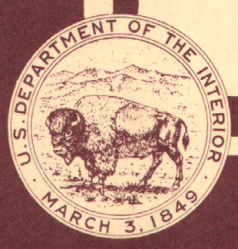
1973

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 1973

1972

OCTOBER

S	M	T	W	T	F	S
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1973

JANUARY

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JULY

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SEPTEMBER

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1973

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

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 Federal Highway Administration
Corps of Engineers, U.S. Army
U.S. Soil Conservation Service
Bureau of Sport Fisheries and Wildlife

Water resources records, 1973, 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

1974

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WATER RESOURCES DATA FOR TEXAS, 1973

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1973 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 1973 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. DeBerry, 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; Bexar, Medina, and Atascosa Counties Water Control and Improvement District No. 1; Bistone Municipal Water Supply District; Brazos River Authority; 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 Municipal Water District; Red Bluff Water Power Control District; Reeves County Water Improvement District No. 1; Richmond Rice Association; Sabine River Authority of Texas; San Antonio 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; Tom Green County Water Control and Improvement District No. 1; Trinity River Authority; Upper Guadalupe River Authority; Upper Neches River Municipal Water Authority; West Central Texas Municipal Water District; White River Municipal Water District; Wichita County Water Improvement District No. 2; and Wood County.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined as follows: See also table for converting English units to International System (SI) units on page 18.

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.

Ft^3/s-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 (ft^3/s) 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 reports 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 1973 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. 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 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 or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual 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 ft^3/s (except for those months with 10,000 or more ft^3/s-days where computer processing procedures limit printed daily values to tenths of a ft^3/s); to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. 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 short 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-station 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 20003, El Paso, Texas 79998.

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 general perennial. Normal annual rainfall exceeds 50 inches or 1,270 mm (millimeters) in the extreme east, and annual runoff may average as much as 15 inches (381 mm). In the west, streams are generally of the arroyo type and streamflow is highly ephemeral. Normal annual rainfall is less than 8 inches (203 mm) in the extreme west, and annual runoff averages less than 0.1 inch (2.54 mm) in many areas of the west.

During the 1973 water year, annual runoff over the State was deficient in the west, near normal in the north and central, and excessive in the south and east. Figure 1 on page 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 60 major reservoirs, combined conservation capacity 30,001,000 acre-feet (37.0 cubic kilometers), increased from 78 percent of capacity last September to 88 percent at the end of September 1973.

At the beginning of the water year, streamflow was about normal throughout the State, except for a deficiency in the North Concho basin in west Texas. During November, heavy rains occurred in parts of the State with excessive flows recorded in the Sulphur River basin in northeast Texas, in all of the south-central part of the State, and in the upper Colorado and Brazos River basins of west Texas.

Streamflow in December 1972 and January 1973 returned to near normal. The Beaumont-Port Arthur area had 3 inches (76.2 mm) of snow in January which was the heaviest since 1895. February streamflows were about the same as in January, with several ice and snow storms occurring during the month.

Runoff in March increased over the previous months with above-average streamflow occurring in the lower Red, Sulphur, Guadalupe, San Antonio, Lavaca, Devils, and Upper Colorado River basins. By April, excessive streamflows were recorded in all of the State except far west Texas. However, all had receded to near normal levels by mid-May.

Near the middle of June heavy rains fell in east and southeast Texas causing serious flooding. Historical flood peaks were exceeded at 12 gaging stations in the lower Trinity and San Jacinto River basins near Houston. Flood peaks on the Lavaca and Navidad Rivers were the highest since the mid-thirties. Except in the Lavaca and Navidad Rivers, these excessive flows generally receded by July. Near mid-July, heavy rains in Kendall and Bandera Counties caused brief flooding on the Medina River near Pipe Creek, gage height 37.3 feet or 11.4 meters and discharge 72,000 ft^3/s (cubic feet per second) or 2,040 m^3/s (cubic meters per second), which has been exceeded only once since 1880 (in 1919). The gaging station downstream from Medina Dam (Medina River near Riomedina) was destroyed by this flood and the gaging station Cibolo Creek at Selma reached a stage of 26.2 feet (8.0 meters), with a discharge of 64,000 ft^3/s (1,810 m^3/s), which is the highest in the last 100 years.

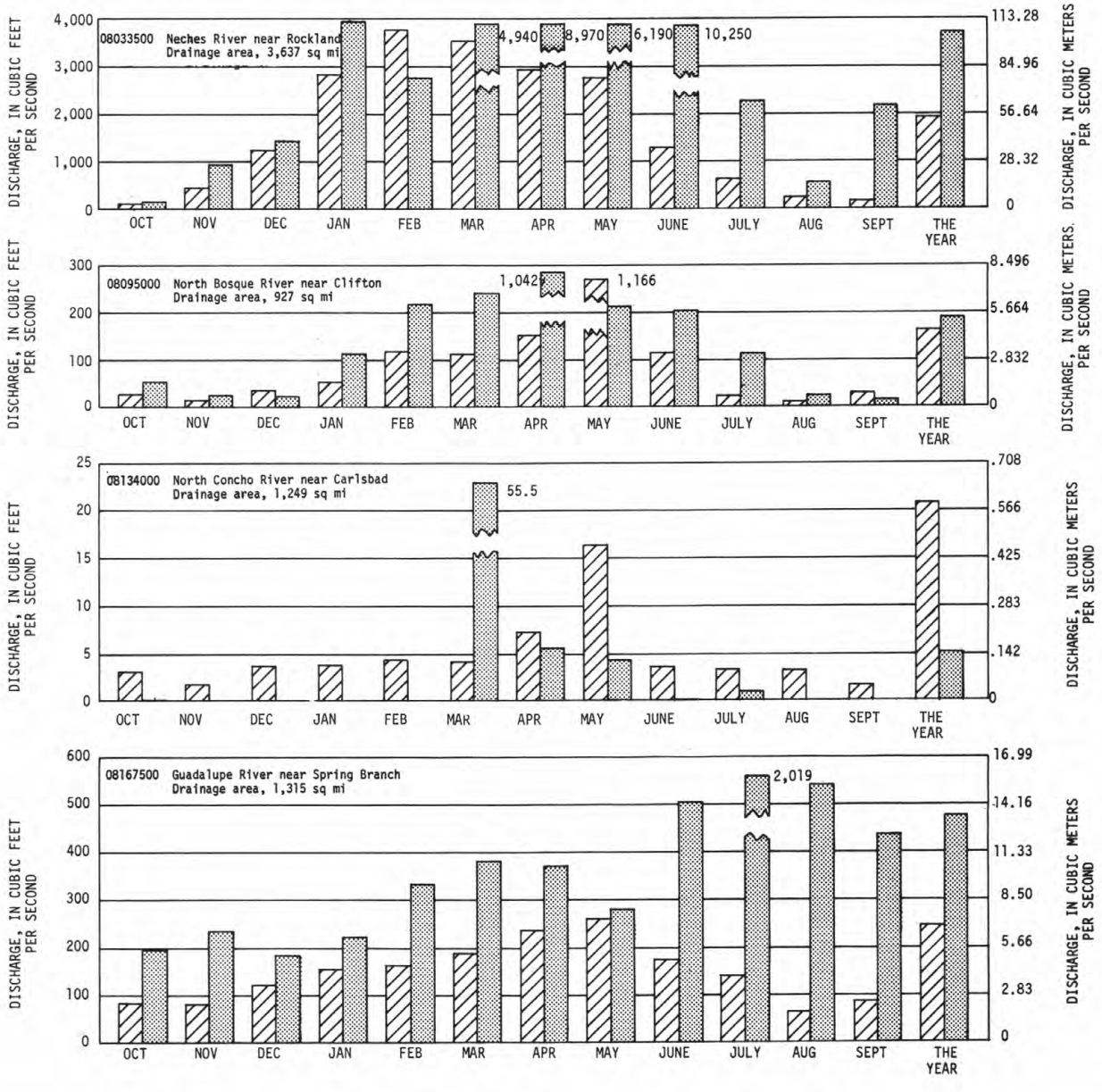
Streamflows receded in August, but were still excessive in a narrow band in the south central part of the State at the month's end. During September, tropical storms caused above-average rainfall in many areas, but especially caused high flows in south and east Texas. The San Antonio River near Elmendorf had a peak discharge of 42,000 ft^3/s (1,190 m^3/s), 50-year occurrence interval, on the 26th. In contrast, a large area of west Texas was experiencing deficiencies in streamflow at the end of the water year.

SELECTED REFERENCES

Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.



Median of monthly and yearly mean discharge for 30-year period 1931-60.

Monthly and yearly mean discharge for 1973 water year.

FIGURE 1.--COMPARISON OF DISCHARGE AT FOUR LONG-TERM REPRESENTATIVE GAGING STATIONS DURING THE 1973 WATER YEAR WITH MEDIAN DISCHARGE FOR THE PERIOD 1931-60.

Table 1.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI units equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
Length		
inches (in)	25.4	millimeters (mm)
	.0254	meters (m)
feet (ft)	.3048	meters (m)
miles (mi)	1.609	kilometers (km)
Area		
acres	4047	square meters (m^2)
	.4047	square hectometer (hm^2)
	.004047	square kilometers (km^2)
square miles (mi^2)	2.590	square kilometers (km^2)
Volume		
million gallons (10^6 gal)	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	28.32	cubic decimeters (dm^3)
	.02832	cubic meters (m^3)
acre-feet (acre-ft)	1233	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
Flow		
cubic feet per second (ft^3/s)	28.32	cubic decimeters per second (dm^3/s)
	.02832	cubic meters per second (m^3/s)
Mass		
ton (short)	.9072	tonne (t)

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 (3.4 km) south of Stead, and 26 miles (42 km) south of Clayton.

DRAINAGE AREA.--556 mi² (1,440 km²), approximately.

PERIOD OF RECORD.--October 1964 to May 1966 (annual maximum only), June 1966 to December 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 4,481.19 ft (1,365.87 m) above mean sea level. Prior to Feb. 6, 1969, at site 90 ft (27 m) upstream at datum 1.61 ft (0.49 m) lower.

AVERAGE DISCHARGE.--7 years, 4.38 ft³/s (124 dm³/s), 3,170 acre-ft/yr (3.91 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13 ft³/s (0.37 m³/s) Mar. 30, gage height, 2.71 ft (0.83 m); no flow most of time.
Period of record: Maximum discharge, 12,300 ft³/s (348 m³/s) Oct. 17, 1965, gage height, 14.9 ft (4.54 m), 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 (8.3 m), discharge, about 45,500 ft³/s (1,290 m³/s) with only a single span bridge, and a flood in 1937 reached a stage of about 20.4 ft (6.2 m), discharge, about 31,600 ft³/s (895 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.27	2.0	.46	.61	.53	6.2	1.1				
2	1.1	.61	1.4	.46	.80	.46	7.0	.80				
3	.80	.46	1.6	.53	.61	.27	6.2	.80				
4	.80	.40	1.7	.61	.40	.21	4.8	.46				
5	.70	.33	1.3	.61	.46	.33	4.1	.21				
6	.53	.27	1.4	.53	.40	.21	3.5	.11				
7	.53	.27	1.4	.46	.33	.27	3.1	.16				
8	.46	.21	1.3	.40	.61	.40	2.5	.16				
9	.46	.33	1.2	.53	.21	.80	2.5	.03				
10	.27	.33	1.2	.61	.61	.70	1.8	.01				
11	.16	.21	1.0	.61	.70	.53	1.6	0				
12	.11	.27	1.1	.70	.70	.40	1.4	0				
13	.11	.46	1.0	.70	.53	2.1	1.1	.44				
14	.07	.40	1.0	1.2	.40	2.5	1.0	1.6				
15	.04	.46	1.0	1.3	.46	2.4	.70	1.3				
16	.02	.40	.90	1.2	.40	2.7	.90	.53				
17	0	.53	.90	1.1	.53	2.7	.70	.40				
18	0	1.0	.90	.80	.40	2.2	.70	.16				
19	.07	1.1	1.0	.70	.53	2.0	1.6	.02				
20	1.6	.80	1.1	.61	.40	2.5	1.2	.01				
21	1.4	.61	.80	.40	.27	2.5	1.3	0				
22	1.0	.70	1.1	.70	.53	2.2	2.0	0				
23	.90	.80	1.0	.40	.90	2.7	3.3	.21				
24	.90	.90	.61	.46	.90	4.8	3.1	.06				
25	.80	1.1	.61	.70	.90	4.4	4.4	0				
26	.61	1.6	.40	.61	.80	4.4	4.1	0				
27	.53	1.4	.53	.33	.70	6.2	3.1	0				
28	.40	1.4	.70	.08	.61	6.7	2.5	0				
29	.27	1.4	.70	.15	------	5.1	1.7	0				
30	.16	1.7	.33	.67	------	8.1	1.6	0				
31	.11	------	.53	.90	------	6.4	------	0	------			------
TOTAL	16.31	20.72	31.71	19.52	15.70	77.71	79.70	8.57	0	0	0	0
MEAN	.53	.69	1.02	.63	.56	2.51	2.66	.28	0	0	0	0
MAX	1.6	1.7	2.0	1.3	.90	8.1	7.0	1.6	0	0	0	0
MIN	0	.21	.33	.08	.21	.21	.70	0	0	0	0	0
AC-FT	32	41	63	39	31	154	158	17	0	0	0	0

CAL YR 1972 TOTAL 3,137.28 MEAN 8.57 MAX 1,200 MIN 0 AC-FT 6,220
WTR YR 1973 TOTAL 269.94 MEAN .74 MAX 8 MIN 0 AC-FT 535

PEAK DISCHARGE (BASE, 1,200 ~~FT³/S~~).--~~No peak~~ above base.

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 (13.7 km) west of Channing, and 10.3 miles (16.6 km) upstream from mouth.

DRAINAGE AREA.--3,568 mi² (9,241 km²), of which 2,068 mi² (5,356 km²) is probably noncontributing.

PERIOD OF RECORD.--October (revised) 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 3,390.87 ft (1,033.54 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 15.7 ft³/s (0.445 m³/s), 11,370 acre-ft/yr (14.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 51 ft³/s (1.44 m³/s) Oct. 20, gage height, 4.43 ft (1.35 m); no flow for many days.
Period of record: Maximum discharge, 24,200 ft³/s (685 m³/s) Aug. 28, 1972, gage height, 6.00 ft (1.83 m); 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 (14.9 hm³), 23 miles (37 km) upstream. Small diversions from Lake Rita Blanca.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	17	11	21	21	7.2	14	7.1				
2	0	11	11	22	13	6.7	41	.81				
3	0	8.2	11	22	12	5.9	28	6.4				
4	0	6.6	5.9	8.7	9.0	5.7	8.3	.81				
5	0	5.6	6.8	26	7.8	5.2	8.2	.47				
6	0	3.4	4.5	22	9.9	4.8	6.9	.19				
7	0	3.1	4.5	14	11	4.9	6.6	.25				
8	0	3.6	7.6	9.3	11	7.6	5.2	.16				
9	0	3.7	5.5	6.1	10	9.1	5.2	.10				
10	0	3.4	6.5	4.0	12	19	5.7	0				
11	0	3.1	5.5	4.0	13	13	8.5	0				
12	0	3.9	6.5	5.0	18	7.8	15	0				
13	0	9.5	8.0	7.5	9.7	8.1	13	0				
14	0	8.7	9.5	8.7	8.0	7.3	13	22				
15	0	8.2	6.0	10	8.0	4.3	13	11				
16	0	5.6	7.0	13	8.8	4.5	12	3.3				
17	0	8.0	8.0	16	9.6	3.7	10	3.3				
18	0	8.1	9.0	16	8.9	3.0	8.5	.81				
19	2.6	7.7	10	13	9.0	2.9	.47	.53				
20	48	9.0	11	13	8.5	3.7	.42	.25				
21	30	9.5	11	9.5	5.8	3.0	.37	0				
22	8.9	8.0	14	7.8	5.5	6.9	.37	0				
23	11	6.0	13	13	8.0	28	.47	0				
24	9.4	8.0	12	13	9.5	23	.69	0				
25	8.6	12	11	12	12	13	22	0				
26	6.1	11	10	13	10	11	13	0				
27	5.4	10	10	9.9	10	14	13	0				
28	4.9	11	17	6.4	10	23	12	0				
29	4.0	12	10	6.4	------	18	9.8	0				
30	6.4	11	9.4	24	------	27	7.4	0				
31	8.9	------	9.4	28	------	15	------	0	------			------
TOTAL	154.2	235.9	281.6	404.3	289.0	316.3	302.09	57.48	0	0	0	0
MEAN	4.97	7.86	9.08	13.0	10.3	10.2	10.1	1.85	0	0	0	0
MAX	48	17	17	28	21	28	41	22	0	0	0	0
MIN	0	3.1	4.5	4.0	5.5	2.9	.37	0	0	0	0	0
AC-FT	306	468	559	802	573	627	599	114	0	0	0	0

CAL YR 1972 TOTAL 28,183.36 MEAN 77.0 MAX 5,680 MIN 0 AC-FT 55,900
WTR YR 1973 TOTAL 2,040.87 MEAN 5.59 MAX 48 MIN 0 AC-FT 4,050

PEAK DISCHARGE (BASE, 1,000 FT³/S).--No peak above base.

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 (1.3 km) northwest of Tascosa, and 1.0 mile (1.6 km) southwest of Boys Ranch.

DRAINAGE AREA.--18,536 mi² (48,008 km²), of which approximately 3,823 mi² (9,902 km²) is noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 3,169.25 ft (965.99 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 230 ft³/s (6.51 m³/s), 166,600 acre-ft/yr (205 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) July 23, gage height, 7.00 ft (2.13 m); no flow at times.
Period of record: Maximum discharge, 27,500 ft³/s (779 m³/s) July 27, 1971, gage height, 8.50 ft (2.59 m), from rating curve extended above 12,000 ft³/s (340 m³/s); 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, total capacity, 439,700 acre-ft, revised (542 hm³). Conchas and Bell Ranch Canals divert from Conchas Reservoir for irrigation of about 36,000 acres (14,570 hm²) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	567	58	40	26	34	11	72	48	30	0	270	0
2	491	50	45	36	35	10	340	30	25	0	145	0
3	504	50	40	36	31	11	270	19	4.1	0	235	19
4	526	50	30	31	27	10	118	12	2.8	0	1,160	38
5	434	45	30	25	27	5.8	114	12	0	0	660	42
6	184	43	25	20	31	5.4	127	8.5	0	0	300	37
7	115	35	25	15	30	7.3	132	6.0	0	0	256	55
8	72	40	30	12	20	13	156	8.7	0	0	90	38
9	69	43	30	10	15	28	162	5.1	0	0	37	14
10	48	42	28	9.0	15	112	127	4.8	0	0	26	17
11	42	39	30	9.0	20	106	65	3.2	0	0	14	112
12	38	48	32	10	30	46	55	3.1	0	0	9.4	75
13	35	50	35	15	32	20	132	39	18	0	5.5	36
14	35	49	40	30	30	8.6	184	53	28	6.1	7.2	15
15	35	43	35	35	28	18	184	39	7.5	5.5	6.6	72
16	32	42	40	40	26	15	178	35	0	3.0	2.8	73
17	32	42	43	40	24	10	178	28	0	0	.79	24
18	28	40	47	36	22	5.8	178	24	0	0	.04	38
19	1,110	35	50	36	20	7.2	150	29	0	0	0	44
20	820	40	52	34	20	6.6	104	36	0	0	0	22
21	114	35	51	30	28	3.6	132	39	0	0	0	6.3
22	162	30	49	25	61	1.1	86	62	0	0	0	2.6
23	109	30	35	20	45	21	65	72	0	3,080	0	1.2
24	82	35	27	20	39	50	62	58	0	580	0	.02
25	72	40	25	25	35	28	140	82	0	270	0	0
26	65	40	27	30	30	15	242	55	0	162	0	0
27	58	35	28	25	22	17	132	28	0	214	0	0
28	52	30	28	15	14	22	68	33	0	200	0	0
29	50	30	21	15	------	33	38	35	0	221	0	0
30	48	35	24	20	------	156	26	26	0	122	0	0
31	58	------	26	25	------	122	------	25	------	189	0	------
TOTAL	6,087	1,224	1,068	755.0	791	925.4	4,017	958.4	115.4	5,052.6	3,225.33	781.12
MEAN	196	40.8	34.5	24.4	28.3	29.9	134	30.9	3.85	163	104	26.0
MAX	1,110	58	52	40	61	156	340	82	30	3,080	1,160	112
MIN	28	30	21	9.0	14	1.1	26	3.1	0	0	0	0
AC-FT	12,070	2,430	2,120	1,500	1,570	1,840	7,970	1,900	229	10,020	6,400	1,550

CAL YR 1972 TOTAL 123,595.02 MEAN 338 MAX 14,900 MIN 0 AC-FT 245,200
WTR YR 1973 TOTAL 25,000.25 MEAN 68.5 MAX 3,080 MIN 0 AC-FT 49,590

PEAK DISCHARGE (BASE, 10,000 FT³/S).--July 23 (1600) 11,000 ft³/s (7.00 ft).

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 (457 m) downstream from Pitcher Creek, 1.4 miles (2.3 km) downstream from East Amarillo Creek, 1.7 miles (2.7 km) downstream from Panhandle and Santa Fe Railway Co. bridge, 19 miles (31 km) north of Amarillo, and at mile 537.7 (865.2 km).

DRAINAGE AREA.--19,445 mi² (50,362 km²), of which 4,069 mi² (10,539 km²) 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 (911.10 m) 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 (6 m) upstream at same datum. June 2 to Dec. 5, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years, 378 ft³/s (10.7 m³/s), 273,900 acre-ft/yr (338 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,540 ft³/s (157 m³/s) July 24, gage height, 5.41 ft (1.65 m); minimum daily, 0.43 ft³/s (12 dm³/s) Aug. 27.
Period of record: Maximum discharge, 135,000 ft³/s (3,820 m³/s) July 25, 1941, gage height, 15.7 ft (4.79 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); no flow at times January 1924 to December 1925, Aug. 7, 8, 1940.
Flood in May 1914 reached a stage of 24 ft (7 m); a higher stage probably occurred during flood in October 1904, from information by local resident.

REMARKS.--Records poor. The city of Amarillo reported that during the year 6,660 acre-ft (8.21 hm³) of sewage effluent was discharged into East Amarillo Creek. Extreme low flow is maintained by effluent. For regulation and diversions see preceding page. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	512	120	40	31	46	35	246	66	11	4.6	327	1.5
2	486	140	40	25	45	28	263	53	12	4.0	700	2.7
3	434	153	30	22	45	27	1,180	49	8.2	4.0	440	.83
4	460	102	20	18	42	24	424	36	7.4	5.2	1,160	1.9
5	473	59	10	15	40	20	162	27	7.4	5.2	822	3.3
6	447	49	5.0	12	40	19	94	24	8.2	5.2	642	5.6
7	228	45	6.0	10	35	18	99	20	7.4	5.8	820	9.4
8	114	47	8.0	17	30	16	123	18	7.4	5.8	492	34
9	90	40	7.0	5.0	30	25	130	16	6.6	5.2	183	19
10	81	36	6.0	5.0	35	233	189	14	6.6	5.8	90	6.2
11	75	33	7.0	5.0	39	867	111	12	6.6	6.6	53	8.7
12	56	35	8.0	10	40	347	74	12	6.6	6.8	33	13
13	56	34	9.0	20	38	219	81	20	6.6	23	23	30
14	40	39	8.0	30	38	103	259	31	8.2	52	144	21
15	41	60	8.0	38	38	97	282	40	6.6	15	56	12
16	40	53	10	59	38	102	260	33	5.8	14	15	39
17	31	40	15	170	38	78	250	23	5.2	12	3.9	78
18	29	35	50	106	38	64	259	21	5.2	11	2.0	33
19	45	30	60	85	38	53	288	16	5.2	11	1.9	12
20	805	30	70	71	38	54	282	11	5.2	12	1.2	20
21	1,210	25	85	65	38	39	194	12	5.8	12	1.1	14
22	514	30	85	57	38	36	194	21	5.2	16	1.4	9.2
23	534	35	73	52	41	219	144	50	5.8	191	.53	7.4
24	443	40	59	48	46	354	138	35	5.2	2,320	.56	7.4
25	339	40	42	48	46	165	156	18	5.2	872	.62	7.4
26	252	35	35	48	46	82	649	14	5.2	623	.58	7.4
27	194	35	33	47	41	58	554	14	4.6	421	.43	15
28	163	30	33	41	38	107	243	10	5.8	587	.52	9.2
29	151	30	33	44	------	92	123	9.2	5.2	1,070	.84	9.2
30	133	35	31	45	------	287	81	8.2	4.6	531	1.4	8.2
31	100	------	31	46	------	491	------	10	------	415	2.9	------
TOTAL	8,576	1,515	957.0	1,295.0	1,105	4,359	7,532	743.4	196.0	7,272.2	6,019.88	445.53
MEAN	277	50.5	30.9	41.8	39.5	141	251	24.0	6.53	235	194	14.9
MAX	1,210	153	85	170	46	867	1,180	66	12	2,320	1,160	78
MIN	29	25	5.0	5.0	30	16	74	8.2	4.6	4.0	.43	.83
AC-FT	17,010	3,010	1,900	2,570	2,190	8,650	14,940	1,470	389	14,420	11,940	884

CAL YR 1972 TOTAL 122,397.59 MEAN 334 MAX 12,300 MIN .43 AC-FT 242,800
WTR YR 1973 TOTAL 40,016.01 MEAN 110 MAX 2,320 MIN .43 AC-FT 79,370

PEAK DISCHARGE (BASE, 14,000 FT³/S).--No peak above base.

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 (1.9 km) northwest of Sanford, and at mile 508.5 (818.2 km).

DRAINAGE AREA.--20,220 mi² (52,370 km²), of which 4,172 mi² (10,805 km²) 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, 546,100 acre-ft (673 hm³) Apr. 28, elevation, 2,914.91 ft (888.46 m); minimum, 498,600 acre-ft (615 hm³) Sept. 30, elevation, 2,911.13 ft (887.31 m).
Period of record: Maximum contents, 546,100 acre-ft (673 hm³) Apr. 28, 1973, elevation, 2,914.91 ft (888.46 m); minimum since first appreciable storage, 219,900 acre-ft (271 hm³) Apr. 10, 11, 1967, elevation, 2,883.10 ft (878.77 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 6,410 ft (1,954 m) 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 (903.7 m), located at left end of dam with a 22-foot-diameter (6.7-meter) concrete pipe, designed to discharge 19,300 ft³/s (547 m³/s) at an elevation of 3,004.9 ft (915.9 m). Flood-control outlet works consist of three gate-controlled outlets, opening into three 15.5-foot (4.7-meter) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542,700	540,900	538,900	536,100	534,800	531,000	537,600	545,300	537,600	525,200	520,600	510,100
2	542,500	540,700	538,900	536,100	534,500	531,000	536,800	545,000	538,100	524,700	520,900	509,100
3	542,500	540,700	538,400	536,100	534,500	531,000	538,600	545,000	537,600	524,200	521,100	508,400
4	542,500	540,700	538,600	536,100	534,300	530,500	540,000	544,800	537,100	523,400	521,100	508,200
5	542,700	540,400	538,400	536,100	533,800	530,200	540,700	544,800	536,800	522,900	521,600	507,700
6	542,200	540,200	538,400	535,800	533,800	530,200	540,900	544,800	536,600	522,600	521,600	506,900
7	542,200	539,900	538,400	535,600	533,500	530,200	540,900	544,000	536,300	522,400	521,400	507,200
8	542,200	540,200	537,600	535,600	532,500	530,200	540,900	543,500	536,100	521,400	521,400	507,200
9	541,700	539,700	537,600	535,600	532,500	530,200	540,900	543,500	535,600	520,900	521,600	506,700
10	541,700	539,400	537,600	535,600	532,200	531,500	541,200	543,200	535,000	520,600	521,100	506,400
11	541,200	539,100	537,600	535,600	532,200	533,000	541,500	542,700	534,500	520,400	520,900	506,200
12	541,700	538,400	537,600	535,600	532,200	533,800	541,700	542,700	534,000	519,900	520,400	506,200
13	540,700	538,400	537,300	535,600	532,000	534,000	542,000	542,500	533,500	519,100	520,100	505,600
14	540,400	537,900	537,100	535,300	531,700	534,800	542,500	542,500	533,500	518,900	520,100	505,200
15	539,700	537,900	536,800	535,000	531,700	533,800	543,000	542,500	533,000	517,900	519,900	505,200
16	539,700	537,600	537,100	535,000	531,700	533,800	543,500	542,700	532,800	517,600	519,600	504,000
17	539,400	537,300	536,800	535,300	531,700	533,800	544,000	542,200	532,000	517,100	519,100	503,500
18	538,900	537,600	536,600	535,600	531,500	533,800	544,000	542,000	531,200	516,900	518,600	503,200
19	538,100	537,600	536,300	535,800	531,200	533,800	544,500	542,000	530,200	516,400	517,900	503,000
20	538,900	537,300	536,300	535,800	531,200	533,300	543,800	541,500	529,900	515,900	517,100	502,800
21	539,700	537,900	536,600	535,600	530,500	533,300	543,500	541,500	529,500	515,100	516,600	502,500
22	540,400	537,900	536,600	535,000	531,000	533,300	543,500	541,200	529,200	516,100	516,400	502,000
23	540,400	537,900	536,600	535,000	531,500	533,000	543,200	541,200	529,000	516,100	515,600	501,800
24	540,700	537,900	536,600	535,000	531,200	534,000	544,000	540,900	528,000	516,400	514,900	501,300
25	540,700	538,600	536,600	534,800	531,200	534,500	544,300	540,700	527,700	519,100	514,400	500,500
26	540,900	538,600	536,600	534,800	531,000	534,500	544,300	540,700	527,200	519,600	513,400	500,000
27	540,700	538,600	536,600	534,800	531,000	534,500	545,000	540,200	526,700	519,900	512,600	500,000
28	540,700	538,600	536,300	534,500	531,200	535,000	546,100	539,100	525,900	519,600	512,100	500,000
29	540,700	538,600	536,600	534,300	------	534,800	545,600	538,600	525,700	519,600	511,600	499,600
30	540,400	538,600	536,600	534,500	------	535,800	545,300	538,100	525,400	520,100	510,900	498,600
31	539,400	------	536,100	534,300	------	536,800	------	537,900	------	520,400	510,900	------
(†)	2,914.39	2,914.33	2,914.13	2,913.99	2,913.75	2,914.19	2,914.87	2,914.27	2,913.29	2,912.89	2,912.13	2,911.13
(*)	-3,300	-800	-2,500	-1,800	-3,100	+5,600	+8,500	-7,400	-12,500	-5,000	-9,500	-12,300
(††)	6,440	1,544	4,604	3,944	3,837	4,171	4,438	4,995	6,546	6,647	6,404	5,437
MAX	542,700	540,900	538,900	536,100	534,800	536,800	546,100	545,300	538,100	525,200	521,600	510,100
MIN	538,100	537,300	536,100	534,300	530,500	530,200	536,800	537,900	525,400	515,100	510,900	498,600

CAL YR 1972..... * +90,700 †† 61,426 MAX 543,000 MIN 415,800
WTR YR 1973..... * -44,100 †† 59,007 MAX 546,100 MIN 498,600

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use.

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 (152 m) downstream from Panhandle and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) downstream from Red Deer Creek, 1.6 miles (2.6 km) northeast of Canadian, and at mile 433.9 (698.1 km).

DRAINAGE AREA.--22,866 mi² (59,222 km²), of which 4,688 mi² (12,142 km²) 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 (701.50 m) 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 (91 m) upstream at same datum.

AVERAGE DISCHARGE.--26 years (1938-64) prior to completion of Lake Meredith, 549 ft³/s (15.5 m³/s), 397,800 acre-ft/yr (490 hm³/yr); 9 years (1964-73) after completion of Lake Meredith, 98.7 ft³/s (2.80 m³/s), 71,510 acre-ft/yr (88.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 27,800 ft³/s (787.3 m³/s) Apr. 15, gage height, 9.83 ft (3.00 m); minimum daily, 0.32 ft³/s (9.1 dm³/s) July 20.

Period of record: Maximum discharge, 122,000 ft³/s (3,460 m³/s) Sept. 23, 1941, gage height, 9.8 ft (3.0 m), from graph based on gage readings, from rating curves for two channels extended above 8,000 and 54,000 ft³/s (227 and 1,530 m³/s); no flow at times.

Maximum stage 20.0 ft (6.1 m) Oct. 2, 1904. Floods of May 2, 1914, and Oct. 5, 1923, second highest known, reached stages of 12 ft (4 m).

REMARKS.--Records fair. Extreme low flow maintained by springs which enter river about 600 ft (183 m) above gage. Some regulation and diversions upstream by Lake Meredith 75 miles (121 km) upstream (station 07227900).

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	46	66	16	120	80	355	206	56	.80	8.5	.46
2	.74	38	64	16	100	78	254	105	48	.74	16	.46
3	.80	28	53	16	80	78	370	117	42	.74	5.5	.46
4	.74	24	24	15	70	75	380	80	38	.68	3.2	1.3
5	.68	21	24	15	56	72	186	72	20	.62	1.5	.97
6	.74	18	20	14	46	69	134	72	13	.51	1.4	.97
7	.74	17	24	13	42	64	109	66	8.5	.46	3.0	1.6
8	.68	14	20	12	30	78	124	64	6.3	.42	7.5	1.8
9	.68	11	15	11	40	105	139	61	3.4	.38	5.2	1.2
10	.62	8.0	12	10	50	782	116	58	2.4	.62	3.4	1.2
11	.62	7.5	10	10	75	1,770	97	56	1.6	.46	2.2	.97
12	.62	19	10	12	83	959	90	48	1.2	.42	1.1	.97
13	.62	36	12	15	64	354	206	51	.97	.38	1.1	1.1
14	.56	38	14	25	69	187	221	64	.80	.51	.97	1.1
15	.46	38	16	50	69	129	7,660	66	.62	.38	.97	1.1
16	.56	36	20	100	66	113	1,880	66	.51	.42	.88	1.1
17	.62	35	26	129	66	101	1,060	56	.42	.38	.88	1.6
18	.46	33	35	94	86	94	390	46	.42	.38	.88	1.3
19	.74	32	67	38	94	90	609	36	.38	.35	.74	1.2
20	3.4	30	103	40	75	83	270	42	.42	.32	.74	1.2
21	7.5	35	80	30	66	78	158	42	.42	6.2	.68	1.2
22	9.1	30	44	26	66	72	109	42	.46	28	.62	1.1
23	6.3	30	42	21	116	114	124	139	.35	21	.56	1.1
24	5.9	40	36	19	134	1,160	322	139	.46	1.3	.51	.97
25	5.9	50	30	16	129	324	199	94	.42	.74	.42	.97
26	5.2	60	24	27	120	179	272	69	.42	.56	.42	2.0
27	6.3	50	24	46	101	173	390	51	.46	.46	.42	1.9
28	8.0	45	30	21	75	199	199	30	.88	314	.38	1.4
29	6.3	40	22	58	-------	189	124	16	2.0	124	.42	1.5
30	7.1	50	19	109	-------	4,180	115	14	1.1	28	.46	1.4
31	26	-------	17	116	-------	2,640	-------	64	-------	43	.51	-------
TOTAL	109.56	959.5	1,003	1,140	2,188	14,669	16,662	2,132	251.91	577.23	71.06	35.60
MEAN	3.53	32.0	32.4	36.8	78.1	473	555	68.8	8.40	18.6	2.29	1.19
MAX	26	60	103	129	134	4,180	7,660	206	56	314	16	2.0
MIN	.46	7.5	10	10	30	64	90	14	.35	.32	.38	.46
AC-FT	217	1,900	1,990	2,260	4,340	29,100	33,050	4,230	500	1,140	141	71

CAL YR 1972 TOTAL 22,230.48 MEAN 60.7 MAX 1,450 MIN .46 AC-FT 44,090
WTR YR 1973 TOTAL 39,798.86 MEAN 109 MAX 7,660 MIN .32 AC-FT 78,940

PEAK DISCHARGE (BASE, 8,900 FT³/S).--Mar. 30 (1900) 9,740 ft³/s (6.37 ft); Apr. 15 (0600) 27,800 ft³/s (9.83 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 (10 km) west of Spearman, and 18 miles (29 km) upstream from Horse Creek.

DRAINAGE AREA.--960 mi² (2,490 km²), of which 520 mi² (1,350 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,961.63 ft (902.70 m) above mean sea level. May 8, 1968, to Dec. 4, 1969, at site 5 miles (8 km) downstream at different datum.

AVERAGE DISCHARGE.--28 years, 20.8 ft³/s (0.589 m³/s), 15,070 acre-ft/yr (18.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 720 ft³/s (20.4 m³/s) May 23, gage height, 9.43 ft (2.87 m); no flow at times.
Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) Oct. 7, 1946, gage height, 19.87 ft (6.06 m); no flow at times. Maximum stage since 1936, 22.5 ft (6.9 m) Sept. 4, 1938, from floodmark, discharge about 34,000 ft³/s (963 m³/s). Flood of June 4, 1936, reached a stage of 21 ft (6 m), from floodmark, discharge, 26,100 ft³/s (739 m³/s), from rating curve extended above 20,000 ft³/s (566 m³/s).

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

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.1	.15	.30	1.6	.01	86	.88	3.5	.01	17	95
2	3.3	3.3	.15	.20	1.7	0	55	.93	2.8	0	5.2	46
3	2.9	3.2	.14	.10	1.5	0	57	.67	1.0	0	2.8	18
4	4.3	3.1	.14	.07	.28	.19	100	1.3	.50	0	6.2	9.3
5	3.4	3.1	.10	.05	.66	.21	103	1.8	.25	0	3.6	6.0
6	3.6	2.0	.10	.05	.94	.37	53	1.6	.12	0	2.6	4.0
7	3.5	1.5	.20	.05	.50	.39	28	1.4	.06	0	4.5	5.8
8	5.1	1.3	.15	.05	.20	.34	19	2.3	.02	0	12	9.4
9	5.5	1.2	.08	.05	.20	2.1	10	1.5	.01	0	7.8	15
10	4.3	1.1	.08	.05	1.0	11	10	4.0	0	0	26	7.6
11	3.3	1.2	.08	.05	2.0	44	14	4.0	0	0	71	3.7
12	2.7	1.6	.08	.05	1.7	9.7	14	5.0	0	0	17	1.8
13	2.6	1.6	.10	.15	1.2	4.8	14	3.8	0	0	6.8	.97
14	2.6	1.1	.10	.40	.86	1.2	32	5.0	0	0	4.1	.42
15	2.6	.73	.10	.40	.41	0	23	3.6	0	0	7.2	.09
16	2.8	.77	.15	.50	.63	0	11	14	0	0	2.9	0
17	2.8	.70	.25	.50	.89	0	6.0	6.2	0	0	.94	0
18	2.8	.50	.35	.50	.77	0	4.8	4.2	0	0	2.1	0
19	2.8	.30	.50	.40	.63	0	3.8	3.3	0	0	3.0	0
20	2.6	.20	.50	.40	.50	0	1.7	4.4	0	0	2.8	0
21	2.8	.15	.50	.30	.35	0	1.1	22	0	0	2.3	0
22	2.8	.10	.50	.20	.60	0	.80	33	0	0	1.3	0
23	2.8	.15	.50	.20	1.2	25	.93	309	0	0	1.7	.03
24	2.8	.20	.50	.30	1.1	393	1.2	98	0	0	1.5	1.5
25	2.8	.20	.50	.30	.91	249	1.5	41	0	4.5	.54	.26
26	3.1	.15	.50	.30	.86	91	3.3	33	0	3.0	1.3	0
27	3.1	.13	.50	.20	.47	66	2.6	13	0	2.6	1.6	.02
28	3.1	.12	1.0	.10	.18	48	2.1	9.2	0	22	3.1	11
29	3.1	.10	1.0	.10	------	37	1.5	8.2	.02	43	4.4	57
30	2.8	.10	.60	.50	------	45	.71	5.8	.02	8.8	4.3	20
31	2.8	------	.45	1.2	------	105	------	4.7	------	29	77	------
TOTAL	97.2	33.00	10.05	8.02	23.84	1,133.31	661.04	646.78	8.30	112.91	304.58	312.89
MEAN	3.14	1.10	.32	.26	.85	36.6	22.0	20.9	.28	3.64	9.83	10.4
MAX	5.5	3.3	1.0	1.2	2.0	393	103	309	3.5	43	77	95
MIN	1.7	.10	.08	.05	.18	0	.71	.67	0	0	.54	0
AC-FT	193	65	20	16	47	2,250	1,310	1,280	16	224	604	621

CAL YR 1972 TOTAL 5,165.27 MEAN 14.1 MAX 520 MIN 0 AC-FT 10,250
WTR YR 1973 TOTAL 3,351.92 MEAN 9.18 MAX 393 MIN 0 AC-FT 6,650

PEAK DISCHARGE (BASE, 500 FT³/S).--Mar. 24 (1500) 570 ft³/s (8.95 ft); May 23 (1845) 720 ft³/s (9.43 ft).

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 (0.5 km) north of Lipscomb, 0.7 mile (1.1 km) downstream from Little Sandy Creek, 2 miles (3 km) upstream from Plum Creek, and at mile 61.2 (98.5 km).

DRAINAGE AREA.--697 mi² (1,805 km²), of which 222 mi² (575 km²) 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 (722.77 m) above mean sea level. Prior to Feb. 25, 1938, nonrecording gage, Feb. 25, 1938, to Sept. 30, 1942, water-stage recorder at present site at datum 5.77 ft (1.76 m) higher.

AVERAGE DISCHARGE.--17 years (1937-42, 1961-73), 21.5 ft³/s (0.61 m³/s), 15,580 acre-ft/yr (19.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 761 ft³/s (21.6 m³/s) Mar. 31, gage height, 6.43 ft (1.96 m); minimum daily, 0.13 ft³/s (3.68 dm³/s) Oct. 16-19.
Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) Oct. 21, 1941, gage height, 11.57 ft (3.53 m) present datum, from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of velocity-area studies; no flow at times.
Maximum stage since 1890, 15.5 ft (4.7 m) June 23, 1957, present site and datum, from floodmarks. Flood in May 1955 reached a stage of 12.1 ft (3.7 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	3.9	5.0	5.8	7.2	6.5	126	21	14	3.7	1.2	.53
2	.53	2.6	5.3	6.3	7.2	6.5	76	19	30	3.2	1.5	.53
3	.68	2.1	5.3	6.3	7.0	6.5	61	19	16	2.6	1.2	.53
4	.68	1.9	5.1	5.3	6.5	6.5	52	18	13	2.8	1.0	1.3
5	.68	1.5	4.5	5.0	6.3	6.7	46	17	12	3.0	1.0	4.2
6	.68	1.2	5.0	4.0	6.0	6.5	43	16	10	2.8	1.0	2.6
7	.68	1.2	4.0	3.5	5.8	6.5	41	15	9.7	2.3	1.0	2.3
8	.68	1.5	3.0	3.5	5.3	6.5	40	16	9.2	2.1	.84	2.3
9	.53	1.5	3.5	3.0	5.0	7.0	41	15	9.0	2.6	1.9	2.1
10	.53	1.7	3.0	2.5	4.8	13	38	15	8.5	3.0	1.7	1.2
11	.53	1.5	2.5	2.0	6.5	14	37	14	8.2	3.0	1.0	1.0
12	.40	3.0	2.0	1.0	6.3	12	36	14	7.7	2.1	.53	1.0
13	.29	3.2	2.0	1.0	6.0	16	35	14	7.5	1.9	.40	1.0
14	.29	2.3	2.0	2.0	5.8	16	35	14	7.0	2.3	.40	.84
15	.29	2.3	2.0	4.0	5.8	15	69	14	6.7	3.0	.29	.84
16	.13	2.1	2.0	6.0	6.0	12	55	14	6.3	2.1	.29	.68
17	.13	2.6	2.0	7.0	6.7	11	41	13	6.0	1.9	.29	.68
18	.13	3.0	3.0	7.7	6.7	10	36	13	5.8	1.7	.29	1.0
19	.13	3.2	4.0	7.2	6.5	10	185	13	5.3	1.7	.29	1.0
20	.20	3.2	5.0	6.5	6.3	10	145	12	5.3	1.5	.29	.84
21	.64	3.0	6.0	6.5	6.3	10	46	13	5.1	1.5	.29	.84
22	1.0	3.0	7.5	6.3	6.3	10	35	14	5.1	1.9	.29	.68
23	.40	4.6	7.7	6.0	6.3	9.2	30	35	4.6	2.8	.40	.68
24	.40	5.1	7.5	5.5	6.3	16	36	19	4.4	1.9	.29	.53
25	.40	5.3	7.2	4.6	6.3	64	31	15	3.9	2.1	.29	.53
26	.40	5.3	6.7	4.4	6.3	28	29	14	3.7	2.1	.29	1.9
27	.40	5.5	6.3	4.8	6.3	18	27	13	3.5	1.7	.29	2.1
28	.68	5.0	6.3	5.1	6.0	14	25	13	3.7	1.5	.29	1.9
29	.53	4.5	6.0	6.0	------	13	23	13	4.6	1.7	.40	1.7
30	.53	4.5	5.8	6.3	------	41	22	13	4.8	1.5	.40	1.5
31	2.6	------	5.3	7.0	------	460	------	14	------	1.2	.53	------
TOTAL	16.90	91.3	142.5	152.1	173.8	881.4	1,562	482	240.6	69.2	20.17	38.83
MEAN	.55	3.04	4.60	4.91	6.21	28.4	52.1	15.5	8.02	2.23	.65	1.29
MAX	2.6	5.5	7.7	7.7	7.2	460	185	35	30	3.7	1.9	4.2
MIN	.13	1.2	2.0	1.0	4.8	6.5	22	12	3.5	1.2	.29	.53
AC-FT	34	181	283	302	345	1,750	3,100	956	477	137	40	77

CAL YR 1972 TOTAL 2,754.55 MEAN 7.53 MAX 201 MIN .13 AC-FT 5,460
WTR YR 1973 TOTAL 3,870.80 MEAN 10.6 MAX 460 MIN .13 AC-FT 7,680

PEAK DISCHARGE (BASE, 500 FT³/S).--Mar. 31 (0600) 761 ft³/s (6.43 ft).

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 (13.5 km) southwest of Umbarger and 9 miles (14.5 km) upstream from Buffalo Lake Dam.

DRAINAGE AREA.--1,968 mi² (5,097 km²), of which 1,430 mi² (3,704 km²) 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 September 1973 (discontinued).

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 3,650 ft (1,110 m), from topographic map. Prior to Aug. 29, 1940, water-stage recorder or nonrecording gage at conduit tower at different datum.

AVERAGE DISCHARGE.--20 years (1940-54, 1967-73), 10.4 ft³/s (0.29 m³/s), 7,530 acre-ft/yr (9.28 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 83 ft³/s (2.35 m³/s) Mar. 11, gage height, 3.77 ft (1.15 m); no flow for many days. Period of record: Maximum discharge, 11,300 ft³/s (320 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.22	.22	.07	.05			0		
2			0	.22	.22	.07	.04			0		
3			.02	.20	.19	.06	.05			0		
4			.06	.18	.19	.05	.06			0		
5			.12	.16	.16	.04	.07			0		
6			.19	.14	.13	.03	.07			0		
7			.30	.12	.11	.02	.05			0		
8			.39	.12	.10	.02	.10			0		
9			.46	.15	.08	.02	.14			0		
10			.46	.18	.07	1.3	.19			0		
11			.46	.23	.07	49	.16			0		
12			.46	.30	.08	11	.15			0		
13			.35	.35	.03	4.2	.13			0		
14			.28	.43	.02	1.3	.12			1.6		
15			.28	.50	.01	.84	.11			2.2		
16			.30	.55	.01	.68	.07			.68		
17			.35	.50	.01	.37	.06			.25		
18			.43	.48	.01	.18	.05			.11		
19			.50	.46	0	.09	.15			.05		
20			.58	.41	0	.04	.01			.02		
21			.66	.35	0	.03	0			0		
22			.71	.30	0	.02	0			0		
23			.66	.26	.01	.01	0			.02		
24			.58	.19	.02	0	.01			.07		
25			.48	.14	.04	0	.01			.04		
26			.48	.12	.05	0	.01			.02		
27			.46	.08	.05	0	.01			.01		
28			.41	.08	.05	0	.02			0		
29			.35	.10	------	0	.01			0		
30			.28	.13	------	.01	.01			0		
31		------	.25	.18	------	.04	------		------	0		------
TOTAL	0	0	11.31	7.83	1.93	69.49	1.91	0	0	5.07	0	0
MEAN	0	0	.36	.25	.069	2.24	.064	0	0	.16	0	0
MAX	0	0	.71	.55	.22	49	.19	0	0	2.2	0	0
MIN	0	0	0	.08	0	0	0	0	0	0	0	0
AC-FT	0	0	22	16	3.8	138	3.8	0	0	10	0	0

CAL YR 1972 TOTAL 342.25 MEAN .94 MAX 80 MIN 0 AC-FT 679
WTR YR 1973 TOTAL 97.54 MEAN .27 MAX 49 MIN 0 AC-FT 193

PEAK DISCHARGE (BASE, 500 FT³/S).--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 (30 m) upstream, 200 ft (61 m) to right of left end of dam on Tierra Blanca Creek, 2 miles (3.2 km) south of Umbarger, 20 miles (32.2 km) upstream from Palo Duro Creek, and at mile 1,200 (1,931 km).

DRAINAGE AREA.--2,075 mi² (5,374 km²), of which 1,500 mi² (3,885 km²) is probably noncontributing.

PERIOD OF RECORD.--June 1938 to September 1954, March 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 3,515.6 ft (1,071.6 m) above mean sea level. Prior to Aug. 29, 1940, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 701 acre-ft (0.86 hm³) Oct. 1, gage height, 112.37 ft (34.25 m); minimum, 180 acre-ft (0.22 hm³) Sept. 30, gage height, 109.50 ft (33.38 m).
Period of record: Maximum contents, 25,100 acre-ft (30.9 hm³) June 6, 1941, gage height, 130.43 ft (39.76 m); 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 (269 m) long with an uncontrolled concrete service spillway at right end 200 ft (61 m) long with crest at gage height 127.0 ft ((38.7 m). Storage began June 9, 1938, and dam completed June 15, 1938. Outlet works consist of a 4- by 5-foot (1.2- by 1.5-meter) 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 (35.4 m) 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)

109.5	180	111.5	482
110.0	230	112.0	590
110.5	302	112.5	740
111.0	375		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	698	632	599	599	560	608	650	605	513	360	323	230
2	695	632	599	599	558	599	650	599	510	356	321	228
3	680	632	599	599	556	599	650	596	506	346	320	220
4	680	632	599	599	551	599	653	693	504	343	318	217
5	668	632	599	599	549	599	653	590	500	339	317	215
6	659	626	599	599	547	599	653	586	495	336	316	215
7	656	626	599	599	545	584	650	584	493	332	314	213
8	650	620	599	599	541	581	650	581	489	329	313	212
9	650	605	599	599	538	581	650	579	478	324	311	212
10	650	605	599	599	536	659	650	577	476	324	310	212
11	650	599	599	602	534	659	650	573	467	323	307	211
12	644	599	599	605	530	671	650	571	467	321	304	210
13	641	599	599	605	528	668	650	568	465	321	300	208
14	635	599	602	605	526	665	650	564	461	346	292	205
15	635	596	602	605	523	665	650	562	457	346	288	204
16	635	586	602	605	519	665	650	560	450	346	282	202
17	626	586	602	605	517	665	647	556	444	346	278	201
18	626	584	602	605	513	665	635	553	435	343	275	198
19	629	593	602	602	510	650	620	551	418	342	269	196
20	641	590	602	590	508	650	605	547	414	339	265	195
21	635	593	602	590	560	644	599	543	409	334	265	194
22	632	593	602	588	568	641	596	541	405	332	262	193
23	632	593	602	586	568	641	605	538	403	332	255	192
24	632	599	602	584	568	638	608	536	394	332	255	189
25	632	602	602	579	562	638	611	532	390	332	247	187
26	632	602	602	577	568	638	614	530	386	332	243	186
27	629	599	599	575	611	638	620	528	371	330	240	185
28	626	599	599	573	614	629	620	526	369	329	237	183
29	620	602	599	568	------	620	617	521	365	327	234	182
30	620	602	599	566	------	650	611	519	362	326	233	180
31	620	------	599	564	------	659	------	515	------	324	233	------
(†)	112.10	112.04	112.03	111.88	112.08	112.23	112.07	111.65	110.91	110.65	110.02	109.50
(*)	-81	-18	-3	-35	+50	+45	-48	-96	-153	-38	-101	-53
MAX	698	632	602	605	614	671	653	605	513	360	323	230
MIN	620	584	599	564	508	581	596	515	362	321	233	180

CAL YR 1972..... * -1,861 MAX 2,470 MIN 584
WTR YR 1973..... * -521 MAX 698 MIN 180

† 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 (8 m) downstream from Buffalo Lake dam on Tierra Blanca Creek, 2 miles (3.2 km) south of Umbarger, 20 miles (32.2 km) upstream from Palo Duro Creek, and at mile 1,200 (1,930.8 km).

DRAINAGE AREA.--2,075 mi² (5,374 km²), of which 1,500 mi² (3,885 km²) is probably noncontributing. All drainage area is above Buffalo Lake dam.

PERIOD OF RECORD.--March 1967 to September 1973 (discontinued).

GAGE (revised).--Water-stage recorder and Parshall flume. Datum of gage is 3,612.42 ft (1,101.07 m) above mean sea level. Prior to Mar. 28, 1973, metal H Weir at same site and at datum 0.92 ft (0.28 m) lower.

AVERAGE DISCHARGE.--6 years, 0.061 ft³/s (1.73 dm³/s), 44 acre-ft/yr (54,250 m³/yr).

EXTREMES.--Current year: Maximum daily discharge, 0.03 ft³/s (0.85 dm³/s) Oct. 7, gage height, 0.13 ft (0.04 m); no flow at times. Period of record: Maximum daily discharge, 14 ft³/s (0.40 m³/s) Mar. 24, 1971; maximum gage height, 2.45 ft (0.75 m) 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 (22.4 hm³), 25 ft (8 m) upstream from station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01										
2	.02	.01										
3	.02	.01										
4	.02	.01										
5	.02	.01										
6	.02	.01										
7	.03	.01										
8	.02	.01										
9	.02	.01										
10	.01	.01										
11	0	0										
12	0	0										
13	0	.01										
14	0	0										
15	0	0										
16	0	0										
17	0	0										
18	0	0										
19	.01	0										
20	.01	0										
21	.01	0										
22	0	0										
23	0	0										
24	.01	0										
25	.01	0										
26	.01	0										
27	.01	0										
28	.01	0										
29	.01	0			------							
30	.01	0			------							
31	.01	------			------		------		------			------
TOTAL	.31	.11	0	0	0	0	0	0	0	0	0	0
MEAN	.010	.004	0	0	0	0	0	0	0	0	0	0
MAX	.03	.01	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.6	.2	0	0	0	0	0	0	0	0	0	0

CAL YR 1972 TOTAL 2.81 MEAN .0080 MAX .04 MIN 0 AC-FT 5.6
WTR YR 1973 TOTAL 0.42 MEAN .0010 MAX .03 MIN 0 AC-FT .8

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 (21 km) northeast of Wayside, 26 miles (42 km) south of Claude, and at mile 1,145 (1,842 km).

DRAINAGE AREA.--4,211 mi² (10,906 km²), of which 3,281 mi² (8,498 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,463.74 ft (750.95 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 37.5 ft³/s (1.06 m³/s), 27,170 acre-ft/yr (33.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,500 ft³/s (212 m³/s) May 21, gage height, 10.00 ft (3.05 m); no flow at times.
Period of record: Maximum discharge, 58,000 ft³/s (1,640 m³/s) Aug. 28, 1968, gage height, 13.0 ft (4.0 m), 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 (35.3 hm³). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	19	2.8	1.9	2.0	3.2	13	8.2	16	0	0	0
2	.01	6.0	2.6	2.6	1.4	1.8	14	7.0	362	0	2.3	0
3	.01	4.5	1.2	2.8	1.7	1.4	12	6.9	25	0	.04	0
4	.01	3.1	1.0	2.1	1.5	1.3	8.9	5.5	3.0	.20	0	0
5	.01	2.3	1.2	1.8	1.4	1.4	7.9	5.9	2.3	.17	0	0
6	0	1.7	1.2	1.6	1.3	1.3	7.0	4.4	1.6	0	0	.18
7	0	1.4	1.2	1.2	1.2	1.3	6.1	2.5	1.6	0	2.8	17
8	0	1.1	.98	.80	.80	2.1	7.7	3.5	1.3	0	71	1.6
9	0	1.3	.80	.60	.80	2.9	6.5	3.8	1.1	18	10	.07
10	0	1.4	.50	.20	1.0	133	6.5	3.1	.73	25	.60	.02
11	0	1.5	.50	.20	1.4	64	6.2	3.2	.62	4.8	.12	.01
12	0	88	1.0	.60	1.1	20	6.6	1.9	12	.17	.04	.30
13	0	30	1.7	2.0	1.1	12	6.5	2.3	7.1	74	.32	.03
14	0	4.6	1.2	6.0	1.3	8.0	6.1	4.6	1.7	84	8.3	0
15	.05	3.6	1.6	4.6	1.2	6.2	5.1	3.2	.85	8.7	.12	16
16	.01	3.1	1.7	3.4	1.1	5.1	4.2	2.3	.43	2.3	.04	153
17	0	3.2	2.6	3.0	1.4	4.8	4.4	1.4	.35	.67	.03	2.3
18	.05	5.2	1.8	2.9	1.7	4.4	3.9	1.1	.17	.37	.01	.70
19	.13	3.5	2.1	2.9	1.4	3.8	2.0	1.3	.17	.22	0	.40
20	35	3.0	2.1	2.9	1.3	4.2	1.3	194	.10	.03	0	.16
21	14	3.6	1.8	2.5	1.2	3.1	1.4	687	.07	.01	0	.12
22	.58	3.1	2.1	2.7	2.2	2.9	1.7	597	.07	172	0	.11
23	.43	2.8	1.8	2.8	2.7	5.8	80	32	.05	77	0	.12
24	.52	4.4	1.6	3.2	2.0	4.6	120	8.9	.05	11	0	.13
25	.62	3.0	1.9	3.2	1.6	5.5	142	6.7	.05	3.5	0	.10
26	.87	2.7	1.9	3.2	1.5	4.8	152	5.5	.04	1.8	0	4.4
27	.70	2.8	2.2	2.8	1.4	4.9	28	4.8	.03	1.1	0	1.6
28	.60	2.4	3.1	1.9	1.6	4.5	15	3.2	.02	112	0	.35
29	.48	3.0	2.5	2.0	------	3.7	9.4	3.0	.01	20	0	.22
30	.95	3.1	2.0	2.8	------	122	7.2	2.8	.02	.06	0	.17
31	128	------	2.1	3.0	------	22	------	19	------	0	0	------
TOTAL	183.04	218.4	52.78	74.20	40.30	466.0	692.6	1,636.0	438.53	617.10	95.72	199.09
MEAN	5.90	7.28	1.70	2.39	1.44	15.0	23.1	52.8	14.6	19.9	3.09	6.64
MAX	128	88	3.1	6.0	2.7	133	152	687	362	172	71	153
MIN	0	1.1	.50	.20	.80	1.3	1.3	1.1	.01	0	0	0
AC-FT	363	433	105	147	80	924	1,370	3,250	870	1,220	190	395

CAL YR 1972 TOTAL 5,859.55 MEAN 16.0 MAX 1,460 MIN 0 AC-FT 11,620
WTR YR 1973 TOTAL 4,713.76 MEAN 12.9 MAX 687 MIN 0 AC-FT 9,350

PEAK DISCHARGE (BASE, 6,000 FT³/S).--May 21 (2200) 7,500 ft³/s (10.00 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 (76 m) to left of concrete spillway, 1.0 mile (1.6 km) upstream from mouth, and 3.2 miles (5.1 km) northeast of Tulia.

DRAINAGE AREA.--About 189 mi² (490 km²), of which 124 mi² (321 km²) is probably noncontributing.

PERIOD OF RECORD.--May 1939 to June 1940 (monthly figures only), November 1940 to September 30, 1973 (discontinued). Prior to October 1950, published as North Tule Creek at reservoir, near Tulia.

GAGE.--Water-stage recorder. Datum of gage is 3,309 ft (1,009 m) above mean sea level. Prior to Nov. 27, 1940, nonrecording gage at present datum.

AVERAGE DISCHARGE.--32 years (1941-73), 3.12 ft³/s (88.4 dm³/s), 2,260 acre-ft/yr (2.79 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 2.4 ft³/s (68 dm³/s) Oct. 30; maximum gage height, 80.13 ft (24.42 m) Oct. 1; no flow most of year.
Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) June 10, 1965; maximum gage height, 98.62 ft (30.06 m) 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 (28.0 m), spillway crest, determined from daily change in contents of reservoir; that above gage height 91.9 ft (28.0 m) 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 (0.846 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.40										
2	0	.20										
3	0	.10										
4	0	0										
5	0	0										
6	0	1.3										
7	0	.60										
8	0	.20										
9	0	.80										
10	0	.40										
11	0	.20										
12	0	.10										
13	0	0										
14	0	0										
15	0	0										
16	0	0										
17	0	0										
18	0	0										
19	0	0										
20	.40	0										
21	.20	0										
22	.10	0										
23	0	0										
24	0	0										
25	0	0										
26	0	0										
27	0	0										
28	0	0										
29	0	0			------							
30	2.4	0			------							
31	.90	------			------		------		------			------
TOTAL	4.00	4.30	0	0	0	0	0	0	0	0	0	0
MEAN	.13	.14	0	0	0	0	0	0	0	0	0	0
MAX	2.4	1.3	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	7.9	8.5	0	0	0	0	0	0	0	0	0	0

CAL YR 1972 TOTAL 24.10 MEAN .066 MAX 2.4 MIN 0 AC-FT 48
WTR YR 1973 TOTAL 8.30 MEAN .023 MAX 2.4 MIN 0 AC-FT 16

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 (0.2 km) downstream from Rock Creek, 8.6 miles (13.8 km) northwest of Silverton, 15 miles (24 km) downstream from South Tule Draw, and 17.5 miles (28.2 km) upstream from Prairie Dog Town Fork Red River.

DRAINAGE AREA.--1,150 mi² (2,980 km²), of which 960 mi² (2,490 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,852.44 ft (869.42 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--9 years, 9.24 ft³/s (0.262 m³/s), 6,690 acre-ft/yr (8.25 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft³/s (49.6 m³/s) May 23, gage height, 6.18 ft (1.88 m); no flow for many days.
Period of record: Maximum discharge, 9,900 ft³/s (280 m³/s) June 11, 1965, gage height, 11.65 ft (3.55 m); 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 (6.2 m), discharge unknown, from information by local residents.

REMARKS.--Records good. Flow partly regulated by reservoir on North Tule Draw near Tulia 25 miles (40 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20	.08	0	.15	.36	.20	.06	17	0	0	0
2	0	.06	.08	0	.08	.27	3.0	.04	.01	0	8.2	0
3	0	.02	.06	0	.08	.27	2.9	0	0	0	1.5	0
4	0	.01	.03	0	.11	.20	.20	0	.35	0	0	0
5	0	.01	.03	0	.08	.27	.08	0	3.8	0	0	0
6	0	0	.01	0	.11	.20	.04	0	0	0	0	.54
7	0	0	0	0	.11	.20	.02	0	0	0	15	.88
8	0	0	0	0	.58	.36	.08	0	.08	0	69	0
9	0	0	0	0	.36	.74	.20	0	0	0	14	0
10	0	0	0	0	.27	31	.20	0	0	0	.06	0
11	0	0	0	0	.27	4.9	.20	0	0	0	0	1.4
12	0	0	0	0	.20	1.2	.20	0	0	0	0	0
13	0	.01	.01	0	.15	.74	.20	0	0	0	0	0
14	0	0	.04	.02	.11	.46	.20	0	0	.03	0	0
15	0	0	.08	.20	.15	.27	20	.03	0	0	0	7.7
16	0	.01	.08	.46	.15	.27	.27	.02	0	0	0	90
17	0	.01	.15	.46	.20	.27	.15	0	0	0	0	38
18	0	.04	.15	.27	.36	.20	.11	0	0	0	0	33
19	0	.06	.15	.15	.20	.36	.08	0	0	0	0	13
20	0	.03	.11	.15	.15	.27	.06	0	0	0	0	.02
21	8.8	0	.04	.15	.20	.27	.04	0	0	0	0	0
22	4.5	0	.02	.08	.58	.20	.02	49	0	1.5	0	0
23	3.2	.01	.02	.08	.94	.20	4.8	208	0	12	0	0
24	0	.08	.01	.06	.74	.27	7.5	38	0	.01	0	0
25	0	.04	.01	.15	.46	.20	.74	8.1	0	0	0	0
26	0	0	0	.20	.20	.15	5.1	0	0	0	0	3.5
27	.01	.02	0	1.0	.27	1.5	.27	0	0	0	0	.01
28	0	.04	0	.11	.27	.11	.15	0	0	0	0	0
29	0	.08	0	.06	------	.74	.11	0	0	0	0	0
30	0	.11	0	.15	------	14	.08	0	0	0	0	0
31	.19	------	0	.11	------	.46	------	11	------	0	0	------
TOTAL	16.70	.84	1.16	3.86	7.53	60.91	47.20	314.25	21.24	13.54	107.76	188.05
MEAN	.54	.028	.037	.12	.27	1.96	1.57	10.1	.71	.44	3.48	6.27
MAX	8.8	.20	.15	1.0	.94	31	20	208	17	12	69	90
MIN	0	0	0	0	.08	.11	.02	0	0	0	0	0
AC-FT	33	1.7	2.3	7.7	15	121	94	623	42	27	214	373

CAL YR 1972 TOTAL 537.86 MEAN 1.47 MAX 129 MIN 0 AC-FT 1,070
WTR YR 1973 TOTAL 783.04 MEAN 2.15 MAX 208 MIN 0 AC-FT 1,550

PEAK DISCHARGE (BASE, 1,000 FT³/S).--May 23 (1130) 1,750 ft³/s (6.18 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 (12.2 km) southwest of Lakeview, 8.6 miles (13.8 km) upstream from Little Red River, 13.3 miles (21.4 km) downstream from former gage near Brice, and at mile 1,092.5 (1,757.8 km).

DRAINAGE AREA.--6,792 mi² (17,591 km²), of which 4,769 mi² (12,352 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,926.41 ft (587.17 m) above mean sea level. Aug. 29 to Dec. 12, 1968, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--10 years, 71.9 ft³/s (2.04 m³/s), 52,090 acre-ft/yr (64.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,200 ft³/s (544 m³/s) Sept. 16, gage height, 7.40 ft (2.26 m); no flow at times.
Period of record: Maximum discharge, 51,000 ft³/s (1,440 m³/s) Aug. 29, 1968, gage height, 9.10 ft (2.77 m), from floodmarks, from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 10.50 ft (3.20 m) June 26, 1965; no flow at times.

REMARKS.--Records poor. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	667	3.5	1.0	.80	.06	61	391	1.0	0	9.6	.05
2	0	154	3.0	1.7	.14	.05	126	20	1,440	0	2.1	.01
3	0	66	1.3	2.5	.26	.04	425	12	97	0	11	0
4	0	20	.45	1.5	.15	.03	143	3.5	22	0	23	418
5	0	4.2	.27	2.4	.16	.03	26	3.0	6.0	19	2.2	392
6	0	1.7	.20	2.1	.21	.02	13	2.0	2.6	1.1	.08	245
7	0	.90	.10	1.8	.40	.02	14	.90	1.8	0	71	1,240
8	0	.35	.09	1.0	1.8	5.0	46	.75	.75	0	1,220	145
9	0	.04	.03	.50	.74	3.0	91	.75	.35	0	1,630	75
10	0	.03	.03	.20	.47	990	19	.16	.27	0	140	32
11	0	.04	.10	.20	.41	850	14	.75	.21	0	38	12
12	0	3.0	.20	.10	.30	350	18	1.5	.21	0	13	53
13	0	61	.65	1.0	.09	67	249	2.3	.43	0	6.5	58
14	0	28	.07	4.0	.07	20	110	3.0	1.8	4.3	1.8	16
15	0	5.6	.05	15	.12	7.5	192	.90	.37	20	.40	15
16	0	.28	.10	11	.15	4.5	90	.16	.12	1.6	.08	4,840
17	0	.01	.30	6.5	.36	3.0	26	.21	.07	0	.03	231
18	0	22	.88	3.2	.44	2.3	65	.60	.04	0	.21	39
19	0	45	2.8	.74	.17	1.3	585	1.3	.01	0	.03	26
20	3.0	14	4.2	.75	.07	.90	110	1.3	.02	0	.02	15
21	3.3	9.1	1.9	.45	.05	1.6	55	617	.03	0	.01	5.4
22	1.0	4.5	.80	.07	.75	1.4	26	390	.03	0	.07	2.2
23	.11	2.6	.57	.06	.54	39	47	1,830	.01	25	.08	1.3
24	.06	7.5	.36	.21	.25	488	2,220	252	.01	82	.10	.60
25	.09	10	.42	.90	.12	107	1,200	24	.01	10	.10	.21
26	.40	5.5	.60	.75	.10	58	2,530	14	.01	.43	.07	4.7
27	.23	3.5	.68	.60	.09	77	530	3.0	0	.14	.06	429
28	.18	.90	1.0	.09	.07	86	194	.09	.18	46	.01	70
29	.12	1.1	1.5	.16	------	160	70	.07	.01	1,390	0	19
30	.82	2.6	1.3	.27	------	2,290	34	.07	.07	206	0	5.0
31	11	------	1.0	1.4	------	562	------	.60	------	37	0	------
TOTAL	20.31	1,140.45	28.45	62.15	9.28	6,174.75	9,329	3,576.91	1,575.41	1,842.57	3,169.55	8,389.47
MEAN	.66	38.0	.92	2.00	.33	199	311	115	52.5	59.4	102	280
MAX	11	667	4.2	15	1.8	2,290	2,530	1,830	1,440	1,390	1,630	4,840
MIN	0	.01	.03	.06	.05	.02	13	.07	0	0	0	0
AC-FT	40	2,260	56	123	18	12,250	18,500	7,090	3,120	3,650	6,290	16,640

CAL YR 1972 TOTAL 22,000.91 MEAN 60.1 MAX 3,210 MIN 0 AC-FT 43,640
WTR YR 1973 TOTAL 35,318.30 MEAN 96.8 MAX 4,840 MIN 0 AC-FT 70,050

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5-23	0400	6.80	12,000
8- 9	0700	6.25	7,000
9-16	0500	7.40	19,200

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 (16 km) upstream from mouth, and 14.5 miles (23.3 km) northeast of Turkey.

DRAINAGE AREA.--139 mi² (360 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,925.39 ft (586.86 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 10.6 ft³/s (0.300 m³/s), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,790 ft³/s (79.0 m³/s) Aug. 8, gage height, 11.93 ft (3.64 m); minimum, 0.03 ft³/s (0.85 dm³/s) July 2.
Period of record: Maximum discharge, 3,570 ft³/s (101 m³/s) Aug. 29, 1968, gage height, 13.48 ft (4.11 m), from floodmarks, from rating curve extended above 450 ft³/s (12.7 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	16	.93	.21	.12	.16	10	10	3.2	.05	1.2	.59
2	.10	2.8	.77	.21	.12	.16	21	5.7	238	.04	1.1	.59
3	.10	.59	.59	.35	.12	.14	59	5.4	16	.04	.93	.59
4	.10	.10	.44	.49	.12	.10	18	3.8	.54	.11	.77	121
5	.10	.08	.35	.31	.10	.10	10	3.2	.08	19	.70	86
6	.08	.10	.31	.31	.10	.10	6.2	3.6	.08	.18	.77	348
7	.08	.10	.27	.25	.10	.10	3.8	1.9	.07	.07	77	400
8	.08	.08	.27	.20	.08	12	17	1.5	.07	.06	686	88
9	.07	.07	.27	.10	.16	4.8	8.8	1.5	.08	.08	181	24
10	.07	.08	.24	.10	.14	330	3.8	1.3	.08	.05	19	9.6
11	.08	.12	.24	.20	.10	89	3.2	.93	.10	.04	4.3	7.6
12	.08	.12	.24	.60	.07	17	3.4	.70	.10	.04	2.6	76
13	.08	13	.93	1.2	.06	13	12	.54	.10	.05	2.2	56
14	.10	1.3	.77	5.4	.06	4.8	5.7	1.3	.08	187	1.9	21
15	.10	.35	.77	2.8	.06	2.6	151	1.4	.07	21	1.9	19
16	.12	.31	.54	1.8	.06	2.2	15	.85	.10	.39	1.7	522
17	.10	.27	.77	1.4	.07	1.7	4.5	.54	.10	.14	1.2	37
18	.08	21	.59	.77	.07	1.3	19	.35	.10	.10	1.0	10
19	.08	10	.54	.39	.07	.93	310	.31	.10	.08	1.0	5.9
20	.33	2.5	.39	.31	.07	.70	25	.24	.10	.10	.93	3.7
21	19	4.2	.31	.21	.07	.59	12	.31	.10	.08	.93	2.1
22	11	2.3	.27	.18	.10	.44	7.6	.35	.10	.16	.85	1.4
23	.64	1.1	.24	.18	4.6	3.3	30	.54	.08	5.5	.77	.98
24	.24	5.2	.21	.18	1.2	45	716	.49	.07	.14	.77	.78
25	.12	4.8	.21	.21	.54	4.8	91	.35	.07	.10	.70	.61
26	.10	1.1	.21	.64	.27	1.9	328	.24	.07	.10	.70	109
27	.08	.85	.21	.70	.18	3.4	78	.21	.07	.07	.64	98
28	.08	.93	.21	.31	.16	2.3	31	.21	.10	150	.64	9.7
29	.08	1.1	.21	.16	------	6.3	15	.21	.10	75	.64	1.8
30	.10	1.4	.21	.14	------	91	12	.27	.08	4.0	.64	1.1
31	38	------	.21	.16	------	24	------	25	------	1.4	.64	------
TOTAL	71.47	91.95	12.72	20.47	8.97	663.92	2,027.0	73.24	259.99	465.17	995.12	2,062.04
MEAN	2.31	3.07	.41	.66	.32	21.4	67.6	2.36	8.67	15.0	32.1	68.7
MAX	38	21	.93	5.4	4.6	330	716	25	238	187	686	522
MIN	.07	.07	.21	.10	.06	.10	3.2	.21	.07	.04	.64	.59
AC-FT	142	182	25	41	18	1,320	4,020	145	516	923	1,970	4,090

CAL YR 1972 TOTAL 3,751.24 MEAN 10.2 MAX 701 MIN .01 AC-FT 7,440
WTR YR 1973 TOTAL 6,752.06 MEAN 18.5 MAX 716 MIN .04 AC-FT 13,390

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-19	0100	8.75	1,300	9- 4	2130	8.93	1,380
4-24	0230	11.35	2,500	9- 6	1900	8.15	1,030
7-28	2000	8.21	1,050	9-16	0300	11.00	2,320
8- 8	0030	11.93	2,790				

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 (5.0 km) downstream from Salt Creek, 10.0 miles (16.1 km) north of Childress, and at mile 1,061 (1,707 km).

DRAINAGE AREA.--7,725 mi² (20,008 km²), of which 4,769 mi² (12,352 km²) 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 (496.3 m) above mean sea level, from highway bridge plans.

AVERAGE DISCHARGE.--8 years, 106 ft³/s (3.00 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,000 ft³/s (793 m³/s) June 2, gage height, 10.25 ft (3.12 m); minimum daily, 0.11 ft³/s (3.1 dm³/s) May 20.
Period of record: Maximum discharge, 58,800 ft³/s (1,670 m³/s) June 26, 1965, gage height, 12.0 ft (3.7 m), from rating curve extended above 33,000 ft³/s (935 m³/s); no flow Aug. 5-8, Sept. 12, 1970.
Maximum stage since at least 1899, 16.9 ft (5.2 m) in May or June 1957, from information by local residents and State Highway Department.

REMARKS.--Records poor. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	153	17	11	8.8	9.3	194	23	94	3.6	47	6.1
2	1.4	331	14	15	4.1	7.6	41	86	5,970	2.1	11	3.0
3	1.7	115	12	34	2.1	5.9	47	32	437	3.6	3.5	.92
4	2.5	53	8.8	21	2.1	4.4	66	16	152	8.2	1.6	271
5	2.4	31	7.9	14	2.1	3.0	53	14	53	39	1.4	357
6	1.6	17	4.7	10	2.1	2.3	36	12	21	14	.92	408
7	1.4	9.3	5.0	7.0	2.4	2.8	20	12	14	2.5	.57	734
8	2.3	7.7	6.0	5.0	5.3	196	70	11	7.0	1.7	1,030	401
9	2.5	4.8	5.0	4.0	7.9	125	63	11	6.1	.72	1,760	48
10	1.7	4.5	4.0	3.0	5.9	1,360	54	7.9	6.1	2.1	605	18
11	.72	4.0	4.0	3.0	5.8	1,100	45	4.1	6.1	2.1	182	14
12	.57	24	5.0	4.0	5.3	156	37	2.1	5.4	2.1	60	4.7
13	.57	37	6.0	5.0	3.0	86	790	.72	5.4	3.0	9.2	3.6
14	.68	7.0	7.0	8.0	2.5	34	420	8.8	4.7	2.1	4.7	66
15	2.4	52	8.0	35	2.1	23	632	9.8	4.7	32	3.6	30
16	1.9	45	9.0	30	2.5	21	837	7.0	14	63	5.4	3,620
17	1.3	26	11	28	4.1	17	220	4.7	8.8	12	5.4	1,060
18	.72	108	11	18	9.8	7.9	17	.57	3.7	5.4	4.1	227
19	.88	68	11	10	9.5	5.4	934	.57	3.6	1.7	3.6	170
20	41	70	10	7.0	5.6	4.1	370	.11	2.1	.72	2.1	112
21	455	81	8.1	10	5.2	4.1	78	1.4	2.1	.72	1.7	78
22	24	48	7.6	7.0	18	4.1	41	701	2.1	.92	1.7	46
23	9.8	36	8.4	1.5	55	184	38	1,540	3.0	.92	1.7	36
24	7.9	76	7.1	1.3	25	226	5,980	1,410	2.1	2.2	1.4	30
25	8.0	72	7.4	9.4	20	282	1,850	336	2.1	7.4	.72	23
26	17	37	7.5	22	16	144	1,040	89	3.0	11	.72	112
27	8.8	34	7.9	12	13	132	3,250	40	8.8	4.9	2.1	340
28	11	26	8.7	5.2	8.8	191	431	23	8.8	79	5.4	410
29	11	24	15	1.6	------	199	107	8.8	4.7	425	8.8	219
30	136	19	23	2.7	------	1,280	50	9.2	3.6	424	4.7	122
31	112	------	14	3.8	------	1,720	------	117	------	166	4.1	------
TOTAL	870.14	1,620.3	281.1	348.5	254.0	7,536.9	17,811	4,538.77	6,859.0	1,323.70	3,774.13	8,970.32
MEAN	28.1	54.0	9.07	11.2	9.07	243	594	146	229	42.7	122	299
MAX	455	331	23	35	55	1,720	5,980	1,540	5,970	425	1,760	3,620
MIN	.57	4.0	4.0	1.3	2.1	2.3	17	.11	2.1	.72	.57	.92
AC-FT	1,730	3,210	558	691	504	14,950	35,330	9,000	13,600	2,630	7,490	17,790

CAL YR 1972 TOTAL 28,349.64 MEAN 77.5 MAX 5,430 MIN .05 AC-FT 56,230
WTR YR 1973 TOTAL 54,187.86 MEAN 148 MAX 5,980 MIN .11 AC-FT 107,500

PEAK DISCHARGE (BASE, 7,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-24	1300	9.47	14,700
6- 2	0715	10.25	28,000
9-16	1500	9.42	14,100

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 (13 km) north of Quanah, 30 miles (48 km) upstream from Salt Fork Red River, and at mile 1,030 (1,657 km).

DRAINAGE AREA.--8,321 mi² (21,551 km²), of which 4,769 mi² (12,352 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,412.97 ft (430.07 m) above mean sea level.

AVERAGE DISCHARGE.--13 years (1960-73), 142 ft³/s (4.02 m³/s), 102,900 acre-ft/yr (127 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,600 ft³/s (527 m³/s) June 2, gage height, 10.83 ft (3.30 m); no flow at times.
Period of record: Maximum discharge, 64,000 ft³/s (1,810 m³/s) June 7, 1960, gage height, 16.00 ft (4.88 m), from rating curve extended above 32,000 ft³/s (906 m³/s); no flow at times.
Maximum stage since at least 1891 occurred in 1896, about 23 ft (7 m); second highest stage occurred June 1, 1957, 21.2 ft (6.5 m), from information by local resident.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	71	16	11	37	27	399	62	2.4	0	44	15
2	.02	51	16	13	28	22	185	27	4,480	0	16	4.0
3	.01	60	13	50	19	17	125	46	1,690	0	5.7	1.7
4	.01	47	11	71	11	14	144	33	141	0	1.6	521
5	.02	18	11	64	7.4	9.9	213	18	71	0	.39	69
6	.04	8.1	5.6	45	6.2	7.9	139	18	46	0	.31	686
7	.05	1.7	6.8	10	8.7	4.2	117	11	19	0	.05	767
8	.04	.80	6.2	5.0	12	15	163	7.5	14	0	.90	1,190
9	.01	.20	5.0	4.0	15	94	183	4.6	8.0	0	1,850	262
10	.01	.02	4.0	3.0	15	840	153	2.3	6.8	13	1,590	69
11	0	.01	3.0	2.5	15	808	124	1.2	4.2	1.7	840	14
12	0	1.3	4.0	2.0	12	493	120	.59	3.2	5.3	450	2.2
13	0	6.2	5.0	3.0	6.1	248	368	.31	3.2	.38	217	.35
14	.01	5.1	5.0	4.0	4.2	164	351	.42	2.8	.02	120	.01
15	9.2	6.2	4.5	8.0	3.0	110	566	.42	3.2	.01	62	3.3
16	4.2	3.7	5.0	20	2.6	79	420	.25	3.7	.01	30	616
17	2.2	7.4	10	109	7.2	51	242	.27	10	0	14	3,530
18	.68	280	23	71	11	32	154	.18	7.4	0	10	249
19	.20	86	18	52	10	24	131	.13	1.5	0	8.1	155
20	11	69	15	41	7.3	14	361	.02	.47	0	5.6	109
21	237	62	9.4	75	6.2	10	159	.01	.47	0	2.2	104
22	194	64	6.2	62	15	7.8	104	21	.25	0	1.1	90
23	67	56	5.6	41	40	11	69	115	.20	0	.31	75
24	26	54	3.2	31	76	192	1,750	710	.15	0	.03	64
25	3.2	67	2.8	41	77	140	2,230	102	.10	0	0	37
26	.31	60	2.2	67	51	147	457	78	.08	0	0	90
27	2.4	39	1.7	64	37	99	1,180	44	.05	0	.20	229
28	.47	25	1.9	52	28	177	367	14	.03	3.0	.20	223
29	.31	23	4.2	34	------	138	105	2.0	.02	18	.20	179
30	47	20	8.0	31	------	496	63	.26	.01	190	.07	90
31	78	------	9.4	30	------	838	------	16	------	150	.03	------
TOTAL	683.39	1,192.73	241.7	1,116.5	567.9	5,329.8	11,142	1,335.46	6,519.23	381.42	5,269.99	9,444.56
MEAN	22.0	39.8	7.80	36.0	20.3	172	371	43.1	217	12.3	170	315
MAX	237	280	23	109	77	840	2,230	710	4,480	190	1,850	3,530
MIN	0	.01	1.7	2.0	2.6	4.2	63	.01	.01	0	0	.01
AC-FT	1,360	2,370	479	2,210	1,130	10,570	22,100	2,650	12,930	757	10,450	18,730

CAL YR 1972 TOTAL 20,525.03 MEAN 56.1 MAX 4,140 MIN 0 AC-FT 40,710
WTR YR 1973 TOTAL 43,224.68 MEAN 118 MAX 4,480 MIN 0 AC-FT 85,740

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-24	2015	9.49	8,100	8- 9	1200	9.07	5,170
6- 2	1630	10.83	18,600	9-10	2400	10.32	14,600

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 (3 km) downstream from confluence of North and South Groesbeck Creeks, 4 miles (6 km) north of Quanah, and 9 miles (14 km) upstream from mouth.

DRAINAGE AREA.--303 mi² (785 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,425.69 ft (434.55 m) above mean sea level.

AVERAGE DISCHARGE.--11 years (1962-73), 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,140 ft³/s (88.9 m³/s) June 3, gage height, 18.01 ft (5.49 m); minimum, 0.88 ft³/s (25 dm³/s) Sept. 4.
Period of record: Maximum discharge, 12,000 ft³/s (340 m³/s) Oct. 18, 1965, gage height, 22.93 ft (6.99 m), from rating curve extended above 6,100 ft³/s (173 m³/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	36	2.8	3.1	3.1	3.1	11	3.9	3.5	3.1	5.8	11
2	1.3	5.2	2.8	3.1	3.3	3.1	3.6	3.8	481	2.9	1.9	2.5
3	1.4	2.5	2.8	2.5	2.8	2.9	2.7	3.8	1,390	2.7	1.4	1.3
4	1.5	3.1	2.8	2.5	2.9	3.1	2.0	3.8	199	2.8	1.4	241
5	1.5	3.5	2.7	2.5	3.0	3.1	1.7	4.0	53	2.5	1.5	205
6	1.4	3.8	2.6	2.3	3.0	3.3	1.8	4.4	52	2.3	1.7	676
7	1.5	3.3	2.0	2.0	3.0	3.6	1.8	4.3	41	3.3	1.6	987
8	1.6	3.4	1.5	1.8	2.8	3.8	1.9	3.9	22	3.4	1.6	287
9	1.5	3.5	1.5	1.5	2.5	4.0	2.0	4.2	12	3.3	1.7	49
10	1.5	2.9	1.5	1.0	2.5	22	1.8	4.1	10	3.6	1.7	23
11	1.5	3.9	1.5	1.0	3.0	14	1.7	4.2	9.2	4.0	1.6	10
12	1.4	5.0	1.5	1.0	3.1	13	2.1	4.1	8.0	3.0	1.6	7.1
13	1.4	6.0	2.2	1.2	3.0	7.6	48	4.7	7.5	3.1	1.4	132
14	1.3	2.2	2.2	1.4	3.1	4.9	22	5.2	7.1	3.3	1.3	142
15	1.2	1.6	2.0	1.6	3.1	3.4	24	5.1	6.7	3.2	1.3	36
16	1.4	1.6	2.2	2.0	2.5	3.4	317	5.1	6.5	2.7	1.3	9.8
17	1.5	1.6	2.5	2.5	2.7	3.1	71	5.7	5.7	2.5	1.3	7.1
18	1.4	2.1	2.8	3.2	3.0	3.1	9.9	5.9	5.7	2.5	1.3	5.7
19	1.4	2.4	2.8	3.0	3.1	3.4	4.3	5.8	5.3	2.4	1.5	5.3
20	2.2	2.2	2.8	2.8	3.1	3.1	2.3	6.3	5.1	2.2	1.4	4.5
21	10	2.6	2.8	6.5	3.1	3.1	1.8	6.1	4.5	1.8	1.4	4.2
22	7.1	2.8	2.5	5.7	3.1	3.6	3.0	6.9	4.5	1.9	1.3	4.2
23	2.5	2.8	2.5	3.1	2.8	4.9	3.3	164	4.5	1.7	1.2	4.5
24	1.9	2.8	2.5	2.5	2.8	4.1	123	29	4.2	1.1	1.1	4.5
25	1.8	2.8	2.5	2.5	2.9	3.7	97	11	4.2	1.0	.99	4.5
26	1.8	2.8	2.5	2.9	3.0	3.4	13	5.9	3.8	1.0	1.0	43
27	1.9	2.5	2.5	2.9	3.1	3.3	5.7	4.0	3.8	1.0	1.2	138
28	2.0	2.5	3.1	2.8	3.1	3.6	4.4	3.1	3.8	2.2	1.4	50
29	2.0	2.5	3.1	2.8	------	3.6	4.0	5.0	3.8	74	1.5	17
30	38	2.7	3.1	2.6	------	151	4.1	4.3	3.3	132	1.9	8.1
31	99	------	3.1	2.9	------	66	------	3.4	------	51	2.7	------
TOTAL	197.5	122.6	75.7	79.2	82.5	361.3	791.9	335.0	2,370.7	327.5	49.99	3,120.3
MEAN	6.37	4.09	2.44	2.55	2.95	11.7	26.4	10.8	79.0	10.6	1.61	104
MAX	99	36	3.1	6.5	3.3	151	317	164	1,390	132	5.8	987
MIN	1.2	1.6	1.5	1.0	2.5	2.9	1.7	3.1	3.3	1.0	.99	1.3
AC-FT	392	243	150	157	164	717	1,570	664	4,700	650	99	6,190

CAL YR 1972 TOTAL 1,548.99 MEAN 4.23 MAX 216 MIN .06 AC-FT 3,070
WTR YR 1973 TOTAL 7,914.19 MEAN 21.7 MAX 1,390 MIN .99 AC-FT 15,700

PEAK DISCHARGE (BASE, 1,000 FT³/S).--June 3 (0045) 3,140 ft³/s (18.01 ft); Sept. 6 (2200) 1,660 ft³/s (16.10 ft).

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 (6.9 km) north of Clarendon.

DRAINAGE AREA.--457 mi² (1,184 km²), of which 191 mi² (495 km²) 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, 28,010 acre-ft (34.5 hm³) June 3, elevation, 2,644.09 ft (805.92 m); minimum, 22,250 acre-ft (27.4 hm³) Oct. 19, elevation, 2,638.88 ft (804.33 m).
Period of record: Maximum contents, 28,010 acre-ft (34.5 hm³) June 3, 1973, elevation, 2,644.09 ft (805.92 m); minimum, 2,950 acre-ft (3.64 hm³) Aug. 30, 1967, elevation, 2,607.37 ft (794.73 m).

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 5,800 ft (1,770 m) 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 (815.0 m) is an open cut about 1,500 ft (457 m) wide, located at left end of dam, and will discharge 184,000 ft³/s (5,210 m³/s) at a lake elevation of 2,684.0 ft (818.1 m). 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)

2,638.0	21,370	2,642.0	25,580
2,639.0	22,370	2,643.0	26,720
2,640.0	23,410	2,644.0	27,900
2,641.0	24,480	2,645.0	29,120

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,690	22,400	22,650	22,900	23,260	23,620	24,820	27,040	27,810	27,130	26,730	26,010
2	22,660	22,410	22,660	22,920	23,220	23,620	24,890	27,040	28,000	27,090	26,700	26,100
3	22,640	22,430	22,620	22,940	23,200	23,620	24,940	27,060	28,010	27,040	26,650	26,070
4	22,630	22,450	22,640	22,940	23,300	23,540	24,940	27,050	27,980	26,930	26,620	26,400
5	22,620	22,460	22,570	22,940	23,240	23,550	24,920	27,110	27,970	26,920	26,590	26,440
6	22,530	22,440	22,570	22,940	23,240	23,570	24,940	27,070	27,970	26,900	26,560	26,500
7	22,530	22,430	22,600	22,930	23,240	23,560	25,000	27,050	27,980	26,860	26,530	26,550
8	22,530	22,430	22,600	22,930	23,180	23,620	24,950	27,040	27,950	26,790	26,530	26,600
9	22,530	22,420	22,590	22,960	23,180	23,650	25,000	27,050	27,940	26,760	26,590	26,650
10	22,520	22,410	22,570	22,960	23,170	23,970	24,960	27,070	27,890	26,760	26,560	26,670
11	22,510	22,400	22,590	22,960	23,210	23,990	24,990	27,050	27,850	26,720	26,530	26,670
12	22,490	22,450	22,620	22,970	23,270	24,020	25,050	27,000	27,830	26,660	26,490	26,690
13	22,470	22,410	22,650	23,050	23,220	24,090	25,490	27,000	27,790	26,690	26,450	26,690
14	22,400	22,400	22,630	23,070	23,210	24,140	25,520	27,030	27,760	26,640	26,410	26,650
15	22,400	22,400	22,720	23,100	23,230	24,130	25,510	27,040	27,730	26,630	26,380	26,920
16	22,390	22,410	22,690	23,140	23,230	24,100	25,520	27,030	27,660	26,610	26,300	27,160
17	22,380	22,420	22,690	23,150	23,250	24,100	25,560	27,050	27,640	26,570	26,300	27,120
18	22,270	22,470	22,720	23,160	23,250	24,160	25,610	27,040	27,570	26,540	26,230	27,130
19	22,250	22,490	22,750	23,200	23,290	24,150	25,600	27,050	27,460	26,510	26,210	27,170
20	22,290	22,490	22,800	23,210	23,370	24,060	25,640	27,020	27,460	26,460	26,160	27,190
21	22,350	22,520	22,820	23,180	23,360	24,070	25,640	27,020	27,430	26,410	26,120	27,180
22	22,320	22,540	22,810	23,150	23,340	24,090	25,640	27,030	27,400	26,420	26,070	27,170
23	22,320	22,550	22,860	23,120	23,380	24,190	25,780	27,070	27,360	26,480	26,010	27,130
24	22,300	22,600	22,840	23,130	23,400	24,210	26,280	27,050	27,320	26,450	25,940	27,100
25	22,310	22,590	22,880	23,160	23,400	24,200	26,340	27,070	27,270	26,390	25,860	27,130
26	22,320	22,610	22,840	23,190	23,460	24,170	26,400	26,990	27,250	26,340	25,810	27,180
27	22,320	22,600	22,870	23,200	23,450	24,180	26,460	26,960	27,190	26,330	25,750	27,170
28	22,320	22,600	22,880	23,150	23,510	24,240	26,530	26,870	27,140	26,720	25,720	27,160
29	22,350	22,610	22,920	23,110	------	24,260	26,540	26,910	27,160	26,800	25,690	27,140
30	22,300	22,650	22,910	23,180	------	24,610	27,070	26,930	27,160	26,790	25,660	27,130
31	22,370	------	22,880	23,230	------	24,830	------	26,980	------	26,760	25,650	------
(†)	2639.00	2639.27	2639.49	2639.83	2640.09	2641.32	2643.30	2643.22	2643.37	2643.03	2642.06	2643.35
(*)	-330	+280	+230	+350	+280	+1,320	+2,240	-90	+180	-400	-1,110	+1,480
(††)	198	158	168	199	169	167	172	268	344	364	346	208
MAX	22,690	22,650	22,920	23,230	23,510	24,830	27,070	27,110	28,010	27,130	26,730	27,190
MIN	22,250	22,400	22,570	22,900	23,170	23,540	24,820	26,870	27,140	26,330	25,650	26,010

CAL YR 1972..... * +1,460 †† 2,508 MAX 24,100 MIN 20,880
WTR YR 1973..... * +4,430 †† 2,761 MAX 28,010 MIN 22,250

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal and industrial use.

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 (6 km) downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 miles (7.2 km) south of Lutie, and 7.2 miles (11.6 km) north of Wellington.

DRAINAGE AREA.--1,222 mi² (3,165 km²), of which 209 mi² (541 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,941.41 ft (591.74 m) above mean sea level.

AVERAGE DISCHARGE.--15 years (1952-67) prior to completion of Greenbelt Reservoir, 68.9 ft³/s (1.95 m³/s), 49,920 acre-ft/yr (61.6 hm³/yr); 6 years (1967-73) regulated, 40.8 ft³/s (1.16 m³/s), 29,560 acre-ft/yr (36.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 35,600 ft³/s (1,010 m³/s) Apr. 24, gage height, 11.52 ft (3.51 m); minimum daily, 3.5 ft³/s (99 dm³/s) Oct. 13.
Period of record: Maximum discharge, 146,000 ft³/s (4,130 m³/s) May 16, 1957, gage height, 19.00 ft (5.79 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of 63,400 ft³/s (1,800 m³/s); minimum, 0.1 ft³/s (2.8 dm³/s) June 19, 1952.

REMARKS.--Records fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	38	36	18	41	34	64	58	545	11	11	5.6
2	7.8	23	32	21	43	36	64	58	2,130	11	11	5.6
3	7.3	17	28	28	32	34	150	60	122	10	11	6.5
4	6.4	15	26	25	25	28	68	50	52	11	11	11
5	6.8	14	26	22	25	21	36	41	24	9.4	11	38
6	7.3	13	25	20	25	28	28	43	8.8	8.8	11	22
7	4.6	13	21	18	26	26	38	45	4.7	8.8	11	46
8	4.6	12	23	17	26	56	125	40	6.0	8.2	56	20
9	5.9	13	25	17	23	96	110	35	8.8	8.2	46	19
10	6.4	11	21	16	25	594	56	35	10	8.2	23	18
11	5.9	13	19	15	32	258	41	35	11	9.4	14	18
12	4.2	25	20	14	34	93	100	32	12	10	10	29
13	3.5	54	25	22	25	86	250	32	12	11	10	23
14	3.8	18	23	36	26	93	125	32	11	11	8.2	12
15	4.6	19	23	75	28	51	320	32	11	9.4	7.6	14
16	5.0	18	25	54	34	43	78	29	14	8.8	7.6	176
17	5.9	14	28	22	43	26	43	27	12	7.6	7.1	54
18	7.3	59	25	17	43	26	56	24	11	7.6	7.1	24
19	7.8	110	25	18	43	25	340	23	12	7.6	7.1	23
20	14	46	61	21	36	25	78	23	11	7.6	7.1	22
21	48	34	56	21	34	26	51	23	11	7.6	7.1	20
22	18	43	32	22	48	26	34	23	10	10	7.1	21
23	13	38	21	22	100	43	416	74	9.4	17	6.0	22
24	13	46	17	22	64	168	5,040	35	8.8	11	5.6	21
25	14	34	17	25	46	59	181	23	8.2	9.4	5.1	18
26	15	30	17	28	41	51	176	18	8.2	10	4.7	34
27	15	35	22	26	41	75	126	17	7.6	9.4	5.1	41
28	13	36	23	23	38	89	96	16	7.6	17	5.1	43
29	12	32	23	19	------	96	74	16	10	15	4.7	32
30	26	38	32	23	------	390	60	17	12	15	5.1	28
31	32	------	22	28	------	125	------	17	------	13	5.6	------
TOTAL	346.5	914	819	755	1,047	2,827	8,424	1,033	3,121.1	319.0	349.0	866.7
MEAN	11.2	30.5	26.4	24.4	37.4	91.2	281	33.3	104	10.3	11.3	28.9
MAX	48	110	61	75	100	594	5,040	74	2,130	17	56	176
MIN	3.5	11	17	14	23	21	28	16	4.7	7.6	4.7	5.6
AC-FT	687	1,810	1,620	1,500	2,080	5,610	16,710	2,050	6,190	633	692	1,720

CAL YR 1972 TOTAL 12,627.8 MEAN 34.5 MAX 2,370 MIN 2.7 AC-FT 25,050
WTR YR 1973 TOTAL 20,821.3 MEAN 57.0 MAX 5,040 MIN 3.5 AC-FT 41,300

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 (0.8 km) south of Mangum, 13 miles (20.9 km) downstream from Fish Creek, and at mile 35.5 (57.1 km).

DRAINAGE AREA.--1,566 mi² (4,056 km²), of which 209 mi² (541 km²) 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 (454.42 m) above mean sea level (levels by Bureau of Reclamation). Apr. 11, 1905, to June 30, 1906, nonrecording gage at site 0.2 mile (0.3 km) upstream at different datum. Oct. 1, 1937, to Nov. 8, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years (1937-73), 88.0 ft³/s (2.49 m³/s), 63,760 acre-ft/yr (78.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30,700 ft³/s (869 m³/s) gage height, 13.17 ft (4.01 m); no flow at times.
Period of record: Maximum discharge, 72,000 ft³/s (2,040 m³/s) May 16, 1957, gage height, 14.55 ft (4.43 m); maximum gage height, 14.7 ft (4.5 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	87	9.0	10	39	34	232	41	88	3.0	9.6	0
2	0	58	7.4	11	34	31	169	39	6,690	2.3	4.1	0
3	0	45	5.4	16	35	30	159	48	1,080	.80	2.3	0
4	0	16	4.5	19	33	36	216	56	163	.56	1.4	.51
5	0	8.2	3.5	16	29	35	160	57	81	.25	.35	.30
6	0	4.4	2.5	4.5	24	31	115	59	49	.01	0	46
7	0	2.2	2.0	4.0	22	24	96	60	40	0	0	64
8	0	1.1	2.1	3.5	23	33	113	62	42	0	0	46
9	0	.69	2.3	3.1	16	58	119	64	52	0	11	33
10	0	.33	2.6	2.9	21	442	149	54	63	.67	82	18
11	0	.15	3.1	2.6	22	617	133	54	60	0	41	13
12	0	.66	4.8	2.3	25	248	99	52	50	0	20	8.6
13	0	3.0	5.8	10	21	169	184	49	42	0	10	6.4
14	0	4.2	6.8	15	18	122	324	50	38	0	5.4	4.6
15	0	5.8	8.2	17	20	95	1,570	53	36	0	1.9	9.8
16	0	3.9	8.5	169	20	73	322	49	33	0	1.1	11
17	0	2.6	9.7	159	20	52	160	42	45	0	.06	190
18	0	7.6	13	98	21	44	139	44	38	0	0	94
19	0	16	16	56	21	41	92	42	27	0	0	50
20	0	22	26	40	22	36	585	37	21	0	0	31
21	0	21	29	43	21	34	257	35	16	0	0	23
22	15	17	29	45	25	32	189	37	15	0	0	18
23	29	15	23	33	33	38	149	159	14	0	0	17
24	8.7	18	15	26	36	50	7,070	198	9.6	0	0	16
25	2.0	22	11	30	53	183	1,410	176	9.2	0	0	13
26	.22	22	8.3	37	55	120	209	111	8.1	0	0	41
27	1.1	21	6.9	34	43	98	98	77	5.7	0	0	66
28	1.1	17	6.4	27	36	127	83	60	5.3	0	0	44
29	2.2	12	7.1	30	------	167	55	53	5.6	0	0	34
30	14	11	8.3	27	------	808	47	47	4.4	9.5	0	27
31	157	------	8.5	36	------	531	------	70	------	18	0	------
TOTAL	230.32	464.83	295.7	1,026.9	788	4,439	14,703	2,035	8,830.9	35.09	190.21	925.21
MEAN	7.43	15.5	9.54	33.1	28.1	143	490	65.6	294	1.13	6.14	30.8
MAX	157	87	29	169	55	808	7,070	198	6,690	18	82	190
MIN	0	.15	2.0	2.3	16	24	47	35	4.4	0	0	0
AC-FT	457	922	587	2,040	1,560	8,800	29,160	4,040	17,520	70	377	1,840

CAL YR 1972 TOTAL 10,617.44 MEAN 29.0 MAX 2,390 MIN 0 AC-FT 21,060
WTR YR 1973 TOTAL 33,964.16 MEAN 93.1 MAX 7,070 MIN 0 AC-FT 67,370

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-15	1145	10.69	6,650
4-24	1545	13.17	30,700
6- 2	1145	11.71	13,900

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 (8 km) upstream from mouth, and 6.6 miles (10.6 km) north of McLean.

DRAINAGE AREA.--759 mi² (1,966 km²), of which 299 mi² (774 km²) 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 (782.42 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 23.1 ft³/s (0.654 m³/s), 16,740 acre-ft/yr (20.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,690 ft³/s (47.9 m³/s) Mar. 30, gage height, 9.54 ft (2.91 m); no flow at times.
Period of record: Maximum discharge, 8,730 ft³/s (247 m³/s) Apr. 18, 1970, July 9, 1972, gage height, 10.64 ft (3.24 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s); no flow at times each year.
Maximum stage since 1912, 21 ft (6 m) 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 (6.16 hm³) 18 miles (29 km) upstream. One small diversion from Lake McClellan.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	12	11	5.0	28	19	12	59	8.9			0
2	1.5	21	12	5.0	24	14	46	21	53			0
3	1.9	11	8.2	5.0	36	9.4	72	26	27			0
4	2.7	9.4	8.0	4.5	26	6.0	26	24	14			0
5	3.0	7.4	8.0	4.0	24	6.0	21	21	9.9			0
6	.29	8.2	7.0	3.7	21	5.2	16	26	5.0			0
7	.61	7.0	7.0	3.4	18	6.0	14	19	4.8			1.3
8	1.0	6.0	7.0	3.2	15	14	169	21	3.2			8.2
9	1.0	6.0	6.0	3.0	15	14	30	11	1.8			7.1
10	.81	4.4	5.0	3.0	17	126	11	8.2	2.0			1.9
11	1.8	5.2	4.5	3.5	18	35	11	6.0	1.6			.02
12	2.2	6.0	5.0	5.0	12	26	21	4.4	3.0			0
13	2.6	7.0	6.0	7.0	12	19	86	7.0	5.2			0
14	2.7	7.0	8.0	10	9.4	16	59	6.0	4.4			0
15	3.4	5.2	10	11	8.2	16	105	12	1.9			0
16	2.5	5.2	15	12	8.2	28	55	16	1.2			60
17	.61	6.0	30	14	8.2	26	45	11	.72			12
18	.61	6.0	50	24	8.2	21	40	9.2	.38			7.0
19	1.9	6.0	85	28	7.0	19	169	9.4	0			7.5
20	73	6.0	51	26	6.0	14	59	11	0			4.4
21	30	7.0	26	24	7.0	8.2	38	12	0			3.2
22	14	9.0	19	14	9.4	9.4	31	9.4	0			2.0
23	11	12	14	8.2	9.4	142	67	17	0			1.7
24	13	12	16	11	6.0	59	318	12	0			.89
25	12	7.0	22	9.4	6.0	21	63	7.0	0			.47
26	7.9	6.0	22	11	6.0	19	76	7.0	0			3.5
27	7.9	6.0	11	12	7.0	21	55	6.6	0			6.5
28	7.7	9.4	6.6	10	7.0	21	55	8.2	0			4.4
29	8.2	11	6.0	15	------	21	51	7.0	0			3.6
30	7.1	9.4	5.2	33	------	286	48	3.8	0			3.6
31	4.4	------	5.0	33	------	36	------	14	------			------
TOTAL	227.59	240.8	496.5	360.9	379.0	1,083.2	1,869	432.2	148.00	0	0	139.28
MEAN	7.34	8.03	16.0	11.6	13.5	34.9	62.3	13.9	4.93	0	0	4.64
MAX	73	21	85	33	36	286	318	59	53	0	0	60
MIN	.26	4.4	4.5	3.0	6.0	5.2	11	3.8	0	0	0	0
AC-FT	451	478	985	716	752	2,150	3,710	857	294	0	0	276

CAL YR 1972 TOTAL 8,059.52 MEAN 22.0 MAX 790 MIN 0 AC-FT 15,990
WTR YR 1973 TOTAL 5,376.47 MEAN 14.7 MAX 318 MIN 0 AC-FT 10,660

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 (4.0 km) north of Shamrock, 16 miles (26 km) upstream from Oklahoma-Texas State line, and 23 miles (37 km) downstream from McClellan Creek.

DRAINAGE AREA.--1,082 mi² (2,802 km²), of which 379 mi² (982 km²) 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 (660.06 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 25.6 ft³/s (0.72 m³/s), 18,550 acre-ft/yr (22.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,180 ft³/s (147 m³/s) Apr. 14, gage height, 4.87 ft (1.48 m); no flow at times.
Period of record: Maximum discharge, 11,200 ft³/s (317 m³/s) June 7, 1967, gage height, 5.80 ft (1.77 m), from rating curve extended above 3,800 ft³/s (108 m³/s); no flow at times.
Maximum stage since at least 1915, 16.1 ft (4.9 m) 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 (6.16 hm³), 41 miles (66 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	31	21	36	51	30	129	601	2.9			0
2	.01	19	18	45	33	27	198	102	83			0
3	0	5.8	12	55	27	25	210	59	42			0
4	0	1.8	6.6	48	27	19	95	51	7.5			33
5	0	.52	1.0	10	27	19	81	76	.58			11
6	0	.14	0	2.0	25	14	66	61	.20			8.6
7	0	.07	0	1.5	23	14	63	41	.06			16
8	0	.06	0	1.0	20	36	126	28	.05			.58
9	0	.04	0	.70	21	27	90	23	.03			.06
10	0	.04	0	1.5	23	186	55	21	.01			.01
11	0	.03	0	10	25	51	47	18	.02			0
12	0	4.6	.03	20	30	36	96	12	.03			0
13	0	8.5	.06	30	19	39	370	24	.04			0
14	0	3.8	.07	40	15	28	1,260	81	.03			0
15	0	1.4	.07	89	13	18	893	49	.03			7.6
16	0	.58	.29	63	13	16	139	21	.02			261
17	0	.58	8.5	48	19	16	55	7.4	0			48
18	0	12	12	36	19	19	189	3.3	0			16
19	0	45	48	33	15	15	355	2.3	0			5.8
20	.12	30	51	36	12	14	112	.59	0			.20
21	1.2	42	42	23	9.0	13	83	28	0			.08
22	.13	39	33	18	17	11	78	51	0			.03
23	.07	30	27	16	21	23	216	68	0			.02
24	.07	68	23	16	25	223	1,250	23	0			0
25	.06	48	23	27	23	39	405	3.3	0			0
26	.08	36	21	42	19	31	361	.33	0			8.5
27	.08	27	21	39	20	49	169	.14	0			97
28	.09	21	25	30	24	56	77	.01	0			13
29	.09	23	45	25	------	68	51	.01	0			2.4
30	5.1	23	48	23	------	948	247	.01	0			.15
31	11	------	42	51	------	514	------	.70	------			------
TOTAL	18.13	521.96	528.62	915.70	615.0	2,624	7,566	1,456.09	136.50	0	0	529.03
MEAN	.58	17.4	17.1	29.5	22.0	84.6	252	47.0	4.55	0	0	17.6
MAX	11	68	51	89	51	948	1,260	601	83	0	0	261
MIN	0	.03	0	.70	9.0	11	47	.01	0	0	0	0
AC-FT	36	1,040	1,050	1,820	1,220	5,200	15,010	2,890	271	0	0	1,050

CAL YR 1972 TOTAL 5,672.64 MEAN 15.5 MAX 887 MIN 0 AC-FT 11,250
WTR YR 1973 TOTAL 14,911.03 MEAN 40.9 MAX 1,260 MIN 0 AC-FT 29,580

PEAK DISCHARGE (BASE, 3,000 FT³/S).--Apr. 14 (0900) 5,180 ft³/s (4.87 ft); Apr. 23 (2400) 4,860 ft³/s (4.80 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 (8 km) north of Kelton, 8 miles (13 km) upstream from Texas-Oklahoma State line, and 8.5 miles (13.7 km) northeast of Wheeler.

DRAINAGE AREA.--287 mi² (743 km²), of which 20 mi² (50 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,230 ft (680 m), from topographic map.

AVERAGE DISCHARGE.--11 years (1962-73), 13.9 ft³/s (0.394 m³/s), 10,070 acre-ft/yr (12.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 631 ft³/s (17.9 m³/s) May 1, gage height, 12.54 ft (3.82 m); minimum daily, 0.32 ft³/s (9.1 dm³/s) Oct. 6.
Period of record: Maximum discharge, 2,110 ft³/s (59.8 m³/s) Apr. 18, 1970, gage height, 14.95 ft (4.56 m); no flow at times. Maximum stage since at least 1882, about 20 ft (6 m) May 16, 1957.

REMARKS.--Records good. Diversion above station for ranch use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	4.3	6.2	11	17	15	45	278	15	2.8	3.8	.76
2	.44	4.0	6.0	11	16	15	37	81	41	2.6	3.0	.76
3	.44	2.8	6.0	12	15	14	47	52	35	2.5	2.8	.76
4	.40	2.5	6.0	10	13	13	35	44	20	2.5	2.6	2.5
5	.36	2.4	6.0	9.0	13	13	30	39	15	2.4	2.4	16
6	.32	2.3	5.0	8.0	12	13	27	39	14	2.3	2.0	2.4
7	.36	2.1	5.0	5.0	12	13	26	35	13	2.2	4.5	5.4
8	.40	2.1	4.0	3.0	11	15	31	32	11	2.2	12	3.3
9	.44	2.1	3.0	2.0	10	16	36	30	10	2.1	3.1	2.1
10	.44	2.2	2.0	1.0	12	89	34	29	9.5	2.1	2.6	1.9
11	.40	2.3	2.0	.80	13	71	31	27	9.0	2.2	2.1	2.1
12	.44	2.5	2.0	1.0	13	39	31	26	9.0	2.1	1.9	3.6
13	.40	4.5	3.0	3.0	12	32	89	25	9.0	2.1	1.8	4.8
14	.40	5.2	3.0	10	12	28	116	27	9.0	2.2	1.6	2.8
15	.44	3.8	3.0	13	12	22	74	26	8.2	2.3	1.5	8.2
16	.44	3.5	4.0	17	12	21	51	24	7.8	2.1	1.4	214
17	.44	3.3	5.0	16	12	20	43	22	7.5	2.0	1.3	70
18	.44	3.8	6.0	15	13	19	40	22	7.0	1.9	1.3	20
19	.64	5.0	7.0	13	13	19	261	20	6.6	1.8	1.2	14
20	.89	5.0	10	13	13	18	72	19	6.2	1.7	1.1	10
21	1.6	5.4	14	13	12	18	48	18	5.6	1.7	1.1	8.4
22	1.7	5.2	13	12	13	17	39	18	5.4	1.9	1.1	7.1
23	1.5	5.4	13	11	16	22	37	39	5.2	9.1	.99	6.1
24	1.4	6.2	12	11	16	41	166	23	4.8	6.0	.96	5.8
25	1.4	8.0	11	12	15	31	88	19	4.5	3.2	.96	5.6
26	1.4	6.8	11	13	14	24	55	18	4.3	2.9	.96	15
27	1.7	6.4	11	13	13	23	46	16	3.8	2.7	.96	20
28	1.6	6.0	11	12	13	47	41	15	3.4	3.8	.88	15
29	1.8	5.8	12	10	------	46	37	14	3.3	11	.83	11
30	2.1	6.2	13	14	------	143	49	13	3.1	6.9	.82	9.5
31	2.5	------	11	14	------	82	------	16	------	5.0	.82	------
TOTAL	27.77	127.1	226.2	308.80	368	999	1,762	1,106	306.2	98.3	64.38	488.88
MEAN	.90	4.24	7.30	9.96	13.1	32.2	58.7	35.7	10.2	3.17	2.08	16.3
MAX	2.5	8.0	14	17	17	143	261	278	41	11	12	214
MIN	.32	2.1	2.0	.80	10	13	26	13	3.1	1.7	.82	.76
AC-FT	55	252	449	613	730	1,980	3,490	2,190	607	195	128	970

CAL YR 1972 TOTAL 2,830.44 MEAN 7.73 MAX 93 MIN .04 AC-FT 5,610
WTR YR 1973 TOTAL 5,882.63 MEAN 16.1 MAX 278 MIN .32 AC-FT 11,670

PEAK DISCHARGE (BASE, 500 FT³/S).--May 1 (0800) 631 ft³/s (12.54 ft); Sept. 16 (0530) 530 ft³/s (12.20 ft).

07307600 North Pease River near Childress, Tex.

LOCATION.--Lat 34°16'30", long 100°17'05", Cottle County, on left bank at downstream side of bridge on U.S. Highways 62 and 83, 12.2 miles (19.6 km) south of Childress, and at mile 87.6 (140.9 km).

DRAINAGE AREA.--1,434 mi² (3,714 km²).

PERIOD OF RECORD.--May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 1,614 ft (492 m), from topographic map.

EXTREMES.--Maximum discharge during period, 7,130 ft³/s (202 m³/s) June 2, gage height, 10.24 ft (3.12 m); no flow at times.

REMARKS.--Records fair. Water-quality records for the period May to September are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								38	.05	0	.17	.40
2								33	2,540	0	0	2.7
3								29	490	0	0	1.2
4								27	77	0	0	45
5								22	25	0	0	373
6								20	12	0	0	166
7								16	7.6	0	0	1,300
8								16	4.8	0	2.7	293
9								51	3.3	0	101	64
10								25	2.6	0	71	24
11								10	2.4	0	9.6	13
12								4.8	1.9	0	1.9	88
13								3.5	1.5	0	.42	24
14								4.4	1.4	0	.21	4.7
15								3.3	1.0	8.1	.10	2.9
16								2.1	.81	4.9	0	48
17								1.2	.74	.47	0	95
18								.66	.32	0	0	30
19								.30	.13	0	0	15
20								.17	.08	0	0	8.3
21								.05	.06	0	0	4.1
22								.10	.04	0	0	2.4
23								34	.02	0	0	1.5
24								4.4	.01	0	0	1.1
25								6.9	0	0	0	.74
26								2.6	0	0	0	25
27								.36	0	0	0	40
28								.07	0	2.0	0	9.4
29					------			.02	0	14	0	4.4
30					------			.01	0	4.1	0	2.7
31		------			------		------	.05	------	.50	0	------
TOTAL								355.99	3,172.76	34.07	187.10	2,689.54
MEAN								11.5	106	1.10	6.04	89.7
MAX								51	2,540	14	101	1,300
MIN								.01	0	0	0	.40
AC-FT								706	6,290	68	371	5,330

WTR YR 1973 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-2	0800	10.24	7,130
9-4	2400	8.07	1,610
9-7	1200	8.16	1,760

07307750 Middle Pease River near Paducah, Tex.

LOCATION.--Lat 34°12'31", long 100°18'03", Cottle County, on left bank at downstream side of bridge on U.S. Highways 62 and 83, 11.8 miles (19.0 km) north of Paducah, and at mile 13.4 (21.6 km).

DRAINAGE AREA.--1,086 mi² (2,813 km²), of which 65 mi² (168 km²) is probably noncontributing.

PERIOD OF RECORD.--May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 1,634 ft (498 m), from topographic map.

EXTREMES.--Maximum discharge during period, 442 ft³/s (12.5 m³/s) Sept. 8, gage height, 6.24 ft (1.90 m); no flow for many days.

REMARKS.--Records fair. Water-quality records for the period May to September are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								22	0	0	0	0
2								16	83	0	0	0
3								15	74	0	0	0
4								15	17	0	0	0
5								14	6.4	0	0	5.6
6								13	2.4	0	0	15
7								12	1.0	0	0	155
8								12	.26	0	0	226
9								11	.01	0	5.8	50
10								9.8	0	0	5.3	20
11								8.3	0	0	.55	9.8
12								7.4	0	0	.05	7.4
13								7.0	0	0	0	20
14								6.7	0	0	0	3.3
15								6.0	0	0	0	1.6
16								4.5	0	0	0	1.7
17								3.0	0	0	0	.84
18								2.0	0	0	0	.20
19								1.0	0	0	0	0
20								.50	0	0	0	0
21								0	0	0	0	0
22								0	0	0	0	0
23								.38	0	0	0	0
24								.09	0	0	0	0
25								.01	0	0	0	0
26								0	0	0	0	.21
27								0	0	0	0	.10
28								0	0	2.6	0	0
29					------			0	0	.06	0	0
30					------			0	0	0	0	0
31		------			------		------	0	------	0	0	------
TOTAL								186.68	184.07	2.66	11.70	516.75
MEAN								6.02	6.14	.086	.38	17.2
MAX								22	83	2.6	5.8	226
MIN								0	0	0	0	0
AC-FT								370	365	5.3	23	1,020

WTR YR 1973 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 400 FT³/S).--Apr. 8 (0100) 442 ft³/s (6.24 ft).

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 (1.3 km) upstream from Catfish Creek, 4.4 miles (7.1 km) downstream from confluence of North and Middle Forks, 17 miles (27 km) southeast of Childress, and at mile 71.0 (114.2 km).

DRAINAGE AREA (revised).--2,754 mi² (7,133 km²), of which 559 mi² (1,448 km²) 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 (455.06 m) above mean sea level.

AVERAGE DISCHARGE.--8 years (1960-62, 1967-73), 67.1 ft³/s (1.90 m³/s), 48,610 acre-ft/yr (59.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,200 ft³/s (289 m³/s) June 2, gage height, 12.00 ft (3.66 m); minimum, 0.07 ft³/s (1.98 dm³/s) Sept. 4.
Period of record: Maximum discharge, 19,000 ft³/s (538 m³/s) June 9, 1960, gage height, 13.59 ft (4.14 m); no flow Aug. 10-22, 1969, May 25, 26, 1971.
Maximum stage since at least 1909, 22 ft (7 m) June 1, 1957; flood in May 1935 reached a stage of 18 ft (5 m) 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 mi² (18.1 km²) above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 1,840 acre-ft (2.27 hm³) below the flood-spillway crests, of which 1,360 acre-ft (1.68 hm³) is floodwater-retarding capacity and 480 acre-ft (0.592 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	99	12	5.9	29	24	218	70	4.4	.40	24	24
2	.98	71	12	8.5	26	20	102	52	2,940	.50	18	6.5
3	.63	30	12	24	22	18	78	44	918	.50	14	.98
4	.63	28	11	16	18	11	107	33	240	.50	11	.50
5	.63	20	11	14	16	11	71	28	102	.50	9.9	130
6	.50	13	10	10	14	9.2	44	28	49	.40	9.2	639
7	.40	9.2	9.0	7.0	14	7.2	35	28	30	.31	8.5	1,670
8	.50	8.5	8.0	6.0	22	7.8	49	20	22	.25	145	719
9	.50	8.5	8.0	5.5	18	9.9	52	62	14	.15	789	242
10	.50	7.8	10	5.0	18	654	73	34	11	.31	169	67
11	.50	7.8	11	6.0	18	930	62	28	11	.31	50	35
12	.50	11	14	7.8	31	400	56	18	9.9	.24	20	575
13	.50	21	14	9.2	33	247	153	22	7.8	.42	11	457
14	.50	11	12	24	26	148	112	24	6.5	20	6.9	41
15	.50	9.2	11	97	22	102	647	20	5.4	7.8	4.4	20
16	.63	8.5	9.2	105	18	64	185	16	4.4	11	2.9	44
17	.63	8.5	7.8	62	18	49	77	12	2.4	6.5	2.2	189
18	.63	33	6.5	39	22	44	47	9.2	.98	2.0	1.7	56
19	.98	41	7.2	29	18	42	47	9.2	.78	1.8	1.4	26
20	12	22	7.2	24	20	35	132	7.2	.63	3.2	1.1	14
21	573	28	7.2	51	22	30	59	5.4	.40	1.2	.95	6.5
22	95	28	7.2	41	29	28	36	5.4	.31	.63	.87	3.6
23	35	22	7.8	44	42	145	35	158	.19	.31	.73	2.4
24	22	28	5.9	32	64	755	1,440	67	.19	.78	.67	1.8
25	18	30	5.9	34	75	364	678	30	.19	.26	.62	1.2
26	16	28	5.4	35	58	149	616	14	.31	.32	.50	160
27	18	27	5.4	36	39	75	736	7.8	.31	.49	.45	89
28	13	22	5.4	44	29	54	268	4.4	.31	188	.47	23
29	12	18	7.8	33	-------	70	150	3.6	.31	471	96	4.7
30	112	16	9.9	29	-------	542	100	3.2	.31	99	30	2.8
31	130	-------	7.8	27	-------	558	-------	3.2	-------	34	5.4	-------
TOTAL	1,068.44	715.0	278.6	910.9	781	5,603.1	6,465	866.6	4,383.02	853.08	1,435.86	5,250.98
MEAN	34.5	23.8	8.99	29.4	27.9	181	216	28.0	146	27.5	46.3	175
MAX	573	99	14	105	75	930	1,440	158	2,940	471	789	1,670
MIN	.40	7.8	5.4	5.0	14	7.2	35	3.2	.19	.15	.45	.50
AC-FT	2,120	1,420	553	1,810	1,550	11,110	12,820	1,720	8,690	1,690	2,850	10,420

CAL YR 1972 TOTAL 23,372.36 MEAN 63.9 MAX 2,430 MIN .02 AC-FT 46,360
WTR YR 1973 TOTAL 28,611.58 MEAN 78.4 MAX 2,940 MIN .15 AC-FT 56,750

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-15	1130	9.85	3,120	8- 9	0600	9.92	3,300
4-24	1500	9.83	3,080	9- 7	0800	9.88	3,200
6- 2	1100	12.00	10,200	9-12	2200	10.15	3,880
7-28	2300	9.77	2,920				

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 (3.1 km) north of Vernon, and 10 miles (16 km) upstream from mouth.

DRAINAGE AREA.--3,488 mi² (9,034 km²), of which 559 mi² (1,448 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,166.03 ft (355.41 m) above mean sea level.

AVERAGE DISCHARGE.--13 years (1960-73), 98.8 ft³/s (2.80 m³/s), 71,580 acre-ft/yr (88.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 ft³/s (357 m³/s) July 30, gage height, 14.70 ft (4.48 m); no flow Oct. 15-19.

Period of record: Maximum discharge, 31,000 ft³/s (878 m³/s) Sept. 19, 1965, gage height, 18.50 ft (5.64 m); no flow at times each year.

Maximum stage since at least 1890, 24 ft (7 m) in 1891; flood in September 1936 reached a stage of 23.5 ft (7.2 m), and flood of June 2, 1957, reached a stage of 22.0 ft (6.7 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	873	28	25	86	55	809	235	18	3.0	255	247
2	9.7	202	27	32	81	53	381	211	1,960	3.0	106	165
3	8.3	120	27	29	70	49	262	197	5,360	2.6	69	72
4	6.0	74	26	25	64	46	186	186	904	2.0	46	1,500
5	4.6	61	25	23	59	43	156	162	424	.93	31	657
6	3.0	49	21	22	56	41	156	130	271	.20	23	3,110
7	2.3	42	19	21	53	38	128	108	193	.10	19	5,390
8	2.0	36	20	20	58	35	115	94	144	.08	15	2,310
9	1.4	31	21	17	56	34	115	94	115	.08	13	900
10	1.2	28	19	14	55	548	113	141	100	.08	247	424
11	.45	25	16	14	52	1,190	113	123	86	.10	214	239
12	.20	27	19	16	49	668	120	120	77	1.7	123	165
13	.10	49	23	20	46	428	204	113	72	12	88	3,210
14	.02	43	23	32	43	251	275	106	69	12	59	840
15	0	29	24	35	42	183	231	108	66	9.0	43	400
16	0	26	24	37	42	138	704	108	61	6.5	34	302
17	0	26	24	40	42	110	305	106	50	5.5	41	235
18	0	30	29	40	45	98	284	106	41	5.5	24	172
19	0	27	28	37	46	88	225	94	35	5.5	18	225
20	.98	26	28	26	43	83	204	104	28	5.5	15	165
21	567	31	26	465	41	79	190	108	24	5.5	14	125
22	1,320	34	26	500	41	76	169	115	21	5.1	12	98
23	274	31	26	275	43	74	169	156	17	4.6	9.0	88
24	80	31	25	128	45	82	954	153	15	4.6	6.5	79
25	46	31	25	150	46	509	1,340	113	13	4.6	6.0	72
26	32	30	26	950	48	446	581	98	7.7	4.2	5.5	221
27	24	28	25	200	62	291	870	70	5.5	3.8	5.5	683
28	18	28	25	130	59	204	752	46	3.4	5.5	5.5	255
29	15	28	27	102	------	169	383	28	3.0	225	6.0	125
30	32	28	25	94	------	1,300	289	18	2.3	6,650	255	96
31	929	------	24	90	------	933	------	17	------	1,320	74	------
TOTAL	3,390.25	2,124	751	3,609	1,473	8,342	10,783	3,568	10,185.9	8,308.27	1,882.0	22,570
MEAN	109	70.8	24.2	116	52.6	269	359	115	340	268	60.7	752
MAX	1,320	873	29	950	86	1,300	1,340	235	5,360	6,650	255	5,390
MIN	0	25	16	14	41	34	113	17	2.3	.08	5.5	72
AC-FT	6,720	4,210	1,490	7,160	2,920	16,550	21,390	7,080	20,200	16,480	3,730	44,770

CAL YR 1972 TOTAL 40,798.35 MEAN 111 MAX 4,250 MIN 0 AC-FT 80,920
WTR YR 1973 TOTAL 76,986.42 MEAN 211 MAX 6,650 MIN 0 AC-FT 152,700

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-30	1900	10.46	2,520	9- 4	1600	12.20	5,960
4-25	0600	10.75	2,940	9- 6	2000	12.63	7,020
6- 3	0700	13.00	7,950	9-13	1300	12.35	6,330
7-30	1100	14.70	12,600				

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 (3 km) northeast of Burkburnett, and at mile 933 (1,501 km).

DRAINAGE AREA.--20,570 mi² (53,280 km²), of which 5,936 mi² (15,374 km²) 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 (291 m), from topographic map. July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

AVERAGE DISCHARGE.--13 years (1960-73), 749 ft³/s (21.2 m³/s), 542,700 acre-ft/yr (669 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 21,200 ft³/s (600 m³/s) Apr. 26, gage height, 9.55 ft (2.91 m); minimum, 4.3 ft³/s (122 dm³/s) Oct. 19.
Period of record: Maximum discharge, 62,800 ft³/s (1,780 m³/s) Oct. 19, 1965, gage height, 11.46 ft (3.49 m); no flow at times.
Flood of June 3, 1957, reached a stage of 13.54 ft (4.13 m), from floodmarks. According to local residents, higher stages occurred in 1891 and June 1941.

REMARKS.--Records fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	15,300	112	122	835	322	15,500	1,760	364	216	3,650	184
2	300	8,150	91	122	652	307	15,800	1,560	1,330	204	1,510	196
3	152	3,680	78	275	572	294	13,900	1,500	6,390	188	1,080	491
4	91	3,950	78	336	530	281	2,720	1,430	12,100	192	830	528
5	60	1,690	86	257	460	250	2,190	1,430	14,500	246	610	1,240
6	37	972	78	200	351	1,340	2,450	1,260	8,800	208	469	3,480
7	25	594	78	100	329	1,070	1,760	1,070	2,600	188	357	6,980
8	19	399	70	50	351	373	1,340	737	2,000	176	285	11,800
9	14	294	60	30	344	233	1,060	680	1,450	164	250	9,380
10	13	228	50	30	336	1,350	1,140	626	1,120	164	212	4,280
11	13	186	50	35	315	6,250	940	650	885	151	196	1,920
12	11	147	60	40	300	7,670	925	626	770	148	526	1,390
13	11	207	76	45	288	7,420	1,090	570	690	145	650	840
14	9.6	212	78	50	275	3,420	2,140	498	649	181	476	3,720
15	10	169	94	70	250	1,820	4,560	469	690	196	364	1,650
16	12	152	100	88	244	1,110	6,290	448	650	192	270	1,150
17	12	126	100	248	257	792	13,300	420	740	164	220	955
18	5.0	129	100	510	288	835	15,100	399	570	180	232	4,150
19	5.0	152	102	520	281	850	9,200	371	455	192	245	1,810
20	16	152	115	583	275	714	865	344	719	164	224	1,350
21	62	132	118	572	275	550	895	332	530	160	160	1,020
22	811	147	118	7,890	263	460	1,240	320	434	125	151	810
23	3,820	156	122	6,970	269	443	2,220	371	364	115	139	618
24	1,690	156	122	3,300	288	985	3,210	371	326	115	128	538
25	1,020	169	126	2,380	288	1,760	7,430	1,040	296	118	115	469
26	652	136	132	1,760	307	1,980	19,300	1,860	265	115	105	512
27	560	132	132	2,100	307	1,560	17,200	1,190	240	112	93	932
28	416	129	122	1,560	315	1,390	9,120	710	232	115	85	3,540
29	250	126	126	1,470	------	1,120	4,500	490	228	173	103	4,350
30	645	118	132	1,120	------	4,110	2,220	420	220	2,230	122	2,640
31	7,380	------	129	910	------	17,500	------	378	------	8,650	131	------
TOTAL	18,512.6	38,290	3,035	33,743	9,845	68,559	179,605	24,330	60,607	15,687	13,988	72,923
MEAN	597	1,276	97.9	1,088	352	2,212	5,987	785	2,020	506	451	2,431
MAX	7,380	15,300	132	7,890	835	17,500	19,300	1,860	14,500	8,650	3,650	11,800
MIN	5.0	118	50	30	244	233	865	320	220	112	85	184
AC-FT	36,720	75,950	6,020	66,930	19,530	136,000	356,200	48,260	120,200	31,120	27,750	144,600

CAL YR 1972 TOTAL 205,061.6 MEAN 560 MAX 15,300 MIN 5.0 AC-FT 406,700
WTR YR 1973 TOTAL 539,124.6 MEAN 1,477 MAX 19,300 MIN 5.0 AC-FT 1,069,000

PEAK DISCHARGE (BASE, 9,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	2000	9.33	18,300	4-26	0900	9.55	21,200
1-21	2300	8.89	13,500	6- 5	0130	10.36	15,400
3-11	1800	8.52	9,530	7-31	1200	9.60	11,500
3-31	1300	9.48	20,400	9- 8	1600	10.60	12,900
4-18	1800	9.09	16,100				

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 (6.4 km) downstream from Cottonwood Creek, 7 miles (11.3 km) downstream from Salt Creek, 12 miles (19.3 km) upstream from Middle Fork, and 14 miles (22.5 km) southeast of Paducah.

DRAINAGE AREA.--540 mi² (1,399 km²).

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 (467 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 17.8 ft³/s (0.504 m³/s), 12,900 acre-ft/yr (15.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 373 ft³/s (10.6 m³/s) July 22, gage height, 5.30 ft (1.62 m); minimum, 6.7 ft³/s (190 dm³/s) July 28.
Period of record: Maximum discharge, 9,920 ft³/s (281 m³/s) Aug. 25, 1966, gage height, 15.3 ft (4.7 m) from floodmarks; minimum, 0.3 ft³/s (8.5 dm³/s) Sept. 1-4, 1964.
Maximum stage since at least 1908, 29.5 ft (9.0 m) in October 1955; flood in May or June 1956 reached a stage of 27 ft (8 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	26	11	12	13	13	16	16	10	8.4	7.8	16
2	10	16	12	13	13	13	16	14	28	8.4	7.8	11
3	10	12	11	16	13	13	16	14	19	8.4	7.8	10
4	10	12	11	15	13	12	15	14	15	8.4	8.4	10
5	10	12	11	14	13	12	15	16	9.7	8.4	8.4	13
6	9.0	11	11	14	13	12	15	16	9.7	7.8	8.4	36
7	9.0	11	12	15	14	12	16	14	9.7	7.8	8.4	50
8	9.7	11	12	14	15	12	16	14	9.7	7.8	32	23
9	9.7	9.7	12	13	14	13	16	14	9.0	7.8	55	16
10	9.7	9.0	12	13	13	42	16	14	9.7	8.4	27	15
11	10	9.7	12	13	13	48	16	13	9.7	8.4	14	14
12	10	11	13	14	12	27	15	12	10	14	14	15
13	10	11	13	14	12	19	17	12	9.7	16	12	81
14	9.7	9.7	13	15	12	16	17	13	10	21	11	37
15	9.7	9.7	12	15	12	16	18	14	9.7	11	10	17
16	9.7	10	12	15	12	16	16	13	9.7	10	10	17
17	9.7	10	12	16	13	16	16	12	9.0	10	9.7	14
18	9.7	12	12	15	14	16	17	12	9.0	10	10	14
19	11	12	12	14	13	16	17	12	7.8	10	9.7	14
20	12	12	12	14	12	15	16	12	7.8	10	9.7	14
21	22	12	12	29	12	16	16	12	7.8	10	9.7	14
22	13	12	12	26	14	16	16	13	7.8	194	9.7	14
23	11	12	12	14	14	16	17	14	8.4	34	9.7	14
24	10	13	12	12	13	20	18	13	8.4	12	9.7	15
25	10	12	12	14	13	20	17	12	8.4	8.4	9.7	15
26	11	12	12	16	13	18	17	10	8.4	7.8	9.7	36
27	11	11	12	14	13	18	16	9.0	8.4	7.2	9.7	35
28	11	11	12	13	13	19	17	8.4	8.4	7.2	9.7	18
29	11	11	13	14	------	19	17	9.0	9.0	9.7	10	15
30	23	12	12	14	------	32	17	9.0	9.0	9.7	10	15
31	45	------	12	14	------	18	------	9.7	------	7.8	11	------
TOTAL	376.6	354.8	371	464	364	571	490	390.1	305.9	509.8	389.7	628
MEAN	12.1	11.8	12.0	15.0	13.0	18.4	16.3	12.6	10.2	16.4	12.6	20.9
MAX	45	26	13	29	15	48	18	16	28	194	55	81
MIN	9.0	9.0	11	12	12	12	15	8.4	7.8	7.2	7.8	10
AC-FT	747	704	736	920	722	1,130	972	774	607	1,010	773	1,250

CAL YR 1972 TOTAL 8,133.3 MEAN 22.2 MAX 1,980 MIN 6.2 AC-FT 16,130
WTR YR 1973 TOTAL 5,214.9 MEAN 14.3 MAX 194 MIN 7.2 AC-FT 10,340

PEAK DISCHARGE (BASE, 400 FT³/S).--No peak above base.

07311622 North Fork Wichita River near Crowell, Tex.

LOCATION.--Lat 33°52'12", long 99°56'48", Foard County, on left bank 152 ft (46 m) downstream from ranch road, 2.0 miles (3.2 km) upstream from Middle Fork, 15.0 miles (24.1 km) southwest of Crowell, and at mile 203.3 (327.1 km).

DRAINAGE AREA.--591 mi² (1,531 km²).

PERIOD OF RECORD.--1956-57, occasional discharge measurements at site 2 miles (3.2 km) downstream, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,448 ft (441 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,520 ft³/s (43.0 m³/s) July 15, gage height, 5.38 ft (1.64 m); minimum, 6.0 ft³/s (170 dm³/s) Aug. 28.
Period of record: Maximum discharge, 4,200 ft³/s (119 m³/s) Sept. 4, 1972, gage height, 8.17 ft (2.49 m); minimum, 1.2 ft³/s (34 dm³/s) July 19, 1971.

REMARKS.--Records good except for December and January, 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	36	14	13	17	13	22	14	11	9.1	14	14
2	13	18	14	15	16	12	21	14	17	9.1	14	11
3	13	13	14	18	15	12	19	14	23	9.1	14	9.0
4	13	13	14	18	15	12	18	14	15	9.1	13	10
5	13	12	14	17	14	12	18	14	12	8.2	13	20
6	13	12	12	17	14	12	18	14	11	9.1	12	59
7	13	12	12	15	15	12	18	14	10	8.2	11	46
8	13	12	13	15	18	13	18	14	10	7.4	203	24
9	13	12	13	14	17	13	18	25	10	7.4	36	16
10	13	12	14	14	16	122	17	16	10	7.4	41	12
11	13	12	14	14	14	174	17	14	10	11	20	12
12	12	15	14	14	14	54	17	13	12	11	14	12
13	12	19	15	15	14	29	20	13	12	21	13	41
14	12	14	15	16	14	22	19	13	12	371	12	51
15	12	14	14	16	14	21	19	14	11	22	10	22
16	12	14	13	16	14	20	20	14	10	14	9.1	16
17	12	14	13	16	14	19	18	13	9.1	11	8.9	15
18	12	14	13	16	14	18	17	11	9.1	10	7.9	14
19	13	15	13	16	14	18	17	12	9.1	10	8.1	14
20	16	15	13	16	14	18	17	10	10	16	8.2	14
21	76	15	13	35	14	18	16	9.1	10	11	7.8	12
22	34	15	13	50	14	18	17	12	9.1	102	7.7	11
23	16	15	13	25	15	24	18	14	8.2	56	7.6	11
24	15	15	13	18	15	26	22	14	7.4	19	7.5	11
25	14	15	13	16	14	25	20	14	7.4	14	7.5	11
26	14	15	13	18	14	24	18	11	8.2	13	7.3	27
27	14	14	12	18	13	22	17	9.1	7.4	11	6.7	36
28	14	14	13	17	13	21	14	9.1	8.2	9.1	6.6	19
29	14	14	14	16	------	23	14	9.1	9.1	12	6.7	13
30	19	14	14	16	------	65	15	9.1	9.1	10	6.7	12
31	99	------	13	17	------	32	------	10	------	38	6.9	------
TOTAL	585	444	415	557	409	924	539	400.5	317.4	876.2	561.2	595.0
MEAN	18.9	14.8	13.4	18.0	14.6	29.8	18.0	12.9	10.6	28.3	18.1	19.8
MAX	99	36	15	50	18	174	22	25	23	371	203	59
MIN	12	12	12	13	13	12	14	9.1	7.4	7.4	6.6	9.0
AC-FT	1,160	881	823	1,100	811	1,830	1,070	794	630	1,740	1,110	1,180

CAL YR 1972 TOTAL 8,513.5 MEAN 23.3 MAX 1,080 MIN 2.2 AC-FT 16,890
WTR YR 1973 TOTAL 6,623.3 MEAN 18.1 MAX 371 MIN 6.6 AC-FT 13,140

PEAK DISCHARGE (BASE, 600 FT³/S).--July 15 (0700) 1,520 ft³/s (5.38 ft); Aug. 8 (0600) 894 ft³/s (4.49 ft).

07311648 Middle Fork Wichita River near Truscott, Tex.

LOCATION (revised).--Lat 33°51'12", long 99°57'44", Foard County, on right bank 32 ft (10 m) downstream from ranch road, 3.0 miles (4.8 km) upstream from mouth, and 11.1 miles (17.9 km) northwest of Truscott.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--1956-57, 1968-70, occasional discharge measurements made 3 miles (4.8 km) downstream, published as "near Crowell", October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,457 ft (444 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 257 ft³/s (7.28 m³/s) Aug. 9, gage height, 5.34 ft (1.63 m); minimum daily, 3.2 ft³/s (91 dm³/s) Oct. 1, 2, and 5.
Period of record: Maximum discharge, 1,510 ft³/s (42.8 m³/s) May 30, 1971, gage height, 9.51 ft (2.90 m); minimum, 1.6 ft³/s (45 dm³/s) July 9, 1971.
Maximum stage since at least 1900 occurred in August 1913, about 17 ft (5 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	37	5.2	4.2	5.4	5.0	5.8	4.8	5.8	5.6	7.7	8.0
2	3.2	22	5.2	4.2	5.2	4.8	5.6	4.4	6.7	5.6	7.2	6.0
3	3.4	4.4	5.2	5.0	5.0	4.8	5.8	4.4	6.7	5.4	6.5	6.3
4	3.4	4.4	5.0	5.2	4.8	4.8	5.6	4.4	6.5	5.0	6.3	18
5	3.2	4.4	4.8	4.8	4.6	4.8	5.4	4.2	6.0	4.6	6.0	26
6	3.4	4.4	4.8	4.6	4.8	4.8	5.4	4.8	5.6	4.6	6.3	131
7	3.4	4.4	4.6	4.8	4.8	4.8	5.6	4.8	5.6	4.6	6.3	49
8	3.4	4.4	4.6	4.6	6.0	5.0	6.3	4.6	5.6	4.6	31	8.2
9	3.4	4.4	4.8	4.2	5.8	5.0	5.8	4.6	5.6	4.6	41	7.0
10	3.4	4.4	4.6	4.2	5.2	40	5.4	4.6	5.6	4.6	18	7.0
11	3.4	4.4	4.8	4.4	5.0	29	5.4	4.6	5.6	4.6	6.7	7.0
12	3.4	24	4.8	4.8	5.0	21	5.6	4.4	5.4	4.6	6.3	7.0
13	3.4	33	4.4	4.8	5.0	20	6.3	4.2	5.6	5.2	5.8	11
14	3.4	22	4.4	5.4	4.8	8.2	6.3	5.0	5.6	64	6.0	9.9
15	3.4	5.4	4.0	5.2	4.6	7.0	5.8	5.2	5.8	8.5	6.0	8.0
16	3.6	5.4	4.2	5.2	4.6	5.2	5.6	5.4	5.6	8.0	6.0	7.5
17	3.6	5.4	4.8	5.2	4.6	5.2	5.0	5.2	5.6	8.0	5.6	7.4
18	3.7	5.6	4.2	5.0	5.4	5.2	5.0	5.0	5.4	7.7	5.6	7.5
19	3.7	5.8	4.4	4.6	5.2	5.4	4.8	5.0	5.4	7.7	5.4	7.7
20	24	5.6	4.4	5.0	4.4	5.2	4.6	5.0	5.4	11	5.4	7.7
21	70	5.6	4.4	8.5	4.4	5.2	4.4	4.8	5.2	8.0	5.4	7.7
22	41	5.6	4.4	7.4	4.6	5.2	4.1	5.4	5.2	7.4	5.4	7.7
23	19	5.6	4.4	5.6	5.4	5.6	4.2	6.5	5.2	7.2	5.2	7.6
24	3.9	5.6	4.2	4.8	5.4	6.0	6.8	7.4	5.4	7.0	5.2	7.4
25	3.9	5.8	4.2	5.0	5.0	6.3	5.6	7.2	5.4	6.7	5.2	7.4
26	3.9	5.6	4.2	6.0	5.0	5.8	4.8	6.7	5.4	6.7	5.2	60
27	3.9	5.4	4.1	5.6	4.8	5.8	4.6	5.8	5.2	6.5	5.2	10
28	3.9	5.2	4.1	5.4	4.8	6.3	4.4	5.6	5.4	6.5	5.2	8.1
29	4.1	5.2	4.2	5.2	------	16	4.4	5.4	5.4	6.5	5.2	6.5
30	24	5.2	4.2	5.0	------	51	4.4	5.6	5.6	9.8	5.2	6.1
31	70	------	4.1	5.4	------	14	------	5.8	------	64	5.6	------
TOTAL	336.6	265.6	139.7	159.3	139.6	322.4	158.8	160.8	168.5	314.8	253.1	475.7
MEAN	10.9	8.85	4.51	5.14	4.99	10.4	5.29	5.19	5.62	10.2	8.16	15.9
MAX	70	37	5.2	8.5	6.0	51	6.8	7.4	6.7	64	41	131
MIN	3.2	4.4	4.0	4.2	4.4	4.8	4.1	4.2	5.2	4.6	5.2	6.0
AC-FT	668	527	277	316	277	639	315	319	334	624	502	944

CAL YR 1972 TOTAL 4,167.3 MEAN 11.4 MAX 567 MIN 2.3 AC-FT 8,270
WTR YR 1973 TOTAL 2,894.9 MEAN 7.93 MAX 131 MIN 3.2 AC-FT 5,740

PEAK DISCHARGE (BASE, 200 FT³/S).--Aug. 9 (2000) 257 ft³/s (5.34 ft).

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 (7.2 km) north of Truscott, about 33 miles (53.1 km) upstream from confluence with South Fork, and at mile 188.4 (303.1 km).

DRAINAGE AREA.--937 mi² (2,427 km²).

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 (412.02 m) above mean sea level. Nov. 6, 1959, to Jan. 2, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years (1960-73), 61.5 ft³/s (1.74 m³/s), 44,560 acre-ft/yr (54.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,300 ft³/s (93.5 m³/s) July 14, gage height, 13.96 ft (4.26 m); minimum, 4.3 ft³/s (122 dm³/s) Aug. 26, 29-31.
Period of record: Maximum discharge, 28,900 ft³/s (818 m³/s) Sept. 19, 1965, gage height, 21.96 ft (6.69 m); minimum, 0.01 ft³/s (0.28 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	208	24	19	33	26	74	27	16	12	48	21
2	15	77	23	20	30	26	55	23	87	9.9	25	22
3	15	49	23	29	27	25	50	22	56	9.0	25	14
4	15	38	22	31	26	24	41	21	75	8.2	22	46
5	15	32	23	25	24	23	35	22	39	7.4	14	109
6	15	28	19	20	25	24	33	27	25	7.6	12	488
7	15	27	18	15	29	23	32	27	19	6.7	11	362
8	15	26	16	13	44	22	37	24	17	5.7	292	199
9	15	26	20	10	43	23	38	39	16	5.3	216	62
10	15	24	16	8.0	37	257	34	107	16	5.6	252	24
11	15	24	14	8.0	33	376	30	48	16	6.1	126	17
12	16	49	17	9.0	30	149	29	33	15	76	45	15
13	16	99	15	10	28	83	46	27	14	40	24	112
14	15	40	14	12	27	53	44	29	14	1,480	20	226
15	15	27	14	22	26	40	41	31	16	191	17	85
16	16	23	18	28	27	35	37	29	15	64	14	44
17	16	23	23	26	31	30	34	24	14	46	13	30
18	16	25	22	24	36	29	29	22	13	34	12	28
19	18	29	20	21	33	29	28	21	12	27	11	26
20	28	29	20	19	29	27	26	19	12	25	10	20
21	442	29	19	184	27	26	25	17	11	34	9.2	17
22	211	27	19	142	30	25	55	16	11	103	7.7	15
23	58	25	19	76	39	42	42	28	11	181	6.2	12
24	29	26	18	50	37	74	163	19	10	68	5.3	9.0
25	22	28	19	56	31	53	71	19	9.8	29	5.1	7.4
26	20	26	19	89	24	42	50	21	9.5	17	5.1	131
27	19	23	19	62	27	38	44	16	9.2	12	4.9	128
28	18	22	19	45	26	35	35	13	10	11	4.9	69
29	18	23	19	38	------	68	30	12	11	27	4.5	38
30	26	24	20	35	------	354	27	12	13	11	4.4	26
31	384	------	20	32	------	158	------	12	------	228	4.7	------
TOTAL	1,568	1,156	591	1,178.0	863	2,239	1,315	807	612.5	2,787.5	1,272.0	2,402.4
MEAN	50.6	38.5	19.1	38.0	30.8	72.2	43.8	26.0	20.4	89.9	41.0	80.1
MAX	442	208	24	184	44	376	163	107	87	1,480	292	488
MIN	15	22	14	8.0	24	22	25	12	9.2	5.3	4.4	7.4
AC-FT	3,110	2,290	1,170	2,340	1,710	4,440	2,610	1,600	1,210	5,530	2,520	4,770

CAL YR 1972 TOTAL 27,891.7 MEAN 76.2 MAX 3,260 MIN 3.4 AC-FT 55,320
WTR YR 1973 TOTAL 16,791.4 MEAN 46.0 MAX 1,480 MIN 4.4 AC-FT 33,310

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Oct. 21 (1245) 1,170 ft³/s (9.94 ft); July 14 (1015) 3,300 ft³/s (13.96 ft).

