.4	2.8	2.4	1.8	3.8	2.0	1.4	1.8	3.7
23	256	54	10	4.3	2.6	2.2	1.7	3.8	2.0	1.5	2.0	4.3
24	240	49	9.5	4.3	2.6	2.2	1.7	3.8	1.9	1.6	1,460	12
25	226	45	8.9	4.1	2.6	2.2	1.7	3.7	1.9	1.5	123	4.7
26	218	44	8.6	4.1	2.6	2.2	1.7	3.4	1.8	1.5	296	4.1
27	220	40	8.0	4.0	2.4	2.2	1.7	3.1	1.7	1.4	230	4.0
28	242	39	7.3	3.8	2.4	2.2	1.7	3.0	1.6	1.4	100	4.0
29	206	37	7.1	4.1	2.4	2.1	1.7	2.8	1.6	1.3	69	4.0
30	188	36	6.7	4.3	------	2.1	1.7	2.8	1.6	1.4	51	3.8
31	176	------	6.7	3.8	------	2.0	------	3.0	------	1.4	40	------
TOTAL	7,376.9	2,519	645.8	155.0	87.0	71.4	55.7	222.2	69.5	45.6	2,420.9	236.6
MEAN	238	84.0	20.8	5.00	3.00	2.30	1.86	7.17	2.32	1.47	78.1	7.89
MAX	674	164	42	6.6	3.8	2.4	2.1	53	2.9	1.7	1,460	33
MIN	8.9	36	6.7	3.8	2.4	2.0	1.7	1.5	1.6	1.3	1.3	3.4
AC-FT	14,630	5,000	1,280	307	173	142	110	441	138	90	4,800	469

CAL YR 1971 TOTAL 33,823.73 MEAN 92.7 MAX 9,030 MIN .23 AC-FT 67,090
WTR YR 1972 TOTAL 13,905.60 MEAN 38.0 MAX 1,460 MIN 1.3 AC-FT 27,580

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	1300	8.66	1,360	8-24	1000	a15.35	8,260
10-20	2200	6.42	336	8-26	1000	7.85	888
5-10	1430	6.03	232				

a From floodmark.

08200000 Hondo Creek near Tarpley, Tex.

LOCATION.--Lat 29°34'10", long 99°14'47", Medina County, on left bank 460 ft downstream from bridge on Ranch Road 462, 6.3 miles southeast of Tarpley, and 16.6 miles northwest of Hondo.

DRAINAGE AREA.--86.2 sq mi.

PERIOD OF RECORD.--August 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,169.1 ft above mean sea level (Magnolia Oil Co. bench mark).

AVERAGE DISCHARGE.--20 years, 32.2 cfs (23,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,200 cfs Aug. 24 (gage height, 11.47 ft), from rating curve extended above 2,600 cfs as explained below; minimum, 4.4 cfs Apr. 17, 18, 22, 23.
Period of record: Maximum discharge, 69,800 cfs June 17, 1958 (gage height, 28.2 ft, from floodmark), from rating curve extended above 2,600 cfs on basis of slope-area measurements of 18,600 and 69,800 cfs; no flow at times in 1952-57, 1962-64, 1967, 1971.
Maximum stage since at least 1907, that of June 17, 1958. Flood in July 1932, reached a stage of about 26 ft (58,500 cfs), from information by local resident.

REMARKS.--Records good. Several small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1712: 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	133	45	28	18	11	7.6	28	59	36	16	103
2	60	125	52	28	18	9.2	7.6	28	57	35	13	95
3	62	116	45	27	18	9.6	7.6	27	54	35	20	89
4	953	108	44	26	17	10	7.2	25	52	34	17	82
5	444	103	47	24	17	9.2	7.6	27	49	35	16	85
6	361	95	48	24	17	9.6	8.0	100	48	32	14	82
7	310	91	43	24	17	10	7.6	570	46	32	13	74
8	336	88	44	26	17	9.6	6.4	173	45	32	12	70
9	298	86	43	26	16	9.2	6.8	159	49	28	13	65
10	268	82	40	25	16	9.2	7.2	341	48	27	34	60
11	250	79	39	24	16	9.6	7.2	242	48	26	60	56
12	232	77	38	22	16	10	7.2	313	49	25	68	54
13	225	74	38	22	16	9.6	6.4	255	44	24	59	51
14	212	72	39	22	15	8.8	6.4	220	42	23	49	48
15	199	69	36	22	15	8.8	6.0	197	49	22	45	45
16	199	67	36	22	14	8.4	5.6	177	50	23	43	55
17	191	68	35	22	13	8.0	5.2	160	177	24	40	50
18	203	64	33	22	13	8.0	5.2	143	93	47	39	46
19	380	60	33	21	13	7.6	5.6	127	70	28	38	43
20	326	58	32	20	13	14	6.0	116	66	23	37	42
21	265	57	31	20	12	13	6.8	108	60	22	37	41
22	255	57	30	20	12	10	4.8	100	58	21	37	40
23	245	59	30	20	12	10	13	97	55	25	39	46
24	230	53	30	19	12	9.6	28	91	52	33	1,380	77
25	218	52	30	18	12	8.4	27	83	50	23	301	59
26	210	50	30	18	11	8.4	28	77	48	20	235	52
27	208	48	30	18	11	8.4	167	72	45	18	183	48
28	185	47	30	18	11	8.0	61	68	43	17	157	45
29	173	46	29	20	11	7.6	31	66	41	16	136	42
30	160	45	28	20	------	7.6	28	64	39	16	125	40
31	139	------	28	19	------	7.6	------	61	------	15	112	------
TOTAL	7,865	2,229	1,136	687	419	288.0	529.0	4,315	1,686	817	3,388	1,785
MEAN	254	74.3	36.6	22.2	14.4	9.29	17.6	139	56.2	26.4	109	59.5
MAX	953	133	52	28	18	14	167	570	177	47	1,380	103
MIN	60	45	28	18	11	7.6	4.8	25	39	15	12	40
AC-FT	15,600	4,420	2,250	1,360	831	571	1,050	8,560	3,340	1,620	6,720	3,540

CAL YR 1971 TOTAL 33,992.11 MEAN 93.1 MAX 6,250 MIN 0 AC-FT 67,420
WTR YR 1972 TOTAL 25,144.00 MEAN 68.7 MAX 1,380 MIN 4.8 AC-FT 49,870

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	0130	6.10	2,620	5-10	1400	5.00	1,400
10-19	2200	5.64	2,070	5-12	1930	4.82	1,260
4-27	1930	5.56	1,970	6-17	1730	4.31	896
5- 6	1200	3.72	570	8-24	0600	11.47	10,200
5- 7	0930	6.08	2,600				

08200700 Hondo Creek at King Waterhole near Hondo, Tex.

LOCATION.--Lat 29°23'26", long 99°09'04", Medina County, on left bank 0.3 mile downstream from county road low-water crossing, 3.1 miles north of Hondo, and 7.8 miles upstream from Verde Creek.

DRAINAGE AREA.--142 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 897.87 ft above mean sea level.

AVERAGE DISCHARGE.--12 years, 13.5 cfs (9,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,300 cfs Aug. 24 (gage height, 7.80 ft); no flow most of time.
Period of record: Maximum discharge, 44,500 cfs Aug. 13, 1971 (gage height, 16.0 ft, from floodmark), from rating curve extended above 9,800 cfs on basis of contracted-opening measurement of peak flow; no flow most of time.
Maximum stage since at least 1875, 21 ft in September 1919, from information by local resident. Other floods occurred in July 1932 (18 ft) and June 17, 1958 (17 ft).

REMARKS.--Records good Oct. 1 to May 24, fair thereafter. Most of the low flow of Hondo Creek enters Edwards and associated limestones in the Balcones Fault Zone which crosses basin upstream from station. Small diversions above station for irrigation, amounts unknown.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	48						0	.60	.40	.20	.50
2	0	43						0	.60	.40	.20	.45
3	0	37						0	.60	.40	.20	.40
4	676	30						0	.60	.40	.20	.35
5	380	28						0	.60	.40	.20	.30
6	290	24						0	.50	.40	.20	.30
7	224	22						688	.50	.40	.20	.30
8	206	21						180	.50	.40	.20	.30
9	222	20						88	.50	.40	.20	.25
10	164	16						561	.50	.40	.20	.25
11	144	11						258	.40	.40	.15	.25
12	132	8.0						176	.40	.40	.15	.25
13	114	6.8						304	.40	.40	.15	.25
14	102	4.4						164	.40	.40	.15	.25
15	84	2.3						124	.40	.40	.15	.25
16	78	1.1						93	.40	.30	.15	.20
17	68	.61						80	.40	.30	.15	.20
18	70	.69						62	.69	.30	.10	.20
19	110	.28						41	.50	.30	.10	.20
20	808	.08						27	.50	.30	.10	.20
21	160	.01						16	.50	.30	.10	.20
22	144	0						7.2	.50	.30	.10	.20
23	128	0						2.8	.50	.30	.10	.15
24	114	0						1.5	.50	.30	1,080	.15
25	102	0						1.3	.50	.30	268	.15
26	96	0						1.2	.50	.30	145	.15
27	90	0						1.1	.50	.30	70	.15
28	78	0						1.0	.50	.30	38	.15
29	65	0						.90	.50	.30	13	.15
30	60	0			------			.80	.50	.30	2.3	.10
31	54	------			------		------	.70	------	.30	.61	------
TOTAL	4,963	324.27	0	0	0	0	0	2,880.50	14.99	10.80	1,620.56	7.20
MEAN	160	10.8	0	0	0	0	0	92.9	.50	.35	52.3	.24
MAX	808	48	0	0	0	0	0	688	.69	.40	1,080	.50
MIN	0	0	0	0	0	0	0	0	.40	.30	.10	.10
AC-FT	9,840	643	0	0	0	0	0	5,710	30	21	3,210	14

CAL YR 1971 TOTAL 36,839.50 MEAN 101 MAX 11,700 MIN 0 AC-FT 73,070
WTR YR 1972 TOTAL 9,821.32 MEAN 26.8 MAX 1,080 MIN 0 AC-FT 19,480

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 4	1000	4.66	1,830	5-10	1800	5.23	2,670
10-20	0200	5.88	3,860	5-13	0100	3.59	753
5- 7	1400	5.53	3,160	8-24	1000	7.80	8,300

08201500 Seco Creek at Miller Ranch near Utopia, Tex.

LOCATION.--Lat 29°34'23", long 99°24'10", Medina County, on right bank 200 ft upstream from county road crossing, 4.5 miles downstream from Cascade Creek, and 7.9 miles southeast of Utopia.

DRAINAGE AREA.--43.1 sq mi.

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

GAGE.--Water-stage recorder, crest-stage gages, and concrete control. Datum of gage is 1,265.8 ft above mean sea level, adjustment unknown (Magnolia Oil Co. bench mark).

AVERAGE DISCHARGE.--11 years, 16.5 cfs (11,950 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20,200 cfs Aug. 24 (gage height, 10.90 ft), from rating curve extended as explained below; minimum, 2.6 cfs Apr. 25, 26.
Period of record: Maximum discharge, 20,200 cfs Aug. 24, 1972 (gage height, 10.90 ft), from rating curve extended above 910 cfs on basis of flow over and around end of dam field estimate of 14,100 cfs and slope-area measurement of 52,600 cfs; no flow for many days in 1963-64.
Maximum stage since at least 1901, 16.4 ft June 17, 1958, from floodmarks (discharge, 52,600 cfs, by slope-area measurement of peak flow).

REMARKS.--Records good except those above 1,000 cfs, which are fair. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	74	27	13	8.7	5.9	4.8	7.2	26	10	4.5	96
2	59	71	30	13	8.6	5.1	4.8	8.5	25	9.5	4.3	88
3	291	66	26	13	7.1	5.0	4.5	7.9	23	9.0	6.9	82
4	951	63	26	12	6.9	5.4	4.6	6.2	22	9.6	13	76
5	353	60	27	11	7.3	5.1	4.4	7.1	21	11	6.6	76
6	287	58	31	11	7.9	4.8	4.6	19	20	8.7	5.3	70
7	243	56	25	11	7.1	5.1	4.8	349	20	8.1	4.8	64
8	253	56	24	12	7.0	5.1	3.9	81	19	7.6	4.4	59
9	213	54	25	12	7.0	4.8	4.1	59	21	7.2	7.4	56
10	184	50	22	12	7.0	4.8	4.3	94	20	6.8	25	54
11	165	50	22	11	7.1	5.0	4.4	75	20	6.7	39	52
12	154	48	20	11	6.7	5.2	4.4	75	20	6.4	43	50
13	146	48	19	11	6.7	5.2	4.1	70	17	6.1	38	47
14	130	46	21	10	6.7	5.1	3.8	62	17	6.1	35	44
15	122	43	19	9.0	6.6	4.9	3.7	58	18	6.4	32	44
16	116	42	19	8.7	6.3	4.9	3.4	56	17	6.3	30	57
17	112	42	19	9.0	6.3	4.4	3.5	53	46	6.9	27	41
18	113	40	18	9.9	5.8	4.6	3.3	49	27	14	25	38
19	124	38	18	10	5.9	4.4	3.5	47	21	8.8	24	37
20	128	38	17	9.8	5.9	14	3.5	45	19	9.2	23	35
21	112	37	16	9.3	5.9	7.5	4.3	41	18	11	22	35
22	108	36	16	8.8	5.9	6.3	3.1	40	17	8.7	21	37
23	104	38	16	8.7	5.9	5.9	3.1	40	16	7.8	25	40
24	98	34	16	8.7	5.9	6.1	3.1	38	15	6.5	2,180	44
25	95	32	15	8.1	5.9	5.6	3.0	35	14	5.9	228	38
26	92	32	15	8.0	5.8	5.6	3.0	33	13	5.5	277	35
27	96	31	15	8.4	5.4	5.5	85	32	12	5.2	172	35
28	89	30	15	8.2	5.6	5.2	17	30	12	5.1	146	33
29	85	29	15	8.2	5.7	4.8	9.1	29	11	4.9	128	32
30	78	29	14	11	------	4.7	8.0	27	11	5.1	114	29
31	77	------	13	9.1	------	4.8	------	27	------	4.8	106	------
TOTAL	5,243	1,371	621	315.9	190.6	170.8	221.1	1,600.9	578	234.9	3,817.2	1,524
MEAN	169	45.7	20.0	10.2	6.57	5.51	7.37	51.6	19.3	7.58	123	50.8
MAX	951	74	31	13	8.7	14	85	349	46	14	2,180	96
MIN	59	29	13	8.0	5.4	4.4	3.0	6.2	11	4.8	4.3	29
AC-FT	10,400	2,720	1,230	627	378	339	439	3,180	1,150	466	7,570	3,020

CAL YR 1971 TOTAL 17,847.50 MEAN 48.9 MAX 1,710 MIN .22 AC-FT 35,400
WTR YR 1972 TOTAL 15,888.40 MEAN 43.4 MAX 2,180 MIN 3.0 AC-FT 31,510

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	2400	7.67	8,580	5- 7	0930	4.49	2,010
4-27	1730	3.86	1,190	8-24	0445	10.90	20,200
				8-26	0200	3.45	770

08202700 Seco Creek at Rowe Ranch near D'Hanis, Tex.

LOCATION.--Lat 29°21'43", long 99°17'05", Medina County, on left bank 2.9 miles north of D'Hanis and 8.0 miles downstream from Rocky Creek.

DRAINAGE AREA.--168 sq mi.

PERIOD OF RECORD.--November 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 900.88 ft above mean sea level. Prior to October 1970, published as "at Crook Ranch, near D'Hanis".

AVERAGE DISCHARGE.--11 years (1961-72), 10.4 cfs (7,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,100 cfs Aug. 24 (gage height, 23.70 ft), from rating curve extended above 16,000 cfs as explained below; no flow most of time.
Period of record: Maximum discharge, 25,100 cfs Aug. 13, 1971, Aug. 24, 1972 (gage height, 23.70 ft), from rating curve extended above 16,000 cfs on the basis of slope-area measurement of 35,800 cfs; no flow most of time.
Maximum stage since at least 1852, 35.7 ft May 31, 1935, present site and datum, from information by local resident. Other floods occurred Aug. 31, 1894, 33 ft; September 1919, 28 ft; July 2, 1932, 28.2 ft (discharge, 35,800 cfs, by slope-area measurement); June 17, 1958, 32.4 ft; all at present site and datum.

REMARKS.--Records fair. All of low flow of Seco Creek enters Edwards and associated limestones in the Balcones Fault Zone which crosses basin just north of Uvalde and upstream from station. No diversion above station. Beginning December 1958, discharge measurements have been made at Farm Road 1796 crossing 5.5 miles upstream from gage (see station 08202500 for records prior to water year 1965). Observations of no flow were made Nov. 30, 1971, Jan. 4, Feb. 11, Mar. 14, Apr. 18, May 25, June 27, Aug. 1, and Sept. 6, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0			0	1.4
2	0							0			0	.80
3	0							0			0	.26
4	2,460							0			0	.01
5	860							0			0	0
6	590							0			0	0
7	380							1.4			0	0
8	365							18			0	0
9	290							.56			0	0
10	210							.64			0	0
11	160							.26			0	0
12	125							.10			0	0
13	90							0			0	0
14	55							0			0	0
15	30							0			0	0
16	15							0			0	0
17	10							0			0	0
18	8.0							0			0	0
19	5.5							0			0	0
20	8.0							0			0	0
21	3.0							0			0	0
22	1.5							0			0	0
23	.20							0			0	0
24	.10							0			2,370	0
25	0							0			172	0
26	0							0			190	0
27	0							0			58	0
28	0							0			22	0
29	0							0			8.8	0
30	0				------			0			4.4	0
31	0	------			------		------	0	------		2.7	------
TOTAL	5,666.30	0	0	0	0	0	0	20.96	0	0	2,827.9	2.47
MEAN	183	0	0	0	0	0	0	.68	0	0	91.2	.082
MAX	2,460	0	0	0	0	0	0	18	0	0	2,370	1.4
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	11,240	0	0	0	0	0	0	42	0	0	5,610	4.9

CAL YR 1971 TOTAL 32,403.64 MEAN 88.8 MAX 7,230 MIN 0 AC-FT 64,270
WTR YR 1972 TOTAL 8,517.63 MEAN 23.3 MAX 2,460 MIN 0 AC-FT 16,890

PEAK DISCHARGE (BASE, 600 CFS).--Oct. 4 (0700) 7,520 cfs (15.18 ft); Aug. 24 (0900) 25,100 cfs (23.70 ft).

08205500 Frio River near Derby, Tex.

LOCATION.--Lat 28°44'10", long 99°08'45", Frio County, on left bank at downstream side of pier of bridge on U.S. Highway 81, 150 ft upstream from Missouri Pacific Railroad Co. bridge, 750 ft downstream from Leona River, 2.4 miles south of Derby, and at mile 122.4.

DRAINAGE AREA.--3,493 sq mi.

PERIOD OF RECORD.--August 1915 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 449.11 ft above mean sea level. Aug. 1, 1915, to Apr. 21, 1931, nonrecording gage and Apr. 22, 1931, to Mar. 6, 1940, water-stage recorder at railroad bridge 150 ft downstream at same datum.

AVERAGE DISCHARGE.--57 years, 128 cfs (92,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,010 cfs Oct. 22 (gage height, 8.61 ft); no flow July 13-15.
Period of record: Maximum discharge, 230,000 cfs July 4, 1932 (gage height, 29.45 ft, present site, from floodmarks at former site), from rating curve extended above 46,000 cfs on basis of slope-area measurement of peak flow; no flow at times.
Maximum stage since at least 1860, that of July 4, 1932.

REMARKS.--Records good prior to May 4, fair thereafter. Part of flow of Frio River and its headwater tributaries enters the Edwards and associated limestones in the Balcones Fault Zone just north of Uvalde. At low stages most of headwater flow enters this formation. Considerable losses of floodflows into various permeable formations occur downstream from the Balcones Fault Zone. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 568: 1915-16, 1918-22. WSP 763: Drainage area. WSP 1312: 1917-18(M), 1920-21(M). WSP 1923: 1954.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	468	93	58	50	30	26	11	24	1.3	2.5	151
2	83	440	93	56	50	30	26	16	22	.90	2.5	122
3	64	415	93	54	48	29	24	16	21	.64	2.5	122
4	175	375	93	56	48	29	22	14	20	.45	2.5	122
5	753	343	95	56	48	29	21	20	19	.30	2.5	72
6	2,960	320	98	56	48	29	22	30	19	.19	2.5	53
7	2,690	304	95	54	45	29	25	308	18	.12	2.5	37
8	1,600	285	95	54	42	29	24	639	18	.07	5.2	14
9	1,180	270	98	54	43	29	22	1,150	18	.04	5.2	14
10	949	255	95	56	46	29	22	861	17	.02	5.2	9.7
11	822	244	93	58	46	29	22	411	17	.02	12	6.3
12	711	232	86	58	43	29	23	1,180	16	.01	35	6.3
13	632	215	81	58	42	29	21	819	16	0	68	6.3
14	568	204	78	56	42	29	21	485	15	0	145	6.3
15	526	190	74	54	43	29	17	460	15	0	60	6.3
16	501	177	74	53	43	29	16	476	14	.76	35	14
17	460	170	74	51	42	29	16	594	14	5.2	28	14
18	431	164	72	50	40	29	17	680	13	5.2	22	14
19	403	145	72	50	40	29	16	624	13	5.2	22	14
20	399	133	70	50	39	29	15	543	12	5.2	16	14
21	1,410	127	68	53	36	29	15	501	10	5.2	12	14
22	3,730	119	68	54	35	28	13	497	8.9	2.5	12	14
23	1,960	116	66	53	35	28	13	444	7.5	2.5	12	14
24	1,200	116	66	51	33	28	13	316	6.3	2.5	5.2	14
25	840	108	64	50	35	28	13	208	5.2	2.5	5.2	14
26	719	105	64	48	33	29	13	170	4.3	2.5	1,920	72
27	654	103	64	46	32	28	13	145	3.5	2.5	1,690	72
28	598	100	64	43	30	26	12	88	2.8	2.5	1,220	419
29	615	98	64	42	30	25	11	46	2.2	2.5	827	122
30	589	95	62	48	------	25	10	32	1.7	2.5	427	72
31	518	------	60	50	------	26	------	26	------	2.5	262	------
TOTAL	28,806	6,436	2,432	1,630	1,187	882	544	11,810	393.4	55.82	6,868.5	1,645.2
MEAN	929	215	78.5	52.6	40.9	28.5	18.1	381	13.1	1.80	222	54.8
MAX	3,730	468	98	58	50	30	26	1,180	24	5.2	1,920	419
MIN	64	95	60	42	30	25	10	11	1.7	0	2.5	6.3
AC-FT	57,140	12,770	4,820	3,230	2,350	1,750	1,080	23,430	780	111	13,620	3,260

CAL YR 1971 TOTAL 218,670.95 MEAN 599 MAX 65,300 MIN 0 AC-FT 433,700
WTR YR 1972 TOTAL 62,689.92 MEAN 171 MAX 3,730 MIN 0 AC-FT 124,300

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 6	2300	8.02	3,440	5-12	1900	a5.10	1,690
10-22	1100	8.61	4,010	8-26	about	a7.33	2,950
5- 9	1800	a4.45	1,380		1600		

a From floodmark.

08206700 San Miguel Creek near Tilden, Tex.

LOCATION.--Lat 28°35'14", long 98°32'44", McMullen County, on left bank 25 ft downstream from State Highway 16, 0.3 mile upstream from mouth of Bruce Branch, 0.9 mile downstream from mouth of Far Live Oak Creek, 3 miles upstream from San Patricio Creek, 7 miles downstream from Clear Creek, 8.7 miles north of Tilden, and 13 miles upstream from mouth.

DRAINAGE AREA.--793 sq mi.

PERIOD OF RECORD.--January 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 242.95 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 61.0 cfs (44,190 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,020 cfs Oct. 20 (gage height, 15.25 ft); no flow at times.
Period of record: Maximum discharge, 13,700 cfs Sept. 22, 1967 (gage height, 25.99 ft); no flow at times in 1964-67, 1969-72.
Maximum stage since 1919, 32.6 ft in 1942; stage of 1919 flood not known, from information by local residents.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Five diversions above station (amounts unknown). At times excess water from Bexar-Medina-Atascosa Counties Water Improvement District No. 1 system enters San Miguel Creek Basin via Chacon Creek 52 miles upstream (amounts unknown).

REVISIONS (WATER YEARS).--WRD Texas 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	8.5	3.8	4.0	3.6	1.9	1.4	1.7	6.0	1.8	.17	0
2	4.0	8.0	4.0	4.0	2.8	1.7	1.3	4.0	6.0	1.8	.10	0
3	2.4	7.5	3.8	4.0	2.5	1.7	1.3	3.5	5.5	1.1	2.0	0
4	1.8	7.0	3.2	3.8	3.6	1.7	1.3	3.0	5.0	.53	1.5	0
5	693	6.5	4.9	3.8	5.2	1.6	1.3	2.7	4.5	1.4	.90	0
6	1,500	6.0	25	3.6	4.5	1.6	1.2	12	4.0	.17	.50	0
7	950	5.5	51	3.4	4.0	1.7	1.2	190	3.8	.15	.30	0
8	248	5.3	32	3.6	3.8	1.7	1.2	160	3.6	.12	.25	0
9	672	5.1	18	3.8	3.6	1.6	1.2	50	5.4	2.1	.20	0
10	246	4.9	12	4.0	3.4	1.6	2.5	115	6.2	1.5	.15	0
11	149	4.7	9.2	4.0	3.4	1.6	1.5	960	5.7	.97	.12	0
12	65	4.5	8.0	4.0	3.2	1.6	1.0	190	8.3	.97	.10	0
13	39	4.3	6.5	4.0	2.8	1.6	.80	910	14	.89	.09	0
14	31	4.3	6.0	4.0	2.5	1.6	.70	220	10	2.5	.09	0
15	26	5.0	5.5	3.6	2.7	1.6	1.8	160	8.3	3.6	.08	0
16	22	4.7	5.2	3.4	2.5	1.7	1.8	60	7.4	2.7	.07	0
17	21	4.5	5.0	3.4	2.4	1.7	1.3	40	82	2.4	.07	0
18	18	5.7	4.5	3.2	2.2	1.6	1.3	25	5.4	4.1	3.6	0
19	18	28	4.3	3.6	2.1	1.2	1.2	16	5.7	1.8	2.8	0
20	1,180	120	4.0	3.4	2.1	1.2	1.1	15	29	2.1	2.1	0
21	104	30	4.8	3.2	2.1	1.2	1.0	13	13	2.7	1.1	0
22	46	20	4.5	3.0	2.1	1.5	.90	11	7.1	2.5	.42	.21
23	24	14	4.5	3.4	2.1	1.5	.80	10	6.2	3.4	.13	10
24	18	12	4.3	3.2	2.1	1.4	.60	9.0	5.2	2.7	.07	35
25	16	9.9	4.3	3.2	2.1	1.1	.50	8.0	4.8	1.4	.04	1.5
26	14	8.3	4.3	3.0	2.1	1.2	.50	7.0	4.5	.89	.03	340
27	13	7.1	4.3	3.2	1.9	1.2	12	6.0	3.4	.42	.02	154
28	12	6.5	4.3	3.4	1.9	.97	5.5	5.0	2.1	1.1	0	2.0
29	11	5.2	4.0	3.4	1.9	.81	2.0	4.5	1.4	1.4	0	.29
30	11	4.3	4.0	5.2	------	1.4	1.2	4.0	.89	.81	0	.13
31	9.2	------	4.0	6.8	------	1.4	------	3.5	------	.29	0	------
TOTAL	6,174.3	367.3	263.2	115.6	81.2	45.88	51.40	3,218.9	274.39	50.31	17.00	543.13
MEAN	199	12.2	8.49	3.73	2.80	1.48	1.71	104	9.15	1.62	.55	18.1
MAX	1,500	120	51	6.8	5.2	1.9	12	960	82	4.1	3.6	340
MIN	1.8	4.3	3.2	3.0	1.9	.81	.50	1.7	.89	.12	0	0
AC-FT	12,250	729	522	229	161	91	102	6,380	544	100	34	1,080

CAL YR 1971 TOTAL 11,620.63 MEAN 31.8 MAX 1,500 MIN 0 AC-FT 23,050
WTR YR 1972 TOTAL 11,202.61 MEAN 30.6 MAX 1,500 MIN 0 AC-FT 22,220

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 6	1800	11.94	1,690	5-11	unknown	11.11	1,420
10- 9	1000	10.67	1,300	5-13	unknown	10.74	1,320
10-20	0700	15.25	3,020	9-26	2100	12.73	1,990

NOTE.--No gage-height record Mar. 31 to May 4, May 7 to June 8.

08207000 Frio River at Calliham, Tex.

LOCATION.--Lat 28°29'31", long 98°20'47", McMullen County, on right bank at upstream side of county bridge, 0.6 mile upstream from bridge on Farm Road 99, 0.8 mile north of Calliham, 10.7 miles downstream from San Miguel Creek, and at mile 20.8.

DRAINAGE AREA.--5,491 sq mi.

PERIOD OF RECORD.--October 1924 to April 1926 (monthly discharge only), April 1932 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 153.47 ft above mean sea level. Prior to Apr. 30, 1926, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--41 years (1924-25, 1932-72), 238 cfs (172,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,150 cfs Oct. 23 (gage height, 25.81 ft); minimum, 3.0 cfs Aug. 9, 10.
Period of record: Maximum discharge, 80,200 cfs July 6, 1932 (gage height, 39.2 ft, from floodmarks), from rating curve extended above 24,000 cfs on basis of contracted-opening measurement and flow-over-road measurement of 42,400 cfs; no flow at times.
Maximum stage since at least 1870, that of July 6, 1932, from information by local resident.

REMARKS.--Records good. Part of flow of Frio River and its headwater tributaries enter the Edwards and associated limestones in the Balcones Fault Zone which crosses basin just north of Uvalde. At low stages, most of headwater flow enters this formation. Considerable losses of floodflows into various permeable formations also occur downstream from the Balcones Fault Zone. Many small diversions above station for irrigation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 788: Drainage area. WSP 1923: 1932. WRD Texas 1971: 1932, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	610	130	85	85	53	33	22	55	16	4.5	930
2	100	571	211	85	80	50	32	22	50	13	4.1	951
3	83	532	153	85	73	43	31	22	46	12	4.9	400
4	78	466	130	83	73	41	31	21	46	10	5.4	173
5	148	404	130	80	73	40	31	18	43	16	5.4	128
6	1,240	362	145	80	71	40	31	22	41	28	4.5	98
7	1,940	323	170	80	71	40	31	23	36	19	4.1	80
8	2,700	292	178	80	69	38	29	158	32	15	3.7	69
9	4,540	270	158	80	69	37	28	245	40	9.8	3.4	56
10	4,960	257	143	80	69	36	28	209	38	11	3.7	48
11	3,960	245	135	80	67	36	27	241	71	11	4.9	41
12	3,080	235	133	80	65	36	27	1,300	46	9.2	5.9	38
13	2,240	227	128	80	65	36	27	1,200	40	7.4	4.9	35
14	1,600	219	125	80	65	36	27	1,220	51	6.4	4.1	32
15	1,240	215	118	80	62	36	27	960	71	5.9	24	29
16	1,000	207	113	80	60	36	27	842	71	6.9	52	27
17	933	200	110	80	58	37	26	1,010	50	9.2	153	25
18	741	198	105	80	56	35	25	871	126	6.9	110	23
19	699	185	103	78	56	33	24	542	46	7.4	71	23
20	1,620	248	100	76	56	33	23	283	38	8.0	50	23
21	3,030	325	98	76	55	33	21	211	56	5.4	36	20
22	5,060	193	95	73	55	33	20	180	36	5.9	28	52
23	5,660	168	95	73	55	33	19	160	29	8.0	22	29
24	2,910	158	90	73	55	33	18	150	28	8.6	19	481
25	1,430	148	88	73	53	33	18	118	23	7.4	16	272
26	1,670	143	88	73	53	35	18	103	20	7.4	16	202
27	1,890	143	88	73	51	35	25	93	20	6.4	14	4,210
28	1,560	140	88	73	50	35	40	83	19	5.9	13	3,060
29	1,130	138	88	73	50	35	32	76	19	5.9	215	377
30	864	133	88	95	------	35	22	65	18	5.9	502	203
31	709	------	85	90	------	33	------	58	------	4.9	704	------
TOTAL	58,925	7,955	3,709	2,457	1,820	1,145	798	10,528	1,305	299.8	2,108.5	12,135
MEAN	1,901	265	120	79.3	62.8	36.9	26.6	340	43.5	9.67	68.0	405
MAX	5,660	610	211	95	85	53	40	1,300	126	28	704	4,210
MIN	78	133	85	73	50	33	18	18	18	4.9	3.4	20
AC-FT	116,900	15,780	7,360	4,870	3,610	2,270	1,580	20,880	2,590	595	4,180	24,070

CAL YR 1971 TOTAL 234,473.79 MEAN 642 MAX 36,700 MIN 0 AC-FT 465,100
WTR YR 1972 TOTAL 103,185.30 MEAN 282 MAX 5,660 MIN 3.4 AC-FT 204,700

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G.HT.	DISCHARGE
10-10	0600	24.41	5,150
10-23	0400	25.81	6,150
9-27	1900	24.37	5,120

08208000 Atascosa River at Whitsett, Tex.

LOCATION.--Lat 28°37'18", long 98°17'02", Live Oak County, on right bank 1,000 ft upstream from bridge on Farm Road 99, 1.1 miles southwest of Whitsett, 3.9 miles downstream from La Parita Creek, and at mile 13.1.

DRAINAGE AREA.--1,171 sq mi.

PERIOD OF RECORD.--September 1924 to May 1926, May 1932 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 159.04 ft above mean sea level. Prior to May 8, 1926, nonrecording gage at bridge 1,200 ft downstream at datum 1.38 ft higher.

AVERAGE DISCHARGE.--41 years (1924-25, 1932-72), 133 cfs (96,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,680 cfs May 8 (gage height, 25.98 ft); minimum, 1.4 cfs Sept. 9 (gage height, 3.70 ft).
Period of record: Maximum discharge, 121,000 cfs Sept. 23, 1967 (gage height, 41.3 ft, from floodmark), from rating curve extended above 24,000 cfs on basis of slope-area measurement of peak flow; no flow at times.
Maximum stage since at least 1881, that of Sept. 23, 1967. Second highest stage, 41 ft (discharge, 106,000 cfs) occurred in September 1919.

REMARKS.--Records good. Considerable losses of floodflows into various permeable formations occur upstream from station. Records of the Lower Nueces River Water Supply District indicate that during the period Feb. 21 to Apr. 20, the Campbellton water wells discharged 349 acre-ft into the Atascosa River 12 miles upstream from this station. Several small diversions above station.