07311780 South Fork Wichita River near Guthrie, Tex.

LOCATION.--Lat 33°37'29", long 100°13'04", King County, on left bank 60 ft (18 m) upstream from ranch road, 3.9 miles (6.3 km) upstream from Willow Creek, 6.1 miles (9.8 km) east of Guthrie, and at mile 92.5 (148.8 km).

DRAINAGE AREA.--239 mi² (619 km²).

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 (488 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 126 ft³/s (3.57 m³/s) Mar. 10, gage height, 3.21 ft (0.98 m); minimum daily, 3.6 ft³/s (102 dm³/s) July 5.
Period of record: Maximum discharge, 2,060 ft³/s (58.3 m³/s) Aug. 25, 1971, gage height, 7.15 ft (2.18 m); minimum, 2.1 ft³/s (59 dm³/s) for many days in 1971.
Maximum stage since 1950, 20.8 ft (6.34 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	6.3	5.0	4.4	5.3	4.4	5.6	5.3	6.3	4.4	6.0	5.6
2	5.0	5.3	5.0	4.4	5.3	4.4	5.6	5.0	6.3	4.4	6.0	5.0
3	5.0	5.0	5.0	5.3	5.0	4.4	5.3	5.0	5.0	4.1	6.0	5.0
4	5.0	5.0	5.0	5.0	5.0	4.7	5.3	5.0	4.7	3.8	6.0	5.2
5	5.0	5.0	4.7	5.0	5.0	4.7	5.3	5.3	4.4	3.6	6.0	5.5
6	5.0	5.0	4.7	4.7	5.0	5.0	5.6	5.3	4.4	3.8	6.0	8.9
7	5.0	5.0	4.7	4.7	5.0	5.0	5.3	5.3	4.1	3.8	5.6	9.0
8	5.0	5.0	4.7	4.7	5.3	5.0	5.6	5.0	4.4	4.1	5.6	11
9	4.7	5.0	4.7	4.4	5.0	4.7	5.3	5.3	4.7	4.1	5.6	8.2
10	4.7	5.0	4.7	4.4	4.7	47	5.0	5.0	4.7	4.7	6.0	6.5
11	4.7	5.0	4.7	4.4	4.7	21	5.3	5.0	4.7	4.7	22	6.0
12	4.7	5.0	4.7	4.4	4.7	7.8	5.6	5.0	5.0	5.0	9.2	6.4
13	4.7	5.0	5.0	4.4	4.7	6.6	5.6	4.7	5.0	5.3	6.3	6.8
14	4.7	5.0	5.0	4.7	4.7	6.3	5.6	4.7	5.3	5.3	5.7	6.0
15	4.7	5.0	5.0	4.7	4.7	6.0	5.6	4.7	5.0	5.0	5.3	5.6
16	4.4	5.0	5.0	5.0	4.4	6.0	5.3	4.7	5.0	5.6	5.3	5.6
17	4.4	5.0	5.0	5.0	4.4	6.0	5.3	4.7	5.0	5.6	5.3	5.6
18	4.4	5.0	5.3	4.4	4.4	6.0	5.3	4.4	5.0	5.6	5.3	5.6
19	4.4	5.0	5.3	4.7	4.4	5.6	5.3	4.4	4.7	5.6	5.3	5.6
20	5.0	5.0	5.3	4.7	4.7	6.0	5.3	4.4	4.7	6.0	5.3	5.6
21	6.3	5.0	5.3	8.7	4.7	6.0	5.3	4.4	5.0	6.0	5.3	5.5
22	5.6	5.0	5.3	6.3	5.0	6.3	6.3	5.6	4.7	6.0	5.3	5.3
23	4.7	5.0	5.0	5.6	4.7	7.8	5.3	5.3	4.4	6.0	5.3	5.3
24	4.4	5.0	5.0	5.3	4.7	7.8	6.3	5.0	4.4	6.0	5.3	5.6
25	4.4	5.0	4.7	5.3	4.7	7.0	6.0	5.0	4.4	6.0	5.3	5.5
26	4.4	5.0	4.7	5.6	4.7	6.6	5.6	4.7	4.4	5.6	5.3	8.8
27	4.4	5.0	4.7	5.3	4.7	6.6	5.3	4.1	4.1	5.6	5.3	7.1
28	4.4	5.0	4.7	5.0	4.4	7.0	5.3	4.1	4.4	6.0	5.3	6.7
29	4.7	5.0	4.7	5.0	------	7.0	5.6	4.1	4.1	6.0	5.3	6.7
30	5.0	5.0	4.7	5.3	------	7.4	5.3	3.8	4.4	6.3	5.3	6.4
31	9.0	------	4.7	5.3	------	6.0	------	4.1	------	6.6	5.4	------
TOTAL	152.5	151.6	152.0	156.1	134.0	242.1	164.4	148.4	142.7	160.6	192.2	191.6
MEAN	4.93	5.05	4.90	5.04	4.79	7.81	5.48	4.79	4.76	5.18	6.20	6.39
MAX	9.0	6.3	5.3	8.7	5.3	47	6.3	5.6	6.3	6.6	22	11
MIN	4.4	5.0	4.7	4.4	4.4	4.4	5.0	3.8	4.1	3.6	5.3	5.0
AC-FT	303	301	301	310	266	480	326	294	283	319	381	380

CAL YR 1972 TOTAL 1,811.8 MEAN 4.95 MAX 40 MIN 3.3 AC-FT 3,590
WTR YR 1973 TOTAL 1,988.5 MEAN 5.45 MAX 47 MIN 3.6 AC-FT 3,940

PEAK DISCHARGE (BASE, 200 FT³/S).--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 (52 m) upstream from ranch road, 1.6 miles (2.6 km) downstream from Ox Yoke Creek, 13.7 miles (22.0 km) northwest of Benjamin, and at mile 64.5 (103.8 km).

DRAINAGE AREA.--499 mi² (1,292 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,451 ft (442 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 342 ft³/s (9.69 m³/s) Apr. 22, gage height, 6.20 ft (1.89 m); 0.55 ft³/s (16 dm³/s) Aug. 25.
Period of record: Maximum discharge, 1,480 ft³/s (41.9 m³/s) Sept. 4, 1972, gage height, 9.70 ft (2.96 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	72	10	7.3	16	13	17	14	13	2.3	3.0	2.1
2	5.8	43	9.6	7.8	14	11	14	15	42	2.1	3.6	2.5
3	5.4	24	7.8	14	14	10	16	17	24	1.9	2.7	2.1
4	5.8	18	7.3	13	13	9.6	14	16	12	1.7	2.3	3.4
5	5.8	18	7.8	12	12	9.6	14	15	6.8	1.5	2.1	2.5
6	5.4	17	6.5	10	10	9.6	14	14	5.4	1.4	1.9	13
7	5.8	14	7.5	6.5	12	9.0	14	15	3.3	1.0	1.7	26
8	6.3	13	9.0	6.0	18	8.4	14	17	3.3	1.0	1.4	14
9	5.8	12	9.0	6.0	17	9.0	13	15	4.2	1.0	1.4	9.0
10	6.8	12	7.0	5.5	12	68	12	14	4.6	1.0	1.7	7.8
11	6.8	11	8.0	5.0	12	113	11	14	4.6	1.0	1.5	5.8
12	6.8	10	8.4	5.0	11	56	11	13	4.6	1.2	2.3	6.3
13	6.3	11	8.0	8.0	9.6	36	15	11	4.6	1.5	9.0	7.3
14	6.3	10	8.4	9.0	9.0	27	14	9.6	4.6	7.0	5.0	9.6
15	5.8	10	8.0	10	9.0	23	14	7.3	3.9	6.3	3.3	7.3
16	5.8	10	7.5	9.0	8.4	20	12	6.8	3.0	4.6	2.5	6.3
17	5.4	9.0	8.0	9.6	10	19	11	6.8	2.7	3.3	2.3	6.3
18	4.6	10	9.0	9.0	13	18	11	6.8	2.5	2.7	1.7	6.3
19	6.3	11	8.4	7.8	11	18	10	7.3	2.3	2.5	1.5	5.8
20	11	12	7.8	7.8	11	16	9.0	7.8	2.1	2.3	1.5	5.8
21	124	12	7.8	36	10	15	8.4	7.8	2.3	2.1	1.2	5.8
22	102	11	7.3	41	14	15	98	12	2.3	1.9	1.0	5.4
23	29	10	7.3	22	19	21	116	13	2.1	1.7	1.0	4.6
24	19	11	7.3	14	14	65	93	11	2.1	1.5	.91	5.0
25	16	11	7.3	16	14	31	52	8.4	2.1	1.4	.79	5.0
26	16	11	7.3	24	14	19	43	7.3	2.1	1.4	.79	7.3
27	14	10	7.3	23	13	16	34	5.4	2.3	1.4	.79	14
28	14	10	7.8	18	12	16	27	5.0	2.1	1.4	.79	9.6
29	13	9.6	7.8	17	------	16	20	4.6	2.5	1.4	.79	6.8
30	20	9.6	7.8	17	------	31	18	4.2	3.6	2.5	.79	6.3
31	76	------	7.3	17	------	29	------	4.2	------	2.7	1.0	------
TOTAL	566.8	452.2	245.3	413.3	352.0	777.2	769.4	325.3	177.0	66.7	62.25	219.0
MEAN	18.3	15.1	7.91	13.3	12.6	25.1	25.6	10.5	5.90	2.15	2.01	7.30
MAX	124	72	10	41	19	113	116	17	42	7.0	9.0	26
MIN	4.6	9.0	6.5	5.0	8.4	8.4	8.4	4.2	2.1	1.0	.79	2.1
AC-FT	1,120	897	487	820	698	1,540	1,530	645	351	132	123	434

CAL YR 1972 TOTAL 6,350.44 MEAN 17.4 MAX 508 MIN 0 AC-FT 12,600
WTR YR 1973 TOTAL 4,426.45 MEAN 12.1 MAX 124 MIN .79 AC-FT 8,780

PEAK DISCHARGE (BASE, 500 FT³/S).--No peak above base.

07311800 South Fork Wichita River near Benjamin, Tex.

LOCATION.--Lat 33°38'39", long 99°48'02", Knox County, on right bank at upstream side of bridge on State Highway 283, 2 miles (3.2 km) downstream from Panhandle and Santa Fe Railway Co. bridge, 4 miles (6.4 km) north of Benjamin, and 34 miles (54.7 km) upstream from confluence with North Fork Wichita River.

DRAINAGE AREA.--584 mi² (1,513 km²).

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 (406.67 m) above mean sea level. Prior to Jan. 2, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years (1960-73), 43.7 ft³/s (1.24 m³/s), 31,660 acre-ft/yr (39.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,180 ft³/s (61.7 m³/s) Oct. 21, gage height, 11.64 ft (3.55 m); no flow at times.
Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Oct. 18, 1960, gage height, 15.40 ft (4.69 m); maximum gage height, 16.48 ft (5.02 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	218	15	12	23	21	45	28	14	2.3	4.2	24
2	9.0	83	14	12	20	20	39	26	31	1.8	1.4	15
3	8.8	53	14	17	19	19	39	24	24	.58	1.2	7.2
4	8.5	40	14	19	19	18	35	22	18	.30	1.0	44
5	8.5	35	14	18	19	17	31	22	12	.12	.90	156
6	8.7	32	13	15	19	19	29	24	8.9	0	.90	735
7	8.6	27	13	13	23	17	30	23	8.5	0	.85	173
8	8.2	24	10	10	34	15	29	19	7.4	0	.80	47
9	7.9	23	12	8.0	32	15	27	18	5.8	0	1.4	26
10	7.0	21	13	6.0	28	290	25	17	5.3	0	98	18
11	6.8	21	12	6.0	26	162	24	16	5.3	0	16	14
12	6.7	29	13	7.0	24	108	24	14	5.5	0	4.2	56
13	6.6	25	11	9.0	22	62	30	13	4.8	0	1.7	166
14	6.6	19	9.0	12	22	48	30	13	4.4	297	1.9	25
15	6.6	17	10	20	21	40	27	14	4.3	73	16	18
16	6.6	18	11	18	21	36	24	14	4.3	17	3.8	16
17	6.2	17	12	17	24	33	21	13	3.8	12	2.6	13
18	6.2	18	13	16	29	33	21	12	3.8	13	2.1	12
19	6.6	19	13	16	25	31	20	9.9	3.3	6.8	1.7	12
20	10	19	12	15	23	26	18	9.4	2.8	4.3	1.5	11
21	990	20	12	28	22	25	17	9.1	2.8	3.4	1.2	8.8
22	311	19	11	38	26	25	234	8.9	2.7	2.3	1.0	6.8
23	68	18	11	30	34	134	220	11	2.4	1.2	.75	4.1
24	34	19	11	25	30	202	292	11	2.3	1.1	.65	5.0
25	25	19	11	31	26	72	89	9.5	1.7	1.0	.45	4.2
26	22	17	11	37	23	49	55	8.8	1.7	1.0	.30	197
27	21	16	11	33	22	46	42	7.1	1.5	.90	.25	49
28	19	14	11	27	21	44	37	6.3	1.5	.85	.16	18
29	18	15	12	23	------	41	31	5.5	2.6	2.7	.16	14
30	32	15	12	24	------	228	28	5.1	3.2	2.2	.16	9.5
31	833	------	12	23	------	76	------	5.0	------	25	.18	------
TOTAL	2,526.1	930	373.0	585.0	677	1,972	1,613	438.6	199.6	469.85	167.41	1,904.6
MEAN	81.5	31.0	12.0	18.9	24.2	63.6	53.8	14.1	6.65	15.2	5.40	63.5
MAX	990	218	15	38	34	290	292	28	31	297	98	735
MIN	6.2	14	9.0	6.0	19	15	17	5.0	1.5	0	.16	4.1
AC-FT	5,010	1,840	740	1,160	1,340	3,910	3,200	870	396	932	332	3,780

CAL YR 1972 TOTAL 23,329.82 MEAN 63.7 MAX 3,480 MIN 0 AC-FT 46,270
WTR YR 1973 TOTAL 11,856.16 MEAN 32.5 MAX 990 MIN 0 AC-FT 23,520

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	1800	11.64	2,180	8-10	1715	7.92	846
10-31	1300	10.60	1,780	9- 6	1400	9.63	1,440
7-14	1400	10.29	1,670				

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 (9.7 km) upstream from head of Lake Kemp, 10 miles (16.1 km) downstream from confluence of North and South Forks, and 10.5 miles (16.9 km) northwest of Seymour.

DRAINAGE AREA.--1,874 mi² (4,854 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,152.7 ft (351.3 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--13 years (1960-73), 178 ft³/s (5.04 m³/s), 129,000 acre-ft/yr (159 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,700 ft³/s (331 m³/s) Oct. 31, gage height, 15.67 ft (4.78 m); minimum, 2.3 ft³/s (65.1 dm³/s) Aug. 30 to Sept. 1.
Period of record: Maximum discharge, 23,100 ft³/s (654 m³/s) Sept. 20, 1965, gage height, 17.75 ft (5.41 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	4,010	52	32	65	59	347	104	43	14	285	2.3
2	36	1,060	51	35	62	57	213	88	52	7.9	114	105
3	34	358	49	107	58	57	168	78	72	6.9	71	35
4	31	238	49	84	54	54	141	68	72	6.3	44	120
5	29	182	48	49	52	53	124	62	65	6.1	41	175
6	27	149	37	45	51	88	112	65	53	5.6	40	2,130
7	26	126	41	30	64	54	105	60	39	4.9	36	2,180
8	27	107	42	20	102	53	102	58	33	4.3	27	647
9	27	91	39	15	70	50	98	61	28	4.1	114	299
10	27	79	40	14	66	1,150	93	49	24	14	180	173
11	25	74	39	14	60	842	87	70	21	19	249	123
12	26	71	41	15	56	486	78	66	21	4.0	122	109
13	25	143	38	20	52	277	94	56	24	107	57	275
14	24	134	41	50	48	190	96	54	22	487	36	259
15	23	87	38	84	45	153	110	52	20	1,900	23	194
16	24	71	35	66	44	132	91	50	19	325	87	140
17	24	63	36	66	53	121	79	49	20	137	29	106
18	22	82	37	57	60	112	72	48	17	110	20	85
19	23	66	38	51	58	107	124	44	15	79	13	73
20	35	61	38	49	57	102	151	41	14	68	9.7	65
21	1,700	67	37	311	53	100	64	38	14	54	7.3	55
22	2,990	61	36	399	66	95	470	45	13	47	5.5	48
23	1,050	59	35	169	83	105	667	41	12	40	4.0	45
24	248	68	34	115	74	424	1,020	41	12	106	3.3	44
25	150	63	34	286	72	321	654	62	10	68	3.0	44
26	122	60	33	307	66	158	299	42	9.6	44	2.8	275
27	98	59	33	151	62	119	211	36	9.8	27	2.8	846
28	86	56	33	107	59	104	174	33	9.6	21	2.5	213
29	78	53	34	84	------	129	143	31	9.0	312	2.5	126
30	499	53	34	71	------	2,410	126	31	9.0	150	2.5	93
31	5,520	------	33	66	------	1,060	------	29	------	337	2.3	------
TOTAL	13,096	7,851	1,205	2,969	1,712	9,222	6,313	1,652	782.0	4,516.1	1,636.2	9,084.3
MEAN	422	262	38.9	95.8	61.1	297	210	53.3	26.1	146	52.8	303
MAX	5,520	4,010	52	399	102	2,410	1,020	104	72	1,900	285	2,180
MIN	22	53	33	14	44	50	64	29	9.0	4.0	2.3	2.3
AC-FT	25,980	15,570	2,390	5,890	3,400	18,290	12,520	3,280	1,550	8,960	3,250	18,020

CAL YR 1972 TOTAL 96,654.3 MEAN 264 MAX 6,220 MIN 1.8 AC-FT 191,700
WTR YR 1973 TOTAL 60,038.6 MEAN 164 MAX 5,520 MIN 2.3 AC-FT 119,100

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	2330	12.23	4,790	7-15	0730	10.31	2,700
10-31	1900	15.67	11,700	9- 6	1900	11.48	3,920
3-30	1100	11.75	4,220				

07312000 Lake Kemp near Mabelle, Tex.

LOCATION (revised).--Lat 33°45'30", long 99°09'03", Baylor County, in outlet gate tower near center of dam on Wichita River, 6.2 miles (10.0 km) north of Mabelle, 10.2 miles (16.4 km) northeast of Seymour, and at mile 126.7 (203.9 km).

DRAINAGE AREA.--2,086 mi² (5,403 km²).

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

GAGE (revised).--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1972, nonrecording gage at different site and at datum 2.40 ft (0.73 m) higher.

EXTREMES.--Current year: Maximum contents, 251,400 acre-ft (310 hm³) Nov. 3, elevation, 1,139.48 ft (347.31 m); minimum, 184,500 acre-ft (227 hm³) Sept. 5, elevation, 1,133.98 ft (345.64 m).
Period of record: Maximum contents, 420,900 acre-ft (519 hm³) June 30, 1941, gage height, 1,149.6 ft (350.4 m), former datum; minimum since first appreciable storage, 26,160 acre-ft (32.3 hm³) June 30, 1953, gage height, 1,105.6 ft (337.0 m).

REMARKS (revised).--Lake is formed by a hydraulic earthfill dam 8,890 ft (2,710 m) long, with an uncontrolled service spillway 3,000 ft (914 m) long, on right bank upstream from dam. Outlet works, near center of dam, consist of two hydraulically operated slide gates 5 ft 8 inches by 13 ft (4 by 4 m) with a 13-foot-diameter (4-meter) conduit and spillway basin. Storage began Oct. 1, 1922, and dam was completed Aug. 25, 1923. Enlargement of dam will be completed in 1974. Water is used for irrigation in Wichita River Valley, oilfield operation, and industrial use. Forty-two thousand acres (17,000 hm²) 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	1,183.0	-
Top of design flood pool	1,156.0	576,900
Crest of service spillway	1,160.0	672,100
Invert of outlet conduits	1,090.0	1,580

COOPERATION.--Capacity table No. 3-C furnished by U.S. Army Corps of Engineers.

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

1,133.0	174,200	1,138.0	231,700
1,134.0	184,700	1,140.0	258,600
1,136.0	207,100		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213,200	247,500	196,800	194,500	201,000	196,900	223,900	246,900	238,800	226,600	208,100	186,500
2	212,700	250,700	196,700	195,600	200,000	197,000	224,200	246,800	239,400	225,600	208,300	185,800
3	211,900	251,100	196,100	196,300	199,000	197,100	224,800	246,600	239,100	225,500	208,500	185,400
4	211,300	249,000	195,600	196,300	197,900	197,200	224,800	246,600	239,100	224,400	208,300	184,700
5	210,500	246,500	195,400	196,400	197,000	197,600	225,000	246,600	239,000	223,300	208,300	184,700
6	209,400	243,200	195,000	196,300	196,000	198,300	225,300	246,900	239,000	221,000	207,900	191,200
7	208,700	240,600	194,600	196,200	195,300	198,400	225,400	246,900	238,800	219,900	207,600	198,200
8	207,800	237,600	194,500	195,500	194,700	198,600	225,400	248,000	238,600	217,700	207,500	200,900
9	207,800	234,300	194,300	195,000	194,000	198,700	225,300	248,600	237,800	216,000	207,300	201,200
10	207,800	230,900	193,800	194,900	193,000	207,300	225,300	248,900	237,300	214,300	207,200	201,800
11	207,700	227,500	193,700	195,000	192,700	210,500	225,800	248,500	236,400	212,500	207,200	201,900
12	207,300	224,400	193,600	194,800	193,200	211,500	226,000	248,200	236,000	211,300	207,100	203,400
13	206,500	221,500	193,400	194,700	193,200	211,900	226,600	248,200	235,200	209,900	206,300	204,200
14	205,600	218,000	193,200	194,900	193,300	210,900	227,200	248,200	235,200	209,400	204,900	204,700
15	204,700	214,900	193,200	195,400	193,300	210,000	229,400	248,000	234,300	212,700	203,400	203,500
16	203,600	211,900	193,400	195,700	193,300	208,900	229,800	247,900	233,900	213,000	202,500	203,000
17	202,900	208,400	193,400	195,800	193,600	207,900	229,900	247,500	233,100	212,600	200,500	201,400
18	201,800	206,400	194,000	196,100	194,000	206,900	230,500	247,200	233,000	211,500	200,200	200,900
19	200,600	203,000	194,000	196,100	194,200	205,900	233,600	246,500	232,900	210,800	199,500	199,600
20	199,800	200,100	194,000	196,200	194,400	204,600	234,200	245,700	232,400	209,300	198,800	198,000
21	205,100	197,100	194,000	197,100	194,500	203,000	233,400	245,600	232,500	208,900	198,000	196,800
22	212,700	195,000	194,300	198,200	195,000	203,000	236,200	245,400	232,200	208,200	196,900	195,400
23	215,500	195,000	194,300	198,400	195,400	203,600	238,800	245,000	231,800	206,300	195,800	194,100
24	216,300	195,700	194,200	198,600	195,700	205,600	244,600	244,200	231,600	205,500	194,900	193,800
25	217,100	196,000	194,300	202,300	196,100	206,100	246,200	243,600	231,000	204,900	193,800	193,800
26	216,300	196,200	194,300	203,700	196,200	206,400	246,200	243,400	230,400	204,600	192,300	195,600
27	215,600	196,300	194,400	203,800	196,400	206,900	246,200	242,300	229,800	203,600	190,900	198,300
28	214,900	196,400	194,700	203,400	196,600	207,100	246,500	240,900	229,100	203,400	189,900	197,800
29	214,500	196,400	194,700	203,200	------	207,100	246,900	240,100	228,800	205,200	188,800	199,000
30	221,000	197,700	194,700	202,600	------	218,500	247,000	239,100	227,400	206,400	187,600	198,800
31	236,100	------	194,500	201,900	------	222,800	------	238,600	------	207,100	186,800	------
(†)	1,138.34	1,135.09	1,134.90	1,135.55	1,135.08	1,137.29	1,139.16	1,138.53	1,137.66	1,136.00	1,134.20	1,135.28
(*)	+29,400	-38,400	-3,200	+7,400	-5,300	+26,200	+24,200	-8,400	-11,200	-20,300	-20,300	+12,000
MAX	236,100	251,100	196,800	203,800	201,000	222,800	247,000	248,900	239,400	226,600	208,500	204,700
MIN	199,800	195,000	193,200	194,500	192,700	196,900	223,900	238,600	227,400	203,400	186,800	184,700

CAL YR 1972..... * +63,500 MAX 251,100 MIN 109,600
WTR YR 1973..... * -7,900 MAX 251,100 MIN 184,700

† Elevation, 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 (0.5 km) downstream from Lake Kemp Dam, 6 miles (10 km) north of Mabelle, and 13 miles (21 km) northeast of Seymour.

DRAINAGE AREA.--2,086 mi² (5,403 km²), 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 (323.92 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 166 ft³/s (4.70 m³/s), 120,300 acre-ft/yr (148 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,610 ft³/s (45.6 m³/s) Nov. 5, gage height, 6.88 ft (2.10 m); minimum daily, 0.15 ft³/s (4.2 dm³/s) June 22.
Period of record: Maximum daily discharge, 1,800 ft³/s (51.0 m³/s) Sept. 27, 28, 1966, Oct. 1, 2, 4, 6-8, 1967; minimum daily, 0.15 ft³/s (4.2 dm³/s) June 22, 1973.

REMARKS.--Records good. Flow completely regulated by Lake Kemp (see station 07312000). Water is released from Lake Kemp to supply Lake Diversion. Water from Lake Diversion is released for mining use, industrial use, recreation, and irrigation in vicinity of Wichita Falls, 42,000 acres (17,000 hm²) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	995	61	8.3	412	7.9	1.2	.46	213	205	.84	200
2	197	848	114	8.8	412	7.8	1.2	.46	83	217	.63	198
3	286	319	114	80	412	7.8	1.1	.46	.92	306	.82	198
4	298	1,280	113	122	412	7.9	.97	.39	.73	309	.94	198
5	301	1,600	113	124	412	7.8	.99	.54	.76	374	.94	199
6	298	1,600	114	124	412	8.0	.99	.54	.70	416	.82	61
7	298	1,590	114	124	412	8.2	1.1	.46	.72	416	.94	2.8
8	239	1,580	114	124	412	8.3	1.1	3.1	108	490	.94	.94
9	11	1,560	114	124	409	8.2	.87	2.3	164	535	.82	.94
10	17	1,560	114	124	409	20	.90	.54	164	535	103	.94
11	33	1,560	114	124	186	9.1	.94	.54	165	537	162	.82
12	208	1,560	114	89	6.4	117	.96	.54	165	537	159	10
13	301	1,540	114	69	6.3	408	1.3	.54	164	535	313	4.0
14	298	1,540	47	69	6.4	410	1.1	.46	164	452	410	147
15	298	1,530	7.8	69	6.8	412	5.4	.46	163	409	409	412
16	298	1,520	7.8	69	6.7	412	1.4	71	163	374	411	415
17	295	1,520	7.2	69	6.8	412	1.2	108	140	306	412	417
18	298	1,520	7.2	69	7.5	412	.95	107	.95	304	292	418
19	295	1,500	7.2	69	7.3	412	12	234	.59	304	204	418
20	298	1,500	7.2	69	7.0	412	275	246	.65	304	204	417
21	258	1,490	7.2	103	7.5	238	417	210	.68	307	204	416
22	160	829	7.2	126	7.6	1.3	166	211	.15	306	205	417
23	172	3.4	7.8	124	7.8	1.6	1.5	210	.36	306	204	417
24	126	3.4	7.8	124	7.5	1.8	12	212	.69	278	204	149
25	253	2.3	7.8	174	7.4	1.2	.96	214	16	199	298	5.7
26	440	1.9	7.8	211	6.9	4.5	.54	213	159	198	408	11
27	440	2.3	7.2	228	7.1	1.1	.46	213	159	198	409	6.0
28	440	3.6	7.2	228	7.9	1.1	.46	213	159	199	409	5.7
29	440	4.7	7.8	228	------	96	.54	213	189	100	408	5.7
30	920	9.4	7.8	349	------	15	.39	213	205	1.0	285	149
31	1,070	------	7.8	412	------	1.4	------	213	------	3.7	198	------
TOTAL	9,301	30,572.0	1,601.8	4,035.1	4,420.9	3,871.0	910.52	3,112.79	2,750.90	9,960.7	6,318.69	5,300.54
MEAN	300	1,019	51.7	130	158	125	30.4	100	91.7	321	204	177
MAX	1,070	1,600	114	412	412	412	417	246	213	537	412	418
MIN	11	1.9	7.2	8.3	6.3	1.1	.39	.39	.15	1.0	.63	.82
AC-FT	18,450	60,640	3,180	8,000	8,770	7,680	1,810	6,170	5,460	19,760	12,530	10,510

CAL YR 1972 TOTAL 70,433.00 MEAN 192 MAX 1,600 MIN 1.9 AC-FT 139,700
WTR YR 1973 TOTAL 82,155.94 MEAN 225 MAX 1,600 MIN .15 AC-FT 163,000

07312110 South Side Canal near Dundee, Tex.

LOCATION.--Lat 33°48'50", long 98°55'57", Archer County, on left bank 125 ft (38 m) downstream from Lake Diversion headgates and 5.3 miles (8.5 km) northwest of Dundee.

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

GAGE.--Water-stage recorder. Datum of gage is 1,039.70 ft (316.90 m) above mean sea level (Wichita County Water Improvement District bench mark).

EXTREMES.--Period of record: Maximum daily discharge, 356 ft³/s (10.1 m³/s) July 6, 1973, gage height, 7.98 ft (2.43 m); maximum gage height, 8.23 ft (2.51 m) July 6, 1973; minimum daily discharge, 0.72 ft³/s (20 dm³/s) Nov. 14, 1972.

REMARKS.--Records good. Water diverted from Lake Diversion is used for mining, industrial use, recreation, and irrigation. Forty-two thousand acres (17,000 hm²) were available for irrigation; 31,820 acres (12,900 hm²) were irrigated during the current year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	6.0	32	41	35	24	32	56	180	267	123	248
2	53	1.8	32	55	60	23	33	58	157	286	123	231
3	70	1.2	32	55	63	23	32	59	105	306	123	214
4	95	1.1	32	56	62	21	32	59	76	318	120	173
5	96	1.1	33	56	64	22	32	60	75	333	115	171
6	96	32	32	56	60	20	33	57	75	356	120	153
7	97	70	33	56	34	20	32	63	77	350	125	72
8	99	68	33	55	18	20	31	72	91	353	135	69
9	101	42	33	56	16	20	31	71	109	352	143	69
10	110	1.1	32	56	16	21	32	71	121	351	160	54
11	116	1.1	32	55	16	20	32	70	118	346	163	43
12	141	1.1	32	56	15	21	32	79	120	349	163	46
13	147	.84	32	56	15	19	32	110	127	336	178	58
14	148	.72	32	55	15	21	34	110	150	339	214	64
15	150	7.5	32	37	14	23	33	109	161	330	215	61
16	151	13	32	19	13	23	32	115	167	302	215	56
17	155	24	32	19	11	25	46	124	96	295	212	44
18	157	41	32	17	5.2	25	19	122	97	301	213	43
19	158	39	35	18	9.4	25	18	130	118	316	211	43
20	159	39	35	17	23	25	30	162	122	322	218	45
21	162	39	35	16	32	27	42	197	123	329	235	47
22	166	38	36	16	21	25	60	168	124	320	240	49
23	163	37	34	17	19	25	49	125	134	322	250	76
24	159	37	35	17	19	24	45	102	140	321	246	88
25	156	33	35	18	19	23	53	104	154	320	242	100
26	153	33	35	18	18	24	50	103	181	320	252	107
27	148	33	35	17	18	25	51	101	208	318	271	98
28	91	33	36	16	35	17	52	101	244	315	274	97
29	12	33	35	18	------	1.1	51	119	257	224	273	80
30	13	32	34	18	------	5.9	54	133	256	111	265	78
31	13	------	36	18	------	31	------	146	------	121	258	------
TOTAL	3,589	739.56	1,036	1,080	745.6	669.0	1,135	3,156	4,163	9,529	6,095	2,777
MEAN	116	24.7	33.4	34.8	26.6	21.6	37.8	102	139	307	197	92.6
MAX	166	70	36	56	64	31	60	197	257	356	274	248
MIN	12	.72	32	16	5.2	1.1	18	56	75	111	115	43
AC-FT	7,120	1,470	2,050	2,140	1,480	1,330	2,250	6,260	8,260	18,900	12,090	5,510

CAL YR 1972 TOTAL 38,609.76 MEAN 105 MAX 325 MIN .72 AC-FT 76,580
WTR YR 1973 TOTAL 34,714.16 MEAN 95.1 MAX 356 MIN .72 AC-FT 68,860

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 (10.5 km) northwest of Kamay, 8 miles (13 km) upstream from Wichita River, and 9 miles (14 km) south of Electra.

DRAINAGE AREA.--652 mi² (1,689 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 991.3 ft (302.1 m) above mean sea level (State Highway Department reference point).

AVERAGE DISCHARGE.--13 years, 61.3 ft³/s (1.74 m³/s), 44,410 acre-ft/yr (54.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,020 ft³/s (170 m³/s) Nov. 1, gage height, 28.80 ft (8.78 m); minimum, 0.73 ft³/s (21 dm³/s) Dec. 29.
Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) Mar. 17, 1961, gage height, 33.57 ft (10.23 m); no flow at times.
Maximum stage since at least 1925, 36.0 ft (11.0 m) 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 (14.3 hm³) about 30 miles (48 km) upstream. Several small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4,340	4.0	1.3	114	5.4	599	32	9.2	3.9	288	7.4
2	3.5	1,360	3.4	3.7	124	5.2	418	29	109	2.9	66	7.4
3	4.0	480	3.3	185	114	4.8	407	28	176	2.2	25	7.2
4	4.1	477	2.9	124	96	4.8	375	28	111	1.6	15	7.2
5	3.9	477	2.7	10	86	4.8	276	28	52	3.1	14	7.4
6	3.8	477	1.0	5.0	82	119	216	31	22	5.2	9.7	242
7	3.8	410	1.0	4.0	82	64	185	29	11	5.2	8.7	325
8	3.6	251	1.0	3.0	94	16	162	29	8.0	5.6	21	162
9	3.8	125	1.0	2.5	82	8.2	136	29	6.6	6.1	8.7	93
10	4.0	74	1.0	2.5	76	800	123	29	5.7	6.6	8.7	25
11	3.9	57	1.2	2.5	72	728	117	30	5.6	7.0	24	12
12	3.6	50	1.5	3.0	69	169	112	17	5.6	8.8	26	7.7
13	3.3	56	1.2	3.2	66	105	111	6.4	5.4	9.7	8.7	38
14	3.2	51	1.2	15	66	96	114	3.4	5.3	9.5	7.9	29
15	3.2	41	1.2	96	64	92	192	3.2	22	9.7	7.7	46
16	3.1	97	1.4	46	48	86	323	3.6	119	9.4	7.7	48
17	2.9	103	1.6	26	12	82	149	3.5	195	11	7.9	47
18	2.9	122	1.8	14	8.5	76	116	3.5	26	15	7.4	44
19	3.0	119	1.7	7.2	7.7	74	159	3.5	8.1	11	7.4	14
20	3.5	94	1.4	4.6	6.6	72	447	3.6	5.8	9.6	7.2	7.7
21	435	81	1.4	5.9	6.4	71	205	3.7	5.3	12	7.2	6.6
22	554	76	1.3	84	6.6	63	222	4.3	5.0	121	7.2	6.4
23	63	55	1.3	35	12	15	378	6.6	4.9	42	6.9	30
24	10	20	1.2	11	13	60	978	11	4.6	19	6.9	14
25	5.7	22	1.1	217	7.9	79	518	7.8	4.6	11	6.9	7.9
26	10	17	1.0	706	6.6	29	116	4.9	4.6	8.7	6.9	218
27	12	9.4	.93	288	5.9	7.9	69	4.4	4.5	9.0	6.9	277
28	5.9	6.2	.88	180	5.7	7.6	52	4.4	4.6	20	7.2	149
29	4.4	4.6	.90	168	------	8.1	40	4.7	4.4	808	7.2	99
30	477	4.2	2.7	162	------	1,400	35	5.2	4.4	1,470	7.7	47
31	2,930	------	1.1	144	------	2,130	------	5.4	------	687	7.2	------
TOTAL	4,577.7	9,556.4	49.31	2,559.4	1,433.9	6,482.8	7,350	432.1	955.2	3,350.8	654.9	2,031.9
MEAN	148	319	1.59	82.6	51.2	209	245	13.9	31.8	108	21.1	67.7
MAX	2,930	4,340	4.0	706	124	2,130	978	32	195	1,470	288	325
MIN	2.9	4.2	.88	1.3	5.7	4.8	35	3.2	4.4	1.6	6.9	6.4
AC-FT	9,080	18,960	98	5,080	2,840	12,860	14,580	857	1,890	6,650	1,300	4,030

CAL YR 1972 TOTAL 20,474.93 MEAN 55.9 MAX 4,340 MIN 0 AC-FT 40,610
WTR YR 1973 TOTAL 39,434.41 MEAN 108 MAX 4,340 MIN .88 AC-FT 78,220

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	2115	16.04	1,070	3-31	0400	23.50	2,620
11- 1	0200	28.80	6,020	4-24	1145	17.88	1,370
3-10	1600	17.87	1,370	7-30	1545	19.19	1,610

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 (6 km) upstream from Fort Worth and Denver Railway Co. bridge, 8.4 miles (13.5 km) upstream from Holliday Creek, and at mile 55.3 (89.0 km).

DRAINAGE AREA.--3,140 mi² (8,133 km²), of which 2,086 mi² (5,403 km²) 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 (281.71 m) above mean sea level. February 1900 to February 1902 and Oct. 1, 1910, to Dec. 31, 1911, nonrecording gages at site 4 miles (6 km) downstream at different datum. Mar. 30, 1938, to Dec. 1, 1959, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years (1900-1, 1938-73), 291 ft³/s (8.24 m³/s), 210,800 acre-ft/yr (260 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,350 ft³/s (180 m³/s) Nov. 3, gage height, 19.16 ft (5.84 m); minimum daily, 40 ft³/s (1.13 m³/s) Oct. 3.
Period of record: Maximum discharge, 17,800 ft³/s (504 m³/s) Oct. 3, 1941, gage height, 24.0 ft (7.3 m); no flow Oct. 11, 1960 (construction of cofferdam upstream).
Maximum discharge, 50,000 ft³/s (1,420 m³/s) June 8, 1915, computed by Vernon L. Sullivan, engineer for Big Wichita River Irrigation Co.

REMARKS.--Records good. Flow from 2,086 mi² (5,403 km²) is regulated by Lake Kemp, capacity, 672,100 acre-ft (829 hm³) 71 miles (114 km) 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 (49.3 hm³), 51 miles (82 km) upstream for irrigation, 42,000 acres (17,000 hm²) under permit in the vicinity of Wichita Falls. During the water year, Wichita County Water Improvement District No. 2 diverted 68,860 acre-ft (84.9 hm³) from Lake Diversion for mining, industrial use, recreation, and irrigation of 31,817 acres (12,900 hm²). The city of Wichita Falls diverted 13,618 acre-ft (16.8 hm³) from Lake Kickapoo on North Fork Little Wichita River and 4,171 acre-ft (5.14 hm³) from Lake Arrowhead on Little Wichita River for municipal use, of which 14,856 acre-ft (18.3 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	5,770	172	117	612	655	2,160	183	84	98	661	135
2	56	5,900	161	116	661	382	685	172	191	104	311	147
3	40	6,250	157	292	654	179	444	168	492	98	163	160
4	46	4,950	151	336	601	149	409	168	265	96	124	158
5	47	2,670	149	231	572	282	369	157	202	97	106	136
6	46	1,410	149	161	577	498	301	154	130	93	98	299
7	50	1,480	156	140	580	619	258	142	112	95	93	587
8	60	1,580	161	100	591	548	233	126	88	105	90	757
9	56	1,510	167	90	579	270	213	144	82	107	121	394
10	58	1,410	170	90	551	266	199	118	82	133	153	225
11	65	1,330	169	90	539	1,170	190	115	76	138	117	176
12	61	1,260	172	110	535	862	184	108	76	132	108	152
13	65	1,310	175	130	534	296	180	98	84	136	113	143
14	64	1,290	182	158	532	233	179	95	81	128	100	141
15	62	1,260	171	200	524	209	186	101	82	143	106	142
16	72	1,230	162	238	361	194	269	106	146	147	107	234
17	71	1,270	156	192	213	184	310	100	464	143	108	492
18	65	1,350	151	164	167	177	219	95	459	128	111	655
19	56	1,420	146	155	151	170	628	99	239	120	105	648
20	75	1,410	136	148	143	167	669	95	144	113	100	467
21	213	1,340	129	143	136	157	684	94	102	136	107	295
22	973	1,290	125	149	134	159	340	110	95	149	106	205
23	787	1,280	124	196	144	203	556	136	81	175	109	161
24	298	1,200	123	174	255	605	1,450	114	82	165	105	178
25	237	810	130	278	395	351	1,850	92	76	136	108	179
26	230	510	129	1,140	418	237	867	101	71	134	112	165
27	390	356	121	1,140	425	179	371	87	74	116	121	550
28	640	275	118	793	548	144	248	82	82	109	125	456
29	748	219	119	598	------	134	215	79	92	272	131	213
30	1,250	193	131	501	------	199	194	75	105	1,240	140	184
31	4,070	------	124	469	------	1,550	------	78	------	1,400	130	------
TOTAL	11,011	53,533	4,586	8,839	12,132	11,428	15,060	3,592	4,439	6,386	4,289	8,834
MEAN	355	1,784	148	285	433	369	502	116	148	206	138	294
MAX	4,070	6,250	182	1,140	661	1,550	2,160	183	492	1,400	661	757
MIN	40	193	118	90	134	134	179	75	71	93	90	135
AC-FT	21,840	106,200	9,100	17,530	24,060	22,670	29,870	7,120	8,800	12,670	8,510	17,520

CAL YR 1972 TOTAL 97,889 MEAN 267 MAX 6,250 MIN 26 AC-FT 194,200
WTR YR 1973 TOTAL 144,129 MEAN 395 MAX 6,250 MIN 40 AC-FT 285,900

07312700 Wichita River near Charlie, Tex.

LOCATION.--Lat 34°03'11", long 98°17'47", Clay County, on right bank at upstream side of bridge on Farm Road 810, 3.0 miles (4.8 km) southeast of Charlie, and 5.7 miles (9.2 km) northwest of Petrolia.

DRAINAGE AREA.--3,439 mi² (8,907 km²), of which 2,086 mi² (5,403 km²) is above Lake Kemp Dam and 143 mi² (370 km²) is above Lake Wichita Dam.

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

GAGE.--Water-stage recorder. Datum of gage is 872.7 ft (266.0 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 296 ft³/s (8.38 m³/s), 214,500 acre-ft/yr (264 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,090 ft³/s (172 m³/s) Nov. 4, gage height, 21.21 ft (6.46 m); minimum, 74 ft³/s (2.10 m³/s) Oct. 4.
Period of record: Maximum discharge, 6,090 ft³/s (172 m³/s) Nov. 4, 1972, gage height, 21.21 ft (6.46 m); minimum, 41 ft³/s (1.16 m³/s) Jan. 7, 1968 (result of freeze-up).

REMARKS.--Records good. Flow is partly regulated by four major reservoirs whose total capacity is 737,700 acre-ft (910 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	4,650	328	150	592	691	1,730	263	138	185	1,350	166
2	106	5,600	299	141	757	750	1,760	237	460	173	727	211
3	102	5,850	279	387	777	422	795	209	2,020	179	432	208
4	79	6,020	260	631	761	288	590	206	1,010	170	294	272
5	77	5,910	249	400	703	201	550	213	478	171	244	209
6	87	4,030	241	250	677	435	490	213	318	183	219	467
7	86	1,940	235	180	684	672	418	199	218	184	205	973
8	85	1,820	249	120	738	745	358	185	187	176	191	950
9	92	1,800	256	100	718	622	320	189	179	192	184	1,050
10	101	1,720	260	100	681	346	279	202	166	200	289	483
11	91	1,640	260	100	653	522	260	202	165	268	269	307
12	92	1,570	258	120	638	1,360	252	185	170	249	220	236
13	92	1,610	259	150	633	814	256	176	171	237	198	207
14	94	1,590	258	200	629	401	263	154	178	239	199	175
15	91	1,570	262	270	621	312	241	163	180	247	175	172
16	91	1,520	246	330	595	279	271	160	162	260	182	177
17	102	1,500	234	347	385	238	418	163	752	276	188	345
18	103	1,580	222	268	278	223	422	163	773	435	186	614
19	99	1,660	216	223	215	212	680	169	578	312	187	743
20	97	1,620	203	207	186	199	1,210	160	354	270	189	707
21	173	1,600	190	195	172	215	940	160	225	267	192	537
22	858	1,560	177	193	164	209	740	166	183	406	179	376
23	1,250	1,520	169	194	197	237	795	213	186	320	167	269
24	761	1,510	163	257	187	1,380	1,420	249	162	361	160	215
25	385	1,390	157	253	349	1,290	2,140	199	160	326	147	233
26	334	995	163	1,040	492	535	1,800	180	163	280	152	223
27	392	685	166	1,450	513	358	825	188	151	264	154	522
28	563	535	152	1,200	530	267	451	161	145	237	159	748
29	777	446	150	864	------	223	349	164	150	257	144	529
30	1,080	376	186	670	------	185	299	166	162	1,140	160	314
31	2,870	------	172	591	------	555	------	137	------	1,620	174	------
TOTAL	11,317	65,817	6,919	11,581	14,525	15,186	21,322	5,794	10,344	10,084	7,916	12,638
MEAN	365	2,194	223	374	519	490	711	187	345	325	255	421
MAX	2,870	6,020	328	1,450	777	1,380	2,140	263	2,020	1,620	1,350	1,050
MIN	77	376	150	100	164	185	241	137	138	170	144	166
AC-FT	22,450	130,500	13,720	22,970	28,810	30,120	42,290	11,490	20,520	20,000	15,700	25,070

CAL YR 1972 TOTAL 125,239 MEAN 342 MAX 6,020 MIN 54 AC-FT 248,400
WTR YR 1973 TOTAL 193,443 MEAN 530 MAX 6,020 MIN 77 AC-FT 383,700

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 (13.2 km) south of Mankins, and 9.2 miles (14.8 km) northwest of Archer City.

DRAINAGE AREA.--275 mi² (712 km²).

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, 109,200 acre-ft (135 hm³) Nov. 3-5, elevation, 1,045.5 ft (318.7 m); minimum observed, 86,560 acre-ft (107 hm³) Oct. 14-21, elevation, 1,041.8 ft (317.5 m).
Period of record: Maximum contents, 134,300 acre-ft (166 hm³) Aug. 2, 1950, elevation, 1,049.2 ft (319.8 m); minimum observed since first filling in July 1950, 35,660 acre-ft (44.0 hm³) June 30, 1953, elevation, 1,029.8 ft (313.9 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 6,800 ft (2,073 m) long, containing a 483-foot (147-meter) 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 (1- by 2-meter) outlet conduits at elevation 1,000.92 ft (305.08 m). 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 (2-meter) 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 given 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)

1,041.0	82,000	1,044.0	99,700
1,042.0	87,700	1,045.0	106,000
1,043.0	93,600	1,046.0	112,500

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87,700	104,100	106,600	104,700	107,300	106,600	108,000	108,000	105,400	104,100	99,700	97,870
2	87,700	108,600	106,600	104,700	106,600	106,600	108,000	108,000	105,400	103,500	99,700	97,260
3	87,700	109,200	106,600	105,400	106,600	106,600	108,000	108,000	105,400	103,500	99,700	97,260
4	87,700	109,200	106,600	105,400	106,600	106,600	108,000	108,000	105,400	103,500	99,700	97,260
5	87,700	109,200	106,600	105,400	106,600	106,600	106,600	108,000	105,400	103,500	99,700	97,260
6	87,130	108,000	106,600	105,400	106,600	108,600	106,600	108,000	105,400	103,500	99,700	97,260
7	87,130	108,000	106,600	105,400	106,600	108,000	106,600	106,600	104,700	102,800	99,700	97,260
8	87,130	108,000	106,600	105,400	106,600	108,000	106,600	106,600	104,700	102,800	99,700	97,260
9	87,130	108,000	106,600	105,400	106,600	108,000	106,600	106,600	104,700	102,800	99,700	97,260
10	87,130	108,000	106,600	106,000	106,600	108,000	106,600	106,600	104,700	102,200	99,700	97,260
11	87,130	107,300	106,000	106,000	106,600	108,000	106,600	106,600	104,700	102,200	99,700	97,260
12	87,130	107,300	106,000	106,000	106,600	108,000	106,600	106,600	104,700	101,600	99,700	96,650
13	87,130	107,300	106,000	106,000	106,600	108,000	106,600	106,600	104,700	101,600	99,700	96,650
14	86,560	107,300	106,000	106,000	106,600	108,000	106,600	106,600	104,700	101,600	99,090	96,650
15	86,560	107,300	106,000	106,000	106,600	108,000	106,600	106,600	104,700	101,000	99,090	96,040
16	86,560	107,300	106,000	106,000	106,600	108,000	106,600	106,600	104,700	101,000	99,090	96,040
17	86,560	106,600	106,000	106,600	106,600	108,000	106,600	106,600	104,700	100,300	99,090	96,040
18	86,560	106,600	106,000	106,600	106,600	108,000	106,600	106,000	104,700	100,300	99,090	96,040
19	86,560	106,600	106,000	106,600	106,600	108,000	106,600	106,600	104,100	99,090	99,090	95,430
20	86,560	106,600	106,000	106,600	106,600	108,000	106,600	106,600	104,100	99,090	99,090	95,430
21	86,560	106,600	106,000	106,600	106,600	108,000	106,600	105,400	104,100	98,480	99,090	95,430
22	87,130	106,600	106,000	106,600	106,600	108,000	106,600	105,400	104,100	98,480	99,090	95,430
23	87,700	106,600	106,000	106,600	106,600	108,000	106,600	105,400	104,100	98,480	98,480	95,430
24	87,700	106,600	106,000	106,600	106,600	108,000	108,000	105,400	104,100	97,870	98,480	95,430
25	87,700	106,600	105,400	106,600	106,600	108,000	108,000	105,400	104,100	97,870	98,480	95,430
26	87,700	106,600	105,400	106,600	106,600	108,000	108,000	105,400	104,100	97,260	98,480	95,430
27	87,700	106,600	105,400	107,300	106,600	108,000	108,000	105,400	104,100	97,260	98,480	95,430
28	87,700	106,600	105,400	108,000	106,600	108,000	108,000	105,400	104,100	97,260	97,870	95,430
29	88,880	106,600	105,400	108,000	------	108,000	108,000	105,400	104,100	97,260	97,870	95,430
30	90,060	106,600	105,400	107,300	------	108,000	108,000	105,400	104,100	97,260	97,870	96,650
31	91,240	------	104,700	107,300	------	108,000	------	105,400	------	97,260	97,870	------
(†)	1,042.6	1,045.1	1,044.8	1,045.2	1,045.1	1,045.3	1,045.3	1,044.9	1,044.7	1,043.6	1,043.7	1,043.5
(≠)	+3,540	+15,360	-1,900	+2,600	-700	+1,400	0	-2,600	-1,300	-6,840	+610	-1,220
(††)	864	798	1,123	954	839	1,201	871	1,440	1,234	1,407	1,456	1,431
MAX	91,240	109,200	106,600	108,000	107,300	108,600	108,000	108,000	105,400	104,100	99,700	97,870
MIN	86,560	104,100	104,700	104,700	106,600	106,600	106,600	105,400	104,100	97,260	97,870	95,430

CAL YR 1972..... ≠ +1,900 †† 11,794 MAX 109,200 MIN 86,560
WTR YR 1973..... ≠ +8,950 †† 13,618 MAX 109,200 MIN 86,560

† 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 (2.4 km) downstream from confluence of North and Middle Forks, and 4.8 miles (7.7 km) north of Archer City.

DRAINAGE AREA.--481 mi² (1,246 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 934.72 ft (284.90 m) 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 ft³/s (3.12 m³/s), 79,700 acre-ft/yr (98.3 hm³/yr); 17 years (1945-55, 1966-73) regulated, 39.1 ft³/s (1.11 m³/s), 28,330 acre-ft/yr (34.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,390 ft³/s (39.4 m³/s) July 30, gage height, 19.25 ft (5.87 m); no flow for many days.
Period of record: Maximum discharge, 17,900 ft³/s (507 m³/s) Oct. 31, 1941, gage height, 26.18 ft (7.98 m); no flow at times. Flood of June 1930 reached a stage of about 28 ft (9 m), 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 13,618 acre-ft (16.8 hm³) was diverted from Lake Kickapoo for municipal use during the 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1,240	1.2	1.6	4.9	.69	130	27	.89	.78	45	2.0
2	0	757	2.2	.78	61	4.0	26	33	3.9	.78	17	2.5
3	0	130	1.0	55	19	5.0	41	19	27	.73	4.2	2.5
4	0	83	2.4	158	3.9	11	57	6.4	24	.67	1.9	2.5
5	0	61	4.3	26	3.2	20	31	2.1	5.7	.67	1.3	2.5
6	0	44	2.8	11	3.7	59	5.5	1.9	2.4	.67	1.1	46
7	0	41	10	5.2	11	92	2.1	7.1	1.9	.47	1.0	270
8	0	34	2.2	3.8	87	91	2.8	24	1.6	.29	.72	147
9	0	13	1.2	2.2	68	73	43	14	1.4	.37	.52	154
10	0	47	.90	1.6	24	212	23	30	1.4	.35	22	28
11	0	24	.78	1.4	11	311	3.5	8.5	1.4	1.2	20	9.3
12	0	4.3	.90	1.2	5.7	215	1.4	3.3	1.4	1.6	27	4.9
13	0	4.2	1.8	1.6	6.7	198	2.5	2.1	1.5	1.6	6.9	23
14	0	66	3.3	3.2	11	196	8.6	1.4	2.9	1.6	3.4	127
15	0	22	1.2	5.2	12	101	7.2	1.6	1.6	1.6	2.2	19
16	0	3.5	.57	7.9	3.0	48	3.3	1.3	1.4	1.6	2.2	6.7
17	0	3.9	1.8	6.6	1.3	52	4.4	1.2	15	1.6	2.5	3.5
18	0	5.9	1.0	4.3	1.1	18	2.0	1.3	4.4	1.5	2.4	2.7
19	0	11	.57	3.0	.78	10	47	1.2	1.2	1.2	2.0	2.7
20	0	9.1	.48	2.8	2.0	37	57	1.0	.90	1.2	2.0	2.7
21	0	3.8	.40	2.1	2.8	17	30	6.3	.89	.68	1.8	2.5
22	48	5.1	.46	7.4	1.3	3.0	22	2.6	.75	.40	1.8	2.2
23	46	7.1	2.0	4.8	2.1	6.6	18	5.8	.78	.26	1.3	1.9
24	8.8	6.3	2.3	2.9	4.3	341	196	5.5	.83	.39	.94	2.0
25	6.3	11	4.4	59	3.9	398	554	4.1	.97	.86	.96	2.0
26	4.0	44	.90	641	3.2	239	306	3.3	1.0	.96	.96	9.0
27	11	15	.48	499	2.2	70	215	1.4	.97	.90	1.7	121
28	19	4.0	.20	129	2.1	35	90	17	.80	.98	1.9	44
29	7.1	4.0	.40	91	------	31	56	13	.78	650	2.0	9.1
30	124	2.2	.90	14	------	24	40	2.3	.78	1,350	2.0	3.6
31	866	------	4.0	5.9	------	85	------	1.2	------	625	2.0	------
TOTAL	1,140.2	2,706.4	57.04	1,758.48	362.18	3,003.29	2,025.3	249.9	110.44	2,650.91	182.70	1,055.8
MEAN	36.8	90.2	1.84	56.7	12.9	96.9	67.5	8.06	3.68	85.5	5.89	35.2
MAX	866	1,240	10	641	87	398	554	33	27	1,350	45	270
MIN	0	2.2	.20	.78	.78	.69	1.4	1.0	.75	.26	.52	1.9
AC-FT	2,260	5,370	113	3,490	718	5,960	4,020	496	219	5,260	362	2,090

CAL YR 1972 TOTAL 7,899.48 MEAN 21.6 MAX 1,240 MIN 0 AC-FT 15,670
WTR YR 1973 TOTAL 15,302.64 MEAN 41.9 MAX 1,350 MIN 0 AC-FT 30,350

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 (3.7 km) upstream from Lake Creek, 11 miles (18 km) southwest of Henrietta, and 12.3 miles (19.8 km) southeast of Wichita Falls.

DRAINAGE AREA.--822 mi² (2,129 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 0.4 ft (0.12 m) below mean sea level.

EXTREMES.--Current year: Maximum contents, 171,200 acre-ft (211 hm³) Aug. 2, gage height, 919.99 ft (280.41 m); minimum, 120,900 acre-ft (149 hm³) Oct. 19, gage height, 915.36 ft (279.00 m).
Period of record: Maximum contents, 171,200 acre-ft (211 hm³) Aug. 2, 1973, gage height, 919.99 (280.41 m); minimum since first appreciable storage, 6,510 acre-ft (8.03 hm³) June 2, 1967, gage height, 93.0 ft (28.3 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam approximately 3 miles (5 km) long with an uncontrolled reinforced concrete service spillway, 1,581 ft (482 m) 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 (323 hm³), gage height, 926.4 ft (282.4 m). 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)

914.0	108,400	918.0	148,000
915.0	117,500	919.0	159,400
916.0	127,100	920.0	171,300
917.0	137,200	921.0	183,900

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125,500	138,100	141,500	139,300	149,900	152,500	158,700	169,600	165,300	164,000	170,700	162,700
2	125,300	140,900	141,600	140,000	149,900	152,500	158,800	168,900	168,300	163,500	170,700	163,100
3	125,100	142,000	140,400	140,800	150,400	152,500	158,900	169,200	168,700	163,400	170,600	162,900
4	124,900	142,300	141,100	140,900	150,200	152,400	159,000	169,200	168,900	163,000	170,200	161,700
5	124,900	142,300	139,500	140,900	150,000	153,000	159,400	169,400	168,700	162,400	170,100	160,700
6	124,000	142,000	140,000	141,100	149,900	152,800	159,400	169,400	168,700	162,100	170,100	164,900
7	124,200	142,000	140,400	140,900	149,200	153,400	159,000	168,900	168,600	161,700	169,900	166,000
8	124,600	142,200	140,000	140,700	149,600	153,000	158,400	168,900	168,300	161,100	169,500	167,200
9	124,400	141,800	139,400	140,700	150,800	153,300	158,400	169,000	168,100	161,100	169,200	167,900
10	124,200	141,700	139,500	140,800	151,300	153,900	158,700	169,300	167,800	160,600	168,700	167,700
11	123,900	141,700	140,000	140,800	151,400	154,700	158,800	168,300	167,600	160,500	168,900	167,600
12	123,700	142,000	139,800	141,300	151,900	155,900	159,100	167,900	167,500	160,300	168,900	167,300
13	123,600	140,700	139,800	141,200	151,900	156,500	159,400	167,600	167,300	160,300	168,800	167,000
14	122,800	140,900	139,800	141,400	151,900	156,200	159,900	167,300	167,700	160,300	168,700	166,900
15	123,000	141,100	139,600	141,600	151,800	155,900	159,400	167,700	167,600	160,300	168,300	166,700
16	123,100	140,700	139,900	142,000	151,800	155,600	159,000	167,100	167,600	160,300	167,800	166,400
17	123,100	140,900	140,000	142,500	152,100	156,400	159,000	167,100	167,500	160,200	167,600	166,200
18	121,000	141,100	140,400	142,000	152,400	156,500	159,800	167,100	167,100	160,000	167,200	166,000
19	121,600	140,900	140,100	141,800	152,000	155,600	159,800	166,900	166,500	160,000	167,100	166,000
20	121,900	140,900	140,000	142,500	152,100	155,300	160,500	166,900	166,700	159,400	167,100	166,000
21	123,700	140,900	139,800	141,800	152,000	155,600	162,900	166,700	166,500	158,700	166,500	165,900
22	123,500	141,100	140,400	141,700	152,100	155,900	163,800	166,700	166,400	158,500	166,400	165,600
23	123,300	141,200	139,600	141,600	152,300	156,400	164,600	166,700	166,000	158,200	166,000	166,000
24	123,300	141,500	139,800	141,800	152,400	156,800	165,900	166,500	165,900	157,900	165,400	166,100
25	123,600	141,200	139,800	143,400	152,300	157,300	167,700	166,500	165,400	157,300	164,900	166,200
26	124,100	141,200	139,700	146,000	152,300	158,400	168,300	166,500	165,300	157,100	164,700	166,400
27	124,100	140,900	140,000	147,400	152,500	158,500	169,400	166,100	164,800	157,000	164,200	166,200
28	124,100	141,100	140,100	149,000	152,800	158,500	169,800	165,300	164,600	157,000	163,600	166,600
29	124,400	141,100	140,300	149,400	------	158,800	170,100	165,300	164,200	161,600	163,600	166,500
30	127,900	141,200	139,600	150,800	------	158,500	170,200	165,200	164,100	167,100	163,500	166,400
31	133,900	------	139,300	150,600	------	158,500	------	164,900	------	170,100	163,400	------
(†)	916.68	917.37	917.20	918.24	918.43	918.93	919.91	919.47	919.40	919.90	919.34	919.59
(*)	+8,400	+7,300	-1,900	+11,300	+2,200	+5,700	+11,700	-5,300	-800	+6,000	-6,700	+3,000
(††)	796	557	136	289	272	0	0	153	439	737	741	51
MAX	133,900	142,300	141,600	150,800	152,800	158,800	170,200	169,600	168,900	170,100	170,700	167,900
MIN	121,000	138,100	139,300	139,300	149,200	152,400	158,400	164,900	164,100	157,000	163,400	160,700

CAL YR 1972..... * +35,000 †† 8,062 MAX 149,300 MIN 96,370
WTR YR 1973..... * +40,900 †† 4,171 MAX 170,700 MIN 121,000

† 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 (2.4 km) northwest of Henrietta, 4 miles (6 km) upstream from Turkey Creek, and 5 miles (8 km) upstream from Dry Fork Little Wichita River.

DRAINAGE AREA.--1,037 mi² (2,686 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 831.57 ft (253.46 m) above mean sea level. Prior to June 26, 1953, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years (1953-66) prior to completion of Lake Arrowhead, 124 ft³/s (3.51 m³/s), 89,840 acre-ft/yr (111 hm³/yr); 7 years (1966-73) regulated, 19.0 ft³/s (0.538 m³/s), 13,770 acre-ft/yr (17.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,510 ft³/s (42.8 m³/s) Mar. 25, gage height, 13.44 ft (4.10 m); no flow for many days.
Period of record: Maximum discharge, 7,630 ft³/s (216 m³/s) May 1, 1966, gage height, 18.28 ft (5.57 m); maximum gage height, 18.36 ft (5.60 m) May 2, 1957; no flow at times each year.
Flood in 1908 reached a stage of about 21 ft (6 m), from information by State Highway Department.

REMARKS.--Records good. Two major reservoir, Lake Kickapoo and Lake Arrowhead, with a total capacity of 368,100 acre-ft (454 hm³) largely regulate the flow above station. The city of Wichita Falls diverted 13,618 acre-ft (16.8 hm³) from Lake Kickapoo and 4,171 acre-ft (5.14 hm³) from Lake Arrowhead for municipal use, and returned 14,789 acre-ft (18.2 hm³) as sewage effluent and filter plant washwater to the Wichita River below station 07312500 at Wichita Falls and above station 07312700 near Charlie. The city of Henrietta diverted 356 acre-ft (0.44 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	900		0	19	.42	12	10	0	0	40	0
2	0	564		0	13	.19	19	6.5	27	0	5.6	0
3	0	154		9.7	8.0	.08	17	4.6	179	0	4.4	0
4	0	66		47	5.9	.03	20	2.6	19	0	2.0	0
5	0	36		42	3.8	.01	22	1.5	9.4	0	1.1	0
6	0	22		26	2.1	3.0	17	.83	2.0	0	.56	75
7	0	13		14	23	10	13	.26	.06	0	.20	85
8	0	7.0		9.0	215	21	8.9	.05	.05	0	0	32
9	0	2.4		6.0	183	22	5.4	0	.03	0	0	22
10	0	.23		5.0	107	17	3.6	0	.01	0	0	14
11	0	5.4		5.0	58	15	2.0	0	0	0	0	5.1
12	0	3.9		5.0	34	10	1.5	0	0	0	0	3.3
13	0	.68		5.0	22	3.0	2.0	0	0	0	0	2.1
14	0	.03		5.0	10	9.7	1.0	0	0	0	0	.87
15	0	.01		8.0	.44	8.5	1.0	0	0	0	0	.28
16	0	0		16	3.8	5.5	.44	0	.70	0	0	.04
17	0	0		17	3.5	3.2	0	0	17	0	0	.01
18	0	.01		8.7	2.4	2.1	0	0	18	0	0	0
19	0	.01		6.6	1.6	1.1	0	0	6.9	0	0	0
20	0	0		6.5	1.2	.57	8.0	0	2.0	0	0	0
21	0	0		4.8	.99	.34	43	0	.59	0	0	0
22	0	0		2.8	1.3	.22	156	0	.12	0	0	0
23	0	0		1.8	2.1	4.2	59	0	.01	0	0	0
24	0	0		1.2	1.5	309	140	0	0	0	0	0
25	0	0		21	2.1	1,170	130	0	0	0	0	0
26	0	0		231	2.4	595	111	0	0	0	0	4.1
27	0	0		351	1.4	127	66	0	0	0	0	12
28	0	0		239	.81	55	39	0	0	0	0	6.3
29	0	0		94	------	34	24	0	0	122	0	3.4
30	327	0		47	------	22	15	0	0	793	0	1.5
31	782	------		30	------	13	------	0	------	281	0	------
TOTAL	1,109	1,774.67	0	1,265.1	729.34	2,462.16	936.84	26.34	281.87	1,196	53.86	267.00
MEAN	35.8	59.2	0	40.8	26.0	79.4	31.2	.85	9.40	38.6	1.74	8.90
MAX	782	900	0	351	215	1,170	156	10	179	793	40	85
MIN	0	0	0	0	.44	.01	0	0	0	0	0	0
AC-FT	2,200	3,520	0	2,510	1,450	4,880	1,860	52	559	2,370	107	530

CAL YR 1972 TOTAL 6,158.03 MEAN 16.8 MAX 1,170 MIN 0 AC-FT 12,210
WTR YR 1973 TOTAL 10,102.18 MEAN 27.7 MAX 1,170 MIN 0 AC-FT 20,040

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 (9.3 km) upstream from Little Wichita River, 6.4 miles (10.3 km) east of Henrietta, and 8.9 miles (14.3 km) west of Ringgold.

DRAINAGE AREA.--178 mi² (461 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 825.32 ft (251.56 m) above mean sea level.

AVERAGE DISCHARGE.--9 years (1964-73), 23.8 ft³/s (0.674 m³/s), 17,240 acre-ft/yr (21.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,310 ft³/s (93.7 m³/s) July 31, gage height, 24.29 ft (7.40 m); no flow Oct. 1-21.
Period of record: Maximum discharge, 15,500 ft³/s (439 m³/s) May 12, 1972, gage height, 28.85 ft (8.79 m); no flow for many days.
Maximum stage since at least 1920, 28.85 ft (8.79 m) in May 1972.

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

REVISIONS (WATER YEARS).--WRD Texas 1972: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1,080	.10	.10	9.3	1.8	.55	7.6	.06	.10	1,080	.08
2	0	544	.10	.07	6.9	1.6	.49	5.5	32	.08	142	.10
3	0	28	.09	39	5.3	1.4	.49	4.0	1,400	.06	24	.09
4	0	10	.09	89	3.5	1.3	.90	3.2	601	.06	11	.11
5	0	4.1	.10	38	2.8	1.2	1.4	2.6	144	.05	6.3	.13
6	0	2.2	.10	14	1.8	1.0	1.4	2.1	346	.05	3.9	33
7	0	1.4	.09	7.6	2.9	.90	1.3	1.7	182	.04	2.6	181
8	0	1.3	.09	5.0	123	.80	1.1	1.4	20	.03	2.0	38
9	0	.94	.10	3.0	99	.80	.94	1.1	9.3	.03	1.8	9.3
10	0	.70	.10	2.0	41	.90	.74	.90	5.3	.03	1.6	3.8
11	0	.55	.10	1.0	19	.90	.61	.78	3.3	.03	1.2	2.1
12	0	.52	.11	.50	11	1.0	.55	.55	7.5	.03	.83	1.7
13	0	1.1	.11	1.0	6.6	1.0	.49	.46	3.3	.03	.62	1.1
14	0	.67	.12	3.0	3.9	.90	.37	.37	9.9	.04	.42	.79
15	0	.43	.11	5.1	4.2	.90	43	.32	5.8	12	.26	.57
16	0	.37	.09	6.4	4.2	.80	225	.30	8.1	130	.22	.36
17	0	.30	.07	5.8	4.5	.70	382	.30	36	13	.19	.27
18	0	.37	.06	5.3	4.6	.60	44	.28	12	3.9	.17	.20
19	0	.40	.07	3.1	4.3	.55	63	.24	4.9	1.8	.16	.16
20	0	.30	.08	1.5	4.0	.43	164	.22	2.7	1.1	.13	.13
21	0	.22	.08	1.1	3.5	.37	61	.20	2.0	.78	.13	.10
22	93	.20	.08	1.0	3.3	.30	163	.21	1.6	.46	.12	.10
23	110	.18	.08	.74	5.8	.32	20	.20	1.0	.24	.10	.09
24	15	.18	.08	.61	4.9	1.2	187	.15	.67	.06	.09	.09
25	3.6	.16	.08	9.1	3.6	.90	1,020	.15	.43	.07	.08	.10
26	2.0	.14	.06	306	3.1	4.8	702	.15	.26	.04	.08	.15
27	15	.12	.06	415	2.4	4.3	51	.11	.20	.02	.08	.38
28	14	.11	.06	143	2.1	2.1	23	.07	.16	.01	.08	.19
29	5.5	.11	.07	32	------	1.3	14	.07	.15	126	.08	.13
30	247	.11	.10	16	------	.98	9.8	.07	.12	970	.09	.13
31	824	------	.10	10	------	.74	------	.06	------	2,540	.08	------
TOTAL	1,329.1	1,679.18	2.73	1,165.02	390.5	36.79	3,183.13	35.36	2,839.75	3,800.14	1,280.41	274.44
MEAN	42.9	56.0	.088	37.6	13.9	1.19	106	1.14	94.7	123	41.3	9.15
MAX	824	1,080	.12	415	123	4.8	1,020	7.6	1,400	2,540	1,080	181
MIN	0	.11	.06	.07	1.8	.30	.37	.06	.06	.01	.08	.08
AC-FT	2,640	3,330	5.4	2,310	775	73	6,310	70	5,630	7,540	2,540	544

CAL YR 1972 TOTAL 14,509.03 MEAN 39.6 MAX 5,510 MIN 0 AC-FT 28,780
WTR YR 1973 TOTAL 16,016.55 MEAN 43.9 MAX 2,540 MIN 0 AC-FT 31,770

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 1	1400	20.17	1,100	4-25	2000	20.70	1,250
1-27	1200	14.90	431	6- 3	1000	22.01	1,720
4-17	1200	15.06	447	6- 6	2400	14.63	416
4-22	0300	14.58	412	7-31	0230	24.29	3,310

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 (0.8 km) downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 1.2 miles (1.9 km) south of Terral, 3.6 miles (5.8 km) downstream from Little Wichita River, and at mile 872 (1,403 km).

DRAINAGE AREA.--28,723 mi² (74,393 km²), of which 5,936 mi² (15,374 km²) 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 (234.79 m) above mean sea level. Prior to Jan. 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 2,193 ft³/s (62.1 m³/s), 1,589,000 acre-ft/yr (1,960 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 48,400 ft³/s (1,370 m³/s) Nov. 2, gage height, 21.24 ft (6.47 m); minimum, 88 ft³/s (2.49 m³/s) Oct. 18, 19.
Period of record: Maximum discharge, 197,000 ft³/s (5,580 m³/s) June 8, 1941, gage height, 28.12 ft (8.57 m); minimum, 43 ft³/s (1.22 m³/s) 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 (8.3 m); floods in 1891 and May 1, 1908, are reported to have reached about the same stage.

REMARKS.--Records good. Flow partly regulated by seven major upstream reservoirs, total capacity, 1,348,900 acre-ft (1,660 hm³). Principal diversions are from Wichita River for irrigation of about 20,000 acres (8,090 hm²) in the vicinity of Wichita Falls, Tex., and from North Fork Red River for irrigation of about 48,000 acres (19,400 hm²) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	30,000	745	384	1,890	914	21,200	3,230	948	596	18,100	315
2	145	44,000	699	359	1,690	984	22,800	3,620	4,480	550	10,900	326
3	371	36,000	652	483	1,660	1,140	15,200	2,270	28,800	530	4,700	400
4	310	11,800	619	1,950	1,600	1,020	9,570	2,000	32,200	535	2,180	434
5	226	7,810	598	3,680	1,520	1,460	5,020	1,830	27,500	450	1,310	499
6	179	7,180	570	2,380	1,400	1,550	4,250	1,700	19,400	430	1,020	642
7	148	5,010	546	1,390	1,390	3,230	3,570	1,830	7,170	456	848	5,510
8	136	2,430	522	940	1,990	7,840	2,940	1,540	3,780	428	730	13,000
9	126	1,940	506	794	1,870	4,620	2,520	1,520	2,880	397	642	15,600
10	117	1,730	501	700	1,560	2,100	2,200	1,370	2,460	385	666	10,600
11	112	1,550	489	600	1,370	3,150	1,960	1,310	1,760	430	623	5,810
12	111	1,430	488	550	1,250	12,200	1,770	1,240	1,480	386	1,130	3,260
13	106	1,430	490	600	1,180	12,500	1,680	1,230	1,450	398	1,240	2,220
14	100	1,950	486	650	1,110	7,120	1,680	1,210	1,310	381	1,100	1,780
15	95	2,530	463	731	1,070	4,000	2,300	1,140	1,820	550	784	3,350
16	94	2,230	458	752	1,030	2,720	5,090	1,080	1,740	1,230	648	1,900
17	95	1,620	459	1,000	1,000	2,160	9,600	1,010	1,340	768	547	1,500
18	91	1,450	451	1,690	897	1,760	13,400	981	1,980	572	504	1,420
19	89	1,510	437	2,010	780	1,470	14,100	941	2,100	495	471	3,370
20	92	1,910	414	1,640	730	1,280	14,800	906	3,140	494	446	2,290
21	111	2,010	401	1,270	683	1,130	13,000	891	5,420	420	443	1,810
22	287	1,870	386	1,220	668	1,020	11,400	870	5,090	395	400	1,560
23	967	1,670	378	8,040	669	1,040	8,070	849	2,370	440	368	1,330
24	5,210	1,580	362	7,230	680	4,960	15,200	1,020	1,160	430	338	1,160
25	3,120	1,560	349	6,200	695	15,000	18,300	1,380	912	761	322	996
26	1,340	1,460	342	5,000	740	14,600	17,500	1,420	788	980	311	933
27	856	1,200	342	9,280	920	9,470	15,600	2,750	716	556	298	1,030
28	740	1,030	350	8,660	926	4,220	9,560	2,940	668	408	296	2,170
29	722	895	352	5,220	------	2,350	6,280	1,810	644	425	289	7,140
30	2,250	818	344	2,920	------	2,050	4,400	1,180	638	1,750	309	6,350
31	12,900	------	338	2,180	------	7,540	------	1,060	------	11,000	311	------
TOTAL	31,385	179,603	14,537	80,503	32,968	136,598	274,960	48,128	166,144	28,026	52,274	98,705
MEAN	1,012	5,987	469	2,597	1,177	4,406	9,165	1,553	5,538	904	1,686	3,290
MAX	12,900	44,000	745	9,280	1,990	15,000	22,800	3,620	32,200	11,000	18,100	15,600
MIN	89	818	338	359	668	914	1,680	849	638	381	289	315
AC-FT	62,250	356,200	28,830	159,700	65,390	270,900	545,400	95,460	329,500	55,590	103,700	195,800

CAL YR 1972 TOTAL 444,718 MEAN 1,215 MAX 44,000 MIN 89 AC-FT 882,100
WTR YR 1973 TOTAL 1,143,831 MEAN 3,134 MAX 44,000 MIN 89 AC-FT 2,269,000

PEAK DISCHARGE (BASE, 21,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
11-2	2200	21.24	48,400
4-2	0100	17.75	26,800
6-4	0900	18.82	33,000

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 (2.6 km) upstream from Bearhead Creek, 3.7 miles (6.0 km) upstream from mouth, and 11 miles (17.7 km) northwest of Gainesville.

DRAINAGE AREA.--65 mi² (168 km²).

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, 25,000 acre-ft (30.8 hm³) Apr. 15, elevation, 716.54 ft (218.40 m); minimum, 20,800 acre-ft (25.6 hm³) Oct. 20, elevation, 712.77 ft (217.25 m).
Period of record: Maximum contents, 26,770 acre-ft (33.0 hm³) May 17, 1968, elevation, 718.02 ft (218.85 m); minimum since lake first filled in May 1968, 20,800 acre-ft (25.6 hm³) Oct. 20, 1972, elevation, 712.77 ft (217.25 m).

REMARKS.--Lake is formed by a rolled earthfill dam 1,460 ft (445 m) 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 (2.1- by 2.1-meter) conduit with an uncontrolled rectangular drop inlet designed to discharge 2,500 cfs ft³/s (70.8 m³/s) a 10-foot (3.0 m) head. The emergency spillway is a 400-foot (122-meter) wide cut through natural ground located about 100 ft (30.5 m) 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)

712.0	20,010	715.0	23,210
713.0	21,040	716.0	24,360
714.0	22,110	717.0	25,550

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,190	21,520	21,680	21,680	22,600	23,290	23,210	23,300	23,140	23,040	23,220	22,530
2	21,160	21,510	21,680	21,740	22,640	23,290	23,210	23,270	23,310	23,030	23,180	22,530
3	21,140	21,500	21,680	21,810	22,660	23,390	23,200	23,230	23,690	23,020	23,140	22,510
4	21,110	21,490	21,670	21,810	22,660	23,380	23,190	23,220	23,580	23,010	23,120	22,470
5	21,100	21,480	21,670	21,820	22,690	23,360	23,180	23,220	23,570	22,980	23,100	22,630
6	21,060	21,670	21,650	21,850	22,720	23,810	23,170	24,960	23,470	22,970	23,080	22,770
7	21,060	21,670	21,650	21,900	23,160	23,650	23,170	24,300	23,410	22,950	23,060	22,780
8	21,020	21,660	21,650	21,890	23,240	23,520	23,170	23,910	23,360	22,920	23,030	22,770
9	21,010	21,650	21,650	21,890	23,350	23,450	23,140	23,670	23,310	22,900	23,020	22,770
10	21,000	21,640	21,640	21,870	23,380	23,700	23,130	23,530	23,280	22,890	23,010	22,760
11	20,980	21,640	21,650	21,870	23,380	23,590	23,130	23,440	23,260	22,870	22,990	22,750
12	20,970	21,700	21,650	21,870	23,320	23,490	23,130	23,370	23,240	22,850	22,970	22,750
13	20,970	21,720	21,650	21,900	23,270	23,440	23,210	23,300	23,260	22,840	22,960	22,750
14	20,950	21,700	21,650	21,900	23,220	23,370	23,210	23,280	23,260	22,860	22,950	22,720
15	20,930	21,690	21,650	21,900	23,190	23,320	25,000	23,240	23,230	23,070	22,910	22,700
16	20,920	21,680	21,640	21,900	23,180	23,280	24,310	23,220	23,220	23,070	22,900	22,690
17	20,920	21,680	21,630	21,900	23,180	23,240	23,990	23,190	23,210	23,070	22,870	22,660
18	20,860	21,710	21,630	21,900	23,170	23,230	23,900	23,190	23,180	23,070	22,860	22,640
19	20,820	21,700	21,620	21,900	23,170	23,210	23,730	23,180	23,230	23,040	22,850	22,640
20	20,800	21,700	21,610	21,900	23,160	23,190	23,590	23,180	23,230	23,020	22,820	22,630
21	20,910	21,700	21,600	21,900	23,160	23,180	23,500	23,170	23,210	23,080	22,810	22,620
22	20,930	21,700	21,600	21,870	23,190	23,180	23,450	23,200	23,190	23,070	22,790	22,600
23	20,920	21,700	21,600	21,850	23,190	23,220	23,390	23,210	23,170	23,040	22,750	22,590
24	20,890	21,700	21,600	21,850	23,190	23,290	24,110	23,230	23,140	23,020	22,720	22,580
25	20,890	21,700	21,600	21,960	23,190	23,280	23,810	23,210	23,130	23,010	22,680	22,570
26	20,930	21,690	21,600	22,080	23,230	23,260	23,610	23,200	23,110	22,990	22,670	22,790
27	20,920	21,680	21,600	22,180	23,230	23,230	23,500	23,160	23,090	22,970	22,640	22,820
28	20,920	21,680	21,630	22,360	23,220	23,210	23,410	23,120	23,090	22,980	22,630	22,810
29	20,920	21,690	21,630	22,520	------	23,200	23,360	23,120	23,080	23,080	22,600	22,800
30	21,430	21,690	21,650	22,550	------	23,240	23,350	23,100	23,070	23,310	22,570	22,790
31	21,490	------	21,680	22,590	------	23,210	------	23,100	------	23,270	22,550	------
(†)	713.42	713.61	713.60	714.44	715.01	715.00	715.12	714.90	714.87	715.05	714.40	714.62
(≠)	+270	+200	-10	+910	+630	-10	+140	-250	-30	+200	-720	+240
MAX	21,490	21,720	21,680	22,590	23,380	23,810	25,000	24,960	23,690	23,310	23,220	22,820
MIN	20,800	21,480	21,600	21,680	22,600	23,180	23,130	23,100	23,070	22,840	22,550	22,470

CAL YR 1972..... ≠ -1,530 MAX 24,060 MIN 20,800
WTR YR 1973..... ≠ +1,570 MAX 25,000 MIN 20,800

† 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 (0.3 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 5 miles (8.0 km) downstream from Fish Creek, 7 miles (11.3 km) north of Gainesville, and at mile 791.5 (1,273.5 km).

DRAINAGE AREA.--30,782 mi² (79,725 km²), of which 5,936 mi² (15,374 km²) 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 (1,913.39 m) 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.--37 years, 2,737 ft³/s (77.5 m³/s), 1,983,000 acre-ft/yr (2,445 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 51,600 ft³/s (1,460 m³/s) June 5, gage height, 21.00 ft (6.40 m); minimum, 104 ft³/s (2.95 m³/s) Oct. 20.
Period of record: Maximum discharge, 168,000 ft³/s (4,760 m³/s) June 9, 1941, gage height, 24.15 ft (7.36 m); maximum gage height, 26.53 ft (8.09 m) May 21, 1951; minimum discharge, 48 ft³/s (1.36 m³/s) Jan. 27, 1940.

REMARKS.--Records good. Flow slightly regulated by Lake Kemp (station 07312000), since 1943 by Lake Altus, since 1946 by Lake Kickapoo (station 07314000), and since 1967 by Lake Arrowhead (station 07314800) and Moss Lake (station 07315950).

COOPERATION.--Gage-height record and 45 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	21,400	1,220	494	3,380	1,100	8,930	6,880	1,360	1,670	10,000	410
2	157	31,700	1,150	484	2,770	1,300	27,600	4,970	1,260	1,910	17,300	400
3	151	40,700	1,100	623	2,370	1,410	25,000	4,000	8,000	1,030	13,500	396
4	147	43,700	1,090	945	2,230	1,330	15,000	3,420	45,000	890	8,930	396
5	160	14,300	1,090	1,510	2,060	3,230	10,000	2,830	50,000	870	4,560	435
6	356	9,290	1,020	4,250	1,920	2,760	7,720	3,280	45,100	804	2,830	998
7	297	8,230	846	4,630	1,950	3,180	6,540	5,220	25,000	769	2,030	2,210
8	226	7,130	825	2,990	2,800	2,980	5,490	3,190	10,000	691	1,570	5,970
9	189	4,880	811	1,970	4,540	8,710	4,160	2,140	7,000	691	1,360	11,800
10	162	3,650	790	1,210	5,430	9,580	3,430	1,980	4,500	707	1,320	14,100
11	143	2,800	755	642	3,160	5,820	2,910	1,720	3,700	697	1,300	12,200
12	136	2,400	734	623	2,250	3,840	2,640	1,600	3,000	696	1,180	6,990
13	131	2,100	720	751	1,910	13,000	2,520	1,450	2,500	729	1,020	4,870
14	126	2,000	707	928	1,620	13,000	2,420	1,450	2,000	735	1,370	3,480
15	121	2,560	688	949	1,480	8,200	3,620	1,400	2,000	1,190	1,710	2,650
16	118	3,570	678	1,020	1,360	5,880	6,590	1,350	2,680	971	1,560	2,190
17	113	3,890	637	1,150	1,300	4,400	10,300	1,230	3,200	847	1,210	3,310
18	110	3,170	625	1,090	1,270	2,950	14,500	1,110	3,060	1,730	998	2,150
19	105	2,510	625	1,410	1,210	2,160	14,000	1,070	2,670	1,240	889	1,600
20	104	2,240	625	2,470	1,160	1,790	15,000	1,030	3,680	875	811	1,740
21	106	2,390	607	2,730	1,100	1,400	16,000	948	3,010	771	746	3,230
22	153	2,830	587	2,210	1,050	1,200	16,000	988	4,340	717	689	2,410
23	227	2,830	574	1,730	1,050	1,100	17,000	988	5,980	636	657	1,920
24	731	2,560	555	6,620	1,000	1,150	18,000	988	4,670	612	611	1,500
25	2,000	2,260	544	10,300	1,000	3,180	21,100	948	2,610	591	563	1,280
26	3,840	2,100	536	8,650	980	15,100	21,700	1,000	1,820	610	519	1,260
27	2,420	2,070	520	8,800	1,000	17,000	18,500	1,200	1,510	698	486	1,790
28	1,260	1,840	510	12,200	1,000	14,300	17,300	1,500	1,330	1,160	462	1,900
29	832	1,500	498	11,200	------	8,860	11,900	2,400	1,250	1,360	485	1,900
30	988	1,380	519	6,990	------	4,630	8,540	3,200	1,310	1,700	466	4,260
31	5,500	------	511	4,840	------	3,350	------	1,800	------	2,340	425	------
TOTAL	21,273	233,980	22,697	106,409	54,350	167,890	354,410	67,280	253,540	30,937	81,557	99,745
MEAN	686	7,799	732	3,433	1,941	5,416	11,810	2,170	8,451	998	2,631	3,325
MAX	5,500	43,700	1,220	12,200	5,430	17,000	27,600	6,880	50,000	2,340	17,300	14,100
MIN	104	1,380	498	484	980	1,100	2,420	948	1,250	591	425	396
AC-FT	42,190	464,100	45,020	211,100	107,800	333,000	703,000	133,400	502,900	61,360	161,800	197,800

CAL YR 1972 TOTAL 505,057 MEAN 1,380 MAX 43,700 MIN 104 AC-FT 1,002,000
WTR YR 1973 TOTAL 1,494,068 MEAN 4,093 MAX 50,000 MIN 104 AC-FT 2,963,000

PEAK DISCHARGE (BASE, 24,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-4	0800	20.0	49,000	4-24	0600	18.4	33,700
4-2	2100	17.8	31,600	6- 5	1000	21.00	51,600

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 (2.3 km) north of Sadler, and 2.0 miles (3.2 km) upstream from Mustang Creek.

DRAINAGE AREA.--26.0 mi² (67.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 650.00 ft (198.12 m) above mean sea level.

AVERAGE DISCHARGE.--5 years (1968-73), 11.7 ft³/s (0.331 m³/s), 6.11 in/yr (155.2 mm/yr), 8,480 acre-ft/yr (10.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,140 ft³/s (60.6 m³/s) Sept. 26, gage height, 13.70 ft (4.18 m); no flow at times.
Period of record: Maximum discharge, 2,270 ft³/s (64.3 m³/s) May 14, 1969, gage height, 13.62 ft (4.15 m); no flow at times each year.
Maximum stage since about 1900, about 18 ft (5 m) in 1922, from information by local residents.

REMARKS.--Records good. The city of Whitesboro, which obtained 30 acre-ft (37,000 m³) of water from wells, discharged 7.6 acre-ft (9,370 m³) of sewage effluent into a tributary above the station during the 1973 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	15	.76	.65	41	17	3.8	12	4.6	1.9	2.0	0
2	0	6.4	.76	.76	5.9	25	3.3	10	5.4	1.7	1.0	0
3	0	3.6	.76	63	4.2	56	4.2	9.4	152	1.6	.70	0
4	0	2.8	.65	11	3.0	39	3.0	8.7	16	1.5	.55	0
5	0	2.6	.65	4.8	2.5	4.3	2.5	8.5	22	1.4	.50	1.9
6	0	110	.60	3.6	2.2	65	2.4	254	6.6	1.5	.50	31
7	0	8.2	.65	4.6	472	8.9	2.4	142	4.2	1.4	.45	43
8	0	3.2	.70	4.3	84	3.3	2.6	15	3.6	1.4	.40	2.1
9	0	2.5	.70	3.2	14	3.7	2.8	11	3.4	1.6	.35	1.1
10	0	1.6	.70	3.2	9.6	408	2.0	8.5	3.0	7.8	.31	.60
11	0	1.4	.76	3.2	7.4	18	2.0	7.6	3.4	3.7	.27	.45
12	0	1.5	.76	3.0	6.5	8.7	2.0	8.0	14	1.5	.24	.40
13	0	22	1.2	2.9	5.7	6.8	5.3	6.6	13	1.3	.18	82
14	0	3.3	.88	2.7	5.2	5.7	2.9	6.3	21	1.3	.15	2.9
15	0	2.1	.82	3.2	4.8	4.8	304	6.1	5.7	2.0	.10	1.4
16	0	1.7	.70	3.0	4.4	4.4	83	5.7	5.0	1.7	.15	.88
17	0	1.4	.70	2.9	4.3	4.0	18	5.6	4.6	8.5	.15	.60
18	0	12	.70	2.9	4.3	3.8	20	5.4	3.6	2.6	.12	.50
19	0	6.3	.76	2.7	4.2	3.7	12	5.2	29	1.5	.06	.55
20	0	2.0	.76	2.7	4.2	3.3	8.9	5.2	61	1.3	.04	.55
21	20	1.4	.70	2.7	4.0	3.2	8.0	5.0	5.9	1.1	.01	.55
22	136	1.3	.60	2.6	4.2	3.2	14	6.6	3.2	1.1	.05	.55
23	2.4	1.1	.65	2.4	5.4	3.3	14	10	2.6	.94	.02	.55
24	.27	1.1	.60	2.2	4.4	5.6	450	7.6	2.2	.88	0	.50
25	.08	1.1	.60	30	4.2	5.4	24	6.6	2.0	.82	0	.50
26	2.4	.88	.60	80	8.4	3.4	17	6.3	2.0	.82	0	424
27	3.5	.76	.60	5.7	5.7	3.0	13	5.6	2.0	.76	0	497
28	.94	.76	.60	3.0	4.6	3.2	12	5.0	2.0	3.4	0	18
29	1.9	.70	.70	2.0	------	2.9	11	4.9	2.0	19	0	8.7
30	553	.82	.82	1.5	------	5.2	11	4.8	2.0	75	0	6.1
31	78	------	.76	133	------	12	------	4.6	------	5.2	0	------
TOTAL	798.49	219.52	22.20	393.41	730.3	743.8	1,061.1	607.8	407.0	156.22	8.30	1,126.38
MEAN	25.8	7.32	.72	12.7	26.1	24.0	35.4	19.6	13.6	5.04	.27	37.5
MAX	553	110	1.2	133	472	408	450	254	152	75	2.0	497
MIN	0	.70	.60	.65	2.2	2.9	2.0	4.6	2.0	.76	0	0
CFSM	.99	.28	.03	.49	1.00	.92	1.36	.75	.52	.19	.01	1.44
IN.	1.14	.31	.03	.56	1.04	1.06	1.52	.87	.58	.22	.01	1.61
AC-FT	1,580	435	44	780	1,450	1,480	2,100	1,210	807	310	16	2,230

CAL YR 1972 TOTAL 1,427.43 MEAN 3.90 MAX 553 MIN 0 CFSM .15 IN 2.04 AC-FT 2,830
WTR YR 1973 TOTAL 6,274.52 MEAN 17.2 MAX 553 MIN 0 CFSM .66 IN 8.98 AC-FT 12,450

PEAK DISCHARGE (BASE, 1,400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	1000	13.00	1,670	4-24	0700	12.95	1,640
2- 7	1700	12.98	1,660	5- 6	2300	12.91	1,610
3-10	1000	12.63	1,470	9-26	2400	13.70	2,140
4-15	2000	12.85	1,580				

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 (1.9 km) upstream from Shawnee Creek, 1.8 miles (2.9 km) upstream from Sand Creek, 4.0 miles (6.4 km) northwest of Denison, and at mile 725.9 (1,168.0 km).

DRAINAGE AREA.--39,719 mi² (102,872 km²), of which 5,936 mi² (15,374 km²) 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, 3,348,000 acre-ft (4,130 hm³) Apr. 27, elevation, 623.36 ft (190.00 m); minimum, 2,016,000 acre-ft (2,490 hm³) Oct. 20, 21, elevation, 607.87 ft (185.28 m).
Period of record: Maximum contents, 5,911,300 acre-ft (7,290 hm³) June 5, 1957, elevation, 643.18 ft (196.04 m); minimum since power pool was first filled, 1,565,100 acre-ft (1,930 hm³) Sept. 16, 1964; minimum elevation, 599.96 ft (182.87 m) 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 (6,650 hm³) at elevation 640.0 ft (195.1 m), crest of spillway, 2,733,300 acre-ft ((3,370 hm³) at elevation 617.0 ft (188.1 m), maximum power pool, 1,049,200 acre-ft (1,290 hm³) at elevation 590.0 ft (179.8 m), minimum power pool, in Denison pool. Dead storage, 11,000 acre-ft (13.6 hm³) at elevation 610.0 ft (185.9 m) in Cumberland pool. When contents are below 2,167,900 acre-ft (2,670 hm³), 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 (186 m). 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)

607.0	1,957	616.0	2,646
610.0	2,168	620.0	3,010
613.0	2,398	624.0	3,416

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,122	2,204	2,721	2,629	2,838	2,751	2,887	3,231	2,873	2,816	2,721	2,581
2	2,118	2,276	2,724	2,629	2,836	2,759	2,924	3,181	2,892	2,810	2,750	2,578
3	2,117	2,358	2,732	2,638	2,834	2,778	2,959	3,127	2,959	2,802	2,773	2,575
4	2,113	2,452	2,725	2,641	2,834	2,800	2,973	3,084	3,020	2,794	2,779	2,572
5	2,106	2,526	2,733	2,641	2,831	2,810	2,967	3,050	3,120	2,790	2,780	2,598
6	2,105	2,585	2,720	2,646	2,828	2,833	2,952	3,046	3,198	2,783	2,773	2,619
7	2,102	2,601	2,715	2,658	2,864	2,834	2,938	3,062	3,229	2,778	2,766	2,636
8	2,100	2,611	2,713	2,654	2,870	2,838	2,930	3,056	3,194	2,778	2,761	2,655
9	2,093	2,626	2,718	2,643	2,867	2,845	2,910	3,050	3,137	2,774	2,756	2,685
10	2,086	2,624	2,711	2,638	2,859	2,905	2,898	3,040	3,070	2,770	2,748	2,716
11	2,083	2,626	2,702	2,634	2,849	2,914	2,890	3,026	3,006	2,762	2,745	2,746
12	2,075	2,642	2,695	2,626	2,838	2,924	2,881	3,010	2,973	2,752	2,742	2,762
13	2,067	2,654	2,679	2,629	2,833	2,938	2,874	2,994	2,956	2,745	2,737	2,794
14	2,066	2,649	2,671	2,632	2,818	2,957	2,865	2,980	2,933	2,746	2,729	2,804
15	2,063	2,656	2,653	2,628	2,802	2,958	2,905	2,959	2,915	2,745	2,725	2,811
16	2,054	2,659	2,638	2,632	2,786	2,958	2,926	2,944	2,905	2,745	2,716	2,817
17	2,043	2,659	2,632	2,638	2,773	2,957	2,944	2,923	2,892	2,738	2,707	2,818
18	2,038	2,677	2,624	2,647	2,766	2,954	2,957	2,904	2,879	2,733	2,702	2,818
19	2,024	2,682	2,618	2,650	2,758	2,951	2,986	2,889	2,900	2,723	2,698	2,818
20	2,016	2,681	2,613	2,659	2,750	2,929	3,016	2,881	2,904	2,716	2,690	2,817
21	2,039	2,685	2,612	2,672	2,748	2,900	3,051	2,870	2,905	2,711	2,681	2,814
22	2,044	2,688	2,611	2,678	2,746	2,879	3,087	2,865	2,897	2,707	2,668	2,814
23	2,042	2,696	2,619	2,682	2,740	2,863	3,114	2,863	2,892	2,702	2,659	2,811
24	2,042	2,702	2,615	2,687	2,743	2,863	3,210	2,861	2,884	2,696	2,648	2,804
25	2,043	2,711	2,620	2,716	2,748	2,854	3,281	2,858	2,872	2,688	2,638	2,805
26	2,052	2,711	2,617	2,741	2,750	2,856	3,339	2,860	2,856	2,682	2,632	2,857
27	2,057	2,717	2,617	2,778	2,745	2,879	3,345	2,877	2,847	2,674	2,622	2,896
28	2,063	2,716	2,616	2,794	2,740	2,893	3,332	2,868	2,836	2,679	2,615	2,896
29	2,065	2,717	2,622	2,806	------	2,895	3,301	2,867	2,822	2,692	2,608	2,898
30	2,127	2,719	2,626	2,814	------	2,895	3,263	2,868	2,819	2,703	2,596	2,894
31	2,150	------	2,627	2,828	------	2,892	------	2,870	------	2,709	2,585	------
(†)	609.75	616.84	615.78	618.07	617.07	618.76	622.53	618.53	617.97	616.72	615.28	618.79
(*)	+26	+569	-92	+201	-88	+152	+371	-393	-51	-110	-124	+309
MAX	2,150	2,179	2,733	2,828	2,870	2,958	3,345	3,231	3,229	2,816	2,780	2,898
MIN	2,016	2,204	2,611	2,626	2,740	2,751	2,865	2,858	2,819	2,674	2,585	2,572

CAL YR 1972..... * -164 MAX 2,795 MIN 2,016
WTR YR 1973..... * +770 MAX 3,345 MIN 2,016

† 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 (549 m) downstream from Denison Dam powerhouse, 0.4 mile (0.6 km) upstream from Shawnee Creek (spillway flow return), 4.5 miles (7.2 km) north of Denison, and at mile 725.5 (1,167.3 km).

DRAINAGE AREA.--39,720 mi² (102,880 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing. At site used prior to October 1961, drainage area 39,777 mi² (103,022 km²), of which 5,936 mi² (15,374 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.40 m) above mean sea level. See WSP 1920 for history of changes prior to July 29, 1942.

AVERAGE DISCHARGE.--50 years, 4,749 ft³/s (134 m³/s), 3,441,000 acre-ft/yr (4,243 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 45,000 ft³/s (1,270 m³/s) June 10, gage height, 18.68 ft (5.69 m); minimum daily, 67 ft³/s (1.90 m³/s) Dec. 3.
Period of record: Maximum discharge, 201,000 ft³/s (5,690 m³/s) May 21, 1935, gage height, 31.8 ft (9.7 m), at site and datum then in use; maximum gage height, 32.0 ft (9.8 m) Apr. 25, 1942 (at site and datum used in 1943); minimum daily discharge, 12 ft³/s (0.34 m³/s) Jan. 10, 1944.
Flood of May 26, 1908, reached a stage of 45.5 ft (13.9 m) 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 and 23 discharge measurements furnished by Corps of Engineers; records computed 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	1,960	180	83	5,880	3,900	10,200	34,900	3,300	3,070	250	2,450
2	1,550	1,660	69	2,880	6,300	3,650	10,300	34,900	5,840	5,900	2,020	1,840
3	92	1,620	67	2,930	5,200	866	12,600	33,800	11,700	5,900	4,670	1,440
4	1,340	88	1,700	2,920	5,200	2,320	16,400	28,900	17,200	4,000	5,800	2,960
5	3,300	82	2,080	5,290	5,210	5,400	16,500	21,200	23,900	4,500	5,490	190
6	198	4,280	2,990	2,380	6,010	7,190	16,500	21,700	23,500	3,980	5,900	3,550
7	75	3,040	3,000	2,320	7,900	10,200	16,500	15,800	32,100	3,130	4,600	4,370
8	318	4,490	2,360	5,670	8,550	10,200	16,500	9,280	45,600	209	4,610	1,200
9	3,720	2,950	98	6,480	8,680	10,200	13,300	9,770	44,900	4,480	4,550	105
10	3,390	2,610	2,440	4,270	10,200	11,300	10,300	10,300	45,100	4,750	4,140	2,150
11	2,000	2,290	4,450	3,670	10,300	10,200	8,480	10,400	42,700	4,850	4,610	2,140
12	3,580	108	5,720	3,590	10,300	10,400	9,620	10,400	26,700	4,310	2,410	2,380
13	4,120	2,060	7,960	878	10,300	10,900	9,880	10,500	17,100	4,090	4,280	4,590
14	168	2,860	8,040	189	10,200	10,800	9,860	10,600	16,200	1,670	3,620	4,690
15	1,040	1,220	8,030	4,390	10,300	10,800	11,100	10,600	14,800	1,560	5,260	4,440
16	3,790	4,360	6,420	137	10,200	10,600	10,000	10,500	10,900	3,650	4,740	4,140
17	4,230	3,380	4,080	103	8,290	10,800	9,850	10,600	10,900	4,370	4,970	4,110
18	3,540	566	6,100	478	6,480	10,800	9,880	10,700	11,000	4,230	3,680	3,900
19	2,880	488	3,660	128	8,470	10,800	9,850	10,800	11,300	5,880	3,260	2,930
20	2,720	3,620	1,090	101	5,200	12,600	12,700	5,660	11,200	5,490	4,490	4,530
21	114	3,330	4,220	96	3,120	16,400	16,300	7,080	10,700	2,370	4,640	4,530
22	123	151	824	104	4,540	13,500	16,300	5,340	10,800	2,540	4,840	4,510
23	786	85	80	709	4,450	10,200	20,600	3,820	10,800	3,330	4,500	4,510
24	82	1,870	80	2,250	195	9,900	31,400	3,290	10,800	4,040	4,350	4,410
25	71	668	81	2,590	93	10,000	18,700	2,810	10,800	4,590	4,380	3,010
26	1,070	112	722	1,110	3,750	10,100	14,600	2,830	10,900	4,460	3,560	3,230
27	1,000	859	790	915	4,880	10,200	29,600	699	7,610	4,270	4,640	7,360
28	84	1,360	83	743	3,300	10,200	35,200	2,440	6,850	368	4,380	10,700
29	78	1,820	80	5,880	------	10,200	35,000	2,930	8,770	123	4,490	10,700
30	3,810	968	79	6,170	------	10,300	34,800	3,130	5,450	1,910	4,520	10,800
31	3,310	------	80	3,850	------	10,100	------	2,660	------	2,380	4,500	------
TOTAL	52,664	54,955	77,653	73,304	183,498	295,026	492,820	358,339	519,420	110,400	132,150	121,865
MEAN	1,699	1,832	2,505	2,365	6,554	9,517	16,430	11,560	17,310	3,561	4,263	4,062
MAX	4,230	4,490	8,040	6,480	10,300	16,400	35,200	34,900	45,600	5,900	5,900	10,800
MIN	71	82	67	83	93	866	8,480	699	3,300	123	250	105
AC-FT	104,500	109,000	154,000	145,400	364,000	585,200	977,500	710,800	1,030M	219,000	262,100	241,700

CAL YR 1972 TOTAL 827,625 MEAN 2,261 MAX 8,040 MIN 59 AC-FT 1,642,000
WTR YR 1973 TOTAL 2,472,094 MEAN 6,773 MAX 45,600 MIN 67 AC-FT 4,903,000

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 (3.7 km) upstream from Henson Creek, and 2.4 miles (3.9 km) east of Randolph.

DRAINAGE AREA.--72 mi² (186 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 564.38 ft (172.02 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--10 years (1963-73), 58.6 ft³/s (1.66 m³/s), 42,460 acre-ft/yr (52.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 ft³/s (357 m³/s) Sept. 27, gage height, 22.04 ft (6.72 m); no flow Oct. 17-21, Sept. 1.
Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 9, 1971 (gage height, 22.31 ft (6.80 m); no flow at times most years.
Maximum stage since at least 1922, 24.6 ft (7.5 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	639	14	10	342	285	21	335	16	6.4	3.6	0
2	.10	72	13	9.6	58	84	19	60	33	5.8	2.5	.9
3	.05	19	11	222	41	1,290	19	32	132	5.2	2.0	.6
4	.03	11	10	50	36	1,380	16	26	108	4.5	1.6	.2
5	.06	8.4	10	31	32	81	15	25	1,590	3.8	1.4	970
6	.05	450	9.2	27	29	342	15	39	144	3.4	1.2	2,420
7	.03	88	7.6	46	595	102	16	538	43	5.7	1.2	412
8	.02	26	8.8	38	607	59	17	44	28	6.4	.97	46
9	.04	17	11	25	77	49	17	32	21	3.2	.83	19
10	.06	12	10	22	58	1,340	13	25	17	2.4	.71	12
11	.05	11	10	22	52	126	13	23	16	2.5	.67	9.4
12	.04	19	30	22	46	58	12	29	92	2.7	.55	8.2
13	.04	434	42	22	41	63	34	21	548	2.1	.43	1,300
14	.02	30	52	22	32	84	20	19	815	1.7	.38	89
15	.01	19	48	23	28	43	244	16	99	8.2	.34	31
16	.01	16	26	28	25	34	338	14	39	18	7.7	20
17	0	14	19	22	25	30	43	11	27	59	8.4	14
18	0	244	19	28	24	28	36	10	19	110	2.0	12
19	0	55	22	24	23	26	45	9.4	19	8.0	1.2	11
20	0	27	21	16	19	21	29	8.3	56	4.4	.81	8.6
21	0	26	17	57	19	21	23	7.6	22	3.2	.62	7.1
22	49	29	14	31	23	20	224	6.8	14	2.5	.56	5.8
23	5.5	22	14	17	36	20	241	8.8	13	2.2	.38	5.5
24	1.3	21	12	14	27	336	1,910	11	11	2.2	.24	5.5
25	.43	24	11	140	23	95	120	86	9.6	2.0	.13	5.0
26	86	19	11	493	25	41	63	284	8.4	1.7	.09	6.9
27	70	17	10	78	23	34	46	23	7.8	1.4	.06	5,410
28	4.0	13	11	41	20	32	38	12	7.6	1.3	.07	178
29	218	12	12	29	------	28	33	9.4	7.1	2.0	.09	64
30	305	13	13	30	------	26	32	7.8	6.8	4.2	.06	39
31	1,140	------	12	331	------	28	------	6.8	------	6.7	.05	------
TOTAL	1,880.04	2,407.4	530.6	1,970.6	2,386	6,206	3,712	1,779.9	3,969.3	292.8	40.84	11,110.7
MEAN	60.6	80.2	17.1	63.6	85.2	200	124	57.4	132	9.45	1.32	370
MAX	1,140	639	52	493	607	1,380	1,910	538	1,590	110	8.4	5,410
MIN	0	8.4	7.6	9.6	19	20	12	6.8	6.8	1.3	.05	0
CFSM	.84	1.11	.24	.88	1.18	2.78	1.72	.80	1.83	.13	.02	5.14
IN.	.97	1.24	.27	1.02	1.23	3.21	1.92	.92	2.05	.15	.02	5.74
AC-FT	3,730	4,780	1,050	3,910	4,730	12,310	7,360	3,530	7,870	581	81	22,040

CAL YR 1972 TOTAL 6,163.90 MEAN 16.8 MAX 1,140 MIN 0 CFSM .23 IN 3.18 AC-FT 12,230
WTR YR 1973 TOTAL 36,286.18 MEAN 99.4 MAX 5,410 MIN 0 CFSM 1.38 IN 18.75 AC-FT 71,970

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0430	10.81	3,120	4-24	0600	14.53	5,520
11- 1	1400	7.88	1,700	5- 1	1200	8.51	1,960
1-31	2000	8.04	1,730	6- 5	0700	11.77	3,660
2- 7	1900	10.06	2,740	9- 5	2300	17.02	7,520
3- 3	2100	18.15	8,420	9-13	0930	10.89	3,160
3-10	1030	13.25	4,620	9-27	0530	22.04	12,600

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 (853 m) to right of outlet channel, 2.0 miles (3.2 km) southeast of Chicota, and 4.6 miles (7.4 km) upstream from the Red River.

DRAINAGE AREA.--175 mi² (453 km²).

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, 150,800 acre-ft (186 hm³) Mar. 11, 12, elevation, 455.16 ft (138.73 m); minimum, 109,600 acre-ft (135 hm³) Oct. 20, 21, elevation, 448.42 ft (136.68 m).
Period of record: Maximum contents, 208,000 acre-ft (256 hm³) Dec. 11, 12, 1971, elevation, 462.87 ft (141.08 m); minimum since conservation pool was first reached on Apr. 20, 1968, 109,600 acre-ft (135 hm³) Oct. 20, 21, 1972, elevation, 448.42 ft (136.68 m).

REMARKS.--Lake is formed by a rolled earthfill dam about 7,080 ft (2,158 m) long with an emergency spillway 100 ft (30 m) 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 (2.21-meter) 525-foot (160-meter) long outlet conduit under the dam. A 24-inch-diameter (610-millimeter) low-flow pipe and a 12-inch (305-millimeter) 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 7,530 acre-ft (9.28 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111,500	128,100	128,700	128,600	134,000	132,200	138,000	140,100	129,900	128,500	124,200	121,000
2	111,400	130,400	128,300	128,300	134,700	133,900	137,300	139,400	129,900	128,300	124,100	120,800
3	111,300	131,000	128,500	128,600	134,500	136,800	136,600	138,700	132,300	128,000	124,000	120,800
4	111,200	131,000	128,300	128,600	134,000	148,200	136,100	137,800	132,200	127,700	123,800	120,700
5	111,100	130,700	128,100	128,600	133,700	149,800	135,500	137,100	133,100	127,600	123,600	123,200
6	111,000	130,700	127,900	128,500	133,300	149,500	135,100	137,100	133,800	127,400	123,600	126,500
7	110,900	130,700	127,700	128,600	133,900	148,600	134,600	136,600	133,600	127,100	123,400	130,100
8	110,900	130,600	127,700	129,000	136,600	147,200	134,400	136,300	133,200	126,900	123,300	130,300
9	110,700	130,400	127,700	129,000	138,500	145,900	133,900	135,800	132,800	126,800	123,000	130,100
10	110,700	130,100	127,500	129,000	138,200	149,200	133,600	135,300	132,300	126,600	122,800	129,900
11	110,700	129,700	127,600	128,900	137,600	150,800	133,300	135,400	132,300	126,400	122,800	129,500
12	110,500	129,400	128,000	128,700	137,100	150,200	133,000	135,000	131,700	126,200	122,700	129,100
13	110,500	130,400	129,000	128,700	136,400	149,000	132,800	134,500	131,500	126,000	122,700	129,400
14	110,400	130,700	129,900	128,600	135,800	147,500	133,000	133,900	131,500	125,800	122,500	129,000
15	110,200	130,700	130,600	128,500	135,200	146,100	135,200	133,500	131,600	126,200	122,300	128,800
16	110,200	130,500	131,000	128,500	134,800	144,600	138,700	133,000	131,300	126,100	122,700	128,600
17	110,200	130,200	131,000	128,500	134,300	143,300	140,500	132,600	131,100	126,300	122,800	128,200
18	110,000	130,300	130,800	128,500	133,800	142,200	139,900	132,300	131,000	126,300	122,900	128,000
19	109,800	130,500	130,800	128,500	133,600	141,200	139,400	131,900	131,400	126,300	122,800	127,800
20	109,600	130,500	130,500	128,600	133,100	140,000	138,700	131,700	131,700	126,200	122,800	127,600
21	110,000	130,500	130,400	128,500	132,800	139,200	138,200	131,300	131,700	125,900	122,700	127,400
22	110,900	130,400	130,200	128,500	132,400	138,400	138,100	131,000	131,500	125,800	122,600	127,200
23	110,900	130,200	129,900	128,500	132,100	137,600	139,200	131,000	131,100	125,600	122,300	127,000
24	110,700	130,000	129,700	128,400	131,800	141,600	142,100	130,600	130,700	125,400	122,100	126,900
25	110,600	129,900	129,600	128,800	131,500	143,500	145,700	130,400	130,400	125,200	122,000	126,900
26	111,000	129,700	129,400	130,500	131,500	143,200	144,800	130,500	130,000	125,000	121,800	126,600
27	111,000	129,400	129,300	133,000	131,300	142,200	143,700	130,200	129,600	124,800	121,800	128,000
28	111,200	129,300	129,000	132,800	131,000	141,200	142,600	130,000	129,300	124,600	121,600	128,800
29	111,800	129,000	129,100	132,500	------	140,300	141,700	129,800	128,900	124,600	121,400	129,000
30	113,300	128,900	129,000	132,200	------	139,600	140,600	129,500	128,800	124,500	121,300	128,800
31	120,800	------	128,800	132,900	------	138,900	------	129,300	------	124,500	121,100	------
(†)	450.37	451.72	451.71	452.37	452.07	453.33	453.60	451.79	451.70	450.99	450.43	451.71
(*)	+9,200	+8,100	-100	+4,100	-1,900	+7,900	+1,700	-11,300	-500	-4,300	-3,400	+7,700
(††)	350	740	644	884	874	605	412	347	445	858	828	549
MAX	120,800	131,000	131,000	133,000	138,500	150,800	145,700	140,100	133,800	128,500	124,200	130,300
MIN	109,600	128,100	127,500	128,300	131,000	132,200	132,800	129,300	128,800	124,500	121,100	120,700

CAL YR 1972..... * -45,800 †† 7,640 MAX 173,000 MIN 109,600
WTR YR 1973..... * +17,200 †† 7,530 MAX 150,800 MIN 109,600

† 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 95°32'28", Lamar County, on upstream side of Pat Mayse Dam, 2,800 ft (853 m) to right of morning-glory drop inlet, 2.0 miles (3.2 km) southeast of Chicota, and 4.6 miles (7.4 km) upstream from mouth.

DRAINAGE AREA.--175 mi² (453 km²), at Pat Mayse Dam; 184 mi² (477 km²) at former site 2.6 miles (4.2 km) 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 (134.11 m) above mean sea level. Prior to Oct. 1, 1967, at site 2.6 miles (4.2 km) downstream at datum 52.77 ft (16.08 m) lower. Oct. 1, 1967, to Sept. 30, 1970, at datum 10.00 ft (3.05 m) higher.

AVERAGE DISCHARGE.--6 years, 155 ft³/s (4.39 m³/s), 112,300 acre-ft/yr (138 hm³/yr).

EXTREMES.-Current year: Maximum outflow, 873 ft³/s (24.7 m³/s) Mar. 11, 12, gage height, 15.16 ft (4.62 m); no flow at times.
Period of record: Maximum outflow, 1,060 ft³/s (30.0 m³/s) May 19, 1969, gage height, 10.20 ft (3.11 m), datum then in use; maximum gage height, 22.87 ft (6.97 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		18	69	65	210	139	443	542	84	65		0
2		76	61	61	259	195	398	506	101	59		0
3		125	59	62	259	259	371	482	138	54		0
4		129	59	64	246	626	342	435	165	48		0
5		121	53	64	231	863	310	393	190	42		0
6		118	49	63	216	868	287	366	216	38		6.9
7		120	45	61	209	863	269	363	223	35		58
8		117	44	69	281	855	255	347	211	32		107
9		111	44	74	425	840	243	325	194	30		106
10		104	42	74	441	847	224	304	180	26		98
11		96	41	74	411	868	211	284	170	22		90
12		87	45	69	385	871	199	291	156	19		82
13		102	61	67	363	865	189	268	147	16		82
14		115	86	66	329	858	193	244	143	15		77
15		118	104	63	299	844	218	223	145	15		71
16		118	124	62	274	810	358	206	141	17		66
17		110	127	62	254	755	524	189	130	18		60
18		105	125	61	234	682	535	174	130	20		52
19		110	123	61	220	617	503	165	131	19		48
20		114	115	60	207	555	470	152	144	19		44
21		114	111	63	193	502	442	142	150	15		40
22		112	106	62	178	459	418	133	147	13		36
23		106	98	62	168	418	447	129	135	11		33
24		100	96	61	157	505	583	122	124	9.8		32
25		99	89	60	150	678	770	111	114	7.0		29
26		94	87	88	144	725	815	108	103	5.1		26
27		86	83	154	140	669	768	116	93	3.3		39
28		81	75	193	132	616	710	103	83	1.7		62
29		76	74	182	------	565	638	96	77	.50		71
30		73	76	173	------	517	579	89	69	0		71
31		------	70	170	------	480	------	83	------	0		------
TOTAL	0	3,055	2,441	2,570	7,015	20,214	12,712	7,491	4,234	675.40	0	1,486.9
MEAN	0	102	78.7	82.9	251	652	424	242	141	21.8	0	49.6
MAX	0	129	127	193	441	871	815	542	223	65	0	107
MIN	0	18	41	60	132	139	189	83	69	0	0	0
AC-FT	0	6,060	4,840	5,100	13,910	40,090	25,210	14,860	8,400	1,340	0	2,950

CAL YR 1972 TOTAL 30,860.00 MEAN 84.3 MAX 938 MIN 0 AC-FT 61,210
WTR YR 1973 TOTAL 61,894.30 MEAN 170 MAX 871 MIN 0 AC-FT 122,800

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 (17.1 km) downstream from Muddy Boggy River, 26.0 miles (41.8 km) upstream from Kiamichi River, and at mile 633.1 (1,018.7 km).

DRAINAGE AREA.--44,531 mi² (115,335 km²), of which 5,936 mi² (15,374 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 380.07 ft (115.85 m) above mean sea level. From 1905-11, nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft (61 m) upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years, 8,118 ft³/s (230 m³/s), 5,881,000 acre-ft/yr (7,251 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Apr. 25, gage height, 22.25 ft (6.78 m); minimum, 388 ft³/s (11.0 m³/s) Oct. 4, gage height, 4.00 ft (1.22 m).
Period of record: Maximum discharge, about 400,000 ft³/s (11,300 m³/s) May 28, 1908, gage height, 43.2 ft (13.2 m), from rating curve extended above 41,000 ft³/s (1,160 m³/s) on basis of records for later years; minimum, 130 ft³/s (3.68 m³/s) Dec. 11, 12, 1956, gage height, 4.49 ft (1.37 m).

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma (station 07331500) 92.8 miles (149.3 km) above station.

COOPERATION.--Gage-height record and 53 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,240	39,800	2,720	1,380	11,400	8,300	18,200	44,000	3,870	9,220	2,530	5,310
2	1,080	33,200	2,710	1,300	15,300	12,700	19,600	44,000	4,530	7,600	4,550	5,180
3	558	29,200	2,260	1,400	15,400	20,400	19,500	45,400	13,400	5,790	3,740	4,180
4	404	22,700	1,530	6,140	13,200	28,700	18,700	43,600	34,100	7,300	2,430	3,050
5	1,000	17,900	1,240	12,400	9,870	32,200	18,900	40,600	39,400	7,390	5,210	2,920
6	637	16,300	1,260	11,500	8,240	29,300	20,700	32,300	50,300	6,280	6,210	10,300
7	1,040	22,500	2,600	11,800	8,140	26,600	19,800	41,300	50,300	6,070	6,280	24,800
8	2,300	25,200	3,460	9,130	25,700	31,600	18,900	53,300	49,200	5,500	6,290	28,700
9	966	19,500	3,930	6,600	32,400	31,400	18,800	35,200	64,500	4,720	5,310	20,000
10	481	15,600	3,580	7,300	25,200	33,500	19,000	27,200	65,800	2,890	5,340	12,300
11	530	12,800	2,450	7,660	21,900	45,200	15,800	24,700	60,000	4,230	5,400	8,930
12	2,670	9,160	2,200	6,490	21,500	44,600	13,300	22,800	53,400	5,740	5,220	6,200
13	2,770	7,690	5,700	5,760	20,000	37,300	11,600	17,400	41,500	5,800	5,840	5,130
14	2,460	12,700	7,290	5,310	16,700	34,200	14,100	14,300	28,100	5,410	4,670	6,730
15	3,440	13,500	8,970	3,680	13,600	32,000	14,900	13,200	24,500	5,220	5,490	13,000
16	3,010	10,900	9,370	3,630	12,800	29,500	32,200	12,600	22,700	3,830	5,340	11,500
17	1,020	7,170	8,710	6,550	12,500	25,800	43,400	12,400	18,800	3,280	7,220	8,490
18	1,440	6,340	7,560	5,860	11,600	22,300	36,400	12,000	18,600	4,760	6,470	6,820
19	3,460	8,120	6,040	4,590	10,400	18,400	34,300	11,800	18,700	5,510	6,100	6,300
20	3,720	8,920	6,890	4,270	9,100	14,900	34,300	11,700	21,300	5,350	5,050	5,620
21	3,450	7,650	5,680	4,530	9,220	14,000	33,100	10,600	31,200	6,210	4,270	4,740
22	3,850	7,270	3,390	6,170	7,540	16,500	36,200	7,660	23,900	6,050	4,820	5,720
23	7,400	7,050	5,140	7,310	5,930	18,800	43,100	8,800	18,000	3,990	5,680	5,660
24	11,800	4,500	3,320	6,150	6,400	18,100	47,900	6,930	15,100	3,340	5,520	5,560
25	6,880	2,990	2,170	3,880	6,350	24,100	70,800	5,890	13,300	3,600	5,180	5,560
26	3,280	2,960	1,630	5,590	3,590	25,100	58,800	5,270	12,700	4,240	5,240	5,180
27	1,750	3,300	1,460	11,900	2,580	22,700	42,800	5,410	12,400	4,740	5,190	5,190
28	1,550	2,750	1,440	13,200	5,520	22,500	45,300	5,720	11,700	4,960	4,690	31,200
29	2,950	2,150	1,830	10,000	------	22,300	51,900	3,440	9,060	4,430	5,110	37,300
30	4,520	2,690	1,820	7,870	------	21,200	48,400	3,270	9,750	2,900	5,230	30,300
31	35,300	------	1,450	8,260	------	17,900	------	3,660	------	1,430	5,230	------
TOTAL	117,956	382,510	119,800	207,610	362,080	782,100	920,700	626,450	840,110	157,780	160,850	331,870
MEAN	3,805	12,750	3,865	6,697	12,930	25,230	30,690	20,210	28,000	5,090	5,189	11,060
MAX	35,300	39,800	9,370	13,200	32,400	45,200	70,800	53,300	65,800	9,220	7,220	37,300
MIN	404	2,150	1,240	1,300	2,580	8,300	11,600	3,270	3,870	1,430	2,430	2,920
AC-FT	234,000	758,700	237,600	411,800	718,200	1,551M	1,826M	1,243M	1,666M	313,000	319,000	658,300

CAL YR 1972 TOTAL 1,527,473 MEAN 4,173 MAX 39,800 MIN 236 AC-FT 3,030,000
WTR YR 1973 TOTAL 5,009,816 MEAN 13,730 MAX 70,800 MIN 404 AC-FT 9,937,000

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 (2.6 km) south of Kanawha, and 2.5 miles (4.0 km) upstream from mouth.

DRAINAGE AREA.--75.4 mi² (195 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 389.26 ft (118.65 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 10,500 ft³/s (297 m³/s) Apr. 24, gage height, 18.11 ft (5.52 m), from rating curve extended as explained below; no flow at times.
Period of record: Maximum discharge, 30,200 ft³/s (855 m³/s) Dec. 10, 1971, gage height, 21.26 ft (6.48 m), from rating curve extended above 4,400 ft³/s (125 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	769	3.0	3.0	466	81	150	263	.66	4.8	.12	0
2	0	853	2.1	2.2	648	610	48	1,080	27	4.2	.09	0
3	0	406	1.9	25	114	407	24	278	311	3.7	.06	0
4	0	50	1.5	104	46	1,650	14	42	796	3.7	.03	0
5	0	11	1.4	56	24	1,180	9.5	23	780	5.7	.01	4.2
6	0	280	1.2	41	15	290	6.2	14	1,370	5.7	0	203
7	0	888	1.0	104	79	505	7.2	159	538	4.2	0	845
8	0	589	2.3	351	1,280	316	11	151	56	3.5	0	446
9	0	100	9.4	151	1,060	137	57	38	21	2.6	0	59
10	0	28	12	41	195	3,500	58	16	8.0	1.8	0	12
11	0	9.8	14	20	64	2,100	21	13	4.1	1.3	0	4.7
12	0	4.4	90	12	42	404	9.0	203	3.3	1.1	0	2.0
13	0	241	435	9.3	33	83	35	248	12	.81	0	1.3
14	0	430	308	8.8	25	68	214	42	33	.78	0	1.3
15	0	89	388	8.8	16	58	125	14	17	.74	0	1.2
16	0	27	490	8.0	8.8	33	1,250	6.0	7.0	11	0	1.1
17	0	10	102	6.6	5.9	21	626	3.5	21	20	0	.90
18	0	118	44	6.4	4.2	13	166	2.4	26	39	0	.74
19	0	576	33	6.4	3.5	9.3	247	2.3	19	18	0	.70
20	0	381	29	4.8	2.9	6.6	1,500	1.9	53	5.1	0	.70
21	0	79	22	43	2.5	5.3	361	1.6	40	2.3	0	.63
22	.28	53	15	168	2.4	4.0	188	1.9	12	1.2	0	.48
23	.06	40	9.3	76	2.3	2.7	559	2.0	3.7	.69	0	.48
24	.25	25	5.4	25	2.0	194	4,130	1.8	1.9	.28	0	1.0
25	.19	30	3.9	12	1.8	1,340	1,970	1.3	3.0	.12	0	1.4
26	.65	30	2.8	358	3.9	518	328	1.0	2.9	.06	0	5.1
27	17	23	2.1	845	12	96	78	75	2.8	.04	0	12
28	5.0	11	1.7	289	10	49	40	41	2.9	.02	0	280
29	103	5.3	1.6	121	------	33	24	9.3	3.5	.06	0	643
30	233	3.7	3.7	52	------	30	15	2.6	4.2	.10	0	143
31	649	------	4.4	49	------	171	------	.90	------	.12	0	------
TOTAL	1,008.43	6,160.2	2,040.7	3,007.3	4,169.2	13,914.9	12,270.9	2,738.50	4,179.96	142.72	.31	2,670.93
MEAN	32.5	205	65.8	97.0	149	449	409	88.3	139	4.60	.010	89.0
MAX	649	888	490	845	1,280	3,500	4,130	1,080	1,370	39	.12	845
MIN	0	3.7	1.0	2.2	1.8	2.7	6.2	.90	.66	.02	0	0
CFSM	.43	2.72	.87	1.29	1.98	5.95	5.42	1.17	1.84	.06	.0001	1.18
IN.	.50	3.04	1.01	1.48	2.06	6.87	6.05	1.35	2.06	.07	0	1.32
AC-FT	2,000	12,220	4,050	5,960	8,270	27,600	24,340	5,430	8,290	283	.6	5,300

CAL YR 1972 TOTAL 10,783.17 MEAN 29.5 MAX 888 MIN 0 CFSM .39 IN 5.32 AC-FT 21,390
WTR YR 1973 TOTAL 52,304.05 MEAN 143 MAX 4,130 MIN 0 CFSM 1.90 IN 25.81 AC-FT 103,700

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-27	0600	14.30	1,030	4-16	1730	15.18	2,000
2- 8	1830	15.27	2,280	4-24	1530	18.11	10,500
3- 4	1630	15.90	3,760	5- 2	1130	14.69	1,400
3-10	2000	18.01	10,040	6- 6	1130	14.88	1,630
3-25	1100	15.00	1,800				

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 (0.3 km) downstream from Tanyard Bayou, 4.3 miles (6.9 km) upstream from Little White Oak Creek, and 6.0 miles (9.7 km) northeast of Clarksville.

DRAINAGE AREA.--100 mi² (259 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 360.00 ft (109.73 m) above mean sea level. Prior to Oct. 1, 1970, at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--11 years, 74.9 ft³/s (2.12 m³/s), 10.17 in/yr (258.3 mm/yr), 54,260 acre-ft/yr (66.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,880 ft³/s (167 m³/s) Apr. 25, gage height, 13.07 ft (3.98 m); no flow at times.
Period of record: Maximum discharge, 21,300 ft³/s (603 m³/s) Dec. 10, 1971, gage height, 15.92 ft (4.85 m); no flow at times.
Maximum stage since at least 1910, about 17 ft (5 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	183	7.2	12	392	59	170	18	3.3	.16	.11	0
2	0	567	5.6	12	637	227	128	16	20	.13	.06	0
3	0	397	4.6	25	495	445	50	23	47	.10	.04	0
4	0	195	3.4	40	139	1,720	31	24	780	.08	.03	0
5	0	48	2.6	46	72	1,800	26	15	1,690	.42	.02	.22
6	0	29	2.2	54	46	970	21	12	2,080	.80	.02	.41
7	0	131	1.7	94	77	840	19	9.1	1,300	6.7	.02	.14
8	0	292	20	136	604	764	20	9.2	323	6.3	.02	38
9	0	309	23	139	1,310	284	34	13	56	3.2	.02	72
10	0	75	20	80	767	1,110	34	10	23	1.6	.03	39
11	0	28	29	48	149	3,080	34	8.8	14	.87	.02	14
12	0	14	94	36	67	1,080	27	32	13	.51	.02	6.5
13	0	16	219	28	57	290	22	61	13	.26	.01	11
14	0	16	420	25	47	174	24	86	23	.19	.01	7.9
15	0	27	524	23	40	112	91	29	25	.26	0	3.6
16	0	27	412	21	33	82	998	15	18	.21	.03	2.6
17	0	17	363	21	28	63	1,840	8.9	15	.16	.02	2.0
18	0	36	116	20	25	44	725	5.8	10	.99	.01	1.7
19	0	109	70	19	23	30	1,030	4.4	6.8	1.3	.02	1.5
20	0	278	48	19	22	25	2,950	3.3	5.2	1.0	.02	1.4
21	0	193	37	95	21	22	1,060	2.3	4.3	3.4	.01	1.2
22	0	63	31	180	31	20	408	1.6	3.4	17	0	.96
23	0	34	26	172	32	18	701	1.5	2.2	6.7	0	.86
24	0	25	22	94	32	514	2,270	1.4	1.5	3.3	0	.79
25	0	20	18	60	31	1,510	3,340	1.1	.88	1.4	0	.61
26	0	16	16	265	24	1,400	819	.86	.52	.81	0	.40
27	0	13	14	455	25	318	216	2.1	.32	.45	0	.48
28	0	11	13	596	27	77	63	2.0	.26	.26	0	.87
29	0	10	13	198	------	48	30	12	.21	.23	0	1.8
30	.16	9.2	14	116	------	39	21	10	.18	.18	0	27
31	5.0	------	13	79	------	102	------	5.1	------	.16	0	------
TOTAL	5.16	3,188.2	2,602.3	3,208	5,253	17,267	17,202	443.46	6,479.07	59.13	.54	236.94
MEAN	.17	106	83.9	103	188	557	573	14.3	216	1.91	.017	7.90
MAX	5.0	567	524	596	1,310	3,080	3,340	86	2,080	17	.11	72
MIN	0	9.2	1.7	12	21	18	19	.86	.18	.08	0	0
CFSM	.002	1.06	.84	1.03	1.88	5.57	5.73	.14	2.16	.02	.0002	.08
IN.	.001	1.19	.97	1.19	1.95	6.42	6.40	.16	2.41	.02	0	.09
AC-FT	10	6,320	5,160	6,360	10,420	34,250	34,120	880	12,850	117	1.1	470

CAL YR 1972 TOTAL 6,953.75 MEAN 19.0 MAX 567 MIN 0 CFSM .19 IN 2.59 AC-FT 13,790
WTR YR 1973 TOTAL 55,944.80 MEAN 153 MAX 3,340 MIN 0 CFSM 1.53 IN 20.81 AC-FT 111,000

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2- 9	1500	10.54	1,630	4-17	1000	10.76	2,140
3- 5	1100	11.03	2,020	4-20	0800	12.35	4,000
3-11	0900	12.42	4,400	4-25	0200	13.07	5,880
3-25	2300	10.52	1,980	6- 5	2000	11.48	2,570

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 (7.7 km) upstream from North Mill Creek, 13 miles (20.9 km) north of De Kalb, and at mile 556.9 (896.1 km).

DRAINAGE AREA.--47,348 mi² (122,631 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft (92.33 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 12,050 ft³/s (341 m³/s), 8,730,000 acre-ft/yr (10,760 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 131,000 ft³/s (3,710 m³/s) Apr. 26, gage height, 28.54 ft (8.70 m); minimum, 440 ft³/s (12.5 m³/s) Oct. 6, 7, gage height, 9.00 ft (2.74 m).
Period of record: Maximum discharge, 189,000 ft³/s (5,350 m³/s) Dec. 11, 1971, gage height, 31.55 ft (9.62 m), from graph based on gage readings; minimum, 431 ft³/s (12.2 m³/s) Sept. 4, 5, 1972.
Maximum stage since 1957, 32.2 ft (9.81 m) 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 (272 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,660	55,800	5,430	3,220	15,000	6,100	28,600	68,400	7,260	11,300	3,330	5,450
2	1,270	76,700	5,730	2,900	19,100	13,500	26,000	65,500	7,990	11,900	3,070	5,520
3	1,900	69,400	5,750	3,140	25,900	21,900	27,200	66,200	14,300	9,420	4,490	5,560
4	1,360	59,100	5,200	3,730	27,600	34,500	26,200	71,300	29,900	7,730	5,600	5,350
5	749	47,000	4,720	6,080	23,400	46,800	25,200	69,400	64,200	7,880	3,930	4,350
6	500	35,700	3,970	15,400	17,800	53,300	24,400	57,900	84,700	8,520	3,600	4,170
7	672	34,600	3,520	18,000	13,600	51,600	26,100	47,400	93,200	8,090	5,850	11,000
8	694	45,700	3,910	18,100	18,000	45,500	25,600	58,200	91,000	7,100	6,950	33,200
9	796	54,100	5,140	16,000	40,500	46,400	24,800	77,700	81,400	7,030	6,790	40,700
10	1,860	49,400	5,960	12,000	48,800	49,800	24,600	64,500	82,300	6,330	6,360	33,200
11	1,270	35,100	6,170	10,400	41,700	67,200	24,700	46,200	82,500	5,390	5,750	22,800
12	694	25,000	6,010	10,400	33,200	78,500	22,400	36,500	78,000	4,250	6,030	18,200
13	530	18,200	6,380	9,500	29,600	75,000	18,800	35,100	70,400	6,240	6,430	11,100
14	2,120	14,500	8,330	8,300	26,600	64,300	17,500	26,800	55,700	7,160	6,520	8,250
15	2,810	21,100	12,800	7,570	22,500	54,300	17,900	21,000	41,400	7,030	6,120	7,710
16	2,760	26,300	15,000	6,690	18,200	48,500	29,900	18,300	35,000	6,840	5,520	14,900
17	3,540	21,600	15,500	5,810	16,100	43,400	55,700	17,000	32,600	6,170	6,260	17,000
18	3,180	15,900	14,600	7,160	15,100	36,700	70,300	16,300	26,400	5,080	7,100	13,000
19	1,450	14,300	12,800	9,140	14,000	30,900	70,000	15,800	20,500	4,910	8,220	9,480
20	1,330	16,100	10,900	7,940	12,300	25,600	69,000	15,500	22,500	6,190	7,520	7,880
21	3,080	18,500	9,810	9,280	10,800	20,800	58,000	15,100	31,300	6,790	6,740	7,030
22	4,050	17,200	9,790	9,670	10,300	18,300	51,800	14,100	43,200	7,030	5,470	5,900
23	4,090	14,700	6,950	10,200	9,170	18,900	54,900	11,400	39,000	7,440	4,550	5,920
24	5,560	13,500	6,520	13,600	7,520	24,600	79,000	10,700	28,800	6,520	4,490	6,200
25	8,850	11,100	6,280	13,600	6,840	36,200	105,000	10,500	23,500	4,630	5,850	7,340
26	10,400	8,720	4,930	11,400	7,160	48,100	128,000	8,380	19,400	4,190	5,770	6,720
27	7,000	7,470	4,030	10,900	6,190	52,000	103,000	8,470	17,300	4,450	5,500	6,170
28	4,310	7,490	3,480	17,300	4,990	48,400	85,800	8,920	16,300	4,970	5,500	8,030
29	3,070	6,640	3,180	22,800	------	48,000	72,900	9,530	14,600	5,710	5,390	30,900
30	3,710	5,850	3,050	19,300	------	35,400	72,500	9,730	12,500	5,560	4,930	41,300
31	11,600	------	3,450	14,900	------	32,600	------	7,600	------	5,100	5,370	------
TOTAL	96,865	846,770	219,290	334,430	541,970	1,277.1M	1,465.8M	1,009.4M	1,267.2M	206,950	175,000	404,330
MEAN	3,125	28,230	7,074	10,790	19,360	41,200	48,860	32,560	42,240	6,676	5,645	13,480
MAX	11,600	76,700	15,500	22,800	48,800	78,500	128,000	77,700	93,200	11,900	8,220	41,300
MIN	500	5,850	3,050	2,900	4,990	6,100	17,500	7,600	7,260	4,190	3,070	4,170
AC-FT	192,100	1,680M	435,000	663,300	1,075M	2,533M	2,907M	2,002M	2,513M	410,500	347,100	802,000

CAL YR 1972 TOTAL 7,843,385 MEAN 21,430 MAX 128,000 MIN 500 AC-FT 15,560,000
WTR YR 1973 TOTAL 7,845,085 MEAN 21,490 MAX 128,000 MIN 500 AC-FT 15,560,000

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 (3.5 km) south of Ogden, 20.6 miles (33.1 km) upstream from Little River, and at mile 485.3 (780.9 km).

DRAINAGE AREA.--48,030 mi² (124,400 km²), of which 5,936 mi² (15,374 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft (75.25 m) above mean sea level. Prior to Dec. 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 11,860 ft³/s (336 m³/s), 8,593,000 acre-ft/yr (10,600 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 97,900 ft³/s (2,770 m³/s) Apr. 27, gage height, 22.01 ft (6.71 m); minimum, 1,040 ft³/s (29.5 m³/s) Oct. 15, gage height, 3.01 ft (0.92 m).
Period of record: Maximum discharge, 297,000 ft³/s (8,410 m³/s) Feb. 23, 1938, gage height, 34.25 ft (10.44 m); minimum, 378 ft³/s (10.7 m³/s) Nov. 28, 1956.

REMARKS.--Records good. Some regulation since Oct. 31, 1943, by Lake Texoma (station 07331500) 241 miles (388 km) upstream, capacity, 5,392,000 acre-ft (6,650 hm³).

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,640	12,600	5,250	3,070	15,800	5,770	32,200	64,400	6,750	12,500	5,060	4,800
2	1,540	52,900	4,580	3,210	16,100	6,550	28,200	60,600	6,210	10,700	4,160	5,080
3	1,720	67,500	4,560	2,970	19,000	12,100	25,800	60,600	6,650	11,200	3,310	5,090
4	1,600	63,100	4,550	3,010	23,700	23,100	25,900	61,400	12,400	9,560	3,770	5,150
5	1,820	52,800	4,410	3,210	25,000	37,200	25,000	63,600	37,700	7,940	4,890	5,430
6	1,610	41,500	3,990	4,020	21,200	45,600	23,500	62,000	65,300	7,200	4,860	5,350
7	1,270	36,500	3,510	11,000	16,700	52,100	22,800	53,700	76,000	7,870	3,720	4,570
8	1,090	36,100	3,310	15,500	16,300	47,700	23,500	46,200	78,600	7,770	4,510	7,090
9	1,120	43,300	3,670	15,900	25,500	42,300	23,800	59,000	76,200	6,920	5,870	28,600
10	1,170	48,500	4,230	14,500	41,700	43,600	22,900	69,000	69,900	6,640	6,430	35,400
11	1,210	43,100	5,600	11,500	43,300	51,100	22,300	59,200	70,200	6,130	6,420	28,200
12	1,700	32,100	6,550	9,540	36,700	61,500	21,900	47,000	70,200	5,380	5,740	20,000
13	1,530	25,100	7,840	9,120	30,800	68,400	19,900	39,200	68,000	4,280	5,530	14,700
14	1,210	19,800	8,020	8,530	27,700	67,700	16,900	35,000	63,600	4,900	5,740	10,600
15	1,080	16,400	10,600	7,400	25,000	59,600	15,500	27,300	54,300	6,370	5,990	7,660
16	1,780	20,800	14,400	6,510	21,500	52,800	20,400	21,300	42,800	6,650	6,200	6,260
17	2,330	25,300	15,300	5,760	18,100	47,900	34,200	18,200	36,800	6,520	5,410	9,710
18	2,520	22,700	14,600	4,810	16,400	42,600	50,200	16,500	33,700	6,270	5,460	14,100
19	3,350	19,100	13,400	5,210	15,600	36,700	56,500	15,400	28,200	5,210	5,770	12,200
20	2,740	16,200	11,600	7,050	14,700	31,900	63,000	14,700	25,500	4,570	6,820	8,940
21	1,890	16,300	9,700	8,160	13,200	27,000	61,600	14,200	27,800	5,150	7,200	7,090
22	1,980	17,900	8,360	8,970	11,600	22,600	52,700	13,700	35,900	5,890	6,560	6,190
23	3,260	17,100	8,220	10,000	10,900	20,200	49,200	13,000	41,700	6,140	5,770	5,300
24	3,780	14,400	6,610	9,550	9,910	22,900	56,400	10,500	35,100	6,610	4,840	4,760
25	3,900	12,900	5,340	11,000	8,390	35,400	73,800	9,410	27,800	6,420	4,690	5,050
26	6,050	10,800	5,480	13,700	7,490	43,400	88,000	9,430	23,200	5,040	5,250	5,240
27	10,300	8,200	4,500	13,700	7,520	47,000	96,200	7,780	19,300	4,070	5,430	5,660
28	8,770	6,710	3,640	12,400	6,960	47,200	92,300	7,220	17,100	4,070	5,200	5,490
29	5,880	6,320	3,140	15,300	------	43,100	75,000	7,440	15,800	4,460	5,120	6,160
30	4,470	5,910	2,930	20,300	------	37,700	66,000	7,860	14,800	5,080	5,130	26,700
31	4,090	------	3,020	17,900	------	34,600	------	8,260	------	5,390	4,870	------
TOTAL	88,400	811,940	210,910	292,800	546,770	1,217.3M	1,285.6M	1,003.1M	1,187.5M	202,900	165,720	316,570
MEAN	2,852	27,060	6,804	9,445	19,530	39,270	42,850	32,360	39,580	6,545	5,346	10,550
MAX	10,300	67,500	15,300	20,300	43,300	68,400	96,200	69,000	78,600	12,500	7,200	35,400
MIN	1,080	5,910	2,930	2,970	6,960	5,770	15,500	7,220	6,210	4,070	3,310	4,570
AC-FT	175,300	1,610M	418,300	580,800	1,085M	2,415M	2,550M	1,990M	2,355M	402,500	328,700	627,900

CAL YR 1972 TOTAL 2,358,508 MEAN 6,444 MAX 67,500 MIN 850 AC-FT 4,678,000
WTR YR 1973 TOTAL 7,329,540 MEAN 20,080 MAX 96,200 MIN 1,080 AC-FT 14,540,000

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, 1.0 mile (1.6 km) downstream from Big Creek, 1.0 mile (1.6 km) upstream from Brushy Creek, 4.5 miles (7.2 km) downstream from Doctors Creek, and 5.6 miles (9.0 km) southeast of Cooper.

DRAINAGE AREA.--527 mi² (1,365 km²).

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 (113.36 m) above mean sea level. Prior to Oct. 1, 1970, at datum 3.00 ft (0.91 m) 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 (213 m) to right of present gage.

AVERAGE DISCHARGE.--31 years, 388 ft³/s (11.0 m³/s), 10.00 in/yr (254.0 mm/yr), 281,100 acre-ft/yr (347 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,700 ft³/s (558 m³/s) Apr. 25, gage height, 22.45 ft (6.84 m); minimum, 0.18 ft³/s (5.1 dm³/s) Sept. 3, gage height, 2.77 ft (0.84 m).
Period of record: Maximum discharge, 42,500 ft³/s (1,200 m³/s) Dec. 10, 1971, gage height, 26.15 ft (7.97 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	1,940	13	9.8	995	221	29	102	9.5	2.2	.42	.4
2	15	2,380	11	11	1,380	990	23	630	382	1.8	.41	.3
3	11	2,700	9.8	86	972	973	21	788	459	1.7	.41	.2
4	6.5	1,670	8.2	386	197	2,950	20	240	1,740	1.5	.41	2.0
5	3.9	266	7.2	461	85	3,300	20	91	2,860	1.2	.45	393
6	2.5	888	6.2	157	49	2,750	17	52	4,340	1.2	.55	3,530
7	1.7	2,490	5.7	464	111	1,030	15	45	3,450	1.1	.52	4,740
8	1.3	1,950	5.2	1,100	2,520	505	14	281	1,170	.98	.42	5,130
9	1.3	974	5.0	810	4,660	206	13	254	153	3.3	.35	3,070
10	.94	153	5.0	216	3,870	2,760	15	71	63	3.5	.32	424
11	.66	54	6.8	70	1,220	9,930	15	41	47	3.3	4.4	80
12	.67	30	383	37	332	5,940	13	1,400	179	3.9	4.9	40
13	.79	392	1,370	27	163	2,410	13	1,130	332	2.9	1.4	298
14	.67	726	1,500	23	68	436	13	212	979	5.8	.67	1,060
15	.55	416	2,010	22	45	207	144	69	1,060	6.1	.35	1,130
16	.52	106	1,840	22	33	127	1,930	29	552	7.6	36	205
17	.49	45	917	23	26	77	2,190	15	134	114	17	58
18	.50	285	207	22	22	47	2,060	10	45	120	24	30
19	1.2	1,030	106	21	19	34	2,380	6.9	17	55	16	17
20	13	805	71	20	16	25	4,710	4.7	10	15	5.4	12
21	9.1	228	51	712	14	21	3,480	3.5	49	5.2	3.3	8.9
22	481	90	40	766	13	18	620	2.5	87	4.8	3.2	6.9
23	385	52	35	263	14	16	1,910	2.2	31	6.4	2.6	5.3
24	68	37	35	106	16	1,470	7,140	4.6	15	3.0	1.4	5.5
25	20	28	30	117	18	3,600	16,300	5.8	11	1.8	.89	4.5
26	167	28	24	2,250	43	3,390	7,090	466	7.6	1.1	.63	3.8
27	1,430	29	19	3,350	200	753	3,120	554	5.8	.77	.45	2,730
28	916	25	16	3,260	152	160	628	277	4.3	.59	.34	6,150
29	367	19	13	1,040	------	90	240	96	3.5	.44	.26	5,520
30	1,470	15	12	205	------	49	138	38	2.7	.47	.42	3,480
31	1,680	------	10	98	------	36	------	16	------	.49	.66	------
TOTAL	7,071.29	19,851	8,772.1	16,154.8	17,253	44,521	54,321	6,937.2	18,198.4	377.14	128.53	38,134.8
MEAN	228	662	283	521	616	1,436	1,811	224	607	12.2	4.15	1,271
MAX	1,680	2,700	2,010	3,350	4,660	9,930	16,300	1,400	4,340	120	36	6,150
MIN	.49	15	5.0	9.8	13	16	13	2.2	2.7	.44	.26	.20
CFSM	.43	1.26	.54	.99	1.17	2.72	3.44	.43	1.15	.02	.008	2.41
IN.	.50	1.40	.62	1.14	1.22	3.14	3.83	.49	1.28	.03	.009	2.69
AC-FT	14,030	39,370	17,400	32,040	34,220	88,310	107,700	13,760	36,100	748	255	75,640

CAL YR 1972 TOTAL 42,602.19 MEAN 116 MAX 2,700 MIN 0 CFSM .22 IN 3.01 AC-FT 84,500
WTR YR 1973 TOTAL 231,720.26 MEAN 635 MAX 16,300 MIN .20 CFSM 1.20 IN 16.36 AC-FT 459,600

PEAK DISCHARGE (BASE, 8,000 FT³/S).--Mar. 11 (1230) 11,500 ft³/s (21.47 ft); Apr. 25 (0500) 19,700 ft³/s (22.45 ft).

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 (3.7 km) upstream from Auds Creek, 5.5 miles (8.8 km) upstream from Hickory Creek, 8.7 miles (14.0 km) northeast of Cooper, and at mile 15.6 (25.1 km).