REVISIONS (WATER YEARS).--WRD Texas 1969: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	19	13	15	26	10	7.0	3.8	28	10	5.6	3.0
2	47	19	16	15	26	9.7	7.0	3.8	27	9.4	4.3	3.0
3	30	18	15	16	21	10	7.0	3.6	26	9.0	5.6	2.8
4	22	17	16	15	17	9.7	7.0	3.4	25	8.3	205	3.0
5	20	17	18	15	14	9.4	6.7	3.4	24	8.7	569	3.0
6	293	16	25	15	13	11	6.7	24	23	8.7	190	2.4
7	2,860	16	27	14	12	9.7	6.7	1,110	21	8.3	33	2.1
8	2,600	16	41	14	11	9.4	5.1	4,750	21	7.3	23	1.8
9	641	16	66	14	11	9.0	7.6	3,200	24	7.0	17	1.7
10	583	16	34	14	11	9.0	6.1	1,620	27	7.0	14	1.8
11	549	16	27	14	10	9.0	5.8	1,670	60	6.4	12	1.8
12	172	15	23	14	10	9.7	5.8	4,250	59	6.1	17	2.1
13	69	15	20	14	10	9.7	5.8	2,650	30	6.1	27	3.0
14	61	14	18	13	10	11	5.8	3,060	32	5.8	29	2.3
15	47	14	18	12	12	10	5.8	1,860	32	5.6	17	6.5
16	41	14	17	11	11	10	5.8	1,460	80	5.8	12	5.8
17	53	14	16	11	10	10	5.6	630	444	7.3	10	17
18	44	15	15	12	10	10	5.6	293	447	7.6	12	21
19	40	16	15	12	10	9.4	5.3	134	239	7.3	9.0	10
20	83	15	15	12	10	9.4	4.3	93	146	7.6	7.3	6.4
21	936	24	15	12	9.4	9.4	3.6	71	62	8.3	9.4	5.8
22	665	50	14	11	9.4	9.0	3.8	59	37	8.3	8.3	23
23	71	30	15	11	10	8.7	3.4	52	27	11	5.8	6.1
24	46	23	16	11	10	8.7	3.8	46	21	9.4	5.1	164
25	37	19	14	11	10	8.3	4.8	42	19	8.7	4.1	389
26	29	17	13	11	10	8.3	3.6	39	17	9.7	3.8	204
27	26	16	15	11	10	8.0	3.6	36	15	8.7	3.8	732
28	24	15	15	11	10	8.7	3.4	34	14	7.6	3.4	754
29	23	14	15	11	10	8.0	3.4	33	12	7.0	3.2	602
30	21	14	15	14	------	7.6	3.6	31	11	6.1	3.0	95
31	20	------	15	24	------	7.3	------	29	------	5.3	3.0	------
TOTAL	10,261	540	617	410	353.8	287.1	159.5	27,294.0	2,050	239.4	1,271.7	3,075.4
MEAN	331	18.0	19.9	13.2	12.2	9.26	5.32	880	68.3	7.72	41.0	103
MAX	2,860	50	66	24	26	11	7.6	4,750	447	11	569	754
MIN	20	14	13	11	9.4	7.3	3.4	3.4	11	5.3	3.0	1.7
AC-FT	20,350	1,070	1,220	813	702	569	316	54,140	4,070	475	2,520	6,100

CAL YR 1971 TOTAL 23,958.48 MEAN 65.6 MAX 3,410 MIN 0 AC-FT 47,520
WTR YR 1972 TOTAL 46,558.90 MEAN 127 MAX 4,750 MIN 1.7 AC-FT 92,350

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 7	2000	24.12	4,080	5-12	1200	24.94	4,660
10-21	2000	18.04	1,560	5-14	1300	23.16	3,500
5- 8	0600	25.98	5,680				

08210000 Nueces River near Three Rivers, Tex.

LOCATION.--Lat 28°26'10", long 98°11'06", Live Oak County, on left bank 100 ft downstream from Missouri Pacific Railroad bridge, 0.2 mile downstream from Frio River, 1.7 miles south of Three Rivers, and at mile 102.6.

DRAINAGE AREA.--15,600 sq mi.

PERIOD OF RECORD.--July 1915 to current year. Monthly discharge only for November 1919 to January 1920, published in WSP 1312.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 101.13 ft above mean sea level. Prior to Apr. 5, 1932, nonrecording gage at railroad bridge 100 ft upstream at same datum.

AVERAGE DISCHARGE.--57 years, 861 cfs (623,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 41,700 cfs Oct. 21 (gage height, 41.89 ft); minimum, 12 cfs Aug. 1-3.
Period of record: Maximum discharge, 141,000 cfs Sept. 23, 1967 (gage height, 49.21 ft); no flow at times.
Maximum stage since about 1875, that of Sept. 23, 1967.

REMARKS.--Records good. Part of flow of Nueces and Frio Rivers and their headwater tributaries enter the Edwards and associated limestones in the Balcones Fault Zone just north of Uvalde. At low stages, most of headwater flow enters this formation. Considerable losses of floodflows into various permeable formations occur downstream from the Balcones Fault Zone. Many small diversions for irrigation and municipal supply above station. Upstream regulation same as that for Nueces River near Asherton (station 08193000).

REVISIONS (WATER YEARS).--WSP 548: 1920-21. WSP 1562: 1916, 1918-21, 1922(M), 1923, 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,860	4,850	448	289	370	150	78	33	203	58	13	1,020
2	1,690	4,460	494	287	318	234	72	32	178	51	12	1,150
3	747	3,630	608	284	269	497	66	31	164	46	20	949
4	537	3,020	484	278	220	329	64	67	152	41	381	457
5	517	2,420	486	276	201	181	62	566	139	53	380	334
6	1,180	1,730	515	274	203	146	63	820	132	63	602	284
7	3,010	1,190	520	271	211	136	62	1,580	135	62	110	249
8	5,020	1,010	528	274	209	132	60	2,640	123	47	45	222
9	7,750	924	517	271	207	121	56	4,550	130	39	32	199
10	22,000	860	496	267	202	114	55	4,660	125	33	26	179
11	35,700	805	450	265	195	109	54	2,860	282	32	23	162
12	29,500	764	443	260	190	109	52	3,050	741	30	20	154
13	20,300	737	426	257	187	110	50	4,870	567	27	26	151
14	17,000	703	406	252	187	111	48	4,800	334	25	39	146
15	14,400	674	390	249	186	112	45	4,750	376	24	53	137
16	11,400	656	374	247	181	116	42	4,320	648	24	377	130
17	9,510	628	367	243	178	181	40	4,190	561	37	246	123
18	9,570	615	353	236	173	155	38	4,390	766	37	200	122
19	11,100	597	342	231	171	121	36	4,500	526	32	129	126
20	25,900	573	338	226	166	108	35	4,000	333	26	140	118
21	41,000	739	337	220	166	100	33	3,550	258	26	497	100
22	38,700	645	332	214	165	95	30	3,770	201	25	647	95
23	31,300	584	325	205	163	91	29	3,900	134	25	762	135
24	22,100	534	320	204	158	90	29	3,290	114	30	854	293
25	17,900	506	320	202	154	89	28	1,140	100	27	933	1,060
26	13,500	494	315	200	153	88	29	401	86	25	1,050	1,170
27	10,200	479	312	201	151	87	35	326	76	23	1,190	2,870
28	7,790	473	306	196	148	85	103	280	74	21	1,300	5,200
29	6,220	461	298	189	147	82	54	245	69	18	807	4,060
30	5,510	450	292	830	------	80	41	220	64	16	721	1,560
31	5,240	------	289	623	------	82	------	207	------	15	858	------
TOTAL	428,151	36,211	12,431	8,521	5,629	4,241	1,489	74,038	7,791	1,038	12,493	22,955
MEAN	13,810	1,207	401	275	194	137	49.6	2,388	260	33.5	403	765
MAX	41,000	4,850	608	830	370	497	103	4,870	766	63	1,300	5,200
MIN	517	450	289	189	147	80	28	31	64	15	12	95
AC-FT	849,200	71,820	24,660	16,900	11,170	8,410	2,950	146,900	15,450	2,060	24,780	45,530

CAL YR 1971 TOTAL 1,233,705.48 MEAN 3,380 MAX 41,000 MIN .19 AC-FT 2,447,000
WTR YR 1972 TOTAL 614,988.00 MEAN 1,680 MAX 41,000 MIN 12 AC-FT 1,220,000

PEAK DISCHARGE (BASE, 6,000 CFS).--Oct. 11 (1000) 36,600 cfs (41.32 ft); Oct. 21 (1200) 41,700 cfs (41.89 ft).

08210300 Ramirena Creek near George West, Tex.

LOCATION.--Lat 28°08'30", long 98°06'11", Live Oak County, near left bank at downstream side of bridge on U.S. Highway 281, 1.7 miles downstream from Elm Creek, and 13.5 miles south of George West.

DRAINAGE AREA.--84.4 sq mi.

PERIOD OF RECORD.--February 1968 to March 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 175.79 ft above mean sea level.

EXTREMES.--October 1971 to March 1972: Maximum discharge during period, 50,800 cfs Oct. 17 (gage height, 31.0 ft, from floodmark), from rating curve extended above as explained below; no flow for many days.
Period of record: Maximum discharge, 50,800 cfs Oct. 17, 1971 (gage height, 31.0 ft, from floodmark), from rating curve extended above 4,400 cfs on basis of indirect measurements of 13,600 and 50,800 cfs; no flow for many days each year.
Flood of Oct. 17, 1971, is the highest stage since at least 1928. Flood of Sept. 22, 1967 (caused by Hurricane Beulah), reached a stage of 19.7 ft (discharge, 13,600 cfs).

REMARKS.--Records good. No known regulation or diversion in vicinity of gage. Station discontinued Mar. 27, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1971 TO MARCH 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.4	3.5	.02	0	.02							
2	.1	8.8	5.0	0	0							
3	0	3.8	3.0	0	0							
4	0	2.7	.20	0	0							
5	0	2.5	3.0	0	0							
6	2.7	2.5	3.0	0	0							
7	1.5	2.1	.01	0	0							
8	.2	2.3	0	0	0							
9	7.2	2.1	0	0	0							
10	1.0	1.3	0	0	0							
11	0	.57	0	0	0							
12	0	.30	0	0	0							
13	0	.21	0	0	0							
14	0	.14	0	0	0							
15	0	.09	0	0	0							
16	12	.07	0	0	0							
17	12,000	.07	0	0	0							
18	97	.09	0	0	0							
19	24	.04	0	0	0							
20	22	.01	0	0	0							
21	11	.01	0	0	0							
22	7.5	.07	0	0	0							
23	6.7	.07	0	0	0							
24	5.9	.05	0	0	0							
25	5.3	.05	0	0	0							
26	5.0	.04	0	0	0							
27	5.0	.04	0	0	0							
28	4.7	.03	0	0	0							
29	4.4	.02	0	0	0							
30	3.8	.02	0	.02	------							
31	3.5	------	0	.05	------		------		------			------
TOTAL	12,230.9	33.59	14.23	.07	.02	0						
MEAN	395	1.12	.46	.002	.0007	0						
MAX	12,000	8.8	5.0	.05	.02	0						
MIN	0	.01	0	0	0	0						
AC-FT	24,260	67	28	.1	.04	0						

CAL YR 1971 TOTAL 20,848.67 MEAN 57.1 MAX 12,000 MIN 0 AC-FT 41,350
WTR YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -

08210400 Lagarto Creek near George West, Tex.

LOCATION.--Lat 28°03'34", long 98°05'48", Live Oak County, near right bank 75 ft downstream from bridge on U.S. Highway 281, 0.6 mile upstream from Dix Hollow, and 19.3 miles south of George West.

DRAINAGE AREA.--155 sq mi.

PERIOD OF RECORD.--April to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 197.77 ft above mean sea level.

EXTREMES.--April to September 1972: Maximum discharge during period, 1,900 cfs May 13 (gage height, 12.20 ft); no flow for many days.
Period of record: Maximum discharge, 1,900 cfs May 13, 1972 (gage height, 12.20 ft); no flow for many days.
Maximum stage since about 1887, 25.1 ft (discharge, 33,500 cfs) Oct. 17, 1971. Second highest stage, 24.3 ft (discharge, 29,500 cfs) occurred Sept. 12, 1971. The third and fourth highest floods occurred in 1914 and September 1967 (stages unknown).

REMARKS.--Records poor. No known regulation or diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	.06	0		
2								0	.03	0		
3								0	.01	0		
4								0	.01	0		
5								0	.01	0		
6								0	.03	0		
7								0	.03	0		
8								0	.02	0		
9								0	.27	0		
10								252	.58	0		
11								194	1.2	0		
12								348	.91	0		
13								754	1.4	0		
14								47	.91	0		
15								21	1.0	0		
16								12	.58	0		
17								26	.34	6.3		
18								18	17	4.3		
19								7.6	10	2.5		
20								5.0	3.8	.58		
21								3.8	1.6	.49		
22								3.1	.49	1.5		
23								2.6	.08	1.7		
24								2.0	.01	1.7		
25								1.6	0	.79		
26								1.2	0	.11		
27								.79	0	.01		
28								.58	0	0		
29								.34	0	0		
30					------			.20	0	0		
31		------			------		------	.11	------	0		------
TOTAL							0	1,700.92	40.37	19.98	0	0
MEAN							0	54.9	1.35	.64	0	0
MAX							0	754	17	6.3	0	0
MIN							0	0	0	0	0	0
AC-FT							0	3,370	80	40	0	0

WTR YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -

08210500 Lake Corpus Christi near Mathis, Tex.

LOCATION.--Lat 28°02'17", long 97°52'15", San Patricio-Jim Wells County line, on right upstream corner of outlet tower at right end of Wesley E. Seale Dam on Nueces River, 0.6 mile upstream from bridge on State Highway 359, and 4.5 miles southwest of Mathis.

DRAINAGE AREA.--16,656 sq mi.

PERIOD OF RECORD.--September 1948 to current year. Prior to October 1960, monthend records only. The Soil Conservation Service, U.S. Department of Agriculture, in cooperation with the Texas Board of Water Engineers (now Texas Water Development Board), collected fragmentary gage-height records in connection with sedimentation studies from Feb. 2, 1942, to July 10, 1947.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level. Prior to Oct. 1, 1957, nonrecording gage at various sites 0.2 mile upstream at datum 0.52 ft higher. Oct. 1, 1957, to Apr. 3, 1961, nonrecording gage near left end of Mathis Dam 0.2 mile upstream at present datum.

EXTREMES (at 0600).--Current year: Maximum contents, 308,700 acre-ft Oct. 18 (elevation, 94.30 ft); minimum, 276,300 acre-ft Apr. 27, May 1, 2, 5; minimum elevation, 92.76 ft Apr. 27.
Period of record: Maximum contents, 320,000 acre-ft Sept. 22, 1967, and Sept. 12, 1971; maximum elevation, 94.82 ft Sept. 22, 1967; minimum contents, 14,740 acre-ft May 5, 1951 (elevation, 67.62 ft).

REMARKS.--Mathis Dam was completed and storage began July 24, 1934. The original capacity at spillway crest (elevation, 74.5 ft) of 54,000 acre-ft had decreased to 39,400 acre-ft by March 1948. Wesley E. Seale Dam was completed and impoundment began on Apr. 26, 1958, submerging the old Mathis Dam. Wesley E. Seale Dam is a rolled-fill earthen dam, 5,930 ft long, with two spillways. On the 1,320-foot north spillway there are 33 gates which are operated by movable hydraulic lifts. The 27 gates on the 1,080-foot south spillway are electrically operated from the control tower. Gates were repaired and modified in August 1966; each gate is 37.5 ft wide. Water for municipal supply for the city of Corpus Christi is released through 4.0-foot-diameter cylinder valve and three 2.5- by 4-foot rectangular openings and is diverted from river at Calallen 35 miles downstream. The city of Alice withdrew 1,080 acre-ft from Lake Corpus Christi during the water year. Data regarding dam and lake are shown in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of gates (when closed) on north spillway	94.3	308,700
Top of gates (when closed) on south spillway	94.0	302,100
Crest of spillways	88.0	185,900
Invert of three 2.5- by 4-foot rectangular openings	55.5	140

COOPERATION.--Capacity curve, from a June 1956 survey, furnished by the Lower Nueces River Water Supply District. Elevation record furnished by city of Corpus Christi.

REVISIONS (WATER YEARS).--WSP 1923: 1953(M), 1957(M).

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

92.0	259,800	94.0	302,100
93.0	280,500	95.0	324,600

CONTENTS, IN ACRE-FEET, AT 0600, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302,100	304,300	302,100	304,300	302,100	293,400	291,200	276,300	299,900	295,600	282,700	291,200
2	304,300	302,100	302,100	302,100	299,900	295,600	289,100	276,300	299,900	293,400	282,700	291,200
3	302,100	302,100	302,100	302,100	302,100	293,400	289,100	278,400	299,900	293,400	282,700	293,400
4	304,300	302,100	302,100	306,500	297,800	295,600	291,200	278,400	302,100	293,400	284,800	293,400
5	302,100	302,100	304,300	297,800	297,800	295,600	289,100	276,300	299,900	291,200	284,800	293,400
6	304,300	302,100	304,300	297,800	297,800	295,600	289,100	278,400	299,900	293,400	284,800	293,400
7	304,300	302,100	302,100	297,800	302,100	295,600	289,100	280,500	299,900	293,400	284,800	293,400
8	302,100	302,100	302,100	297,800	299,900	295,600	289,100	284,800	299,900	293,400	284,800	293,400
9	302,100	304,300	299,900	297,800	297,800	295,600	286,900	289,100	299,900	291,200	284,800	293,400
10	299,900	304,300	302,100	299,900	297,800	295,600	286,900	295,600	299,900	291,200	282,700	291,200
11	302,100	302,100	302,100	299,900	297,800	295,600	286,900	302,100	302,100	291,200	282,700	291,200
12	302,100	302,100	302,100	299,900	299,900	293,400	284,800	302,100	302,100	289,100	282,700	291,200
13	299,900	302,100	302,100	299,900	297,800	295,600	284,800	299,900	302,100	289,100	282,700	291,200
14	302,100	302,100	299,900	302,100	297,800	297,800	286,900	304,300	302,100	286,900	282,700	291,200
15	302,100	304,300	302,100	302,100	297,800	297,800	284,800	302,100	302,100	286,900	282,700	291,200
16	302,100	304,300	302,100	297,800	299,900	297,800	286,900	302,100	302,100	286,900	280,500	291,200
17	304,300	302,100	304,300	297,800	297,800	297,800	284,800	302,100	299,900	286,900	280,500	289,100
18	308,700	302,100	302,100	297,800	297,800	297,800	284,800	302,100	302,100	286,900	280,500	289,100
19	297,800	302,100	302,100	297,800	297,800	297,800	282,700	302,100	302,100	286,900	280,500	289,100
20	299,900	299,900	302,100	297,800	295,600	297,800	280,500	302,100	302,100	286,900	280,500	289,100
21	302,100	299,900	302,100	297,800	295,600	297,800	282,700	299,900	299,900	286,900	280,500	289,100
22	299,900	299,900	302,100	297,800	295,600	295,600	282,700	299,900	299,900	286,900	280,500	289,100
23	302,100	302,100	302,100	297,800	293,400	295,600	280,500	302,100	299,900	289,100	280,500	289,100
24	302,100	302,100	302,100	297,800	295,600	293,400	280,500	299,900	299,900	286,900	280,500	291,200
25	302,100	302,100	302,100	297,800	293,400	297,800	278,400	302,100	297,800	286,900	280,500	293,400
26	302,100	304,300	302,100	297,800	295,600	293,400	278,400	299,900	297,800	286,900	284,800	291,200
27	302,100	302,100	304,300	295,600	295,600	293,400	276,300	299,900	297,800	284,800	284,800	295,600
28	302,100	302,100	304,300	297,800	293,400	293,400	280,500	299,900	295,600	284,800	286,900	302,100
29	302,100	302,100	304,300	297,800	295,600	297,800	278,400	299,900	295,600	284,800	289,100	302,100
30	299,900	302,100	302,100	302,100	------	293,400	278,400	299,900	295,600	284,800	289,100	302,100
31	302,100	------	304,300	304,300	------	293,400	------	299,900	------	282,700	289,100	------
(†)	94.00	94.01	94.10	94.07	93.67	93.60	92.86	93.90	93.70	93.13	93.40	94.00
(*)	-2,200	0	+2,200	0	-8,700	-2,200	-15,000	+21,500	-4,300	-12,900	+6,400	+13,000
MAX	308,700	304,300	304,300	306,500	302,100	297,800	291,200	304,300	302,100	295,600	289,100	302,100
MIN	297,800	299,900	299,900	295,600	293,400	293,400	276,300	276,300	295,600	282,700	280,500	289,100

CAL YR 1971..... * +38,400 MAX 320,000 MIN 191,000
WTR YR 1972..... * -2,200 MAX 308,700 MIN 276,300

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

08211000 Nueces River near Mathis, Tex.

LOCATION.--Lat 28°02'17", long 97°51'36", San Patricio-Jim Wells County line, on left bank 6 ft downstream from pier of bridge on State Highway 359, 200 ft downstream from Texas and New Orleans Railroad Co. bridge, 0.6 mile downstream from Wesley E. Seale Dam, 4 miles southwest of Mathis, and at mile 46.7.

DRAINAGE AREA.--16,660 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 27.53 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 870 cfs (630,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 72,700 cfs Oct. 17 (gage height, 40.48 ft); minimum daily, 84 cfs Mar. 10.
Period of record: Maximum discharge, 138,000 cfs Sept. 24, 1967 (gage height, 47.7 ft, from floodmark); minimum daily, 6.8 cfs Aug. 15, 1940.
Maximum stage since at least 1888, that of Sept. 24, 1967. A stage of about 40 ft occurred Sept. 20, 1919, from information by Texas and New Orleans Railroad Co. and is the second highest known.

REMARKS.--Records good. Flow regulated by Lake Corpus Christi 0.6 miles upstream (station 08210500). Numerous diversions above station for irrigation and municipal use. Water for municipal and industrial use at Corpus Christi is released from Lake Corpus Christi above gage and is diverted from river at Calallen 34 miles downstream. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,760	5,980	481	535	1,430	106	87	129	130	145	139	359
2	1,510	5,990	734	510	324	319	87	131	110	145	138	259
3	1,690	3,980	461	314	916	107	88	127	113	145	143	251
4	918	3,110	326	1,480	258	100	125	127	116	145	139	259
5	729	2,420	719	648	237	114	234	128	110	148	139	186
6	768	2,450	809	100	237	94	317	127	175	132	138	129
7	2,550	1,630	775	94	367	90	220	129	134	132	137	123
8	4,550	373	676	91	274	123	110	127	132	131	131	125
9	6,050	953	349	96	243	91	109	479	128	130	129	124
10	8,590	1,170	521	112	232	84	109	6,680	138	129	129	122
11	13,800	1,050	687	114	238	87	109	6,000	130	129	129	120
12	24,800	820	759	132	245	87	109	5,000	168	129	129	115
13	26,400	459	583	185	232	88	109	6,730	418	127	128	115
14	21,600	447	280	298	231	88	109	6,240	417	127	128	150
15	18,200	589	326	516	238	88	115	5,360	449	127	128	148
16	26,100	998	313	176	261	94	108	5,170	1,590	128	125	122
17	30,500	990	783	146	272	89	113	4,770	1,100	127	122	116
18	46,600	1,360	360	131	235	91	119	4,110	162	122	122	114
19	11,700	1,030	267	131	237	87	121	4,160	295	122	122	113
20	12,000	441	170	131	236	88	170	4,230	240	122	123	108
21	17,500	300	179	131	236	90	173	4,050	141	119	123	168
22	26,700	299	184	136	235	89	164	2,730	138	111	123	249
23	31,400	484	155	130	235	89	163	4,150	139	113	123	175
24	28,500	397	155	157	235	89	154	3,540	143	112	122	108
25	23,400	359	157	288	174	95	147	2,050	142	111	123	107
26	19,000	690	159	199	153	89	142	933	140	110	123	111
27	14,300	740	182	196	119	92	157	138	139	110	123	366
28	13,600	524	217	204	108	92	115	127	146	109	124	3,870
29	11,600	320	224	226	104	171	113	120	152	109	311	5,250
30	8,640	430	411	696	------	103	129	119	146	109	364	3,770
31	4,980	------	568	1,610	------	98	------	184	------	127	363	------
TOTAL	460,435	40,783	12,970	9,913	8,542	3,212	4,125	78,095	7,681	3,882	4,640	17,332
MEAN	14,850	1,359	418	320	295	104	138	2,519	256	125	150	578
MAX	46,600	5,990	809	1,610	1,430	319	317	6,730	1,590	148	364	5,250
MIN	729	299	155	91	104	84	87	119	110	109	122	107
AC-FT	913,300	80,890	25,730	19,660	16,940	6,370	8,180	154,900	15,240	7,700	9,200	34,380

CAL YR 1971 TOTAL 1,284,308 MEAN 3,519 MAX 56,800 MIN 34 AC-FT 2,547,000
WTR YR 1972 TOTAL 651,610 MEAN 1,780 MAX 46,600 MIN 84 AC-FT 1,292,000

08211800 San Diego Creek at Alice, Tex.

LOCATION.--Lat 27°45'59", long 98°04'31", Jim Wells County, at bridge on Edith Drive in Alice, 540 ft downstream from Texas and New Orleans Railroad Co. bridge, and 3.2 miles upstream from confluence with Chiltipin Creek.

DRAINAGE AREA.--319 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 189.60 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 17.5 cfs (12,680 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,200 cfs Oct. 17 (gage height, 17.70 ft); no flow for many days.
Period of record: Maximum discharge, 19,200 cfs Oct. 17, 1971 (gage height, 17.70 ft); no flow most of time each year. Maximum stage since at least 1928, 18.2 ft April 1949 (equivalent gage height in channel modified in 1955, 17.2 ft), from information by local residents.

REMARKS.--Records good. At end of year, flow from 170 sq mi above this station was partly controlled by 10 floodwater-retarding structures with a total combined capacity of 37,750 acre-ft below the flood-spillway crests, of which 35,980 acre-ft is floodwater-retarding capacity and 1,770 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1971, superseding figures published in WRD Texas, 1971, are given below:

Sept. 26..... 9.3	Sept. 29..... 1.2
27..... 3.5	30..... .4
28..... 1.7	

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
September 1971.....	14,959.1	8,960	0	499	29,670
WTR YR 1971.....	16,787.73	8,960	0	46.0	33,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.4	176	.40		.55	21		0	0	0		0
2	0	168	.40		1.1	3.1		17	0	0		0
3	0	152	.58		.24	1.1		4.3	0	0		0
4	0	108	.64		.13	.53		1.7	0	0		0
5	0	71	.70		.07	.15		.40	0	0		0
6	0	56	4.1		.04	.07		.11	.29	0		0
7	0	35	5.6		.01	.04		.02	.61	0		0
8	0	25	.70		0	.02		0	.21	0		0
9	1.1	19	.36		0	0		0	.36	0		0
10	.4	14	.27		0	0		.91	.38	0		0
11	.5	9.9	.21		0	0		21	.48	0		0
12	0	8.0	.21		0	0		37	.13	0		0
13	0	6.6	.21		0	0		24	.89	0		0
14	0	5.6	.70		0	0		13	2.1	0		0
15	0	4.6	.30		0	0		6.8	.36	0		0
16	93	5.3	.19		0	0		10	.10	0		0
17	11,900	5.6	.17		0	0		97	6.7	0		0
18	3,000	4.1	.13		0	0		9.0	19	0		0
19	1,010	1.1	.09		0	0		1.5	2.7	0		0
20	589	.84	.07		0	0		.55	.82	0		0
21	505	.84	.06		0	0		.19	.26	0		0
22	460	.91	.03		0	0		.05	.08	3.4		0
23	439	.52	.01		0	0		0	.02	6.5		0
24	418	.15	0		0	0		0	0	2.1		14
25	393	.08	0		0	0		0	0	.60		1.3
26	323	.34	0		0	0		0	0	.11		.18
27	214	.44	0		0	0		0	0	.01		9.4
28	193	.40	0		0	0		0	0	0		1.7
29	187	.30	0		53	0		0	0	0		.14
30	181	.36	0		------	0		0	0	0		0
31	179	------	0		------	0	------	0	------	0		------
TOTAL	20,086.4	879.98	16.13	0	55.14	26.01	0	244.53	35.49	12.72	0	26.72
MEAN	648	29.3	.52	0	1.90	.84	0	7.89	1.18	.41	0	.89
MAX	11,900	176	5.6	0	53	21	0	97	19	6.5	0	14
MIN	0	.08	0	0	0	0	0	0	0	0	0	0
AC-FT	39,840	1,750	32	0	109	52	0	485	70	25	0	53

CAL YR 1971 TOTAL 37,770.24 MEAN 103 MAX 11,900 MIN 0 AC-FT 74,920
WTR YR 1972 TOTAL 21,383.12 MEAN 58.4 MAX 11,900 MIN 0 AC-FT 42,410

PEAK DISCHARGE (BASE, 250 CFS).--Oct. 16 (0900) 299 cfs (5.58 ft); Oct. 17 (1300) 19,200 cfs (17.70 ft).

08211850 Lake Alice at Alice, Tex.

LOCATION.--Lat 27°47'25", long 98°03'39", Jim Wells County, on right bank just upstream from Alice Dam on Chiltipin Creek, 1.8 miles upstream from confluence of Chiltipin and San Diego Creeks, and 2.6 miles northeast of Alice.

DRAINAGE AREA.--150 sq mi.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by city of Alice).

EXTREMES.--Current year: Maximum contents, 4,410 acre-ft Oct. 17 (elevation, 198.35 ft); minimum, 307 acre-ft Sept. 20 (elevation, 190.58 ft).
Period of record: Maximum contents, 4,780 acre-ft Sept. 12, 1971 (elevation, 198.83 ft, from floodmark); minimum, 14 acre-ft Feb. 3, 1965 (elevation, 185.67 ft).

REMARKS.--Lake is formed by Alice Dam, which has a total length of 11,525 ft including 4,275 ft of west protective levee, a 1,000-foot temporary weir between the main embankment and the west protective levee, rolled earthfill west embankment 3,470 ft long, concrete siphon spillway 22.5 ft wide, and concrete main spillway 414 ft wide, and rolled earthfill east embankment 2,343 ft long. Service spillway is a concrete siphon type, 22.5 ft wide with two 3,200 gallons per minute pumps. Main spillway is concrete, 414 ft wide with thirteen 30-foot wide slots for gates. Emergency spillway is 50 wood gates 20 ft wide by 3.5 ft high, resting on concrete. Rolled earthfilled embankments are 15 ft thick on top with varying bottom widths. The levee is a rolled earthfill embankment 8 ft thick on top with varying bottom widths. Dam is property of Alice Water Authority and was built to store water for use by the city of Alice. Storage began Oct. 26, 1964; dam completed Mar. 16, 1965. Capacity table is based on data furnished by Alice Water Authority using revised maps surveyed in 1963. At end of year, flow from 73.4 sq mi above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 15,690 acre-ft below the flood-spillway crests, of which 14,780 acre-ft is floodwater-retarding capacity and 912 acre-ft is sediment-pool capacity. All of these structures were built during the period September 1960 to January 1965. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Records furnished by city of Alice show that they diverted 3,380 acre-ft for municipal use, and records furnished by city of Corpus Christi show that 1,080 acre-ft was diverted to Lake Alice from Lake Corpus Christi during the water year. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	205.0	-
Top of west levee	202.0	-
Top of east levee	199.0	4,910
Elevation siphon spillway	196.0	2,780

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

190.5	288	195.0	2,180
191.0	423	197.0	3,440
192.0	754	199.0	4,910
193.0	1,160		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,160	3,280	2,730	2,420	2,020	1,950	1,440	818	1,540	1,420	903	375
2	3,140	3,280	2,690	2,390	2,020	1,930	1,410	884	1,520	1,390	880	375
3	3,120	3,250	2,690	2,390	2,000	1,910	1,390	896	1,500	1,360	899	366
4	3,100	3,250	2,690	2,280	1,960	1,910	1,370	899	1,480	1,340	880	366
5	3,110	3,240	2,690	2,280	1,970	1,880	1,340	888	1,460	1,310	856	363
6	3,090	3,190	2,700	2,290	1,980	1,860	1,320	868	1,490	1,280	833	355
7	3,090	3,160	2,700	2,290	1,960	1,860	1,310	856	1,470	1,260	810	352
8	3,050	3,150	2,700	2,290	1,940	1,830	1,280	845	1,480	1,230	784	349
9	3,050	3,160	2,680	2,290	1,940	1,820	1,260	845	1,520	1,210	769	355
10	3,050	3,130	2,670	2,280	1,920	1,810	1,250	845	1,510	1,170	740	349
11	3,030	3,120	2,670	2,260	1,920	1,790	1,220	1,130	1,490	1,140	725	358
12	3,020	3,110	2,660	2,250	1,920	1,760	1,190	1,130	1,490	1,120	701	349
13	2,990	3,060	2,650	2,240	1,910	1,760	1,160	1,150	1,490	1,120	673	363
14	2,980	3,050	2,620	2,210	1,900	1,760	1,140	1,150	1,480	1,100	666	375
15	2,960	3,020	2,610	2,160	1,880	1,760	1,110	1,220	1,450	1,060	655	377
16	3,290	3,010	2,590	2,140	1,870	1,740	1,080	1,220	1,650	1,030	641	355
17	4,370	2,990	2,580	2,140	1,850	1,730	1,050	1,500	1,730	1,070	608	325
18	3,530	2,950	2,560	2,140	1,830	1,710	1,050	1,560	1,750	1,060	591	320
19	3,590	2,920	2,550	2,120	1,800	1,690	1,030	1,590	1,740	1,040	565	312
20	3,480	2,910	2,540	2,120	1,780	1,670	1,030	1,590	1,720	1,040	578	307
21	3,420	2,900	2,530	2,120	1,770	1,660	1,010	1,590	1,700	1,040	561	312
22	3,420	2,870	2,520	2,110	1,740	1,630	984	1,590	1,690	1,060	535	315
23	3,420	2,860	2,500	2,100	1,730	1,630	960	1,590	1,660	1,070	507	336
24	3,400	2,830	2,490	2,080	1,720	1,640	927	1,590	1,630	1,060	478	1,150
25	3,370	2,830	2,470	2,040	1,710	1,610	896	1,590	1,600	1,060	459	1,160
26	3,350	2,830	2,460	2,020	1,690	1,600	876	1,580	1,570	1,050	432	1,210
27	3,350	2,810	2,450	2,020	1,670	1,570	880	1,570	1,540	1,030	409	1,550
28	3,340	2,800	2,440	2,000	1,650	1,540	880	1,570	1,510	1,000	383	1,550
29	3,300	2,780	2,420	1,980	1,920	1,500	856	1,570	1,480	984	363	1,520
30	3,280	2,750	2,420	2,000	------	1,480	833	1,560	1,450	955	375	1,490
31	3,280	------	2,420	2,020	------	1,460	------	1,550	------	927	372	------
(†)	196.76	195.95	195.42	194.73	194.54	193.64	192.21	193.82	193.62	192.45	190.82	193.71
(*)	+100	-530	-330	-400	-100	-460	-627	+717	-100	-523	-555	+1,118
MAX	4,370	3,280	2,730	2,420	2,020	1,950	1,440	1,590	1,750	1,420	903	1,550
MIN	2,960	2,750	2,420	1,980	1,650	1,460	833	818	1,450	927	363	307

CAL YR 1971..... * +2,310 MAX 4,600 MIN 80
WTR YR 1972..... * -1,690 MAX 4,370 MIN 307

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

08211900 San Fernando Creek at Alice, Tex.

LOCATION.--Lat 27°46'20", long 98°02'00", Jim Wells County, on left bank 34 ft downstream from downstream bridge of two bridges on State Highways 44 and 359, 0.5 mile downstream from confluence of San Diego and Chiltipin Creeks, 2.3 miles upstream from head of Pintas Creek, and 2.7 miles northeast of Alice.

DRAINAGE AREA.--507 sq mi.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 161.68 ft above mean sea level.

AVERAGE DISCHARGE.--7 years (1965-72), 45.8 cfs (33,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 23,200 cfs Oct. 17 (gage height, 16.18 ft); minimum, 0.16 cfs Sept. 2.
Period of record: Maximum discharge, 26,800 cfs Sept. 12, 1971 (gage height, 16.51 ft); no flow part of each day Aug. 23-26, Sept. 14, 1965, and for several days in June, July, and August 1967.
Maximum stage since at least 1949, that of Sept. 12, 1971. Other high stages for this period are 15.86 ft Sept. 23, 1967 (discharge, 16,900 cfs); 15.5 ft Sept. 9, 1962 (discharge, 14,600 cfs, from field estimate); 14.2 ft Sept. 14, 1951. Discharge for flood of Sept. 14, 1951, may have exceeded that for 1962 as the highway was raised between 1952 and 1962. Flood in 1951 was higher at site of discontinued station "San Fernando Creek near Alice". Flood in 1962 was higher than that of 1967 at site of discontinued station; there is a diversion into the Pintas Creek Basin between the two gaging sites, and apparently this diversion was greater in 1967 than in 1962.