DRAINAGE AREA.--276 mi² (715 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 372.42 ft (113.51 m) 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 (15 m) upstream at datum 9.00 ft (2.74 m) higher, and May 22, 1960, to Sept. 30, 1970, at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--24 years, 242 ft³/s (6.85 m³/s), 11.91 in/yr (302.5 mm/yr), 175,300 acre-ft/yr (216 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 39,600 ft³/s (1,120 m³/s) Apr. 24, gage height, 29.55 ft (9.01 m), from floodmarks; no flow Oct. 17-20.
Period of record: Maximum discharge, 90,600 ft³/s (2,570 m³/s) Oct. 19, 1971, gage height, 36.16 ft (11.02 m), 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 (10.9 m), present datum, and flood in 1932 reached about same stage, from information by Corps of Engineers and local residents.

REMARKS.--Records good. In 1928-29 the channel was rectified for a distance of 28 miles (45 km) upstream and 18 miles (29 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	3,420	16	26	1,650	821	29	1,830	236	2.7	.80	.6
2	1.6	805	14	23	149	589	24	400	136	2.3	.83	.4
3	.64	87	13	254	62	1,010	30	102	118	2.0	.51	.5
4	.52	35	12	165	42	5,280	20	58	1,870	1.6	.38	.4
5	.42	22	11	52	38	315	14	39	2,860	3.4	.25	326
6	.33	555	11	47	38	188	16	49	422	3.7	.24	6,210
7	.25	1,280	12	616	2,410	280	20	812	92	3.5	.17	1,630
8	.09	110	14	329	4,240	92	24	119	14	2.4	.12	119
9	4.5	40	19	62	263	407	36	52	26	2.0	.09	159
10	5.8	23	18	44	110	10,600	26	32	15	2.5	.21	59
11	2.4	15	14	33	86	435	19	78	211	10	.61	22
12	1.8	15	764	31	77	140	16	458	282	4.7	.48	12
13	1.3	920	435	23	71	90	41	55	920	2.5	.30	395
14	.64	95	188	29	59	106	64	25	618	1.7	.38	92
15	.52	29	690	33	51	68	532	14	169	2.6	.28	31
16	.13	20	141	34	46	50	2,150	11	82	35	70	17
17	0	18	89	34	42	42	178	8.2	84	114	5.7	9.9
18	0	884	64	74	45	37	110	7.2	28	65	2.8	6.2
19	0	340	70	104	46	33	1,070	6.6	12	9.8	1.7	4.9
20	0	76	62	39	50	28	185	6.2	211	4.1	.92	4.5
21	.23	40	64	354	48	27	98	5.8	65	16	.48	3.4
22	142	42	94	144	50	26	1,470	5.3	27	16	.33	3.1
23	29	34	46	51	63	26	1,710	5.3	13	4.1	.09	2.8
24	6.3	28	36	31	64	4,060	14,200	8.7	7.7	1.8	.09	16
25	2.2	42	30	587	55	505	619	82	5.8	.96	.06	7.2
26	135	41	28	4,010	64	88	204	496	4.6	.58	.04	3.8
27	612	30	26	424	71	49	120	65	3.7	.39	.04	6,050
28	45	24	24	146	56	43	78	18	3.3	.23	.18	2,140
29	417	20	25	65	------	38	57	8.7	3.1	.18	1.8	152
30	2,420	16	29	58	------	32	51	4.5	2.8	.40	1.1	57
31	4,780	------	30	184	------	34	------	3.4	------	.64	.94	------
TOTAL	8,613.87	9,106	3,089	8,106	10,046	25,539	23,211	4,864.9	8,542.0	316.78	91.92	17,534.7
MEAN	278	304	99.6	261	359	824	774	157	285	10.2	2.97	584
MAX	4,780	3,420	764	4,010	4,240	10,600	14,200	1,830	2,860	114	70	6,210
MIN	0	15	11	23	38	26	14	3.4	2.8	.18	.04	.40
CFSM	1.01	1.10	.36	.95	1.30	2.99	2.80	.57	1.03	.04	.01	2.12
IN.	1.16	1.23	.42	1.09	1.35	3.44	3.13	.66	1.15	.04	.01	2.36
AC-FT	17,090	18,060	6,130	16,080	19,930	50,660	46,040	9,650	16,940	628	182	34,780

CAL YR 1972 TOTAL 24,116.49 MEAN 65.9 MAX 4,780 MIN 0 CFSM .24 IN 3.25 AC-FT 47,840
WTR YR 1973 TOTAL 119,061.17 MEAN 326 MAX 14,200 MIN 0 CFSM 1.18 IN 16.05 AC-FT 236,200

PEAK DISCHARGE (BASE, 20,000 FT³/S).--Apr. 24 (0900) 39,600 ft³/s (29.55 ft).

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 (3.5 km) northwest of Talco, 3.2 miles (5.1 km) downstream from Mustang Creek, and at mile 162 (261 km).

DRAINAGE AREA.--1,365 mi² (3,535 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 290.82 ft (88.64 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 1,446 ft³/s (41.0 m³/s), 14.39 in/yr (365.5 mm/yr), 1,048,000 acre-ft/yr (1,292 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,700 ft³/s (898 m³/s) Apr. 25, gage height, 24.80 ft (7.56 m); minimum daily, 0.64 ft³/s (18 dm³/s) Oct. 11, Aug. 9.
Period of record: Maximum discharge, 77,000 ft³/s (2,180 m³/s) Dec. 11, 1971, gage height, 29.40 ft (8.96 m), from floodmark; no flow at times in 1957, 1964-65, 1970.
Floods in 1908 and 1914 each reached a stage of 27.5 ft (8.4 m), and flood in 1945 reached a stage of 26.5 ft (8.1 m), from information by local residents.

REMARKS.--Records good. At end of year, flow from 17.7 mi² (45.8 km²) above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 6,960 acre-ft (8.58 hm³) below the flood-spillway crests, of which 5,930 acre-ft (7.31 hm³) is floodwater-retarding capacity and 1,030 acre-ft (1.27 hm³) 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 498 acre-ft (0.614 hm³) during November 1972 into an off-channel reservoir located 1.0 mile (1.6 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	9,150	76	59	3,860	307	1,120	1,670	60	18	3.7	2.1
2	39	11,900	67	55	7,350	2,890	606	3,850	266	15	3.5	3.4
3	22	10,800	59	54	3,740	4,410	284	2,590	1,130	13	2.2	3.2
4	11	7,700	54	538	1,830	10,400	202	1,800	5,750	12	1.5	2.1
5	8.5	4,580	48	757	759	22,000	163	1,150	12,600	11	1.1	7.3
6	6.5	1,580	43	632	329	14,300	137	884	14,000	9.8	.77	4,010
7	3.5	4,560	40	544	226	12,400	121	998	11,400	10	.70	15,600
8	1.8	9,450	141	3,630	6,270	8,150	115	1,180	9,050	12	.70	12,400
9	1.1	6,720	285	3,220	13,400	2,600	138	823	4,960	14	.64	9,250
10	.7	2,990	189	1,490	9,800	5,060	145	592	1,130	15	.84	8,500
11	.6	938	157	402	8,500	25,800	137	233	395	12	1.3	4,250
12	.8	464	391	200	5,220	20,900	119	989	224	11	14	589
13	2.7	667	4,070	135	1,530	18,100	106	3,320	436	12	25	232
14	5.0	2,300	7,020	117	992	14,100	153	1,850	773	15	16	860
15	4.1	1,440	7,220	110	716	6,340	241	482	1,480	17	10	1,290
16	2.4	664	9,200	104	436	2,310	6,800	170	1,370	18	7.3	1,270
17	1.5	249	4,980	100	206	1,420	13,400	106	739	18	4.6	395
18	.9	229	2,310	97	154	1,090	8,830	81	294	201	68	143
19	.8	3,320	844	112	134	930	7,500	69	136	219	68	86
20	.7	3,720	423	161	121	827	13,100	59	180	107	47	65
21	1.3	1,830	238	397	112	743	9,500	52	325	61	42	51
22	8.1	608	177	2,340	106	668	7,900	47	131	38	30	40
23	772	307	176	1,470	105	581	12,800	43	113	42	18	33
24	553	221	125	545	112	2,320	17,700	41	97	50	12	28
25	163	185	101	245	121	15,600	28,400	42	69	31	8.5	29
26	70	178	90	3,860	125	13,500	23,700	110	49	21	6.9	46
27	1,180	170	79	11,700	189	9,500	20,500	683	37	13	5.4	1,370
28	2,770	134	69	8,900	331	3,920	16,100	843	30	8.8	5.0	9,610
29	1,700	108	62	6,440	------	1,300	8,300	370	25	6.9	4.1	13,100
30	2,410	89	58	3,510	------	960	3,270	147	21	5.4	3.5	11,900
31	5,980	------	59	1,090	------	1,420	------	86	------	4.3	2.7	------
TOTAL	15,779.0	87,251	38,851	53,014	66,774	224,846	201,587	25,360	67,270	1,041.2	414.95	95,165.1
MEAN	509	2,908	1,253	1,710	2,385	7,253	6,720	818	2,242	33.6	13.4	3,172
MAX	5,980	11,900	9,200	11,700	13,400	25,800	28,400	3,850	14,000	219	68	15,600
MIN	.60	89	40	54	105	307	106	41	21	4.3	.64	2.1
CFSM	.37	2.13	.92	1.25	1.75	5.31	4.92	.60	1.64	.02	.010	2.32
IN.	.43	2.38	1.06	1.44	1.82	6.13	5.49	.69	1.83	.03	.01	2.59
AC-FT	31,300	173,100	77,060	105,200	132,400	446,000	399,800	50,300	133,400	2,070	823	188,800

CAL YR 1972 TOTAL 162,766.85 MEAN 445 MAX 11,900 MIN .06 CFSM .33 IN 4.44 AC-FT 322,800
WTR YR 1973 TOTAL 877,353.25 MEAN 2,404 MAX 28,400 MIN .60 CFSM 1.76 IN 23.91 AC-FT 1,740,000

PEAK DISCHARGE (BASE, 15,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3- 5	0700	24.05	25,000	4-25	1200	24.80	31,700
3-11	1400	24.57	29,600	6- 6	1400	23.32	15,100
3-25	1500	23.10	17,300	9- 7	1300	23.62	16,900
4-17	0600	23.03	16,700				

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 (9.7 km) northeast of Bogata, and 8 miles (13 km) upstream from Scatter Creek.

DRAINAGE AREA.--69 mi² (179 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 352.44 ft (107.42 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 64.5 ft³/s (1.83 m³/s), 12.69 in/yr (322.2 mm/yr), 46,700 acre-ft/yr (57.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,410 ft³/s (182 m³/s) Mar. 10, gage height, 18.78 ft (5.72 m); no flow at times.
Period of record: Maximum discharge, 20,400 ft³/s (578 m³/s) Dec. 10, 1971, gage height, 21.58 ft (6.58 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	500	1.0	5.1	742	30	61	14	6.7	.32		0
2	0	629	.92	5.6	198	396	17	13	44	.27		0
3	0	72	.66	22	51	162	11	11	92	.22		0
4	0	20	.38	73	23	2,270	24	8.0	833	.18		0
5	0	11	.38	32	15	751	11	6.7	1,040	.14		18
6	0	42	.27	20	14	323	8.0	6.4	968	.14		355
7	0	924	.22	260	67	625	6.7	5.6	97	.10		161
8	0	219	5.6	259	1,590	112	7.7	4.9	27	.06		40
9	0	26	8.7	54	465	45	18	4.1	9.1	.06		14
10	0	8.0	3.9	23	74	2,640	21	5.1	5.6	.01		52
11	0	4.3	9.4	14	35	2,200	8.4	6.4	4.6	0		15
12	0	2.6	296	9.4	22	121	6.4	448	4.1	0		6.2
13	0	69	491	9.1	16	40	5.4	172	10	0		8.2
14	0	103	165	9.1	14	20	22	22	5.9	0		23
15	0	19	602	8.7	11	21	105	8.4	3.0	0		10
16	0	5.6	162	9.1	9.8	12	1,400	5.4	2.0	0		6.5
17	0	2.8	32	8.4	8.0	8.0	332	4.1	2.0	0		4.8
18	0	128	21	8.0	7.0	7.0	55	3.0	1.5	.03		3.7
19	0	364	16	7.7	6.7	6.7	1,670	2.8	1.3	0		3.0
20	0	71	14	7.7	6.1	5.9	2,010	2.2	1.2	0		2.5
21	0	17	14	252	5.6	5.4	165	2.1	1.1	0		1.9
22	0	11	11	168	5.6	5.1	140	1.6	.92	0		1.8
23	0	7.3	8.4	44	5.4	4.6	1,180	1.6	.83	0		1.6
24	0	4.6	7.3	20	5.1	745	2,310	1.5	.66	0		1.6
25	0	3.6	6.4	30	5.4	1,300	1,590	1.5	.58	0		1.6
26	6.2	3.4	5.9	908	5.6	171	122	1.5	.44	0		1.3
27	13	3.4	5.4	387	5.4	41	64	3.2	.44	0		20
28	2.7	2.8	5.1	82	10	18	34	2.4	.38	.02		248
29	32	1.8	4.9	39	------	11	21	1.6	.38	.06		205
30	239	1.4	4.6	21	------	47	17	1.5	.32	0		31
31	542	------	4.6	55	------	347	------	1.5	------	0		------
TOTAL	834.9	3,276.6	1,908.03	2,850.9	3,422.7	12,490.7	11,442.6	773.1	3,164.05	1.61	0	1,236.7
MEAN	26.9	109	61.5	92.0	122	403	381	24.9	105	.052	0	41.2
MAX	542	924	602	908	1,590	2,640	2,310	448	1,040	.32	0	355
MIN	0	1.4	.22	5.1	5.1	4.6	5.4	1.5	.32	0	0	0
CFSM	.39	1.58	.89	1.33	1.77	5.84	5.52	.36	1.52	.0008	0	.60
IN.	.45	1.77	1.03	1.54	1.85	6.73	6.17	.42	1.71	0	0	.67
AC-FT	1,660	6,500	3,780	5,650	6,790	24,780	22,700	1,530	6,280	3.2	0	2,450

CAL YR 1972 TOTAL 6,682.28 MEAN 18.3 MAX 924 MIN 0 CFSM .27 IN 3.60 AC-FT 13,250
WTR YR 1973 TOTAL 41,401.89 MEAN 113 MAX 2,640 MIN 0 CFSM 1.64 IN 22.32 AC-FT 82,120

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	1500	14.30	1,030	3-25	0300	15.57	1,820
1-26	1400	14.59	1,090	4-16	0800	15.17	1,530
2- 8	1615	15.56	1,810	4-19	2245	18.03	4,870
3- 4	2045	16.50	2,670	4-24	2230	17.72	4,480
3-10	1945	18.78	6,410	6- 5	2215	15.51	1,770

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 (1.3 km) downstream from Lewis Creek, 2.4 miles (3.9 km) upstream from Ripley Creek, 2.7 miles (4.3 km) south of Talco, and at mile 38.4 (61.8 km).

DRAINAGE AREA.--494 mi² (1,279 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 286.45 ft (87.31 m) above mean sea level.

AVERAGE DISCHARGE.--23 years (1950-73), 423 ft³/s (12.0 m³/s), 11.63 in/yr (295.4 mm/yr), 306,500 acre-ft/yr (378 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,000 ft³/s (453 m³/s) Mar. 12, gage height, 18.27 ft (5.57 m); no flow Aug. 30 to Sept. 2.
Period of record: Maximum discharge, 48,000 ft³/s (1,359 m³/s) Dec. 11, 1971, gage height, 21.20 ft (6.46 m), from rating curve extended above 23,000 ft³/s (651 m³/s); no flow at times in 1954, 1956, 1964-65, and 1969-73.
Maximum stage since at least 1870, 22.9 ft (7.0 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	2,120	74	53	1,620	249	608	388	44	8.8	2.2	0
2	444	2,720	52	52	1,610	503	591	169	96	7.8	1.9	0
3	421	5,340	36	53	1,840	743	359	191	245	7.0	1.4	4.8
4	174	4,480	27	135	1,690	1,270	183	188	1,260	12	.82	3.5
5	46	3,270	21	313	1,460	1,820	120	157	3,070	14	.48	24
6	16	2,350	17	446	815	2,220	85	102	6,210	11	2.3	543
7	7.6	1,830	19	530	295	2,550	68	77	5,820	8.7	1.8	1,020
8	3.9	1,170	58	682	1,180	2,480	59	65	3,870	7.5	1.2	1,640
9	2.1	673	290	874	2,070	2,110	116	60	2,780	27	.97	2,340
10	1.1	498	627	915	3,100	1,730	189	58	2,020	136	.85	2,230
11	.60	381	643	909	3,690	2,720	197	52	1,040	84	1.0	1,640
12	.34	203	734	836	2,890	13,500	146	45	294	39	1.7	697
13	.54	183	1,330	468	2,100	6,520	92	88	115	23	1.8	181
14	.87	478	1,790	195	1,170	3,790	76	388	138	52	1.2	148
15	.87	730	2,700	147	364	2,600	112	315	198	41	.86	161
16	.80	777	4,140	123	183	1,690	1,170	124	114	42	.66	137
17	.87	838	4,250	109	135	734	2,340	79	72	114	.41	91
18	.95	832	3,470	95	100	356	3,800	68	52	445	.33	49
19	3.1	728	2,550	82	78	243	4,440	60	38	232	.26	30
20	2.5	804	1,860	74	67	172	8,590	50	35	101	.19	21
21	2.5	906	1,030	245	59	123	8,840	40	27	61	.12	16
22	11	931	325	599	54	96	5,550	31	26	34	.18	12
23	109	965	166	640	54	84	3,580	25	73	19	.27	9.5
24	336	793	118	583	57	599	3,460	22	58	13	.27	7.8
25	445	370	89	590	80	2,290	6,080	31	35	9.4	.26	6.6
26	520	249	71	1,030	103	4,660	7,740	78	24	7.2	.22	5.2
27	508	257	58	1,560	160	4,500	4,630	131	19	5.4	.15	4.6
28	737	234	56	1,950	208	3,070	3,070	182	15	4.1	.08	5.9
29	982	159	52	2,210	------	2,210	2,210	243	12	3.2	.02	294
30	1,280	103	46	2,300	------	1,470	1,370	146	10	2.7	0	567
31	1,750	------	57	1,890	------	635	------	73	------	2.4	0	------
TOTAL	8,163.64	35,372	26,756	20,688	27,232	67,737	69,871	3,726	27,810	1,574.2	23.90	11,888.9
MEAN	263	1,179	863	667	973	2,185	2,329	120	927	50.8	.77	396
MAX	1,750	5,340	4,250	2,300	3,690	13,500	8,840	388	6,210	445	2.3	2,340
MIN	.34	103	17	52	54	84	59	22	10	2.4	0	0
CFSM	.53	2.39	1.75	1.35	1.97	4.42	4.71	.24	1.88	.10	.002	.80
IN.	.61	2.66	2.01	1.56	2.05	5.10	5.26	.28	2.09	.12	.001	.90
AC-FT	16,190	70,160	53,070	41,030	54,010	134,400	138,600	7,390	55,160	3,120	47	23,580

CAL YR 1972 TOTAL 93,878.38 MEAN 256 MAX 5,340 MIN 0 CFSM .52 IN 7.07 AC-FT 186,200
WTR YR 1973 TOTAL 300,842.64 MEAN 824 MAX 13,500 MIN 0 CFSM 1.67 IN 22.65 AC-FT 596,700

PEAK DISCHARGE (BASE, 9,000 FT³/S).--Mar. 12 (0700) 16,000 ft³/s (18.27 ft); Apr. 20 (1700) 10,100 ft³/s (17.90 ft).

07344200 Wright Patman Lake near Texarkana, Tex.
(Formerly published as Lake Texarkana near Texarkana)

LOCATION (revised).--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 (0.8 km) upstream from U.S. Highway 59, 10 miles (16 km) southwest of Texarkana, and at mile 44.5 (71.6 km).

DRAINAGE AREA.--3,443 mi² (8,917 km²).

PERIOD OF RECORD.--July 1953 to current year. Published as Texarkana Reservoir prior to October 1970 and as Lake Texarkana from October 1970 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). July 19 to Dec. 31, 1953, non-recording gage at site about 125 ft (38 m) upstream at datum 200 ft (61 m) higher.

EXTREMES.--Current year: Maximum contents, 773,100 acre-ft (953 hm³) May 4, elevation, 237.15 ft (72.28 m); minimum, 163,000 acre-ft (201 hm³) Jan. 20, elevation, 220.78 ft (67.29 m).
Period of record: Maximum contents, 1,912,100 acre-ft (2,360 hm³) May 9, 1966, elevation, 252.64 ft (77.0 m); minimum since first appreciable storage and after deliberate impoundment began, 137,500 acre-ft (170 hm³) Sept. 5, 1958.

REMARKS.--Lake is formed by an 18,500-foot (5,639-meter) earthfill dam, with a 200-foot (61-meter) uncontrolled concrete spillway and a 1-mile-long (2-kilometers) dike. Flood-control outlet works consist of two 20-foot-diameter (6-meter) conduits controlled by four 10- by 20-foot (3- by 6-meter) 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 (16.5 hm³) of storage in the lake and during the water year 1973 diverted 32,550 acre-ft (40.1 hm³). At end of year, flow from 34.3 mi² (88.8 km²) above this station was partly controlled by 24 floodwater-retarding structures with a total combined capacity of 13,870 acre-ft (17.1 hm³) below the flood-spillway crests, of which 11,170 acre-ft (13.8 hm³) is floodwater-retarding capacity and 2,700 acre-ft (3.33 hm³) 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 ACRE-FEET, AT 0700, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173,290	195,270	169,870	174,430	179,470	166,510	477,160	718,890	371,040	339,500	312,440	286,620
2	173,060	197,230	170,100	170,780	182,460	167,830	480,820	749,980	367,130	336,810	306,700	285,110
3	172,610	196,490	168,970	171,690	185,700	168,060	480,000	766,550	361,250	338,150	306,060	284,200
4	172,830	195,020	168,510	171,920	185,930	172,830	478,780	773,100	367,840	337,140	301,930	283,300
5	172,610	189,680	165,200	170,100	188,740	175,800	471,520	772,560	379,230	340,180	304,160	285,710
6	173,060	187,570	166,730	169,190	194,530	177,630	460,720	768,190	389,250	338,150	303,520	291,170
7	173,290	195,270	163,900	170,100	199,440	189,210	449,600	760,080	388,170	336,470	302,890	294,210
8	173,520	195,270	167,610	176,030	194,530	191,600	433,970	749,980	377,450	336,130	302,250	292,990
9	173,750	196,740	168,280	179,010	193,800	202,640	423,710	733,080	377,800	335,460	301,610	291,770
10	173,290	194,530	168,060	178,090	193,070	217,460	402,650	717,310	389,250	336,130	300,980	292,080
11	173,520	192,330	169,420	180,620	191,850	248,960	384,230	698,760	404,140	333,770	300,040	291,170
12	173,750	194,050	172,610	179,010	201,900	271,280	365,390	679,530	422,960	332,110	299,120	290,250
13	173,520	202,640	173,750	176,260	193,560	291,770	346,260	662,410	437,800	330,800	299,120	293,600
14	173,750	196,250	176,260	175,340	199,930	309,250	327,870	642,370	453,960	330,140	298,500	292,990
15	171,920	200,670	183,850	174,430	190,630	328,520	309,570	620,650	464,310	329,820	298,190	294,210
16	173,750	194,050	186,170	172,830	203,380	366,780	304,790	602,670	467,910	331,780	297,270	294,820
17	172,830	199,190	182,000	169,870	198,950	414,660	297,580	584,200	464,710	333,100	295,740	296,040
18	172,610	188,970	186,870	169,650	199,930	454,760	289,040	565,880	457,940	332,770	295,130	297,580
19	170,780	198,210	184,080	166,940	198,460	479,590	279,080	549,030	446,820	332,110	294,820	300,980
20	171,690	197,970	187,570	163,900	194,530	493,300	272,180	527,990	432,060	331,450	294,510	299,120
21	172,380	197,230	184,540	164,330	198,460	493,720	263,740	506,260	412,780	325,600	296,960	296,040
22	174,430	195,510	185,930	164,550	194,530	489,970	268,050	484,970	397,540	321,730	291,770	287,830
23	175,800	191,360	188,270	163,690	191,850	482,480	289,340	463,520	375,660	317,880	291,470	282,390
24	175,120	186,630	195,270	164,550	183,620	476,750	328,190	444,850	362,280	315,320	291,170	276,680
25	174,660	182,460	192,580	165,420	178,090	493,300	398,270	427,880	356,120	312,440	290,860	274,880
26	175,340	185,700	197,230	171,240	174,200	485,390	463,520	408,640	350,670	310,520	289,950	272,480
27	179,240	183,390	198,460	171,690	170,100	476,750	517,640	392,850	346,260	309,570	288,740	270,680
28	181,310	181,080	189,440	175,120	167,830	468,310	569,520	389,250	342,880	314,040	288,130	273,680
29	183,390	176,720	185,470	171,470	------	461,520	620,650	380,300	339,840	313,720	288,440	275,780
30	186,170	173,290	181,540	172,610	------	456,350	676,000	375,660	340,180	313,720	288,130	275,180
31	191,360	------	179,700	174,430	------	467,910	------	372,820	------	314,040	287,220	------
(†)	222.02	221.24	221.52	221.29	221.00	230.68	235.29	228.16	227.21	226.41	225.55	225.15
(*)	+17,840	-8,070	+6,410	-5,270	-6,600	+300,080	+208,090	-303,180	-32,640	-26,140	-26,820	-12,040
(††)	811	1,363	2,302	2,797	2,759	3,296	2,885	3,375	3,007	3,573	3,472	2,914
MAX	191,360	202,640	198,460	180,620	203,380	493,720	676,000	773,100	467,910	340,180	312,440	300,980
MIN	170,780	173,290	163,900	163,690	167,830	166,510	263,740	372,820	339,840	309,570	287,220	270,680

CAL YR 1972..... * -835,200 †† 11,900 MAX 1,002,600 MIN 155,790
WTR YR 1973..... * +101,660 †† 32,550 MAX 773,100 MIN 163,690

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

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 (0.8 km) upstream from Louisiana & Arkansas Railway Co. bridge, 1.4 miles (2.3 km) upstream from Williamson Creek, 5.2 miles (8.4 km) east of Pittsburg, and at mile 110.0 (177.0 km).

DRAINAGE AREA.--366 mi² (948 km²).

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 (75.44 m) above mean sea level. Prior to Nov. 12, 1954, water-stage recorder at site 1,900 ft (579 m) downstream at present datum.

AVERAGE DISCHARGE.--25 years (1943-62, 1967-73), 328 ft³/s (9.29 m³/s), 12.17 in/yr (309.1 mm/yr), 237,600 acre-ft/yr (293 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,740 ft³/s (163 m³/s) Apr. 25, gage height, 15.50 ft (4.72 m); minimum, 2.6 ft³/s (74 dm³/s) Oct. 18.
Period of record: Maximum discharge, 58,500 ft³/s (1,660 m³/s) Mar. 30, 1945, gage height, 28.3 ft (8.6 m), from floodmark and adjusted to present site on basis of record for flood of Apr. 27, 1958, from rating curve extended above 20,000 ft³/s (566 m³/s); 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 (8 m), present site, adjusted as explained above, from information by local resident.

REMARKS.--Records good. Small diversions upstream for municipal water supply. Flow from 36.2 mi² (93.8 km²) above this station partly controlled by Lower Blundell Creek Reservoir, capacity 40,100 acre-ft (49.4 hm³), operated by the Dallas Power and Light Co. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	451	39	314	503	106	595	541	34	28	28	5.7
2	14	568	35	190	1,030	205	442	368	80	25	25	5.6
3	7.2	395	33	165	1,070	330	254	286	297	23	14	5.1
4	23	187	32	261	722	683	140	244	794	22	8.9	5.3
5	12	89	30	359	406	1,080	112	217	1,210	19	7.2	39
6	8.6	50	30	310	217	1,230	112	202	2,110	16	6.9	209
7	6.5	71	30	351	127	1,380	99	200	2,180	17	5.8	274
8	5.8	177	34	542	564	1,490	118	204	1,570	16	5.0	296
9	5.4	166	105	651	1,350	1,190	299	282	1,290	15	11	255
10	4.3	78	201	479	1,330	1,050	593	360	1,110	12	13	237
11	3.6	46	185	265	1,000	1,230	594	347	870	12	15	151
12	4.7	34	332	177	795	1,540	310	253	640	12	24	71
13	5.0	97	720	131	541	1,290	219	367	357	12	32	114
14	4.6	322	975	114	250	1,010	235	450	347	11	32	121
15	4.3	554	1,200	105	145	801	357	545	420	10	29	116
16	3.7	236	1,240	95	98	1,040	2,490	556	511	13	17	36
17	3.5	75	1,150	87	74	1,200	2,850	353	501	23	23	23
18	2.8	65	860	82	61	948	1,960	82	277	83	22	18
19	4.7	152	570	97	53	557	1,350	48	142	60	13	16
20	5.3	238	268	96	50	297	1,140	41	156	25	12	15
21	6.1	155	164	435	48	169	1,080	37	187	17	22	15
22	7.5	97	122	1,070	46	107	1,040	35	130	14	12	15
23	13	69	97	1,010	53	83	1,110	34	90	11	6.3	14
24	15	54	78	486	69	695	2,250	32	69	9.1	5.2	11
25	23	71	65	197	70	3,640	5,200	34	56	8.4	6.6	9.5
26	22	101	57	573	69	2,990	2,810	46	49	8.6	5.8	10
27	51	90	51	1,020	96	1,500	1,500	64	44	7.7	4.9	11
28	103	69	49	1,150	117	1,100	1,130	121	40	19	4.8	28
29	98	54	48	852	------	842	908	97	36	27	5.8	46
30	156	44	65	542	------	512	725	62	32	26	5.8	28
31	243	------	238	276	------	489	------	42	------	26	5.7	------
TOTAL	901.6	4,855	9,103	12,482	10,954	30,784	32,022	6,550	15,629	627.8	428.7	2,200.2
MEAN	29.1	162	294	403	391	993	1,067	211	521	20.3	13.8	73.3
MAX	243	568	1,240	1,150	1,350	3,640	5,200	556	2,180	83	32	296
MIN	2.8	34	30	82	46	83	99	32	32	7.7	4.8	5.1
CFSM	.08	.44	.80	1.10	1.07	2.71	2.92	.58	1.42	.06	.04	.20
IN.	.09	.49	.93	1.27	1.11	3.13	3.25	.67	1.59	.06	.04	.22
AC-FT	1,790	9,630	18,060	24,760	21,730	61,060	63,520	12,990	31,000	1,250	850	4,360

CAL YR 1972 TOTAL 39,086.5 MEAN 107 MAX 1,550 MIN 1.8 CFSM .29 IN 3.97 AC-FT 77,530
WTR YR 1973 TOTAL 126,537.3 MEAN 347 MAX 5,200 MIN 2.8 CFSM .95 IN 12.86 AC-FT 251,000

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-25	2000	14.57	4,470
4-17	0100	13.70	3,020
4-25	0800	15.50	5,740

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 (0.6 km) upstream from Louisiana & Arkansas Railway Co. bridge, 3.8 miles (6.1 km) west of Daingerfield, and 9 miles (14 km) upstream from mouth.

DRAINAGE AREA.--72 mi² (186 km²).

PERIOD OF RECORD.--March 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 258.41 ft (78.76 m) above mean sea level. Prior to Oct. 1, 1954, at site 1,700 ft (518 m) downstream at same datum.

AVERAGE DISCHARGE.--30 years, 77.0 ft³/s (2.18 m³/s), 14.52 in/yr (368.8 mm/yr), 55,790 acre-ft/yr (68.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,820 ft³/s (137 m³/s) Apr. 25, gage height, 12.36 ft (3.77 m); no flow at times.
Period of record: Maximum discharge, 28,900 ft³/s (818 m³/s) Apr. 27, 1958, gage height, 17.80 ft (5.43 m), from rating curve extended above 13,000 ft³/s (368 m³/s); 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 (5.3 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	78	23	79	161	68	178	80	9.5	4.9	1.6	0
2	3.0	98	21	56	240	96	157	74	13	4.2	1.4	0
3	1.1	71	20	58	226	143	100	67	26	3.5	1.1	0
4	.42	37	20	90	127	181	81	54	160	3.0	.84	0
5	.16	19	19	114	83	411	70	46	394	3.0	.62	17
6	.05	14	20	94	72	459	60	43	826	2.9	.43	84
7	0	39	19	111	66	1,330	65	47	460	3.1	.27	110
8	0	82	23	142	159	569	78	46	226	3.1	.14	83
9	0	73	46	160	446	276	122	35	94	2.9	.05	35
10	0	40	78	111	336	196	156	28	48	2.7	0	17
11	0	23	76	78	192	195	118	24	38	2.2	0	16
12	0	17	93	66	114	231	75	33	35	1.8	0	8.0
13	0	89	144	61	94	162	64	50	39	1.5	0	6.0
14	0	134	189	62	89	167	86	47	62	1.4	0	5.8
15	0	145	218	62	79	224	145	27	80	1.7	0	6.1
16	0	76	328	56	65	377	2,580	19	70	2.5	0	5.3
17	0	43	252	52	55	567	1,250	16	40	6.1	0	3.9
18	0	48	141	50	51	341	408	14	27	84	0	3.1
19	0	90	87	50	49	207	254	13	22	109	0	2.5
20	0	108	74	56	47	135	213	12	27	44	.30	2.2
21	0	82	68	88	44	106	294	11	51	12	.20	2.1
22	0	54	61	253	42	91	302	9.4	44	6.9	.04	1.8
23	.97	42	54	274	49	79	278	8.1	23	4.7	0	1.6
24	1.6	36	47	147	58	231	1,650	7.2	16	3.5	0	1.4
25	.56	43	42	83	57	1,360	3,020	9.8	12	2.9	0	1.3
26	.42	55	37	150	54	526	672	23	10	2.3	0	1.3
27	19	61	34	320	67	266	296	40	8.6	2.0	0	1.4
28	22	48	32	305	78	165	191	72	7.2	1.7	0	2.3
29	16	35	31	182	------	114	121	64	6.3	1.5	0	15
30	38	27	36	102	------	102	92	24	5.3	1.6	0	18
31	49	------	59	83	------	142	------	13	------	1.7	0	------
TOTAL	162.58	1,807	2,392	3,595	3,200	9,517	13,176	1,056.5	2,879.9	328.3	6.99	451.1
MEAN	5.24	60.2	77.2	116	114	307	439	34.1	96.0	10.6	.23	15.0
MAX	49	145	328	320	446	1,360	3,020	80	826	109	1.6	110
MIN	0	14	19	50	42	68	60	7.2	5.3	1.4	0	0
CFSM	.07	.84	1.07	1.61	1.58	4.26	6.10	.47	1.33	.15	.003	.21
IN.	.08	.93	1.24	1.86	1.65	4.92	6.81	.55	1.49	.17	.003	.23
AC-FT	322	3,580	4,740	7,130	6,350	18,880	26,130	2,100	5,710	651	14	895

CAL YR 1972 TOTAL 12,015.13 MEAN 32.8 MAX 584 MIN 0 CFSM .46 IN 6.21 AC-FT 23,830
WTR YR 1973 TOTAL 38,572.37 MEAN 106 MAX 3,020 MIN 0 CFSM 1.47 IN 19.93 AC-FT 76,510

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3- 7	1200	11.06	1,790	4-25	0100	12.36	4,820
3-25	0900	11.10	1,840	6- 6	1200	10.30	1,000
4-16	1600	12.20	4,200				

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 (14.5 km) west of Jefferson, and at mile 80.1 (128.9 km).

DRAINAGE AREA.--850 mi² (2,202 km²).

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, 405,760 acre-ft (500 hm³) Apr. 28, elevation, 235.40 ft (71.75 m); minimum, 242,160 acre-ft (299 hm³) Oct. 21, elevation, 227.70 ft (69.40 m).
Period of record: Maximum contents, 694,360 acre-ft (856 hm³) May 5, 1966, elevation, 245.41 ft (74.80 m); minimum since December 1959, 219,700 acre-ft (271 hm³) Nov. 16, 1963, elevation, 226.54 ft (69.05 m).

REMARKS.--Lake is formed by a 10,600-foot (3,231-meter) rolled earthfill dam and a 200-foot (61-meter) concrete spillway. Flood-control outlet works consist of two 10-foot-diameter (3-meter) conduits controlled by two 8.0- by 12.5-foot (2.4- by 3.8-meter) electrically driven broome-type gates. Low-flow outlet works consist of one 14-inch (356-millimeter) pipe and valve. Flow over spillway is discharged into a 2,000-foot (610-meter) 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, 766 acre-ft (0.944 hm³) was diverted for municipal use, 3,477 acre-ft (4.29 hm³) was diverted by Texas Utility Co., and 3,186 acre-ft (3.93 hm³) was diverted by Southwestern Electric Power Co. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246,530	253,260	258,900	258,520	268,030	259,460	290,080	400,360	286,650	286,040	281,690	272,900
2	246,170	253,630	258,330	258,900	268,420	261,350	286,040	399,380	286,850	285,840	281,100	272,510
3	245,800	254,760	258,520	259,650	266,100	261,730	283,660	395,470	286,650	285,840	280,710	272,120
4	245,800	255,510	259,650	259,840	264,570	264,190	280,320	390,670	292,100	285,440	280,320	272,120
5	245,440	256,070	258,140	260,400	263,620	264,000	276,010	385,680	298,190	284,850	279,730	276,800
6	245,440	258,140	260,590	260,220	263,240	264,380	271,140	380,700	305,960	284,650	279,340	282,280
7	245,620	260,400	258,520	261,160	263,050	268,810	267,840	376,450	308,880	284,450	278,560	284,850
8	244,890	259,650	258,900	261,350	268,230	269,780	264,190	372,200	312,450	284,450	278,160	286,040
9	244,530	258,900	259,460	261,350	267,840	273,280	264,570	367,130	313,500	284,250	277,970	286,440
10	244,340	259,840	266,100	260,970	266,480	270,750	262,100	362,100	312,660	284,450	277,580	286,850
11	243,980	260,030	266,670	261,160	264,950	274,450	260,780	357,330	310,560	284,450	277,190	286,850
12	243,980	259,080	267,640	260,970	265,330	273,090	260,400	353,930	307,420	283,860	276,800	286,850
13	243,800	262,480	266,100	260,030	266,100	270,370	260,220	349,400	304,510	283,660	276,600	287,050
14	243,430	262,860	263,810	259,650	267,060	272,700	260,030	344,530	304,510	283,460	276,410	287,050
15	242,890	260,220	265,900	258,900	265,330	275,430	260,030	339,470	301,850	283,070	277,190	286,240
16	243,070	259,080	263,810	258,710	263,050	283,460	286,240	333,790	298,390	283,660	276,990	285,840
17	242,890	259,080	263,430	258,330	261,730	285,040	306,790	329,210	294,330	283,270	276,600	283,660
18	242,710	259,460	264,190	258,330	260,780	284,650	324,050	323,420	291,900	283,270	276,800	281,300
19	243,430	262,860	265,710	258,520	260,030	283,860	329,210	318,970	288,870	283,270	277,190	278,360
20	242,890	261,160	266,870	257,950	259,080	284,450	333,790	313,290	291,900	283,070	276,990	276,800
21	242,160	260,400	266,870	260,220	258,140	281,500	333,350	307,840	290,690	283,270	276,990	274,650
22	245,800	260,030	264,760	259,650	258,330	278,360	332,920	302,060	289,670	282,870	276,210	272,900
23	247,270	259,460	263,050	260,400	259,270	274,260	332,700	296,360	288,260	282,680	275,820	270,750
24	246,720	258,710	264,190	260,590	259,460	271,920	335,100	293,110	287,650	282,870	275,620	268,810
25	245,990	260,220	261,350	261,350	259,650	280,510	365,760	289,880	286,850	282,480	275,230	265,520
26	246,350	260,030	260,970	265,710	260,780	281,500	390,670	288,660	286,440	282,280	274,650	263,430
27	249,880	259,080	259,080	266,100	260,400	287,250	403,060	289,070	286,850	282,280	274,260	260,970
28	249,320	259,270	258,330	270,560	260,030	291,700	405,760	288,460	286,850	281,690	273,870	264,380
29	249,510	258,710	257,580	267,640	------	293,520	405,270	287,250	286,240	281,690	273,670	261,350
30	250,820	259,460	259,080	266,100	------	292,100	403,800	286,650	286,240	281,500	273,870	259,840
31	251,940	------	258,900	265,330	------	291,900	------	286,440	------	282,090	273,280	------
(†)	228.23	228.63	228.60	228.94	228.66	230.29	235.32	230.02	230.01	229.80	229.35	228.65
(*)	+4,300	+7,520	-700	+6,430	-5,300	+31,870	+111,900	-117,360	-200	-4,150	-8,810	-13,440
(††)	645	677	57	450	1,289	1,898	53	56	57	318	985	943
MAX	251,940	262,860	267,640	270,560	268,420	293,520	405,760	400,360	313,500	286,040	281,690	287,050
MIN	242,160	253,260	257,580	257,950	258,140	259,460	260,030	286,440	286,240	281,500	273,280	259,840

CAL YR 1972..... * +190 †† 6,012 MAX 261,920 MIN 236,740
WTR YR 1973..... * +12,200 †† 7,429 MAX 405,760 MIN 242,160

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Texas Utility Co. and Southwestern Electric Power Co.

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 (1.8 km) north of Jefferson, 2.0 miles (3.2 km) upstream from Texas and Pacific Railway bridge, and at mile 5.2 (8.4 km).

DRAINAGE AREA.--365 mi² (945 km²).

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 (52.26 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--5 years, 287 ft³/s (8.13 m³/s), 10.68 in/yr (271.3 mm/yr), 207,900 acre-ft/yr (256 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,170 ft³/s (175 m³/s) Apr. 28, gage height, 16.59 ft (5.06 m); minimum, 1.5 ft³/s (42 dm³/s) Oct. 21, 22, gage height, 3.38 ft (1.03 m).
Period of record: Maximum discharge, 6,170 ft³/s (175 m³/s) Apr. 28, 1973, gage height, 16.59 ft (5.06 m); no flow at times most years.
Maximum stage since 1938, 22.42 ft (6.83 m) Apr. 29, 1958, from records of Corps of Engineers.

REMARKS.--Records good. No known regulation or diversion in vicinity of gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	164	350	303	722	283	1,280	1,580	156	149	55	5.9
2	68	182	327	287	751	310	1,090	1,160	159	115	41	6.9
3	57	199	305	292	746	335	961	935	163	95	34	6.2
4	47	212	283	339	725	418	879	787	222	79	29	6.4
5	39	224	261	406	711	474	815	680	399	67	25	66
6	32	229	244	478	696	514	746	605	614	63	22	214
7	26	245	231	544	667	655	702	538	681	64	20	273
8	21	251	222	590	786	747	665	474	880	60	18	258
9	16	257	225	583	838	853	669	414	1,130	56	16	259
10	13	243	487	558	799	1,130	643	362	1,220	52	14	326
11	10	222	653	539	743	1,470	603	319	1,130	50	12	394
12	7.7	210	661	533	723	1,570	565	323	964	48	10	418
13	6.1	243	675	528	733	1,400	551	350	925	44	9.4	410
14	4.6	278	694	515	727	1,190	557	382	1,100	39	11	387
15	3.2	284	776	495	712	1,180	565	359	999	36	20	351
16	2.6	273	834	468	694	1,740	1,270	340	848	34	27	300
17	2.3	259	845	436	662	2,210	2,340	344	761	36	22	234
18	2.2	292	819	408	612	2,360	3,030	342	773	42	16	164
19	2.5	378	801	378	547	2,420	4,520	321	774	47	13	118
20	2.4	424	781	353	481	2,250	4,550	288	788	46	15	95
21	1.9	438	743	371	421	1,860	3,350	249	746	65	12	80
22	10	434	699	382	373	1,460	2,210	204	674	125	9.8	68
23	18	446	659	377	338	1,180	1,580	164	589	180	8.9	59
24	26	470	616	365	312	1,160	2,000	137	491	211	7.9	52
25	23	500	564	365	293	1,470	3,700	124	407	214	6.9	48
26	32	495	505	467	282	1,510	3,030	127	351	170	5.9	44
27	92	475	444	537	282	1,770	4,930	133	320	113	4.9	43
28	108	442	389	563	282	2,140	5,810	136	294	77	4.0	93
29	101	406	346	555	------	2,220	4,090	129	253	60	3.9	110
30	113	375	323	563	------	1,950	2,480	135	198	49	3.5	93
31	141	------	317	600	------	1,550	------	149	------	53	4.3	------
TOTAL	1,103.5	9,550	16,079	14,178	16,658	41,779	60,181	12,590	19,009	2,539	501.4	4,982.4
MEAN	35.6	318	519	457	595	1,348	2,006	406	634	81.9	16.2	166
MAX	141	500	845	600	838	2,420	5,810	1,580	1,220	214	55	418
MIN	1.9	164	222	287	282	283	551	124	156	34	3.5	5.9
CFSM	.10	.87	1.42	1.25	1.63	3.69	5.50	1.11	1.74	.22	.04	.45
IN.	.11	.97	1.64	1.44	1.70	4.26	6.13	1.28	1.94	.26	.05	.51
AC-FT	2,190	18,940	31,890	28,120	33,040	82,870	119,400	24,970	37,700	5,040	995	9,880

CAL YR 1972 TOTAL 64,783.68 MEAN 177 MAX 1,360 MIN 0 CFSM .48 IN 6.60 AC-FT 128,500
WTR YR 1973 TOTAL 199,150.30 MEAN 546 MAX 5,810 MIN 1.9 CFSM 1.50 IN 20.30 AC-FT 395,000

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Apr. 19 (2100) 4,850 ft³/s (16.10 ft); Apr. 28 (0400) 6,170 ft³/s (16.59 ft).

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 (6 km) downstream from Clear Creek, 9 miles (14 km) south of Ore City, and 12 miles (19 km) north of Longview.

DRAINAGE AREA.--383 mi² (992 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 232.67 ft (70.92 m) above mean sea level.

AVERAGE DISCHARGE.--10 years (1963-73), 241 ft³/s (6.83 m³/s), 8.55 in/yr (217.2 mm/yr), 174,600 acre-ft/yr (215 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,500 ft³/s (411 m³/s) Apr. 17, gage height, 16.08 ft (4.90 m); minimum, 0.11 ft³/s (3.1 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 23,500 ft³/s (666 m³/s) Apr. 24, 1966, gage height, 20.20 ft (6.16 m); 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 (5.9 m), or 1.3 ft (0.4 m) lower than the flood of March 1945 at a point 6 miles (10 km) upstream, from information by local resident.

REMARKS.--Records good. No known diversion above station. During water year, the city of Gilmer discharged 16.2 acre-ft (20,000 m³/s) of sewage effluent into tributaries above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	122	169	361	884	203	994	1,030	98	63	62	4.0
2	63	121	146	402	898	277	793	849	84	54	49	13
3	39	130	127	382	870	315	688	701	77	49	34	13
4	23	140	110	364	805	435	636	588	612	44	26	9.8
5	14	145	101	361	778	463	590	476	2,120	40	20	153
6	8.1	147	99	379	744	539	507	414	4,870	36	17	758
7	5.7	203	101	430	655	829	466	364	3,450	35	14	1,120
8	4.3	229	100	509	808	953	442	308	2,560	46	11	1,150
9	3.6	184	111	535	881	1,480	482	259	1,810	49	9.8	1,340
10	3.2	128	590	531	846	1,970	472	225	1,400	52	8.7	1,260
11	2.5	93	874	533	772	1,680	424	201	1,090	57	7.8	1,020
12	1.6	73	860	541	793	1,420	392	199	913	54	7.2	823
13	.89	100	733	513	820	1,220	388	224	793	53	7.0	657
14	.52	170	631	463	761	1,370	395	218	961	66	13	513
15	.28	161	698	405	685	1,780	435	215	990	60	13	377
16	.18	137	688	353	588	2,280	5,500	226	790	45	9.8	211
17	.14	130	636	306	493	2,300	13,200	244	606	38	9.1	113
18	.12	161	582	262	417	2,110	7,120	255	509	49	8.7	86
19	.18	315	562	229	350	1,680	3,540	255	446	59	7.8	74
20	.16	356	565	207	282	1,420	2,180	209	366	47	32	66
21	.12	339	541	211	234	1,240	1,670	147	330	35	33	60
22	4.7	316	489	216	204	1,060	1,420	115	274	28	18	53
23	56	319	433	207	189	888	1,400	99	211	30	11	48
24	77	321	383	221	180	1,150	3,640	91	189	27	7.8	51
25	58	334	331	271	173	1,680	11,200	86	164	23	6.4	51
26	47	321	277	428	173	2,410	10,200	98	131	20	5.4	49
27	109	283	222	539	188	2,770	4,830	119	104	17	4.8	48
28	163	238	189	582	195	2,120	2,420	133	95	16	4.8	133
29	147	209	170	597	------	1,610	1,640	127	83	17	4.0	212
30	118	190	170	657	------	1,310	1,280	125	74	32	3.8	162
31	121	------	258	716	------	1,180	------	118	------	54	3.9	------
TOTAL	1,159.29	6,115	11,946	12,711	15,666	42,142	79,344	8,718	26,200	1,295	469.8	10,627.8
MEAN	37.4	204	385	410	560	1,359	2,645	281	873	41.8	15.2	354
MAX	163	356	874	716	898	2,770	13,200	1,030	4,870	66	62	1,340
MIN	.12	73	99	207	173	203	388	86	74	16	3.8	4.0
CFSM	.10	.53	1.01	1.07	1.46	3.55	6.91	.73	2.28	.11	.04	.92
IN.	.11	.59	1.16	1.23	1.52	4.09	7.71	.85	2.54	.13	.05	1.03
AC-FT	2,300	12,130	23,690	25,210	31,070	83,590	157,400	17,290	51,970	2,570	932	21,080

CAL YR 1972 TOTAL 58,034.29 MEAN 159 MAX 2,300 MIN 0 CFSM .42 IN 5.64 AC-FT 115,100
WTR YR 1973 TOTAL 216,393.89 MEAN 593 MAX 13,200 MIN .12 CFSM 1.55 IN 21.02 AC-FT 429,200

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-10	0230	10.82	2,030	4-17	0430	16.08	14,500
3-16	1500	11.19	2,450	4-25	2200	15.18	12,400
3-26	2100	11.67	3,060	6- 6	0600	12.71	5,290

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 (0.5 km) downstream from Texas and Pacific Railway Co. bridge, 3.3 miles (5.3 km) downstream from Grays Creek, and 3.5 miles (5.6 km) south of Jefferson.

DRAINAGE AREA.--675 mi² (1,748 km²).

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 (53.22 m) above mean sea level. Prior to Sept. 19, 1947, nonrecording gage at upstream side of bridge at same datum.

AVERAGE DISCHARGE.--27 years, 515 ft³/s (14.6 m³/s), 10.36 in/yr (263.1 mm/yr), 373,100 acre-ft/yr (460 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,800 ft³/s (334 m³/s) Apr. 27, gage height, 16.90 ft (5.15 m); minimum, 5.8 ft³/s (164 dm³/s) Oct. 17-19, 21, 22, gage height, 2.32 ft (0.71 m).
Period of record: Maximum discharge, 35,500 ft³/s (1,010 m³/s) Apr. 26, 1966, gage height, 22.28 ft (6.79 m); 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 (6.43 m).

REMARKS.--Records good. For record of discharges into tributaries above this station, see Little Cypress Creek near Ore City (station 07346050). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	330	477	478	1,140	372	2,990	4,000	194	186	44	24
2	76	315	445	419	1,480	402	2,380	2,970	185	157	50	22
3	95	282	404	387	1,400	420	1,920	2,270	182	136	65	21
4	100	247	357	383	1,330	551	1,700	1,780	397	119	72	26
5	84	222	316	405	1,360	720	1,530	1,540	1,030	104	67	270
6	64	214	283	467	1,340	741	1,360	1,330	1,790	92	56	515
7	46	339	256	568	1,250	863	1,220	1,160	2,350	110	44	660
8	32	374	246	727	1,340	950	1,130	1,030	3,380	240	35	898
9	23	375	292	764	1,450	1,040	1,160	901	4,780	171	29	1,240
10	18	377	739	753	1,410	1,180	1,180	783	4,370	130	26	1,510
11	15	371	957	744	1,360	1,290	1,110	678	3,440	109	24	1,490
12	12	360	973	740	1,340	1,270	1,020	1,120	2,650	104	23	1,350
13	9.8	402	1,100	713	1,300	1,280	949	1,260	2,460	102	20	1,250
14	8.4	447	1,400	687	1,230	1,540	879	810	2,730	104	18	1,190
15	7.4	461	1,700	667	1,150	1,790	822	563	2,630	99	16	1,130
16	6.9	465	1,780	646	1,080	2,050	1,210	491	2,400	95	14	1,020
17	6.2	457	1,680	632	1,020	2,190	1,350	434	2,030	119	14	887
18	5.9	487	1,540	626	978	2,440	1,670	378	1,720	122	25	744
19	6.4	578	1,400	619	943	3,040	9,160	347	1,510	107	33	603
20	6.8	568	1,260	589	891	3,150	10,200	334	1,410	85	25	452
21	6.0	539	1,130	661	821	2,920	7,550	329	1,210	73	22	276
22	11	531	1,020	707	744	2,530	5,370	326	1,040	73	20	164
23	18	533	925	634	669	2,090	3,920	319	922	75	20	128
24	27	535	835	575	595	2,100	4,790	298	798	74	24	116
25	83	553	767	534	529	3,090	8,960	258	660	73	26	109
26	118	555	714	687	473	2,970	11,400	228	519	63	20	111
27	209	541	665	816	436	2,750	11,700	235	409	53	17	128
28	241	523	615	764	397	2,670	10,800	229	329	45	16	221
29	271	511	568	716	------	2,760	8,150	217	274	38	17	252
30	311	499	545	709	------	3,420	5,760	208	226	34	24	267
31	332	------	542	741	------	3,420	------	202	------	45	30	------
TOTAL	2,313.8	12,991	25,931	19,558	29,456	57,999	123,340	27,028	48,025	3,137	936	17,074
MEAN	74.6	433	836	631	1,052	1,871	4,111	872	1,601	101	30.2	569
MAX	332	578	1,780	816	1,480	3,420	11,700	4,000	4,780	240	72	1,510
MIN	5.9	214	246	383	397	372	822	202	182	34	14	21
CFSM	.11	.64	1.24	.93	1.56	2.77	6.09	1.29	2.37	.15	.04	.84
IN.	.13	.72	1.43	1.08	1.62	3.20	6.80	1.49	2.65	.17	.05	.94
AC-FT	4,590	25,770	51,430	38,790	58,430	115,000	244,600	53,610	95,260	6,220	1,860	33,870

CAL YR 1972 TOTAL 99,884.75 MEAN 273 MAX 2,220 MIN 0 CFSM .40 IN 5.50 AC-FT 198,100
WTR YR 1973 TOTAL 367,788.80 MEAN 1,008 MAX 11,700 MIN 5.9 CFSM 1.49 IN 20.27 AC-FT 729,500

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 (2.6 km) upstream from Colley Creek, 3.7 miles (6.0 km) upstream from Johns Creek, and 5.5 miles (8.8 km) northeast of Linden.

DRAINAGE AREA.--48.0 mi² (124 km²).

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 (69.7 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--8 years (1965-73), 33.4 ft³/s (0.946 m³/s), 9.45 in/yr (240.0 mm/yr), 24,200 acre-ft/yr (29.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,560 ft³/s (72.5 m³/s) Apr. 25, gage height, 10.85 ft (3.31 m); no flow at times.
Period of record: Maximum discharge, 2,620 ft³/s (74.2 m³/s) Apr. 24, 1966, gage height, 12.28 ft (3.74 m); no flow at times each year.
Maximum stage since at least 1945, 15.6 ft (4.8 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	22	15	47	136	40	161	74	12	7.9	4.3	2.0
2	.94	18	15	38	166	87	122	64	12	6.8	3.6	1.5
3	.81	18	15	45	94	77	84	57	17	5.6	3.1	1.6
4	.60	10	15	61	62	94	73	49	119	4.8	2.5	2.0
5	.38	6.7	14	50	54	130	62	45	200	4.8	2.1	37
6	.22	8.5	16	54	49	129	56	44	228	13	1.8	126
7	.08	36	25	63	56	196	64	49	151	9.6	1.7	161
8	.04	46	23	83	154	237	79	43	54	7.9	1.5	79
9	.01	21	39	62	189	138	116	36	38	7.2	1.3	32
10	0	13	65	48	122	96	128	33	31	5.6	1.2	26
11	0	11	69	44	72	120	78	30	27	4.6	1.2	18
12	0	8.8	85	42	59	112	61	34	27	3.7	.99	15
13	0	36	116	41	57	73	58	43	46	3.5	1.4	13
14	0	80	109	45	51	176	76	29	297	3.1	1.5	17
15	0	39	120	45	42	561	74	25	376	3.0	1.6	13
16	0	23	136	40	38	408	900	23	126	8.9	1.2	11
17	0	18	87	38	36	316	551	22	54	45	1.9	10
18	0	35	60	38	36	202	226	20	42	109	4.0	8.8
19	0	85	54	40	35	136	201	19	33	68	3.2	7.7
20	0	60	50	39	34	105	212	18	46	28	1.6	7.1
21	0	32	47	81	32	92	192	17	65	20	1.2	6.8
22	.40	27	43	118	31	75	155	15	35	16	.94	6.2
23	5.3	23	38	75	34	67	125	14	26	13	.64	5.7
24	5.0	20	35	50	37	274	381	13	21	12	.50	6.6
25	1.6	36	32	58	35	1,030	1,530	29	18	10	.42	9.6
26	3.2	41	30	134	33	323	400	39	16	7.1	.38	8.4
27	16	28	29	178	38	184	200	36	13	5.9	.38	8.8
28	20	22	27	123	38	130	142	43	11	4.9	.88	29
29	11	18	28	72	------	121	107	23	10	4.8	3.8	34
30	30	16	44	60	------	118	85	18	8.9	5.6	5.4	16
31	41	------	71	65	------	126	------	14	------	5.4	3.5	------
TOTAL	137.68	858.0	1,552	1,977	1,820	5,973	6,699	1,018	2,159.9	454.7	59.73	719.8
MEAN	4.44	28.6	50.1	63.8	65.0	193	223	32.8	72.0	14.7	1.93	24.0
MAX	41	85	136	178	189	1,030	1,530	74	376	109	5.4	161
MIN	0	6.7	14	38	31	40	56	13	8.9	3.0	.38	1.5
CFSM	.09	.60	1.04	1.33	1.35	4.02	4.65	.68	1.50	.31	.04	.50
IN.	.11	.66	1.20	1.53	1.41	4.63	5.19	.79	1.67	.35	.05	.56
AC-FT	273	1,700	3,080	3,920	3,610	11,850	13,290	2,020	4,280	902	118	1,430

CAL YR 1972 TOTAL 6,911.28 MEAN 18.9 MAX 195 MIN 0 CFSM .39 IN 5.36 AC-FT 13,710
WTR YR 1973 TOTAL 23,428.81 MEAN 64.2 MAX 1,530 MIN 0 CFSM 1.34 IN 18.16 AC-FT 46,470

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-15	1300	9.20	724	4-16	1700	10.08	1,560
3-25	0700	9.97	1,440	4-25	0430	10.85	2,560

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 (0.5 km) downstream from Horse Creek, 0.9 mile (1.4 km) downstream from Louisiana and Arkansas Railroad Co. bridge, 1.8 miles (2.9 km) east of Greenville, and at mile 558.3 (898.3 km).

DRAINAGE AREA.--77.7 mi² (201 km²).

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 (147.85 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 60.3 ft³/s (1.71 m³/s), 10.54 inches/yr (267.7 mm/yr), 43,690 acre-ft/yr (53.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,810 ft³/s (136.2 m³/s) Apr. 24, gage height, 16.78 ft (5.11 m); no flow Oct. 4, 5.
Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) May 7, 1969, gage height, 17.95 ft (5.47 m); no flow at times in 1964, 1969-70, 1972-73.
Maximum stage since 1895, 22 ft (7 m) in May 1935, from information by local resident and city engineer of Greenville. Flood of July 3, 1913, reached a stage of 20 ft (6 m), from information by local resident.

REMARKS.--Records good. The city of Greenville reported that during the current water year 2,140 acre-ft (2.64 hm³) of water was diverted from city lakes upstream from station and 1,900 acre-ft (2.34 hm³) from Lake Tawakoni for municipal use, and 1,760 acre-ft (2.64 hm³) 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.

REVISIONS (WATER YEARS).--WSP 1732: Drainage area. WSP 1922: 1960. WRD Texas 1968: 1966-67.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	215	.38	2.0	430	7.7	1.0	18	.18	1.0	.83	.40
2	.02	216	.36	2.0	27	89	1.2	40	.57	.95	.65	.33
3	.01	6.2	.33	61	6.8	11	1.7	7.4	52	.71	.67	.33
4	0	2.4	.33	50	5.3	133	1.1	3.9	1,050	.51	.70	.39
5	0	1.7	.33	6.0	4.1	23	.88	3.5	867	.96	.65	142
6	1.4	2.3	.31	3.9	3.5	13	1.1	2.7	431	1.1	.78	2,030
7	.88	108	.33	86	118	34	1.4	1.2	16	.77	.95	367
8	.75	8.6	.33	77	1,590	8.6	1.2	2.0	5.6	.58	.41	12
9	.75	3.6	.38	7.1	78	5.0	1.3	1.1	3.7	.60	.90	3.3
10	.75	2.9	.38	3.4	8.0	1,410	.83	1.1	2.6	.60	1.0	1.5
11	.75	2.5	.41	2.2	5.8	902	.90	.76	3.3	1.0	1.0	2.7
12	1.1	1.6	.44	1.9	4.9	25	1.3	15	6.2	.60	.75	54
13	1.1	71	.44	1.5	4.0	11	2.1	1.8	191	.60	.67	32
14	.75	18	30	1.9	3.6	8.8	1.4	.90	702	.60	.51	42
15	.53	4.6	16	2.6	3.5	6.6	39	.42	48	6.1	.85	3.4
16	.36	2.8	4.3	2.5	3.1	4.3	665	1.4	5.6	7.3	.98	1.8
17	.33	2.0	3.9	1.6	2.9	2.6	25	1.8	3.2	16	1.2	1.3
18	.33	32	4.1	1.4	2.7	2.1	9.6	1.7	2.1	3.1	1.1	1.3
19	.31	74	4.1	1.3	2.8	1.6	31	.78	1.9	2.6	.97	1.1
20	.31	6.1	3.9	1.2	2.8	1.2	9.6	.50	2.4	2.2	.90	.83
21	.31	3.5	4.1	3.9	2.7	1.4	6.0	.51	1.6	1.9	.83	.79
22	12	2.0	4.0	1.9	2.8	1.4	8.8	1.2	1.2	1.6	.83	.71
23	6.3	1.5	3.8	1.1	3.2	1.4	453	1.1	1.2	1.6	.83	.63
24	5.8	1.2	3.6	.73	2.7	320	4,070	.74	1.3	1.3	.92	.56
25	5.5	.93	3.4	70	2.5	107	1,540	1.9	.98	1.1	.93	.71
26	23	.75	2.4	1,030	3.7	7.7	51	.74	1.0	1.2	1.3	1.6
27	11	.63	2.0	83	3.7	3.9	20	.55	1.2	1.2	1.6	1,730
28	8.0	.53	2.2	9.5	3.4	3.0	13	.32	1.0	1.1	.94	903
29	11	.44	2.3	5.5	------	2.2	9.4	.22	1.0	1.4	.89	28
30	116	.41	2.5	5.4	------	1.8	7.8	.15	1.2	1.0	.59	4.6
31	98	------	2.0	15	------	1.5	------	.16	------	1.1	.57	------
TOTAL	307.33	793.19	103.35	1,542.53	2,331.5	3,150.8	6,975.61	113.55	3,406.03	62.38	26.70	5,368.28
MEAN	9.92	26.4	3.33	49.8	83.3	102	233	3.66	114	2.01	.86	179
MAX	116	216	30	1,030	1,590	1,410	4,070	40	1,050	16	1.6	2,030
MIN	0	.41	.31	.73	2.5	1.2	.83	.15	.18	.51	.41	.33
CFSM	.13	.34	.04	.64	1.07	1.31	3.00	.05	1.47	.03	.01	2.30
IN.	.15	.38	.05	.74	1.12	1.51	3.34	.05	1.63	.03	.01	2.57
AC-FT	610	1,570	205	3,060	4,620	6,250	13,840	225	6,760	124	53	10,650

CAL YR 1972 TOTAL 1,587.60 MEAN 4.34 MAX 216 MIN 0 CFSM .06 IN .76 AC-FT 3,150
WTR YR 1973 TOTAL 24,181.30 MEAN 66.3 MAX 4,070 MIN 0 CFSM .85 IN 11.58 AC-FT 47,960

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2- 8	1000	15.67	2,210	9- 6	1215	15.39	2,650
3-10	2015	15.77	2,410	9-27	1500	15.74	2,350
4-24	0600	16.78	4,810				

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 (3.9 km) upstream from Dry Creek, 6.2 miles (10.0 km) upstream from Bearpen Creek, and 7 miles (11 km) southwest of Quinlan.

DRAINAGE AREA.--78.7 mi² (204 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 461.40 ft (140.63 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 60.0 ft³/s (1.70 m³/s), 10.35 in/yr (262.9 mm/yr), 43,470 acre-ft/yr (53.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,700 ft³/s (303 m³/s) Apr. 24, gage height, 16.59 ft (5.06 m); no flow for many days.
Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) May 7, 1969, gage height, 16.93 ft (5.16 m); no flow at times each year.
Maximum stage since at least 1890, 21 ft (6 m) July 29, 1902, from information by local resident. Flood of Apr. 27, 1957, reached a stage of 17.76 ft (5.41 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	220	.19	.40	879	4.6	.80	162	.6	.16		0
2	0	394	.14	.41	37	32	.67	380	.6	.07		0
3	0	19	.14	247	10	11	1.2	12	730	.03		0
4	0	6.0	.11	66	5.7	6.7	1.1	4.8	4,600	.01		0
5	0	2.7	.11	11	3.8	5.1	.52	3.0	3,370	0		0
6	0	1.2	.09	6.9	2.9	3.6	.35	3.5	1,150	0		19
7	0	.62	.07	326	98	8.3	.44	5.8	39	0		295
8	0	.44	.07	121	2,380	4.0	.59	2.6	12	6.4		20
9	0	1.3	.09	11	96	2.4	.63	1.5	7.2	3.2		3.3
10	0	.62	.15	5.1	19	1,040	.46	.80	5.1	1.8		.98
11	0	.31	.27	3.8	11	253	.35	.58	25	35		211
12	0	.19	33	3.0	7.4	16	.28	428	48	3.6		588
13	0	176	111	2.5	5.9	8.1	.28	23	366	2.0		529
14	0	28	176	4.1	4.0	17	.42	4.9	1,230	1.6		199
15	0	8.5	334	11	2.6	8.5	8.4	2.0	72	348		11
16	0	3.6	24	9.7	1.8	4.7	576	.92	11	512		4.6
17	0	1.7	8.9	6.7	1.4	2.9	29	.54	5.6	224		2.0
18	0	68	5.2	5.5	1.2	2.1	10	.35	3.3	31		.82
19	0	51	4.1	3.8	1.0	1.6	921	.25	2.4	6.5		.43
20	0	11	3.2	2.6	.76	1.2	166	.18	124	2.4		.24
21	0	5.1	2.8	224	.65	1.0	13	.15	26	1.0		.11
22	0	5.0	1.8	32	.63	.85	18	.10	4.4	.52		.04
23	0	3.9	1.3	9.0	3.5	.87	148	.08	2.2	.26		.01
24	0	2.5	.90	3.9	2.6	328	5,360	.25	1.6	.08		.03
25	0	3.2	.59	346	2.0	92	672	375	1.0	.01		.05
26	4.0	3.8	.43	1,530	4.3	12	28	412	.9	0		.49
27	2.4	2.4	.34	106	13	5.3	11	17	.5	0		3,420
28	.36	1.3	.27	22	5.6	3.4	5.2	4.5	.4	0		1,290
29	1.3	.72	.29	7.6	------	2.4	3.3	1.6	.3	0		75
30	31	.35	.47	4.8	------	1.7	2.8	.87	.2	0		14
31	79	------	.67	103	------	1.4	------	.65	------	0		------
TOTAL	118.06	1,022.45	710.69	3,235.81	3,600.74	1,881.72	7,879.79	1,848.92	11,839.2	1,179.64	0	6,684.10
MEAN	3.81	34.1	22.9	104	129	60.7	263	59.6	395	38.1	0	223
MAX	79	394	334	1,530	2,380	1,040	5,360	428	4,600	512	0	3,420
MIN	0	.19	.07	.40	.63	.85	.28	.08	.20	0	0	0
CFSM	.05	.43	.29	1.32	1.64	.77	3.34	.76	5.02	.48	0	2.83
IN.	.06	.48	.34	1.53	1.70	.89	3.72	.87	5.60	.56	0	3.16
AC-FT	234	2,030	1,410	6,420	7,140	3,730	15,630	3,670	23,480	2,340	0	13,260

CAL YR 1972 TOTAL 3,063.52 MEAN 8.3 MAX 507 MIN 0 CFSM .11 IN 1.45 AC-FT 6,080
WTR YR 1973 TOTAL 40,001.12 MEAN 110 MAX 5,360 MIN 0 CFSM 1.40 IN 18.91 AC-FT 79,340

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-26	0315	15.22	2,320	4-24	1030	16.59	10,700
2- 8	0715	15.58	3,980	6- 4	0545	16.22	8,140
3-10	1500	15.19	2,220	9-27	1245	15.85	5,600
4-19	1515	15.13	2,040				

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 (229 m) upstream from bridge on Farm Road 47, 3 miles (4.8 km) upstream from McBee Creek, 9.0 miles (14.5 km) northeast of Wills Point, and at mile 514.5 (827.8 km).

DRAINAGE AREA.--756 mi² (1,958 km²).

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, 1,045,000 acre-ft (1,290 hm³) Apr. 25, elevation, 440.42 ft (134.24 m); minimum, 802,700 acre-ft (990 hm³) Oct. 21, elevation, 433.65 ft (132.18 m).
Period of record: Maximum contents, 1,130,000 acre-ft (1,390 hm³) May 1, 1966, elevation, 442.58 ft (134.90 m); minimum since lake first filled in May 1965, 802,700 acre-ft (990 hm³) Oct. 21, 1972, elevation, 433.65 ft (132.18 m).

REMARKS.--Lake is formed by a rolled earthfill dam, 29,560 ft (9,010 m) long including a 480-foot (146-meter) uncontrolled concrete gravity spillway with ogee weir section. Outlet works consist of two 4- by 6-foot (1.2- by 1.8-meter) sluice gates and two 20-inch (508-millimeter) 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 49,050 acre-ft (60.5 hm³) of water for municipal use in the Trinity River Basin, the city of Greenville diverted 1,940 acre-ft (2.39 hm³), and that 19 other users in the Sabine River Basin diverted a total of 1,630 acre-ft (2.01 hm³). 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)

433.0	781,200	438.0	954,300
434.0	814,300	440.0	1,029,000
436.0	882,800	442.0	1,107,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	814.3	833.6	843.8	854.1	906.8	935.9	956.9	995.0	945.3	947.1	931.2	904.0
2	814.3	839.7	843.4	855.1	907.6	936.6	956.9	988.7	945.3	945.6	929.7	904.7
3	813.3	841.4	845.8	858.2	907.6	938.8	955.4	983.9	959.9	944.9	928.3	904.4
4	812.7	841.1	843.4	860.3	907.6	937.7	951.8	979.1	990.1	943.5	927.2	904.7
5	811.7	841.4	850.3	861.3	907.6	938.1	950.3	975.0	1,015	943.5	926.1	915.7
6	811.0	841.4	843.4	861.0	907.6	938.8	950.0	971.3	1,020	942.0	925.4	924.3
7	810.4	841.4	842.1	866.9	914.6	938.8	948.5	970.6	1,013	941.3	924.0	933.0
8	809.4	841.4	843.1	868.9	933.4	938.8	954.3	968.0	1,004	940.9	923.2	935.5
9	809.0	841.4	843.8	868.6	939.5	938.8	947.1	965.0	997.7	940.6	922.5	937.7
10	809.0	841.4	843.8	868.9	940.6	976.5	944.2	962.4	989.8	940.6	921.8	937.3
11	808.7	840.7	843.8	870.0	939.9	986.8	943.5	962.8	987.9	940.6	921.1	938.8
12	808.7	840.7	845.1	867.2	939.9	985.0	942.8	968.4	984.6	939.9	920.3	939.1
13	808.0	849.2	846.1	867.6	939.9	981.6	942.4	966.5	982.4	939.1	919.6	941.7
14	807.7	844.1	853.4	867.6	939.9	978.0	943.8	963.9	982.0	938.8	918.9	941.7
15	806.7	843.8	855.8	867.6	938.1	974.6	951.4	960.2	982.0	939.9	917.5	940.6
16	806.4	843.8	855.4	867.6	936.2	971.7	956.5	958.0	978.3	940.2	916.4	940.6
17	805.7	843.1	854.8	868.9	936.2	967.2	958.4	956.5	974.6	941.7	915.7	939.9
18	805.4	847.5	854.4	868.9	936.2	963.6	956.5	954.7	970.9	941.7	915.3	938.1
19	804.4	848.2	855.4	868.9	936.2	963.9	968.0	953.2	968.7	940.6	914.6	937.0
20	803.7	847.2	856.5	868.9	935.2	960.2	975.0	952.2	966.9	939.9	913.9	936.2
21	802.7	848.5	856.1	868.9	934.4	957.7	973.2	950.7	964.3	938.8	913.2	935.5
22	810.0	847.5	854.8	868.9	934.8	955.4	971.7	949.6	961.7	937.3	912.2	935.2
23	809.4	847.2	855.8	868.9	934.4	955.8	975.7	948.9	959.9	936.2	910.7	934.4
24	807.4	847.2	854.4	871.0	934.1	973.2	1,032	948.9	957.6	935.9	909.7	933.7
25	806.7	848.2	855.4	876.6	934.1	975.4	1,045	950.7	955.8	935.5	908.6	933.0
26	817.7	845.8	854.1	886.7	935.2	969.5	1,036	950.7	953.2	934.1	907.9	937.0
27	819.4	847.5	853.4	893.0	934.8	966.5	1,021	952.5	951.8	932.6	906.5	950.7
28	819.7	845.8	852.7	893.4	934.4	964.7	1,010	948.9	950.3	933.7	906.5	970.9
29	822.5	845.5	855.1	893.4	------	962.8	1,003	947.8	948.9	933.4	905.8	975.0
30	824.1	844.8	854.8	893.4	------	960.6	995.8	946.4	948.2	933.4	905.1	972.4
31	827.2	------	854.4	896.2	------	959.9	------	945.6	------	932.6	904.7	------
(†)	434.38	434.90	435.18	436.38	437.45	438.15	439.12	437.76	437.83	437.40	436.62	438.49
(≠)	+10.80	+17.60	+10.00	+41.80	+38.20	+25.50	+35.90	-50.20	+2.60	-15.60	-27.90	+67.70
(††)	4.11	1.35	4.57	3.10	3.10	5.12	4.79	5.61	4.65	5.71	6.53	3.98
MAX	827.2	849.2	856.5	896.2	940.6	986.8	1,045	995.0	1,020	947.1	931.2	975.0
MIN	802.7	833.6	842.1	854.1	906.8	935.9	942.4	945.6	945.3	932.6	904.7	904.0

CAL YR 1972..... ≠ -103.2 †† 52.62 MAX 968.0 MIN 802.7
WTR YR 1973..... ≠ +156.0 †† 52.62 MAX 1,045 MIN 802.7

† 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 (229 m) downstream from Iron Bridge Dam which forms Lake Tawakoni, 3.0 miles (4.8 km) upstream from McBee Creek, 9.0 miles (14.5 km) northeast of Wills Point, and at mile 514.3 (827.5 km).

DRAINAGE AREA.--756 mi² (1,958 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft (112.78 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 7,350 ft³/s (208 m³/s) Apr. 25, gage height, 16.99 ft (5.18 m); no flow Oct. 1, 2, 4-18, 20, 21, 23.
Period of record: Maximum discharge, 13,600 ft³/s (385 m³/s) Dec. 11, 1971, gage height, 18.5 ft (5.6 m), from graph based on gage readings; no flow in October 1971 and October 1972.
Maximum discharge since construction of Iron Bridge Dam in 1960, about 21,000 ft³/s (595 m³/s) May 1, 1966, from theoretical rating curve of flow over dam 750 ft (229 m) upstream.

REMARKS.--Records good. Flow regulated by Lake Tawakoni (see station 08017400).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	10	.19	.02	13	.4	867	2,830	134	216	73	.28
2	0	32	.24	2.4	30	29	746	2,800	160	180	66	.28
3	4.2	.37	.95	.46	.49	11	908	2,480	295	154	4.0	.19
4	0	.28	.67	.09	.21	108	890	2,180	2,140	127	.30	.19
5	0	.28	17	.13	.28	19	477	1,910	4,250	126	.62	20
6	0	.28	15	.37	4.4	45	345	1,750	5,230	115	.84	160
7	0	6.2	.19	12	44	46	344	1,630	5,010	91	5.0	110
8	0	.28	.25	15	571	30	545	1,380	4,240	78	3.1	14
9	0	.38	.08	.47	454	45	918	1,140	3,610	70	1.7	31
10	0	1.6	2.1	2.1	64	769	412	994	3,090	64	1.8	79
11	0	.27	.32	.19	15	2,520	125	918	2,760	102	1.7	71
12	0	1.4	5.3	.19	13	2,700	111	1,220	2,640	61	1.5	61
13	0	8.5	.28	.12	107	2,420	115	1,260	2,430	42	1.5	103
14	0	20	1.1	.19	433	2,250	112	1,090	2,310	35	5.1	281
15	0	3.1	25	.19	215	2,110	173	956	2,360	61	.99	144
16	0	.27	.29	3.8	74	2,150	828	826	2,170	67	12	94
17	0	.19	.03	.30	16	1,680	848	734	1,900	83	.96	200
18	0	.46	.02	.28	.49	1,370	805	604	1,630	95	.95	110
19	.11	2.5	2.9	.28	9.6	1,230	968	526	1,410	83	.84	20
20	0	.20	.21	.31	116	1,290	1,840	463	1,320	82	.84	15
21	0	4.6	6.3	.52	5.2	911	1,960	385	1,180	86	3.6	11
22	.74	.55	.08	.29	22	776	1,810	329	1,010	74	.64	4.6
23	0	.19	.02	3.7	30	709	1,800	308	904	55	.46	1.2
24	4.5	.22	1.4	.31	.45	1,510	3,630	274	803	53	.46	.37
25	.01	5.7	.02	1.7	.39	2,160	6,910	371	700	50	.37	.19
26	4.4	.22	.36	93	75	1,960	6,910	403	591	49	.37	.19
27	4.8	.26	.02	22	14	1,540	5,550	626	494	34	.28	137
28	.01	3.8	.02	289	.12	1,340	4,420	655	412	6.6	.28	1,280
29	.19	.28	.04	26	------	1,160	3,690	293	321	13	5.2	2,190
30	.01	.20	.08	3.9	------	1,000	3,180	203	257	12	.28	1,940
31	.01	------	.02	.55	------	982	------	162	------	30	.28	------
TOTAL	18.98	104.58	80.48	479.86	2,327.63	34,870.4	52,237	31,700	55,761	2,394.6	194.96	7,078.49
MEAN	.61	3.49	2.60	15.5	83.1	1,125	1,741	1,023	1,859	77.2	6.29	236
MAX	4.8	32	25	289	571	2,700	6,910	2,830	5,230	216	73	2,190
MIN	0	.19	.02	.02	.12	.40	111	162	134	6.6	.28	.19
AC-FT	38	207	160	952	4,620	69,170	103,600	62,880	110,600	4,750	387	14,040

CAL YR 1972 TOTAL 21,765.57 MEAN 59.5 MAX 1,780 MIN 0 AC-FT 43,170
WTR YR 1973 TOTAL 187,247.98 MEAN 513 MAX 6,910 MIN 0 AC-FT 371,400

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 (6.0 km) upstream from Sandy Creek, 7.2 miles (11.6 km) south of Emory, 12.3 miles (19.8 km) downstream from McBee Creek, 13.8 miles (22.2 km) downstream from Lake Tawakoni, and at mile 500.7 (805.6 km).

DRAINAGE AREA.--888 mi² (2,300 km²), including Little and Yellow Steer Sloughs.

PERIOD OF RECORD.--July 1952 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 350.28 ft (106.77 m) above mean sea level (Texas Reclamation Department bench mark).

AVERAGE DISCHARGE.--7 years (1952-59) prior to regulation by Lake Tawakoni, 547 ft³/s (15.5 m³/s), 396,300 acre-ft/yr (489 hm³/yr); 14 years (1959-73) after regulation by Lake Tawakoni, 436 ft³/s (12.3 m³/s), 315,900 acre-ft/yr (390 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,830 ft³/s (278 m³/s) Apr. 25, gage height, 15.32 ft (4.67 m); no flow at times.
Period of record: Maximum discharge, 74,000 ft³/s (2,100 m³/s) Apr. 27, 1957, gage height, 25.06 ft (7.64 m), from rating curve extended above 47,000 ft³/s (1,330 m³/s); no flow at times. Maximum discharge since construction of Lake Tawakoni dam in 1960, 24,900 ft³/s (705 m³/s) May 1, 1966, gage height, 18.38 ft (5.60 m).
Maximum stage since at least 1900, 25.7 ft (7.83 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	114	1.7	.72	99	8.5	1,120	4,400	275	316	65	0
2	.34	752	1.8	.97	126	12	968	3,820	325	272	116	.2
3	.93	353	1.3	91	55	21	848	3,630	418	231	102	24
4	0	93	.83	438	20	34	1,040	3,180	3,030	199	27	65
5	0	35	.75	111	6.0	81	916	2,760	7,170	175	5.3	52
6	0	14	.55	50	3.4	33	517	2,430	8,820	175	2.1	935
7	0	7.0	9.4	200	7.3	71	436	2,140	7,040	155	1.1	1,490
8	0	3.9	10	799	1,340	51	427	1,950	6,480	130	.71	635
9	0	4.6	5.5	158	2,000	32	779	1,750	5,730	115	2.5	164
10	0	2.6	3.9	48	648	556	878	1,510	4,920	103	2.3	160
11	0	1.4	3.5	26	92	2,670	367	1,300	4,120	109	1.4	150
12	0	.91	39	15	41	2,960	214	1,420	3,890	119	.70	153
13	0	2.7	207	8.5	25	3,030	210	1,910	3,540	79	.42	156
14	0	17	153	5.9	204	2,770	216	1,680	3,080	60	.22	233
15	0	67	787	3.9	298	2,500	454	1,430	3,010	58	.13	368
16	0	32	349	2.9	158	2,340	2,980	1,210	2,860	83	.04	193
17	0	15	74	2.1	57	2,290	2,860	965	2,690	88	6.3	155
18	0	14	31	2.6	16	1,920	1,400	797	2,360	98	3.6	289
19	0	15	17	1.6	2.7	1,570	1,020	650	2,030	103	1.3	138
20	0	9.7	9.6	5.3	45	1,390	1,290	566	1,810	88	.73	52
21	0	17	7.5	96	66	1,360	1,690	512	1,660	94	.55	30
22	0	15	5.1	93	9.1	1,100	1,930	452	1,510	91	.36	18
23	.25	11	5.9	46	11	853	1,930	426	1,330	75	.15	13
24	.02	9.1	3.5	22	15	1,770	6,090	392	1,120	57	.48	12
25	0	7.1	2.1	44	4.4	4,680	9,420	443	919	61	.64	6.6
26	4.7	4.1	1.4	1,030	2.4	2,750	8,770	546	754	58	.46	4.0
27	352	2.5	1.1	808	51	2,200	8,270	593	609	57	.28	391
28	255	3.3	.99	184	21	1,770	6,920	765	513	39	.10	1,370
29	104	3.0	.77	191	------	1,520	5,970	633	435	11	.03	1,560
30	166	1.9	1.0	50	------	1,360	5,210	386	364	17	.01	1,720
31	104	------	.92	21	------	1,220	------	316	------	16	0	------
TOTAL	987.24	1,627.81	1,736.11	4,555.49	5,423.3	44,922.5	75,140	44,962	82,812	3,332	341.91	10,536.8
MEAN	31.8	54.3	56.0	147	194	1,449	2,505	1,450	2,760	107	11.0	351
MAX	352	752	787	1,030	2,000	4,680	9,420	4,400	8,820	316	116	1,720
MIN	0	.91	.55	.72	2.4	8.5	210	316	275	11	0	0
AC-FT	1,960	3,230	3,440	9,040	10,760	89,100	149,000	89,180	164,300	6,610	678	20,900

CAL YR 1972 TOTAL 31,694.08 MEAN 86.6 MAX 2,460 MIN 0 AC-FT 62,870
WTR YR 1973 TOTAL 276,377.16 MEAN 757 MAX 9,420 MIN 0 AC-FT 548,200

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 (0.5 km) downstream from Texas and Pacific Railway Co. bridge, 1.7 miles (2.7 km) upstream from mouth, and 5.5 miles (8.8 km) east of Grand Saline.

DRAINAGE AREA.--91.4 mi² (237 km²).

PERIOD OF RECORD.--January 1968 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 325.5 ft (99.2 m) above mean sea level (Texas Highway Department bench mark).

AVERAGE DISCHARGE.--5 years, 61.8 ft³/s (1.75 m³/s), 9.18 in/yr (233.2 mm/yr), 44,770 acre-ft/yr (55.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,850 ft³/s (222 m³/s) June 4, gage height, 13.05 ft (3.98 m); minimum, 0.14 ft³/s (3.96 dm³/s) Oct. 15, 16.
Period of record: Maximum discharge, 7,850 ft³/s (222 m³/s) June 4, 1973, gage height, 13.05 ft (3.98 m); maximum gage height, 16.62 ft (5.07 m) Dec. 10, 1971 (backwater from Sabine River); no flow at times in 1969-71.
Maximum stage since about 1945, 16.62 ft (5.07 m) Dec. 10, 1971 (backwater from Sabine River). Flood in April 1957 reached a stage of 15.9 ft (4.8 m), from information by local residents.

REMARKS.--Records good except those for periods of backwater, which are fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	35	11	18	83	21	38	13	3.4	2.9	2.0	1.5
2	.38	97	9.4	19	54	33	29	7.8	220	2.3	1.9	1.1
3	.24	28	9.4	46	42	30	24	7.3	175	2.0	1.9	.94
4	.18	22	8.7	61	35	29	22	7.0	3,910	1.8	1.9	.94
5	.16	12	9.1	43	29	28	20	7.0	4,830	1.6	1.9	80
6	.16	8.7	8.4	38	27	35	19	7.8	2,290	1.5	1.9	224
7	.18	19	35	110	28	54	20	9.1	588	1.5	2.0	57
8	.18	28	12	191	494	34	32	8.4	177	1.4	2.0	27
9	.18	26	9.7	110	72	87	85	7.6	52	1.4	2.1	16
10	.18	19	10	68	45	1,470	42	7.0	29	1.4	2.2	9.7
11	.18	13	15	35	38	427	34	6.8	20	1.9	2.1	6.8
12	.18	10	61	31	33	145	22	40	21	3.5	2.1	4.3
13	.18	24	100	29	28	114	18	32	14	3.4	2.1	3.9
14	.16	30	129	28	24	100	24	9.4	9.1	2.9	2.0	5.7
15	.14	20	383	27	20	94	133	10	8.4	2.8	2.4	8.1
16	.16	19	306	25	17	110	3,160	9.7	7.8	4.4	2.3	7.6
17	.24	14	146	24	15	118	1,360	8.4	7.3	3.5	2.3	5.8
18	.29	51	48	24	14	91	339	7.8	6.8	2.6	2.1	3.9
19	.35	99	35	24	14	70	145	7.3	6.3	2.1	1.9	3.5
20	.35	42	31	22	13	56	114	6.3	5.8	1.9	1.8	3.0
21	.42	31	28	63	12	46	108	5.8	5.4	1.6	1.6	2.6
22	8.9	25	26	51	12	38	102	5.2	5.2	1.5	1.4	2.3
23	13	19	24	38	17	32	126	4.8	5.0	1.4	1.1	2.1
24	4.2	16	22	30	20	872	441	4.8	4.6	1.4	1.2	2.0
25	1.3	20	20	60	19	1,620	4,030	5.4	4.3	1.5	2.1	2.0
26	18	24	19	447	23	756	1,340	7.3	3.9	1.5	2.1	2.1
27	83	20	18	443	25	219	425	7.8	3.8	1.5	2.1	2.4
28	19	16	17	245	21	114	185	5.6	3.5	3.3	2.2	2.9
29	13	13	17	90	------	86	72	3.9	3.4	2.9	2.6	3.9
30	14	11	18	38	------	66	29	3.4	3.0	2.5	1.9	4.3
31	10	------	18	33	------	50	------	3.2	------	2.2	2.0	------
TOTAL	189.83	811.7	1,603.7	2,511	1,274	7,045	12,538	276.9	12,423.0	68.1	61.2	497.38
MEAN	6.12	27.1	51.7	81.0	45.5	227	418	8.93	414	2.20	1.97	16.6
MAX	83	99	383	447	494	1,620	4,030	40	4,830	4.4	2.6	224
MIN	.14	8.7	8.4	18	12	21	18	3.2	3.0	1.4	1.1	.94
CFSM	.07	.30	.57	.89	.50	2.48	4.57	.10	4.53	.02	.02	.18
IN.	.08	.33	.65	1.02	.52	2.87	5.10	.11	5.06	.03	.02	.20
AC-FT	377	1,610	3,180	4,980	2,530	13,970	24,870	549	24,640	135	121	987

CAL YR 1972 TOTAL 8,510.79 MEAN 23.3 MAX 1,300 MIN .11 CFSM .25 IN 3.46 AC-FT 16,880
WTR YR 1973 TOTAL 39,299.81 MEAN 108 MAX 4,830 MIN .14 CFSM 1.18 IN 16.00 AC-FT 77,950

PEAK DISCHARGE (BASE, 900 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-10	0400	10.65	1,620	4-25	1300	12.95	7,350
3-25	0700	10.87	1,870	6- 4	1900	13.05	7,850
4-16	1400	12.15	4,250				

NOTE.--Backwater from Sabine River Jan. 28-30, Feb. 8-12, Mar. 11-23, Mar. 26 to Apr. 4, Apr. 17 to May 18, June 6-26, Sept. 8, 9, 30.

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 (5.6 km) south of Mineola, 4.5 miles (7.2 km) upstream from Missouri Pacific Railway Lines bridge, 16.2 miles (26.1 km) upstream from Lake Fork Creek, and at mile 461.1 (741.9 km).

DRAINAGE AREA.--1,357 mi² (3,515 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 304.16 ft (92.71 m) above mean sea level. May 12, 1939, to Dec. 11, 1955, at site 55 ft (17 m) 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 ft³/s (29.8 m³/s), 763,600 acre-ft/yr (942 hm³/yr); 6 years (1967-73) regulated, 1,038 ft³/s (29.4 m³/s), 752,000 acre-ft/yr (927 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,900 ft³/s (507 m³/s) June 7, gage height, 18.86 ft (5.75 m); maximum gage height, 18.95 ft (5.78 m) Apr. 26; minimum discharge, 3.3 ft³/s (93 dm³/s) Aug. 25.
Period of record: Maximum discharge, 76,000 ft³/s (2,150 m³/s) Apr. 1, 1945, gage height, 24.00 ft (7.32 m); maximum gage height, 24.37 ft (7.43 m) 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 (85 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	228	61	73	671	203	2,000	5,500	345	367	28	6.7
2	18	319	56	77	580	204	1,590	4,620	358	311	25	5.8
3	18	458	53	137	494	252	1,350	4,060	610	281	25	5.2
4	18	604	51	286	414	286	1,190	3,740	2,410	249	76	4.9
5	17	581	46	391	307	279	1,040	3,580	6,520	220	82	97
6	17	334	43	557	213	318	945	3,450	14,400	202	49	420
7	17	181	42	524	158	394	908	3,210	17,200	182	29	660
8	17	187	45	632	496	375	740	2,910	13,100	182	21	838
9	17	137	59	876	1,290	346	700	2,580	8,940	157	15	1,100
10	17	95	65	1,070	1,740	1,150	748	2,270	7,360	132	12	1,180
11	17	69	87	990	2,180	3,800	786	2,000	6,100	118	9.6	752
12	17	65	179	568	2,310	4,700	826	1,850	5,150	110	8.7	360
13	17	89	366	278	1,750	4,300	589	1,620	4,460	120	7.4	220
14	16	154	485	173	968	3,790	344	1,430	3,940	121	6.5	222
15	16	142	794	147	392	3,720	369	1,400	3,670	96	6.1	199
16	16	127	1,130	134	327	3,760	3,240	1,460	3,440	81	6.8	249
17	16	136	1,230	120	346	3,730	7,180	1,440	3,130	83	8.1	278
18	16	163	1,200	117	294	3,460	7,900	1,340	2,890	109	15	190
19	17	296	878	112	208	3,020	6,760	1,190	2,660	117	9.8	148
20	17	296	443	110	147	2,620	4,800	980	2,490	115	7.6	186
21	18	210	238	249	120	2,270	3,560	746	2,270	114	6.0	127
22	35	190	152	364	129	1,900	2,710	533	2,040	99	5.0	62
23	50	161	126	496	169	1,560	2,770	410	1,780	97	4.1	39
24	51	124	111	470	149	2,220	3,880	359	1,540	95	3.7	32
25	33	110	100	347	144	3,690	11,700	334	1,380	82	3.4	32
26	41	115	89	592	152	3,840	15,300	324	1,240	64	3.6	26
27	163	112	79	1,130	169	4,150	11,600	353	1,080	57	4.0	27
28	238	91	72	1,400	176	4,340	8,440	400	874	59	8.3	55
29	300	78	70	1,620	------	3,790	7,180	446	644	57	14	419
30	314	67	73	1,490	------	3,140	6,520	510	459	57	8.5	850
31	227	------	75	1,060	------	2,490	------	477	------	39	7.2	------
TOTAL	1,810	5,919	8,498	16,590	16,493	74,097	117,665	55,522	122,480	4,173	515.4	8,790.6
MEAN	58.4	197	274	535	589	2,390	3,922	1,791	4,083	135	16.6	293
MAX	314	604	1,230	1,620	2,310	4,700	15,300	5,500	17,200	367	82	1,180
MIN	16	65	42	73	120	203	344	324	345	39	3.4	4.9
AC-FT	3,590	11,740	16,860	32,910	32,710	147,000	233,400	110,100	242,900	8,280	1,020	17,440

CAL YR 1972 TOTAL 84,395.81 MEAN 231 MAX 4,520 MIN 0 AC-FT 167,400
WTR YR 1973 TOTAL 432,553.00 MEAN 1,185 MAX 17,200 MIN 3.4 AC-FT 858,000

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 (0.5 km) downstream from Dry Creek, 2.4 miles (3.9 km) south of Quitman, and 23.4 miles (37.7 km) upstream from mouth.

DRAINAGE AREA.--585 mi² (1,515 km²).

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 (96.75 m) above mean sea level. June 27, 1924, to Apr. 30, 1926, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

AVERAGE DISCHARGE.--35 years (1924-25, 1939-73), 427 ft³/s (12.1 m³/s), 9.91 in/yr (251.7 mm/yr), 309,400 acre-ft/yr (381 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,400 ft³/s (436 m³/s) Apr. 25, gage height, 19.8 ft (6.04 m); minimum, 0.42 ft³/s (12 dm³/s) Oct. 8, Aug. 25.
Period of record: Maximum discharge, 75,600 ft³/s (2,140 m³/s) Mar. 30, 1945, gage height, 29.85 ft (9.10 m), from floodmark, from rating curve extended above 49,000 ft³/s (1,390 m³/s); 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 (7.9 m), from information by local resident.

REMARKS.--Records good. No large diversion above station. At end of year, flow from 51.8 mi² (134 km²) above this station was partly controlled by 18 floodwater-retarding structures with a total combined capacity of 19,550 acre-ft (24.1 hm³) below the flood-spillway crests, of which 17,700 acre-ft (21.8 hm³) is floodwater-retarding capacity and 1,850 acre-ft (2.28 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	579	59	70	859	272	562	921	23	14	6.6	.54
2	1.1	714	46	85	778	293	478	580	80	13	5.1	.54
3	.77	870	43	124	895	422	454	433	267	11	3.8	.61
4	.65	956	39	242	1,040	580	235	381	1,440	9.4	2.9	.54
5	.58	1,080	43	307	1,090	732	168	410	3,950	9.0	2.4	29
6	.51	1,090	61	468	716	776	143	316	6,610	11	2.2	102
7	.45	700	35	580	360	923	144	208	6,290	11	2.2	108
8	.45	299	38	650	750	970	159	165	3,410	11	1.9	239
9	.58	260	48	788	1,500	842	283	145	2,540	9.9	1.5	382
10	.58	330	55	897	3,000	1,720	396	108	1,930	10	1.0	566
11	.65	228	129	1,040	3,920	7,530	317	81	1,180	21	3.3	744
12	.95	95	254	870	2,090	7,700	257	84	736	75	.98	650
13	1.4	74	455	488	1,300	5,040	168	143	494	154	.90	350
14	2.0	117	809	223	802	2,760	197	250	312	78	.68	161
15	2.6	279	1,020	188	413	1,670	651	382	242	48	3.7	110
16	2.6	593	1,470	168	247	1,330	4,850	443	168	58	1.8	159
17	2.6	561	2,020	160	185	1,110	6,890	244	117	46	1.1	90
18	3.0	422	2,020	143	143	888	5,020	101	76	138	.90	53
19	4.7	237	1,450	129	122	690	3,040	63	57	168	.85	35
20	8.1	237	937	136	108	419	2,120	48	49	78	1.0	25
21	3.6	338	509	171	100	260	1,700	39	51	49	.81	17
22	17	440	278	312	92	190	2,360	34	111	31	.68	14
23	66	371	201	441	105	159	2,960	30	225	22	.54	11
24	26	184	149	555	117	371	4,800	25	94	19	.48	6.8
25	74	136	112	712	126	3,310	13,300	28	53	17	.45	1.9
26	87	126	92	752	150	7,260	9,800	34	36	13	.54	7.2
27	219	105	79	1,070	194	4,570	5,160	42	28	9.2	.54	6.8
28	291	107	68	1,210	229	2,240	2,700	75	23	4.5	.48	29
29	354	98	64	2,000	------	1,590	1,790	59	19	5.6	.61	183
30	462	76	65	1,700	------	1,000	1,200	49	16	4.6	.61	515
31	523	------	72	1,200	------	736	------	30	------	4.6	.54	------
TOTAL	2,159.67	11,702	12,720	17,879	21,431	58,353	72,302	5,951	30,627	1,152.8	51.09	4,596.93
MEAN	69.7	390	410	577	765	1,882	2,410	192	1,021	37.2	1.65	153
MAX	523	1,090	2,020	2,000	3,920	7,700	13,300	921	6,610	168	6.6	744
MIN	.45	74	35	70	92	159	143	25	16	4.5	.45	.54
CFSM	.12	.67	.70	.99	1.31	3.22	4.12	.33	1.75	.06	.003	.26
IN.	.14	.74	.81	1.14	1.36	3.71	4.60	.38	1.95	.07	.003	.29
AC-FT	4,280	23,210	25,230	35,460	42,510	115,700	143,400	11,800	60,750	2,290	101	9,120

CAL YR 1972 TOTAL 68,742.72 MEAN 188 MAX 3,820 MIN 0 CFSM .32 IN 4.37 AC-FT 136,400
WTR YR 1973 TOTAL 238,925.49 MEAN 655 MAX 13,300 MIN .45 CFSM 1.12 IN 15.19 AC-FT 473,900

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-12	0900	18.2	9,540	4-25	1800	19.8	15,400
3-26	1000	17.6	7,700	6- 6	0700	17.3	6,860
4-17	1700	17.4	7,140				

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 (1.3 km) upstream from bridge on State Highway 37, 2.5 miles (4.0 km) upstream from Indian Creek, and 5.8 miles (9.3 km) southwest of Winnsboro.

DRAINAGE AREA.--27.1 mi² (70.2 km²).

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, 9,970 acre-ft (12.3 hm³) Apr. 24, elevation, 421.17 ft (128.37 m); minimum, 6,720 acre-ft (8.29 hm³) Oct. 18, elevation, 417.18 ft (127.16 m).
Period of record: Maximum contents, 10,020 acre-ft (12.4 hm³) May 7, 1969, elevation, 421.23 ft (128.39 m); minimum since first appreciable storage, 2,430 acre-ft (3.00 hm³) Jan. 19, 20, 1965, elevation, 409.79 ft (124.90 m).

REMARKS.--Lake is formed by a rolled earthfill dam 2,500 ft (762 m) 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 (6.1-meter) square drop-inlet structure, with crest elevation at 419.0 ft (127.7 m). The crest was raised in April 1966 from elevation 417 to 419 ft (127 to 128 m). Emergency spillway is a 300-foot (91.4-meter) 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)

417.0	6,590	420.0	8,940
418.0	7,330	421.0	9,820
419.0	8,110	422.0	10,740

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,880	7,320	7,680	8,170	8,430	8,260	8,340	8,340	8,110	7,950	7,690	7,160
2	6,880	7,390	7,680	8,170	8,390	8,300	8,300	8,270	8,220	7,940	7,660	7,150
3	6,860	7,410	7,680	8,220	8,340	8,330	8,260	8,250	8,390	7,940	7,640	7,150
4	6,860	7,410	7,680	8,240	8,310	8,330	8,230	8,220	9,100	7,920	7,600	7,100
5	6,860	7,420	7,680	8,240	8,290	8,340	8,210	8,200	8,970	7,920	7,600	7,390
6	6,840	7,420	7,660	8,240	8,260	8,730	8,210	8,220	8,790	7,900	7,600	7,400
7	6,820	7,430	7,640	8,320	8,370	8,770	8,220	8,190	8,600	7,900	7,570	7,400
8	6,810	7,460	7,710	8,340	8,730	8,670	8,300	8,180	8,450	7,890	7,560	7,400
9	6,800	7,460	7,740	8,310	8,640	8,680	8,340	8,170	8,370	7,870	7,540	7,400
10	6,800	7,450	7,770	8,270	8,560	9,020	8,300	8,170	8,310	7,960	7,520	7,390
11	6,790	7,450	7,830	8,260	8,490	8,810	8,300	8,170	8,270	7,950	7,510	7,370
12	6,780	7,460	7,990	8,230	8,460	8,620	8,270	8,180	8,250	7,940	7,500	7,360
13	6,780	7,510	8,100	8,220	8,410	8,510	8,270	8,170	8,240	7,900	7,490	7,380
14	6,770	7,520	8,230	8,220	8,360	8,420	8,280	8,140	8,230	7,890	7,460	7,350
15	6,750	7,520	8,390	8,220	8,310	8,370	8,880	8,110	8,220	7,930	7,440	7,340
16	6,740	7,530	8,340	8,220	8,290	8,410	9,260	8,100	8,180	7,920	7,440	7,320
17	6,730	7,510	8,300	8,210	8,260	8,390	8,970	8,090	8,180	7,920	7,420	7,310
18	6,730	7,560	8,270	8,210	8,240	8,350	8,770	8,090	8,140	7,910	7,410	7,300
19	6,750	7,590	8,270	8,200	8,240	8,320	8,670	8,090	8,120	7,890	7,400	7,290
20	6,750	7,590	8,260	8,240	8,220	8,300	8,600	8,070	8,120	7,870	7,380	7,280
21	6,760	7,610	8,230	8,280	8,210	8,270	8,530	8,070	8,100	7,850	7,370	7,270
22	6,850	7,620	8,210	8,290	8,210	8,260	8,490	8,060	8,090	7,830	7,310	7,250
23	6,870	7,620	8,210	8,250	8,210	8,240	8,640	8,040	8,060	7,820	7,300	7,250
24	6,860	7,640	8,180	8,230	8,220	9,590	9,910	8,030	8,060	7,810	7,280	7,250
25	6,840	7,670	8,180	8,330	8,220	9,160	9,300	8,050	8,040	7,780	7,260	7,250
26	6,990	7,680	8,160	8,520	8,240	8,820	8,910	8,050	8,030	7,760	7,250	7,230
27	7,010	7,680	8,150	8,480	8,250	8,640	8,650	8,080	8,020	7,750	7,230	7,250
28	7,030	7,680	8,150	8,390	8,250	8,520	8,510	8,070	8,000	7,730	7,210	7,310
29	7,140	7,680	8,190	8,340	------	8,440	8,430	8,060	7,980	7,730	7,210	7,290
30	7,220	7,680	8,180	8,300	------	8,390	8,360	8,050	7,960	7,730	7,200	7,280
31	7,260	------	8,180	8,340	------	8,380	------	8,050	------	7,710	7,180	------
(†)	417.91	418.45	419.08	419.28	419.17	419.33	419.31	418.92	418.81	418.50	417.81	417.94
(*)	+360	+420	+500	+160	-90	+130	-20	-310	-90	-250	-530	+100
MAX	7,260	7,680	8,390	8,520	8,730	9,590	9,910	8,340	9,100	7,960	7,690	7,400
MIN	6,730	7,320	7,640	8,170	8,210	8,240	8,210	8,030	7,960	7,710	7,180	7,100

CAL YR 1972..... * -50 MAX 8,870 MIN 6,730
WTR YR 1973..... * +380 MAX 9,910 MIN 6,730

† 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 (0.8 km) upstream from St. Louis Southwestern Railway Lines bridge, 1.6 miles (2.6 km) northeast of Big Sandy, and 6.5 miles (10.5 km) upstream from mouth.

DRAINAGE AREA.--231 mi² (598 km²).

PERIOD OF RECORD.--February 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 278.38 ft (84.85 m) 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 (2.1 km) upstream at datum 3.00 ft (0.91 m) higher.

AVERAGE DISCHARGE.--34 years, 177 ft³/s (5.01 m³/s), 128,200 acre-ft/yr (158 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,930 ft³/s (140 m³/s) Apr. 26, gage height, 17.09 ft (5.21 m); minimum, 14 ft³/s (0.396 m³/s) Oct. 16.
Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) Mar. 31, 1945, gage height, 24.1 ft (7.3 m), present site and datum, from floodmark, from rating curve extended above 13,000 ft³/s (368 m³/s); minimum, 5.0 ft³/s (142 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	134	80	104	366	134	492	608	103	51	44	28
2	28	196	73	104	375	148	401	510	270	48	37	29
3	24	292	61	134	301	152	348	419	304	45	36	29
4	21	246	54	152	265	164	295	354	950	44	36	29
5	19	182	50	148	259	160	252	307	1,480	44	35	150
6	18	152	48	154	284	262	214	275	1,980	47	34	390
7	18	171	48	177	278	574	220	248	2,100	53	35	226
8	18	141	60	214	337	494	212	219	1,550	84	34	163
9	18	112	79	199	347	406	225	197	1,070	61	37	132
10	18	91	120	187	281	432	209	180	766	56	34	114
11	17	73	108	185	296	584	202	165	579	82	33	107
12	15	53	121	192	390	542	216	195	480	97	32	100
13	15	96	143	195	498	892	255	194	445	74	32	100
14	15	89	152	185	419	1,170	281	173	427	65	32	124
15	15	86	207	169	334	1,020	322	161	418	62	30	114
16	15	86	200	155	270	1,150	2,430	158	390	64	29	96
17	17	72	217	145	229	787	2,510	161	328	86	30	75
18	15	117	230	137	204	622	3,320	149	280	75	39	62
19	16	189	226	129	182	524	1,860	128	233	67	42	53
20	19	152	223	122	165	464	1,110	105	195	59	33	44
21	20	131	216	136	150	417	859	91	165	52	32	38
22	46	118	200	139	141	358	676	81	152	47	32	32
23	53	120	175	172	141	294	624	74	133	43	30	30
24	46	113	153	176	134	468	1,550	72	113	41	29	32
25	37	116	135	163	127	946	2,610	93	96	40	28	110
26	49	101	126	233	130	1,190	4,500	101	83	39	27	114
27	112	88	117	244	137	2,290	2,700	107	78	38	27	118
28	92	78	109	237	134	1,460	1,420	112	76	35	27	184
29	82	71	105	239	------	950	970	106	65	101	27	135
30	92	74	125	245	------	706	747	102	55	89	29	104
31	111	------	118	278	------	581	------	105	------	63	28	------
TOTAL	1,115	3,740	4,079	5,449	7,174	20,341	32,030	5,950	15,364	1,852	1,010	3,062
MEAN	36.0	125	132	176	256	656	1,068	192	512	59.7	32.6	102
MAX	112	292	230	278	498	2,290	4,500	608	2,100	101	44	390
MIN	15	53	48	104	127	134	202	72	55	35	27	28
AC-FT	2,210	7,420	8,090	10,810	14,230	40,350	63,530	11,800	30,470	3,670	2,000	6,070

CAL YR 1972 TOTAL 35,443 MEAN 96.8 MAX 1,280 MIN 11 AC-FT 70,300
WTR YR 1973 TOTAL 101,166 MEAN 277 MAX 4,500 MIN 15 AC-FT 200,700

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-27	0800	14.65	2,500	4-26	1100	17.09	4,930
4-18	0500	16.03	3,610	6- 7	0300	14.28	2,230

08020000 Sabine River near Gladewater, Tex.

LOCATION.--Lat 32°31'37", long 94°57'36", Gregg County, on right bank 46 ft (14 m) downstream from bridge on U.S. Highway 271, 0.4 mile (0.6 km) downstream from Glade Creek, 1.2 miles (1.9 km) southwest of Gladewater, and at mile 397.5 (639.6 km).

DRAINAGE AREA.--2,791 mi² (7,229 km²).

PERIOD OF RECORD.--October 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 243.85 ft (74.33 m) 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, 2,012 ft³/s (57.0 m³/s), 1,458,000 acre-ft/yr (1,798 hm³/yr); 13 years (1960-73) regulated, 1,599 ft³/s (45.3 m³/s), 1,158,000 acre-ft/yr (1,428 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 26,300 ft³/s (745 m³/s) Apr. 29, gage height, 36.27 ft (11.06 m); minimum, 42 ft³/s (1.19 m³/s) Oct. 13, 14.
Period of record: Maximum discharge, 138,000 ft³/s (3,910 m³/s) Apr. 2, 1945, gage height, 44.16 ft (13.46 m), from floodmark, from rating curve extended above 91,000 ft³/s (2,580 m³/s) minimum, 5.6 ft³/s (159 dm³/s) 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 (12.7 m), discharge, 85,900 ft³/s (2,430 m³/s), 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 (1,200 hm³). 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. Revised figures of discharge, in cubic feet per second, in water year 1972, superseding figures published in WRD Texas 1972, are given below:

1972		1972--Con.	
Sept. 23	79	Sept. 27	200
24	373	28	143
25	301	29	121
26	238	30	122

Month	Ft³/s-days	Maximum	Minimum	Mean	Runoff in acre-ft
September 1972.....	2,047	373	15	68.2	4,060
WTR YR 1971-72.....	633,202.0	38,900	14	1,730	1,256,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	1,050	490	821	3,340	836	7,730	20,800	905	1,190	294	79
2	118	1,130	465	737	3,480	913	7,700	17,800	1,020	977	232	79
3	95	1,190	434	742	3,600	970	7,350	15,200	1,180	825	191	77
4	84	1,250	398	909	3,600	1,090	6,880	12,200	3,480	683	162	74
5	73	1,280	369	1,030	3,490	1,190	6,300	10,400	5,560	583	141	733
6	68	1,310	365	1,170	2,880	1,620	5,400	9,130	6,160	515	136	1,990
7	62	1,650	326	1,410	2,500	2,970	4,720	8,070	5,950	445	163	2,160
8	59	1,750	319	1,680	2,660	3,120	3,950	7,190	6,400	425	167	2,050
9	58	1,670	396	1,850	2,830	3,050	3,380	6,770	8,670	555	147	1,680
10	58	1,420	1,580	1,890	2,810	2,850	2,860	6,300	13,500	575	125	1,490
11	55	1,160	1,920	1,880	2,730	2,790	2,380	5,860	16,700	515	108	1,390
12	48	885	1,880	1,910	2,730	2,780	2,040	5,500	16,700	529	97	1,400
13	44	944	1,520	1,980	2,890	3,190	1,920	4,380	14,600	456	90	1,390
14	44	1,060	1,480	2,010	3,160	4,230	1,850	3,920	13,500	415	85	1,310
15	56	1,020	2,000	1,900	3,480	5,730	1,980	3,420	11,600	418	85	1,200
16	62	919	2,140	1,520	3,660	6,500	5,240	2,990	10,200	474	83	1,040
17	62	737	2,210	1,190	3,750	7,530	5,380	2,610	9,060	448	81	822
18	64	954	2,230	960	3,890	8,370	5,830	2,440	8,030	415	111	661
19	69	1,460	2,270	846	2,780	8,800	6,350	2,220	7,180	371	144	629
20	66	1,570	2,370	779	1,870	8,530	7,290	2,070	6,580	373	136	540
21	66	1,530	2,500	784	1,240	7,910	8,990	1,900	6,050	436	118	432
22	161	1,330	2,600	890	915	7,280	10,700	1,550	5,560	432	105	399
23	194	1,090	2,600	1,040	798	6,720	11,600	1,310	4,640	371	92	356
24	217	964	2,290	1,140	778	6,550	15,000	1,110	4,100	310	84	295
25	195	1,040	1,790	1,250	793	6,630	18,200	994	3,610	267	77	272
26	333	1,050	1,230	1,720	775	6,440	17,800	907	3,200	238	71	241
27	772	942	872	2,010	781	6,310	19,000	897	2,740	216	65	235
28	843	763	677	2,200	807	6,380	23,700	873	2,240	191	63	375
29	901	622	589	2,260	------	6,540	26,100	853	1,810	245	65	521
30	911	536	656	2,320	------	6,890	24,100	875	1,430	429	69	531
31	959	------	868	2,570	------	7,380	------	879	------	394	84	------
TOTAL	6,928	34,276	41,834	45,398	69,017	152,089	271,720	161,418	202,355	14,716	3,671	24,451
MEAN	223	1,143	1,349	1,464	2,465	4,906	9,057	5,207	6,745	475	118	815
MAX	959	1,750	2,600	2,570	3,890	8,800	26,100	20,800	16,700	1,190	294	2,160
MIN	44	536	319	737	775	836	1,850	853	905	191	63	74
AC-FT	13,740	67,990	82,980	90,050	136,900	301,700	539,000	320,200	401,400	29,190	7,280	48,500

CAL YR 1972 TOTAL 303,985 MEAN 831 MAX 8,330 MIN 14 AC-FT 603,000
WTR YR 1973 TOTAL 1,027,873 MEAN 2,816 MAX 26,100 MIN 44 AC-FT 2,039,000

08020200 Prairie Creek near Gladewater, Tex.

LOCATION.--Lat 32°28'45", long 94°57'14", Gregg County, on downstream side of bridge on State Highway 135, 0.7 mile (1.1 km) upstream from Little Caney Creek, 3.5 miles (5.6 km) upstream from mouth, and 4.0 miles (6.4 km) south of Gladewater.

DRAINAGE AREA.--48.9 mi² (127 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 280.95 ft (85.63 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--5 years, 30.6 ft³/s (0.87 m³/s), 8.50 in/yr (215.9 mm/yr), 22,170 acre-ft/yr (27.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,730 ft³/s (106 m³/s) Apr. 24, gage height, 9.84 ft (3.00 m); minimum, 0.58 ft³/s (16 dm³/s) Oct. 19.
Period of record: Maximum discharge, 4,030 ft³/s (114 m³/s) May 10, 1968, gage height, 9.91 ft (3.02 m); no flow at times.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	33	24	29	133	25	60	59	9.7	12	14	.96
2	5.0	34	23	28	265	36	47	55	11	11	11	.82
3	4.4	34	23	44	102	35	48	45	12	10	8.7	.82
4	4.0	22	22	57	56	42	53	34	95	9.5	7.5	.89
5	3.9	17	21	48	44	53	41	29	584	8.7	5.4	74
6	2.7	19	23	55	40	69	35	29	562	7.3	5.0	650
7	2.0	55	23	70	39	295	46	33	246	13	4.5	358
8	1.8	77	22	97	91	191	57	30	67	16	4.2	73
9	1.8	47	33	88	159	83	69	25	31	11	4.0	29
10	1.6	36	239	54	93	64	81	23	25	8.6	3.8	21
11	1.4	22	254	43	58	72	51	21	24	10	3.4	18
12	1.1	19	183	39	46	60	38	26	69	9.5	2.9	18
13	.96	72	145	36	43	43	37	30	232	8.6	2.7	17
14	.96	125	131	35	39	105	47	23	562	7.7	2.4	17
15	.82	79	188	33	34	627	63	19	251	7.3	2.2	15
16	.82	36	185	32	31	793	341	17	83	8.9	3.6	14
17	.82	36	97	31	29	378	410	16	43	12	2.7	12
18	.70	60	63	31	29	148	313	16	29	12	4.5	11
19	.96	142	53	32	28	85	212	15	24	7.8	4.0	11
20	3.0	119	49	29	27	64	108	15	61	6.3	3.2	11
21	2.0	60	44	37	26	52	97	14	83	5.4	2.8	11
22	24	41	39	45	26	45	87	12	35	4.8	2.2	9.9
23	41	33	35	33	31	41	101	11	25	5.9	1.8	9.5
24	13	33	32	27	32	318	1,170	11	21	6.7	1.5	9.7
25	18	59	30	31	28	1,010	1,200	13	18	6.2	1.4	17
26	59	66	28	80	26	262	442	17	17	5.7	1.2	16
27	190	44	27	124	30	106	167	18	15	5.4	1.1	13
28	217	32	26	75	27	70	98	17	14	6.5	1.0	43
29	80	27	26	47	------	60	77	13	13	23	.96	56
30	48	25	31	36	------	54	65	11	12	34	1.0	26
31	42	------	38	43	------	58	------	10	------	20	1.0	------
TOTAL	779.44	1,504	2,157	1,489	1,612	5,344	5,661	707	3,273.7	320.8	115.66	1,563.59
MEAN	25.1	50.1	69.6	48.0	57.6	172	189	22.8	109	10.3	3.73	52.1
MAX	217	142	254	124	265	1,010	1,200	59	584	34	14	650
MIN	.70	17	21	27	26	25	35	10	9.7	4.8	.96	.82
CFSM	.51	1.02	1.42	.98	1.18	3.52	3.87	.47	2.23	.21	.08	1.07
IN.	.59	1.14	1.64	1.13	1.23	4.07	4.31	.54	2.49	.24	.09	1.19
AC-FT	1,550	2,980	4,280	2,950	3,200	10,600	11,230	1,400	6,490	636	229	3,100

CAL YR 1972 TOTAL 8,683.54 MEAN 23.7 MAX 254 MIN .01 CFSM .48 IN 6.61 AC-FT 17,220
WTR YR 1973 TOTAL 24,527.19 MEAN 67.2 MAX 1,200 MIN .70 CFSM 1.37 IN 18.66 AC-FT 48,650

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-15	2130	8.50	1,180	6- 5	0330	8.27	727
3-24	2300	8.57	1,270	6-14	0600	8.23	683
4-16	1730	8.15	705	9- 6	0930	8.42	892
4-24	2100	9.84	3,730				

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 (0.6 km) upstream from Big Caney Creek, 4.4 miles (7.1 km) upstream from Peavine Creek, and 14 miles (23 km) upstream from mouth.

DRAINAGE AREA.--75.8 mi² (196 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 299.80 ft (91.38 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--10 years, 48.0 ft³/s (1.36 m³/s), 8.60 in/yr (218.4 mm/yr), 34,780 acre-ft/yr (42.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,200 ft³/s (119 m³/s) Apr. 25, gage height, 12.88 ft (3.93 m); minimum, 0.14 ft³/s (4.0 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 15,200 ft³/s (430 m³/s) Apr. 24, 1966, gage height, 16.40 ft (5.00 m); no flow at times in 1964, 1967-68, 1972.
Maximum stage since at least 1943, 19.6 ft (6.0 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	59	35	40	488	57	90	78	14	29	45	4.8
2	2.8	55	34	42	310	99	71	74	17	26	22	4.0
3	1.3	38	34	75	91	63	84	66	16	24	16	3.6
4	.76	30	34	71	69	88	78	58	1,190	22	13	3.8
5	.58	26	32	61	62	71	61	54	1,020	20	12	460
6	.52	24	40	81	58	193	58	58	806	20	11	775
7	.52	187	38	227	56	311	129	70	348	85	10	317
8	.47	80	40	178	316	109	113	57	84	104	9.8	67
9	.58	43	102	83	206	72	250	46	59	37	12	44
10	.52	33	435	62	90	84	111	42	52	27	11	33
11	.47	28	199	58	71	81	71	38	115	25	9.5	26
12	.34	26	140	56	65	58	63	61	323	25	8.0	27
13	.30	343	120	54	64	54	67	54	369	19	7.2	24
14	.24	183	180	53	58	226	75	38	546	19	7.2	25
15	.24	62	353	49	51	161	175	33	758	18	9.5	19
16	.30	45	143	46	48	196	1,220	30	262	36	7.7	17
17	.24	37	76	46	47	154	690	28	93	66	7.0	15
18	.21	265	65	48	46	83	575	26	70	35	15	14
19	5.2	277	62	45	45	67	320	26	58	23	11	14
20	5.8	92	59	42	44	62	143	24	340	18	9.2	14
21	3.0	59	56	72	42	55	147	23	381	15	7.5	13
22	275	51	49	59	44	52	122	21	129	14	6.0	12
23	112	44	45	44	57	50	308	19	73	14	5.0	12
24	23	50	42	39	51	779	1,240	18	59	14	4.4	13
25	11	139	40	71	46	1,170	2,060	34	53	12	4.0	22
26	291	81	39	259	49	290	477	45	48	11	3.6	16
27	1,400	55	37	129	54	104	161	36	42	11	3.4	56
28	392	45	36	83	47	99	110	24	38	19	3.8	175
29	85	39	38	58	------	267	91	18	35	85	87	74
30	108	36	56	52	------	161	83	16	32	53	11	35
31	71	------	51	98	------	140	------	14	------	75	6.2	------
TOTAL	2,800.39	2,532	2,710	2,381	2,675	5,456	9,243	1,229	7,430	1,001	395.0	2,335.2
MEAN	90.3	84.4	87.4	76.8	95.5	176	308	39.6	248	32.3	12.7	77.8
MAX	1,400	343	435	259	488	1,170	2,060	78	1,190	104	87	775
MIN	.21	24	32	39	42	50	58	14	14	11	3.4	3.6
CFSM	1.19	1.11	1.15	1.01	1.26	2.32	4.06	.52	3.27	.43	.17	1.03
IN.	1.37	1.24	1.33	1.17	1.31	2.68	4.54	.60	3.65	.49	.19	1.15
AC-FT	5,550	5,020	5,380	4,720	5,310	10,820	18,330	2,440	14,740	1,990	783	4,630

CAL YR 1972 TOTAL 14,838.38 MEAN 40.5 MAX 1,400 MIN 0 CFSM .53 IN 7.28 AC-FT 29,430
WTR YR 1973 TOTAL 40,187.59 MEAN 110 MAX 2,060 MIN .21 CFSM 1.45 IN 19.72 AC-FT 79,710

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-27	0700	11.50	2,010	6- 4	1830	11.93	2,410
3-24	2330	11.59	2,130	6-15	0500	10.61	998
4-16	1530	11.30	1,770	9- 6	0030	10.82	1,190
4-25	0100	12.88	4,200				

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 (3.7 km) upstream from dam on Cherokee Bayou, 10 miles (16.1 km) upstream from Sabine River, and 10.3 miles (16.6 km) southeast of Longview.

DRAINAGE AREA.--158 mi² (409 km²).

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, 50,700 acre-ft (62.5 hm³) June 14, 15, elevation, 281.0 ft (85.6 m); minimum observed, 38,950 acre-ft (48.0 hm³) Oct. 12-21, elevation, 277.9 ft (84.7 m).
Period of record: Maximum contents observed, 71,170 acre-ft (87.8 hm³) May 3, 1959, elevation, 285.5 ft (87.0 m); minimum observed, 34,620 acre-ft (42.7 hm³) Oct. 16-18, 31, 1956, Aug. 9, 18-21, Aug. 31 to Sept. 8, 11-18, 1958, elevation, 276.6 ft (84.3 m).

REMARKS.--Lake is formed by a rolled earthfill dam 4,000 ft (1,220 m) long with an uncontrolled concrete spillway 828 ft (252 m) long. Emergency spillway is a 160-foot (48.8-meter) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40,710	47,100	47,480	47,480	48,270	47,480	47,480	47,880	46,700	46,700	47,880	45,920
2	40,710	47,100	47,480	47,480	48,270	47,480	47,480	47,480	46,700	46,700	47,480	46,320
3	40,710	47,480	47,480	47,480	48,270	47,480	47,480	47,480	46,700	46,700	47,480	46,700
4	40,710	47,100	46,700	47,480	47,880	47,880	47,480	47,480	48,270	46,700	47,480	46,700
5	40,000	47,100	46,700	47,480	47,480	47,480	47,480	47,480	49,880	46,700	47,480	48,670
6	40,000	47,480	47,100	47,480	47,480	48,270	47,480	47,480	49,880	46,700	47,100	48,670
7	39,650	47,480	47,100	48,270	47,480	48,270	47,880	47,480	49,070	46,700	46,700	48,670
8	39,650	47,480	47,480	48,270	48,270	48,270	47,880	47,480	48,270	47,100	46,700	48,670
9	39,650	47,480	47,480	48,270	48,270	48,270	47,880	47,100	47,880	47,480	46,700	48,670
10	39,300	47,480	47,880	47,880	48,270	48,270	47,880	47,100	47,880	47,480	46,700	48,670
11	39,300	47,100	47,880	47,880	47,880	47,880	47,480	46,700	47,480	47,480	46,700	48,670
12	38,950	47,100	48,270	47,480	47,880	47,880	47,480	47,100	47,880	47,100	46,700	48,670
13	38,950	47,880	47,480	47,480	47,480	47,480	47,480	47,100	48,670	47,480	46,700	48,670
14	38,950	47,880	47,480	47,480	47,480	47,480	47,480	47,100	50,700	47,100	46,700	48,670
15	38,950	48,270	48,270	47,480	47,100	47,880	47,880	47,100	50,700	47,480	46,700	47,100
16	38,950	48,270	48,270	47,480	47,100	48,270	48,270	47,100	49,470	47,480	46,700	47,100
17	38,950	47,480	48,270	47,480	46,700	47,880	48,270	46,700	48,270	47,100	46,700	47,100
18	38,950	48,270	48,270	47,480	46,700	47,880	49,070	46,700	47,880	47,100	46,700	47,100
19	38,950	50,290	48,270	47,480	46,700	47,880	48,670	46,700	47,480	47,100	46,700	48,670
20	38,950	50,290	47,880	47,480	46,700	47,880	48,670	46,700	48,270	46,700	46,700	47,100
21	38,950	48,270	47,880	47,480	46,700	47,880	48,270	46,700	48,270	46,700	46,320	46,700
22	39,650	47,880	47,480	47,480	46,700	47,880	48,270	46,700	48,270	46,700	46,320	46,700
23	39,650	47,480	47,480	47,480	46,700	47,480	49,070	46,700	48,270	46,700	46,320	46,700
24	40,000	47,880	47,480	47,480	46,700	48,670	47,880	46,700	47,880	46,700	45,920	46,700
25	40,000	48,270	47,100	47,480	46,700	49,880	47,100	46,700	47,480	46,700	45,920	46,700
26	42,160	48,270	47,100	47,480	47,480	48,670	49,470	46,700	47,100	46,700	45,920	46,700
27	42,530	48,270	47,100	48,270	47,480	47,880	48,670	46,700	47,100	46,700	45,540	46,700
28	44,390	47,480	47,100	47,880	47,480	48,270	47,880	46,700	47,100	46,700	45,540	46,700
29	45,920	47,480	47,100	47,480	------	47,880	47,480	46,700	47,100	48,270	45,540	46,700
30	46,700	47,480	47,480	47,480	------	48,270	47,880	46,700	47,100	48,270	45,540	46,700
31	46,700	------	47,480	48,270	------	47,480	------	46,700	------	48,270	45,540	------
(†)	280.0	280.2	280.2	280.4	280.2	280.2	280.3	280.0	280.1	280.4	279.7	280.0
(*)	+6,390	+780	0	+790	-790	0	+400	-1,180	+400	+1,170	-2,730	+1,160
(††)	1,050	943	959	992	875	968	895	1,100	1,040	1,230	1,360	1,080
MAX	46,700	50,290	48,270	48,270	48,270	49,880	49,470	47,880	50,700	48,270	47,880	48,670
MIN	38,950	47,100	46,700	47,480	46,700	47,480	47,100	46,700	46,700	46,700	45,540	45,920

CAL YR 1972..... * +4,580 †† 13,751 MAX 50,290 MIN 38,950
WTR YR 1973..... * +6,390 †† 12,490 MAX 50,700 MIN 38,950

† 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 (8.2 km) northeast of Tatum, 5.2 miles (8.4 km) upstream from Potters Creek, 5.6 miles (9.0 km) downstream from Cherokee Bayou, and at mile 339.4 (546.1 km).

DRAINAGE AREA.--3,493 mi² (9,047 km²).

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 (62.23 m) 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 ft³/s (75.4 m³/s), 1,929,000 acre-ft/yr (2,378 hm³/yr); 13 years (1960-73) regulated, 2,073 ft³/s (58.7 m³/s), 1,502,000 acre-ft/yr (1,852 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,100 ft³/s (683 m³/s) May 2, gage height, 26.39 ft (8.04 m); minimum, 58 ft³/s (1.64 m³/s) Oct. 17.

Period of record: Maximum discharge, 123,000 ft³/s (3,483 m³/s) Apr. 4, 1945, gage height, 33.80 ft (10.30 m, from graph based on gage readings, from rating curve extended above 66,000 ft³/s (1,869 m³/s) on basis of partly estimated measurement of 88,900 ft³/s (2,518 m³/s); minimum observed, 2.4 ft³/s (68 dm³/s) 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 (10 m), from information by local residents.

REMARKS.--Records good. Flow partly regulated by Lake Tawakoni (station 08017400) located 175 miles (282 km) upstream and six small reservoirs, combined capacity, 1,022,000 acre-ft (1,260 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	1,470	926	1,260	4,120	1,150	10,100	22,600	983	2,920	1,920	138
2	231	1,410	815	1,270	5,230	1,380	9,590	23,900	1,000	2,070	1,360	128
3	172	1,480	731	1,230	5,400	1,590	9,310	23,700	1,060	1,590	901	126
4	151	1,470	678	1,350	5,320	1,720	9,210	22,400	2,520	1,210	632	125
5	126	1,460	645	1,510	5,110	2,120	9,190	20,300	5,640	989	485	984
6	106	1,460	598	1,770	4,870	2,240	9,120	18,200	8,640	845	388	3,700
7	92	1,750	605	2,270	4,580	3,120	9,080	16,800	9,510	1,250	324	5,160
8	86	2,420	598	3,050	4,560	4,090	8,990	15,400	9,270	2,560	294	5,290
9	81	2,580	660	3,560	4,770	4,580	8,920	14,400	8,790	1,470	302	4,720
10	73	2,390	1,340	3,180	4,770	4,690	8,690	13,500	8,340	1,000	340	3,740
11	70	2,130	3,090	3,020	4,600	4,600	8,100	12,600	8,050	1,050	264	2,780
12	68	1,780	3,900	2,860	4,310	4,340	7,160	11,700	8,190	1,280	243	2,200
13	68	1,680	3,990	2,730	4,000	4,030	5,930	10,900	9,190	1,120	216	1,930
14	66	2,370	3,770	2,670	3,820	3,850	4,550	9,880	11,500	884	201	1,830
15	63	2,550	3,980	2,660	3,770	4,100	4,460	8,740	14,400	740	196	1,690
16	60	2,150	4,280	2,600	3,830	4,710	4,200	7,660	18,000	689	201	1,500
17	59	1,770	4,210	2,420	3,950	5,460	5,480	6,720	18,400	734	191	1,290
18	63	1,620	3,870	2,070	4,100	6,050	6,690	5,740	17,000	770	228	1,050
19	69	2,330	3,610	1,710	4,220	6,510	7,540	4,650	15,800	696	207	866
20	75	3,060	3,380	1,400	4,220	6,980	7,960	3,690	15,100	615	189	758
21	82	3,090	3,180	1,430	3,870	7,390	8,120	3,020	14,200	550	210	692
22	140	2,740	3,200	1,650	2,930	7,820	8,160	2,630	13,400	548	207	615
23	717	2,390	3,200	1,570	1,950	8,230	8,400	2,320	12,600	668	187	530
24	983	1,960	3,200	1,500	1,440	8,920	9,700	1,990	11,700	615	169	488
25	557	1,780	3,100	1,560	1,240	10,500	13,500	1,630	10,600	518	149	472
26	448	2,020	2,800	2,180	1,170	11,700	17,300	1,390	9,280	445	132	438
27	1,590	1,960	2,210	3,020	1,170	12,100	19,500	1,260	7,960	395	124	418
28	3,120	1,690	1,530	3,360	1,160	11,900	20,900	1,190	6,770	362	132	804
29	3,020	1,390	1,110	3,400	------	11,500	20,800	1,090	5,540	636	161	1,410
30	2,360	1,100	1,040	3,280	------	11,200	21,000	995	4,220	1,070	179	1,210
31	1,820	------	1,130	3,160	------	10,600	------	968	------	2,000	173	------
TOTAL	16,900	59,450	71,376	70,700	104,480	189,170	301,650	291,963	287,653	32,289	10,905	47,082
MEAN	545	1,982	2,302	2,281	3,731	6,102	10,060	9,418	9,588	1,042	352	1,569
MAX	3,120	3,090	4,280	3,560	5,400	12,100	21,000	23,900	18,400	2,920	1,920	5,290
MIN	59	1,100	598	1,230	1,160	1,150	4,200	968	983	362	124	125
AC-FT	33,520	117,900	141,600	140,200	207,200	375,200	598,300	579,100	570,600	64,050	21,630	93,390

CAL YR 1972 TOTAL 481,507 MEAN 1,316 MAX 10,400 MIN 16 AC-FT 955,100
WTR YR 1973 TOTAL 1,483,618 MEAN 4,065 MAX 23,900 MIN 59 AC-FT 2,943,000

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 (4.8 km) west of Gary, and 9.0 miles (14.5 km) southwest of Carthage.

DRAINAGE AREA.--115 mi² (298 km²).

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, 55,220 acre-ft (68.1 hm³) Apr. 18, elevation, 267.58 ft (81.56 m); minimum, 44,340 acre-ft (54.7 hm³) Oct. 21, elevation, 264.92 ft (80.75 m).
Period of record: Maximum contents, 58,050 acre-ft (71.6 hm³) Mar. 30, 1965, elevation, 268.24 ft (81.76 m); minimum since lake first filled in 1958, 26,670 acre-ft (32.9 hm³) about Sept. 19, 1958, elevation, 259.9 ft (79.2 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 8,300 ft (2,530 m) long. Spillway is an uncontrolled concrete flat-crested weir section 270 ft (82 m) long at right end of dam, designed to discharge 26,700 ft³/s (756 m³/s) under a 10-foot (3-meter) head. Storage began in November 1957 and dam completed in June 1958. Outlet works consist of an outlet tower and a 36-inch-diameter (914.4-millimeter) 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 793 acre-ft (0.978 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45,360	48,500	47,200	48,330	49,280	47,320	47,640	47,840	45,800	46,240	48,820	46,080
2	45,240	48,330	47,120	48,090	48,990	47,440	47,440	47,640	45,760	46,200	48,290	45,960
3	45,240	48,170	47,120	48,090	48,500	47,560	47,400	47,440	45,760	46,160	47,920	45,920
4	45,240	48,000	47,000	48,040	48,170	47,560	47,240	47,280	46,880	46,080	47,600	46,080
5	45,200	47,840	47,040	48,250	47,920	47,520	47,160	47,280	47,880	46,240	47,400	49,970
6	45,160	48,330	46,800	48,660	47,760	48,780	47,200	47,400	48,130	46,640	47,240	50,710
7	45,080	49,320	46,760	52,700	47,960	49,440	47,320	47,640	47,840	50,260	47,080	50,380
8	45,040	49,110	46,840	51,940	48,860	48,030	47,840	47,600	47,560	49,970	47,000	49,520
9	45,040	48,820	46,880	50,670	48,990	48,540	48,000	47,480	47,320	49,150	46,880	48,860
10	45,000	48,410	47,720	49,680	48,580	48,580	47,880	47,320	47,200	48,460	46,800	48,330
11	44,960	48,130	48,000	49,070	48,250	48,370	47,720	47,240	47,160	48,040	46,680	47,960
12	44,960	47,880	48,580	48,540	48,040	48,040	47,560	47,200	48,040	47,720	46,640	47,680
13	44,920	49,280	48,620	48,210	47,920	47,840	47,440	47,080	50,050	47,680	46,520	47,520
14	44,920	49,110	49,890	47,960	47,720	47,720	47,440	46,960	50,870	47,760	46,480	47,280
15	44,690	48,660	50,870	47,760	47,600	47,640	47,920	46,880	49,970	47,560	46,440	47,120
16	44,650	48,290	50,010	47,560	47,440	48,370	48,130	46,800	49,110	47,560	46,400	46,960
17	44,610	48,000	49,190	47,440	47,320	48,540	54,000	46,680	48,500	47,520	46,320	46,880
18	44,530	49,190	48,660	47,440	47,280	48,250	54,000	46,640	48,040	47,320	46,520	46,720
19	44,460	49,440	48,290	47,320	47,240	48,040	51,860	46,600	47,800	47,160	46,520	46,640
20	44,420	48,990	48,040	48,580	47,200	47,760	50,460	46,520	47,520	47,040	46,480	46,600
21	44,340	48,580	47,840	50,340	47,160	47,640	49,520	46,480	47,320	46,920	46,440	46,560
22	44,920	48,250	47,600	49,680	47,200	47,440	48,950	46,440	47,120	46,840	46,360	46,480
23	44,920	47,960	47,480	48,990	47,200	47,400	48,460	46,440	47,000	46,760	46,320	46,440
24	44,770	47,960	47,320	48,500	47,200	52,950	50,220	46,360	46,880	46,720	46,200	46,440
25	44,690	48,040	47,240	48,910	47,160	52,230	51,080	46,360	46,760	46,600	46,120	46,400
26	45,800	47,920	47,120	49,640	47,240	50,590	50,300	46,360	46,640	46,520	46,040	46,360
27	45,960	47,760	47,040	49,680	47,240	49,560	49,360	46,280	46,560	46,480	45,960	46,760
28	46,000	47,560	46,960	48,030	47,200	48,910	48,740	46,120	46,480	46,360	46,080	47,640
29	47,400	47,440	47,040	48,580	------	48,410	48,290	46,080	46,400	47,720	46,200	47,560
30	48,500	47,320	48,460	48,210	------	48,170	48,000	46,040	46,320	48,130	46,160	47,360
31	48,580	------	48,660	48,330	------	47,840	------	45,880	------	49,150	46,120	------
(†)	265.98	265.67	266.00	265.92	265.64	265.80	265.84	265.31	265.42	266.12	265.37	265.68
(*)	+3,140	-1,260	+1,340	-330	-1,130	+640	+160	-2,120	+440	+2,830	-3,030	+1,240
(††)	70.0	67.5	57.4	69.7	60.5	67.0	62.3	70.4	69.4	62.5	77.4	58.9
MAX	48,580	49,440	50,870	52,700	49,280	52,950	54,000	47,840	50,870	50,260	48,820	50,710
MIN	44,340	47,320	46,760	47,320	47,160	47,320	47,160	45,880	45,760	46,080	45,960	45,920

CAL YR 1972..... * +2,020 †† 828 MAX 53,240 MIN 44,340
WTR YR 1973..... * +1,920 †† 793 MAX 54,000 MIN 44,340

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

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 (0.5 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.0 mile (1.6 km) downstream from Indian Creek, 1.5 miles (2.4 km) north of Gary, and 3 miles (5 km) downstream from Murvaul Lake.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 217.82 ft (66.39 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 78.3 ft³/s (2.22 m³/s), 56,730 acre-ft/yr (69.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,880 ft³/s (53.2 m³/s) Apr. 18, gage height, 10.97 ft (3.34 m); no flow Oct. 9-22.
Period of record: Maximum discharge, 3,590 ft³/s (102 m³/s) Mar. 18, 1969, gage height, 11.57 ft (3.53 m); no flow at times in 1967-73.
Maximum stage since at least 1928, about 14.5 ft (4.4 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	160	64	329	275	49	155	150	.54	4.1	437	.82
2	.74	139	54	272	421	81	108	122	.45	2.7	325	.63
3	.36	117	48	254	386	95	91	99	.36	1.8	214	.51
4	.20	98	47	250	293	101	87	71	25	1.2	140	.45
5	.10	82	41	241	218	96	62	54	137	.95	95	162
6	.05	83	43	313	161	210	50	52	223	1.5	68	501
7	.02	412	35	936	126	467	75	108	216	79	53	677
8	.01	347	28	1,250	304	439	83	110	161	507	42	624
9	0	290	32	930	379	373	240	84	112	595	34	495
10	0	232	167	659	371	300	190	66	85	459	27	375
11	0	168	246	507	300	296	139	54	67	325	20	255
12	0	121	276	412	220	237	111	48	93	199	14	158
13	0	413	377	315	171	166	91	39	312	139	10	113
14	0	425	465	239	149	136	76	30	672	131	7.5	89
15	0	365	822	181	118	115	101	23	850	126	6.3	64
16	0	284	738	140	90	202	250	17	631	109	5.2	47
17	0	206	575	117	68	317	386	13	473	106	3.6	37
18	0	290	453	112	57	276	1,630	8.1	342	87	2.5	29
19	0	466	366	129	51	210	1,300	6.7	189	66	5.7	19
20	0	426	284	166	47	167	890	6.1	155	48	7.0	14
21	0	358	219	718	41	119	642	4.4	114	38	5.2	11
22	0	278	167	642	38	91	495	3.8	81	28	4.0	8.6
23	.26	201	118	509	42	71	391	3.3	60	23	2.4	6.6
24	.20	147	101	408	44	593	393	3.4	47	21	1.5	5.5
25	.06	200	81	342	43	1,250	880	2.6	37	18	1.1	5.5
26	16	193	70	527	43	910	822	2.3	30	13	.74	4.5
27	81	153	58	516	52	628	592	2.0	21	9.8	.57	4.3
28	26	120	48	505	52	476	453	3.8	16	6.1	.48	85
29	36	92	43	415	------	376	329	3.1	10	58	.45	132
30	364	77	193	316	------	274	220	1.2	7.2	148	.57	87
31	203	------	373	235	------	204	------	.70	------	513	1.2	------
TOTAL	729.70	6,943	6,632	12,885	4,560	9,325	11,332	1,191.50	5,167.55	3,864.15	1,535.01	4,011.41
MEAN	23.5	231	214	416	163	301	378	38.4	172	125	49.5	134
MAX	364	466	822	1,250	421	1,250	1,630	150	850	595	437	677
MIN	0	77	28	112	38	49	50	.70	.36	.95	.45	.45
AC-FT	1,450	13,770	13,150	25,560	9,040	18,500	22,480	2,360	10,250	7,660	3,040	7,960

CAL YR 1972 TOTAL 26,331.19 MEAN 71.9 MAX 1,190 MIN 0 AC-FT 52,230
WTR YR 1973 TOTAL 68,176.32 MEAN 187 MAX 1,630 MIN 0 AC-FT 135,200

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 (2.3 km) upstream from Salt Creek, 15 miles (24.1 km) east of Carthage, and at mile 20.5 (33.0 km).

DRAINAGE AREA.--82.6 mi² (214 km²).

PERIOD OF RECORD.--February 1962 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 230.00 ft (70.10 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 41.6 ft³/s (1.18 m³/s), 6.84 in/yr (173.7 mm/yr), 30.140 acre-ft/yr (37.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,540 ft³/s (185 m³/s) July 8, gage height, 11.66 ft (3.55 m); no flow Oct. 7-25.
Period of record: Maximum discharge, 6,540 ft³/s (185 m³/s) July 8, 1973, gage height, 11.66 ft (3.55 m), from rating curve extended above 2,300 ft³/s (65.1 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	54	12	228	60	16	35	28	1.4	2.1	281	.85
2	.51	27	8.9	149	149	34	29	22	1.6	1.7	82	.85
3	.42	14	7.1	67	270	106	33	20	5.2	1.5	28	.85
4	.32	11	6.0	59	126	101	34	19	28	1.2	13	2.0
5	.12	7.3	5.2	79	56	135	40	15	141	2.3	7.3	10
6	.03	4.6	4.4	153	42	246	32	13	233	33	4.7	150
7	0	14	4.0	580	36	252	41	30	281	407	3.5	300
8	0	59	4.0	880	89	438	68	116	135	3,670	3.7	100
9	0	69	4.3	800	305	290	126	105	40	1,310	3.0	40
10	0	36	32	388	447	109	206	43	20	506	2.4	15
11	0	19	82	138	190	80	161	22	12	142	16	9.8
12	0	9.8	157	69	76	107	63	14	8.5	46	16	7.2
13	0	67	170	54	53	77	37	13	24	26	6.7	5.4
14	0	146	310	47	44	48	27	17	222	17	3.9	3.9
15	0	165	524	42	41	37	25	10	544	13	2.7	3.2
16	0	69	712	38	38	68	97	7.3	439	11	2.0	2.7
17	0	32	500	34	30	261	546	5.7	206	11	1.4	2.3
18	0	40	180	31	24	492	845	4.8	49	25	1.1	2.2
19	0	149	72	31	20	210	596	4.1	24	34	1.0	1.8
20	0	297	50	36	18	73	308	3.6	31	15	1.0	1.5
21	0	205	43	197	16	46	121	3.2	64	9.2	.97	1.2
22	0	67	39	859	15	37	74	2.8	51	6.4	.97	1.0
23	0	36	35	833	15	30	55	2.6	26	5.1	.95	1.0
24	0	25	30	303	16	157	215	2.4	14	4.1	.90	1.2
25	0	30	24	105	18	906	2,050	2.9	8.6	4.3	.90	1.2
26	.40	57	20	208	17	1,170	1,420	2.5	6.1	4.8	.90	1.0
27	1.5	67	16	550	16	526	631	2.2	4.6	4.6	.90	2.2
28	54	48	14	553	16	150	186	2.3	3.7	3.1	.85	9.1
29	43	32	13	257	------	63	61	2.5	3.0	2.9	.85	22
30	52	20	20	128	------	47	39	2.1	2.5	2.8	.85	43
31	82	------	102	70	------	40	------	1.8	------	133	.85	------
TOTAL	235.60	1,876.7	3,200.9	7,966	2,243	6,352	8,201	539.8	2,629.2	6,455.1	490.29	742.45
MEAN	7.60	62.6	103	257	80.1	205	273	17.4	87.6	208	15.8	24.7
MAX	82	297	712	880	447	1,170	2,050	116	544	3,670	281	300
MIN	0	4.6	4.0	31	15	16	25	1.8	1.4	1.2	.85	.85
CFSM	.09	.76	1.25	3.11	.97	2.48	3.31	.21	1.06	2.52	.19	.30
IN.	.11	.85	1.44	3.59	1.01	2.86	3.69	.24	1.18	2.91	.22	.33
AC-FT	467	3,720	6,350	15,800	4,450	12,600	16,270	1,070	5,220	12,800	972	1,470

CAL YR 1972 TOTAL 12,074.90 MEAN 33.0 MAX 880 MIN 0 CFSM .40 IN 5.44 AC-FT 23,950
WTR YR 1973 TOTAL 40,932.04 MEAN 112 MAX 3,670 MIN 0 CFSM 1.36 IN 18.43 AC-FT 81,190

PEAK DISCHARGE (BASE, 900 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 8	1500	9.48	916	4-17	2100	9.54	988
1-22	2000	9.62	1,090	4-25	1700	10.58	2,800
3-26	0030	9.85	1,440	7- 8	0900	11.66	6,540

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 (4.8 km) upstream from Bayou Castor, 111 miles (178.6 km) upstream from Toledo Bend Dam, and at mile 267.1 (429.8 km).

DRAINAGE AREA.--7,178 mi² (18,591 km²), 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 (45.03 m) 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 (1,402 m) upstream. Jan. 16, 1964, to Dec. 10, 1968, water-stage recorder 4,700 ft (1,433 m) upstream. All gages to present datum except prior to Dec. 31, 1906, when datum was 2 ft (0.61 m) lower.

AVERAGE DISCHARGE.--64 years (1903-67), 3,208 ft³/s (90.9 m³/s), 2,324,000 acre-ft/yr (2,870 hm³/yr).

EXTREMES.--Current year: Maximum gage height, 29.98 ft (9.14 m) May 8; minimum, 18.40 ft (5.61 m) Oct. 19.
Period of gage-height record 1968-73: Maximum gage height, 32.50 ft (9.91 m) Apr. 20, 1969; minimum since initial filling of Toledo Bend Reservoir in June 1968, 18.40 ft (5.61 m) Oct. 19, 1972.
Period of discharge record 1903-67: Maximum discharge, 92,000 ft³/s (2,610 m³/s) Apr. 8, 1945, gage height, 44.07 ft (13.43 m) from floodmark; minimum, 16 ft³/s (0.45 m³/s) 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 (12.01 m), 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 (1,320 hm³), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.74	20.22	21.30	23.23	24.54	24.03	27.35	29.32	24.15	26.04	24.15	22.40
2	18.74	19.96	21.28	23.31	24.52	23.86	27.16	29.34	24.29	25.55	24.18	22.42
3	18.72	19.82	21.23	23.29	24.52	24.08	26.87	29.32	24.05	25.00	24.06	22.38
4	18.70	19.75	21.21	23.21	24.61	24.07	26.67	29.36	24.08	24.76	23.84	22.29
5	18.70	19.75	21.38	23.31	24.62	24.25	26.54	29.47	24.27	24.62	23.72	22.60
6	18.64	19.78	21.19	23.59	24.58	24.02	26.45	29.62	24.50	24.57	23.81	22.92
7	18.63	19.79	21.31	24.71	24.54	24.81	26.34	29.95	24.77	25.01	23.78	23.22
8	18.66	20.23	21.31	25.53	23.93	25.14	26.33	29.92	25.07	25.44	23.70	23.48
9	18.64	20.45	21.32	25.70	24.47	25.32	26.25	29.67	25.40	26.05	23.64	23.70
10	18.67	20.43	21.62	25.72	24.67	25.61	26.25	29.36	25.75	26.65	23.62	23.90
11	18.66	20.39	22.06	25.64	24.85	25.67	26.24	29.02	26.02	26.59	23.63	23.92
12	18.65	20.30	22.36	25.43	24.99	25.72	26.18	28.60	26.18	25.89	23.61	23.60
13	18.65	20.60	22.68	25.10	24.97	25.87	26.10	28.20	26.25	25.17	23.59	23.13
14	18.61	20.79	23.21	24.68	24.82	25.62	26.04	27.73	26.70	24.77	23.50	22.87
15	18.58	21.03	23.77	24.33	24.71	25.38	26.09	27.42	27.10	24.58	23.48	22.70
16	18.62	21.06	24.30	24.09	24.62	25.37	26.87	27.10	27.30	24.44	23.56	22.65
17	18.59	20.95	24.64	23.95	24.58	25.60	26.35	26.82	27.50	24.30	23.40	22.51
18	18.53	20.91	24.77	23.71	24.52	25.75	26.64	26.57	27.78	24.17	23.32	22.46
19	18.54	21.16	24.77	23.64	24.50	25.71	26.82	26.32	28.00	24.07	23.31	22.47
20	18.57	21.53	24.63	23.72	24.45	25.52	26.94	26.00	28.25	23.95	23.22	22.34
21	18.66	21.67	24.27	24.00	24.45	25.60	26.97	25.72	28.40	23.86	23.15	22.25
22	18.75	21.71	24.06	24.18	24.43	25.60	26.98	25.46	28.50	23.85	23.08	22.21
23	18.65	21.67	23.84	24.27	24.33	25.76	27.02	25.10	28.43	23.75	23.04	22.22
24	18.72	21.52	23.56	24.28	24.21	26.40	27.12	24.98	28.28	23.72	22.99	22.24
25	18.81	21.33	23.52	24.30	24.10	27.03	27.38	25.10	28.05	23.69	22.86	22.16
26	18.93	21.45	23.37	24.40	24.00	27.27	27.51	24.93	27.80	23.77	22.89	22.10
27	19.07	21.48	23.37	24.56	23.93	27.57	27.90	24.58	27.52	23.63	22.82	22.02
28	19.41	21.32	23.32	24.46	23.95	27.88	28.56	24.34	27.20	23.63	22.80	21.96
29	19.96	21.26	23.34	24.62	------	28.00	28.99	24.18	26.88	23.62	22.12	21.93
30	20.41	21.26	23.08	24.67	------	27.92	29.21	24.12	26.52	23.66	22.52	21.93
31	20.43	------	23.19	24.75	------	27.68	------	24.23	------	23.95	22.44	------
MEAN	18.86	20.79	22.88	24.33	24.48	25.75	26.94	27.16	26.50	24.60	23.35	22.63
MAX	20.43	21.71	24.77	25.72	24.99	28.00	29.21	29.95	28.50	26.65	24.18	23.92
MIN	18.53	19.75	21.19	23.21	23.93	23.86	26.04	24.12	24.05	23.62	22.12	21.93

CAL YR 1972 MEAN 5.24 MAX 28.32 MIN 18.53
WTR YR 1973 MEAN 24.02 MAX 29.95 MIN 18.53

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 (0.8 km) northwest of Shelbyville, 4.2 miles (6.8 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 5.0 miles (8.0 km) upstream from Beauchamp Creek.

DRAINAGE AREA.--97.8 mi² (253 km²).

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 (62.70 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 74.7 ft³/s (2.12 m³/s), 10.37 in/yr (263.4 mm/yr), 54,120 acre-ft/yr (66.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,710 ft³/s (105 m³/s) Apr. 18, gage height, 10.74 ft (3.27 m); minimum, 0.10 ft³/s (2.8 dm³/s) Oct. 15-18.
Period of record: Maximum discharge, 15,200 ft³/s (430 m³/s) Mar. 11, 1953, gage height, 13.85 ft (4.22 m); no flow at times. Maximum stage since at least 1884, 15.0 ft (4.6 m) Nov. 23, 1940, from information by local residents.

REMARKS.--Records fair, except those for period of no gage-height record and those above 1,500 ft³/s (42.5 m³/s), which are poor. The city of Center reported that during the year they diverted 1,550 acre-ft (1.91 hm³) upstream from gage and returned 911 acre-ft (1.12 hm³) as sewage effluent 1.0 mile (1.6 km) downstream from gage.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	100	6.5	50	350	41	59	50	7.5	12	35	4.0
2	4.4	40	6.0	70	250	57	50	50	14	9.8	38	2.9
3	3.0	20	5.5	120	150	58	45	84	15	8.9	13	3.6
4	1.9	12	5.5	150	80	101	43	59	83	10	7.0	3.2
5	1.4	8.0	12	150	65	89	40	42	261	32	5.5	66
6	.94	6.0	22	450	59	163	37	43	340	199	4.8	139
7	.61	5.0	23	500	56	690	96	199	138	225	4.3	62
8	.46	4.5	25	1,700	167	320	125	302	36	337	3.8	30
9	.34	4.0	69	950	375	108	188	116	100	261	7.6	17
10	.27	3.7	142	396	231	120	168	50	65	53	50	23
11	.29	3.5	243	136	107	217	80	39	42	30	15	13
12	.19	3.5	151	114	78	110	53	33	46	23	8.0	32
13	.16	50	148	111	74	70	45	33	292	17	8.6	57
14	.13	35	182	107	144	75	42	28	900	15	11	59
15	.10	20	650	94	92	94	62	24	2,800	14	6.6	27
16	.10	12	850	77	66	278	347	23	1,800	13	4.7	15
17	.11	9.0	420	71	56	441	500	20	350	14	3.7	11
18	.10	20	120	69	52	174	3,150	17	74	12	3.5	7.9
19	.17	30	80	66	49	86	1,170	17	43	11	35	6.2
20	.27	25	60	63	46	67	474	17	33	10	25	6.3
21	.62	15	50	344	42	55	154	15	31	9.9	11	5.7
22	1.5	10	40	275	41	47	106	15	31	9.7	5.9	4.9
23	15	8.0	35	119	54	46	80	12	28	28	4.3	4.8
24	6.7	7.0	30	77	59	550	107	11	23	72	3.4	7.5
25	3.2	40	27	72	52	1,950	1,070	10	20	17	2.8	13
26	3.1	25	25	521	46	1,000	975	11	16	9.8	2.6	7.8
27	35	15	23	568	45	320	442	15	14	7.1	2.6	5.8
28	36	10	22	500	43	106	112	12	12	6.9	2.2	40
29	34	8.0	22	200	------	83	72	9.9	27	5.3	26	133
30	350	7.0	80	100	------	71	57	8.2	19	4.7	21	78
31	300	------	60	80	------	68	------	7.7	------	4.9	6.8	------
TOTAL	810.06	556.2	3,634.5	8,300	2,929	7,655	9,949	1,372.8	7,660.5	1,482.0	378.7	885.6
MEAN	26.1	18.5	117	268	105	247	332	44.3	255	47.8	12.2	29.5
MAX	350	100	850	1,700	375	1,950	3,150	302	2,800	337	50	139
MIN	.10	3.5	5.5	50	41	41	37	7.7	7.5	4.7	2.2	2.9
CFSM	.27	.19	1.20	2.74	1.07	2.53	3.39	.45	2.61	.49	.12	.30
IN.	.31	.21	1.38	3.16	1.11	2.91	3.78	.52	2.91	.56	.14	.34
AC-FT	1,610	1,100	7,210	16,460	5,810	15,180	19,730	2,720	15,190	2,940	751	1,760

CAL YR 1972 TOTAL 12,429.69 MEAN 34.0 MAX 850 MIN .06 CFSM .35 IN 4.73 AC-FT 24,650
WTR YR 1973 TOTAL 45,613.36 MEAN 125 MAX 3,150 MIN .10 CFSM 1.28 IN 17.35 AC-FT 90,470

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 8	unknown	unknown	*1,800	4-25	1500	9.70	1,360
3-25	unknown	unknown	*2,000	6-15	unknown	unknown	*2,900
4-18	about 0600	a10.74	3,710				

* Estimated.
a From peak mark.
NOTE.--No gage-height record Nov. 1 to Dec. 4, and above 1,500 ft³/s.

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 (10.5 km) northeast of Milam, 38 miles (61.1 km) upstream from Toledo Bend Dam, and at mile 194.8 (313.4 km).

DRAINAGE AREA.--7,178 mi² (18,591 km²), see station 08025350.

PERIOD OF RECORD.--Gage-height record, October 1966 to January 1968, December 1968 to June 1973 (discontinued); 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 (29.86 m) above mean sea level.

AVERAGE DISCHARGE.--29 years (1923-25, 1939-66), 4,982 ft³/s (141 m³/s), 3,607,000 acre-ft/yr (4,447 hm³/yr).

EXTREMES.--Maximum gage height during period October 1972 to June 1973, 74.94 ft (22.84 m) May 2; minimum, 68.14 ft (20.77 m) Oct. 15.

Period of gage-height record: Maximum gage height, 75.22 ft (22.93 m) Mar. 20, 1969; minimum, 68.14 ft (20.77 m) Oct. 15, 1972.

Period of discharge record 1923-25, 1939-66: Maximum discharge, 83,400 ft³/s (2,360 m³/s) Apr. 12, 1945, gage height, 48.87 ft (14.90 m); minimum, 25 ft³/s (0.71 m³/s) 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). Station discontinued June 30, 1973.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.41	69.08	70.83	72.58	73.17	73.34	74.33	74.83	73.55			
2	68.37	69.14	70.87	72.62	73.15	73.35	74.25	74.80	73.48			
3	68.40	69.20	70.89	72.62	73.09	73.34	74.25	74.82	73.54			
4	68.40	69.23	70.85	72.57	73.04	73.48	74.18	74.71	73.49			
5	68.40	69.27	70.88	72.68	73.02	73.50	74.18	74.61	73.55			
6	68.32	69.30	70.88	72.74	73.03	73.71	74.18	74.59	73.58			
7	68.32	69.28	70.90	72.97	73.06	73.86	74.23	74.83	73.61			
8	68.33	69.36	70.95	73.20	73.00	74.03	74.17	74.77	73.68			
9	68.28	69.38	70.97	73.33	73.19	74.17	74.20	74.59	73.77			
10	68.30	69.40	71.14	73.41	73.27	74.29	74.17	74.48	73.89			
11	68.29	69.45	71.27	73.43	73.29	74.39	74.15	74.45	74.00			
12	68.30	69.50	71.31	73.43	73.32	74.45	74.11	74.43	74.13			
13	68.29	69.64	71.45	73.42	73.56	74.47	74.08	74.42	74.30			
14	68.24	69.67	71.68	73.38	73.62	74.45	74.06	74.38	74.54			
15	68.19	69.75	71.76	73.31	73.67	74.41	73.99	74.37	74.71			
16	68.20	69.81	72.11	73.21	73.67	74.58	74.30	74.40	74.75			
17	68.20	69.83	72.27	73.10	73.65	74.48	74.58	74.45	74.72			
18	68.17	70.09	72.44	73.07	73.65	74.35	74.63	74.49	74.70			
19	68.18	70.15	72.56	73.04	73.65	74.32	74.64	74.52	74.67			
20	68.19	70.24	72.66	73.05	73.62	74.24	74.57	74.55	74.74			
21	68.21	70.31	72.72	73.14	73.61	74.20	74.47	74.54	74.72			
22	68.39	70.36	72.76	73.20	73.61	74.13	74.37	74.53	74.67			
23	68.31	70.43	72.72	73.23	73.60	74.07	74.40	74.51	74.64			
24	68.27	70.52	72.72	73.24	73.57	74.43	74.44	74.46	74.63			
25	68.36	70.63	72.69	73.30	73.53	74.62	74.52	74.41	74.65			
26	68.49	70.67	72.68	73.29	73.50	74.78	74.57	.4.28	74.65			
27	68.58	70.72	72.64	73.28	73.44	74.77	74.65	74.15	74.63			
28	68.62	70.75	72.60	73.15	73.38	74.71	74.69	73.99	74.63			
29	68.73	70.80	72.51	73.21	------	74.62	74.69	73.86	74.62			
30	68.89	70.83	72.62	73.14	------	74.55	74.70	73.78	74.55			
31	68.99	------	72.62	73.09	------	74.43	------	73.67	------			------
MAX	68.99	70.83	72.76	73.43	73.67	74.78	74.70	74.83	74.75			
MIN	68.17	69.08	70.83	72.57	73.00	73.34	73.99	73.67	73.48			

CAL YR 1972 MAX 73.81 MIN 68.17
WTR YR 1973 MAX 74.83 MIN 68.17

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 Sabine River, 1.0 mile (1.6 km) upstream from Bayou Toro, 15 miles (24.1 km) northeast of Burkeville, and at mile 156.5 (251.8 km).

DRAINAGE AREA.--7,178 mi² (18,591 km²).

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, 4,700,000 acre-ft (5,800 hm³) May 3, elevation, 173.21 ft (52.79 m); minimum, 3,517,000 acre-ft (4,340 hm³) Oct. 22, elevation, 166.29 ft (50.69 m).
Period of record: Maximum contents, 4,739,000 acre-ft (5,840 hm³) Mar. 21, 1969, elevation, 173.42 ft (52.86 m); minimum since initial filling of reservoir in June 1968, 3,517,000 acre-ft (4,340 hm³) Oct. 22, 1972, elevation, 166.29 ft (50.69 m).

REMARKS.--Reservoir is formed by a rolled earthfill dam, 11,243 ft (3,430 m) 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 (134 m) is controlled by eleven 40- by 28-foot (12.2- by 8.5-meter) 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 (2.5- by 3.7-meter) concrete conduit controlled by a single gate. Two 20-inch-diameter (508-millimeter) conduits are provided which bypass the sluice gate. Water for turbines is admitted through four 16.75- by 29-foot (5.1- by 8.8-meter) 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 (6.1-meter) contour intervals.

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

166.25	3,511,000	172.0	4,476,000
166.3	3,519,000	173.2	4,698,000
168.0	3,788,000	173.3	4,716,000
170.0	4,123,000		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,564	3,666	3,925	4,264	4,355	4,364	4,562	4,623	4,400	4,572	4,359	4,148
2	3,562	3,676	3,930	4,258	4,345	4,390	4,536	4,690	4,377	4,560	4,370	4,150
3	3,562	3,687	3,939	4,257	4,333	4,379	4,581	4,664	4,404	4,549	4,381	4,157
4	3,565	3,697	3,956	4,253	4,311	4,409	4,553	4,629	4,399	4,526	4,381	4,161
5	3,569	3,697	3,956	4,255	4,317	4,404	4,533	4,588	4,415	4,522	4,384	4,154
6	3,562	3,703	3,973	4,258	4,326	4,442	4,538	4,586	4,433	4,522	4,368	4,157
7	3,542	3,726	3,962	4,338	4,324	4,469	4,544	4,647	4,436	4,515	4,364	4,164
8	3,539	3,703	3,977	4,359	4,373	4,504	4,520	4,642	4,444	4,518	4,366	4,175
9	3,545	3,708	3,982	4,381	4,384	4,526	4,557	4,599	4,453	4,531	4,361	4,195
10	3,562	3,726	4,016	4,391	4,372	4,542	4,540	4,577	4,480	4,542	4,357	4,189
11	3,553	3,722	4,018	4,408	4,350	4,568	4,527	4,572	4,492	4,553	4,350	4,190
12	3,552	3,721	4,054	4,393	4,364	4,582	4,522	4,586	4,520	4,557	4,352	4,194
13	3,552	3,769	4,057	4,381	4,417	4,564	4,517	4,584	4,544	4,545	4,345	4,194
14	3,545	3,777	4,126	4,377	4,444	4,586	4,498	4,586	4,582	4,526	4,340	4,195
15	3,544	3,769	4,164	4,368	4,449	4,597	4,462	4,581	4,609	4,492	4,329	4,189
16	3,530	3,774	4,164	4,354	4,444	4,629	4,547	4,577	4,625	4,485	4,319	4,192
17	3,528	3,785	4,187	4,324	4,440	4,582	4,605	4,590	4,619	4,467	4,310	4,185
18	3,527	3,810	4,214	4,328	4,440	4,549	4,609	4,581	4,610	4,456	4,319	4,164
19	3,542	3,837	4,241	4,326	4,436	4,553	4,597	4,582	4,605	4,440	4,322	4,142
20	3,533	3,837	4,262	4,310	4,436	4,575	4,581	4,596	4,609	4,415	4,310	4,128
21	3,521	3,854	4,295	4,338	4,433	4,536	4,575	4,592	4,629	4,397	4,304	4,118
22	3,556	3,862	4,271	4,364	4,429	4,522	4,562	4,588	4,623	4,382	4,287	4,120
23	3,572	3,867	4,267	4,377	4,429	4,496	4,566	4,590	4,618	4,384	4,267	4,109
24	3,562	3,898	4,273	4,375	4,420	4,577	4,581	4,577	4,616	4,384	4,241	4,096
25	3,547	3,906	4,267	4,377	4,415	4,618	4,599	4,570	4,616	4,382	4,232	4,085
26	3,586	3,895	4,266	4,368	4,415	4,649	4,642	4,522	4,619	4,379	4,223	4,071
27	3,581	3,928	4,251	4,377	4,402	4,632	4,625	4,527	4,614	4,366	4,213	4,054
28	3,584	3,935	4,237	4,390	4,384	4,619	4,621	4,509	4,612	4,357	4,197	4,059
29	3,610	3,942	4,220	4,350	------	4,616	4,603	4,478	4,599	4,355	4,185	4,049
30	3,615	3,934	4,258	4,335	------	4,592	4,609	4,458	4,581	4,343	4,170	4,039
31	3,637	------	4,257	4,329	------	4,573	------	4,426	------	4,357	4,147	------
(†)	167.06	168.88	170.77	171.18	171.49	172.53	172.72	171.72	172.57	171.34	170.14	169.51
(*)	+64.0	+297.0	+323.0	+72.0	+55.0	+189.0	+36.0	-183.0	+155.0	-224.0	-210.0	-108.0
MAX	3,637	3,942	4,295	4,408	4,449	4,649	4,642	4,690	4,629	4,572	4,384	4,195
MIN	3,521	3,666	3,925	4,253	4,311	4,364	4,462	4,426	4,377	4,343	4,147	4,039

CAL YR 1972..... * +82.0 MAX 4,467 MIN 3,517
WTR YR 1973..... * +466.0 MAX 4,690 MIN 3,521

† 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 (2.6 km) south of Toledo Bend Reservoir gage, 10 miles (16.1 km) upstream from Sabine River near Burkeville gage, and at mile 156.5 (251.8 km).

DRAINAGE AREA.--7,178 mi² (18,591 km²).

PERIOD OF RECORD.--October 1971 to September 1973 (discharge computation discontinued).

GAGE.--Water-stage recorders. Datum of gages is at mean sea level (levels by Sabine River Authority).

EXTREMES.--Current year: Maximum daily discharge, 37,300 ft³/s (1,060 m³/s) May 9; maximum elevation (forebay), 173.05 ft (52.75 m) May 3; maximum gage height (tailrace), 108.20 ft (32.98 m) May 10; minimum daily discharge, 30 ft³/s (0.85 m³/s) estimated Oct. 1-4; minimum elevation (forebay and tailrace), not determined.
Period of record: Maximum daily discharge, 37,300 ft³/s (1,060 m³/s) May 9, 1973; maximum elevation (forebay), 173.05 ft (52.75 m) May 3, 1973; maximum gage height (tailrace), 108.20 ft (32.98 m) May 10, 1973; minimum daily discharge, 30 ft³/s (0.85 m³/s) estimated Oct. 1-4, 1972; minimum elevation (forebay and tailrace), not determined.

REMARKS.--Discharges above 16,000 ft³/s (453 m³/s) are result of tainter gate operations and are based on tainter gate rating. Discharges below 16,000 ft³/s (453 m³/s) are based upon megawatt-discharge relationships with adjustments for differential water surface elevations during turbine release periods, estimates of turbine leakage during non-turbine release periods, and low-flow sluiceway discharge based on discharge measurements.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	100	1,540	6,760	15,000	5,610	26,200	15,500	8,600	14,500	3,680	100
2	30	100	100	7,050	15,300	3,480	19,500	23,700	3,350	14,500	3,190	100
3	30	100	100	10,100	14,800	100	14,200	31,800	130	14,500	1,580	100
4	30	100	100	10,500	14,800	100	14,500	30,900	7,590	14,500	100	7,430
5	70	100	100	6,920	10,400	3,530	14,700	26,700	4,060	12,000	100	7,920
6	1,640	100	100	6,830	6,820	3,460	15,000	22,600	3,290	3,080	3,430	100
7	100	100	100	7,020	6,820	2,730	14,900	21,500	3,200	6,690	3,070	7,370
8	100	100	100	11,500	6,920	100	14,800	32,900	3,130	6,780	2,910	100
9	100	100	100	15,100	7,020	2,730	14,600	37,300	130	6,880	2,800	100
10	100	100	100	15,000	6,920	6,290	14,900	31,400	130	6,690	2,960	7,860
11	100	100	940	14,900	6,670	6,680	14,800	22,800	3,280	8,010	100	8,220
12	100	100	1,260	14,600	6,670	6,680	14,800	20,900	3,750	10,700	100	8,230
13	100	100	1,110	14,600	6,600	9,080	14,800	18,000	4,550	10,900	2,930	8,080
14	2,660	100	100	14,600	7,090	14,300	14,800	18,200	11,700	10,600	2,990	8,150
15	100	100	100	14,800	6,920	14,700	14,800	14,700	15,600	10,800	2,950	110
16	2,020	100	100	15,000	6,820	28,300	13,600	9,380	17,900	10,700	3,020	110
17	100	100	100	15,000	6,850	26,700	19,100	6,950	20,400	10,900	6,040	7,850
18	1,280	100	140	10,400	6,490	21,200	27,000	6,950	20,300	9,500	130	8,040
19	100	100	5,430	6,760	6,670	15,000	27,100	6,850	19,800	9,420	130	5,950
20	100	100	7,970	6,850	6,850	14,900	26,700	6,850	14,300	9,310	7,810	7,700
21	100	100	8,390	6,830	6,750	14,900	26,500	6,850	22,000	6,850	2,990	6,810
22	100	1,020	9,300	6,920	6,750	14,500	22,300	6,780	21,300	6,610	5,100	110
23	100	100	10,000	6,440	6,750	15,000	17,300	6,780	19,800	2,330	6,130	110
24	100	100	6,920	6,760	6,750	15,000	14,600	7,860	17,300	80	8,500	8,090
25	100	100	6,610	11,300	6,750	15,300	14,600	9,700	15,200	2,750	4,730	8,300
26	100	100	6,520	15,400	6,750	15,500	14,900	13,500	15,000	4,330	130	8,040
27	100	100	6,850	15,800	6,750	22,200	14,900	14,500	15,000	7,500	7,250	7,990
28	100	100	6,760	14,900	6,750	27,000	14,900	14,900	14,200	130	6,900	5,010
29	100	100	6,760	15,000	------	26,400	14,900	13,500	14,700	130	7,600	6,630
30	100	100	6,850	15,000	------	26,700	14,900	6,730	15,000	4,630	8,100	6,330
31	100	------	6,850	15,000	------	26,200	------	7,080	------	5,450	8,000	------
TOTAL	9,990	3,920	101,500	353,640	226,430	404,370	520,600	514,060	334,690	241,750	115,450	151,040
MEAN	322	131	3,274	11,410	8,087	13,040	17,350	16,580	11,160	7,798	3,724	5,035
MAX	2,660	1,020	10,000	15,800	15,300	28,300	27,100	37,300	22,000	14,500	8,500	8,300
MIN	30	100	100	6,440	6,490	100	13,600	6,730	130	80	100	100
AC-FT	19,820	7,780	201,300	701,400	449,100	802,100	1,033M	1,020M	663,900	479,500	229,000	299,600

CAL YR 1972 TOTAL 1,237,500 MEAN 3,381 MAX 15,400 MIN 30 AC-FT 2,455,000
WTR YR 1973 TOTAL 2,977,440 MEAN 8,157 MAX 37,300 MIN 30 AC-FT 5,906,000

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 (61 m) downstream from Pearl Creek, 10 miles (16.1 km) northeast of Burkeville, 16 miles (25.7 km) downstream from Bayou Toro, and at mile 139.7 (224.8 km).

DRAINAGE AREA.--7,482 mi² (19,378 km²).

PERIOD OF RECORD.--September 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 70.59 ft (21.52 m) 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 ft³/s (132 m³/s), 3,371,000 acre-ft/yr (4,156 hm³/yr); 7 years (1966-73) regulated, 4,144 ft³/s (117 m³/s), 3,002,000 acre-ft/yr (3,701 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 39,400 ft³/s (1,120 m³/s) May 10, gage height, 29.11 ft (8.87 m); minimum daily, 147 ft³/s (4.16 m³/s) Oct. 4.
Period of record: Maximum discharge, 52,900 ft³/s (1,500 m³/s) May 15, 1957, gage height, 32.43 ft (9.88 m); minimum daily, 38 ft³/s (1.08 m³/s) Sept. 14, 15, 1967.
Maximum stage since at least 1860, 35.9 ft (10.9 m) in May 1884, from information by local resident. Flood of Apr. 15, 1945, reached a stage of 35.8 ft (10.9 m), and flood of May 23, 1953, reached a stage of 35.3 ft (10.8 m), from floodmarks.

REMARKS.--Records good. Flow regulated by Toledo Bend Reservoir (station 08025350) 16.8 miles (27.0 km) upstream, capacity, 4,660,000 acre-ft (5,746 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	450	824	7,060	16,400	6,580	26,400	15,500	9,560	15,000	4,000	2,500
2	184	400	1,120	7,180	16,500	3,910	24,800	21,200	6,090	15,000	3,500	470
3	152	400	325	8,970	15,700	1,870	17,400	28,700	1,870	14,500	3,000	310
4	147	500	622	11,100	15,100	1,150	15,200	33,600	5,170	13,600	1,400	8,000
5	164	450	573	8,850	13,200	3,050	14,800	31,800	7,010	13,800	380	8,000
6	821	350	439	8,060	7,900	3,970	14,800	28,900	4,100	8,000	3,200	4,680
7	1,090	295	380	8,800	6,940	4,420	15,500	27,700	4,030	6,000	3,300	4,940
8	266	273	354	11,200	7,300	2,970	15,500	32,000	3,850	7,000	3,200	3,900
9	234	261	383	15,800	8,380	2,250	15,200	37,200	2,190	7,000	3,000	594
10	226	259	892	16,200	8,020	6,340	15,200	38,600	765	7,000	3,200	4,610
11	223	245	1,910	15,500	7,300	7,060	15,300	33,400	2,320	8,000	700	8,200
12	223	235	2,100	15,300	6,940	7,060	15,000	27,700	4,690	10,500	300	8,670
13	223	409	2,000	15,200	7,540	7,360	14,800	22,200	6,070	11,000	3,000	8,440
14	1,120	664	1,620	15,300	11,100	12,900	14,800	19,400	10,400	11,000	3,000	8,170
15	1,890	602	3,390	15,400	9,540	14,500	15,000	18,400	16,900	11,000	3,000	4,490
16	1,100	405	2,680	15,500	8,260	21,900	18,700	12,200	17,600	11,000	3,200	544
17	1,400	319	1,720	15,400	7,420	30,300	22,600	8,140	19,700	10,500	5,000	4,590
18	640	445	950	13,500	6,940	29,000	31,200	7,660	19,900	10,000	500	8,200
19	1,180	1,040	3,120	7,890	6,760	22,000	33,800	7,540	19,700	9,500	400	6,560
20	364	819	7,830	7,230	6,940	16,800	33,300	7,540	18,500	9,000	6,500	7,480
21	341	542	9,980	9,090	6,940	15,200	31,700	7,540	17,100	8,000	4,000	7,160
22	349	873	10,600	9,160	6,940	14,500	29,400	7,540	24,500	7,000	3,300	3,690
23	490	696	10,800	7,900	6,940	14,500	23,900	7,420	21,000	2,000	8,000	505
24	412	339	9,370	7,110	6,820	17,100	18,000	7,980	19,000	250	9,000	4,740
25	352	424	7,130	8,760	6,820	19,000	15,900	8,810	17,000	1,700	5,000	8,200
26	330	546	6,580	14,700	6,820	17,600	15,800	13,100	16,000	2,830	1,000	8,180
27	600	503	6,940	16,100	6,820	18,200	15,800	15,100	15,000	7,060	10,000	9,010
28	580	398	6,940	15,800	6,700	24,300	15,600	15,300	15,000	2,990	9,000	7,140
29	450	337	6,940	15,400	------	26,000	15,500	15,300	15,000	610	9,500	6,170
30	550	322	7,060	15,300	------	26,200	15,500	9,690	15,000	1,980	9,800	5,810
31	550	------	7,300	15,300	------	26,700	------	8,060	------	6,580	8,000	------
TOTAL	16,966	13,801	122,872	374,060	248,980	424,690	586,400	575,220	355,015	249,400	130,380	163,953
MEAN	547	460	3,964	12,070	8,892	13,700	19,550	18,560	11,830	8,045	4,206	5,465
MAX	1,890	1,040	10,800	16,200	16,500	30,300	33,800	38,600	24,500	15,000	10,000	9,010
MIN	147	235	325	7,060	6,700	1,150	14,800	7,420	765	250	300	310
AC-FT	33,650	27,370	243,700	741,900	493,900	842,400	1,163M	1,141M	704,200	494,700	258,600	325,200

CAL YR 1972 TOTAL 1,351,115 MEAN 3,692 MAX 19,100 MIN 147 AC-FT 2,680,000
WTR YR 1973 TOTAL 3,261,737 MEAN 8,936 MAX 38,600 MIN 147 AC-FT 6,470,000

NOTE.--No gage-height record June 23 to July 26, Aug. 1 to Sept. 5.

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 (1.1 km) upstream from Quicksand Creek, 0.8 mile (1.3 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.0 miles (3.2 km) east of Bon Wier, 2.4 miles (3.9 km) upstream from Caney Creek, and at mile 97.7 (157.2 km).

DRAINAGE AREA.--8,229 mi² (21,313 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 46.42 ft (14.15 m) above mean sea level. Prior to July 8, 1931, nonrecording gage at site 0.8 mile (1.3 km) 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 ft³/s (194 m³/s), 4,960,000 acre-ft/yr (6,116 hm³/yr); 7 years (1966-73) regulated, 4,990 ft³/s (141 m³/s), 3,615,000 acre-ft/yr (4,457 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 41,600 ft³/s (1,178 m³/s) May 11, gage height, 21.52 ft (6.56 m); minimum daily, 400 ft³/s (11.3 m³/s) Oct. 14.

Period of record: Maximum discharge, 115,000 ft³/s (3,257 m³/s) May 19, 1953, gage height, 25.70 ft (7.83 m); minimum daily, 134 ft³/s (3.79 m³/s) Nov. 9, 1966.

Maximum stage since at least 1833, 30.5 ft (9.30 m) 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 (8 m). 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 (94.6 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,620	1,300	885	8,200	19,200	8,200	29,900	16,600	8,340	16,000	7,300	8,360
2	996	1,160	1,240	8,870	21,600	7,220	29,500	19,300	9,500	15,000	7,430	3,760
3	670	955	1,550	9,480	20,300	5,500	26,700	29,500	7,000	15,000	6,300	1,350
4	560	980	915	11,300	19,000	3,920	20,300	33,700	4,000	15,000	4,290	1,140
5	510	1,160	1,690	12,200	17,100	4,750	17,200	34,900	6,000	15,000	2,030	6,750
6	482	1,020	2,340	9,940	13,000	5,960	16,600	34,400	8,000	14,000	1,440	12,000
7	925	880	1,600	12,000	9,250	6,240	18,300	34,600	6,500	12,000	3,480	7,340
8	1,250	760	1,030	14,000	9,000	6,460	20,300	38,500	5,000	10,000	4,510	8,340
9	578	690	1,260	15,000	10,000	4,720	19,400	38,100	4,500	9,090	4,340	5,270
10	462	638	1,430	17,000	11,000	5,300	18,300	39,100	3,000	8,580	4,000	2,240
11	440	598	3,200	17,500	11,000	8,600	17,200	41,000	2,200	8,220	3,870	6,150
12	427	566	5,200	17,200	10,000	9,130	16,800	38,900	3,000	8,700	2,170	8,470
13	406	730	8,100	16,800	12,000	8,920	16,400	34,400	7,500	10,600	1,120	9,080
14	400	1,500	9,200	16,600	15,400	10,200	16,200	28,100	11,000	11,600	2,510	9,510
15	1,200	1,200	8,700	16,500	16,800	14,300	16,200	23,700	20,000	12,000	3,730	9,230
16	1,720	1,000	7,600	16,500	16,400	17,700	20,100	19,000	23,000	12,000	3,720	4,310
17	1,310	900	6,100	16,400	16,400	15,200	27,600	17,000	24,000	11,500	3,740	1,730
18	1,460	800	5,100	16,200	11,100	32,300	34,100	9,740	22,500	11,000	5,550	6,010
19	875	1,200	3,900	12,500	9,700	32,600	37,900	8,910	22,000	11,000	2,990	8,100
20	1,280	2,000	6,520	8,960	9,100	29,200	40,300	8,590	21,500	11,000	1,130	7,500
21	686	1,800	11,000	9,910	8,900	23,400	40,500	8,220	21,000	10,500	5,470	7,500
22	630	1,630	13,000	13,200	8,700	19,200	38,300	8,220	22,000	9,000	4,770	7,500
23	880	1,300	14,000	12,100	8,600	17,200	35,500	8,220	27,000	8,000	4,970	3,300
24	1,000	1,100	13,000	10,600	8,600	21,800	30,200	8,220	24,000	5,500	6,180	1,450
25	815	1,200	11,500	9,570	8,600	31,600	22,900	8,830	22,000	5,000	7,780	5,740
26	690	1,600	10,000	12,800	8,500	30,200	19,300	10,700	20,000	4,860	6,020	8,220
27	1,060	1,600	8,700	17,200	8,500	27,400	18,700	14,400	18,000	4,750	2,720	7,980
28	1,680	1,400	8,100	18,100	8,400	28,100	17,700	15,200	17,000	7,280	5,310	8,100
29	1,46	1,150	7,860	17,700	------	30,200	17,200	15,400	17,000	3,020	7,750	7,500
30	1,220	985	7,700	16,800	------	30,600	16,900	14,100	17,000	1,370	8,260	7,170
31	1,400	------	8,000	16,800	------	30,200	------	9,480	------	4,260	8,460	------
TOTAL	30,092	33,802	190,420	427,930	346,150	526,320	716,500	669,030	423,540	300,830	143,340	191,100
MEAN	971	1,127	6,143	13,800	12,360	16,980	23,880	21,580	14,120	9,704	4,624	6,370
MAX	2,620	2,000	14,000	18,100	21,600	32,600	40,500	41,000	27,000	16,000	8,460	12,000
MIN	400	566	885	8,200	8,400	3,920	16,200	8,220	2,200	1,370	1,120	1,140
AC-FT	59,690	67,050	377,700	848,800	686,600	1,044M	1,421M	1,327M	840,100	596,700	284,300	379,000

CAL YR 1972 TOTAL 1,740,895 MEAN 4,757 MAX 23,700 MIN 400 AC-FT 3,453,000
WTR YR 1973 TOTAL 3,999,054 MEAN 10,960 MAX 41,000 MIN 400 AC-FT 7,932,000

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 (4.2 km) southwest of Newton, 5.0 miles (8.0 km) downstream from Melhomes Creek, and 8.0 miles (12.9 km) upstream from Whiteoak Creek.

DRAINAGE AREA.--128 mi² (332 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 134.69 ft (41.05 m) above mean sea level (levels by Topographic Division). Prior to Dec. 19, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 99.3 ft³/s (2.81 m³/s), 10.54 in/yr (267.7 mm/yr), 71,940 acre-ft/yr (88.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,800 ft³/s (164 m³/s) Apr. 18, gage height, 16.78 ft (5.11 m); minimum daily, 18 ft³/s (0.51 m³/s) Oct. 15, 18.
Period of record: Maximum discharge, 20,200 ft³/s (572 m³/s) Apr. 29, 1953, gage height, 19.45 ft (5.93 m); minimum daily, 10 ft³/s (0.28 m³/s) July 7, 8, 21-23, 1971.
Maximum stage since at least 1907, 27.5 ft (8.4 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	93	56	133	482	105	140	126	85	93	444	117
2	37	66	53	216	333	100	130	535	85	93	1,860	98
3	30	60	52	225	153	120	120	2,020	79	90	689	110
4	25	290	55	211	109	250	110	852	75	88	175	137
5	24	146	86	138	95	300	105	244	79	144	131	1,090
6	23	78	94	217	88	150	100	173	122	605	116	1,700
7	22	59	80	389	83	120	300	1,440	155	550	133	692
8	22	50	68	644	145	100	800	1,910	117	609	154	245
9	22	46	80	277	688	100	300	600	216	192	125	169
10	21	43	214	167	364	120	170	217	175	131	108	143
11	21	41	596	169	167	150	130	171	264	111	98	131
12	20	40	253	167	130	133	120	315	431	104	91	127
13	19	213	166	166	204	110	110	364	624	113	112	125
14	19	407	138	158	1,410	108	100	213	738	161	256	122
15	18	123	967	142	984	150	200	148	1,330	131	170	110
16	22	73	1,180	118	264	600	754	126	1,120	94	121	101
17	21	60	246	104	165	1,580	1,460	115	408	160	108	96
18	18	152	145	100	141	444	3,600	103	256	142	100	93
19	64	672	133	109	126	182	1,420	98	189	96	97	90
20	222	248	260	101	115	144	554	105	160	83	92	88
21	76	107	870	423	106	123	340	109	247	77	83	85
22	60	85	583	564	102	108	252	106	263	73	77	83
23	309	74	191	200	115	101	206	102	172	82	73	82
24	122	72	134	124	140	600	181	98	136	88	70	144
25	60	260	109	116	130	2,000	164	98	122	93	69	212
26	53	200	97	440	125	900	296	122	112	119	69	137
27	390	107	87	282	120	400	244	116	102	802	73	104
28	186	79	80	255	110	250	162	97	95	654	154	112
29	83	68	78	171	------	200	133	87	94	174	479	130
30	243	60	112	159	------	170	122	81	94	119	347	109
31	212	------	237	112	------	150	------	80	------	101	187	------
TOTAL	2,506	4,072	7,500	6,797	7,194	10,068	12,823	10,971	8,145	6,172	6,861	6,782
MEAN	80.8	136	242	219	257	325	427	354	272	199	221	226
MAX	390	672	1,180	644	1,410	2,000	3,600	2,020	1,330	802	1,860	1,700
MIN	18	40	52	100	83	100	100	80	75	73	69	82
CFSM	.63	1.06	1.89	1.71	2.01	2.54	3.34	2.77	2.13	1.55	1.73	1.77
IN.	.73	1.18	2.18	1.98	2.09	2.93	3.73	3.19	2.37	1.79	1.99	1.97
AC-FT	4,970	8,080	14,880	13,480	14,270	19,970	25,430	21,760	16,160	12,240	13,610	13,450

CAL YR 1972 TOTAL 35,620 MEAN 97.3 MAX 1,260 MIN 14 CFSM .76 IN 10.35 AC-FT 70,650
WTR YR 1973 TOTAL 89,891 MEAN 246 MAX 3,600 MIN 18 CFSM 1.92 IN 26.12 AC-FT 178,300

PEAK DISCHARGE (BASE, 1,100 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-16	0300	15.21	1,780	5- 3	0900	15.90	3,000
2-14	2000	15.39	2,040	5- 7	2300	16.28	3,940
3-17	0800	15.43	2,100	6-15	1800	14.99	1,540
3-25	unknown	unknown	*4,000	8- 2	1000	15.56	2,320
4-18	0800	16.78	5,800	9- 6	0100	15.54	2,280

* Estimated.

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 (0.5 km) downstream from Boggy Creek, 3.2 miles (5.1 km) east of Buna, and 9.5 miles (15.3 km) upstream from Little Cypress Creek.

DRAINAGE AREA.--69.2 mi² (179 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 46.16 ft (14.07 m) above mean sea level. Prior to Oct. 23, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 66.6 ft³/s (1.89 m³/s), 13.07 in/yr (332.0 mm/yr), 48,250 acre-ft/yr (59.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,400 ft³/s (68.0 m³/s) Mar. 24, gage height, 11.03 ft (3.36 m); no flow Oct. 10-18.
Period of record: Maximum discharge, 7,100 ft³/s (201 m³/s) Sept. 18, 1963, gage height, 13.28 ft (4.05 m); no flow at times.

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

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	16	6.6	108	585	14	44	8.5	.27	.39	15	40
2	3.0	12	4.8	437	550	100	26	322	.26	.36	56	14
3	2.0	13	3.8	436	337	85	16	815	.22	.23	46	6.6
4	1.0	27	8.2	310	218	265	10	741	.17	.14	20	5.9
5	.40	24	88	178	109	170	6.8	379	.20	.15	9.2	391
6	.17	11	261	253	60	81	5.3	90	.32	.53	9.0	548
7	.07	6.3	78	430	44	58	299	459	.30	1.2	79	493
8	.04	4.3	46	521	130	43	428	1,300	.34	9.1	75	480
9	.01	4.3	92	365	550	48	242	1,130	73	22	47	290
10	0	2.4	162	249	535	79	162	627	34	14	25	89
11	0	1.3	374	200	380	156	81	365	12	5.0	16	69
12	0	.81	236	157	284	72	40	230	48	2.2	14	204
13	0	92	169	156	202	39	22	315	322	1.1	9.3	650
14	0	139	113	120	640	25	13	133	686	.65	37	271
15	0	48	354	86	735	82	54	54	698	.39	30	88
16	0	20	308	65	770	169	862	22	427	.26	62	37
17	0	10	151	52	550	233	1,340	11	245	.27	77	16
18	0	81	84	48	334	129	2,190	7.2	157	.20	48	8.3
19	.13	337	64	48	139	81	1,500	5.7	90	2.3	21	5.1
20	22	143	144	39	66	47	880	3.7	31	2.1	11	3.4
21	7.7	55	200	190	44	28	577	2.5	11	1.1	6.1	2.4
22	3.4	27	150	272	31	17	338	1.9	36	.59	3.8	1.8
23	25	17	86	147	62	31	129	1.7	46	.32	2.3	1.3
24	18	12	54	92	67	1,480	54	1.5	18	.17	1.5	46
25	6.1	41	35	89	52	1,520	30	1.3	7.4	.16	1.0	368
26	4.0	49	23	444	37	981	28	1.1	3.9	2.1	.76	88
27	58	26	16	340	25	634	37	.88	2.3	134	.62	32
28	35	16	12	229	18	355	17	.69	1.5	169	1.1	21
29	11	13	9.0	165	------	147	9.4	.53	.92	98	14	55
30	42	9.2	29	99	------	82	5.9	.41	.60	48	57	32
31	47	------	140	68	------	60	------	.33	------	13	72	------
TOTAL	291.02	1,257.61	3,501.4	6,393	7,554	7,311	9,446.4	7,030.94	2,952.70	529.01	866.68	4,356.8
MEAN	9.39	41.9	113	206	270	236	315	227	98.4	17.1	28.0	145
MAX	58	337	374	521	770	1,520	2,190	1,300	698	169	79	650
MIN	0	.81	3.8	39	18	14	5.3	.33	.17	.14	.62	1.3
CFSM	.14	.61	1.63	2.98	3.90	3.41	4.55	3.28	1.42	.25	.40	2.10
IN.	.16	.68	1.88	3.44	4.06	3.93	5.08	3.78	1.59	.28	.47	2.34
AC-FT	577	2,490	6,950	12,680	14,980	14,500	18,740	13,950	5,860	1,050	1,720	8,640

CAL YR 1972 TOTAL 20,773.77 MEAN 56.8 MAX 1,550 MIN 0 CFSM .82 IN 11.17 AC-FT 41,200
WTR YR 1973 TOTAL 51,490.56 MEAN 141 MAX 2,190 MIN 0 CFSM 2.04 IN 27.68 AC-FT 102,100

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-24	1700	11.03	2,400
4-18	0700	10.98	2,320
5- 8	2000	10.32	1,540

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 (3.9 km) north of Ruliff, 4.2 miles (6.8 km) upstream from the Kansas City Southern Railway Co. bridge, 4.5 miles (7.2 km) downstream from Cypress Creek, and at mile 40.2 (64.7 km).

DRAINAGE AREA.--9,329 mi² (24,162 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4.08 ft (1.24 m) above mean sea level. Prior to Mar. 1, 1941, nonrecording gage at Kansas City Southern Railway Co. bridge, 4.2 miles (6.8 km) downstream and at datum 2.02 ft (0.62 m) 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 ft³/s (238 m³/s), 6,102,000 acre-ft/yr (7,524 hm³/yr); 7 years (1966-73) regulated, 6,487 ft³/s (184 m³/s), 4,700,000 acre-ft/yr (5,795 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 47,600 ft³/s (1,348 m³/s) Apr. 20, 21, gage height, 16.10 ft (4.91 m); minimum daily, 694 ft³/s (19.7 m³/s) Oct. 15.
Period of record: Maximum discharge, 121,000 ft³/s (3,427 m³/s) May 22, 1953, gage height, 19.98 ft (6.09 m); minimum, 270 ft³/s (7.65 m³/s) Sept. 27-30, Oct. 1-3, 17-20, 1956.
Maximum stage since at least 1835, 22.2 ft (6.8 m) 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 (5.9 m), present site and datum, from information by local resident.

REMARKS.--Records fair. Flow partly regulated by Toledo Bend Reservoir (station 08025350) 116.3 miles (187.1 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,530	2,360	1,820	11,200	20,700	10,700	27,100	18,800	16,500	17,800	5,750	9,460
2	7,540	2,450	1,620	11,800	20,900	10,700	26,800	19,700	16,100	16,800	6,950	9,880
3	4,420	2,130	1,560	12,600	21,600	10,600	26,500	20,800	13,300	15,900	8,420	9,330
4	2,230	1,810	2,010	13,300	23,000	10,400	25,700	21,300	11,700	16,000	9,550	7,560
5	1,460	1,640	1,880	14,100	24,000	9,660	24,800	25,300	9,570	16,500	10,100	6,900
6	1,160	1,850	2,270	15,100	23,400	8,510	22,700	31,400	7,570	16,500	9,650	9,570
7	1,010	1,910	3,350	16,500	21,800	8,130	21,200	34,800	7,770	16,500	7,030	12,600
8	977	1,640	3,440	17,500	20,400	8,340	19,900	36,000	7,920	17,300	5,350	15,100
9	1,540	1,430	3,020	17,800	19,000	8,560	19,500	38,300	7,430	16,800	5,660	15,900
10	1,340	1,260	2,720	17,900	17,700	8,400	20,000	43,200	7,230	15,600	6,270	15,800
11	967	1,140	2,760	18,300	17,200	7,630	20,400	43,600	6,740	14,200	6,470	13,900
12	825	1,060	4,120	19,200	17,600	8,100	20,000	41,300	5,260	13,000	6,110	10,500
13	770	1,210	5,920	20,400	17,900	9,260	19,200	40,600	6,300	12,000	5,470	11,300
14	731	2,020	6,880	21,000	18,000	10,200	18,500	37,100	9,450	11,400	3,930	13,800
15	694	2,870	6,920	20,900	17,800	10,900	18,300	32,900	12,900	11,400	3,160	14,700
16	767	3,360	7,140	20,400	18,400	11,700	19,200	27,600	15,200	12,000	4,320	14,000
17	1,750	2,940	8,580	20,000	20,200	13,100	21,400	23,300	17,400	12,600	5,050	12,900
18	1,560	2,430	9,930	19,800	21,600	15,200	27,400	20,300	22,200	12,900	5,260	10,000
19	1,780	2,770	10,300	19,600	20,600	18,100	35,900	18,100	25,500	13,000	5,540	7,210
20	1,440	3,920	9,420	19,300	18,600	24,300	44,300	16,100	25,000	13,100	5,930	7,440
21	1,440	5,050	8,560	19,200	16,500	29,100	47,300	14,200	23,900	12,900	4,390	8,400
22	1,450	4,930	9,560	18,900	14,800	28,400	46,100	12,800	22,400	12,500	3,640	8,670
23	1,330	3,830	11,400	16,800	13,500	26,300	43,400	11,700	21,500	12,000	5,300	8,860
24	1,270	2,950	13,300	16,400	12,500	28,400	39,900	11,000	21,300	11,400	5,710	8,880
25	1,530	2,740	14,800	16,800	11,900	31,900	35,500	10,500	21,500	10,700	5,960	6,790
26	1,540	2,400	15,800	17,200	11,500	35,200	31,100	10,100	21,400	8,280	6,700	6,300
27	1,510	2,600	15,800	17,000	11,200	39,200	25,800	10,100	20,400	5,560	7,590	8,140
28	1,500	2,770	14,800	16,900	10,900	37,200	22,200	10,500	19,100	5,660	7,540	9,700
29	2,210	2,460	13,200	17,600	------	32,400	20,400	11,400	18,000	7,170	6,220	11,100
30	2,540	2,110	12,000	17,900	------	28,400	19,300	12,600	17,100	8,250	6,920	11,100
31	2,310	------	11,200	19,700	------	27,100	------	14,600	------	7,070	8,220	------
TOTAL	60,211	74,040	236,080	540,200	503,200	566,090	809,800	720,000	457,640	392,790	194,160	315,790
MEAN	1,942	2,468	7,615	17,430	17,970	18,260	26,990	23,230	15,250	12,670	6,263	10,530
MAX	8,530	5,050	15,800	21,000	24,000	39,200	47,300	43,600	25,500	17,800	10,100	15,900
MIN	694	1,060	1,560	11,200	10,900	7,630	18,300	10,100	5,260	5,560	3,160	6,300
AC-FT	119,400	146,900	468,300	1,071M	998,100	1,123M	1,606M	1,428M	907,700	779,100	385,100	626,400

CAL YR 1972 TOTAL 2,235,645 MEAN 6,108 MAX 27,100 MIN 694 AC-FT 4,434,000
WTR YR 1973 TOTAL 4,870,001 MEAN 13,340 MAX 47,300 MIN 694 AC-FT 9,660,000

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 (0.6 km) upstream from Kansas City Southern Railway Co. bridge, and 2.7 miles (4.3 km) southwest of Mauriceville.

DRAINAGE AREA.--83.3 mi² (216 km²).

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 (1.44 m) above mean sea level. Prior to Oct. 23, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years, 92.7 ft³/s (2.63 m³/s), 15.11 in/yr (383.8 mm/yr), 67,160 acre-ft/yr (82.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Apr. 20, gage height, 14.12 ft (4.30 m); minimum, 0.12 ft³/s (3.4 dm³/s) Oct. 20-22.
Period of record: Maximum discharge, 4,600 ft³/s (130 m³/s) Sept. 19, 1963, gage height, 18.15 ft (5.53 m); no flow at times. Maximum stage since at least 1940, 18.16 ft (5.54 m) Oct. 28, 1970.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	45	60	262	296	51	263	49	.72	.86	65	1.4
2	13	38	50	432	271	56	160	510	1.8	1.0	66	1.3
3	8.5	36	40	367	282	49	90	1,040	1.9	.91	61	1.2
4	6.2	54	35	304	307	60	57	991	1.6	.52	59	86
5	11	45	170	274	297	71	35	882	2.1	.35	47	1,040
6	12	36	319	377	262	158	24	680	3.7	.62	33	1,010
7	9.8	33	223	455	223	300	214	664	1.4	6.5	38	982
8	7.1	28	224	537	220	367	166	685	1.1	30	107	931
9	5.1	24	264	556	342	342	135	629	1.0	23	142	812
10	3.6	20	274	586	304	288	132	555	1.3	13	122	595
11	2.6	16	261	591	313	232	122	430	4.1	7.4	78	374
12	1.9	13	251	542	321	187	102	478	109	4.3	44	368
13	1.4	87	244	472	324	164	74	707	470	119	26	388
14	1.0	125	243	387	469	150	51	465	638	141	16	413
15	.67	112	276	318	406	136	74	308	715	19	33	310
16	.48	126	251	263	371	121	440	214	679	5.7	18	263
17	.30	144	228	224	334	102	778	139	642	3.7	37	222
18	.21	200	208	205	289	86	1,130	134	516	2.4	69	175
19	.20	300	193	185	246	81	1,270	66	344	1.5	52	107
20	.16	250	187	150	206	78	1,290	32	223	.97	31	63
21	.12	200	248	189	165	71	1,200	17	125	.62	18	34
22	.34	160	200	207	123	59	1,040	10	68	.52	10	18
23	.95	130	174	203	133	148	829	6.8	39	.38	6.4	12
24	.75	110	159	205	111	967	520	4.6	22	.22	4.3	9.7
25	.57	150	146	268	93	1,120	280	3.2	11	7.1	3.1	80
26	3.7	180	134	416	82	1,170	181	2.4	6.2	34	2.5	87
27	14	150	116	388	71	1,210	107	1.8	4.0	68	2.6	70
28	6.7	120	94	417	61	1,150	68	1.3	2.7	99	2.7	97
29	4.5	100	74	388	------	1,020	40	.95	1.8	125	2.1	117
30	63	80	73	341	------	806	24	.83	1.2	128	1.7	102
31	68	------	65	289	------	478	------	.67	------	87	1.5	------
TOTAL	272.85	3,112	5,484	10,798	6,922	11,278	10,896	9,707.55	4,637.62	931.57	1,198.9	8,769.6
MEAN	8.80	104	177	348	247	364	363	313	155	30.1	38.7	292
MAX	68	300	319	591	469	1,210	1,290	1,040	715	141	142	1,040
MIN	.12	13	35	150	61	49	24	.67	.72	.22	1.5	1.2
CFSM	.11	1.25	2.12	4.18	2.97	4.37	4.36	3.76	1.86	.36	.46	3.51
IN.	.12	1.39	2.45	4.82	3.09	5.04	4.87	4.34	2.07	.42	.54	3.92
AC-FT	541	6,170	10,880	21,420	13,730	22,370	21,610	19,250	9,200	1,850	2,380	17,390

CAL YR 1972 TOTAL 31,066.85 MEAN 84.9 MAX 760 MIN .04 CFSM 1.02 IN 13.87 AC-FT 61,620
WTR YR 1973 TOTAL 74,008.09 MEAN 203 MAX 1,290 MIN .12 CFSM 2.44 IN 33.05 AC-FT 146,800

PEAK DISCHARGE (BASE, 900 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-27	0600	13.68	1,220	5-3	0800	12.83	1,060
4-20	0300	14.12	1,300	9-5	0800	13.01	1,090

08031200 Kickapoo Creek near Brownsboro, Tex.

LOCATION.--Lat 32°18'34", long 95°36'19", Henderson County, on left bank 94 ft (29 m) downstream from bridge on Farm Road 314 and 1.0 mile (1.6 km) northeast of Brownsboro.

DRAINAGE AREA.--232 mi² (601 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 358.62 ft (109.31 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 134 ft³/s (3.79 m³/s), 7.84 in/yr (199.1 mm/yr), 97,080 acre-ft/yr (120 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,100 ft³/s (314 m³/s) June 5, gage height, 14.57 ft (4.44 m); no flow Oct. 15-21.
Period of record: Maximum discharge, 14,800 ft³/s (419 m³/s) Apr. 27, 1966, gage height, 14.79 ft (4.51 m); maximum gage height, 15.34 ft (4.68 m) May 11, 1968; no flow for many days.
Maximum stage since 1935, 16.4 ft (5.0 m) in 1936 or 1937, from information by local residents.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	194	82	79	377	98	221	322	40	25	103	.20
2	6.5	178	76	81	361	95	176	252	81	22	86	.14
3	3.7	186	71	101	305	93	151	196	121	20	61	.12
4	2.3	172	65	148	269	92	139	154	3,110	19	39	.10
5	2.0	138	63	180	269	94	125	127	8,580	17	27	31
6	1.7	115	60	168	249	148	111	118	8,940	15	20	155
7	1.1	110	59	197	210	235	112	116	5,320	15	16	238
8	.78	114	61	297	299	259	119	111	2,080	25	12	148
9	.52	108	63	324	446	226	134	107	940	40	9.5	105
10	.36	92	143	290	407	422	153	102	567	25	7.5	89
11	.19	73	173	257	534	1,280	163	94	422	19	5.8	72
12	.08	64	191	250	519	1,500	176	188	357	16	4.5	53
13	.03	95	225	238	416	1,030	190	272	329	15	3.6	57
14	.01	410	274	210	328	616	199	200	311	14	2.9	76
15	0	395	357	170	255	582	265	229	323	15	3.2	100
16	0	306	389	134	197	1,290	708	265	333	16	4.8	84
17	0	232	355	113	148	1,280	1,390	213	275	16	7.0	74
18	0	231	328	104	117	1,100	2,110	124	211	20	5.0	63
19	0	248	326	97	102	704	1,280	82	144	22	4.0	46
20	0	249	307	94	92	459	817	64	98	22	3.2	35
21	0	206	266	96	85	353	607	54	75	22	2.4	28
22	9.1	166	223	100	82	279	504	49	62	17	1.7	23
23	19	152	176	100	85	231	501	45	55	12	1.2	21
24	37	153	132	104	91	474	987	42	50	8.5	.95	19
25	35	162	107	139	95	1,150	3,200	42	45	5.9	.70	18
26	33	148	94	274	97	1,560	3,850	48	41	4.2	.55	17
27	99	126	87	390	100	1,080	1,860	64	37	3.1	.50	19
28	164	105	81	351	100	616	868	66	34	2.3	.42	59
29	164	93	78	392	------	428	555	60	31	26	.44	48
30	130	87	78	448	------	326	416	52	28	68	.45	42
31	125	------	78	396	------	268	------	43	------	102	.29	------
TOTAL	840.47	5,108	5,068	6,322	6,635	18,368	22,087	3,901	33,040	669.0	434.60	1,720.56
MEAN	27.1	170	163	204	237	593	736	126	1,101	21.6	14.0	57.4
MAX	164	410	389	448	534	1,560	3,850	322	8,940	102	103	238
MIN	0	64	59	79	82	92	111	42	28	2.3	.29	.10
CFSM	.12	.73	.70	.88	1.02	2.56	3.17	.54	4.75	.09	.06	.25
IN.	.13	.82	.81	1.01	1.06	2.95	3.54	.63	5.30	.11	.07	.28
AC-FT	1,670	10,130	10,050	12,540	13,160	36,430	43,810	7,740	65,530	1,330	862	3,410

CAL YR 1972 TOTAL 33,044.85 MEAN 90.3 MAX 2,230 MIN 0 CFSM .39 IN 5.30 AC-FT 65,540
WTR YR 1973 TOTAL 104,193.63 MEAN 285 MAX 8,940 MIN 0 CFSM 1.23 IN 16.71 AC-FT 206,700

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-12	1000	10.02	1,560	4-18	0300	10.74	2,290
3-16	1800	9.80	1,360	4-26	0300	12.08	4,500
3-26	1100	10.14	1,680	6- 5	1900	14.57	11,100

08031290 Lake Athens near Athens, Tex.
(Formerly 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 (13 km) east of Athens, 5 miles (8 km) downstream from Underwood Lake, and 18 miles (29 km) upstream from Neches River.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1972, published as Flat Creek Reservoir.

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

EXTREMES.--Current year: Maximum contents, 35,530 acre-ft (43.8 hm³) June 5, elevation, 441.76 ft (134.65 m); minimum, 31,750 acre-ft (39.1 hm³) Oct. 21, elevation, 439.31 ft (133.90 m).
Period of record: Maximum contents, 36,500 acre-ft (45.0 hm³) May 10, 1968, elevation, 442.37 ft (134.83 m); minimum since operating level was reached (May 7, 1968), 30,400 acre-ft (37.5 hm³) Sept. 22, 1971, elevation, 438.40 ft (133.62 m).

REMARKS.--Lake is formed by compacted earthfill embankment 3,000 ft (9,144 m) long. The uncontrolled emergency spillway is a 300-foot-wide (91-meter) trapezoid-shaped ditch cut in clay. Deliberate impoundment began Nov. 1, 1962; dam was completed in May 1963. A 72-inch (2-meter) square drop inlet, elevation, 440.0 ft (134.1 m), will maintain the normal operation level, 32,790 acre-ft (40.4 hm³). Total capacity, 42,600 acre-ft (52.5 hm³), elevation, 446.0 ft (135.9 m), 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)

439.0	31,290	441.0	34,340
440.0	32,790	442.0	35,912

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32,170	33,420	33,220	33,300	33,380	33,310	33,370	33,540	33,310	32,960	33,270	32,600
2	32,160	33,420	33,220	33,330	33,380	33,310	33,340	33,480	33,330	32,960	33,210	32,670
3	32,160	33,360	33,220	33,440	33,360	33,340	33,320	33,450	33,390	32,920	33,140	32,670
4	32,130	33,310	33,190	33,420	33,340	33,330	33,310	33,410	34,350	32,900	33,100	32,640
5	32,130	33,280	33,160	33,410	33,340	33,310	33,300	33,390	35,470	32,900	33,070	33,500
6	32,130	33,300	33,160	33,410	33,330	33,470	33,290	33,470	34,940	32,870	33,020	33,610
7	32,050	33,270	33,130	33,470	33,410	33,470	33,280	33,450	34,510	32,880	33,010	33,560
8	32,020	33,240	33,180	33,450	33,440	33,440	33,270	33,410	34,180	32,900	32,990	33,500
9	31,990	33,160	33,360	33,410	33,440	33,610	33,260	33,380	33,950	32,880	32,980	33,450
10	31,960	33,140	33,440	33,360	33,390	33,730	33,250	33,360	33,790	32,880	32,920	33,410
11	31,920	33,110	33,450	33,360	33,380	33,670	33,250	33,420	33,620	32,880	32,900	33,360
12	31,920	33,100	33,530	33,340	33,360	33,610	33,240	33,450	33,650	32,880	32,870	33,350
13	31,900	33,410	33,500	33,340	33,360	33,540	33,240	33,440	33,580	32,880	32,870	33,450
14	31,900	33,480	33,650	33,330	33,330	33,500	33,400	33,390	33,510	32,860	32,980	33,640
15	31,890	33,410	33,610	33,330	33,310	33,850	33,560	33,270	33,470	32,860	32,990	33,550
16	31,870	33,360	33,560	33,330	33,280	33,900	33,700	33,300	33,440	32,930	32,960	33,500
17	31,840	33,340	33,510	33,330	33,250	33,780	33,900	33,280	33,390	32,950	32,950	33,400
18	31,800	33,450	33,480	33,310	33,250	33,670	33,850	33,250	33,340	32,950	32,920	33,320
19	31,830	33,440	33,450	33,310	33,240	33,610	33,780	33,240	33,330	32,920	32,900	33,280
20	31,780	33,380	33,450	33,330	33,240	33,530	33,720	33,220	33,280	32,900	32,900	33,240
21	31,800	33,340	33,410	33,300	33,250	33,470	33,650	33,180	33,250	32,900	32,880	33,210
22	32,350	33,340	33,390	33,300	33,250	33,420	33,600	33,140	33,210	32,860	32,860	33,180
23	32,370	33,300	33,380	33,280	33,280	33,380	33,800	33,130	33,180	32,840	32,820	33,140
24	32,370	33,330	33,360	33,250	33,300	33,810	34,300	33,130	33,140	32,820	32,790	33,140
25	32,320	33,360	33,330	33,420	33,300	33,710	34,340	33,220	33,140	32,810	32,750	33,130
26	33,070	33,330	33,310	33,440	33,300	33,640	34,100	33,220	33,110	32,780	32,720	33,110
27	33,140	33,310	33,310	33,360	33,280	33,560	33,900	33,210	33,070	32,760	32,700	33,220
28	33,190	33,250	33,280	33,310	33,270	33,530	33,750	33,160	33,050	32,720	32,670	33,300
29	33,190	33,250	33,330	33,330	------	33,480	33,650	33,130	33,020	33,220	32,660	33,280
30	33,270	33,240	33,330	33,300	------	33,470	33,600	33,100	32,990	33,250	32,640	33,220
31	33,310	------	33,330	33,380	------	33,420	------	33,100	------	33,270	32,600	------
(†)	440.34	440.29	440.35	440.38	440.31	-	-	440.20	440.13	440.31	439.87	440.28
(*)	+1,140	-70	+90	+50	-110	+150	+180	-500	-110	+280	-670	+620
(††)	87.0	70.8	73.7	69.2	43.7	40.5	69.1	88.2	94.6	141	125	99.6
MAX	33,310	33,480	33,650	33,470	33,440	33,900	34,340	33,540	35,470	33,270	33,270	33,640
MIN	31,780	33,100	33,130	33,250	33,240	33,310	33,240	33,100	32,990	32,720	32,600	32,600

CAL YR 1972..... * +350 †† 1,170 MAX 33,650 MIN 31,780
WTR YR 1973..... * +1,050 †† 1,000 MAX 35,470 MIN 31,780

† 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 (43 m) upstream from Blackburn Crossing Dam on Neches River, 5 miles (8 km) east of Frankston, 11 miles (18 km) upstream from gage, Neches River near Neches, and at mile 354.0 (569.6 km).

DRAINAGE AREA.--839 mi² (2,173 km²).

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, 501,300 acre-ft (618 hm³) June 7, elevation, 348.29 ft (106.16 m); minimum, 214,900 acre-ft (265 hm³) Oct. 21, elevation, 335.66 ft (102.31 m).
Period of record: Maximum contents, 501,300 acre-ft (618 hm³) June 7, 1973, elevation, 348.29 ft (106.16 m); minimum since first appreciable storage, 11,450 acre-ft (14.1 hm³) Nov. 28, 1970, elevation, 310.00 ft (94.49 m).

REMARKS.--Lake is formed by a rolled earthfill embankment 5,720 ft (1,743 m) long, including a 500-foot (152-meter) 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 (2.6-meter) conduit through the dam. Outflow is also controlled by two 3-foot (1-meter) 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)

335.0	203,900	346.0	437,900
338.0	256,500	349.0	521,800
342.0	339,500		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221,100	247,800	289,800	340,700	396,700	418,300	436,600	447,100	419,100	416,500	419,100	406,300
2	221,100	250,100	290,800	341,400	399,200	418,800	436,100	444,600	418,100	415,700	417,800	405,800
3	221,100	251,500	292,500	343,900	401,000	419,100	434,000	439,000	422,800	415,200	416,500	405,800
4	220,800	252,600	292,100	345,500	402,300	419,400	430,800	435,600	444,600	414,400	416,000	407,300
5	220,400	253,200	296,300	349,000	404,800	418,300	429,300	433,200	483,900	414,200	414,900	435,600
6	221,600	254,700	293,900	349,700	405,800	426,400	430,100	431,900	500,100	414,200	413,100	442,000
7	220,100	256,100	293,500	352,900	412,100	428,200	428,000	431,100	498,700	419,100	412,600	441,400
8	219,400	256,300	294,300	354,500	413,900	428,500	431,600	429,600	486,700	418,800	411,800	439,800
9	219,400	257,900	297,400	355,900	412,800	428,000	428,000	426,700	475,300	417,800	412,600	437,400
10	219,400	258,200	300,600	357,800	414,400	428,500	426,200	426,200	465,200	417,800	411,600	434,500
11	219,300	258,600	302,000	359,400	415,200	431,600	424,600	425,400	458,400	419,400	411,300	432,200
12	219,100	259,000	306,500	360,100	417,300	435,300	424,300	434,000	453,600	418,600	411,300	429,300
13	219,100	266,400	308,400	361,400	420,200	436,900	425,100	432,900	451,700	417,300	410,500	430,100
14	218,800	266,200	314,800	361,700	420,400	437,600	425,900	431,600	447,100	416,200	411,000	428,500
15	218,800	268,100	317,100	364,500	420,400	442,000	433,700	430,600	443,000	416,500	411,300	426,700
16	218,300	270,500	319,100	364,300	419,400	442,800	446,000	427,700	440,300	416,800	410,800	425,400
17	217,800	271,600	321,500	365,000	419,100	444,400	453,600	426,900	436,900	416,000	411,000	425,100
18	220,100	276,100	324,400	366,900	418,800	444,100	454,600	424,600	434,200	415,400	410,300	421,700
19	218,600	278,900	326,400	366,700	419,100	446,000	453,300	423,800	434,800	414,400	410,300	419,100
20	217,800	279,900	328,600	370,100	418,300	442,500	453,300	423,300	434,000	413,630	410,000	418,800
21	216,300	283,600	330,200	371,000	418,300	439,200	449,200	422,000	431,900	413,400	409,800	418,100
22	222,400	282,800	330,800	372,200	419,400	436,100	448,400	419,400	429,600	412,600	409,300	417,500
23	222,900	283,800	332,600	372,700	418,800	434,000	448,700	421,200	427,200	412,300	408,500	416,500
24	222,400	285,800	332,600	373,400	418,800	446,300	459,000	417,800	425,100	411,800	407,500	415,200
25	221,600	287,000	333,700	377,500	418,800	451,400	469,700	417,500	423,800	411,000	407,800	415,200
26	223,600	286,200	334,000	380,000	419,100	451,900	473,600	417,000	422,000	410,500	407,500	414,900
27	235,600	290,000	334,400	385,700	418,600	449,000	468,500	419,100	420,700	410,300	407,000	422,800
28	237,400	289,200	334,400	386,000	417,000	447,400	460,800	417,500	419,900	409,800	406,500	423,000
29	239,900	290,000	336,200	385,700	------	444,600	455,400	417,000	418,300	419,100	407,000	422,800
30	242,300	289,800	338,800	388,000	------	441,700	450,600	416,000	417,500	419,600	406,800	422,500
31	244,000	------	339,700	392,500	------	439,200	------	415,200	------	419,100	405,800	------
(†)	337.32	339.69	342.01	344.23	345.20	346.05	346.47	345.13	345.22	345.28	344.76	345.41
(*)	+22,500	+45,800	+49,900	+52,800	+24,500	+22,200	+11,400	-35,400	+2,300	+1,600	-13,300	+16,700
MAX	244,000	290,000	339,700	392,500	420,400	451,900	473,600	447,100	500,100	419,600	419,100	442,000
MIN	216,300	247,800	289,800	340,700	396,700	418,300	424,300	415,200	417,500	409,800	405,800	405,800

CAL YR 1972..... * +216,700 MAX 339,700 MIN 126,700
WTR YR 1973..... * +201,000 MAX 500,100 MIN 216,300

† 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 (1.6 km) downstream from Missouri Pacific Railroad Co. bridge, 1.4 miles (2.3 km) downstream from Walnut Creek, 4.4 miles (7.1 km) northeast of Neches, and at mile 333.2 (536.1 km).

DRAINAGE AREA.--1,145 mi² (2,966 km²).

PERIOD OF RECORD.--February 1939 to current year.

GAGE.--Water-stage recorder and Conductance Monitor System. Datum of gage is 264.06 ft (80.49 m) above mean sea level. Prior to Oct. 27, 1945, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--22 years (1939-61) unregulated, 804 ft³/s (22.8 m³/s), 582,500 acre-ft/yr (718 hm³/yr); 12 years (1961-73) regulated, 575 ft³/s (16.3 m³/s), 416,600 acre-ft/yr (514 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,100 ft³/s (399 m³/s) June 8, gage height, 17.66 ft (5.38 m); minimum daily, 26 ft³/s (0.74 m³/s) Oct. 13-18.
Period of record: Maximum discharge, 45,500 ft³/s (1,290 m³/s) Apr. 2, 1945, gage height, 22.07 ft (6.73 m); no flow Oct. 3-5, 1939.
Flood in May 1908, stage 24.3 ft (7.4 m), was the highest since flood in May 1884, which was probably higher.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Some regulation by Lake Palestine (station 08031400) 11 miles (18 km) upstream and Flat Creek Reservoir (station 08031290) 50 miles (80 km) upstream, total capacity, 100,200 acre-ft (124 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	305	122	232	499	580	3,030	5,060	356	676	915	120
2	76	216	114	208	738	620	2,680	4,340	338	570	848	100
3	59	227	111	238	646	600	2,400	3,760	489	493	720	90
4	52	263	112	305	508	560	2,170	3,340	1,260	440	608	80
5	47	198	112	322	367	540	2,040	2,820	3,490	400	498	200
6	40	134	111	330	281	520	1,860	2,410	8,010	395	425	750
7	36	114	110	352	243	1,000	1,690	2,140	13,000	405	363	1,610
8	31	114	108	461	354	1,500	1,550	1,900	13,500	470	304	3,000
9	30	98	114	463	652	1,500	1,500	1,750	12,100	666	274	3,500
10	29	84	139	417	716	1,400	1,460	1,620	10,100	740	264	3,000
11	28	74	176	359	636	1,350	1,420	1,460	8,270	791	256	2,600
12	27	67	190	302	560	1,300	1,330	1,320	6,870	831	230	2,500
13	26	130	224	274	548	1,300	1,230	1,260	6,080	840	210	2,700
14	26	317	246	265	596	1,400	1,140	1,340	5,380	764	199	2,400
15	26	279	415	256	671	1,600	1,150	1,490	4,700	653	184	2,100
16	26	234	502	239	721	1,800	1,300	1,550	3,930	568	185	1,890
17	26	198	431	230	726	1,900	2,530	1,500	3,300	556	185	1,660
18	26	165	372	224	695	2,000	4,750	1,380	2,760	574	175	1,440
19	27	211	307	220	654	2,000	5,440	1,260	2,500	516	174	1,270
20	32	214	253	213	635	2,000	5,600	1,150	2,260	431	169	1,130
21	40	187	219	289	629	1,900	5,400	1,040	2,260	380	158	982
22	51	178	195	372	606	1,800	5,070	939	2,220	334	147	836
23	135	158	178	333	600	3,000	4,550	827	2,000	301	135	706
24	149	139	164	292	580	4,500	4,780	722	1,760	271	118	610
25	134	166	153	263	580	6,000	7,550	645	1,540	242	99	533
26	122	212	145	442	617	5,800	8,680	587	1,370	223	68	482
27	282	192	138	561	580	5,400	8,540	548	1,210	205	58	444
28	432	177	131	522	560	4,600	8,360	536	1,070	186	70	663
29	411	159	130	470	------	4,350	7,430	513	941	258	90	927
30	464	137	140	352	------	4,020	6,080	453	815	697	80	1,070
31	436	------	197	276	------	3,600	------	403	------	899	100	------
TOTAL	3,425	5,347	6,059	10,082	16,198	70,440	112,710	50,063	123,879	15,775	8,309	39,393
MEAN	110	178	195	325	579	2,272	3,757	1,615	4,129	509	268	1,313
MAX	464	317	502	561	738	6,000	8,680	5,060	13,500	899	915	3,500
MIN	26	67	108	208	243	520	1,140	403	338	186	58	80
AC-FT	6,790	10,610	12,020	20,000	32,130	139,700	223,600	99,300	245,700	31,290	16,480	78,140

CAL YR 1972 TOTAL 43,203 MEAN 118 MAX 1,580 MIN 15 AC-FT 85,690
WTR YR 1973 TOTAL 461,680 MEAN 1,265 MAX 13,500 MIN 26 AC-FT 915,700

NOTE.--No gage-height record Feb. 22 to Mar. 31.

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 (183 m) downstream from Bowles Creek, 7.5 miles (12.1 km) southwest of Alto, and at mile 273.9 (440.7 km).

DRAINAGE AREA.--1,945 mi² (5,038 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 198.29 ft (60.44 m) above mean sea level.

AVERAGE DISCHARGE.--17 years (1944-61) unregulated, 1,272 ft³/s (36.0 m³/s), 921,600 acre-ft/yr (1,136 hm³/yr); 12 years (1961-73) regulated, 900 ft³/s (25.5 m³/s), 652,000 acre-ft/yr (804 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft³/s (292 m³/s) June 12, gage height, 19.15 ft (5.84 m); minimum daily, 36 ft³/s (1.02 m³/s) Oct. 19-21.
Period of record: Maximum discharge, 42,800 ft³/s (1,210 m³/s) Apr. 4, 1945, gage height, 26.85 ft (8.18 m); minimum, 0.1 ft³/s (2.8 dm³/s) Sept. 27, 28, 1954.
Maximum stage since at least 1861, 28.2 ft (8.6 m) in May 1884, from information by local residents, discharge, about 50,000 ft³/s (1,420 m³/s).

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 (161 hm³). During the current year, Upper Neches River Municipal Water Authority diverted 2,230 acre-ft (2.75 hm³) from stream at Rocky Point Crossing 50 miles (80 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	988	326	354	1,090	878	5,020	7,390	625	1,550	379	108
2	161	733	301	342	1,260	896	4,820	6,970	576	1,320	560	109
3	145	613	278	400	1,140	951	4,590	6,490	536	1,090	700	109
4	119	523	254	529	1,060	928	4,290	5,930	544	892	773	107
5	100	429	232	574	1,090	903	3,940	5,350	622	788	775	268
6	83	368	216	613	1,090	966	3,650	4,880	1,130	910	716	828
7	71	432	211	1,020	998	1,590	3,470	4,600	1,620	764	622	1,040
8	64	379	212	1,620	940	1,970	3,270	4,330	1,910	616	531	1,380
9	57	315	219	1,680	1,140	1,980	3,090	3,930	2,800	570	470	1,470
10	52	246	241	1,310	1,220	1,900	2,900	3,550	6,890	531	405	1,500
11	49	215	296	1,050	1,110	1,900	2,650	3,190	9,750	544	347	1,660
12	46	192	348	942	1,110	1,860	2,440	2,960	10,100	626	303	1,810
13	44	289	424	860	1,140	1,830	2,260	3,070	9,680	761	273	1,940
14	42	469	490	789	1,140	1,850	2,100	3,500	9,360	804	253	2,130
15	40	465	742	714	1,060	1,910	1,980	3,200	8,600	833	230	2,290
16	39	367	957	640	955	1,980	1,980	2,590	7,370	871	208	2,320
17	38	383	882	589	906	2,070	2,150	2,160	6,410	892	191	2,320
18	37	413	786	564	913	2,070	3,320	1,880	5,750	807	182	2,280
19	36	480	778	597	942	2,080	4,050	1,750	5,050	687	209	2,200
20	36	512	756	576	957	2,140	4,020	1,700	4,600	620	245	2,090
21	36	433	690	549	947	2,220	4,380	1,650	4,220	587	221	1,940
22	46	393	609	631	921	2,340	5,040	1,570	3,680	546	209	1,780
23	97	380	531	593	922	2,510	5,570	1,480	3,390	499	186	1,580
24	158	356	468	584	960	3,060	5,940	1,360	3,060	475	167	1,370
25	152	360	420	617	945	4,520	6,950	1,250	2,750	422	153	1,150
26	168	424	384	936	909	5,440	7,670	1,230	2,560	370	140	956
27	213	426	354	1,320	889	5,540	7,670	1,220	2,380	361	126	825
28	311	383	333	1,230	888	5,700	7,690	994	2,220	343	111	1,260
29	332	369	322	1,040	------	5,730	7,740	832	2,020	302	101	1,240
30	874	353	322	968	------	5,480	7,580	733	1,800	290	102	1,030
31	1,090	------	342	923	------	5,210	------	670	------	278	94	------
TOTAL	4,869	12,688	13,724	25,154	28,642	80,402	132,220	92,409	122,003	20,949	9,982	41,090
MEAN	157	423	443	811	1,023	2,594	4,407	2,981	4,067	676	322	1,370
MAX	1,090	988	957	1,680	1,260	5,730	7,740	7,390	10,100	1,550	775	2,320
MIN	36	192	211	342	888	878	1,980	670	536	278	94	107
AC-FT	9,660	25,170	27,220	49,890	56,810	159,500	262,300	183,300	242,000	41,550	19,800	81,500

CAL YR 1972 TOTAL 94,108 MEAN 257 MAX 1,860 MIN 18 AC-FT 186,700
WTR YR 1973 TOTAL 584,132 MEAN 1,600 MAX 10,100 MIN 36 AC-FT 1,159,000

08033000 Neches River near Diboll, Tex.

LOCATION (revised).--Lat 31°07'59", long 94°48'35", Angelina-Polk County line, near center of main span on downstream side of downstream bridge on U.S. Highway 59, 700 ft (213 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.9 miles (4.7 km) downstream from Alabama Creek, 3.8 miles (6.1 km) south of Diboll, and at mile 203.5 (327.4 km).

DRAINAGE AREA.--2,724 mi² (7,055 km²).

PERIOD OF RECORD.--October 1923 to September 1925, March 1939 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE (revised).--Water-stage recorder. Datum of gage is 134.46 ft (40.98 m) above mean sea level. Prior to July 10, 1925, nonrecording gage at site 630 ft (192 m) upstream; July 10 to Aug. 31, 1925, and Mar. 30, 1939, to Sept. 24, 1943, nonrecording gage at site 500 ft (152 m) upstream; Sept. 25, 1943, to Aug. 16, 1973, nonrecording gage at site 70 ft (21 m) upstream; all at present datum.

AVERAGE DISCHARGE.--24 years (1923-25, 1939-61) unregulated, 1,807 ft³/s (51.2 m³/s), 1,309,000 acre-ft/yr (1,614 hm³/yr); 12 years (1961-73) regulated, 1,167 ft³/s (33.0 m³/s), 845,500 acre-ft/yr (1,043 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,200 ft³/s (629 m³/s) June 15, gage height, 16.40 ft (5.00 m); minimum daily, 37 ft³/s (1.05 m³/s) Oct. 21.
Period of record: Maximum discharge, 49,900 ft³/s (1,410 m³/s) May 4, 1944, gage height, 18.70 ft (5.70 m); no flow Aug. 15-22, 1925.
Maximum stage since at least 1874, 21 ft (6 m) in May 1884, discharge, about 110,000 ft³/s (3,120 m³/s), from rating curve extended above 40,000 ft³/s (1,130 m³/s); flood in 1900 reached a stage of 19.9 ft (6.1 m), discharge, about 80,000 ft³/s (2,270 m³/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	1,200	646	1,060	2,180	1,180	5,100	8,000	1,430	3,000	342	126
2	169	1,460	592	1,230	1,940	1,180	5,100	8,400	1,180	2,900	334	108
3	179	1,580	574	1,400	1,820	1,150	5,300	8,850	970	2,710	350	98
4	174	1,550	538	1,370	1,780	1,130	5,100	8,400	862	2,550	484	96
5	182	1,310	511	1,370	1,820	1,130	5,100	8,000	808	2,350	628	346
6	182	1,040	484	1,580	1,820	1,180	4,900	7,650	844	3,300	718	1,370
7	169	826	466	1,980	1,780	1,580	5,100	8,000	898	2,640	772	1,780
8	143	718	448	3,200	1,740	1,820	4,900	8,000	952	2,130	790	1,460
9	120	682	439	4,100	1,860	2,080	4,900	6,950	1,040	1,860	772	1,490
10	108	700	448	4,300	1,940	2,230	4,700	6,050	1,250	1,550	826	1,460
11	92	628	511	4,500	2,080	2,290	4,500	5,550	1,370	1,250	808	1,370
12	79	520	826	4,300	2,130	2,290	4,100	5,100	1,660	1,010	682	1,490
13	73	520	1,040	3,800	2,080	2,350	3,800	4,500	4,670	898	538	1,490
14	66	700	1,200	3,300	1,940	2,410	3,650	4,200	15,000	844	422	1,580
15	57	880	1,700	3,000	1,860	2,480	3,650	3,950	21,200	862	358	1,660
16	52	970	2,030	2,550	1,780	2,550	4,500	3,650	18,500	898	326	1,700
17	46	898	2,630	2,230	1,700	2,800	5,550	3,400	15,000	934	278	1,740
18	42	790	2,800	1,860	1,620	2,800	7,650	3,200	12,000	992	254	1,820
19	40	718	2,630	1,580	1,550	2,710	7,650	3,100	10,400	1,060	232	1,860
20	39	844	2,230	1,400	1,430	2,550	6,050	3,000	8,850	1,040	232	1,940
21	37	970	1,820	1,550	1,310	2,480	5,300	3,000	7,650	970	224	2,030
22	59	970	1,550	1,740	1,250	2,410	4,700	2,800	6,950	880	224	2,080
23	107	862	1,340	1,940	1,230	2,350	4,500	2,550	6,350	772	232	2,180
24	542	754	1,180	1,900	1,250	3,050	4,300	2,350	5,550	682	224	2,230
25	664	718	1,040	1,660	1,250	8,850	4,300	2,230	5,100	610	202	2,550
26	430	754	898	1,860	1,230	12,600	4,500	2,130	4,500	574	182	2,480
27	342	844	790	1,980	1,230	10,900	4,900	2,030	4,100	520	172	2,230
28	457	862	718	2,350	1,200	8,400	6,050	2,030	3,650	466	160	2,230
29	538	808	646	2,550	------	6,650	7,300	1,980	3,400	430	176	2,180
30	718	718	718	2,550	------	5,550	7,650	1,860	3,200	398	169	2,130
31	992	------	970	2,410	------	5,100	------	1,700	------	374	162	------
TOTAL	7,008	26,794	34,413	72,600	46,800	108,230	154,800	142,610	169,334	41,454	12,273	47,304
MEAN	226	893	1,110	2,342	1,671	3,491	5,160	4,600	5,644	1,337	396	1,577
MAX	992	1,580	2,800	4,500	2,180	12,600	7,650	8,850	21,200	3,300	826	2,550
MIN	37	520	439	1,060	1,200	1,130	3,650	1,700	808	374	160	96
AC-FT	13,900	53,150	68,260	144,000	92,830	214,700	307,000	282,900	335,900	82,220	24,340	93,830

CAL YR 1972 TOTAL 175,958 MEAN 481 MAX 2,800 MIN 11 AC-FT 349,000
WTR YR 1973 TOTAL 863,620 MEAN 2,366 MAX 21,200 MIN 37 AC-FT 1,713,000

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 (10.1 km) northeast of Groveton, and 7.3 miles (11.7 km) upstream from Caney Creek.

DRAINAGE AREA.--79.0 mi² (205 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 251.40 ft (76.63 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 26.5 ft³/s (0.750 m³/s), 4.56 in/yr (115.8 mm/yr), 19,200 acre-ft/yr (23.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,890 ft³/s (167 m³/s) Mar. 24, gage height, 15.43 ft (4.70 m); no flow for many days.
Period of record: Maximum discharge, 5,890 ft³/s (167 m³/s) Mar. 24, 1973, gage height, 15.43 ft (4.70 m); no flow at times.
Maximum stage since at least 1921, 17 ft (5 m) in May 1942, from information by local residents.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	42	6.5	58	28	7.0	20	10	1.3	3.1	.82	0
2	0	18	5.8	53	63	6.9	16	9.0	1.1	2.7	5.3	0
3	0	12	5.3	162	91	7.7	13	13	.93	2.4	9.3	0
4	0	8.9	5.1	172	49	7.6	11	9.1	1.4	2.0	10	.08
5	0	7.1	5.0	114	28	15	9.9	7.4	9.5	30	3.6	57
6	0	6.0	5.0	198	20	29	9.6	7.1	18	198	1.4	340
7	0	72	6.0	389	16	198	39	63	38	51	.78	181
8	0	58	6.5	736	14	190	50	135	20	35	.61	47
9	0	16	5.6	679	87	90	87	76	33	16	.49	24
10	0	9.6	5.3	381	243	43	75	25	63	7.6	.41	15
11	0	7.1	17	85	156	58	37	13	19	4.7	.31	25
12	0	5.8	59	64	67	38	20	9.9	89	32	1.9	26
13	0	105	69	66	35	23	14	8.5	1,470	57	2.1	28
14	0	172	125	69	25	16	11	5.8	2,060	9.1	.59	68
15	0	54	493	59	24	13	52	4.2	1,220	4.6	.31	25
16	0	19	507	44	24	49	384	3.4	720	3.2	.20	10
17	0	12	164	32	20	93	602	2.9	200	9.2	.17	5.4
18	0	9.7	48	27	15	49	964	2.7	47	5.5	.15	3.5
19	0	36	30	43	11	25	658	2.4	27	2.8	.13	2.6
20	0	36	24	59	9.7	16	367	2.3	19	1.7	.11	2.1
21	0	22	19	96	8.3	12	108	2.1	191	1.3	.08	1.7
22	.19	13	16	134	7.9	9.9	60	2.0	90	1.0	.05	1.4
23	99	9.3	13	60	12	9.2	44	2.0	26	.84	.01	1.3
24	66	7.8	12	34	15	1,810	33	1.9	16	.75	0	1.9
25	18	33	10	25	13	3,080	26	2.4	12	.65	0	2.3
26	9.1	52	9.3	286	11	908	25	2.7	9.2	.53	0	1.8
27	6.3	25	8.7	432	9.0	463	21	8.3	7.2	.71	0	3.6
28	12	15	8.1	286	7.7	82	18	6.8	5.7	21	0	386
29	33	10	7.9	131	------	43	14	2.8	4.6	6.8	0	326
30	234	7.9	18	55	------	31	11	1.9	3.8	2.2	0	136
31	176	------	106	35	------	25	------	1.5	------	1.1	0	------
TOTAL	653.59	901.2	1,820.1	5,064	1,109.6	7,447.3	3,799.5	444.1	6,422.73	514.48	38.82	1,721.68
MEAN	21.1	30.0	58.7	163	39.6	240	127	14.3	214	16.6	1.25	57.4
MAX	234	172	507	736	243	3,080	964	135	2,060	198	10	386
MIN	0	5.8	5.0	25	7.7	6.9	9.6	1.5	.93	.53	0	0
CFSM	.27	.38	.74	2.06	.50	3.04	1.61	.18	2.71	.21	.02	.73
IN.	.31	.42	.86	2.38	.52	3.51	1.79	.21	3.02	.24	.02	.81
AC-FT	1,300	1,790	3,610	10,040	2,200	14,770	7,540	881	12,740	1,020	77	3,410

CAL YR 1972 TOTAL 3,857.75 MEAN 10.5 MAX 507 MIN 0 CFSM .13 IN 1.82 AC-FT 7,650
WTR YR 1973 TOTAL 29,937.10 MEAN 82.0 MAX 3,080 MIN 0 CFSM 1.04 IN 14.10 AC-FT 59,380

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-16	0200	11.42	584	4-18	1600	12.35	900
1- 8	1600	12.10	800	6-13	2300	14.07	3,040
3-24	2300	15.43	5,890				

08033500 Neches River near Rockland, Tex.

LOCATION (revised).--Lat 31°01'29", long 94°23'55", Tyler County, on downstream side of bridge at U.S. Highway 69, 2,200 ft (671 m) upstream from abandoned ferry crossing, 0.8 mile (1.3 km) upstream from Texas and New Orleans Railway Co. bridge, 1.2 miles (1.9 km) north of Rockland, 3.2 miles (5.1 km) downstream from Billams Creek, and 32.4 miles (52.1 km) upstream from Angelina River.

DRAINAGE AREA.--3,636 mi² (9,417 km²). Prior to May 23, 1973, 3,637 mi² (9,420 km²).

PERIOD OF RECORD.--July 1903 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 91.41 ft (27.86 m) above mean sea level. Prior to May 23, 1973, nonrecording gage located 2,200 ft (671 m) downstream at same datum.

AVERAGE DISCHARGE.--58 years (1903-61) unregulated, 2,362 ft³/s (66.9 m³/s), 1,711,000 acre-ft/yr (2,110 hm³/yr); 12 years (1961-73) regulated, 1,653 ft³/s (46.8 m³/s), 1,198,000 acre-ft/yr (1,477 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,600 ft³/s (952 m³/s) June 17, gage height, 28.00 ft (8.53 m); minimum daily, 53 ft³/s (1.50 m³/s) Oct. 20, 21.
Period of record: Maximum discharge, 49,800 ft³/s (1,410 m³/s) May 6, 1944, gage height, 32.04 ft (9.77 m) present site; minimum observed during period of daily records, 1.6 ft³/s (45 dm³/s) Sept. 28-30, Oct. 1, 2, 1956.
Historical flood information begins with flood in May 1884 which reached a stage of 35.0 ft (10.7 m) present site, from information by local resident, discharge, about 62,000 ft³/s (1,760 m³/s).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	910	746	1,340	3,860	1,460	10,600	5,480	1,990	4,340	711	321
2	200	960	658	2,060	3,800	1,400	9,420	6,440	1,830	3,860	711	278
3	176	1,120	594	2,600	3,320	1,580	8,160	8,860	1,590	3,560	661	248
4	174	1,150	552	3,200	2,960	3,740	7,040	9,630	1,430	3,280	550	297
5	176	1,460	512	3,080	2,480	3,440	6,180	10,100	1,520	3,280	574	3,480
6	172	1,460	474	4,040	2,240	2,840	5,660	10,000	1,820	4,280	734	3,340
7	166	1,260	452	4,400	2,120	3,380	5,730	10,600	1,820	4,220	878	2,930
8	166	988	435	5,060	2,480	3,680	5,730	10,900	1,550	4,100	878	2,820
9	150	768	421	5,120	3,980	3,500	5,860	11,000	1,410	3,920	896	3,120
10	133	658	814	5,360	3,980	3,200	5,860	11,000	1,350	3,350	925	3,100
11	116	636	1,320	5,060	3,560	3,440	5,660	10,500	1,760	2,670	945	2,820
12	104	615	1,120	4,880	3,080	3,320	5,540	9,630	3,060	2,500	975	2,540
13	1	746	1,520	5,000	3,020	2,960	5,360	8,790	5,380	3,240	940	2,520
14	83	768	2,000	5,180	4,880	2,840	5,120	7,810	8,460	2,230	774	2,520
15	77	988	2,840	5,240	4,640	3,080	5,540	6,770	18,800	1,690	550	2,080
16	68	910	3,080	5,120	4,160	5,980	8,720	5,860	30,200	1,450	475	1,920
17	65	935	3,200	4,880	3,380	6,900	11,000	5,120	33,200	1,330	436	1,880
18	60	1,100	2,600	4,400	2,720	6,700	16,000	4,640	31,000	1,200	444	1,870
19	56	1,290	2,420	3,580	2,240	6,250	19,300	4,280	26,800	1,130	402	1,860
20	53	1,120	2,480	3,080	2,000	5,300	19,100	3,920	21,800	1,150	369	1,870
21	53	960	2,660	5,020	1,880	4,400	17,200	3,680	18,500	1,180	339	1,890
22	58	988	2,660	4,280	1,700	3,620	15,100	3,440	16,500	1,260	321	1,920
23	83	988	2,480	2,960	1,640	3,260	13,000	3,220	15,000	1,520	312	1,970
24	74	935	2,120	2,480	1,760	4,440	11,200	3,090	13,400	1,010	309	2,080
25	174	1,070	1,760	2,480	1,640	5,600	9,490	2,940	11,600	879	306	2,170
26	532	1,020	1,320	4,280	1,580	6,120	8,090	2,800	9,840	773	297	2,220
27	552	1,020	1,070	4,280	1,520	7,320	6,900	2,640	8,360	1,820	291	2,360
28	404	910	910	4,280	1,460	8,930	5,990	2,430	6,920	1,330	330	2,510
29	373	885	791	3,740	------	11,000	5,360	2,260	5,780	1,060	819	2,670
30	452	837	746	3,380	------	11,900	5,180	2,150	4,940	998	526	2,850
31	636	------	791	3,260	------	11,500	------	2,080	------	864	422	------
TOTAL	5,887	29,455	45,546	123,220	78,080	153,080	269,090	191,960	307,610	69,474	18,100	64,454
MEAN	190	982	1,469	3,975	2,789	4,938	8,970	6,192	10,250	2,241	584	2,148
MAX	636	1,460	3,200	5,360	4,880	11,900	19,300	11,000	33,200	4,340	975	3,480
MIN	53	615	421	1,340	1,460	1,400	5,120	2,080	1,350	773	291	248
AC-FT	11,680	58,420	90,340	244,400	154,900	303,600	533,700	380,900	610,100	137,800	35,900	127,800

CAL YR 1972 TOTAL 291,041 MEAN 795 MAX 5,440 MIN 45 AC-FT 577,300
WTR YR 1973 TOTAL 1,355,956 MEAN 3,715 MAX 33,200 MIN 53 AC-FT 2,690,000

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 (0.2 km) downstream from Everett Branch, 0.9 mile (1.4 km) upstream from Reagan Branch, 3.5 miles (5.6 km) north of Cushing, and 8 miles (13 km) upstream from Angelina River.

DRAINAGE AREA.--158 mi² (409 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 275.29 ft (83.91 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 90.9 ft³/s (2.57 m³/s), 7.81 in/yr (198.4 mm/yr), 65,860 acre-ft/yr (81.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,350 ft³/s (94.9 m³/s) Apr. 18, gage height, 10.71 ft (3.26 m); minimum daily, 3.4 ft³/s (96 dm³/s) Oct. 18.
Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) July 23, 1968, gage height, 11.66 ft (3.55 m), from rating curve extended above 4,600 ft³/s (130 m³/s); minimum, 0.7 ft³/s (20 dm³/s) Aug. 14, 1964.

REMARKS.--Records good, except those for period of no gage-height record, which are poor. No know diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	150	47	288	294	88	130	141	28	31	214	31
2	13	90	45	167	342	120	113	137	27	28	99	26
3	8.7	60	44	178	324	138	120	128	29	27	55	24
4	7.1	50	44	214	195	116	127	109	38	25	44	23
5	6.2	40	44	194	143	123	106	96	104	50	37	276
6	5.5	70	41	228	128	179	94	104	204	147	34	615
7	5.0	100	41	662	120	332	132	286	142	295	32	720
8	4.7	90	41	1,560	221	366	163	340	65	863	37	520
9	4.5	70	49	971	324	243	245	215	48	815	47	300
10	4.2	55	124	534	323	167	243	115	44	438	34	200
11	4.0	50	237	281	225	189	171	90	42	147	30	150
12	3.9	45	232	203	163	159	121	97	56	149	26	200
13	3.8	220	227	189	148	125	107	131	261	103	24	250
14	3.7	200	263	181	147	113	100	93	1,500	80	23	200
15	3.6	140	523	164	130	112	125	74	1,220	71	21	300
16	3.5	77	712	143	111	164	184	67	654	202	20	400
17	3.5	52	480	129	102	241	427	62	320	211	21	300
18	3.4	105	230	125	98	216	1,960	59	131	180	70	220
19	10	254	146	129	95	146	1,120	57	92	91	213	170
20	7.0	243	143	129	92	125	658	55	78	61	139	140
21	5.0	141	128	233	87	112	416	52	86	52	59	110
22	80	84	107	345	86	97	270	49	71	46	42	90
23	40	68	90	304	110	90	206	47	61	49	34	75
24	20	60	80	159	123	294	270	45	54	58	29	65
25	15	99	72	148	104	1,360	1,160	43	50	64	25	60
26	60	141	67	331	92	867	1,120	44	47	47	23	55
27	120	104	63	396	93	465	638	46	43	41	21	50
28	70	69	61	370	91	236	345	40	39	37	26	400
29	50	55	62	252	------	173	194	34	36	35	39	500
30	280	49	151	173	------	153	155	32	34	41	58	300
31	250	------	286	159	------	144	------	29	------	169	43	------
TOTAL	1,116.3	3,031	4,880	9,539	4,511	7,453	11,220	2,917	5,604	4,653	1,619	6,770
MEAN	36.0	101	157	308	161	240	374	94.1	187	150	52.2	226
MAX	280	254	712	1,560	342	1,360	1,960	340	1,500	863	214	720
MIN	3.4	40	41	125	86	88	94	29	27	25	20	23
CFSM	.23	.64	.99	1.95	1.02	1.52	2.37	.60	1.18	.95	.33	1.43
IN.	.26	.71	1.15	2.25	1.06	1.75	2.64	.69	1.32	1.10	.38	1.59
AC-FT	2,210	6,010	9,680	18,920	8,950	14,780	22,250	5,790	11,120	9,230	3,210	13,430

CAL YR 1972 TOTAL 20,029.9 MEAN 54.7 MAX 712 MIN 3.1 CFSM .35 IN 4.72 AC-FT 39,730
WTR YR 1973 TOTAL 63,313.3 MEAN 173 MAX 1,960 MIN 3.4 CFSM 1.09 IN 14.91 AC-FT 125,600

PEAK DISCHARGE (BASE, 900 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 8	1000	10.25	1,900	4-25	2000	10.14	1,630
3-25	1000	10.33	1,840	6-14	1700	10.26	1,930
4-18	1300	10.71	3,350	7- 8	1500	10.09	1,530

NOTE.--No gage-height record Oct. 6 to Nov. 15.

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 (3.2 km) north of Whitehouse Dam on Prairie Creek, 3.0 miles (4.8 km) northwest of Mud Creek Dam on Mud Creek, and 3.2 miles (5.1 km) northeast of Whitehouse.

DRAINAGE AREA.--107 mi² (277 km²). Prior to May 29, 1968, 45.3 mi² (117 km²).

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 (201 m) south of pumphouse. All gages at same datum.

EXTREMES.--Current year: Maximum contents, 86,840 acre-ft (107 hm³) Apr. 25, elevation, 376.61 ft (114.79 m); minimum, 66,030 acre-ft (81.4 hm³) Oct. 22, elevation, 372.13 ft (113.43 m).
Period of record: Maximum contents, 86,840 acre-ft (107 hm³) Apr. 25, 1973, elevation, 376.61 ft (114.79 m); maximum elevation, 378.3 ft (115.3 m) Apr. 24, 1966, prior to joining of lakes; minimum contents since first appreciable storage in 1950, 29,200 acre-ft (36.0 hm³) Oct. 25 to Nov. 29, 1964, elevation, 368.9 ft (112.4 m), prior to joining of lakes.

REMARKS.--Lake is formed by two earthfill dams, Lake Tyler on Prairie Creek, 4,708 ft (1,435 m) long, and Lake Tyler East on Mud Creek, 4,700 ft (1,433 m) long. These dams are connected by an excavated canal. The west spillway is a concrete flume 200 ft (61 m) wide located 800 ft (244 m) left of Whitehouse Dam. The east spillway is a concrete weir 300 ft (91 m) 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)

372.0	65,470	375.0	79,000
373.0	69,820	376.0	83,820
374.0	74,330	377.0	88,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67,630	70,440	72,510	77,160	82,410	81,730	81,680	81,920	80,660	81,000	81,100	78,570
2	67,630	70,490	72,510	77,390	82,210	81,680	81,630	81,870	80,610	80,950	81,000	78,470
3	67,540	70,490	72,510	77,630	81,970	81,730	81,730	81,580	81,190	80,900	80,800	78,430
4	67,360	70,440	72,510	77,720	81,770	81,680	81,580	81,580	85,650	80,760	80,660	78,470
5	67,320	70,440	72,510	77,910	81,730	81,730	81,440	82,020	86,040	80,760	80,610	81,530
6	67,230	70,490	72,510	78,140	81,630	82,500	81,630	82,020	84,560	80,760	80,520	81,390
7	67,110	70,670	72,740	78,570	81,920	82,410	81,630	82,070	83,330	81,390	80,370	81,390
8	67,060	70,620	72,960	78,760	82,120	82,210	81,770	81,970	82,460	81,390	80,610	81,390
9	67,060	70,580	73,190	78,860	81,920	82,020	81,730	81,820	82,210	81,390	80,610	81,390
10	66,990	70,540	73,420	78,900	81,580	81,730	81,630	81,820	82,020	81,190	80,520	81,390
11	66,930	70,490	73,880	78,900	81,630	81,730	81,580	81,730	82,070	81,440	80,470	81,140
12	66,850	70,540	74,330	79,090	81,630	81,630	81,580	82,070	82,120	81,390	80,330	80,900
13	66,850	71,250	74,330	79,140	81,580	81,970	81,680	81,920	83,080	81,240	80,280	80,900
14	66,670	70,940	74,790	79,190	81,340	82,120	81,920	81,730	82,840	81,100	80,140	80,900
15	66,670	70,710	75,250	79,280	81,140	82,160	83,230	81,730	82,840	81,190	80,140	80,900
16	66,590	70,710	75,710	79,330	81,050	82,210	84,210	81,530	82,360	81,240	80,090	80,900
17	66,460	70,940	75,710	79,380	81,050	82,070	84,160	81,290	81,870	81,240	79,900	80,900
18	66,330	71,160	75,710	79,520	81,050	81,820	83,530	81,290	81,390	81,140	79,850	80,660
19	66,330	71,610	75,940	79,610	81,050	81,730	82,940	81,240	83,130	81,100	79,900	80,470
20	66,160	71,610	76,180	80,000	81,050	81,490	82,840	81,240	84,120	80,900	79,810	80,470
21	66,070	71,840	76,640	80,040	81,050	81,440	82,700	81,190	83,180	80,850	79,660	80,420
22	66,760	72,060	76,690	80,180	81,100	81,390	82,790	81,100	82,600	80,760	79,610	80,370
23	66,670	72,060	76,730	80,230	81,140	81,390	83,430	81,100	82,160	80,800	79,420	80,370
24	66,670	72,290	76,730	80,330	81,680	83,770	86,790	81,050	82,160	80,800	79,330	80,370
25	66,550	72,510	76,780	81,050	81,530	82,940	85,300	81,100	81,680	80,710	79,190	80,420
26	68,940	72,510	76,830	81,290	81,630	82,260	83,870	81,050	81,530	80,610	79,140	80,370
27	69,690	72,510	76,830	81,290	81,530	81,970	82,890	80,950	81,440	80,470	78,950	80,520
28	69,870	72,510	76,880	81,140	81,530	82,070	82,550	80,900	81,290	80,420	78,860	80,850
29	70,090	72,510	76,970	81,290	------	82,120	82,260	80,710	81,190	81,290	78,860	80,900
30	70,270	72,510	77,060	81,290	------	81,920	82,120	80,610	81,140	81,290	78,860	80,900
31	70,310	------	77,110	82,310	------	81,820	------	80,560	------	81,240	78,660	------
(†)	373.11	373.60	374.60	375.69	375.53	375.59	375.65	375.33	375.45	375.47	374.93	375.40
(*)	+2,590	+2,200	+4,600	+5,200	-780	+290	+300	-1,560	+580	+100	-2,580	+2,240
(††)	851	856	882	883	820	891	824	977	1,004	1,322	1,485	1,011
MAX	70,310	72,510	77,110	82,310	82,410	83,770	86,790	82,070	86,040	81,440	81,100	81,530
MIN	66,070	70,440	72,510	77,160	81,050	81,390	81,440	80,560	80,610	80,420	78,660	78,430

CAL YR 1972..... * +7,110 †† 12,345 MAX 79,330 MIN 66,070
WTR YR 1973..... * +13,180 †† 11,806 MAX 86,790 MIN 66,070

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use 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 (1.0 km) downstream from Caney Creek, 3.9 miles (6.3 km) downstream from another Caney Creek, 4 miles (6 km) downstream from Missouri Pacific Railroad Co. bridge, 6.9 miles (11.1 km) east of Jacksonville, and 25.9 miles (41.7 km) upstream from mouth.

DRAINAGE AREA.--376 mi² (974 km²).

PERIOD OF RECORD.--May 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 271.64 ft (82.80 m) above mean sea level.

AVERAGE DISCHARGE.--9 years (1939-48) prior to regulation by Lake Tyler, 383 ft³/s (10.8 m³/s), 277,500 acre-ft/yr (342 hm³/yr); 25 years (1948-73) regulated, 206 ft³/s (5.83 m³/s), 149,200 acre-ft/yr (184 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,800 ft³/s (193 m³/s) June 6, gage height, 10.20 ft (3.11 m); minimum daily, 4.0 ft³/s (113 dm³/s) Oct. 15.
Period of record: Maximum discharge, 27,500 ft³/s (779 m³/s) Apr. 25, 1966, gage height, 15.20 ft (4.63 m); no flow at times. Maximum stage since May 1884, 20 ft (6 m) in May 1908 and December 1913; flood in May 1884 was higher, stage unknown, from information by local residents.

REMARKS.--Records poor below 1,000 ft³/s (28.3 m³/s) and fair above. Some regulation by Lake Tyler (station 08034000), capacity 80,900 acre-ft (99.7 hm³). Several diversions above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	323	91	103	486	218	508	541	31	120	721	54
2	48	207	78	122	528	261	473	482	30	100	665	40
3	41	140	72	181	470	288	463	435	32	89	573	27
4	26	118	68	236	520	291	438	391	62	85	268	23
5	13	92	66	210	573	286	399	353	1,450	74	122	226
6	9.4	69	65	239	516	363	391	310	6,190	74	90	1,790
7	7.5	54	64	321	457	807	393	290	5,000	101	75	1,730
8	6.2	46	64	371	518	566	390	292	3,320	459	70	2,440
9	5.5	44	67	333	542	494	461	278	1,820	836	250	1,110
10	5.1	49	79	313	479	543	456	257	1,160	934	277	592
11	4.9	62	121	297	491	552	443	200	872	800	141	460
12	4.6	55	166	268	505	473	442	184	780	600	100	472
13	4.2	102	209	207	484	415	414	186	884	355	67	340
14	4.1	239	280	172	429	378	368	243	1,110	280	55	311
15	4.0	199	378	160	359	390	404	345	1,200	217	47	289
16	4.2	169	375	150	318	420	495	411	1,290	155	40	235
17	4.4	161	351	142	288	452	1,090	343	1,140	150	35	159
18	4.1	167	338	138	252	465	4,430	163	908	205	60	111
19	4.2	190	320	135	209	486	2,600	111	750	272	54	94
20	4.2	193	271	129	180	492	1,660	91	690	185	48	85
21	4.6	185	193	165	168	463	1,150	78	848	115	47	75
22	9.5	173	153	219	170	412	837	70	2,320	91	36	70
23	26	173	134	222	190	349	693	62	1,710	127	29	64
24	28	133	121	203	217	872	1,700	54	1,110	155	24	61
25	33	134	110	203	236	1,920	4,540	49	824	130	23	59
26	47	154	102	272	242	1,420	5,520	49	690	97	22	58
27	180	152	96	364	228	1,890	3,350	51	552	63	20	59
28	195	147	91	401	216	1,060	1,780	58	355	51	20	153
29	232	137	89	403	------	730	980	53	211	170	34	235
30	330	116	94	412	------	604	668	45	154	1,100	33	210
31	355	------	104	409	------	541	------	36	------	717	36	------
TOTAL	1,695.7	4,183	4,810	7,500	10,271	18,901	37,936	6,511	37,493	8,907	4,082	11,632
MEAN	54.7	139	155	242	367	610	1,265	210	1,250	287	132	388
MAX	355	323	378	412	573	1,920	5,520	541	6,190	1,100	721	2,440
MIN	4.0	44	64	103	168	218	368	36	30	51	20	23
AC-FT	3,360	8,300	9,540	14,880	20,370	37,490	75,250	12,910	74,370	17,670	8,100	23,070

CAL YR 1972 TOTAL 28,634.0 MEAN 78.2 MAX 1,420 MIN 1.0 AC-FT 56,800
WTR YR 1973 TOTAL 153,921.7 MEAN 422 MAX 6,190 MIN 4.0 AC-FT 305,300

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-25	0400	8.63	2,690	6- 6	0400	10.20	6,800
4-18	0800	9.54	5,120	6-22	1100	8.38	2,540
4-26	0700	9.93	5,990	9- 8	0500	8.54	2,870

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 (0.6 km) upstream from Allen Creek, 1.5 miles (2.4 km) upstream from Bingham Creek, 7.5 miles (12.1 km) east of Alto, and at mile 149.3 (240.2 km).

DRAINAGE AREA.--1,276 mi² (3,305 km²).

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 (62.27 m) above mean sea level. May 9, 1940, to Mar. 31, 1949, nonrecording gage on bridge at natural channel 1,400 ft (427 m) to right at same datum. Feb. 18 to Sept. 15, 1959, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--15 years (1942-43, 1959-73), 715 ft³/s (20.2 m³/s), 518,000 acre-ft/yr (639 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,650 ft³/s (217 m³/s) Apr. 29, gage height, 18.27 ft (5.57 m); minimum daily, 14 ft³/s (0.40 m³/s) Oct. 18.
Period of record: Maximum discharge, 30,600 ft³/s (867 m³/s) Apr. 28, 1966, gage height, 21.51 ft (6.56 m), but may have been higher during period of no gage-height record in November 1940; minimum, 2.0 ft³/s (57 dm³/s) Aug. 14, 15, 1964.
Maximum stage since at least 1905, about 22 ft (7 m) in May 1908, from information by local residents. Flood in 1932 reached a stage of 21.5 ft (6.6 m), and flood in May 1958 reached a stage of 20.3 ft (6.2 m), 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 (57.1 km) upstream and Lake Tyler 69.9 miles (112.5 km) upstream since January 1949, total capacity, 107,900 acre-ft (133 hm³). Recording rain gage located at station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	826	684	523	1,750	705	3,580	5,450	166	896	396	132
2	135	919	616	637	1,670	769	3,080	4,400	155	624	653	126
3	134	1,070	507	755	1,560	803	2,660	3,570	151	429	971	112
4	141	1,200	382	815	1,530	824	2,220	2,900	164	296	1,170	107
5	222	1,240	312	784	1,550	858	1,830	2,370	199	220	1,210	250
6	227	1,220	276	794	1,600	967	1,490	1,970	337	219	1,050	650
7	222	1,390	246	1,280	1,660	1,220	1,260	1,840	465	302	758	1,000
8	204	878	238	1,660	1,770	1,260	1,120	1,610	875	410	513	1,250
9	127	565	240	1,490	1,850	1,400	1,100	1,420	1,840	479	300	1,580
10	61	466	269	1,670	1,840	1,720	1,110	1,310	2,750	608	214	1,920
11	38	436	306	1,980	1,850	2,070	1,180	1,200	3,290	1,060	194	2,260
12	29	378	378	2,300	1,910	2,410	1,320	1,080	3,410	1,570	236	2,510
13	24	416	502	2,480	1,960	2,500	1,430	978	3,550	1,780	311	2,510
14	21	420	662	2,440	1,960	2,370	1,460	1,090	3,590	1,830	292	2,350
15	18	453	1,010	2,250	1,860	2,140	1,430	1,130	3,340	1,820	208	2,050
16	17	580	1,080	2,000	1,690	1,950	1,380	1,020	3,070	1,760	149	1,720
17	16	693	1,210	1,720	1,470	1,790	1,510	842	3,330	1,490	121	1,550
18	14	808	1,390	1,400	1,260	1,640	2,590	705	3,750	1,060	126	1,100
19	15	920	1,590	1,060	1,120	1,550	2,710	619	3,890	786	114	800
20	16	956	1,750	802	1,000	1,530	3,850	615	3,760	700	121	600
21	15	1,100	1,790	753	895	1,520	6,140	604	3,340	559	467	450
22	40	1,250	1,700	741	764	1,460	6,740	520	2,880	408	629	350
23	60	1,330	1,510	719	670	1,360	5,820	396	2,410	345	438	300
24	108	1,310	1,310	769	623	1,520	5,050	310	2,020	300	217	270
25	193	1,180	1,140	926	610	1,860	4,810	271	1,790	230	140	250
26	222	923	1,000	1,240	627	1,850	4,230	259	1,740	220	113	240
27	221	699	814	1,300	645	2,260	4,570	246	1,690	245	95	300
28	235	674	601	1,370	673	3,200	6,580	222	1,610	229	88	450
29	443	715	464	1,450	------	3,970	7,450	208	1,460	227	80	600
30	903	722	457	1,530	------	4,250	6,700	193	1,210	269	76	700
31	794	------	480	1,590	------	4,040	------	177	------	234	95	------
TOTAL	5,109	25,737	24,914	41,228	38,367	57,766	96,400	39,525	62,232	21,605	11,545	28,487
MEAN	165	858	804	1,330	1,370	1,863	3,213	1,275	2,074	697	372	950
MAX	903	1,390	1,790	2,480	1,960	4,250	7,450	5,450	3,890	1,830	1,210	2,510
MIN	14	378	238	523	610	705	1,100	177	151	219	76	107
AC-FT	10,130	51,050	49,420	81,780	76,100	114,600	191,200	78,400	123,400	42,850	22,900	56,500
(††)	6.96	4.07	3.14	5.18	2.13	4.84	7.76	2.33	6.43	6.72	2.60	9.39

CAL YR 1972 TOTAL 132,196.0 MEAN 361 MAX 3,340 MIN 6.3 AC-FT 262,200 †† -
WTR YR 1973 TOTAL 452,915.0 MEAN 1,241 MAX 7,450 MIN 14 AC-FT 898,400 †† 61.55

†† Rainfall, in inches.

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 (61 m) upstream from Procella Creek, 1.5 miles (2.4 km) downstream from Bayou Loco, 1.5 miles (2.4 km) upstream from Southern Pacific Lines bridge, 8 miles (13 km) north of Lufkin, and at mile 109.5 (176.2 km).

DRAINAGE AREA.--1,600 mi² (4,140 km²).

PERIOD OF RECORD.--October 1923 to September 1934, July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 164.72 ft (50.21 m) above mean sea level. Oct. 29, 1923, to Jan. 17, 1926, nonrecording gage at Southern Pacific Lines bridge 1.5 miles (2.4 km) downstream at datum 1.39 ft (0.42 m) lower; Jan. 18, 1926, to Sept. 30, 1934, nonrecording gage at Lufkin-Nacogdoches highway bridge 1,400 ft (427 m) upstream at present datum.

AVERAGE DISCHARGE.--20 years (1923-34, 1939-48) unregulated, 1,438 ft³/s (40.7 m³/s), 1,042,000 acre-ft/yr (1,280 hm³/yr); 25 years (1948-73) regulated, 948 ft³/s (26.8 m³/s), 686,800 acre-ft/yr (847 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,190 ft³/s (260 m³/s) Apr. 26, gage height, 12.91 ft (3.94 m); minimum daily, 20 ft³/s (0.57 m³/s) Oct. 20, 21.
Period of record: Maximum discharge, 38,200 ft³/s (1,080 m³/s) Feb. 24, 1932; maximum gage height, 18.55 ft (5.65 m) May 7, 1944; minimum discharge, 0.8 ft³/s (22.7 dm³/s) Oct. 29, 30, 1956.
Flood in May 1884 reached a stage of 26.5 ft (8.1 m) and is the highest since at least that date, and flood in May 1908 reached a stage of 25.0 ft (7.6 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	1,690	1,030	1,200	2,010	970	3,060	5,660	273	1,560	302	121
2	75	1,600	1,010	1,290	2,040	1,020	3,410	6,270	251	1,410	336	119
3	112	1,360	975	1,330	2,240	1,040	3,620	5,880	234	1,150	495	142
4	120	1,210	905	1,290	2,400	1,120	3,610	5,100	236	868	677	144
5	126	1,170	810	1,490	2,270	1,150	3,410	4,420	410	662	860	355
6	153	1,220	694	1,730	2,100	1,280	3,160	3,930	665	548	985	794
7	172	1,270	608	2,360	2,000	1,610	2,930	3,770	743	538	1,040	1,100
8	172	1,450	535	3,800	2,080	1,820	2,590	3,440	677	701	1,000	1,250
9	173	1,680	490	4,770	2,270	1,830	2,290	2,990	729	705	860	1,290
10	160	1,670	520	4,140	2,360	1,830	1,970	2,590	940	680	715	1,230
11	124	1,340	729	3,410	2,430	1,800	1,690	2,140	1,250	694	450	1,310
12	90	995	1,030	2,860	2,430	1,880	1,540	1,770	1,540	836	298	1,430
13	62	836	1,140	2,610	2,390	2,020	1,470	1,570	3,060	1,050	267	1,650
14	43	888	1,330	2,590	2,410	2,160	1,470	1,430	5,660	1,270	292	2,030
15	33	1,070	1,790	2,680	2,350	2,290	1,610	1,290	6,880	1,430	336	2,130
16	28	1,010	2,300	2,770	2,310	2,480	1,890	1,250	5,570	1,580	302	2,190
17	24	920	2,310	2,820	2,280	2,590	2,160	1,240	4,540	1,640	239	2,200
18	22	910	2,320	2,840	2,220	2,560	3,030	1,200	3,870	1,660	197	2,060
19	21	1,010	2,050	2,700	2,110	2,460	3,350	1,080	3,410	1,590	296	1,780
20	20	1,240	1,870	2,530	1,880	2,280	3,540	940	3,200	1,330	321	1,390
21	20	1,370	1,860	2,880	1,610	2,060	3,310	832	3,210	1,050	446	1,010
22	53	1,400	1,950	2,850	1,440	1,880	3,130	796	3,350	868	550	749
23	138	1,350	2,040	2,100	1,330	1,780	3,330	747	3,380	840	608	576
24	181	1,400	2,070	1,830	1,240	3,610	4,380	674	3,280	668	585	474
25	113	1,540	2,030	1,570	1,130	6,780	6,510	596	3,050	563	436	428
26	127	1,640	1,850	1,730	1,050	5,240	8,890	588	2,700	450	265	375
27	218	1,650	1,620	2,130	1,000	3,800	7,390	555	2,350	365	193	342
28	355	1,500	1,430	2,270	965	3,090	5,660	460	2,040	327	255	571
29	452	1,270	1,250	2,340	------	2,660	4,690	394	1,820	321	236	813
30	824	1,100	1,060	2,150	------	2,560	4,590	336	1,680	291	160	896
31	1,410	------	1,020	2,030	------	2,740	------	300	------	290	134	------
TOTAL	5,646	38,759	42,626	75,090	54,345	72,390	103,680	64,238	70,998	27,935	14,136	30,949
MEAN	182	1,292	1,375	2,422	1,941	2,335	3,456	2,072	2,367	901	456	1,032
MAX	1,410	1,690	2,320	4,770	2,430	6,780	8,890	6,270	6,880	1,660	1,040	2,200
MIN	20	836	490	1,200	965	970	1,470	300	234	290	134	119
AC-FT	11,200	76,880	84,550	148,900	107,800	143,600	205,600	127,400	140,800	55,410	28,040	61,390

CAL YR 1972 TOTAL 182,940.9 MEAN 500 MAX 2,720 MIN 9.0 AC-FT 362,900
WTR YR 1973 TOTAL 600,792.0 MEAN 1,646 MAX 8,890 MIN 20 AC-FT 1,192,000

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 (23.3 km) upstream from mouth.

DRAINAGE AREA.--31.3 mi² (81.1 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 264.23 ft (80.54 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 26.0 ft³/s (0.736 m³/s), 11.28 in/yr (286.5 mm/yr), 18,840 acre-ft/yr (23.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,500 ft³/s (70.8 m³/s) Mar. 24, gage height, 16.55 ft (5.04 m); minimum, 0.13 ft³/s (3.7 dm³/s) Oct. 16-19.
Period of record: Maximum discharge, 2,870 ft³/s (81.3 m³/s) May 7, 1969, gage height, 17.29 ft (5.27 m); no flow at times. Maximum stage since at least 1956, 19.6 ft (6.0 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	30	18	45	99	24	33	37	4.3	6.9	5.6	1.4
2	.33	38	17	60	52	39	30	37	4.1	6.2	6.8	1.1
3	.16	20	17	117	41	29	34	31	17	5.9	3.3	1.0
4	.14	14	16	69	37	36	30	27	263	5.7	1.6	2.3
5	.14	11	18	135	35	27	26	24	158	10	1.3	144
6	.14	25	20	145	34	259	31	33	78	17	1.2	28
7	1.8	468	15	1,060	33	168	89	200	25	31	1.2	22
8	.43	52	23	282	160	57	55	46	17	12	1.4	107
9	.26	30	29	109	105	46	142	30	16	7.5	12	6.2
10	.23	22	259	85	54	70	45	24	14	5.9	5.6	9.7
11	.20	17	113	79	44	61	34	21	16	6.6	1.7	10
12	.21	15	162	72	41	38	31	35	31	8.6	1.7	5.3
13	.20	235	109	74	41	34	29	22	417	5.5	1.5	55
14	.20	54	356	66	40	32	28	17	497	5.0	1.3	16
15	.19	31	402	53	33	30	50	16	283	4.9	2.1	7.5
16	.15	25	89	46	29	87	86	14	70	9.2	1.3	5.9
17	.13	21	62	44	28	53	512	13	45	5.2	13	5.0
18	.13	123	49	53	27	35	643	12	33	4.0	17	4.4
19	.46	91	49	47	26	31	114	11	26	3.6	5.5	4.4
20	.21	38	52	145	24	30	96	9.5	25	3.2	3.0	4.1
21	.39	30	43	720	23	25	77	9.0	23	3.1	2.2	3.8
22	45	29	34	128	26	23	60	8.0	20	3.0	1.2	3.7
23	10	24	31	72	34	24	49	7.2	17	3.0	.83	3.4
24	2.3	33	27	55	28	1,120	357	6.7	15	4.1	.83	3.5
25	.79	135	25	148	24	328	890	11	14	1.9	.56	3.5
26	29	47	23	370	25	95	123	16	12	2.0	.70	3.0
27	57	33	22	125	26	65	74	8.0	11	2.1	15	19
28	8.7	24	21	109	23	55	55	5.9	9.9	1.5	11	107
29	115	21	23	62	------	48	46	5.3	9.1	1.4	2.8	15
30	286	20	262	54	------	44	40	4.9	8.2	1.4	3.0	8.5
31	34	------	85	53	------	41	------	4.6	------	7.4	1.4	------
TOTAL	594.99	1,756	2,471	4,682	1,192	3,054	3,909	746.1	2,178.6	194.8	127.62	610.7
MEAN	19.2	58.5	79.7	151	42.6	98.5	130	24.1	72.6	6.28	4.12	20.4
MAX	286	468	402	1,060	160	1,120	890	200	497	31	17	144
MIN	.13	11	15	44	23	23	26	4.6	4.1	1.4	.56	1.0
CFSM	.61	1.87	2.55	4.82	1.36	3.15	4.15	.77	2.32	.20	.13	.65
IN.	.71	2.09	2.94	5.56	1.42	3.63	4.65	.89	2.59	.23	.15	.73
AC-FT	1,180	3,480	4,900	9,290	2,360	6,060	7,750	1,480	4,320	386	253	1,210

CAL YR 1972 TOTAL 8,273.88 MEAN 22.6 MAX 468 MIN .09 CFSM .72 IN 9.83 AC-FT 16,410
WTR YR 1973 TOTAL 21,516.81 MEAN 59.0 MAX 1,120 MIN .13 CFSM 1.89 IN 25.57 AC-FT 42,680

PEAK DISCHARGE (BASE, 1,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	0830	12.14	1,120	3-24	1730	16.55	2,500
1- 7	1700	14.50	1,680	4-18	0100	14.93	1,810
1-21	1200	12.82	1,240	4-25	0030	14.98	1,820

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 (3.5 km) upstream from Amaladeros Creek, 2.8 miles (4.5 km) east of Chireno, 5.4 miles (8.7 km) downstream from Arenoso Creek, and 41 miles (66 km) upstream from mouth.

DRAINAGE AREA.--503 mi² (1,303 km²).

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 (51.69 m) 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.--34 years, 432 ft³/s (12.2 m³/s), 11.66 in/yr (296.2 mm/yr), 313,000 acre-ft/yr (386 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,600 ft³/s (187 m³/s) Mar. 26, gage height, 18.90 ft (5.76 m); minimum, 12 ft³/s (0.34 m³/s) Oct. 16-20.
Period of record: Maximum discharge, 31,900 ft³/s (903 m³/s) Nov. 24, 1940, gage height, 25.97 ft (7.92 m); minimum, 0.8 ft³/s (23 dm³/s) Aug. 26, 27, 1956.
Maximum stage since at least 1865, 29.9 ft (9.1 m) June 29, 1902, from information by local residents. Flood in July 1933 reached a stage of 25.2 ft (7.7 m), from information by local residents.

REMARKS.--Records fair. At end of year, flow from 18.5 mi² (47.9 km²) above this station was partly controlled by four floodwater-retarding structures with a total combined capacity of 6,130 acre-ft (7.56 hm³) below the flood-spillway crests, of which 5,800 acre-ft (7.15 hm³) is floodwater-retarding capacity and 334 acre-ft (0.412 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	655	184	467	1,410	249	1,260	1,460	83	144	141	83
2	103	658	159	575	1,350	251	824	1,300	84	114	398	80
3	68	681	142	706	1,200	261	544	1,060	90	102	506	68
4	46	677	130	751	933	277	391	631	91	93	561	65
5	34	554	126	760	656	346	348	429	311	92	608	105
6	27	269	124	912	486	523	332	383	576	164	583	334
7	23	151	135	1,220	394	931	375	610	658	428	269	538
8	20	185	135	1,480	459	963	472	795	689	520	123	606
9	18	401	143	3,540	667	930	594	794	698	553	99	620
10	16	481	219	4,080	745	920	688	753	527	612	98	635
11	15	445	369	2,610	753	971	682	632	373	655	132	650
12	14	248	526	2,070	767	979	689	393	309	680	108	650
13	13	171	613	1,750	782	916	646	276	548	622	90	600
14	13	266	739	1,510	846	757	540	257	1,160	413	109	451
15	13	490	1,100	1,350	709	571	440	261	1,770	356	94	306
16	12	564	1,120	1,170	504	612	798	226	2,810	359	79	195
17	12	603	1,250	891	396	744	1,670	191	2,570	340	70	152
18	12	632	2,190	587	340	731	2,060	172	1,980	293	65	127
19	12	587	2,050	454	307	666	4,090	160	1,620	260	72	111
20	12	464	1,730	438	287	604	4,820	151	1,420	190	94	101
21	15	456	1,470	741	271	488	2,860	142	1,230	134	154	93
22	21	454	1,280	775	260	376	2,170	134	746	107	158	89
23	51	404	1,010	741	271	335	1,810	124	353	104	108	85
24	125	269	585	741	285	879	1,570	116	256	343	77	83
25	123	245	358	900	293	1,540	1,660	113	213	462	64	90
26	93	332	280	1,410	294	4,450	1,930	126	186	245	57	93
27	97	433	244	1,710	278	4,050	2,390	141	165	139	52	90
28	224	435	220	1,560	260	2,440	2,470	131	146	127	51	98
29	348	346	207	1,420	------	2,090	2,030	111	159	103	52	332
30	538	233	457	1,370	------	1,790	1,690	95	192	89	60	517
31	671	------	547	1,380	------	1,500	------	88	------	80	77	------
TOTAL	2,896	12,789	19,842	40,069	16,203	33,140	42,843	12,255	22,013	8,923	5,209	8,047
MEAN	93.4	426	640	1,293	579	1,069	1,428	395	734	288	168	268
MAX	671	681	2,190	4,080	1,410	4,450	4,820	1,460	2,810	680	608	650
MIN	12	151	124	438	260	249	332	88	83	80	51	65
CFSM	.19	.85	1.27	2.57	1.15	2.13	2.84	.79	1.46	.57	.33	.53
IN.	.21	.95	1.47	2.96	1.20	2.45	3.17	.91	1.63	.66	.39	.60
AC-FT	5,740	25,370	39,360	79,480	32,140	65,730	84,980	24,310	43,660	17,700	10,330	15,960

CAL YR 1972 TOTAL 74,084.5 MEAN 202 MAX 2,190 MIN 7.3 CFSM .40 IN 5.48 AC-FT 146,900
WTR YR 1973 TOTAL 224,229.0 MEAN 614 MAX 4,820 MIN 12 CFSM 1.22 IN 16.58 AC-FT 444,800

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 9	2000	18.44	5,450	4-27	2200	17.01	2,720
3-26	1800	18.90	6,600	6-16	1500	17.43	3,300
4-19	2100	18.84	6,450				

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 (4.8 km) upstream from Turkey Creek, and 9.5 miles (15.3 km) south of San Augustine.

DRAINAGE AREA.--89.0 mi² (231 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 190.22 ft (57.98 m) above mean sea level. Prior to June 2, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 69.9 ft³/s (1.98 m³/s), 10.67 in/yr (271.0 mm/yr), 50,600 acre-ft/yr (62.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,200 ft³/s (147 m³/s) Apr. 18, gage height, 14.15 ft (4.31 m); minimum, 1.1 ft³/s (31 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 13,200 ft³/s (374 m³/s) Apr. 9, 1968, gage height, 16.82 ft (5.13 m); no flow at times. Maximum discharge since October 1957, 15,900 ft³/s (450 m³/s) Sept. 21 or 22, 1958, gage height, 17.5 ft (5.3 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	49	22	284	414	64	107	77	17	41	13	7.1
2	5.3	25	20	263	360	72	86	113	16	32	171	5.5
3	3.9	20	19	395	174	70	77	520	13	28	70	6.5
4	3.0	15	27	330	133	87	69	284	16	25	30	12
5	2.4	14	28	239	119	107	61	116	47	24	19	97
6	2.0	11	27	556	111	156	57	96	84	79	15	187
7	1.7	9.7	26	660	105	777	171	406	51	116	13	209
8	1.6	8.8	22	1,130	201	501	159	628	40	125	12	69
9	1.5	8.5	28	652	398	187	205	196	46	72	12	38
10	1.6	7.6	161	280	219	164	144	108	37	45	11	28
11	1.7	7.1	326	222	149	299	90	82	386	34	9.9	31
12	1.6	6.8	213	200	127	159	74	69	200	30	8.2	39
13	1.5	30	195	193	140	115	65	66	506	27	7.2	28
14	1.4	87	247	180	409	107	59	54	1,280	22	11	119
15	1.4	40	830	155	254	125	137	48	2,950	19	11	52
16	1.4	25	750	132	153	305	785	43	918	17	9.4	32
17	1.3	18	259	120	124	611	1,050	39	341	19	8.5	24
18	1.1	37	154	115	110	241	2,760	36	152	23	13	19
19	1.2	123	162	114	101	143	874	33	108	17	27	15
20	1.3	71	148	114	92	118	430	30	89	14	28	14
21	1.4	40	127	546	83	97	248	28	325	11	16	13
22	2.2	31	114	756	80	83	187	25	209	10	11	11
23	3.2	27	83	257	104	79	149	23	111	30	8.3	10
24	10	24	64	156	104	652	127	21	80	21	6.5	13
25	9.5	57	55	161	87	2,070	319	29	66	13	5.4	21
26	7.4	115	53	577	77	733	336	45	57	13	4.8	17
27	18	57	51	575	74	262	186	43	49	47	4.6	14
28	41	38	47	306	69	176	121	38	42	36	12	22
29	29	30	36	204	------	155	97	23	46	19	8.3	67
30	254	24	200	155	------	133	84	18	57	14	7.2	29
31	192	------	420	143	------	129	------	16	------	12	10	------
TOTAL	612.3	1,056.5	4,914	10,170	4,571	8,977	9,314	3,353	8,339	1,035	593.3	1,249.1
MEAN	19.8	35.2	159	328	163	290	310	108	278	33.4	19.1	41.6
MAX	254	123	830	1,130	414	2,070	2,760	628	2,950	125	171	209
MIN	1.1	6.8	19	114	69	64	57	16	13	10	4.6	5.5
CFSM	.22	.40	1.79	3.69	1.83	3.26	3.48	1.21	3.12	.38	.21	.47
IN.	.26	.44	2.05	4.25	1.91	3.75	3.89	1.40	3.49	.43	.25	.52
AC-FT	1,210	2,100	9,750	20,170	9,070	17,810	18,470	6,650	16,540	2,050	1,180	2,480
(††)	4.70	3.52	4.90	5.18	1.70	7.19	5.75	4.33	9.70	1.05	2.92	3.98

CAL YR 1972 TOTAL 17,081.58 MEAN 46.7 MAX 830 MIN .33 CFSM .52 IN 7.14 AC-FT 33,880 †† 43.61
WTR YR 1973 TOTAL 54,184.20 MEAN 148 MAX 2,950 MIN 1.1 CFSM 1.66 IN 22.65 AC-FT 107,500 †† 54.92

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 8	0700	12.08	1,420	4-18	0300	14.15	5,200
3-25	0130	13.56	4,020	6-15	0530	13.88	4,660

†† 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 (16 km) northwest of Jasper, and 25.2 miles (40.5 km) upstream from mouth.

DRAINAGE AREA.--3,449 mi² (8,933 km²).

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, 3,293,000 acre-ft (4,060 hm³) May 8, elevation, 167.71 ft (51.12 m); minimum, 2,249,000 acre-ft (2,770 hm³) Oct. 21, elevation, 158.29 ft (48.25 m).
Period of record: Maximum contents, 3,574,000 acre-ft (4,410 hm³) May 17, 1969, elevation, 169.91 ft (51.79 m); minimum since conservation storage was reached in 1968, 2,180,000 acre-ft (2,690 hm³) Nov. 17, 1971, elevation, 157.64 ft (48.05 m).

REMARKS.--Reservoir is formed by a rolled earthfill dam, 19,430 ft (5,922 m) 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 (3- by 6-meter) rectangular concrete lined conduits controlled by two 10- by 20-foot (3- by 6-meter) tractor type service gates and one 10- by 20-foot (3- by 6-meter) tractor type emergency gate. Water for turbines is admitted through four 18- by 26-foot (5- by 8-meter) penstocks and controlled by two wheeled-leaf type headgates. The emergency spillway is an uncontrolled broad-crested weir 2,200 ft (671 m) wide on right bank 7,000 ft (2,134 m) to right of outlet works designed to discharge 125,300 ft³/s (3,550 m³/s) at maximum design water level of 183.0 ft (55.8 m). Surface area and capacity tables are based on topographic maps and detailed sedimentation ranges established in 1961 and dated February 1965. 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)

158.0	2,221,000	166.0	3,085,000
160.0	2,421,000	168.0	3,329,000
162.0	2,631,000	170.0	3,586,000
164.0	2,853,000		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,305	2,285	2,353	2,560	2,880	2,831	3,053	3,200	2,904	3,182	2,857	2,713
2	2,303	2,283	2,353	2,566	2,878	2,834	3,051	3,214	2,893	3,161	2,857	2,713
3	2,302	2,291	2,358	2,570	2,872	2,836	3,059	3,216	2,901	3,142	2,854	2,713
4	2,297	2,292	2,364	2,575	2,865	2,853	3,039	3,228	2,892	3,120	2,854	2,719
5	2,291	2,294	2,368	2,596	2,861	2,846	3,020	3,239	2,908	3,122	2,854	2,721
6	2,291	2,297	2,371	2,613	2,856	2,866	3,019	3,245	2,894	3,106	2,855	2,716
7	2,288	2,302	2,369	2,644	2,850	2,873	3,003	3,285	2,886	3,096	2,859	2,708
8	2,286	2,296	2,369	2,657	2,866	2,872	2,999	3,289	2,886	3,079	2,865	2,716
9	2,283	2,296	2,374	2,669	2,863	2,870	2,987	3,284	2,889	3,049	2,868	2,722
10	2,279	2,297	2,389	2,678	2,855	2,876	2,963	3,274	2,892	3,022	2,871	2,713
11	2,277	2,294	2,391	2,696	2,846	2,880	2,947	3,265	2,886	3,010	2,866	2,715
12	2,276	2,289	2,403	2,706	2,846	2,878	2,933	3,258	2,907	2,990	2,868	2,715
13	2,272	2,300	2,405	2,716	2,863	2,878	2,920	3,239	2,940	2,970	2,858	2,710
14	2,272	2,304	2,434	2,727	2,870	2,879	2,905	3,225	3,078	2,950	2,845	2,704
15	2,271	2,313	2,448	2,739	2,870	2,884	2,905	3,206	3,137	2,934	2,838	2,704
16	2,267	2,317	2,449	2,746	2,861	2,926	2,966	3,184	3,163	2,918	2,825	2,707
17	2,261	2,317	2,453	2,755	2,866	2,943	3,062	3,165	3,185	2,908	2,817	2,706
18	2,255	2,338	2,461	2,770	2,873	2,946	3,093	3,141	3,202	2,900	2,817	2,692
19	2,257	2,338	2,474	2,778	2,879	2,957	3,122	3,122	3,217	2,893	2,817	2,684
20	2,252	2,336	2,485	2,788	2,884	2,957	3,145	3,102	3,248	2,884	2,806	2,677
21	2,249	2,339	2,501	2,812	2,879	2,935	3,171	3,082	3,258	2,886	2,798	2,672
22	2,269	2,334	2,496	2,829	2,877	2,921	3,186	3,062	3,266	2,886	2,785	2,673
23	2,272	2,338	2,503	2,838	2,871	2,917	3,198	3,045	3,275	2,879	2,772	2,674
24	2,266	2,349	2,508	2,838	2,869	2,974	3,206	3,027	3,281	2,872	2,761	2,661
25	2,259	2,353	2,513	2,850	2,864	3,012	3,216	3,027	3,285	2,871	2,762	2,651
26	2,272	2,353	2,515	2,855	2,862	3,023	3,224	2,998	3,287	2,864	2,762	2,642
27	2,267	2,362	2,516	2,873	2,853	3,036	3,221	2,985	3,292	2,859	2,753	2,632
28	2,267	2,362	2,518	2,888	2,841	3,043	3,216	2,964	3,276	2,859	2,745	2,633
29	2,278	2,364	2,520	2,879	------	3,046	3,211	2,943	3,245	2,855	2,737	2,632
30	2,278	2,355	2,539	2,872	------	3,052	3,200	2,927	3,206	2,853	2,725	2,625
31	2,279	------	2,544	2,874	------	3,056	------	2,918	------	2,849	2,714	------
(†)	158.59	159.35	161.18	164.19	163.90	165.75	166.95	164.57	167.00	163.97	162.76	161.94
(*)	-27	+76	+189	+330	-33	+215	+144	-282	+288	-357	-135	-89
MAX	2,305	2,364	2,544	2,888	2,884	3,056	3,224	3,289	3,292	3,182	2,871	2,722
MIN	2,249	2,283	2,353	2,560	2,841	2,831	2,905	2,918	2,886	2,849	2,714	2,625

CAL YR 1972..... * +190 MAX 2,812 MIN 2,249
WTR YR 1973..... * +319 MAX 3,292 MIN 2,249

† 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 (0.6 km) downstream from Jordans Creek, 4 miles (6 km) northeast of the abandoned town of Horger, and 7.6 miles (12.2 km) downstream from Sam Rayburn Dam.

DRAINAGE AREA.--3,486 mi² (9,029 km²), 3,449 mi² (8,933 km²) at Sam Rayburn Dam.

PERIOD OF RECORD.--March 1928 to April 1951, February 1958 to September 1973 (discontinued), 1958-65 medium- and high-water records only.

GAGE.--Water-stage recorder. Auxiliary water-stage recorder 3.2 miles (5.1 km) downstream. Datum of gage is 68.54 ft (20.89 m) 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 (7.7 km) 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 ft³/s (92.9 m³/s), 2,375,000 acre-ft/yr (2,928 hm³/yr); 8 years (1965-73) regulated, 1,497 ft³/s (42.4 m³/s), 1,085,000 acre-ft/yr (1,338 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,100 ft³/s (513 m³/s) July 1, gage height, 28.23 ft (8.60 m); no flow at times.
Period of record: Maximum discharge, 49,900 ft³/s (1,410 m³/s) May 6, 1944, gage height, 36.90 ft (11.25 m); minimum observed prior to closure of Sam Rayburn Dam, 13 ft³/s (0.368 m³/s) Sept. 22, 1937; no release at times.
Maximum stage since 1885, 39.5 ft (12.0 m), at site 4.8 miles (7.7 km) downstream, in August 1915, discharge, 82,000 ft³/s (2,320 m³/s), from rating curve extended above 50,000 ft³/s (1,420 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2,870	1,820	0	5,450	4,630	4,110	10,000	4,400	16,200	790	0
2	5.0	1,110	685	1,050	5,820	4,580	3,420	10,000	4,400	14,400	1,200	0
3	0	0	0	2,490	5,580	0	5,570	7,750	0	11,600	0	0
4	2,260	350	0	2,520	5,740	0	8,600	1,230	4,130	10,000	0	4,380
5	2,050	0	0	0	6,250	3,310	9,610	0	2,830	10,500	0	4,360
6	971	1,110	642	0	5,910	4,460	10,400	3,960	4,500	10,000	0	3,840
7	0	0	862	0	5,520	4,200	10,400	0	4,350	7,500	5.0	4,440
8	0	1,040	1,890	3,450	6,130	5,230	10,400	4,270	2,920	8,020	0	750
9	896	1,680	0	2,070	6,080	4,860	10,400	5,300	0	11,800	0	0
10	896	1,280	0	8,420	5,900	3,800	10,400	8,000	1,430	13,800	0	4,220
11	896	1,420	5.0	3,400	5,400	4,020	9,330	8,000	2,860	11,900	0	4,460
12	896	0	0	954	5,370	3,890	8,800	8,000	2,260	10,000	0	4,040
13	875	635	0	713	5,690	4,840	8,800	8,000	0	9,450	4,200	4,220
14	0	0	0	935	5,680	4,700	8,800	8,000	0	9,000	4,000	4,890
15	0	10	754	0	6,050	4,840	8,800	8,880	0	9,000	4,230	0
16	896	0	1,060	521	4,780	2,610	2,640	9,530	0	9,000	4,520	0
17	2,040	0	1,380	0	0	0	0	9,600	0	7,690	4,580	4,590
18	1,990	0	655	0	0	0	5	9,600	0	5,240	0	4,500
19	0	0	0	0	0	5	0	9,600	5.0	4,650	0	4,420
20	0	0	1,370	1,380	576	4,610	0	9,600	0	4,560	5,040	4,580
21	0	0	1,620	0	4,600	8,400	0	9,600	0	0	4,090	4,060
22	0	101	1,410	377	4,260	8,400	0	9,600	0	0	4,040	0
23	896	0	1,730	0	4,370	8,400	1,620	9,350	0	4,230	4,370	0
24	700	0	0	2,390	2,820	5,130	3,300	9,200	0	4,880	4,600	5,380
25	700	190	0	5,130	3,530	146	4,380	9,200	2,620	4,150	0	5,000
26	700	0	1,100	5,090	4,210	4,420	8,400	9,200	0	4,110	0	5,220
27	700	219	900	0	4,500	5,180	9,330	8,840	0	4,100	4,530	4,870
28	0	131	532	0	4,560	6,780	10,000	8,800	6,540	408	4,860	3,780
29	0	1,000	1,580	5,270	------	3,890	10,100	8,800	12,700	263	4,890	1,180
30	700	4,010	0	6,260	------	4,220	10,000	7,620	15,400	356	4,420	3,300
31	700	------	0	5,640	------	3,960	------	4,350	------	3,310	4,700	------
TOTAL	19,767.0	17,156	19,995.0	58,060	124,776	123,511	187,615	233,880	71,345.0	220,117	69,065.0	90,480
MEAN	638	572	645	1,873	4,456	3,984	6,254	7,545	2,378	7,101	2,228	3,016
MAX	2,260	4,010	1,890	8,420	6,250	8,400	10,400	10,000	15,400	16,200	5,040	5,380
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	39,210	34,030	39,660	115,200	247,500	245,000	372,100	463,900	141,500	436,600	137,000	179,500
(††)	4.92	5.42	4.99	7.25	4.00	8.01	9.02	5.41	12.88	7.08	2.59	4.89

CAL YR 1972 TOTAL 327,982.00 MEAN 896 MAX 5,150 MIN 0 AC-FT 650,600 †† 40.20
WTR YR 1973 TOTAL 1,235,767.00 MEAN 3,386 MAX 16,200 MIN 0 AC-FT 2,451,000 †† 76.46

†† 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 (21 m) upstream from outlet structure of Town Bluff Dam on Neches River, 0.4 mile (0.6 km) north of Town Bluff, and at mile 113.7 (182.9 km).

DRAINAGE AREA.--7,573 mi² (19,614 km²).

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 (149 m) upstream at same datum.