REMARKS.--Records good. San Diego Creek joins Chiltipin Creek below Lake Alice to form San Fernando Creek. Flow regulated by Lake Alice (station 08211850) 2.3 miles upstream on Chiltipin Creek since Oct. 26, 1964. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see San Diego Creek at Alice (station 08211800). Records furnished by city of Alice show that they discharged 1,330 acre-ft of sewage effluent into San Diego Creek 1.3 miles upstream, which comprises most of the low flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	128	3.0	2.6	6.2	59	1.5	1.6	1.4	1.3	.95	.79
2	19	120	3.0	2.6	4.4	13	1.4	64	1.6	1.3	1.0	.54
3	14	113	5.0	2.7	4.4	5.4	1.6	18	1.7	1.3	1.6	.59
4	18	90	4.5	4.7	3.6	3.7	1.4	6.6	1.6	1.2	1.3	.70
5	15	73	6.0	3.6	3.1	2.6	1.4	3.3	1.7	1.2	1.1	.90
6	24	56	12	2.4	3.3	2.5	1.4	2.6	2.2	1.2	.94	.67
7	12	45	20	2.8	3.2	2.4	1.2	2.0	1.7	1.1	1.1	.67
8	14	29	6.0	2.7	3.3	2.0	1.4	1.8	2.0	1.1	.88	.94
9	17	28	4.0	2.3	3.5	1.9	1.5	1.7	5.6	1.1	.94	1.2
10	13	21	3.5	2.9	3.4	1.9	1.6	3.7	5.9	1.1	.92	1.1
11	7.3	15	3.3	2.6	3.5	2.0	1.4	46	2.5	1.3	1.1	1.2
12	6.0	12	3.2	2.7	3.6	2.0	1.4	57	2.4	1.2	1.1	1.0
13	5.2	10	3.2	2.6	3.2	1.9	1.4	41	2.0	1.2	1.0	1.1
14	4.6	8.5	4.0	2.3	3.4	2.1	1.3	41	4.4	1.2	1.1	1.8
15	4.0	7.8	3.6	2.5	3.4	2.1	1.4	36	2.9	.98	.93	1.4
16	629	6.7	3.5	2.2	3.1	1.9	1.3	15	3.5	1.3	.94	1.5
17	12,300	6.6	5.5	2.5	3.1	1.8	1.4	663	151	1.9	.96	1.2
18	5,930	18	3.1	3.1	2.7	1.8	1.3	95	41	1.2	1.1	1.6
19	1,360	8.2	2.8	2.7	2.8	1.7	1.1	16	13	1.1	1.3	1.4
20	1,230	4.8	2.6	2.8	2.8	1.8	1.2	6.7	5.1	1.2	1.4	1.2
21	684	3.6	2.6	2.7	2.8	1.8	1.3	3.8	2.8	2.1	1.4	1.1
22	585	3.6	2.7	2.8	2.6	1.9	1.0	2.6	1.9	6.7	.96	1.1
23	550	3.3	2.7	2.4	2.5	1.8	1.3	2.0	1.6	17	.80	1.7
24	501	3.1	2.6	2.8	2.6	1.8	1.5	1.8	1.5	6.2	.83	75
25	431	3.0	2.5	2.6	2.2	1.8	1.2	1.6	1.4	2.4	.72	64
26	361	2.9	2.7	2.5	2.2	1.8	1.2	1.6	1.6	1.5	.48	21
27	254	3.2	2.8	2.6	1.9	1.8	1.5	1.5	1.4	1.2	.67	218
28	200	3.2	2.7	2.6	2.0	1.9	1.8	1.4	1.4	1.3	.60	59
29	154	3.2	2.9	2.6	61	1.6	1.6	1.6	1.4	1.3	.54	23
30	139	3.0	2.8	4.6	------	1.5	1.5	1.5	1.4	1.1	.54	9.0
31	132	------	2.7	5.3	------	1.4	------	1.4	------	1.1	.72	------
TOTAL	25,644.1	832.7	131.5	88.8	149.8	132.6	41.5	1,142.8	269.6	66.38	29.92	494.40
MEAN	827	27.8	4.24	2.86	5.17	4.28	1.38	36.9	8.99	2.14	.97	16.5
MAX	12,300	128	20	5.3	61	59	1.8	663	151	17	1.6	218
MIN	4.0	2.9	2.5	2.2	1.9	1.4	1.0	1.4	1.4	.98	.48	.54
AC-FT	50,870	1,650	261	176	297	263	82	2,270	535	132	59	981

CAL YR 1971 TOTAL 72,365.00 MEAN 198 MAX 22,200 MIN 1.2 AC-FT 143,500
WTR YR 1972 TOTAL 29,024.10 MEAN 79.3 MAX 12,300 MIN .48 AC-FT 57,570

08212400 Los Olmos Creek near Falfurrias, Tex.

LOCATION.--Lat 27°15'51", long 98°08'08", Brooks County, at downstream side of bridge on U.S. Highway 281 and 2.6 miles north of Falfurrias.

DRAINAGE AREA.--480 sq mi, of which 4.5 sq mi is probably noncontributing.

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder and V-notch weir low-water control. Datum of gage is 116.58 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 8.25 cfs (5,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 437 cfs Mar. 2 (gage height, 7.47 ft); no flow most of time.
Period of record: Maximum discharge, 5,300 cfs Sept. 13, 1971 (gage height, 12.66 ft); no flow at times in 1970-72.
Maximum stage since at least 1929, 15.0 ft Sept. 13, 1951, from information by Texas Highway Department.

REMARKS.--Records fair. La Gloria Oil Refinery no longer releases waste during low-flow periods.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38				4.5	2.1		0	0			
2	.23				1.5	288		13	0			
3	.13				.50	99		188	.02			
4	.11				.15	21		115	.03			
5	.17				.10	10		28	.07			
6	.58				.07	4.1		14	.14			
7	.26				.05	2.0		5.6	.04			
8	.27				.03	1.0		2.0	.04			
9	1.8				.02	.53		.99	.52			
10	.88				.02	.32		1.2	.30			
11	.32				.20	.13		1.9	1.8			
12	.15				.10	.03		3.8	.52			
13	.11				.05	.01		1.1	.26			
14	.09				.02	0		25	.15			
15	.07				.01	0		7.7	.10			
16	.06				0	0		13	4.3			
17	.05				0	0		214	5.6			
18	50				0	0		72	3.9			
19	84				0	0		15	1.8			
20	12				0	0		3.5	.44			
21	.94				0	0		1.1	.15			
22	.72				0	0		.44	.07			
23	.26				0	0		.23	.04			
24	.10				0	0		.12	.03			
25	.06				0	0		.08	.02			
26	.05				0	0		.06	.01			
27	.04				0	0		.04	.01			
28	.03				0	0		.03	.01			
29	.03				0	0		.02	0			
30	.02				------	0		.01	0			
31	.01	------			------	0	------	0	------			------
TOTAL	153.92	0	0	0	7.32	428.22	0	726.92	20.37	0	0	0
MEAN	4.97	0	0	0	.25	13.8	0	23.4	.68	0	0	0
MAX	84	0	0	0	4.5	288	0	214	5.6	0	0	0
MIN	.01	0	0	0	0	0	0	0	0	0	0	0
AC-FT	305	0	0	0	15	849	0	1,440	40	0	0	0

CAL YR 1971 TOTAL 12,601.00 MEAN 34.5 MAX 3,790 MIN 0 AC-FT 24,990
WTR YR 1972 TOTAL 1,336.75 MEAN 3.65 MAX 288 MIN 0 AC-FT 2,650

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	0600	4.57	115	5- 3	1800	7.32	294
3- 2	1500	7.47	437	5-17	1300	7.14	273

08363840 Rio Grande at Vinton Bridge near Anthony, Tex.

LOCATION (revised).--Lat 31°57'32", long 106°36'17", El Paso County, on right bank 40 ft downstream from Farm Road 273, 480 ft west of U.S. Highway 80, and 2.8 miles south of Anthony.

DRAINAGE AREA.--28,680 sq mi, approximately.

PERIOD OF RECORD.--January 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,766.72 ft above mean sea level. Prior to May 31, 1972, on left bank at same datum.

EXTREMES.--Current year: Maximum discharge, 1,910 cfs Aug. 27 (gage height, 5.46 ft); minimum daily, 20 cfs Feb. 29, Mar. 1, June 2.
Period of record: Maximum discharge, 1,910 cfs Aug. 27, 1972 (gage height, 5.46 ft); minimum daily, 20 cfs Feb. 29, Mar. 1, June 2, 1972.

REMARKS.--Records good. Flow regulated by Caballo Reservoir (capacity, 344,000 acre-ft, 1958 survey) and Elephant Butte Reservoir (capacity, 2,137,000 acre-ft, 1959 survey), both in New Mexico. About 84,000 acre-ft was diverted for irrigation above station and below Caballo Reservoir during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	45	37	33	33	20	398	163	24	485	386	141
2	54	46	42	32	34	22	386	198	20	506	527	238
3	53	44	39	34	30	22	366	148	24	552	636	386
4	53	44	40	37	32	206	337	186	22	594	657	903
5	53	40	36	30	32	431	288	186	26	699	699	202
6	53	41	30	32	32	349	288	174	33	888	657	152
7	56	43	36	32	30	279	284	174	25	615	518	127
8	53	40	39	37	30	324	292	155	26	514	382	81
9	53	40	39	39	30	415	271	130	26	518	202	60
10	53	40	37	39	30	476	304	75	24	615	167	58
11	53	40	37	37	30	493	304	121	24	353	98	84
12	51	42	34	37	30	481	292	171	32	300	134	144
13	51	39	37	37	30	573	329	174	26	210	148	312
14	51	34	40	36	34	615	366	267	24	137	218	308
15	49	40	37	34	26	596	374	259	24	206	182	134
16	50	40	37	34	30	636	324	198	43	230	127	113
17	48	34	34	37	33	518	267	54	39	234	98	98
18	47	33	36	36	32	594	234	25	58	415	33	74
19	47	36	37	33	32	636	222	111	65	615	113	60
20	48	40	39	32	32	678	206	141	79	636	259	58
21	47	45	37	30	30	657	182	119	163	324	124	49
22	47	53	34	30	29	573	171	68	206	361	110	51
23	46	47	34	29	27	657	141	40	238	762	58	49
24	46	44	37	30	29	636	163	37	117	573	79	47
25	46	44	37	29	27	678	186	33	124	415	76	45
26	46	42	37	32	24	657	190	29	267	324	316	44
27	47	42	36	29	24	720	159	33	292	247	877	40
28	45	42	30	27	23	783	182	31	296	141	720	39
29	47	40	30	27	20	636	163	26	337	190	535	36
30	45	40	29	27	------	493	167	28	468	194	390	34
31	45	------	29	30	------	448	------	27	------	411	255	------
TOTAL	1,541	1,240	1,113	1,018	855	15,302	7,836	3,581	3,172	13,264	9,781	4,167
MEAN	49.7	41.3	35.9	32.8	29.5	494	261	116	106	428	316	139
MAX	58	53	42	39	34	783	398	267	468	888	877	903
MIN	45	33	29	27	20	20	141	25	20	137	33	34
AC-FT	3,060	2,460	2,210	2,020	1,700	30,350	15,540	7,100	6,290	26,310	19,400	8,270

CAL YR 1971 TOTAL 89,567 MEAN 245 MAX 783 MIN 29 AC-FT 177,700
WTR YR 1972 TOTAL 62,870 MEAN 172 MAX 903 MIN 20 AC-FT 124,700

08365550 Franklin Canal at El Paso, Tex.

LOCATION.--Lat 31°44'56", long 106°28'52", El Paso County, in center of canal between the Southern Pacific Railroad and the Rio Grande and at the south end of Kansas and Campbell Streets in El Paso.

PERIOD OF RECORD.--October 1968 to September 1972 (discontinued).

GAGE.--Water-stage recorder.

EXTREMES.--Period of record: Maximum daily discharge, 292 cfs Aug. 4, 1969 (gage height, 5.77 ft); no flow at times.

REMARKS.--Records good. Station is above all diversions. Canal diverts from lower end of American Canal for irrigation in the El Paso Valley.

COOPERATION.--Gage-height record and 41 discharge measurements furnished by the U.S. Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	58	52	0	0	31	154	106	23	142	145	100
2	0	56	46	0	0	26	148	127	22	139	145	112
3	0	26	43	0	0	22	160	139	23	139	145	96
4	0	0	44	0	0	30	160	103	24	139	145	97
5	0	0	44	0	0	110	112	148	28	136	139	139
6	0	0	46	0	0	145	81	133	42	154	136	136
7	0	0	44	0	0	136	62	121	41	160	139	102
8	0	0	44	0	0	124	82	109	20	160	133	69
9	0	0	42	0	0	142	74	76	32	160	127	72
10	0	0	44	16	0	136	86	66	21	160	124	69
11	0	0	42	41	0	139	112	44	15	160	106	72
12	0	0	30	40	0	136	86	92	25	160	109	94
13	0	0	6.7	39	0	145	79	127	25	142	121	103
14	0	0	.79	41	0	160	136	151	15	127	139	103
15	19	0	0	42	0	151	115	154	11	94	154	97
16	23	0	0	41	0	139	115	127	40	92	154	86
17	20	0	0	43	0	145	84	57	42	92	141	72
18	36	0	0	44	0	151	39	13	30	82	162	60
19	32	0	0	43	0	148	77	54	45	86	155	56
20	52	0	0	42	9.8	148	136	84	44	112	181	41
21	51	0	0	42	30	145	115	62	24	150	181	38
22	49	0	0	42	29	145	94	50	11	86	181	38
23	49	0	0	42	30	142	79	42	29	132	158	34
24	54	0	0	30	29	142	60	31	86	145	156	34
25	54	0	0	8.1	26	151	109	36	100	148	160	34
26	62	9.6	0	2.8	29	151	127	29	109	95	157	30
27	60	54	0	0	36	160	97	26	139	123	139	30
28	58	56	0	0	29	160	103	26	142	110	124	28
29	64	56	0	0	29	151	109	24	139	100	100	31
30	64	54	0	0	------	160	115	34	145	118	118	30
31	61	------	0	0	------	160	------	20	------	118	109	------
TOTAL	811.6	369.6	528.49	598.9	276.8	4,031	3,106	2,411	1,492	3,961	4,383	2,103
MEAN	26.2	12.3	17.0	19.3	9.54	130	104	77.8	49.7	128	141	70.1
MAX	64	58	52	44	36	160	160	154	145	160	181	139
MIN	0	0	0	0	0	22	39	13	11	82	100	28
AC-FT	1,610	733	1,050	1,190	549	8,000	6,160	4,780	2,960	7,860	8,690	4,170

CAL YR 1971 TOTAL 41,837.29 MEAN 115 MAX 282 MIN 0 AC-FT 82,980
WTR YR 1972 TOTAL 24,072.39 MEAN 65.8 MAX 181 MIN 0 AC-FT 47,750

08365600 McKelligon Canyon at El Paso, Tex.

LOCATION.--Lat 31°49'20", long 106°28'09", El Paso County, on left bank 120 ft south of McKelligon Canyon Drive, 0.2 mile west of Alabama Avenue, 0.5 mile south of crest of Sugarloaf Mountain, 1.6 miles west of U.S. Highway 54, and 4.5 miles north of El Paso Post Office.

DRAINAGE AREA.--2.3 sq mi, approximately.

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

GAGE.--Water-stage recorder and small earthfill dam with uncontrolled concrete outlet tower. Datum of gage is 4,257.33 ft above mean sea level (levels by city of El Paso).

AVERAGE DISCHARGE.--15 years, 0.003 cfs (2.2 acre-ft per year).

EXTREMES.--Current year: No flow during year.
Period of record: Maximum discharge, 76 cfs Sept. 11, 1958 (on basis of culvert measurement of peak flow); no flow except Sept. 11, 12, 1958.

REMARKS.--No flow since Sept. 12, 1958. Floodflow controlled by four small reservoirs upstream with a total capacity of about 95 acre-ft.

08365800 Government Ditch at El Paso, Tex.

LOCATION.--Lat 31°47'02", long 106°26'41", El Paso County, at intersection of Montana and Houston Streets and 2 miles northeast of the business center of El Paso.

DRAINAGE AREA.--6.4 sq mi, approximately.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,740 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 0.15 cfs (109 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 430 cfs July 19 (gage height, 2.35 ft); no flow most of time.
Period of record: Maximum discharge, 550 cfs Sept. 11, 1958 (gage height, 2.64 ft), from rating curve extended above 148 cfs on basis of slope-area measurement of peak flow; no flow most of time.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1923: 1958-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0					0	0	0	0
2	0	0	.03	0					0	0	0	7.1
3	0	0	0	0					0	0	0	6.0
4	.09	0	0	.01					0	0	0	.01
5	0	0	0	0					.28	0	0	0
6	0	0	0	0					1.8	0	0	0
7	0	0	0	0					0	0	0	.05
8	0	0	0	0					8.5	0	3.2	.03
9	0	0	.01	0					2.0	0	13	0
10	0	0	0	0					0	0	0	0
11	0	0	0	0					0	.90	0	0
12	.12	0	0	0					2.0	0	0	0
13	0	0	0	0					0	.20	0	0
14	0	0	0	0					0	0	3.7	0
15	0	1.2	0	0					0	0	.49	.01
16	0	.02	0	0					.87	0	0	0
17	0	0	0	0					.18	0	1.2	0
18	0	0	0	0					0	0	2.4	0
19	0	0	0	0					0	12	0	0
20	0	0	0	0					0	0	0	0
21	0	0	0	0					0	0	0	0
22	0	0	0	0					0	0	0	0
23	0	0	0	0					0	0	0	0
24	0	0	0	0					0	0	0	0
25	6.7	0	0	0					0	0	.14	0
26	.04	0	0	0					0	0	34	0
27	0	0	0	0					0	0	.17	0
28	0	0	0	0					0	0	0	0
29	0	0	0	0					0	0	0	0
30	0	0	0	0	------				0	0	0	0
31	0	------	0	.02	------		------		------	0	0	------
TOTAL	6.95	1.22	.04	.03	0	0	0	0	15.63	13.10	58.30	13.20
MEAN	.22	.041	.001	.001	0	0	0	0	.52	.42	1.88	.44
MAX	6.7	1.2	.03	.02	0	0	0	0	8.5	12	34	7.1
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	14	2.4	.08	.06	0	0	0	0	31	26	116	26

CAL YR 1971 TOTAL 117.42 MEAN .32 MAX 50 MIN 0 AC-FT 233
WTR YR 1972 TOTAL 108.47 MEAN .30 MAX 34 MIN 0 AC-FT 215

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6- 8	2130	0.71	59	8-17	1715	0.56	40
7-19	1930	2.35	430	8-26	1230	1.66	230
8- 8	2345	1.30	152	9- 2	2245	1.18	131

08366400 Riverside Canal near Socorro, Tex.

LOCATION.--Lat 31°39'30", long 106°19'32", El Paso County, on right bank 0.2 mile downstream from headgates and 1.5 miles west of Socorro.

PERIOD OF RECORD.--October 1968 to September 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 3,656.79 ft above mean sea level (levels by Bureau of Reclamation). Auxiliary water-stage recorder at site 1.9 miles downstream from base gage at same datum used Mar. 5, 1969, to Mar. 8, 1971.

EXTREMES.--Period of record: Maximum daily discharge, 1,160 cfs July 20, 1970 (gage height, 7.08 ft); maximum gage height, 7.35 ft Aug. 5, 1969; no flow at times.

REMARKS.--Records fair. Canal diverts from left bank of Rio Grande for irrigation in the lower El Paso Valley.

COOPERATION.--Gage-height record and 49 discharge measurements furnished by the U.S. Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	92	24	0	75	18	133	57	13	327	233	339
2	53	86	30	0	69	13	100	81	14	304	249	352
3	51	70	23	0	67	8.9	102	86	8.1	377	339	555
4	79	64	24	0	63	8.1	110	97	8.9	377	420	567
5	59	61	26	0	65	320	95	54	34	450	450	525
6	54	60	26	0	61	377	61	61	42	579	435	390
7	53	57	26	0	61	299	53	51	30	527	306	205
8	44	57	27	0	65	315	47	72	21	339	308	160
9	58	60	27	0	61	257	44	65	62	281	288	132
10	54	59	28	0	61	450	39	51	16	327	149	104
11	53	61	28	0	59	435	47	72	10	297	138	93
12	57	64	47	0	58	435	53	54	37	205	123	126
13	47	65	72	0	58	420	45	87	12	144	149	178
14	44	63	67	0	60	540	110	97	13	104	144	352
15	44	78	72	0	60	540	102	196	8.9	65	251	185
16	37	78	71	0	57	412	124	165	10	42	207	120
17	37	65	67	0	54	465	84	96	98	38	211	93
18	14	61	65	0	60	450	50	34	13	36	337	88
19	30	59	64	0	51	450	27	12	16	31	221	82
20	12	61	63	4.1	51	480	90	8.5	30	132	264	77
21	7.3	61	63	35	61	510	99	6.1	25	220	369	67
22	7.7	64	60	38	31	435	75	2.1	13	364	183	68
23	7.3	67	32	36	27	405	55	2.8	11	480	181	61
24	7.3	65	0	58	26	480	47	2.6	9.4	315	160	53
25	12	63	0	64	20	450	52	3.1	8.1	217	147	45
26	34	60	0	65	20	390	61	5.0	18	132	455	35
27	183	42	0	64	18	327	53	6.5	158	91	588	27
28	194	55	0	64	18	405	43	6.5	169	133	675	29
29	134	45	0	61	18	377	32	6.9	194	109	640	29
30	86	23	0	61	------	233	42	6.9	221	132	588	30
31	67	------	0	71	------	167	------	14	------	164	364	------
TOTAL	1,678.6	1,866	1,032	621.1	1,455	10,872.0	2,075	1,559.0	1,323.4	7,339	9,572	5,167
MEAN	54.1	62.2	33.3	20.0	50.2	351	69.2	50.3	44.1	237	309	172
MAX	194	92	72	71	75	540	133	196	221	579	675	567
MIN	7.3	23	0	0	18	8.1	27	2.1	8.1	31	123	27
AC-FT	3,330	3,700	2,050	1,230	2,890	21,560	4,120	3,090	2,620	14,560	18,990	10,250

CAL YR 1971 TOTAL 78,505.6 MEAN 215 MAX 1,040 MIN 0 AC-FT 155,700
WTR YR 1972 TOTAL 44,560.1 MEAN 122 MAX 675 MIN 0 AC-FT 88,380

08368000 Tornillo Drain at mouth near Tornillo, Tex.

LOCATION.--Lat 31°24'01", long 106°01'34", El Paso County, on left bank just downstream from confluence of Tornillo and Alamo Alto drains, 1.2 miles upstream from Hudspeth regulating reservoir, and 5 miles southeast of Tornillo.

PERIOD OF RECORD.--October 1968 to September 1972 (discontinued).

GAGE.--Water-stage recorder.

EXTREMES.--Period of record: Maximum daily discharge, 98 cfs Sept. 8, 1970; maximum gage height, 2.51 ft July 9, 1971; minimum daily discharge, 11 cfs June 25, 26, July 27, 28, Aug. 1, 2, 1972.

REMARKS.--Records good. Discharge past this station is return flow from irrigation in the El Paso valley. There is no regulation above this station.

COOPERATION.--Gage-height record and 64 discharge measurements furnished by the U.S. Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	24	23	20	23	22	33	21	13	12	11	15
2	26	23	23	20	21	17	39	22	12	13	11	16
3	26	23	22	22	19	19	35	22	12	12	12	23
4	26	24	22	22	19	19	37	21	12	12	12	28
5	26	30	22	25	19	16	35	21	14	12	13	22
6	26	28	22	22	20	20	24	21	16	12	14	22
7	31	27	22	26	19	22	27	21	15	14	15	22
8	33	27	22	26	19	23	26	19	14	13	13	23
9	31	26	22	26	22	26	26	19	13	14	13	21
10	31	24	22	25	22	26	25	20	13	14	12	19
11	34	23	21	23	21	26	24	19	12	16	12	19
12	34	23	21	23	21	29	25	18	15	15	13	18
13	33	26	29	23	23	28	24	19	14	16	13	17
14	33	24	25	22	23	26	24	19	14	18	12	33
15	35	22	20	21	24	28	23	19	13	16	12	23
16	33	26	20	20	24	25	25	19	13	13	12	22
17	37	24	20	20	23	30	23	19	13	15	12	26
18	32	25	20	20	22	30	21	19	14	13	13	25
19	30	24	20	21	23	31	22	21	14	13	14	28
20	31	29	20	21	23	30	21	19	14	16	13	22
21	31	27	19	21	22	28	20	18	14	12	12	22
22	30	24	19	22	23	31	22	17	14	13	13	22
23	29	26	19	23	23	32	22	16	12	12	12	21
24	29	23	19	22	23	29	22	27	12	13	12	20
25	29	29	19	21	22	34	24	51	11	13	13	21
26	30	36	19	22	22	36	24	56	11	12	21	17
27	29	35	19	21	22	34	23	49	12	11	29	18
28	28	33	19	20	23	31	22	40	12	11	42	16
29	31	29	19	20	23	32	22	25	12	12	36	15
30	26	24	19	19	------	34	22	14	12	12	28	16
31	25	------	20	19	------	33	------	13	------	12	22	------
TOTAL	933	788	648	678	633	847	762	724	392	412	492	632
MEAN	30.1	26.3	20.9	21.9	21.8	27.3	25.4	23.4	13.1	13.3	15.9	21.1
MAX	37	36	29	26	24	36	39	56	16	18	42	33
MIN	25	22	19	19	19	16	20	13	11	11	11	15
AC-FT	1,850	1,560	1,290	1,340	1,260	1,680	1,510	1,440	778	817	976	1,250

CAL YR 1971 TOTAL 13,786 MEAN 37.8 MAX 85 MIN 19 AC-FT 27,340
WTR YR 1972 TOTAL 7,941 MEAN 21.7 MAX 56 MIN 11 AC-FT 15,750

08368300 Tornillo Canal near Tornillo, Tex.

LOCATION.--Lat 31°24'09", long 106°01'13", El Paso County, on left bank 300 ft downstream from check gates and 5.2 miles southeast of Tornillo.

PERIOD OF RECORD.--October 1968 to September 1972 (discontinued).

GAGE.--Water-stage recorder.

EXTREMES.--Period of record: Maximum daily discharge, 228 cfs June 8, 1970; maximum gage height, 3.31 ft Oct. 7, 1970; no flow at times each year.

REMARKS.--Records poor. The canal diverts water from Riverside Canal extension and Franklin Canal for irrigation in Hudspeth County.

COOPERATION.--Gage-height record and 22 discharge measurements furnished by the U.S. Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	62	28	.42	0	.09	.32		0	0	0	67
2	4.4	22	51	.37	0	.09	.14		0	0	0	42
3	.86	45	55	6.5	0	.14	.14		0	0	0	100
4	5.1	69	55	16	0	.14	.18		0	1.3	0	108
5	.71	70	54	11	0	.14	.23		0	1.4	0	63
6	.71	68	57	19	0	.37	.18		0	.37	0	60
7	.51	64	55	18	0	.66	.14		0	2.4	0	85
8	.71	80	58	22	.04	.61	.09		0	2.4	0	36
9	.71	63	59	24	0	.51	.09		0	1.9	0	56
10	.71	40	61	16	2.7	.37	.04		0	1.9	0	32
11	.86	26	60	20	1.4	.37	.02		0	1.4	0	41
12	.71	42	48	26	.37	.37	0		0	1.1	0	42
13	.81	17	52	38	.47	.42	0		0	.92	0	30
14	5.3	41	56	30	1.7	.37	0		0	.92	0	47
15	6.8	52	59	23	2.4	6.4	0		0	.98	0	15
16	7.9	46	89	15	1.3	1.8	0		0	.86	0	11
17	14	83	80	19	1.2	.37	0		0	.66	0	10
18	10	86	76	18	1.3	.32	0		0	.92	0	9.8
19	5.5	73	91	18	.98	0	0		0	.37	0	9.1
20	4.6	72	89	4.4	2.5	0	0		0	.42	0	7.8
21	15	77	72	.98	4.1	.42	0		0	.32	0	4.4
22	15	68	56	9.3	3.7	.32	0		0	0	0	0
23	11	38	73	1.9	.92	0	0		0	0	0	0
24	9.2	61	36	11	.42	.14	0		.08	0	.23	0
25	13	62	1.3	6.8	.14	.32	0		0	0	.81	0
26	17	66	.61	3.3	.23	5.4	0		0	0	18	0
27	76	69	.56	2.5	.23	3.6	0		0	0	121	0
28	151	49	.51	1.3	.23	2.1	0		0	0	83	0
29	147	76	.42	.61	.14	.71	0		0	0	35	0
30	120	75	.42	.37	------	1.1	0		0	0	60	0
31	86	------	.42	0	------	1.5	------		------	0	83	------
TOTAL	742.10	1,762	1,474.24	382.75	26.47	29.15	1.57	0	.08	20.54	401.04	876.1
MEAN	23.9	58.7	47.6	12.3	.91	.94	.052	0	.003	.66	12.9	29.2
MAX	151	86	91	38	4.1	6.4	.32	0	.08	2.4	121	108
MIN	.51	17	.42	0	0	0	0	0	0	0	0	0
AC-FT	1,470	3,490	2,920	759	53	58	3.1	0	.2	41	795	1,740

CAL YR 1971 TOTAL 6,089.88 MEAN 16.7 MAX 151 MIN .18 AC-FT 12,080
WTR YR 1972 TOTAL 5,716.04 MEAN 15.6 MAX 151 MIN 0 AC-FT 11,340

08368900 Hudspeth Feeder Canal near Tornillo, Tex.

LOCATION.--Lat 31°24'29", long 106°05'27", El Paso County, on right bank on Rio Grande Levee Road, 2.5 miles southeast of Tornillo, and 5.3 miles upstream from Hudspeth regulating reservoir.

PERIOD OF RECORD.--October 1968 to September 1972 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 3,570.36 ft above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 206 cfs Sept. 5, 1972 (gage height, 5.45 ft); no flow at times.

REMARKS.--Records good. Flow may be regulated by headgates of the Fabens waste channel at Fabens, Tex.

COOPERATION.--Gage-height record and 49 measurements furnished by the U.S. Bureau of Reclamation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	5.5	27	26	3.8	7.2	2.3	0	.10	1.2	5.5
2	14	13	12	26	27	4.7	8.4	1.5	.05	0	1.3	37
3	12	22	12	8.4	20	3.5	9.0	1.2	.52	0	1.1	103
4	12	13	12	7.0	14	2.7	10	1.2	0	0	.40	196
5	13	14	12	4.7	9.6	4.6	11	.55	.02	0	.73	206
6	13	9.4	12	6.9	8.6	9.7	12	0	.16	0	2.3	156
7	9.8	7.6	11	5.8	8.4	4.6	9.6	0	1.4	27	22	124
8	9.4	7.4	11	5.6	10	4.6	8.6	0	1.9	.40	1.8	56
9	8.8	7.6	11	5.5	9.2	5.6	7.8	0	10	.40	1.4	48
10	8.8	8.2	11	5.3	6.8	4.4	8.8	0	2.3	2.3	2.5	43
11	11	8.0	10	4.9	5.8	7.0	8.0	0	2.0	2.0	1.9	38
12	10	8.8	11	5.3	4.7	3.2	8.6	0	2.4	.95	2.2	30
13	19	11	12	5.3	4.9	3.4	7.0	0	1.8	.32	2.2	28
14	15	17	13	5.1	5.1	7.2	6.0	0	1.2	.62	3.5	102
15	16	7.6	12	6.1	5.3	6.0	5.3	0	.62	.32	2.5	111
16	16	6.8	6.8	9.8	6.2	11	9.4	3.1	.84	.84	4.0	100
17	13	8.4	5.6	8.0	4.9	5.1	5.8	1.3	.84	8.2	1.5	98
18	14	5.8	5.1	7.8	4.4	6.6	5.3	.62	.73	1.9	3.2	93
19	10	5.6	4.4	7.2	4.6	8.6	6.2	.08	.24	2.5	5.4	84
20	9.2	5.5	4.1	5.8	4.7	9.0	3.9	0	.95	28	.84	95
21	10	5.5	3.6	7.2	5.1	6.8	4.2	0	1.1	3.1	2.3	79
22	14	5.3	6.4	8.6	5.3	8.4	4.1	0	.95	4.4	.62	61
23	12	6.0	8.4	11	5.3	7.2	4.6	0	.62	4.4	.16	33
24	13	4.7	24	21	4.9	12	4.1	0	.51	3.1	1.7	29
25	11	5.6	28	15	4.9	9.4	3.6	0	.04	3.1	.08	20
26	14	5.3	30	9.8	3.9	16	2.8	0	0	2.0	17	15
27	40	5.3	28	9.6	3.6	9.2	2.0	0	0	1.8	175	10
28	73	5.1	30	21	3.2	8.0	1.9	0	0	2.3	176	4.1
29	23	6.8	29	19	4.2	7.8	1.8	0	0	1.8	158	3.4
30	16	5.5	29	22	------	7.2	2.4	0	.54	1.3	125	2.9
31	12	------	28	33	------	5.6	------	0	------	1.1	99	------
TOTAL	485.0	253.8	437.9	344.7	230.6	212.9	189.4	11.85	31.73	104.25	816.83	2,010.9
MEAN	15.6	8.46	14.1	11.1	7.95	6.87	6.31	.38	1.06	3.36	26.3	67.0
MAX	73	22	30	33	27	16	12	3.1	10	28	176	206
MIN	8.8	4.7	3.6	4.7	3.2	2.7	1.8	0	0	0	.08	2.9
AC-FT	962	503	869	684	457	422	376	24	63	207	1,620	3,990

CAL YR 1971 TOTAL 11,117.30 MEAN 30.5 MAX 144 MIN 3.6 AC-FT 22,050
WTR YR 1972 TOTAL 5,129.86 MEAN 14.0 MAX 206 MIN 0 AC-FT 10,180

08373200 Cibolo Creek near Presidio, Tex.

LOCATION.--Lat 29°34'50", long 104°21'55", Presidio County, on left bank at downstream side of bridge on U.S. Highway 67, 1.3 miles north of Presidio, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--276 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 2,645.87 ft above mean sea level.

EXTREMES.--August to September 1971: Maximum discharge during period, 2,780 cfs Sept. 23 (gage height, 3.95 ft); no flow most of time.
Water year 1972: Maximum discharge, 7,540 cfs July 13 (gage height, 5.20 ft); no flow most of time.
Period of record: Maximum discharge, 7,540 cfs July 13, 1972 (gage height, 5.20 ft); no flow most of time.
Maximum stage since about 1900, 12 ft in 1944, from information by local resident and Texas Highway Department.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13												0
14												0
15												0
16												0
17												0
18												0
19												0
20												0
21												0
22												0
23												330
24												0
25												0
26												0
27												0
28												0
29					------							0
30					------							0
31		------			------		------		------			------
TOTAL											0	330
MEAN											0	11.0
MAX											0	330
MIN											0	0
AC-FT											0	655

WTR YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 1,000 CFS).--Sept. 23 (1100) 2,780 cfs (3.95 ft).

08373200 Cibolo Creek near Presidio, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0								0	0	0	0
2	0								0	0	0	0
3	175								0	0	0	0
4	22								0	0	0	0
5	2.0								0	0	0	0
6	.15								0	0	0	0
7	0								0	0	0	0
8	0								0	0	0	86
9	0								0	0	0	0
10	0								0	0	0	0
11	0								0	0	0	0
12	0								0	0	0	0
13	0								210	0	0	0
14	0								0	0	0	0
15	0								2.6	0	0	0
16	0								0	0	126	12
17	0								0	0	0	0
18	0								0	3.8	0	22
19	0								0	0	0	0
20	0								0	0	0	0
21	0								0	13	0	476
22	0								0	0	0	399
23	0								0	0	0	0
24	0								0	0	0	0
25	0								0	0	0	0
26	0								0	0	0	0
27	0								0	0	0	0
28	0								0	0	5.8	0
29	0								0	0	0	0
30	0				------				0	0	0	0
31	0	------			------		------		------	0	0	------
TOTAL	199.15	0	0	0	0	0	0	0	212.6	16.8	131.8	995
MEAN	6.42	0	0	0	0	0	0	0	7.09	.54	4.25	33.2
MAX	175	0	0	0	0	0	0	0	210	13	126	476
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	395	0	0	0	0	0	0	0	422	33	261	1,970

CAL YR 1971 TOTAL 199.15 MEAN .55 MAX 175 MIN 0 AC-FT 395
WTR YR 1972 TOTAL 1,555.35 MEAN 4.25 MAX 476 MIN 0 AC-FT 3,090

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	1700	3.31	1,300	8-16	1700	4.21	3,570
6-13	0600	5.20	7,540	9-21	2300	3.50	1,690

08376300 Sanderson Canyon at Sanderson, Tex.

LOCATION (revised).--Lat 30°07'42", long 102°23'04", Terrell County, on left bank at upstream side of bridge on U.S. Highway 90, 1.0 mile south of Sanderson, 2.9 miles downstream from Three Mile Draw, and 30 miles upstream from mouth.

DRAINAGE AREA.--195 sq mi.

PERIOD OF RECORD.--February 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,706.35 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,460 cfs June 13 (gage height, 4.41 ft); no flow most of time.
Period of record: Maximum discharge, 32,600 cfs Sept. 18, 1969 (gage height, 9.18 ft); no flow most of time.
Maximum flood since at least 1935, 14.2 ft June 11, 1965 (discharge about 100,000 cfs, by combining two slope-area measurements within 4 miles upstream from gage). The next highest flood occurred in 1935 (about 20,000 cfs, estimated channel capacity by Corps of Engineers).