EXTREMES.--Current year: Maximum contents, 104,800 acre-ft (129 hm³) June 19, elevation, 83.77 ft (25.53 m); minimum, 68,690 acre-ft (84.7 hm³) July 10, elevation, 80.91 ft (24.66 m).
Period of record: Maximum contents, 128,400 acre-ft (158 hm³) May 22, 1953, elevation, 85.21 ft (25.97 m); 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 (2,042 m) including concrete spillway and nonoverflow section. There is a 6,100-foot (1,860-meter) uncontrolled emergency spillway on left bank with crest at elevation 85.0 ft (25.9 m). There is also a 326-foot (99-meter) gated spillway with six 40- by 35-foot (12- by 11-meter) tainter gates with sill at elevation 50.0 ft (15.2 m). Capacity of service spillway, 80,000 ft³/s (2,270 m³/s) with pool level at 85.0 ft (25.9 m). Total spillway capacity, 218,300 ft³/s (6,180 m³/s) at elevation 93.0 ft (28.3 m), 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)

76.0	27,960	82.0	81,280
78.0	41,830	84.0	108,700
79.0	50,090	85.0	124,700
80.0	59,320		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87,890	83,610	89,710	91,910	92,040	88,020	87,370	74,780	86,460	89,190	91,270	91,270
2	85,690	87,370	87,500	93,730	90,750	90,620	82,960	84,130	86,460	93,860	88,280	84,650
3	83,480	88,020	85,950	94,680	88,280	89,970	77,790	99,020	79,880	92,040	86,080	81,920
4	84,650	89,580	85,820	94,830	86,720	94,390	77,910	91,780	80,350	88,150	84,780	87,370
5	86,950	89,060	84,520	92,560	88,020	93,210	79,650	78,370	86,460	86,980	83,220	94,830
6	88,020	90,230	85,170	90,880	88,020	92,820	85,040	71,180	86,460	89,060	82,570	93,210
7	85,170	89,060	84,780	91,400	87,110	92,820	87,240	75,470	86,330	87,110	82,180	91,010
8	82,960	87,890	87,240	94,250	89,710	90,490	87,760	75,130	85,170	75,470	81,790	88,150
9	82,700	87,890	86,720	89,710	92,560	88,930	87,240	74,550	84,650	69,160	81,790	84,000
10	82,440	87,890	89,060	89,320	90,750	86,850	86,590	81,270	86,460	72,230	81,790	84,130
11	82,310	87,240	90,620	91,010	88,020	89,190	84,910	86,460	89,710	80,810	81,920	87,110
12	82,050	84,780	92,040	88,410	86,460	88,670	83,350	88,540	93,470	83,220	81,660	87,240
13	81,530	87,760	89,710	88,540	92,300	88,800	83,350	88,670	95,980	85,950	88,280	85,300
14	79,530	85,300	92,950	89,060	99,890	91,140	82,830	86,850	102,200	83,350	91,520	86,460
15	77,210	83,610	94,540	88,800	95,840	91,270	85,170	80,810	94,680	79,300	92,300	85,950
16	76,630	84,130	91,650	88,930	89,580	100,000	94,250	81,270	88,410	77,100	93,600	81,270
17	77,560	83,870	92,560	88,930	85,170	92,300	93,990	82,570	91,910	79,880	95,120	83,480
18	79,530	87,500	90,750	88,540	85,300	83,870	84,780	84,520	102,600	78,720	89,840	86,590
19	79,070	88,800	87,110	88,410	86,460	76,400	78,610	86,460	100,000	80,810	82,310	88,150
20	77,210	89,320	89,840	88,540	88,930	74,550	83,350	86,080	89,060	85,170	87,630	89,710
21	74,780	89,970	92,300	92,820	93,600	81,160	88,800	83,480	81,790	85,820	89,320	90,490
22	75,590	91,650	88,800	92,950	93,860	84,130	89,450	83,090	77,210	83,220	89,710	88,540
23	76,630	88,670	88,540	88,020	93,600	86,590	86,980	83,740	75,360	86,210	90,360	84,650
24	75,820	89,710	85,300	89,970	91,010	93,600	85,560	83,090	76,630	88,800	92,300	87,110
25	75,130	90,880	81,920	98,150	90,230	87,110	79,880	83,870	78,610	90,750	91,140	90,620
26	77,210	89,320	83,350	102,900	91,400	80,690	81,790	83,220	76,630	92,040	87,760	91,650
27	77,910	88,540	85,820	95,690	91,650	77,790	79,650	84,650	74,200	94,680	89,060	91,140
28	77,210	88,150	86,590	91,010	91,400	85,950	76,870	85,040	73,040	91,140	93,470	89,840
29	76,750	89,450	88,670	91,520	------	88,540	73,150	86,590	77,210	85,300	96,710	88,540
30	77,330	92,040	89,970	92,300	------	90,880	70,720	92,430	81,270	88,930	97,140	89,580
31	78,030	------	89,710	92,170	------	89,710	------	89,710	------	91,520	96,270	------
(†)	81.72	82.83	82.65	82.84	82.78	82.65	81.09	82.65	82.00	82.79	83.14	82.64
(*)	-11,940	+14,010	-2,330	+2,460	-770	-1,690	-18,990	+18,990	-8,440	+10,250	+4,750	-6,690
MAX	88,020	92,040	94,540	102,900	99,890	100,000	94,250	99,020	102,600	94,680	97,140	94,830
MIN	74,780	83,610	81,920	88,020	85,170	74,550	70,720	71,180	73,040	69,160	81,660	81,270

CAL YR 1972..... * +3,250 MAX 100,600 MIN 54,710
WTR YR 1973..... * -390 MAX 102,900 MIN 69,160

† 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 (0.5 km) downstream from Town Bluff Dam, 0.5 mile (0.8 km) northeast of Town Bluff, 2.5 miles (4.0 km) upstream from Walnut Run, 8 miles (13 km) downstream from Wolf Creek, and at mile 113.4 (182.5 km).

DRAINAGE AREA.--7,573 mi² (19,614 km²).

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 ft³/s (125 m³/s), 3,192,000 acre-ft/yr (3,936 hm³/yr); 9 years (1964-73) regulated, 3,657 ft³/s (104 m³/s), 2,649,000 acre-ft/yr (3,266 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,600 ft³/s (895 m³/s) June 20, elevation, 75.85 ft (23.12 m); minimum daily, 1,050 ft³/s (29.7 m³/s) Nov. 4.
Period of record: Maximum discharge, 90,900 ft³/s (2,570 m³/s) May 21, 22, 1953, elevation, 82.85 ft (25.25 m); no flow at times due to regulation of B. A. Steinhagen Lake.
Flood of May 1884, stage about 86.8 ft (26.5 m), discharge about 120,000 ft³/s (3,400 m³/s), is the highest since at least that date, from information by Corps of Engineers.

REMARKS.--Records fair. Flow regulated by B. A. Steinhagen Lake 0.3 mile (0.5 km) upstream (see preceding page) and Sam Rayburn Reservoir (station 08039300) 37.9 miles (61.0 km) upstream. Some diversions above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,360	1,110	4,650	1,330	11,700	7,750	17,500	16,900	9,210	17,500	4,840	6,150
2	1,350	1,120	2,880	2,060	11,400	7,490	17,500	16,500	7,800	18,000	5,280	3,820
3	1,340	1,080	1,820	4,480	11,600	4,960	17,500	18,500	7,240	18,900	3,160	2,180
4	1,330	1,050	1,390	6,490	10,600	4,770	17,400	18,400	6,040	18,600	1,810	2,830
5	1,330	1,590	1,390	6,520	9,740	9,090	17,000	17,800	4,190	17,700	1,730	7,360
6	1,340	2,240	1,380	7,120	9,310	10,500	16,100	17,400	5,390	18,800	1,710	10,400
7	1,330	2,400	1,390	7,330	9,280	10,500	16,900	19,400	7,490	19,500	1,700	11,000
8	1,340	2,410	1,280	7,540	9,470	10,800	18,100	21,800	7,220	19,400	1,700	8,590
9	1,250	2,410	1,200	10,500	10,900	11,300	18,200	19,600	4,500	18,900	1,690	6,750
10	1,120	2,410	1,200	10,300	12,000	10,700	18,200	18,100	2,580	17,900	1,680	7,040
11	1,160	2,420	1,200	9,380	12,000	9,340	18,100	18,200	3,660	16,000	1,200	7,670
12	1,250	2,420	1,300	8,560	11,000	8,820	17,600	19,100	6,650	14,000	1,580	8,370
13	1,250	2,460	2,220	6,980	10,800	9,190	16,400	19,300	8,120	14,200	1,940	9,200
14	1,250	2,500	2,360	6,620	13,700	8,480	16,200	19,300	15,300	14,500	3,730	8,460
15	1,240	1,960	4,250	6,600	14,700	8,960	16,200	19,100	26,400	14,400	5,370	6,000
16	1,250	1,160	5,840	6,250	15,200	11,600	17,500	18,400	24,800	13,800	5,630	4,840
17	1,270	1,130	4,370	6,070	10,800	15,400	20,800	17,000	23,400	12,000	5,640	4,750
18	1,1 0	1,130	4,810	6,200	4,840	14,400	28,100	15,600	25,600	8,910	5,640	5,440
19	1,160	1,140	4,920	5,390	2,880	12,500	25,900	14,700	28,800	6,600	5,200	6,350
20	1,120	1,160	3,340	5,000	2,170	11,800	21,300	14,900	31,300	5,430	2,680	6,380
21	1,110	1,150	4,700	5,980	3,520	11,400	19,100	15,400	30,100	3,240	4,160	6,390
22	1,100	1,760	6,100	7,850	6,950	12,500	19,400	15,200	27,500	3,120	5,090	5,520
23	1,100	2,790	5,510	7,520	7,800	13,100	19,700	14,100	24,500	3,760	5,120	4,460
24	1,110	1,360	4,900	5,340	7,710	13,700	19,600	14,000	20,500	5,680	4,810	5,040
25	1,110	1,330	3,940	4,670	6,920	14,100	19,500	13,700	17,900	6,290	3,510	6,840
26	1,110	1,820	2,170	8,500	6,590	13,800	19,500	13,200	16,800	6,890	2,440	7,560
27	1,120	2,350	1,520	11,100	6,940	14,200	19,500	13,100	14,200	7,310	3,360	8,460
28	1,110	1,340	1,430	8,920	7,360	14,200	19,300	12,700	12,700	7,380	4,920	8,510
29	1,110	1,310	1,320	8,140	------	14,100	19,100	11,900	15,200	6,450	5,430	7,490
30	1,120	2,570	1,320	9,330	------	14,600	18,400	10,700	17,200	1,540	6,240	5,720
31	1,120	------	1,340	10,300	------	16,400	------	9,060	------	3,220	6,620	------
TOTAL	37,440	53,080	87,440	218,370	257,880	350,450	565,600	503,060	452,290	359,920	115,610	199,570
MEAN	1,208	1,769	2,821	7,044	9,210	11,300	18,850	16,230	15,080	11,610	3,729	6,652
MAX	1,360	2,790	6,100	11,100	15,200	16,400	28,100	21,800	31,300	19,500	6,620	11,000
MIN	1,100	1,050	1,200	1,330	2,170	4,770	16,100	9,060	2,580	1,540	1,200	2,180
AC-FT	74,260	105,300	173,400	433,100	511,500	695,100	1,122M	997,800	897,100	713,900	229,300	395,800

CAL YR 1972 TOTAL 778,247 MEAN 2,126 MAX 11,400 MIN 629 AC-FT 1,544,000
WTR YR 1973 TOTAL 3,200,710 MEAN 8,769 MAX 31,300 MIN 1,050 AC-FT 6,349,000

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 (1.3 km) upstream from Mill Creek, 16 miles (26 km) upstream from Village Creek, and at mile 55.6 (89.5 km).

DRAINAGE AREA.--7,951 mi² (20,593 km²).

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 (2.51 m) 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 (1.9 km) downstream at datum 5.50 ft (1.68 m) lower; Apr. 1, 1921, to Dec. 7, 1948, nonrecording gages at site 1.2 miles (1.9 km) downstream at present datum; Dec. 8, 1948, to Nov. 8, 1963, water-stage recorder at site 1.2 miles (1.9 km) downstream at present datum.

AVERAGE DISCHARGE.--45 years (1904-6, 1921-64) prior to regulation by Sam Rayburn Reservoir, 6,308 ft³/s (179 m³/s), 4,570,000 acre-ft/yr (5,635 hm³/yr); 9 years (1964-73) regulated, 4,079 ft³/s (116 m³/s), 2,955,000 acre-ft/yr (3,644 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,100 ft³/s (881 m³/s) June 23, gage height, 18.58 ft (5.66 m); minimum daily, 1,220 ft³/s (34.6 m³/s) Oct. 12.
Period of record: Maximum discharge, 92,100 ft³/s (2,610 m³/s) May 11, 1944, gage height, 23.58 ft (7.19 m), from floodmark, at site then in use; minimum daily, 63 ft³/s (1.78 m³/s) Nov. 26-28, 1956.
Flood in May 1884, stage, 26.2 ft (8.0 m) at former site, discharge, about 125,000 ft³/s (3,540 m³/s), and flood in August 1915, stage, 24.5 ft (7.5 m) at former site, discharge, about 102,000 ft³/s (2,890 m³/s), 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 (93.5 km) upstream, capacity, 124,700 acre-ft (154 hm³), and Sam Rayburn Reservoir (station 08039300) 95.7 miles (154.0 km) upstream, capacity, 4,442,000 acre-ft (5,477 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,530	1,510	2,190	1,930	10,600	7,620	15,700	20,600	11,200	14,200	3,870	5,890
2	1,510	1,480	4,150	2,200	11,400	7,990	16,200	20,800	10,300	15,400	4,600	6,130
3	1,490	1,430	4,150	2,440	12,500	8,210	17,000	21,100	9,640	16,500	5,920	5,670
4	1,470	1,400	3,070	4,480	13,100	8,510	18,000	19,900	8,940	17,300	5,820	4,220
5	1,460	1,380	2,170	5,990	13,000	7,190	18,400	19,600	8,320	18,700	4,100	4,680
6	1,450	1,520	2,080	7,100	12,200	7,510	18,700	19,800	7,310	19,100	2,880	5,840
7	1,440	2,180	2,010	7,790	11,200	9,090	19,200	20,800	6,470	18,900	2,390	7,600
8	1,430	2,490	1,960	8,110	10,700	10,200	18,700	22,300	7,140	19,600	2,200	9,410
9	1,430	2,560	1,920	8,480	10,800	10,800	18,300	22,600	8,090	19,700	2,120	9,910
10	1,400	2,580	1,960	9,360	11,200	11,200	18,000	22,900	7,770	19,500	2,100	8,880
11	1,260	2,580	2,200	10,600	12,000	11,500	18,500	22,500	6,360	19,000	2,020	7,750
12	1,220	2,580	2,410	10,800	12,900	11,200	19,000	21,200	5,660	18,300	1,830	7,490
13	1,320	2,740	2,460	10,600	13,600	10,500	19,200	20,300	7,210	17,100	1,700	7,630
14	1,380	2,970	2,920	9,900	13,800	9,980	19,000	19,800	8,710	15,400	1,980	8,050
15	1,380	3,270	3,710	8,670	14,500	9,770	18,500	19,800	10,300	14,300	2,990	8,380
16	1,380	2,970	4,650	8,030	15,900	9,610	19,600	19,900	13,800	14,000	4,210	7,840
17	1,380	2,030	6,230	7,660	17,200	10,000	21,300	19,900	20,100	14,000	5,090	6,640
18	1,390	1,700	6,640	7,270	17,300	11,900	24,200	19,700	23,600	13,500	5,540	5,750
19	1,460	2,050	6,360	6,970	13,800	14,800	26,200	18,900	23,900	11,800	5,640	5,420
20	1,410	2,410	6,410	6,660	9,160	15,600	28,500	17,500	24,300	9,590	5,580	5,720
21	1,350	2,240	5,880	6,320	6,070	14,700	30,100	16,100	25,900	7,650	4,760	6,050
22	1,360	1,850	5,550	6,240	4,700	13,300	27,900	15,600	28,700	5,650	4,090	6,200
23	1,430	1,900	6,310	7,130	5,800	12,700	24,800	15,300	30,600	4,220	4,540	6,140
24	1,460	3,000	6,820	7,960	7,250	14,600	22,600	15,200	30,000	3,830	4,930	5,650
25	1,430	2,400	6,580	7,810	8,050	15,700	21,600	14,900	27,500	4,460	5,070	5,390
26	1,370	1,900	5,940	6,920	8,180	16,100	20,800	14,400	24,000	5,470	4,690	5,730
27	1,410	2,080	4,440	7,080	7,780	16,100	20,600	14,000	20,600	6,840	3,730	6,330
28	1,460	2,740	2,810	9,020	7,560	15,900	20,400	13,700	18,300	7,700	3,270	7,080
29	1,510	2,120	2,120	10,400	------	16,000	20,300	13,300	15,800	7,680	4,120	7,790
30	1,490	1,710	1,910	10,300	------	15,600	20,200	13,000	14,000	7,060	4,810	7,900
31	1,480	------	1,870	10,000	------	15,700	------	12,200	------	5,370	5,410	------
TOTAL	43,960	65,770	119,880	234,220	312,250	369,580	621,500	567,600	464,520	391,820	122,000	203,160
MEAN	1,418	2,192	3,867	7,555	11,150	11,920	20,720	18,310	15,480	12,640	3,935	6,772
MAX	1,530	3,270	6,820	10,800	17,300	16,100	30,100	22,900	30,600	19,700	5,920	9,910
MIN	1,220	1,380	1,870	1,930	4,700	7,190	15,700	12,200	5,660	3,830	1,700	4,220
AC-FT	87,190	130,500	237,800	464,600	619,300	733,100	1,233M	1,126M	921,400	777,200	242,000	403,000

CAL YR 1972 TOTAL 995,299 MEAN 2,719 MAX 10,900 MIN 858 AC-FT 1,974,000
WTR YR 1973 TOTAL 3,516,260 MEAN 9,634 MAX 30,600 MIN 1,220 AC-FT 6,975,000

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 (2.6 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.1 miles (5.0 km) upstream from Cypress Creek, 3.4 miles (5.5 km) northeast of Kountze, and 4.3 miles (6.9 km) downstream from Beech Creek.

DRAINAGE AREA.--860 mi² (2,227 km²).

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 (7.66 m) above mean sea level. Prior to Apr. 30, 1939, nonrecording gage at site 1.6 miles (2.6 km) downstream at different datum. Apr. 30, 1939, to Sept. 30, 1966, water-stage recorder at site 2,000 ft (610 m) downstream at present datum.

AVERAGE DISCHARGE.--37 years, 774 ft³/s (21.9 m³/s), 12.22 in/yr (310.4 mm/yr), 560,800 acre-ft/yr (691 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 21,400 ft³/s (606 m³/s) Apr. 20, gage height, 21.82 ft (6.65 m); minimum daily, estimated 60 ft³/s (1.70 m³/s) Oct. 20.
Period of record: Maximum discharge, 67,200 ft³/s (1,900 m³/s) Nov. 26, 1940, gage height, 27.6 ft (8.4 m), former site, from floodmark, from rating curve extended above 32,000 ft³/s (906 m³/s); minimum not determined, probably occurred during period of no gage-height record Sept. 16 to Oct. 3, 1956; minimum daily, 16 ft³/s (0.453 m³/s) Oct. 1, 2, 1956.
Maximum stage since 1884, about 34 ft (10 m) in August 1915 at site 2,000 ft (610 m) downstream at present datum. Flood of May 27, 1929, reached a stage of about 32 ft (10 m) at site 2,000 ft (610 m) 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 (2.6 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	457	422	531	2,220	1,130	1,790	1,420	382	532	986	652
2	234	370	366	764	2,160	992	1,490	1,170	374	472	1,740	483
3	203	304	328	918	1,990	1,010	1,170	2,630	329	428	1,890	398
4	167	313	328	978	1,940	1,600	916	3,660	304	405	2,160	378
5	141	401	437	993	1,790	2,020	785	3,470	308	409	2,510	1,360
6	121	365	704	1,040	1,400	2,190	706	3,040	356	684	2,220	2,940
7	106	324	631	1,300	1,050	2,280	958	3,220	522	1,330	1,410	4,290
8	96	270	507	1,840	996	2,260	1,580	6,430	699	2,420	1,060	4,490
9	89	225	471	2,200	1,710	2,180	1,950	10,700	720	3,300	1,100	4,220
10	83	195	477	2,420	2,380	2,100	2,240	9,480	767	3,900	1,100	3,510
11	79	180	743	2,630	2,640	1,950	2,280	6,270	1,020	3,700	996	2,870
12	75	167	825	2,560	2,680	1,880	1,920	4,150	1,400	2,770	866	2,330
13	72	345	947	2,320	2,530	1,780	1,370	2,960	2,450	1,860	779	2,160
14	70	663	1,070	2,070	3,050	1,570	963	2,070	5,000	1,460	864	2,010
15	67	682	1,370	1,830	8,000	1,320	857	1,490	8,900	1,540	920	1,800
16	65	736	1,750	1,580	10,200	1,350	1,830	1,170	11,600	1,440	1,110	1,460
17	63	609	1,910	1,280	8,800	1,520	5,410	984	11,400	1,250	1,090	973
18	61	583	2,010	1,090	6,550	2,540	14,400	890	8,900	1,080	1,020	723
19	61	1,180	1,950	973	4,920	3,620	18,600	784	6,000	884	894	611
20	60	1,420	1,620	961	3,450	4,560	20,300	630	3,800	730	708	540
21	100	1,380	1,230	1,200	2,460	4,500	14,200	550	2,700	609	630	487
22	150	1,140	1,190	1,800	1,800	3,260	7,850	497	2,200	504	548	464
23	130	791	1,360	2,100	1,550	2,250	5,100	465	2,000	414	468	439
24	200	535	1,310	1,900	1,640	2,270	3,740	428	1,900	374	409	421
25	250	471	1,100	1,800	1,760	3,190	2,840	393	1,800	355	368	454
26	220	595	877	2,000	1,780	3,830	2,190	372	1,400	383	336	504
27	200	756	686	2,300	1,650	3,940	1,840	358	950	892	315	516
28	250	797	587	2,600	1,410	3,800	1,800	346	767	1,310	330	535
29	300	678	534	2,900	------	3,310	1,830	335	663	1,250	583	531
30	400	519	510	2,710	------	2,810	1,720	353	586	1,180	696	504
31	500	------	516	2,370	------	2,150	------	346	------	910	762	------
TOTAL	4,856	17,451	28,766	53,958	84,506	75,162	124,625	71,061	80,197	38,775	30,868	43,053
MEAN	157	582	928	1,741	3,018	2,425	4,154	2,292	2,673	1,251	996	1,435
MAX	500	1,420	2,010	2,900	10,200	4,560	20,300	10,700	11,600	3,900	2,510	4,490
MIN	60	167	328	531	996	992	706	335	304	355	315	378
CFSM	.18	.68	1.08	2.02	3.51	2.82	4.83	2.67	3.11	1.45	1.16	1.67
IN.	.21	.75	1.24	2.33	3.66	3.25	5.39	3.07	3.47	1.68	1.34	1.86
AC-FT	9,630	34,610	57,060	107,000	167,600	149,100	247,200	140,900	159,100	76,910	61,230	85,400

CAL YR 1972 TOTAL 267,832 MEAN 732 MAX 4,190 MIN 58 CFSM .85 IN 11.59 AC-FT 531,200
WTR YR 1973 TOTAL 653,278 MEAN 1,790 MAX 20,300 MIN 60 CFSM 2.08 IN 28.26 AC-FT 1,296,000

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 (8.2 km) southeast of Sour Lake.

DRAINAGE AREA.--336 mi² (870 km²).

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

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

AVERAGE DISCHARGE.--6 years, 346 ft³/s (9.80 m³/s), 13.99 in/yr (355.3 mm/yr), 250,700 acre-ft/yr (309 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,900 ft³/s (280 m³/s) June 14, elevation, 30.25 ft (9.22 m); minimum, 1.3 ft³/s (37 dm³/s) Oct. 21, 22.
Period of record: Maximum discharge, 9,900 ft³/s (280 m³/s) June 14, 1973, elevation, 30.25 ft (9.22 m); minimum daily, 0.58 ft³/s (16 dm³/s) Nov. 8, 1967.
Maximum stage since at least 1917, about 31 ft (9 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	14	232	242	796	432	1,160	315	37	128	244	478
2	108	16	188	489	802	978	984	419	53	98	395	456
3	78	23	151	573	805	1,190	783	1,000	50	74	512	318
4	55	147	135	642	776	1,240	539	1,040	42	57	655	280
5	33	153	246	665	693	1,210	310	965	47	51	767	1,090
6	17	135	576	679	585	1,120	198	904	77	63	862	1,250
7	11	673	688	777	488	1,110	281	1,060	56	136	963	1,680
8	5.9	888	750	964	422	1,210	384	1,380	51	501	1,050	2,280
9	5.2	873	757	1,020	660	1,400	392	1,660	173	598	1,070	2,720
10	4.7	807	788	1,100	784	1,520	376	1,730	154	737	970	3,080
11	3.5	695	886	1,200	881	1,490	346	1,760	206	1,060	813	3,140
12	2.8	563	936	1,260	974	1,370	325	1,880	3,380	1,500	641	2,900
13	2.3	691	984	1,290	1,040	1,210	286	1,970	8,610	1,660	566	2,720
14	2.0	939	977	1,300	1,260	1,050	235	1,710	9,720	1,530	614	2,280
15	1.9	998	995	1,290	1,270	883	332	1,380	8,450	1,370	506	1,840
16	2.0	957	960	1,220	1,290	694	968	1,040	6,780	1,130	360	1,530
17	1.7	840	923	1,100	1,290	536	2,410	682	5,230	812	272	1,300
18	1.4	768	876	949	1,300	473	6,460	372	4,060	416	232	1,090
19	1.4	836	802	811	1,460	470	9,030	213	3,160	186	220	899
20	1.4	850	731	674	1,520	477	8,960	161	2,610	125	224	654
21	1.3	868	709	657	1,410	489	7,540	110	2,180	106	268	382
22	2.2	867	686	649	1,210	497	5,800	92	1,640	102	309	222
23	4.0	831	645	590	1,090	494	4,310	73	1,260	77	300	158
24	9.8	794	567	529	939	987	3,300	68	917	67	240	126
25	11	777	459	515	798	1,330	2,540	76	648	61	145	106
26	13	729	359	719	677	1,490	1,950	123	443	68	80	87
27	27	616	289	798	576	1,520	1,450	124	318	83	127	194
28	23	474	234	846	501	1,420	1,080	71	249	127	154	514
29	17	351	181	849	------	1,350	783	58	190	328	142	517
30	13	279	145	811	------	1,310	488	43	155	164	216	464
31	12	------	134	758	------	1,270	------	32	------	108	390	------
TOTAL	635.5	18,452	17,989	25,966	26,297	32,220	64,000	22,511	60,946	13,523	14,307	34,755
MEAN	20.5	615	580	838	939	1,039	2,133	726	2,032	436	462	1,159
MAX	164	998	995	1,300	1,520	1,520	9,030	1,970	9,720	1,660	1,070	3,140
MIN	1.3	14	134	242	422	432	198	32	37	51	80	87
CFSM	.06	1.83	1.73	2.49	2.79	3.09	6.35	2.16	6.05	1.30	1.38	3.45
IN.	.07	2.04	1.99	2.87	2.91	3.57	7.09	2.49	6.75	1.50	1.58	3.85
AC-FT	1,260	36,600	35,680	51,500	52,160	63,910	126,900	44,650	120,900	26,820	28,380	68,940

CAL YR 1972 TOTAL 123,620.9 MEAN 338 MAX 2,670 MIN 1.3 CFSM 1.01 IN 13.69 AC-FT 245,200
WTR YR 1973 TOTAL 331,601.5 MEAN 908 MAX 9,720 MIN 1.3 CFSM 2.70 IN 36.71 AC-FT 657,700

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 (1.1 km) south of LaBelle, 6.0 miles (9.7 km) upstream from Hillebrandt Bayou, 7.2 miles (11.6 km) upstream from State Highway 73, and 11.2 miles (18.0 km) upstream from salt-water gates and barge locks. Distances are measured along rectified channel.

DRAINAGE AREA.--262 mi² (679 km²).

PERIOD OF RECORD.--April 1954 to current year, complete records for storms of 1.0 inch (25.4 mm) or more runoff, except for the period Sept. 10-22, 1961.

GAGE.--Water-stage recorder. Datum of gage is 4.63 ft (1.41 m) below mean sea level, determined by several comparisons of water surface with auxiliary water-stage recorder 7.2 miles (11.6 km) downstream during times of no flow and ideal weather conditions.

EXTREMES.--Current year: Maximum discharge, 7,250 ft³/s (205 m³/s) Apr. 18, gage height, 10.19 ft (3.11 m); minimum discharge not determined (affected by tides and pumping); minimum gage height, 3.62 ft (1.10 m) Dec. 16.
Period of record: Maximum discharge, 9,590 ft³/s (272 m³/s) Sept. 22, 1963; maximum gage height, 11.78 ft (3.59 m) Sept. 20, 1963 (backwater from Hillebrandt Bayou); minimum discharge not determined (affected by tides and pumping); minimum gage height, 2.31 ft (0.70 m) July 17, 1954.
Maximum stage since at least 1941, that of Sept. 20, 1963. Flood in 1941 reached a stage of 11.3 ft (3.4 m), from information by Corps of Engineers; flood in 1946 reached a stage of 10.4 ft (3.2 m), from county bridge plans; flood of Sept. 13, 1961 (Hurricane Carla), reached a stage of 11.51 ft (3.51 m).

REMARKS.--Records poor. Discharge is computed using fall as a factor. Discharge for periods of insufficient fall or estimated discharge is not computed. 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 CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-	-				860	-
2						-	-				3,620	-
3						-	-				3,010	100
4						-	-				1,710	1,180
5						-	-				600	2,480
6						-	-				300	4,190
7						-	-				-	4,650
8						-	-				-	4,130
9						-	-				-	4,580
10						-	-				-	3,940
11						-	-				-	2,970
12						-	-				-	2,880
13						-	-				-	3,730
14						-	100				-	4,420
15						-	1,050				-	3,330
16						-	3,350				-	1,860
17						-	5,850				-	500
18						-	7,150				-	300
19						-	6,800				-	-
20						-	5,950				-	-
21						-	4,950				-	-
22						100	3,750				-	-
23						750	2,650				-	-
24						4,300	1,900				-	-
25						5,300	1,300				-	-
26						4,350	900				-	-
27						2,500	600				-	-
28						700	400				-	-
29					------	200	300				-	-
30					------	-	200				-	-
31		------			------	-	------		------		-	------
MAX						4,350	7,150				3,620	4,650

CAL YR 1972..... MAX 3,690
WTR YR 1973..... MAX 4,650

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 (2.1 km) southeast of Lovell Lake, and 4.4 miles (7.1 km) upstream (along rectified channel) from Taylor Bayou.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--April 1954 to current year, complete records for storms of 1.0 inch (25.4 mm) or more runoff, except for the period Sept. 11-18, 1961.

GAGE.--Water-stage recorder. Auxiliary water-stage recorder 3.0 miles (4.8 km) downstream. Datum of gage is 4.63 ft (1.41 m) below mean sea level, determined by comparisons of water surface with Taylor Bayou near LaBelle, auxiliary gage, 5.6 miles (9.0 km) 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 (1.9 km) downstream from Hillebrandt Bayou, nonrecording gages on Taylor Bayou 2.3 and 5.2 miles (3.7 and 8.4 km) downstream from Hillebrandt Bayou.

EXTREMES.--Current year: Maximum discharge, 5,990 ft³/s (170 m³/s) Apr. 17, gage height, 9.98 ft (3.04 m); maximum gage height, 10.04 ft (3.06 m) Apr. 18; minimum discharge not determined (affected by tides and pumping); minimum gage height, 3.59 ft (1.09 m) Dec. 16.
Period of record: Maximum discharge, 15,000 ft³/s (425 m³/s) Sept. 18, 1963; maximum gage height, 12.34 ft (3.76 m) Sept. 19, 1963; minimum discharge not determined (affected by tides and pumping); minimum gage height, 2.33 ft (0.71 m) July 17, 1954.
Maximum stage since 1941, 12.34 ft (3.76 m) Sept. 19, 1963. A stage of 11.56 ft (3.52 m) occurred Sept. 13, 1961 (backwater caused by Hurricane Carla).

REMARKS.--Records fair. Discharge computed using fall as a factor. Discharge for period of insufficient fall or estimated discharge is not computed. 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 CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						-	-			-		-
2						-	-			-		-
3						-	-			-		-
4						-	-			-		450
5						-	-			100		3,040
6						-	-			980		2,560
7						-	-			1,320		1,850
8						-	-			2,240		2,820
9						-	-			700		2,130
10						-	-			100		1,130
11						-	-			-		850
12						-	-			-		1,790
13						-	-			-		1,320
14						-	-			-		700
15						-	100			-		300
16						-	2,120			-		-
17						-	4,270			-		-
18						-	5,420			-		-
19						-	3,730			-		-
20						-	2,630			-		-
21						-	1,800			-		-
22						-	1,000			-		-
23						350	600			-		-
24						3,810	300			-		-
25						3,120	-			-		-
26						1,160	-			-		-
27						300	-			-		-
28						-	-			-		-
29					------	-	-			-		-
30					------	-	-			-		-
31		------			------	-	------		------	-		------
MAX						3,810	5,420			2,240		3,040

CAL YR 1972..... MAX 2,810
WTR YR 1973..... MAX 3,810

08042650 North Creek subwatershed No. 28-A near Jermyn, Tex.

LOCATION.--Lat 33°14'52", long 98°19'19", Jack County, near center of earthfill dam on unnamed tributary of North Creek, 0.2 miles (0.3 km) upstream from North Creek, and 4.0 miles (6.4 km) southeast of Jermyn.

DRAINAGE AREA.--6.82 mi² (17.7 km²).

PERIOD OF RECORD.--March 1972 to current year.

GAGE.--Water-stage recorder and flat-crested weir on concrete drop inlet. Datum of gage is 1,090.39 ft (332.35 m) above mean sea level (Soil Conservation Service bench mark). Prior to Oct. 5, 1972, staff gage at same datum.

EXTREMES.--March to September 1972: Maximum gage height during period, 16.80 ft (5.12 m) May 12, contents, 196 acre-ft (0.24 hm³); no outflow during period. Maximum inflow, not determined, but probably occurred May 12, 1972; no inflow at times.
Water year 1973: Maximum gage height, 16.01 ft (4.88 m) July 30, contents, 170 acre-ft (0.21 hm³); no outflow during year. Maximum inflow, 559 ft³/s (15.8 m³/s), average for 5-minute interval, July 30, computed from change in pool contents and adjusted for rainfall on pool surface during time of peak inflow; no inflow at times.
Period of record: Maximum gage height, 16.80 ft (5.12 m) May 12, 1972, contents, 196 acre-ft (0.24 hm³); no outflow. Maximum inflow, 559 ft³/s (15.8 m³/s), average for 5-minute interval, July 30, 1973, computed from change in pool contents and adjusted for rainfall on pool surface during time of peak inflow; no inflow at times.

REMARKS.--Records fair. The pool is formed by a rolled earthfill dam 1,800 ft (549 m) long with a 100-foot (30-meter) wide earthen spillway at the left end of dam. The crest of emergency spillway is at gage height 33.5 ft (10.2 m). The dam was completed in March 1972, and storage began May 12, 1972. The outlet structure consists of a 2.5- by 7.5-foot (0.8- by 2.3-meter) uncontrolled concrete drop-inlet structure that is connected to a 30-inch (762-millimeter) concrete outlet pipe. The drop-inlet structure is also equipped with a 12-inch (305-millimeter) diameter slide gage near the bottom of the tower with invert at a gage height of 8.61 ft (2.62 m). The crest of the drop inlet is at gage height 18.12 ft (5.52 m). The capacity of pool at crest of emergency spillway is 1,940 acre-ft (2.39 hm³), at crest of drop inlet is 245 acre-ft (0.302 hm³), and at the controlled outlet pipe is 24 acre-ft (30,000 m³). The capacity table below 18.12 ft (5.52 m) was computed using the average-end-area method from a surface area table based on a survey of Mar. 14, 1972. The capacity table above 18.12 ft (5.52 m) was computed using the average-end-area method and based on an area table furnished by the Soil Conservation Service.

POOL WATER BUDGET, IN ACRE-FEET, MARCH 1971 TO SEPTEMBER 1972

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	-	-	-	-	-	0	0	190	2.4	1.2	0.7	0.9
Outflow	-	-	-	-	-	0	0	0	0	0	0	0
(†)	-	-	-	-	-	0	0	140	-27.6	-21.9	-17.9	-12.7
(††)	-	-	-	-	-	.59	3.21	5.36	1.75	1.81	.79	1.84

CAL YR 1971: Inflow - Outflow - † - †† -
WTR YR 1972: Inflow - Outflow - † - †† -

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	8.1	0.6	0.1	2.6	1.8	3.2	2.0	1.5	4.6	152	0.7	4.1
Outflow	0	0	0	0	0	0	0	0	0	0	0	0
(†)	-3.4	-8.0	-7.1	1.2	-2.7	-3.7	-3.4	-6.2	-3.1	145	-36.7	-3.9
(††)	3.96	1.13	.43	3.79	1.51	2.34	2.83	1.62	2.56	5.46	0	5.55

CAL YR 1972: Inflow - Outflow - † - †† -
WTR YR 1973: Inflow 181 Outflow 0 † 68.3 †† 31.18

PEAK INFLOW (BASE, 200 FT³/S).--July 30 (0605) *559 ft³/s.

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.

08042700 North Creek near Jacksboro, Tex.

LOCATION (revised).--Lat 33°16'57", long 98°17'53", Jack County, near left bank on downstream side of bridge on U.S. Highway 281, 1.7 miles (2.7 km) upstream from Henderson Creek, 8.4 miles (13.5 km) upstream from mouth, and 9.5 miles (15.3 km) northwest of Jacksboro.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,016.33 ft (309.78 m) above mean sea level (State Highway Department bench mark), unadjusted.

AVERAGE DISCHARGE.--14 years (1956-70) prior to completion of floodwater-retarding structures, 5.75 ft³/s (0.163 m³/s), 3.62 in/yr (91.9 mm/yr), 4,170 acre-ft/yr (5.14 hm³/yr); 3 years (1970-73) regulated, 1.06 ft³/s (30.0 dm³/s), 0.67 in/yr (17.0 mm/yr), 768 acre-ft/yr (0.947 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 387 ft³/s (11.0 m³/s) July 30, gage height, 8.88 ft (2.71 m); no flow for many days.
Period of record: Maximum discharge, 6,990 ft³/s (198 m³/s) Apr. 28, 1957, gage height, 24.45 ft (7.45 m); no flow at times each year.
Flood of May 3, 1956, reached a stage of 21.58 ft (6.58 m), 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 mi² (42.2 km²) above this station was partly controlled by five floodwater-retarding structures with a total combined capacity of 4,420 acre-ft (5.45 hm³) below the flood-spillway crests, of which 3,940 acre-ft (4.86 hm³) is floodwater-retarding capacity and 479 acre-ft (0.591 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.03		0	0	0	.01	.01	0	0	.09	0
2	0	0		0	0	0	0	0	0	0	0	0
3	0	0		.28	0	.05	0	0	.12	0	0	0
4	0	0		.03	0	.05	0	0	.03	0	0	0
5	0	0		0	0	0	0	0	.25	0	0	0
6	0	0		0	0	2.8	0	0	.07	0	0	11
7	0	0		0	.01	.12	0	0	.01	0	0	7.1
8	0	0		0	.12	.03	0	0	0	0	0	.09
9	0	0		0	.05	0	0	0	0	0	0	0
10	0	0		0	.03	0	0	0	0	0	0	0
11	0	0		0	0	0	0	0	0	0	0	0
12	0	0		0	0	0	0	0	0	0	0	0
13	0	0		0	0	0	.05	0	0	0	0	0
14	0	0		0	0	0	.03	0	0	0	0	0
15	0	0		0	0	0	.01	0	0	0	0	0
16	0	0		0	0	0	.01	0	0	0	0	0
17	0	0		0	0	0	.01	0	0	0	0	0
18	0	0		0	0	0	.03	0	0	0	0	0
19	0	0		0	0	0	.03	0	0	0	0	0
20	0	0		0	0	0	.01	0	0	0	0	0
21	.01	0		0	0	0	0	0	0	0	0	0
22	1.1	0		0	0	0	0	0	0	0	0	0
23	0	0		0	0	.07	0	.47	0	0	0	0
24	0	0		0	0	.44	8.2	6.9	0	0	0	0
25	0	0		2.1	0	.05	.25	.84	0	0	0	0
26	2.1	0		2.4	0	.03	.03	.05	0	0	0	4.3
27	.18	0		.41	0	.01	.01	.01	0	0	0	.68
28	0	0		.05	0	0	.01	0	0	.01	0	0
29	0	0		.01	------	0	.01	0	0	55	0	0
30	1.7	0		0	------	.09	.01	0	0	67	0	0
31	2.1	------		0	------	.03	------	0	------	.95	0	------
TOTAL	7.19	.03	0	5.28	.21	3.77	8.71	8.28	.48	122.96	.09	23.17
MEAN	.23	.001	0	.17	.008	.12	.29	.27	.016	3.97	.003	.77
MAX	2.1	.03	0	2.4	.12	2.8	8.2	6.9	.25	67	.09	11
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CFSM	.01	0	0	.008	.0004	.006	.01	.01	.0007	.18	.0001	.04
IN.	.01	0	0	.009	0	.006	.02	.01	0	.21	0	.04
AC-FT	14	.06	0	10	.4	7.5	17	16	1.0	244	.2	46

CAL YR 1972 TOTAL 626.85 MEAN 1.71 MAX 440 MIN 0 CFSM .08 IN 1.08 AC-FT 1,240
WTR YR 1973 TOTAL 180.17 MEAN .49 MAX 67 MIN 0 CFSM .02 IN .31 AC-FT 357

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 (6 km) downstream from North Creek, 7 miles (11 km) upstream from Carroll Creek, and 7 miles (11 km) northeast of Jacksboro.

DRAINAGE AREA.--683 mi² (1,769 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 869.28 ft (264.96 m) 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.--17 years, 104 ft³/s (2.95 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,270 ft³/s (36.0 m³/s) July 31, gage height, 16.48 ft (5.02 m); no flow at times.
Period of record: Maximum discharge, 35,100 ft³/s (994 m³/s) Apr. 27, 1957, gage height, 32.10 ft (9.78 m), 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 (9 m), from information by local residents.

REMARKS.--Records good. At end of year, flow from 66.8 mi² (173 km²) above this station was partly controlled by 20 floodwater-retarding structures with a total combined capacity of 21,720 acre-ft (26.8 hm³) below the flood-spillway crests, of which 18,860 acre-ft (23.3 hm³) is floodwater-retarding capacity and 2,860 acre-ft (3.53 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	586	.40	0	27	.56	4.1	8.6	3.0	.15	1,170	.71
2	0	793	.36	0	17	.43	3.8	5.5	2.2	.14	922	.57
3	0	943	.32	30	11	.30	2.8	3.7	4.1	.14	336	.42
4	0	835	.32	40	7.4	.24	2.1	2.7	41	.12	54	.37
5	0	117	.28	46	5.1	.29	1.2	2.1	178	.08	27	.57
6	0	19	.22	63	3.8	133	.95	2.0	213	7.4	12	24
7	0	9.1	.16	34	11	66	.95	1.7	397	4.7	5.7	227
8	0	5.6	.12	18	66	40	2.4	1.5	249	1.5	3.4	378
9	0	3.8	.10	10	75	49	2.0	1.3	66	.87	2.3	259
10	0	2.5	.07	7.0	52	33	1.2	1.2	20	.51	1.7	190
11	0	1.6	.05	5.0	29	15	.95	1.2	24	.31	1.3	76
12	0	1.1	.05	4.0	21	8.4	.95	6.6	13	.16	1.2	31
13	0	2.2	.05	3.5	14	5.2	1.8	17	17	.10	1.1	13
14	0	1.9	.03	3.0	10	3.6	1.4	8.1	11	.06	.91	6.6
15	0	.97	.02	3.2	7.0	2.5	36	3.3	4.7	12	.82	5.9
16	0	.66	.01	3.4	4.8	1.9	66	2.0	2.5	3.6	.74	3.8
17	0	.57	0	2.8	3.7	3.3	228	1.6	1.6	1.2	.66	2.8
18	0	.95	0	2.4	3.0	4.0	77	1.5	1.2	.57	.72	2.2
19	0	.78	0	2.0	2.2	3.1	46	1.4	1.1	.25	.60	1.9
20	0	.50	0	2.0	1.8	2.2	64	1.3	.98	.12	.51	3.6
21	.06	.78	0	2.2	1.4	1.4	80	1.3	.73	.06	.45	3.6
22	10	.64	0	2.0	1.3	.97	36	1.4	.52	.02	.41	2.3
23	258	.50	0	1.5	1.3	.73	22	63	.46	.01	.34	2.2
24	463	.57	0	1.0	1.1	1.0	47	52	.54	0	.29	2.9
25	145	.64	0	17	1.0	.80	101	65	.47	0	.26	5.6
26	40	.57	0	198	1.3	101	154	79	.43	0	.28	3.6
27	76	.57	0	505	1.2	73	144	111	.39	0	.37	20
28	56	.45	0	599	.83	22	72	71	.35	0	14	29
29	33	.40	0	505	------	11	30	24	.29	435	9.0	15
30	34	.40	0	150	------	7.0	15	9.5	.19	1,020	1.2	10
31	218	------	0	45	------	4.6	------	4.6	------	1,260	.93	------
TOTAL	1,333.06	3,330.75	2.56	2,305.0	381.23	595.52	1,244.60	556.1	1,254.75	2,749.07	2,570.19	1,321.04
MEAN	43.0	111	.083	74.4	13.6	19.2	41.5	17.9	41.8	88.7	82.9	44.0
MAX	463	943	.40	599	75	133	228	111	397	1,260	1,170	378
MIN	0	.40	0	0	.83	.24	.95	1.2	.19	0	.26	.37
AC-FT	2,640	6,610	5.1	4,570	756	1,180	2,470	1,100	2,490	5,450	5,100	2,620

CAL YR 1972 TOTAL 42,937.76 MEAN 117 MAX 15,300 MIN 0 AC-FT 85,170
WTR YR 1973 TOTAL 17,643.87 MEAN 48.3 MAX 1,260 MIN 0 AC-FT 35,000

PEAK DISCHARGE (BASE, 1,200 FT³/S).--July 31 (1400) 1,270 ft³/s (16.48 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 (7.4 km) west of Bridgeport, and 13 miles (21 km) upstream from Big Sandy Creek.

DRAINAGE AREA.--1,111 mi² (2,877 km²).

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 (0.02 m) 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, 183,100 acre-ft (226 hm³) Aug. 6-8, gage height, 816.6 ft (248.9 m); minimum observed, 137,300 acre-ft (169 hm³) Oct. 20, 21, gage height, 810.6 ft (247.1 m).
Period of record: Maximum contents observed, 407,600 acre-ft (503 hm³) Apr. 29, 30, 1942, gage height, 836.2 ft (254.9 m); minimum since first appreciable storage in 1935, 7,170 acre-ft (8.84 hm³) Oct. 12-16, 1956.

REMARKS (revised).--Reservoir is formed by a rolled-fill earthen dam built by the Tarrant County Water Control and Improvement District No. 1. Reservoir is used by city of Fort Worth for municipal water supply and flood control. The original dam, 1,900 ft (579 m) long, was completed in December 1931 and storage began Apr. 1, 1932. In 1971-72, the dam was lengthened to 2,040 ft (622 m), raised to elevation 874.0 ft (266.4 m), and the old service spillway eliminated. A new service spillway with approach and discharge channels was built in natural ground on the left bank 2,800 ft (853 m) from left end of dam. The spillway is 90 ft (27 m) long and has eight vertical lift gates with crest at elevation 820.0 ft (249.9 m) and top of gates at 842.0 ft (256.6 m). There is an emergency spillway with crest at elevation 866 ft (264 m). Outlet works consist of one 48-inch-diameter (1,219-millimeter) and one 8-inch-diameter (203-millimeter) pipe in a concrete conduit through the dam, and a 60-inch-diameter (1,524-millimeter) pipe at the spillway. Water is released to flow downstream to Eagle Mountain Reservoir (station 08045000). Records furnished by the Tarrant County Water Control and Improvement District No. 1 show that several small diversions, totaling about 2,560 acre-ft (3.16 hm³), were made from the reservoir for municipal and commercial use. Capacities are based on surveys made in 1956 and 1958. Figures given herein represent total contents. At end of year, flow from 76.2 mi² (197 km²) above this station was partly controlled by 24 floodwater-retarding structures with a total combined capacity of 24,170 acre-ft (29.8 hm³) below the flood-spillway crests, of which 20,800 acre-ft (25.6 hm³) is floodwater-retarding capacity and 3,370 acre-ft (4.16 hm³) 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)
Top of conservation storage	836.0	387,000
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)

810.0	133,200	814.0	162,400
811.0	140,200	815.0	170,200
812.0	147,400	816.0	178,200
813.0	154,800	817.0	186,400

CONTENTS, IN ACRE-FEET, AT 0730, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143,000	147,400	153,200	143,700	145,900	146,600	149,500	160,800	164,700	167,800	177,400	178,200
2	143,000	148,100	153,200	143,000	145,900	146,600	149,500	160,800	164,700	167,000	179,800	177,400
3	143,000	149,500	153,200	143,700	145,900	146,600	149,500	160,800	165,500	167,000	182,300	177,400
4	142,300	151,800	153,200	143,700	145,900	146,600	149,500	160,800	165,500	167,000	183,100	177,400
5	142,300	152,500	153,200	143,700	145,900	146,600	149,500	160,800	167,000	167,000	183,100	177,400
6	142,300	154,000	152,500	144,400	145,900	147,400	149,500	160,800	167,800	167,000	183,100	178,200
7	141,600	154,800	151,800	144,400	145,200	148,100	149,500	160,800	167,800	167,000	183,100	179,800
8	141,600	154,800	151,000	143,700	145,900	148,800	149,500	160,800	168,600	166,200	183,100	180,600
9	141,600	154,800	151,000	143,000	145,900	148,800	149,500	160,800	169,400	166,200	182,300	180,600
10	140,900	154,000	149,500	143,000	145,900	148,800	149,500	160,800	168,600	166,200	182,300	181,500
11	140,200	154,000	150,300	142,300	145,900	149,500	149,500	160,800	168,600	166,200	182,300	181,500
12	140,200	154,000	149,500	142,300	145,900	149,500	149,500	160,800	168,600	166,200	182,300	181,500
13	140,200	154,800	149,500	141,600	145,900	149,500	149,500	160,800	168,600	166,200	181,500	181,500
14	139,400	154,000	148,800	141,600	145,900	149,500	149,500	160,800	169,400	166,200	181,500	181,500
15	139,400	154,000	148,800	141,600	145,900	149,500	149,500	160,800	169,400	166,200	181,500	181,500
16	138,700	154,000	148,100	140,900	145,900	149,500	151,000	160,000	169,400	166,200	181,500	181,500
17	138,700	154,000	148,100	140,900	146,600	149,500	151,800	160,000	169,400	166,200	180,600	181,500
18	138,700	154,000	147,400	140,900	146,600	149,500	153,200	160,000	168,600	165,500	180,600	181,500
19	138,000	154,000	147,400	140,200	146,600	148,800	154,000	160,000	168,600	165,500	180,600	180,600
20	137,300	154,000	146,600	140,200	146,600	148,800	154,000	160,000	169,400	165,500	180,600	180,600
21	137,300	154,000	146,600	140,200	146,600	148,800	154,000	160,000	169,400	165,500	179,800	180,600
22	138,000	154,000	145,900	140,200	146,600	148,800	154,000	160,000	168,600	164,700	179,800	180,600
23	137,300	154,000	145,900	140,200	146,600	148,800	156,200	161,600	168,600	164,700	179,800	180,600
24	137,300	154,000	145,200	140,200	146,600	149,500	157,800	162,400	168,600	164,700	179,800	180,600
25	137,300	154,000	145,200	140,200	146,600	150,300	159,300	162,400	168,600	164,700	179,000	180,600
26	138,000	154,000	145,200	141,600	146,600	149,500	160,000	163,900	168,600	163,900	179,000	179,800
27	138,700	154,000	144,400	142,300	146,600	149,500	160,000	164,700	167,800	163,900	179,000	181,500
28	139,400	154,000	144,400	143,000	146,600	149,500	160,000	164,700	167,800	163,900	178,200	180,600
29	139,400	153,200	144,400	143,700	------	149,500	160,000	164,700	167,800	164,700	178,200	180,600
30	142,300	153,200	144,400	145,200	------	149,500	160,000	164,700	167,800	168,600	178,200	180,600
31	146,600	------	144,400	145,900	------	149,500	------	164,700	------	175,000	178,200	------
(†)	811.9	812.8	811.6	811.8	811.9	812.3	813.7	814.3	814.7	815.6	816.0	816.3
(*)	+2,900	+6,600	-8,800	+1,500	+700	+2,900	+10,500	+4,700	+3,100	+7,200	+3,200	+2,400
MAX	146,600	154,800	153,200	145,900	146,600	150,300	160,000	164,700	169,400	175,000	183,100	181,500
MIN	137,300	147,400	144,400	140,200	145,200	146,600	149,500	160,000	164,700	163,900	177,400	177,400

CAL YR 1972..... * -24,200 MAX 237,400 MIN 137,300
WTR YR 1973..... * +36,900 MAX 183,100 MIN 137,300

† 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 (3.1 km) upstream from Greathouse Branch, 4.0 miles (6.4 km) east of Bridgeport, and 4.4 miles (7.1 km) upstream from mouth.

DRAINAGE AREA.--333 mi² (862 km²).

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 727.44 ft (221.72 m) above mean sea level.

AVERAGE DISCHARGE.--37 years, 74.1 ft³/s (2.10 m³/s), 53,690 acre-ft/yr (66.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,440 ft³/s (126 m³/s) July 30, gage height, 9.52 ft (2.90 m); no flow Oct. 1-27.
Period of record: Maximum discharge, 53,000 ft³/s (1,500 m³/s) June 10, 1941, gage height, 15.69 ft (4.78 m), from floodmark, from rating curve extended above 22,000 ft³/s (623 m³/s); 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 mi² (267 km²) above station partly controlled by Amon Carter Reservoir 30 miles (48 km) upstream, capacity 15,240 acre-ft (18.8 hm³) at elevation 920.0 ft (280.4 m), service spillway. Records furnished by city of Bowie show that during the year 734 acre-ft (0.91 hm³) of water was diverted from Amon Carter Reservoir for municipal use and 368 acre-ft (0.45 hm³) of sewage effluent was discharged into a tributary above station. At end of year, flow from 37.5 mi² (97.1 km²) above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 10,840 acre-ft (13.4 hm³) below the flood-spillway crests, of which 9,440 acre-ft (11.6 hm³) is floodwater-retarding capacity and 1,400 acre-ft (1.73 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	329	4.0	5.5	23	14	19	23	7.2	2.8	2,640	4.2
2	0	45	4.2	5.3	19	14	16	20	7.0	2.2	1,950	3.8
3	0	27	4.0	42	15	13	16	16	67	1.6	1,080	3.4
4	0	13	4.0	83	13	15	15	15	261	1.3	497	3.4
5	0	8.5	4.0	54	13	15	15	14	216	.93	290	4.0
6	0	13	3.6	20	13	29	14	18	319	.84	185	9.5
7	0	8.0	3.4	16	13	141	14	120	120	.68	112	29
8	0	6.0	3.4	15	147	68	15	44	46	.50	65	24
9	0	4.2	3.4	15	106	39	16	24	29	.58	48	13
10	0	3.1	3.4	16	48	61	14	15	20	.50	39	8.0
11	0	2.4	3.3	16	31	132	14	11	15	.50	31	6.2
12	0	2.1	3.6	16	23	49	14	112	14	.58	25	5.5
13	0	62	3.6	16	18	32	16	357	13	.76	20	4.9
14	0	37	3.6	15	16	23	20	238	141	1.0	18	4.4
15	0	16	4.2	13	14	18	46	66	72	14	16	3.8
16	0	10	4.0	11	13	16	401	40	26	8.7	14	3.6
17	0	6.7	3.6	10	12	15	504	29	16	4.0	13	3.4
18	0	7.2	3.4	9.7	14	14	269	20	13	2.2	11	3.3
19	0	9.7	3.6	8.7	14	14	138	16	18	1.0	10	3.1
20	0	8.5	4.2	8.0	13	13	62	13	103	.58	10	3.1
21	0	7.0	4.4	8.0	12	12	46	12	29	.50	9.2	2.9
22	0	6.2	4.2	7.7	13	12	63	11	14	.50	8.5	2.8
23	0	5.7	4.2	6.7	16	13	101	100	9.0	.37	7.7	2.6
24	0	5.3	4.0	6.5	16	53	312	41	6.5	.37	6.5	2.6
25	0	5.1	3.6	12	15	54	269	46	5.3	.37	5.7	2.8
26	0	4.9	3.6	190	15	37	83	80	4.4	.30	5.1	3.1
27	0	5.1	3.4	128	14	23	45	39	3.8	.30	4.9	11
28	3.6	4.7	3.6	50	14	19	33	20	3.4	.30	4.9	17
29	6.6	4.2	3.8	29	------	16	27	11	3.3	22	4.7	10
30	297	4.0	4.4	20	------	16	25	8.7	3.1	1,970	4.9	6.7
31	875	------	5.3	18	------	23	------	7.7	------	3,570	4.4	------
TOTAL	1,182.2	670.6	119.0	871.1	693	1,013	2,642	1,587.4	1,605.0	5,610.26	7,140.5	205.1
MEAN	38.1	22.4	3.84	28.1	24.8	32.7	88.1	51.2	53.5	181	230	6.84
MAX	875	329	5.3	190	147	141	504	357	319	3,570	2,640	29
MIN	0	2.1	3.3	5.3	12	12	14	7.7	3.1	.30	4.4	2.6
AC-FT	2,340	1,330	236	1,730	1,370	2,010	5,240	3,150	3,180	11,130	14,160	407

CAL YR 1972 TOTAL 8,916.83 MEAN 24.4 MAX 1,720 MIN 0 AC-FT 17,690
WTR YR 1973 TOTAL 23,339.16 MEAN 63.9 MAX 3,570 MIN 0 AC-FT 46,290

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 (1.0 km) northeast of Boyd, 3.5 miles (5.6 km) downstream from Boggy Creek, and at mile 602 (969 km).

DRAINAGE AREA.--1,725 mi² (4,468 km²).

PERIOD OF RECORD.--January 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 660.57 ft (201.34 m) above mean sea level. Prior to Dec. 14, 1954, water-stage recorder at site 2.2 miles (3.5 km) downstream at datum 5.48 ft (1.67 m) lower.

AVERAGE DISCHARGE.--26 years, 220 ft³/s (6.23 m³/s), 159,400 acre-ft/yr (197 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,420 ft³/s (96.9 m³/s) Aug. 1, gage height, 17.43 ft (5.31 m); minimum, 4.1 ft³/s (116 dm³/s) July 25.
Period of record: Maximum discharge, 27,300 ft³/s (773 m³/s) Oct. 5, 1959, gage height, 22.17 ft (6.76 m); no flow at times. Maximum stage since at least 1880, 25 ft (8 m), 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 (6.3 m), present site and datum, from information by State Highway Department.

REMARKS.--Records good. Flow largely regulated by Bridgeport Reservoir (station 08043000) and by Amon Carter Reservoir near Bowie since May 1956; combined capacity, 402,200 acre-ft (496 hm³), revised. Sustained flow during several periods was released water from Bridgeport Reservoir 21 miles (34 km) upstream. At end of year, flow from 73.5 mi² (190 km²) above this station was partly controlled by 28 floodwater-retarding structures with a total combined capacity of 22,430 acre-ft (27.7 hm³) below the flood-spillway crests, of which 19,860 acre-ft (24.5 hm³) is floodwater-retarding capacity and 2,570 acre-ft (3.17 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	553	13	186	79	27	47	83	50	14	2,810	14
2	63	195	12	188	81	27	47	76	47	11	3,210	7.5
3	63	59	12	241	78	26	48	69	52	8.9	2,440	5.2
4	63	32	12	288	75	26	45	65	180	7.6	1,370	5.0
5	62	21	43	244	73	25	42	62	411	7.0	546	20
6	61	54	161	208	72	37	39	77	406	6.6	320	31
7	71	47	185	203	70	74	38	406	315	7.8	213	545
8	108	21	189	200	97	131	38	172	157	7.7	138	178
9	108	14	187	191	201	72	38	107	96	6.8	98	54
10	108	9.4	184	190	125	58	38	85	75	6.4	77	77
11	108	7.3	181	187	65	155	38	64	60	6.0	63	66
12	107	6.3	181	184	42	126	37	705	53	8.0	55	22
13	107	33	182	185	37	70	37	357	50	9.0	48	17
14	107	82	183	184	34	57	36	382	986	82	59	19
15	108	54	181	186	31	51	413	212	342	74	41	15
16	110	28	179	187	28	46	1,380	121	144	22	34	13
17	111	20	180	184	26	43	728	96	85	13	35	11
18	110	17	182	171	25	41	736	80	49	18	30	7.5
19	111	19	183	194	25	40	364	69	41	13	25	7.4
20	112	21	183	113	25	39	183	63	133	10	44	10
21	114	22	185	65	26	39	119	58	146	8.5	25	13
22	119	19	186	63	25	37	95	54	59	6.9	17	14
23	118	17	187	62	25	36	152	219	41	5.7	14	9.7
24	116	15	187	61	27	42	773	270	31	4.8	12	8.9
25	114	15	186	69	28	103	870	491	26	12	11	6.5
26	131	14	184	253	28	80	305	210	22	11	30	8.6
27	127	15	182	305	28	59	158	152	19	8.3	16	27
28	34	15	184	181	28	51	110	104	17	6.4	9.4	38
29	22	14	186	123	------	45	96	78	15	28	8.1	28
30	94	13	189	94	------	42	92	61	14	552	7.7	17
31	556	------	188	81	------	42	------	53	------	1,370	24	------
TOTAL	3,406	1,452.0	4,857	5,271	1,504	1,747	7,142	5,101	4,122	2,352.4	11,830.2	1,295.3
MEAN	110	48.4	157	170	53.7	56.4	238	165	137	75.9	382	43.2
MAX	556	553	189	305	201	155	1,380	705	986	1,370	3,210	545
MIN	22	6.3	12	61	25	25	36	53	14	4.8	7.7	5.0
AC-FT	6,760	2,880	9,630	10,460	2,980	3,470	14,170	10,120	8,180	4,670	23,470	2,570

CAL YR 1972 TOTAL 58,716.9 MEAN 160 MAX 988 MIN 6.3 AC-FT 116,500
WTR YR 1973 TOTAL 50,079.9 MEAN 137 MAX 3,210 MIN 4.8 AC-FT 99,330

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 (19.0 km) northwest of Fort Worth.

DRAINAGE AREA.--1,970 mi² (5,102 km²).

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 (1.6 km) of present site at present datum.

EXTREMES (at 0700).--Current year: Maximum contents observed, 191,300 acre-ft (236 hm³) May 7, 25, elevation, 649.2 ft (197.9 m); minimum observed, 169,200 acre-ft (209 hm³) Oct. 8-20, elevation, 646.7 ft (197.1 m).
Period of record: Maximum contents, 333,500 acre-ft (411 hm³) Apr. 26, 1942, elevation, 659.9 ft (201.1 m); minimum since first appreciable storage in 1935, 57,690 acre-ft (71.1 hm³) 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 (1,219-millimeter) 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 (8-meter) bays, three of which are equipped with vertical lift gates and the fourth left open. In 1971, a side-channel spillway located 300 ft (91 m) to left of service spillway and containing six 11.25-foot (3.43-meter) wide vertical lift gates with crest at elevation 637.0 ft (1,942 m) 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 2,580 acre-ft (3.18 hm³) of water was diverted to a generating plant of the Texas Electric Service Company and that 1,140 acre-ft (1.41 hm³) was diverted by three 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 0700, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170,900	173,400	171,700	171,700	176,900	179,600	179,600	187,700	187,700	186,800	187,700	182,200
2	170,900	174,300	171,700	171,700	176,900	179,600	178,700	187,700	187,700	185,800	189,500	181,300
3	170,000	175,200	171,700	173,400	176,900	179,600	179,600	187,700	188,600	185,800	189,500	181,300
4	170,000	175,200	171,700	173,400	176,900	179,600	178,700	187,700	187,700	185,800	190,400	180,400
5	170,000	175,200	170,900	173,400	176,900	179,600	178,700	187,700	188,600	185,800	190,400	180,400
6	170,000	175,200	170,900	173,400	176,900	179,600	178,700	187,700	189,500	185,800	189,500	179,600
7	170,000	175,200	171,700	174,300	176,900	179,600	178,700	191,300	190,400	184,900	189,500	183,100
8	169,200	175,200	170,900	174,300	179,600	179,600	178,700	190,400	190,400	184,900	189,500	184,000
9	169,200	175,200	170,900	174,300	179,600	179,600	178,700	189,500	189,500	184,900	189,500	184,000
10	169,200	175,200	170,900	174,300	179,600	180,400	177,800	187,700	189,500	184,900	189,500	184,000
11	169,200	174,300	170,900	174,300	179,600	180,400	177,800	187,700	188,600	185,800	189,500	184,000
12	169,200	174,300	171,700	174,300	179,600	180,400	177,800	189,500	188,600	185,800	189,500	184,000
13	169,200	175,200	171,700	174,300	179,600	180,400	177,800	188,600	187,700	185,800	189,500	184,000
14	169,200	175,200	171,700	174,300	180,400	180,400	177,800	187,700	188,600	185,800	189,500	183,100
15	169,200	175,200	171,700	174,300	179,600	180,400	176,900	187,700	190,400	186,800	189,500	183,100
16	169,200	174,300	171,700	174,300	179,600	180,400	181,300	187,700	190,400	186,800	188,600	182,200
17	169,200	174,300	171,700	174,300	179,600	180,400	183,100	187,700	189,500	186,800	188,600	182,200
18	169,200	174,300	171,700	174,300	179,600	180,400	183,100	187,700	189,500	186,800	188,600	181,300
19	169,200	174,300	171,700	175,200	179,600	180,400	187,700	187,700	188,600	186,800	188,600	181,300
20	169,200	174,300	171,700	174,300	179,600	180,400	187,700	187,700	188,600	185,800	188,600	180,400
21	170,000	174,300	171,700	174,300	179,600	179,600	188,600	187,700	188,600	185,800	188,600	180,400
22	171,700	173,400	171,700	174,300	179,600	179,600	188,600	187,700	188,600	185,800	187,700	180,400
23	171,700	173,400	171,700	174,300	179,600	179,600	188,600	188,600	188,600	185,800	187,700	179,600
24	171,700	173,400	171,700	174,300	179,600	179,600	189,500	189,500	187,700	184,000	186,800	179,600
25	171,700	173,400	171,700	174,300	179,600	179,600	189,500	191,300	187,700	183,100	185,800	178,700
26	171,700	173,400	171,700	175,200	179,600	179,600	189,500	190,400	186,800	181,300	185,800	178,700
27	171,700	172,600	171,700	176,000	179,600	179,600	187,700	189,500	186,800	180,400	184,900	179,600
28	173,400	172,600	171,700	176,000	179,600	179,600	186,800	187,700	186,800	180,400	184,000	179,600
29	173,400	172,600	171,700	176,900	------	179,600	187,700	187,700	186,800	180,400	184,000	179,600
30	173,400	172,600	171,700	176,900	------	179,600	187,700	187,700	186,800	181,300	183,100	178,700
31	173,400	------	171,700	176,900	------	179,600	------	187,700	------	186,800	182,200	------
(†)	647.2	647.1	647.0	647.6	647.9	647.9	648.8	648.8	648.7	648.7	648.2	647.8
(*)	+1,700	-800	-900	+5,200	+2,700	0	+8,100	0	-900	0	-4,600	-3,500
MAX	173,400	175,200	171,700	176,900	180,400	180,400	189,500	191,300	190,400	186,800	190,400	184,000
MIN	169,200	172,600	170,900	171,700	176,900	179,600	176,900	187,700	186,800	180,400	182,200	178,700

CAL YR 1972..... * -15,100 MAX 187,700 MIN 167,500
WTR YR 1973..... * +7,000 MAX 191,300 MIN 169,200

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

08046000 Clear Fork Trinity River near Aledo, Tex.

LOCATION (revised).--Lat 32°38'28", long 97°33'51", Parker County, on left bank 3 miles (5 km) downstream from Turkey Creek, 3.5 miles (5.6 km) upstream from bridge on U.S. Highway 377, 4 miles (6 km) southeast of Aledo, and 11.8 miles (19.0 km) upstream from Benbrook Dam.

DRAINAGE AREA.--251 mi² (650 km²).

PERIOD OF RECORD.--August 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 723.33 ft (220.47 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--9 years (1947-56) prior to regulation by Lake Weatherford, 32.6 ft³/s (0.923 m³/s), 23,620 acre-ft/yr (29.1 hm³/yr); 17 years (1956-73) regulated, unadjusted, 38.9 ft³/s (1.10 m³/s), 28,180 acre-ft/yr (34.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft³/s (30.6 m³/s) Mar. 6, gage height, 9.16 ft (2.79 m); no flow Oct. 10-20.
Period of record: Maximum discharge, 34,000 ft³/s (963 m³/s) May 25, 1957, gage height, 29.00 ft (8.84 m); no flow at times most years.
Maximum stage since at least 1858, 34 ft (10 m) in April 1922, from information by local resident.

REMARKS.--Records good. Since Dec. 15, 1956, Lake Weatherford, located about 15 miles (24 km) upstream, has partly controlled runoff from 105 mi² (272 km²) above station. Lake Weatherford has a capacity of 19,600 acre-ft (24.2 hm³) at elevation 896.0 ft (273.1 m), fixed glory hole outlet, and 35,180 acre-ft (43.4 hm³) at elevation 906.0 ft (276.1 m), emergency flood spillway. At end of year, flow from 37.6 mi² (97.4 km²) above this station was partly controlled by 12 floodwater-retarding structures with a total combined capacity of 12,820 acre-ft (15.8 hm³) below the flood-spillway crests, of which 11,160 acre-ft (13.8 hm³) is floodwater-retarding capacity and 1,660 acre-ft (2.05 hm³) 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 1,408 acre-ft (1.74 hm³) from Lake Weatherford for municipal use and returned 41 acre-ft (50,600 m³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	2.6	3.4	7.6	12	19	4.8	7.2	8.5	4.5	607	1.2
2	3.0	3.5	4.7	10	18	20	3.3	4.2	29	3.6	491	1.1
3	2.0	4.8	4.4	112	13	22	3.3	5.2	286	3.3	387	.98
4	1.0	3.4	4.0	70	14	29	2.9	2.2	141	2.6	255	.92
5	.50	3.1	4.3	18	18	32	2.3	2.4	333	2.4	219	1.1
6	.20	3.0	3.4	13	17	301	2.9	34	122	4.0	191	16
7	.10	15	3.7	18	213	70	4.0	466	43	3.7	167	51
8	.05	7.3	4.9	25	506	16	4.3	68	31	78	127	11
9	.02	4.8	3.8	12	77	14	5.1	33	23	16	79	4.2
10	0	2.7	4.0	9.0	13	126	5.4	23	19	7.7	52	3.7
11	0	2.6	3.7	9.0	17	24	6.5	26	16	5.8	38	3.3
12	0	5.3	4.2	8.1	24	3.3	6.9	94	15	6.3	27	3.1
13	0	14	4.1	10	24	3.4	11	70	62	7.8	20	20
14	0	22	3.9	12	15	3.1	14	37	60	12	17	22
15	0	9.4	4.2	10	13	2.7	54	50	60	70	13	8.3
16	0	2.8	3.2	8.8	17	1.6	365	19	25	24	9.7	6.8
17	0	2.4	3.6	8.9	33	1.4	151	16	15	8.7	7.6	5.7
18	0	12	3.8	8.6	38	1.5	301	14	11	4.9	6.4	5.2
19	0	26	2.8	11	32	1.5	90	12	51	2.6	5.4	5.4
20	0	8.8	2.5	8.9	24	.83	48	11	125	1.7	4.5	4.9
21	.10	2.7	3.8	8.6	19	.80	28	9.2	70	1.5	3.7	4.3
22	80	2.6	4.5	7.0	50	.90	20	8.3	52	1.1	3.1	3.9
23	12	4.7	5.3	7.0	71	1.4	121	14	39	1.1	2.5	3.9
24	2.7	4.3	4.7	6.9	31	44	348	16	18	.88	2.1	4.6
25	1.6	3.9	3.9	57	21	17	75	45	13	.79	1.9	4.0
26	107	7.9	3.9	171	27	6.5	51	127	10	.65	1.6	4.2
27	152	7.2	2.9	39	21	4.3	38	33	8.6	.55	1.4	27
28	4.3	4.7	2.8	14	22	5.4	14	18	6.9	1.9	1.2	16
29	30	3.8	6.5	9.9	------	3.5	9.6	15	6.4	386	1.0	9.2
30	3.2	3.9	7.6	10	------	3.5	7.8	11	5.4	240	.91	6.2
31	2.7	------	7.3	11	------	13	------	9.0	------	797	1.1	------
TOTAL	406.47	201.2	129.8	731.3	1,400	792.63	1,798.1	1,299.7	1,704.8	1,701.07	2,744.11	259.20
MEAN	13.1	6.71	4.19	23.6	50.0	25.6	59.9	41.9	56.8	54.9	88.5	8.64
MAX	152	26	7.6	171	506	301	365	466	333	797	607	51
MIN	0	2.4	2.5	6.9	12	.80	2.3	2.2	5.4	.55	.91	.92
AC-FT	806	399	257	1,450	2,780	1,570	3,570	2,580	3,380	3,370	5,440	514

CAL YR 1972 TOTAL 3,927.32 MEAN 10.7 MAX 249 MIN 0 AC-FT 7,790
WTR YR 1973 TOTAL 13,168.38 MEAN 36.1 MAX 797 MIN 0 AC-FT 26,120

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 (4.0 km) south of Benbrook, 3.5 miles (5.6 km) upstream from Marys Creek, and 14.6 miles (23.5 km) upstream from mouth.

DRAINAGE AREA.--429 mi² (1,111 km²).

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, 100,200 acre-ft (124 hm³) June 7, elevation, 697.03 ft (212.45 m); minimum, 78,520 acre-ft (96.8 hm³) Oct. 20, elevation, 691.43 ft (210.72 m).
Period of record: Maximum contents, 185,000 acre-ft (228 hm³) June 6, 1957, elevation, 713.35 ft (217.43 m); minimum since lake first filled in 1957, 64,630 acre-ft (79.7 hm³) Sept. 15, 1964, elevation, 687.18 ft (209.45 m).

REMARKS.--Lake is formed by a rolled earthfill dam 9,130 ft (2,780 m) long including a 500-foot (152-meter) uncontrolled off-channel concrete gravity spillway with ogee weir section with a 100-foot (30-meter) notch in center. Outlet works consist of a 13-foot-diameter (4-meter) concrete conduit controlled by two 6.5- by 13-foot (2.0- by 4-meter) broome-type gates and two 30-inch (1-meter) 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)

690.0	73,900	696.0	95,990
692.0	80,890	698.0	104,200
694.0	88,250		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79,560	81,290	81,360	81,510	86,160	89,510	88,480	96,640	88,710	88,250	92,810	88,290
2	79,550	81,290	81,360	81,800	86,240	89,470	88,520	96,110	88,780	88,250	92,690	88,210
3	79,440	81,330	81,360	82,160	86,390	89,090	88,590	95,680	94,030	88,250	92,460	88,180
4	79,400	81,290	81,250	82,240	86,500	88,670	88,630	94,930	97,860	88,250	92,140	88,060
5	79,370	81,250	81,250	82,270	86,610	88,440	88,710	94,540	99,400	88,210	91,760	88,140
6	79,330	81,360	81,150	82,310	86,690	89,280	88,750	94,620	100,000	88,180	91,380	88,520
7	79,300	81,400	81,180	82,450	87,390	89,280	88,520	94,890	99,930	88,780	90,920	88,550
8	79,160	81,360	81,180	82,490	88,780	88,940	88,330	94,540	99,360	88,900	90,460	88,550
9	79,080	81,290	81,180	82,490	89,200	88,550	88,180	93,950	98,750	88,940	89,970	88,520
10	79,010	81,250	81,150	82,560	89,580	89,780	88,250	93,440	98,100	88,940	89,620	88,440
11	78,980	81,220	81,180	82,670	89,850	90,120	88,290	93,010	97,730	89,050	89,620	88,440
12	78,910	81,360	81,220	82,740	90,160	90,040	88,400	92,970	98,020	89,090	89,620	88,400
13	78,870	81,330	81,250	82,780	90,310	89,780	88,550	92,460	99,160	89,050	89,620	88,750
14	78,800	81,290	81,330	82,930	90,500	89,360	88,800	91,870	99,640	89,280	89,580	88,670
15	78,800	81,250	81,290	83,040	90,610	88,900	89,970	91,260	99,890	90,190	89,580	88,630
16	78,730	81,220	81,330	83,180	90,650	88,480	90,690	90,610	99,560	90,350	89,510	88,630
17	78,690	81,180	81,360	83,360	90,350	88,180	94,620	90,000	98,990	90,390	89,430	88,520
18	78,620	81,330	81,360	83,360	89,970	88,140	95,320	89,470	97,250	90,390	89,390	88,400
19	78,590	81,330	81,400	83,400	89,550	88,210	94,030	88,860	95,090	90,390	89,360	88,360
20	78,520	81,330	81,400	83,580	89,200	88,290	93,050	88,360	96,400	90,190	89,320	88,330
21	79,370	81,330	81,400	83,580	88,710	88,400	92,610	88,180	96,030	89,890	89,280	88,210
22	79,650	81,330	81,440	83,580	88,210	88,520	92,140	88,140	94,030	89,580	89,200	88,180
23	79,620	81,360	81,510	83,620	88,290	88,820	92,260	88,180	91,380	89,550	89,090	88,210
24	79,550	81,360	81,470	83,650	88,440	89,240	97,290	88,330	89,130	89,470	89,010	88,210
25	79,550	81,400	81,360	84,560	88,710	89,320	98,140	88,550	88,060	89,430	88,900	88,100
26	80,430	81,360	81,470	85,120	88,940	89,090	98,470	88,550	88,100	89,390	88,820	88,330
27	80,610	81,360	81,510	85,340	89,160	88,630	98,380	88,550	88,140	89,320	88,710	88,400
28	80,640	81,330	81,510	85,460	89,360	88,290	97,980	88,520	88,180	90,190	88,630	88,360
29	80,710	81,400	81,550	85,610	------	88,180	97,570	88,480	88,210	90,770	88,550	88,360
30	80,820	81,360	81,550	85,830	------	88,360	97,130	88,480	88,250	91,640	88,480	88,290
31	80,890	------	81,550	86,050	------	88,400	------	88,520	------	92,570	88,400	------
(†)	692.00	692.13	692.18	693.41	694.29	694.04	696.28	694.07	694.00	695.13	694.04	694.01
(*)	+1,200	+470	+190	+4,500	+3,310	-960	+8,730	-8,610	-270	+4,320	-4,170	-110
MAX	80,890	81,400	81,550	86,050	90,650	90,120	98,470	96,640	100,000	92,570	92,810	88,750
MIN	78,520	81,180	81,150	81,510	86,160	88,140	88,180	88,140	88,060	88,180	88,400	88,060

CAL YR 1972..... * -12,670 MAX 93,120 MIN 78,520
WTR YR 1973..... * +8,600 MAX 100,000 MIN 78,520

† 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 (2.4 km) downstream from Benbrook Dam, 1.7 miles (2.7 km) southeast of Benbrook, 2.9 miles (4.7 km) upstream from Marys Creek, and at mile 13.1 (21.1 km) upstream from West Fork Trinity River.

DRAINAGE AREA.--431 mi² (1,116 km²).

PERIOD OF RECORD.--July 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 604.22 ft (184.17 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--5 years (1947-52) prior to regulation by Benbrook Lake, 105 ft³/s (2.97 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr); 21 years (1952-73) regulated, unadjusted, 57.0 ft³/s (1.61 m³/s), 41,300 acre-ft/yr (50.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,540 ft³/s (43.6 m³/s) June 18, gage height, 7.48 ft (2.28 m); no flow at times.
Period of record: Maximum discharge, 82,900 ft³/s (2,350 m³/s) May 17, 1949, gage height, 28.72 ft (8.75 m), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of velocity-area studies and slope-area measurement of 82,900 ft³/s (2,350 m³/s); no flow at times. Maximum discharge since construction of Benbrook Dam in 1952, 4,350 ft³/s (123 m³/s) June 26, 1957, gage height, 11.28 ft (3.44 m).
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 (1.6 km) upstream for Pecan Valley Golf Course.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	13	.82	.50	.82	6.3	2.0	358	1.7	.82	152	.26
2	.11	1.3	1.0	.82	.50	113	2.0	358	.50	.50	301	.40
3	.08	.82	1.0	9.0	.50	294	2.0	351	48	.26	297	.26
4	.08	.63	1.0	.26	.82	294	2.0	351	8.2	.26	294	.32
5	.04	.82	1.0	.20	.82	234	1.7	344	2.0	.32	287	.02
6	.06	1.3	.82	.20	1.3	54	39	347	.82	.26	287	3.6
7	.06	1.3	1.0	1.4	15	168	128	380	182	6.0	284	.63
8	.08	3.1	1.0	.26	3.7	294	128	380	448	3.2	287	.50
9	.15	2.0	1.0	.15	.63	294	58	380	452	1.3	287	.82
10	.11	2.4	1.3	.15	.50	136	2.0	383	441	.40	210	.50
11	.06	2.0	1.3	.20	.50	2.0	2.4	390	323	.50	.11	.32
12	.04	3.2	1.3	.15	.50	184	3.2	398	5.1	1.3	.11	.50
13	.02	4.1	1.0	.20	.50	294	4.1	401	7.7	.82	.06	4.8
14	.01	1.0	1.3	.50	.50	294	7.0	401	5.1	5.3	.01	.32
15	0	1.0	1.0	.32	.50	294	17	401	5.1	29	0	.32
16	0	1.0	1.0	.26	103	294	3.7	401	256	3.7	0	.32
17	0	1.0	.82	.26	290	230	21	332	405	3.7	0	.32
18	0	3.6	.82	.32	287	92	353	322	1,000	2.4	.01	.32
19	0	1.3	1.0	.40	284	1.7	1,010	322	1,370	2.0	.01	.50
20	0	1.3	1.0	.32	284	1.3	828	322	5.1	68	.02	.40
21	8.4	2.5	1.0	.32	379	1.7	394	142	323	130	.02	.50
22	21	1.0	1.0	1.4	502	1.7	387	18	1,120	114	.01	.50
23	.15	1.0	1.0	.82	148	2.0	552	19	1,450	1.7	.01	.82
24	.11	1.7	1.0	.32	7.0	4.6	50	19	1,200	.32	.01	.82
25	.06	1.7	1.0	11	7.0	2.0	29	20	672	.32	.28	.40
26	19	1.3	.82	1.7	7.0	200	28	19	1.3	.32	1.3	.55
27	1.3	1.0	.82	.32	7.0	304	230	18	.63	.32	.82	2.4
28	.63	.63	.63	.32	6.3	252	369	20	.32	22	.85	1.0
29	7.2	.50	1.0	.26	------	96	362	21	.26	31	.01	.82
30	1.0	2.1	.63	.32	------	2.0	362	13	.26	35	.01	.82
31	4.3	------	.82	.63	------	2.0	------	.26	------	9.0	.04	------
TOTAL	64.16	59.60	30.20	33.28	2,338.39	4,442.3	5,377.1	7,631.26	9,734.09	474.02	2,689.69	24.06
MEAN	2.07	1.99	.97	1.07	83.5	143	179	246	324	15.3	86.8	.80
MAX	21	13	1.3	11	502	304	1,010	401	1,450	130	301	4.8
MIN	0	.50	.63	.15	.50	1.3	1.7	.26	.26	.26	0	.02
AC-FT	127	118	60	66	4,640	8,810	10,670	15,140	19,310	940	5,340	48

CAL YR 1972 TOTAL 12,101.52 MEAN 33.1 MAX 1,080 MIN 0 AC-FT 24,000
WTR YR 1973 TOTAL 32,898.15 MEAN 90.1 MAX 1,450 MIN 0 AC-FT 65,250

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 (73 m) upstream from the Texas and Pacific Railway Co. bridge in Fort Worth, 830 ft (253 m) upstream from East-West Expressway bridge, 2.5 miles (4.0 km) upstream from mouth, 5 miles (8 km) downstream from Marys Creek, and 10 miles (16 km) downstream from Benbrook Dam.

DRAINAGE AREA.--518 mi² (1,342 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 532.91 ft (162.43 m) above mean sea level. Prior to Apr. 3, 1970, various nonrecording and recording gages within 650 ft (198 m) of present site at different datums.

AVERAGE DISCHARGE.--28 years (1924-52) prior to regulation by Benbrook Lake, 112 ft³/s (3.17 m³/s), 81,140 acre-ft/yr (100 hm³/yr); 21 years (1952-73) regulated, unadjusted, 86.3 ft³/s (2.44 m³/s), 62,520 acre-ft/yr (77.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,700 ft³/s (133 m³/s) June 19, gage height, 11.81 ft (3.60 m); no flow Oct. 16, 17.
Period of record: Maximum discharge, 107,000 ft³/s (3,030 m³/s) May 17, 1949, gage height, 28.20 ft (8.60 m) present datum, from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of contracted-opening measurement of 107,000 ft³/s (3,030 m³/s); no flow at times.
Maximum stage since at least 1900, 28.20 ft (8.60 m) May 17, 1949, present datum. Flood of Apr. 25, 1922, reached a stage of 27.5 ft (8.4 m) present datum, discharge, 74,300 ft³/s (2,100 m³/s) 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).

REVISIONS (WATER YEARS).--WSP 1392: 1924-25, 1927. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	153	11	8.4	53	40	23	373	17	25	134	.92
2	1.2	37	11	21	42	74	23	362	22	20	302	.89
3	.90	19	10	146	36	330	27	355	959	19	296	.93
4	1.5	13	9.4	31	34	330	20	349	280	18	286	.77
5	1.7	10	10	18	34	309	18	374	107	16	282	6.1
6	1.0	19	9.5	15	32	435	21	423	54	15	277	118
7	.58	14	9.5	43	359	169	148	615	105	134	274	34
8	.68	12	9.9	25	283	337	158	392	353	154	271	13
9	.51	11	9.7	18	90	337	108	375	363	31	268	5.8
10	.42	9.6	9.8	16	75	582	24	371	360	21	244	7.7
11	.50	8.7	11	17	65	75	18	375	330	24	31	6.9
12	.42	13	19	19	62	168	17	553	40	20	21	3.7
13	.24	50	16	28	53	337	69	383	141	15	15	45
14	.09	18	24	28	48	337	42	374	92	120	11	17
15	.11	10	20	24	38	337	366	371	41	416	9.3	9.5
16	.06	7.8	13	21	55	337	115	370	153	57	7.5	7.5
17	.03	7.3	11	20	337	301	432	330	343	40	6.6	6.5
18	.05	40	11	18	351	162	236	308	797	32	5.5	5.7
19	34	25	10	16	351	37	930	306	1,920	25	5.3	5.5
20	7.3	14	11	16	351	34	881	302	1,140	31	5.9	4.8
21	128	17	10	20	386	31	394	196	320	149	5.8	4.8
22	551	15	9.6	16	584	31	382	43	1,120	141	6.3	4.5
23	22	12	9.4	15	261	40	648	51	1,560	29	6.1	4.9
24	9.4	15	8.8	14	56	115	686	46	1,360	19	5.3	13
25	6.8	16	8.6	256	48	46	134	54	941	16	4.4	6.2
26	441	11	8.6	132	46	157	94	67	48	14	3.8	26
27	71	9.3	9.0	62	42	330	181	44	37	12	3.3	55
28	23	8.5	9.1	48	42	281	386	39	33	179	3.7	22
29	138	11	9.1	37	------	156	374	36	31	443	5.0	13
30	31	13	9.5	36	------	45	374	33	29	599	2.5	8.6
31	35	------	8.7	50	------	29	------	18	------	154	1.3	------
TOTAL	1,509.79	619.2	346.2	1,234.4	4,214	6,329	7,329	8,288	13,096	2,988	2,799.6	458.21
MEAN	48.7	20.6	11.2	39.8	151	204	244	267	437	96.4	90.3	15.3
MAX	551	153	24	256	584	582	930	615	1,920	599	302	118
MIN	.03	7.3	8.6	8.4	32	29	17	18	17	12	1.3	.77
AC-FT	2,990	1,230	687	2,450	8,360	12,550	14,540	16,440	25,980	5,930	5,550	909

CAL YR 1972 TOTAL 15,566.75 MEAN 42.5 MAX 980 MIN 0 AC-FT 30,880
WTR YR 1973 TOTAL 49,211.40 MEAN 135 MAX 1,920 MIN .03 AC-FT 97,610

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 (38 m) upstream from Texas Electric Service Co.'s concrete dam, 980 ft (299 m) downstream from centerline of Paddock Viaduct (North Main Street) at Fort Worth, 2,600 ft (792 m) downstream from Clear Fork Trinity River, and at mile 556.8 (895.9 km).

DRAINAGE AREA.--2,615 mi² (6,773 km²).

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.

GAGE.--Water-stage recorder and concrete dam control with angle-iron-crested notch for flow below 50 ft³/s (1.42 m³/s). Datum of gage is 519.24 ft (158.26 m) 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 (366 m) upstream at same datum. Aug. 22, 1954, to Oct. 15, 1955, at site 2,000 ft (610 m) upstream at same datum.

AVERAGE DISCHARGE.--53 years, 375 ft³/s (10.6 m³/s), 271,700 acre-ft/yr (335 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 7,360 ft³/s (208 m³/s) June 19, gage height, 4.42 ft (1.35 m); minimum, 3.2 ft³/s (91 dm³/s) Oct. 18.

Period of record: Maximum discharge, 85,000 ft³/s (2,410 m³/s) Apr. 25, 1922, gage height, 23.95 ft (7.30 m), site then in use, by slope-area measurement of peak flow by city engineer of Fort Worth; maximum gage height, 25.91 ft (7.90 m) site then in use, May 17, 1949, discharge 64,300 ft³/s (1,820 m³/s); 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 capacity of 738,500 acre-ft (911 hm³), revised, of which 76,550 acre-ft (94.4 hm³) is for flood control. Records furnished by city of Fort Worth show that during year 74,680 acre-ft (92.1 hm³) was diverted above station for municipal and industrial use, and 77,100 acre-ft (95.1 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	340	24	21	80	49	36	507	43	42	176	18
2	11	83	20	55	49	48	38	471	43	39	422	19
3	8.6	42	20	388	43	340	47	446	1,770	37	411	21
4	8.0	30	20	51	41	396	37	434	1,030	35	669	20
5	8.0	26	21	34	39	384	33	467	761	33	1,380	28
6	8.0	34	20	30	39	680	33	565	346	31	1,550	345
7	7.0	26	19	94	447	199	190	976	259	159	860	143
8	6.5	21	19	41	591	436	248	622	613	418	492	40
9	5.6	20	21	31	142	434	186	1,020	635	75	387	31
10	5.2	18	20	29	107	932	42	1,160	626	49	358	45
11	6.0	16	20	30	92	129	34	978	620	75	74	34
12	7.0	27	35	31	78	151	31	1,560	187	95	37	28
13	7.0	142	36	39	69	418	145	1,540	456	42	32	94
14	6.5	36	44	41	57	422	76	1,550	359	165	28	37
15	5.6	26	42	36	50	422	680	1,110	159	1,030	27	28
16	5.6	23	28	32	47	417	260	736	370	156	27	24
17	4.4	19	22	31	340	401	620	543	803	86	26	22
18	4.0	135	21	31	397	233	282	449	1,060	63	24	21
19	142	47	21	29	390	75	1,080	433	2,690	51	25	19
20	26	31	22	28	390	43	1,080	425	2,810	43	24	20
21	300	40	21	31	400	41	550	325	1,050	189	23	19
22	1,350	35	19	26	677	40	557	68	1,370	217	23	17
23	50	27	19	25	358	42	882	98	1,810	77	23	17
24	27	31	18	22	76	212	1,230	75	1,550	37	23	27
25	20	36	17	365	60	76	237	111	1,090	33	22	24
26	946	26	17	284	55	116	156	276	142	31	21	76
27	186	24	17	102	51	397	232	712	70	28	20	200
28	50	23	19	63	49	390	681	765	65	173	19	63
29	546	24	22	52	------	228	574	311	52	848	19	33
30	83	27	26	51	------	117	532	140	48	1,080	19	27
31	98	------	23	68	------	48	------	62	------	297	19	------
TOTAL	3,951.0	1,435	713	2,191	5,214	8,316	10,809	18,935	22,887	5,734	7,260	1,540
MEAN	127	47.8	23.0	70.7	186	268	360	611	763	185	234	51.3
MAX	1,350	340	44	388	677	932	1,230	1,560	2,810	1,080	1,550	345
MIN	4.0	16	17	21	39	40	31	62	43	28	19	17
AC-FT	7,840	2,850	1,410	4,350	10,340	16,490	21,440	37,560	45,400	11,370	14,400	3,050

CAL YR 1972 TOTAL 24,567.65 MEAN 67.1 MAX 1,350 MIN .75 AC-FT 48,730
WTR YR 1973 TOTAL 88,985.00 MEAN 244 MAX 2,810 MIN 4.0 AC-FT 176,500

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 (9.3 km) south of Fort Worth City Hall, and 8.9 miles (14.3 km) upstream from mouth.

DRAINAGE AREA.--17.7 mi² (45.8 km²).

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, 2,960 ft³/s (83.8 m³/s) June 4, elevation, 637.15 ft (194.20 m); no flow at times.
Period of record: Maximum discharge, 5,450 ft³/s (154 m³/s) Oct. 19, 1971, elevation, 639.77 ft (195.00 m); no flow at times.
Flood of May 6, 1969, reached an elevation of 640.1 ft (195.1 m), from floodmarks, discharge, 5,800 ft³/s (164 m³/s). Flood in 1908 reached an elevation of 645.9 ft (196.9 m), and flood in 1938 reached an elevation of 644.4 ft (196.4 m), from information by State Highway Department.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	82	.45	.30	3.6	2.8	1.0	4.8	.21	.24	15	0
2	0	9.5	.45	5.8	1.5	2.4	1.8	3.2	.16	.12	9.1	0
3	0	3.5	.37	26	1.2	2.4	2.8	1.8	537	.10	6.8	0
4	0	1.6	.24	5.0	1.2	4.4	.70	1.0	482	.06	5.4	0
5	0	.88	.37	4.0	.85	2.8	.55	5.4	30	.03	3.2	.04
6	0	9.3	.55	3.6	.70	38	.85	69	14	.03	2.4	42
7	0	1.4	.30	12	7.6	6.0	2.8	92	8.4	14	1.5	7.6
8	0	.58	.37	4.8	7.2	4.4	4.7	9.4	5.1	16	.85	.85
9	0	.43	.37	2.4	6.8	2.8	3.3	5.4	4.0	4.8	.70	.24
10	0	.22	.55	1.5	6.8	155	1.5	3.6	3.2	.70	.37	.12
11	0	.16	.45	2.1	7.2	13	.85	2.3	2.8	2.1	.24	.06
12	0	11	4.9	3.2	6.8	8.4	.70	4.6	4.4	.85	.12	.04
13	0	21	3.4	6.2	5.7	6.0	6.8	1.9	38	.30	.12	36
14	0	2.8	8.9	5.3	3.6	5.4	2.1	1.4	34	22	.12	3.2
15	0	1.4	3.6	4.4	4.0	4.4	128	1.0	8.4	73	.06	.85
16	0	.87	1.2	3.0	2.8	4.0	33	.99	4.0	5.4	.03	.37
17	0	.70	.85	2.3	3.2	3.6	286	.45	2.8	2.4	.02	.19
18	0	19	.70	1.5	3.6	2.8	32	.35	2.1	.85	.02	.15
19	7.6	3.6	.85	1.1	4.8	2.4	19	.30	41	.45	.02	.12
20	.19	1.0	.85	1.1	4.8	1.8	8.0	.27	76	.24	.02	.12
21	23	4.8	.70	4.2	3.2	1.5	5.4	.15	10	.12	.02	.06
22	117	1.2	.70	.99	14	1.8	5.4	.25	4.4	.10	.01	.02
23	1.0	.70	.45	.74	8.8	2.8	23	1.3	2.8	.04	0	.06
24	.30	4.0	.45	.62	5.1	20	205	.35	2.1	.03	0	11
25	.12	2.8	.37	6.8	3.2	4.0	20	4.1	1.2	.02	0	.55
26	171	.85	.37	9.5	2.8	2.1	9.5	4.2	.85	.02	0	6.4
27	16	.55	.30	7.2	2.8	1.5	6.8	.47	.70	.02	0	18
28	2.8	.45	.30	4.0	2.8	1.2	5.1	.14	.45	158	0	6.0
29	6.8	.55	.45	2.4	------	1.0	4.4	.07	.37	148	0	1.0
30	3.2	.85	.70	2.8	------	9.0	4.0	.03	.30	174	0	1.0
31	10	------	.37	4.4	------	2.7	------	.02	------	46	0	------
TOTAL	359.01	187.69	34.88	139.25	126.65	320.4	825.05	220.24	1,320.74	670.02	46.12	136.04
MEAN	11.6	6.26	1.13	4.49	4.52	10.3	27.5	7.10	44.0	21.6	1.49	4.53
MAX	171	82	8.9	26	14	155	286	92	537	174	15	42
MIN	0	.16	.24	.30	.70	1.0	.55	.02	.16	.02	0	0
CFSM	.66	.35	.06	.25	.26	.58	1.55	.40	2.49	1.22	.08	.26
IN.	.75	.39	.07	.29	.27	.67	1.73	.46	2.78	1.41	.10	.29
AC-FT	712	372	69	276	251	636	1,640	437	2,620	1,330	91	270
(††)	5.88	2.78	.52	2.94	2.14	2.42	4.67	2.22	7.47	6.57	0	4.02

CAL YR 1972 TOTAL 1,385.29 MEAN 3.78 MAX 250 MIN 0 CFSM .21 IN 2.91 AC-FT 2,750 †† 24.02
WTR YR 1973 TOTAL 4,386.09 MEAN 12.0 MAX 537 MIN 0 CFSM .68 IN 9.22 AC-FT 8,700 †† 41.63

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-22	0045	634.33	1,200	4-24	0645	634.07	1,060
10-26	1515	633.95	1,000	6- 3	0945	635.25	1,680
3-10	0715	634.30	1,180	6- 4	0115	637.15	2,960
4-15	1900	634.24	1,150	7-28	2230	635.25	1,680
4-17	1000	634.65	1,360				

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

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 (0.3 km) northeast of intersection of Hemphill Street and Seminary Drive in Fort Worth, 1.8 miles (2.9 km) upstream from mouth, and 4.5 miles (7.2 km) south of Fort Worth City Hall.

DRAINAGE AREA.--0.97 mi² (2.51 km²).

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, 384 ft³/s (10.9 m³/s) July 28, elevation, 654.04 ft (199.35 m); minimum daily, 0.01 ft³/s (0.28 dm³/s) Oct. 4-10, 15-18, 20.
Period of record: Maximum discharge, 584 ft³/s (16.5 m³/s) Oct. 19, 1971, elevation, 655.49 ft (199.79 m); no flow at times. Maximum stage since 1966, about 656.0 ft (199.9 m) 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 basic-data reports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	7.1	.08	.05	.13	.08	.06	.36	.22	.08	.31	.06
2	.05	.19	.10	2.3	.08	.08	1.3	.09	.05	.06	.28	.05
3	.05	.13	.10	3.3	.08	.13	.09	.08	31	.16	.19	.04
4	.01	.13	.06	.13	.06	.10	.10	.08	12	.16	.19	.05
5	.01	.16	.06	.25	.10	.06	.10	1.4	1.8	.08	.13	2.5
6	.01	.85	.06	.52	.10	3.1	.37	6.9	.52	.08	.10	5.6
7	.01	.04	.06	1.5	9.9	.16	.11	.80	.39	1.8	.10	.25
8	.01	.04	.71	.08	1.9	.13	.89	.16	.28	.22	.08	.16
9	.01	.04	.04	.10	.43	.22	.08	.19	.25	.85	.08	.16
10	.01	.04	.50	.13	.31	11	.08	.10	.22	.06	.08	.16
11	.02	.04	.07	.08	.22	.35	.08	.14	.39	.79	.08	.16
12	.02	2.6	1.3	1.2	.19	.25	.08	.26	.31	.06	.06	.16
13	.02	.22	.71	1.5	.16	.22	2.1	.06	4.7	.06	.04	2.6
14	.02	.05	1.4	.28	.13	.19	.85	.05	1.5	2.7	.05	.13
15	.01	.05	.33	.13	.10	.16	8.9	.05	.25	5.8	.05	.06
16	.01	.05	.10	.10	.10	.13	.19	.05	.19	.25	.04	.06
17	.01	.05	.10	.08	.25	.13	14	.05	.16	.13	.05	.05
18	.01	3.2	.10	.08	.13	.10	.99	.13	.16	.10	.08	.04
19	1.9	.08	.08	.08	.10	.16	.73	.06	7.0	.10	.06	.04
20	.01	.06	.08	.79	.10	.13	.31	.04	7.4	.08	.05	.02
21	8.5	1.1	.06	.13	.16	1.8	.35	.02	.35	.08	.05	.02
22	3.1	.05	.05	.08	2.1	.13	.28	.02	.25	.06	.06	.02
23	.04	.05	.05	.10	.28	.39	7.5	.73	.25	.05	.10	.92
24	.02	1.0	.05	.06	.13	2.4	6.6	.19	.16	.05	.10	.47
25	.08	.06	.05	9.3	.10	.13	.47	1.4	.13	.05	.08	.02
26	12	.05	.05	.85	.10	.10	.43	.09	.10	.06	.05	2.7
27	.25	.13	.06	.31	.08	.34	.25	.05	.10	.05	.05	1.8
28	.16	.19	.05	.19	.08	.10	.22	.04	.10	29	.05	.16
29	1.9	.43	.08	.19	------	.08	.19	.04	.08	4.3	.05	.16
30	.52	.08	.08	.16	------	1.7	.16	.04	.08	14	.05	.16
31	.52	------	.05	.57	------	.07	------	.06	------	.67	.13	------
TOTAL	29.37	18.26	6.67	24.62	17.60	24.12	47.86	13.73	70.39	61.99	2.87	18.78
MEAN	.95	.61	.22	.79	.63	.78	1.60	.44	2.35	2.00	.093	.63
MAX	12	7.1	1.4	9.3	9.9	11	14	6.9	31	29	.31	5.6
MIN	.01	.04	.04	.05	.06	.06	.06	.02	.05	.05	.04	.02
CFSM	.98	.63	.23	.81	.65	.80	1.65	.45	2.42	2.06	.10	.65
IN.	1.13	.70	.26	.94	.67	.93	1.84	.53	2.70	2.38	.11	.72
AC-FT	58	36	13	49	35	48	95	27	140	123	5.7	37
(††)	6.60	2.98	.64	3.55	1.77	2.72	5.13	2.26	8.74	8.25	0	4.12

CAL YR 1972 TOTAL 132.66 MEAN .36 MAX 13 MIN .01 CFSM .37 IN 5.09 AC-FT 263 †† 24.50
WTR YR 1973 TOTAL 336.26 MEAN .92 MAX 31 MIN .01 CFSM .95 IN 12.90 AC-FT 667 †† 46.76

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-21	2335	652.98	274	6- 3	0810	653.69	349
3-10	0610	652.85	258	6- 4	0005	653.90	370
4-15	1655	653.28	308	6-19	1935	653.11	290
4-17	0750	653.22	302	7-28	2130	654.04	384
5- 6	2040	652.47	206	7-30	1045	653.13	292
6- 3	0220	653.12	291				

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

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 (0.5 km) north of Seminary Drive in Fort Worth, 1.2 miles (1.9 km) upstream from mouth, and 4.3 miles (6.9 km) south of Fort Worth City Hall.

DRAINAGE AREA.--1.35 mi² (3.50 km²).

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, 882 ft³/s (25.0 m³/s) July 28, elevation, 627.24 ft (191.18 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) Oct. 15-18.
Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) Oct. 19, 1971, elevation, 628.41 ft (191.54 m); minimum daily, 0.01 ft³/s (0.28 dm³/s) for many days.
Maximum elevation since 1969, that of Oct. 19, 1971. Flood in May 1969 reached an elevation of 627.2 ft (191.2 m), from floodmarks.

REMARKS.--Records fair. Records include runoff from a shopping center. Low flows are sustained by effluents. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	10	.12	.07	.15	.09	.18	.55	.39	.12	.38	.15
2	.07	.32	.09	3.1	.12	.09	1.6	.14	.09	.12	.38	.13
3	.06	.18	.09	4.1	.09	.28	.16	.12	61	.14	.30	.12
4	.04	.15	.09	.17	.09	.14	.12	.12	19	.16	.26	.16
5	.03	.32	.09	.34	.15	.09	.12	2.1	2.3	.15	.21	3.8
6	.07	1.4	.09	.76	.15	5.7	.62	13	.60	.18	.17	10
7	.06	.09	.09	2.0	14	.19	.16	1.2	.52	2.6	.18	.60
8	.03	.08	.68	.16	2.0	.16	1.4	.31	.38	.35	.16	.32
9	.03	.07	.07	.15	.45	.44	.13	.36	.32	1.3	.16	.32
10	.03	.07	.53	.15	.38	18	.11	.17	.32	.14	.15	.32
11	.03	.04	.17	.18	.26	.42	.10	.25	.60	1.2	.15	.32
12	.03	4.9	2.0	1.3	.26	.33	.12	.39	.38	.23	.15	.32
13	.03	.44	.67	1.7	.21	.26	3.7	.12	4.8	.17	.12	5.6
14	.03	.07	2.1	.28	.18	.21	1.3	.12	1.6	5.3	.12	.38
15	.02	.07	.29	.24	.15	.21	16	.12	.32	8.8	.12	.32
16	.02	.07	.12	.16	.12	.18	.59	.14	.26	.47	.09	.26
17	.02	.06	.12	.17	.26	.18	20	.13	.21	.18	.09	.18
18	.02	3.7	.12	.13	.12	.15	1.2	.19	.18	.15	.12	.09
19	3.3	.13	.11	.15	.12	.18	.99	.15	11	.14	.12	.12
20	.03	.10	.09	.86	.12	.18	.40	.12	10	.12	.12	.12
21	17	1.3	.07	.25	.12	1.8	.51	.09	.50	.09	.12	.15
22	5.8	.12	.08	.13	2.9	.12	.37	.07	.33	.09	.14	.15
23	.11	.08	.07	.15	.42	.45	4.3	1.2	.26	.07	.16	1.7
24	.05	1.4	.07	.11	.17	3.2	8.8	.34	.26	.07	.20	.97
25	.07	.14	.07	11	.15	.15	.61	2.3	.18	.07	.15	.18
26	19	.11	.07	1.0	.15	.15	.47	.18	.18	.08	.14	4.1
27	.37	.15	.09	.38	.15	.42	.32	.15	.13	.07	.16	2.5
28	.21	.15	.07	.21	.12	.15	.28	.09	.12	60	.19	.20
29	3.1	.52	.12	.18	------	.12	.20	.09	.15	5.7	.19	.35
30	.93	.12	.09	.18	------	3.8	.18	.15	.15	30	.13	.29
31	1.0	------	.07	.67	------	.18	------	.12	------	1.0	.24	------
TOTAL	51.72	26.35	8.60	30.43	23.56	38.02	65.04	24.58	116.53	119.26	5.37	34.22
MEAN	1.67	.88	.28	.98	.84	1.23	2.17	.79	3.88	3.85	.17	1.14
MAX	19	10	2.1	11	14	18	20	13	61	60	.38	10
MIN	.02	.04	.07	.07	.09	.09	.10	.07	.09	.07	.09	.09
CFSM	1.24	.65	.21	.73	.62	.91	1.61	.59	2.87	2.85	.13	.84
IN.	1.43	.73	.24	.84	.65	1.05	1.79	.68	3.21	3.29	.15	.94
AC-FT	103	52	17	60	47	75	129	49	231	237	11	68
(††)	6.28	2.86	.62	3.33	1.77	2.64	5.00	2.20	8.63	8.24	0	3.98

CAL YR 1972 TOTAL 240.22 MEAN .66 MAX 24 MIN .02 CFSM .49 IN 6.62 AC-FT 476 †† 24.03
WTR YR 1973 TOTAL 543.68 MEAN 1.49 MAX 61 MIN .02 CFSM 1.10 IN 14.98 AC-FT 1,080 †† 45.55

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-21	2345	623.86	589	6- 3	0230	623.41	522
3- 6	0625	622.15	332	6- 3	0820	625.34	756
3-10	0615	622.79	428	6- 4	0015	625.08	743
4-15	1700	623.35	513	6-19	1945	623.31	506
4-17	0800	622.61	402	7-28	2135	627.24	882
5- 6	2040	622.92	448	7-30	1045	623.37	516

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

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 (9 m) upstream from culvert on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles (1.8 km) upstream from mouth, and 2.9 miles (4.7 km) northeast of Tarrant County Courthouse.

DRAINAGE AREA.--2.15 mi² (5.57 km²).

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

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft (163.83 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 1.53 ft³/s (43.3 dm³/s), 9.66 in/yr (245.4 mm/yr), 1,110 acre-ft/yr (1.37 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 274 ft³/s (7.76 m³/s) June 19, gage height, 4.45 ft (1.36 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) Sept. 22.
Period of record: Maximum discharge, 352 ft³/s (9.97 m³/s) Oct. 19, 1971, gage height, 5.10 ft (1.55 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) June 25, 1971, June 27, 1972, and Sept. 22, 1973.
Maximum stage since April 1964, 9.0 ft (2.7 m) in April 1966 at upstream side of Fain Street culvert, from information by local resident (discharge not determined).

REMARKS.--Records good above 1.0 ft³/s (28 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	14	.13	.22	.77	.61	.15	.22	1.0	.03	.85	.05
2	.08	.83	.13	3.0	.61	.61	1.4	.13	.08	.03	.36	.04
3	.08	.27	.13	11	.59	.58	.53	.13	61	.03	.14	.03
4	.08	.16	.25	.69	.38	.32	.17	.13	15	.03	.13	.03
5	.08	.08	.22	.61	.47	.30	.13	4.1	4.4	.04	.13	3.1
6	.06	.87	.14	.62	.61	14	.37	12	1.5	.05	.13	27
7	.05	.10	.13	4.1	24	1.1	.41	7.2	.61	6.2	.11	1.4
8	.05	.08	.13	.85	6.9	.61	1.2	.79	.39	1.2	.08	.10
9	.05	.07	.13	.38	1.2	.63	.23	1.3	.35	2.7	.13	.05
10	.05	.05	.13	.38	.82	33	.08	.22	.22	.61	.13	.04
11	.05	.05	.17	.68	.61	1.6	.13	.32	.75	15	.13	.05
12	.05	4.9	1.7	.94	.61	.88	.08	.94	.50	.85	.13	.05
13	.05	1.6	.32	.90	.42	.61	1.4	.19	8.5	.56	.13	1.2
14	.05	.18	2.0	.76	.25	.61	4.2	.13	4.3	16	.13	.03
15	.05	.12	.59	.61	.22	.44	15	.13	.61	63	.13	.03
16	.05	.08	.22	.42	.22	.30	1.3	.13	.28	2.6	.20	.03
17	.05	.15	.22	.22	.49	.22	25	.13	.13	1.0	.05	.03
18	.05	5.9	.22	.22	.61	.22	1.8	.13	.10	.38	.05	.03
19	5.5	.33	.22	.22	.36	.22	1.3	.13	43	.38	.05	.03
20	.10	.09	.22	.36	.13	.22	.38	.13	22	.13	.05	.03
21	19	1.5	.22	.90	.13	.22	.39	.13	1.5	.13	.05	.03
22	18	.28	.21	.48	2.7	.22	2.8	.13	.37	.08	.05	.02
23	.24	.22	.08	.38	.94	.34	13	.94	.16	.08	.05	.08
24	.08	1.2	.08	.31	.61	4.1	33	.32	.08	.08	.03	.54
25	.08	.44	.08	19	.61	.22	1.8	5.1	.08	.08	.16	.05
26	34	.13	.08	2.9	.61	.08	.78	.77	.08	.08	.06	2.4
27	1.4	.21	.12	.83	.61	.05	.42	.11	.08	.08	.05	2.7
28	.31	.22	.08	.61	.61	.05	.22	.08	1.9	5.7	.05	.26
29	17	.65	.08	.61	------	.05	.22	.07	.13	4.4	.05	.06
30	1.8	.27	.19	.50	------	4.7	.22	.05	.04	24	.05	.05
31	2.8	------	.22	1.2	------	.41	------	.05	------	1.5	.05	------
TOTAL	101.37	35.03	8.84	54.90	47.09	67.52	108.11	36.33	169.14	147.03	3.89	39.54
MEAN	3.27	1.17	.29	1.77	1.68	2.18	3.60	1.17	5.64	4.74	.13	1.32
MAX	34	14	2.0	19	24	33	33	12	61	63	.85	27
MIN	.05	.05	.08	.22	.13	.05	.08	.05	.04	.03	.03	.02
CFSM	1.52	.54	.13	.82	.78	1.01	1.67	.54	2.62	2.20	.06	.61
IN.	1.75	.61	.15	.95	.81	1.17	1.87	.63	2.93	2.54	.07	.68
AC-FT	201	69	18	109	93	134	214	72	335	292	7.7	78
(††)	6.88	2.40	.46	2.80	1.79	3.36	4.82	2.40	8.40	8.14	0	4.03

CAL YR 1972 TOTAL 264.89 MEAN .72 MAX 34 MIN .02 CFSM .33 IN 4.58 AC-FT 525 †† 20.33
WTR YR 1973 TOTAL 818.79 MEAN 2.24 MAX 63 MIN .02 CFSM 1.04 IN 14.17 AC-FT 1,620 †† 45.48

PEAK DISCHARGE (BASE, 170 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	2330	3.51	173	6- 3	0230	3.72	194
10-29	0245	3.52	174	6- 3	1015	4.29	255
3-10	0630	4.10	234	6-19	1945	4.45	274
4-17	0900	3.58	180	7-15	0845	4.30	256
4-24	0615	3.82	204	9- 6	1930	3.72	194

†† 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 (2.4 km) upstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 2.0 miles (3.2 km) upstream from Little Fossil Creek, and 3.5 miles (5.6 km) upstream from mouth.

DRAINAGE AREA.--52.8 mi² (137 km²).

PERIOD OF RECORD.--January 1959 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 489.48 ft (149.19 m) above mean sea level. Prior to Oct. 1, 1967, at same site at datum 2.00 ft (0.61 m) higher.

AVERAGE DISCHARGE.--14 years, 22.0 ft³/s (0.623 m³/s), 15,940 acre-ft/yr (19.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,690 ft³/s (189 m³/s) July 15, gage height, 6.87 ft (2.09 m); no flow Oct. 1-18.
Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Sept. 7, 1962, gage height, 26.90 ft (8.20 m), present datum, from rating curve extended above 16,500 ft³/s (467 m³/s) 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 fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	61	.40	.23	7.0	7.5	4.6	17	25	17	9.4	.16
2	0	9.4	.55	2.2	6.4	8.7	4.6	13	21	15	7.0	.16
3	0	3.9	.55	35	4.2	7.0	5.9	15	656	19	5.9	.16
4	0	1.9	.70	17	3.7	7.0	5.4	17	294	19	5.4	.16
5	0	1.6	.40	7.5	3.9	6.4	5.0	20	23	19	2.9	.85
6	0	1.9	.30	5.0	4.2	127	5.9	36	17	13	1.3	31
7	0	.55	.23	9.4	143	40	4.6	126	12	22	1.8	298
8	0	.08	.30	7.5	258	19	5.4	30	11	17	1.2	10
9	0	.04	.30	5.0	37	12	5.9	54	12	14	.70	5.0
10	0	.02	.30	2.9	21	275	5.9	30	14	9.4	.55	4.6
11	0	.03	.40	2.9	17	18	5.4	21	15	263	.70	2.5
12	0	1.1	1.6	2.9	14	8.1	5.4	67	41	23	.70	1.9
13	0	1.5	.55	2.7	12	5.9	6.4	32	71	13	.55	2.1
14	0	.08	1.6	3.2	9.4	5.0	14	24	262	82	.55	1.2
15	0	.11	.85	3.7	7.0	3.7	39	24	50	1,350	.55	.70
16	0	.08	.85	5.0	6.4	3.7	54	24	28	101	.55	.55
17	0	.11	.30	5.4	7.5	3.7	33	24	20	12	.55	.40
18	0	7.3	.30	5.0	7.0	3.7	11	26	26	7.5	2.2	.40
19	.85	3.9	.30	4.2	7.5	3.4	8.1	24	213	6.4	2.1	.40
20	.03	2.7	.30	4.2	6.4	3.4	5.9	23	344	6.4	1.6	.40
21	11	2.4	.40	3.9	5.4	3.7	5.4	23	28	9.4	.70	.40
22	45	1.8	.30	3.7	7.5	3.9	5.9	21	19	8.7	.55	.23
23	2.9	1.3	.30	3.4	10	4.2	106	23	14	5.4	.40	.16
24	.85	1.8	.23	2.9	10	4.2	802	32	12	4.2	.30	.16
25	.85	1.3	.30	78	8.7	3.9	79	106	12	2.9	.23	.16
26	180	.70	.30	84	7.0	3.9	30	110	13	2.5	.23	16
27	43	.55	.40	18	7.0	3.9	23	57	13	1.3	.23	26
28	6.4	.40	.40	8.7	6.4	3.9	19	40	13	3.2	.23	3.5
29	32	.70	.40	5.4	------	3.9	18	26	20	9.4	.16	.55
30	5.9	.55	.30	4.6	------	4.2	18	24	37	125	.11	.23
31	3.9	------	.30	5.0	------	5.0	------	23	------	32	.11	------
TOTAL	332.68	108.80	14.71	348.53	644.6	612.9	1,341.7	1,132	2,336	2,232.7	49.45	408.03
MEAN	10.7	3.63	.47	11.2	23.0	19.8	44.7	36.5	77.9	72.0	1.60	13.6
MAX	180	61	1.6	84	258	275	802	126	656	1,350	9.4	298
MIN	0	.02	.23	.23	3.7	3.4	4.6	13	11	1.3	.11	.16
AC-FT	660	216	29	691	1,280	1,220	2,660	2,250	4,630	4,430	98	809

CAL YR 1972 TOTAL 1,457.56 MEAN 3.98 MAX 180 MIN 0 AC-FT 2,890
WTR YR 1973 TOTAL 9,562.10 MEAN 26.2 MAX 1,350 MIN 0 AC-FT 18,970

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-24	0900	4.55	2,480
6- 3	0800	4.18	2,060
7-15	1100	6.87	6,690

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 (46 m) upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles (6.9 km) northeast of county courthouse, and approximately 4.3 miles (6.9 km) upstream from Big Fossil Creek.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft (167.22 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 5.57 ft³/s (0.158 m³/s), 6.15 in/yr (156.2 mm/yr), 4,040 acre-ft/yr (4.98 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,630 ft³/s (46.2 m³/s) July 15, gage height, 8.78 ft (2.68 m); no flow Oct. 3-18, Sept. 4.
Period of record: Maximum discharge, 1,630 ft³/s (46.2 m³/s) July 15, 1973, gage height, 8.78 ft (2.68 m); maximum gage height, 8.90 ft (2.71 m) Dec. 9, 1971; no flow at times each year.
Maximum stage since 1955, 10.5 ft (3.2 m), 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 (2.7 m), discharge, 1,600 ft³/s (45.3 m³/s), 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 (4.2 km) upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	32	1.3	.42	5.0	2.0	1.5	2.3	.83	2.3	6.6	.04
2	.01	6.6	.83	1.5	3.0	2.3	2.0	1.5	.83	1.7	4.0	.03
3	0	2.6	.83	26	2.0	2.0	2.0	1.3	199	1.5	2.6	.01
4	0	2.0	.83	6.2	1.7	2.0	1.3	1.3	108	1.5	2.3	0
5	0	1.5	.71	3.6	1.3	1.7	.97	4.0	19	1.3	2.0	.13
6	0	1.5	.71	3.0	1.3	39	.71	17	7.6	.97	1.7	20
7	0	1.3	.60	7.5	32	8.0	.71	68	3.0	3.6	1.5	20
8	0	1.1	.60	4.7	62	4.4	.97	6.6	2.1	5.8	1.5	3.0
9	0	.97	.60	2.3	9.0	3.6	1.7	8.0	1.9	3.0	1.1	1.1
10	0	.71	.60	2.0	5.8	116	1.1	4.0	1.7	1.1	.97	.71
11	0	.71	.50	2.0	4.7	11	.83	3.0	1.5	73	.97	.60
12	0	1.1	.97	2.0	4.0	5.8	.71	8.0	1.3	10	.71	.35
13	0	8.5	1.1	2.3	3.3	4.7	4.0	4.0	7.0	5.0	.60	.71
14	0	2.0	1.5	3.3	2.3	4.0	2.3	2.0	5.0	12	.60	.28
15	0	1.3	1.3	3.0	2.0	3.3	22	1.5	4.4	324	.42	.22
16	0	.97	.83	2.6	1.7	3.0	17	1.3	3.6	23	.35	.17
17	0	.97	.71	2.3	1.5	2.3	12	1.1	3.3	9.5	.28	.17
18	0	8.0	.60	2.0	1.5	2.0	8.0	1.1	3.0	5.4	.22	.13
19	2.0	4.4	.60	1.5	1.5	2.0	4.7	1.1	53	4.0	.22	.13
20	.17	2.0	.60	1.3	1.5	1.7	2.6	.83	54	2.6	.22	.13
21	17	.30	.60	3.3	2.3	1.5	1.7	.83	24	2.0	.17	.13
22	00	2.6	.60	1.5	4.4	1.5	6.2	.83	7.0	2.0	.17	.13
23	3.3	1.7	.60	1.3	5.4	1.5	53	5.4	5.0	1.5	.13	.10
24	.83	1.7	.50	1.3	3.6	6.2	246	3.0	4.0	1.3	.10	.22
25	.50	2.3	.50	37	3.0	3.0	15	15	3.3	1.1	.08	.22
26	112	1.7	.50	34	2.3	1.7	7.5	23	3.6	.97	.08	.42
27	17	1.3	.42	8.0	2.0	1.5	4.4	3.3	2.6	.71	.06	6.6
28	3.3	1.1	.42	5.0	2.0	1.3	3.6	1.3	4.4	1.1	.06	2.6
29	32	.97	.42	3.3	------	1.3	2.6	.83	3.0	9.5	.04	.83
30	5.	1.3	.42	3.0	------	6.6	2.6	.71	2.3	81	.04	.42
31	5.8	------	.42	3.6	------	3.0	------	.60	------	21	.08	------
TOTAL	298.93	95.20	21.72	180.82	172.1	249.9	429.70	192.73	539.26	613.45	29.87	59.58
MEAN	9.64	3.17	.70	5.83	6.15	8.06	14.3	6.22	18.0	19.8	.96	1.99
MAX	112	32	1.5	37	62	116	246	68	199	324	6.6	20
MIN	0	.30	.42	.42	1.3	1.3	.71	.60	.83	.71	.04	0
CFSM	.78	.26	.06	.47	.50	.66	1.16	.51	1.46	1.61	.08	.16
IN.	.90	.29	.07	.55	.52	.76	1.30	.58	1.63	1.86	.09	.18
AC-FT	593	189	43	359	341	496	852	382	1,070	1,220	59	118
(††)	6.71	1.91	.40	2.86	1.59	2.69	4.34	3.80	7.20	7.38	0	3.81

CAL YR 1972 TOTAL 547.63 MEAN 1.50 MAX 112 MIN 0 CFSM .12 IN 1.66 AC-FT 1,090 †† 20.14
WTR YR 1973 TOTAL 2,883.26 MEAN 7.90 MAX 324 MIN 0 CFSM .64 IN 8.72 AC-FT 5,720 †† 42.69

PEAK DISCHARGE (BASE, 290 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0030	5.37	561	6- 3	about 1000	a6.60	1,040
10-26	1630	4.93	429				
3-10	0700	5.56	626	6-19	2015	4.95	435
4-24	0600	5.76	704	7-15	0900	8.78	1,630

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

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 (2.4 km) upstream from The Texas and Pacific Railway Co. bridge, and 7 miles (11.3 km) upstream from West Fork Trinity River.

DRAINAGE AREA.--143 mi² (370 km²).

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, 55,040 acre-ft (67.9 hm³) June 4, elevation, 554.01 ft (168.86 m); minimum, 24,560 acre-ft (30.3 hm³) Oct. 20, elevation, 538.80 ft (164.23 m).
Period of record: Maximum contents, 56,620 acre-ft (69.8 hm³) May 1, 1966, elevation, 554.65 ft (169.06 m); minimum since lake first filled in April 1957, 18,110 acre-ft (22.3 hm³) Oct. 17, 1971, elevation, 534.27 ft (162.85 m).

REMARKS.--Lake is formed by a rolled earthfill dam 6,482 ft (1,976 m) long. Service spillway is an uncontrolled circular drop inlet designed to discharge 4,000 ft³/s (113 m³/s) through 10-foot-diameter (3-meter) concrete conduit. Emergency spillway 882 ft (269 m) 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, 18,980 acre-ft (23.4 hm³) of water was diverted for municipal use and 7,676 acre-ft (9.46 hm³) 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)

538.0	23,320	548.0	41,430
540.0	26,520	550.0	45,710
542.0	29,950	552.0	50,240
544.0	33,570	554.0	55,010
546.0	37,390	555.0	57,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26,600	27,560	26,740	25,330	26,060	27,700	28,800	42,480	41,540	45,380	46,090	41,430
2	26,500	27,620	26,690	25,320	25,990	27,650	28,780	42,480	41,660	45,230	45,910	41,290
3	26,420	27,620	26,620	25,660	25,940	27,630	28,690	42,440	46,600	45,080	45,800	41,120
4	26,300	27,560	26,590	25,890	25,910	27,620	28,620	42,400	52,980	44,950	45,670	40,980
5	26,250	27,530	26,470	25,940	25,860	27,600	28,590	42,480	49,940	44,820	45,540	40,940
6	26,100	27,530	26,400	25,940	25,770	27,670	28,550	42,840	48,440	44,750	45,450	41,080
7	25,990	27,530	26,350	25,870	26,690	27,670	28,520	43,390	47,600	44,750	45,270	41,220
8	25,870	27,530	26,300	25,810	27,940	27,630	28,480	43,390	47,020	44,790	45,120	41,160
9	25,760	27,440	26,240	25,760	28,010	27,700	28,420	43,390	46,660	44,730	44,990	41,080
10	25,660	27,390	26,220	25,690	28,020	29,070	28,380	43,350	46,400	44,600	44,900	41,000
11	25,540	27,390	26,190	25,620	28,020	29,510	28,330	43,290	46,260	44,560	44,730	40,920
12	25,500	27,440	26,170	25,580	28,020	29,600	28,280	43,220	46,110	44,510	44,560	40,830
13	25,360	27,440	26,120	25,530	27,990	29,620	28,350	43,180	46,750	44,450	44,430	40,890
14	25,220	27,440	26,160	25,450	27,940	29,560	28,420	43,070	46,730	44,970	44,300	40,830
15	25,120	27,360	26,120	25,380	27,900	29,490	29,390	43,010	46,530	45,430	44,170	40,790
16	25,010	27,230	26,090	25,320	27,850	29,420	29,920	42,950	46,350	45,400	43,970	40,750
17	24,880	27,230	26,020	25,250	27,840	29,350	32,250	42,840	46,180	45,380	43,820	40,630
18	24,690	27,210	25,990	25,200	27,820	29,320	32,690	42,780	46,020	45,300	43,690	40,540
19	24,690	27,210	25,940	25,170	27,780	29,250	33,020	42,690	46,180	45,190	43,580	40,420
20	24,560	27,190	25,890	25,110	27,770	29,160	33,060	42,560	47,580	45,080	43,410	40,340
21	25,010	27,190	25,840	25,040	27,730	29,100	33,090	42,540	47,110	44,920	43,260	40,200
22	25,610	27,190	25,790	25,030	27,780	29,050	33,110	42,420	46,730	44,790	43,120	40,070
23	25,530	27,190	25,720	25,070	27,840	29,040	34,100	42,380	46,490	44,660	42,970	40,070
24	25,450	27,180	25,670	25,120	27,820	29,210	41,430	42,270	46,260	44,490	42,780	40,180
25	25,370	27,090	25,620	25,590	27,800	29,120	42,380	42,270	46,110	44,340	42,590	40,090
26	26,350	27,020	25,590	26,240	27,780	29,040	42,480	42,210	45,950	44,210	42,380	40,260
27	26,820	26,940	25,530	26,350	27,770	29,000	42,480	42,060	45,820	44,040	42,210	40,380
28	26,860	26,860	25,500	26,290	27,750	28,970	42,480	41,930	45,690	45,160	42,060	40,340
29	26,860	26,820	25,480	26,240	------	28,930	42,480	41,810	45,600	45,800	41,910	40,300
30	27,020	26,770	25,450	26,190	------	28,900	42,480	41,720	45,490	46,380	41,740	40,220
31	27,360	------	25,400	26,100	------	28,850	------	41,510	------	46,290	41,580	------
(†)	540.50	540.15	539.32	539.75	540.73	541.37	548.50	548.04	549.90	550.26	548.07	547.41
(*)	+640	-590	-1,370	+700	+1,650	+1,100	+13,630	-970	+3,980	+800	-4,710	-1,360
MAX	27,360	27,620	26,740	26,350	28,020	29,620	42,480	43,390	52,980	46,380	46,090	41,430
MIN	24,560	26,770	25,400	25,030	25,770	27,600	28,280	41,510	41,540	44,040	41,580	40,070

CAL YR 1972..... * -19,520 MAX 45,340 MIN 24,560
WTR YR 1973..... * +13,500 MAX 52,980 MIN 24,560

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

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 (2.1 km) northeast of Grand Prairie, 3.7 miles (6.0 km) upstream from Bear Creek, 6.5 miles (10.5 km) upstream from Mountain Creek, and at mile 514.6 (828.0 km).

DRAINAGE AREA.--3,065 mi² (7,938 km²).

PERIOD OF RECORD.--March 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 410.42 ft (125.10 m) above mean sea level. Prior to Dec. 6, 1933, nonrecording gage at bridge on old channel 2,500 ft (762 m) southeast of present site at datum 2.56 ft (0.78 m) higher. Dec. 6, 1933, to May 24, 1956, water-stage recorder at site 440 ft (134 m) downstream from site of nonrecording gage at datum 2.56 ft (0.78 m) higher than present datum. May 25, 1956, to Apr. 18, 1957, nonrecording gage at site 1.5 miles (2.4 km) downstream at different datum. Apr. 19 to Aug. 13, 1957, nonrecording gage on bridge at present site and datum.

AVERAGE DISCHARGE.--48 years, 540 ft³/s (15.3 m³/s), 391,200 acre-ft/yr (482 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) June 4, gage height, 22.07 ft (6.73 m); minimum daily, 104 ft³/s (2.95 m³/s) Sept. 22.
Period of record: Maximum discharge, 62,000 ft³/s (1,760 m³/s) May 17, 1949, gage height, 28.00 ft (8.53 m), site and datum then in use, from rating curve extended above 36,000 ft³/s (1,020 m³/s); minimum observed, 3.2 ft³/s (91 dm³/s) June 6, 1925. Maximum stage since at least 1900, 30.6 ft (9.3 m), former site and datum, in May 1908, from information by local resident. Flood in April 1922 reached a stage of 29.0 ft (8.8 m), former site and datum, from floodmarks.

REMARKS.--Records good. Flow largely regulated by seven major reservoirs with a total capacity of 748,200 acre-ft (923 hm³), of which 76,550 acre-ft (94.4 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	971	149	118	235	182	187	713	157	166	655	118
2	135	1,210	130	115	203	186	153	685	167	149	494	115
3	138	319	132	177	156	185	213	616	3,020	150	567	115
4	130	220	125	1,080	141	436	173	587	9,720	135	521	118
5	130	182	115	510	132	456	147	599	6,540	123	1,040	162
6	132	185	112	246	132	696	139	898	2,630	124	1,690	789
7	130	204	118	197	353	1,180	147	2,460	1,280	377	1,610	2,000
8	122	161	120	266	3,050	399	297	1,210	946	780	835	308
9	125	140	130	370	1,170	523	360	1,160	1,020	344	546	199
10	140	132	122	232	428	2,070	261	1,530	904	206	456	156
11	132	125	118	179	332	2,320	153	1,320	838	1,060	417	183
12	128	120	179	161	299	414	134	1,460	747	829	232	173
13	128	437	200	167	291	437	212	1,800	456	425	170	174
14	125	292	182	188	252	585	308	1,810	1,830	547	170	299
15	120	164	204	204	225	552	577	1,720	1,060	3,080	170	181
16	120	140	185	207	212	518	2,420	1,100	519	3,340	170	153
17	125	138	140	197	211	491	1,190	768	760	563	170	140
18	118	303	130	188	487	444	1,980	586	973	321	170	128
19	152	446	130	164	492	318	917	516	1,750	250	167	115
20	280	214	125	161	489	206	1,230	495	5,910	200	164	122
21	200	194	128	146	473	174	962	484	4,100	180	167	112
22	3,020	224	130	152	548	164	601	383	1,780	289	167	104
23	1,230	188	125	140	955	163	802	198	2,070	272	167	143
24	238	161	120	138	477	391	6,290	221	2,170	168	146	184
25	152	200	112	671	236	382	5,060	231	1,650	140	140	192
26	913	182	110	1,960	203	207	774	631	980	129	132	346
27	3,330	173	108	921	193	274	446	751	290	121	132	842
28	462	155	112	288	183	456	661	1,000	229	123	130	403
29	1,130	135	112	204	------	424	839	641	223	2,860	127	198
30	795	138	115	207	------	309	732	320	187	1,270	125	156
31	616	------	115	194	------	324	------	204	------	2,840	122	------
TOTAL	14,851	7,853	4,133	10,148	12,558	15,866	28,365	27,097	54,906	21,561	11,969	8,428
MEAN	479	262	133	327	449	512	946	874	1,830	696	386	281
MAX	3,330	1,210	204	1,960	3,050	2,320	6,290	2,460	9,720	3,340	1,690	2,000
MIN	118	120	108	115	132	163	134	198	157	121	122	104
AC-FT	29,460	15,580	8,200	20,130	24,910	31,470	56,260	53,750	108,900	42,770	23,740	16,720

CAL YR 1972 TOTAL 90,684 MEAN 248 MAX 3,330 MIN 98 AC-FT 179,900
WTR YR 1973 TOTAL 217,735 MEAN 597 MAX 9,720 MIN 104 AC-FT 431,900

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 (30 m) downstream from St. Louis Southwestern Railway Lines bridge, 3.5 miles (5.6 km) southwest of Grapevine, and 7 miles (11 km) upstream from confluence with Little Bear Creek.

DRAINAGE AREA.--29.6 mi² (76.7 km²).

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 554.00 ft (168.86 m) above mean sea level.

AVERAGE DISCHARGE.--6 years (1967-73), 8.23 ft³/s (0.233 m³/s), 5,960 acre-ft/yr (7.35 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,500 ft³/s (42.5 m³/s) Apr. 24, gage height, 12.80 ft (3.90 m); no flow for many days.
Period of record: Maximum discharge, 2,600 ft³/s (73.6 m³/s) May 6, 1969, gage height, 14.35 ft (4.37 m); no flow at times each year.
Maximum stage since at least 1930, about 20 ft (6 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	18	.02	.16	1.4	.63	1.0	5.9	3.6	.58	4.4	0
2	0	2.1	.02	.22	1.2	.69	.98	4.2	4.6	.53	1.1	0
3	0	.39	.02	2.9	.90	.69	1.0	2.7	457	.48	.43	0
4	0	.12	.02	4.2	.90	.63	1.0	2.1	85	.43	.16	0
5	0	.06	.01	.98	.69	.58	.98	2.0	23	.39	.03	0
6	0	.03	.01	.43	.69	36	.90	8.8	14	.35	.02	16
7	0	.02	.01	.43	11	8.0	.82	63	9.9	.31	.01	11
8	0	.01	.01	.98	81	2.0	.69	9.7	7.6	.31	0	2.1
9	0	.01	.01	.12	10	.90	.63	5.7	6.1	.31	0	.48
10	0	0	0	.14	3.4	179	.53	4.0	5.3	.31	0	.16
11	0	0	.01	.12	1.8	15	.48	3.4	5.3	5.3	0	.10
12	0	0	.01	.10	1.5	5.1	.53	2.8	5.1	9.3	0	.08
13	0	.31	.02	.08	1.4	2.5	.71	1.3	5.7	5.3	0	.72
14	0	1.4	.03	.06	1.1	2.0	.57	.90	47	72	0	.05
15	0	.39	.03	.04	1.1	1.9	8.1	.90	17	161	0	.02
16	0	.06	.03	.06	.98	1.8	15	.82	8.2	33	0	.01
17	0	.02	.02	.06	.82	1.8	4.6	.82	5.7	8.2	0	0
18	0	.10	.02	.10	.90	1.7	2.7	.82	4.6	2.5	0	0
19	0	.16	.03	.10	.90	1.7	2.5	.75	14	.98	0	0
20	0	1.3	.03	.12	.82	1.7	1.7	.69	138	.48	0	0
21	0	.75	.04	.19	.75	1.7	1.1	.63	18	.43	0	0
22	33	.48	.05	.19	.75	1.6	7.7	.58	5.7	.43	0	0
23	2.4	.16	.04	.16	.75	1.6	92	4.3	4.0	.43	0	0
24	.63	.08	.05	.25	.82	1.6	807	5.2	1.7	.43	0	0
25	.14	.04	.06	12	.82	1.5	36	114	1.6	.39	0	0
26	84	.03	.19	43	.90	1.4	15	138	1.2	.31	0	.03
27	49	.02	.08	7.2	.75	1.4	11	13	1.3	.28	0	.10
28	1.2	.02	.06	2.8	.63	1.3	8.5	5.7	.98	.31	0	.02
29	1.8	.02	.04	2.3	------	1.3	7.4	2.8	.82	2.5	0	0
30	.82	.02	.08	1.9	------	1.2	6.5	1.8	.63	23	0	0
31	.63	------	.12	1.5	------	1.1	------	2.3	------	20	0	------
TOTAL	173.62	26.10	1.17	82.89	128.67	280.02	1,037.62	409.61	902.63	350.57	6.15	30.87
MEAN	5.60	.87	.038	2.67	4.60	9.03	34.6	13.2	30.1	11.3	.20	1.03
MAX	84	18	.19	43	81	179	807	138	457	161	4.4	16
MIN	0	0	0	.04	.63	.58	.48	.58	.63	.28	0	0
CFSM	.19	.03	.001	.09	.16	.31	1.17	.45	1.02	.38	.007	.03
IN.	.22	.03	.001	.10	.16	.35	1.30	.51	1.13	.44	.007	.04
AC-FT	344	52	2.3	164	255	555	2,060	812	1,790	695	12	61

CAL YR 1972 TOTAL 481.74 MEAN 1.32 MAX 84 MIN 0 CFSM .04 IN .61 AC-FT 956
WTR YR 1973 TOTAL 3,429.92 MEAN 9.40 MAX 807 MIN 0 CFSM .32 IN 4.31 AC-FT 6,800

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	1400	9.82	728
4-24	0700	12.80	1,500
6- 3	1200	11.75	1,160

08049600 Mountain Creek near Cedar Hill, Tex.

LOCATION.--Lat 32°35'03", long 97°01'23", Dallas County, on right bank 50 ft (15 m) downstream from county road bridge, 3.5 miles (5.6 km) downstream from Texas and New Orleans Railroad Co. bridge, 4.5 miles (7.2 km) southwest of Cedar Hill, and 12 miles (19 km) upstream from Mountain Creek Lake Dam.

DRAINAGE AREA.--119 mi² (308 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 478.31 ft (145.79 m) above mean sea level. Prior to Nov. 25, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 52.2 ft³/s (1.48 m³/s), 37,820 acre-ft/yr (46.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 21,700 ft³/s (615 m³/s) Apr. 24, gage height, 24.39 ft (7.43 m); no flow Oct. 1-17, Sept. 14-23.
Period of record: Maximum discharge, 28,300 ft³/s (801 m³/s) May 7, 1969, gage height, 25.10 ft (7.65 m), from rating curve extended above 14,000 ft³/s (396 m³/s); no flow at times each year.
Maximum stage since at least 1910, 30 ft (9 m) May 25, 1922, from information by local resident.

REMARKS.--Records good. At end of year, flow from 14.2 mi² (36.8 km²) above this station was partly controlled by three floodwater-retarding structures with a total combined capacity of 6,750 acre-ft (8.32 hm³) below flood-spillway crests, of which 5,550 acre-ft (6.84 hm³) is floodwater-retarding capacity and 1,200 acre-ft (1.48 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	257	2.1	1.5	65	14	5.5	293	.58	2.2	97	.11
2	0	108	2.2	18	35	15	8.5	179	.53	1.4	85	.10
3	0	24	2.4	457	20	13	15	117	228	1.2	81	.10
4	0	9.5	1.9	42	17	12	9.1	114	4,090	.96	79	.10
5	0	1.8	1.7	2.7	12	12	5.7	119	469	.64	77	.10
6	0	18	1.7	1.1	9.8	115	5.0	202	292	.58	76	.64
7	0	127	1.7	193	169	76	6.3	132	138	.58	74	.52
8	0	19	1.5	115	1,690	29	6.3	114	119	1.2	69	.10
9	0	4.7	1.5	32	251	21	6.5	104	106	3.5	46	.10
10	0	1.1	1.5	18	83	405	4.7	100	101	2.4	39	.10
11	0	1.7	1.7	15	51	66	4.3	85	108	1.9	34	.08
12	0	14	1.9	15	36	30	4.1	81	107	1.8	18	.07
13	0	106	3.9	12	27	25	7.4	72	319	9.3	9.1	.03
14	0	38	8.0	14	21	15	16	59	590	3.2	4.7	0
15	0	8.8	29	18	16	10	91	54	116	5.0	3.5	0
16	0	2.8	15	18	13	15	473	51	90	25	3.0	0
17	0	8.9	7.4	14	12	13	87	47	74	4.5	2.4	0
18	55	3.9	5.2	13	13	10	111	45	53	2.4	1.9	0
19	25	.78	4.3	8.8	13	9.1	53	45	46	1.7	1.7	0
20	5.0	.36	3.9	8.1	12	8.8	35	46	179	1.4	1.5	0
21	85	.44	3.5	8.1	12	8.1	21	35	87	.96	1.3	0
22	140	.48	2.8	7.4	15	7.8	16	15	50	.64	.78	0
23	30	.48	2.7	5.7	41	8.1	1,160	6.8	26	.36	.48	0
24	10	.64	2.4	4.3	31	40	8,840	5.0	16	.18	.29	315
25	5.0	3.3	2.1	423	18	17	453	5.2	9.8	.08	.16	19
26	860	4.1	1.8	1,210	17	13	186	5.7	6.5	.03	.12	76
27	300	3.7	1.7	157	14	10	144	5.0	4.5	.01	.08	2,210
28	85	3.2	1.5	87	13	9.1	135	4.3	3.5	.09	.08	264
29	50	2.5	1.5	42	------	9.1	123	2.2	3.0	2,580	.28	114
30	31	2.1	1.7	20	------	8.5	121	1.1	2.7	537	.16	80
31	114	------	1.7	26	------	7.8	------	.64	------	163	.14	------
TOTAL	1,795.0	776.28	121.9	3,006.7	2,726.8	1,052.4	12,153.4	2,144.94	7,435.11	3,353.21	806.67	3,080.15
MEAN	57.9	25.9	3.93	97.0	97.4	33.9	405	69.2	248	108	26.0	103
MAX	860	257	29	1,210	1,690	405	8,840	293	4,090	2,580	97	2,210
MIN	0	.36	1.5	1.1	9.8	7.8	4.1	.64	.53	.01	.08	0
AC-FT	3,560	1,540	242	5,960	5,410	2,090	24,110	4,250	14,750	6,650	1,600	6,110

CAL YR 1972 TOTAL 7,743.96 MEAN 21.2 MAX 900 MIN 0 AC-FT 15,360
WTR YR 1973 TOTAL 38,452.56 MEAN 105 MAX 8,840 MIN 0 AC-FT 76,270

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-26	about 1800	a19.38	3,330	4-24	0200	24.39	21,700
				6- 4	2100	21.84	8,380
1-26	0400	17.52	2,040	7-29	1000	21.30	6,800
2- 8	0900	18.08	2,420	9-27	0900	20.39	4,960

a From floodmark.

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 (4.2 km) northeast of Mansfield, 3.3 miles (5.3 km) downstream from Texas and New Orleans Railroad Co. bridge, and 10.2 miles (16.4 km) upstream from mouth.

DRAINAGE AREA.--62.8 mi² (163 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 531.08 ft (161.87 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 15.6 ft³/s (0.442 m³/s), 11,300 acre-ft/yr (13.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,420 ft³/s (210 m³/s) June 4, gage height, 28.60 ft (8.72 m); no flow Oct. 1-17, 20, 25.
Period of record: Maximum discharge, 7,420 ft³/s (210 m³/s) June 4, 1973, gage height, 28.60 ft (8.72 m); no flow at times each year.

REMARKS.--Records good except those for Oct. 24 to Nov. 29, which are fair. During the 1973 water year, the city of Mansfield discharged about 381 acre-ft (0.470 hm³) of sewage effluent into a tributary 2.5 miles (4.0 km) upstream from station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.3	.05	.05	5.6	3.8	1.6	13	.59	2.2	8.2	.06
2	0	.39	.06	.86	2.6	3.0	1.3	13	1.0	1.9	5.1	.06
3	0	.34	.08	47	.88	3.4	1.6	10	1,050	1.5	3.4	.06
4	0	.19	.09	10	.59	3.4	1.5	9.3	3,480	1.3	3.0	.06
5	0	.09	.11	.78	.52	2.8	1.3	12	82	1.3	2.4	.09
6	0	11	.09	.19	.45	29	1.3	26	37	1.1	1.9	36
7	0	1.9	.11	17	72	11	2.1	11	19	7.0	1.5	8.4
8	0	1.9	.13	11	450	4.6	2.8	7.9	12	6.2	1.3	.39
9	0	1.5	.16	3.4	23	5.1	2.2	5.8	10	1.0	1.1	.19
10	0	.88	.19	3.4	8.8	140	1.3	6.1	9.3	.78	.78	.11
11	0	.34	.16	3.2	6.1	17	.88	5.4	9.6	1.0	.78	.11
12	0	100	.68	3.0	4.9	7.4	.88	5.1	12	266	.52	.13
13	0	6.6	.22	2.6	4.4	7.6	3.5	4.4	198	52	.52	22
14	0	.08	.72	1.6	3.2	5.4	6.1	4.2	203	4.6	.45	1.4
15	0	.09	.39	.78	2.4	4.0	43	4.0	28	223	.39	.19
16	0	.08	.09	.45	2.1	3.6	102	4.0	16	78	.29	.11
17	0	.13	.06	.29	2.1	3.0	11	3.8	12	9.0	.29	.09
18	38	1.6	.05	.19	2.4	3.0	83	3.6	9.0	4.4	.29	.09
19	3.3	.29	.08	.13	2.4	3.0	28	3.2	14	2.8	.26	.11
20	0	.26	.08	.16	2.2	2.2	13	2.8	104	2.1	.19	.39
21	70	.16	.06	.22	1.9	1.9	4.9	2.2	23	1.5	.19	.29
22	88	.08	.04	.13	4.2	2.1	5.1	1.9	11	1.1	.19	.34
23	.19	.05	.04	.13	7.6	2.4	363	1.5	8.2	1.0	.13	2.4
24	.01	.26	.04	.11	4.9	11	3,490	1.6	6.8	.78	.11	1,410
25	0	.68	.04	184	3.4	5.1	104	2.6	5.6	.59	.11	23
26	262	.39	.04	126	3.4	2.6	42	3.0	5.1	.59	.11	86
27	29	.11	.04	13	2.8	2.1	27	1.9	4.2	.52	.11	355
28	.13	.04	.04	4.0	2.6	1.6	22	.88	3.4	11	.11	51
29	.08	.06	.05	1.9	------	2.2	18	.68	3.2	502	.81	15
30	.04	.06	.06	1.3	------	2.4	16	.59	2.6	26	.09	10
31	.19	------	.08	4.0	------	2.2	------	.59	------	17	.08	------
TOTAL	490.94	131.85	4.13	440.87	627.44	297.9	4,400.36	172.04	5,379.59	1,229.26	34.70	2,023.07
MEAN	15.8	4.40	.13	14.2	22.4	9.61	147	5.55	179	39.7	1.12	67.4
MAX	262	100	.72	184	450	140	3,490	26	3,480	502	8.2	1,410
MIN	0	.04	.04	.05	.45	1.6	.88	.59	.59	.52	.08	.06
AC-FT	974	262	8.2	874	1,240	591	8,730	341	10,670	2,440	69	4,010
(††)	6.90	2.01	.27	3.49	2.21	2.62	4.71	1.34	10.15	3.90	.18	7.83

CAL YR 1972 TOTAL 1,803.52 MEAN 4.93 MAX 262 MIN 0 AC-FT 3,580 †† 26.64
WTR YR 1973 TOTAL 15,232.15 MEAN 41.7 MAX 3,490 MIN 0 AC-FT 30,210 †† 45.70

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
	about			7-12	1800	17.32	1,380
10-26	1600	a14.80	863	7-15	2000	15.63	1,030
2- 8	0600	14.38	792	7-29	1000	15.90	1,080
4-24	0300	27.06	5,650	9-24	1000	25.03	4,480
6- 4	0600	28.60	7,420	9-27	0600	14.28	775

†† Rainfall, in inches.
a From floodmark.

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 (3.7 km) downstream from Walnut Creek, 4.5 miles (7.2 km) west of Duncanville, and 5.5 miles (8.8 km) upstream from Mountain Creek Lake Dam.

DRAINAGE AREA.--225 mi² (583 km²).

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

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

EXTREMES.--Current year: Maximum elevation, 468.48 ft (142.79 m) June 4; minimum daily, 454.89 ft (138.65 m) Oct. 16-18.
Period of record: Maximum elevation, 468.48 ft (142.79 m) June 4, 1973; minimum daily, 454.88 ft (138.65 m) Aug. 27 to Sept. 1, Sept. 5, 1972.