REMARKS.--Records fair. No known regulation or diversion above the station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	0	0	0	0
2	98							0	0	0	0	0
3	302							0	0	0	0	0
4	0							0	0	0	0	0
5	0							0	0	0	0	0
6	0							0	0	0	0	0
7	0							0	0	0	0	0
8	0							0	0	0	0	0
9	0							0	0	0	0	0
10	0							0	0	0	0	0
11	0							588	0	0	517	0
12	0							0	0	0	8.3	0
13	0							0	524	3.8	520	0
14	0							289	0	0	0	0
15	0							0	0	0	0	0
16	0							0	0	0	0	0
17	0							.69	0	0	0	0
18	0							0	0	0	19	0
19	0							0	0	0	0	0
20	0							0	0	0	0	0
21	0							0	0	0	0	544
22	0							0	0	0	0	0
23	0							0	0	0	0	0
24	0							0	0	0	0	0
25	0							.83	0	0	0	0
26	0							0	0	0	0	0
27	0							0	0	0	0	0
28	0							.75	0	0	0	0
29	189							0	0	0	0	0
30	0				------			2.3	0	0	0	0
31	0	------			------		------	0	------	0	0	------
TOTAL	589	0	0	0	0	0	0	881.57	524	3.8	1,064.3	544
MEAN	19.0	0	0	0	0	0	0	28.4	17.5	.12	34.3	18.1
MAX	302	0	0	0	0	0	0	588	524	3.8	520	544
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1,170	0	0	0	0	0	0	1,750	1,040	7.5	2,110	1,080

CAL YR 1971 TOTAL 6,473.80 MEAN 17.7 MAX 1,770 MIN 0 AC-FT 12,840
WTR YR 1972 TOTAL 3,606.67 MEAN 9.85 MAX 588 MIN 0 AC-FT 7,150

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	0030	3.96	4,100	8-11	1930	4.26	4,960
5-11	0530	4.00	4,220	8-13	0600	4.15	4,700
5-14	0300	3.27	2,390	9-21	0930	4.36	5,330
6-13	0200	4.41	5,460				

08407500 Pecos River at Red Bluff, N. Mex.

LOCATION.--Lat 32°04'30", long 104°02'21", in SW¼NW¼NE¼ sec. 1, T.26 S., R.28 E., Eddy County, on right bank at Red Bluff, 0.2 mile downstream from Red Bluff Draw, 1.6 miles northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 miles north of the New Mexico-Texas State line, and 5.6 miles upstream from Delaware River.

DRAINAGE AREA.--19,540 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder. Datum of gage is 2,850.05 ft above mean sea level.

AVERAGE DISCHARGE.--35 years, 192 cfs (139,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,530 cfs Sept. 11 (gage height, 8.02 ft); minimum, 1.6 cfs July 17.
Period of record: Maximum discharge, 111,000 cfs Aug. 23, 1966 (gage height, 33.32 ft), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow; minimum, 0.19 cfs Aug. 1, 1966.
The flood of Aug. 23, 1966, exceeded all known floods at this location. Flood in October 1904 reached a stage of 28.0 ft, from information by Panhandle and Santa Fe Railway Co.

REMARKS.--Records good. Flow regulated by storage in Alamogordo Reservoir, Lake McMillan, Lake Avalon, and by several small diversion dams that divert for power or irrigation. Diversions and ground-water withdrawals above station for irrigation of about 202,000 acres (1959 determination).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	18	21	37	28	20	19	9.7	5.0	11	3.0	13
2	20	19	24	34	27	17	17	12	4.4	7.7	2.6	246
3	20	18	24	33	24	15	19	13	4.4	9.1	2.6	812
4	21	18	26	34	23	22	18	11	4.1	10	35	287
5	21	18	32	33	22	23	19	9.1	3.3	9.1	92	1,120
6	20	17	31	33	23	23	20	6.1	3.3	8.6	6.0	276
7	21	17	30	33	22	26	21	6.4	3.0	8.2	4.0	116
8	21	16	29	34	21	30	19	13	2.8	7.7	27	74
9	54	16	34	32	20	29	17	21	2.6	7.7	24	110
10	21	16	37	32	20	27	17	21	2.4	7.3	10	616
11	31	16	35	32	20	24	16	25	2.6	6.9	9.0	1,700
12	23	16	35	31	20	22	15	22	2.8	6.4	9.0	631
13	20	17	35	32	20	20	15	13	3.3	6.4	9.0	1,700
14	20	16	35	30	22	19	14	7.7	6.1	5.0	12	278
15	20	17	35	30	23	19	13	6.9	6.4	3.6	160	158
16	20	17	33	31	20	18	12	9.7	4.1	2.8	259	957
17	20	19	33	31	20	19	11	7.7	18	2.0	46	964
18	20	20	34	29	20	19	12	5.0	21	1.8	17	894
19	20	20	34	29	20	14	12	4.1	7.7	350	13	302
20	20	21	33	30	20	12	12	5.4	14	350	10	152
21	20	21	33	31	20	12	14	4.7	11	97	9.0	190
22	24	20	34	32	20	11	10	4.1	9.1	32	8.0	127
23	26	20	36	30	17	15	11	6.9	7.7	17	105	82
24	23	20	37	29	14	24	11	11	8.2	11	47	66
25	21	20	36	29	11	24	12	5.7	8.2	9.7	60	53
26	23	21	38	29	16	20	12	3.6	7.7	12	20	44
27	22	20	39	30	22	27	10	4.4	7.3	9.1	15	40
28	20	20	40	30	24	32	8.2	4.1	6.9	5.3	13	39
29	20	19	40	30	24	24	8.2	3.6	6.9	4.1	12	40
30	19	21	39	30	------	22	10	3.6	6.4	3.6	13	35
31	19	------	38	30	------	20	------	4.7	------	3.3	12	------
TOTAL	690	554	1,040	970	603	649	424.4	285.2	200.7	1,025.4	1,064.2	12,122
MEAN	22.3	18.5	33.5	31.3	20.8	20.9	14.1	9.20	6.69	33.1	34.3	404
MAX	54	21	40	37	28	32	21	25	21	350	259	1,700
MIN	19	16	21	29	11	11	8.2	3.6	2.4	1.8	2.6	13
AC-FT	1,370	1,100	2,060	1,920	1,200	1,290	842	566	398	2,030	2,110	24,040

CAL YR 1971 TOTAL 9,912.76 MEAN 27.2 MAX 923 MIN .96 AC-FT 19,660
WTR YR 1972 TOTAL 19,627.90 MEAN 53.6 MAX 1,700 MIN 1.8 AC-FT 38,930

PEAK DISCHARGE (BASE, 1,800 CFS).--Sept. 11 (0600) 2,530 cfs (8.02 ft); Sept. 13 (0900) 2,430 cfs (7.93 ft).

08408500 Delaware River near Red Bluff, N. Mex.

LOCATION.--Lat 32°01'23", long 104°03'15", in NE¼SW¼SE¼ sec. 23, T.26 S., R.28 E., Eddy County, near center of channel on downstream side of pier of bridge on U.S. Highway 285, 2.1 miles northwest of the New Mexico-Texas State line, 3.6 miles southwest of Red Bluff, 3.7 miles upstream from mouth, and 14 miles south of Malaga.

DRAINAGE AREA.--689 sq mi.

PERIOD OF RECORD.--April 1912 to September 1913, May 1914 to June 1915, October 1937 to current year. Published as "near Malaga, N. Mex." 1912-13 and as "near Angeles, Tex." 1914-15.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,900.66 ft above mean sea level. Prior to May 1914, at site 3 miles upstream at different datum. May 1914 to June 1915 at site 2.5 miles downstream at different datum.

AVERAGE DISCHARGE.--35 years (1937-72), 14.3 cfs (10,360 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,270 cfs Sept. 7 (gage height, 5.96 ft); no flow at times.
Period of record: Maximum discharge, 81,400 cfs Oct. 2, 1955 (gage height, 27.0 ft, from floodmark), from rating curve extended above 1,500 cfs on basis of slope-area measurements at gage heights 8.65, 12.84, 18.00, and 27.0 ft; no flow for many days most years.
Maximum stage since at least 1911, that of Oct. 2, 1955. Flood of June 27, 1938, reached a stage of 18.00 ft, from floodmark.

REMARKS.--Records poor. One small upstream diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	2.5	3.0	3.0	3.5	3.5	2.9	1.3	1.1	.61	0	5.5
2	4.1	2.5	3.0	3.0	3.3	3.5	2.9	1.3	.93	0	0	254
3	3.8	2.5	3.0	3.0	3.3	3.3	2.9	1.3	.69	0	0	422
4	4.1	2.5	3.1	3.0	3.0	3.5	2.9	1.2	.51	.53	8.6	28
5	4.1	2.9	3.5	3.0	3.3	3.5	2.9	1.2	.43	.69	.47	18
6	5.2	2.9	3.5	3.0	3.0	3.3	2.8	1.3	.37	.15	2.8	14
7	4.1	2.9	3.1	3.0	3.0	3.3	2.7	1.4	.36	0	13	632
8	4.1	2.9	3.3	3.3	3.3	3.3	2.6	1.7	.41	0	8.9	55
9	129	2.9	3.3	3.3	3.3	3.3	2.5	1.5	.53	0	4.1	46
10	3.3	2.9	3.2	3.3	3.3	3.3	2.4	1.9	.49	0	3.7	18
11	2.9	2.9	3.2	3.3	3.3	2.9	2.3	1.8	.37	0	3.7	15
12	2.7	2.9	3.2	3.2	3.3	3.0	2.1	1.5	.35	0	1.2	49
13	3.8	2.9	3.3	3.1	3.5	3.0	2.1	2.5	1.3	0	.70	27
14	14	3.0	3.2	3.0	3.3	3.0	2.0	3.4	.72	0	.60	13
15	4.1	3.0	3.2	3.0	3.3	2.9	2.0	1.4	.49	0	46	10
16	3.0	3.0	3.1	3.0	3.3	2.9	2.0	1.3	.31	0	23	8.7
17	2.7	3.0	3.2	3.4	3.3	2.9	2.0	1.2	1.1	0	2.0	8.9
18	2.4	3.0	3.3	3.5	3.3	2.9	1.9	1.1	.27	0	1.5	7.4
19	2.4	3.0	3.3	3.4	3.3	2.9	1.8	1.1	.28	25	31	5.6
20	2.4	3.0	3.2	3.3	3.0	2.9	1.7	173	.22	5.0	16	4.8
21	2.4	3.0	3.3	3.4	3.0	2.9	1.6	7.1	.18	10	6.1	3.8
22	2.4	3.0	3.3	3.3	3.0	3.0	1.6	1.4	.14	7.4	3.7	3.3
23	2.4	3.0	3.3	3.3	3.0	3.0	1.5	.99	.08	1.8	46	3.2
24	2.4	3.0	3.0	3.2	3.0	3.0	1.5	.76	.06	.65	21	3.5
25	2.7	3.0	3.0	3.0	3.0	3.0	1.4	.64	.04	.15	8.4	3.1
26	2.7	3.0	3.0	3.0	3.0	2.9	1.3	.63	.02	.02	4.1	3.0
27	2.7	3.0	3.0	3.3	3.0	2.9	1.2	.58	0	0	5.2	2.9
28	2.4	3.0	3.0	3.3	3.3	2.7	1.1	.67	0	0	4.8	3.0
29	2.4	3.0	3.0	3.3	3.3	2.7	1.3	1.7	0	0	18	2.7
30	2.4	3.0	3.0	3.3	------	2.9	1.3	1.4	0	0	12	2.4
31	2.4	------	3.0	3.3	------	2.9	------	1.1	------	0	5.9	------
TOTAL	234.0	87.1	98.1	98.8	92.8	95.0	61.2	219.37	11.75	52.00	302.47	1,672.8
MEAN	7.55	2.90	3.16	3.19	3.20	3.06	2.04	7.08	.39	1.68	9.76	55.8
MAX	129	3.0	3.5	3.5	3.5	3.5	2.9	173	1.3	25	46	632
MIN	2.4	2.5	3.0	3.0	3.0	2.7	1.1	.58	0	0	0	2.4
AC-FT	464	173	195	196	184	188	121	435	23	103	600	3,320

CAL YR 1971 TOTAL 3,933.37 MEAN 10.8 MAX 1,320 MIN 0 AC-FT 7,800
WTR YR 1972 TOTAL 3,025.39 MEAN 8.27 MAX 632 MIN 0 AC-FT 6,000

08410000 Red Bluff Reservoir near Orla, Tex.

LOCATION.--Lat 31°54'06", long 103°54'42", Reeves County, at right end of Red Bluff Dam on Pecos River, 3 miles upstream from Salt (Screwbean) Draw, and 4.5 miles north of Orla.

DRAINAGE AREA.--20,720 sq mi, approximately (contributing area).

PERIOD OF RECORD.--February 1937 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Nonrecording gage read at irregular intervals. Datum of gage is 0.30 ft below mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 45,800 acre-ft Feb. 23, 24, Mar. 11-19 (gage height, 2,802.6 ft); minimum observed, 23,000 acre-ft Aug. 14, 15 (gage height, 2,791.8 ft).
Period of record: Maximum contents observed, 352,000 acre-ft Sept. 27, 28, 1941 (gage height, 2,846.2 ft, observed on nonrecording gage at service spillway, affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft May 13, 1948 (gage height, 2,781.4 ft).

REMARKS.--Reservoir is formed by a rock-faced earthfill dam 9,200 ft long. Dam completed and storage began in September 1936. The concrete service spillway is equipped with 12 tainter gates 25 ft wide by 15 ft high. The emergency spillway, located on the right bank, is 790 ft long. Water is used for power development and irrigation from Mentone to Grandfalls. Inflow partly regulated by major reservoirs above station include Alamogordo Reservoir, Lake McMillan, and Lake Avalon, with a total combined capacity of 154,400 acre-ft. Also several small diversion dams divert water for power and irrigation. Contents computed from intermittent gage readings. Figures given herein represent total contents. Data regarding dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of emergency spillway	2,845.0	340,000
Top of tainter gates (top of conservation storage)	2,842.0	310,000
Crest of service spillway	2,827.0	166,500
Bottom of two 7.0- by 9.0-foot conduits	2,764.0	3,000

COOPERATION.--Gage-height records and capacity curve furnished by Red Bluff Water Power and Control District. Capacity curve based on Geological Survey topographic map, survey of 1925.

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

2,790.0	20,400	2,798.0	34,400
2,792.0	23,300	2,800.0	39,000
2,794.0	26,600	2,802.0	44,000
2,796.0	30,300	2,804.0	50,000

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41,750	42,000	42,250	43,750	45,200	45,500	45,200	35,280	33,350	31,300	23,620	24,260
2	41,750	42,000	42,250	43,750	45,200	45,500	45,200	34,840	33,140	31,100	23,460	23,940
3	41,500	42,000	42,250	43,750	45,200	45,500	45,200	34,400	33,140	31,100	23,300	25,410
4	41,500	42,000	42,250	44,000	45,200	45,500	45,200	34,400	32,930	30,900	23,300	27,140
5	41,250	42,000	42,500	44,000	45,200	45,500	45,200	34,190	32,930	30,700	23,300	28,040
6	41,250	42,000	42,500	44,000	45,200	45,500	45,200	34,190	32,720	30,700	23,150	29,540
7	41,000	42,000	42,500	44,000	45,200	45,500	45,200	34,190	32,720	30,500	23,460	29,730
8	41,000	41,750	42,500	44,000	45,200	45,500	45,200	33,980	32,510	30,300	23,300	30,500
9	40,750	42,000	42,500	44,300	45,500	45,500	45,200	33,980	32,510	29,920	23,300	30,110
10	41,750	42,000	42,500	44,300	45,500	45,500	45,200	33,980	32,300	29,730	23,300	29,920
11	41,750	42,000	42,750	44,300	45,500	45,800	45,200	33,980	32,930	29,540	23,150	31,300
12	41,750	42,000	42,750	44,300	45,500	45,800	45,200	33,980	32,720	29,350	23,150	34,400
13	41,750	42,000	42,750	44,300	45,500	45,800	45,200	33,980	32,720	29,160	23,150	35,940
14	41,750	42,000	42,750	44,300	45,500	45,800	44,300	33,770	32,510	28,780	23,000	38,760
15	42,000	42,000	42,750	44,600	45,500	45,800	43,500	33,770	32,510	28,400	23,000	39,750
16	42,000	42,000	43,000	44,600	45,500	45,800	42,750	33,770	32,300	28,220	24,740	44,000
17	42,000	42,000	43,000	44,600	45,500	45,800	42,250	33,770	32,510	28,040	25,070	41,500
18	42,000	42,000	43,000	44,600	45,500	45,800	42,000	33,560	32,510	27,860	24,900	42,750
19	42,000	42,000	43,000	44,600	45,500	45,800	41,500	33,560	32,510	27,500	24,900	44,300
20	41,750	42,000	43,000	44,600	45,500	45,500	41,000	33,350	32,300	28,040	24,740	44,600
21	41,750	42,000	43,250	44,600	45,500	45,500	40,500	34,400	32,300	28,400	24,740	44,900
22	41,750	42,000	43,250	44,900	45,500	45,500	40,000	34,190	32,300	28,220	24,900	44,900
23	41,750	42,000	43,250	44,900	45,800	45,500	39,500	34,190	32,100	27,680	25,240	45,200
24	41,750	42,000	43,250	44,900	45,800	45,500	39,000	33,980	32,100	26,960	25,410	45,200
25	41,750	42,000	43,500	44,900	45,500	45,500	38,520	33,980	32,100	26,090	25,410	45,200
26	41,750	42,250	43,500	44,900	45,500	45,500	38,040	33,770	31,900	25,580	25,580	45,200
27	41,750	42,250	43,500	44,900	45,500	45,500	37,320	33,770	31,700	24,580	25,580	45,200
28	41,750	42,250	43,500	44,900	45,500	45,500	36,600	33,770	31,500	24,100	25,580	45,200
29	41,750	42,250	43,750	44,900	45,500	45,500	35,720	33,560	31,500	23,940	25,240	44,900
30	41,750	42,250	43,750	45,200	------	45,500	35,720	33,560	31,300	23,940	24,900	44,900
31	42,000	------	43,750	45,200	------	45,200	------	33,350	------	23,780	24,740	------
(†)	2,801.2	2,801.3	2,801.9	2,802.4	2,802.5	2,802.4	2,798.6	2,797.5	2,796.5	2,792.3	2,792.9	2,802.3
(*)	+250	+250	+1,500	+1,450	+300	-300	-9,480	-2,370	-2,050	-7,520	+960	+20,160
MAX	42,000	42,250	43,750	45,200	45,800	45,800	45,200	34,400	33,350	31,300	25,580	45,200
MIN	40,750	41,750	42,250	43,750	45,200	45,200	35,720	33,350	31,300	23,780	23,000	23,940

CAL YR 1971..... * -19,400 MAX 65,500 MIN 31,100
WTR YR 1972..... * +3,150 MAX 45,800 MIN 23,000

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

08412500 Pecos River near Orla, Tex.

LOCATION.--Lat 31°52'21", long 103°49'52", Reeves County, on right bank at bridge on Farm Road 652, 5.5 miles downstream from Salt (Screwbean) Draw, 5.9 miles northeast of Orla, and 8.5 miles downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 sq mi, approximately (contributing area).

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

GAGE.--Water-stage recorder. Datum of gage is 2,730.86 ft above mean sea level. Prior to Nov. 16, 1969, at site 6.9 miles downstream at datum 12.81 ft lower.

AVERAGE DISCHARGE.--35 years, 189 cfs (136,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs Aug. 23 (gage height, 8.68 ft); minimum, 10 cfs Apr. 12, 13.
Period of Record: Maximum discharge, 23,700 cfs Sept. 29, 1941 (gage height, 20.74 ft, site and datum then in use); no flow at times in 1946 and 1965.

REMARKS.--Records good. Flow largely regulated by Red Bluff Reservoir (station 08410000) and reservoirs above Carlsbad, N. Mex. Occasional runoff from draws between dam and station. Many diversions above Red Bluff Reservoir for irrigation. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 928: 1937.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	25	24	17	16	12	11	236	42	44	47	124
2	95	25	21	17	17	12	12	168	43	45	47	198
3	96	25	21	16	17	12	12	44	43	45	48	192
4	98	25	20	16	28	11	12	40	43	44	47	189
5	114	25	20	17	23	11	12	37	43	44	46	187
6	107	25	19	17	14	12	12	38	43	69	45	185
7	106	25	19	17	14	12	11	38	43	93	47	221
8	107	25	19	17	14	12	11	47	43	95	46	189
9	161	26	20	17	14	12	11	41	44	95	47	189
10	758	27	19	17	14	12	11	40	44	95	47	191
11	214	27	19	17	14	12	11	40	85	94	47	196
12	73	27	19	16	14	12	11	40	89	103	48	190
13	53	27	18	14	14	12	34	40	59	169	47	225
14	42	26	18	13	14	13	416	40	49	163	76	190
15	37	25	18	13	13	13	388	40	45	104	73	214
16	34	25	18	13	13	12	184	40	45	104	227	192
17	31	25	18	13	13	12	182	40	45	102	77	196
18	27	24	17	14	13	11	181	40	45	104	56	166
19	26	24	17	16	13	11	181	48	44	104	52	19
20	26	25	18	17	13	12	180	58	44	107	50	14
21	25	24	19	15	13	12	178	47	43	152	51	17
22	23	24	18	15	12	12	179	40	42	271	55	21
23	24	23	17	14	13	13	178	40	42	253	602	24
24	24	23	17	13	14	12	177	41	42	245	329	28
25	25	22	17	12	13	13	179	40	43	239	91	26
26	27	21	17	12	12	13	197	40	43	237	60	24
27	27	21	17	12	12	12	249	40	42	230	53	26
28	27	20	17	13	12	12	252	41	42	86	86	27
29	25	20	17	14	13	11	251	41	43	47	355	27
30	25	21	17	14	------	11	251	42	45	47	180	27
31	25	------	17	14	------	11	------	41	------	46	122	------
TOTAL	2,575	727	572	462	419	370	3,974	1,608	1,408	3,676	3,204	3,714
MEAN	83.1	24.2	18.5	14.9	14.4	11.9	132	51.9	46.9	119	103	124
MAX	758	27	24	17	28	13	416	236	89	271	602	225
MIN	23	20	17	12	12	11	11	37	42	44	45	14
AC-FT	5,110	1,440	1,130	916	831	734	7,880	3,190	2,790	7,290	6,360	7,370

CAL YR 1971 TOTAL 31,039.4 MEAN 85.0 MAX 2,660 MIN 8.2 AC-FT 61,570
WTR YR 1972 TOTAL 22,709.0 MEAN 62.0 MAX 758 MIN 11 AC-FT 45,040

08414000 Pecos River near Mentone, Tex.

LOCATION.--Lat 31°40'07", long 103°37'34", Reeves-Loving County line, at bridge on State Highway 302 and 3.0 miles southwest of Mentone.

DRAINAGE AREA.--21,650 sq mi, approximately (contributing area).

PERIOD OF RECORD.--February 1922 to July 1926 (published as "near Porterville"), September to December 1968 (low-flow measurements only), December 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,647.55 ft above mean sea level. Nonrecording gage prior to Dec. 10, 1968, and at different datum prior to Sept. 25, 1968.

EXTREMES.--Current year: Maximum discharge, 2,080 cfs Aug. 24 (gage height, 16.70 ft); minimum, 7.1 cfs Apr. 14.
Period of record: Maximum discharge, 5,690 cfs Aug. 12, 1925 (gage height, 12.70 ft, datum then in use); minimum, 0.08 cfs May 20, 1969.

REMARKS.--Records good. Flow largely regulated by Red Bluff Reservoir (station 08410000) and reservoirs above Carlsbad, N. Mex. Many diversions above Red Bluff Reservoir for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	23	19	16	13	11	9.6	250	43	49	46	146
2	79	22	22	16	13	10	9.6	236	43	50	45	156
3	79	22	20	16	13	10	9.6	160	43	47	45	207
4	78	22	20	16	13	10	9.6	58	43	47	51	215
5	80	22	20	16	13	10	9.6	45	44	47	137	201
6	96	22	19	16	26	8.3	9.6	47	44	52	70	201
7	83	22	19	16	16	8.9	9.6	44	44	60	44	243
8	83	22	19	17	14	8.9	8.9	41	44	80	44	264
9	88	21	19	18	14	8.9	8.9	57	45	92	44	201
10	193	21	19	17	13	8.9	8.3	51	45	92	43	201
11	935	21	17	17	12	8.9	8.3	49	44	96	43	201
12	295	21	17	17	12	8.9	8.3	47	284	95	44	335
13	90	21	17	16	12	8.9	7.7	44	274	97	43	271
14	58	21	17	16	12	8.9	49	45	75	148	117	236
15	50	21	17	14	13	8.9	309	45	56	160	250	292
16	36	21	17	14	13	8.9	269	45	55	130	276	341
17	30	20	17	14	13	8.9	194	45	50	100	333	222
18	28	20	17	14	13	8.9	187	44	49	106	93	208
19	26	20	17	13	13	8.9	194	44	51	106	66	186
20	26	20	17	13	13	8.3	194	50	51	116	55	80
21	25	20	17	14	13	8.3	194	76	50	114	50	30
22	24	20	16	15	13	8.3	194	69	51	105	49	20
23	24	20	16	14	13	8.3	194	47	49	236	494	22
24	23	20	16	12	13	8.3	194	47	50	264	1,890	25
25	24	20	16	12	13	8.3	194	47	49	250	621	30
26	25	20	16	12	13	8.3	194	47	49	243	103	30
27	25	19	16	12	13	8.3	201	47	49	236	78	28
28	25	18	16	12	13	8.3	250	46	47	222	53	29
29	24	18	16	12	12	8.9	250	45	52	142	67	29
30	24	18	16	12	------	8.9	244	47	49	62	247	29
31	23	------	16	12	------	9.6	------	45	------	50	187	------
TOTAL	2,768	618	543	451	390	277.1	3,622.6	2,010	1,922	3,694	5,728	4,679
MEAN	89.3	20.6	17.5	14.5	13.4	8.94	121	64.8	64.1	119	185	156
MAX	935	23	22	18	26	11	309	250	284	264	1,890	341
MIN	23	18	16	12	12	8.3	7.7	41	43	47	43	20
AC-FT	5,490	1,230	1,080	895	774	550	7,190	3,990	3,810	7,330	11,360	9,280

CAL YR 1971 TOTAL 35,854.4 MEAN 98.2 MAX 2,770 MIN 6.0 AC-FT 71,120
WTR YR 1972 TOTAL 26,702.7 MEAN 73.0 MAX 1,890 MIN 7.7 AC-FT 52,960

08431700 Limpia Creek above Fort Davis, Tex.
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 30°36'55", long 104°00'10", Jeff Davis County, on left bank about 600 ft upstream from low-water crossing on State Highway 118, about 2,000 ft upstream from Jones Creek, and 6.8 miles west of Fort Davis.

DRAINAGE AREA.--52.4 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about 5,200 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 2.17 cfs (1,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs July 19 (gage height, 6.45 ft); no flow most of year.
Period of record: Maximum discharge, 2,530 cfs Aug. 31, 1966 (gage height, 8.03 ft); no flow at times.
Maximum stage since at least 1925, about 10 ft in 1939, from information by local resident.

REMARKS.--Records fair. No diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	.13	0	2.1	16
2	0							0	0	0	2.3	14
3	0							0	0	0	2.6	11
4	0							0	0	0	7.4	9.9
5	0							0	0	0	4.5	7.4
6	0							0	0	0	3.1	5.8
7	0							0	0	0	3.1	5.5
8	0							0	0	0	3.3	4.9
9	0							0	0	0	3.1	3.7
10	0							0	0	0	3.1	7.5
11	0							0	0	0	13	7.0
12	0							0	0	9.3	22	9.5
13	6.5							0	0	4.1	21	7.4
14	2.4							.11	0	0	67	52
15	0							0	0	0	64	60
16	0							0	0	0	39	26
17	0							0	0	0	16	21
18	0							0	0	11	11	12
19	0							0	0	96	8.7	8.3
20	0							0	0	76	7.4	7.6
21	0							0	0	85	6.2	56
22	0							0	0	41	6.2	30
23	0							0	0	18	65	15
24	0							0	0	9.9	34	10
25	0							0	0	5.8	21	7.0
26	0							0	0	4.6	71	5.8
27	0							0	0	3.4	50	5.2
28	0							0	0	3.1	264	4.3
29	0							0	0	2.6	70	3.7
30	0				------			1.7	0	2.6	44	2.8
31	0	------			------		------	0	------	2.3	26	------
TOTAL	8.9	0	0	0	0	0	0	1.81	.13	374.7	961.1	436.3
MEAN	.29	0	0	0	0	0	0	.058	.004	12.1	31.0	14.5
MAX	6.5	0	0	0	0	0	0	1.7	.13	96	264	60
MIN	0	0	0	0	0	0	0	0	0	0	2.1	2.8
AC-FT	18	0	0	0	0	0	0	3.6	.3	743	1,910	865

CAL YR 1971 TOTAL 46.41 MEAN .13 MAX 14 MIN 0 AC-FT 92
WTR YR 1972 TOTAL 1,782.94 MEAN 4.87 MAX 264 MIN 0 AC-FT 3,540

PEAK DISCHARGE (BASE, 1,000 CFS).--July 19 (1730) 1,080 cfs (6.45 ft).

08431800 Limpia Creek below Fort Davis, Tex.

LOCATION.--Lat 30°40'52", long 103°47'27", Jeff Davis County, on downstream side of bridge on State Highway 17, 0.7 mile upstream from Frazier Canyon, and 9.0 miles northeast of Fort Davis.

DRAINAGE AREA.--227 sq mi.

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

GAGE.--Water-stage recorder. Datum of gage is 4,459.22 ft above mean sea level.

AVERAGE DISCHARGE.--10 years (1962-72), 4.56 cfs (3,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,340 cfs Sept. 21 (gage height, 5.11 ft); no flow at times.
Period of record: Maximum discharge, 3,700 cfs June 26, 1962, and June 10, 1964; maximum gage height, 7.85 ft June 10, 1964; no flow at times each year.
Maximum stages since 1904 occurred in 1932 and 1946 (stages unknown), the 1932 flood was the greatest, from information by local residents.

REMARKS.--Records fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.11	.02				0	0	.49	.01	.22	28
2	.07	.11	.02				0	.01	.29	.01	.22	26
3	.06	.09	.02				0	.01	.22	0	.22	22
4	.07	.09	.02				0	.01	.19	0	7.8	21
5	.09	.09	.02				0	.01	.13	0	7.2	18
6	.09	.11	.02				0	.01	.11	0	.49	16
7	.09	.11	.02				0	.01	.11	0	.38	14
8	.09	.13	.01				0	.01	.11	0	.38	24
9	.09	.11	.01				0	0	.11	0	.38	13
10	.07	.11	.01				0	0	.11	0	1.3	11
11	.07	.11	0				0	0	.11	0	2.1	29
12	.07	.09	0				0	0	.76	0	17	19
13	.06	.11	0				0	0	.25	0	35	15
14	.07	.11	0				0	0	.16	0	34	20
15	.07	.11	0				0	.01	.13	0	279	139
16	.07	.09	0				0	.01	.11	0	218	58
17	.06	.09	0				0	.01	.11	0	70	36
18	.07	.09	0				0	.01	.11	0	33	26
19	.09	.09	0				0	0	.09	0	21	21
20	.09	.09	0				0	0	.09	122	14	17
21	.09	.07	0				0	0	.07	87	10	386
22	.09	.05	0				0	0	.07	32	7.5	102
23	.09	.04	0				0	0	.09	10	45	45
24	.09	.04	0				0	0	.11	4.2	56	31
25	.11	.04	0				0	0	.13	1.5	31	25
26	.13	.03	0				0	0	.13	.55	33	20
27	.11	.04	0				0	0	.11	.33	79	16
28	.11	.03	0				.01	27	.06	.25	320	14
29	.11	.03	0				.02	.39	.05	.25	97	12
30	.11	.03	0		------		.01	2.9	.03	.22	52	10
31	.11	------	0		------		------	.95	------	.22	37	------
TOTAL	2.66	2.44	.17	0	0	0	.04	31.35	4.64	258.54	1,509.19	1,234
MEAN	.086	.081	.006	0	0	0	.001	1.01	.15	8.34	48.7	41.1
MAX	.13	.13	.02	0	0	0	.02	27	.76	122	320	386
MIN	.06	.03	0	0	0	0	0	0	.03	0	.22	10
AC-FT	5.3	4.8	.3	0	0	0	.08	62	9.2	513	2,990	2,450

CAL YR 1971 TOTAL 758.27 MEAN 2.08 MAX 256 MIN 0 AC-FT 1,500
WTR YR 1972 TOTAL 3,043.03 MEAN 8.31 MAX 386 MIN 0 AC-FT 6,040

PEAK DISCHARGE (BASE, 1,300 CFS).--Sept. 21 (1100) 1,340 cfs (5.11 ft).

08435600 Paisano Creek near Alpine, Tex.

LOCATION.--Lat 30°21'30", long 103°42'48", Brewster County, on right bank 200 ft upstream from bridge on Farm Road 1703 and 3.4 miles west of Alpine.

DRAINAGE AREA.--27.9 sq mi.

PERIOD OF RECORD.--November 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,614.80 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 576 cfs May 30 (gage height, 1.72 ft); no flow most of time.
Period of record: Maximum discharge, 3,530 cfs Aug. 14, 1971 (gage height, 4.73 ft); no flow most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	.40	0		0
2								0	0	0		0
3								0	0	0		0
4								0	0	0		0
5								0	0	0		0
6								0	0	0		0
7								0	0	0		26
8								0	.03	3.9		0
9								0	0	0		0
10								0	0	0		1.9
11								0	0	0		0
12								0	.08	1.1		0
13								0	4.3	0		0
14								0	0	0		0
15								0	0	0		0
16								0	0	0		0
17								0	0	5.9		0
18								0	0	0		0
19								0	0	0		0
20								0	0	5.6		0
21								0	0	0		0
22								0	0	0		0
23								0	0	0		0
24								0	0	0		0
25								0	.02	0		0
26								0	0	0		0
27								0	0	0		0
28								0	0	0		0
29								5.1	.07	0		0
30					------			145	0	0		0
31		------			------		------	41	------	0		------
TOTAL	0	0	0	0	0	0	0	191.1	4.90	16.5	0	27.9
MEAN	0	0	0	0	0	0	0	6.16	.16	.53	0	.93
MAX	0	0	0	0	0	0	0	145	4.3	5.9	0	26
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	379	9.7	33	0	55

CAL YR 1971 TOTAL 386.60 MEAN 1.06 MAX 204 MIN 0 AC-FT 767
WTR YR 1972 TOTAL 240.40 MEAN .66 MAX 145 MIN 0 AC-FT 477

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-30	0910	1.72	576	7-20	0630	1.05	157
7- 8	1550	.90	97	9- 7	0800	1.35	316
7-17	1600	1.00	135	9-10	1530	.75	50

08435620 Alpine Creek at Alpine, Tex.

LOCATION.--Lat 30°21'06", long 103°40'00", Brewster County, on left bank on upstream side of low-water crossing at Avenue G in Alpine.

DRAINAGE AREA.--18.1 sq mi.

PERIOD OF RECORD.--November 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,489.49 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 17 cfs May 30 (gage height, 1.09 ft); no flow most of time.
Period of record: Maximum discharge, 58 cfs Aug. 24, 1971 (gage height, 1.59 ft); no flow most of time.

REMARKS.--Records good. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	0	0		0
2	0							0	0	0		0
3	0							0	0	0		0
4	0							0	0	0		.19
5	0							0	0	0		0
6	0							0	0	0		0
7	.15							0	0	0		.30
8	.08							0	.05	1.3		.03
9	0							0	0	0		0
10	0							0	0	0		.02
11	0							0	0	0		0
12	0							0	0	0		0
13	0							0	0	.70		0
14	0							0	0	.01		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		0
20	0							0	0	.78		0
21	0							0	0	.20		.65
22	0							0	0	0		0
23	0							0	0	0		0
24	0							0	0	0		0
25	0							0	0	0		0
26	0							0	0	0		0
27	0							.90	0	0		0
28	0							.01	0	0		0
29	0							0	0	0		0
30	0				------			2.6	0	0		0
31	0	------			------		------	.07	------	0		------
TOTAL	.23	0	0	0	0	0	0	3.58	.05	2.99	0	1.19
MEAN	.007	0	0	0	0	0	0	.12	.002	.097	0	.040
MAX	.15	0	0	0	0	0	0	2.6	.05	1.3	0	.65
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.5	0	0	0	0	0	0	7.1	.1	5.9	0	2.4

CAL YR 1971 TOTAL 12.50 MEAN .034 MAX 6.5 MIN 0 AC-FT 25
WTR YR 1972 TOTAL 8.04 MEAN .022 MAX 2.6 MIN 0 AC-FT 16

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-27	1715	1.00	12	7- 8	unknown	1.06	15
5-30	0750	1.09	17	7-20	2015	1.00	12

08435660 West Moss Creek near Alpine, Tex.

LOCATION.--Lat 30°20'10", long 103°38'24", Brewster County, on right bank 0.3 mile upstream from State Highway 118 and 1.8 miles south of Alpine.

DRAINAGE AREA.--11.3 sq mi.

PERIOD OF RECORD.--November 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,577.72 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 277 cfs July 13 (gage height, 3.08 ft); no flow most of time.
Period of record: Maximum discharge, 277 cfs July 13, 1972 (gage height, 3.08 ft); no flow most of time.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	0	0	0	0
2	0							0	0	0	0	0
3	0							0	0	0	0	0
4	.03							0	0	0	0	4.9
5	.02							0	0	0	0	.01
6	0							0	0	.02	0	0
7	2.6							0	0	0	0	0
8	.21							0	0	3.1	0	0
9	0							0	0	0	2.9	0
10	0							0	0	0	5.3	0
11	0							0	0	1.4	1.4	0
12	0							0	.01	.02	.41	0
13	0							0	.03	12	0	0
14	0							0	0	0	0	0
15	0							0	0	0	0	0
16	0							0	0	0	1.6	0
17	0							0	0	1.9	.09	0
18	0							0	0	0	0	0
19	0							0	0	0	0	0
20	0							0	0	2.8	0	0
21	0							0	0	5.0	0	3.7
22	0							0	0	0	0	.06
23	0							0	0	0	.19	0
24	0							0	0	0	0	0
25	0							0	0	0	0	0
26	0							0	0	0	0	0
27	0							3.4	0	0	0	0
28	0							0	0	0	0	0
29	0							8.2	0	0	0	0
30	0				------			.36	0	0	0	0
31	0	------			------		------	0	------	0	0	------
TOTAL	2.86	0	0	0	0	0	0	11.96	.04	26.24	11.89	8.67
MEAN	.092	0	0	0	0	0	0	.39	.001	.85	.38	.29
MAX	2.6	0	0	0	0	0	0	8.2	.03	12	5.3	4.9
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	5.7	0	0	0	0	0	0	24	.08	52	24	17

CAL YR 1971 TOTAL 31.71 MEAN .087 MAX 14 MIN 0 AC-FT 63
WTR YR 1972 TOTAL 61.66 MEAN .17 MAX 12 MIN 0 AC-FT 122

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-27	1730	1.82	65	7-21	0035	2.24	115
5-29	1920	2.75	203	8-10	1550	2.52	160
7-13	1415	3.08	277	9- 4	0455	1.78	61
7-17	1505	1.85	68	9-21	0545	1.81	64

08435700 Sunny Glen Canyon near Alpine, Tex.

LOCATION.--Lat 30°22'52", long 103°44'08", Brewster County, on right bank just upstream from private low-water crossing, about 200 ft north of the end of Farm Road 1703, 4.7 miles northwest of Alpine, and 9.2 miles upstream from Paisano Creek.

DRAINAGE AREA.--29.7 sq mi.

PERIOD OF RECORD.--February 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about 4,660 ft.

EXTREMES.--Current year: Maximum discharge, 570 cfs Sept. 21 (gage height, 2.70 ft); no flow most of time.
Period of record: Maximum discharge, 570 cfs Sept. 21, 1972 (gage height, 2.70 ft); no flow most of time.

REMARKS.--Records poor. No known diversions or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	0
2											0	0
3											0	0
4											0	0
5											0	0
6											0	0
7											0	3.2
8											0	.05
9											4.8	0
10											.01	0
11											0	0
12											0	0
13											0	0
14											0	0
15											0	0
16											0	0
17											.05	0
18											0	0
19											0	0
20											0	0
21											0	20
22											0	1.7
23											0	.21
24											0	0
25											0	0
26											12	0
27											3.0	0
28											0	0
29											0	0
30					------						0	0
31		------			------		------		------		0	------
TOTAL	0	0	0	0	0	0	0	0	0	0	19.86	25.16
MEAN	0	0	0	0	0	0	0	0	0	0	.64	.84
MAX	0	0	0	0	0	0	0	0	0	0	12	20
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	39	50

CAL YR 1971 TOTAL 7.86 MEAN .022 MAX 7.3 MIN 0 AC-FT 16
WTR YR 1972 TOTAL 45.02 MEAN .12 MAX 20 MIN 0 AC-FT 89

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.HT	DISCHARGE
8-26	2330	2.20	340
9- 7	2230	1.45	107
9-21	0730	2.70	570

08435800 Coyanosa Draw near Fort Stockton, Tex.

LOCATION.--Lat 31°02'27", long 103°08'15", Pecos County, at downstream side of bridge on U.S. Highway 285 and 18.4 miles northwest of Fort Stockton.

DRAINAGE AREA.--1,182 sq mi.

PERIOD OF RECORD.--February 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,846.86 ft above mean sea level (Texas Highway Department bridge plans). Jan. 22 to Sept. 30, 1969, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years, 3.20 cfs (2,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,830 cfs Sept. 21 (gage height, 8.91 ft); no flow most of year.
Period of record: Maximum discharge, 12,600 cfs June 15, 1967 (gage height, 15.20 ft); no flow most of time.
Maximum stage occurred in 1954, stage 19.6 ft. Discharge for flood of Sept. 4, 1925, 4,070 cfs (by slope-area measurement) at a site 8 miles upstream on U.S. Highway 290.

REMARKS.--Records poor. No known regulation or diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	0	0	0	0
2								0	0	0	0	0
3								0	0	0	0	5.6
4								0	0	0	0	0
5								.56	0	0	0	0
6								0	0	0	0	0
7								0	0	0	0	40
8								0	0	0	0	31
9								21	0	0	0	4.7
10								3.1	0	0	49	0
11								641	0	0	0	0
12								20	2.5	0	0	0
13								0	0	0	0	0
14								2.0	0	0	0	0
15								0	0	0	0	0
16								0	0	0	0	0
17								8.1	0	0	0	0
18								0	0	0	0	0
19								0	0	17	0	0
20								0	0	46	0	0
21								0	0	29	0	419
22								0	0	0	0	563
23								0	0	0	28	2.3
24								0	0	0	0	0
25								0	0	0	0	0
26								0	0	0	0	0
27								0	0	0	63	0
28								1.0	0	0	2.2	0
29								0	0	0	0	0
30					------			.71	0	0	0	0
31		------			------		------	0	------	0	0	------
TOTAL	0	0	0	0	0	0	0	697.47	2.5	92	142.2	1,065.6
MEAN	0	0	0	0	0	0	0	22.5	.083	2.97	4.59	35.5
MAX	0	0	0	0	0	0	0	641	2.5	46	63	563
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	1,380	5.0	182	282	2,110

CAL YR 1971 TOTAL 262.09 MEAN .72 MAX 100 MIN 0 AC-FT 520
WTR YR 1972 TOTAL 1,999.77 MEAN 5.46 MAX 641 MIN 0 AC-FT 3,970

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5- 9	2200	6.87	215	8-23	0700	6.30	220
5-11	0900	8.82	1,360	8-27	1300	6.20	182
7-19	2000	6.52	318	9- 3	1400	6.31	226
7-20	2200	6.68	389	9- 7	1900	6.62	362
8-10	unknown	6.80	464	9-21	2200	8.91	1,830

08446500 Pecos River near Girvin, Tex.

LOCATION.--Lat 31°06'40", long 102°25'00", Pecos County, on right bank 2.4 miles upstream from Comanche Creek, 2.6 miles northwest of Girvin, and 7.8 miles upstream from bridge on U.S. Highway 67.

DRAINAGE AREA.--29,560 sq mi, approximately (contributing area of supplementary gage 7.8 miles downstream).

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

GAGE.--Water-stage recorder and combination concrete control and measuring flume. Supplementary water-stage recorder (used as regular gage prior to July 17, 1951, now used only for flows exceeding about 1,200 cfs) 7.8 miles downstream at datum 2,269.65 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 103 cfs (73,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 853 cfs May 13 (gage height, 7.15 ft); minimum daily, 8.0 cfs Aug. 8.
Period of record: Maximum discharge, 20,000 cfs Oct. 5, 1941 (gage height, 20.49 ft, at supplementary gage); minimum daily, 2.2 cfs July 18, 1964.
Maximum stage since at least 1932, that of Oct. 5, 1941.

REMARKS.--Records good. Flow largely regulated by Red Bluff Reservoir (station 08410000) and reservoirs above Carlsbad, N. Mex. Numerous diversions above station for irrigation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	30	25	34	34	24	19	13	14	15	13	37
2	155	28	26	33	36	24	19	11	16	14	11	25
3	90	27	27	32	36	23	19	9.4	25	13	10	48
4	58	27	28	32	34	23	18	8.7	34	12	9.4	37
5	40	27	32	32	33	22	18	11	30	13	8.7	16
6	32	27	33	32	33	22	18	216	24	11	8.7	34
7	26	27	33	32	32	22	18	29	20	9.4	8.7	18
8	25	27	33	32	32	22	17	22	19	9.4	8.0	14
9	24	28	33	32	31	22	17	28	18	9.4	9.4	37
10	26	28	34	32	32	22	16	26	17	8.7	37	71
11	25	28	58	32	32	22	16	25	17	8.7	28	72
12	23	27	65	32	32	22	15	16	21	8.7	27	74
13	25	26	65	32	33	22	14	124	96	10	26	66
14	33	26	66	31	32	22	14	253	115	8.7	31	61
15	36	26	66	31	31	22	18	11	55	8.0	39	63
16	34	26	69	31	31	22	18	8.7	28	8.0	38	72
17	37	26	68	31	31	22	16	12	24	8.0	31	71
18	39	26	68	31	31	21	14	12	22	8.0	24	63
19	40	25	71	31	30	26	14	18	30	8.7	23	50
20	44	26	72	32	30	30	14	16	39	8.0	51	36
21	42	25	71	32	28	26	12	17	36	8.0	52	33
22	39	25	63	33	28	26	12	16	42	8.0	44	30
23	36	25	55	33	27	23	13	16	39	8.0	43	30
24	32	25	50	33	27	22	19	16	34	8.0	56	24
25	28	26	44	32	27	22	26	16	25	12	46	21
26	27	26	42	32	26	21	17	15	21	65	39	20
27	28	25	40	32	26	20	16	15	21	52	43	31
28	30	25	39	32	26	19	16	16	20	43	52	59
29	31	25	38	33	24	20	15	16	19	39	83	46
30	31	25	37	33	------	19	13	18	17	32	117	27
31	30	------	36	33	------	19	------	15	------	22	68	------
TOTAL	1,382	790	1,487	995	885	694	491	1,045.8	938	496.7	1,084.9	1,286
MEAN	44.6	26.3	48.0	32.1	30.5	22.4	16.4	33.7	31.3	16.0	35.0	42.9
MAX	216	30	72	34	36	30	26	253	115	65	117	74
MIN	23	25	25	31	24	19	12	8.7	14	8.0	8.0	14
AC-FT	2,740	1,570	2,950	1,970	1,760	1,380	974	2,070	1,860	985	2,150	2,550

CAL YR 1971 TOTAL 9,667.7 MEAN 26.5 MAX 216 MIN 3.9 AC-FT 19,180
WTR YR 1972 TOTAL 11,575.4 MEAN 31.6 MAX 253 MIN 8.0 AC-FT 22,960

Principal diversions from Pecos River between Red Bluff Reservoir and Imperial, Tex.

Records of discharge are collected for eight canals that divert water from the Pecos River between Red Bluff Reservoir and Imperial. A stream-gaging station equipped with a water-stage recorder for obtaining gage-height record is maintained on each of these canals. All stream-gaging stations are located within 2 miles of the canal headgate except as noted herein. Water diverted into these canals is used for irrigation on both sides of the Pecos River in Reeves, Ward, and Pecos Counties. Local runoff is deleted from the record. Prior to 1941, daily discharge records were published separately for each station.

08414500 REEVES COUNTY WATER IMPROVEMENT DISTRICT NO. 2 CANAL NEAR MENTONE, diverts from right bank, lat 31°37'57", long 103°34'30". Period of record, February 1922 to July 1925, August 1939 to September 1957, March 1964 to current year. Average discharge, 26 years (1922-24, 1939-40, 1942-57, 1964-72), 10.5 cfs (7,610 acre-ft per year). Published as "Farmers Independent Canal near Porterville" 1922-25.

08415000 WARD COUNTY WATER IMPROVEMENT DISTRICT NO. 3 CANAL NEAR BARSTOW, diverts from left bank, lat 31°34'28", long 103°30'04". Period of record, August 1939 to September 1957, March 1964 to current year. Average discharge, 24 years (1939-40, 1942-57, 1964-72), 9.16 cfs (6,640 acre-ft per year).

08418000 WARD COUNTY IRRIGATION DISTRICT NO. 1 CANAL NEAR BARSTOW, diverts from left bank, lat 31°32'26", long 103°29'42". Period of record, February 1922 to September 1925, August 1939 to September 1957, March 1964 to current year. Average discharge, 28 years (1922-25, 1939-40, 1941-57, 1964-72), 33.2 cfs (24,050 acre-ft per year). Published as "Barstow Canal near Barstow" 1922-25.

08435000 GRANDFALLS-BIG VALLEY CANAL NEAR BARSTOW, diverts from left bank, lat 31°25'21", long 103°15'21". Period of record, March 1922 to November 1925, September 1939 to September 1957, March 1964 to current year. Average discharge, 24 years (1939-40, 1942-57, 1964-72), 4.35 cfs (3,150 acre-ft per year). Water diverted through Ward County Water Improvement District No. 2 canal irrigates most of lands formerly supplied by this canal.

08436500 PECOS COUNTY WATER IMPROVEMENT DISTRICT NO. 2 (UPPER DIVERSION) CANAL NEAR GRANDFALLS, diverts from right bank, lat 31°18'43", long 102°55'10". Gage located 12.5 miles downstream from headgates. Period of record, March 1922 to July 1925, August 1939 to September 1957, March 1964 to current year. Average discharge, 27 years (1923-24, 1939-57, 1964-72), 34.3 cfs (24,850 acre-ft per year). Published as "Imperial High-line Canal near Grandfalls" 1922-25.

08437500 PECOS COUNTY WATER IMPROVEMENT DISTRICT NO. 2 CANAL NEAR IMPERIAL, diverts from Imperial Reservoir on right bank, lat 31°16'40", long 102°44'05". Period of record, April 1940 to September 1957, March 1964 to current year. Average discharge, 23 years (1942-57, 1964-72), 13.6 cfs (9,850 acre-ft per year).

08437600 PECOS COUNTY WATER IMPROVEMENT DISTRICT NO. 3 CANAL NEAR IMPERIAL, diverts from Pecos County Water Improvement District No. 2 canal above station near Imperial on that canal, lat 31°17'00", long 102°44'25". Period of record, March 1940 to September 1957, March 1964 to current year. Average discharge, 24 years (1940-41, 1942-57, 1964-72), 11.6 cfs (8,400 acre-ft per year).

08437700 WARD COUNTY WATER IMPROVEMENT DISTRICT NO. 2 CANAL NEAR GRANDFALLS, diverts from left bank, lat 31°22'13", long 103°00'24". Period of record, August 1939 to September 1957, March 1964 to current year. Average discharge, 24 years (1939-40, 1942-57, 1964-72), 23.5 cfs (17,030 acre-ft per year).

Several small diversions (pumps) divert water from the Pecos River between Red Bluff Reservoir and Imperial for irrigation of lands adjacent to the river, but no records for them were obtained.

Principal diversions from Pecos River between Red Bluff Reservoir and Imperial, Tex.--Continued

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

Month	Reeves County District No. 2 Canal near Mentone	Ward County District No. 3 Canal near Barstow	Ward County District No. 1 Canal near Barstow	Grandfalls-Big Valley Canal near Barstow
October	171	1,270	1,800	6.9
November	23	6.9	682	0
December	21	5.7	16	0
CAL YR 1971	2,490	4,770	9,780	2,380
January	13	530	0	0
February	8.1	690	0	0
March	8.9	280	0	0
April	73	144	138	4.4
May	85	587	90	8.0
June	222	148	509	2.7
July	316	1,400	303	0
August	784	1,120	2,450	0
September	9.4	220	1,000	1.5
WTR YR 1972	1,730	6,400	6,990	23

Month	Pecos County District No. 2 Canal (upper diversion) near Grandfalls	Pecos County District No. 2 Canal near Imperial †	Pecos County District No. 3 Canal near Imperial †	Ward County District No. 2 Canal near Grandfalls
October	935	934	74	566
November	0	702	29	34
December	9.4	29	0	137
CAL YR 1971	12,370	6,430	1,300	10,770
January	0	0	0	99
February	0	0	0	2.0
March	0	0	0	0
April	3,320	289	212	215
May	2,300	228	14	133
June	144	651	219	0
July	1,770	728	225	.38
August	1,230	678	491	628
September	2,270	1,330	218	3,500
WTR YR 1972	11,980	5,570	1,480	5,320

† Combined flow of Pecos County Water Improvement District No. 2 Canal near Imperial and Pecos County Water Improvement District No. 3 Canal near Imperial represents released water from Imperial Reservoir (fed by Pecos County Water Improvement District No. 2 Canal, upper diversion).

08449000 Devils River near Juno, Tex.

LOCATION.--Lat 29°57'48", long 101°08'42", Val Verde County, on left bank 500 ft downstream from Walter Baker ranchhouse, 2 miles upstream from Phillips Creek, and 13.5 miles southwest of Juno.

DRAINAGE AREA.--2,730 sq mi.

PERIOD OF RECORD.--June 1925 to September 1949, September 1952 to September 1963 (miscellaneous measurements or low-flow partial record only), October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.7 ft above mean sea level.

AVERAGE DISCHARGE.--33 years (1925-49, 1963-72), 190 cfs (137,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 166,000 cfs Aug. 12 (gage height, 25.1 ft); minimum, 67 cfs July 31 to Aug. 3.
Period of record: Maximum discharge, 370,000 cfs Sept. 1, 1932 (gage height, 33.8 ft, from floodmarks), from rating curve extended above 16,000 cfs on basis of slope-area measurements of 44,700, 104,000, 245,000, and 370,000 cfs; minimum, 9.5 cfs July 5, 1969 (result of temporary unknown obstruction upstream).
Maximum stage since at least 1882, 35.0 ft June 28, 1954 (discharge, 393,000 cfs), from floodmark, information by local resident.

REMARKS.--Records good. No known diversion upstream from station. At end of year, flow from 158 sq mi above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 37,860 acre-ft below the flood-spillway crests, of which 36,050 acre-ft is floodwater-retarding capacity and 1,810 acre-ft is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

COOPERATION.--Gage-height record furnished by International Boundary and Water Commission, United States and Mexico.

REVISIONS (WATER YEARS).--WSP 1118: 1932 (maximum gage height).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	134	126	115	102	91	89	85	84	80	68	140
2	171	134	126	114	102	89	88	90	83	80	69	139
3	166	131	124	117	99	88	89	91	83	80	71	138
4	166	129	124	116	98	92	87	85	82	81	78	137
5	161	129	126	113	100	90	88	86	81	80	74	136
6	153	134	124	114	100	89	88	87	81	77	71	135
7	151	129	124	113	99	91	88	90	81	76	71	134
8	161	129	124	113	99	90	87	87	83	76	70	133
9	153	129	123	114	98	89	86	87	83	76	82	132
10	151	129	122	113	99	89	88	88	83	75	84	131
11	151	129	121	112	99	90	87	88	82	74	6,160	130
12	151	126	121	112	98	90	87	89	83	75	56,500	130
13	148	126	120	112	97	90	86	87	86	75	35,600	130
14	146	126	121	110	97	89	86	89	83	74	5,060	132
15	146	126	122	108	95	90	84	88	92	73	837	131
16	146	129	122	108	93	89	83	92	87	74	424	132
17	143	131	120	109	93	89	84	97	87	75	286	131
18	143	129	120	110	92	89	86	92	89	78	244	131
19	143	129	120	110	91	90	86	90	87	78	206	129
20	141	129	120	108	92	92	86	89	86	75	190	129
21	138	129	119	108	92	94	86	87	84	74	179	149
22	138	129	118	107	92	92	84	89	82	74	174	132
23	136	129	118	106	91	92	84	89	82	74	169	131
24	134	126	118	106	92	92	84	87	82	73	164	131
25	136	126	118	104	91	90	83	85	82	72	160	130
26	141	126	118	105	91	90	86	85	81	71	158	629
27	143	126	118	107	90	90	86	84	80	71	153	263
28	138	129	117	106	90	89	85	84	79	71	151	202
29	138	126	117	104	91	88	84	84	79	71	148	189
30	138	126	116	102	------	89	84	85	81	70	144	177
31	136	------	115	102	------	89	------	85	------	69	142	------
TOTAL	4,584	3,859	3,742	3,398	2,763	2,791	2,579	2,721	2,498	2,322	107,987	4,793
MEAN	148	129	121	110	95.3	90.0	86.0	87.8	83.3	74.9	3,483	160
MAX	177	134	126	117	102	94	89	97	92	81	56,500	629
MIN	134	126	115	102	90	88	83	84	79	69	68	129
AC-FT	9,090	7,650	7,420	6,740	5,480	5,540	5,120	5,400	4,950	4,610	214,200	9,510

CAL YR 1971 TOTAL 181,727 MEAN 498 MAX 48,100 MIN 18 AC-FT 360,500
WTR YR 1972 TOTAL 144,037 MEAN 394 MAX 56,500 MIN 68 AC-FT 285,700

PEAK DISCHARGE (BASE, 500 CFS).--Aug. 12 (1730) 166,000 cfs (25.1 ft); Sept. 26 (1545) 2,900 cfs (6.11 ft).

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in Texas made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of that stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Arkansas River Basin				
07227700	Chicken Creek near Amarillo, Tex.	Lat 35°28'29", long 101°45'35", Potter County, about 1.5 miles northeast of LX Ranch headquarters and about 18 miles northeast of Amarillo.	(c)	1953-72	2-17-72 8-10-72	1.13 1.15
		Red River Basin				
07299750	Wanderers Creek at Odell, Tex.	Lat 34°20'50", long 99°25'15", Wilbarger County, at county road bridge and 0.25 mile northwest of Odell Post Office.	199	1949-50, 1952-72	2-28-72 7-18-72	.86 .31
07299890	Lelia Lake Creek below Bell Creek near Hedley, Tex.	Lat 34°56'08", long 100°41'46", Donley County, 150 ft downstream from county road crossing, about 1.0 mile downstream from mouth of Bell Creek, and 5 miles north of Hedley.	74	1964-72	2-28-72 8-22-72	3.25 1.71
07303300	Elm Creek near Shamrock, Tex.	Lat 35°07'21", long 100°17'07", Collingsworth County, at county road bridge, 1,500 ft downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, and 6 miles southwest of Shamrock.	(c)	1947-72	2-28-72 9- 7-72	1.88 2.54
07307500	Quitaque Creek near Quitaque, Tex.	Lat 34°14', long 101°07', Floyd County, 0.75 mile upstream from W. F. Saul's Ranchhouse, 1.0 mile downstream from Wilson Creek, 1.5 miles upstream from Turkey Creek, and 10 miles southwest of Quitaque.	h293	1945-59*, 1960-72	2-23-72 8-29-72	2.11 1.96
07307700	Roaring Springs near Roaring Springs, Tex.	Lat 33°51'12", long 100°51'53", Motley County, 3.5 miles south of Roaring Springs.	(c)	1937, 1943-72	2- 1-72 7-25-72	1.23 1.27
07308400	China Creek near Electra, Tex.	Lat 34°06'20", long 98°53'58", Wichita County, on paved county road and 5.3 miles northeast of Electra.	37	1968-72	10-13-71 11-16-71 12-20-71 1-25-72 2-29-72 4- 3-72 5- 9-72 6-13-72 7-18-72 8-22-72 9-25-72	a.04 a.02 ef1.19 a.03 a.12 a.07 ef1.12 0 0 0 0

* Operated as a continuous-record station.
a Estimated.
c Not applicable.
e Includes surface runoff.
f Water-quality records for the current year are published in Part 2 of this report.
h Of which 258 sq mi is probably noncontributing.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Red River Basin--Continued				
07316230	Sandy Creek near Sadler, Tex.	Lat 33°44'14", long 96°51'04", Grayson County, at bridge on Farm Road 901 and 3.9 miles north of Sadler.	24	1968-72	10- 7-71	f0.26
					11- 9-71	af.04
					12- 5-71	319
					1-13-72	f.63
					2-16-72	f2.44
					3-29-72	f.20
					5- 3-72	f.50
					6- 6-72	f.01
					7-11-72	0
					8-15-72	0
					9-19-72	0
07343480	White Oak Creek near Mount Vernon, Tex.	Lat 33°16'25", long 95°14'19", Franklin County, at bridge on State Highway 37 and 6.0 miles north of Mount Vernon.	434	1965-66, 1969-72	10-17-71	f8.82
					4-10-72	f13.4
					5-19-72	f3.24
07343850	White Oak Creek near Omaha, Tex.	Lat 33°16'30", long 94°44'30", Morris County, at bridge on U.S. Highway 259 and 6.2 miles north of Omaha.	773	1965-67, 1969-72	10-15-72	f25.4
07346160	Frazier Creek near McLeod, Tex.	Lat 32°54'17", long 94°07'16", Cass County, at bridge on Farm Road 125 and 3.3 miles southwest of McLeod.	199	1964-72	6- 7-72	0
					9-19-72	0
		Sabine River Basin				
08018950	Dry Creek near Quitman, Tex. f/	Lat 32°47'52", long 95°27'50", Wood County, at bridge on State Highways 154 and 182 and 0.8 mile west of Quitman.	63.6	1967-72	10-28-71	1.17
					11-30-71	1.99
					12-10-71	e1,500
					2- 9-72	17.2
					3-15-72	9.91
					4-27-72	3.46
					6- 6-72	.93
					7-14-72	1.28
					8-29-72	.53
08019400	Big Sandy Creek near Winnsboro, Tex.	Lat 32°52'33", long 95°20'23", Wood County, at bridge on State Highway 37, 0.8 mile downstream from Lake Winnsboro Dam, 1.7 miles upstream from Indian Creek, and 6 miles southwest of Winnsboro.	(c)	1963-72	11-30-71	1.31
					6- 7-72	.60
					8-30-72	.78
		Neches River Basin				
08031300	Flat Creek below Flat Creek Reservoir near Athens, Tex.	Lat 32°12'19", long 95°43'29", Henderson County, downstream from Flat Creek Dam and 7.7 miles east of Athens.	21.6	1963-72	12- 1-71	a.01
					9- 6-72	a.01
08033600	Bowles Creek near Selman City, Tex.	Lat 32°11'41", long 94°58'36", Rush County, at bridge on State Highway 64 and 1.5 miles west of Selman City.	-	1968-72	10-28-71	f.49
					11-30-71	f1.09
					1- 5-72	f25.6
					2- 9-72	3.96
					3-15-72	f3.64
					4-21-72	f1.69
					5-26-72	f.45
					7-13-72	f.24
					8- 2-72	f.30
					9- 7-72	af.005
		East Bayou Basin				
08042540	East Bay Bayou near Stowell, Tex.	Lat 29°42'15", long 94°25'35", Chambers County, at bridge on Farm Road 1941 and about 6.6 miles southwest of Stowell (discontinued).	-	1968, 1971-72	10-26-71	f.69
					11- 3-71	f.20
					12- 6-71	f165
					1- 4-72	f96.0
					3-20-72	f1.30
					4-17-72	f5.08
					5- 3-72	f11.5
					7- 5-72	26.4
		Double Bayou Basin				
*08042550	West Fork Double Bayou near Anahuac, Tex. f/	Lat 29°45'39", long 94°38'00", Chambers County, at bridge on Farm Road 562 (Smith Point Road) and 3 miles southeast of Anahuac.	4.43	1967-72	11- 3-71	1.57
					12- 6-71	279
					1- 4-72	43.0
					3-20-72	5.18
					4-17-72	19.9
					7-19-72	27.3

* Also a crest-stage partial-record station.
a Estimated.
c Not applicable.
e Includes surface runoff.
f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Trinity River Basin				
08065950	Nelson Creek near Riverside, Tex.	Lat 30°53'40", long 95°30'51", Walker County, at low-water crossing on county road, 3.1 miles north of Farm Road 980, 6.0 miles upstream from mouth at Lake Livingston, and 7.4 miles northwest of Riverside.	-	1949, 1965, 1970-72	10-18-71	20.0
08066050	West Carolina Creek near Oakhurst, Tex. f/	Lat 30°49'32", long 95°20'10", Walker County, on county road, 4.2 miles southeast of Riverside, and 6.2 miles north of Oakhurst.	15.2	1949, 1966-72	10-26-71 11-29-71 1- 4-72 2- 7-72 3-15-72 4-17-72 5-22-72 7- 5-72 7-31-72 9- 5-72	.23 .11 70.3 1.93 .39 .08 .54 0 0 0
08066140	Tantaboque Creek near Trinity, Tex. f/	Lat 31°03'51", long 95°25'26", Trinity County, at bridge on State Highway 19 and 9.4 miles north of Trinity.	61.3	1949, 1966-72	10-26-71 11-29-71 1- 4-72 2- 8-72 3-15-72 4-17-72 5-22-72 7- 5-72 7-31-72 9- 5-72	.01 .16 79.8 4.21 .18 .48 .10 0 0 0
08066145	Caney Creek near Groveton, Tex. f/	Lat 30°59'14", long 95°12'52", Trinity County, at county road crossing and 7.3 miles southwest of Groveton.	41.4	1966-72	10-27-71 11-30-71 2- 8-72 3-14-72 4-18-72 5-23-72 7- 6-72 8- 1-72 9- 6-72	.24 .24 3.05 .06 .27 .31 .10 .06 .42
08066180	Rocky Creek near Onalaska, Tex. f/	Lat 30°52'02", long 95°03'42", Polk County, at end of county road and 5.4 miles northeast of Onalaska.	40.6	1966-72	10-27-71 11-30-72 1- 5-72 2- 9-72 3-14-72 4-18-72 5-23-72 7- 6-72 8- 3-72 9- 6-72	.11 .48 32.0 4.89 1.14 .55 1.69 .65 .40 .87
08066800	Gaylor Creek near Moss Hill, Tex. f/	Lat 30°16'55", long 94°51'36", Liberty County, at bridge on county road and 7.5 miles northwest of Moss Hill.	32.3	1966-72.	10-19-71 1-11-72 2-14-72 3-17-72 4-20-72 5-25-72 7-12-72 8- 7-72 9-13-72	4.59 7.30 10.4 6.40 .51 .53 0 0 0
08067120	Turtle Bayou near Hankamer, Tex. f/	Lat 29°53'47", long 94°39'48", Liberty County, at culvert on private road, 2.1 miles east of Farm Road 563, and 3.5 miles northwest of Hankamer (discontinued).	-	1971-72	10-26-71 4-17-72	.08 3.58
08067250	Turtle Bayou near Anahuac, Tex. f/	Lat 29°49'42", long 94°40'11", Chambers County, at Farm Road 563 and 3.7 miles north of Anahuac (discontinued).	180	1972	12- 6-71 3-22-72 5- 3-72	2,310 539 1,360
		Goose Creek Basin				
08067520	Goose Creek near McNair, Tex.	Lat 29°48'00", long 95°00'15", Harris County, at bridge on Interstate Highway 10 and 0.7 mile southeast of McNair (discontinued).	-	1963-65, 1971-72	10-27-71 1-17-72 4-10-72 5- 3-72 7-18-72	f.43 f1.04 f1.14 f3.20 1.55

f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		San Jacinto River Basin				
08067900	Lake Creek near Conroe, Tex. f/	Lat 30°15'12", long 95°34'43", Montgomery County, at bridge on county road and 8.3 miles southwest of Conroe.	291	1969-72	10-27-71 11-29-71 1-12-72 2-15-72 3-21-72 4-24-72 5-30-72 7- 3-72 8- 8-72 9-14-72	12.2 2.54 24.3 26.2 285 9.46 12.0 4.33 2.45 4.92
08068100	West Fork San Jacinto River near Porter, Tex.	Lat 30°03'36", long 95°16'28", Montgomery County, 100 ft west of River Club Estates park (formerly River Ridge) and 4.0 miles southwest of Porter.	970	1968-72	2-23-72 5-25-72 7-12-72 8- 1-72	58.8 197 32.8 36.8
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.	435	1937 1962, 1970-72	2-24-72 5-24-72 7-13-72 8- 1-72	20.5 100 20.0 60.0
08068750	Cypress Creek near Cypress, Tex. f/	Lat 29°57'23", long 95°40'41", Harris County, at bridge on U.S. Highway 290 and 1.5 miles southeast of Cypress.	138	1970-72	12-20-71 2- 7-72 6- 8-72 8-24-72	26.6 20.2 18.6 1.23
08069200	Cypress Creek near Humble, Tex. f/	Lat 30°01'49", long 95°19'47", Harris County, 500 ft north of end of dirt road extension of Tettar Road, about 2 miles upstream from mouth, and 4.7 miles northwest of Humble.	319	1970-72	12-20-71 2- 7-72 6- 8-72	44.1 38.2 24.1
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.	388	1952-54, 1956-57, 1969-72	2-23-72 5-25-72 7-12-72 8- 1-72	41.5 55.6 23.9 20.3
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.	178	1970-72	2-23-72 5-24-72 7-12-72 7-31-72	20.0 31.5 12.7 12.7
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.	155	1970-72	2-23-72 5-24-72 7-12-72 7-31-72	18.5 24.2 14.7 9.88
08071300	Luce Bayou near Huffman, Tex.	Lat 30°05'31", long 95°05'03", Harris County, near end of Inland Road, 0.8 mile upstream from mouth of John Young Gully, and 4.8 miles north of Huffman.	-	1970, 1972	2-24-72 7-13-72	a8.0 a12.0
08074550	Little Whiteoak Bayou at Houston, Tex. f/	Lat 29°47'05", long 95°21'56", Harris County, at bridge on North Main Street, 0.8 mile upstream from mouth, and 1.7 miles north of Harris County courthouse.	20.9	1971-72	1-17-72 3-20-72 5-16-72 7-26-72 8-28-72 9-13-72	3.32 6,780 8.63 2.42 3.44 5.17
08075100	Brays Bayou at Scott Street at Houston, Tex. f/	Lat 29°42'35", long 95°21'23", Harris County, at bridge on Scott Street, Houston.	106	1971-72	11-18-71 1-24-72 4-12-72 7-25-72 8-14-72 8-30-72	855 41.9 62.0 61.8 59.9 41.3
08075720	Plum Creek at Houston, Tex. f/	Lat 29°42'11", long 95°17'00", Harris County, at bridge on Berkley Street, Houston (discontinued).	2.72	1971-72	10-27-71 11-22-71 12-14-71 5-12-72 7-17-72	f.52 f1.14 f.68 159 .72