REMARKS.--This station is used to 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	454.90	461.04	456.12	456.08	459.07	457.43	456.89	460.03	456.44	456.70	458.88	456.88
2	454.90	459.22	456.10	456.14	458.29	457.50	456.93	459.15	456.43	456.69	458.76	456.88
3	454.90	457.55	456.10	460.71	457.61	457.39	457.41	459.08	464.20	456.69	458.68	456.87
4	454.90	456.89	456.08	459.38	457.30	457.33	457.17	459.02	464.55	456.69	458.67	456.87
5	454.90	456.58	456.05	458.25	457.19	457.22	456.90	459.17	460.80	456.68	458.66	456.87
6	454.90	456.56	456.03	457.51	457.07	459.68	456.79	459.27	459.90	456.68	458.65	457.03
7	454.90	459.31	456.01	460.24	460.90	458.81	456.89	459.04	459.63	459.34	458.63	457.30
8	454.90	457.35	456.02	459.39	461.20	458.20	457.01	459.00	459.42	457.63	458.60	456.88
9	454.90	456.74	456.02	458.11	459.48	457.77	457.08	458.80	459.30	456.98	458.53	456.88
10	454.90	456.61	456.06	457.47	459.22	462.71	456.88	458.73	459.20	456.85	458.20	456.88
11	454.90	456.34	456.08	457.03	458.93	459.43	456.78	458.50	459.48	458.88	457.96	456.88
12	454.90	456.31	456.17	456.90	458.67	459.23	456.75	458.39	459.15	460.60	457.58	456.88
13	454.90	459.61	456.37	456.98	458.40	459.20	457.11	458.26	460.64	457.90	457.05	457.57
14	454.90	457.67	456.57	457.23	458.03	459.12	458.37	458.06	459.80	456.83	457.03	456.88
15	454.90	456.90	457.54	457.54	457.64	459.00	459.92	457.96	459.17	460.45	457.01	456.88
16	454.89	456.56	457.14	457.39	457.39	458.84	459.77	457.87	458.96	458.73	457.00	456.87
17	454.89	456.36	456.78	457.19	457.38	458.73	459.48	457.78	458.76	457.20	457.00	456.87
18	454.89	456.88	456.57	457.02	457.42	458.75	459.50	457.72	458.83	456.83	456.99	456.86
19	456.02	457.30	456.48	456.82	457.40	458.16	459.30	457.66	459.70	456.82	456.98	456.86
20	456.08	456.78	456.42	456.73	457.29	457.72	458.78	457.62	460.34	456.81	456.98	456.86
21	456.11	456.54	456.36	456.71	457.19	457.37	458.12	457.36	459.27	456.80	456.97	456.86
22	461.00	456.41	456.29	456.68	457.44	457.23	457.81	456.84	458.25	456.80	456.96	456.85
23	457.44	456.34	456.25	456.56	458.70	457.21	462.50	456.76	457.45	456.80	456.96	456.85
24	456.60	456.31	456.19	456.45	458.45	458.68	465.10	456.74	457.12	456.79	456.96	462.67
25	456.24	456.37	456.15	461.46	457.96	458.16	459.89	456.73	456.94	456.79	456.95	458.75
26	461.81	456.37	456.12	460.19	457.73	457.59	459.55	456.72	456.83	456.78	456.94	460.50
27	460.05	456.34	456.08	459.52	457.49	457.23	459.38	456.71	456.74	456.78	456.93	463.00
28	458.84	456.25	456.07	459.17	457.36	457.10	459.28	456.65	456.71	457.37	456.91	459.57
29	458.57	456.17	456.10	458.59	------	456.98	459.33	456.57	456.71	463.66	456.90	458.94
30	457.74	456.13	456.17	458.10	------	457.04	459.20	456.50	456.70	459.92	456.89	458.64
31	457.56	------	456.12	458.85	------	457.07	------	456.45	------	459.24	456.89	------
MEAN	456.20	457.06	456.28	457.95	458.15	458.19	458.53	457.91	458.91	457.73	457.55	457.71
MAX	461.81	461.04	457.54	461.46	461.20	462.71	465.10	460.03	464.55	463.66	458.88	463.00
MIN	454.89	456.13	456.01	456.08	457.07	456.98	456.75	456.45	456.43	456.68	456.89	456.85

CAL YR 1972 MEAN 114.75 MAX 462.27 MIN 454.89
WTR YR 1973 MEAN 457.67 MAX 465.10 MIN 454.89

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 (4.0 km) upstream from Texas and Pacific Railway Co. bridge, and 3.7 miles (6.0 km) southeast of Grand Prairie.

DRAINAGE AREA.--295 mi² (764 km²).

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, 24,510 acre-ft (30.2 hm³) June 18, elevation, 457.58 ft (139.47 m); minimum, 14,120 acre-ft (17.4 hm³) Oct. 18, elevation, 453.25 ft (138.15 m).
Period of record: Maximum contents, 25,790 acre-ft (31.8 hm³) May 7, 1969, elevation, 458.02 ft (139.60 m); minimum, 14,120 acre-ft (17.4 hm³) Oct. 18, 1972, elevation, 453.25 ft (138.15 m).

REMARKS.--Lake is formed by a rolled earthfill dam 5,800 ft (1,768 m) long including a gated spillway with six 34- by 27-foot (10- by 8-meter) 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	457.0	22,840
455.0	17,890	458.0	25,720

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,860	20,900	20,390	20,600	20,160	21,550	20,720	19,950	21,160	23,270	23,360	21,910
2	14,840	20,720	20,390	20,800	20,290	21,580	20,800	20,440	21,240	23,210	23,530	21,860
3	14,800	20,930	20,310	21,220	20,360	21,650	20,800	20,670	21,030	23,190	23,850	21,780
4	14,760	20,980	20,310	20,960	20,470	21,650	20,800	20,880	22,220	23,130	24,020	21,700
5	14,760	21,010	20,190	21,160	20,470	21,680	20,850	21,370	21,960	23,010	23,470	21,910
6	14,660	21,060	20,190	21,270	20,490	20,050	20,900	21,860	22,350	22,980	23,420	22,840
7	14,640	21,240	20,210	21,580	21,190	20,360	20,930	22,300	22,790	23,190	23,130	23,390
8	14,610	21,420	20,210	20,260	23,330	20,470	21,010	22,320	23,070	23,130	23,210	23,330
9	14,550	20,420	20,190	20,440	19,740	20,620	20,980	20,490	23,330	23,160	23,240	23,300
10	14,550	20,390	20,210	20,540	20,070	19,880	20,980	20,670	23,560	23,130	23,470	22,870
11	14,530	20,390	20,260	20,620	20,210	20,210	21,010	20,780	23,960	23,650	23,760	22,790
12	14,550	20,520	20,310	20,700	20,520	20,600	21,010	20,850	22,630	22,610	23,360	22,870
13	14,510	20,600	20,340	20,750	20,470	20,930	21,090	20,900	23,160	23,190	23,190	22,900
14	14,450	20,720	20,440	20,830	20,490	21,140	21,240	20,980	23,440	23,300	23,130	23,160
15	14,410	20,800	20,440	20,900	20,540	21,240	20,140	21,060	23,930	23,620	23,040	20,650
16	14,390	20,800	20,490	21,010	20,570	21,400	21,190	21,110	24,140	23,130	22,960	22,870
17	14,340	20,830	20,540	21,220	20,620	21,600	21,760	21,160	24,340	23,240	23,300	22,660
18	14,120	21,290	20,620	21,140	20,670	21,680	20,290	21,270	23,210	23,210	23,470	22,630
19	14,180	21,340	20,600	21,160	20,700	20,070	20,670	21,270	23,210	23,190	23,040	22,610
20	14,160	21,400	20,600	21,290	20,750	20,070	20,780	21,320	23,360	23,130	22,760	22,530
21	14,470	20,210	20,570	21,240	20,780	20,120	20,900	21,370	23,930	23,040	22,660	22,710
22	15,030	20,290	20,620	21,220	20,960	20,160	20,960	21,400	23,360	22,960	22,630	22,840
23	15,480	20,290	20,600	21,190	21,030	20,190	19,830	21,340	23,470	22,870	22,580	22,660
24	15,550	20,390	20,600	21,220	21,160	20,570	24,310	21,340	23,500	22,810	22,500	21,630
25	15,550	20,390	20,570	19,980	21,240	20,520	20,000	21,450	23,500	22,760	22,380	20,360
26	16,380	20,520	20,620	19,570	21,290	20,540	20,670	21,400	23,500	22,680	22,270	20,780
27	19,550	20,340	20,600	19,080	21,340	20,600	21,110	21,290	23,440	22,870	22,220	21,520
28	20,260	20,340	20,650	19,310	21,400	20,620	21,470	21,160	23,360	24,160	22,170	20,340
29	20,540	20,360	20,670	19,500	------	20,650	21,780	21,140	23,360	24,140	22,090	21,470
30	20,780	20,390	20,650	19,690	------	20,780	21,190	21,090	23,300	23,850	22,040	21,270
31	21,030	------	20,620	20,000	------	20,720	------	21,030	------	23,190	21,960	------
(†)	456.30	456.05	456.14	455.89	456.44	456.18	456.36	456.30	457.16	457.12	456.66	456.39
(*)	+6,110	-640	+230	-620	+1,400	-680	+470	-160	+2,270	-110	-1,230	-690
MAX	21,030	21,420	20,670	21,580	23,330	21,680	24,310	22,320	24,340	24,160	24,020	23,390
MIN	14,120	20,210	20,190	19,080	19,740	19,880	19,830	19,950	21,030	22,610	21,960	20,340

CAL YR 1972..... * +1,100 MAX 22,120 MIN 14,120
WTR YR 1973..... * +6,350 MAX 24,340 MIN 14,120

† 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 (305 m) upstream from bridge on U.S. Highway 80, 1.2 miles (1.9 km) upstream from Texas and Pacific Railroad Co. bridge, 1.5 miles (2.4 km) downstream from Mountain Creek Lake Dam, and 4.4 miles (7.1 km) east of Grand Prairie.

DRAINAGE AREA.--298 mi² (772 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 407.31 ft (124.15 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 99.9 ft³/s (2.83 m³/s), 72,380 acre-ft/yr (89.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,900 ft³/s (733 m³/s) June 4, gage height, 23.28 ft (7.10 m); no flow June 29, 30.
Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) May 7, 1969, gage height, 24.62 ft (7.50 m); no flow in 1964, 1972-73.

REMARKS.--Records good. Flow regulated by Mountain Creek Lake (station 08050050).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	470	.80	.26	2.8	.47	.7	685	.2	.03	1.6	.95
2	.39	601	.67	.47	.67	.56	.8	1.8	1.1	.03	.80	.56
3	.39	3.6	.47	58	.56	.32	1.0	.80	2,250	.05	.56	.26
4	.26	1.3	.67	494	.47	.26	.8	.80	20,600	.09	.47	.14
5	.21	.80	.67	1.3	.39	.26	.7	1.3	4,450	.11	.32	.09
6	.17	1.1	.80	.80	.32	616	.6	3.1	238	.11	.26	28
7	.11	.56	.95	4.6	18	2.8	.8	1.3	3.6	295	401	286
8	.26	.56	.80	747	890	1.3	1.3	27	1.8	271	.67	2.0
9	.26	413	.67	3.7	2,240	1.3	1.3	888	1.1	2.3	.80	1.5
10	.17	4.7	.80	1.6	4.8	1,480	1.1	1.1	1.1	1.8	.56	1.1
11	.11	1.3	.95	1.5	2.2	869	.8	.95	1.6	712	.47	.80
12	.17	.80	1.5	1.3	1.5	3.7	.6	1.1	605	484	.47	.67
13	.17	2.0	.80	1.1	.95	2.3	1.1	.80	3.3	2.9	.47	.56
14	.11	.80	1.1	.80	.67	1.8	1.3	.67	669	2.0	.47	.56
15	.07	.80	.80	.67	.56	1.5	515	.95	2.5	2.2	.47	.47
16	.09	.95	.67	.47	.56	1.5	44	.67	2.0	487	.47	.39
17	.05	.80	.47	.39	.56	1.3	2.5	.47	1.3	2.0	.47	.32
18	.04	6.1	.39	.32	.47	1.1	906	2.4	377	1.1	.56	.21
19	.21	1.8	.32	.26	.47	609	3.4	.95	377	1.1	.47	.17
20	.56	1.1	.26	.21	.39	2.8	1.1	.80	767	.95	.47	.14
21	.95	512	.26	.39	.32	1.6	.7	.67	1.3	.56	.47	.14
22	4.7	3.3	.26	.32	.47	1.5	1.5	.56	257	.47	.47	.14
23	.67	1.6	.26	.21	.95	.95	659	.56	.7	.39	.47	.11
24	.56	1.5	.17	.14	.47	3.5	12,700	.26	.1	.26	.47	563
25	.56	1.3	.21	823	.32	1.6	8,580	.21	.1	.21	.47	1,170
26	13	.95	.21	1,480	.67	1.3	7.5	.21	.1	.14	.47	296
27	2.8	.67	.21	454	.39	1.1	3.4	.04	.1	.21	.47	1,680
28	1.1	.67	.21	1.3	.32	.95	2.5	.04	.1	1.5	.67	1,600
29	1.6	.80	.32	.80	------	.67	1.6	.09	0	1,290	.80	7.4
30	1.8	.95	.26	.56	------	.80	221	.14	0	2,510	.67	4.2
31	4.2	------	.26	3.6	------	.80	------	.11	------	385	.47	------
TOTAL	36.30	2,036.81	17.19	4,083.07	3,170.25	3,612.04	23,662.1	1,622.85	30,612.1	6,454.51	417.73	5,645.88
MEAN	1.17	67.9	.55	132	113	117	789	52.4	1,020	208	13.5	188
MAX	13	601	1.5	1,480	2,240	1,480	12,700	888	20,600	2,510	401	1,680
MIN	.04	.56	.17	.14	.32	.26	.60	.04	0	.03	.26	.09
AC-FT	72	4,040	34	8,100	6,290	7,160	46,930	3,220	60,720	12,800	829	11,200

CAL YR 1972 TOTAL 6,540.70 MEAN 17.9 MAX 1,480 MIN 0 AC-FT 12,970
WTR YR 1973 TOTAL 81,370.83 MEAN 223 MAX 20,600 MIN 0 AC-FT 161,400

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 (1.6 km) west of Farm Road 373, and 2.6 miles (4.2 km) southwest of Muenster.

DRAINAGE AREA.--0.77 mi² (1.99 km²).

PERIOD OF RECORD.--October 1956 to September 1973 (discontinued).

GAGE.--Water-stage recorder and flat-crested weir on concrete drop inlet. Datum of gage is 941.75 ft (287.05 m) above mean sea level (Soil Conservation Service bench mark).

AVERAGE INFLOW.--17 years, 324 acre-ft/yr (0.399 hm³/yr).

AVERAGE OUTFLOW.--17 years, 285 acre-ft/yr (0.351 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 8.10 ft³/s (229 dm³/s) July 30, gage height, 25.00 ft (7.62 m); no outflow at times. Maximum inflow, 192 ft³/s (5.44 m³/s), average for 5-minute interval, July 30, 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 ft³/s (0.40 m³/s) Apr. 29, 1957, gage height, 28.77 ft (8.77 m); maximum gage height, 33.16 ft (10.11 m) Nov. 19, 1964; no outflow for many days each year. Maximum inflow, 842 ft³/s (23.8 m³/s), 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 (244 m) 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 (0.8-meter) square concrete drop inlet connected to a 17-inch (432-millimeter) concrete pipe. The concrete pipe has a steel baffle plate with an 8-inch (203-millimeter) circular opening at entrance. The crest of the drop inlet is at gage height 19.83 ft (6.04 m); crest of emergency spillway is at gage height 34.2 ft (10.4 m). There is also a valve-controlled 8-inch-diameter (203-millimeter) water-supply outlet at the bottom of the drop-inlet structure at gage height 9.33 ft (2.84 m). The capacity of pool at crest of the emergency spillway is 279 acre-ft (0.344 hm³) at crest of the drop inlet 75.1 acre-ft (92,600 m³), and at the controlled outlet pipe 17.8 acre-ft (21,900 m³). 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	4.8	14.9	2.3	30.4	160	69.9	105	49.9	15.4	82.6	10.5	10.2
Outflow	3.6	0	0	15.6	160	69.2	103	47.7	12.0	43.4	39.6	1.4
(†)	-.4	15.5	1.6	15.6	-.5	-.1	.1	-1.3	-.9	35.2	-37.8	3.4
(††)	5.00	5.08	1.20	3.67	1.98	3.57	4.66	4.90	4.56	5.85	0	2.06

CAL YR 1972: Inflow 70.2 Outflow 47.2 † -15.1 †† 25.71
WTR YR 1973: Inflow 556 Outflow 496 † 30.4 †† 42.53

PEAK INFLOW (BASE, 100 FT³/S).--May 6 (1615) *158 ft³/s; July 30 (0800) *192 ft³/s.

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.

08050300 Elm Fork Trinity River near Muenster, Tex.

LOCATION.--Lat 33°36'36", long 97°22'57", Cooke County, on left bank 40 ft (12 m) upstream from bridge on Farm Road 373, 2.5 miles (4.0 km) south of Muenster, 2.5 miles (4.0 km) downstream from Long Branch, and 6.5 miles (10.5 km) upstream from Brushy Elm Creek.

DRAINAGE AREA.--46.0 mi² (119 km²).

PERIOD OF RECORD.--October 1956 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 889.33 ft (271.07 m) above mean sea level (Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--17 years, 19.3 ft³/s (0.547 m³/s), 5.70 in/yr (144.8 mm/yr), 13,980 acre-ft/yr (17.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft³/s (49.3 m³/s) Apr. 24, gage height, 11.95 ft (3.64 m); no flow at times.
Period of record: Maximum discharge, 5,900 ft³/s (167 m³/s) May 1, 1958, gage height, 20.20 ft (6.16 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of indirect measurement of 3,440 ft³/s (97.4 m³/s); no flow at times.
Maximum stage since at least 1900, about 23 ft (7 m) in May 1935, from information by local resident.

REMARKS.--Records good. At end of year, flow from 33.5 mi² (86.8 km²) above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 12,380 acre-ft (15.3 hm³) below the flood-spillway crests, of which 10,500 acre-ft (12.9 hm³) is floodwater-retarding capacity and 1,880 acre-ft (2.32 hm³) 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. Three recording and one nonrecording rain gages are located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.4	.43	.28	37	21	11	26	7.0	3.0	65	1.3
2	0	.46	.46	.28	30	19	12	19	9.1	3.0	50	.91
3	0	.18	.55	8.1	18	25	13	16	164	2.7	38	.80
4	0	.12	.52	5.4	14	23	12	14	43	2.7	28	.74
5	0	.11	.63	3.9	12	17	11	13	26	2.7	25	2.1
6	0	16	.65	3.0	11	47	10	265	13	2.9	20	8.2
7	0	.49	.50	2.5	10	27	10	234	8.1	2.9	18	7.7
8	0	.27	.50	2.0	140	20	11	121	7.0	3.5	14	4.8
9	0	.28	.50	1.5	100	18	11	88	6.4	3.2	14	4.1
10	0	.39	.50	1.0	54	58	10	63	6.0	3.3	13	3.2
11	0	.50	.40	1.0	37	57	10	45	5.7	7.6	12	2.7
12	0	.85	.35	2.0	30	31	10	38	5.7	3.4	9.5	2.4
13	0	5.2	.35	2.5	24	25	13	24	5.7	3.2	7.0	2.2
14	0	.42	.30	4.0	18	20	14	15	10	3.0	6.6	1.8
15	0	.29	.25	8.3	14	16	191	12	6.7	3.9	6.3	1.6
16	0	.24	.30	8.4	13	15	157	11	5.7	3.6	5.9	1.4
17	0	.22	.40	8.2	13	13	142	9.8	5.1	3.2	5.9	1.4
18	0	.52	.50	7.8	14	12	145	9.4	4.8	3.1	5.6	1.4
19	0	.48	.52	7.1	16	12	125	9.1	4.8	2.9	5.6	1.4
20	0	.36	.72	6.8	13	11	116	8.8	4.8	2.7	5.4	1.3
21	0	.49	.44	6.8	12	9.5	111	8.3	4.2	2.8	5.0	1.2
22	0	.55	.44	5.7	13	9.5	94	8.8	3.6	2.6	4.9	.94
23	0	.44	.62	5.4	21	13	74	9.6	3.6	2.5	4.8	.94
24	0	.54	.52	5.4	16	36	532	7.2	3.6	2.4	4.7	.84
25	0	.59	.52	15	14	25	177	7.5	3.6	2.3	4.3	.82
26	0	.44	.62	87	15	15	149	6.8	3.6	2.2	4.3	1.1
27	.04	.44	.62	69	14	13	125	6.2	3.6	2.2	4.0	1.7
28	.05	.32	.62	37	13	13	84	6.0	3.6	26	3.8	1.4
29	.05	.31	.72	23	------	11	58	5.7	3.6	96	4.0	1.1
30	8.8	.37	.82	20	------	13	39	5.7	3.6	312	3.6	.96
31	17	------	.38	19	------	14	------	5.4	------	88	2.6	------
TOTAL	25.94	33.27	15.65	377.36	736	659.0	2,477	1,118.3	385.2	605.5	400.8	62.45
MEAN	.84	1.11	.50	12.2	26.3	21.3	82.6	36.1	12.8	19.5	12.9	2.08
MAX	17	16	.82	87	140	58	532	265	164	312	65	8.2
MIN	0	.11	.25	.28	10	9.5	10	5.4	3.6	2.2	2.6	.74
CFSM	.02	.02	.01	.27	.57	.46	1.80	.78	.28	.42	.28	.05
IN.	.02	.03	.01	.31	.60	.53	2.00	.90	.31	.49	.32	.05
AC-FT	51	66	31	748	1,460	1,310	4,910	2,220	764	1,200	795	124

CAL YR 1972 TOTAL 1,467.33 MEAN 4.01 MAX 205 MIN 0 CFSM .09 IN 1.19 AC-FT 2,910
WTR YR 1973 TOTAL 6,896.47 MEAN 18.9 MAX 532 MIN 0 CFSM .41 IN 5.58 AC-FT 13,680

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 (6.6 km) downstream from Spring Creek, 5.0 miles (8.0 km) upstream from Isle du Bois Creek, and 5.4 miles (8.7 km) northeast of Sanger.

DRAINAGE AREA.--381 mi² (987 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 553.72 ft (168.77 m) above mean sea level. Prior to May 7, 1955, at site 500 ft (152 m) downstream at same datum.

AVERAGE DISCHARGE.--24 years, 146 ft³/s (4.13 m³/s), 105,800 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,900 ft³/s (450 m³/s) Apr. 24, gage height, 26.54 ft (8.09 m); minimum, 1.2 ft³/s (34 dm³/s) Oct. 13, 16, 17.
Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) Feb. 9, 1966, gage height, 27.71 ft (8.45 m); no flow at times. Maximum stage since at least 1903, 30.7 ft (9.4 m) in May 1908, from information by local residents. Flood of May 18, 1935, reached a stage of 29.7 ft (9.1 m), from floodmarks.

REMARKS.--Records good. At end of year, flow from 94.7 mi² (245 km²) above this station was partly controlled by 41 floodwater-retarding structures with a total combined capacity of 30,920 acre-ft (38.1 hm³) below the flood-spillway crests, of which 26,790 acre-ft (33.0 hm³) is floodwater-retarding capacity and 4,130 acre-ft (5.09 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	365	18	22	262	72	119	135	41	24	454	34
2	1.7	203	18	22	154	217	80	124	57	22	228	34
3	1.6	78	18	762	106	128	75	99	781	21	142	34
4	1.5	31	16	281	87	377	69	87	1,180	19	112	34
5	1.5	17	16	104	78	149	61	82	537	18	94	34
6	1.4	2,030	15	71	71	1,140	54	89	208	18	84	129
7	1.4	702	14	73	597	1,050	50	3,490	118	18	73	204
8	1.4	143	16	80	3,730	280	51	633	86	18	62	129
9	1.4	87	16	56	529	195	56	343	66	18	57	77
10	1.4	62	16	41	259	1,990	51	222	55	19	52	50
11	1.4	43	16	36	169	836	45	174	47	36	47	28
12	1.4	35	16	33	141	259	42	445	46	28	42	22
13	1.4	591	20	33	125	174	44	161	60	22	39	21
14	1.4	157	22	64	107	155	47	120	1,970	24	35	20
15	1.4	60	20	96	93	125	1,210	101	198	402	30	19
16	1.4	31	18	87	84	102	2,330	92	117	137	28	17
17	1.3	22	17	75	79	91	591	85	115	36	32	17
18	1.4	110	16	68	80	86	473	80	81	25	31	16
19	1.4	125	16	58	83	82	361	75	78	22	27	15
20	1.7	48	16	50	78	76	254	71	1,160	20	24	15
21	3.4	29	15	49	69	70	215	67	149	19	24	14
22	335	31	14	49	67	67	750	69	75	19	24	14
23	20	27	14	42	102	66	624	133	54	19	24	14
24	5.8	25	13	36	104	97	7,320	97	45	19	24	13
25	4.5	28	13	135	85	141	3,020	127	39	19	24	13
26	38	29	12	1,290	83	105	594	94	36	19	24	26
27	39	26	11	358	90	83	394	69	32	19	24	527
28	12	22	12	171	78	75	254	56	29	18	26	122
29	167	20	11	113	------	70	182	48	27	1,320	29	47
30	3,300	18	15	92	------	101	146	44	26	6,410	35	29
31	1,880	------	25	99	------	295	------	41	------	3,850	35	------
TOTAL	5,834.1	5,195	495	4,546	7,590	8,754	19,562	7,553	7,513	12,678	1,986	1,768
MEAN	188	173	16.0	147	271	282	652	244	250	409	64.1	58.9
MAX	3,300	2,030	25	1,290	3,730	1,990	7,320	3,490	1,970	6,410	454	527
MIN	1.3	17	11	22	67	66	42	41	26	18	24	13
AC-FT	11,570	10,300	982	9,020	15,050	17,360	38,800	14,980	14,900	25,150	3,940	3,510

CAL YR 1972 TOTAL 20,135.3 MEAN 55.0 MAX 3,300 MIN 1.3 AC-FT 39,940
WTR YR 1973 TOTAL 83,474.1 MEAN 229 MAX 7,320 MIN 1.3 AC-FT 165,600

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	2000	23.86	6,620	4-24	1430	26.54	15,900
11- 6	1900	20.45	4,150	5- 7	0930	22.20	5,200
2- 8	0800	22.99	5,580	6-14	0930	23.16	5,950
4-15	2200	22.73	5,600	7-30	1900	25.80	9,900

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 (3.9 km) downstream from Wolf Creek, 3.0 miles (4.8 km) west of Pilot Point, and 6.3 miles (10.1 km) upstream from mouth.

DRAINAGE AREA.--266 mi² (689 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 555.48 ft (169.31 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 8, 1958, water-stage recorder at site 1.0 mile (1.6 km) upstream at datum 4.22 ft (1.29 m) higher.

AVERAGE DISCHARGE.--24 years, 116 ft³/s (3.29 m³/s), 84,040 acre-ft/yr (104 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,700 ft³/s (190 m³/s) Sept. 28, gage height, 24.13 ft (7.35 m); no flow Oct. 4-20.
Period of record: Maximum discharge, 22,700 ft³/s (643 m³/s) Apr. 26, 1957, gage height, 28.2 ft (8.6 m), present site and datum; no flow at times each year.
Maximum stage since at least 1900, 30.4 ft (9.3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	1,470	3.7	1.5	566	13	84	32	12	4.0	324	.3
2	.10	739	3.2	1.4	260	16	33	31	11	4.5	65	.3
3	.02	223	3.1	597	83	36	26	28	446	4.1	33	.3
4	0	51	2.7	828	41	1,140	26	20	1,560	3.4	18	.2
5	0	23	6.1	164	29	780	21	20	1,750	2.4	11	.6
6	0	19	5.1	65	22	744	16	31	1,800	1.9	5.8	77
7	0	216	10	52	51	1,420	12	1,410	556	1.9	3.7	640
8	0	102	3.9	49	1,430	224	10	1,750	45	1.8	2.7	843
9	0	34	2.3	42	1,140	77	9.6	131	21	1.7	2.0	66
10	0	17	1.9	32	137	1,750	11	51	13	1.6	1.4	17
11	0	13	6.8	23	71	4,010	9.9	36	13	110	2.7	7.2
12	0	7.1	4.5	16	47	385	7.5	48	28	48	7.2	4.1
13	0	325	3.0	12	35	127	6.6	36	21	11	3.0	109
14	0	580	2.2	12	33	137	11	23	1,650	5.4	2.2	980
15	0	96	2.4	20	26	124	748	23	908	739	1.5	334
16	0	28	3.5	26	18	71	4,730	22	150	354	2.0	21
17	0	16	3.7	22	14	48	1,950	20	82	70	1.4	9.3
18	0	27	2.5	17	13	33	184	19	79	27	1.1	5.3
19	0	210	2.2	14	11	31	122	18	38	16	1.1	3.5
20	0	104	2.0	11	10	27	94	16	1,090	10	1.1	2.9
21	.47	36	1.9	10	11	30	72	14	638	4.9	.90	2.2
22	621	20	2.2	11	10	29	101	13	84	3.3	.83	1.8
23	63	13	2.9	17	13	27	1,900	123	33	2.6	.73	1.6
24	9.3	9.9	2.0	13	16	31	3,530	102	21	1.9	.61	1.5
25	4.2	8.5	1.6	32	14	149	4,630	119	14	1.3	.51	1.3
26	85	12	1.5	1,040	15	42	580	347	9.9	.96	.48	265
27	687	7.3	1.5	883	18	23	111	122	7.3	.80	.63	4,130
28	318	9.0	1.5	155	15	15	57	31	5.8	.82	.44	5,160
29	480	8.1	1.5	64	------	11	41	18	5.3	107	.40	830
30	1,340	4.9	1.5	29	------	10	33	16	4.6	2,330	.36	89
31	3,490	------	1.6	34	------	56	------	14	------	2,850	.38	------
TOTAL	7,098.66	4,428.8	94.5	4,292.9	4,149	11,616	19,166.6	4,684	11,095.9	6,721.28	496.17	13,603.4
MEAN	229	148	3.05	138	148	375	639	151	370	217	16.0	453
MAX	3,490	1,470	10	1,040	1,430	4,010	4,730	1,750	1,800	2,850	324	5,160
MIN	0	4.9	1.5	1.4	10	10	6.6	13	4.6	.80	.36	.20
AC-FT	14,080	8,780	187	8,510	8,230	23,040	38,020	9,290	22,010	13,330	984	26,980

CAL YR 1972 TOTAL 13,955.37 MEAN 38.1 MAX 3,490 MIN 0 AC-FT 27,680
WTR YR 1973 TOTAL 87,447.21 MEAN 240 MAX 5,160 MIN 0 AC-FT 173,500

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1400	21.09	4,250	6-14	1130	17.87	2,960
3-11	0500	23.11	5,700	7-30	2400	20.63	4,000
4-16	1600	22.75	5,400	9-28	0130	24.13	6,700
4-25	0400	23.51	6,060				

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 (305 m) downstream from Interstate Highway 35 and U.S. Highway 77, 1,350 ft (411 m) downstream from Duck Creek, 1.1 miles (1.8 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 1.8 miles (2.9 km) south of Sanger.

DRAINAGE AREA.--295 mi² (764 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 587.23 ft (178.99 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--24 years, 77.0 ft³/s (2.18 m³/s), 55,790 acre-ft/yr (68.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,390 ft³/s (209 m³/s) July 30, gage height, 20.16 ft (6.14 m); no flow Oct. 1-20, 24, 25.
Period of record: Maximum discharge, 18,200 ft³/s (515 m³/s) Sept. 13, 1950, gage height, 24.80 ft (7.56 m); no flow at times most years.
Maximum stage since at least 1880, 31.5 ft (9.6 m) in May 1908, from information by Gulf, Colorado, and Santa Fe Railway Co. Flood in May 1935 reached a stage of 29.0 ft (8.8 m), from information by State Highway Department.

REMARKS.--Records good. No appreciable diversion above station. At end of year, flow from 153 mi² (396 km²) above this station was partly controlled by 65 floodwater-retarding structures with a total capacity of 44,480 acre-ft (54.8 hm³) below the flood-spillway crests, of which 39,310 acre-ft (48.5 hm³) is floodwater-retarding capacity and 5,170 acre-ft (6.37 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	74	9.3	8.0	91	44	52	106	25	19	865	6.0
2	0	34	9.1	7.5	74	50	41	93	34	17	446	5.6
3	0	14	8.7	90	55	53	40	74	395	14	237	5.4
4	0	8.8	8.3	109	48	73	39	66	422	13	136	5.3
5	0	7.0	7.9	64	43	63	33	65	271	12	88	6.6
6	0	325	7.1	48	40	163	29	64	190	10	72	30
7	0	214	6.7	47	72	297	28	262	88	11	52	116
8	0	72	6.8	48	602	139	29	510	63	9.8	37	61
9	0	32	7.6	41	293	91	31	216	48	10	26	31
10	0	19	7.3	34	147	352	29	117	38	10	21	20
11	0	12	7.7	31	99	322	26	86	33	18	21	14
12	0	10	8.0	29	81	146	25	99	35	20	19	11
13	0	99	9.1	28	70	102	28	79	34	16	18	11
14	0	58	9.8	31	57	87	35	58	1,710	14	16	9.2
15	0	23	9.1	44	48	69	1,270	47	313	26	15	8.1
16	0	15	9.1	45	43	58	2,880	42	164	48	10	7.7
17	0	12	9.1	41	41	50	358	40	99	29	11	8.7
18	0	16	9.1	39	42	46	471	38	77	17	9.6	7.4
19	0	27	8.3	34	44	44	394	36	78	10	9.0	7.6
20	0	20	8.6	30	42	39	200	34	426	7.9	8.7	8.2
21	10	16	8.2	29	39	35	138	33	202	6.8	8.3	7.6
22	36	16	8.0	28	38	34	994	33	104	6.2	7.9	6.8
23	.06	15	7.6	25	55	35	2,210	54	61	6.2	6.9	6.5
24	0	14	7.0	22	62	56	3,990	129	43	5.4	6.7	6.9
25	0	14	6.8	35	53	73	1,570	61	35	4.7	6.3	7.4
26	6.7	14	6.5	339	50	50	324	98	27	4.2	5.8	7.7
27	.90	12	6.5	197	51	40	278	61	23	3.4	5.5	25
28	.04	9.8	6.5	111	47	38	171	36	22	4.9	5.8	34
29	1.0	8.8	6.9	72	------	36	118	28	21	216	9.1	22
30	397	9.0	8.3	61	------	41	113	26	19	3,800	8.0	15
31	299	------	9.0	58	------	60	------	26	------	1,450	6.8	------
TOTAL	750.70	1,220.4	248.0	1,825.5	2,427	2,786	15,944	2,717	5,100	5,839.5	2,194.4	518.7
MEAN	24.2	40.7	8.00	58.9	86.7	89.9	531	87.6	170	188	70.8	17.3
MAX	397	325	9.8	339	602	352	3,990	510	1,710	3,800	865	116
MIN	0	7.0	6.5	7.5	38	34	25	26	19	3.4	5.5	5.3
AC-FT	1,490	2,420	492	3,620	4,810	5,530	31,620	5,390	10,120	11,580	4,350	1,030

CAL YR 1972 TOTAL 10,830.30 MEAN 29.6 MAX 1,280 MIN 0 AC-FT 21,480
WTR YR 1973 TOTAL 41,571.20 MEAN 114 MAX 3,990 MIN 0 AC-FT 82,460

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0400	15.52	3,880	6-14	0830	19.58	6,780
4-24	2000	16.85	4,610	7-30	1530	20.16	7,390

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 (2.6 km) upstream from mouth, and 4.7 miles (7.6 km) southwest of Gunter.

DRAINAGE AREA.--2.10 mi² (5.44 km²).

PERIOD OF RECORD.--April 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 615.51 ft (187.61 m) above mean sea level (Soil Conservation Service bench mark).

AVERAGE INFLOW.--7 years, 986 acre-ft/yr (1.22 hm³/yr).

AVERAGE OUTFLOW.--7 years, 883 acre-ft/yr (1.09 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 24.5 ft³/s (0.694 m³/s) Sept. 27, gage height, 23.52 ft (7.17 m); no outflow most of time. Maximum inflow, 675 ft³/s (19.1 m³/s), average for 5-minute interval, May 6, computed and adjusted as below; no inflow at times.

Period of record: Maximum outflow, 31.9 ft³/s (0.903 m³/s) Apr. 30, 1966, gage height, 27.09 ft (8.26 m); no outflow most of time each year. Maximum inflow, 3,240 ft³/s (91.8 m³/s), 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 (484 m) long, with a 130-foot (40-meter) wide emergency spillway at left end of dam, with crest at gage height 29.2 ft (8.9 m). Outlet structure is a 2.0- by 4.0-foot (0.6- by 1.2-meter) uncontrolled concrete drop-inlet structure with crest at gage height 20.00 ft (6.10 m) and connected to a 24-inch (610-millimeter) concrete pipe with invert at gage height 13.0 ft (4.0 m). There is also a 12-inch (305-millimeter) controlled slide gate used as a water-supply outlet that is connected to the drop inlet at gage height 13.5 ft (4.1 m). Pool capacity is 868 acre-ft (1.07 hm³) at spillway crest, 159 acre-ft (0.196 hm³) at crest of drop inlet, and 40 acre-ft (49,320 m³) 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 basic-data report.

REVISIONS.--WRD Texas 1968: Drainage area.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	202	92.3	4.2	112	83.0	306	139	122	261	91.6	17.4	340
Outflow	82.8	96.7	.2	98.2	87.3	298	127	112	253	46.4	34.2	266
(†)	115	-9.8	-4.4	14.2	-9.8	4.3	2.0	-9.1	-.4	33.7	-41.1	57.9
(††)	5.60	2.64	.33	2.48	1.28	4.25	2.25	2.81	5.16	4.80	.58	4.33

CAL YR 1972: Inflow 352 Outflow 277 † -5.5 †† 24.14
WTR YR 1973: Inflow 1,770 Outflow 1,500 † 152 †† 36.51

PEAK INFLOW (BASE, 100 FT³/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
10-22	about 0100	about *600	5- 6	2240	*675
3- 3	2340	*166	6- 3	0510	*211
3- 6	0945	*181	6- 5	0445	*204
3-10	0810	*472	7-30	0855	*327
3-24	2010	*304	9- 5	2125	*292
4-24	0400	*501	9-26	2055	*631

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.

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 (5.8 km) northwest of Celina, and 10 miles (16 km) upstream from Mustang Creek.

DRAINAGE AREA.--46.7 mi² (121 km²).

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 582.4 ft (177.5 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--7 years, 33.1 ft³/s (0.937 m³/s), 9.62 in/yr (244.3 mm/yr), 23,980 acre-ft/yr (29.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,420 ft³/s (96.9 m³/s) Sept. 27, gage height, 12.38 ft (3.77 m); no flow for many days. Period of record: Maximum discharge, 5,340 ft³/s (151 m³/s) May 31, 1967, gage height, 13.32 ft (4.06 m); 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 mi² (73.6 km²) above this station was partly controlled by 12 floodwater-retarding structures with a total combined capacity of 9,490 acre-ft (11.7 hm³) below the flood-spillway crests, of which 7,960 acre-ft (9.81 hm³) is floodwater-retarding capacity and 1,530 acre-ft (1.89 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	517	1.6	.20	88	8.6	4.4	14	5.0	.02	40	0
2	0	234	1.3	.14	39	9.6	3.3	10	9.7	0	20	0
3	0	133	1.2	238	23	117	3.1	7.7	913	0	11	0
4	0	66	1.1	94	16	294	2.4	6.9	299	0	6.0	0
5	0	38	.74	52	12	138	1.8	6.6	971	0	3.2	0
6	0	44	.38	30	9.4	422	1.4	33	331	0	1.8	117
7	0	34	.14	33	154	228	1.3	430	243	0	1.3	173
8	0	18	.14	26	328	140	1.3	213	180	0	.96	127
9	0	13	.20	19	121	100	1.3	165	97	0	.85	65
10	0	10	.38	7.9	65	1,040	1.2	94	57	0	.74	34
11	0	6.9	.38	7.0	38	342	1.2	46	39	0	1.7	19
12	0	6.0	.96	5.5	22	270	1.1	30	25	0	1.8	11
13	0	119	4.0	5.0	17	241	2.6	16	59	0	1.3	7.3
14	0	57	3.0	6.0	12	181	2.4	11	292	0	.96	4.5
15	0	33	6.7	6.8	9.0	86	113	8.9	124	0	.85	2.9
16	0	19	2.4	7.8	6.7	46	146	6.2	63	12	.50	2.0
17	0	11	1.5	7.5	5.3	26	50	4.5	31	8.2	.28	1.4
18	0	58	2.1	6.9	4.3	16	28	3.5	18	3.1	.20	1.1
19	0	21	1.6	5.2	3.5	11	20	2.5	16	1.4	.10	.85
20	0	11	1.4	4.1	3.1	7.8	14	1.8	18	1.2	.05	.50
21	17	9.4	1.4	4.9	2.6	5.2	11	1.3	18	1.0	0	.28
22	870	9.6	1.4	5.2	2.5	3.8	81	.90	10	.62	0	.14
23	132	6.5	.62	3.5	3.8	3.4	89	.80	5.0	.38	0	.07
24	61	5.3	.28	2.5	3.3	5.4	780	5.0	3.0	.20	0	.05
25	35	6.0	.14	85	3.0	95	268	305	1.2	.14	0	.02
26	225	5.0	.07	241	8.2	56	189	74	.70	.07	0	282
27	176	4.6	.03	101	4.7	30	97	11	.20	.02	0	1,410
28	69	2.7	.02	59	3.4	18	53	8.0	.15	.01	0	430
29	273	1.8	.02	32	------	12	29	6.0	.08	.02	0	344
30	171	2.0	.74	20	------	8.8	19	4.2	.04	107	0	296
31	126	------	1.3	48	------	6.2	------	3.3	------	88	0	------
TOTAL	2,155	1,501.8	37.24	1,164.14	1,007.8	3,967.8	2,015.8	1,530.10	3,829.07	223.38	93.59	3,329.11
MEAN	69.5	50.1	1.20	37.6	36.0	128	67.2	49.4	128	7.21	3.02	111
MAX	870	517	6.7	241	328	1,040	780	430	971	107	40	1,410
MIN	0	1.8	.02	.14	2.5	3.4	1.1	.80	.04	0	0	0
CFSM	1.49	1.07	.03	.81	.77	2.74	1.44	1.06	2.74	.15	.06	2.38
IN.	1.72	1.20	.03	.93	.80	3.16	1.61	1.22	3.05	.18	.07	2.65
AC-FT	4,270	2,980	74	2,310	2,000	7,870	4,000	3,030	7,590	443	186	6,600

CAL YR 1972 TOTAL 4,004.47 MEAN 10.9 MAX 870 MIN 0 CFSM .23 IN 3.19 AC-FT 7,940
WTR YR 1973 TOTAL 20,854.83 MEAN 57.1 MAX 1,410 MIN 0 CFSM 1.22 IN 16.61 AC-FT 41,370

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 (2.4 km) upstream from Mustang Creek, 5.5 miles (8.8 km) east of Aubrey, and 18 miles (29 km) upstream from Lewisville Dam.

DRAINAGE AREA.--75.5 mi² (196 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 534.76 ft (162.99 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--17 years, 42.7 ft³/s (1.21 m³/s), 7.68 in/yr (195.1 mm/yr), 30,940 acre-ft/yr (38.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,650 ft³/s (103 m³/s) Sept. 27, gage height, 15.84 ft (4.83 m); no flow for many days.
Period of record: Maximum discharge, 7,830 ft³/s (222 m³/s) Apr. 26, 1957, gage height, 17.34 ft (5.29 m); no flow at times each year.
Maximum stage since about 1900, 18.2 ft (5.5 m) 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 mi² (92.5 km²) above this station was partly controlled by 16 floodwater-retarding structures with a total combined capacity of 12,340 acre-ft (15.2 hm³) below the flood-spillway crests, of which 10,260 acre-ft (12.7 hm³) is floodwater-retarding capacity and 2,080 acre-ft (2.56 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	621	3.0	1.0	145	5.7	7.9	19	3.7	0	90	0
2	.14	509	2.7	.63	58	15	6.6	14	3.9	0	51	0
3	.06	242	2.3	333	32	39	5.7	9.8	548	0	23	0
4	.02	119	2.0	186	20	435	5.2	7.3	677	0	10	0
5	.01	61	1.7	79	14	210	4.3	5.6	1,110	0	6.4	.04
6	0	63	1.4	45	11	398	3.6	9.1	726	0	4.0	74
7	0	105	.95	43	106	370	3.2	413	332	0	2.3	204
8	0	35	1.2	46	540	193	3.0	263	261	0	.95	169
9	0	21	.70	22	199	162	2.9	194	158	0	.23	98
10	0	15	.63	15	91	1,170	2.8	125	94	0	.06	51
11	0	11	.86	11	53	493	2.6	79	64	0	.04	28
12	0	9.2	1.0	8.2	33	340	2.1	141	40	0	1.2	14
13	0	160	3.6	8.0	23	303	3.9	32	33	0	2.3	9.3
14	0	99	4.4	8.5	16	257	4.5	17	457	0	1.3	6.9
15	0	53	7.1	10	12	138	49	12	270	0	.45	4.8
16	0	32	6.0	11	8.9	70	313	9.1	101	3.8	.14	3.0
17	0	20	3.3	11	7.2	40	83	7.0	52	15	.04	1.9
18	0	125	2.6	11	6.3	23	46	5.2	24	7.3	0	.63
19	0	72	2.8	9.1	5.5	15	30	4.0	14	4.0	0	.23
20	0	23	2.4	7.7	4.9	11	21	3.2	22	1.7	0	.06
21	1.1	15	2.4	7.5	4.3	8.7	15	2.6	14	.35	0	.01
22	1,480	14	2.1	8.2	4.2	7.1	51	2.0	8.1	.07	0	0
23	312	10	1.7	7.3	5.2	6.0	164	3.6	5.1	.01	.01	0
24	166	8.4	.95	5.5	6.0	6.4	1,010	2.5	3.0	.01	.01	0
25	114	8.3	.63	57	5.2	68	422	116	1.9	0	.01	0
26	285	7.6	.45	411	6.5	68	277	541	.70	0	.01	17
27	531	6.5	.30	164	9.7	40	163	82	.14	0	.01	2,150
28	176	5.3	.20	85	6.1	23	80	46	.05	0	.01	771
29	381	4.0	.30	46	------	15	46	19	.02	.03	.01	445
30	269	3.1	.95	27	------	12	27	8.8	.01	146	0	393
31	236	------	.70	24	------	9.7	------	5.3	------	242	0	------
TOTAL	3,951.78	2,477.4	61.32	1,708.63	1,433.0	4,951.6	2,855.3	2,198.1	5,023.62	420.27	193.48	4,440.87
MEAN	127	82.6	1.98	55.1	51.2	160	95.2	70.9	167	13.6	6.24	148
MAX	1,480	621	7.1	411	540	1,170	1,010	541	1,110	242	90	2,150
MIN	0	3.1	.20	.63	4.2	5.7	2.1	2.0	.01	0	0	0
CFSM	1.68	1.09	.03	.73	.68	2.12	1.26	.94	2.21	.18	.08	1.96
IN.	1.95	1.22	.03	.84	.71	2.44	1.41	1.08	2.48	.21	.10	2.19
AC-FT	7,840	4,910	122	3,390	2,840	9,820	5,660	4,360	9,960	834	384	8,810

CAL YR 1972 TOTAL 7,211.37 MEAN 19.7 MAX 1,480 MIN 0 CFSM .26 IN 3.55 AC-FT 14,300
WTR YR 1973 TOTAL 29,715.37 MEAN 81.4 MAX 2,150 MIN 0 CFSM 1.08 IN 14.64 AC-FT 58,940

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 (3 km) upstream from bridge on State Highway 121, 2.4 miles (3.9 km) northeast of Lewisville, 12 miles (19 km) upstream from Denton Creek, and at mile 30.0 (48.3 km).

DRAINAGE AREA.--1,660 mi² (4,299 km²).

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 (1,220 m) upstream at same datum.

EXTREMES.--Current year: Maximum contents, 591,800 acre-ft (730 hm³) Apr. 29, elevation, 520.04 ft (158.51 m); minimum, 328,900 acre-ft (406 hm³) Oct. 20, elevation, 508.30 ft (154.93 m).
Period of record: Maximum contents, 1,146,000 acre-ft (1,413 hm³) June 3, 1957, elevation, 535.57 ft (163.24 m); minimum since initial filling in 1957, 307,200 acre-ft (379 hm³) Feb. 29, 1964, elevation, 507.00 ft (154.53 m).

REMARKS.--Lake is formed by a rolled-fill dam, 32,888 ft (10,024 m) long including a 560-foot (171-meter) uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of a 16-foot-diameter (5-meter) conduit controlled by three 6.5- by 13-foot (2.0- by 4-meter) broome-type gates and two 60-inch (2-meter) 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 298 mi² (772 km²) above this station was partly controlled by 129 floodwater-retarding structures with a total combined capacity of 93,020 acre-ft (115 hm³) below the flood-spillway crests, of which 80,910 acre-ft (99.8 hm³) is floodwater-retarding capacity and 12,110 acre-ft (14.9 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 626 acre-ft (0.772 hm³), of which 124 acre-ft (0.153 hm³) 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)

507.0	307,200	515.0	464,500	521.0	619,100
509.0	340,800	517.0	512,600	523.0	678,500
511.0	377,100	519.0	563,600	526.0	773,100
513.0	419,300				

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342,900	395,300	419,700	412,100	446,900	467,400	467,400	581,700	479,400	495,800	540,200	457,700
2	342,200	401,300	419,500	413,200	448,300	467,900	468,100	575,000	475,200	488,400	535,800	457,200
3	341,300	402,400	419,500	417,100	448,700	469,300	467,100	568,500	481,600	482,700	528,500	456,300
4	340,800	402,800	419,100	422,600	448,700	473,500	465,700	562,300	493,300	479,700	521,000	455,800
5	340,100	402,400	418,900	424,400	449,000	476,400	465,300	555,100	508,500	477,300	512,600	461,100
6	339,800	408,200	418,200	425,100	449,000	484,200	465,700	553,100	518,900	477,300	501,900	463,400
7	338,200	414,300	417,800	426,400	458,400	490,100	465,700	564,200	522,500	476,600	490,100	467,400
8	337,600	415,000	417,600	426,400	470,700	490,100	465,500	567,700	523,200	474,900	483,700	469,700
9	337,000	415,600	418,200	426,200	477,300	483,900	465,300	562,300	521,200	475,200	481,600	471,200
10	336,400	414,700	417,600	426,200	479,200	500,400	464,500	555,900	515,400	475,700	480,100	471,400
11	335,500	413,900	417,300	426,000	479,700	522,000	464,500	550,200	511,200	474,900	479,400	471,400
12	334,800	415,600	417,100	425,100	480,100	527,000	464,500	550,500	511,900	475,200	478,500	471,400
13	334,300	418,200	416,900	425,100	477,800	525,000	464,500	551,000	512,400	473,800	476,800	470,000
14	333,500	418,900	417,100	425,100	473,500	523,000	464,500	551,000	550,700	474,900	475,400	469,000
15	332,800	419,300	416,700	424,900	470,000	518,200	470,000	550,200	566,300	478,700	474,500	469,000
16	332,100	419,300	415,600	424,900	468,800	511,900	491,900	548,200	567,700	482,700	473,500	467,900
17	331,300	418,900	415,400	425,100	468,100	504,300	507,500	541,500	565,000	482,500	472,600	466,200
18	330,600	422,000	415,600	425,500	467,400	496,300	508,500	533,800	559,000	481,300	471,900	464,800
19	329,800	422,400	415,400	425,500	466,700	490,900	509,500	526,800	559,500	480,100	471,200	464,100
20	328,900	422,900	415,400	425,800	466,000	482,500	506,500	519,200	565,300	478,700	469,500	463,400
21	334,800	422,900	415,600	425,300	465,300	475,400	502,900	511,400	567,400	478,000	468,600	462,300
22	345,500	422,400	414,700	425,100	465,300	471,200	500,400	504,800	562,600	476,400	467,400	461,800
23	348,500	422,200	414,100	424,900	465,300	470,000	507,000	499,200	555,600	475,200	466,000	461,100
24	349,400	422,200	413,600	424,200	465,300	471,900	544,000	493,600	548,200	474,500	465,000	460,200
25	349,000	422,400	413,900	428,400	465,700	472,300	574,700	489,200	541,700	474,000	463,600	459,500
26	356,600	421,700	413,900	436,500	466,400	469,700	589,000	493,300	534,300	472,800	463,200	470,000
27	361,500	421,700	413,000	442,100	466,400	467,100	590,900	493,600	527,300	471,600	462,000	497,200
28	363,800	420,900	412,300	443,000	465,700	466,200	590,900	493,100	519,400	471,900	460,600	510,200
29	365,500	420,600	412,600	443,700	------	466,000	588,700	491,100	510,700	476,100	460,200	512,200
30	370,200	420,400	412,600	443,900	------	466,700	584,400	486,500	503,100	498,000	459,500	506,000
31	382,200	------	412,300	445,100	------	467,400	------	482,700	------	529,000	458,400	------
(†)	511.25	513.05	512.68	514.15	515.05	515.12	519.77	515.77	516.61	517.65	514.73	516.73
(*)	+38,600	-38,200	-8,100	+32,800	+20,600	+1,700	+117,000	-101,700	+20,400	+25,900	-70,600	+47,600
(††)	834	620	586	591	545	601	597	681	728	902	1,021	778
MAX	382,200	422,900	419,700	445,100	480,100	527,000	590,900	581,700	567,700	529,000	540,200	512,200
MIN	328,900	395,300	412,300	412,100	446,900	466,000	464,500	482,700	475,200	471,600	458,400	455,800

CAL YR 1972..... * -236,000 †† 8,822 MAX 642,000 MIN 328,900
WTR YR 1973..... * +162,400 †† 8,484 MAX 590,900 MIN 328,900

† 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 (2.9 km) east of Lewisville, 1.9 miles (3.1 km) downstream from Lewisville Lake, and 8.3 miles (13.4 km) upstream from Denton Creek.

DRAINAGE AREA.--1,673 mi² (4,333 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 432.39 ft (131.79 m) above mean sea level (Corps of Engineers bench mark). Prior to Jan. 6, 1950, nonrecording gage 0.6 mile (1.0 km) upstream at datum 3.26 ft (0.99 m) lower.

AVERAGE DISCHARGE.--24 years, 571 ft³/s (16.2 m³/s), 413,700 acre-ft/yr (510 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 6,360 ft³/s (180 m³/s) Aug. 7, gage height, 25.77 ft (7.85 m); minimum daily, 27 ft³/s (0.76 m³/s) Sept. 12.
Period of record: Maximum discharge, 21,700 ft³/s (615 m³/s) Sept. 15, 1950, gage height, 30.75 ft (9.37 m); minimum daily, 0.8 ft³/s (23 dm³/s) Jan. 19, 1955. Maximum discharge since construction of Lewisville Dam in 1954, 11,400 ft³/s (323 m³/s) May 27, 1957, includes about 4,000 ft³/s (113 m³/s) passing over spillway of Lewisville Dam and bypassing gage.
Maximum stage since at least 1907, 33.8 ft (10.3 m) 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 low 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	130	165	150	169	164	172	3,070	1,880	3,920	872	243
2	194	103	126	175	167	149	171	3,140	1,890	3,700	2,830	200
3	314	186	138	179	167	136	366	3,170	1,420	3,670	4,000	158
4	238	190	170	93	166	137	531	3,340	182	1,670	4,180	287
5	183	155	131	114	168	494	155	3,610	169	1,050	4,250	169
6	239	172	132	113	174	725	112	3,680	136	242	4,820	98
7	235	162	174	119	208	848	126	3,800	126	161	6,310	79
8	204	162	214	116	255	2,190	128	3,760	141	167	4,870	30
9	176	175	114	114	183	2,320	104	4,000	946	119	1,580	29
10	189	224	106	130	181	2,260	122	4,040	2,300	117	390	29
11	193	208	107	187	179	211	169	4,110	3,110	124	379	28
12	230	172	107	153	245	706	160	2,250	523	113	376	27
13	232	115	99	169	1,290	1,730	119	214	152	82	374	756
14	201	118	137	171	2,100	2,100	122	189	404	108	370	939
15	210	167	173	209	1,980	2,820	154	183	291	92	368	551
16	238	243	155	220	634	3,000	145	812	750	63	367	549
17	197	184	141	211	369	3,500	127	2,670	1,600	229	330	550
18	228	149	141	167	369	3,930	332	3,630	2,490	464	252	344
19	159	84	140	146	369	3,970	996	3,770	3,610	465	250	153
20	115	140	130	152	369	3,970	1,740	3,780	1,370	465	457	187
21	116	188	111	165	367	3,790	2,420	3,770	623	467	493	262
22	180	152	100	179	317	2,560	3,010	3,760	2,260	467	206	250
23	99	121	133	189	161	1,030	3,100	3,770	3,520	338	266	217
24	118	171	165	169	158	291	2,160	3,760	3,760	176	288	230
25	83	111	114	209	157	279	274	3,700	3,760	181	265	201
26	181	177	110	223	160	649	188	1,140	3,760	208	303	181
27	143	209	225	157	157	1,290	180	143	3,840	197	277	292
28	98	168	240	151	156	1,270	188	132	4,260	254	254	679
29	70	119	151	157	------	233	772	603	4,290	164	211	2,340
30	69	134	114	166	------	175	2,350	1,850	4,010	121	181	3,790
31	68	------	100	168	------	174	------	1,880	------	111	203	------
TOTAL	5,364	4,789	4,363	5,021	11,375	47,101	20,693	81,726	57,573	19,705	40,572	13,848
MEAN	173	160	141	162	406	1,519	690	2,636	1,919	636	1,309	462
MAX	314	243	240	223	2,100	3,970	3,100	4,110	4,290	3,920	6,310	3,790
MIN	68	84	99	93	156	136	104	132	126	63	181	27
AC-FT	10,640	9,500	8,650	9,960	22,560	93,420	41,040	162,100	114,200	39,080	80,470	27,470

CAL YR 1972 TOTAL 175,651 MEAN 480 MAX 5,000 MIN 33 AC-FT 348,400
WTR YR 1973 TOTAL 312,130 MEAN 855 MAX 6,310 MIN 27 AC-FT 619,100

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 (30 m) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.2 miles (3.5 km) north of Justin, 3.0 miles (4.8 km) upstream from Olivers Creek, 12.9 miles (20.8 km) upstream from Harriet Creek, and 32.9 miles (52.9 km) upstream from Grapevine Dam.

DRAINAGE AREA.--400 mi² (1,036 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 606.66 ft (184.91 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 82.2 ft³/s (2.33 m³/s), 59,550 acre-ft/yr (73.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,770 ft³/s (163 m³/s) June 14, gage height, 15.00 ft (4.57 m); no flow Oct. 1-21.
Period of record: Maximum discharge, 29,800 ft³/s (844 m³/s) May 24, 1957, gage height, 17.64 ft (5.38 m); no flow at times 1949-65, 1967-73.
Flood in May 1935 was the highest flood since 1908 and reached a stage of 20.6 ft (6.3 m) at site about 1,500 ft (457 m) upstream, from information by local resident. Flood in May 1908 reached a stage about 1.0 ft (0.3 m) 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 195 mi² (505 km²) above this station was partly controlled by 96 floodwater-retarding structures with a total combined capacity of 59,480 acre-ft (73.3 hm³) below the flood-spillway crests, of which 51,840 acre-ft (63.9 hm³) is floodwater-retarding capacity and 7,640 acre-ft (9.42 hm³) is sediment-pool capacity. Nine structures were built during the current year and have a total combined capacity below flood-spillway crests of 7,450 acre-ft (9.19 hm³), of which 861 acre-ft (1.06 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WSP 1732: 1950(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	100	3.1	33	35	27	36	85	31	9.4	986	11
2	0	45	5.1	31	35	26	29	73	32	7.7	533	13
3	0	22	5.0	81	26	25	31	60	96	6.6	323	12
4	0	13	5.0	75	21	37	29	51	347	5.8	180	4.5
5	0	7.2	9.5	31	19	36	30	44	228	4.8	113	1.7
6	0	84	8.7	22	18	55	26	406	138	3.9	85	9.0
7	0	79	8.4	19	63	132	24	1,090	66	3.5	65	66
8	0	17	9.2	21	228	74	25	223	43	3.2	50	35
9	0	6.9	8.5	10	124	52	26	125	32	3.1	42	24
10	0	3.5	11	6.9	68	244	24	80	26	3.1	37	13
11	0	3.9	11	7.4	50	201	21	60	22	3.5	35	9.1
12	0	3.4	11	7.3	43	92	19	349	24	20	29	6.9
13	0	57	11	7.1	38	64	21	265	23	14	26	3.7
14	0	39	15	8.5	32	53	26	138	2,890	9.8	25	6.7
15	0	15	13	13	26	43	308	91	519	23	23	4.2
16	0	7.0	12	17	24	35	1,770	67	214	22	23	3.5
17	0	4.0	11	18	22	30	418	54	136	14	22	3.4
18	0	8.6	9.8	15	24	28	368	47	83	9.8	22	3.6
19	0	8.9	11	13	25	27	259	42	78	7.0	21	3.8
20	0	8.2	15	10	25	25	188	37	418	5.4	21	4.0
21	0	4.8	15	9.6	23	22	126	35	208	4.4	21	4.1
22	117	3.4	16	9.7	22	22	91	33	101	3.6	21	3.4
23	6.2	3.9	15	8.5	29	22	405	136	64	3.1	21	2.8
24	1.0	3.4	14	7.1	33	35	2,560	114	46	2.7	21	2.5
25	.15	3.0	15	49	30	89	1,000	108	35	2.3	21	2.9
26	87	3.5	15	198	28	49	454	101	29	1.8	21	6.3
27	33	4.0	15	122	27	36	222	66	25	1.5	17	20
28	4.1	3.1	15	63	28	32	150	45	20	1.5	6.6	21
29	6.3	3.1	16	37	------	30	111	35	15	131	8.5	12
30	230	2.6	21	29	------	28	93	32	11	3,250	7.5	8.1
31	320	------	33	27	------	34	------	31	------	3,060	8.8	------
TOTAL	804.75	567.4	383.3	1,006.1	1,166	1,705	8,890	4,123	6,000	6,641.5	2,835.4	321.2
MEAN	26.0	18.9	12.4	32.5	41.6	55.0	296	133	200	214	91.5	10.7
MAX	320	100	33	198	228	244	2,560	1,090	2,890	3,250	986	66
MIN	0	2.6	3.1	6.9	18	22	19	31	11	1.5	6.6	1.7
AC-FT	1,600	1,130	760	2,000	2,310	3,380	17,630	8,180	11,900	13,170	5,620	637

CAL YR 1972 TOTAL 10,813.53 MEAN 29.5 MAX 2,020 MIN 0 AC-FT 21,450
WTR YR 1973 TOTAL 34,443.65 MEAN 94.4 MAX 3,250 MIN 0 AC-FT 68,320

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0530	12.97	3,080	6-14	1000	15.00	5,770
4-24	0145	13.77	3,840	7-30	1330	14.83	5,430
5- 7	0015	14.02	4,150				

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 (4.3 km) northeast of Grapevine, 4.3 miles (6.9 km) upstream from bridge on State Highway 121, and 11.7 miles (18.8 km) upstream from mouth.

DRAINAGE AREA.--695 mi² (1,800 km²).

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 (305 m) upstream at present datum.

EXTREMES.--Current year: Maximum contents, 204,500 acre-ft (252 hm³) June 21, elevation, 538.11 ft (164.02 m); minimum, 141,400 acre-ft (174 hm³) Oct. 20, 21, elevation, 529.15 ft (161.28 m).
Period of record: Maximum contents, 445,800 acre-ft (550 hm³) June 6, 1957, elevation, 560.80 ft (170.93 m); minimum since lake first filled in 1957, 114,000 acre-ft (141 hm³) Mar. 6, 1964, elevation, 523.33 ft (159.51 m).

REMARKS.--Lake is formed by a rolled earthfill dam, 12,850 ft (3,917 m) long including a 500-foot (152-meter) 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 since April 1972 based on survey made in October 1966. 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 215 mi² (557 km²) above this station was partly controlled by 99 floodwater-retarding structures with a total combined capacity of 65,110 acre-ft (80.3 hm³) below the flood-spillway crests, of which 56,940 acre-ft (70.2 hm³) is floodwater-retarding capacity and 8,170 acre-ft (10.1 hm³) is sediment-pool capacity. Nine structures were built during the current year and have a total combined capacity below flood-spillway crests of 7,450 acre-ft (9.19 hm³), of which 861 acre-ft (1.06 hm³) 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	425,500
Top of conservation storage	535.0	181,100
Inverts of lowest intakes to wet wells	500.5	22,140
Invert of two 6.5- by 13-foot broome-type gates sill	475.0	100

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	122,700	534.0	173,900
528.0	134,300	536.0	188,500
530.0	146,800	538.0	203,600
532.0	160,000	540.0	219,600

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146,300	147,700	147,000	145,200	150,100	157,000	166,200	196,900	192,100	190,900	194,800	180,000
2	146,000	147,800	147,000	145,700	150,300	157,200	166,500	195,800	190,800	189,000	194,100	179,500
3	145,700	147,700	147,000	146,100	150,200	157,600	166,500	194,800	194,100	187,100	192,800	179,200
4	145,500	147,700	146,900	146,400	150,100	157,600	166,400	193,900	195,300	185,300	191,100	179,000
5	145,200	147,600	146,800	146,500	150,100	157,600	166,400	193,200	197,200	184,000	189,500	179,700
6	145,000	147,800	146,800	146,600	150,300	158,700	166,400	192,900	197,500	183,300	188,100	179,700
7	144,700	148,100	146,400	146,700	151,600	159,000	166,600	201,100	197,400	183,100	187,900	179,500
8	144,400	148,000	146,400	146,800	154,300	159,400	166,600	201,300	196,900	182,900	187,600	179,200
9	144,200	148,000	146,400	146,700	154,700	159,600	166,500	200,500	195,900	182,900	187,400	178,700
10	144,000	147,700	146,300	146,700	154,900	161,300	166,400	199,500	195,300	182,700	187,300	178,400
11	143,700	147,500	146,300	146,600	155,000	164,000	166,300	198,400	195,200	182,400	187,100	177,700
12	143,400	148,000	146,300	146,600	155,200	164,200	166,300	200,100	195,000	182,100	186,700	177,400
13	143,300	148,000	146,300	146,600	155,400	164,600	166,400	200,500	194,800	182,000	186,500	177,400
14	143,000	147,800	146,300	146,600	155,500	165,000	166,600	200,800	201,500	182,100	186,300	177,300
15	142,800	147,700	146,200	146,600	155,600	165,000	168,300	200,800	203,900	182,700	185,800	177,100
16	142,600	147,700	146,000	146,700	155,500	164,900	172,800	200,200	204,000	182,600	185,500	176,900
17	142,400	147,700	145,900	146,800	155,600	165,000	174,800	199,200	203,200	182,400	185,100	176,800
18	142,200	148,000	145,900	146,900	155,600	165,000	175,800	198,200	202,500	182,200	184,900	176,600
19	142,000	147,900	145,900	146,900	155,800	165,100	176,600	197,200	202,800	182,100	184,600	176,300
20	141,400	147,800	145,900	147,000	155,800	165,100	177,300	196,200	204,000	181,900	184,400	176,100
21	143,000	147,800	145,900	147,000	156,000	165,000	177,700	195,200	204,200	181,800	184,000	176,000
22	144,200	147,700	145,800	147,000	156,100	165,000	178,400	194,100	203,400	181,500	183,700	175,800
23	144,000	147,600	145,700	146,900	156,300	165,500	180,000	193,800	202,500	181,300	183,200	175,800
24	143,800	147,700	145,600	146,800	156,400	165,700	193,700	193,500	201,600	180,800	182,900	175,700
25	143,500	147,600	145,600	147,900	156,700	165,800	196,600	194,300	200,500	180,500	182,400	175,400
26	145,500	147,500	145,600	148,900	156,800	165,700	198,100	196,200	199,500	180,200	182,100	176,400
27	146,100	147,400	145,400	149,600	156,700	165,700	198,500	196,300	198,200	179,700	181,700	176,800
28	146,100	147,300	145,300	149,600	156,800	165,900	198,800	196,000	196,300	179,800	181,300	176,700
29	146,100	147,300	145,300	149,600	------	165,900	198,500	195,300	194,400	180,000	181,000	176,600
30	146,400	147,200	145,200	149,600	------	166,300	197,500	194,100	192,700	185,900	180,600	176,600
31	147,000	------	145,200	149,800	------	166,200	------	193,200	------	192,600	180,200	------
(†)	530.04	530.06	529.76	530.47	531.52	532.91	537.21	536.64	536.57	536.55	534.88	534.37
(*)	+400	+200	-2,000	+4,600	+7,000	+9,400	+31,300	-4,300	-500	-100	-12,400	-3,600
(††)	76	60	60	61	55	59	59	70	66	85	107	73
MAX	147,000	148,100	147,000	149,800	156,800	166,300	198,800	201,300	204,200	192,600	194,800	180,000
MIN	141,400	147,200	145,200	145,200	150,100	157,000	166,200	192,900	190,800	179,700	180,200	175,400

CAL YR 1972..... * -67,700 †† 907 MAX 212,100 MIN 141,400
WTR YR 1973..... * +30,000 †† 831 MAX 204,200 MIN 141,400

† 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 (2.1 km) downstream from Bakers Branch, 4.3 miles (6.9 km) downstream from Grapevine Dam, 5.0 miles (8.0 km) northeast of Grapevine, and 6.1 miles (9.8 km) upstream from mouth.

DRAINAGE AREA.--705 mi² (1,826 km²).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 439.11 ft (133.84 m) above mean sea level.

AVERAGE DISCHARGE.--5 years (1947-52) prior to regulation, 140 ft³/s (3.96 m³/s), 101,400 acre-ft/yr (125 hm³/yr); 21 years (1952-73) regulated, unadjusted, 139 ft³/s (3.94 m³/s), 100,700 acre-ft/yr (124 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,230 ft³/s (34.8 m³/s) Apr. 24, gage height, 14.11 ft (4.30 m); minimum, 0.04 ft³/s (1.1 dm³/s) Mar. 16.

Period of record: Maximum discharge, 13,900 ft³/s (394 m³/s) Feb. 26, 1948, gage height, 30.38 ft (9.26 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of conveyance-slope study; no flow at times. Maximum discharge since construction of Grapevine Dam in 1952, 6,430 ft³/s (182 m³/s) Sept. 21, 1964, gage height, 26.50 ft (8.08 m).

Flood in May 1908 was slightly higher than the flood in April 1942, which reached a stage of 35.9 ft (10.9 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	111	19	25	21	7.8	6.4	529	501	917	334	95
2	74	21	19	22	21	7.9	6.8	526	490	910	968	95
3	74	17	19	45	21	7.6	9.1	510	483	909	971	95
4	74	17	19	23	21	7.7	9.0	509	156	904	972	95
5	74	18	19	23	21	7.8	9.4	519	153	607	971	98
6	74	19	19	22	21	41	10	532	147	137	588	100
7	74	19	20	23	47	8.8	16	134	146	99	98	128
8	74	19	22	22	73	1.2	21	303	230	81	97	227
9	74	20	22	22	25	.33	21	565	561	80	97	197
10	75	20	22	20	22	123	20	562	468	96	97	208
11	75	19	22	1.6	21	6.4	21	567	149	97	96	214
12	76	20	22	.43	21	.97	20	236	147	97	96	149
13	75	24	21	.43	16	.97	20	102	147	96	96	82
14	75	20	21	.43	.54	.97	20	102	194	97	95	59
15	76	20	21	.97	.25	.17	45	105	148	98	95	19
16	77	20	21	2.5	.25	.05	30	267	319	97	95	19
17	73	20	20	4.8	.25	.07	16	517	538	89	96	19
18	72	24	20	22	.33	.17	16	514	536	18	95	19
19	73	22	21	20	.33	.29	14	513	536	18	96	19
20	73	21	21	21	.29	.25	.29	512	180	17	95	19
21	76	20	23	21	.39	.33	.09	507	237	17	95	19
22	111	20	27	21	.43	.66	10	500	518	17	95	19
23	73	20	27	21	1.8	.97	31	505	512	54	95	19
24	73	20	27	21	6.7	1.8	557	503	514	94	95	19
25	73	21	26	53	6.8	.43	17	379	518	95	95	19
26	141	23	25	43	7.1	.14	6.5	125	517	95	96	25
27	79	23	25	22	6.9	.54	4.7	118	685	95	95	37
28	72	20	25	21	6.9	1.8	5.0	117	920	96	95	21
29	73	19	26	21	------	2.5	141	259	921	98	96	18
30	74	19	25	21	------	5.0	639	503	920	96	95	18
31	77	------	25	22	------	6.8	------	502	------	75	95	------
TOTAL	2,409	696	691	608.16	390.26	244.41	1,742.28	12,142	12,491	6,296	7,195	2,170
MEAN	77.7	23.2	22.3	19.6	13.9	7.88	58.1	392	416	203	232	72.3
MAX	141	111	27	53	73	123	639	567	921	917	972	227
MIN	72	17	19	.43	.25	.05	.09	102	146	17	95	18
AC-FT	4,780	1,380	1,370	1,210	774	485	3,460	24,080	24,780	12,490	14,270	4,300

CAL YR 1972 TOTAL 33,101.00 MEAN 90.4 MAX 570 MIN 14 AC-FT 65,660
WTR YR 1973 TOTAL 47,075.11 MEAN 129 MAX 972 MIN .05 AC-FT 93,370

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 (12 m) upstream from Carrollton Dam, 0.3 mile (0.5 km) downstream from Denton Creek, 1.0 mile (1.6 km) upstream from St. Louis Southwestern Railway Lines bridge, 2.3 miles (3.7 km) northwest of Carrollton, and at mile 18.2 (29.3 km).

DRAINAGE AREA.--2,459 mi² (6,369 km²).

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 (132.10 m) above mean sea level. Prior to November 1923, nonrecording gage at site 15.5 miles (24.9 km) 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 (15.0 km) downstream at datum 22.94 ft (6.99 m) lower. Apr. 15, 1939, to Sept. 30, 1955, water-stage recorder at site 8.5 miles (13.7 km) downstream at datum 22.94 ft (6.99 m) lower.

AVERAGE DISCHARGE.--66 years, 781 ft³/s (22.1 m³/s), 565,800 acre-ft/yr (698 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,980 ft³/s (254 m³/s) Apr. 24, gage height, 6.95 ft (2.12 m); no flow Jan. 20.
Period of record: Maximum gage height, about 17 ft (5 m) May 25, 1908, present site and datum, from information by local resident (discharge not determined); maximum gage height subsequent to 1908, 14.5 ft (4.4 m) Apr. 26, 1942, present site and datum, from observation by National Weather Service; discharge at site 8.5 miles (13.7 km) downstream, 90,700 ft³/s (2,570 m³/s); 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 93,670 acre-ft (115 hm³) was diverted from pool at gage and 50,060 acre-ft (61.7 hm³) was diverted from river channel 14 miles (23 km) downstream for municipal use. About 400 acre-ft (0.493 hm³) 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 5,870 acre-ft (7.24 hm³) was diverted from pool at gage into 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	18	81	32	15	39	73	3,820	2,340	4,830	638	156
2	65	40	41	137	4.5	50	45	3,930	2,320	4,740	3,530	129
3	185	79	35	271	4.7	25	216	3,910	2,340	4,430	4,850	61
4	160	126	137	36	19	22	498	4,030	535	2,300	5,170	163
5	91	99	164	35	11	210	73	4,350	400	1,490	5,210	166
6	132	68	164	30	8.0	889	12	4,470	217	197	5,190	104
7	185	112	191	43	96	524	13	4,420	145	90	5,960	37
8	129	61	236	50	662	1,990	57	4,150	171	153	5,210	130
9	79	52	137	74	39	2,130	27	4,680	1,210	58	1,900	104
10	68	96	133	88	10	3,390	12	4,750	2,600	75	341	67
11	247	99	133	153	14	330	86	4,760	3,280	87	317	119
12	220	82	137	121	32	354	105	4,350	794	96	324	52
13	172	58	127	133	832	1,590	69	350	168	61	294	523
14	151	14	92	123	2,020	1,860	52	223	1,120	92	249	882
15	108	20	37	171	2,010	2,730	195	192	390	118	232	358
16	210	108	16	135	666	2,900	345	706	806	38	241	393
17	200	85	20	45	274	3,410	92	3,190	1,910	179	235	467
18	151	68	14	21	272	3,810	217	4,340	2,800	327	175	318
19	122	32	41	.71	256	3,900	888	4,510	4,290	278	139	49
20	72	38	49	0	264	3,910	1,630	4,530	2,940	278	242	43
21	72	84	28	4.8	252	3,860	2,290	4,500	593	241	441	134
22	30	82	12	9.9	254	2,660	3,140	4,490	2,560	305	75	150
23	35	30	24	25	16	1,070	3,410	4,510	3,960	217	113	98
24	79	106	113	22	8.7	177	5,950	4,510	4,240	97	164	127
25	61	35	96	110	23	159	611	4,470	4,260	67	129	120
26	168	61	19	316	21	406	223	1,600	4,220	123	183	143
27	283	125	114	30	18	1,090	154	150	4,420	75	147	913
28	108	112	213	25	35	1,340	128	125	5,110	166	163	428
29	61	53	96	10	------	170	643	625	5,160	168	143	2,040
30	45	87	42	7.5	------	65	3,010	2,300	4,930	107	90	3,700
31	63	------	12	15	------	57	------	2,310	------	67	82	------
TOTAL	3,924	2,130	2,754	2,273.91	8,136.9	45,117	24,264	99,251	70,229	21,550	42,177	12,174
MEAN	127	71.0	88.8	73.4	291	1,455	809	3,202	2,341	695	1,361	406
MAX	283	126	236	316	2,020	3,910	5,950	4,760	5,160	4,830	5,960	3,700
MIN	30	14	12	0	4.5	22	12	125	145	38	75	37
AC-FT	7,780	4,220	5,460	4,510	16,140	89,490	48,130	196,900	139,300	42,740	83,660	24,150

CAL YR 1972 TOTAL 160,090.16 MEAN 437 MAX 5,590 MIN .04 AC-FT 317,500
WTR YR 1973 TOTAL 333,980.81 MEAN 915 MAX 5,960 MIN 0 AC-FT 662,500

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 (396 m) downstream from bridge on Northwest Highway, 1.9 miles (3.1 km) upstream from Bachman Lake Dam, and 6.0 miles (10.0 km) northwest of Dallas City Hall.

DRAINAGE AREA.--9.58 mi² (24.8 km²). Area at site used prior to May 1, 1970, 10.0 mi² (25.9 km²).

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 (701 m) downstream at same datum.

AVERAGE DISCHARGE.--10 years, 9.38 ft³/s (0.266 m³/s), 13.30 in/yr (337.8 mm/yr), 6,800 acre-ft/yr (8.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,750 ft³/s (77.9 m³/s) May 11, elevation, 465.30 ft (141.82 m), from rating curve extended above 600 ft³/s (17.0 m³/s); minimum, 0.04 ft³/s (1.1 dm³/s) Oct. 18.
Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) Apr. 28, 1966, elevation, 467.97 ft (142.64 m), former site, from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of contracted-opening measurements of 5,300, 9,200, and 16,000 ft³/s (150, 261, and 453 m³/s); 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 (141.9 m), discharge, 9,200 ft³/s (261 m³/s), at former site.

REMARKS.--Records poor. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	85	2.0	2.0	16	10	3.8	18	15	3.2	1.4	.62
2	.14	8.0	2.0	5.0	6.0	4.5	10	6.4	9.9	3.2	1.4	.55
3	.23	6.0	2.0	71	5.0	4.0	4.0	6.0	143	2.8	1.4	.69
4	.50	5.0	2.0	8.0	4.4	4.0	2.8	5.8	104	2.8	1.2	1.0
5	.74	4.0	2.0	4.5	4.0	3.5	2.8	16	64	2.8	1.1	59
6	.65	5.0	2.0	5.0	3.8	10	3.0	13	18	2.8	1.1	34
7	.56	4.0	2.0	20	66	4.5	4.0	20	13	12	1.4	9.1
8	.47	3.0	2.5	5.0	56	4.0	7.5	5.8	10	7.6	1.7	2.5
9	.38	2.5	2.0	4.0	12	30	4.2	5.8	7.7	5.6	1.6	2.1
10	.30	2.5	2.0	3.5	6.0	100	2.8	5.6	8.1	3.5	1.6	2.4
11	.22	2.0	3.0	4.5	5.0	15	2.7	49	17	46	1.1	3.0
12	.30	20	20	4.0	4.5	7.0	2.7	89	26	40	.76	2.5
13	.20	17	3.5	3.5	4.5	5.5	15	13	50	7.5	.55	36
14	.15	4.0	3.0	3.5	4.0	5.0	5.4	10	40	15	.84	3.8
15	.10	2.5	3.0	3.0	4.0	4.5	18	8.8	8.1	17	.69	3.0
16	.07	2.0	2.5	3.0	3.8	8.0	7.3	6.8	6.8	9.5	.69	2.2
17	.05	2.5	2.5	3.0	3.8	6.0	6.2	6.2	6.2	7.9	2.8	3.0
18	.04	50	2.5	2.6	3.8	5.0	5.2	6.4	5.0	5.5	.84	2.0
19	4.0	7.0	2.5	2.6	3.6	4.5	7.4	6.4	73	2.0	.69	1.2
20	1.0	4.0	2.0	5.0	3.6	4.5	4.6	5.4	30	9.9	.62	3.4
21	60	10	2.0	11	3.6	4.0	5.4	5.0	8.1	11	.55	1.4
22	110	3.0	2.0	4.0	12	4.0	7.3	4.8	6.6	12	.55	1.2
23	10	2.0	2.0	3.0	5.0	3.8	41	7.5	5.8	12	.55	.84
24	4.0	4.0	2.0	3.0	4.0	50	123	51	5.0	14	.49	12
25	3.0	3.0	2.0	68	4.0	8.0	16	58	4.8	4.4	.49	1.0
26	140	2.2	2.0	25	12	5.0	11	8.6	4.4	1.1	.49	121
27	4.5	2.0	2.0	6.0	5.0	4.0	9.6	5.0	4.2	.84	.37	47
28	3.8	2.0	2.0	4.0	4.0	4.0	7.3	4.2	3.8	19	1.8	8.4
29	30	2.0	2.0	3.0	------	3.8	6.8	3.2	3.8	24	11	5.0
30	20	2.0	2.0	3.0	------	12	6.4	2.2	3.6	31	.49	4.2
31	50	------	2.0	52	------	4.0	------	2.2	------	3.5	1.1	------
TOTAL	445.55	268.2	87.0	344.7	269.4	342.1	353.2	455.1	704.9	339.44	41.36	374.10
MEAN	14.4	8.94	2.81	11.1	9.62	11.0	11.8	14.7	23.5	10.9	1.33	12.5
MAX	140	85	20	71	66	100	123	89	143	46	11	121
MIN	.04	2.0	2.0	2.0	3.6	3.5	2.7	2.2	3.6	.84	.37	.55
CFSM	1.50	.93	.29	1.16	1.00	1.15	1.23	1.53	2.45	1.14	.14	1.30
IN.	1.73	1.04	.34	1.34	1.05	1.33	1.37	1.77	2.74	1.32	.16	1.45
AC-FT	884	532	173	684	534	679	701	903	1,400	673	82	742
(††)	5.85	3.10	1.04	3.64	1.72	3.34	5.16	4.92	7.41	3.94	1.02	6.79

CAL YR 1972 TOTAL 1,636.76 MEAN 4.47 MAX 160 MIN 0 CFSM .47 IN 6.36 AC-FT 3,250 †† 23.21
WTR YR 1973 TOTAL 4,025.05 MEAN 11.0 MAX 143 MIN .04 CFSM 1.15 IN 15.63 AC-FT 7,980 †† 47.93

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	ELEV.	DISCHARGE
3-10	about 0800	a462.5	1,200
4-24	0500	463.30	1,550
5-11	2400	465.30	2,750

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

08056500 Turtle Creek at Dallas, Tex.

LOCATION.--Lat 32°48'26", long 96°48'08", Dallas County, on left bank 68 ft (21 m) upstream from Hall Street Dam, 210 ft (64 m) upstream from Hall Street in Dallas, and 2.0 miles (3.2 km) north of Dallas County Courthouse.

DRAINAGE AREA.--7.98 mi² (20.7 km²).

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 (130.49 m) above mean sea level. Prior to Dec. 17, 1951, at site 52 ft (16 m) upstream at same datum.

AVERAGE DISCHARGE.--22 years, 7.92 ft³/s (0.224 m³/s), 13.48 in/yr (342.4 mm/yr), 5,740 acre-ft/yr (7.08 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,160 ft³/s (118 m³/s) June 3, gage height, 7.67 ft (2.34 m); minimum daily, 0.60 ft³/s (17 dm³/s) Oct. 10, 11, 15.
Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) Apr. 28, 1966, gage height, 10.54 ft (3.21 m), from rating curve extended above 2,460 ft³/s (69.7 m³/s) on basis of contracted-opening measurement of 12,200 ft³/s (346 m³/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	87	1.7	1.5	7.0	13	2.6	24	32	2.9	2.4	1.6
2	.65	6.1	1.7	13	4.8	4.5	11	4.1	13	2.5	2.0	1.8
3	.71	4.2	1.7	71	4.3	3.9	5.8	3.5	546	2.2	2.0	1.2
4	.71	3.4	1.5	5.2	4.0	3.9	3.0	3.3	226	2.3	1.8	1.6
5	.71	2.6	1.6	5.0	4.0	3.5	2.9	56	101	3.2	1.4	84
6	1.0	3.4	1.6	5.8	3.8	18	4.6	11	13	2.4	1.3	42
7	.80	2.6	1.1	21	107	4.1	5.2	6.8	8.0	83	1.4	11
8	.84	1.5	2.9	4.5	26	4.0	16	3.6	6.6	9.1	1.3	2.8
9	.85	1.4	2.0	3.7	8.2	30	4.4	3.1	5.8	4.6	1.2	2.0
10	.60	1.6	1.5	3.5	6.4	227	2.8	3.1	4.5	3.1	1.1	1.9
11	.60	1.1	2.6	4.7	5.5	9.1	3.1	98	31	13	1.1	1.8
12	.69	19	16	5.7	4.9	6.7	2.9	102	12	18	.97	1.6
13	.70	14	3.3	5.9	4.6	10	20	5.6	40	4.4	1.1	49
14	.65	3.1	13	4.8	4.3	6.5	9.9	4.6	10	3.7	1.1	3.0
15	.60	2.2	3.9	4.1	4.0	4.7	59	4.2	5.8	55	1.1	2.0
16	1.5	2.2	2.1	3.5	3.9	7.8	8.7	3.5	5.2	11	1.1	1.6
17	2.0	2.9	2.1	4.0	4.0	4.4	6.4	3.3	4.8	6.1	1.2	1.4
18	.77	63	2.1	3.2	3.7	4.0	4.9	2.9	4.5	3.0	1.5	1.4
19	12	4.0	2.6	2.9	3.7	3.7	10	2.8	108	2.6	1.3	1.3
20	3.0	3.0	2.0	5.9	3.6	3.7	3.9	2.8	34	2.4	1.2	1.3
21	74	9.8	2.0	12	3.0	3.2	5.6	2.6	6.6	2.0	1.2	1.4
22	73	2.8	1.6	3.1	15	3.4	14	2.5	5.5	1.8	1.3	1.3
23	2.2	2.4	1.6	2.8	6.3	3.7	43	3.0	5.1	1.8	1.2	3.8
24	1.4	7.9	1.4	2.8	3.6	56	243	59	4.6	2.0	1.1	14
25	1.2	4.1	1.4	77	3.5	4.5	9.5	67	4.7	2.0	.96	2.1
26	162	1.7	1.5	18	8.0	4.0	6.1	7.6	3.5	1.9	.95	172
27	7.2	2.2	1.5	6.9	3.8	3.6	5.0	3.7	3.5	1.9	3.6	56
28	3.4	2.0	1.9	5.0	3.5	3.7	4.7	2.7	3.0	6.1	1.4	7.5
29	32	2.0	2.9	4.2	------	3.2	4.3	2.4	2.8	28	19	3.7
30	13	2.4	4.8	4.1	------	4.9	4.2	2.8	2.9	19	2.0	3.0
31	52	------	1.6	37	------	4.1	------	2.2	------	4.1	1.5	------
TOTAL	451.56	265.6	89.2	351.8	264.4	466.8	526.5	503.7	1,253.4	305.1	61.78	479.1
MEAN	14.6	8.85	2.88	11.3	9.44	15.1	17.6	16.2	41.8	9.84	1.99	16.0
MAX	162	87	16	77	107	227	243	102	546	83	19	172
MIN	.60	1.1	1.1	1.5	3.0	3.2	2.6	2.2	2.8	1.8	.95	1.2
CFSM	1.83	1.11	.36	1.42	1.18	1.89	2.21	2.03	5.24	1.23	.25	2.01
IN.	2.11	1.24	.42	1.64	1.23	2.18	2.45	2.35	5.84	1.42	.29	2.23
AC-FT	896	527	177	698	524	926	1,040	999	2,490	605	123	950
(††)	6.11	3.27	.99	3.93	1.95	3.84	4.59	4.80	9.71	3.89	.62	6.51

CAL YR 1972 TOTAL 1,882.04 MEAN 5.14 MAX 162 MIN .56 CFSM .64 IN 8.77 AC-FT 3,730 †† 23.47
WTR YR 1973 TOTAL 5,018.94 MEAN 13.8 MAX 546 MIN .60 CFSM 1.73 IN 23.40 AC-FT 9,960 †† 50.21

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	2400	4.64	1,390	6- 3	2230	7.67	4,160
3-10	0700	5.99	2,500	6-19	2015	5.31	1,920
4-24	0545	6.25	2,740	7- 7	1930	4.57	1,330
5-11	2345	6.85	3,300	7-15	1530	4.68	1,430
6- 3	0930	6.78	3,230				

†† 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 (8.4 km) downstream from confluence of West and Elm Forks, and at mile 500.3 (805.0 km).

DRAINAGE AREA.--6,106 mi² (15,815 km²).

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 (112.17 m) above mean sea level. Oct. 1, 1898, to Dec. 31, 1899, nonrecording gage at site 2 miles (3 km) 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 (10 km) downstream at datum 3.08 ft (0.94 m) lower.

AVERAGE DISCHARGE.--70 years, 1,486 ft³/s (42.1 m³/s), 1,077,000 acre-ft/yr (1,328 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 32,900 ft³/s (932 m³/s) June 4, gage height, 38.67 ft (11.79 m); minimum, 154 ft³/s (4.36 m³/s) Oct. 16.
Period of record: Maximum discharge, 184,000 ft³/s (5,210 m³/s) May 25, 1908, gage height, 52.6 ft (16.0 m), from rating curve extended above 109,000 ft³/s (3,090 m³/s); minimum observed for periods 1903-6, 1920-73, 1.2 ft³/s (34 dm³/s) July 4, 1953, result of storage behind temporary dam 4 miles (6 km) 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 capacity of 2,325,000 acre-ft (2,870 hm³) of which 848,800 acre-ft (1,050 hm³) is for flood control. The city of Dallas reported the diversion for municipal use during the year of 93,670 acre-ft (115 hm³) of water from the Elm Fork, 48,240 acre-ft (59.5 hm³) from Lake Tawakoni (on Sabine River), the purchase of 8,590 acre-ft (10.6 hm³) from North Texas Municipal Water District (from the East Fork), and the return of 162,400 acre-ft (200 hm³) of sewage effluent to river 4 miles (6 km) downstream from station. Trinity River Authority reported a discharge of 35,210 acre-ft (43.4 hm³) of sewage effluent into the river above the 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. Revised figures of discharge, in cubic feet per second, for water year 1972, superseding figures published in WRD Texas 1972, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1971		1971-Con.		1971-Con.		1971-Con.		1972-Con.	
Oct. 3	5,160	Nov. 1	2,330	Dec. 8	5,440	Dec. 22	6,690	Jan. 7	5,790
4	5,560	18	1,910	9	18,900	23	6,170	20	4,950
5	2,510	19	1,250	10	30,800	29	7,020	21	4,360
18	2,680	Dec. 2	2,770	11	19,100	30	7,430	22	2,510
19	13,600	3	7,040	12	7,100	31	6,700	Apr. 27	2,320
20	21,400	4	2,520	13	4,880	1972		28	2,900
21	15,800	5	6,830	14	5,940	Jan. 5	7,420	May 7	1,950
22	4,420	6	10,100	15	6,880	6	6,410	8	3,570
23	2,740	7	5,680						

Month	Ft³/s-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1971	89,252	21,400	172	2,879	177,000
November	22,830	2,330	218	761	45,280
December	239,870	30,800	1,410	7,738	475,800
January 1972	132,178	7,420	354	4,264	262,200
April	16,917	2,900	160	564	33,550
May	16,422	3,570	179	530	32,570
CAL YR 1971	450,393	30,800	146	1,234	893,400
WTR YR 1972	564,181	30,800	153	1,542	1,119,000

08057000 Trinity River at Dallas, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	3,100	234	196	781	422	382	6,160	2,430	4,510	1,520	218
2	186	3,190	226	250	559	412	342	4,560	2,570	4,370	2,560	203
3	210	1,030	218	1,730	604	362	432	4,380	8,960	4,250	4,210	189
4	250	468	210	2,310	352	515	728	4,320	25,700	3,280	4,900	196
5	178	350	203	559	342	616	525	4,740	21,400	2,140	5,460	648
6	175	312	210	372	324	2,380	290	5,310	7,840	757	6,320	1,510
7	175	324	210	645	934	2,220	290	7,090	3,760	1,170	7,390	2,650
8	168	266	218	1,620	6,630	2,170	412	6,520	2,330	2,920	6,180	1,550
9	165	498	218	673	5,600	2,910	581	7,260	1,970	1,270	4,420	412
10	171	577	210	324	1,920	8,580	462	6,020	2,950	520	1,450	290
11	175	218	218	290	712	8,180	306	6,040	4,350	2,320	736	250
12	171	224	382	306	548	2,810	266	8,350	3,770	3,180	493	274
13	165	1,040	402	333	800	2,390	422	5,360	1,800	1,000	402	600
14	168	692	372	362	2,110	2,720	559	2,430	4,240	588	402	1,380
15	164	306	482	352	2,610	3,320	1,290	1,890	2,560	4,610	372	808
16	157	258	372	333	1,840	3,650	4,480	1,460	1,360	6,120	342	526
17	174	250	282	342	784	3,840	1,970	2,790	2,230	1,730	412	559
18	165	881	266	342	592	4,240	3,930	3,920	3,930	604	382	581
19	263	784	234	306	928	5,370	2,190	4,330	5,310	442	282	250
20	306	432	226	274	928	4,280	3,080	4,420	11,900	402	226	203
21	319	1,000	242	324	904	4,140	3,520	4,460	8,590	392	538	196
22	3,500	505	226	306	1,000	3,600	3,760	4,380	5,270	482	266	196
23	2,700	324	226	274	1,250	2,210	5,220	4,150	5,610	592	226	189
24	499	298	210	274	808	1,400	17,300	4,240	6,250	342	203	485
25	285	306	196	1,650	412	952	21,800	4,780	5,800	282	196	2,540
26	1,990	290	182	6,480	412	618	6,960	5,120	5,110	274	196	1,400
27	4,780	258	189	3,210	362	1,160	3,170	1,850	4,160	258	203	8,090
28	1,710	258	203	878	342	1,900	1,710	1,200	4,380	308	203	4,280
29	1,370	234	218	537	------	1,270	1,260	928	4,710	4,470	351	2,580
30	1,830	226	242	426	------	537	2,870	2,080	4,760	5,230	242	3,000
31	1,590	------	210	592	------	526	------	2,400	------	4,230	196	------
TOTAL	24,369	18,899	7,737	26,870	35,388	79,700	90,557	132,938	176,000	63,043	51,279	36,253
MEAN	786	630	250	867	1,264	2,571	3,019	4,288	5,867	2,034	1,654	1,208
MAX	4,780	3,190	482	6,480	6,630	8,580	21,800	8,350	25,700	6,120	7,390	8,090
MIN	157	218	182	196	324	362	266	928	1,360	258	196	189
AC-FT	48,340	37,490	15,350	53,300	70,190	158,100	179,600	263,700	349,100	125,000	101,700	71,910

CAL YR 1972 TOTAL 263,234 MEAN 719 MAX 7,420 MIN 15[illegible] AC-FT 522,100
WTR YR 1973 TOTAL 743,033 MEAN 2,036 MAX 25,700 MIN 157 AC-FT 1,474,000

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 (0.8 km) upstream from St. Louis Southwestern Railway Lines bridge, 0.9 mile (1.4 km) upstream from Spanky Branch, and 13 miles (21 km) north of Dallas County Courthouse.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

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.--12 years, 19.0 ft³/s (0.538 m³/s), 8.78 in/yr (223.0 mm/yr), 13,770 acre-ft/yr (17.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,060 ft³/s (143 m³/s) Sept. 26, elevation, 560.13 ft (170.73 m), from floodmark; no flow Oct. 1-25.
Period of record: Maximum discharge, 37,900 ft³/s (1,070 m³/s) Sept. 21, 1964, elevation, 574.51 ft (175.11 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of contracted-opening measurement of 37,900 ft³/s (1,070 m³/s); 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 (173.6 m), from information by local resident.

REMARKS.--Records good. No diversion above station in the 1973 water year. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	137	1.7	2.0	18	5.8	8.4	29	7.6	8.1	12	.13
2	0	12	2.7	2.1	17	5.9	8.7	17	7.8	7.3	10	.05
3	0	2.4	1.7	13	15	5.8	9.3	6.5	308	8.6	7.8	.03
4	0	1.1	1.2	17	13	7.2	8.4	9.4	240	9.6	3.8	.02
5	0	.70	1.5	19	13	7.6	8.4	10	158	7.2	4.9	2.5
6	0	28	9.4	19	13	15	8.4	20	36	1.9	5.7	59
7	0	24	12	18	56	12	8.4	180	20	.20	4.9	166
8	0	1.9	12	17	122	8.0	9.5	19	15	4.4	3.5	13
9	0	1.1	11	14	27	8.0	9.2	15	4.4	7.2	2.1	6.5
10	0	.61	4.0	9.6	22	578	7.2	11	4.1	8.1	.13	4.4
11	0	.89	2.1	6.0	20	29	7.9	31	4.1	8.0	.51	4.2
12	0	2.8	2.2	4.0	19	17	7.5	441	7.2	7.2	1.9	6.0
13	0	52	4.8	3.4	19	14	9.1	22	27	6.7	1.5	31
14	0	4.3	18	4.0	19	15	11	16	146	6.0	.94	11
15	0	2.1	10	4.0	17	10	54	13	28	5.5	1.6	5.9
16	0	1.9	5.4	4.8	14	8.9	48	12	18	3.7	4.8	5.3
17	0	1.5	8.5	6.0	14	5.6	13	10	16	2.1	3.8	6.6
18	0	10	4.6	7.7	14	4.9	11	6.7	16	4.1	.10	9.1
19	0	4.4	3.0	6.6	10	6.4	8.9	7.2	639	3.9	.06	3.4
20	0	2.5	7.0	4.4	5.1	5.6	8.4	7.2	310	3.1	.04	.65
21	0	2.2	5.6	7.2	3.1	4.9	7.2	5.5	36	2.6	.02	1.6
22	0	2.4	3.4	5.8	4.3	5.9	34	2.3	21	2.1	.08	2.0
23	0	2.4	2.8	4.5	8.2	6.0	164	11	16	3.5	.95	2.9
24	0	2.1	2.4	4.1	6.3	13	1,110	35	13	3.8	3.0	7.2
25	0	3.2	2.4	5.9	4.3	8.2	49	124	11	1.6	.19	2.6
26	15	2.3	2.4	53	9.8	5.3	28	59	8.4	1.5	.11	463
27	7.2	2.1	2.5	25	9.2	7.2	24	16	8.0	2.3	2.5	738
28	.38	2.1	6.4	18	7.4	8.6	19	14	8.4	.13	.18	66
29	1.7	2.6	4.5	17	------	8.4	18	13	8.4	12	.05	26
30	13	2.5	4.1	17	------	9.6	16	12	8.4	63	.27	15
31	96	------	3.7	19	------	10	------	10	------	28	1.4	------
TOTAL	133.28	315.10	163.0	358.1	519.7	856.8	1,733.9	1,184.8	2,150.8	233.43	78.83	1,659.08
MEAN	4.30	10.5	5.26	11.6	18.6	27.6	57.8	38.2	71.7	7.53	2.54	55.3
MAX	96	137	18	53	122	578	1,110	441	639	63	12	738
MIN	0	.61	1.2	2.0	3.1	4.9	7.2	2.3	4.1	.13	.02	.02
CFSM	.15	.36	.18	.39	.63	.94	1.97	1.30	2.44	.26	.09	1.88
IN.	.17	.40	.21	.45	.66	1.08	2.19	1.50	2.72	.30	.10	2.10
AC-FT	264	625	323	710	1,030	1,700	3,440	2,350	4,270	463	156	3,290
(††)	7.66	2.29	.82	3.03	2.03	3.81	6.05	6.14	7.57	3.72	.04	9.08

CAL YR 1972 TOTAL 1,398.61 MEAN 3.82 MAX 137 MIN 0 CFSM .13 IN 1.77 AC-FT 2,770 †† 26.02
WTR YR 1973 TOTAL 9,386.82 MEAN 25.7 MAX 1,110 MIN 0 CFSM .87 IN 11.88 AC-FT 18,620 †† 52.24

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
3-10	0915	556.14	3,120	6-19	2130	559.20	4,550
4-24	0700	558.41	4,160	9-26	2330	a560.13	5,060
5-12	0100	555.72	2,950				

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

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 (6 m) downstream from bridge on Greenville Avenue in Dallas, 1.1 miles (1.8 km) downstream from Texas and New Orleans Railroad Co. bridge, 1.2 miles (1.9 km) downstream from Cottonwood Creek, 2.9 miles (4.7 km) upstream from White Rock Lake, and 8.2 miles (13.2 km) northeast of Dallas County Courthouse.

DRAINAGE AREA.--66.4 mi² (172 km²).

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.--12 years, 59.4 ft³/s (1.68 m³/s), 12.15 in/yr (308.6 mm/yr), 43,040 acre-ft/yr (53.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,300 ft³/s (348 m³/s) Apr. 24, elevation, 488.05 ft (148.76 m), from floodmark; minimum daily, 0.40 ft³/s (11 dm³/s) Oct. 5.
Period of record: Maximum discharge, 38,100 ft³/s (1,080 m³/s) Sept. 21, 1964, elevation, 490.43 ft (149.48 m); minimum daily, 0.01 ft³/s (0.28 dm³/s) 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 (0.2 km) upstream, diverted 49 acre-ft (60,400 m³) during water year. Six recording rain gages were operated in basin above station during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	382	13	9.9	65	55	21	214	47	39	20	5.7
2	1.6	58	13	21	48	34	48	58	34	35	16	6.0
3	.79	27	14	192	42	29	28	39	1,120	33	14	6.0
4	.57	17	12	30	40	35	18	35	647	32	11	5.2
5	.40	14	12	29	38	28	17	91	369	29	11	220
6	.79	17	13	31	35	50	21	70	109	32	11	188
7	.60	60	22	79	283	35	23	357	60	192	10	184
8	1.3	15	25	31	326	26	24	50	47	35	9.7	23
9	.87	11	25	29	81	35	21	39	43	24	11	14
10	.63	9.1	20	26	61	1,760	19	33	39	25	8.2	12
11	.45	8.4	16	25	55	115	18	59	49	170	7.4	12
12	.60	49	93	27	51	68	17	1,170	47	81	7.8	10
13	.60	192	21	26	47	71	19	59	163	29	7.7	112
14	.86	24	43	25	42	58	18	42	310	42	8.2	19
15	1.4	15	21	25	40	45	200	36	74	81	7.6	10
16	.78	13	17	24	35	46	140	33	49	82	8.6	9.6
17	.86	12	17	25	33	38	70	32	44	40	10	9.0
18	.52	176	17	24	32	37	30	28	40	24	6.9	10
19	14	28	17	22	31	37	24	26	1,270	22	6.9	9.3
20	2.5	20	14	27	26	34	20	25	1,040	21	6.6	6.6
21	35	39	13	40	22	32	17	23	103	20	5.8	6.7
22	208	20	13	23	52	32	50	21	66	19	5.4	6.8
23	4.4	17	12	21	38	33	87	34	54	19	4.5	7.4
24	3.6	26	12	19	31	146	2,360	125	47	20	4.8	22
25	2.6	21	12	202	29	37	176	327	44	16	7.0	10
26	350	16	12	128	53	31	98	140	40	15	5.5	227
27	32	15	12	57	33	30	80	33	36	18	5.4	1,780
28	6.9	13	13	45	29	31	64	26	34	47	25	92
29	150	14	15	39	------	30	56	24	37	121	55	44
30	167	16	20	38	------	40	53	22	37	155	6.8	34
31	209	------	11	184	------	27	------	21	------	45	5.3	------
TOTAL	1,200.62	1,344.5	590	1,523.9	1,698	3,105	3,837	3,292	6,099	1,563	330.1	3,101.3
MEAN	38.7	44.8	19.0	49.2	60.6	100	128	106	203	50.4	10.6	103
MAX	350	382	93	202	326	1,760	2,360	1,170	1,270	192	55	1,780
MIN	.40	8.4	11	9.9	22	26	17	21	34	15	4.5	5.2
CFSM	.58	.67	.29	.74	.91	1.51	1.93	1.60	3.06	.76	.16	1.55
IN.	.67	.75	.33	.85	.95	1.74	2.15	1.84	3.42	.88	.18	1.74
AC-FT	2,380	2,670	1,170	3,020	3,370	6,160	7,610	6,530	12,100	3,100	655	6,150
(††)	7.80	2.27	1.03	3.34	2.06	3.67	5.71	5.70	7.67	4.16	.19	7.85

CAL YR 1972 TOTAL 6,659.79 MEAN 18.2 MAX 382 MIN .04 CFSM .27 IN 3.73 AC-FT 13,210 †† 24.82
WTR YR 1973 TOTAL 27,684.42 MEAN 75.8 MAX 2,360 MIN .40 CFSM 1.14 IN 15.51 AC-FT 54,910 †† 51.45

PEAK DISCHARGE (BASE, 2,900 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
3-10	0845	486.92	6,960	6- 3	1100	485.61	4,630
4-24	about 0700	a488.05	12,300	6-19	2200	487.83	10,060
				9-27	0215	487.34	7,800
5-12	0200	486.31	5,740				

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

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 (152 m) upstream from right end of White Rock Lake spillway, 1,500 ft (457 m) upstream from bridge on Garland Road (State Highway 78) in Dallas, and 10.3 miles (16.6 km) upstream from mouth.

DRAINAGE AREA.--100 mi² (259 km²).

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.--11 years, 74.3 ft³/s (2.10 m³/s), 10.09 in/yr (256.3 mm/yr), 53,830 acre-ft/yr (66.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,350 ft³/s (152 m³/s) Apr. 24, elevation, 460.55 ft (140.38 m); no flow at times.
Period of record: Maximum discharge, 28,300 ft³/s (801 m³/s) Sept. 21, 1964, elevation, 465.60 ft (141.91 m); 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 (141.8 m), from information by city of Dallas.

REMARKS.--Records poor below 50 ft³/s (1.42 m³/s) and fair above. Discharge is outflow of White Rock Lake, capacity, 10,700 acre-ft (13.2 hm³) in 1970 at spillway crest. Storage in White Rock Lake began 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 10 acre-ft (12,300 m³) was diverted for irrigation. Seven recording rain gages (fourteen prior to Sept. 30, 1972) are operated in basin above station. A lake sedimentation survey by the Soil Conservation Service was made in October 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	491	3.6	3.6	205	66	43	113	17	23	43	0
2	0	145	2.8	4.6	79	94	43	123	103	23	14	0
3	0	72	2.1	250	66	60	48	54	1,830	20	4.6	0
4	0	43	1.1	86	48	54	20	43	2,810	17	3.6	0
5	0	26	1.1	48	43	48	17	48	820	17	2.8	32
6	0	20	1.1	30	43	79	20	195	375	14	2.1	277
7	0	20	1.1	79	187	86	20	315	145	330	2.1	182
8	0	20	5.0	43	640	60	30	145	79	970	1.6	94
9	0	17	3.0	30	170	52	34	60	54	158	1.1	48
10	0	14	10	30	94	1,700	26	54	43	60	.75	20
11	0	14	5.0	48	66	568	23	39	60	72	.50	10
12	0	17	25	38	60	182	23	1,810	113	220	.38	6.5
13	0	170	30	34	60	113	54	384	170	113	.28	60
14	0	48	48	30	60	113	60	113	300	79	.18	60
15	0	17	30	26	54	66	150	54	123	296	.18	20
16	0	14	17	23	48	54	476	38	86	301	.18	17
17	0	6.5	4.0	20	48	48	113	30	66	145	.18	6.5
18	0	172	3.0	20	48	43	72	26	60	79	.18	1.1
19	0	72	2.5	20	43	38	66	22	267	48	.18	1.6
20	0	30	2.0	20	43	34	54	20	2,830	38	.18	2.1
21	0	57	2.1	34	43	30	54	17	345	30	.18	2.1
22	0	54	1.6	26	48	30	60	14	123	23	.12	1.1
23	0	34	1.6	26	72	30	116	10	54	20	0	1.1
24	0	54	1.6	20	60	234	3,050	18	48	20	0	4.6
25	0	34	1.1	166	48	103	565	440	43	17	0	17
26	373	20	1.1	286	66	72	123	390	38	10	0	69
27	544	20	1.1	94	60	60	94	86	34	6.5	0	1,820
28	113	14	.75	60	48	48	79	48	34	4.6	0	334
29	195	6.5	1.1	30	------	43	66	26	30	103	.11	158
30	145	3.6	2.8	26	------	43	60	20	26	123	0	79
31	258	------	3.6	81	------	48	------	14	------	94	0	------
TOTAL	1,628	1,725.6	215.85	1,732.2	2,550	4,299	5,659	4,769	11,126	3,474.1	78.48	3,323.7
MEAN	52.5	57.5	6.96	55.9	91.1	139	189	154	371	112	2.53	111
MAX	544	491	48	286	640	1,700	3,050	1,810	2,830	970	43	1,820
MIN	0	3.6	.75	3.6	43	30	17	10	17	4.6	0	0
CFSM	.53	.58	.07	.56	.91	1.39	1.89	1.54	3.71	1.12	.03	1.11
IN.	.61	.64	.08	.64	.95	1.60	2.11	1.77	4.14	1.29	.03	1.24
AC-FT	3,230	3,420	428	3,440	5,060	8,530	11,220	9,460	22,070	6,890	156	6,590

CAL YR 1972 TOTAL 6,356.01 MEAN 17.4 MAX 544 MIN 0 CFSM .17 IN 2.36 AC-FT 12,610
WTR YR 1973 TOTAL 40,580.93 MEAN 111 MAX 3,050 MIN 0 CFSM 1.11 IN 15.10 AC-FT 80,490

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 (9 m) downstream from Texas and New Orleans Railroad Co. bridge, 125 ft (38 m) downstream from Scyene Road (State Highway 352) in Dallas, 4.5 miles (7.2 km) east of Dallas County Courthouse, and 5.8 miles (9.3 km) upstream from mouth.

DRAINAGE AREA.--122 mi² (316 km²).

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 (9 m) upstream at same datum.

AVERAGE DISCHARGE.--11 years, 107 ft³/s (3.03 m³), 11.91 in/yr (302.5 mm/yr), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,500 ft³/s (439 m³/s) June 4, elevation, 402.56 ft (122.70 m); minimum daily, 2.1 ft³/s (59 dm³/s) Oct. 4, 5, 8, 9.
Period of record: Maximum discharge, 30,200 ft³/s (855 m³/s) Sept. 21, 1964, elevation, 404.30 ft (123.23 m), from rating curve extended above 20,000 ft³/s (566 m³/s) on basis of contracted-opening measurement of 30,200 ft³/s (855 m³/s); minimum daily, 0.4 ft³/s (11 dm³/s) Aug. 2, 3, 1964.
Maximum elevation since at least 1886, 409.2 ft (124.7 m) 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 ft³/s (793 m³/s), 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 (13.2 hm³), at normal level, 4.5 miles (7.2 km) upstream. The Dallas Power and Light Co. reported diversion of 2,200 acre-ft (2.71 hm³) to off-channel reservoir at generating plant 0.8 mile (1.3 km) upstream from station. Low flow sustained by wastewater. Seven recording rain gages (fourteen prior to Sept. 30, 1972) above station and one at station have been operated in basin since 1962.

REVISIONS.--WRD Texas 1970: Drainage area. Revised figures of discharge, in cubic feet per second, for high-water period in water year 1972, superseding figures published in WRD Texas 1972, are given below:

Dec. 10, 1971.....	4,860
Dec. 11, 1971.....	849
Dec. 12, 1971.....	416

Month	Ft³/s-days	Maximum	Minimum	Mean	Cfsm	Inches	Runoff in acre-feet
December 1971.....	21,845	6,820	57	705	5.78	6.66	43,330
CAL YR 1971.....	54,713.3	6,820	1.4	150	1.23	16.69	108,520
WTR YR 1972.....	49,608.7	6,820	1.1	136	1.11	15.13	98,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	751	17	18	326	84	40	130	56	26	97	3.1
2	2.2	385	17	20	115	96	144	262	121	18	36	4.0
3	2.2	113	20	302	70	68	127	119	3,560	16	20	2.6
4	2.1	66	31	119	61	62	58	66	5,460	17	11	3.6
5	2.1	41	15	77	59	56	26	103	1,290	26	6.8	101
6	2.4	35	43	74	58	119	25	296	543	25	6.1	394
7	2.2	46	21	134	308	92	36	336	234	1,200	6.2	267
8	2.1	43	10	177	1,360	63	57	217	146	1,220	6.0	105
9	2.1	31	13	76	304	67	90	89	101	166	5.6	59
10	2.5	31	29	62	128	3,390	29	67	84	65	5.7	40
11	2.7	26	27	55	98	1,190	9.9	137	208	79	5.7	34
12	2.8	26	37	53	87	312	8.8	2,780	194	229	5.5	25
13	2.7	189	45	49	89	154	97	399	380	159	5.0	86
14	3.1	137	66	52	92	155	127	111	513	73	5.4	129
15	3.2	51	80	52	60	145	219	81	285	290	5.7	56
16	3.2	25	36	52	56	112	696	59	141	338	6.5	4.3
17	3.3	26	18	51	52	53	220	48	85	159	8.4	76
18	3.5	159	18	51	51	49	124	35	63	53	6.7	21
19	25	163	21	49	52	55	117	40	195	46	4.8	7.3
20	4.8	66	22	45	57	71	87	38	3,600	35	4.8	6.0
21	20	43	35	66	46	46	66	25	540	22	3.9	6.2
22	138	47	19	67	64	40	105	31	181	14	3.8	5.9
23	6.9	29	12	58	90	45	192	33	109	17	6.2	6.9
24	4.8	90	19	41	68	340	4,380	40	51	13	4.1	32
25	4.4	48	12	277	58	195	1,230	519	54	13	3.4	17
26	497	41	18	419	65	93	333	495	50	13	3.3	404
27	561	24	9.9	154	64	54	172	156	44	13	6.2	3,350
28	74	33	4.0	133	56	53	118	58	34	15	3.0	596
29	156	18	4.2	68	------	39	87	39	26	124	3.2	184
30	193	16	6.4	43	------	24	79	33	23	135	2.7	117
31	407	------	15	83	------	28	------	25	------	175	2.5	------
TOTAL	2,138.6	2,799	740.5	2,977	3,994	7,350	9,099.7	6,867	18,371	4,794	301.2	6,142.9
MEAN	69.0	93.3	23.9	96.0	143	237	303	222	612	155	9.72	205
MAX	561	751	80	419	1,360	3,390	4,380	2,780	5,460	1,220	97	3,350
MIN	2.1	16	4.0	18	46	24	8.8	25	23	13	2.5	2.6
CFSM	.57	.76	.20	.79	1.17	1.94	2.48	1.82	5.02	1.27	.08	1.68
IN.	.65	.85	.23	.91	1.22	2.24	2.77	2.09	5.60	1.46	.09	1.87
AC-FT	4,240	5,550	1,470	5,900	7,920	14,580	18,050	13,620	36,440	9,510	597	12,180

CAL YR 1972 TOTAL 12,388.1 MEAN 33.8 MAX 751 MIN 1.1 CFSM .28 IN 3.78 AC-FT 24,570
WTR YR 1973 TOTAL 65,574.9 MEAN 180 MAX 5,460 MIN 2.1 CFSM 1.48 IN 19.99 AC-FT 130,100

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 (1.6 km) downstream from White Rock Creek, 1.5 miles (2.4 km) upstream from Fivemile Creek, 6.4 miles (10.3 km) southeast of Dallas County Courthouse in Dallas, and at mile 491.8 (791.3 km).

DRAINAGE AREA.--6,278 mi² (16,260 km²).

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 (111.52 m) above mean sea level.

AVERAGE DISCHARGE.--16 years (1957-73), 1,607 ft³/s (45.5 m³/s), 1,164,000 acre-ft/yr (1,435 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,500 ft³/s (694 m³/s) June 5, gage height, 27.59 ft (8.41 m); minimum, 285 ft³/s (8.07 m³/s) Oct. 9.
Period of record: Maximum discharge, 65,700 ft³/s (1,860 m³/s) May 27, 1957, gage height, 32.02 ft (9.76 m); minimum daily, 131 ft³/s (3.71 m³/s) Dec. 9, 1956.
Flood of May 25, 1908, reached a stage of 41.1 ft (12.5 m), 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 (15.4 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	415	2,450	433	370	1,160	709	651	4,980	2,580	4,840	2,440	445
2	379	2,350	424	471	962	756	646	5,240	2,890	4,660	2,360	422
3	397	1,370	442	1,750	760	668	821	4,760	5,230	4,510	3,870	408
4	424	819	424	2,250	662	726	977	4,550	17,000	4,090	4,590	430
5	397	643	397	975	652	850	865	4,590	23,600	2,580	4,960	910
6	370	597	406	741	626	1,750	557	5,320	17,100	1,260	5,570	1,930
7	354	620	424	975	952	2,130	544	5,900	8,930	905	6,150	2,890
8	336	574	433	1,330	3,860	1,770	625	6,740	4,810	4,670	6,210	1,990
9	354	564	406	1,090	4,390	2,220	885	6,390	2,410	2,500	5,640	787
10	370	852	388	663	2,620	4,140	752	6,260	3,160	1,020	2,300	630
11	397	433	424	605	1,160	6,160	556	5,980	4,090	1,580	1,020	565
12	388	406	643	611	938	4,640	499	7,130	4,910	3,950	740	608
13	379	1,160	741	630	980	2,520	666	7,390	2,860	1,910	633	944
14	362	1,050	715	650	1,790	2,400	921	4,630	3,660	829	662	1,670
15	345	643	819	656	2,100	2,540	1,100	2,610	4,310	3,250	629	1,300
16	354	531	741	625	1,870	2,780	4,640	1,830	1,840	6,040	590	854
17	370	491	531	621	1,050	2,800	2,980	2,700	2,290	3,730	652	896
18	379	957	511	638	973	2,940	3,260	3,840	3,580	1,370	687	951
19	481	1,100	491	602	1,080	3,280	2,580	4,410	4,370	1,090	517	609
20	531	780	451	549	1,080	3,440	2,970	4,540	7,430	901	484	487
21	551	985	461	610	1,070	3,080	3,390	4,570	10,500	782	726	484
22	2,370	884	451	606	1,100	2,900	3,600	4,510	7,910	753	593	479
23	2,470	574	397	570	1,320	2,100	4,140	4,330	6,590	866	455	458
24	804	531	370	548	1,070	1,600	8,030	4,310	6,290	627	449	771
25	501	620	354	1,210	728	1,240	19,200	4,770	6,180	523	426	2,640
26	1,270	551	354	3,990	706	926	17,700	5,530	5,670	506	417	1,190
27	3,260	481	388	2,590	669	1,180	8,200	3,100	4,800	483	440	7,010
28	1,980	491	397	1,270	626	1,700	3,840	1,490	4,500	475	442	6,990
29	1,240	461	397	882	------	1,370	1,820	1,220	4,770	3,230	537	4,430
30	1,660	433	424	772	------	808	2,810	1,980	4,930	5,650	506	3,260
31	1,480	------	379	792	------	776	------	2,580	------	4,670	432	------
TOTAL	25,368	24,401	14,616	30,642	36,954	66,899	100,225	138,180	189,190	74,250	56,127	47,438
MEAN	818	813	471	988	1,320	2,158	3,341	4,457	6,306	2,395	1,811	1,581
MAX	3,260	2,450	819	3,990	4,390	6,160	19,200	7,390	23,600	6,040	6,210	7,010
MIN	336	406	354	370	626	668	499	1,220	1,840	475	417	408
AC-FT	50,320	48,400	28,990	60,780	73,300	132,700	198,800	274,100	375,300	147,300	111,300	94,090

CAL YR 1972 TOTAL 342,388 MEAN 935 MAX 7,300 MIN 328 AC-FT 679,100
WTR YR 1973 TOTAL 804,290 MEAN 2,204 MAX 23,600 MIN 336 AC-FT 1,595,000

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 (0.2 km) downstream from Missouri, Kansas, and Texas Railroad bridge, 0.5 mile (0.8 km) downstream from Deep Branch, 1.0 mile (1.6 km) south of Lancaster, and 14.1 miles (22.7 km) upstream from mouth.

DRAINAGE AREA.--52.8 mi² (137 km²).

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, 12,900 ft³/s (365 m³/s) Sept. 27, elevation, 466.00 ft (142.04 m), from floodmarks, from rating curve extended as explained below; no flow Oct. 13-20.
Period of record: Maximum discharge, 12,900 ft³/s (365 m³/s) Sept. 27, 1973, elevation, 466.00 ft (142.04 m), from floodmarks, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times.
Maximum elevation since 1942, 468.4 ft (142.8 m) 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 (142.0 m), from floodmarks at downstream side of bridge, and a discharge of 12,900 ft³/s (365 m³/s), on the basis of a contracted-opening measurement of peak flow.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	97	4.2	4.4	54	30	25	201	15	26	34	3.5
2	.04	15	4.0	16	38	29	29	81	19	24	29	3.5
3	.04	4.7	3.8	121	35	25	40	57	451	22	26	3.1
4	.03	3.0	3.2	26	35	25	25	51	2,910	21	24	3.1
5	.03	2.5	3.5	22	33	23	23	68	253	19	22	24
6	.02	5.8	3.1	21	31	37	22	97	202	22	21	67
7	.01	13	2.6	64	92	29	26	52	138	206	20	32
8	.01	3.1	4.3	32	250	24	24	43	101	310	18	12
9	.01	2.0	4.3	25	70	24	24	44	81	35	17	9.4
10	.01	1.6	4.2	23	57	1,610	20	36	72	31	16	8.1
11	.01	1.8	4.5	24	52	124	20	34	343	154	15	7.3
12	.01	3.2	15	23	49	76	20	103	126	44	14	7.2
13	0	46	13	24	45	73	34	35	114	37	13	200
14	0	6.8	20	26	40	65	42	32	167	31	14	20
15	0	3.9	17	24	37	50	135	31	83	89	17	12
16	0	3.5	11	22	36	54	83	29	64	103	11	11
17	0	2.8	9.9	22	35	47	37	25	56	43	11	8.8
18	0	20	9.5	21	34	44	38	25	50	34	11	8.0
19	0	8.5	10	19	33	41	55	23	57	30	10	8.5
20	0	5.0	9.3	21	31	37	33	22	190	27	9.5	7.4
21	.01	6.4	8.7	27	31	36	30	21	60	24	8.7	7.4
22	87	6.7	6.3	19	36	36	35	19	49	22	7.3	5.7
23	2.7	4.9	6.3	18	38	35	594	19	44	20	6.5	5.5
24	.64	6.3	5.5	18	31	88	1,750	19	40	19	5.5	21
25	.38	9.2	5.2	156	29	37	211	18	38	18	4.9	8.1
26	176	5.1	5.5	123	28	33	111	20	36	17	4.5	690
27	25	5.0	5.2	54	27	31	81	17	33	16	4.4	4,080
28	4.8	4.2	5.4	42	27	31	69	14	31	50	4.0	300
29	4.7	4.2	5.8	38	------	29	63	13	29	302	4.0	200
30	6.0	5.5	6.7	38	------	28	59	13	28	58	4.0	125
31	20	------	4.9	51	------	28	------	13	------	46	3.6	------
TOTAL	327.49	306.7	221.9	1,164.4	1,334	2,879	3,758	1,275	5,880	1,900	409.9	5,898.6
MEAN	10.6	10.2	7.16	37.6	47.6	92.9	125	41.1	196	61.3	13.2	197
MAX	176	97	20	156	250	1,610	1,750	201	2,910	310	34	4,080
MIN	0	1.6	2.6	4.4	27	23	20	13	15	16	3.6	3.1
CFSM	.20	.19	.14	.71	.90	1.76	2.37	.78	3.71	1.16	.25	3.73
IN.	.23	.22	.16	.82	.94	2.03	2.65	.90	4.14	1.34	.29	4.16
AC-FT	650	608	440	2,310	2,650	5,710	7,450	2,530	11,660	3,770	813	11,700
(††)	6.10	3.10	1.16	4.15	1.85	4.24	6.01	2.32	10.18	7.32	.26	10.94

CAL YR 1972 TOTAL 4,158.38 MEAN 11.4 MAX 176 MIN 0 CFSM .22 IN 2.93 AC-FT 8,250 †† 23.30
WTR YR 1973 TOTAL 25,354.99 MEAN 69.5 MAX 4,080 MIN 0 CFSM 1.32 IN 17.86 AC-FT 50,290 †† 57.63

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-26	1700	448.09	724	6-11	1700	453.49	1,590
3-10	1000	462.52	7,350	7- 7	2400	458.22	3,330
4-24	0030	461.76	6,410	7-29	0215	448.15	732
5- 1	1815	450.63	1,090	9-13	1100	450.13	1,020
6- 3	1300	452.40	1,380		about		
6- 4	0300	463.57	8,820	9-27	0300	a466.00	12,900

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

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 (2.4 km) west of Farm Road 543, and 8.4 miles (13.5 km) northwest of McKinney.

DRAINAGE AREA.--2.14 mi² (5.54 km²).

PERIOD OF RECORD.--September 1952 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 629.00 ft (191.72 m) above mean sea level (Soil Conservation Service bench mark).

AVERAGE INFLOW.--21 years, 886 acre-ft/yr (1.09 hm³/yr).

AVERAGE OUTFLOW.--21 years, 683 acre-ft/yr (0.842 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 6.9 ft³ (195 dm³) Apr. 24, gage height, 18.24 ft (5.56 m); no outflow at times. Maximum inflow, 879 ft³/s (24.9 m³/s), average for 5-minute interval, Apr. 24, computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 716 ft³/s (20.3 m³/s) May 26, 1957, gage height, 28.77 ft (8.77 m); no outflow at times each year. Maximum inflow, 3,360 ft³/s (95.2 m³/s), 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 (397 m) 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 (0.8-meter) square concrete drop-inlet structure that is connected to a 12-inch (305-millimeter) concrete outlet pipe. The emergency spillway crest is at gage height 26.8 ft (8.2 m); crest of drop-inlet structure is at gage height 14.84 ft (4.52 m); and invert at bottom of outlet pipe is at gage height 4.8 ft (1.5 m). There is also an 8-inch (203-millimeter) controlled outlet pipe connected to the drop inlet at gage height 4.8 ft (1.5 m). Pool capacity is 1,170 acre-ft (1.44 hm³) at crest of emergency spillway, 428 acre-ft (0.528 hm³) at crest of drop inlet, and 123 acre-ft (0.152 hm³) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	13.0	22.9	17.8	54.0	96.3	210	295	108	269	27.8	2.0	147
Outflow	0	0	0	0	44.3	204	195	200	257	2.1	1.1	53.1
(†)	-3.8	10.6	5.4	53.7	46.3	0	101	-104	-1.3	3.0	-37.9	84.4
(††)	4.26	2.96	.46	2.67	1.82	3.61	4.93	4.02	4.85	3.27	.10	7.92

CAL YR 1972: Inflow 262 Outflow 401 † -359 †† 22.83
WTR YR 1973: Inflow 1,260 Outflow 957 † 157 †† 40.87

PEAK INFLOW (BASE, 100 FT³/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
3-10	0800	*266	6- 5	0355	*260
4-24	0410	*879	6-13	1600	*259
5-25	1805	*196	9-26	2110	*380

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 (0.8 km) west of Farm Road 543, and 7.8 miles (12.6 km) northwest of McKinney.

DRAINAGE AREA.--1.26 mi^2 (3.26 km^2).

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

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 623.00 ft (189.89 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--21 years, 531 acre-ft/yr (0.655 hm^3/yr).

AVERAGE OUTFLOW.--21 years, 448 acre-ft/yr (0.552 hm^3/yr).

EXTREMES.--Current year: Maximum outflow, 7.8 ft^3/s (221 dm^3/s) Sept. 27, gage height, 19.70 ft (6.00 m); no outflow at times. Maximum inflow, 614 ft^3/s (17.4 m^3/s), average for 5-minute interval, Apr. 24, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 766 ft^3/s (21.7 m^3/s) May 26, 1957, gage height, 29.23 ft (8.91 m); no outflow most of time each year. Maximum inflow, 1,490 ft^3/s (42.2 m^3/s), 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. The pool is formed by a rolled earthfill dam, 1,253 ft (382 m) 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 (0.8-meter) square concrete drop-inlet structure that is connected to a 12-inch (305-millimeter) concrete outlet pipe. The emergency spillway crest is at gage height 27.0 ft (8.2 m); crest of drop-inlet structure is at gage height 14.99 ft (4.57 m); and invert at bottom of outlet pipe is at gage height 5.0 ft (1.5 m). There is also an 8-inch (203-millimeter) controlled outlet pipe connected to the drop inlet at gage height 5.0 ft (1.5 m). Pool capacity is 477 acre-ft (0.588 hm^3) at the emergency spillway crest, 104 acre-ft (0.128 hm^3) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	5.2	8.6	6.4	24.7	46.6	135	182	101	107	21.1	6.2	139
Outflow	0	0	0	0	40.3	132	178	101	102	9.8	1.2	81.5
(†)	.6	5.6	2.6	24.7	4.2	.4	4.5	-5.6	-1.1	2.4	-11.6	59.8
(††)	4.38	3.17	.42	2.54	1.82	4.43	5.25	4.02	3.88	3.24	.10	9.58

CAL YR 1972: Inflow 100 Outflow 50.3 † -28.5 †† 20.75
WTR YR 1973: Inflow 783 Outflow 646 † 86.5 †† 42.83

PEAK INFLOW (BASE, 100 FT^3/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
3- 3	1735	*229	5- 6	2340	*206
3-10	0630	*239	5-25	1905	*286
4-15	1910	*118	6- 5	0450	*378
4-24	0505	*614	9-26	2105	*453

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† 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 (7.2 km) downstream from Haw Branch, 5.6 miles (9.0 km) upstream from mouth, and 6.0 miles (9.7 km) northwest of McKinney.

DRAINAGE AREA.--39.0 mi² (101 km²).

PERIOD OF RECORD.--July 1951 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 563.68 ft (171.81 m) above mean sea level (Soil Conservation Service reference mark).

AVERAGE DISCHARGE.--22 years, 19.4 ft³/s (0.549 m³/s), 14,060 acre-ft/yr (17.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,940 ft³/s (112 m³/s) Sept. 27, gage height, 18.22 ft (5.55 m); no flow at times.
Period of record: Maximum discharge, 7,920 ft³/s (224 m³/s) May 26, 1957, gage height, 20.29 ft (6.18 m); no flow at times each year.
Maximum stage since at least 1930, 23.0 ft (7.0 m) in spring of 1950, from information by local resident.

REMARKS.--Records good. At end of year, flow from 27.9 mi² (72.3 km²) above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 10,070 acre-ft (12.4 hm³) below the flood-spillway crests, of which 7,760 acre-ft (9.57 hm³) is floodwater-retarding capacity and 2,310 acre-ft (2.85 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 985 acre-ft (1.21 hm³), of which 156 acre-ft (0.192 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	73	5.1	4.5	18	14	11	34	9.4	4.6	6.6	.18
2	0	47	4.7	4.2	14	16	11	27	16	3.5	2.9	.04
3	0	31	4.5	54	12	112	11	22	97	2.6	1.8	0
4	0	19	4.1	34	11	225	9.1	20	85	2.1	1.4	0
5	0	11	3.6	19	10	115	8.0	17	365	2.0	7.4	2.5
6	0	14	3.9	15	10	256	7.8	24	215	2.0	.72	26
7	0	21	3.0	18	66	151	8.2	218	123	1.8	.50	29
8	0	10	2.9	16	212	74	8.8	63	69	1.7	.43	14
9	0	7.8	3.2	12	68	62	9.5	27	44	1.5	.43	9.6
10	0	6.1	3.3	11	34	744	7.4	19	26	1.5	.37	15
11	0	3.6	3.3	11	25	265	6.9	15	19	1.5	.32	4.3
12	0	2.2	5.6	10	22	210	6.7	26	24	2.1	.32	2.0
13	0	21	6.8	9.3	21	158	11	16	104	1.4	.19	1.5
14	0	13	6.4	9.0	18	96	12	11	307	1.3	.23	1.2
15	0	11	8.1	8.6	16	66	106	9.6	155	4.6	.27	.89
16	0	9.5	6.2	8.6	14	50	166	8.3	90	2.8	.15	.72
17	0	8.8	5.4	8.6	12	44	54	7.2	61	2.0	.15	.64
18	0	28	5.5	13	12	42	31	6.5	33	1.5	.19	.57
19	0	21	5.7	12	11	38	33	4.6	23	1.3	.27	.50
20	0	14	6.8	11	11	35	22	3.7	79	1.2	.19	.43
21	0	13	7.7	11	10	32	19	3.6	35	3.2	.04	.72
22	26	13	7.3	10	11	31	72	2.9	23	2.0	0	.64
23	1.6	11	6.1	7.0	14	19	148	4.6	17	1.1	0	.64
24	.22	9.7	4.3	6.1	12	21	593	4.4	14	.95	0	.37
25	0	10	4.2	19	12	19	233	176	12	.86	0	.32
26	13	8.9	4.0	94	17	14	147	259	10	.81	0	234
27	13	7.0	3.6	43	15	12	92	110	8.5	.77	0	974
28	4.8	5.6	3.8	24	13	12	76	47	7.6	.74	0	246
29	15	4.9	3.9	16	------	11	54	18	7.3	4.4	0	198
30	23	5.5	5.5	15	------	14	45	12	7.0	21	.33	154
31	21	------	5.5	15	------	15	------	10	------	13	.47	------
TOTAL	117.62	460.6	154.0	548.9	721	2,973	2,019.4	1,226.4	2,085.8	91.83	25.67	1,917.76
MEAN	3.79	15.4	4.97	17.7	25.8	95.9	67.3	39.6	69.5	2.96	.83	63.9
MAX	26	73	8.1	94	212	744	593	259	365	21	7.4	974
MIN	0	2.2	2.9	4.2	10	11	6.7	2.9	7.0	.74	0	0
AC-FT	233	914	305	1,090	1,430	5,900	4,010	2,430	4,140	182	51	3,800

CAL YR 1972 TOTAL 1,708.91 MEAN 4.67 MAX 73 MIN 0 AC-FT 3,390
WTR YR 1973 TOTAL 12,341.98 MEAN 33.8 MAX 974 MIN 0 AC-FT 24,480

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 (1.9 km) northeast of McKinney, 4.2 miles (6.8 km) downstream from Honey Creek, 11 miles (18 km) upstream from Wilson Creek, 22 miles (35 km) upstream from Lavon Dam, and at mile 82.4 (132.6 km).

DRAINAGE AREA.--190 mi² (492 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 511.69 ft (155.96 m) above mean sea level. Since Feb. 21, 1966, supplementary water-stage recorder on overflow channel, 3,680 ft (1,122 m) to left of main channel.

AVERAGE DISCHARGE.--24 years, 105 ft³/s (2.97 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,800 ft³/s (391 m³/s) Sept. 27, gage height, 16.68 ft (5.08 m); maximum gage height, 16.72 ft (5.10 m) Sept. 27; no flow Oct. 1-20.
Period of record: Maximum discharge not determined; maximum gage height, 17.23 ft (5.25 m) June 11, 1950; maximum discharge measured, 23,900 ft³/s (677 m³/s) May 26, 1957, gage height, 16.65 ft (5.07 m); no flow at times.
Maximum stage since at least 1913, 21 ft (6 m) 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 91.7 mi² (238 km²) above this station was partly controlled by 51 floodwater-retarding structures with a total combined capacity of 33,760 acre-ft (41.6 hm³) below the flood-spillway crests, of which 26,860 acre-ft (33.1 hm³) is floodwater-retarding capacity and 6,900 acre-ft (8.51 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 985 acre-ft (1.21 hm³), of which 156 acre-ft (0.192 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	281	33	22	152	85	98	204	71	21	81	3.1
2	0	398	31	18	97	108	78	177	93	18	52	2.6
3	0	131	29	106	81	98	73	135	571	16	35	2.4
4	0	88	27	171	72	1,360	66	110	1,330	14	26	2.2
5	0	64	24	94	67	525	59	95	1,560	13	25	13
6	0	139	22	79	63	718	55	122	2,180	12	21	281
7	0	322	20	75	112	1,210	56	791	714	13	17	510
8	0	93	19	85	992	361	57	529	366	11	14	243
9	0	74	19	70	299	319	60	256	267	9.3	12	161
10	0	63	20	60	185	1,860	53	168	206	8.2	11	124
11	0	54	20	55	148	2,400	49	130	152	23	9.3	99
12	0	47	24	53	128	993	48	125	140	25	8.2	74
13	0	157	36	52	116	536	53	97	139	14	7.5	74
14	0	120	38	51	101	407	83	77	509	7.0	7.0	101
15	0	74	42	55	86	298	133	68	396	9.9	6.4	67
16	0	60	40	58	82	226	984	61	236	82	6.2	50
17	0	52	33	58	77	179	299	55	167	39	5.5	37
18	0	68	30	58	74	155	200	51	123	21	5.3	33
19	0	106	32	63	71	136	176	48	100	20	5.0	26
20	0	75	33	54	68	119	140	44	159	16	4.8	21
21	.03	63	35	57	64	106	105	41	114	12	3.9	18
22	57	64	33	57	65	100	172	37	83	37	3.7	16
23	76	60	30	49	82	92	483	38	65	10	6.6	14
24	28	52	27	43	80	125	2,970	44	53	6.8	7.0	13
25	17	52	22	47	72	170	2,000	42	45	5.5	5.5	12
26	30	52	20	299	81	132	662	1,340	39	4.6	3.0	43
27	100	44	19	216	88	99	417	395	33	3.7	2.7	6,070
28	44	39	18	137	76	91	328	250	28	3.3	1.4	2,670
29	88	32	18	97	------	83	270	172	25	67	3.0	1,240
30	101	30	18	84	------	79	227	125	23	155	2.5	976
31	271	------	21	92	------	153	------	89	------	164	2.6	------
TOTAL	812.03	2,954	833	2,515	3,679	13,323	10,454	5,916	9,987	861.3	401.1	12,996.3
MEAN	26.2	98.5	26.9	81.1	131	430	348	191	333	27.8	12.9	433
MAX	271	398	42	299	992	2,400	2,970	1,340	2,180	164	81	6,070
MIN	0	30	18	18	63	79	48	37	23	3.3	1.4	2.2
AC-FT	1,610	5,860	1,650	4,990	7,300	26,430	20,740	11,730	19,810	1,710	796	25,780

CAL YR 1972 TOTAL 10,418.09 MEAN 28.5 MAX 398 MIN 0 AC-FT 20,660
WTR YR 1973 TOTAL 64,731.73 MEAN 177 MAX 6,070 MIN 0 AC-FT 128,400

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 (2.3 km) northeast of Princeton, 2.3 miles (3.7 km) downstream from Stiff Creek, 5 miles (8 km) upstream from mouth, and 15 miles (24 km) upstream from Lavon Dam.

DRAINAGE AREA.--113 mi² (293 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 487.52 ft (148.60 m) above mean sea level (Corps of Engineers bench mark), unadjusted.

AVERAGE DISCHARGE.--24 years, 65.4 ft³/s (1.85 m³/s), 47,380 acre-ft/yr (58.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,140 ft³/s (117 m³/s) Sept. 28, gage height, 15.08 ft (4.60 m); no flow Oct. 1-30, Aug. 24-27, Sept. 1.
Period of record: Maximum discharge, 9,080 ft³/s (257 m³/s) Apr. 26, 1957, gage height, 16.28 ft (4.96 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of contracted-opening measurement of 7,560 ft³/s (214 m³/s); maximum gage height, 16.55 ft (5.04 m) Apr. 30, 1966; no flow at times.
Maximum stage since at least 1865, 22 ft (7 m) in July 1913, from information by local residents.

REMARKS.--Records good. At end of year, flow from 57.6 mi² (149 km²) above this station was partly controlled by 37 floodwater-retarding structures with a total combined capacity of 19,870 acre-ft (24.5 hm³) below the flood-spillway crests, of which 15,600 acre-ft (19.2 hm³) is floodwater-retarding capacity and 4,270 acre-ft (5.26 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WSP 1392: 1950, 1951(P). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	84	4.7	22	215	78	81	357	48	21	39	0
2	0	125	6.1	18	161	95	58	154	48	19	25	.04
3	0	49	6.6	35	107	79	52	93	107	15	18	1.1
4	0	28	6.0	111	89	446	50	71	314	13	13	1.1
5	0	19	6.2	69	84	583	45	63	417	13	11	3.8
6	0	12	5.1	48	80	289	42	70	534	10	9.5	234
7	0	116	4.3	44	103	398	42	314	294	12	8.5	390
8	0	62	4.4	49	545	219	43	279	159	13	7.9	272
9	0	34	3.8	48	371	151	43	128	91	11	7.2	150
10	0	22	3.5	33	235	692	40	89	71	15	6.8	97
11	0	11	4.4	27	162	1,280	35	69	82	15	8.2	63
12	0	6.6	5.9	30	124	581	34	59	86	15	6.9	47
13	0	26	8.6	26	109	300	33	47	86	10	5.5	42
14	0	50	19	24	94	230	90	37	159	9.3	5.1	159
15	0	26	25	24	75	172	54	33	190	65	5.0	76
16	0	9.6	27	28	68	133	311	32	102	61	4.5	55
17	0	4.9	25	30	66	110	219	28	74	27	4.1	43
18	0	3.8	20	30	66	102	116	26	57	19	8.6	38
19	0	34	19	39	65	92	93	23	49	15	4.2	32
20	0	46	20	51	60	83	97	21	49	12	3.0	33
21	0	26	22	43	59	74	71	19	48	9.2	2.6	32
22	0	20	21	47	61	71	118	17	43	10	2.1	26
23	0	20	20	43	66	68	312	14	35	12	2.1	24
24	0	20	16	32	75	108	1,370	21	31	7.6	0	24
25	0	17	17	35	70	135	1,480	20	27	6.3	0	22
26	0	18	17	161	71	102	632	328	24	5.3	0	25
27	0	19	15	200	75	74	281	653	23	4.6	0	1,260
28	0	14	17	119	70	66	190	197	21	4.1	.21	3,160
29	0	10	18	88	------	62	150	114	19	27	.49	1,580
30	0	5.8	17	74	------	58	124	76	20	75	.14	925
31	34	------	19	107	------	74	------	58	------	77	.03	------
TOTAL	34	938.7	423.6	1,735	3,426	7,005	6,306	3,510	3,308	628.4	208.67	8,815.04
MEAN	1.10	31.3	13.7	56.0	122	226	210	113	110	20.3	6.73	294
MAX	34	125	27	200	545	1,280	1,480	653	534	77	39	3,160
MIN	0	3.8	3.5	18	59	58	33	14	19	4.1	0	0
AC-FT	67	1,860	840	3,440	6,800	13,890	12,510	6,960	6,560	1,250	414	17,480

CAL YR 1972 TOTAL 36,338.41 MEAN 99.3 MAX 3,160 MIN 0 AC-FT 72,080
WTR YR 1973 TOTAL 36,338.41 MEAN 99.6 MAX 3,160 MIN 0 AC-FT 72,080

PEAK DISCHARGE (BASE, 1,800 FT³/S).--Sept. 28 (0400) 4,140 ft³/s (15.08 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 (1,170 m) upstream from St. Louis Southwestern Railway Lines bridge, 4,000 ft (1,220 m) upstream from bridge on State Highway 78, 2.9 miles (4.7 km) west of Lavon, and at mile 55.9 (89.9 km).

DRAINAGE AREA.--770 mi² (1,994 km²).

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, 220,300 acre-ft (272 hm³) Apr. 30, elevation, 478.10 ft (145.72 m); minimum, 85,850 acre-ft (106 hm³) Oct. 18, elevation, 466.02 ft (142.04 m).
Period of record: Maximum contents, 462,800 acre-ft (571 hm³) May 26, 1957, elevation, 491.90 ft (149.93 m); minimum since lake first filled in 1957, 87,980 acre-ft (108 hm³) Sept. 22, 1971, elevation, 466.27 ft (142.12 m).

REMARKS.--Lake is formed by a rolled earthfill dam 9,499 ft (2,895 m) long, including a 568-foot (173-meter) gated spillway with twelve 40- by 28-foot (12- by 9-meter) tainter gates. The low-flow outlets consist of five 36-inch-diameter (1-meter) gate-controlled sluices with inverts at elevation 453.0 ft (138.1 m). 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 (138.1 m). At end of year, flow from 234 mi² (606 km²) above this station was partly controlled by 141 floodwater-retarding structures with a total combined capacity of 84,000 acre-ft (104 hm³) below the flood-spillway crests, of which 66,890 acre-ft (82.5 hm³) is floodwater-retarding capacity and 17,110 acre-ft (21.1 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,225 acre-ft (1.51 hm³), of which 215 acre-ft (0.265 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91,210	94,010	107,200	111,200	134,100	144,400	145,400	217,800	150,100	154,200	146,400	133,200
2	90,780	94,980	107,300	111,600	137,400	145,800	145,800	218,600	148,400	150,500	146,200	132,800
3	90,610	96,770	107,200	112,100	138,800	147,300	145,400	217,700	152,800	149,500	145,800	132,500
4	90,100	97,310	107,200	113,100	139,400	149,200	144,400	213,700	157,400	148,700	145,000	132,300
5	89,760	97,580	107,200	114,500	140,100	156,900	144,000	208,300	167,000	148,500	144,900	133,700
6	90,270	97,940	107,200	115,200	140,600	161,000	143,700	203,100	176,900	148,200	144,100	135,200
7	88,910	98,920	107,300	116,100	143,800	164,100	143,800	201,400	184,400	147,900	143,800	137,400
8	88,660	100,600	107,500	116,700	150,400	165,200	143,900	199,800	186,100	147,800	143,500	141,500
9	88,320	101,300	107,600	117,100	156,800	162,100	144,100	195,300	186,300	147,600	143,300	143,200
10	88,150	101,400	107,600	117,500	159,400	169,400	144,000	190,300	182,200	147,300	143,000	144,000
11	87,900	101,400	107,700	117,900	160,800	184,300	143,800	185,300	180,600	147,200	142,500	144,400
12	87,640	102,000	107,900	118,000	161,300	193,200	143,900	184,900	181,800	147,000	142,200	145,100
13	87,220	102,300	108,100	117,700	160,200	196,900	144,000	185,400	183,200	146,500	141,900	145,800
14	86,960	103,000	108,200	117,100	157,000	198,900	144,100	182,900	187,200	146,300	141,400	146,200
15	86,710	103,700	108,900	116,500	153,400	197,800	147,000	176,800	192,400	148,100	140,900	147,100
16	86,450	104,100	109,300	116,400	149,700	192,900	150,200	170,800	194,800	148,300	140,400	147,500
17	86,030	104,500	109,600	116,700	147,000	185,600	154,400	163,900	195,500	148,300	140,000	147,600
18	85,860	105,200	109,900	117,100	145,000	176,800	155,500	157,700	195,400	148,400	139,400	147,400
19	85,940	105,600	110,200	117,400	144,500	170,300	154,900	152,700	193,200	148,400	139,200	147,200
20	86,200	105,900	110,400	117,700	143,900	163,000	153,200	149,100	194,000	148,400	138,900	147,100
21	86,280	106,300	110,600	118,100	143,200	155,000	151,200	145,600	195,300	148,000	138,400	147,000
22	87,220	106,300	110,600	118,400	143,000	150,200	150,500	145,300	195,500	147,600	137,800	147,000
23	87,130	106,500	110,700	118,700	143,300	147,900	157,300	146,100	195,700	147,100	137,000	146,500
24	86,880	106,800	110,700	118,700	144,000	149,700	184,800	145,800	195,700	146,800	136,500	146,300
25	86,880	107,100	110,900	120,300	144,600	151,500	205,100	145,300	191,200	146,500	136,100	146,100
26	89,930	107,000	110,800	121,800	144,600	152,500	213,800	147,400	184,800	145,900	135,700	150,200
27	90,190	107,300	110,700	126,300	143,700	149,200	216,400	149,600	178,900	145,300	135,200	157,600
28	90,530	106,900	110,700	128,100	143,100	145,700	218,200	150,800	172,500	145,000	134,600	183,500
29	90,780	107,300	110,800	128,600	------	144,200	219,800	152,200	166,000	144,800	134,200	194,900
30	91,460	107,300	111,200	129,200	------	144,200	218,100	151,800	159,600	145,100	133,900	200,600
31	92,4 0	------	111,200	131,000	------	145,000	------	150,800	------	146,100	133,500	------
(†)	466.80	468.44	468.86	470.83	471.96	472.13	477.94	472.64	473.40	472.22	471.07	476.66
(*)	+1,100	+14,820	+3,900	+19,800	+12,100	+1,900	+73,100	-67,300	+8,800	-13,500	-12,600	+67,100
(††)	4,440	4,140	3,120	3,720	2,840	2,750	3,010	3,820	4,040	5,160	7,100	4,800
MAX	92,480	107,300	111,200	131,000	161,300	198,900	219,800	218,600	195,700	154,200	146,400	200,600
MIN	85,860	94,010	107,200	111,200	134,100	144,200	143,700	145,300	148,400	144,800	133,500	132,300

CAL YR 1972..... * -184,100 †† 50,960 MAX 288,800 MIN 85,860
WTR YR 1973..... * +109,220 †† 48,940 MAX 219,800 MIN 85,860

† 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 (46 m) upstream from bridge on State Highway 78, 3,550 ft (1,082 m) downstream from Lavon Dam, 2.5 miles (4.0 km) west of Lavon, and at mile 54.9 (88.3 km).

DRAINAGE AREA.--773 mi² (2,002 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 429.58 ft (130.94 m) above mean sea level. Prior to Oct. 1, 1969, at site 150 ft (46 m) downstream at same datum.

AVERAGE DISCHARGE.--20 years, 361 ft³/s (10.2 m³/s), 261,500 acre-ft/yr (322 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,500 ft³/s (127 m³/s) Mar. 18, gage height, 14.80 ft (4.51 m); no flow at times.
Period of record: Maximum discharge, 39,000 ft³/s (1,100 m³/s) May 26, 27, 1957, from records of released flow from Lavon Lake furnished by Corps of Engineers; maximum gage height, 17.34 ft (5.29 m) May 26, 1957; no flow at times each year.
Maximum stage since at least 1894, 22.3 ft (6.8 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.15	.10	.5	.3	49	2,500	540	2,790	22	2.2
2	0	0	.15	.10	.4	.3	44	2,000	550	1,880	22	2.1
3	0	0	.15	.50	.4	.1	486	1,800	294	436	26	1.7
4	0	0	.15	.40	.3	.1	667	2,200	56	51	14	.75
5	0	0	.15	.30	.3	.1	413	2,900	44	33	1.8	3.6
6	0	0	.10	.20	.4	.2	232	2,800	5.0	38	1.0	6.6
7	0	.05	.10	.50	2.0	279	89	2,700	4.0	36	1.3	4.9
8	0	.10	.10	.40	10	1,280	97	2,900	2.0	26	1.1	1.6
9	0	.10	.10	.30	1.0	2,200	89	2,900	786	18	1.3	3.3
10	0	.15	.10	.20	.6	900	80	2,700	2,200	10	1.5	4.1
11	.02	.10	.10	.20	.4	1.0	90	3,020	1,490	4.9	3.2	.05
12	.05	.10	.10	.10	480	.7	99	670	6.0	4.1	1.2	.11
13	.20	.30	.10	.10	1,300	119	93	10	6.3	3.1	.24	10
14	.15	.20	.10	.05	1,700	189	100	932	4.4	3.4	3.7	.14
15	.10	.15	.10	.05	2,000	1,370	119	2,660	2.0	6.1	2.3	1.9
16	.05	.10	.10	.05	1,900	2,590	105	2,810	1.0	4.0	2.0	.97
17	0	.10	.10	.05	1,700	3,630	96	2,960	1.0	4.3	4.9	.08
18	0	.50	.10	.05	1,320	4,420	460	2,750	467	5.0	.97	.01
19	0	.40	.10	.05	650	4,290	1,100	2,190	1,640	5.0	2.6	0
20	0	.30	.10	.05	574	4,150	1,500	2,150	75	6.2	5.5	0
21	0	.30	.10	.05	665	4,010	1,760	1,420	2.6	6.2	3.6	.03
22	0	.30	.10	.05	197	2,850	1,210	62	3.1	7.1	1.9	0
23	0	.30	.10	.05	2.7	1,410	10	61	1.5	6.7	1.2	0
24	0	.30	.10	.05	1.9	247	50	57	.9	16	.77	.04
25	0	.30	.10	.40	1.1	27	100	58	1,480	24	.59	.05
26	0	.20	.10	.80	396	485	200	58	2,970	32	.65	6.2
27	0	.20	.10	.60	707	1,760	200	56	2,940	24	.71	48
28	0	.20	.10	.40	249	2,070	150	57	2,920	23	.62	5.4
29	0	.20	.10	.30	------	1,200	120	61	2,890	21	3.3	1.1
30	0	.20	.10	.30	------	49	1,200	403	2,850	20	3.1	.12
31	0	------	.10	.30	------	49	------	549	------	27	1.9	------
TOTAL	.57	5.15	3.35	7.05	13,860.0	39,576.8	11,008	48,394	24,231.8	5,571.1	136.95	105.05
MEAN	.018	.17	.11	.23	495	1,277	367	1,561	808	180	4.42	3.50
MAX	.20	.50	.15	.80	2,000	4,420	1,760	3,020	2,970	2,790	26	48
MIN	0	0	.10	.05	.30	.10	10	10	.90	3.1	.24	0
AC-FT	1.1	10	6.6	14	27,490	78,500	21,830	95,990	48,060	11,050	272	208

CAL YR 1972 TOTAL 84,871.96 MEAN 232 MAX 4,500 MIN 0 AC-FT 168,300
WTR YR 1973 TOTAL 142,899.82 MEAN 392 MAX 4,420 MIN 0 AC-FT 283,400

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 (46 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 250 ft (76 m) downstream from Spring Creek, and 1.5 miles (2.4 km) southwest of Sachse.

DRAINAGE AREA.--120 mi² (311 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 450.00 ft (137.16 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 91.6 ft³/s (2.59 m³/s), 66,360 acre-ft/yr (81.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,820 ft³/s (221 m³/s) Apr. 24, gage height, 24.80 ft (7.56 m); minimum, 0.49 ft³/s (14 dm³/s) Oct. 9, 16.
Period of record: Maximum discharge, 24,700 ft³/s (700 m³/s) Dec. 9, 1971, gage height, 28.35 ft (8.64 m); no flow Aug. 24 to Sept. 2, 1969.
Maximum stage since at least 1942, 35.4 ft (10.8 m) in 1942, from information by Texas Highway Department.

REMARKS.--Records good. No known diversion above station. The city of Plano reported the discharge of 5,020 acre-ft (6.19 hm³) of sewage effluent into a tributary above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	672	30	27	232	78	48	458	60	56	43	5.5
2	2.1	87	29	31	85	83	48	128	172	52	34	5.4
3	2.0	39	29	193	76	69	53	81	1,280	49	30	4.8
4	2.7	29	28	62	71	77	43	79	1,050	46	28	5.6
5	1.9	24	27	49	69	68	40	91	664	45	24	106
6	2.0	21	26	48	68	93	40	119	214	48	24	356
7	2.0	80	24	80	301	82	45	672	110	133	22	469
8	2.0	36	28	64	687	68	53	94	93	88	19	42
9	1.7	28	28	47	138	65	54	78	81	48	18	28
10	2.4	23	27	46	112	1,910	45	74	75	42	18	23
11	1.9	23	28	48	103	192	40	113	72	66	16	18
12	2.2	24	67	44	95	117	40	949	88	45	14	18
13	1.7	227	55	47	91	106	60	100	336	38	13	173
14	1.8	42	50	50	81	108	45	80	566	36	13	44
15	2.0	32	52	52	75	85	100	73	145	84	13	25
16	1.9	30	39	51	71	78	500	67	90	44	12	21
17	2.6	28	37	48	70	73	200	64	81	36	11	18
18	2.4	157	37	48	68	70	100	59	74	30	9.8	17
19	22	58	37	43	67	66	80	58	315	27	9.2	17
20	5.2	43	37	45	66	62	70	54	2,500	25	9.3	16
21	4.8	48	36	61	65	60	65	54	202	22	8.5	14
22	188	47	34	48	73	59	60	49	124	20	7.6	13
23	12	40	32	41	80	58	150	70	106	17	7.2	12
24	7.9	39	29	41	68	133	3,960	101	92	15	6.3	16
25	5.9	45	28	164	64	63	311	270	84	14	5.9	13
26	298	37	27	295	95	54	157	198	78	14	5.2	143
27	82	35	27	101	72	53	122	63	70	13	5.6	2,260
28	19	32	28	77	66	54	103	50	67	41	5.3	153
29	95	30	30	66	------	51	95	47	66	168	16	77
30	281	32	38	66	------	52	93	44	62	231	6.8	62
31	386	------	29	213	------	63	------	43	------	111	6.7	------
TOTAL	1,445.1	2,088	1,053	2,296	3,209	4,250	6,820	4,480	9,017	1,704	461.4	4,175.3
MEAN	46.6	69.6	34.0	74.1	115	137	227	145	301	55.0	14.9	139
MAX	386	672	67	295	687	1,910	3,960	949	2,500	231	43	2,260
MIN	1.7	21	24	27	64	51	40	43	60	13	5.2	4.8
AC-FT	2,870	4,140	2,090	4,550	6,370	8,430	13,530	8,890	17,890	3,380	915	8,280

CAL YR 1972 TOTAL 10,232.6 MEAN 28.0 MAX 672 MIN 1.1 AC-FT 20,300
WTR YR 1973 TOTAL 40,998.8 MEAN 112 MAX 3,960 MIN 1.7 AC-FT 81,320

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-10	1115	23.03	4,630	6- 4	0600	19.75	3,030
4-24	1000	24.80	7,820	6-20	0215	24.54	7,200
5-12	0315	20.38	3,260	9-27	1300	21.57	3,730
6- 3	1400	21.37	3,650				

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 (0.8 km) upstream from Duck Creek, 1.8 miles (2.9 km) upstream from bridge on Interstate Highway 20, 3.8 miles (6.1 km) northwest of Forney, 24 miles (39 km) downstream from Lavon Dam, and at mile 31.8 (51.2 km).

DRAINAGE AREA.--1,071 mi² (2,774 km²).

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, 500,900 acre-ft (618 hm³) June 4, elevation, 435.98 ft (132.89 m); minimum, 408,900 acre-ft (504 hm³) Oct. 21, elevation, 431.75 ft (131.60 m).
Period of record: Maximum contents, 500,900 acre-ft (618 hm³) June 4, 1973, elevation, 435.98 ft (132.89 m); minimum since first appreciable filling following closure of gates on Mar. 22, 1970, 371,000 acre-ft (457 hm³) July 23, 1971, elevation, 429.85 ft (131.02 m).

REMARKS.--Lake is formed by a rolled earthfill dam 12,500 ft (3,810 m) long, including a 664-foot (202-meter) gated spillway with fourteen 40- by 28-foot (12- by 9-meter) tainter gates. Low-flow releases are through three 4.5- by 6.75-foot (1.4- by 2.06-meter) sluiceways, with inverts at elevation 388.0 ft (118.3 m). Flow in each sluiceway can be controlled by three sluice gates. One gate is 4- by 6-foot (1- by 2-meter) with invert at elevation 388.0 ft (118.3 m), one is 2- by 3-foot (1 by 1-meter) with invert at elevation 409.0 ft (124.7 m), and one is 1.5- by 2-foot (0.5- by 1-meter) with invert at elevation 409.0 ft (124.7 m). 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 mi² (115 km²) 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 (17.8 hm³) below the flood-spillway crests, of which 12,520 acre-ft (15.4 hm³) is floodwater-retarding capacity and 1,950 acre-ft (2.40 hm³) 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)

431.0	393,700	434.0	456,500
432.0	414,000	435.0	478,600
433.0	435,000	436.0	501,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414,200	422,300	424,400	427,800	443,300	471,900	466,200	478,200	481,100	488,800	483,600	470,100
2	413,800	423,200	424,600	428,000	443,300	472,400	467,500	476,800	481,300	489,700	482,900	469,700
3	413,600	423,200	426,100	429,700	443,100	472,100	467,500	475,000	499,500	490,200	481,800	469,700
4	413,400	422,900	424,400	430,500	443,700	472,100	466,800	473,000	487,400	489,700	481,600	472,400
5	413,000	422,700	428,000	431,600	444,100	471,000	467,000	473,300	485,200	489,900	480,900	473,300
6	414,000	424,000	424,800	431,100	444,400	470,600	467,700	473,500	482,700	489,500	480,200	475,300
7	412,400	424,200	424,200	432,400	453,200	467,500	467,900	475,700	483,400	492,700	479,800	476,400
8	412,000	423,600	424,800	432,400	455,400	465,500	470,100	475,500	484,300	491,300	479,500	476,400
9	411,500	424,400	426,100	432,000	453,900	465,300	468,600	473,900	484,300	488,800	479,100	476,400
10	411,300	423,600	425,900	431,800	454,100	475,000	467,700	472,600	485,200	488,300	478,900	476,400
11	411,100	423,200	425,300	432,400	453,900	471,900	467,700	475,000	486,700	488,300	478,600	478,600
12	411,100	424,600	426,300	431,600	454,500	468,400	467,900	473,900	484,300	485,800	478,200	478,200
13	410,900	427,600	425,900	431,800	458,200	468,600	469,000	471,700	483,800	483,800	478,200	481,300
14	410,900	424,600	427,600	431,800	457,400	469,500	467,700	470,100	482,000	483,600	477,300	479,800
15	410,500	424,200	427,600	431,800	459,100	469,900	471,900	470,400	480,400	486,100	476,800	478,200
16	410,300	424,400	426,500	432,000	462,000	468,400	473,700	471,000	480,400	484,500	476,800	476,800
17	409,900	424,400	426,300	431,800	464,800	467,300	472,800	472,100	480,000	483,600	476,400	476,200
18	412,400	425,900	426,300	432,600	467,500	468,200	470,800	473,900	480,200	483,400	475,900	473,500
19	409,900	425,700	426,700	432,600	469,700	470,600	470,100	476,200	483,100	483,400	475,700	471,900
20	409,300	424,800	427,600	433,700	469,300	470,800	471,500	479,100	480,700	482,900	475,500	470,800
21	408,900	425,900	427,400	436,000	470,600	470,600	472,100	480,700	476,800	482,700	475,300	470,600
22	412,800	425,000	426,700	435,400	470,800	469,700	473,000	481,300	476,600	482,500	474,400	470,800
23	412,400	425,000	427,800	434,100	470,600	468,600	476,200	481,800	476,400	482,000	473,500	470,600
24	411,300	425,300	426,900	434,300	470,100	466,800	486,500	483,800	476,400	482,000	472,800	470,400
25	410,500	425,500	428,000	438,600	469,700	465,500	475,900	486,100	477,500	482,000	472,600	470,100
26	416,300	424,600	426,900	439,400	470,800	465,100	472,100	484,300	481,800	481,300	472,600	484,000
27	415,700	426,100	426,500	443,500	471,700	467,500	471,900	480,400	485,400	480,900	471,900	485,400
28	415,700	425,500	426,100	440,900	471,000	469,700	471,300	480,000	487,700	482,200	471,900	475,300
29	416,700	425,300	427,400	439,600	------	467,900	471,700	479,800	488,600	483,400	471,500	471,300
30	417,300	425,000	427,600	439,200	------	466,400	473,500	479,500	488,800	484,300	470,800	470,400
31	420,200	------	427,600	441,600	------	466,600	------	479,800	------	484,500	470,400	------
(†)	432.30	432.53	432.65	433.31	434.66	434.46	434.77	435.05	435.45	435.26	434.63	434.63
(*)	+5,400	+4,800	+2,600	+14,000	+29,400	-4,400	+6,900	+6,300	+9,000	-4,300	-14,100	0
MAX	420,200	427,600	428,000	443,500	471,700	475,000	486,500	486,100	499,500	492,700	483,600	485,400
MIN	408,900	422,300	424,200	427,800	443,100	465,100	466,200	470,100	476,400	480,900	470,400	469,700

CAL YR 1972..... * -28,900 MAX 463,100 MIN 408,900
WTR YR 1973..... * +55,600 MAX 499,500 MIN 408,900

† 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 (9.7 km) southeast of Garland, and 7.7 miles (12.4 km) upstream from mouth.

DRAINAGE AREA.--31.6 mi² (81.8 km²).

PERIOD OF RECORD.--January 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 430.02 ft (131.07 m) above mean sea level. Prior to Oct. 1, 1962, at datum 4.00 ft (1.22 m) higher.

AVERAGE DISCHARGE.--15 years, 24.9 ft³/s (0.705 m³/s), 10.70 in/yr (271.8 mm/yr), 18,040 acre-ft/yr (22.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,670 ft³/s (217 m³/s) Sept. 27, gage height, 18.30 ft (5.58 m); no flow Oct. 6-18.
Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) July 27, 1962, gage height, 20.80 ft (6.34 m), present datum; no flow at times.
Maximum stage since about 1895, 21.5 ft (6.6 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	225	2.7	3.4	59	41	6.0	36	20	3.6	6.6	.56
2	.07	24	2.2	12	13	14	15	24	77	3.1	4.0	.39
3	.03	7.8	2.4	176	8.2	7.5	22	8.0	1,370	3.0	2.8	.26
4	.02	4.2	2.4	19	6.6	8.8	6.8	7.6	1,540	2.9	2.7	.28
5	.01	2.8	2.4	11	5.8	6.0	4.7	32	264	3.9	2.2	136
6	0	3.4	2.6	10	6.1	56	5.7	100	51	17	1.7	140
7	0	2.4	2.4	76	312	14	12	28	33	275	1.9	45
8	0	1.7	2.6	21	310	7.6	20	11	16	219	1.5	5.0
9	0	1.6	3.4	9.1	28	6.9	17	5.6	14	18	1.5	3.3
10	0	.44	3.6	6.5	18	1,040	5.9	4.8	14	10	1.3	3.0
11	0	.80	3.1	8.3	13	34	4.8	5.2	80	76	2.1	3.0
12	0	.73	63	7.0	11	18	4.8	434	82	112	1.9	3.1
13	0	97	19	6.5	9.6	31	48	16	158	18	1.0	74
14	0	5.0	53	6.0	7.2	27	19	11	57	10	1.1	6.8
15	0	2.4	24	5.8	5.8	15	233	7.6	19	263	1.0	3.8
16	0	1.8	7.0	5.6	5.2	15	109	5.6	16	64	.82	3.4
17	0	1.4	5.2	5.4	5.2	11	19	4.8	15	41	.73	3.0
18	0	142	4.8	5.2	5.2	9.6	14	4.6	12	10	.86	2.5
19	12	16	5.2	5.0	5.2	8.6	33	4.2	99	6.0	.64	2.5
20	1.1	5.8	5.2	4.9	4.2	8.1	13	3.6	515	4.8	.51	2.3
21	10	16	5.1	38	4.2	7.3	8.2	3.4	32	4.5	.52	1.8
22	145	9.4	4.3	9.0	18	7.7	42	3.1	17	3.8	.86	1.3
23	4.6	4.4	4.0	5.5	16	20	67	4.0	11	3.4	1.0	.84
24	.88	10	4.0	4.6	6.1	128	1,240	41	8.0	3.4	.47	10
25	.34	15	3.5	203	5.0	15	61	263	6.9	3.3	.39	2.8
26	357	4.6	3.5	107	29	8.2	30	37	5.8	2.7	.27	185
27	48	3.5	3.0	24	8.6	7.6	21	9.5	5.0	2.3	.20	1,560
28	5.9	3.0	2.9	14	6.4	7.3	15	5.2	6.2	11	.19	64
29	117	2.4	3.1	8.7	------	7.3	11	4.0	5.1	91	20	16
30	24	3.4	16	8.1	------	7.0	11	3.6	4.9	58	2.4	18
31	143	------	4.9	76	------	12	------	3.4	------	20	.84	------
TOTAL	869.18	617.97	270.5	901.6	931.6	1,606.5	2,118.9	1,130.8	4,553.9	1,363.7	64.00	2,297.93
MEAN	28.0	20.6	8.73	29.1	33.3	51.8	70.6	36.5	152	44.0	2.06	76.6
MAX	357	225	63	203	312	1,040	1,240	434	1,540	275	20	1,560
MIN	0	.44	2.2	3.4	4.2	6.0	4.7	3.1	4.9	2.3	.19	.26
CFSM	.89	.65	.28	.92	1.05	1.64	2.23	1.16	4.81	1.39	.07	2.42
IN.	1.02	.73	.32	1.06	1.10	1.89	2.49	1.33	5.36	1.61	.08	2.71
AC-FT	1,720	1,230	537	1,790	1,850	3,190	4,200	2,240	9,030	2,700	127	4,560
(††)	5.91	2.78	1.12	3.59	2.04	4.03	5.02	4.13	8.92	5.13	.28	7.66

CAL YR 1972 TOTAL 3,499.76 MEAN 9.56 MAX 357 MIN 0 CFSM .30 IN 4.12 AC-FT 6,940 †† 22.27
WTR YR 1973 TOTAL 16,726.58 MEAN 45.8 MAX 1,560 MIN 0 CFSM 1.45 IN 19.69 AC-FT 33,180 †† 50.61

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-10	0915	17.66	5,980	6- 4	0030	17.78	6,270
4-24	0745	17.35	5,240	6-20	0115	16.05	2,780
5-12	0400	15.56	2,170	7- 7	2315	16.27	3,160
6- 3	1300	17.30	5,120	9-27	0115	18.30	7,670

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

08061750 East Fork Trinity River near Forney, Tex.

LOCATION.--Lat 32°46'26", long 96°30'03", Kaufman County, at downstream side of downstream bridge on Interstate Highway 20, 0.2 mile (0.3 km) downstream from Duck Creek, 1.9 miles (3.1 km) downstream from Lake Ray Hubbard dam, 2.5 miles (4.0 km) upstream from Texas and Pacific Railroad Co. bridge, and 2.5 miles (4.0 km) northwest of Forney.

DRAINAGE AREA.--1,118 mi² (2,896 km²), of which 1,071 mi² (2,774 km²) is above Lake Ray Hubbard.

PERIOD OF RECORD.--January to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m) above mean sea level (from topographic map).

EXTREMES.--Maximum discharge during period, 27,100 ft³/s (767 m³/s) June 4, gage height, 15.87 ft (4.84 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 3, gage height, 0.96 ft (0.29 m).

REMARKS.--Records good. Flow is regulated by Lake Ray Hubbard (station 08061550). Low flow is sustained by sewage effluent from the city of Garland. Records furnished by the city of Garland show that during the 1973 water year 21,230 acre-ft (26.2 hm³) of sewage effluent was discharged into Duck Creek which enters East Fork Trinity River 0.2 miles (0.3 km) upstream from this station.

DISCHARGE, IN CUBIC FEET PER SECOND, JANAURY TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				-	227	344	144	2,570	558	3,250	39	21
2				-	80	407	141	3,180	160	2,530	30	18
3				-	44	352	353	3,050	2,380	168	27	17
4				-	33	344	568	3,420	15,000	129	25	20
5				-	31	410	128	4,000	6,990	127	23	32
6				-	31	1,340	47	4,150	2,920	138	23	268
7				-	34	2,430	67	4,000	274	132	24	155
8				-	1,100	2,800	68	3,970	144	1,480	24	48
9				-	193	2,820	106	4,030	711	1,490	24	31
10				-	68	4,160	76	4,300	2,180	568	24	26
11				-	46	2,940	54	4,300	2,240	478	23	33
12				-	67	2,780	36	5,590	2,300	1,640	21	29
13				-	1,040	1,430	75	2,330	2,440	1,120	22	207
14				-	2,200	105	529	904	2,440	513	23	783
15				-	1,890	1,430	991	3,130	1,510	471	22	743
16				-	746	3,570	1,220	3,160	303	1,590	23	735
17				-	68	4,390	890	3,180	236	732	23	743
18				-	29	4,420	1,520	2,520	228	84	21	748
19				25	40	4,420	1,610	1,710	1,130	64	20	758
20				25	126	4,420	1,700	1,160	5,470	59	20	622
21				54	186	4,450	2,180	956	2,980	56	23	49
22				52	284	4,480	2,190	76	170	53	26	23
23				31	417	3,620	1,740	46	142	52	25	22
24				26	348	3,090	8,170	48	134	53	22	27
25				91	337	2,000	7,980	981	323	45	21	31
26				563	359	184	4,250	2,370	1,080	27	20	27
27				123	359	211	400	1,820	1,340	25	20	7,760
28				76	341	1,410	250	346	2,130	26	20	7,850
29				42	------	2,740	184	133	2,520	111	29	3,140
30				36	------	1,520	957	285	3,200	57	32	1,010
31		------		38	------	157	------	778	------	92	25	------
TOTAL				-	10,724	69,174	38,624	72,493	63,633	17,360	744	25,976
MEAN				-	383	2,231	1,287	2,338	2,121	560	24.0	866
MAX				-	2,200	4,480	8,170	5,590	15,000	3,250	39	7,850
MIN				-	29	105	36	46	134	25	20	17
AC-FT				-	21,270	137,200	76,610	143,800	126,200	34,430	1,480	51,520

WTR YR 1973: TOTAL - MEAN - MAX - MIN - AC-FT -

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 (5.3 km) southeast of Mesquite, and 3.6 miles (5.8 km) upstream from mouth.

DRAINAGE AREA.--23.0 mi² (59.6 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 389.91 ft (118.84 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 21.3 ft³/s (0.603 m³/s), 12.58 in/yr (319.5 mm/yr), 15,430 acre-ft/yr (19.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,000 ft³/s (255 m³/s) June 4, gage height, 12.10 ft (3.69 m); no flow at times.
Period of record: Maximum discharge, 9,000 ft³/s (255 m³/s) June 4, 1973, gage height, 12.10 ft (3.69 m); no flow at times.
Maximum stage since about 1918, 14.3 ft (4.4 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	201	.80	1.9	84	12	4.7	169	.69	.07	2.3	0
2	.07	35	1.0	13	8.7	10	4.5	68	59	.12	1.5	0
3	.03	3.9	.98	233	5.8	2.1	53	7.1	744	.04	.90	0
4	.01	2.3	1.4	17	3.2	1.1	7.2	3.1	2,070	.01	.42	0
5	0	1.7	.73	7.6	2.1	.75	4.1	6.8	289	.31	.22	32
6	0	1.4	.39	6.1	1.6	22	3.5	123	61	69	.06	123
7	0	2.4	.38	145	74	7.5	6.4	11	13	24	.02	19
8	0	1.9	1.4	18	366	1.7	4.8	5.7	7.2	227	.01	3.4
9	0	1.3	3.1	6.3	17	.65	13	3.1	4.4	11	.04	1.4
10	0	.70	1.7	4.0	8.4	614	3.9	2.4	3.3	3.2	.06	.56
11	0	.67	1.4	3.8	5.0	30	3.1	1.0	128	2.4	.02	3.5
12	0	.65	101	3.6	3.7	11	2.7	274	101	6.0	0	6.0
13	0	41	48	3.5	3.3	12	30	14	145	3.8	0	18
14	0	3.8	107	3.4	2.1	23	62	6.0	132	.95	0	7.7
15	0	1.3	51	3.3	1.3	7.3	202	5.1	12	35	0	1.1
16	0	1.2	9.0	3.2	1.0	6.4	244	4.2	5.5	48	0	.30
17	0	.55	4.3	3.1	.72	5.7	27	3.8	3.2	22	0	.02
18	0	82	2.6	3.1	.78	5.0	21	2.7	1.9	5.8	0	0
19	13	10	2.3	3.0	.70	3.9	151	1.3	4.3	1.5	0	0
20	3.0	2.3	2.5	3.0	.64	3.6	18	.99	259	.54	0	0
21	5.0	7.4	2.4	26	.47	3.7	12	1.6	14	.23	0	0
22	123	8.4	2.2	5.9	3.6	3.5	51	1.7	5.0	.07	0	0
23	4.5	1.9	1.6	3.5	17	15	219	2.1	4.1	.03	0	0
24	1.1	1.4	1.3	2.9	3.0	163	932	.73	2.6	3.9	0	3.9
25	.30	13	.91	177	1.3	17	32	167	1.2	.86	0	3.7
26	230	2.4	.70	201	6.6	6.8	12	56	.66	.05	0	27
27	117	1.2	.68	17	4.3	6.3	6.5	6.4	.21	0	0	1,080
28	5.0	.79	.58	8.1	1.1	6.5	4.3	2.2	.38	0	0	79
29	31	.59	.71	5.6	------	6.2	3.6	1.6	.32	88	0	8.4
30	11	.60	4.9	5.4	------	5.6	3.6	1.1	.09	11	0	3.5
31	112	------	4.8	72	------	5.0	------	.50	------	15	0	------
TOTAL	656.34	432.75	361.76	1,009.3	627.41	1,018.30	2,141.9	953.22	4,072.05	579.88	5.55	1,421.48
MEAN	21.2	14.4	11.7	32.6	22.4	32.8	71.4	30.7	136	18.7	.18	47.4
MAX	230	201	107	233	366	614	932	274	2,070	227	2.3	1,080
MIN	0	.55	.38	1.9	.47	.65	2.7	.50	.09	0	0	0
CFSM	.92	.63	.51	1.42	.97	1.43	3.10	1.33	5.91	.81	.008	2.06
IN.	1.06	.70	.59	1.63	1.01	1.65	3.46	1.54	6.59	.94	.008	2.30
AC-FT	1,300	858	718	2,000	1,240	2,020	4,250	1,890	8,080	1,150	11	2,820
(††)	7.36	3.42	1.79	4.50	2.71	4.26	7.63	5.09	11.97	5.51	0	9.51

CAL YR 1972 TOTAL 3,083.59 MEAN 8.43 MAX 246 MIN 0 CFSM .37 IN 4.99 AC-FT 6,120 †† 27.90
WTR YR 1973 TOTAL 13,279.94 MEAN 36.4 MAX 2,070 MIN 0 CFSM 1.58 IN 21.48 AC-FT 26,340 †† 63.75

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2- 8	0245	8.19	845	6- 3	1630	10.07	2,560
3-10	1100	9.96	2,360	6- 4	0300	12.10	9,000
4-24	0700	10.20	2,810	9-27	0430	10.50	3,450

†† 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 (1.1 km) downstream from Mustang Creek, 1.8 miles (2.9 km) northwest of Crandall, 4.0 miles (6.4 km) upstream from Buffalo Creek, and at mile 11.0 (17.7 km).

DRAINAGE AREA.--1,256 mi² (3,253 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 343.69 ft (104.76 m) above mean sea level.

AVERAGE DISCHARGE.--4 years (1949-53) prior to regulation by Lavon Lake, 652 ft³/s (18.5 m³/s), 472,400 acre-ft/yr (582 hm³/yr); 20 years (1953-73) regulated, 573 ft³/s (16.2 m³/s), 415,100 acre-ft/yr (512 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,200 ft³/s (515 m³/s) June 5, gage height, 19.50 ft (5.94 m); minimum, 23 ft³/s (0.65 m³/s) Oct. 2.
Period of record: Maximum discharge, 33,000 ft³/s (935 m³/s) May 28, 1957, gage height, 22.81 ft (6.95 m); 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 mi² (102 km²) 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 (16.9 hm³) below the flood-spillway crests, of which 11,750 acre-ft (14.5 hm³) is floodwater-retarding capacity and 1,920 acre-ft (2.37 hm³) 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 Forney show that 81.7 acre-ft (0.101 hm³) 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 6,440 acre-ft (7.94 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	295	43	43	336	356	187	1,100	640	2,490	102	45
2	24	492	45	41	298	348	158	2,220	317	2,680	90	41
3	24	151	43	227	134	341	203	3,060	515	2,240	72	37
4	26	65	42	430	99	353	424	2,620	9,130	384	65	34
5	26	50	42	121	76	360	291	2,760	15,200	156	57	42
6	25	44	41	67	67	444	107	3,620	8,230	305	54	230
7	25	42	43	109	68	948	84	3,770	4,340	227	49	309
8	26	41	42	252	884	1,360	99	3,600	867	572	49	174
9	26	38	42	122	1,210	2,020	108	3,550	535	1,360	46	66
10	26	36	43	72	451	2,900	116	3,470	1,020	1,140	45	49
11	28	36	43	58	152	4,610	91	3,730	1,870	492	44	48
12	32	34	45	49	108	3,530	80	4,170	2,740	800	43	61
13	28	50	136	47	165	2,490	77	4,960	2,470	1,310	42	65
14	25	122	116	51	793	1,600	155	2,800	2,620	950	44	418
15	25	69	189	54	1,200	374	943	1,130	2,540	569	45	614
16	26	45	131	52	1,360	1,150	1,550	2,220	1,440	971	44	636
17	26	40	68	48	638	2,630	1,650	2,660	430	1,300	44	640
18	30	65	51	42	105	3,660	1,040	2,700	284	564	45	616
19	38	191	48	41	67	3,800	1,360	2,380	261	134	41	590
20	50	107	49	43	91	3,770	2,030	1,420	1,170	104	41	588
21	51	61	48	50	144	3,800	1,750	966	4,060	94	42	319
22	102	63	45	84	200	3,800	1,790	524	3,630	87	46	58
23	167	64	42	66	313	3,860	1,930	113	397	79	48	41
24	56	51	40	48	349	3,750	3,870	88	194	81	46	48
25	29	48	37	113	353	2,980	9,530	181	171	70	45	128
26	63	61	35	858	357	1,910	7,840	1,180	500	53	43	57
27	442	52	36	716	335	376	4,720	1,810	923	52	42	1,010
28	183	47	36	196	345	480	958	1,280	1,150	249	42	3,720
29	67	46	36	101	------	1,230	493	246	1,590	332	42	7,000
30	141	44	36	76	------	1,850	375	179	1,870	177	54	3,950
31	126	------	39	80	------	1,180	------	483	------	172	54	------
TOTAL	1,987	2,550	1,732	4,357	10,698	62,260	44,009	64,990	71,074	20,194	1,566	21,634
MEAN	64.1	85.0	55.9	141	382	2,008	1,467	2,096	2,369	651	50.5	721
MAX	442	492	189	858	1,360	4,610	9,530	4,960	15,200	2,680	102	7,000
MIN	24	34	35	41	67	341	77	88	171	52	41	34
AC-FT	3,940	5,060	3,440	8,640	21,220	123,500	87,290	128,900	141,000	40,050	3,110	42,910

CAL YR 1972 TOTAL 115,242 MEAN 315 MAX 5,440 MIN 20 AC-FT 228,600
WTR YR 1973 TOTAL 307,051 MEAN 841 MAX 15,200 MIN 24 AC-FT 609,000

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 (4.0 km) south of Rosser, 8.5 miles (13.7 km) downstream from East Fork Trinity River, and at mile 451.4 (726.3 km).

DRAINAGE AREA.--8,146 mi² (21,098 km²).

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 (92.25 m) above mean sea level. July 25, 1924, to Sept. 30, 1925, nonrecording gage at abandoned lock and dam No. 7, 1.7 miles (2.7 km) upstream from present site at datum 6.94 ft (2.12 m) higher.

AVERAGE DISCHARGE.--36 years, 2,528 ft³/s (71.6 m³/s), 1,832,000 acre-ft/yr (2,259 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 34,100 ft³/s (966 m³/s) June 6, gage height, 33.14 ft (10.10 m); minimum, 315 ft³/s (8.92 m³/s) Oct. 9.
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 (12.66 m) Apr. 22, 1942, just prior to levee breaks; maximum daily discharge, 133,000 ft³/s (3,770 m³/s) Apr. 23, 1942; minimum discharge, 32 ft³/s (0.91 m³/s) for several days in 1924-25.
Flood in May 1908 reached a stage of about 33 ft (10 m), 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 (3,860 hm³), 1,129,000 acre-ft (1,390 hm³) 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 mi² (199 km²) 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 (33.1 hm³) below flood-spillway crests, of which 22,690 acre-ft (28.0 hm³) is floodwater-retarding capacity and 4,180 acre-ft (5.15 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460	2,430	496	442	2,060	992	2,070	5,000	3,000	6,860	4,930	454
2	403	4,420	474	451	2,170	1,120	1,020	7,400	3,300	7,170	2,730	396
3	390	4,360	465	1,420	1,600	1,120	1,060	7,800	3,800	7,190	3,180	359
4	408	1,930	427	3,180	1,130	1,030	1,180	7,800	12,100	6,540	4,330	339
5	442	947	455	2,900	959	1,120	1,430	7,300	26,700	4,450	4,860	427
6	396	707	428	1,400	890	1,230	1,130	7,700	33,000	2,960	5,220	1,170
7	371	806	434	1,700	815	3,040	787	8,700	26,000	1,580	5,690	2,190
8	358	694	464	2,400	4,040	3,220	728	9,200	16,500	3,480	6,120	3,100
9	340	584	443	2,400	7,610	3,660	909	9,600	11,900	5,890	6,180	1,780
10	356	725	432	1,350	7,930	6,790	1,050	9,500	5,800	3,850	5,300	794
11	370	733	436	1,000	4,540	12,800	882	9,300	5,600	2,550	2,050	641
12	384	446	478	845	1,770	12,400	688	9,400	9,200	3,690	1,000	586
13	383	628	763	790	1,340	11,100	681	10,200	9,300	4,920	734	692
14	371	1,390	859	804	1,540	7,030	971	10,800	7,400	3,170	650	1,420
15	361	1,110	1,050	832	3,170	5,190	1,670	7,600	7,700	2,160	651	1,770
16	345	687	1,110	826	3,900	4,320	6,800	4,200	7,200	4,830	626	1,470
17	356	538	919	798	3,320	4,900	7,600	4,200	4,300	6,880	594	1,230
18	386	527	678	784	1,800	6,110	5,200	5,500	3,850	4,580	669	1,250
19	400	1,260	627	751	1,320	7,380	5,380	6,500	4,750	1,920	619	1,310
20	482	1,230	552	702	1,280	8,110	5,300	6,800	5,700	1,320	491	1,020
21	541	896	535	712	1,290	8,090	5,500	6,200	8,800	1,100	454	950
22	934	1,200	544	762	1,280	7,710	5,600	5,600	11,100	939	722	685
23	3,120	893	520	742	1,550	7,290	6,200	5,000	11,400	951	495	463
24	2,870	639	471	689	1,830	6,690	21,700	4,600	8,830	970	412	470
25	877	617	442	780	1,400	6,010	20,600	4,600	7,160	758	389	1,030
26	616	648	416	4,400	1,090	4,450	20,000	5,200	6,600	687	370	2,210
27	3,280	588	418	6,900	1,070	3,120	22,700	6,300	6,360	636	364	6,580
28	4,860	536	438	5,100	1,020	2,170	16,700	4,500	5,760	608	391	12,200
29	2,720	540	464	1,700	------	2,660	11,000	2,800	5,780	1,650	391	11,500
30	1,840	525	472	1,210	------	2,510	4,800	1,560	6,380	5,090	488	10,500
31	2,220	------	492	1,140	------	2,710	------	2,500	------	5,860	450	------
TOTAL	31,640	33,234	17,202	49,910	63,714	156,072	181,336	203,360	285,270	105,239	61,550	68,986
MEAN	1,021	1,108	555	1,610	2,276	5,035	6,045	6,560	9,509	3,395	1,985	2,300
MAX	4,860	4,420	1,110	6,900	7,930	12,800	22,700	10,800	33,000	7,190	6,180	12,200
MIN	340	446	416	442	815	992	681	1,560	3,000	608	364	339
AC-FT	62,760	65,920	34,120	99,000	126,400	309,600	359,700	403,400	565,800	208,700	122,100	136,800

CAL YR 1972 TOTAL 483,860 MEAN 1,322 MAX 14,500 MIN 302 AC-FT 959,700
WTR YR 1973 TOTAL 1,257,513 MEAN 3,445 MAX 33,000 MIN 339 AC-FT 2,494,000

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 (0.3 km) downstream from Cedar Creek Reservoir Spillway, 1.8 miles (2.9 km) upstream from mouth of cut channel at Trinity River, and 7.6 miles (12.2 km) north of Trinidad.

DRAINAGE AREA.--1,007 mi² (2,608 km²), 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 (1,829 m) downstream from base gage at same datum.

AVERAGE DISCHARGE.--8 years, 582 ft³/s (16.5 m³/s), 421,700 acre-ft/yr (520 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 110,000 ft³/s (3,120 m³/s) June 4, elevation, 300.75 ft (91.67 m); no flow for many days.
Period of record: Maximum discharge, 110,000 ft³/s (3,120 m³/s) June 4, 1973, elevation, 300.75 ft (91.67 m); no flow at times.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	0	.05	.10	0	.1	0	3,740	1	.15	.15	.10
2	.05	0	.05	.05	1,780	.1	0	2,850	0	.15	.15	.10
3	0	0	.05	.10	1,460	.1	0	2,060	708	.15	.10	.05
4	0	0	0	.05	.1	.1	0	1,300	55,900	.15	.10	.15
5	0	0	0	.05	0	.1	0	1,180	31,100	.30	.10	.15
6	0	0	0	.05	0	.1	0	538	32,300	.30	.10	.22
7	0	0	0	.05	.1	.1	0	26	666	.30	.10	0
8	0	0	0	0	3,580	.1	0	462	1,790	.30	.05	0
9	0	0	0	0	4,820	.2	0	982	5,350	.22	.05	0
10	0	0	.05	0	2,810	2,720	0	1,100	2,660	.15	0	0
11	0	0	.05	0	2,680	7,500	0	1,210	4,100	1.0	0	.05
12	.05	0	.05	0	1,730	9,810	0	2,700	3,510	1.0	0	0
13	.05	.05	.05	0	1,340	5,000	0	3,430	3,950	1.0	0	.10
14	.05	0	.10	0	1,320	2,180	447	1,670	1,760	1.0	.22	0
15	.05	0	.05	0	460	2,300	1,790	1,540	3,510	1.5	.05	0
16	0	0	.05	.05	.1	1,850	8,650	1,480	1,320	1.5	.05	0
17	0	0	.05	.05	0	968	16,300	530	1	1.0	.05	0
18	0	0	.05	.05	0	0	5,340	.1	0	1.0	.05	0
19	.10	0	.05	.05	0	0	252	.1	0	.50	.10	0
20	0	0	.05	.10	0	0	1,400	.1	0	.50	.10	0
21	.05	0	.05	0	0	0	1,710	.1	0	.50	.10	0
22	.30	0	.05	.05	0	0	1,390	.1	0	.50	.10	0
23	.05	0	.10	.05	0	0	1,780	.1	0	.50	.05	0
24	.05	0	.10	.05	0	2,010	25,600	.2	0	.50	.05	0
25	.05	0	.10	.15	0	5,020	41,400	.2	0	.50	.05	0
26	.10	0	.05	.05	0	5,040	10,200	.2	0	.50	.05	0
27	0	.05	.05	0	0	3,030	3,790	.2	0	.50	.05	4,800
28	0	.05	.10	1,630	0	1,210	3,590	.1	0	.50	.10	2,950
29	0	.05	.10	514	------	0	3,800	.2	0	.30	.05	0
30	0	0	.05	.05	------	0	4,140	.2	0	.30	.10	0
31	0	------	.05	.10	------	0	------	.2	------	.22	.10	------
TOTAL	1.00	.20	1.55	2,145.25	21,980.3	48,639.0	131,579	26,800.1	148,626	16.99	2.32	7,750.92
MEAN	.032	.007	.050	69.2	785	1,569	4,386	865	4,954	.55	.075	258
MAX	.30	.05	.10	1,630	4,820	9,810	41,400	3,740	55,900	1.5	.22	4,800
MIN	0	0	0	0	0	0	0	.10	0	.15	0	0
AC-FT	2.0	.4	3.1	4,260	43,600	96,480	261,000	53,160	294,800	34	4.6	15,370

CAL YR 1972 TOTAL 91,714.03 MEAN 251 MAX 11,100 MIN 0 AC-FT 181,900
WTR YR 1973 TOTAL 387,542.63 MEAN 1,062 MAX 55,900 MIN 0 AC-FT 768,700

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 (0.8 km) downstream from St. Louis Southwestern Railway Lines bridge, 0.9 mile (1.4 km) downstream from bridge on State Highway 31, 8 miles (13 km) upstream from Cedar Creek, and at mile 391.2 (629.4 km).

DRAINAGE AREA.--8,538 mi² (22,110 km²), not including 1,007 mi² (2,608 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 239.21 ft (72.91 m) above mean sea level. Prior to May 3, 1967, at site 0.9 mile (1.4 km) upstream at datum 1.28 ft (0.39 m) higher.

AVERAGE DISCHARGE.--9 years, 3,749 ft³/s (106 m³/s), 2,716,000 acre-ft/yr (3,349 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 56,100 ft³/s (1,590 m³/s) June 6, gage height, 42.11 ft (12.84 m); minimum daily, 344 ft³/s (9.74 m³/s) Oct. 11.
Period of record: Maximum discharge, 83,000 ft³/s (2,350 m³/s) May 8, 1969, gage height, 44.10 ft (13.44 m); minimum daily, 312 ft³/s (8.84 m³/s) Aug. 9, 1972.
Maximum stage since at least 1908, 49.8 ft (15.2 m) Apr. 25, 1942 (present site and datum), from records of the National Weather Service. Flood in 1908 reached a stage of 48.3 ft (14.7 m), 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 (21 km) upstream from station. At end of year, flow from 126 mi² (326 km²) 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 (57.2 hm³) below the flood-spillway crests, of which 38,690 acre-ft (47.7 hm³) is floodwater-retarding capacity and 7,720 acre-ft (9.52 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	518	2,280	546	504	1,530	1,070	2,600	23,600	2,350	5,580	5,070	538
2	459	2,800	513	482	3,150	1,030	2,160	18,400	3,010	5,970	4,420	479
3	399	4,320	506	515	4,390	1,130	1,230	13,600	3,760	6,250	2,700	471
4	376	4,280	491	1,860	2,060	1,160	1,070	11,300	14,500	6,330	2,890	459
5	372	2,400	477	3,220	1,290	1,080	1,210	9,960	44,400	5,950	3,790	444
6	399	1,170	471	2,970	1,060	1,130	1,430	9,020	51,200	4,240	4,290	484
7	408	828	473	1,790	975	1,260	1,250	8,410	42,300	2,690	4,620	1,110
8	363	812	464	2,370	2,950	2,570	876	8,410	38,400	1,670	5,020	2,150
9	353	789	493	2,680	8,410	3,140	817	8,670	37,900	3,280	5,390	2,780
10	345	686	482	2,430	9,820	4,170	893	8,950	32,900	4,880	5,510	1,850
11	344	690	480	1,710	10,300	9,280	1,080	9,160	25,600	3,540	4,720	906
12	351	886	486	1,050	9,590	13,600	945	9,610	22,000	2,580	2,160	704
13	363	572	528	867	4,850	17,900	780	10,800	17,700	3,400	1,030	674
14	378	620	807	835	2,940	17,800	945	11,000	15,000	4,100	775	826
15	372	1,400	1,280	856	2,630	17,000	3,280	10,400	13,400	2,850	694	1,360
16	363	1,250	1,310	888	2,960	15,900	7,510	10,200	12,500	2,230	682	1,760
17	358	821	1,230	890	3,580	13,100	14,100	9,040	10,300	4,190	670	1,540
18	349	628	1,040	863	3,200	8,710	20,700	5,560	6,170	5,670	644	1,280
19	369	618	759	842	2,030	6,590	16,400	5,330	3,800	4,270	694	1,280
20	403	1,160	672	824	1,420	6,920	11,700	6,050	4,160	1,940	690	1,320
21	437	1,340	622	794	1,340	7,410	10,000	6,440	5,280	1,250	574	1,090
22	632	1,030	590	778	1,340	7,780	9,320	6,200	6,990	1,050	528	985
23	807	1,140	576	824	1,350	7,790	8,380	5,640	8,130	929	690	784
24	2,460	1,090	568	801	1,590	8,600	10,400	5,000	8,880	918	626	560
25	2,740	734	522	950	1,830	11,000	35,100	4,420	9,440	941	502	509
26	1,620	648	484	2,600	1,510	13,000	51,500	4,350	9,350	766	482	1,030
27	1,760	698	464	5,030	1,180	13,200	36,300	4,860	8,040	678	461	4,670
28	2,820	650	446	6,890	1,110	9,990	29,400	5,640	6,450	634	453	9,570
29	4,250	582	466	7,190	------	4,140	28,000	4,510	5,510	626	462	9,660
30	3,050	568	482	3,150	------	2,740	27,000	2,790	5,230	1,610	470	9,500
31	1,980	------	495	1,450	------	2,570	------	1,710	------	4,320	538	------
TOTAL	30,198	37,490	19,223	58,903	90,385	232,760	336,376	259,030	474,650	95,332	62,245	60,773
MEAN	974	1,250	620	1,900	3,228	7,508	11,210	8,356	15,820	3,075	2,008	2,026
MAX	4,250	4,320	1,310	7,190	10,300	17,900	51,500	23,600	51,200	6,330	5,510	9,660
MIN	344	568	446	482	975	1,030	780	1,710	2,350	626	453	444
AC-FT	59,900	74,360	38,130	116,800	179,300	461,700	667,200	513,800	941,500	189,100	123,500	120,500

CAL YR 1972 TOTAL 627,678 MEAN 1,715 MAX 29,900 MIN 312 AC-FT 1,245,000
WTR YR 1973 TOTAL 1,757,365 MEAN 4,815 MAX 51,500 MIN 344 AC-FT 3,486,000

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 (5 km) upstream from Williams Creek, 8 miles (13 km) northeast of Kemp, and at mile 51.5 (82.9 km).

DRAINAGE AREA.--189 mi² (490 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 341.48 ft (104.08 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 115 ft³/s (3.26 m³/s), 83,320 acre-ft/yr (103 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,200 ft³/s (346 m³/s) June 4, gage height, 14.52 ft (4.43 m); no flow at times.
Period of record: Maximum discharge, 29,000 ft³/s (821 m³/s) Apr. 26, 1966, gage height, 16.00 ft (4.88 m); no flow at times each year.
Maximum stage since at least 1889, about 20.5 ft (6.2 m) 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 (10.2 hm³). Records furnished by city of Terrell show that during year the city diverted 2,980 acre-ft (3.67 hm³) from Terrell Municipal Lake for municipal use and returned 1,950 acre-ft (2.40 hm³) of sewage effluent into a tributary of Kings Creek which enters downstream from station. At end of year, flow from 49.8 mi² (129 km²) above this station was partly controlled by 16 floodwater-retarding structures with a total combined capacity of 18,770 acre-ft (23.1 hm³) below the flood-spillway crests, of which 17,390 acre-ft (21.4 hm³) is floodwater-retarding capacity and 1,380 acre-ft (1.70 hm³) is sediment-pool capacity. Three structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,720 acre-ft (2.12 hm³), of which 259 acre-ft (0.319 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	50	2.7	13	127	5.8	25	88	7.0	12	.01	0
2	0	140	1.8	14	243	6.7	22	65	85	11	.56	0
3	0	250	1.3	194	74	17	21	53	231	8.6	1.2	0
4	0	100	.98	711	38	15	19	45	5,580	6.4	.66	0
5	0	40	.69	343	26	13	17	39	4,970	5.1	.30	0
6	0	30	.46	82	21	13	16	37	4,870	4.7	.11	.21
7	0	30	.33	196	21	13	15	34	2,470	3.6	.04	77
8	0	25	.36	862	542	18	14	32	1,410	3.6	.01	92
9	0	17	.31	589	1,250	13	19	29	800	3.3	0	49
10	0	12	.29	106	703	444	24	29	414	2.5	0	27
11	0	11	.60	46	127	1,940	16	29	346	2.0	0	17
12	0	9.4	37	29	50	1,260	13	80	900	3.1	0	12
13	0	36	152	25	33	668	26	203	1,080	4.7	0	14
14	0	75	151	22	24	203	34	87	785	4.1	0	24
15	0	33	484	20	19	77	107	46	425	2.7	0	16
16	0	19	673	19	16	54	1,830	33	128	1.6	0	8.3
17	0	13	149	17	14	64	2,040	27	71	1.7	.13	5.0
18	0	43	52	15	13	50	1,150	23	52	2.2	.21	3.4
19	0	106	31	14	11	33	345	20	40	1.1	.07	2.1
20	0	55	23	14	10	27	207	18	35	.59	0	1.4
21	0	26	20	26	9.1	23	134	16	49	.33	0	.77
22	0	16	18	100	8.2	19	72	14	33	.22	0	.46
23	0	11	17	42	7.6	17	276	13	26	.17	0	.18
24	6.0	8.4	15	23	7.5	600	3,080	12	24	.10	0	.05
25	2.8	6.6	14	71	8.9	1,910	3,700	10	20	.04	0	.01
26	1.2	4.5	13	752	8.0	1,260	1,930	10	17	.01	0	0
27	35	4.3	12	1,130	6.5	384	1,070	11	15	0	0	264
28	226	4.1	11	432	5.8	116	518	12	12	0	0	300
29	151	3.9	10	82	------	59	190	11	11	0	0	161
30	32	3.5	9.9	41	------	41	123	9.5	13	.02	0	56
31	73	------	8.9	30	------	32	------	7.9	------	.02	0	------
TOTAL	527.0	1,182.7	1,910.62	6,060	3,423.6	9,395.5	17,053	1,143.4	24,919.0	85.50	3.30	1,130.88
MEAN	17.0	39.4	61.6	195	122	303	568	36.9	831	2.76	.11	37.7
MAX	226	250	673	1,130	1,250	1,940	3,700	203	5,580	12	1.2	300
MIN	0	3.5	.29	13	5.8	5.8	13	7.9	7.0	0	0	0
AC-FT	1,050	2,350	3,790	12,020	6,790	18,640	33,820	2,270	49,430	170	6.5	2,240

CAL YR 1972 TOTAL 14,035.52 MEAN 38.3 MAX 1,700 MIN 0 AC-FT 27,840
WTR YR 1973 TOTAL 66,834.50 MEAN 183 MAX 5,580 MIN 0 AC-FT 132,600

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-11	1000	13.37	2,660	4-24	2300	13.82	5,610
3-25	1000	13.30	2,340	6- 4	1400	14.52	12,200
4-16	1600	13.43	2,960				

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 (5 km) upstream from Big Cottonwood Creek, 4 miles (6 km) downstream from Big Brushy Creek, and 5 miles (8 km) south of Kaufman.

DRAINAGE AREA.--233 mi² (603 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 343.24 ft (104.62 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--10 years, 152 ft³/s (4.30 m³/s), 110,100 acre-ft/yr (136 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,200 ft³/s (289 m³/s) Apr. 25, gage height, 20.66 ft (6.30 m); minimum, 0.18 ft³/s (5.1 dm³/s) Dec. 6.
Period of record: Maximum discharge, 33,800 ft³/s (957 m³/s) May 7, 1969, gage height, 23.34 ft (7.11 m), from rating curve extended above 17,000 ft³/s (481 m³/s); no flow at times.
Maximum stage since at least 1942, 23.34 ft (7.11 m) May 7, 1969. Flood in 1949 reached a stage of 23.1 ft (7.0 m), from information by State Highway Department.

REMARKS.--Records good. During the water year, the city of Terrell diverted 2,980 acre-ft (3.67 hm³) from Cedar Creek Basin and returned 1,950 acre-ft (2.40 hm³) of sewage effluent into the basin above this station. The city of Kaufman diverted 90 acre-ft (0.111 hm³) from Big Cottonwood Creek (enters Kings Creek below gage) and returned 538 acre-ft (0.663 hm³) of sewage effluent above gage. At end of year, flow from 34.4 mi² (89.1 km²) above this station was partly controlled by 21 floodwater-retarding structures with a total combined capacity of 13,510 acre-ft (16.7 hm³) below the flood-spillway crests, of which 11,200 acre-ft (13.8 hm³) is floodwater-retarding capacity and 2,310 acre-ft (2.85 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,783 acre-ft (2.20 hm³) of which 264 acre-ft (0.326 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	324	.44	1.5	1,440	9.3	17	108	5.6	2.0	22	2.2
2	1.8	1,220	.33	2.8	1,110	7.4	12	442	8.9	1.9	12	2.0
3	1.5	382	.39	573	144	9.1	12	386	45	1.4	8.7	2.0
4	1.3	46	.39	915	74	10	12	107	3,760	1.2	6.7	2.0
5	1.1	19	.29	175	41	7.6	11	74	6,260	1.4	5.6	2.9
6	1.0	11	.25	72	27	6.0	8.6	63	3,850	1.6	4.3	11
7	1.2	16	.23	796	29	5.6	13	51	2,390	1.1	3.5	37
8	1.1	6.5	.26	1,170	1,860	3.9	9.6	33	513	1.1	3.1	40
9	.98	4.2	.45	234	2,420	2.9	7.9	24	255	1.1	3.1	14
10	.74	3.8	.53	60	297	1,730	7.9	17	194	.99	3.1	7.4
11	.72	4.4	.63	33	126	3,580	6.7	14	167	1.1	2.9	4.2
12	.52	3.6	.94	29	87	667	6.2	108	273	4.0	2.7	2.3
13	.63	30	105	20	62	160	7.4	215	264	4.4	2.6	18
14	.59	51	201	16	35	123	17	68	700	1.6	2.7	8.7
15	.50	17	705	14	23	80	249	32	483	44	2.5	19
16	.53	7.8	283	12	18	52	2,690	17	116	227	2.5	7.4
17	.32	4.9	77	10	14	34	2,580	11	61	66	2.7	4.9
18	.28	7.9	35	8.3	10	22	361	12	30	78	3.0	3.6
19	.29	82	23	6.5	10	12	323	8.1	16	25	2.9	2.7
20	.53	58	14	5.3	9.2	6.8	1,280	6.3	43	8.3	2.7	2.5
21	.63	22	10	4.7	7.9	3.6	550	5.9	99	6.0	2.4	2.5
22	8.5	11	7.0	4.3	7.4	3.1	160	4.4	30	4.3	2.1	2.2
23	43	6.5	5.3	8.4	7.9	2.8	538	3.8	13	3.9	2.0	2.2
24	19	4.2	4.4	5.1	8.8	1,110	4,370	4.0	6.2	3.2	2.0	2.3
25	7.8	2.8	3.3	252	11	1,460	6,840	4.3	3.5	2.5	2.2	2.2
26	82	1.9	2.8	1,530	7.9	328	2,660	80	3.1	2.2	2.0	2.3
27	819	1.2	2.3	1,370	7.9	81	702	61	2.4	2.3	1.9	371
28	235	.91	2.1	215	12	51	320	24	2.2	2.3	2.0	1,030
29	72	.62	2.1	99	------	38	192	11	2.4	340	1.9	419
30	118	.56	1.8	53	------	31	141	7.3	2.1	271	2.2	128
31	47	------	1.5	129	------	25	------	5.8	------	56	2.1	------
TOTAL	1,469.56	2,350.79	1,490.73	7,823.9	7,907.0	9,662.1	24,104.3	2,007.9	19,598.4	1,166.89	122.1	2,155.5
MEAN	47.4	78.4	48.1	252	282	312	803	64.8	653	37.6	3.94	71.9
MAX	819	1,220	705	1,530	2,420	3,580	6,840	442	6,260	340	22	1,030
MIN	.28	.56	.23	1.5	7.4	2.8	6.2	3.8	2.1	.99	1.9	2.0
AC-FT	2,910	4,660	2,960	15,520	15,680	19,160	47,810	3,980	38,870	2,310	242	4,280

CAL YR 1972 TOTAL 13,895.17 MEAN 38.0 MAX 2,450 MIN .23 AC-FT 27,560
WTR YR 1973 TOTAL 79,859.17 MEAN 219 MAX 6,840 MIN .23 AC-FT 158,400

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2- 9	0300	18.26	3,420	4-25	0500	20.66	10,200
3-11	0200	19.31	5,680	6- 5	0300	20.26	8,520
4-16	2100	18.53	4,020				

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 (305 m) north of spillway, 5.5 miles (8.8 km) upstream from Joe B. Hogsett Dam on Cedar Creek, and 8.0 miles (12.9 km) northwest of Trinidad.

DRAINAGE AREA.--1,007 mi² (2,608 km²).

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, 722,000 acre-ft (890 hm³) June 4, elevation, 323.24 ft (98.52 m); minimum, 576,300 acre-ft (711 hm³) Oct. 18, elevation, 318.79 ft (97.17 m).
Period of record: Maximum contents, 722,000 acre-ft (890 hm³) June 4, 1973, elevation, 323.24 ft (98.52 m); minimum since first appreciable storage in 1966, 332,900 acre-ft (410 hm³) Mar. 19, 1967, elevation, 309.42 ft (94.31 m).

REMARKS.--Reservoir is formed by a rolled earthfill dam 3 miles (5 km) long. The spillway is located on the right bank 5.5 miles (8.8 km) upstream from the dam and discharges into the Trinity River through a cut channel 2 miles (3 km) long. The spillway is 472 ft (144 m) long and has eight 40- by 24-foot (12- by 7-meter) radial gates and two automatically operated 40- by 8.5-foot (12- by 2.6-meter) hinged gates. Water may be released through a 5-foot-diameter (2-meter) 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 1,190 acre-ft (1.47 hm³), the city of Mabank diverted 390 acre-ft (0.481 hm³), and local lakeside developers diverted 550 acre-ft (0.678 hm³) from the reservoir during the year. At end of year, flow from 142 mi² (368 km²) above this station was partly controlled by 59 floodwater-retarding structures with a total combined capacity of 53,140 acre-ft (65.5 hm³) below the flood-spillway crests, of which 45,820 acre-ft (56.5 hm³) is floodwater-retarding capacity and 7,320 acre-ft (9.03 hm³) is sediment-pool capacity. Five structures were built during the current year and have a total combined capacity below flood-spillway crests of 3,500 acre-ft (4.32 hm³), of which 520 acre-ft (0.641 hm³) 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)

318.0	552,300	322.0	679,200
319.0	582,600	323.0	713,500
320.0	613,800	324.0	748,800
321.0	646,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	582,900	602,900	602,900	618,000	680,300	673,900	673,600	681,600	679,200	676,200	678,200	659,000
2	582,600	598,800	603,800	619,600	679,900	673,600	674,900	678,900	679,900	675,900	676,900	660,300
3	582,600	601,000	604,500	621,600	678,200	674,600	674,200	678,200	692,600	675,900	675,900	659,000
4	582,000	602,000	603,800	621,600	678,600	674,600	673,600	678,200	664,000	675,800	675,200	659,000
5	581,100	602,000	607,000	629,900	679,600	674,200	673,300	678,900	682,700	676,200	674,300	662,000
6	582,600	602,600	603,800	634,100	680,300	674,900	674,200	678,600	667,900	675,900	672,900	662,600
7	579,600	602,600	602,900	639,600	688,100	675,200	674,600	681,300	684,400	678,200	672,300	662,300
8	579,000	601,400	603,800	644,100	686,800	675,200	676,900	680,300	687,100	678,200	670,900	662,300
9	578,700	602,300	604,200	647,000	684,000	677,600	675,900	680,900	681,600	678,200	670,600	662,600
10	578,700	601,700	605,700	647,700	684,000	685,100	674,900	680,900	679,200	678,900	670,600	662,600
11	578,100	601,400	604,800	648,400	679,200	686,100	674,200	681,300	680,600	679,900	669,900	662,600
12	578,100	601,000	606,000	647,400	677,600	676,900	674,900	682,300	680,300	679,600	669,300	662,600
13	578,100	604,500	606,300	648,000	676,600	670,600	676,600	678,600	678,200	678,900	668,900	666,000
14	577,800	603,500	612,300	647,700	672,600	668,300	677,600	677,900	679,600	678,600	669,300	666,000
15	577,500	603,200	615,800	647,700	671,600	667,900	686,100	677,600	676,900	679,200	668,900	664,600
16	577,200	602,900	618,000	648,000	671,300	665,300	690,500	676,900	676,600	680,900	668,600	664,600
17	576,600	602,600	618,700	648,400	670,900	663,600	675,900	676,900	677,200	680,900	667,900	664,600
18	587,300	604,800	619,600	649,400	671,300	664,300	677,600	675,900	677,900	680,300	667,300	662,600
19	590,400	605,400	619,900	649,000	672,600	665,000	679,200	676,200	678,900	679,900	666,900	661,000
20	591,700	604,800	620,300	651,000	671,300	665,300	680,600	676,200	679,900	679,200	666,600	661,000
21	593,600	605,700	620,600	651,000	671,300	664,300	677,600	675,900	680,300	678,900	666,300	660,300
22	591,100	604,800	619,900	651,300	671,600	664,600	676,900	675,900	680,300	677,900	665,300	659,600
23	591,100	604,800	620,300	651,300	671,600	664,600	682,300	675,900	679,900	677,200	664,000	659,300
24	592,300	605,700	619,300	651,300	671,600	678,200	692,300	675,900	679,200	676,900	663,000	658,000
25	593,600	605,400	618,700	659,300	671,600	680,600	663,300	676,600	678,900	676,600	662,600	658,300
26	602,900	603,800	618,000	667,600	671,900	676,900	670,900	676,900	678,200	675,900	661,600	663,000
27	601,400	605,700	617,700	676,600	672,300	673,900	678,900	676,600	677,900	674,900	661,000	664,000
28	599,800	604,500	617,700	674,900	671,600	672,300	682,000	676,200	677,900	676,600	660,300	661,000
29	607,600	604,500	617,700	672,600	------	672,600	683,000	676,200	677,200	677,200	660,000	663,000
30	606,600	603,800	617,700	673,600	------	672,600	680,900	675,600	676,900	678,200	660,600	663,300
31	607,300	------	617,700	675,900	------	672,900	------	675,200	------	678,600	660,000	------
(†)	319.79	319.68	320.12	321.90	321.77	321.81	322.05	321.88	321.93	321.98	321.42	321.52
(*)	+23,400	-3,500	+13,900	+58,200	-4,300	+1,300	+8,000	-5,700	+1,700	+1,700	-18,600	+3,300
(††)	155	135	193	109	138	162	144	185	138	228	327	216
MAX	607,600	605,700	620,600	676,600	688,100	686,100	692,300	682,300	692,600	680,900	678,200	666,000
MIN	576,600	598,800	602,900	618,000	670,900	663,600	663,300	675,200	664,000	674,900	660,000	658,000

CAL YR 1972..... * +32,300 †† MAX 667,300 MIN 576,600
WTR YR 1973..... * +79,400 †† 2,130 MAX 692,600 MIN 576,600

† Elevation, in feet, at end of month.
* Changes in contents, in acre-feet
†† Diversions, in acre-feet, for municipal use by cities of Trinidad, Mabank, and Kemp and by lakeside developers.

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 (2.7 km) upstream from bridge on State Highway 31, 3.0 miles (4.8 km) upstream from St. Louis Southwestern Railway Lines bridge, 4.2 miles (6.8 km) upstream from Post Oak Creek, 4.6 miles (7.4 km) north of Dawson, and at mile 63.9 (102.8 km).

DRAINAGE AREA.--320 mi² (829 km²).

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, 121,800 acre-ft (150 hm³) May 3, 4, elevation, 433.53 ft (132.14 m); minimum, 48,840 acre-ft (60.2 hm³) Oct. 18, elevation, 421.47 ft (128.46 m).
Period of record: Maximum contents, 183,300 acre-ft (226 hm³) May 18, 1968, elevation, 440.36 ft (134.22 m); minimum since initial filling in May 1965, 48,840 acre-ft (60.2 hm³) Apr. 10, 1967, and Oct. 18, 1972, elevation, 421.47 ft (128.46 m).

REMARKS.--Lake is formed by a rolled earthfill dam 7,570 ft (2,307 m) long, including an off-channel 240-foot (73-meter) gated spillway with six 40- by 29-foot (12- by 9-meter) tainter gates with sill at elevation 414.0 ft (126.2 m). The low-flow outlet works consist of two 36-inch-diameter (914-millimeter) gate-controlled conduits with inverts at elevation 400.0 ft (121.9 m). 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 Corps of Engineers. The lake was built for flood control and water conservation. At end of year, flow from 65.1 mi² (169 km²) above this station was partly controlled by 35 floodwater-retarding structures with a total combined capacity of 22,890 acre-ft (28.2 hm³) below the flood-spillway crests, of which 19,830 acre-ft (24.5 hm³) is floodwater-retarding capacity and 3,060 acre-ft (3.77 hm³) is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,720 acre-ft (2.12 hm³), of which 216 acre-ft (0.266 hm³) 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	427.0	76,760
422.0	51,250	428.0	82,680
423.0	55,940	429.0	89,000
424.0	60,820	430.0	95,690
425.0	65,890	432.0	110,000
426.0	71,180	434.0	125,600

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50,130	58,280	59,310	60,090	68,910	63,610	62,290	120,900	69,220	91,880	65,080	60,870
2	50,030	59,500	59,260	60,430	68,910	63,660	62,640	121,300	70,500	88,870	64,870	60,770
3	50,030	59,550	59,260	61,320	68,380	63,760	62,740	121,500	82,680	86,220	64,720	60,870
4	49,940	59,550	59,210	61,530	67,740	63,760	62,690	121,100	92,410	83,320	64,520	60,570
5	49,760	59,500	59,160	61,580	66,310	63,610	62,690	120,100	102,600	81,380	64,370	60,570
6	49,810	59,600	59,110	61,780	64,320	63,660	62,850	118,800	109,800	79,720	64,110	60,620
7	49,670	59,500	59,160	63,050	64,370	63,710	62,950	117,300	110,300	77,110	64,010	60,670
8	49,490	59,400	59,160	63,250	67,050	63,860	63,200	115,200	111,000	74,360	63,810	60,570
9	49,450	59,400	59,110	63,250	67,480	63,960	63,100	112,800	111,800	71,800	63,610	60,530
10	49,400	59,360	59,210	63,350	67,640	72,130	63,050	110,700	112,200	70,230	63,400	60,480
11	49,360	59,210	59,360	63,400	67,740	73,360	63,050	108,600	114,300	69,490	63,150	60,380
12	49,310	59,450	59,400	63,400	67,580	73,970	63,050	107,500	116,400	68,910	63,000	60,280
13	49,220	59,650	59,260	63,400	65,890	74,530	63,250	107,500	118,100	68,170	62,850	60,280
14	49,130	59,750	59,450	63,450	63,910	74,250	65,180	106,100	118,800	67,480	62,740	60,180
15	49,130	59,700	60,280	63,500	63,250	73,580	69,330	103,700	119,200	67,790	62,640	60,040
16	49,090	59,600	60,230	63,560	63,150	73,800	76,480	101,400	119,500	67,480	62,590	59,940
17	48,910	59,650	60,140	63,710	63,200	73,360	80,910	98,710	118,400	66,840	62,490	59,840
18	48,860	59,790	60,280	63,710	63,150	72,580	84,510	96,250	115,700	66,210	62,340	59,700
19	48,950	59,750	60,180	63,810	63,250	71,080	85,840	93,750	113,700	65,580	62,190	59,600
20	49,040	59,650	60,180	63,910	63,300	68,850	85,590	91,340	116,100	65,180	62,090	59,500
21	49,450	59,650	60,230	64,010	63,400	66,950	84,580	88,810	116,300	64,920	61,980	59,400
22	49,940	59,600	60,180	63,860	63,660	64,870	83,440	86,470	115,100	64,720	61,780	59,310
23	49,760	59,550	60,230	63,560	63,910	63,860	85,710	84,200	113,100	64,520	61,580	59,310
24	49,670	59,700	60,140	63,350	64,110	69,540	110,700	82,330	110,900	64,320	61,680	59,260
25	49,630	59,700	60,180	69,650	64,210	69,750	114,900	81,200	109,200	64,110	61,530	59,110
26	51,770	59,600	60,140	73,020	63,810	69,600	116,500	81,910	107,200	63,910	61,380	60,090
27	53,130	59,550	60,090	73,470	63,400	69,700	117,200	79,840	103,500	63,710	61,270	60,720
28	53,360	59,400	60,090	73,860	63,350	68,430	118,300	77,290	100,500	64,210	61,170	60,770
29	53,270	59,400	60,090	72,860	------	66,420	119,100	74,580	97,580	65,130	61,220	60,770
30	53,410	59,360	60,040	70,810	------	65,030	119,800	72,410	94,620	65,130	61,220	60,820
31	53,500	------	60,040	69,220	------	63,150	------	70,230	------	65,130	61,070	------
(†)	422.48	423.70	423.84	425.63	424.50	424.46	433.27	425.82	429.84	424.85	424.05	424.00
(*)	+3,240	+5,860	+680	+9,180	-5,870	-200	+55,650	-49,570	+24,390	-29,490	-4,060	-250
(††)	335	261	287	300	257	289	252	318	312	362	459	351
MAX	53,500	59,790	60,280	73,860	68,910	74,530	119,800	121,500	119,500	91,880	65,080	60,870
MIN	48,860	58,280	59,110	60,090	63,150	63,150	62,290	70,230	69,220	63,710	61,070	59,110

CAL YR 1972..... * -11,810 †† 4,228 MAX 77,940 MIN 48,860
WTR YR 1973..... * +10,560 †† 3,783 MAX 121,500 MIN 48,860

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by 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 (2.1 km) upstream from St. Louis Southwestern Railway Lines bridge, 1.5 miles (2.4 km) downstream from Navarro Mills Dam, 2.5 miles (4.0 km) upstream from Post Oak Creek, and 3.6 miles (5.8 km) northeast of Dawson.

DRAINAGE AREA.--333 mi² (862 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 370.52 ft (112.93 m) above mean sea level. Prior to Nov. 21, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 151 ft³/s (4.28 m³/s), 109,400 acre-ft/yr (135 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) June 27, gage height, 15.90 ft (4.85 m); no flow at times.
Period of record: Maximum discharge, 25,500 ft³/s (722 m³/s) July 3, 1961, gage height, 22.50 ft (6.86 m), from rating curve extended above 14,000 ft³/s (396 m³/s); no flow at times. Maximum discharge since completion of Navarro Mills Dam in 1963, 3,650 ft³/s (103 m³/s) Sept. 22-24, 27-30, 1968, gage height, 19.83 ft (6.04 m).
Maximum stage since about 1895, about 28 ft (9 m) June 19, 1929, from information by local residents. Floods in 1946 and 1957 reached a stage of about 23 ft (7 m), from information by local residents.

REMARKS.--Records good. 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 mi² (3.32 km²) below Navarro Mills Lake and above this station was partly controlled by one floodwater-retarding structure with a capacity of 382 acre-ft (0.471 hm³) below the flood-spillway crest, of which 297 acre-ft (0.366 hm³) is floodwater-retarding capacity and 85 acre-ft (0.105 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	139	.02	.32	602	4.8	500	5.4	1,040	1,370	72	36
2	1.3	.88	.03	.36	6.7	4.5	7.8	4.6	548	1,350	72	15
3	5.7	0	.04	.48	252	5.0	12	3.9	231	1,340	71	7.6
4	2.4	0	.04	6.4	503	5.2	5.8	398	342	1,320	71	5.0
5	2.7	0	.04	5.4	791	119	3.9	862	246	1,300	71	.22
6	2.3	0	.05	2.2	1,020	109	4.2	990	246	1,310	71	.14
7	.01	0	.05	1.8	643	1.2	4.5	990	43	1,270	70	.12
8	0	0	.05	64	375	.6	4.6	1,080	68	1,250	69	.08
9	0	0	.05	7.1	17	.4	5.0	1,190	99	1,230	69	.18
10	0	0	.08	1.7	5.6	.3	5.0	1,180	94	845	68	.36
11	0	0	.16	1.1	3.3	.2	5.0	1,160	92	362	68	4.3
12	0	0	.28	.94	228	.1	5.0	603	94	357	68	14
13	0	.02	.40	.82	775	.1	5.4	7.8	105	356	33	10
14	0	0	19	.76	1,040	280	69	582	103	353	.44	9.9
15	0	0	8.1	.71	585	591	75	1,150	92	352	.22	10
16	0	0	.20	.61	120	311	142	1,170	89	357	.18	10
17	0	0	.01	.56	82	290	41	1,240	476	355	.08	6.7
18	0	0	0	.56	82	517	18	1,220	1,370	348	.12	.22
19	0	0	0	.56	40	792	14	1,200	1,170	315	.18	.12
20	0	0	0	.61	.88	1,100	306	1,190	204	221	.18	.12
21	0	0	.04	.82	1.2	1,090	845	1,180	111	118	3.6	.10
22	.23	0	.01	1.1	2.3	1,070	1,060	1,160	588	79	.18	.08
23	.18	0	.01	1.6	3.8	677	917	1,140	1,110	78	.05	.06
24	.04	0	.03	58	3.8	110	416	1,130	1,100	78	.05	.10
25	.01	0	.04	168	3.1	12	147	1,120	1,090	77	.08	.08
26	90	0	.04	168	221	9.9	19	1,120	1,220	75	.06	.14
27	23	0	.04	189	303	8.5	9.9	1,110	1,440	73	.18	1.2
28	.03	0	.05	472	82	503	7.1	1,090	1,420	72	.28	1.1
29	0	0	.06	83	------	1,030	5.8	1,080	1,400	83	.36	.52
30	0	.02	.16	1,060	------	1,010	5.6	1,070	1,390	74	.52	.44
31	0	------	.28	1,120	------	996	------	1,050	------	73	19	------
TOTAL	127.90	139.92	29.36	3,418.51	7,791.68	10,647.8	4,665.6	28,476.7	17,621	16,841	898.76	133.88
MEAN	4.13	4.66	.95	110	278	343	156	919	587	543	29.0	4.46
MAX	90	139	19	1,120	1,040	1,100	1,060	1,240	1,440	1,370	72	36
MIN	0	0	0	.32	.88	.10	3.9	3.9	43	72	.05	.06
AC-FT	254	278	58	6,780	15,450	21,120	9,250	56,480	34,950	33,400	1,780	266

CAL YR 1972 TOTAL 15,884.93 MEAN 43.4 MAX 1,030 MIN 0 AC-FT 31,510
WTR YR 1973 TOTAL 90,792.11 MEAN 249 MAX 1,440 MIN 0 AC-FT 180,100

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 (244 m) downstream from Texas and New Orleans Railroad Co. bridge, 1.0 mile (1.6 km) north of Richland, 3.5 miles (5.6 km) downstream from Pin Oak Creek, and at mile 36.7 (59.1 km).

DRAINAGE AREA.--734 mi² (1,901 km²).

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 (91.17 m) above mean sea level. Dec. 11, 1924, to Feb. 11, 1925, nonrecording gage at site 800 ft (244 m) upstream. Mar. 17, 1939, to Feb. 14, 1958, water-stage recorder at site 50 ft (15 m) 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 (1,190 m) 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 ft³/s (11.4 m³/s), 292,700 acre-ft/yr (361 hm³/yr); 11 years (1962-73) regulated, 329 ft³/s (9.32 m³/s), 238,400 acre-ft/yr (294 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,000 ft³/s (255 m³/s) Apr. 25, gage height, 21.86 ft (6.66 m); no flow at times.
Period of record: Maximum discharge, 58,900 ft³/s (1,670 m³/s) May 12, 1948, gage height, 24.16 ft (7.36 m); no flow at times.
Maximum stage since at least 1899, 25.5 ft (7.8 m) 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 (40 km) upstream. At end of year, flow from 130 mi² (337 km²) above this station was partly controlled by 65 floodwater-retarding structures with a total combined capacity of 45,550 acre-ft (56.2 hm³) below the flood-spillway crests, of which 38,270 acre-ft (47.2 hm³) is floodwater-retarding capacity and 7,280 acre-ft (8.98 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,629 acre-ft (3.24 hm³), of which 371 acre-ft (0.457 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	32	1.2	1.2	1,430	76	1,100	330	1,150	1,580	200	.27
2	0	120	1.2	1.2	464	27	288	246	1,180	1,560	170	25
3	0	180	1.9	18	147	20	122	166	432	1,530	140	20
4	0	80	2.1	381	387	14	245	213	3,520	1,510	120	11
5	0	46	1.9	156	485	12	73	747	4,310	1,490	100	9.8
6	0	28	1.8	87	890	127	44	1,090	4,230	1,610	85	8.3
7	0	23	1.6	331	862	85	34	1,130	3,560	1,780	70	5.2
8	0	20	1.6	1,020	2,020	19	29	1,120	1,060	1,560	60	3.1
9	0	14	1.5	351	1,390	13	26	1,280	615	1,490	50	2.1
10	0	8.4	1.3	125	345	914	22	1,340	484	1,430	45	1.4
11	0	5.4	1.2	74	184	2,680	21	1,320	363	642	40	1.1
12	0	4.0	1.5	50	131	593	21	1,280	346	408	35	.84
13	0	3.5	3.1	36	391	295	21	372	2,450	551	30	62
14	0	87	30	34	919	181	179	47	1,310	486	25	47
15	0	63	640	31	1,020	568	1,850	989	662	443	21	35
16	0	31	377	26	351	1,260	3,220	1,270	303	427	18	23
17	0	17	130	21	123	1,040	2,780	1,320	197	838	15	16
18	0	12	67	17	95	742	2,950	1,380	1,080	558	12	12
19	0	9.2	44	14	91	679	1,310	1,370	1,440	481	10	9.8
20	0	7.4	28	12	71	1,120	549	1,350	2,050	338	8.0	5.6
21	0	6.4	18	19	37	1,260	845	1,330	1,770	219	6.0	3.3
22	0	5.7	12	38	30	1,230	1,260	1,310	609	134	5.0	2.0
23	26	4.4	9.4	78	33	1,200	1,780	1,290	1,210	90	4.0	1.3
24	19	3.1	6.5	138	39	2,560	3,780	1,270	1,330	80	3.0	.98
25	4.1	2.3	4.6	798	49	3,790	7,790	1,300	1,290	76	2.5	.76
26	304	1.7	3.1	3,250	40	1,240	7,020	1,290	1,270	72	2.0	.62
27	2,010	1.4	2.4	3,680	321	482	2,010	1,260	1,520	68	1.5	11
28	450	1.0	1.5	977	227	289	926	1,240	1,660	64	1.0	24
29	130	.91	1.5	303	------	1,040	654	1,210	1,630	349	.80	6.4
30	77	1.0	1.6	1,090	------	1,200	457	1,190	1,610	544	.51	7.9
31	47	------	1.5	1,420	------	1,160	------	1,170	------	280	.36	------
TOTAL	3,067.1	818.81	1,400.0	14,577.4	12,572	25,916	41,406	32,220	44,641	22,688	1,280.67	356.77
MEAN	98.9	27.3	45.2	470	449	836	1,380	1,039	1,488	732	41.3	11.9
MAX	2,010	180	640	3,680	2,020	3,790	7,790	1,380	4,310	1,780	200	62
MIN	0	.91	1.2	1.2	30	12	21	47	197	64	.36	.27
AC-FT	6,080	1,620	2,780	28,910	24,940	51,400	82,130	63,910	88,550	45,000	2,540	708

CAL YR 1972 TOTAL 40,103.28 MEAN 110 MAX 4,270 MIN 0 AC-FT 79,540
WTR YR 1973 TOTAL 200,943.75 MEAN 551 MAX 7,790 MIN 0 AC-FT 398,600

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 (8 km) south of Ennis, and 5.6 miles (9.0 km) upstream from mouth.

DRAINAGE AREA.--178 mi² (461 km²).

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, 100,600 acre-ft (124 hm³) May 2, elevation, 431.81 ft (131.62 m); minimum, 48,320 acre-ft (59.6 hm³) Oct. 20, elevation, 419.11 ft (127.74 m).
Period of record: Maximum contents, 103,300 acre-ft (127 hm³) May 19, 1969, elevation, 432.35 ft (131.78 m); minimum since initial filling, 45,840 acre-ft (56.5 hm³) Sept. 4, 1967, elevation, 418.35 ft (127.51 m).

REMARKS.--Lake is formed by a rolled earthfill dam 15,400 ft (4,690 m) long including a 350-foot (107-meter) uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of a 10-foot-diameter (3-meter) concrete conduit with two 5- by 10-foot (2- by 3-meter) 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 mi² (211 km²) above the lake modified by Lake Waxahachie, capacity, 13,500 acre-ft (16.6 hm³), at spillway elevation, on South Prong Creek. During the year, the city of Waxahachie diverted 1,890 acre-ft (2.33 hm³) from Lake Waxahachie and returned 2,090 acre-ft (2.58 hm³) as sewage effluent. At end of year, flow from 51.4 mi² (133 km²) above this station was partly controlled by 22 floodwater-retarding structures with a total combined capacity of 18,040 acre-ft (22.2 hm³) below the flood-spillway crests, of which 15,040 acre-ft (18.5 hm³) is floodwater-retarding capacity and 3,000 acre-ft (3.70 hm³) 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	425.0	70,090
420.0	51,350	427.0	78,460
421.0	54,870	429.0	87,330
422.0	58,500	431.0	96,660
423.0	62,240	432.0	101,540

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49,240	51,040	51,450	52,510	55,480	55,010	55,160	100,300	55,370	55,560	58,420	54,550
2	49,100	51,140	51,450	52,760	54,580	55,120	55,520	99,930	55,340	55,630	58,130	54,480
3	49,140	51,210	51,380	54,130	54,300	55,340	55,700	99,730	58,390	55,630	57,880	54,480
4	49,070	51,180	51,520	54,410	54,340	55,410	55,740	99,880	60,370	55,590	57,590	54,510
5	49,070	51,180	51,490	54,580	54,480	55,160	55,740	98,900	61,450	55,630	57,220	54,760
6	49,040	51,210	51,450	54,900	54,650	55,080	55,880	97,580	62,020	55,700	56,900	54,690
7	48,940	51,210	51,420	55,950	55,590	55,190	55,950	96,140	62,320	55,660	56,640	54,720
8	48,840	51,180	51,490	56,210	56,750	55,300	56,210	94,530	62,590	55,810	56,390	54,720
9	48,770	51,140	51,490	56,280	56,970	55,340	56,140	92,780	62,780	55,950	56,210	54,760
10	48,770	51,110	51,590	56,140	57,260	61,230	56,100	90,780	62,940	56,210	55,990	54,760
11	48,700	51,080	51,590	55,590	57,440	63,550	56,100	88,800	63,480	56,280	55,740	54,720
12	48,670	51,350	51,630	55,080	57,040	64,670	56,170	87,510	64,710	56,570	55,480	54,690
13	48,630	51,380	51,670	55,120	56,100	65,520	55,990	87,470	65,640	56,720	55,260	54,830
14	48,600	51,350	51,770	55,190	54,870	65,560	55,520	86,080	66,300	56,790	55,230	54,800
15	48,560	51,280	52,020	55,260	54,060	64,940	56,280	83,620	66,660	57,010	55,230	54,720
16	48,530	51,280	51,980	55,300	54,370	64,710	58,390	81,320	66,940	57,040	55,230	54,650
17	48,430	51,310	51,980	55,300	54,480	64,170	59,060	78,640	67,100	56,720	55,260	54,620
18	48,430	51,490	52,020	55,300	54,580	62,970	59,430	75,950	66,260	56,430	55,190	54,510
19	48,460	51,490	52,160	55,340	54,720	61,530	59,960	73,290	64,520	56,170	55,160	54,440
20	48,330	51,420	52,190	55,450	54,830	59,130	60,440	70,710	66,100	55,920	55,160	54,440
21	48,330	51,590	52,230	55,520	54,970	56,750	60,070	68,060	66,980	55,660	55,120	54,370
22	49,010	51,450	52,260	55,480	55,190	55,120	59,510	65,720	67,340	55,370	55,080	54,340
23	48,970	51,420	52,300	55,370	55,370	54,870	66,500	63,360	67,580	55,120	54,970	54,340
24	48,870	51,490	52,300	55,300	55,480	56,030	89,990	60,520	67,780	54,970	54,900	54,270
25	48,800	51,560	52,330	56,750	55,630	56,320	93,340	58,310	67,220	54,970	54,830	54,230
26	49,790	51,420	52,330	57,730	55,300	56,280	95,050	56,640	65,750	54,900	54,760	54,870
27	50,060	51,590	52,300	58,170	54,830	56,320	96,090	55,770	63,400	54,970	54,720	57,370
28	50,020	51,490	52,300	58,530	54,800	55,850	97,190	55,260	61,300	55,050	54,690	58,100
29	50,060	51,490	52,300	57,990	------	55,010	98,370	55,050	59,090	56,680	54,650	58,680
30	50,090	51,450	52,330	56,830	------	55,050	99,440	55,050	56,930	57,770	54,580	59,090
31	50,190	------	52,400	56,240	------	55,120	------	55,050	------	58,350	54,580	------
(†)	419.66	420.03	420.30	421.38	420.98	421.07	431.57	421.05	421.57	421.96	420.92	422.16
(*)	+840	+1,260	+950	+3,840	-1,440	+320	+44,320	-44,390	+1,880	+1,420	-3,770	+4,510
(††)	150	116	132	137	113	130	122	140	133	164	196	159
MAX	50,190	51,590	52,400	58,530	57,440	65,560	99,440	100,300	67,780	58,350	58,420	59,090
MIN	48,330	51,040	51,380	52,510	54,060	54,870	55,160	55,050	55,340	54,900	54,580	54,230

CAL YR 1972..... * -11,930 †† 1,687 MAX 69,810 MIN 48,330
WTR YR 1973..... * +9,740 †† 1,692 MAX 100,300 MIN 48,330

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by 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 (1.6 km) downstream from Bardwell Dam, 3.8 miles (6.1 km) upstream from mouth, 3.8 miles (6.1 km) southeast of Bardwell, and 4.0 miles (6.4 km) downstream from bridge on State Highway 34.

DRAINAGE AREA.--178 mi² (461 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 370.18 ft (112.83 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--10 years, 76.3 ft³/s (2.16 m³/s), 55,280 acre-ft/yr (68.2 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 1,320 ft³/s (37.4 m³/s) May 17, gage height, 16.51 ft (5.03 m); no flow at times.
Period of record: Maximum discharge, 2,960 ft³/s (83.8 m³/s) Feb. 9, 1965, gage height, 17.55 ft (5.35 m); no flow at times each year.
Maximum stage since at least 1944, about 23 ft (7 m) in 1944 and 1945, from information by Corps of Engineers.

REMARKS.--Records good. Flow regulated by Bardwell Lake (station 08063700) 1.0 mile (1.6 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.86	0	0	713	9.3	7.0	200	1.8	677	164	.25
2	0	.39	0	0	596	9.8	6.3	653	1.8	6.3	288	.25
3	0	.12	0	0	256	10	6.0	490	3.2	5.5	258	.25
4	3.2	.07	0	0	41	11	5.6	301	2.1	5.2	231	.24
5	3.2	.02	0	.01	5.6	223	5.4	806	2.8	5.2	231	.24
6	3.2	.01	0	.01	4.1	162	5.2	1,060	1.8	5.5	198	.23
7	3.2	.01	0	.18	4.2	4.2	5.4	1,070	1.8	5.4	135	.23
8	3.2	.01	0	.02	5.2	4.2	5.1	1,070	1.7	4.9	108	.22
9	3.0	0	0	0	4.4	4.1	5.1	1,060	1.7	4.6	109	.21
10	3.0	0	.12	64	4.2	5.6	4.8	1,140	1.8	4.0	109	.22
11	3.0	0	.27	312	4.1	4.5	4.6	1,230	2.0	3.8	109	.21
12	2.1	0	.70	258	324	3.4	4.5	781	2.0	3.9	108	.21
13	.15	.01	.80	89	712	3.2	188	5.2	2.0	3.9	109	.20
14	.02	.04	.46	.62	703	336	338	514	1.8	3.8	54	.18
15	.01	.02	.32	.12	364	649	342	1,190	1.7	3.8	5.4	.20
16	0	.01	.27	.46	56	313	145	1,240	1.6	85	1.2	.20
17	0	.01	.18	3.6	9.4	361	6.2	1,320	1.6	189	1.0	.19
18	0	.07	.12	43	8.8	658	5.5	1,300	435	143	1.0	.21
19	0	.12	.09	18	8.6	926	3.8	1,280	1,100	114	1.0	.22
20	0	.06	.06	.70	7.5	1,250	3.4	1,270	86	115	.93	.21
21	0	.03	.03	.62	6.9	1,240	311	1,250	6.7	114	.93	.20
22	.23	.03	.03	42	6.7	913	608	1,220	7.7	114	.60	.20
23	.04	.03	.02	68	6.6	239	528	1,200	7.6	114	.50	.20
24	.01	.04	.02	58	6.4	14	122	1,180	7.6	48	.42	.21
25	0	.03	.01	94	6.4	8.8	82	1,180	344	2.2	.37	.19
26	.58	.02	.01	43	259	8.0	4.6	888	872	2.2	.40	.22
27	.07	.01	.01	7.8	311	8.0	4.5	466	1,100	2.0	.37	.19
28	.01	.01	.01	6.3	58	328	4.5	201	1,080	1.8	.37	.19
29	.01	.01	.01	318	------	455	3.8	60	1,070	2.3	.35	.19
30	.01	0	0	719	------	41	3.4	2.1	1,050	1.8	.32	.18
31	0	------	0	717	------	7.4	------	2.0	------	1.8	.26	------
TOTAL	28.24	2.04	3.54	2,863.44	4,492.1	8,209.5	2,768.7	25,629.3	7,199.8	1,792.9	2,226.42	6.34
MEAN	.91	.068	.11	92.4	160	265	92.3	827	240	57.8	71.8	.21
MAX	3.2	.86	.80	719	713	1,250	608	1,320	1,100	677	288	.25
MIN	0	0	0	0	4.1	3.2	3.4	2.0	1.6	1.8	.26	.18
AC-FT	56	4.0	7.0	5,680	8,910	16,280	5,490	50,840	14,280	3,560	4,420	13

CAL YR 1972 TOTAL 11,521.88 MEAN 31.5 MAX 955 MIN 0 AC-FT 22,850
WTR YR 1973 TOTAL 55,222.32 MEAN 151 MAX 1,320 MIN 0 AC-FT 109,500

08064500 Chambers Creek near Corsicana, Tex.

LOCATION (revised).--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 (131 m) upstream from St. Louis Southwestern Railway Lines bridge, 6,000 ft (1,829 m) upstream from city of Corsicana diversion dam, 5.3 miles (8.5 km) east of Corsicana, and at mile 23.0 (37.0 km).

DRAINAGE AREA.--963 mi² (2,494 km²).

PERIOD OF RECORD.--March 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 294.28 ft (89.70 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 450 ft³/s (12.7 m³/s), 326,000 acre-ft/yr (402 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 34,700 ft³/s (983 m³/s) Apr. 25, gage height, 27.02 ft (8.24 m); minimum, 0.01 ft³/s (0.28 dm³/s) Oct. 11, 12.
Period of record: Maximum discharge, 48,000 ft³/s (1,360 m³/s) May 3, 1944; maximum gage height, 28.10 ft (8.56 m) May 3, 1958; no flow at times.
Maximum stage since at least 1870, 30 ft (9 m) Aug. 27, 1887, from information by local residents. Flood in December 1913 reached a stage of 27.5 ft (8.38 m), 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 mi² (692 km²) above this station was partly controlled by 91 floodwater-retarding structures with a total combined capacity of 94,580 acre-ft (117 hm³) below the flood-spillway crests, of which 77,400 acre-ft (95.4 hm³) is floodwater-retarding capacity and 17,180 acre-ft (21.2 hm³) 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, records furnished by the city of Corsicana show that 6 acre-ft (7,400 m³) was diverted 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	209	11	7.5	1,230	156	172	2,990	87	1,230	250	5.5
2	.28	1,500	10	7.6	1,120	146	153	2,920	351	408	403	5.1
3	.19	1,010	9.3	209	741	140	279	3,120	965	164	384	4.3
4	.13	187	9.1	1,560	271	139	1,090	1,630	5,960	131	324	4.3
5	.18	94	9.6	1,010	90	136	430	1,260	7,650	158	300	4.6
6	.16	66	8.6	286	72	360	237	1,550	7,300	204	286	5.9
7	.11	48	8.1	384	74	177	199	1,710	6,600	118	244	2.0
8	.07	38	8.6	1,470	1,200	170	188	1,550	3,610	107	170	1.0
9	.05	31	8.5	1,070	2,140	163	175	1,370	1,250	111	154	2.6
10	.02	36	9.0	305	1,340	949	156	1,250	683	146	148	1.8
11	.01	24	9.8	408	496	3,540	140	1,290	513	158	143	1.6
12	.01	18	12	441	330	5,920	131	1,270	1,130	139	138	1.5
13	.04	28	23	310	834	2,580	158	460	2,310	256	133	2.0
14	.09	256	71	168	872	956	691	221	4,210	151	130	1.5
15	.12	203	279	137	808	1,120	2,300	1,080	3,720	114	63	.92
16	.10	88	248	136	369	1,090	4,540	1,240	1,800	165	28	1.3
17	.06	49	134	178	208	505	7,520	1,320	712	632	18	2.9
18	.03	39	56	174	195	620	4,970	1,330	507	370	15	34
19	.09	100	36	161	189	824	2,700	1,310	1,180	234	13	27
20	.13	69	28	105	186	1,150	1,500	1,300	1,730	200	15	5.9
21	.13	53	21	100	175	1,240	854	1,280	5,770	184	16	2.9
22	1.8	36	18	107	153	1,200	1,060	1,260	7,380	172	15	1.8
23	265	25	16	173	147	668	1,520	1,230	5,320	166	12	1.4
24	546	21	13	153	174	1,390	8,910	1,210	1,360	159	3.4	1.2
25	102	18	11	143	164	2,590	29,900	1,230	137	68	.58	484
26	356	15	9.5	2,360	152	917	12,100	1,340	1,210	37	.20	1,280
27	922	13	8.6	3,170	495	448	7,040	955	1,450	32	.08	935
28	1,390	13	7.8	2,230	306	342	5,480	503	1,450	27	19	1,920
29	834	13	7.3	645	------	754	4,540	247	1,360	238	22	2,650
30	189	12	7.4	812	------	459	3,790	148	1,290	1,250	9.6	1,810
31	136	------	7.5	922	------	208	------	93	------	538	7.9	------
TOTAL	4,744.24	4,312	1,115.7	19,342.1	14,531	31,057	102,923	39,667	78,995	8,067	3,464.76	9,202.02
MEAN	153	144	36.0	624	519	1,002	3,431	1,280	2,633	260	112	307
MAX	1,390	1,500	279	3,170	2,140	5,920	29,900	3,120	7,650	1,250	403	2,650
MIN	.01	12	7.3	7.5	72	136	131	93	87	27	.08	.92
AC-FT	9,410	8,550	2,210	38,370	28,820	61,600	204,100	78,680	156,700	16,000	6,870	18,250

CAL YR 1972 TOTAL 53,063.40 MEAN 145 MAX 4,930 MIN 0 AC-FT 105,300
WTR YR 1973 TOTAL 317,420.82 MEAN 870 MAX 29,900 MIN .01 AC-FT 629,600

PEAK DISCHARGE (BASE, 13,000 FT³/S).--Apr. 25 (0715) 34,700 ft³/s (27.02 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 (9.3 km) upstream from mouth, 9.0 miles (14.5 km) downstream from Chambers Creek, and 16 miles (26 km) north of Fairfield.

DRAINAGE AREA.--1,957 mi² (5,069 km²).

PERIOD OF RECORD.--March 1972 to current year.

GAGE.--Nonrecording gage. Datum of gage is 230.83 ft (70.36 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge observed, 29,500 ft³/s (835 m³/s) Apr. 26, gage height, 28.76 ft (8.77 m); minimum daily, 1.4 ft³/s (40 dm³/s) Oct. 18.
Period of record: Maximum discharge observed, 29,500 ft³/s (835 m³/s) Apr. 26, 1973, gage height, 28.76 ft (8.77 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) July 26, Aug. 26 to Sept. 2, 1972.
Flood in December 1971 reached a stage of 31.5 ft (9.6 m), 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 401 mi² (1,039 km²) above this station was partly controlled by 159 floodwater-retarding structures with a total combined capacity of 141,800 acre-ft (175 hm³) below the flood-spillway crests, of which 117,200 acre-ft (145 hm³) is floodwater-retarding capacity and 24,600 acre-ft (30.3 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,629 acre-ft (3.24 hm³), of which 371 acre-ft (0.457 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	235	47	11	2,050	436	994	5,750	922	2,610	650	19
2	3.6	624	22	8.8	2,180	232	922	5,440	913	2,460	418	18
3	2.9	1,820	11	10	1,980	169	886	5,040	1,010	1,810	424	18
4	3.1	1,010	11	11	863	151	832	4,600	3,400	1,540	400	28
5	2.0	455	12	1,270	576	146	760	4,190	5,440	1,480	340	37
6	1.5	263	12	1,830	569	154	400	3,830	10,800	1,610	340	28
7	1.5	118	11	724	756	225	436	3,850	12,400	1,340	340	21
8	1.7	61	12	1,450	2,230	274	244	3,690	11,200	1,160	328	18
9	2.5	69	12	2,010	3,870	272	192	3,440	8,880	1,180	298	15
10	2.6	44	11	1,220	4,300	1,900	238	3,400	5,300	1,200	304	13
11	2.3	26	11	520	4,260	4,050	195	3,400	4,370	1,090	250	9.4
12	2.0	35	14	460	2,400	4,720	171	3,510	4,280	548	199	7.3
13	2.1	72	16	436	1,060	5,250	158	3,400	5,100	472	189	19
14	2.0	110	110	376	1,110	5,170	159	2,640	5,170	527	189	198
15	2.1	356	1,010	220	1,400	4,600	2,580	2,390	5,100	520	187	82
16	1.9	264	1,190	176	1,180	4,820	4,480	3,200	4,870	448	128	39
17	1.6	135	545	175	796	4,900	4,870	3,400	4,540	569	61	27
18	1.4	61	310	166	325	4,640	5,100	3,020	3,070	1,140	28	22
19	1.8	54	204	166	250	3,330	5,390	2,570	1,860	832	21	20
20	2.3	96	125	171	226	2,320	5,250	2,430	2,390	548	26	48
21	2.7	86	80	139	214	2,750	4,870	2,570	3,440	448	21	34
22	156	58	70	129	174	2,900	4,300	2,610	3,830	328	21	14
23	149	49	67	131	157	2,720	3,450	2,460	4,370	274	24	7.1
24	489	40	65	256	163	3,760	4,520	2,320	4,440	232	19	7.3
25	392	41	25	364	172	5,170	8,120	2,290	4,720	214	14	7.8
26	358	33	19	2,020	184	5,750	24,800	2,360	3,830	175	11	483
27	3,240	28	14	4,340	204	4,980	20,400	2,250	3,360	136	7.6	1,850
28	3,370	18	11	4,440	414	3,920	13,200	1,810	3,290	113	7.8	2,570
29	1,930	41	11	4,230	------	2,090	8,560	1,340	3,080	103	12	3,000
30	810	61	12	2,090	------	1,500	6,180	1,090	2,720	558	32	3,220
31	406	------	12	1,510	------	1,220	------	976	------	1,160	23	------
TOTAL	11,352.7	6,363	4,082	31,059.8	34,063	84,519	132,657	95,266	138,095	26,825	5,312.4	11,879.9
MEAN	366	212	132	1,002	1,217	2,726	4,422	3,073	4,603	865	171	396
MAX	3,370	1,820	1,190	4,440	4,300	5,750	24,800	5,750	12,400	2,610	650	3,220
MIN	1.4	18	11	8.8	157	146	158	976	913	103	7.6	7.1
AC-FT	22,520	12,620	8,100	61,610	67,560	167,600	263,100	189,000	273,900	53,210	10,540	23,560

CAL YR 1972 TOTAL 21,797.70 MEAN 59 MAX 3,370 MIN .02 AC-FT 43,240
WTR YR 1973 TOTAL 581,474.80 MEAN 1,593 MAX 24,800 MIN 1.4 AC-FT 1,153,000

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 (4.5 km) southeast of Streetman, 3.1 miles (5.0 km) downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, and 3.8 miles (6.1 km) upstream from Caney Creek.

DRAINAGE AREA.--142 mi² (368 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 287.58 ft (87.65 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 58.2 ft³/s (1.65 m³/s), 5.57 in/yr (141.5 mm/yr), 42,170 acre-ft/yr (52.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,140 ft³/s (117 m³/s) Apr. 25, gage height, 22.37 ft (6.82 m); no flow at times.
Period of record: Maximum discharge, 23,100 ft³/s (654 m³/s) May 10, 1968, gage height, 25.00 ft (7.62 m); 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 (7 m), from information by State Highway Department.

REMARKS.--Records good. At end of year, flow from 5.75 mi² (14.9 km²) above this station was partly controlled by one floodwater-retarding structure with a capacity of 2,500 acre-ft (3.08 hm³) below the flood-spillway crest, of which 2,300 acre-ft (2.84 hm³) is floodwater-retarding capacity and 200 acre-ft (0.247 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	13	16	10	127	1.5	2.6	5.6	1.5	.56	.02	0
2	0	80	14	10	41	1.5	1.6	4.6	1,040	.48	.02	0
3	0	16	14	112	13	1.5	1.2	3.3	878	.32	.01	4.9
4	0	7.3	14	111	7.3	1.5	.83	2.1	2,580	.35	.01	7.3
5	0	4.9	14	18	5.1	1.7	.67	1.5	644	3.0	0	4.3
6	0	4.2	14	8.7	3.9	1.9	.59	1.8	1,700	82	0	3.3
7	0	5.1	13	108	3.4	8.7	.88	32	150	29	0	2.3
8	0	5.6	13	177	182	3.5	1.3	14	37	6.4	0	2.4
9	0	5.2	13	25	100	1.8	3.0	3.8	17	3.6	0	1.7
10	0	4.2	17	9.8	21	1,560	3.3	.85	11	2.5	0	1.3
11	0	4.5	16	6.3	9.6	208	2.1	.20	17	1.4	0	.97
12	0	4.8	21	4.9	6.0	30	1.1	.05	249	1.3	0	.58
13	0	27	36	4.3	4.5	13	.82	.02	2,260	98	0	2.8
14	0	25	362	4.3	3.5	7.5	11	0	290	12	0	4.3
15	0	8.6	920	6.2	2.6	567	106	0	56	2.5	0	1.9
16	0	5.0	50	6.3	2.0	1,660	2,250	0	24	1.3	0	.76
17	0	4.0	14	5.0	1.6	357	746	0	12	.76	0	.46
18	0	4.4	7.8	4.3	1.4	43	963	0	8.7	.30	0	.18
19	0	8.9	5.6	4.2	1.2	18	112	0	5.9	.23	0	.37
20	0	12	4.8	4.0	1.7	9.8	32	0	61	.17	0	.23
21	0	14	3.7	3.6	1.5	5.6	15	0	53	.11	0	0
22	17	14	3.9	3.2	1.4	3.7	10	0	16	.13	0	0
23	27	13	4.0	3.3	1.8	2.6	45	.01	6.3	.11	0	0
24	7.1	13	6.4	3.9	3.0	1,910	1,410	.06	4.1	.11	0	.01
25	7.9	15	7.7	1,010	2.9	1,030	2,570	.65	3.0	.11	0	.01
26	22	22	8.5	2,160	2.8	73	252	26	1.8	.10	0	.01
27	136	19	9.0	172	2.2	22	41	14	1.2	.08	0	462
28	24	19	9.1	30	1.8	11	20	3.5	1.0	.05	0	181
29	11	19	9.4	15	------	7.5	9.8	1.0	.7	.05	0	29
30	83	18	10	10	------	5.2	6.7	.30	.6	.04	0	7.0
31	17	------	10	9.7	------	3.7	------	.02	------	.03	0	------
TOTAL	352.0	415.7	1,660.9	4,060.0	555.2	7,571.2	8,619.49	115.36	10,129.8	247.09	.06	719.08
MEAN	11.4	13.9	53.6	131	19.8	244	287	3.72	338	7.97	.002	24.0
MAX	136	80	920	2,160	182	1,910	2,570	32	2,580	98	.02	462
MIN	0	4.0	3.7	3.2	1.2	1.5	.59	0	.60	.03	0	0
CFSM	.08	.10	.38	.92	.14	1.72	2.02	.03	2.38	.06	0	.17
IN.	.09	.11	.44	1.06	.15	1.98	2.26	.03	2.65	.06	0	.19
AC-FT	698	825	3,290	8,050	1,100	15,020	17,100	229	20,090	490	.1	1,430

CAL YR 1972 TOTAL 11,542.17 MEAN 31.5 MAX 2,650 MIN 0 CFSM .22 IN 3.02 AC-FT 22,890
WTR YR 1973 TOTAL 34,445.88 MEAN 94.4 MAX 2,580 MIN 0 CFSM .66 IN 9.02 AC-FT 68,320

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-26	0400	22.13	3,580	4-25	0400	22.37	4,140
3-10	0700	21.24	2,710	6- 4	0700	22.01	3,410
3-24	2000	22.06	3,580	6- 6	0200	21.60	3,400
4-16	0900	21.80	3,200	6-13	0800	22.10	3,540

08064800 Catfish Creek near Tennessee Colony, Tex.

LOCATION.--Lat 31°52'51", long 95°52'07", Anderson County, on left bank 47 ft (14 m) downstream from bridge on U.S. Highway 287, 2 miles (3 km) upstream from Beaver Creek, 3.5 miles (5.6 km) northwest of Tennessee Colony, 12 miles (19 km) downstream from Coon Creek Lake, and 12 miles (19 km) upstream from mouth.

DRAINAGE AREA.--207 mi² (536 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 234.93 ft (71.61 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 96.2 ft³/s (2.72 m³/s), 69,700 acre-ft/yr (85.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,690 ft³/s (133 m³/s) June 6, gage height, 13.88 ft (4.23 m); minimum daily, 8.7 ft³/s (246 dm³/s) Oct. 5, 6.
Period of record: Maximum discharge, 7,550 ft³/s (214 m³/s) May 11, 1968, gage height, 15.90 ft (4.85 m); minimum daily, 0.8 ft³/s (23 dm³/s) Aug. 19-21, 1964.
Maximum stage since 1927, 22 ft (7 m) in June 1944 as a result of dam failure at Coon Creek Lake, from information by local residents.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Some regulation upstream by Coon Creek Lake. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	328	100	95	270	456	187	325	38	52	78	50
2	10	314	90	107	263	484	165	273	148	48	69	49
3	9.6	329	79	139	325	400	151	233	204	45	58	46
4	9.0	320	67	161	300	260	149	197	646	42	50	43
5	8.7	283	64	203	237	200	165	165	1,450	40	42	59
6	8.7	220	61	244	184	150	177	147	4,330	38	36	80
7	9.2	147	61	269	153	120	187	150	2,710	36	33	99
8	9.7	104	63	269	158	100	183	196	1,080	35	30	157
9	9.9	92	62	264	179	95	204	283	400	35	29	250
10	10	86	69	285	226	200	210	272	200	100	31	251
11	11	80	96	262	247	600	209	201	141	200	36	215
12	12	73	178	216	219	500	179	279	500	250	32	167
13	11	110	290	186	177	400	153	229	600	220	29	141
14	11	116	377	166	143	260	167	221	550	180	27	128
15	11	165	490	154	127	290	299	262	600	150	26	123
16	12	275	484	144	116	355	800	232	550	120	27	156
17	12	265	494	135	103	475	1,430	174	400	107	33	194
18	13	230	413	126	92	611	1,260	132	250	96	44	164
19	13	208	315	118	85	505	876	102	200	97	36	129
20	14	199	259	114	83	388	666	85	150	90	36	97
21	17	243	214	114	130	290	538	74	150	79	35	78
22	46	237	174	111	120	230	445	68	200	67	33	67
23	63	194	154	108	170	191	408	61	150	58	33	61
24	65	159	137	105	410	317	800	56	110	50	33	56
25	65	147	120	128	657	522	1,650	60	95	44	34	52
26	77	133	110	213	313	816	1,700	63	80	40	36	48
27	114	135	100	234	290	680	990	63	70	37	37	52
28	132	136	93	313	372	503	638	63	65	35	39	68
29	341	124	88	302	------	387	490	57	60	38	39	80
30	450	112	86	253	------	288	394	47	56	54	39	107
31	377	------	87	209	------	224	------	39	------	71	45	------
TOTAL	1,962.8	5,564	5,475	5,747	6,149	11,297	15,870	4,809	16,183	2,554	1,185	3,267
MEAN	63.3	185	177	185	220	364	529	155	539	82.4	38.2	109
MAX	450	329	494	313	657	816	1,700	325	4,330	250	78	251
MIN	8.7	73	61	95	83	95	149	39	38	35	26	43
AC-FT	3,890	11,040	10,860	11,400	12,200	22,410	31,480	9,540	32,100	5,070	2,350	6,480

CAL YR 1972 TOTAL 29,111.7 MEAN 79.5 MAX 970 MIN 1.5 AC-FT 57,740
WTR YR 1973 TOTAL 80,062.8 MEAN 219 MAX 4,330 MIN 8.7 AC-FT 158,800

PEAK DISCHARGE (BASE, 1,400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-25	1600	11.32	1,550	4-25	0100	11.64	1,920
4-17	2000	11.35	1,580	6- 6	1600	13.88	4,690

NOTE.--No record for period June 13 to July 17.

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 (2.4 km) upstream from Missouri Pacific Railroad Co. bridge, 6 miles (10 km) northeast of Oakwood, and at mile 313.4 (504.3 km).

DRAINAGE AREA.--12,833 mi² (33,237 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 175.06 ft (53.36 m) above mean sea level. Prior to July 15, 1932, nonrecording gage at site 1.5 miles (2.4 km) downstream at datum 1.06 ft (0.32 m) lower. July 15, 1932, to Oct. 7, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--30 years (1923-53) unregulated, 5,045 ft³/s (143 m³/s), 3,655,000 acre-ft/yr (4,507 hm³/yr); 20 years (1953-73) regulated, 4,290 ft³/s (121 m³/s), 3,108,000 acre-ft/yr (3,832 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 57,800 ft³/s (1,640 m³/s) Apr. 29, gage height, 45.07 ft (13.74 m); minimum daily, 295 ft³/s (8.35 m³/s) Oct. 13.

Period of record: Maximum discharge, 153,000 ft³/s (4,330 m³/s) Apr. 29, 1942, gage height, 51.64 ft (15.74 m); minimum observed, 28 ft³/s (0.79 m³/s) Aug. 24, 1925.

Flood in May 1890 reached a stage of 53 ft (16 m), discharge, about 180,000 ft³/s (5,100 m³/s), and was the highest since that date, from information in local newspapers. Flood of June 4, 1908, reached a stage of 52.2 ft (15.9 m), present site and datum, from information by the National Weather Service, discharge, about 164,000 ft³/s (4,640 m³/s).

REMARKS.--Records fair. Twenty-one major reservoirs with a total capacity of 4,200,000 acre-ft (5,180 hm³), of which 1,362,000 acre-ft (1,680 hm³) is flood control, partly regulate the flow. At end of year, flow from 577 mi² (1,494 km²) above this station was partly controlled by 229 floodwater-retarding structures with a total combined capacity of 208,100 acre-ft (257 hm³) below the flood-spillway crests, of which 174,100 acre-ft (215 hm³) is floodwater-retarding capacity and 34,000 acre-ft (41.9 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 2,629 acre-ft (3.24 hm³), of which 371 acre-ft (0.457 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WSP 1442: 1934. See also PERIOD OF RECORD. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	464	4,770	840	730	8,520	2,050	8,620	40,400	3,940	10,100	4,950	631
2	540	4,020	808	775	6,390	2,080	5,730	35,700	3,470	9,490	6,040	663
3	553	4,450	760	995	6,450	1,770	4,630	32,600	6,550	9,330	5,930	656
4	475	5,870	708	1,260	6,750	1,620	3,190	30,300	10,300	9,160	4,770	615
5	406	6,240	680	2,420	5,520	1,650	2,330	28,100	13,900	8,940	3,790	725
6	362	4,850	654	4,930	3,630	2,640	2,710	25,900	16,500	8,730	4,260	801
7	350	2,860	624	5,560	2,650	4,430	2,570	23,700	18,400	8,020	4,930	683
8	369	1,620	616	4,780	2,950	3,280	2,340	21,300	30,700	6,510	5,370	702
9	383	1,100	618	5,090	4,600	3,460	2,040	18,800	49,400	4,850	5,720	1,700
10	344	967	634	5,960	9,560	5,000	1,870	16,500	49,300	4,620	6,040	2,820
11	321	855	708	5,250	11,500	7,300	1,810	14,800	46,900	6,160	6,290	3,020
12	304	731	825	3,860	12,100	10,600	1,780	13,900	43,600	6,190	6,040	2,180
13	295	1,130	1,020	2,670	12,100	12,500	1,730	13,400	38,800	4,780	4,120	1,430
14	314	1,450	1,520	2,100	11,000	13,700	1,540	13,300	33,900	4,390	2,270	1,300
15	310	1,260	2,840	1,770	8,010	14,600	2,220	13,100	30,500	5,310	1,430	1,200
16	335	1,470	4,920	1,540	5,850	15,700	7,800	12,800	28,300	4,900	1,120	1,470
17	336	2,080	5,680	1,440	5,160	16,700	12,600	12,500	26,400	3,750	988	1,870
18	323	1,900	4,320	1,420	4,890	17,700	15,000	12,500	24,400	4,580	958	2,070
19	328	1,480	2,900	1,410	4,550	18,800	16,000	12,000	22,400	6,480	887	1,910
20	304	1,210	2,120	1,390	3,560	19,300	17,200	10,700	19,600	6,660	858	1,670
21	354	1,230	1,600	1,540	2,470	18,200	18,800	9,730	15,400	4,680	877	1,630
22	556	1,470	1,330	1,430	2,040	15,900	20,300	9,550	12,400	2,790	809	1,570
23	744	1,680	1,150	1,380	1,930	13,900	21,100	9,560	11,600	1,980	692	1,330
24	1,260	1,450	1,010	1,350	1,910	14,500	21,100	9,340	11,800	1,600	665	1,160
25	1,800	1,620	935	1,540	1,970	16,000	21,700	8,890	12,300	1,400	800	937
26	3,080	1,410	878	3,790	2,240	15,800	21,300	8,270	13,000	1,370	710	706
27	3,180	1,120	802	7,210	2,290	16,100	22,100	7,810	13,300	1,260	603	1,050
28	5,190	998	740	10,100	1,980	16,700	45,800	7,730	13,100	1,020	567	5,380
29	6,850	960	698	11,800	------	17,000	56,200	7,870	12,400	921	544	9,710
30	7,520	888	705	12,200	------	16,700	48,700	7,420	11,200	853	546	11,100
31	6,470	------	738	11,300	------	13,200	------	5,800	------	1,440	578	------
TOTAL	44,420	63,139	44,381	118,990	152,570	348,880	410,810	494,270	643,760	152,264	84,152	62,689
MEAN	1,433	2,105	1,432	3,838	5,449	11,250	13,690	15,940	21,460	4,912	2,715	2,090
MAX	7,520	6,240	5,680	12,200	12,100	19,300	56,200	40,400	49,400	10,100	6,290	11,100
MIN	295	731	616	730	1,910	1,620	1,540	5,800	3,470	853	544	615
AC-FT	88,110	125,200	88,030	236,000	302,600	692,000	814,800	980,400	1,277M	302,000	166,900	124,300

CAL YR 1972 TOTAL 844,327 MEAN 2,307 MAX 30,500 MIN 295 AC-FT 1,675,000
WTR YR 1973 TOTAL 2,620,325 MEAN 7,179 MAX 56,200 MIN 295 AC-FT 5,197,000

08065200 Upper Keechi Creek near Oakwood, Tex.

LOCATION.--Lat 31°34'11", long 95°53'17", Leon County, at right bank 20 ft (6 m) downstream from bridge on U.S. Highway 79, 1.9 miles (3.1 km) upstream from Missouri Pacific Railroad Co. bridge, 2 miles (3 km) southwest of Oakwood, 11 miles (18 km) upstream from Buffalo Creek, and 21 miles (34 km) upstream from mouth.

DRAINAGE AREA.--150 mi² (388 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 240.11 ft (73.19 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 70.7 ft³/s (2.00 m³/s), 6.40 in/yr (162.6 mm/yr), 51,220 acre-ft/yr (63.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,500 ft³/s (382 m³/s) June 4, gage height, 14.51 ft (4.42 m); no flow for many days.
Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) May 16, 1965, and Apr. 25, 1966; maximum gage height, 14.91 ft (4.54 m) May 16, 1965, from rating curve extended above 5,800 ft³/s (164 m³/s); no flow at times.
Maximum stage since 1900, about 21 ft (6 m) in 1932, from information by local residents.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No known diversions or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	183	11	16	150	26	53	50	7.0	8.5	1.1	.03
2	.01	129	10	30	200	30	46	47	47	7.6	1.5	.04
3	0	50	10	133	100	28	45	43	1,480	6.8	6.7	.04
4	0	24	10	180	60	26	43	33	5,790	6.0	3.4	.05
5	0	15	9.1	188	45	26	35	28	2,420	5.3	1.9	9.0
6	0	12	8.9	101	35	723	33	48	1,300	6.3	1.2	8.1
7	0	9.0	8.5	143	30	1,230	46	129	995	13	.83	4.2
8	0	7.8	8.3	248	300	779	49	68	684	18	.77	2.6
9	0	6.2	9.2	292	250	299	73	43	221	10	.67	2.7
10	0	6.0	12	143	150	320	53	30	41	9.0	.50	4.5
11	0	6.2	14	58	100	1,560	39	24	68	7.3	.39	2.9
12	0	5.3	20	49	70	609	36	34	149	6.6	.33	1.8
13	0	122	30	45	50	199	29	45	275	20	.31	13
14	0	130	75	45	40	95	30	32	403	88	.29	32
15	0	77	309	40	35	122	67	22	570	32	.25	18
16	0	22	366	35	30	164	81	19	185	12	.18	11
17	0	14	354	32	27	250	126	16	38	11	.14	7.1
18	0	15	67	29	24	392	411	14	29	19	.14	4.6
19	0	20	39	27	23	187	367	12	20	14	.14	3.5
20	0	28	30	26	22	66	316	12	22	6.3	.16	2.7
21	.01	20	24	25	22	48	87	11	25	3.8	.17	2.3
22	11	15	19	24	25	41	52	10	62	2.9	.17	1.9
23	16	13	16	23	37	35	37	8.7	31	2.2	.14	1.7
24	8.5	13	14	23	36	1,060	318	8.3	17	1.5	.13	1.6
25	4.1	30	13	1,000	32	4,110	3,180	12	15	1.3	.11	1.6
26	10	27	13	2,500	29	1,100	1,700	20	12	1.0	.07	1.4
27	20	23	12	500	28	406	742	19	11	.85	.04	41
28	14	18	11	200	26	143	192	15	10	.77	.04	341
29	98	14	12	100	------	90	65	12	11	.69	.05	126
30	507	12	29	70	------	74	55	9.2	10	.61	.04	27
31	292	------	32	50	------	66	------	7.1	------	1.2	.03	------
TOTAL	980.66	1,066.5	1,596.0	6,375	1,976	14,304	8,406	881.3	14,948.0	323.52	21.89	673.36
MEAN	31.6	35.6	51.5	206	70.6	461	280	28.4	498	10.4	.71	22.4
MAX	507	183	366	2,500	300	4,110	3,180	129	5,790	88	6.7	341
MIN	0	5.3	8.3	16	22	26	29	7.1	7.0	.61	.03	.03
CFSM	.21	.24	.34	1.37	.47	3.07	1.87	.19	3.32	.07	.005	.15
IN.	.24	.26	.40	1.58	.49	3.55	2.08	.22	3.71	.08	.005	.17
AC-FT	1,950	2,120	3,170	12,640	3,920	28,370	16,670	1,750	29,650	642	43	1,340

CAL YR 1972 TOTAL 11,590.54 MEAN 31.7 MAX 1,860 MIN 0 CFSM .21 IN 2.87 AC-FT 22,990
WTR YR 1973 TOTAL 51,552.23 MEAN 141 MAX 5,790 MIN 0 CFSM .94 IN 12.78 AC-FT 102,300

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-26	unknown	13.46	5,800	4-25	1300	13.58	6,400
3-11	0200	12.57	2,220	6- 4	1400	14.51	13,500
3-25	0400	13.63	6,650				

NOTE.--No gage-height record Jan. 15 to Feb. 20.

08065350 Trinity River near Crockett, Tex.

LOCATION.--Lat 31°20'08", long 95°39'27", Houston-Leon County Line, on right bank 30 ft (9 m) downstream from bridge on State Highway 7, 7.1 miles (11.4 km) downstream from Upper Keechi Creek, 11.9 miles (19.1 km) west of Crockett, and at mile 265.2 (426.7 km).

DRAINAGE AREA.--13,911 mi² (36,029 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 136.59 ft (41.63 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 5,763 ft³/s (163 m³/s), 4,175,000 acre-ft/yr (5,148 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 44,700 ft³/s (1,270 m³/s) June 14, gage height, 49.51 ft (15.09 m); minimum daily, 387 ft³/s (11.0 m³/s) Oct. 14, 15.
Period of record: Maximum discharge, 78,000 ft³/s (2,210 m³/s) May 15, 1969, gage height, 52.24 ft (15.92 m); minimum, 275 ft³/s (7.79 m³/s) Aug. 13, 1964.
Maximum stage since at least 1900, 56.1 ft (17.1 m) Apr. 30 or May 1, 1942, from information by State Highway Department.

REMARKS.--Records fair. 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 (24.0 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	702	8,780	1,120	1,040	13,000	2,360	15,300	39,400	6,390	11,600	2,220	668
2	584	6,980	1,050	1,080	10,500	2,520	10,200	42,100	4,870	10,600	5,550	686
3	627	5,720	1,020	1,290	7,840	2,440	6,650	40,800	5,550	10,500	6,620	736
4	645	6,090	953	1,740	7,730	2,080	5,050	38,500	7,580	9,880	6,240	740
5	574	7,250	899	2,030	7,720	2,050	3,690	36,700	12,100	9,780	4,850	1,060
6	502	6,970	874	3,690	5,930	4,570	3,130	35,100	15,900	9,910	4,210	1,740
7	449	5,040	867	7,620	4,100	8,820	3,460	33,500	18,100	9,300	4,760	1,400
8	431	3,070	794	9,350	3,670	7,830	3,320	31,700	19,600	8,380	5,360	1,100
9	439	1,930	775	6,760	4,820	6,460	3,170	29,500	23,300	6,650	5,860	1,280
10	458	1,410	802	6,500	7,350	6,670	2,860	26,600	27,900	5,210	6,270	2,570
11	433	1,230	911	7,030	10,600	7,840	2,600	23,300	32,900	5,710	6,600	3,300
12	412	1,090	1,060	5,930	12,500	10,000	2,470	20,000	37,900	7,080	6,760	3,100
13	399	1,620	1,250	4,310	13,300	12,900	2,390	17,200	42,900	6,340	6,160	2,450
14	387	2,320	1,650	3,180	13,400	14,600	2,230	15,600	44,100	5,120	4,100	2,170
15	387	2,040	3,440	2,580	11,600	15,500	2,300	14,900	41,700	5,440	2,520	1,730
16	401	1,850	4,480	2,170	8,500	16,200	4,320	14,400	38,900	5,860	1,700	1,550
17	416	2,370	6,140	1,900	6,390	17,000	10,000	13,900	36,600	5,140	1,370	1,840
18	419	2,770	6,380	1,780	5,660	17,200	15,900	13,600	34,600	4,390	1,220	2,220
19	414	2,440	5,170	1,760	5,320	18,400	18,200	13,500	32,500	5,610	1,190	2,280
20	403	1,920	3,920	1,730	4,820	19,000	18,700	12,700	30,400	7,120	1,110	2,020
21	401	1,590	2,890	2,080	3,750	19,400	19,300	11,300	27,800	6,580	1,060	1,820
22	632	1,660	2,190	2,180	2,860	19,200	20,100	10,600	24,100	4,550	1,060	1,800
23	952	2,010	1,790	1,800	2,540	18,100	20,900	10,400	18,700	2,980	977	1,670
24	972	1,940	1,550	1,660	2,450	18,800	21,500	10,300	14,800	2,250	852	1,440
25	1,460	1,940	1,360	2,140	2,420	22,500	23,400	10,200	13,300	1,860	818	1,270
26	2,410	2,100	1,260	4,720	2,580	23,500	26,000	11,200	13,500	1,670	940	1,040
27	3,750	1,820	1,180	6,460	2,780	22,900	27,100	10,200	13,900	1,640	847	925
28	4,060	1,540	1,100	9,790	2,560	21,100	26,500	9,400	14,100	1,500	724	2,220
29	7,010	1,380	1,030	12,400	------	19,800	28,300	9,320	13,800	1,260	674	6,920
30	11,400	1,240	1,000	13,500	------	19,100	33,500	9,410	13,000	1,130	657	10,300
31	10,400	------	1,010	13,800	------	18,200	------	8,480	------	1,060	650	------
TOTAL	52,929	90,110	59,915	144,000	186,690	417,040	382,540	623,810	680,790	176,100	93,929	64,045
MEAN	1,707	3,004	1,933	4,645	6,668	13,450	12,750	20,120	22,690	5,681	3,030	2,135
MAX	11,400	8,780	6,380	13,800	13,400	23,500	33,500	42,100	44,100	11,600	6,760	10,300
MIN	387	1,090	775	1,040	2,420	2,050	2,230	8,480	4,870	1,060	650	668
AC-FT	105,000	178,700	118,800	285,600	370,300	827,200	758,800	1,237M	1,350M	349,300	186,300	127,000

CAL YR 1972 TOTAL 1,046,778 MEAN 2,860 MAX 34,000 MIN 387 AC-FT 2,076,000
WTR YR 1973 TOTAL 2,971,898 MEAN 8,142 MAX 44,100 MIN 387 AC-FT 5,895,000

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 (0.3 km) downstream from Mustang Creek, 1.5 miles (2.4 km) southwest of Madisonville, and 13.2 miles (21.2 km) upstream from Bedias Creek.

DRAINAGE AREA.--112 mi² (290 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 213.74 ft (65.15 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 54.0 ft³/s (1.53 m³/s), 6.55 in/yr (166.4 mm/yr), 39,120 acre-ft/yr (48.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,460 ft³/s (126 m³/s) Mar. 24, May 26, gage height, 16.04 ft (4.89 m); no flow at times.
Period of record: Maximum discharge, 15,000 ft³/s (425 m³/s) Apr. 12, 1969, gage height, 17.76 ft (5.41 m); no flow at times each year.
Maximum stages since 1900, 22 ft (7 m) in 1929 and 21.4 ft (6.5 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	23	1.4	.28	23	228	6.5	3.4	8.7	2.4		0
2	0	53	.88	5.3	65	2,390	5.1	3.4	7.0	1.9		0
3	0	34	.74	78	21	750	4.3	3.3	6.0	1.4		0
4	0	11	.85	204	11	96	3.5	3.1	5.8	.88		0
5	0	4.3	.73	77	7.7	32	3.0	2.6	20	.65		24
6	0	1.9	1.0	81	5.9	185	3.3	2.8	51	.51		117
7	0	1.5	.98	1,010	4.9	1,460	30	512	8.9	.41		116
8	0	6.8	1.0	1,310	61	318	26	1,420	6.2	1.4		28
9	0	9.9	1.1	256	272	44	57	153	4.6	3.4		7.4
10	0	3.6	1.5	37	145	25	49	27	3.7	2.0		3.1
11	0	1.6	2.5	27	32	60	13	17	19	1.3		1.2
12	0	.69	7.9	27	20	34	6.5	111	161	1.1		.58
13	0	196	12	38	32	15	4.5	601	1,770	.78		296
14	0	456	35	50	226	11	21	138	1,810	.35		190
15	0	75	164	31	153	11	446	24	333	1.8		14
16	0	13	86	19	22	12	1,510	15	36	1.5		4.9
17	0	5.6	23	13	11	13	714	11	20	.79		2.1
18	0	3.6	11	11	7.0	10	1,950	9.0	14	.40		1.1
19	0	15	6.2	9.1	5.4	7.3	664	7.5	10	.19		.60
20	0	20	4.4	7.5	4.3	5.6	90	6.2	30	.07		.38
21	0	7.2	3.2	25	3.4	4.4	38	5.1	250	.04		.23
22	4.9	3.3	2.3	29	12	3.8	32	4.3	114	.01		.17
23	47	1.7	1.7	13	112	3.9	25	1.5	29	0		.14
24	26	3.3	1.2	7.3	83	2,000	21	3.9	16	0		.12
25	4.5	41	.73	278	26	1,730	17	4.1	11	0		.16
26	5.0	66	.49	1,390	12	249	13	2,160	7.8	0		.50
27	49	21	.38	433	6.9	32	8.5	1,540	6.0	0		87
28	53	9.2	.38	60	4.4	17	5.7	160	4.6	0		1,340
29	12	4.3	.32	30	------	12	4.2	24	3.9	0		1,290
30	92	2.3	.41	21	------	10	3.6	15	3.1	0		132
31	96	------	.36	18	------	8.2	------	11	------	0		------
TOTAL	389.4	1,094.79	373.65	5,595.48	1,388.9	9,777.2	5,774.7	6,999.2	4,770.3	23.28	0	3,656.68
MEAN	12.6	36.5	12.1	180	49.6	315	192	226	159	.75	0	122
MAX	96	456	164	1,390	272	2,390	1,950	2,160	1,810	3.4	0	1,340
MIN	0	.69	.32	.28	3.4	3.8	3.0	1.5	3.1	0	0	0
CFSM	.11	.33	.11	1.61	.44	2.81	1.71	2.02	1.42	.007	0	1.09
IN.	.13	.36	.12	1.86	.46	3.25	1.92	2.32	1.58	.007	0	1.21
AC-FT	772	2,170	741	11,100	2,750	19,390	11,450	13,880	9,460	46	0	7,250

CAL YR 1972 TOTAL 4,289.10 MEAN 11.7 MAX 768 MIN 0 CFSM .10 IN 1.42 AC-FT 8,510
WTR YR 1973 TOTAL 39,843.58 MEAN 109 MAX 2,390 MIN 0 CFSM .97 IN 13.23 AC-FT 79,030

PEAK DISCHARGE (BASE, 1,400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 8	0300	15.33	2,020	4-18	0800	15.68	3,080
1-26	1100	15.31	1,980	5- 8	0100	15.48	2,440
3- 2	1100	15.73	3,260	5-26	1800	16.04	4,460
3- 7	0600	15.51	2,530	6-13	1000	15.59	2,770
3-24	2000	16.04	4,460	9-28	2200	15.49	2,470

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 (0.8 km) upstream from Interstate Highway 45, 1.5 miles (2.4 km) downstream from Caney Creek, and 9.5 miles (15.3 km) southeast of Madisonville.

DRAINAGE AREA.--321 mi² (831 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft (45.72 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 216 ft³/s (6.12 m³/s), 9.14 in/yr (232.2 mm/yr), 156,500 acre-ft/yr (193 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,220 ft³/s (261 m³/s) Mar. 25, gage height, 20.12 ft (6.13 m); minimum daily, 0.17 ft³/s (4.8 dm³/s) Oct. 20, 21.
Period of record: Maximum discharge, 31,000 ft³/s (878 m³/s) Apr. 13, 1969, gage height, 24.60 ft (7.50 m); no flow at times. Maximum stage since at least 1910, 34 ft (10 m) in May 1922 (discharge unknown), from information by local resident.

REMARKS.--Records fair. At end of year, flow from 1.32 mi² (3.42 km²) above this station was partly controlled by two floodwater-retarding structures with a total combined capacity of 1,270 acre-ft (1.57 hm³) below the flood-spillway crests, of which 834 acre-ft (1.03 hm³) is floodwater-retarding capacity and 436 acre-ft (0.538 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	154	16	.6	64	50	45	25	28	16	3.4	.3
2	.50	97	9.1	22	53	1,150	37	21	20	13	12	.3
3	.48	86	5.3	202	100	3,800	32	20	16	12	31	.2
4	.45	107	3.3	516	59	2,300	27	22	24	9.0	9.9	.2
5	.42	59	2.3	679	39	914	22	20	28	8.0	3.7	68
6	.40	34	1.5	537	31	367	20	16	55	7.2	2.0	390
7	.38	32	1.0	892	26	953	61	787	138	6.3	1.4	630
8	.35	15	.78	2,030	32	2,330	199	1,310	55	6.1	1.4	678
9	.32	8.2	.72	2,780	421	1,550	256	2,280	26	6.3	5.1	437
10	.30	15	2.1	1,550	709	427	254	1,380	16	6.3	32	75
11	.28	25	8.9	469	756	137	211	227	60	5.9	21	32
12	.26	16	25	200	294	124	79	131	145	6.1	5.7	16
13	.24	104	66	250	128	106	43	381	1,490	5.9	3.0	44
14	.23	398	117	250	377	63	35	758	4,340	5.1	2.0	729
15	.22	622	423	200	564	51	353	694	3,540	4.5	1.3	1,140
16	.21	488	581	150	532	47	1,870	122	2,010	4.0	1.0	1,090
17	.20	93	545	100	153	66	3,520	58	621	4.0	.82	279
18	.19	52	155	70	68	60	3,470	40	102	3.6	3.1	43
19	.18	49	55	54	49	48	3,590	31	52	3.1	67	24
20	.17	31	34	44	40	36	2,400	25	146	2.9	42	13
21	.17	47	23	42	34	29	1,060	20	526	2.4	12	8.0
22	116	37	15	43	32	24	252	17	550	2.0	4.8	5.3
23	317	22	10	79	252	20	127	14	525	1.4	2.7	4.3
24	261	15	6.7	55	578	1,540	96	12	165	1.1	1.7	3.2
25	146	130	4.6	215	604	6,460	75	9.6	79	1.0	1.0	3.0
26	67	266	3.2	1,080	211	3,290	142	211	48	1.3	.63	2.5
27	144	283	2.3	2,410	88	1,580	160	872	37	2.0	.45	111
28	219	99	1.8	1,370	57	404	163	1,910	29	33	.32	858
29	215	47	1.3	696	------	110	57	857	24	39	.28	3,400
30	93	28	1.0	163	------	73	33	117	19	12	.27	2,990
31	91	------	.74	86	------	57	------	43	------	5.3	.26	------
TOTAL	1,675.50	3,459.2	2,121.64	17,234.6	6,351	28,166	18,689	12,430.6	14,914	235.8	273.23	13,074.3
MEAN	54.0	115	68.4	556	227	909	623	401	497	7.61	8.81	436
MAX	317	622	581	2,780	756	6,460	3,590	2,280	4,340	39	67	3,400
MIN	.17	8.2	.72	.60	26	20	20	9.6	16	1.0	.26	.20
CFSM	.17	.36	.21	1.73	.71	2.83	1.94	1.25	1.55	.02	.03	1.36
IN.	.19	.40	.25	2.00	.74	3.26	2.17	1.44	1.73	.03	.03	1.52
AC-FT	3,320	6,860	4,210	34,180	12,600	55,870	37,070	24,660	29,580	468	542	25,930

CAL YR 1972 TOTAL 18,810.81 MEAN 51.4 MAX 2,300 MIN 0 CFSM .16 IN 2.18 AC-FT 37,310
WTR YR 1973 TOTAL 118,624.87 MEAN 325 MAX 6,460 MIN .17 CFSM 1.01 IN 13.75 AC-FT 235,300

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 9	0300	17.68	3,170	4-17	2300	18.17	3,940
1-27	1500	17.65	3,120	6-14	1400	19.12	6,200
3- 3	0900	18.48	4,600	9-29	1200	18.52	4,700
3-25	1200	20.12	9,220				

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 (3.2 km) upstream from Little White Rock Creek, 2.2 miles (3.5 km) upstream from Tantabogue Creek, 6.4 miles (10.3 km) north of Trinity, and 14.2 miles (22.8 km) above mouth.

DRAINAGE AREA.--228 mi² (591 km²).

PERIOD OF RECORD (revised).--December 1965 to current year. Low stages affected by storage in Livingston Reservoir. Peak discharge, supplemental peak discharges, and discharge measurements only beginning October 1971.

GAGE.--Water-stage recorder. Datum of gage is 124.30 ft (37.89 m) above mean sea level.

AVERAGE DISCHARGE.--5 years (1966-71), 92.5 ft³/s (2.62 m³/s), 5.51 in/yr (140.0 mm/yr), 67,020 acre-ft/yr (82.6 hm³/yr).

EXTREMES.--Water year 1972: Maximum discharge (estimated), 500 ft³/s (14.2 m³/s) Jan. 31 (not previously published); maximum gage height, 9.05 ft (2.76 m) Dec. 26, 27 (backwater from storage in Livingston Reservoir); minimum gage height, 2.98 ft (0.91 m) Oct. 11-15.
Water year 1973: Maximum discharge, 16,700 ft³/s (473 m³/s) Mar. 25, gage height, 25.35 ft (7.73 m); minimum gage height, 5.93 ft (1.81 m) Oct. 19.
Period of record: Maximum discharge, 16,700 ft³/s (473 m³/s) Mar. 25, 1973, gage height, 25.35 ft (7.73 m); no flow at times.

REMARK (revised).--Only peak discharge and supplemental peaks are published. Low-water stages affected by backwater from Livingston Reservoir.

DISCHARGE MEASUREMENTS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Feb.	22	34
June	4	46
July	9	17
Aug.	20	2.2
Sept.	17	26

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1- 8	1500	12.00	2,900	4-17	2000	11.40	2,430
3-25	0400	25.35	16,700	6-14	2000	12.28	3,120

08066170 Kickapoo Creek near Onalaska, Tex.

LOCATION.--Lat 30°54'25", long 95°05'18", Polk County, on right bank 114 ft (35 m) downstream from old bridge site, 1.2 miles (1.9 km) downstream from Magnolia Creek, 6.2 miles (10.0 km) upstream from Rocky Creek, 7.3 miles (11.7 km) northeast of Onalaska, and 15.9 miles (25.6 km) upstream from mouth.

DRAINAGE AREA.--57.0 mi² (148 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 139.85 ft (42.63 m) above mean sea level.

AVERAGE DISCHARGE.--7 years (1966-73), 37.2 ft³/s (1.05 m³/s), 8.86 in/yr (225.0 mm/yr), 26,950 acre-ft/yr (33.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,000 ft³/s (453 m³/s) June 13, gage height, 26.0 ft (7.9 m); minimum daily, 0.34 ft³/s (9.6 dm³/s) Oct. 17, 18.
Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) June 13, 1973, gage height, 26.0 ft (7.9 m); minimum, 0.01 ft³/s (0.28 dm³/s) July 19, 20, 1971.

REMARKS.--Records fair except those for March and those for period of no gage-height record, which are poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.6	.63	35	38	7.0	12	14	7.7	5.0	195	7.0
2	1.0	2.2	.49	444	30	19	9.6	457	7.5	4.5	408	13
3	.70	1.8	.42	253	24	15	7.7	297	7.0	10	187	4.1
4	.60	1.3	.49	108	21	20	6.0	52	19	20	43	24
5	.55	.84	.50	103	19	9.6	5.1	31	166	10	20	1,140
6	.50	.81	.78	187	19	50	7.7	27	99	250	14	681
7	.46	.87	.88	993	18	200	139	1,360	16	60	13	104
8	.44	.72	.92	300	171	50	52	127	8.2	15	14	49
9	.42	.61	1.2	150	241	20	112	52	105	7.0	20	54
10	.41	.56	3.2	100	71	12	28	35	59	5.7	60	24
11	.40	.59	6.8	120	38	20	12	27	500	4.5	18	16
12	.39	.51	28	150	30	20	7.0	87	1,500	200	25	16
13	.38	30	22	100	200	12	5.1	51	4,000	100	30	20
14	.37	11	159	80	400	9.0	4.5	31	2,000	20	13	25
15	.37	4.1	171	65	100	8.1	267	25	1,500	10	6.4	12
16	.35	2.6	24	53	50	50	1,590	20	500	5.0	4.9	8.0
17	.34	3.6	9.0	47	30	100	500	17	100	50	3.4	5.4
18	.34	31	5.7	78	15	40	1,500	15	50	15	2.9	5.2
19	.45	18	7.8	64	10	20	600	14	30	8.0	2.5	4.6
20	.42	6.5	12	43	8.0	12	200	12	50	5.0	2.1	3.9
21	.48	4.1	14	168	7.0	8.1	100	11	100	4.0	1.9	3.3
22	27	3.2	7.9	82	12	6.0	80	10	50	4.0	1.7	3.0
23	12	2.4	5.0	47	62	17	55	9.0	25	12	1.6	35
24	2.5	11	3.7	36	29	1,000	45	8.2	15	9.6	1.5	29
25	.85	42	3.0	413	16	2,200	45	7.9	12	8.4	1.4	17
26	2.7	10	2.6	330	11	400	70	25	9.5	12	1.3	12
27	5.2	3.7	2.3	133	8.5	80	40	11	8.0	51	13	168
28	1.9	1.6	2.3	126	7.4	38	25	10	7.0	13	13	603
29	3.3	.93	2.3	59	------	27	20	9.7	6.0	8.3	13	85
30	2.8	.72	428	42	------	21	17	8.1	5.5	6.3	8.9	40
31	1.7	------	108	36	------	17	------	7.7	------	5.6	4.6	------
TOTAL	71.12	199.86	1,033.91	4,945	1,685.9	4,507.8	5,561.7	2,868.6	10,962.4	938.9	1,144.1	3,211.5
MEAN	2.29	6.66	33.4	160	60.2	145	185	92.5	365	30.3	36.9	107
MAX	27	42	428	993	400	2,200	1,590	1,360	4,000	250	408	1,140
MIN	.34	.51	.42	35	7.0	6.0	4.5	7.7	5.5	4.0	1.3	3.0
CFSM	.04	.12	.59	2.81	1.06	2.54	3.25	1.62	6.40	.53	.65	1.88
IN.	.05	.13	.67	3.23	1.10	2.94	3.63	1.87	7.15	.61	.75	2.10
AC-FT	141	396	2,050	9,810	3,340	8,940	11,030	5,690	21,740	1,860	2,270	6,370

CAL YR 1972 TOTAL 8,841.54 MEAN 24.2 MAX 1,470 MIN .02 CFSM .42 IN 5.77 AC-FT 17,540
WTR YR 1973 TOTAL 37,130.79 MEAN 102 MAX 4,000 MIN .34 CFSM 1.79 IN 24.23 AC-FT 73,650

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-24	unknown	18.40	6,670	6-13	unknown	a26.0	16,000
4-16	0530	17.62	6,050	8- 2	1500	12.12	2,410
5- 2	2100	12.48	2,590	9- 5	2300	11.75	2,220
5- 7	0500	14.36	3,720	9-27	2300	11.33	2,020

a From peak mark.
NOTE.--No gage-height record June 11 to July 23.

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 (7.1 km) northwest of Goodrich, 7 miles (11 km) southwest of Livingston, 11.7 miles (18.8 km) upstream from Long King Creek, and at mile 129.2 (207.9 km).

DRAINAGE AREA.--16,583 mi² (42,950 km²).

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 (61 m) upstream and at same datum.

EXTREMES.--Current year: Maximum contents, 1,923,000 acre-ft (2,370 hm³) Mar. 25, elevation, 132.60 ft (40.42 m); minimum, 1,694,000 acre-ft (2,090 hm³) Oct. 21, elevation, 129.84 ft (39.58 m).
Period of record: Maximum contents, 1,923,000 acre-ft (2,370 hm³) Mar. 25, 1973, elevation, 132.60 ft (40.42 m); minimum since deliberate impoundment began on June 26, 1969, 149,600 acre-ft (184 hm³) Dec. 5, 1969, elevation, 98.52 ft (30.03 m).

REMARKS.--Reservoir is formed by an earthfill dam, 14,400 ft (4,389 m) 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 (197 m) long with twelve 40- by 35-foot (12- by 11-meter) tainter gates located near the left end of the embankment. The outlet works is a concrete multi-gated inlet tower located 1,700 ft (518 m) 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)

129.8	1,691,000
132.6	1,923,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,708	1,808	1,811	1,817	1,808	1,800	1,809	1,759	1,802	1,805	1,804	1,799
2	1,707	1,817	1,814	1,828	1,809	1,813	1,803	1,776	1,798	1,807	1,815	1,798
3	1,712	1,822	1,814	1,834	1,807	1,822	1,792	1,778	1,799	1,807	1,822	1,798
4	1,713	1,825	1,813	1,841	1,802	1,824	1,784	1,783	1,802	1,805	1,825	1,809
5	1,713	1,829	1,817	1,846	1,797	1,822	1,784	1,787	1,807	1,811	1,826	1,823
6	1,718	1,846	1,811	1,843	1,798	1,822	1,796	1,792	1,803	1,811	1,817	1,819
7	1,713	1,848	1,809	1,866	1,800	1,822	1,803	1,826	1,797	1,808	1,812	1,819
8	1,708	1,832	1,809	1,876	1,812	1,819	1,813	1,819	1,792	1,808	1,812	1,815
9	1,708	1,833	1,812	1,870	1,817	1,815	1,816	1,812	1,797	1,802	1,809	1,813
10	1,708	1,821	1,816	1,859	1,807	1,807	1,816	1,810	1,799	1,800	1,808	1,809
11	1,706	1,812	1,812	1,848	1,792	1,801	1,812	1,813	1,808	1,797	1,805	1,810
12	1,707	1,811	1,820	1,836	1,797	1,797	1,814	1,812	1,818	1,822	1,807	1,812
13	1,708	1,829	1,817	1,821	1,808	1,802	1,812	1,802	1,915	1,817	1,808	1,813
14	1,705	1,827	1,832	1,813	1,808	1,811	1,812	1,802	1,861	1,800	1,808	1,822
15	1,704	1,822	1,841	1,807	1,807	1,819	1,826	1,802	1,842	1,794	1,807	1,819
16	1,704	1,826	1,839	1,802	1,802	1,832	1,878	1,803	1,826	1,798	1,802	1,819
17	1,702	1,817	1,837	1,799	1,798	1,827	1,886	1,812	1,816	1,799	1,802	1,820
18	1,703	1,834	1,842	1,802	1,805	1,823	1,878	1,812	1,813	1,799	1,802	1,817
19	1,700	1,828	1,844	1,798	1,806	1,828	1,872	1,818	1,808	1,797	1,803	1,814
20	1,697	1,823	1,840	1,799	1,806	1,833	1,858	1,822	1,808	1,798	1,803	1,812
21	1,694	1,823	1,832	1,808	1,796	1,827	1,847	1,824	1,807	1,802	1,802	1,812
22	1,711	1,817	1,816	1,817	1,798	1,832	1,828	1,820	1,808	1,802	1,802	1,810
23	1,720	1,810	1,811	1,812	1,798	1,829	1,813	1,816	1,807	1,802	1,801	1,804
24	1,718	1,817	1,804	1,806	1,795	1,891	1,809	1,807	1,805	1,800	1,798	1,806
25	1,714	1,820	1,798	1,820	1,792	1,923	1,802	1,808	1,802	1,795	1,798	1,803
26	1,726	1,815	1,796	1,832	1,797	1,908	1,786	1,808	1,798	1,797	1,799	1,802
27	1,726	1,823	1,795	1,830	1,797	1,887	1,774	1,820	1,798	1,797	1,798	1,822
28	1,730	1,820	1,794	1,827	1,792	1,869	1,760	1,823	1,798	1,792	1,801	1,833
29	1,746	1,820	1,798	1,817	------	1,837	1,756	1,820	1,794	1,791	1,802	1,832
30	1,766	1,814	1,811	1,812	------	1,811	1,753	1,808	1,800	1,790	1,799	1,837
31	1,788	------	1,811	1,808	------	1,810	------	1,802	------	1,792	1,798	------
(†)	131.00	131.31	131.27	131.24	131.05	131.26	131.57	131.17	131.14	131.05	131.12	131.58
(*)	+76,000	+26,000	-3,000	-3,000	-16,000	+18,000	-57,000	+49,000	-2,000	-8,000	+6,000	+39,000
MAX	1,788	1,848	1,844	1,876	1,817	1,923	1,886	1,826	1,915	1,822	1,826	1,837
MIN	1,694	1,808	1,794	1,798	1,792	1,797	1,753	1,759	1,792	1,790	1,798	1,798

CAL YR 1972..... * -21,000 MAX 1,855 MIN 1,694
WTR YR 1973..... * +125,000 MAX 1,923 MIN 1,694

† 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 (518 m) to right of right spillway abutment, 4.8 miles (7.7 km) northwest of Goodrich, 11.7 miles (18.8 km) upstream from Long King Creek, and at mile 129.2 (207.9 km).