a Estimated.
f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		San Jacinto River Basin--Continued				
08075740	Little Vince Bayou at Pasadena, Tex.	Lat 29°42'38", long 95°12'08", Harris County, at bridge on East Eagle Street, Pasadena (discontinued).	4.33	1963-65, 1971-72	11-18-71 12-13-71 5-11-72 7-17-72 8-29-72	f138 f5.27 f53.4 7.67 f.28
08076800	Buffalo Bayou tributary at Pasadena, Tex.	Lat 29°43'31", long 95°09'59", Harris County, at wooden bridge just off a private road used as the south entrance to Ethyl Corporation and about 0.9 mile north of State Highway 225 at Pasadena (discontinued).	2.58	1971-72	11-18-71 12-15-71 1-10-72 5-11-72 5-12-72 7-17-72 8-29-72	f53.6 f7.55 f3.82 f65.5 f418 3.36 2.94
08076850	Patrick Bayou at Deer Park, Tex.	Lat 29°42'38", long 95°06'53", Harris County, at bridge on State Highway 225 at Deer Park (discontinued).	2.29	1971-72	10-26-71 12-15-71 1-10-72 4-27-72 5-12-72 7-17-72 8-29-72	f2.27 f6.41 f1.76 16.6 f87.2 1.49 1.77
08076900	Carpenters Bayou at Cloverleaf, Tex.	Lat 29°46'21", long 95°09'21", Harris County, at bridge on East Belt Drive, 0.1 mile north of Interstate Highway 10, and about 0.5 mile east of Cloverleaf.	23.5	1963-64, 1971-72	11-15-71 1-17-72 4-10-72 5- 3-72 7-18-72 8-15-72 8-28-72	f1.98 f2.25 f2.03 f17.8 6.07 f16.5 f5.69
		Clear Creek Basin				
08077540	Clear Creek at Farm Road 2351 at Friendswood, Tex. f/	Lat 29°32'31", long 95°11'48", Harris County, at bridge on Farm Road 2351 at Friendswood (discontinued).	99.6	1971-72	12- 7-71 5- 8-72 8-15-72 9-25-72	960 153 75.8 144
08077620	Armand Bayou near Genoa, Tex. (formerly Middle Bayou)	Lat 29°38'02", long 95°06'51", Harris County, at bridge on Genoa-Red Bluff Road and about 4.8 miles east of Genoa.	18.2	1968, 1971-72	10-27-71 11-22-71 12- 7-71 1-11-72 2-15-72 2-16-72 3-28-72 5- 8-72 7-17-72 8-15-72	f2.87 f1.49 f107 f3.13 f9.16 f688 f2.63 f138 3.32 f16.4
		Dickinson Bayou Basin				
08077640	Dickinson Bayou near Alvin, Tex. f/	Lat 29°26'09", long 95°10'11", Galveston County, at bridge on Farm Road 517 and about 5.0 miles east of Alvin (discontinued).	15.7	1963-65, 1971-72	12- 1-71 3-28-72 5- 8-72 7-19-72	.15 3.99 7.02 3.77
		Highland Bayou Basin				
08077680	Highland Bayou near Alta Loma, Tex. f/	Lat 29°21'59", long 95°02'56", Galveston County, at bridge on road to Frank's oilfield, 0.5 mile north of State Highway 6, and about 2.0 miles east of Alta Loma (discontinued).	11.6	1971-72	10-22-71 1-26-72 3-28-72 5-15-72 7-19-72	.90 1.11 .52 40.9 .34
		Halls Bayou Basin				
08077800	Halls Bayou near Algoa, Tex.	Lat 29°21'26", long 95°10'37", Brazoria County, at wooden bridge on private road and about 3.0 miles south of Algoa (discontinued).	3.98	1971-72	11-29-71	f.08
08077850	Halls Bayou near Alta Loma, Tex. f/	Lat 29°17'10", long 95°07'52", Brazoria County, at bridge on Farm Road 2004 and 6.7 miles southwest of Alta Loma (discontinued).	40.3	1972	2- 1-72 5- 8-72	277 87.7

f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Mustang Bayou Basin				
08077900	Mustang Bayou near Liverpool, Tex. f/	Lat 29°17'36", long 95°11'11", Brazoria County, at bridge on county road and about 5.6 miles east of Liverpool (discontinued).	43.1	1971-72	10-22-71	18.9
					11-29-71	8.48
					12-20-71	32.7
					3-13-72	9.83
					5- 8-72	172
					7-19-72	18.0
		Bastrop Bayou Basin				
08078400	Austin Bayou near Liverpool, Tex. f/	Lat 29°16'51", long 95°19'53", Brazoria County, at bridge on State Highway 35 and 3.4 miles southwest of Liverpool (discontinued).	37.0	1968, 1971-72	10-22-71	22.4
					11-29-71	.26
					12-20-71	15.9
					3-13-72	.56
					5-15-72	458
					7-19-72	36.2
					8-16-72	1.54
08078700	Flores Bayou near Danbury, Tex. f/	Lat 29°12'56", long 95°21'32", Brazoria County, at bridge on county road and 1.2 miles southwest of Danbury (discontinued).	23.3	1967-72	10-22-71	.92
					11-29-71	.15
					12-20-71	3.67
					3-13-72	.20
					5-15-72	135
					8-16-72	.19
		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, 1967-72	10-29-71	18.5
					12- 9-71	19.5
					1-18-72	11.4
					2-23-72	8.75
					4- 4-72	9.38
					5- 9-72	20.7
					7-25-72	17.8
					8-30-72	44.2
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 9 miles southeast of Lubbock.	-	1952-54, 1962-63, 1969-72	10-29-71	16.0
					12- 9-71	15.3
					1-18-72	12.0
					2-23-72	8.18
					4- 4-72	5.15
					5- 9-72	26.3
					7-25-72	19.0
					8-30-72	64.3
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)	1951-72	10-28-71	1.25
					1-12-72	1.27
					4-26-72	.58
					7-12-72	.19
08080916	Salt Fork Brazos River at Farm Road 1081 near Clairemont, Tex.	Lat 33°14'33", long 101°55'40", Kent County, at bridge on Farm Road 1081 and 11.7 miles northwest of Clairemont.	-	1965, 1967-72	10-28-71	1.32
					12- 8-71	3.47
					1-12-72	.11
					2-16-72	0
					3-22-72	0
					4-26-72	0
					5-31-72	0
					7-13-72	5.39
					8-16-72	21.9
					9-19-72	9.56
08080940	Salt Fork Brazos River at State Highway 208 near Clairemont, Tex.	Lat 33°12'22", long 100°44'50", Kent County, at bridge on State Highway 208 and 2.8 miles north of Clairemont.	-	1967-72	10-28-71	6.24
					12- 8-71	4.66
					1-12-72	.32
					2-16-72	0
					3-22-72	0
					4-26-72	0
					5-31-72	0
					7-13-72	15.5
					9-19-72	35.4

c Not applicable.
f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
08080959	Salt Fork Brazos River at U.S. Highway 380 near Jayton, Tex.	Lat 33°10'06", long 100°37'50", Kent County, at bridge on U.S. Highway 380 and 6.5 miles southwest of Jayton.	-	1965-72	10-28-71	22.2
					12- 8-71	11.2
					1-12-72	4.86
					2-16-72	5.07
					3-22-72	3.80
					4-26-72	1.54
					5-31-72	17.3
					7-13-72	23.5
					9-19-72	51.5
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 northeast of Jayton.	-	1959-72	11- 4-71	a.06
					11-24-71	.08
					1-11-72	a.04
					2-24-72	0
					5-17-72	0
					6-11-72	0
					8- 2-72	0
					9-19-72	a.02
08081100	Croton Creek below Short Croton Creek near Jayton, Tex.	Lat 33°18'23", long 100°31'55", Kent County, at county road crossing and 4.7 miles northeast of Jayton.	-	1959-72	11- 4-71	1.40
					11-24-71	1.22
					1-11-72	.62
					2-24-72	.19
					5-17-72	0
					7-11-72	6.13
					8- 2-72	0
					9-19-72	2.97
08081400	Salt Croton Creek at Weir D near Aspermont, Tex.	Lat 33°24'00", long 100°24'39", King County, 500 ft upstream from Haystack Creek, 1,000 ft upstream from streamflow station Salt Croton Creek near Aspermont, and 20 miles northwest of Aspermont.	(c)	1957-72	10-13-71	.58
					11- 3-71	.67
					11-23-71	1.14
					12-17-71	.90
					2- 1-72	2.33
					2-23-72	1.05
					3-17-72	.60
					5-16-72	.70
					8- 1-72	.48
					8-23-72	1.44
					9-27-72	.90
08081450	Haystack Creek near Aspermont, Tex.	Lat 33°24'04", long 100°24'41", King County, 400 ft upstream from Salt Croton Creek and 20 miles northwest of Aspermont.	(c)	1957-72	10-13-71	.17
					11- 3-71	.11
					11-23-71	.33
					12-17-71	.24
					2- 1-72	.71
					2-23-72	.24
					3-17-72	.15
					5-16-72	.16
					8- 1-72	.09
					8-23-72	.14
					9-27-72	.28
08082950	Elm Creek near Proffitt, Tex.	Lat 33°11'00", long 98°53'40", Young County, at bridge on State Highway 24 in Proffitt community and about 9 miles west of Newcastle.	-	1969-72	11- 2-71	0
					12- 6-71	ef1.78
					1-10-72	.29
					2- 2-72	0
					3-20-72	0
					4-23-72	0
					5-30-72	a.005
					7- 4-72	a.02
					8- 9-72	0
					9-13-72	a1.72
08083000	Brazos River near Graham, Tex.	Lat 33°04'55", long 98°43'36", Young County, at bridge on Farm Road 209 and about 8 miles southwest of Graham.	15,730	1969-72	11- 2-71	f891
					12- 6-71	f197
					1-10-72	147
					2-15-72	f66.9
					3-20-72	f29.7
					4-24-72	f18.2
					5-30-72	f51.6
					7- 5-72	f385
					8- 9-72	f9.27
					9-13-72	f863

a Estimated.
c Not applicable.
e Includes surface runoff.
f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
08084100	Deadman Creek near Nugent, Tex.	Lat 32°40'36", long 99°37'00", Jones County, at low-water crossing on county road, 3.2 miles east of Nugent, and 4.4 miles upstream from Clear Fork Brazos River.	168	1968-72	10-28-71 12- 7-71 1-10-72 2-14-72 3-20-72 5- 1-72 6- 6-72 7-18-72 8-21-72	22.8 19.3 20.7 9.22 8.47 6.59 7.06 5.26 4.48
08086015	Hubbard Creek near Sedwick, Tex.	Lat 32°36'06", long 99°14'20", Shackelford County, at bridge on county road, 1.0 mile upstream from Reynolds Creek, and 2.2 miles west of Sedwick.	127	1964-66‡, 1967-72	1-11-72 2-15-72 7-19-72	0 0 0
08086020	Hubbard Creek at U.S. Highway 380 near Moran, Tex.	Lat 32°37'24", long 99°13'12", Shackelford County, at bridge on U.S. Highway 380 and 6.1 miles northwest of Moran.	152	1963-72	1-11-72 2-15-72 7-19-72	0 0 0
08086120	Salt Prong Hubbard Creek at U.S. Highway 380 near Albany, Tex.	Lat 32°41'01", long 99°16'05", Shackelford County, at dam downstream from U.S. Highway 380, 2.0 miles upstream from North Fork Hubbard Creek, and 3.2 miles southeast of Albany.	65.2	1963, 1964-68‡, 1969-72	1-11-72 2-15-72 7-19-72	0 0 0
08086130	Cook Creek near Albany, Tex.	Lat 32°44'53", long 99°20'06", Shackelford County, at first crossing of Farm Road 1084 and 2.7 miles northwest of Albany.	10.7	1963-72	1-10-72 2-14-72 7-19-72	0 0 0
08086200	Salt Prong Hubbard Creek near Albany, Tex.	Lat 32°42'02", long 99°12'42", Shackelford County, at bridge on Farm Road 601, 2.7 miles downstream from North Prong Hubbard Creek, 4.9 miles upstream from Hubbard Creek, and 5.2 miles southeast of Albany.	116	1962-63‡, 1964-72	1-11-72 2-15-72 5- 2-72 7-19-72	.33 0 a.18 0
08086210	Snailum Creek near Albany, Tex.	Lat 32°43'27", long 99°10'55", Shackelford County, at low-water crossing on county road, 0.6 mile upstream from Salt Prong Hubbard Creek, and 6.6 miles east of Albany.	25.5	1963, 1964-66‡, 1967-72	1-11-72 2-15-72 7-19-72	0 0 0
08086220	Big Sandy Creek near Eolian, Tex.	Lat 32°35'23", long 98°58'44", Stephens County, at county road crossing (extension of Farm Road 1032), 2.1 miles upstream from Live Oak Creek, and 5.5 miles southeast of Eolian.	91.4	1963-66, 1968-72	1-11-72 2-15-72 7-18-72	0 0 0
08086235	Battle Creek near Moran, Tex.	Lat 32°33'10", long 99°06'32", Shackelford County, at Farm Road 2408 and 3.4 miles east of Moran.	108	1966-68‡, 1969-72	1-11-72 2-15-72 5- 2-72 7-19-72	0 0 0 0
08088420	Brazos River at Farm Road 1287 near Graham, Tex.	Lat 33°03'20", long 98°34'54", Young County, at Gooseneck bridge on Farm Road 1287 and about 3.5 miles south of Graham.	-	1970-72	11- 2-71 12- 6-71 1-10-72 2-16-72 4-22-72 5-30-72 7- 5-72 9-14-72	ef925 ef300 113 f146 f103 f121 ef824 e1,100
08103300	Sulphur Creek below Gold Springs at Lampasas, Tex.	Lat 31°02'58", long 98°11'09", Lampasas County, 0.2 mile south of Lampasas and 0.5 mile downstream from Gold Springs.	(c)	1924, 1931, 1957-72	10- 6-71 11-17-71 12-30-71 2- 2-72 3- 9-72 4-13-72 5-18-72 6-22-72 7-31-72 8-31-72	4.20 3.75 5.47 5.40 6.86 5.56 35.4 4.06 3.70 3.60

‡ Operated as a continuous-record station.
a Estimated.
c Not applicable.
e Includes surface runoff.
f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
08103400	Sulphur Creek below Hancock Springs at Lampasas, Tex. m/	Lat 31°03'14", long 98°10'53", Lampasas County, at bridge on U.S. Highway 281 in Hancock Park, 200 ft downstream from swimming pool discharge outlet, and 1,800 ft downstream from city pumping plant.	(c)	1901-2, 1906, 1911, 1924, 1931, 1957-72	10- 6-71 11-17-71 12-30-71 2- 2-72 3- 9-72 4-13-72 5-18-72 6-22-72 7-31-72 8-31-72	10.2 20.8 19.9 19.4 16.5 13.7 63.9 13.8 8.82 10.4
08103500	Hannah Springs at Lampasas, Tex.	Lat 31°04'08", long 98°10'25", Lampasas County, at Hackberry Street low-water crossing in Lampasas and 200 ft below Hannah Springs.	(c)	1901-2, 1906, 1910, 1957-72	2- 2-72 6-22-72	1.50 1.80
08103700	Sulphur Creek below Lampasas, Tex.	Lat 31°05'10", long 98°03'10", Lampasas County, at county road bridge at Hallmark crossing, 1.8 miles upstream from Lampasas River, and 7.2 miles east of Lampasas.	(c)	1958-72	2- 2-72 6-22-72	12.3 13.3
08104200	Salado Creek above Salado Springs near Salado, Tex.	Lat 30°56'23", long 97°33'16", Bell County, just downstream from mouth of Elm Creek upstream from Salado Springs and 1.5 miles upstream from Salado.	133	1948, 1950-72	1-13-72 4-18-72 7- 7-72 8- 9-72	11.8 1.96 4.07 2.03
08104300	Salado Springs at Salado, Tex.	Lat 30°56'50", long 97°31'51", Bell County, downstream from springs at Salado.	(c)	1902-3, 1934, 1948, 1950-72	1-13-72 4-18-72 7- 7-72 8- 9-72	14.3 10.0 11.0 10.4
08105200	Berry Creek at Farm Road 2606 near Georgetown, Tex.	Lat 30°40'33", long 97°36'52", Williamson County, at Farm Road 2606, 0.4 mile upstream from San Gabriel River, and 4.4 miles northeast of Georgetown.	121	1964-72	1-17-72 7- 3-72	14.8 9.99
08111200	New Year Creek near Chappell Hill, Tex.	Lat 30°09'57", long 96°13'24", Washington County, at bridge on Farm Road 2447 and 2.6 miles northeast of Chappell Hill.	167	1948, 1964-72	4-17-72 5-22-72 7-11-72	5.08 18.1 7.87
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, 1955, 1958, 1964-72	4-18-72 5-22-72 7-11-72	3.17 10.4 2.53
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	1964-72	4-18-72 5-22-72 7-11-72 8- 1-72 8-28-72	0 4.90 0 .47 0
		Colorado River Basin				
08129500	Dove Creek Spring near Knickerbocker, Tex.	Lat 31°11'06", long 100°43'51", Irion County, at headquarters ranchhouse, 500 ft upstream from Dove Creek, 1.8 miles upstream from Stilson Dam on Dove Creek, and 8.5 miles southwest of Knickerbocker.	(c)	1944-58, 1959-72	10-30-71 1-11-72 2-12-72 3-18-72 4-22-72 5-27-72 7- 7-72 8- 3-72 9- 9-72	24.4 12.0 11.7 11.1 9.75 11.5 15.3 12.4 11.1
08131300	South Concho River above Pecan Creek near San Angelo, Tex.	Lat 31°20'13", long 100°28'46", Tom Green County, 1,000 ft upstream from Pecan Creek and 9 miles south of San Angelo.	(c)	1963-72	10- 5-71 11- 6-71 12- 4-71 1- 8-72 2-16-72 3-18-72 4-22-72 5-27-72 8- 3-72 9- 9-72	2.21 2.13 2.42 2.88 4.33 4.15 3.91 3.03 3.04 3.24

c Not applicable.
m Pumping upstream from measuring site not included in measurement.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Colorado River Basin--Continued				
08136150	Concho River near Veribest, Tex.	Lat 31°32'07", long 100°13'05", Tom Green County, at bridge on county road, 2.8 miles downstream from Crownest Creek, 3.0 miles upstream from Willow Creek, 4.5 miles northeast of Veribest, and 17.3 miles downstream from gaging station near San Angelo.	-	1970-72	10-11-71 11-13-71 12-18-71 1-22-72 2-26-72 3-28-72 5- 6-72 6- 8-72 7-13-72 8-17-72	20.2 20.5 15.5 13.6 12.0 4.88 8.52 9.54 2.24 18.5
08143900	Springs at Fort McKavett, Tex.	Lat 30°50'03", long 100°05'37", Menard County, at Fort McKavett.	(c)	1902, 1905, 1922, 1942, 1948-49, 1951-52, 1955-56, 1958-72	12- 8-71 7- 7-72	19.0 14.2
08146500	San Saba Springs at San Saba, Tex.	Lat 31°11'44", long 98°42'42", San Saba County, 150 ft upstream from bridge on U.S. Highway 190 at San Saba and 0.8 mile east of courthouse.	(c)	1939, 1952, 1957, 1959-72	1- 5-72 7- 6-72	9.74 9.62
08149400	South Llano River near Telegraph, Tex.	Lat 30°15'43", long 99°56'01", Edwards County, 3.7 miles upstream from Paint Creek, 5.7 miles south of Telegraph, and 18.7 miles southwest of Junction.	(c)	1939, 1952, 1956, 1959-72	7- 6-72	22.2
08149500	Seven Hundred Springs near Telegraph, Tex.	Lat 30°16'12", long 99°55'22", Edwards County, 3 miles upstream from Paint Creek, 5 miles south of Telegraph, and 18 miles southwest of Junction.	(c)	1939, 1952, 1955-56, 1959-72	7- 6-72	20.6
08155400	Barton Creek above Barton Springs at Austin, Tex.	Lat 30°15'48", long 97°46'19", Travis County, just upstream from upper dam of Barton Creek swimming pool in Zilker Park and upstream from all springs known as Barton Springs at Austin.	125	1919-72	11-29-71 1-24-72 5- 5-72 8-17-72	.06 .48 0 0
08155500	Barton Springs at Austin, Tex.	Lat 30°15'49", long 97°46'02", Travis County, in Zilker Park at Austin.	(c)	1895-1916, 1917-18*, 1919-72	11-29-71 1-24-72 5- 5-72 8-17-72	73.6 99.8 81.9 80.1
08158700	Onion Creek near Driftwood, Tex.	Lat 30°05'00", long 98°00'20", Hays County, at bridge at lower crossing on Farm Road 150, 3.2 miles southeast of Driftwood, and 10 miles west of Buda.	-	1958, 1962-72	11-29-71 1-24-72 3-30-72 5- 5-72 8-17-72 9-20-72	21.0 28.6 12.4 5.39 4.69 3.15
08158800	Onion Creek at Buda, Tex.	Lat 30°05'12", long 97°50'49", Hays County, 600 ft downstream from bridge on Farm Road 967 and 0.4 mile northwest of Buda.	-	1958, 1962-72	11-29-71 1-24-72 3-30-72 5- 5-72 8-17-72 9-20-72	.23 .33 .06 0 0 0
08159100	Onion Creek below Del Valle, Tex.	Lat 30°11'22", long 97°37'12", Travis County, 600 ft upstream from bridge on State Highway 71 and 2.4 miles southeast of Del Valle.	-	1958, 1962-72	11-29-71 1-24-72 3-30-72 5- 5-72 8-17-72 9-20-72	8.11 11.7 5.59 5.45 1.69 .03
08159300	Cedar Creek near Bastrop, Tex.	Lat 30°01'47", long 97°20'19", Bastrop County, at county road, 0.6 mile downstream from Walnut Creek, and 6.0 miles south of Bastrop.	284	1964-72	4-26-71 11-30-71 1-27-72 5- 5-72 8-17-72	b1.03 1.58 1.58 .43 .02
08159400	Piney Creek near Bastrop, Tex.	Lat 30°01'43", long 97°18'55", Bastrop County, 0.6 mile upstream from mouth and 6.0 miles south of Bastrop.	59.3	1964-72	11-30-71 1-27-72 5- 5-72 8-17-72	.37 .79 .17 .18

* Operated as a continuous-record station.
b Not previously published.
c Not applicable.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Cashs Creek Basin				
08162650	Cashs Creek near Blessing, Tex. f/	Lat 28°48'38", long 96°11'51", Matagorda County, at bridge on county road and 4.4 miles southeast of Blessing.	14.8	1969-72	10-19-71	36.0
					11-23-71	12.8
					12-29-71	1.11
					2- 1-72	44.3
					3- 7-72	.40
					4-11-72	2.90
					5-17-72	15.1
					6-20-72	8.33
					7-25-72	.76
					8-30-72	2.48
		East Carancahua Creek Basin				
08162700	East Carancahua Creek near Blessing, Tex. f/	Lat 28°51'48", long 96°17'05", Matagorda County, at bridge on Farm Road 616 and 4.2 miles west of Blessing.	81.2	1967-68, 1970-72	10-19-71	258
					11-23-71	76.4
					12-29-71	7.68
					2- 1-72	200
					3- 7-72	2.61
					4-11-72	11.8
					5-16-72	206
					6-20-72	16.0
					7-26-72	19.3
					8-30-72	6.79
08162800	West Carancahua Creek near LaWard, Tex. f/	Lat 28°53'19", long 96°27'03", Jackson County, at bridge on county road and 3.2 miles northeast of LaWard.	57.1	1967-68, 1970-72	10-19-71	164
					11-23-71	278
					12-29-71	a.10
					2- 1-72	25.4
					3- 7-72	0
					4-11-72	6.87
					5-16-72	50.7
					6-19-72	21.1
					7-25-72	21.9
					8-29-72	2.49
		Chocolate Bayou Basin				
08164850	Chocolate Bayou near Port Lavaca, Tex. f/	Lat 28°35'40", long 96°41'48", Calhoun County, at bridge on Sweetwater Road and 4.5 miles southwest of Port Lavaca.	53.7	1967-68, 1970-72	10-20-71	622
					11-22-71	1.34
					12-29-71	.41
					2- 2-72	38.2
					3- 8-72	.12
					4-10-72	1.86
					5-17-72	56.0
					6-20-72	5.29
					7-24-72	3.27
					8-28-72	1.10
		Guadalupe River Basin				
08168000	Hueco Springs near New Braunfels, Tex.	Lat 29°45'31", long 98°08'34", Comal County, two springs located 200 ft and 400 ft west of Guadalupe River, 0.3 mile upstream from mouth of Elm Creek, and 4.2 miles north of New Braunfels.	(c)	1944-72	11- 2-71	93.0
					11-24-71	92.6
					12-29-71	91.3
					1-31-72	80.9
					3- 1-72	52.2
					3-30-72	30.6
					5- 1-72	52.7
					6- 1-72	92.2
					6-30-72	90.8
					7-27-72	65.7
					9- 1-72	46.2
08168600	Blieders Creek at New Braunfels, Tex.	Lat 29°43'14", long 98°07'23", Comal County, at Grove Avenue crossing in northwest New Braunfels and 0.25 mile upstream from mouth.	-	1962-72	1- 3-72	0
					7- 3-72	0
08168700	Panther Canyon at New Braunfels, Tex.	Lat 29°42'47", long 98°08'14", Comal County, at Landa Park Drive crossing in Landa Park at New Braunfels.	-	1962-72	1- 3-72	0
					7- 3-72	0
08168800	Dry Comal Creek at New Braunfels, Tex.	Lat 29°41'52", long 98°08'11", Comal County, at Floral Avenue crossing in New Braunfels, 0.6 mile upstream from Missouri Pacific Railroad Co. bridge, and 0.9 mile upstream from mouth.	-	1962-72	1- 3-72	.39
					7- 3-72	1.72

a Estimated.
c Not applicable.
f Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Salt Creek Basin				
08189100	Salt Creek near Refugio, Tex. f/	Lat 28°19'00", long 97°00'24", Refugio County, at culvert on Farm Road 774 and 16.4 miles east of Refugio.	13.6	1967-68, 1970-72	10-20-71	122
					11- 5-71	.81
					11- 9-71	a.5
					11-10-71	a.07
					11-24-71	a.19
					12-30-71	a.14
					2- 3-72	1.66
					3- 8-72	a.12
					4-12-72	0
					5-18-72	53.2
					6-21-72	40.3
					7-27-72	.78
					8-31-72	0
		Nueces River Basin				
08204000	Leona River spring flow near Uvalde, Tex.	Lat 29°09'10", long 99°44'30", Uvalde County, at old road crossing on White's ranch, 2.0 miles downstream from Cooks Slough, and 4.7 miles southeast of Uvalde.	(c)	1939-65≠, 1966-72	10-27-71	29.9
					11-30-71	29.7
					1- 4-72	34.1
					2- 8-72	27.9
					3-16-72	27.5
					4-18-72	23.7
					5-24-72	19.8
					6-27-72	19.0
					8- 2-72	22.3
					9- 6-72	22.5
		Rio Grande Basin				
08407600	Smith Spring in Guadalupe Mountain National Park near Salt Flat, Tex.	Lat 31°55'09", long 104°48'25", Hudspeth County, at end of Smith Canyon Road north of Frijole Ranch, 1.8 miles north of U.S. Highways 62 and 180, 1.9 miles north of Pine Spring, and 21 miles northeast of Salt Flat.	-	1969-72	10-25-71	g.08
					11-21-71	g.08
					12-12-71	g.08
					1- 8-72	d.07
					2-19-72	d.07
					3-13-72	g.08
					5-24-72	.06
					6- 3-72	g.08
					6-27-72	g.08
					7-30-72	g.08
					8-26-72	g.09
					9-24-72	g.09
08425500	Phantom Lake Spring near Toyahvale, Tex.	Lat 30°56'01", long 103°50'43", Jeff Davis County, 375 ft downstream from source of spring, 3.5 miles southwest of Toyahvale, and 7.0 miles southwest of Balmorhea.	(c)	1931-33≠, 1942-66≠, 1967-72	10-21-71	5.43
					12- 2-71	5.14
					1-13-72	5.94
					2-17-72	4.59
					3-29-72	4.22
					5- 4-72	4.90
					6- 8-72	4.94
					7-13-72	5.11
					8-17-72	8.53
					9-22-72	15.0
08427000	Giffin Springs at Toyahvale, Tex.	Lat 30°56'51", long 103°47'19", Reeves County, 2,000 ft northwest of post office in Toyahvale.	(c)	1919, 1922-23, 1925, 1932-33≠, 1941-72	1-13-72	2.71
					7-13-72	3.58
08427500	San Solomon Springs at Toyahvale, Tex.	Lat 30°56'34", long 103°47'16", Reeves County, on South Canal at Toyahvale, 540 ft downstream from headgate at pool of springs, and 4.0 miles southwest of Balmorhea.	(c)	1931-33≠, 1941-65≠, 1966-72	10-21-71	29.7
					12- 2-71	27.5
					1-13-72	32.0
					2-17-72	26.4
					3-29-72	26.4
					5- 4-72	26.6
					6- 8-72	28.5
					7-13-72	27.8
					8-17-72	32.7
					9-22-72	35.3
08444500	Comanche Springs at Fort Stockton, Tex.	Lat 30°53'20", long 102°51'59", Pecos County, on outlet canal of Pecos County Water Improvement District No. 1 in Fort Stockton, 0.2 mile upstream from bridge on U.S. Highway 290, and 0.5 mile downstream from head of springs.	(c)	1899-1935, 1936-64≠, 1965-72	1-12-72	0
					7-12-72	0

≠ Operated as a continuous-record station.
a Estimated.
c Not applicable.
d From formula for 90° V-notch weir.
f Water-quality records for the current year are published in Part 2 of this report.
g Measured volumetrically.

Discharge measurements made at low-flow partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Rio Grande Basin--Continued				
08447000	Pecos River near Sheffield, Tex.	Lat 30°39'34", long 101°46'11", Pecos-Crockett County line, at U.S. Highway 290 and 3.8 miles southeast of Sheffield.	-	1922-25, 1940-49*, 1969-72	10-26-71	37.9
					12- 6-71	34.7
					1-11-72	37.6
					2-14-72	30.6
					3-21-72	23.7
					4-24-72	13.9
					6- 1-72	24.9
					7- 5-72	17.5
					8- 8-72	15.9
					9-14-72	22.6
08456300	Las Moras Springs at Brackettville, Tex. k/	Lat 29°18'33", long 100°25'13", Kinney County, in springflow pool at Brackettville, 160 ft south of U.S. Highway 90, and 1,550 ft upstream from bridge on Brackettville-Fort Clark Road.	(c)	1896, 1899-1900, 1902, 1904-6, 1910, 1912, 1925, 1928, 1951-72	10-15-71	41.1
					10-27-71	42.3
					11- 9-71	45.7
					11-30-71	46.4
					12-14-71	41.9
					12-29-71	41.6
					1-11-72	37.7
					1-25-72	30.5
					2-10-72	32.8
					2-23-72	27.9
					3- 7-72	21.6
					3-14-72	19.5
					4- 4-72	15.8
					4-18-72	13.9
					5- 9-72	14.8
					6-20-72	14.2
					7-11-72	14.3
					7-25-72	13.9
					8- 8-72	10.2
					8-30-72	34.5
					9-12-72	32.3

* Operated as a continuous-record station.
c Not applicable.
k Measured by International Boundary and Water Commission.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1972

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Arkansas River Basin					
07227460	East Fork Cheyenne Creek tributary near Channing, Tex. a/	Lat 35°40'35", long 102°16'55", Hartley County, at culvert on State Highway 354 and 2.5 miles east of Channing.	0.86	1965-72	7-22-72	4.65	470
07227480	Tecovas Creek tributary near Bushland, Tex. a/	Lat 35°15'55", long 102°00'20", Potter County, at culvert on Farm Road 1061 and 5.5 miles northeast of Bushland.	-	1966-72	6-29-72	3.19	32
07234150	White Woman Creek tributary near Darrouzett, Tex. a/	Lat 36°24'00", long 100°16'30", Lipscomb County, at culvert on State Highway 305 and 4.5 miles southeast of Darrouzett.	-	1966-72	8-25-72	4.96	384
		Red River Basin					
07297920	Middle Tule Draw near Tulia, Tex. a/	Lat 34°31'42", long 101°53'30", Swisher County, at culvert on State Highway 86 and 6.5 miles west of Tulia.	-	1967-72	6-15-72	8.14	1,880
07298150	Rock Creek tributary near Silverton, Tex. a/	Lat 34°28'40", long 101°25'50", Briscoe County, at culvert on State Highway 86 and 6.7 miles west of Silverton.	-	1966-72	7-18-72	7.08	63
07299575	North Groesbeck Creek tributary near Kirkland, Tex. a/	Lat 34°23'55", long 100°03'25", Childress County, at culvert on Farm Road 1033 and 1.4 miles north of Kirkland.	-	1966-72	7- 3-72	5.47	14
07299940	Oklahoma Draw tributary near Hedley, Tex. a/	Lat 34°53'12", long 100°37'18", Donley County, at culvert on State Highway 203 and 2.7 miles northeast of Hedley.	1.15	1966-72	1972	<5.09	<73
07301405	Doodlebug Creek near Wheeler, Tex. a/	Lat 35°26'40", long 100°13'50", Wheeler County, at culvert on State Highway 152 and 2.5 miles southeast of Wheeler.	.19	1967-72	7- 9-72	9.28	600
07307720	Cottonwood Creek tributary near Afton, Tex. a/	Lat 33°44'20", long 100°50'30", Dickens County, at culvert on State Highway 70 and 2 miles southwest of Afton.	-	1967-72	7- 9-72	3.84	670
07308220	Plum Creek near Vernon, Tex. a/	Lat 34°06'38", long 99°13'22", Wilbarger County, at culvert on Farm Road 433 and 4.0 miles southeast of Vernon.	-	1967-72	12- 2-71	7.24	595
07312140	Beaver Creek tributary near Crowell, Tex. a/	Lat 33°58'54", long 99°41'30", Foard County, at culvert on U.S. Highway 70 and 2 miles east of Crowell.	-	1966-72	5-12-72	5.74	370
07312300	Wolf Creek near Iowa Park, Tex. a/	Lat 33°54'45", long 98°48'30", Wichita County, at culvert on Farm Road 367 and 8.5 miles southwest of Iowa Park.	-	1966-72	10- 3-71	7.46	(†)
07314200	North Fork Little Wichita River tributary near Archer City, Tex. a/	Lat 33°39'50", long 98°43'30", Archer County, at culvert on State Highway 25, 1.3 miles upstream from North Fork Little Wichita River, and 7.4 miles northwest of Archer City.	-	1966-72	5- 7-72	2.86	49
07315550	Farmers Creek near Saint Jo, Tex. a/	Lat 33°42'45", long 97°33'05", Montague County, at culvert on U.S. Highway 82 and 2.0 miles northwest of Saint Jo.	.82	1967-72	10-20-71	9.70	(†)
07332602	Cooper Creek near Bonham, Tex. a/	Lat 33°32'24", long 96°12'03", Fannin County, at culvert on Farm Road 1629, 1.7 miles upstream from Bois d'Arc Creek, and 2.9 miles south of Bonham.		1966-72	12- 9-71	19.45	k3,000
07336940	McKinney Bayou near Leary, Tex. a/	Lat 33°31'33", long 94°11'32", Bowie County, at culvert on Farm Road 2253, 1.1 miles north of Mount Zion, 3.2 miles north of Farm Road 2148, and 4.3 miles north of Leary.	3.33	1966-72	12-21-71 1- 2-72	12.20 11.81	k0 k60

† Discharge not determined.
< Less than.
a Equipped with stage-rainfall recorder.
k Affected by backwater.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Red River Basin--Continued					
07342450	Nelson Branch near Leonard, Tex. a/	Lat 33°21'08", long 96°13'20", Hunt County, at culvert on U.S. Highway 69, 0.7 mile (revised) southeast of Hunt-Fannin county line, and 2.2 miles southeast of Leonard.	-	1966-72	10-19-71	14.25	157
07343350	Dial Branch near Bagwell, Tex. a/	Lat 33°37'46", long 95°10'12", Red River County, at culvert on U.S. Highway 82, 1.8 miles upstream from mouth, and 2.3 miles south of Bagwell.	-	1966-72	12- 9-71	16.30	672
07343900	Buck Creek near Cookville, Tex. a/	Lat 33°11'12", long 94°52'21", Titus County, at culvert on U.S. Highway 67, 1.0 mile west of Cookville, and 5.5 miles east of Mount Pleasant.	-	1966-72	3- 2-72	14.20	274
07344490	Dragoo Creek near Mount Pleasant, Tex. a/	Lat 33°09'36", long 95°01'51", Titus County, at culvert on Interstate Highway 30, 2.5 miles (revised) upstream from mouth, and 3.8 miles west of Mount Pleasant.	-	1967-72	12- 9-71	13.67	k650
07344600	Williamson Creek near Pittsburg, Tex. a/	Lat 33°02'53", long 94°52'37", Titus County, at culvert on Farm Road 2348 and 6.3 miles (revised) northeast of Pittsburg.	-	1967-72	12- 3-71	13.37	k420
07346010	Cypress Creek tributary near Jefferson, Tex. a/	Lat 32°42'50", long 94°25'52", Marion County, at culvert on Farm Road 2208, 4.3 miles upstream from Cypress Creek, and 5.5 miles southwest of Jefferson.	0.21	1966-72	1972	<10.56	<5.6
07346072	Taylor Branch near Smithland, Tex. a/	Lat 32°47'20", long 94°15'02", Marion County, at culvert on State Highway 49 and 6.4 miles northeast of Jefferson.	.73	1966-72	1- 3-72	11.20	92
		Sabine River Basin					
08017700	Burnett Branch near Canton, Tex. a/	Lat 32°32'17", long 95°51'44", Van Zandt County, at culvert on State Highway 19 and 1.3 miles south of Canton.	.33	1966-72	12-11-71	13.61	235
08020800	Grace Creek tributary at Longview, Tex. a/	Lat 32°31'02", long 94°44'23", Gregg County, at culvert on Spur 502 (revised), 1.2 miles north of Longview, and 1.7 miles upstream from mouth.	5.05	1967-72	6-21-72	13.61	814
08022010	Redmon Branch near Hallsville, Tex. a/	Lat 32°29'41", long 94°28'47", Harrison County, at culvert on Farm Road 968, 2.6 miles upstream from Potters Creek, and 5.6 miles east of Hallsville.	-	1966-72	1- 3-72	14.40	136
08024290	Dorsey Branch near Milam, Tex. a/	Lat 31°30'44", long 93°50'45", Sabine County, at culvert on State Highway 87 and 5.5 miles north of Milam.	-	1967-72	3-20-72	3.98	218
08028505	Moore Branch near Newton, Tex. a/	Lat 30°53'00", long 93°40'59", Newton County, at culvert on Farm Road 1414 and 5.2 miles north of Newton.	-	1967-72	12- 2-71	2.70	110
08030700	Adams Bayou tributary near Deweyville, Tex. a/	Lat 30°14'53", long 93°48'56", Newton County, at culvert on State Highway 12 and 5.5 miles southwest of Deweyville.	-	1967-72	12- 6-71	1.76	94
		Neches River Basin					
08031100	Bethlehem Branch near Van, Tex. a/	Lat 32°29'04", long 95°38'35", Van Zandt County, at culvert on Farm Road 314, 0.7 mile upstream from mouth, and 3.1 miles south of Van.	-	1966-72	12- 9-71	11.33	69
08032100	Hurricane Creek tributary near Palestine, Tex. a/	Lat 31°52'10", long 95°34'20", Anderson County, at culvert on State Highway 155 and 8.5 miles northeast of Palestine.	-	1967-72	11-17-69 10-20-71	2.16 2.36	e43 50
08032250	One Arm Creek near Maydelle, Tex. a/	Lat 31°48'29", long 95°17'19", Cherokee County, at culvert on U.S. Highway 84 and 1.0 mile east of Maydelle.	-	1967-72	1972	(f)	<23
08032300	Squirrel Creek near Elkhart, Tex. a/	Lat 31°37'09", long 95°30'15", Anderson County, at culvert on State Highway 294 and 4.5 miles east of Elkhart.	-	1967-72	12- 5-71	2.30	140

< Less than.
a Equipped with stage-rainfall recorder.
e Revised.
f Flow did not reach bottom of intakes.
k Affected by backwater.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Neches River Basin--Continued					
08033250	Piney Creek tributary near Pennington, Tex. a/	Lat 31°12'12", long 95°06'58", Trinity County, at culvert on Farm Road 358 and 7.5 miles east of Pennington.	1.17	1967-72	1-29-72	1.46	49
08033450	Shawnee Creek tributary near Huntington, Tex. a/	Lat 31°13'17", long 94°30'51", Angelina County, at culvert on U.S. Highway 69 and 5.3 miles southeast of Huntington.	.52	1967-72	1-29-72	3.48	64
08033480	Greenwood Creek tributary near Colmesneil, Tex. a/	Lat 30°58'48", long 94°24'22", Tyler County, at culvert on U.S. Highway 69 and 5.2 miles north of Colmesneil.	-	1967-72	3-20-72	4.50	100
08037300	Gingham Branch near Mount Enterprise, Tex. a/	Lat 31°55'14", long 94°33'33", Rusk County, at culvert on U.S. Highway 84 and 7.5 miles east of Mount Enterprise.	-	1967-72	1971 1- 4-72	(f) 8.60	<16 70
08039900	Little Sandy Creek tributary near Jasper, Tex. a/	Lat 30°56'39", long 93°56'16", Jasper County, at culvert on State Highway 63 and 4.0 miles east of Jasper.	-	1967-72	12- 5-71	2.35	22
08041400	Drakes Branch near Spurger, Tex. a/	Lat 30°41'02", long 94°15'32", Tyler County, at culvert on Farm Road 1013 and 5.2 miles west of Spurger.	-	1967-72	4-27-72	2.29	175
		Double Bayou Basin					
08042550	West Fork Double Bayou near Anahuac, Tex. a/	Lat 29°45'39", long 94°38'00", Chambers County, at bridge on Farm Road 562 (Smith Point Road) and 3 miles southeast of Anahuac.	4.43	1967-72	12- 6-71	13.52	280
		Trinity River Basin					
08044200	Walker Creek near Boyd, Tex. a/	Lat 33°04'32", long 97°34'58", Wise County, at culvert on State Highway 114, 1.1 miles upstream from Salt Creek, and 1.1 miles west of Boyd.	2.95	1965-72	12- 8-71	13.30	355
08047200	West Creek at Fort Worth, Tex. a/	Lat 32°40'25", long 97°22'06", Tarrant County, at culvert on Bilglade Road at intersection of West Creek Drive in Fort Worth.	.31	1965-72	10-19-71	14.37	295
08048550	Dry Branch at Blandin Street, Fort Worth, Tex. m/	Lat 32°47'19", long 97°18'22", Tarrant County, at culvert on Blandin Street in north Fort Worth and 2.8 miles upstream from mouth.	1.08	1969-72	10-19-71	588.48	422
08048820	Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. m/	Lat 32°50'22", long 97°19'20", Tarrant County, at culvert on south access road to Interstate Highway 820 and 5.7 miles north of Tarrant County courthouse, Fort Worth.	5.64	1969-72	5-29-71 12- 9-71	612.71 613.89	e258 632
08048900	Deer Creek tributary near Crowley, Tex. a/	Lat 32°35'06", long 97°21'04", Tarrant County, at culvert on Farm Road 731, 0.7 mile upstream from mouth, and 0.7 mile northeast of Crowley.	5.86	1967-72	10-19-71	15.66	1,280
08053100	Jones Valley Creek tributary near Forestburg, Tex. a/	Lat 33°33'15", long 97°37'05", Montague County, at culvert on Farm Road 455, 0.7 mile upstream from Jones Valley Creek, and 3.8 miles northwest of Forestburg.	-	1966-72	5-12-72	18.51	680
08054200	Gamble Branch near Argyle, Tex. a/	Lat 33°04'53", long 97°11'48", Denton County, at culvert on U.S. Highway 377 and 2.8 miles south of Argyle.	.50	1966-72	10- 3-71	12.79	168
08055600	Joes Creek at Dallas, Tex. a/	Lat 32°51'33", long 96°53'00", Dallas County, at bridge on State Highway 114, Dallas, and 0.9 mile upstream from mouth.	7.51	1962-72	7-12-72	422.46	1,850
08057020	Coombs Creek at Sylvan Avenue, Dallas, Tex. a/	Lat 32°46'01", long 96°50'07", Dallas County, at bridge on Sylvan Avenue, Dallas, and 1.2 miles upstream from mouth.	4.75	1965-72	10-19-71	422.85	2,560
08057050	Cedar Creek at Bonnie View Road, Dallas, Tex. a/	Lat 32°44'50", long 96°47'44", Dallas County, at bridge on Bonnie View Road, Dallas, and 0.9 mile upstream from mouth.	9.42	1965-72	10-19-71	405.48	6,780
08057120	Spanky Branch at McCallum Lane, Dallas, Tex. a/	Lat 32°57'58", long 96°48'11", Dallas County, at bridge on McCallum Lane, Dallas, and 0.5 mile upstream from mouth.	6.77	1962-72	12- 9-71	563.91	2,670

< Less than.
a Equipped with stage-rainfall recorder.
e Revised.
f Flow did not reach bottom of intakes.
m Equipped with stage recorder.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Trinity River Basin--Continued					
08057140	Cottonwood Creek at Forest Lane, Dallas, Tex. a/	Lat 32°54'33", long 96°45'54", Dallas County, at bridge on Forest Lane, Dallas, and 0.2 mile upstream from Floyd Branch.	8.50	1962-72	10- 3-71	508.49	3,180
08057160	Floyd Branch at Forest Lane, Dallas, Tex. a/	Lat 32°54'33", long 96°45'34", Dallas County, at bridge on Forest Lane, Dallas, and 0.3 mile upstream from mouth.	4.17	1962-72	10- 3-71	507.75	2,460
08057320	Ash Creek at Highland Road, Dallas, Tex. m/	Lat 32°48'18", long 96°43'04", Dallas County, at bridge on Highland Road, Dallas, and 0.4 mile upstream from mouth.	6.92	1963-72	10-19-71	425.47	6,200
08057340	Forney Creek at Lawnview Avenue, Dallas, Tex. a/	Lat 32°46'45", long 96°43'02", Dallas County, at culvert on Lawnview Avenue, Dallas, and 0.8 mile upstream from mouth.	1.84	1963-72	10-19-71	436.26	1,150
08057420	Fivemile Creek at U.S. Highway 77, Dallas, Tex. m/	Lat 32°41'15", long 96°49'22", Dallas County, at bridge on U.S. Highway 77, Dallas, 0.2 mile mile upstream from Woody Branch, and 8.0 miles upstream from mouth.	13.20	1965-72	10-19-71	470.95	7,440
08057425	Woody Branch at U.S. Highway 77, Dallas, Tex. m/	Lat 32°40'58", long 96°49'22", Dallas County, at bridge on U.S Highway 77, Dallas, and 0.4 mile upstream from mouth.	11.50	1965-72	10-19-71	476.30	5,500
08057430	Fivemile Creek at Lancaster Road, Dallas, Tex. m/	Lat 32°40'49", long 96°47'10", Dallas County, at bridge on Lancaster Road, Dallas, and 6.7 miles upstream from mouth.	37.90	1965-72	10-19-71	438.04	9,550
08059200	Arls Branch near Westminster, Tex. a/	Lat 33°21'31", long 96°26'31", Collin County, at culvert on State Highway 121 and 1.2 miles east of Westminster.	-	1965-72	10- 9-71	16.47	457
08061620	Duck Creek at Buckingham Road, Garland, Tex. m/	Lat 32°55'53", long 96°39'55", Dallas County, at dam 200 ft upstream from Buckingham Road in north Garland and 17.5 miles upstream from mouth.	8.05	1969-72	10- 3-71	562.87	2,800
08061920	South Mesquite Creek at State Highway 352, Mesquite, Tex. a/	Lat 32°46'09", long 96°37'18", Dallas County, at bridge on State Highway 352 in west Mesquite and 9.6 miles upstream from mouth.	13.40	1969-72	10-19-71	447.57	3,120
08062850	Bachelor Creek near Terrell, Tex. a/	Lat 32°42'42", long 96°17'52", Kaufman County, at culvert on Interstate Highway 20, 1.7 miles northwest of State Highway 34, and 2.2 miles southwest of Terrell.	12.96	1967-72	10-19-71	16.74	1,600
08063005	Red Oak Branch near Eustace, Tex. a/	Lat 32°18'36", long 95°57'38", Henderson County, at culvert on Farm Road 2709, 1.3 miles upstream from Clear Creek, and 2.2 miles east of Eustace.	-	1966-72	11-18-71	11.26	36
08063180	Briar Creek tributary near Corsicana, Tex. a/	Lat 32°02'54", long 96°34'49", Navarro County, at culvert on Farm Road 744, 1.7 miles upstream from Briar Creek, and 7.7 miles west of Corsicana.	-	1966-72	10-19-71	13.57	505
08063550	Alvarado Branch near Alvarado, Tex. a/	Lat 32°24'49", long 97°12'20", Johnson County, at culvert on Farm Road 1706, 0.2 mile south of U.S. Highway 67, and 0.6 mile northeast of Alvarado.	.84	1966-72	10-19-71	13.93	454
08063620	Kings Branch near Reagor Springs, Tex. a/	Lat 32°20'41", long 96°47'02", Ellis County, at culvert on Rock Island and Pacific Railroad, 0.7 mile upstream from Waxahachie Creek, and 1.8 miles northwest of Reagor Springs.	.62	1965-72	10-19-71	15.88	302
08064630	Saline Branch tributary near Bethel, Tex. a/	Lat 31°55'46", long 95°55'58", Anderson County, at culvert on U.S. Highway 287 and 1.0 mile northwest of Bethel.	-	1967-72	1- 4-72	5.83	105
08065320	Mayes Branch near Latexo, Tex. a/	Lat 31°25'58", long 95°28'29", Houston County, at culvert on U.S. Highway 287 and 2.6 miles north of Latexo.	4.26	1967-72	1972	<4.96	<173

< Less than.
a Equipped with stage-rainfall recorder.
m Equipped with stage recorder.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Trinity River Basin--Continued					
08066280	Bluff Creek tributary near Livingston, Tex. a/	Lat 30°41'52", long 94°46'58", Polk County, at culvert on U.S. Highway 190 and 9.2 miles east of Livingston.	-	1967-72	5-12-72	3.43	75
		San Jacinto River Basin					
08067550	Welch Branch near Huntsville, Tex. a/	Lat 30°38'33", long 95°40'47", Walker County, at culvert on Farm Road 1791 and 6.9 miles southwest of Huntsville.	2.35	1966-72	5-11-71 5-12-72	e5.87 7.19	182 273
08067750	Landrum Creek tributary near Montgomery, Tex. a/	Lat 30°21'03", long 95°41'50", Montgomery County, at culvert on State Highway 149 and 2.4 miles south of Montgomery.	e.13	1966-72	3-20-72	4.45	44
08068300	Mill Creek tributary near Dobbin, Tex. a/	Lat 30°15'37", long 95°46'14", Montgomery County, at culvert on Farm Road 1486 and 7.8 miles south of Dobbin.	4.07	1967-72	4-27-72	8.91	1,650
08069850	Bear Creek near Cleveland, Tex. a/	Lat 30°26'58", long 95°13'11", San Jacinto County, at culvert on Farm Road 1725 and 12.9 miles northwest of Cleveland.	1.46	1967-72	3-20-72	3.36	153
08073750	Stoney Brook Street Ditch at Houston, Tex. a/	Lat 29°44'05", long 95°30'22", Harris County, at culvert on Stoney Brook Street in west Houston (discontinued).	.50	1967-72	5-12-72	65.74	160
08073800	Bering Ditch at Woodway Drive, Houston, Tex. a/	Lat 29°45'22", long 95°29'44", Harris County, at bridge on Woodway Drive in west Houston.	e2.77	1965-72	5-12-72	57.26	1,240
08074100	Cole Creek at Guhn Road, Houston, Tex. a/	Lat 29°51'24", long 95°30'55", Harris County, at bridge on Guhn Road in northwest Houston (discontinued).	7.05	1965-72	3-20-72	92.44	878
08074200	Brickhouse Gully at Clarblak Street, Houston, Tex. a/	Lat 29°49'53", long 95°31'42", Harris County, at bridge on Clarblak Street in northwest Houston.	2.05	1965-72	3-20-72	94.28	399
08074850	Bintliff Ditch at Bissonnet Street, Houston, Tex. a/	Lat 29°41'16", long 95°30'20", Harris County, at bridge on Bissonnet Street in southwest Houston.	4.29	1968-72	6-10-72	61.46	930
08074900	Willow Waterhole Bayou at Landsdowne Street, Houston, Tex. a/	Lat 29°39'01", long 95°29'11", Harris County, at bridge on Landsdowne Street in southwest Houston (discontinued).	11.20	1965-72	6-10-72	59.49	847
08075300	Sims Bayou at Carlsbad Street, Houston, Tex. a/	Lat 29°37'33", long 95°29'56", Harris County, at bridge on Carlsbad Street in southwest Houston (discontinued).	e3.81	1965-72	5-12-72	62.68	357
08075550	Berry Bayou at Gilpin Street, Houston, Tex. a/	Lat 29°38'32", long 95°13'22", Harris County, at bridge on Gilpin Street in southeast Houston.	3.26	1965-72	6-16-72	34.27	362
08075600	Berry Bayou tributary at Globe Street, Houston, Tex. a/	Lat 29°39'00", long 95°14'48", Harris County, at bridge on Globe Street in southeast Houston (discontinued).	1.58	1965-72	5-12-72	39.38	218
08075700	Berry Creek at Galveston Road, Houston, Tex. a/	Lat 29°40'59", long 95°15'11", Harris County, at bridge on Galveston Road and 0.5 mile upstream from mouth in southeast Houston (discontinued).	4.86	1965-72	4-27-72	18.68	444
08075750	Hunting Bayou tributary at Cavalcade Street, Houston, Tex. a/	Lat 29°48'00", long 95°20'02", Harris County, at bridge on Cavalcade Street in northeast Houston (discontinued).	e1.20	1965-72	3-20-72	46.19	255
08075760	Hunting Bayou at Falls Street, Houston, Tex. a/	Lat 29°48'22", long 95°19'50", Harris County, at bridge on Falls Street in northeast Houston.	e3.50	1965-72	3-20-72	45.51	660

a Equipped with stage-rainfall recorder.
e Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		San Jacinto River Basin--Continued					
08075780	Greens Bayou at Cutten Road near Houston, Tex. a/	Lat 29°56'56", Long 95°31'10", Harris County, at bridge on Cutten Road and about 16.5 miles northwest of Houston.	8.73	1965-72	5-12-72	116.06	190
08076200	Halls Bayou at Deertrail Street near Houston, Tex. a/	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.	6.31	1965-72	3-20-72	85.83	1,180
		Clear Creek Basin					
08077100	Clear Creek tributary at Hall Road, Houston, Tex. a/	Lat 29°36'09", long 95°16'41", Harris County, at bridge on Hall Road in south Houston.	1.33	1965-72	4-27-72	p44.65	249
08077550	Cowart Creek near Friendswood, Tex. a/	Lat 29°30'46", long 95°13'21", Brazoria County, at bridge on county road and 1.7 miles southwest of Friendswood.	18.00	1966-72	5-11-72	21.52	1,380
08077600	Clear Creek near Friendswood, Tex. a/	Lat 29°31'02", long 95°10'42", Galveston County, at bridge on Farm Road 528 and 1.5 miles southeast of Friendswood.	-	1966-72	5-13-72	12.06	(†)
		Highland Bayou Basin					
08077750	Highland Bayou tributary near Texas City, Tex. a/	Lat 29°20'31", long 94°57'03", Galveston County, at Texas City Terminal Railway Company tracks, 600 ft downstream from U.S. Highway 75, 0.4 mile upstream from mouth, and 3 miles southwest of Texas City.	1.97	1966-72	11-23-71	3.60	(†)
		Brazos River Basin					
08079300	Blackwater Draw tributary near Floyd, N. Mex.	NW¼SW¼ sec. 13, T. 1 S., R. 30 E., Roosevelt County, 0.5 mile below section road and 10 miles west of Floyd.	b10.00	1963-72	1972	5.05	(†)
08079570	Barnum Springs Draw near Post, Tex. a/	Lat 33°16'54", long 101°23'30", Garza County, at culvert on Farm Road 122 and 6.4 miles north of Post.	-	1966-72	9- 8-72	4.87	138
08079580	Rattlesnake Creek near Post, Tex. a/	Lat 33°13'36", long 101°21'36", Garza County, at culvert on Farm Road 651 and 2.7 miles north of Post.	-	1966-72	9-15-72	5.47	252
08080510	Guest-Flowers Draw near Aspermont Tex. a/	Lat 33°07'25", long 100°08'15", Stonewall County, at culvert on U.S. Highway 380, 0.2 mile upstream from Tonk Creek, and 5.3 miles east of Aspermont.	-	1966-72	e5-30-68 3- 6-70 10-16-71	<16.75 16.87 18.05	e5 e38 180
08080600	Running Water Draw near Clovis, N. Mex.	NE¼ sec. 31, T. 4 N., R. 36 E., 0.25 mile upstream from State Highway 18 and 8 miles north of Clovis.	109.00	1953-56, 1957-64, 1965-72	8- 8-72	(j)	b8,000
08080750	Callahan Draw near Lockney, Tex. a/	Lat 33°59'48", long 101°32'54", Floyd County, at culvert on Farm Road 784, 7 miles upstream from Running Water Draw, and 10.5 miles southwest of Lockney.	37.50	1966-72	8-28-72	4.52	295
08080918	Red Mud Creek near Spur, Tex. a/	Lat 33°19'24", long 100°55'18", Dickens County, at culvert on Farm Road 1081 and 11 miles southwest of Spur.	65.10	1966-72	5- 6-72	8.63	1,090
08082900	North Elm Creek near Throckmorton, Tex. a/	Lat 33°10'50", long 99°22'05", Throckmorton County, at culvert on State Highway 24 and 11.3 miles west of Throckmorton.	-	1966-72	5-12-72	24.36	600
08085300	Humphries Draw near Haskell, Tex. a/	Lat 33°10'40", long 99°34'30", Haskell County, at culvert on State Highway 24 and 9.3 miles east of Haskell.	-	1966-72	9-21-72	15.49	(†)
08089100	Elm Creek tributary near Graford, Tex. a/	Lat 32°54'35", long 98°17'35", Palo Pinto County, at culvert on Farm Road 4, 0.2 mile upstream from Elm Creek, and 3.2 miles southwest of Graford.	-	1966-72	6-16-72	11.47	22
08090850	Cidwell Branch near Granbury, Tex. a/	Lat 32°35'41", long 97°46'24", Parker County (revised), at culvert on State Highway 51 and 10.5 miles (revised) north of Granbury.	3.37	1966-72	10-19-72	12.52	123

† Discharge not determined.
* Operated as a continuous-record station.
a Equipped with stage-rainfall recorder.
b Estimated.
e Revised.
j Gage-height not determined.
p Occurred at different time than peak discharge.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Brazos River Basin--Continued					
08091200	Morris Branch near Bluff Dale, Tex. a/	Lat 32°21'27", long 98°00'13", Erath County, at culvert on U.S. Highway 377 and 1.2 miles east of Bluff Dale.	-	1966-72	10-19-71	12.73	68
08091700	Panter Branch near Tolar, Tex. a/	Lat 32°20'59", long 97°51'25", Hood County, at culvert on State Highway 51, 2.5 miles upstream from mouth, and 4.6 miles southeast of Tolar.	7.82	1966-72	5- 9-68 9-16-72	21.70 21.88	e3,650 3,750
08093200	Bond Branch near Hillsboro, Tex. a/	Lat 32°02'16", long 97°06'27", Hill County, at culvert on U.S. Highway 77 and 2.3 miles northeast of Hillsboro.	-	1965-72	10-19-71	14.43	328
08095220	South Bosque River near McGregor, Tex. a/	Lat 31°23'22", long 97°22'54", McLennan County, at bridge on State Highway 317 and 3.8 miles south of McGregor.	-	1967-72	10-20-71	4.01	532
08095250	Willow Branch at McGregor, Tex. a/	Lat 31°26'24", long 97°25'18", McLennan County, at culvert on U.S. Highway 84 on west edge of McGregor.	-	1966-72	1972	<4.85	<229
08096550	Box Branch at Robinson, Tex. a/	Lat 31°29'28", long 97°08'47", McLennan County, at culvert on Loop 340 in Robinson city limits, 0.2 mile east of Interstate Highway 35, and 4.9 miles south of Waco.	.40	1966-72	11-17-71	10.35	82
08099350	Sabana River tributary near De Leon, Tex. a/	Lat 32°06'44", long 98°33'58", Comanche County, at culvert on Farm Road 587 and 1.6 miles west of De Leon.	-	1966-72	4-27-72	3.69	38
08100100	Eidson Creek near Hamilton, Tex. a/	Lat 31°46'10", long 98°07'25", Hamilton County, at culvert on U.S. Highway 281 and 4.6 miles north of Hamilton.	2.91	1966-72	12- 9-71	10.67	298
08100400	Bermuda Branch near Gatesville, Tex. a/	Lat 31°32'26", long 97°47'53", Coryell County, at culvert on State Highway 36 and 8.0 miles northwest of Gatesville.	.50	1966-72	12-10-71	5.79	57
08100800	Hoffman Branch near Hamilton, Tex. a/	Lat 31°35'01", long 98°11'45", Hamilton County, at culvert on Farm Road 2414 and 9.3 miles southwest of Hamilton.	5.56	1966-72	10-19-71	13.55	2,050
08102900	School Branch near Lampasas, Tex. a/	Lat 31°13'48", long 98°09'25", Lampasas County, at culvert on Farm Road 1690 and 11.5 miles north of Lampasas.	.90	1966-72	1972	<4.76	<50
08103450	Fleece Branch near Lampasas, Tex. a/	Lat 31°05'46", long 98°12'30", Lampasas County, at culvert on U.S. Highways 183 and 190, 0.7 mile upstream from Burleson Creek, and 2.8 miles northwest of Lampasas.	1.08	1966-72	5- 7-72	10.29	116
08104850	South Fork San Gabriel River near Bertram, Tex. a/	Lat 30°43'14", long 98°06'14", Burnet County, at bridge on Farm Road 243 and 3.4 miles southwest of Bertram.	8.84	1967-72	10-19-72	4.75	(†)
08105900	Avery Branch near Taylor, Tex. a/	Lat 30°29'11", long 97°27'27", Williamson County, at culvert on Farm Road 973 and 6.4 miles southwest of Taylor.	-	1966-72	5- 1-72	10.11	2,950
08108800	Little Branch near Bryan, Tex. a/	Lat 30°45'14", long 96°28'01", Robertson County, at culvert on U.S. Highway 190 and State Highway 6 and 8.3 miles northwest of Bryan.	.14	1966-72	1972	<9.79	<1.0
08110350	Plummers Creek at Mexia, Tex. a/	Lat 31°39'45", long 96°29'56", Limestone County, at culvert on State Highway 14 at southwest city limits of Mexia.	4.42	1966-72	10-11-71	13.18	1,130
08111100	Winkleman Creek near Brenham, Tex. a/	Lat 30°15'19", long 96°15'44", Washington County, at culvert on State Highway 90 and 10.7 miles northeast of Brenham.	.75	1966-72	4-27-72	11.58	208
08114900	Seabourne Creek near Rosenberg, Tex. a/	Lat 29°31'27", long 95°48'29", Fort Bend County, at culvert on State Highway 36 and 2.4 miles south of Rosenberg.	-	1967-72	5-10-72	6.25	300

† Discharge not determined.
< Less than.
a Equipped with stage-rainfall recorder.
e Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		San Bernard River Basin					
08117800	Mound Creek tributary at Guy, Tex. a/	Lat 29°20'49", long 95°46'30", Fort Bend County, at culvert on State Highway 36 and 0.2 mile southeast of Guy.	1.48	1967-72	5-10-72	2.20	195
		Colorado River Basin					
08123620	Sulphur Springs Draw near Wellman, Tex. a/	Lat 33°04'36", long 102°27'54", Terry County, at culvert on Farm Road 402 and 3 miles northwest of Wellman.	-	1966-72	e9-10-69 e10-22-69 9-14-72	<2.05 <2.05 3.92	e5 e5 98
08123750	Coahoma Draw tributary near Big Spring, Tex. a/	Lat 32°21'17", long 101°24'18", Howard County, at culvert on State Highway 350 and 8.5 miles northeast of Big Spring.	-	1966-72	9- 2-72	6.20	1,110
08123760	Bull Creek tributary near Forsan, Tex. a/	Lat 32°08'23", long 101°10'53", Howard County, at culvert on Farm Road 2183 and 11.4 miles east of Forsan.	.40	1966-72	e6-15-68 e5- 6-69 6- 1-70 5- 5-72	<6.02 <6.02 <6.02 9.69	e5 e5 e5 253
08123920	Bitter Creek near Silver, Tex. a/	Lat 31°58'48", long 100°42'52", Coke County, at culvert on Farm Road 2059, 2.5 miles upstream from mouth and 6.4 miles south of Silver.	-	1967-72	e6-10-69 e10- 7-69 10- 4-71	<2.10 <2.10 2.73	e5 e5 66
08125450	Salt Creek tributary near Hylton, Tex. a/ (formerly Fish Creek)	Lat 32°07'57", long 100°14'02", Nolan County, at culvert on Farm Road 1170 and 1.8 miles west of Hylton.	.25	1966-72	9- 3-72	<4.82	5
08127100	Dry Creek near Christoval, Tex. a/	Lat 31°05'21", long 100°20'56", Tom Green County, at culvert on Farm Road 2084 and 11.4 miles southeast of Christoval.	-	1965-72	c8-12-65 e4- 9-68 e4-11-69 12-29-69 6-14-72	g1.77 <1.41 <1.41 1.73 1.64	c51 e10 e10 e48 42
08133300	Quarry Creek near Sterling City, Tex. a/	Lat 31°50'48", long 101°09'18", Sterling County, at culvert on State Highway 158 and 9.8 miles west of Sterling City.	3.25	1966-72	6-12-72	5.44	370
08133800	Broome Creek near Broome, Tex. a/	Lat 31°46'05", long 100°51'09", Sterling County, at culvert on U.S. Highway 87 and 1.1 miles northwest of Broome.	-	1969-72	e4-10-68 e12-29-69 4-16-71 4-20-72	<2.37 <2.37 <2.37 <3.14	e5 e5 e10 5
08134300	Nolke Station Creek near San Angelo, Tex. a/	Lat 31°31'34", long 100°33'46", Tom Green County, at culvert on Farm Road 2288 and 8.6 miles northwest of San Angelo.	.59	1965-72	e6-17-68 8-26-69 c10-27-69 9- 9-72	<2.74 3.01 <2.74 <2.74	e5 e14 e5 5
08134400	Gravel Pit Creek near San Angelo, Tex. a/	Lat 31°27'54", long 100°31'17", Tom Green County, at culvert on Farm Road 2288 and 5.0 miles west of San Angelo.	.19	1966-72	9- 9-72	1.80	18
08136200	Puddle Creek near Veribest, Tex. a/	Lat 31°30'38", long 100°09'31", Tom Green County, at culvert on Farm Road 1692 and 6.2 miles northeast of Veribest.	-	1966-72	5- 9-68 10- 3-71	5.11 5.87	e25 85
08136300	Frog Pond Creek near Eden, Tex. a/	Lat 31°14'21", long 99°59'54", Concho County, at culvert on U.S. Highway 87 and 9.4 miles west of Eden.	-	1967-72	e10-10-69 e7-26-71 10-19-71	1.77 <1.77 4.35	e5 e2 420
08141100	McCall Branch near Coleman, Tex. a/	Lat 31°50'57", long 99°33'12", Coleman County, at culvert on State Highway 53, 1.0 mile upstream from Hords Creek, and 8.2 miles west of Coleman.	2.17	1966-72	6- 1-70 10-19-71	4.46 4.10	e535 460
08143700	Brown's Creek tributary near Goldthwaite, Tex. a/	Lat 31°31'01", long 98°34'00", Mills County, at culvert on State Highway 16 and 4.6 miles north of Goldthwaite.	-	1967-72	e7- 1-67 10-18-71	<3.36 3.58	e10 90
08145100	Brady Creek tributary near Brady, Tex. a/	Lat 31°05'05", long 99°17'33", McCulloch County, at culvert on Farm Road 734 and 4.3 miles southeast of Brady.	-	1967-72	10- 4-71	3.01	78
08150200	Llano River tributary near London, Tex. a/	Lat 30°38'22", long 99°35'52", Kimble County, at culvert on U.S. Highway 377 and 2.7 miles south of London.	.58	1966-72	1-20-68 8-27-69 2-24-70	5.38 5.52 5.03	e15 e23 e6

< Less than.
a Equipped with stage-rainfall recorder.
c Not previously published.
e Revised.
g Maximum for period June to Sept. 1965.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Colorado River Basin--Continued					
08150900	Stone Creek tributary near Art, Tex. a/	Lat 30°44'17", long 99°03'29", Mason County, at culvert on State Highway 29, 3.2 miles east of Art, and 10.6 miles east of Mason.	0.40	1966-72	e5-20-67 9-22-72	<2.98 6.78	e5 218
08151300	Johnson Creek near Valley Spring, Tex. a/	Lat 30°51'38", long 98°49'52", Llano County, at culvert on Farm Road 734, 0.8 mile west of Valley Spring, and 12 miles west of Llano.	5.66	1967-72	10-19-71	4.30	500
08152700	Little Flatrock Creek near Marble Falls, Tex. a/	Lat 30°30'52", long 98°18'44", Burnet County, at culvert on State Highway 71 and 4.8 miles southwest of Marble Falls.	-	1966-72	6-17-72	5.27	129
08152800	Spring Creek near Fredericksburg, Tex. a/	Lat 30°18'09", long 99°03'23", Gillespie County, at downstream side of bridge on U.S. Highway 290 and 11.0 miles west of Fredericksburg.	-	1967-72	10-19-71	5.43	2,100
08153100	Cane Branch at Stonewall, Tex. a/	Lat 30°14'07", long 98°39'21", Gillespie County, at culvert on U.S. Highway 290 at Stonewall and 0.6 mile upstream from Pedernales River.	1.37	1966-72	10-19-71	13.45	275
08158900	Fox Branch near Oak Hill, Tex. a/	Lat 30°14'01", long 97°52'29", Travis County, at culvert on State Highway 71 near intersection with U.S. Highway 290, 0.2 mile upstream from Williamson Creek, and 1.0 mile west of Oak Hill.	-	1966-72	11-17-71	10.81	39
08159450	Reeds Creek near Bastrop, Tex. a/	Lat 30°00'26", long 97°15'03", Bastrop County, at bridge on Farm Road 2571 and 8.3 miles southeast of Bastrop.	5.31	1965-72	1972	<2.38	<660
08161580	Dry Branch tributary near Altair, Tex. a/	Lat 29°34'39", long 96°28'16", Colorado County, at culvert on State Highway 71 and 0.9 mile northwest of Altair.	.68	1967-72	5-12-72	2.62	282
		Guadalupe River Basin					
08166300	Turtle Creek tributary near Kerrville, Tex. a/	Lat 29°58'11", long 99°11'02", Kerr County, at culvert on Farm Road 2771 and 5.9 miles south of Kerrville.	e.46	1966-72	10- 4-71	8.70	76
08168720	Trough Creek near New Braunfels, Tex. a/	Lat 29°46'20", long 98°15'55", Comal County, at culvert on State Highway 46 and 11.0 miles northwest of New Braunfels.	.48	1966-72	5-11-72	12.39	2,510
08168750	West Prong Dry Comal Creek tributary near New Braunfels, Tex. a/	Lat 29°42'48", long 98°17'26", Comal County, at culvert on Farm Road 1863 and 10.3 miles west of New Braunfels.	.32	1966-72	5-11-72	10.45	1,090
08169750	Walnut Branch at Seguin, Tex. a/	Lat 29°34'47", long 97°58'46", Guadalupe County, at culvert on U.S. Highway 90 (West Kingsbury Street) at Seguin.	5.46	1967-72	5-11-72	7.50	1,750
08169850	East Pecan Branch near Gonzales, Tex. a/	Lat 29°29'58", long 97°31'36", Gonzales County, at culvert on U.S. Highway 90-A and 3.7 miles west of Gonzales.	.24	1966-72	5- 7-72	9.14	175
08172100	West Elm Creek near Niederwald, Tex. a/	Lat 29°59'04", long 97°44'39", Caldwell County, at culvert on Farm Road 2001 and 2.3 miles southwest of Niederwald.	e.44	1965-72	9-16-72	8.62	500
08176200	Irish Creek near Cuero, Tex. a/	Lat 29°08'02", long 97°12'10", DeWitt County, at bridge on Farm Road 1447 and 6.2 miles northeast of Cuero.	15.50	1967-72	5-10-72	8.21	(†)
08176600	Threemile Creek near Cuero, Tex. a/	Lat 29°02'00", long 97°20'52", DeWitt County, at culvert on Farm Road 2718 and 5.2 miles southwest of Cuero.	.48	1966-72	5- 7-72	10.42	219
08177600	Olmos Creek tributary at Farm Road 1535, Shavano Park, Tex. a/	Lat 29°34'35", long 98°32'45", Bexar County, at culvert on Farm Road 1535 at Shavano Park.	.33	1969-72	5- 7-72	3.75	107
08178300	Alazan Creek at St. Cloud Street, San Antonio, Tex. a/	Lat 29°27'29", long 98°32'59", Bexar County, at bridge on St. Cloud Street at San Antonio.	3.26	1969-72	4-27-72	11.50	1,520

† Discharge not determined.
< Less than.
a Equipped with stage-rainfall recorder.
e Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Guadalupe River Basin--Continued					
08178600	Panther Springs Creek at Farm Road 2696 near San Antonio, Tex. a/	Lat 29°37'31", long 98°31'06", Bexar County, at culvert on Farm Road 2696 and 5.5 miles north of San Antonio.	9.54	1969-72	5-11-72	9.53	8,610
08178690	Salado Creek tributary at Bitters Road, San Antonio, Tex. a/	Lat 29°31'36", long 98°26'25", Bexar County, at culvert on Bitters Road at San Antonio.	.26	1967-72	5- 7-72	7.88	253
08178737	Salado Creek tributary at Bee Street, San Antonio, Tex. a/	Lat 29°26'37", long 98°27'13", Bexar County, 76 ft downstream from culvert at intersection of Bee and Shirley Streets at San Antonio.	-	1972	5- 7-72	7.21	(†)
08178900	Bandera Creek tributary near Bandera, Tex. a/	Lat 29°50'51", long 99°06'12", Bandera County, at culvert on Farm Road 689 and 10 miles north of Bandera.	.27	1966-72	10- 3-71	6.76	88
08179200	Medina River tributary near Pipe Creek, Tex. a/	Lat 29°38'12", long 98°56'13", Bandera County, at culvert on Farm Road 1283 and 6.8 miles south of Pipe Creek.	-	1966-72	5- 7-72	9.84	420
08181000	Leon Creek tributary at Farm Road 1604, San Antonio, Tex. a/	Lat 29°35'14", long 98°37'40", Bexar County, at culvert on Farm Road 1604 at San Antonio.	5.57	1969-72	5-11-72	6.83	901
08181200	French Creek tributary near Helotes, Tex. a/	Lat 29°33'43", long 98°39'26", Bexar County, at culvert on Farm Road 1604 and 2.2 miles east of Helotes.	1.08	1966-72	5- 7-72	10.26	1,030
08188400	Baugh Creek at Goliad, Tex. a/	Lat 28°39'50", long 97°25'05", Goliad County, at culvert on U.S. Highway 59 and 1.5 miles west of Goliad.	3.02	1966-72	4-27-72	11.17	3,510
		Aransas River Basin					
08189600	Olmos Creek tributary near Skidmore, Tex. a/	Lat 28°15'27", long 97°44'15", Bee County, at culvert on Farm Road 797 and 3.4 miles west of Skidmore.	.58	1966-72	5-10-72	9.27	902
		Nueces River Basin					
08194550	Plant Creek near Tilden, Tex. a/	Lat 28°24'15", long 98°33'11", McMullen County, at culvert on State Highway 16 and 3.9 miles south of Tilden.	.36	1965-72	9-26-72	8.93	144
08198900	East Elm Creek near Sabinal, Tex. a/	Lat 29°18'36", long 99°23'50", Medina County, at bridge on U.S. Highway 90 and 4 miles east of Sabinal.	-	1967-72	8-10-72	1.86	175
08200900	Bone Creek near Hondo, Tex. a/	Lat 29°33'16", long 99°06'12", Medina County, at culvert on Farm Road 689 and 14 miles north of Hondo.	.19	1966-72	5- 6-72	5.29	82
08203500	Leona River tributary near Uvalde, Tex. a/	Lat 29°17'30", long 99°45'31", Uvalde County, at culvert on U.S. Highway 83 and 5.2 miles north of Uvalde.	-	1966-72	1972	f<6.65	<20
08207200	Rutledge Hollow Creek at Poteet, Tex. a/	Lat 29°02'29", long 98°34'41", Atascosa County, at culvert on Farm Road 476 (School Road) at Poteet.	e9.33	1966-72	5- 6-72	4.68	96
08207700	Lucas Creek near Pleasanton, Tex. a/	Lat 29°00'52", long 98°22'47", Atascosa County, at bridge on State Highway 97 and 8 miles northeast of Pleasanton.	32.80	1966-72	10- 5-71	10.05	650
		Petronila Creek Basin					
08211550	Pintas Creek tributary near Banquete, Tex. a/	Lat 27°42'36", long 97°49'57", Nueces County, at culvert on Farm Road 666 and 7.0 miles south of Banquete.	3.28	1966-72	10-16-71	10.10	568
		San Fernando Creek Basin					
08212300	Tranquitas Creek at Kingsville, Tex. a/ h/	Lat 27°31'33", long 97°52'02", Kleberg County, at bridge on U.S. Highway 77 Business Route at Kingsville, 4.9 miles above San Fernando Creek, and 5.9 miles downstream from Tranquitas Dam.	48.50	1965-72	2-29-72	4.16	(†)

† Discharge not determined.
< Less than.
a Equipped with stage-rainfall recorder.
e Revised.
f Flow did not reach bottom of intakes.
h Maximum for period Jan. to Sept. 1967.

Annual maximum discharge at crest-stage partial-record stations during water year 1972--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		San Fernando Creek Basin--Continued					
08212320	North Las Animas Creek tributary near Freer, Tex. a/	Lat 27°47'07", long 98°37'03", Duval County, at culvert on State Highway 16 and 6.8 miles south of Freer.	e0.07	1969-72	5- 9-72	4.81	60
		Rio Grande Basin					
08370200	Camp Rice Arroyo tributary near Fort Hancock, Tex. a/	Lat 31°17'51", long 105°48'52", Hudspeth County, at culvert on Interstate Highway 10 and 1.6 miles east of Fort Hancock.	-	1966-72	e7-22-69 7-31-71 9-14-72	<5.06 <5.06 5.73	e2 e5 98
08370800	Wildhorse Creek tributary near Van Horn, Tex. a/	Lat 31°02'55", long 104°40'13", Culberson County, at culvert on U.S. Highway 80 and 9.5 miles east of Van Horn.	.74	1966-72	e6-30-67 e7- 5-68 10-12-71	<4.37 <4.37 <4.37	e5 e5 5
08377600	Rio Grande tributary near Langtry, Tex. a/	Lat 29°48'17", long 101°29'01", Val Verde County, at culvert on U.S. Highway 90 and 4.7 miles east of Langtry.	-	1966-72	e7-20-67 9-11-72	<4.18 8.36	e5 70
08407800	Delaware River tributary near Orla, Tex. a/	Lat 31°55'46", long 104°28'52", Reeves County, at culvert on State Highway 652 and 36 miles west of Orla.	-	1966-72	1967 1968 9-22-69 10-21-69 1972	<3.11 <3.11 4.17 4.46 -	e0 e0 e25 e32 0
08436800	Courtney Creek tributary near Fort Stockton, Tex. a/	Lat 31°00'28", long 103°04'20", Pecos County, at culvert on Farm Road 1776, 0.2 mile north of U.S. Highway 285, and 14 miles northwest of Fort Stockton.	-	1966-72	5-29-72	4.16	116
08437550	Lake Leon tributary near Fort Stockton, Tex. a/	Lat 30°54'04", long 103°02'50", Pecos County, at culvert on U.S. Highway 290 and 10 miles west of Fort Stockton.	-	1966-72	9-20-72	5.31	235
08437650	Monument Draw tributary at Pyote Tex. a/	Lat 31°33'33", long 103°07'43", Ward County, at culvert on Spur 247 and 2.1 miles northwest of Pyote.	-	1966-72	e7- 2-68 6-22-70 1972	<1.10 1.39 -	e1 e2 0
08444400	Three Mile Mesa Creek near Fort Stockton, Tex. a/	Lat 30°50'16", long 102°50'26", Pecos County, at culvert on State Highway 285 and 4.6 miles southeast of Fort Stockton.	-	1966-72	8-15-71 9-20-72	3.21 2.79	c140 90
08447200	Howards Creek tributary near Ozona, Tex. a/	Lat 30°41'18", long 101°20'51", Crockett County, at culvert on U.S. Highway 290 and 8.7 miles west of Ozona.	7.53	1967-72	6-13-67 5-11-68 4-12-69 10-27-69 9-20-72	g4.20 3.32 4.95 <2.97 3.42	e260 e84 e590 e20 100
08448750	Dry Devils River tributary near Sonora, Tex.	Lat 30°36'13", long 100°38'20", Sutton County, at upstream end of concrete box culvert on U.S. Highway 277, 1.9 miles north of Sonora.	-	1971-72	c8-15-71 8-13-72	cd11.65 16.72	c145 465
08449470	Rough Canyon tributary near Del Rio, Tex. a/	Lat 29°35'50", long 100°51'51", Val Verde County, at culvert on U.S. Highway 277 and 16 miles north of Del Rio.	-	1967-72	9-11-72	24.19	8,540
08449600	Evans Creek tributary near Del Rio, Tex. a/	Lat 29°33'00", long 101°04'58", Val Verde County, at culvert on U.S. Highway 90 and 16 miles northwest of Del Rio.	-	1966-72	8-13-72	5.98	254
08453100	Zorro Creek near Del Rio, Tex. a/	Lat 29°19'52", long 100°49'54", Val Verde County, at culvert on U.S. Highway 277 and 4.7 miles southeast of Del Rio.	-	1966-72	1972	f7.28	<100
08454900	East Perdido Creek near Brackettville, Tex. a/	Lat 29°20'50", long 100°34'32", Kinney County, at culvert on U.S. Highway 90 and 9.7 miles northwest of Brackettville.	-	1966-72	8-10-72	5.68	55
08459600	Arroyo San Bartolo at Zapata, Tex. a/	Lat 26°55'39", long 99°17'20", Zapata County, at culvert on U.S. Highway 83 and 1.0 mile north of Zapata.	.61	1966-72	8-16-72	4.67	k300
08466100	Rio Grande tributary near Rio Grande City, Tex. a/	Lat 26°18'58", long 98°39'45", Starr County, at culvert on U.S. Highway 83 and 10.7 miles southeast of Rio Grande City.	e1.20	1966-72	5- 3-72	4.72	115
08466200	Rio Grande tributary near Sullivan City, Tex. a/	Lat 26°17'12", long 98°35'16", Starr County, at culvert on U.S. Highway 83 and 1.6 miles northwest of Sullivan City.	e.40	1966-72	4-27-72	10.43	195

< Less than.
a Equipped with stage-rainfall recorder.
c Not previously published.
d From high-water mark when gage was established.
e Revised.
f Flow did not reach bottom of intakes.
k Affected by backwater.

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 1972

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Sabine River Basin						
Sabine River	Gulf of Mexico	Lat 32°43'13", long 95°38'05", Van Zandt-Wood County line, at bridge on Farm Road 17 and 5.3 miles northeast of Grand Saline, Tex.	-	-	4-22-72	47.7
.....Do.....	.....do.....	Lat 32°40'22", long 95°34'17", Smith-Wood County line, at bridge on U.S. Highway 80 and 4.9 miles west of Mineola, Tex.	-	-	4-20-72	16.8
.....Do.....	.....do.....	Lat 32°36'05", long 95°23'29", Smith-Wood County line, at bridge on Farm Road 1804 and 7.0 miles southeast of Mineola, Tex.	-	-	4-22-72	50.6
Lake Fork Creek	Sabine River	Lat 32°53'00", long 95°37'33", Wood County, at bridge on Farm Road 515 and 4.4 miles southwest of Yantis, Tex.	-	-	4-23-72	7.45
.....Do.....	.....do.....	Lat 32°48'13", long 95°32'10", Wood County, at bridge on State Highway 182 and 5.8 miles east of Alba, Tex.	-	-	4-23-72 4-28-72	8.1 18.5
.....Do.....	.....do.....	Lat 32°37'57", long 95°21'12", Wood County, at bridge on U.S. Highway 80 and 8.0 miles east of Mineola, Tex.	-	-	4-23-72	31.1
Sabine River	Gulf of Mexico	Lat 32°33'35", long 95°12'24", Smith-Wood County line, 1,000 ft downstream from bridge on Farm Road 14 and 1.9 miles south of Hawkins, Tex.	-	-	4-25-72	92.4
Big Sandy Creek	Sabine River	Lat 32°49'43", long 95°19'21", Wood County, at bridge on Farm Road 2088 and 7.9 miles northeast of Quitman, Tex.	-	-	4-25-72	2.07
.....Do.....	.....do.....	Lat 32°45'33", long 95°16'15", Wood County, at bridge on Farm Road 312 and 1.5 miles northeast of Pine Mills, Tex.	-	-	4-23-72	5.19
.....Do.....	.....do.....	Lat 32°43'59", long 95°13'47", Wood County, at bridge on Farm Road 49 and 3.5 miles east of Pine Mills, Tex.	-	-	4-25-72 4-29-72	9.64 29.8
.....Do.....	.....do.....	Lat 32°42'40", long 95°12'12", Wood County, at bridge on Farm Road 2869 and 5.2 miles southeast of Pine Mills, Tex.	-	-	4-23-72 4-28-72	13.2 23.4
.....Do.....	.....do.....	Lat 32°39'03", long 95°10'00", Wood County, at bridge on Farm Road 1795 and 4.8 miles northeast of Hawkins, Tex.	-	-	4-30-72	47.3
Sabine River	Gulf of Mexico	Lat 32°28'34", long 94°50'58", Gregg County, at bridge on State Highway 42 and 3.0 miles south of White Oak, Tex.	-	-	4-18-72	220
.....Do.....	.....do.....	Lat 32°25'58", long 95°45'30", Gregg County, at bridge on Interstate Highway 20 and 4.8 miles south of Longview, Tex.	-	-	4-19-72	270
.....Do.....	.....do.....	Lat 32°25'01", long 94°42'35", Gregg County, at bridge on State Highway 149 and 6.0 miles southeast of Longview, Tex.	-	-	4-21-72	250
.....Do.....	.....do.....	Lat 32°19'42", long 94°21'12", Harrison-Panola County line, at bridge on U.S. Highway 59 and 11.8 miles north of Carthage, Tex.	-	-	4-18-72	333
.....Do.....	.....do.....	Lat 32°13'28", long 94°13'33", Panola County, at bridge on U.S. Highway 79 and 8.0 miles northeast of Carthage, Tex.	-	-	4-20-72	358
.....Do.....	.....do.....	Lat 32°07'31", long 94°12'06", Panola County, at bridge on Farm Road 2517 and 3.7 miles west of Deadwood, Tex.	-	-	4-20-72	369
Sabine River (Taintor Gate Release Channel)	.....do.....	Lat 31°11'49", long 93°34'12", Sabine Parish, 1,000 ft below low-flow sluiceway of taintor gates on left end of Toledo Bend Reservoir Dam, about 15 miles northeast of Burkeville, Tex.	-	-	7-19-72	73.4
Trinity River Basin						
West Fork Trinity River	Trinity River	Lat 32°45'21", long 97°17'19", Tarrant County, 1,900 ft upstream from bridge on Beach Street, Fort Worth and 0.8 mile downstream from Sycamore Creek.	-	-	7-31-72	1.97

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Trinity River Basin--Continued						
West Fork Trinity River	Trinity River	Lat 32°45'06", long 97°16'43", Tarrant County, 100 ft downstream from return of sewage disposal plant, 0.8 mile downstream from bridge on Beach Street, Fort Worth, and 2.5 miles downstream from Sycamore Creek.	-	-	8- 7-72	27.6
.....Do.....	.....do.....	Lat 32°46'54", long 97°10'42", Tarrant County, at bridge on Precinct Line Road, 2.4 miles upstream from Village Creek, and 6.0 northwest of Arlington, Tex.	-	-	8-10-72	33.9
.....Do.....	.....do.....	Lat 32°46'40", long 97°01'08", Dallas County, about 0.2 mile upstream from Arlington Sewage Disposal plant, 2.0 miles upstream from Belt Line Road, and 2.3 miles north of Grand Prairie, Tex.	-	-	8-13-72	326
.....Do.....	.....do.....	Lat 32°46'24", long 96°57'35", Dallas County, at bridge on Meyers Road, 0.8 mile upstream from Bear Creek, and 3.4 miles northeast of Grand Prairie, Tex.	-	-	7-31-72 8-14-72	89.2 202
.....Do.....	.....do.....	Lat 32°47'03", long 96°54'51", Dallas County, at site of abandoned bridge at old crossing of Singleton Boulevard, 1.6 miles upstream from confluence with Elm Fork, and 2.7 miles southeast of Irving, Tex.	-	-	8- 1-72	112
Trinity River	Gulf of Mexico	Lat 32°44'28", long 96°46'11", Dallas County, 300 ft upstream from return of Dallas Sewage Disposal plant, 1.7 miles upstream from bridge on Central Expressway (U.S. Highway 75), Dallas, and 3.1 miles upstream from White Rock Creek.	-	-	8- 2-72	140
.....Do.....	.....do.....	Lat 32°35'48", long 96°35'14", Dallas County, at bridge on Malloy Bridge Road, 2.7 miles upstream from Tenmile Creek, and 6.3 miles northeast of Ferris, Tex.	-	-	8- 1-72	409
.....Do.....	.....do.....	Lat 32°34'04", long 96°34'10", Dallas County, 0.3 mile downstream from Tenmile Creek, 3.0 miles downstream from bridge on Malloy Bridge Road, and 5.9 miles northeast of Ferris, Tex.	-	-	8- 4-72	360
.....Do.....	.....do.....	Lat 32°18'59", long 96°21'33", Henderson-Navarro County line, at bridge on Farm Road 85, 0.1 mile downstream from Bois d' Arc Creek, and 15.5 miles east of Ennis, Tex.	-	-	7-31-72 8- 4-72	414 386
.....Do.....	.....do.....	Lat 32°12'51", long 96°12'06", Henderson-Navarro County line, 0.8 mile downstream from Humphries Creek and 5.8 miles north of Kerens, Tex.	-	-	8- 2-72	344
.....Do.....	.....do.....	Lat 31°33'12", long 95°43'36", Anderson-Leon County line, 0.8 mile downstream from Box Creek, 7.5 miles south of U.S. Highway 79 and 84, and 7.2 miles southeast of Oakwood, Tex.	-	-	8- 8-72	381
.....Do.....	.....do.....	Lat 31°09'36", long 95°44'04", Houston-Leon County line, 0.7 mile downstream from Henderson Creek, 2.7 miles upstream from Lower Keechi Creek, 11.5 miles south of State Highway 7, and 22 miles southwest of Crockett, Tex.	-	-	8- 7-72	437
.....Do.....	.....do.....	Lat 30°16'37", long 94°47'55", Liberty County, at bridge on Farm Road 162 and 4.0 miles northwest of Moss Hill, Tex.	-	-	8- 6-72	401
San Jacinto River Basin						
Willow Creek	Spring Creek	Lat 30°06'52", long 95°30'24", Harris County, at bridge on Goslin Road and 5.5 miles east of Huffsmith, Tex.	-	1950, 1962	5-12-72	842
Spring Creek	West Fork San Jacinto River	Lat 30°07'09", long 95°38'44", Harris County, at bridge on State Highway 149 and 2.5 miles north-northwest of Tomball, Tex.	-	1950, 1962	5-12-72	2,640
Little Cypress Creek	Cypress Creek	Lat 29°59'18", long 95°39'13", Harris County, at bridge on Telge Road and 3.0 miles east-northeast of Cypress, Tex.	-	-	5-12-72	616

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		San Jacinto River Basin--Continued				
Cypress Creek	Spring Creek	Lat 29°57'42", long 95°37'50", Harris County, at bridge on Huffmeister Road and 4.0 miles east of Cypress, Tex.	-	-	5-12-72	2,290
Greens Bayou	Buffalo Bayou	Lat 29°53'30", long 95°14'17", Harris County, at bridge on Lake Houston Parkway, about 11 miles northeast of Houston, Tex.	-	1963, 1971	11- 1-71 1-19-72 4-26-72 7-18-72	7.13 21.2 6.58 31.5
Halls Bayou	Greens Bayou	Lat 29°50'52", long 95°53'14", Harris County, at bridge on East Houston Road at Houston, Tex.	-	1963, 1971	11- 1-71 1-19-72 4-26-72 7-18-72	10.0 18.3 9.67 20.0
		Clear Creek Basin				
Clear Creek	Gulf of Mexico	Lat 29°34'59", long 95°25'01", Harris-Brazoria County line, at bridge on Almeda School Road and 1.5 miles south of Almeda, Tex.	-	-	2-15-72 2-16-72	3.16 1.70
Hickory Slough	Clear Creek	Lat 29°35'32", long 95°16'22", Brazoria County, at bridge on Robinson Road and 2.0 miles northeast of Pearland, Tex.	-	-	2-14-72 2-17-72	13.6 4.93
Clear Creek	Gulf of Mexico	Lat 29°33'36", long 95°11'57", Harris-Galveston County line, at wooden bridge on private road and 1.9 miles north of Friendswood, Tex.	-	1971	10-25-71 12- 1-71 1-26-72 2-15-72 2-16-72 3-29-72 7-19-72 8-29-72	5.28 3.62 9.98 72.1 56.3 4.35 10.9 8.33
Turkey Creek	Clear Creek	Lat 29°33'49", long 95°11'16", Harris County, at wooden bridge on Choate Road and 2.5 miles north-northeast of Friendswood, Tex.	-	-	10-25-71 12- 1-71 2-14-72 2-17-72 3-29-72 7-17-72	1.44 1.21 10.7 4.36 1.70 4.69
.....Do.....	....do.....	Lat 29°33'35", long 95°11'33", Harris County, at wooden bridge on private road and 2.0 miles north-northeast of Friendswood, Tex.	-	1971	1-26-72 8-29-72	1.90 3.04
Marys Creek	....do.....	Lat 29°32'08", long 95°12'12", Galveston County, at bridge on Farm Road 2351 and 0.9 mile northeast of Friendswood, Tex.	-	-	2-14-72 2-17-72	27.0 8.52
Cowart Creek	....do.....	Lat 29°31'10", long 95°11'54", Galveston County, at bridge on Castlewood Street and 0.75 mile south of Friendswood, Tex.	-	-	2-14-72 2-17-72	40.4 13.2
Chigger Creek	....do.....	Lat 29°30'13", long 95°11'39", Galveston County, at bridge on Farm Road 528 and 1.9 miles south-southeast of Friendswood, Tex.	-	-	2-14-72 2-17-72	18.5 5.48
Armand Bayou	....do.....	Lat 29°39'46", long 95°08'27", Harris County, at bridge on Trebor Street and 5.5 miles southeast of Pasadena, Tex.	-	-	2-15-72 2-16-72	.03 .03
Willow Springs Bayou	Armand Bayou	Lat 29°38'29", long 95°06'49", Harris County, at bridge on Red Bluff Road, about 6.4 miles southeast of Pasadena, Tex.	-	-	2-14-72 2-17-72	7.87 2.89
Armand Bayou	.....do.....	Lat 29°37'41", long 95°06'56", Harris County, at bridge on private road to Clear Lake Oil Field, 0.4 mile south of Genoa-Red Bluff Road, about 8.2 miles southeast of Pasadena, Tex.	-	-	2-14-72 2-17-72	2.45 .76
Spring Gully	.....do.....	Lat 29°39'03", long 95°05'41", Harris County, at bridge on Fairmont Parkway (Cardiff Road on topographic map), about 7.8 miles southeast of Pasadena, Tex.	-	-	2-14-72 2-17-72	.37 .19
Big Island Slough	.....do.....	Lat 29°39'06", long 95°04'31", Harris County, at bridge on Fairmont Parkway (Cardiff Road on topographic map), about 9.0 miles southeast of Pasadena, Tex.	-	-	2-14-72 2-17-72	4.72 1.42
Horsepen Creek	.....do.....	Lat 29°35'05", long 95°07'17", Harris County, 1.1 miles upstream from Bay Area Boulevard and about 10.5 miles southeast of Pasadena, Tex.	-	-	2-14-72 2-17-72	23.6 7.45

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Brazos River Basin						
Walnut Creek	Leon River	Lat 31°57'18", long 98°27'24", Comanche County, 60 ft upstream from mouth and 2.2 miles northeast of Hasse, Tex.	-	1968-71	10-20-71 12- 1-71 3-15-72 4-26-72 5-31-72	9.80 .42 .24 .13 .35
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	12-17-71	46.7
.....Do.....	.....do.....	Lat 32°51'00", long 98°24'20", Palo Pinto County, 2.0 miles downstream from Possum Kingdom Dam and 8.25 miles northwest of Palo Pinto, Tex.	-	1949-51, 1967, 1971	12-17-71	39.7
Brazos River Authority's Canal B	Brazos River (Diversion)	Lat 29°30'21", long 95°32'21", Fort Bend County, at bridge 4,500 ft downstream from pump plant and about 4.0 miles east of Thompsons, Tex.	-	1947-48, 1952, 1969-71,	1-14-72 2-14-72 3-10-72 3-28-72 4-24-72 5- 5-72 5-31-72 6-13-72 7-12-72 7-14-72 7-31-72 8-28-72 8-31-72	312 279 284 135 270 282 298 146 275 151 153 129 118
South Texas Water Co.'s Canal	Brazos River (Diversion)	Lat 29°27'07", long 95°29'30", Fort Bend County, at concrete flume over Oyster Creek, 1.0 mile west of Juliff, Tex. and 2.5 miles below pumps.	-	1939, 1948-49, 1951-52, 1956, 1958, 1963-71	3-20-72 4-14-72 5-31-72 6-13-72 7-12-72 7-14-72 7-31-72 8-25-72 8-31-72	296 280 458 294 319 144 0 112 116
Colorado River Basin						
Deep Creek	Colorado River	Lat 32°47'46", long 100°59'41", Scurry County, at bridge on county road, 4.4 miles southeast of Dermott, 4.6 miles north of Union, and 7.0 miles northwest of courthouse in Snyder, Tex.	53.6	-	8-15-72	†10,600
....Do....	.....do.....	Lat 32°42'17", long 100°54'40", Scurry County, at crossing on 37th Street in Snyder, Tex.	140	1924-25, 1939	8-13-72	†37,000
South Concho River	Concho River	Lat 31°17'11", long 100°30'21", Tom Green County, at Gardner Dam, 2.25 miles upstream from Twin Buttes Dam, and 13 miles south of San Angelo, Tex.	-	1966-68, 1971	12-21-71	49.0
Spring Creek Springs	Spring Creek	Lat 31°13'28", long 100°48'54", Irion County, 2.1 miles south of Mertzon, Tex. and 3.7 miles south of Sherwood, Tex.	-	1943-44, 1948, 1950-52, 1958-66, 1969-70	1-11-72	11.5
West Rocky Creek	Middle Concho River	Lat 31°26'35", long 100°45'29", Irion County, about 500 ft downstream from crossing on Farm Road 853 and 12.6 miles north of Mertzon, Tex.	-	1950, 1970-71	4-20-72 7-14-72	4.08 1.97
San Angelo Reservoir from toe drain on left bank	North Concho River	Lat 31°29'04", long 100°28'46", Tom Green County, on toe drain located on left downstream side of San Angelo Reservoir and about 50 ft above North Concho River at San Angelo, Tex.	-	1959-71	10- 4-71 11- 6-71 12-11-71 1-15-72 2-19-72 3-25-72 4-29-72 5-29-72 7-11-72 8-10-72 9-16-72	0 0 0 0 0 a.01 a.01 a.09 a.05 a.07 a.04
Maynard Spring	West Fork Maynard Creek	Lat 30°26'37", long 100°04'34", Kimble County, 400 ft upstream from mouth of West Fork Maynard Creek and 3.5 miles south-southwest of Roosevelt, Tex.	-	-	12- 8-71	.89

† Peak discharge.
a Estimated.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Colorado River Basin--Continued						
Coleman Ranch Spring	Cajac Creek	Lat 30°23'20", long 99°55'15", Kimble County, on Coleman Ranch, 4.8 miles north of Telegraph, and 11.2 miles southwest of Junction, Tex.	-	-	2-16-72	1.50
Guadalupe River Basin						
Purgatory Creek	San Marcos River	Lat 29°52'06", long 97°58'01", Hays County, 2,000 ft upstream from Farm Road 2439 (Hunter Road) and 2.0 miles southwest of courthouse in San Marcos, Tex.	34.6	1970	5-11-72 5-12-72	†38,800
Cottonwood Creek	York Creek	Lat 29°41'11", long 97°38'46", Caldwell County, at bridge on U.S. Highway 183 at Luling, Tex.	-	-	5-11-72	†6,590
Blieders Creek	Comal River	Lat 29°43'47", long 98°07'18", Comal County, at bridge on State Highway 46 (Loop 337), in the north edge of New Braunfels, and about 3.0 miles west of Interstate Highway 35.	15	-	5-11-72	†48,400
Dry Comal Creek	....do.....	Lat 29°42'10", long 98°07'45", Comal County, at Missouri Pacific Railway Bridge, 800 ft upstream from Landa Street, and 1,200 ft upstream from mouth in New Braunfels, Tex.	112	-	5-12-72	†56,400
San Pedro Springs	San Pedro Creek	Lat 29°26'42", long 98°30'06", Bexar County, at San Pedro Park in San Antonio, Tex.	-	1933-35, 1951-52, 1958-61, 1966	10-20-71	3.08
San Geronimo Creek	Medina River	Lat 29°32'47", long 98°49'03", Medina County, at ranch road crossing and 2.0 miles north of intersection of Farm Roads 471 and 1608.	-	1971	10-19-71 10-21-71	23.1 137
.....Do.....	.....do.....	Lat 29°32'17", long 98°48'40", Medina County, below water gap in fence and 1.5 miles north of intersection of Farm Road 471 and 1608.	-	1971	10-21-71	126
.....Do.....	.....do.....	Lat 29°32'03", long 98°48'26", Medina County, at ranch road crossing and 1.3 miles north of intersection of Farm Roads 471 and 1608.	-	1971	10-21-71	111
.....Do.....	.....do.....	Lat 29°31'17", long 98°48'54", Medina County, at Farm Road 471.	-	1971	10-21-71	115
Artesian Creek Basin						
Artesian Creek	St. Charles Bay	Lat 28°19'20", long 96°56'06", Refugio County, at bridge on Farm Road 774 and 9.6 miles south of Tivoli, Tex.	-	1967, 1968	11- 4-71 11- 9-71 11-10-71	d.61 a.10 ad.08
Willow Creek	Artesian Creek	Lat 28°19'16", long 96°56'44", Refugio County, at bridge on Farm Road 774 and 9.8 miles southwest of Tivoli, Tex.	-	-	11- 5-71 11- 9-71 11-10-71	d2.10 d1.5 d.46
Mission River Basin						
Sous Creek	Mission River	Lat 28°12'48", long 97°19'27", Refugio County, at bridge on Farm Road 1360 and 1.7 miles south of Woodsboro, Tex.	-	1967, 1968	11- 4-71 11- 9-71	d1.70 d1.14
Chocolate Creek	Sous Creek	Lat 28°11'17", long 97°17'42", Refugio County, at bridge on county road 3.8 miles southeast of Woodsboro, Tex.	-	-	11- 4-71 11- 9-71	d3.52 .79
Melon Creek	Mission River	Lat 28°17'16", long 97°13'20", Refugio County, at bridge on Farm Road 774 and 3.1 miles east of Refugio, Tex.	-	1967, 1968	11- 5-71 11- 9-71	d19.4 d12.3
Aransas River Basin						
Papalote Creek	Aransas River	Lat 28°09'40", long 97°35'29", Bee County, at bridge on U.S. Highway 181, 1.0 mile south of Papalote, and 8.3 miles southeast of Skidmore, Tex.	-	1967	11- 5-71 11- 9-71	d2.03 1.41
Nueces River Basin						
Hondo Creek	Nueces River	Lat 27°57'02", long 97°40'35", Nueces County, 1.5 miles south of Edroy, Tex.	-	-	11- 4-71 11- 8-71	0 0
Gum Hollow	Nueces Bay	Lat 27°53'16", long 97°21'49", San Patricio County, on county road 893 and 2.7 miles west of Portland, Tex.	-	-	11- 4-71 11- 8-71 11- 9-71	ad.06 a.09 a.10

† Peak discharge.
a Estimated.
d Water-quality records are published in Part 2 of this report.

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Rio Grande Basin				
La Union East Canal	Rio Grande	Lat 32°00'15", long 106°39'08", Dona Ana County, New Mexico, at headgate of Main Canal and 2.8 miles west of Anthony, Tex.	-	1971	10-12-71	0
					11- 9-71	0
					12-15-71	0
					1-25-72	0
					3- 1-72	0
					4- 7-72	3.40
					5-16-72	.04
					6-23-72	86.0
					7-20-72	65.8
					8-31-72	12.4
Vinton Drain	....do....	Lat 31°57'27", long 106°37'08", El Paso County, at Farm Road 273 and 4.2 miles southwest of Anthony, Tex.	-	1971	10- 8-71	.46
					11- 9-71	.30
					12-15-71	.25
					1-25-72	.20
					3- 2-72	.08
					3-13-72	.08
					5-16-72	0
					6-23-72	0
					7-20-72	0
					8-31-72	0
La Union West Canal	....do....	Lat 32°00'15", long 106°39'12", Dona Ana County, New Mexico, at headgate of Main Canal and 2.8 miles west of Anthony, Tex.	-	1971	10-12-71	0
					11- 9-71	0
					12-15-71	0
					1-25-72	0
					3- 1-72	0
					4- 7-72	38.9
					5-16-72	0
					6-23-72	0
					7-20-72	82.6
					8-31-72	0
Nemexas Drain	....do....	Lat 31°57'22", long 106°38'12", Dona Ana County, New Mexico, at Farm Road 273 and 0.5 mile east of La Union, New Mexico.	-	1971	10- 8-71	2.08
					11- 9-71	2.36
					12-15-71	2.17
					1-25-72	1.49
					3- 2-72	.12
					3-13-72	.10
					3-20-72	.78
					4- 6-72	2.01
					5-16-72	3.08
					6-23-72	.17
					7-20-72	1.65
					8-31-72	2.35
West Drain	....do....	Lat 31°57'07", long 106°39'29", Dona Ana County, New Mexico, at Farm Road 273 and 0.7 mile west of La Union, New Mexico.	-	1971	10- 8-71	12.9
					11- 9-71	4.56
					12-15-71	3.53
					1-25-72	2.51
					3- 2-72	1.58
					3-13-72	7.41
					3-20-72	3.14
					4- 6-72	3.51
					5-16-72	3.76
					6-23-72	.27
					7-20-72	.70
					8-31-72	.83
Montoya Drain	....do....	Lat 31°48'50", long 106°34'12", El Paso County, at Frontera Road in the Upper Rio Grande Valley at El Paso, Tex.	-	1971	10- 8-71	24.6
					11- 9-71	23.4
					12-15-71	26.3
					1-25-72	26.6
					3- 2-72	18.5
					3-20-72	24.5
					4- 6-72	31.6
					5-16-72	21.3
					6-23-72	14.1
					7-24-72	24.0
					8-31-72	16.0

Discharge measurements made at miscellaneous sites during water year 1972--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Rio Grande Basin--Continued				
Mud Springs 1/	Mud Creek	Lat 29°27'10", long 100°37'30", Kinney County, on Mays Ranch and 16 miles northwest of Brackettville, Tex.	-	1939-41, 1952-53, 1962, 1965-72	10-15-71	22.0
					10-27-71	23.0
					11- 9-71	21.3
					11-30-71	23.2
					12-14-71	22.8
					12-29-71	23.5
					1-11-72	23.9
					1-25-72	23.9
					2-10-72	25.7
					2-23-72	25.4
					3- 7-72	26.9
					3-21-72	27.8
					4- 4-72	26.1
					4-18-72	25.9
					5- 9-72	25.2
					5-25-72	22.6
					6-20-72	21.3
					7-11-72	20.9
					7-25-72	21.4
					8- 8-72	22.9
					8-30-72	24.7
					9-12-72	24.8
Pinto Springs 1/	Pinto Creek	Lat 29°24'10", long 100°27'15", Kinney County, on C. C. Belcher Ranch and 7.5 miles northwest of Brackettville, Tex.	-	1939-41, 1952-53, 1962, 1965-72	10-15-71	28.4
					10-27-71	26.9
					11- 9-71	24.7
					11-30-71	24.2
					12-14-71	26.0
					12-29-71	22.2
					1-11-72	23.5
					1-25-72	20.4
					2-10-72	21.5
					2-23-72	16.7
					3- 7-72	12.9
					3-21-72	12.3
					4- 4-72	11.9
					4-18-72	6.8
					5- 9-72	10.9
					5-25-72	8.7
					6-20-72	13.4
					7-11-72	13.2
					7-25-72	12.8
					8- 8-72	6.3
					8-30-72	7.2
					9-12-72	8.6

1/ Measurements by International Boundary and Water Commission.

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