DRAINAGE AREA.--16,583 mi² (42,950 km²).

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: No flow during year; maximum elevation, about 93.0 ft (28.3 m) June 14 (backwater from Trinity River). Period of record: Maximum daily discharge, 3,070 ft³/s (86.9 m³/s) Dec. 11, 12, 1969; maximum elevation, about 93.0 ft (29.3 m) June 14, 1973 (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 (18.87 m). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
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30					------							
31		------			------		------		------			------
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0

CAL YR 1972 TOTAL 1,016.30 MEAN 2.78 MAX 125 MIN 0 AC-FT 2,020
WTR YR 1973 TOTAL 0.00 MEAN .00 MAX .0 MIN 0 AC-FT 0

08066200 Long King Creek at Livingston, Tex.

LOCATION.--Lat 30°42'58", long 94°57'31", Polk County, on right bank 64 ft (20 m) downstream from centerline of bridge on U.S. Highway 190, 2 miles (3 km) west of Livingston, 2 miles (3 km) upstream from Choates Creek, and 14.8 miles (23.8 km) upstream from mouth.

DRAINAGE AREA.--141 mi² (365 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 100.12 ft (30.52 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 77.5 ft³/s (2.19 m³/s), 7.46 in/yr (189.5 mm/yr), 56,150 acre-ft/yr (69.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 26,000 ft³/s (736 m³/s) June 13, gage height, 26.97 ft (8.22 m); minimum, 0.44 ft³/s (12 dm³/s) Oct. 18.
Period of record: Maximum discharge, 26,000 ft³/s (736 m³/s) June 13, 1973, gage height, 26.97 ft (8.22 m); no flow at times.
Maximum stage since at least 1870, about 41 ft (12 m) in May 1929.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	1.5	9.0	26	44	26	50	44	19	14	538	9.4
2	3.8	1.4	8.0	164	37	70	43	80	19	13	1,210	10
3	2.5	1.3	7.0	361	32	79	38	139	18	13	357	9.3
4	2.0	3.9	6.5	185	29	2,540	35	66	19	13	70	14
5	1.5	4.6	15	192	28	399	32	43	23	12	31	1,080
6	1.3	2.0	10	408	27	643	34	39	68	1,070	23	2,750
7	1.0	1.7	5.9	729	27	932	230	2,180	43	219	22	750
8	1.2	1.5	4.7	623	203	192	162	1,090	26	149	18	130
9	.94	1.4	5.0	160	862	105	194	101	146	58	16	100
10	.82	1.3	222	109	203	101	113	52	218	30	97	50
11	.88	1.2	234	113	96	139	56	45	295	22	37	40
12	1.1	1.2	367	115	64	73	40	42	1,030	1,060	25	30
13	.82	50	290	122	1,180	46	35	41	10,700	1,190	21	29
14	.82	37	317	99	1,760	56	36	36	8,160	244	17	28
15	.60	14	971	75	271	90	700	34	3,500	65	15	27
16	.60	10	179	55	126	3,190	6,210	35	344	42	14	22
17	.60	9.1	62	45	84	1,230	5,080	34	125	33	14	21
18	.60	145	37	45	63	179	5,200	32	73	26	12	18
19	.98	125	30	55	50	107	750	30	49	21	11	17
20	.84	36	29	43	41	82	330	29	157	18	10	17
21	.77	21	42	256	38	62	180	28	193	16	9.5	16
22	2.9	14	33	158	44	50	110	27	75	15	8.6	15
23	5.2	11	23	64	202	56	90	26	40	14	8.5	15
24	2.1	15	19	41	128	583	179	25	31	13	8.0	20
25	1.5	146	16	181	70	1,080	1,400	25	27	12	7.6	35
26	1.8	66	14	663	45	159	250	25	24	47	7.6	24
27	5.9	29	13	194	36	86	123	26	21	649	8.1	19
28	2.8	17	12	148	31	73	72	24	19	314	8.0	146
29	2.0	12	12	90	------	78	56	22	17	43	33	105
30	1.8	9.8	16	54	------	73	51	21	15	24	23	34
31	1.6	------	37	48	------	60	------	20	------	20	12	------
TOTAL	56.67	789.9	3,046.1	5,621	5,821	12,639	21,879	4,461	25,494	5,479	2,691.9	5,580.7
MEAN	1.83	26.3	98.3	181	208	408	729	144	850	177	86.8	186
MAX	5.9	146	971	729	1,760	3,190	6,210	2,180	10,700	1,190	1,210	2,750
MIN	.60	1.2	4.7	26	27	26	32	20	15	12	7.6	9.3
CFSM	.01	.19	.70	1.28	1.48	2.89	5.17	1.02	6.03	1.26	.62	1.32
IN.	.01	.21	.80	1.48	1.54	3.33	5.77	1.18	6.73	1.45	.71	1.47
AC-FT	112	1,570	6,040	11,150	11,550	25,070	43,400	8,850	50,570	10,870	5,340	11,070

CAL YR 1972 TOTAL 20,143.67 MEAN 55.0 MAX 1,570 MIN .24 CFSM .39 IN 5.31 AC-FT 39,950
WTR YR 1973 TOTAL 93,559.27 MEAN 256 MAX 10,700 MIN .60 CFSM 1.82 IN 24.68 AC-FT 185,600

PEAK DISCHARGE (BASE, 2,300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-13	2100	13.58	3,500	6-13	2130	26.97	26,000
3- 4	0800	13.85	3,660	7-12	2300	11.62	2,340
3-16	1200	15.50	4,800	8- 2	1900	12.95	3,120
4-18	0200	21.05	10,300	9- 5	2400	13.62	3,520
5- 7	2130	12.99	3,140				

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 (12 m) downstream from downstream bridge on U.S. Highway 59, 0.2 mile (0.3 km) downstream from Long King Creek, 3.0 miles (4.8 km) southeast of Goodrich, and at mile 117.3 (188.7 km).

DRAINAGE AREA.--16,844 mi² (43,626 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft (12.19 m) above mean sea level.

AVERAGE DISCHARGE.--7 years (1966-73), 6,549 ft³/s (185 m³/s), 4,745,000 acre-ft/yr (5,851 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 96,200 ft³/s (2,720 m³/s) June 14, gage height, 46.36 ft (14.13 m); minimum daily, 264 ft³/s (7.48 m³/s) Oct. 20 (regulation by Livingston Reservoir).
Period of record: Maximum discharge, 96,200 ft³/s (2,720 m³/s) June 14, 1973, gage height, 46.36 ft (14.13 m); minimum daily, 191 ft³/s (5.41 m³/s) Aug. 6, 1971 (regulation by Livingston Reservoir).
Maximum stage since at least 1929, 52.0 ft (15.8 m) 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 (2,200 hm³), 11.9 miles (19.1 km) upstream. No diversions between Livingston Reservoir and gaging station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	779	1,530	476	15,900	2,130	20,900	29,900	7,030	10,800	2,030	994
2	304	3,110	1,550	552	13,800	2,830	19,900	30,200	5,590	10,800	2,900	1,000
3	299	3,340	1,550	1,080	10,800	5,370	19,200	30,800	5,450	10,700	3,230	991
4	293	3,360	1,560	2,020	10,600	7,280	10,900	31,400	6,360	10,700	4,580	1,050
5	289	3,370	1,550	4,030	10,600	7,990	4,190	33,000	9,110	10,700	4,640	3,030
6	286	3,390	1,570	7,540	8,400	9,870	2,430	34,400	14,600	11,400	5,930	9,360
7	279	4,620	1,510	9,290	4,800	13,300	2,710	40,500	19,100	11,400	6,880	8,130
8	277	7,060	881	15,700	4,670	14,900	2,640	48,100	19,300	11,000	6,880	5,480
9	277	7,120	764	19,500	6,180	16,000	2,710	46,400	19,300	10,800	6,850	4,910
10	277	6,130	1,050	19,000	9,220	15,900	2,580	42,800	19,700	9,440	6,880	4,040
11	274	3,570	1,250	17,200	13,800	13,600	3,790	39,700	21,200	7,090	6,900	2,810
12	274	1,980	1,450	16,400	12,600	9,520	3,670	37,900	28,400	5,440	6,440	2,810
13	272	2,100	2,170	14,000	13,400	9,370	3,900	36,500	53,100	9,770	5,300	2,790
14	270	3,050	1,940	10,900	19,700	7,070	4,000	29,400	92,400	13,400	4,020	2,770
15	270	3,210	3,710	8,740	16,700	11,600	5,160	21,100	91,300	10,800	4,930	2,760
16	269	3,270	4,790	5,660	15,500	18,300	17,200	15,000	70,900	5,170	3,960	2,750
17	267	3,310	4,520	4,560	13,600	20,600	33,600	11,200	59,300	4,680	1,980	2,730
18	267	3,610	5,360	4,220	6,400	17,800	44,800	10,900	54,300	4,620	1,170	2,710
19	267	3,780	7,090	3,100	5,450	17,300	38,700	10,600	49,900	4,590	1,080	2,710
20	264	3,470	8,570	1,950	5,360	17,500	36,800	10,600	49,000	4,570	1,060	2,710
21	270	3,360	8,690	2,110	5,330	18,200	36,000	10,500	48,500	4,550	1,050	2,620
22	309	3,300	7,960	2,460	4,760	18,100	35,300	11,800	44,000	4,530	1,030	1,880
23	308	3,290	6,730	3,310	4,660	18,200	33,800	13,600	41,300	4,520	1,040	1,800
24	284	2,840	4,560	4,410	5,520	22,000	29,000	13,400	35,600	4,510	850	1,810
25	278	1,800	4,160	4,140	4,560	38,900	30,100	10,900	28,100	4,190	562	1,820
26	290	1,720	2,390	6,560	3,060	44,600	33,100	10,700	17,800	2,140	527	1,820
27	294	1,620	840	11,200	2,940	44,500	32,800	10,600	14,100	3,720	527	1,810
28	288	1,560	484	15,700	2,850	44,500	30,500	10,600	13,900	3,750	566	4,620
29	292	1,550	448	16,000	------	44,700	30,000	11,700	13,800	1,410	992	8,630
30	293	1,530	484	15,800	------	42,700	29,900	14,500	11,300	1,250	1,090	8,700
31	285	------	492	15,900	------	31,400	------	11,600	------	1,200	1,050	------
TOTAL	8,774	96,199	91,603	263,508	251,160	606,030	600,280	720,300	963,740	213,640	96,924	102,045
MEAN	283	3,207	2,955	8,500	8,970	19,550	20,010	23,240	32,120	6,892	3,127	3,402
MAX	309	7,120	8,690	19,500	19,700	44,700	44,800	48,100	92,400	13,400	6,900	9,360
MIN	264	779	448	476	2,850	2,130	2,430	10,500	5,450	1,200	527	991
AC-FT	17,400	190,800	181,700	522,700	498,200	1,202M	1,191M	1,429M	1,912M	423,800	192,200	202,400

CAL YR 1972 TOTAL 1,210,227 MEAN 3,307 MAX 26,900 MIN 232 AC-FT 2,400,000
WTR YR 1973 TOTAL 4,014,203 MEAN 11,000 MAX 92,400 MIN 264 AC-FT 7,962,000

08066300 Menard Creek near Rye, Tex.

LOCATION.--Lat 30°28'52", long 94°46'46", Liberty County, on left bank 20 ft (6 m) downstream from bridge on State Highway 146, 2.3 miles (3.7 km) northwest of Rye, and about 6 miles (10 km) upstream from mouth.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 62.32 ft (19.00 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 65.3 ft³/s (1.85 m³/s), 47,310 acre-ft/yr (58.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,640 ft³/s (74.8 m³/s) Apr. 19, gage height, 22.48 ft (6.85 m); minimum daily, 5.6 ft³/s (159 dm³/s) Oct. 15, 16.
Period of record: Maximum discharge, 9,660 ft³/s (274 m³/s) May 8, 1969, gage height, 30.33 ft (9.24 m), from rating curve extended above 5,600 ft³/s (159 m³/s); minimum daily, 2.6 ft³/s (74 dm³/s) Nov. 1, 1967.
Flood in September 1961 reached a stage of about 34 ft (10 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	28	38	166	110	153	132	36	55	600	39
2	11	15	26	64	175	107	127	174	42	52	822	39
3	11	14	25	80	145	122	110	547	40	49	398	49
4	11	14	44	74	112	178	97	330	38	48	422	80
5	11	14	36	118	85	171	86	228	42	49	373	257
6	10	15	31	180	74	154	84	170	56	92	147	330
7	9.8	22	27	209	69	144	145	1,040	52	123	104	288
8	9.2	28	26	256	117	164	203	1,580	52	218	130	316
9	18	28	25	292	252	218	237	748	52	223	150	294
10	17	12	27	285	224	220	219	561	59	242	140	181
11	6.6	12	30	210	235	162	170	332	77	149	160	125
12	6.3	11	71	137	206	148	140	212	169	109	207	159
13	6.2	59	110	127	300	151	109	203	345	163	130	147
14	6.1	74	148	120	1,480	117	96	163	766	288	93	113
15	5.6	79	254	113	972	99	144	131	859	347	82	111
16	5.6	46	193	102	810	224	353	110	1,150	249	98	91
17	5.7	33	167	90	688	276	552	97	1,110	129	85	73
18	5.8	37	115	80	358	381	1,840	86	713	112	75	62
19	17	33	72	72	222	778	2,390	80	303	99	75	55
20	16	38	63	82	174	454	1,650	74	175	79	82	51
21	6.6	52	67	230	152	202	914	66	156	67	66	47
22	26	44	62	242	139	148	531	61	280	61	57	45
23	35	31	60	220	163	134	332	57	322	53	51	43
24	27	27	54	185	198	240	249	55	252	42	46	44
25	16	27	48	135	218	318	198	53	155	38	42	45
26	13	37	43	195	197	343	192	51	124	37	39	45
27	11	47	39	204	151	324	289	51	108	50	39	64
28	12	46	37	271	125	220	389	51	82	39	46	68
29	20	37	35	252	------	176	273	49	65	41	45	38
30	39	31	36	166	------	183	167	48	60	42	43	51
31	35	------	35	119	------	177	------	38	------	35	40	------
TOTAL	440.5	980	2,034	4,948	8,207	6,843	12,439	7,578	7,740	3,380	4,887	3,350
MEAN	14.2	32.7	65.6	160	293	221	415	244	258	109	158	112
MAX	39	79	254	292	1,480	778	2,390	1,580	1,150	347	822	330
MIN	5.6	11	25	38	69	99	84	38	36	35	39	38
AC-FT	874	1,940	4,030	9,810	16,280	13,570	24,670	15,030	15,350	6,700	9,690	6,640

CAL YR 1972 TOTAL 20,381.8 MEAN 55.7 MAX 894 MIN 5.6 AC-FT 40,430
WTR YR 1973 TOTAL 62,826.5 MEAN 172 MAX 2,390 MIN 5.6 AC-FT 124,600

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-14	0900	21.17	1,980	6-16	2100	19.00	1,240
4-19	1400	22.48	2,640	8- 1	2200	18.35	1,070
5- 7	2100	21.52	2,160				

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 (2.4 km) northeast of Shepherd, and 11.6 miles (18.7 km) upstream from mouth.

DRAINAGE AREA.--38.8 mi² (100 km²).

PERIOD OF RECORD.--January 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 94.90 ft (28.93 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 20.5 ft³/s (0.581 m³/s), 7.18 in/yr (182.4 mm/yr), 14,850 acre-ft/yr (18.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,000 ft³/s (623 m³/s) June 13, gage height, 25.69 ft (7.83 m); minimum, 3.9 ft³/s (110 dm³/s) several days in October.
Period of record: Maximum discharge, 22,000 ft³/s (623 m³/s) June 13, 1973, gage height, 25.69 ft (7.83 m); minimum daily, 1.0 ft³/s (28 dm³/s) Aug. 7, 1967.
Maximum stage since at least 1949, that of June 13, 1973. Flood in 1957 reached 20.3 ft (6.2 m), from information by local resident.

REMARKS.--Records fair. No known regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	10	13	25	31	30	29	24	11	22	23	11
2	6.3	9.1	14	40	28	39	26	66	11	24	33	12
3	5.1	8.5	14	43	24	34	24	129	9.8	23	26	11
4	4.8	9.3	46	36	22	33	22	44	10	22	20	21
5	4.6	9.7	28	37	22	32	20	28	18	24	17	101
6	4.8	6.8	22	105	21	51	26	26	35	57	16	94
7	6.6	55	18	95	21	57	107	219	22	35	17	46
8	4.2	23	18	70	29	36	53	148	16	66	18	29
9	5.3	12	18	41	72	33	47	49	31	33	20	27
10	4.6	9.9	94	39	42	34	34	34	34	26	20	24
11	4.1	8.4	54	44	32	34	28	30	48	24	18	22
12	4.1	8.3	68	42	29	27	26	32	162	24	16	34
13	4.1	55	52	44	448	25	24	37	8,330	25	20	27
14	4.1	29	50	40	650	28	23	26	1,350	22	28	21
15	4.1	12	90	35	114	31	72	23	771	20	23	19
16	4.1	9.6	41	30	70	266	181	22	156	20	18	18
17	4.0	8.4	33	27	58	86	375	21	62	19	16	17
18	4.0	32	31	28	53	44	675	21	44	18	24	18
19	4.0	46	30	29	49	34	127	20	40	17	21	16
20	4.2	21	29	24	45	31	80	19	49	16	17	16
21	4.4	14	35	73	42	27	77	18	113	15	15	15
22	22	12	30	43	46	24	60	17	55	14	13	15
23	34	11	26	30	86	44	48	16	40	14	11	21
24	13	13	25	26	56	109	42	16	34	13	10	22
25	6.3	30	23	42	45	74	40	16	32	13	10	19
26	6.7	23	22	82	40	39	42	33	30	13	9.8	16
27	8.2	18	21	46	36	32	35	27	27	44	9.6	20
28	7.6	15	21	43	32	36	29	18	25	23	22	50
29	5.8	14	21	34	------	51	26	14	23	18	19	22
30	17	13	27	30	------	38	24	12	22	17	16	18
31	14	------	30	30	------	35	------	11	------	16	13	------
TOTAL	234.3	546.0	1,044	1,353	2,243	1,494	2,422	1,216	11,610.8	737	559.4	802
MEAN	7.56	18.2	33.7	43.6	80.1	48.2	80.7	39.2	387	23.8	18.0	26.7
MAX	34	55	94	105	650	266	675	219	8,330	66	33	101
MIN	4.0	6.8	13	24	21	24	20	11	9.8	13	9.6	11
CFSM	.19	.47	.87	1.12	2.06	1.24	2.08	1.01	9.97	.61	.46	.69
IN.	.22	.52	1.00	1.30	2.15	1.43	2.32	1.17	11.13	.71	.54	.77
AC-FT	465	1,080	2,070	2,680	4,450	2,960	4,800	2,410	23,030	1,460	1,110	1,590

CAL YR 1972 TOTAL 6,569.3 MEAN 17.9 MAX 268 MIN 3.7 CFSM .46 IN 6.30 AC-FT 13,030
WTR YR 1973 TOTAL 24,261.5 MEAN 66.5 MAX 8,330 MIN 4.0 CFSM 1.71 IN 23.26 AC-FT 48,120

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-13	2200	15.28	1,490	5- 7	1700	11.84	366
3-16	1500	12.20	460	6-13	1500	25.69	22,000
4-17	2300	14.44	1,100	6-21	0300	10.66	201
5- 3	0100	10.67	237				

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 (3.1 km) south of Romayor, 1.9 miles (3.1 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.7 miles (6.0 km) downstream from Big Creek, and at mile 94.3 (151.7 km).

DRAINAGE AREA.--17,186 mi² (44,512 km²).

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 (10.95 m) above mean sea level. Prior to September 1943, nonrecording gage at datum 53.57 ft (16.33 m) higher at railroad bridge 1.9 miles (3.1 km) upstream.

AVERAGE DISCHARGE.--44 years (1924-68) unregulated, 7,155 ft³/s (203 m³/s), 5,184,000 acre-ft/yr (6,392 hm³/yr); 5 years (1968-73) flow regulated by Livingston Reservoir, 6,489 ft³/s (184 m³/s), 4,701,000 acre-ft/yr (5,796 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 99,000 ft³/s (2,800 m³/s) June 15, gage height, 31.20 ft (9.51 m); minimum daily, 292 ft³/s (8.27 m³/s) Oct. 18.
Period of record: Maximum discharge, 111,000 ft³/s (3,140 m³/s) May 9, 1942, gage height, 35.8 ft (10.9 m) from floodmarks, present site and datum; minimum, 102 ft³/s (2.89 m³/s) Aug. 24, 25, 1956.
Maximum stage since at least 1908, that of May 9, 1942.

REMARKS.--Records fair. Regulated since Sept. 28, 1968, by Livingston Reservoir (station 08066190), capacity, 1,788,000 acre-ft (2,200 hm³) 35 miles (56 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	343	1,540	564	16,200	2,780	25,800	29,800	7,750	11,800	2,610	1,100
2	342	2,020	1,550	620	15,300	2,590	22,500	30,200	5,940	11,200	4,190	1,100
3	339	3,210	1,550	836	11,700	5,070	21,300	31,300	5,410	11,000	3,530	1,090
4	332	3,290	1,630	1,660	10,900	6,740	15,600	31,300	5,630	10,800	4,780	1,160
5	333	3,280	1,630	2,930	10,800	9,100	6,970	32,300	8,230	10,800	4,760	2,050
6	327	3,310	1,620	7,140	9,970	9,700	3,960	33,700	12,300	11,300	5,540	8,100
7	320	3,720	1,610	8,770	5,530	13,600	4,050	37,500	17,600	12,000	6,840	9,250
8	315	6,730	1,250	14,100	4,750	15,600	4,070	44,700	18,600	12,200	6,930	6,280
9	315	7,420	880	18,700	5,870	17,300	3,970	45,200	18,600	12,000	6,900	5,220
10	324	7,100	978	19,100	8,330	17,500	4,120	42,300	18,800	10,900	6,900	4,520
11	310	4,290	1,350	17,600	13,400	16,500	4,260	39,400	19,200	6,810	6,930	3,110
12	306	2,850	1,520	16,800	14,100	11,400	4,870	36,900	25,800	5,960	6,620	3,020
13	302	1,550	2,500	15,200	13,000	11,400	4,610	35,600	39,600	5,380	5,480	3,030
14	299	2,520	2,460	12,100	21,000	8,130	4,850	30,800	73,000	13,500	4,570	2,940
15	297	3,260	3,680	10,200	20,100	11,600	5,330	23,400	94,200	12,600	4,070	2,850
16	295	3,320	5,290	6,700	17,900	17,600	13,200	17,000	79,500	6,840	4,380	2,810
17	295	3,270	5,230	4,740	16,500	22,900	30,200	12,500	66,100	5,030	2,630	2,770
18	292	3,420	5,290	4,370	9,590	20,700	41,500	11,100	58,400	4,870	1,670	2,720
19	296	3,830	7,170	3,590	6,530	20,100	40,500	10,800	52,200	4,820	1,340	2,700
20	302	3,580	8,470	2,270	6,100	19,900	38,200	10,600	49,100	4,760	1,280	2,680
21	299	3,400	9,050	2,270	5,910	20,200	36,700	10,600	48,400	4,710	1,210	2,660
22	344	3,310	8,720	2,480	5,640	20,200	35,700	11,000	45,100	4,680	1,180	2,200
23	392	3,250	7,250	2,970	4,860	20,200	34,700	13,300	42,000	4,660	1,150	1,930
24	358	3,180	5,370	4,100	5,980	22,500	30,700	13,500	37,900	4,620	1,100	1,900
25	327	2,140	4,160	4,320	5,720	36,600	29,300	11,400	31,600	4,560	875	1,880
26	334	1,830	3,300	5,060	3,830	45,000	31,900	10,600	22,800	2,980	810	1,890
27	343	1,730	1,360	9,860	3,410	46,100	32,700	10,500	15,900	2,940	790	1,910
28	331	1,650	713	15,000	3,290	46,600	31,100	10,400	14,700	4,820	800	2,810
29	348	1,590	561	16,500	------	47,000	30,100	10,700	14,600	2,180	960	7,310
30	368	1,560	547	16,300	------	46,500	29,900	13,800	13,000	1,720	1,140	8,730
31	355	------	576	16,100	------	38,600	------	13,100	------	1,640	1,150	------
TOTAL	10,093	95,953	98,805	262,950	276,210	649,710	622,660	715,300	961,960	224,080	103,115	101,720
MEAN	326	3,198	3,187	8,482	9,865	20,960	20,760	23,070	32,070	7,228	3,326	3,391
MAX	392	7,420	9,050	19,100	21,000	47,000	41,500	45,200	94,200	13,500	6,930	9,250
MIN	292	343	547	564	3,290	2,590	3,960	10,400	5,410	1,640	790	1,090
AC-FT	20,020	190,300	196,000	521,600	547,900	1,289M	1,235M	1,419M	1,908M	444,500	204,500	201,800

CAL YR 1972 TOTAL 1,253,469 MEAN 3,425 MAX 28,100 MIN 292 AC-FT 2,486,000
WTR YR 1973 TOTAL 4,122,556 MEAN 11,290 MAX 94,200 MIN 292 AC-FT 8,177,000

08067000 Trinity River at Liberty, Tex.

LOCATION (revised).--Lat 30°03'27", long 94°49'05", Liberty County, near center of channel at upstream side of upstream bridge on U.S. Highway 90 in Liberty, 345 ft (105 m) downstream from Texas and New Orleans Railroad Co. bridge, and at mile 40.3 (64.8 km).

DRAINAGE AREA.--17,468 mi² (45,242 km²).

PERIOD OF RECORD.--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.

GAGE.--Water-stage recorder. Datum of gage is 2.22 ft (0.68 m) below mean sea level. Prior to Mar. 13, 1973, nonrecording gage at site 105 ft (32 m) downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 68,000 ft³/s (1,930 m³/s) June 19, gage height, 28.92 ft (8.81 m); minimum not determined (affected by tides); minimum gage height observed, 3.60 ft (1.10 m) Oct. 12.
Period of record: Maximum discharge, 114,000 ft³/s (3,230 m³) May 12, 1942, gage height, 29.38 ft (8.96 m); minimum not determined (affected by tides); minimum gage height observed, 2.32 ft (0.71 m) 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 (8.7 m), present datum, from observation by the National Weather Service at nonrecording gage on railroad bridge upstream.

REMARKS.--Discharge is not computed below 2,500 ft³/s (70.8 m³/s) because tides affect the stage-discharge relation. Flow regulated by Livingston Reservoir (station 08066190) 88.9 miles (143.0 km) upstream. Diversions above station for municipal supplies, industrial use, and irrigation.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		-	-	-	14,600	3,790	37,300	29,700	11,900	15,800	-	-
2		-	-	-	14,800	3,670	34,000	29,600	8,800	14,100	2,720	-
3		-	-	-	13,800	3,700	27,700	29,800	6,900	13,100	4,480	-
4		2,700	-	-	12,000	5,630	24,200	30,000	6,160	12,400	4,000	-
5		2,950	-	-	11,200	7,310	17,400	30,500	6,420	12,000	4,860	3,080
6		3,020	-	5,100	11,000	9,400	11,500	31,000	8,550	12,900	5,070	5,140
7		3,790	-	6,680	10,300	10,300	8,800	32,800	11,800	13,300	5,920	9,800
8		4,440	-	9,100	7,580	11,900	7,280	36,000	15,500	16,200	7,040	10,200
9		6,540	-	12,400	6,590	13,700	6,420	42,400	16,800	16,000	7,350	8,400
10		7,130	-	16,200	7,800	15,000	5,940	54,200	17,200	14,700	7,430	7,180
11		6,500	-	17,200	9,900	15,300	5,210	57,500	17,500	13,000	7,430	6,420
12		4,720	-	17,400	12,600	14,200	4,860	53,600	21,900	11,200	7,380	5,350
13		3,820	-	16,200	13,600	12,000	5,100	48,900	26,800	8,650	7,040	4,120
14		3,220	-	14,800	15,100	11,200	5,230	43,500	31,500	10,200	6,060	3,760
15		3,250	2,750	12,500	19,400	9,900	5,690	38,900	37,600	12,800	5,280	3,490
16		3,760	3,940	10,500	19,000	11,600	7,720	31,600	48,000	11,900	4,630	3,370
17		3,910	5,040	8,800	18,400	16,500	17,900	25,200	59,000	8,550	4,180	3,190
18		3,790	5,070	6,180	16,400	18,700	27,600	18,700	64,400	5,980	3,310	3,060
19		4,440	5,070	5,420	12,000	18,200	31,800	16,000	67,400	5,360	-	2,950
20		5,350	6,500	4,440	9,500	18,100	33,400	14,400	66,500	5,040	-	2,880
21		4,860	7,580	3,700	8,030	18,100	34,600	13,400	61,700	4,900	-	2,960
22		4,270	8,080	3,250	7,080	18,100	35,200	12,700	58,400	4,800	-	2,840
23		3,850	8,030	3,550	6,680	18,300	34,700	12,700	53,900	4,720	-	2,590
24		3,700	6,860	3,730	5,940	19,200	33,700	13,700	49,100	4,650	-	2,520
25		3,670	5,280	4,440	6,420	22,500	32,400	13,600	43,400	4,620	-	2,520
26		3,130	4,300	5,040	6,060	27,800	31,600	12,000	36,600	4,300	-	2,500
27		-	3,400	6,100	4,720	31,200	31,400	11,300	30,100	2,910	-	2,540
28		-	-	9,700	4,000	33,200	31,100	11,000	24,600	3,060	-	2,470
29		-	-	13,200	------	36,100	30,600	10,800	20,800	4,310	-	3,030
30		-	-	14,400	------	39,300	30,200	11,100	18,500	2,600	-	6,540
31		------	-	14,500	------	42,000	------	12,800	------	-	-	------
TOTAL	-	-	-	-	304,500	535,900	650,550	829,400	947,730	-	-	-
MEAN	-	-	-	-	10,880	17,290	21,690	26,750	31,590	-	-	-
MAX	-	-	-	-	19,400	42,000	37,300	57,500	67,400	-	-	-
MIN	-	-	-	-	4,000	3,670	4,860	10,800	6,160	-	-	-
AC-FT	-	-	-	-	604,000	1,063M	1,290M	1,645M	1,880M	-	-	-

CAL YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1973 TOTAL - MEAN - MAX - MIN - AC-FT -

08067080 Devers Canal near Liberty, Tex.

LOCATION.--Lat 29°57'58", long 94°43'17", Liberty County, in flume over Farm Road 563, 250 ft (76 m) downstream from pump plant No. 2, and 8 miles (13 km) southeast of Liberty.

PERIOD OF RECORD.--March to December 1971 (gage-height and discharge measurements only), January 1972 to current year (monthly discharge only).

GAGE.--Deflection vane and water-stage recorder. Datum of gage is at mean sea level.

REMARKS.--Records fair. Discharge computed from pump record and verified by deflection vane. Flow diverted from Trinity River at pump plant No. 1 and then through a canal 4.7 miles (7.6 km) to pump plant No. 2 located 250 ft (76 m) upstream from station.

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, JANUARY TO SEPTEMBER 1972

MONTH	FT³/S	MAXIMUM	MINIMUM	MEAN	RUNOFF IN ACRE-FEET
October	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-
CAL YR 1971	-	-	-	-	-
January	-	-	-	-	0
February	-	-	-	-	0
March	-	-	-	-	10,360
April	-	-	-	-	17,180
May	-	-	-	-	16,010
June	-	-	-	-	23,970
July	-	-	-	-	16,030
August	-	-	-	-	11,520
September	-	-	-	-	16,060
WTR YR 1972	-	-	-	-	114,980

NOTE.--Water used for irrigation by Trinity River Authority.

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

MONTH	FT³/S	MAXIMUM	MINIMUM	MEAN	RUNOFF IN ACRE-FEET
October	-	-	-	-	0
November	-	-	-	-	1,900
December	-	-	-	-	0
CAL YR 1972	-	-	-	-	113,030
January	-	-	-	-	0
February	-	-	-	-	0
March	-	-	-	-	3,680
April	-	-	-	-	7,720
May	-	-	-	-	19,800
June	-	-	-	-	21,960
July	-	-	-	-	25,950
August	-	-	-	-	15,880
September	-	-	-	-	8,010
WTR YR 1973	-	-	-	-	104,900

NOTE.--Water used for irrigation by Trinity River Authority.

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 (10.6 km) northeast of Crosby.

DRAINAGE AREA.--64.9 mi² (168 km²).

PERIOD OF RECORD.--March to August 1946, March 1963 to February 1964, May to August 1971 (discharge measurements only), October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 31.31 ft (9.54 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,870 ft³/s (81.3 m³/s) June 13, gage height, 24.91 ft (7.59 m); minimum daily, 0.52 ft³/s (15 dm³/s) Oct. 21.
Period of record: Maximum discharge, 2,870 ft³/s (81.3 m³/s) June 13, 1973, gage height, 24.91 ft (7.59 m); minimum daily, 0.04 ft³/s (1.1 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	16	10	44	121	10	60	19	1.5	8.0	22	34
2	30	11	8.0	166	63	102	40	45	1.4	12	32	22
3	30	78	7.0	157	31	53	25	124	1.7	24	39	17
4	30	221	6.0	133	19	80	20	36	9.5	14	29	44
5	28	94	10	72	12	93	17	15	33	54	22	576
6	18	44	9.0	237	9.1	348	50	17	148	670	12	1,350
7	10	795	8.0	360	7.6	204	150	189	44	449	25	907
8	6.6	617	10	400	110	94	100	143	28	1,360	23	390
9	8.0	235	12	166	700	57	50	34	42	502	14	179
10	6.1	94	15	136	313	52	35	18	32	177	16	82
11	6.9	44	12	235	121	59	25	27	478	94	14	65
12	4.9	29	40	220	60	28	22	24	2,310	49	14	127
13	3.6	450	30	187	65	21	20	34	2,640	25	26	74
14	2.1	437	60	122	369	17	30	19	2,710	11	39	38
15	1.5	176	150	73	152	17	1,000	14	2,300	7.3	43	17
16	.86	75	100	48	63	47	1,850	23	1,960	7.0	40	6.9
17	.67	40	50	36	52	44	1,790	25	1,400	7.9	73	3.5
18	.59	150	35	45	114	21	1,840	26	557	11	79	1.5
19	.57	300	40	74	76	12	1,110	29	139	14	100	.99
20	.56	150	40	44	48	11	490	16	45	15	52	1.3
21	.52	70	37	47	33	7.0	225	18	42	16	36	9.0
22	93	40	22	33	34	8.4	77	24	35	13	18	5.6
23	200	25	13	21	125	459	46	18	16	13	9.5	1.1
24	104	40	9.0	12	90	1,050	36	17	16	18	5.8	179
25	45	80	6.6	89	48	700	18	16	15	17	5.0	1,260
26	29	50	5.1	246	31	300	139	10	11	20	3.2	798
27	36	35	3.5	116	22	150	102	5.1	3.4	26	77	367
28	22	20	2.8	74	15	60	17	12	3.1	27	36	240
29	15	15	2.8	38	------	200	17	9.2	4.2	23	8.7	103
30	20	12	4.2	23	------	150	15	6.3	8.1	23	10	47
31	19	------	5.0	22	------	100	------	6.2	------	19	10	------
TOTAL	806.47	4,443	763.0	3,676	2,903.7	4,554.4	9,416	1,018.8	15,033.9	3,726.2	933.2	6,945.89
MEAN	26.0	148	24.6	119	104	147	314	32.9	501	120	30.1	232
MAX	200	795	150	400	700	1,050	1,850	189	2,710	1,360	100	1,350
MIN	.52	11	2.8	12	7.6	7.0	15	5.1	1.4	7.0	3.2	.99
AC-FT	1,600	8,810	1,510	7,290	5,760	9,030	18,680	2,020	29,820	7,390	1,850	13,780
(††)	3.0	6.7	1.6	4.5	3.0	4.6	8.1	2.3	15.0	7.1	4.7	6.8

CAL YR 1972 TOTAL 18,551.59 MEAN 50.7 MAX 1,090 MIN .04 AC-FT 36,800 †† 51.88
WTR YR 1973 TOTAL 54,220.56 MEAN 149 MAX 2,710 MIN .52 AC-FT 107,500 †† 67.4

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	1400	18.11	1,010	7- 8	0500	19.56	1,600
3-24	0800	17.16	1,130	9- 6	0800	19.35	1,450
4-17	2200	21.59	2,050	9-25	0500	18.77	1,330
6-13	2000	24.91	2,870				

†† Rainfall, in inches, at gaging station.
NOTE.--No gage-height record Nov. 16 to Dec. 19.

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 (86 m) upstream from Missouri Pacific Railroad Co. bridge, 3.5 miles (5.6 km) downstream from Lake Creek, and 4.2 miles (6.8 km) south of Conroe.

DRAINAGE AREA.--809 mi² (2,095 km²).

PERIOD OF RECORD.--May 1924 to September 1927, July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 95.03 ft (28.97 m) above mean sea level, datum of 1929, adjustment of 1943. May 7, 1924, to Sept. 30, 1927, nonrecording gage at railroad bridge 285 ft (87 m) downstream at datum 30.10 ft (9.17 m) higher. July 13, 1939, to Sept. 30, 1963, water-stage recorder at datum 5.0 ft (1.5 m) higher.

AVERAGE DISCHARGE.--36 years (1924-27, 1939-72) prior to regulation by Lake Conroe, 477 ft³/s (13.5 m³/s), 8.01 in/yr (203.4 mm/yr), 345,600 acre-ft/yr (426 hm³/yr); 1 year (1972-73) regulated, 518 ft³/s (14.7 m³/s), 375,300 acre-ft/yr (463 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,300 ft³/s (547 m³/s) June 13, gage height, 22.61 ft (6.89 m); minimum daily, 12 ft³/s (0.34 m³/s) Oct. 15-21.

Period of record: Maximum discharge, 110,000 ft³/s (3,120 m³/s) Nov. 25, 1940, gage height, 30.85 ft (9.40 m), present datum, from rating curve extended above 43,000 ft³/s (1,220 m³/s) 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 (9.2 m), present site and datum, from information by Missouri Pacific Railroad Co., discharge, 101,000 ft³/s (2,860 m³/s), from rating curve explained above.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report. Regulated since Jan. 9, 1973, by Lake Conroe (station 08067600) capacity, 532,000 acre-ft (656 hm³), 14.5 miles (23.3 km) upstream. No diversions above station.

REVISIONS (WATER YEARS).--WSP 1058: 1926. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	74	213	203	164	164	196	126	26	62	36	56
2	34	49	190	198	137	299	166	117	25	62	69	51
3	34	41	172	261	114	308	138	193	27	57	116	45
4	51	32	153	339	101	264	115	526	31	51	57	51
5	39	28	144	452	90	425	97	607	27	48	42	468
6	29	44	140	647	82	396	109	408	158	66	37	1,830
7	23	394	129	849	76	420	898	835	653	215	34	1,690
8	20	187	120	1,020	88	300	779	1,300	606	672	35	2,220
9	18	185	111	913	455	338	661	1,380	214	420	59	1,630
10	17	149	114	1,240	688	514	646	1,180	118	313	146	516
11	16	165	114	1,410	811	362	526	908	87	157	59	254
12	14	118	114	674	819	213	371	381	214	103	47	257
13	14	206	110	378	990	156	245	207	8,220	80	209	243
14	13	178	109	328	1,750	141	153	222	17,500	66	471	344
15	12	131	179	326	1,300	130	315	301	10,600	58	291	185
16	12	163	214	295	1,150	1,100	2,290	294	5,350	53	123	158
17	12	255	312	298	587	1,660	4,300	176	2,500	54	81	132
18	12	466	669	277	395	839	9,120	106	1,170	45	67	124
19	12	593	620	242	278	459	5,410	81	448	40	63	95
20	12	659	414	228	212	249	3,250	68	239	45	46	76
21	12	636	394	253	181	158	2,030	59	173	44	39	64
22	28	411	373	505	176	124	1,030	53	144	38	35	57
23	38	311	335	427	337	144	529	49	123	35	31	52
24	22	238	306	258	433	1,010	342	44	127	33	29	50
25	19	218	285	224	523	3,510	257	42	123	31	27	85
26	18	199	266	601	554	10,000	228	41	104	34	27	127
27	21	237	247	722	395	3,880	198	38	91	82	34	97
28	20	337	225	934	227	1,720	183	34	82	63	41	1,050
29	42	343	317	1,010	------	923	201	32	74	40	146	595
30	81	262	335	513	------	403	157	30	66	33	147	618
31	47	------	265	243	------	258	------	27	------	30	70	------
TOTAL	764	7,309	7,689	16,268	13,113	30,867	34,940	9,865	49,320	3,130	2,714	13,220
MEAN	24.6	244	248	525	468	996	1,165	318	1,644	101	87.5	441
MAX	81	659	669	1,410	1,750	10,000	9,120	1,380	17,500	672	471	2,220
MIN	12	28	109	198	76	124	97	27	25	30	27	45
AC-FT	1,520	14,500	15,250	32,270	26,010	61,220	69,300	19,570	97,830	6,210	5,380	26,220

CAL YR 1972 TOTAL 68,096 MEAN 186 MAX 3,450 MIN 12 AC-FT 135,100
WTR YR 1973 TOTAL 189,199 MEAN 518 MAX 17,500 MIN 12 AC-FT 375,300

08068450 Panther Branch near Spring, Tex.

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

DRAINAGE AREA.--34.5 mi² (89.4 km²).

PERIOD OF RECORD.--April 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.69 ft (30.08 m) above mean sea level.

EXTREMES.--Maximum discharge during period April to September 1972, 2,210 ft³/s (62.6 m³/s) May 13, gage height, 13.68 ft (4.17 m); no flow for many days.
Water year 1973: Maximum discharge, 5,550 ft³/s (157 m³/s) June 13, gage height, 15.94 ft (4.86 m); no flow for many days.
Period of record: Maximum discharge, 5,550 ft³/s (157 m³/s) June 13, 1973, gage height, 15.94 ft (4.86 m); no flow for many days.

REMARKS.--Records good except those for April 1972, which are fair. No known diversion or regulation above station. Rain gage located 500 ft (152 m) east of gage.

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.05	5.2	.09	0	0	0
2							.05	22	.08	0	0	0
3							.05	61	.07	0	0	0
4							.05	24	.06	0	0	0
5							.04	6.0	.05	0	0	.06
6							.04	.64	.05	0	0	.01
7							.04	159	.04	0	0	0
8							.04	723	.04	0	0	0
9							.04	146	.03	0	0	0
10							.03	56	0	.01	0	0
11							.03	430	0	.01	0	0
12							.03	447	0	0	0	0
13							.03	1,060	.01	0	0	0
14							.03	166	.31	0	0	0
15							.02	51	.48	0	7.4	0
16							.02	16	13	0	8.8	0
17							.02	7.8	31	0	3.2	0
18							.02	6.4	5.8	0	1.3	0
19							.02	5.9	2.4	.10	.52	0
20							.02	3.0	2.1	.21	.18	0
21							.25	1.7	1.4	.14	.04	0
22							.50	.94	.67	.08	0	0
23							1.0	1.2	.38	.05	.04	0
24							.80	1.2	.21	.02	.50	0
25							.50	.58	.12	0	.34	0
26							.40	.40	.06	0	.09	1.4
27							25	.30	.02	0	.03	2.2
28							189	.20	0	0	0	.36
29							122	.15	0	0	0	.10
30					------		26	.12	0	0	0	.46
31		------			------		------	.10	------	0	0	------
TOTAL							366.12	3,402.83	58.47	.62	22.44	4.59
MEAN							12.2	110	1.95	.020	.72	.15
MAX							189	1,060	31	.21	8.8	2.2
MIN							.02	.10	0	0	0	0
CFSM							.35	3.19	.06	.0006	.02	.004
IN.							.39	3.67	.06	0	.02	.004
AC-FT							726	6,750	116	1.2	45	9.1

WTR YR 1973 TOTAL - MEAN - MAX - MIN - CFSM - IN - AC-FT -

PEAK DISCHARGE (BASE, 300 FT³/S).--May 8 (0600) 1,180 ft³/s (12.26 ft); May 13 (0300) 2,210 ft³/s (13.68 ft).

08068450 Panther Branch near Spring, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	2.7	.11	1.2	5.6	4.8	23	5.1	0	.50	20	3.1
2	.07	.43	.13	4.0	5.2	80	12	8.6	0	.47	21	26
3	.02	.07	.06	10	4.1	71	7.2	10	0	.47	20	24
4	.01	.01	.01	14	3.5	26	4.3	7.8	0	.44	9.7	21
5	0	0	.05	23	2.7	16	2.6	5.3	5.0	.41	3.0	139
6	0	.61	.02	38	2.1	56	8.1	4.3	16	3.3	.99	1,700
7	0	42	0	16	1.9	164	157	160	14	20	1.7	347
8	0	19	0	23	3.1	57	185	178	6.2	124	2.8	66
9	0	3.7	0	15	40	23	56	30	3.5	51	3.3	14
10	0	.80	.34	10	56	17	25	10	2.1	9.6	6.9	6.0
11	0	.31	.25	12	29	14	12	4.5	6.9	4.0	8.6	11
12	0	.06	1.8	15	15	10	8.1	3.2	57	2.2	12	29
13	0	5.5	2.1	15	86	6.8	5.7	3.6	2,310	1.1	4.6	19
14	0	20	1.9	13	487	5.2	4.5	2.6	1,360	.72	2.6	9.0
15	0	11	6.0	10	149	5.0	50	1.5	190	.50	1.8	9.0
16	0	5.9	4.0	7.7	39	40	666	.85	50	.41	1.9	2.2
17	0	2.1	2.9	5.8	19	29	1,080	.60	16	.29	1.4	1.3
18	0	14	2.2	4.7	23	24	1,190	.43	9.7	.23	.79	1.0
19	0	52	1.9	3.8	23	11	194	.35	5.6	.18	.62	1.3
20	0	18	2.8	3.4	15	7.0	66	.23	3.6	.14	.34	1.1
21	0	7.5	9.0	12	11	4.4	41	.19	2.9	.11	.09	.99
22	3.9	5.5	6.6	18	11	3.2	34	.14	2.5	.09	.15	.74
23	7.0	4.2	2.6	9.0	40	28	20	.11	1.9	.07	.11	.58
24	1.2	3.2	2.1	5.1	48	258	15	.08	1.5	.05	.08	.50
25	.02	2.4	1.6	30	24	517	15	.05	1.5	.32	.03	92
26	0	1.9	1.1	98	14	113	34	.04	1.1	.56	.05	80
27	0	1.6	.68	51	9.5	31	30	.03	.83	2.2	.08	18
28	0	1.1	.54	20	6.8	60	15	.02	.79	1.7	.09	40
29	13	.35	.58	10	------	559	8.9	.01	.66	9.0	3.9	76
30	31	.10	.70	7.2	------	155	6.0	.01	.55	2.5	2.3	21
31	9.4	------	.78	5.5	------	52	------	.01	------	.54	.48	------
TOTAL	65.90	226.04	52.85	510.4	1,173.5	2,447.4	3,975.4	437.65	4,069.83	237.10	131.40	2,759.81
MEAN	2.13	7.53	1.70	16.5	41.9	78.9	133	14.1	136	7.65	4.24	92.0
MAX	31	52	9.0	98	487	559	1,190	178	2,310	124	21	1,700
MIN	0	0	0	1.2	1.9	3.2	2.6	.01	0	.05	.03	.50
CFSM	.06	.22	.05	.48	1.21	2.29	3.86	.41	3.94	.22	.12	2.67
IN.	.07	.24	.06	.55	1.27	2.64	4.29	.47	4.39	.26	.14	2.98
AC-FT	131	448	105	1,010	2,330	4,850	7,890	868	8,070	470	261	5,470
(††)	1.85	6.11	2.52	6.09	4.40	6.06	7.16	2.72	9.43	6.99	6.05	11.02

CAL YR 1972 TOTAL 344.79 MEAN .94 MAX 52 MIN 0 CFSM .03 IN .37 AC-FT 684 †† -
WTR YR 1973 TOTAL 16,087.28 MEAN 44.1 MAX 2,310 MIN 0 CFSM 1.28 IN 17.35 AC-FT 31,910 †† 70.40

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-14	0800	10.91	663	6-13	2100	15.94	5,550
3-25	0600	11.39	816	9- 6	1300	14.19	2,690
3-29	0800	11.85	990	9-25	1900	9.49	318
4-17	2400	14.31	2,810				

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

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 (1,372 m) upstream from Missouri Pacific Railroad Co. bridge, 2.4 miles (3.9 km) northwest of Spring, and 4.0 miles (6.4 km) downstream from Willow Creek.

DRAINAGE AREA.--409 mi² (1,059 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 73.10 ft (22.28 m) 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 (1.52 m) higher.

AVERAGE DISCHARGE.--34 years, 199 ft³/s (5.64 m³/s), 6.61 in/yr (167.9 mm/yr), 144,200 acre-ft/yr (178 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,300 ft³/s (547 m³/s) June 15, gage height, 29.65 ft (9.04 m); minimum daily, 7.4 ft³/s (210 dm³/s) Oct. 15.
Period of record: Maximum discharge, 42,700 ft³/s (1,210 m³/s) Nov. 25, 1940, gage height, 33.60 ft (10.24 m), present datum, from graph based on gage readings; minimum, 1.1 ft³/s (31 dm³/s) Oct. 23, 24, 1956.
Maximum stage since at least 1879, 34.3 ft (10.5 m), present datum, May 30, 1929, discharge, 48,300 ft³/s (1,370 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	180	52	34	100	112	269	115	146	47	181	30
2	57	76	47	46	117	128	182	106	83	47	514	45
3	43	50	44	127	104	182	135	120	67	45	322	52
4	28	41	41	196	88	117	112	500	59	43	141	88
5	17	36	37	500	77	200	97	300	63	50	62	449
6	13	105	35	1,200	70	200	97	120	611	54	45	3,900
7	11	514	33	1,000	67	180	468	200	809	181	45	3,920
8	9.8	416	31	650	71	130	1,230	450	1,230	448	158	2,190
9	9.0	253	30	450	250	110	1,700	900	976	291	141	1,230
10	8.5	106	35	310	1,000	90	1,000	550	249	167	62	398
11	8.0	66	35	497	900	95	493	336	186	76	61	195
12	7.8	54	32	370	750	90	243	186	595	55	85	340
13	7.6	97	30	300	1,200	85	158	176	2,880	47	128	230
14	7.5	199	35	240	2,000	80	126	330	10,800	43	84	128
15	7.4	242	110	200	2,600	75	285	263	16,100	39	196	108
16	7.5	128	80	160	1,800	143	2,100	130	6,050	37	98	92
17	7.6	69	60	130	1,400	604	7,220	99	2,310	35	94	74
18	7.5	1,100	40	100	1,000	2,010	10,400	87	983	35	98	61
19	7.8	1,700	30	90	800	1,460	6,930	77	345	34	100	52
20	13	1,000	45	100	600	352	5,420	72	213	36	80	47
21	12	600	110	300	450	172	2,750	68	143	34	50	43
22	57	350	102	250	350	128	928	64	117	32	35	40
23	111	220	85	190	500	151	388	62	99	30	28	39
24	72	180	60	130	650	684	282	60	85	29	26	38
25	45	250	45	250	500	2,000	210	58	73	32	25	182
26	37	150	33	564	350	4,400	391	56	66	49	25	380
27	33	100	35	680	250	2,900	532	55	61	71	24	98
28	30	75	34	686	170	1,170	434	53	57	74	22	95
29	49	62	32	377	------	1,660	227	51	52	55	29	233
30	98	55	34	172	------	1,190	140	49	49	45	39	364
31	201	------	35	116	------	482	------	48	------	39	27	------
TOTAL	1,076.0	8,474	1,487	10,415	18,214	21,380	44,947	5,741	45,557	2,300	3,025	15,141
MEAN	34.7	282	48.0	336	651	690	1,498	185	1,519	74.2	97.6	505
MAX	201	1,700	110	1,200	2,600	4,400	10,400	900	16,100	448	514	3,920
MIN	7.4	36	30	34	67	75	97	48	49	29	22	30
CFSM	.08	.69	.12	.82	1.59	1.69	3.66	.45	3.71	.18	.24	1.23
IN.	.10	.77	.14	.95	1.66	1.94	4.09	.52	4.14	.21	.28	1.38
AC-FT	2,130	16,810	2,950	20,660	36,130	42,410	89,150	11,390	90,360	4,560	6,000	30,030

CAL YR 1972 TOTAL 58,773.9 MEAN 161 MAX 6,430 MIN 7.2 CFSM .39 IN 5.35 AC-FT 116,600
WTR YR 1973 TOTAL 177,757.0 MEAN 487 MAX 16,100 MIN 7.4 CFSM 1.19 IN 16.17 AC-FT 352,600

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-15	unknown	unknown	*3,000	4-18	0400	27.30	12,200
3-18	1800	17.15	2,380	6-15	0500	29.65	19,300
	about			9- 6	2100	23.21	5,810
3-26	1400	22.10	4,830				

* Estimate.

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 (1.4 km) upstream from Senger Gully, 1.8 miles (2.9 km) northwest of Westfield, 2.0 miles (3.2 km) upstream from Missouri Pacific Railroad Co. bridge, and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--285 mi² (738 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 63.89 ft (19.47 m) above mean sea level, datum of 1929, adjustment of 1943; unadjusted for land-surface subsidence. Prior to Mar. 17, 1951, water-stage recorder at upstream side of bridge at datum 12.0 ft (3.7 m) higher.

AVERAGE DISCHARGE.--29 years, 143 ft³/s (4.05 m³/s), 103,600 acre-ft/yr (128 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,710 ft³/s (190 m³/s) Apr. 18, gage height, 27.66 ft (8.43 m); minimum daily, 4.5 ft³/s (127 dm³/s) Oct. 20.
Period of record: Maximum discharge, 22,100 ft³/s (626 m³/s) Oct. 8, 1949, gage height, 33.44 ft (10.19 m) present datum, from rating curve extended above 11,000 ft³/s (312 m³/s); no flow at times.
Maximum stage since at least 1875, 34 ft (10 m), present datum, in May 1929, discharge, 26,000 ft³/s (736 m³/s), from information by local resident. Flood in November 1940 reached a stage of about 32 ft (10 m), present datum, discharge, 15,000 ft³/s (425 m³/s), from information by State Highway Department.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. No large diversion above station. Low flow is maintained by sewage effluent. Between July 1950 and March 1951 the channel below the gage was straightened and the streambed lowered about 3 ft (1 m) at the gage and as much as 6 ft (2 m) at some other places.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	48	32	58	66	71	333	30	104	256	80	110
2	120	34	30	114	66	58	171	39	38	62	550	51
3	100	31	26	238	53	75	102	68	28	32	360	29
4	85	29	24	262	39	95	66	319	27	25	180	163
5	70	21	22	268	32	100	44	212	183	60	100	773
6	80	18	20	627	28	100	82	73	1,700	289	75	3,230
7	44	683	18	718	25	90	332	180	850	841	50	1,500
8	33	716	22	598	89	70	775	341	320	1,540	75	951
9	27	597	30	467	666	60	903	586	148	307	160	574
10	22	297	40	299	674	50	411	304	114	140	150	351
11	19	149	60	271	666	40	168	102	260	74	110	248
12	20	83	75	315	437	35	87	82	1,400	47	80	243
13	17	373	100	307	712	30	55	103	3,460	33	110	252
14	14	386	150	244	1,390	27	44	77	5,550	24	180	188
15	12	230	200	194	1,730	24	483	42	4,960	19	150	127
16	9.6	155	100	138	1,420	46	2,260	27	3,760	15	90	102
17	7.4	100	75	105	837	315	4,320	20	2,990	14	60	72
18	6.0	1,060	60	82	586	1,050	6,560	16	2,370	13	45	55
19	5.6	1,080	46	74	616	764	5,620	14	1,580	12	35	41
20	4.5	868	40	74	467	260	3,940	12	998	11	30	32
21	4.8	558	60	103	268	100	2,810	11	502	30	24	23
22	258	275	99	174	224	61	1,890	9.2	332	20	20	18
23	395	153	116	199	333	141	913	12	248	17	17	14
24	270	130	57	99	427	559	509	9.9	174	15	17	12
25	133	162	38	240	393	1,060	312	8.6	124	15	20	167
26	76	122	28	525	207	1,370	351	8.3	97	25	17	292
27	56	114	23	678	126	1,060	212	7.5	102	50	15	119
28	37	78	18	481	95	739	129	8.0	60	60	17	141
29	74	55	16	204	------	1,420	73	7.2	46	40	61	79
30	65	40	16	118	------	1,230	46	6.6	58	32	144	98
31	56	------	15	85	------	679	------	41	------	28	83	------
TOTAL	2,220.9	8,645	1,656	8,359	12,672	11,779	34,001	2,776.3	32,583	4,146	3,105	10,055
MEAN	71.6	288	53.4	270	453	380	1,133	89.6	1,086	134	100	335
MAX	395	1,080	200	718	1,730	1,420	6,560	586	5,550	1,540	550	3,230
MIN	4.5	18	15	58	25	24	44	6.6	27	11	15	12
AC-FT	4,410	17,150	3,280	16,580	25,130	23,360	67,440	5,510	64,630	8,220	6,160	19,940

CAL YR 1972 TOTAL 64,302.3 MEAN 176 MAX 3,980 MIN 1.8 AC-FT 127,500
WTR YR 1973 TOTAL 131,998.2 MEAN 362 MAX 6,560 MIN 4.5 AC-FT 261,800

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	1400	15.83	1,610	6- 6	0800	17.43	2,010
2-13	2100	16.69	1,820	6-13	2300	26.42	5,870
3-29	1800	15.46	1,520	7- 7	2400	19.91	2,720
4-18	1300	27.66	6,710	9- 6	0600	23.53	4,220

NOTE.--No gage-height record for the period July 18 to Aug. 27.

08069500 West Fork San Jacinto River near Humble, Tex.

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 30.53 ft (9.31 m) above mean sea level. Prior to July 17, 1933, nonrecording gage at site 1,800 ft (549 m) downstream at same datum. July 17, 1933, to Mar. 5, 1939, nonrecording gage at present site and datum.

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

EXTREMES.--Current year: Maximum gage height, 23.09 ft (7.04 m) June 15; minimum, 10.27 ft (3.13 m) Oct. 22.
1928-54: Maximum discharge, 187,000 ft³/s (5,300 m³/s) May 31, 1929, Nov. 25, 26, 1940; maximum gage height, 32.7 ft (10.0 m) May 31, 1929, Nov. 26, 1940, present site and datum, both affected by backwater from East Fork San Jacinto River; minimum discharge, 11 ft³/s (0.31 m³/s) Aug. 31, Sept. 1, 2, 1951.
1954-73: Maximum gage height since first appreciable storage at Lake Houston, 23.09 ft (7.04 m) June 15, 1973; minimum since first appreciable storage at Lake Houston, 5.5 ft (1.7 m) Dec. 12, 1956.
Maximum stage since at least 1865, occurred in September 1900, May 31, 1929, and Nov. 25, 26, 1940, and all reached about the same stage, from information by local resident.

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

REVISIONS.--WSP 1732: Drainage area.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	10.80	-	13.08	12.96		-	13.15	12.85	13.00	12.84	13.09
2	-	10.77	-	13.13	12.94		-	13.09	12.81	12.99	13.28	13.06
3	-	10.81	-	-	12.95		-	13.07	12.80	12.95	13.16	13.00
4	-	10.82	-	-	12.96		-	13.35	12.71	12.94	13.08	13.26
5	10.98	10.85	-	-	12.95		-	13.41	13.08	13.06	13.02	15.07
6	10.95	10.82	-	-	12.94		-	13.35	13.48	13.19	12.97	18.29
7	10.90	12.03	-	-	12.94		-	14.10	13.45	15.28	12.97	16.23
8	10.86	-	-	-	12.93		-	14.43	13.78	14.98	12.91	15.25
9	10.83	-	-	-	13.26		-	14.46	13.44	14.12	13.17	14.41
10	10.78	-	-	-	13.34		-	14.26	13.22	13.65	13.18	13.57
11	10.74	-	-	-	13.37		-	13.81	15.98	13.38	13.12	13.42
12	10.69	-	-	-	13.37		13.32	13.44	15.76	13.25	13.12	13.46
13	10.64	-	-	-	14.31		13.22	13.21	20.72	13.14	13.10	13.32
14	10.60	-	-	-	14.30		13.23	13.12	22.83	13.10	13.15	13.38
15	10.54	-	-	-	14.17		13.91	13.10	22.15	13.09	13.15	13.24
16	10.48	-	-	-	14.04		17.05	13.08	19.00	13.05	13.12	13.14
17	10.41	-	-	-	13.68		19.70	13.04	16.74	12.99	13.06	13.08
18	10.40	-	13.18	-	13.49		20.69	13.04	15.12	12.96	13.06	13.02
19	10.35	-	13.17	-	13.44		19.10	13.01	14.02	12.93	13.02	12.99
20	10.33	-	13.14	-	13.39		17.85	13.00	13.72	12.90	12.98	12.98
21	10.36	-	13.02	-	13.34		16.09	12.96	13.38	12.86	12.93	12.95
22	10.42	-	13.06	13.14	13.33		14.65	12.97	13.46	12.85	12.90	12.94
23	10.54	-	13.10	13.13	13.43		13.83	12.92	13.33	12.80	12.87	12.93
24	10.45	-	13.07	13.11	13.48		13.47	12.95	13.37	12.77	12.85	13.28
25	10.45	-	13.06	13.12	13.48		13.31	12.95	13.18	12.80	12.82	13.24
26	10.46	-	13.03	13.26	13.42		13.36	12.90	13.11	12.73	12.77	13.22
27	10.52	-	13.03	13.32	13.34		13.31	12.88	13.07	12.82	12.87	13.17
28	10.56	-	13.06	13.20	-		13.29	12.80	13.03	12.84	12.89	13.28
29	10.63	-	13.08	13.21	------		13.25	12.78	13.00	12.83	13.03	13.25
30	10.69	-	13.07	13.14	------		13.21	12.77	12.98	12.77	13.13	13.27
31	10.77	-------	13.05	13.12	------		------	12.76	-----	12.76	13.12	-------
MAX	-	-	-	-	-	-	-	14.46	22.83	15.28	13.28	18.29
MIN								12.76	12.71	12.73	12.77	12.93

NOTE.--No gage-height record Oct. 1-4, Nov. 8 to Dec. 17, Jan. 3-21, Feb. 28 to Apr. 11.

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 (573 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) west of Cleveland, and 4.3 miles (6.9 km) downstream from Winter Creek.

DRAINAGE AREA.--325 mi² (842 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 107.98 ft (32.91 m) above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 13, 1955, at site 1,800 ft (549 m) upstream at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--34 years, 210 ft³/s (5.95 m³/s), 8.77 in/yr (222.8 mm/yr), 152,100 acre-ft/yr (188 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 43,600 ft³/s (1,230 m³/s) June 14, gage height, 23.92 ft (7.29 m); minimum daily, 8.2 ft³/s (232 dm³/s) Oct. 19.

Period of record: Maximum discharge, 59,000 ft³/s (1,670 m³/s) Nov. 24, 1940, gage height, 24.1 ft (7.3 m), present site and datum, from rating curve extended above 27,000 ft³/s (765 m³/s); minimum daily, 3.0 ft³/s (85 dm³/s) Aug. 23, 24, Sept. 27, 28, 1956.

Maximum stage since at least 1900, that of Nov. 24, 1940. Flood of May 5, 1935, reached a stage of 23.6 ft (7.2 m), present site and datum, discharge, 53,500 ft³/s (1,520 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	20	39	64	138	126	166	124	40	85	106	59
2	21	16	34	143	117	541	131	214	34	80	191	76
3	17	17	31	199	98	676	110	688	31	77	191	52
4	14	16	37	353	86	935	94	733	30	75	72	77
5	15	20	112	442	77	909	82	963	32	80	58	878
6	16	137	120	569	71	875	91	433	41	354	49	1,410
7	14	582	103	512	67	1,030	445	1,010	68	1,370	72	1,290
8	13	620	62	856	109	943	662	1,770	84	1,600	145	863
9	12	144	49	1,010	406	976	482	2,940	91	551	142	412
10	11	78	84	794	738	674	438	2,770	103	231	128	282
11	10	48	369	416	748	270	373	885	165	155	142	230
12	11	35	272	336	402	209	195	227	538	114	98	189
13	10	104	336	331	640	172	124	396	3,860	200	72	205
14	9.2	202	254	324	2,530	142	112	333	31,900	191	182	168
15	8.7	104	416	282	1,640	131	312	184	9,920	205	215	132
16	8.4	79	589	236	870	336	1,190	131	4,630	100	100	113
17	8.3	55	318	181	360	1,200	3,210	105	2,810	79	65	86
18	8.3	92	181	146	215	2,440	7,740	88	1,100	72	67	74
19	8.2	533	111	142	171	2,040	5,090	79	299	65	101	67
20	8.3	437	96	134	145	582	3,680	75	486	61	76	63
21	8.4	224	168	307	126	208	2,300	67	1,830	59	55	60
22	17	107	239	262	132	155	754	59	777	56	46	55
23	42	68	118	218	332	191	388	54	615	53	42	50
24	36	54	88	191	496	451	280	50	371	52	39	53
25	20	86	72	158	464	950	227	46	209	50	39	59
26	18	161	63	464	290	1,430	342	70	171	50	40	63
27	18	133	54	700	184	2,110	575	76	139	50	40	57
28	21	106	49	789	141	1,380	572	117	119	50	123	190
29	31	68	47	501	------	546	209	124	106	49	173	321
30	34	49	51	265	------	355	146	62	95	49	101	383
31	34	------	71	169	------	216	------	46	------	49	62	------
TOTAL	530.8	4,395	4,633	11,494	11,793	23,199	30,520	14,919	60,694	6,312	3,032	8,017
MEAN	17.1	147	149	371	421	748	1,017	481	2,023	204	97.8	267
MAX	42	620	589	1,010	2,530	2,440	7,740	2,940	31,900	1,600	215	1,410
MIN	8.2	16	31	64	67	126	82	46	30	49	39	50
CFSM	.05	.45	.46	1.14	1.30	2.30	3.13	1.48	6.22	.63	.30	.82
IN.	.06	.50	.53	1.32	1.35	2.66	3.49	1.71	6.95	.72	.35	.92
AC-FT	1,050	8,720	9,190	22,800	23,390	46,020	60,540	29,590	120,400	12,520	6,010	15,900

CAL YR 1972 TOTAL 34,040.3 MEAN 93.0 MAX 1,480 MIN 8.0 CFSM .29 IN 3.90 AC-FT 67,520
WTR YR 1973 TOTAL 179,538.8 MEAN 492 MAX 31,900 MIN 8.2 CFSM 1.51 IN 20.55 AC-FT 356,100

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-14	1100	14.75	2,780	5- 9	2200	15.15	3,350
3-18	1500	14.64	2,680	6-14	0500	23.92	43,600
4-18	0300	18.51	9,030	7- 7	2000	14.77	2,990

08070500 Caney Creek near Splendora, Tex.

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

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--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 (36.10 m) above mean sea level, datum of 1929, adjustment of 1943. Prior to June 17, 1965, at site 170 ft (52 m) upstream at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--30 years, 67.0 ft³/s (1.90 m³/s), 8.66 in/yr (220.0 mm/yr), 48,500 acre-ft/yr (59.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 35,000 ft³/s (991 m³/s) June 14, gage height, 26.30 ft (8.02 m); minimum, 8.0 ft³/s (227 dm³/s) Oct. 17-21.
Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) June 14, 1973, gage height, 26.30 ft (8.02 m); minimum, 4.1 ft³/s (116 dm³/s) Oct. 26, 1956, caused by construction upstream.
Maximum stage since at least 1885, 27.0 ft (8.2 m) in November 1940, present site and datum, from information by local resident. Flood in May 1935 reached a stage of 24.3 ft (7.4 m), present site and datum, from information by local resident.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	19	39	50	48	65	56	28	52	35	90
2	11	12	18	42	46	388	55	58	27	51	69	70
3	10	12	18	123	40	456	50	450	26	51	78	60
4	9.5	11	18	185	36	127	46	182	27	49	42	50
5	9.3	11	34	88	34	90	42	81	33	46	31	700
6	9.0	106	40	122	33	143	46	64	43	104	28	1,000
7	8.6	616	31	237	32	287	370	398	47	354	28	500
8	8.5	208	25	538	39	152	315	2,120	33	434	31	200
9	8.5	51	23	161	354	91	159	371	65	165	47	120
10	8.5	30	28	89	388	81	157	133	65	86	57	100
11	8.5	24	51	105	113	78	75	99	88	64	39	110
12	8.5	20	55	120	73	65	59	83	311	55	33	400
13	8.5	69	58	119	432	54	51	80	8,490	51	31	300
14	8.4	88	53	126	822	51	47	70	11,100	45	107	350
15	8.2	36	190	95	240	56	163	61	1,840	41	60	200
16	8.2	24	132	67	109	268	1,100	56	353	38	42	120
17	8.2	20	56	55	80	2,030	1,700	52	206	40	36	80
18	8.0	64	38	52	70	319	2,410	49	151	37	41	60
19	8.0	422	33	53	63	122	1,600	46	125	34	54	50
20	8.0	94	32	44	57	92	272	43	111	32	36	45
21	8.3	44	59	58	53	75	213	41	644	31	32	42
22	22	31	54	84	59	64	176	39	742	30	30	40
23	23	26	38	52	251	99	134	37	167	29	28	37
24	16	24	31	40	243	507	112	36	112	29	27	35
25	11	31	26	64	104	1,020	96	34	121	30	26	50
26	11	67	24	477	70	240	106	60	82	32	40	45
27	11	38	22	242	58	107	92	92	71	49	100	40
28	12	27	21	126	51	116	69	47	64	48	80	220
29	17	23	21	94	------	195	62	36	59	34	300	395
30	19	20	24	60	------	107	57	32	55	30	200	86
31	16	------	37	51	------	80	------	29	------	28	120	------
TOTAL	343.7	2,262	1,309	3,808	4,000	7,608	9,899	5,035	25,286	2,199	1,908	5,595
MEAN	11.1	75.4	42.2	123	143	245	330	162	843	70.9	61.5	187
MAX	23	616	190	538	822	2,030	2,410	2,120	11,100	434	300	1,000
MIN	8.0	11	18	39	32	48	42	29	26	28	26	35
CFSM	.11	.72	.40	1.17	1.36	2.33	3.14	1.54	8.03	.68	.59	1.78
IN.	.12	.80	.46	1.35	1.42	2.70	3.51	1.78	8.96	.78	.68	1.98
AC-FT	682	4,490	2,600	7,550	7,930	15,090	19,630	9,990	50,150	4,360	3,780	11,100

CAL YR 1972 TOTAL 12,786.4 MEAN 34.9 MAX 656 MIN 7.7 CFSM .33 IN 4.53 AC-FT 25,360
WTR YR 1973 TOTAL 69,252.7 MEAN 190 MAX 11,100 MIN 8.0 CFSM 1.81 IN 24.54 AC-FT 137,400

PEAK DISCHARGE (BASE, 1,300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-13	2300	11.90	1,510	6-14	2300	26.30	35,000
3-17	1400	15.17	2,740	6-21	2300	11.39	1,320
4-18	2200	16.32	3,270	9- 6	unknown	unknown	*1,500
5- 8	1400	15.27	2,780				

* Estimate.
NOTE.--No gage-height record Aug. 26 to Sept. 27.

08071000 Peach Creek at Splendora, Tex.

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

DRAINAGE AREA.--117 mi² (303 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 81.61 ft (24.87 m) above mean sea level, datum of 1929, adjustment of 1936. Prior to Oct. 1, 1965, at same site and 5.00 ft (1.52 m) higher datum.

AVERAGE DISCHARGE.--30 years, 67.2 ft³/s (1.90 m³/s), 7.80 in/yr (198.1 mm/yr), 48,690 acre-ft/yr (60.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,800 ft³/s (731 m³/s) June 14, gage height, 22.57 ft (6.88 m); minimum, 6.0 ft³/s (170 dm³/s) Oct. 18-22.
Period of record: Maximum discharge, 28,500 ft³/s (807 m³/s) Oct. 8, 1949, gage height, 22.73 ft (6.93 m); minimum, 1.1 ft³/s (31 dm³/s) 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 (6.8 m), discharge, 24,700 ft³/s (700 m³/s), from information by local residents.

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

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	20	27	42	56	58	104	52	21	49	48	72
2	11	15	26	71	53	426	76	65	20	47	124	83
3	9.7	13	26	86	45	557	61	168	19	64	174	55
4	8.4	13	26	97	39	296	51	246	19	78	135	81
5	7.6	12	26	88	37	182	44	101	19	56	65	689
6	7.0	50	31	282	36	265	51	68	30	345	44	1,320
7	6.8	1,270	33	304	35	478	264	916	35	1,180	40	692
8	6.8	469	32	228	48	260	320	979	31	4,370	42	267
9	6.8	145	29	142	238	137	207	430	52	842	113	138
10	6.7	64	36	98	283	118	119	153	80	276	132	98
11	6.5	45	73	105	149	118	83	87	147	136	86	100
12	6.5	38	79	118	91	89	64	73	602	95	88	177
13	6.5	186	103	118	186	69	55	76	3,320	90	76	188
14	6.4	142	93	115	3,190	66	52	73	14,400	77	58	302
15	6.3	72	238	100	1,120	76	183	54	1,690	63	119	191
16	6.3	46	145	79	294	135	885	44	665	54	75	102
17	6.3	36	82	66	143	250	1,170	40	312	51	50	70
18	6.2	118	56	60	118	218	3,170	37	171	50	52	57
19	6.0	180	50	60	98	133	1,070	35	117	43	156	50
20	6.0	119	53	62	86	81	454	32	101	39	119	46
21	6.0	65	57	165	74	65	269	30	613	36	60	43
22	13	45	64	167	78	56	206	28	548	34	44	40
23	25	37	56	87	219	106	148	27	267	32	38	38
24	34	36	41	58	256	486	111	26	130	31	33	38
25	19	55	36	70	154	543	94	25	120	30	31	40
26	13	56	32	217	94	300	137	51	163	30	33	41
27	11	46	30	193	74	148	138	134	96	48	104	44
28	11	36	29	127	64	105	90	63	72	43	48	62
29	15	31	28	84	------	498	65	33	61	41	204	112
30	31	29	30	63	------	287	58	26	54	31	152	102
31	29	------	35	54	------	155	------	23	------	28	108	------
TOTAL	354.8	3,489	1,702	3,606	7,358	6,761	9,799	4,195	23,975	8,389	2,651	5,338
MEAN	11.4	116	54.9	116	263	218	327	135	799	271	85.5	178
MAX	34	1,270	238	304	3,190	557	3,170	979	14,400	4,370	204	1,320
MIN	6.0	12	26	42	35	56	44	23	19	28	31	38
CFSM	.10	.99	.47	.99	2.25	1.86	2.79	1.15	6.83	2.32	.73	1.52
IN.	.11	1.11	.54	1.15	2.34	2.15	3.12	1.33	7.62	2.67	.84	1.70
AC-FT	704	6,920	3,380	7,150	14,590	13,410	19,440	8,320	47,550	16,640	5,260	10,590

CAL YR 1972 TOTAL 15,631.4 MEAN 42.7 MAX 1,270 MIN 4.5 CFSM .37 IN 4.97 AC-FT 31,000
WTR YR 1973 TOTAL 77,617.8 MEAN 213 MAX 14,400 MIN 6.0 CFSM 1.82 IN 24.68 AC-FT 154,000

PEAK DISCHARGE (BASE, 900 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	1400	14.88	1,780	6-14	0300	22.57	25,800
2-14	1400	17.15	4,870	6-21	1800	13.53	1,070
4-18	0700	16.70	4,120	7- 8	0400	18.12	6,640
5- 7	2000	14.97	1,980	9- 6	0800	14.19	1,480

08072000 Lake Houston near Sheldon, Tex.

LOCATION.--Lat 29°54'58", long 95°08'28", Harris County, at intake structure on San Jacinto River near right bank 100 ft (30 m) upstream from Lake Houston Dam, 4.0 miles (6.4 km) north of Sheldon, 4.6 miles (7.4 km) upstream from bridge on U.S. Highway 90, and 18 miles (29.0 km) northeast of Houston. Upper gage published as station 08069500 (West Fork San Jacinto River near Humble, Tex.).

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

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

GAGE.--Water-stage recorder. Datum of gage at dam is 0.70 ft (0.21 m) below mean sea level, adjustment of 1959; unadjusted for land-surface subsidence. Prior to Aug. 3, 1954, nonrecording gage read once daily.

EXTREMES.--Current year: Maximum contents, 210,800 acre-ft (260 hm³) June 15, gage height, 49.08 ft (14.96 m); minimum, 118,200 acre-ft (146 hm³) Oct. 21, gage height, 42.00 ft (12.80 m).
Period of record: Maximum contents, 210,000 acre-ft (260 hm³) June 15, 1973, gage height, 49.08 ft (14.96 m); minimum since first filling of lake in August 1954, 53,380 acre-ft (65.8 hm³) Dec. 1, 1971, gage height, 34.08 ft (10.39 m).

REMARKS.--Lake is formed by compacted earthfill embankment sections 4,000 and 4,600 ft (1,219 and 1,402 m) long. Spillway is a slab-and-buttress (Ambursen type) structure 3,160 ft (963 m) long, located near center of dam. Dam completed and storage began Apr. 9, 1954. Usable capacity, 140,500 acre-ft (173 hm³) between gage heights 44.5 and 22.0 ft (13.6 and 6.7 m), bottom of 36-inch (914 millimeter) 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)

42.0	118,200
45.5	159,300
49.1	211,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127,200	125,200	149,600	150,800	151,400	152,900	154,200	151,300	147,700	150,200	148,600	151,700
2	127,100	125,400	149,700	151,200	150,900	153,800	153,100	151,300	147,000	150,200	151,200	151,300
3	127,000	127,100	149,400	152,100	150,800	155,900	150,800	151,400	147,000	149,800	152,100	150,700
4	126,700	127,200	149,100	152,600	150,800	155,900	149,900	153,400	146,700	149,600	151,700	152,200
5	126,600	126,900	149,400	153,700	150,700	156,400	152,700	154,100	149,900	150,400	150,700	148,300
6	126,900	128,200	147,700	155,700	150,400	157,500	151,300	154,300	151,900	151,900	150,200	157,500
7	126,000	145,200	147,800	157,300	150,300	157,800	154,500	157,600	152,700	157,000	149,800	167,100
8	125,400	153,900	148,100	156,100	151,700	156,900	156,900	161,400	154,100	168,000	149,600	162,200
9	125,000	153,900	148,300	155,700	154,700	155,300	157,000	161,300	154,200	162,800	151,900	159,400
10	124,500	152,400	148,000	155,700	156,200	155,200	156,000	160,600	152,900	157,800	152,400	156,000
11	124,000	151,300	148,100	155,300	156,200	154,200	154,800	158,700	163,800	155,100	151,900	154,600
12	123,600	150,300	149,300	154,600	155,700	152,800	153,700	155,900	169,500	153,400	151,900	154,500
13	122,900	153,700	149,800	154,100	157,600	152,300	152,600	153,200	181,000	152,100	151,600	154,100
14	122,500	152,700	152,400	153,600	164,700	151,700	152,200	152,200	210,000	151,700	151,900	154,700
15	122,200	152,100	152,700	153,100	163,400	151,900	156,400	151,600	201,900	151,300	152,100	153,700
16	121,400	151,300	152,700	152,600	161,000	149,900	154,700	151,100	180,300	150,900	151,900	152,600
17	121,100	150,400	152,700	152,200	159,300	155,100	177,800	150,900	169,400	150,600	151,200	151,800
18	120,700	157,800	152,300	151,700	156,800	157,900	185,600	150,300	162,700	150,100	151,300	151,100
19	120,100	156,200	152,300	151,800	155,300	158,200	180,300	150,200	158,200	149,700	151,300	150,700
20	119,300	155,200	151,900	152,100	153,900	155,700	172,000	150,100	155,500	149,200	150,300	150,400
21	118,600	154,300	150,100	151,900	153,200	153,300	166,300	150,100	154,500	148,800	149,800	150,200
22	121,200	152,400	150,200	152,700	152,900	152,200	161,300	149,800	155,900	148,600	149,400	150,100
23	122,800	151,600	151,100	151,900	153,800	154,600	157,300	149,600	154,600	148,200	148,700	149,800
24	123,100	151,700	150,700	152,200	155,000	159,100	154,500	149,600	153,400	147,800	148,500	153,900
25	122,900	150,700	150,600	152,600	155,000	161,300	154,500	149,300	152,700	148,100	148,200	152,700
26	123,400	150,400	149,700	154,700	154,500	166,400	153,400	148,700	151,900	148,200	148,700	152,700
27	123,000	150,900	149,700	156,100	153,300	164,400	153,100	149,200	151,300	148,200	149,200	152,200
28	122,700	149,800	149,600	153,700	152,400	162,100	152,700	148,000	150,800	148,600	149,200	151,900
29	123,300	149,700	149,800	154,300	------	161,800	152,300	147,800	150,400	148,200	150,800	152,900
30	123,600	149,400	150,300	153,800	------	158,500	151,200	147,600	150,200	147,700	152,200	152,900
31	124,100	------	149,800	152,900	------	155,700	------	147,600	------	147,600	152,400	------
(†)	42.55	44.72	44.75	45.00	44.96	45.22	44.86	44.57	44.78	44.57	44.96	45.00
(*)	-3,100	+25,300	+400	+3,100	-500	+3,300	-4,500	-3,600	+2,600	+2,600	+4,800	+500
(††)	16,230	13,030	14,740	14,350	12,230	13,840	13,290	17,030	16,470	19,170	17,710	13,750
MAX	127,200	157,800	152,700	157,300	164,700	166,400	185,600	161,400	210,000	168,000	152,400	167,100
MIN	118,600	125,200	147,700	150,800	150,300	149,900	149,900	147,600	146,700	147,600	148,200	148,300

CAL YR 1972..... * +19,200 †† 183,730 MAX 171,000 MIN 118,600
WTR YR 1973..... * +25,700 †† 181,840 MAX 210,000 MIN 118,600

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use 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 (0.5 km) downstream from Southern Pacific Railway Company bridge, 1.5 miles (2.4 km) east of Sheldon, 4.6 miles (7.4 km) downstream from Lake Houston, and 21 miles (34 km) northeast of Houston.

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

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

GAGE.--Water-stage recorder. Datum of gage is 0.69 ft (0.21 m) below mean sea level, adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 20.12 ft (6.13 m) June 15; minimum, -1.57 ft (-0.48 m) Dec. 16.
Period of record: Maximum gage height, 20.12 ft (6.13 m) June 15, 1973; minimum elevation, -2.36 ft (-0.72 m) Feb. 13, 1971. Maximum elevation since at least 1875, 31.5 ft (9.6 m) Nov. 26, 1940, at site 0.3 mile (0.5 km) upstream at Southern Pacific Railway Co. bridge.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	-	-	2.49	1.20	1.82	0.02	2.62	1.28	-	-	2.55	1.23	2.54	1.43	3.43	2.05	2.72	0.50	2.66	0.30	1.95	0.17	3.07	1.95
2	-	-	2.15	.67	2.23	.65	3.71	1.40	-	-	2.36	.78	2.98	1.55	2.97	1.13	3.38	1.00	2.72	.62	1.63	.09	3.06	1.75
3	-	-	1.88	.68	2.17	.50	3.65	1.35	-	-	2.53	.97	3.27	.42	1.65	.77	3.62	1.52	2.53	.74	2.07	.90	3.18	1.96
4	2.87	1.73	2.40	.92	2.01	.13	2.70	.33	-	-	2.92	1.46	.68	-.46	2.43	.09	3.34	1.34	2.08	.45	2.18	.99	5.50	2.52
5	2.77	1.49	3.15	1.20	1.60	.93	2.85	1.35	-	-	3.86	1.55	2.35	-.96	3.37	.71	2.81	.94	2.27	.58	2.10	.51	5.67	4.56
6	2.57	1.09	3.22	1.48	2.60	-.37	2.37	.82	-	-	4.43	3.30	2.61	.47	3.58	1.62	2.57	.37	1.92	.64	3.66	.50	8.87	4.86
7	2.20	-.15	2.87	.40	2.47	.38	2.70	1.35	-	-	3.30	2.08	3.10	.88	3.43	1.65	1.94	.53	2.28	.86	4.05	2.32	8.83	6.86
8	2.29	.72	2.70	.86	2.85	1.08	2.23	.36	-	-	3.27	1.72	3.15	.78	3.53	2.06	2.43	1.17	6.40	2.15	4.10	.88	6.86	4.56
9	2.28	.64	3.45	1.74	2.38	.81	1.70	.97	-	-	3.58	1.90	1.72	.15	3.51	2.52	2.63	1.30	6.40	3.77	2.06	.65	4.56	3.19
10	2.30	1.02	3.00	.33	2.36	-.14	2.20	1.40	-	-	3.62	2.55	1.23	-.25	3.29	2.46	2.36	1.23	3.77	1.54	2.15	.30	3.19	2.71
11	3.15	1.79	2.13	.85	2.03	.61	2.33	.41	-	-	2.75	1.21	1.67	.01	3.15	2.44	6.77	1.14	1.80	.65	2.14	.52	3.30	1.78
12	3.12	1.69	2.90	1.74	2.56	.38	1.47	-.15	-	-	2.83	.97	1.92	.51	2.63	1.15	8.98	6.77	1.63	.09	2.18	.79	2.62	1.44
13	2.98	1.17	3.65	1.36	1.52	-.03	1.78	.30	-	-	3.52	1.53	1.76	.41	2.20	.82	11.55	7.69	1.82	-.15	2.18	.41	2.40	1.05
14	2.73	1.10	1.69	-.33	2.07	.85	1.83	.27	-	-	3.52	1.47	2.42	.80	2.24	.68	19.10	11.55	1.96	.14	2.71	.62	2.37	.65
15	2.40	.72	1.83	.05	1.29	-1.23	1.72	.12	-	-	2.93	1.37	3.33	2.20	1.56	.16	20.12	-	2.04	.20	3.69	2.28	2.03	.57
16	2.12	.91	2.32	1.33	1.18	-1.57	1.97	-.03	3.61	2.52	2.55	-.73	6.00	2.62	1.75	-.07	-	-	1.96	.24	2.51	1.02	2.19	.46
17	2.25	.80	2.85	1.06	2.25	.44	2.57	.67	3.58	2.58	1.22	-.60	10.47	6.00	1.60	-.03	-	-	1.81	.27	2.51	1.08	2.16	.42
18	2.30	.80	4.40	2.85	2.54	.87	2.80	.63	3.30	1.95	2.53	.93	14.38	10.47	1.32	-.41	-	-	1.73	.12	2.15	.88	2.02	.30
19	1.83	.83	3.20	.83	2.36	.36	2.39	.53	2.70	1.72	2.97	1.91	14.75	14.05	1.83	.07	3.45	-	1.77	.28	2.01	.82	2.24	.75
20	2.86	.90	2.25	.22	2.45	.34	2.98	1.50	2.44	1.31	2.25	.95	14.05	10.70	1.76	-.04	2.55	1.36	1.68	.45	2.00	.57	2.58	.75
21	3.64	2.12	2.26	.50	2.53	-.48	3.17	-	2.05	.71	2.20	.32	10.70	7.22	1.93	.02	1.83	.77	1.64	.67	2.23	.65	2.55	.87
22	3.68	1.90	1.66	-.44	1.46	-.77	1.77	.55	1.88	.20	2.86	.90	7.22	4.43	2.24	.37	2.28	.95	1.77	.67	2.22	.56	2.63	.39
23	3.28	.45	1.88	.13	2.25	.78	1.78	.59	1.92	.76	5.28	1.17	4.43	2.19	2.31	.54	3.15	1.45	2.05	.53	2.61	.54	3.46	.95
24	2.11	.13	2.45	1.04	2.30	-.12	2.17	.67	2.14	.37	4.33	3.59	3.59	2.22	2.12	.28	3.15	.93	1.99	.20	2.65	.36	3.51	1.32
25	2.10	.34	2.70	-.14	1.61	.42	-	-	2.14	.72	3.58	2.93	2.77	1.46	2.20	.64	2.14	.63	2.02	.12	2.95	.95	3.56	2.32
26	2.85	.86	1.12	-1.01	1.80	-.10	-	-	2.12	.57	3.83	1.67	2.47	.83	2.82	1.11	2.06	.51	1.90	.20	2.88	1.17	3.63	2.23
27	2.56	.29	1.95	-.25	1.60	.15	-	-	1.90	.24	1.67	.57	.94	-.56	2.66	.72	2.22	.30	2.06	.00	2.51	1.10	3.82	2.17
28	1.89	.70	1.54	-.45	2.12	.70	-	-	2.20	.51	2.53	.71	2.20	.54	1.48	-.10	2.08	.10	2.12	.07	3.28	1.84	3.17	.94
29	2.36	.86	2.00	.33	2.23	1.17	-	-	-------		2.27	1.56	2.43	1.20	1.63	-.36	2.10	-.07	2.08	.15	2.76	1.52	2.56	1.30
30	2.69	1.10	1.54	.10	3.04	1.17	-	-	-------		2.76	1.61	2.79	1.59	2.30	-.15	2.28	.00	2.26	.13	2.77	1.53	2.77	1.44
31	2.73	.58	-------		2.40	.73	-	-	-------		2.97	1.74	-------		2.68	.29	--------		1.83	.33	2.92	1.79	-------	

08072500 Barker Reservoir near Addicks, Tex.

LOCATION.--Lat 29°46'11", long 95°38'49", Harris County, at dam on Buffalo Bayou, 45 ft (14 m) upstream from reservoir outlet works, 1,160 ft (354 m) upstream from Addicks-Howell county road, 1.1 miles (1.8 km) south of Addicks, and 1.2 miles (1.9 km) upstream from South Mayde Creek; upper gage: lat 29°43'08", long 95°43'53", Fort Bend County, on Buffalo Bayou 2.8 miles (4.5 km) west of Clodine, 4.8 miles (7.7 km), 2.7 miles (4.3 km) by reservoir, upstream from Mason Creek, and 9.0 miles (14.5 km), 6.4 miles (10.3 km) by reservoir, upstream from reservoir outlet works.

DRAINAGE AREA.--134 mi² (347 km²) at outlet works; 89.2 mi² (231 km²) 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 mi² (388 km²) at lower gage and 105 mi² (272 km²) at upper gage.

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

GAGE.--Water-stage recorders. Datum of both gages is 0.33 ft (0.10 m) below mean sea level; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height at dam, 93.88 ft (28.61 m) June 16, contents, 32,040 acre-ft (39.5 hm³); maximum at upper gage, 98.55 ft (30.04 m) June 14.
Period of record: Maximum gage height at dam, 94.60 ft (28.83 m) May 15, 1968, contents, 39,200 acre-ft (48.3 hm³); maximum at upper gage, 99.35 ft (30.28 m) June 26, 1960.
Maximum stage near site of upper gage prior to construction of reservoir, 98.1 ft (29.9 m) in December 1935, from floodmark about 1,100 ft (335 m) to right of and 1,100 ft (335 m) downstream from upper gage.

REMARKS.--Reservoir is formed by rolled-fill earthen dam 72,844 ft (22,203 m) 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 (158 hm³) between gage heights 75.0 ft (22.9 m), bottom of conduits, and 101.9 ft (31.1 m), 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	93.90	32,230

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	6.0	14	8.0	-	14	-	15,020	-	3,870	53	20
2	175	5.0	6.0	17	-	8.0	-	13,890	-	1,110	222	21
3	111	-	5.0	61	-	7.0	-	12,570	-	53	578	14
4	74	-	5.0	104	-	-	-	10,200	-	37	755	226
5	54	-	4.0	84	-	-	-	7,220	-	10	750	1,750
6	41	18	4.0	229	-	-	-	4,240	-	8.0	590	5,600
7	32	103	-	690	-	-	-	1,500	-	84	439	8,330
8	20	366	-	1,230	4.0	-	-	16	-	2,010	549	9,370
9	10	433	-	1,410	524	-	-	5.0	-	2,830	923	9,440
10	8.0	317	-	1,370	900	-	-	-	4.0	2,390	986	8,980
11	-	137	-	1,360	1,550	-	-	-	148	1,640	1,060	9,130
12	-	45	-	1,490	1,250	-	-	-	4,380	776	1,070	10,460
13	-	354	-	1,510	858	-	-	-	15,720	280	847	10,890
14	-	690	-	1,350	1,170	-	4.0	-	26,320	97	466	10,760
15	-	623	-	1,040	1,780	-	199	-	30,980	24	108	10,400
16	-	258	-	504	1,700	-	4,970	-	31,850	7.0	9.0	9,810
17	-	56	-	79	1,800	-	13,100	-	31,270	-	-	8,950
18	-	497	-	6.0	2,680	-	22,450	-	29,940	-	-	7,720
19	-	2,580	-	-	3,100	-	28,280	-	27,830	-	-	6,040
20	-	3,620	-	-	2,710	-	30,420	-	26,240	-	-	4,670
21	5.0	3,900	-	-	2,020	-	30,510	-	25,140	-	-	3,330
22	127	3,630	-	-	1,860	4.0	29,660	-	23,470	9.0	-	1,990
23	714	3,130	-	-	2,320	56	28,010	-	21,450	13	-	797
24	1,270	2,910	-	5.0	2,740	396	26,060	-	19,460	12	-	20
25	1,150	3,170	-	27	2,790	830	23,850	-	17,620	19	-	8.0
26	948	3,360	-	164	2,390	819	22,310	-	15,680	18	-	6.0
27	887	3,120	-	260	1,540	383	20,880	-	13,690	21	-	-
28	654	2,210	-	160	378	30	19,520	-	11,520	22	-	-
29	416	1,250	-	67	------	12	18,130	-	9,310	18	-	-
30	158	368	-	13	------	8.0	16,550	-	6,730	11	10	-
31	38	------	-	7.0	------	-	------	-	------	19	44	------
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-

08073000 Addicks Reservoir near Addicks, Tex.

LOCATION.--Lat 29°47'28", long 95°37'24", Harris County, at dam on South Mayde Creek, 65 ft (20 m) upstream from reservoir outlet works, 2,700 ft (823 m) upstream from U.S. Highway 90, 1.2 miles (1.9 km) east of Addicks, and 1.4 miles (2.3 km) upstream from mouth. Supplementary gages: lat 29°48'03", long 95°41'32", on South Mayde Creek at Groeschke Road bridge, 3.2 miles (5.1 km) west of Addicks, 4.6 miles (7.4 km), 3.5 miles (5.6 km) by reservoir, upstream from Langham Creek, and 5.5 miles (8.8 km), 4.2 miles (6.8 km) 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 (5.8 km) north of Addicks, 4.4 miles (7.1 km), 2.7 miles (4.3 km) by reservoir, upstream from mouth, and 5.3 miles (8.5 km), 3.1 miles (5.0 km) by reservoir, upstream from reservoir outlet works.

DRAINAGE AREA.--133 mi² (344 km²) at outlet works; 34.9 mi² (90.4 km²) at gage on South Mayde Creek; and 45.1 mi² (117 km²) 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 mi² (334 km²) at outlet works, 30 mi² (77.7 km²) at South Mayde Creek gage, and 49 mi² (127 km²) 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, 97.76 ft (29.80 m) Apr. 21, 22, contents, 23,510 acre-ft (29.0 hm³); maximum at gage on South Mayde Creek, 106.86 ft (32.57 m) Apr. 17; maximum at gage on Langham Creek, 101.30 ft (30.88 m) June 13.
Period of record: Maximum elevation at dam, 100.02 ft (30.49 m) May 15, 1968, contents, 37,460 acre-ft (46.2 hm³); maximum at gage on South Mayde Creek, 107.47 ft (32.76 m) June 26, 1960; maximum at gage on Langham Creek, 102.8 ft (31.3 m) July 30 or 31, 1954.
Flood in December 1935 reached a stage of 89.9 ft (27.4 m) at bridge on U.S. Highway 90, 2,700 ft (823 m) downstream from outlet works, from information by Corps of Engineers. This flood reached an elevation of 109.3 ft (33.3 m), 0.2 mile (0.3 km) downstream and 0.1 mile (0.2 km) to right of gage on South Mayde Creek, and an elevation of 104.5 ft (31.9 m), 1,900 ft (579 m) to left and 700 ft (213 m) 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 (18,643 m) 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 (232 hm³) between elevations 73.0 ft (22.3 m), bottom of conduits, and 113.0 ft (34.4 m), 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 (37,000 m³) or more.

Capacity table (elevation, in feet, and 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	97.8	23,730

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	1.0	153	-	1.0	140	1.0	6,710	-	723	8.0	27
2	129	1.0	109	8.0	1.0	100	1.0	4,800	-	228	11	17
3	130	1.0	66	40	1.0	58	0	3,030	-	63	37	2.0
4	128	1.0	24	56	0	16	-	2,040	-	0	54	71
5	123	1.0	0	52	-	1.0	-	1,670	-	1.0	52	640
6	113	25	-	102	-	1.0	-	1,320	-	9.0	39	2,480
7	100	211	-	230	-	1.0	-	970	-	66	26	4,080
8	86	455	-	404	9.0	1.0	-	431	-	282	33	4,670
9	68	542	-	442	130	1.0	-	109	-	446	67	5,010
10	48	478	-	404	398	1.0	-	0	1.0	440	60	5,110
11	28	377	-	398	556	1.0	-	-	55	352	56	5,350
12	4.0	271	-	404	524	1.0	-	-	1,140	252	46	6,020
13	1.0	558	-	364	514	1.0	-	-	7,980	171	34	6,060
14	0	1,220	-	306	1,380	1.0	1.0	-	15,140	123	18	5,700
15	-	599	-	230	2,140	1.0	96	-	18,790	83	4.0	5,150
16	-	314	-	167	2,080	1.0	2,240	-	20,940	46	2.0	4,530
17	-	164	-	125	2,120	1.0	8,760	-	20,940	1.0	2.0	3,900
18	-	605	-	88	2,780	1.0	16,700	-	19,940	1.0	3.0	3,200
19	-	1,880	-	1.0	2,820	0	21,250	-	18,230	1.0	8.0	2,080
20	-	2,520	-	1.0	2,340	-	23,140	-	16,920	-	2.0	1,900
21	-	2,580	-	1.0	1,770	-	23,510	-	15,890	-	1.0	1,310
22	75	2,290	-	1.0	1,450	-	23,190	-	14,370	-	-	770
23	183	1,780	-	1.0	1,550	26	22,330	-	12,550	-	-	374
24	250	1,550	-	0	1,550	82	20,940	-	10,750	-	-	158
25	213	1,760	-	16	1,420	142	20,240	-	9,060	-	-	80
26	183	1,920	-	76	1,040	138	17,270	-	7,310	-	-	6.0
27	158	1,680	-	98	613	103	15,060	-	5,630	-	-	1.0
28	117	1,150	-	86	284	70	12,840	-	4,100	-	-	1.0
29	80	676	-	58	------	16	10,650	-	2,560	-	-	1.0
30	41	324	-	26	------	10	8,350	-	1,470	-	9.0	1.0
31	2.0	------	-	1.0	------	2.0	------	-	------	-	29	------
MAX	-	2,580	-	-	-	-	-	-	-	-	-	6,060
MIN	-	1.0	-	-	-	-	-	-	-	-	-	1.0

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 (2.9 km) downstream from South Mayde Creek, and 2.6 miles (4.2 km) southeast of Addicks.

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

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

GAGE.--Water-stage recorder. Datum of gage is 1.40 ft (0.43 m) below mean sea level, adjustment of 1973; prior record unadjusted to land-surface subsidence. Prior to Feb. 2, 1948, water-stage recorder at bridge on natural channel 1,200 ft (366 m) to right at same datum. Feb. 2 to May 21, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--28 years, 195 ft³/s (5.52 m³/s), 141,300 acre-ft/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,030 ft³/s (85.8 m³/s) June 13, gage height, 68.22 ft (20.79 m); minimum daily, 14 ft³/s (0.40 m³/s) Dec. 28-31.
Period of record: Maximum discharge, 11,200 ft³/s (317 m³/s) Aug. 29, 1945, gage height, 81.23 ft (24.76 m), former site; no flow at times.
Maximum stage since at least 1896, 85.6 ft (26.1 m) in December 1935, adjusted to former site from floodmark 0.5 mile (0.8 km) downstream, on basis of slope of flood of Aug. 29, 1945, from information by local resident.

REMARKS.--Records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 3.2 and 3.0 miles (5.2 and 4.8 km) upstream, respectively, total capacity, 315,900 acre-ft (390 hm³). Extreme low flow sustained by drainage from irrigated lands.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	130	662	67	66	686	68	1,770	19	1,780	148	228
2	276	60	198	143	58	208	42	1,630	19	1,650	214	203
3	263	170	171	274	43	180	30	1,610	26	1,230	268	158
4	256	130	144	319	32	159	24	1,630	25	299	300	333
5	241	70	68	317	27	86	20	1,610	60	117	302	430
6	227	60	26	371	24	80	24	1,560	120	93	317	686
7	207	650	24	424	22	74	82	1,480	139	397	288	442
8	191	450	22	435	82	61	206	1,320	124	715	294	543
9	164	420	21	412	376	48	183	630	68	698	361	669
10	135	400	21	396	444	56	85	353	59	867	457	733
11	117	380	25	420	407	46	46	56	203	797	346	650
12	102	350	30	429	457	37	30	123	1,030	727	324	288
13	67	640	31	408	580	30	23	123	1,810	567	458	683
14	42	350	97	390	683	30	39	86	1,340	312	522	859
15	33	550	129	413	639	31	366	39	1,070	263	427	950
16	29	700	155	520	623	30	1,030	28	1,470	190	272	918
17	27	587	96	470	503	31	1,100	24	1,790	140	162	940
18	26	538	49	292	223	34	889	20	1,710	65	164	1,050
19	26	254	33	213	475	27	577	18	1,780	68	213	1,140
20	26	323	28	128	863	25	974	19	1,710	65	186	1,100
21	26	478	26	56	1,110	22	1,220	22	1,390	71	151	1,070
22	257	597	24	51	968	19	1,340	20	1,550	84	101	1,040
23	140	819	25	44	482	102	1,510	21	1,820	107	99	1,010
24	213	705	24	33	449	217	1,690	18	1,790	122	90	935
25	436	90	20	126	418	150	1,770	19	1,760	133	94	519
26	459	70	16	295	569	225	1,740	22	1,730	134	72	302
27	179	300	15	331	807	424	1,710	23	1,770	157	53	100
28	338	860	14	318	924	442	1,720	25	1,760	155	80	126
29	320	939	14	290	------	289	1,690	23	1,750	152	58	130
30	295	882	14	231	------	178	1,730	22	1,780	116	85	73
31	250	------	14	121	------	112	------	20	------	90	216	------
TOTAL	5,655	12,952	2,236	8,737	12,354	4,139	21,958	14,364	31,672	12,361	7,122	18,308
MEAN	182	432	72.1	282	441	134	732	463	1,056	399	230	610
MAX	459	939	662	520	1,110	686	1,770	1,770	1,820	1,780	522	1,140
MIN	26	60	14	33	22	19	20	18	19	65	53	73
AC-FT	11,220	25,690	4,440	17,330	24,500	8,210	43,550	28,490	62,820	24,520	14,130	36,310

CAL YR 1972 TOTAL 110,732.20 MEAN 303 MAX 1,550 MIN .10 AC-FT 219,600
WTR YR 1973 TOTAL 151,858.00 MEAN 416 MAX 1,820 MIN 14 AC-FT 301,200

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

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

DRAINAGE AREA.--307 mi² (795 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 0.67 ft (0.20 m) below mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,750 ft³/s (106 m³/s) June 13, gage height, 61.47 ft (18.74 m); minimum daily, 37 ft³/s (1.05 m³/s) June 1, 2.
Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Mar. 20, 1972, gage height, 61.48 ft (18.74 m); minimum daily, 25 ft³/s (0.71 m³/s) Nov. 21, 1971.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	103	754	142	74	821	76	1,900	37	1,900	197	280
2	257	52	217	149	69	222	59	1,760	37	1,700	236	270
3	244	131	169	309	60	180	49	1,700	44	1,420	284	210
4	239	105	144	310	52	157	43	1,720	41	410	317	500
5	225	60	90	342	48	101	40	1,700	135	126	319	785
6	210	51	53	488	44	91	72	1,660	181	105	342	1,030
7	186	636	48	474	43	82	131	1,590	129	539	302	495
8	167	408	48	453	146	71	201	1,460	126	963	299	561
9	142	378	45	410	457	63	175	833	85	717	373	686
10	115	351	47	413	477	78	91	418	64	921	518	785
11	99	333	54	487	420	62	60	84	409	860	396	773
12	91	304	59	450	445	54	50	221	1,610	790	401	445
13	68	647	55	415	647	51	45	130	2,510	649	476	676
14	52	293	239	391	754	53	88	98	1,970	328	600	866
15	47	516	207	398	689	52	512	60	1,060	277	470	977
16	44	732	155	522	676	52	1,460	49	1,380	218	310	943
17	41	618	107	484	700	51	1,430	46	1,730	152	205	943
18	45	850	71	325	299	51	1,220	42	1,680	84	187	1,070
19	40	294	57	219	676	47	588	39	1,720	82	228	1,170
20	40	274	52	134	948	45	948	39	1,760	80	204	1,150
21	41	463	49	72	1,140	43	1,230	43	1,410	84	161	1,120
22	311	543	48	66	1,090	40	1,350	41	1,460	123	118	1,090
23	148	817	49	62	588	228	1,500	42	1,770	138	121	1,050
24	160	763	46	54	480	319	1,710	38	1,820	157	113	988
25	393	98	41	204	438	161	1,850	40	1,800	148	117	689
26	484	62	39	295	547	191	1,850	40	1,730	143	95	381
27	142	260	39	331	835	403	1,790	40	1,770	262	79	140
28	311	830	39	315	952	457	1,810	42	1,780	171	109	148
29	296	941	39	290	------	304	1,780	40	1,760	164	95	145
30	276	903	40	233	------	185	1,800	39	1,860	130	97	117
31	235	------	39	123	------	109	------	38	------	100	220	------
TOTAL	5,496	12,816	3,139	9,360	13,794	4,824	24,008	15,992	33,868	13,941	7,989	20,483
MEAN	177	427	101	302	493	156	800	516	1,129	450	258	683
MAX	484	941	754	522	1,140	821	1,850	1,900	2,510	1,900	600	1,170
MIN	40	51	39	54	43	40	40	38	37	80	79	117
AC-FT	10,900	25,420	6,230	18,570	27,360	9,570	47,620	31,720	67,180	27,650	15,850	40,630

CAL YR 1972 TOTAL 118,369 MEAN 323 MAX 2,320 MIN 27 AC-FT 234,800
WTR YR 1973 TOTAL 165,710 MEAN 454 MAX 2,510 MIN 37 AC-FT 328,700

08073700 Buffalo Bayou at Piney Point, Tex.

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

DRAINAGE AREA.--317 mi² (821 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1.35 ft (0.41 m) below mean sea level, adjustment of 1973.

AVERAGE DISCHARGE.--10 years, 244 ft³/s (6.91 m³/s), 176,800 acre-ft/yr (218 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,470 ft³/s (127 m³/s) June 13, elevation, 54.98 ft (16.76 m); minimum daily, 36 ft³/s (1.02 m³/s) Mar. 22, Apr. 5.
Period of record: Maximum discharge, 4,470 ft³/s (127 m³/s) June 13, 1973, elevation, 54.98 ft (16.76 m); minimum daily, 6.0 ft³/s (170 dm³/s) Dec. 6, 7, 1964.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	277	136	714	189	83	851	89	1,810	40	1,960	227	276
2	265	61	264	191	75	258	64	1,710	40	1,730	246	261
3	251	169	196	335	64	204	49	1,640	45	1,520	287	209
4	246	144	177	335	53	178	40	1,640	45	609	323	501
5	234	73	120	393	47	125	36	1,640	150	243	326	1,040
6	221	61	70	548	42	104	69	1,600	200	195	349	1,160
7	205	620	60	519	38	94	156	1,540	170	753	322	523
8	194	389	55	489	148	82	202	1,420	168	1,180	312	536
9	174	359	50	445	497	71	198	915	136	732	370	637
10	145	340	50	447	491	95	112	487	98	885	498	744
11	142	326	60	518	440	71	68	151	517	843	435	736
12	120	304	65	481	444	57	50	280	2,020	782	410	537
13	91	749	60	448	658	52	42	196	2,760	692	469	609
14	71	278	250	424	757	57	120	150	2,560	393	569	796
15	61	434	250	417	681	53	600	98	1,120	334	464	925
16	50	628	200	520	633	57	1,700	70	1,320	275	329	900
17	40	587	136	495	742	49	1,530	60	1,670	209	250	890
18	50	997	90	376	342	52	1,470	50	1,700	135	216	999
19	45	397	69	241	610	47	622	45	1,710	120	231	1,120
20	40	256	60	172	895	43	828	40	1,800	119	229	1,110
21	41	438	52	94	1,110	40	1,110	42	1,450	126	192	1,080
22	420	472	52	78	1,090	36	1,230	45	1,410	173	141	1,050
23	200	708	52	74	645	264	1,370	42	1,750	204	136	1,000
24	200	716	51	61	496	427	1,590	40	1,850	205	126	949
25	450	188	43	245	464	209	1,750	40	1,860	184	132	693
26	500	80	39	314	513	178	1,790	40	1,750	183	112	453
27	200	193	39	347	670	378	1,720	40	1,770	328	96	209
28	310	705	38	334	848	443	1,730	42	1,800	201	101	184
29	296	836	41	311	------	318	1,700	45	1,770	192	132	171
30	276	799	43	260	------	209	1,700	42	1,830	169	108	144
31	242	------	40	142	------	129	------	40	------	130	214	------
TOTAL	6,057	12,443	3,486	10,243	13,576	5,231	23,735	16,000	35,509	15,804	8,352	20,442
MEAN	195	415	112	330	485	169	791	516	1,184	510	269	681
MAX	500	997	714	548	1,110	851	1,790	1,810	2,760	1,960	569	1,160
MIN	40	61	38	61	38	36	36	40	40	119	96	144
AC-FT	12,010	24,680	6,910	20,320	26,930	10,380	47,080	31,740	70,430	31,350	16,570	40,550

CAL YR 1972 TOTAL 122,429 MEAN 335 MAX 2,940 MIN 26 AC-FT 242,800
WTR YR 1973 TOTAL 170,878 MEAN 468 MAX 2,760 MIN 36 AC-FT 338,900

08074000 Buffalo Bayou at Houston, Tex.

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

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

PERIOD OF RECORD.--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 1.36 ft (0.4 m) below mean sea level, adjustment of 1973; prior record unadjusted for land-surface subsidence. Prior to June 19, 1936, nonrecording gage, and June 19, 1936, to Jan. 16, 1962, water-stage recorder at site 0.8 mile (1.3 km) downstream at datum 4.08 ft (1.24 m) below gage datum. Since Jan. 17. 1962, auxilary water-stage recorder 0.8 mile (1.3 km) downstream.

AVERAGE DISCHARGE.--8 years (1936-44) unregulated, 272 ft³/s (7.70 m³/s), 197,100 acre-ft/yr (243 hm³/yr); 24 years (1944-57, 1962-73) regulated, 257 ft³/s (7.28 m³/s), 186,200 acre-ft/yr (230 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,570 ft³/s (243 m³/s) June 13, elevation, 25.91 ft (7.90 m); minimum daily, 35 ft³/s (0.99 m³/s) Oct. 18.
Period of record: Maximum discharge, 10,900 ft³/s (309 m³/s) Aug. 30, 1945, elevation, 28.82 ft (8.78 m), at site 0.8 mile (1.3 km) downstream at present datum; minimum daily, 1.3 ft³/s (37 dm³/s) May 24, 1939, Nov. 5, 1950.
All flood data at site 0.8 mile (1.3 km) downstream at present datum. Maximum elevation since at least 1835, 49.0 ft (14.9 m) Dec. 9, 1935, discharge, 40,000 ft³/s (1,130 m³/s); furnished by engineer for Harris County. Flood of May 31, 1929, reached an elevation of 43.5 ft (13.3 m), discharge, 19,000 ft³/s (538 m³/s) at bridge on Capitol Avenue 2.8 miles (4.5 km) downstream, from rating curve extended above 15,300 ft³/s (433 m³/s), stage-discharge relation materially affected by bridge; furnished by city of Houston.

REMARKS.--Records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 26.3 and 26.5 miles (42.3 and 42.6 km) upstream, respectively. Gage height affected by tides and backwater from Whiteoak Bayou and other streams. Low flow mostly sustained by sewage effluent from Houston suburbs.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	150	802	230	126	1,030	113	1,860	37	2,080	198	305
2	296	90	445	270	93	484	78	1,910	37	1,830	284	358
3	288	250	211	415	81	231	59	1,720	39	1,650	270	310
4	274	200	183	366	66	206	46	1,640	47	920	310	1,290
5	274	90	168	520	55	186	37	1,690	469	234	324	2,450
6	274	80	88	727	51	169	65	1,680	783	252	347	2,000
7	247	1,400	58	678	49	132	184	1,680	159	1,310	375	706
8	234	500	87	550	208	104	196	1,480	223	2,360	318	630
9	196	400	55	450	697	101	228	1,130	373	802	363	671
10	162	350	49	450	540	91	156	562	154	819	451	752
11	142	340	54	600	466	83	86	237	1,390	826	705	820
12	122	330	109	550	442	75	61	389	4,600	754	644	1,350
13	104	1,000	71	470	960	69	47	288	5,510	688	634	538
14	72	450	129	424	1,040	75	61	171	4,810	454	607	752
15	58	450	568	406	718	72	718	106	1,510	330	570	906
16	51	550	179	490	646	77	3,330	70	1,360	282	427	916
17	41	705	196	520	957	63	3,170	58	1,630	247	514	898
18	35	2,800	128	448	718	60	2,520	52	1,800	164	350	927
19	64	966	93	260	536	55	705	57	1,710	109	274	1,090
20	60	254	77	180	856	51	582	44	1,820	120	288	1,120
21	60	449	74	122	1,170	49	963	43	1,670	112	231	1,100
22	800	455	51	93	1,340	47	1,220	47	1,400	135	160	1,070
23	350	683	55	93	1,090	514	1,390	47	1,650	275	158	1,040
24	200	862	52	85	568	826	1,580	46	1,840	156	142	1,010
25	372	522	50	450	485	351	1,760	41	1,930	244	154	862
26	600	97	47	416	464	138	1,900	45	1,800	173	124	633
27	247	73	45	354	708	347	1,720	43	1,770	351	93	330
28	340	571	45	350	896	493	1,710	41	1,790	211	111	352
29	300	849	50	329	------	410	1,730	45	1,790	190	242	186
30	280	852	60	291	------	260	1,730	41	1,810	177	111	156
31	200	------	50	221	------	162	------	39	------	184	191	------
TOTAL	7,087	16,768	4,329	11,808	16,026	7,011	28,145	17,302	45,911	18,439	9,970	25,528
MEAN	229	559	140	381	572	226	938	558	1,530	595	322	851
MAX	800	2,800	802	727	1,340	1,030	3,330	1,910	5,510	2,360	705	2,450
MIN	35	73	45	85	49	47	37	39	37	109	93	156
AC-FT	14,060	33,260	8,590	23,420	31,790	13,910	55,830	34,320	91,060	36,570	19,780	50,630

CAL YR 1972 TOTAL 153,694 MEAN 420 MAX 6,570 MIN 35 AC-FT 304,900
WTR YR 1973 TOTAL 208,324 MEAN 571 MAX 5,510 MIN 35 AC-FT 413,200

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 (2.9 km) upstream from mouth.

DRAINAGE AREA.--8.81 mi² (22.8 km²). Prior to Apr. 1, 1965, 10.0 mi² (25.9 km²). Apr. 1 to May 17, 1965, 8.81 mi² (22.8 km²). At Antoine Drive, May 18 to Aug. 1, 1965, 9.94 mi² (25.7 km²); Aug. 2, 1965, to Sept. 1, 1966, 10.2 mi² (26.4 km²). Drainage area changes due to relocations and changes in storm sewers.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--9 years, 6.81 ft³/s (0.193 m³/s), 4,930 acre-ft/yr (6.08 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,790 ft³/s (50.7 m³/s) June 13, elevation, 78.58 ft (23.95 m); minimum daily, 0.03 ft³/s (0.85 dm³/s) Oct. 17, 18.
Period of record: Maximum discharge, 2,020 ft³/s (57.2 m³/s) Mar. 20, 1972, elevation, 78.60 ft (23.96 m); no flow at times.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	.60	.95	12	1.8	1.7	1.0	.74	.17	20	8.3	9.2
2	1.6	.37	.75	23	1.1	1.6	.76	.85	.19	1.5	2.0	4.4
3	.43	8.2	.63	14	.97	1.5	.80	.81	.28	1.1	1.3	1.5
4	.28	5.2	.55	14	.78	1.5	.60	.66	.39	.61	.33	92
5	.21	1.4	.66	16	.72	1.5	.89	.73	7.6	1.9	.18	141
6	.13	13	.67	42	.66	2.7	3.0	.62	6.8	21	.39	197
7	.10	225	.63	32	1.0	2.8	9.9	1.3	1.2	106	.27	21
8	.12	15	.65	18	18	1.9	3.5	1.0	7.9	96	.33	7.3
9	.12	4.9	.63	9.6	86	1.7	2.8	.67	8.2	10	.15	4.7
10	.12	2.4	.67	10	24	4.8	1.7	.62	2.4	3.9	17	2.3
11	.09	1.4	.87	24	8.6	3.7	.90	.54	200	2.0	11	2.0
12	.05	1.0	1.8	16	5.1	2.0	.73	3.1	750	.99	37	14
13	.06	127	1.3	9.6	30	1.4	.65	1.8	950	.65	22	3.3
14	.04	17	28	6.7	52	1.6	2.5	.68	250	.49	3.4	.93
15	.04	5.2	35	6.2	12	1.7	101	.45	36	.42	1.2	.58
16	.04	2.9	12	4.5	5.2	1.7	375	.40	7.7	.49	.78	.40
17	.03	1.7	5.2	3.2	14	1.3	321	.34	3.4	.86	.51	.30
18	.03	187	4.3	3.0	44	.96	183	.31	1.6	.40	.94	.25
19	1.2	35	3.5	2.7	13	.89	33	.28	1.1	.33	.61	.22
20	.11	9.6	3.3	2.3	7.2	1.2	12	.26	3.2	.27	.37	.20
21	.13	5.1	3.0	3.0	8.1	.78	7.8	.34	3.6	.26	.26	.19
22	94	3.2	2.6	2.3	10	.74	4.5	.57	1.7	1.0	.23	.18
23	18	2.0	2.3	2.2	21	14	3.1	.21	1.1	2.0	.19	.17
24	2.4	7.5	2.0	1.9	10	53	1.9	.32	.80	1.4	.15	.16
25	.91	20	1.7	38	5.6	16	1.4	.24	.72	.37	.15	.15
26	1.2	8.0	1.6	31	3.9	4.5	1.8	.21	.61	.25	.15	.15
27	2.3	3.9	1.6	9.5	2.6	2.2	1.1	.27	.58	7.3	.15	4.0
28	.40	2.5	1.5	5.6	1.9	1.9	1.0	.20	.58	.75	.75	1.6
29	.60	1.6	1.8	3.0	------	4.1	.68	.15	.55	.27	1.5	.68
30	.56	1.1	2.2	1.9	------	2.3	.68	.15	7.0	.17	.48	.58
31	.45	------	1.7	2.0	------	1.6	------	.16	------	.15	1.7	------
TOTAL	129.86	718.77	125.07	369.3	389.23	139.27	1,078.69	18.98	2,255.37	282.83	113.77	510.44
MEAN	4.16	24.0	4.03	11.9	13.9	4.49	36.0	.61	75.2	9.12	3.67	17.0
MAX	94	225	35	42	86	53	375	3.1	950	106	37	197
MIN	.03	.37	.55	1.9	.66	.74	.60	.15	.17	.15	.15	.15
AC-FT	256	1,430	248	733	772	276	2,140	38	4,470	561	226	1,010
(††)	3.20	7.53	1.74	3.96	3.60	2.64	7.40	1.31	11.59	5.97	5.62	6.41

CAL YR 1972 TOTAL 3,021.03 MEAN 8.25 MAX 442 MIN 0 AC-FT 5,990 †† 51.71
WTR YR 1973 TOTAL 6,130.79 MEAN 16.8 MAX 950 MIN .03 AC-FT 12,160 †† 60.97

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11- 7	0345	74.43	487		about		
11-13	0830	73.07	270	6-13	1300	78.58	1,790
11-18	1200	73.88	391	7- 7	2200	73.19	287
4-17	1445	74.87	614	9- 6	0400	73.53	335

†† Weighted-mean rainfall, in inches, based on four rain gages.
NOTE.--No gage-height record June 11-14.

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

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

DRAINAGE AREA.--11.3 mi² (29.3 km²). Prior to May 1965, 10.5 mi² (27.2 km²); May to August 1965, 10.7 mi² (27.7 km²); August 1965 to September 1967, 10.5 mi² (27.2 km²); September 1967 to February 1969, 10.4 mi² (26.9 km²); February 1969 to October 1969, 10.7 mi² (27.7 km²); October 1969 to October 1971, 11.1 mi² (28.7 km²); 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.--9 years, 12.1 ft³/s (0.343 m³/s), 8,770 acre-ft/yr (10.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,600 ft³/s (102 m³/s) June 13, elevation, 65.91 ft (20.09 m); minimum daily, 0.62 ft³/s (18 dm³/s) Oct. 15.
Period of record: Maximum discharge, 5,800 ft³/s (164 m³/s) Mar. 20, 1972, elevation, 69.20 ft (29.09 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.2	3.9	60	5.8	5.7	4.1	2.1	3.1	14	4.2	39
2	2.3	3.1	3.8	23	3.9	5.2	3.7	3.9	2.3	2.9	3.0	8.0
3	1.6	53	2.9	38	2.9	5.5	3.6	2.6	3.1	3.1	1.8	3.4
4	1.9	17	3.8	15	2.2	7.8	3.1	2.3	2.9	1.7	2.4	200
5	2.2	3.9	3.0	40	2.2	17	2.8	1.4	71	13	2.2	400
6	2.4	40	3.7	79	3.1	18	26	2.2	18	39	7.6	450
7	2.0	161	2.3	37	3.7	7.8	19	6.0	2.5	384	3.2	100
8	1.5	25	2.9	19	91	19	5.3	1.5	22	139	2.2	25
9	.83	9.2	2.4	12	100	8.9	5.5	3.4	71	25	1.8	10
10	.71	3.9	3.4	20	33	32	3.6	1.8	15	11	183	5.5
11	1.9	3.2	3.7	42	17	8.9	2.8	3.0	495	6.4	25	27
12	2.4	2.2	6.8	20	10	6.8	3.2	33	539	4.4	110	61
13	1.4	179	3.2	13	73	7.8	3.3	3.0	1,010	3.4	35	19
14	.72	24	90	10	41	13	23	3.0	140	2.7	8.4	9.0
15	.62	12	39	8.0	15	7.4	139	3.2	39	2.7	6.8	5.2
16	.70	6.8	10	5.9	7.4	11	539	3.0	19	3.4	3.0	2.7
17	.62	4.2	6.7	5.2	51	3.9	512	2.5	10	3.4	3.3	2.7
18	1.3	248	5.2	6.5	51	3.6	128	2.2	7.3	2.4	8.0	2.4
19	4.6	43	4.9	5.1	23	3.4	34	1.8	6.0	2.7	2.7	2.2
20	1.1	19	4.9	4.6	11	3.6	17	1.8	7.2	3.7	1.7	1.8
21	2.8	11	4.1	8.1	24	3.2	13	1.5	13	3.2	2.5	1.8
22	117	7.2	3.6	3.6	24	2.6	7.3	2.6	4.8	59	3.0	1.7
23	16	4.9	3.2	4.3	40	69	4.2	2.7	4.3	11	2.8	2.2
24	3.7	25	2.9	4.0	18	78	6.1	1.9	2.8	6.4	2.3	3.4
25	2.3	26	2.5	85	11	20	9.6	2.1	3.9	6.8	.75	2.7
26	7.0	9.7	2.6	31	8.0	7.3	12	1.3	2.9	2.7	.96	4.2
27	4.5	7.1	2.9	13	6.8	5.8	4.7	1.4	2.3	8.4	.91	31
28	2.9	4.6	3.2	7.1	6.7	5.7	3.1	1.6	2.2	2.2	8.4	8.0
29	3.5	4.1	2.9	4.6	------	5.6	2.8	2.4	1.9	1.8	18	3.2
30	4.2	3.3	6.0	5.6	------	4.0	2.4	2.6	30	1.7	12	1.8
31	3.0	------	2.4	5.5	------	4.7	------	2.4	------	3.2	16	------
TOTAL	203.70	965.6	242.8	635.1	685.7	402.2	1,545.2	106.2	2,551.5	774.3	482.92	1,433.9
MEAN	6.57	32.2	7.83	20.5	24.5	13.0	51.5	3.43	85.1	25.0	15.6	47.8
MAX	117	248	90	85	100	78	539	33	1,010	384	183	450
MIN	.62	2.2	2.3	3.6	2.2	2.6	2.4	1.3	1.9	1.7	.75	1.7
AC-FT	404	1,920	482	1,260	1,360	798	3,060	211	5,060	1,540	958	2,840
(††)	2.75	7.44	1.62	3.95	3.40	2.68	6.99	1.35	13.01	6.58	6.64	7.04

CAL YR 1972 TOTAL 6,424.33 MEAN 17.6 MAX 1,280 MIN .29 AC-FT 12,740 †† 51.14
WTR YR 1973 TOTAL 10,029.12 MEAN 27.5 MAX 1,010 MIN .62 AC-FT 19,890 †† 63.45

PEAK DISCHARGE (BASE, 850 FT³/S, REVISED)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11-18	0700	60.33	1,200	7- 7	1500	61.30	1,530
4-16	0245	62.19	1,890	8-10	1700	60.92	1,400
6-13	1215	65.91	3,600	9- 4	unknown	61.70	1,690

†† Weighted-mean rainfall, in inches, based on five 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 (171 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.4 miles (3.9 km) upstream from Little Whiteoak Bayou, and 4.0 miles (6.4 km) upstream from mouth.

DRAINAGE AREA.--84.7 mi² (219 km²); unadjusted for basin boundary changes. During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridges and is 92.0 mi² (238 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 7.35 ft (2.24 m) below mean sea level, datum of 1929, adjustment of 1973. Prior record unadjusted for land-surface subsidence. Prior to June 17, 1936, nonrecording gage, and June 17, 1936, to Apr. 28, 1965, water-stage recorder at site 480 ft (146 m) upstream at same datum.

AVERAGE DISCHARGE.--37 years, 71.8 ft³/s (2.03 m³/s), 52,020 acre-ft/yr (64.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,600 ft³/s (385 m³/s) June 13, gage height, 41.06 ft (12.52 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 14, 16, 17, 20.

Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) Mar. 20, 1972, gage height, 43.50 ft (13.26 m); maximum gage height, 43.60 ft (13.29 m) Nov. 13, 1961; no flow for many days during 1965 water year (result of construction dams).

Maximum stage since at least 1919, 51.5 ft (15.7 m) Dec. 9, 1935, prior to channel rectification, present site and datum, discharge, 14,750 ft³/s (418 m³/s), furnished by engineer for Harris County. Flood of May 31, 1929, reached a stage of 47.0 ± 0.5 ft (14.3 ± 0.2 m), prior to channel rectification, present site and datum, discharge, 9,360 ft³/s (265 m³/s), computed on basis of current-meter measurement at stage 1.0 ft (0.3 m) below crest, furnished by city of Houston.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	20	17	346	42	51	41	27	17	167	382	322
2	23	15	16	171	30	46	35	60	16	43	378	165
3	17	244	16	224	25	43	29	78	15	22	275	104
4	17	73	15	125	23	57	27	26	16	28	110	1,420
5	19	22	19	234	22	104	25	22	325	46	47	1,440
6	19	56	25	441	22	90	24	24	325	279	63	1,580
7	18	711	20	275	23	56	23	49	97	1,560	48	491
8	17	113	18	159	330	79	22	22	247	1,080	29	233
9	15	43	17	95	699	97	22	20	255	280	138	174
10	14	27	17	112	312	112	22	20	125	133	378	119
11	13	26	17	221	180	78	26	22	2,140	70	234	141
12	13	19	40	147	115	44	32	159	3,910	43	298	322
13	12	754	25	104	477	39	29	54	5,850	31	258	142
14	10	176	200	80	668	60	105	28	1,810	21	117	67
15	11	75	600	68	250	42	719	21	660	19	51	40
16	10	43	250	60	164	87	3,170	19	254	20	29	32
17	10	34	100	54	280	38	3,300	19	139	23	49	31
18	13	1,410	60	48	423	28	1,500	20	79	20	187	28
19	15	361	45	44	222	23	578	18	39	19	53	28
20	10	106	40	41	162	25	299	18	38	21	24	26
21	21	48	35	63	179	24	202	19	82	18	38	23
22	425	28	31	36	184	22	156	26	34	101	31	22
23	197	21	29	30	244	462	111	24	25	112	22	27
24	53	72	27	26	170	555	78	20	20	70	17	60
25	27	119	25	412	112	270	58	21	19	45	17	29
26	42	56	24	283	80	127	112	21	18	23	15	58
27	31	32	23	145	62	63	49	21	23	120	17	131
28	21	23	23	87	55	57	34	17	17	88	76	113
29	17	19	25	52	------	86	29	18	17	34	290	28
30	29	17	45	39	------	68	28	19	73	25	193	21
31	19	------	24	37	------	50	------	15	------	34	82	------
TOTAL	1,206	4,763	1,868	4,259	5,555	2,983	10,885	947	16,685	4,595	3,946	7,417
MEAN	38.9	159	60.3	137	198	96.2	363	30.5	556	148	127	247
MAX	425	1,410	600	441	699	555	3,300	159	5,850	1,560	382	1,580
MIN	10	15	15	26	22	22	22	15	15	18	15	21
AC-FT	2,390	9,450	3,710	8,450	11,020	5,920	21,590	1,880	33,090	9,110	7,830	14,710
(††)	3.26	7.08	1.83	4.08	3.84	2.98	7.38	1.40	13.12	5.94	5.62	6.80

CAL YR 1972 TOTAL 30,888.4 MEAN 84.4 MAX 4,150 MIN 5.1 AC-FT 61,270 †† -
WTR YR 1973 TOTAL 65,109.0 MEAN 178 MAX 5,850 MIN 10 AC-FT 129,100 †† 63.33

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	0045	24.31	2,160	6- 5	2100	22.94	2,120
11-13	0515	24.18	2,090	6-13	1400	41.06	13,600
11-18	0900	27.40	3,840	7- 7	1745	27.35	4,560
4-17	1700	31.75	7,900	9- 4	1945	28.61	5,580

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

08074600 Buffalo Bayou at Main Street, Houston, Tex.

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

DRAINAGE AREA.--469 mi² (1,215 km²).

PERIOD OF RECORD.--January 1962 to current year (elevations only prior to 1973, gage heights only beginning 1973).

GAGE.--Water-stage recorder. Datum of gage is 1.47 ft (0.45 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers). Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 23.6 ft (7.2 m) June 13; minimum, -1.3 ft (-0.4 m) Jan. 29.
Period of record: Maximum gage height, 23.6 ft (7.2 m) June 13, 1973; minimum elevation, -3.5 ft (-1.1 m) Jan. 13, 1964.
Maximum elevation since at least 1835, 38.5 ft (11.7 m) Dec. 9, 1935, present site and datum, unadjusted for land-surface subsidence.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	-	-	3.5	2.2	2.7	1.1	3.7	2.4	3.5	1.1	3.5	2.2	3.3	2.0	-	-	-	-	4.1	2.6	3.5	0.7	3.7	2.7
2	-	-	3.2	1.8	3.1	1.5	4.4	2.2	2.4	0.0	3.1	1.4	3.7	2.2	-	-	-	-	3.9	2.3	5.6	1.0	3.7	2.4
3	3.2	2.0	3.8	2.3	2.8	1.3	4.6	2.1	2.1	.3	3.2	1.5	3.9	1.0	-	-	-	-	3.5	2.3	2.7	1.6	3.8	2.7
4	3.6	2.0	3.3	1.8	2.8	.8	3.4	1.0	2.5	.9	3.5	1.7	1.7	.2	-	-	-	-	3.0	1.6	2.9	1.5	11.3	3.3
5	3.4	2.3	4.1	2.3	3.3	1.7	3.7	2.4	2.2	.9	4.6	1.8	3.1	-.1	-	-	-	1.9	3.0	1.3	2.8	1.2	10.6	5.7
6	3.1	1.9	6.2	2.3	3.2	.4	3.2	1.9	2.2	1.1	4.9	3.1	3.7	1.2	-	-	-	2.2	3.5	1.3	3.1	1.2	10.0	4.2
7	2.9	.7	6.5	1.8	3.2	1.1	3.5	1.8	2.9	1.2	3.3	2.1	3.9	1.1	-	-	2.9	1.4	11.7	1.6	3.1	1.1	4.6	2.8
8	3.0	1.5	3.4	1.6	3.7	1.8	2.7	.6	2.7	1.0	4.0	1.8	3.4	1.2	-	-	4.0	2.0	10.3	2.4	3.1	1.2	4.4	2.8
9	3.0	1.4	4.1	2.3	3.1	1.6	2.2	1.2	2.5	1.2	4.3	2.2	2.3	-.1	3.6	2.1	3.9	2.2	3.0	1.3	2.7	1.2	4.1	2.7
10	3.0	1.8	3.6	1.0	3.0	.6	2.8	1.9	2.8	.7	3.3	2.8	1.7	-.3	3.3	-	3.3	2.1	2.7	1.1	3.3	1.0	3.4	2.3
11	3.8	2.6	3.1	1.7	2.7	1.4	2.9	1.0	3.6	1.3	3.6	1.7	2.4	.4	3.5	2.2	14.7	2.0	2.3	.8	3.4	1.6	4.0	2.3
12	3.8	2.2	3.8	2.5	3.3	1.2	2.2	.4	3.8	1.9	3.6	1.6	-	-	3.0	1.6	15.9	7.4	2.4	.7	3.3	1.4	3.8	2.4
13	3.6	1.9	6.6	2.6	2.3	.7	2.4	.9	5.6	2.2	4.3	2.1	-	-	3.2	1.4	23.6	5.8	2.7	.6	2.9	1.5	3.4	2.6
14	3.4	1.9	2.6	.4	3.0	1.6	2.6	.8	4.3	1.6	4.2	1.9	-	-	3.2	1.5	15.8	5.7	2.8	.8	3.2	1.4	2.6	1.2
15	3.1	1.5	2.7	1.1	2.4	-.6	2.4	.7	2.7	.9	3.6	2.0	-	-	2.5	1.0	5.7	3.8	2.8	.8	2.9	1.6	2.7	1.3
16	2.7	1.6	3.1	2.2	1.9	-.9	2.8	.7	2.8	1.3	3.2	-.1	-	-	2.6	.8	4.3	3.3	2.5	.8	3.1	1.7	2.9	1.3
17	2.9	1.6	3.8	1.9	3.1	1.2	3.2	1.5	3.8	2.6	1.9	.1	-	-	2.4	.7	3.9	2.6	2.4	.8	3.5	1.8	3.0	1.3
18	2.9	1.6	10.0	3.8	3.2	1.6	3.4	1.2	3.8	2.3	2.7	1.1	-	-	2.3	.5	3.6	2.6	2.3	.7	3.5	1.6	2.8	1.3
19	2.6	1.6	4.6	1.0	3.0	.9	3.2	1.2	3.3	2.3	3.4	1.7	-	-	2.8	.9	3.8	2.5	2.4	1.0	2.8	1.5	3.1	1.7
20	3.6	1.8	3.0	.5	3.3	.9	3.7	2.2	3.1	2.1	2.3	1.0	-	-	2.8	.9	3.5	2.2	2.3	1.2	2.7	1.2	3.4	1.7
21	4.4	2.9	2.9	1.0	3.1	0.0	3.7	1.2	2.9	1.8	2.9	.7	-	-	2.9	.9	3.1	2.2	2.3	1.3	3.0	1.3	3.4	1.8
22	5.2	3.8	2.3	.2	2.2	0.0	2.6	1.3	3.3	1.6	3.8	1.6	-	-	3.2	1.1	3.3	2.0	2.5	1.4	3.2	1.2	3.4	1.8
23	4.6	1.6	2.8	1.8	2.9	1.5	2.6	1.2	3.0	2.2	6.7	2.4	-	-	3.3	1.4	3.6	2.5	2.8	1.3	3.3	1.2	4.2	1.9
24	3.2	1.2	3.5	2.1	3.0	.5	2.9	1.3	2.8	1.3	5.6	3.3	-	-	3.1	1.3	3.6	2.4	2.7	1.0	3.3	1.5	4.0	2.7
25	3.3	1.6	3.7	1.1	2.2	1.1	4.6	1.9	2.8	1.3	3.3	1.3	-	-	3.2	1.5	3.5	2.3	2.8	.8	3.6	1.6	4.0	2.8
26	4.1	2.1	1.8	0.0	2.5	.5	3.1	1.2	2.8	1.2	1.7	0.0	-	-	3.8	2.1	3.3	2.2	2.6	.8	3.4	1.8	4.1	2.8
27	4.0	1.5	2.6	1.1	2.4	.8	2.8	1.1	2.8	1.0	3.7	1.0	-	-	3.6	1.7	3.4	2.0	3.1	.4	3.7	1.8	3.9	2.6
28	3.1	1.6	2.4	1.1	2.8	1.5	2.2	-.9	3.2	1.5	3.8	2.2	-	-	2.5	.9	3.3	2.0	2.8	.7	3.6	2.1	3.8	1.5
29	3.5	2.1	2.9	1.6	3.4	1.8	1.4	-1.3	------		4.0	2.5	-	-	2.7	.7	3.3	1.8	2.7	.8	4.4	2.1	3.1	1.8
30	3.7	2.2	2.4	1.2	3.6	1.7	2.3	.6	------		4.0	2.4	-	-	-	.9	3.7	1.9	2.8	.8	3.4	2.2	3.4	1.9
31	3.8	2.7	------		3.2	1.2	3.5	1.6	------		3.6	1.7	-----		-	-	-----		2.6	.9	3.5	2.5	-------	

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

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

DRAINAGE AREA.--476 mi² (1,233 km²).

PERIOD OF RECORD.--April 1961 to current year (elevations only prior to 1973, gage heights only beginning 1973).

GAGE.--Water-stage recorder. Datum of gage is 1.73 ft (0.53 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers). Prior to records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 8.3 ft (2.5 m) Sept. 6; minimum, -1.2 ft (-0.4 m) Jan. 29.
Period of record: Maximum elevation, 15.1 ft (4.6 m) Sept. 11, 12, 1961, result of Hurricane Carla; minimum, -3.5 ft (-1.1 m) Jan. 13, 1964.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	3.4	1.1	3.6	2.1	2.7	1.1	4.0	2.3	-	-	-	-	3.4	2.3	-	-	-	-	-	-	-	-	-	-
2	3.7	2.2	3.4	2.0	3.2	1.7	4.8	2.6	-	-	-	-	3.9	2.5	-	-	-	-	-	-	-	-	-	-
3	3.4	2.8	3.2	1.8	3.0	1.5	4.8	2.5	-	-	-	-	4.0	1.2	-	-	-	-	-	-	-	-	-	3.0
4	3.8	2.3	3.5	2.1	3.0	1.0	3.5	1.4	-	-	-	-	1.8	.5	-	-	-	-	-	-	-	-	6.6	3.6
5	3.7	2.5	4.3	2.4	3.5	1.8	4.0	2.5	-	-	-	-	3.3	.2	-	-	-	-	-	-	-	-	6.2	4.8
6	3.7	2.2	4.3	2.6	3.4	.7	3.4	1.7	-	-	-	-	3.8	1.5	-	-	-	-	-	-	-	-	8.3	3.7
7	3.4	1.0	4.4	1.4	3.4	1.4	3.6	1.8	-	-	-	-	4.1	1.3	-	-	-	-	-	-	-	-	4.6	3.0
8	3.0	1.1	3.6	1.8	3.8	2.0	2.8	.8	-	-	-	-	3.6	1.5	-	-	-	-	-	-	-	-	4.6	3.1
9	3.2	1.8	4.3	2.5	3.3	1.8	2.7	1.5	-	-	-	-	2.3	.2	-	-	-	-	-	-	-	-	4.3	2.8
10	3.2	1.7	3.7	1.2	3.2	.9	3.1	2.1	-	-	-	-	1.9	-.1	-	-	-	-	-	-	-	-	3.6	2.5
11	4.8	2.8	3.1	1.9	3.3	1.7	3.2	1.1	-	-	-	-	2.6	.7	-	-	-	-	-	-	-	-	4.2	2.5
12	4.1	2.6	3.9	2.7	3.5	1.4	2.5	.6	3.1	-	3.8	1.9	2.8	1.3	-	-	-	-	-	-	-	-	3.4	2.2
13	3.9	2.1	4.9	2.1	2.6	1.0	2.8	1.2	4.2	2.3	4.5	2.5	2.7	1.4	-	-	8.1	-	-	-	-	-	3.4	1.8
14	3.7	2.1	2.2	.6	3.1	1.9	2.8	1.3	-	-	4.1	2.3	3.5	1.9	-	-	-	-	-	-	-	-	2.8	1.4
15	3.3	1.8	2.8	1.3	2.1	-.5	2.7	1.1	-	-	3.8	2.4	4.2	3.2	-	-	-	-	-	-	-	-	-	1.4
16	3.0	1.8	3.3	2.3	2.2	-.7	3.1	1.1	-	-	3.4	.3	4.3	3.0	-	-	-	-	-	-	-	-	-	-
17	3.2	1.9	3.9	2.1	3.2	1.3	3.5	1.7	-	-	2.1	.4	5.5	2.6	-	-	-	-	-	-	-	-	-	-
18	3.2	1.9	5.7	3.6	3.5	1.9	3.7	1.5	-	-	2.9	1.4	4.3	3.3	-	-	-	-	-	-	-	-	-	-
19	2.7	1.8	3.4	.8	3.4	1.3	3.6	1.4	-	-	3.5	2.0	5.1	3.2	-	-	-	-	-	-	-	-	-	-
20	3.9	2.0	2.8	.7	3.5	1.1	4.0	2.5	-	-	2.5	1.2	-	-	-	-	-	-	-	-	-	-	-	-
21	4.6	3.2	3.1	1.0	3.5	.5	3.8	1.6	-	-	3.1	1.0	-	-	-	-	-	-	-	-	-	-	-	-
22	4.7	3.2	2.4	.3	2.6	.5	2.8	1.5	-	-	3.9	2.9	-	-	-	-	-	-	-	-	-	-	-	-
23	4.2	1.6	2.8	1.0	3.3	1.9	2.8	1.5	-	-	6.2	2.6	-	-	-	-	-	-	-	1.5	-	-	-	-
24	3.2	1.3	3.4	2.0	3.3	1.0	3.3	1.6	-	-	5.2	3.2	-	-	-	-	-	-	2.9	1.0	-	-	-	-
25	3.3	1.5	3.7	1.2	2.8	1.6	4.3	2.2	-	-	3.2	1.5	-	-	-	-	-	-	3.0	1.0	-	-	4.2	-
26	4.0	2.1	1.9	.3	2.9	1.0	3.1	1.3	-	-	1.9	.3	-	-	-	-	-	-	2.8	1.0	-	-	4.4	3.1
27	3.9	1.5	2.7	.7	2.9	1.3	3.0	1.3	-	-	3.8	1.2	-	-	-	-	-	-	3.1	.8	-	-	4.1	2.9
28	3.1	1.9	2.5	1.1	3.2	1.9	2.3	-		-	3.8	2.3	-	-	-	-	-	-	2.9	1.0	-	-	3.9	1.8
29	3.5	2.3	2.9	1.7	3.8	2.3	-	-1.2		-----	4.1	2.7	-	-	-	-	-	-	-	-	-	-	3.5	2.1
30	3.7	2.6	2.5	1.1	4.1	2.3	2.6	.8		-----	4.1	2.7	-	-	-	-	-	-	-	-	-	-	3.6	2.3
31	3.8	2.8		------	3.7	1.8	3.2	-		-----	3.7	2.0	-	------	-	-		------	-	-	-	-		-------

08074800 Keegans Bayou at Roark Road near Houston, Tex.

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

DRAINAGE AREA.--9.64 mi² (24.97 km²). Prior to Jan. 1, 1967, 9.66 mi² (25.02 km²). Prior to Oct. 1, 1971, 9.28 mi² (24.04 km²). 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.--9 years, 9.29 ft³/s (0.263 m³/s), 6,730 acre-ft/yr (8.30 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,570 ft³/s (44.5 m³/s) June 13, elevation, 73.37 ft (22.36 m); minimum daily, 0.56 ft³/s (16 dm³/s) Oct. 15.
Period of record: Maximum discharge, 1,570 ft³/s (44.5 m³/s) June 13, 1973, elevation, 73.37 ft (22.36 m); no flow for many days.

REMARKS.--Records fair. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	2.2	2.0	43	2.0	4.2	1.1	4.9	2.4	2.5	16	4.7
2	1.8	1.3	1.3	30	1.8	3.0	1.3	38	1.3	2.2	3.6	3.6
3	2.9	44	1.2	68	1.5	3.1	1.8	19	1.5	1.4	3.0	1.8
4	2.9	14	1.2	36	1.5	2.5	1.9	6.7	1.2	1.2	2.4	135
5	2.9	3.9	1.2	51	3.0	2.9	1.4	5.5	22	1.1	2.4	290
6	2.8	7.2	1.2	82	1.7	3.2	2.9	4.8	13	1.5	4.3	338
7	1.2	112	1.1	91	1.6	2.7	5.0	19	1.5	158	5.0	160
8	.72	50	1.2	55	16	2.4	1.4	5.4	3.3	172	2.7	100
9	.62	22	1.1	23	71	2.6	1.1	7.8	3.2	98	4.0	40
10	1.1	6.5	2.5	27	48	5.8	1.1	8.7	1.4	64	9.5	13
11	.90	3.9	1.6	53	15	4.6	2.2	7.0	81	20	4.4	8.1
12	1.8	2.0	1.7	45	7.3	2.5	2.2	83	456	5.6	4.2	10
13	1.3	60	1.1	27	106	2.2	2.7	26	735	2.8	4.2	9.5
14	.70	35	7.4	16	96	3.0	4.8	8.2	461	2.0	4.9	9.1
15	.56	13	33	12	46	2.5	112	4.7	229	2.0	3.5	7.0
16	.85	4.7	14	10	19	2.2	418	3.9	130	1.9	3.9	5.1
17	1.7	3.1	5.2	8.5	48	1.7	336	5.2	60	3.0	3.3	4.4
18	1.1	137	2.2	6.5	73	1.4	251	4.8	16	3.2	2.4	3.4
19	.69	81	2.9	3.6	40	1.7	167	2.8	6.8	3.8	1.9	2.2
20	.84	54	1.4	2.8	17	3.4	109	4.4	25	3.7	2.0	2.1
21	.76	18	2.1	2.3	29	3.0	48	2.0	37	3.7	2.0	1.9
22	31	7.3	1.3	2.1	33	1.6	19	2.0	9.2	2.5	1.8	1.8
23	13	6.0	1.2	3.0	47	66	12	2.0	5.6	2.3	2.2	7.6
24	5.4	9.2	1.2	2.2	23	97	10	1.9	3.5	2.3	1.7	12
25	2.5	9.9	1.0	33	11	67	8.5	1.8	2.8	2.2	1.8	59
26	1.7	5.4	1.1	18	6.5	36	15	1.6	1.7	2.6	3.0	34
27	1.7	3.4	1.1	8.1	5.4	9.2	7.7	1.5	2.9	9.3	2.2	23
28	2.7	4.0	3.0	4.2	4.6	3.6	6.4	1.4	4.3	2.9	9.9	14
29	2.8	3.5	2.7	4.3	------	2.7	4.7	1.4	2.1	2.4	4.7	7.2
30	1.7	3.3	1.8	4.8	------	1.8	5.6	2.6	1.6	2.7	4.3	5.0
31	2.6	------	1.2	2.7	------	1.4	------	2.6	------	3.0	2.8	------
TOTAL	98.14	726.8	102.2	775.1	774.9	346.9	1,560.8	290.6	2,321.3	585.8	124.0	1,312.5
MEAN	3.17	24.2	3.30	25.0	27.7	11.2	52.0	9.37	77.4	18.9	4.00	43.8
MAX	31	137	33	91	106	97	418	83	735	172	16	338
MIN	.56	1.3	1.0	2.1	1.5	1.4	1.1	1.4	1.2	1.1	1.7	1.8
AC-FT	195	1,440	203	1,540	1,540	688	3,100	576	4,600	1,160	246	2,600
(††)	1.46	6.48	1.09	3.62	3.98	2.83	6.32	2.70	12.71	4.38	3.62	7.91

CAL YR 1972 TOTAL 3,646.93 MEAN 9.96 MAX 435 MIN .56 AC-FT 7,230 †† 42.19
WTR YR 1973 TOTAL 9,019.04 MEAN 24.7 MAX 735 MIN .56 AC-FT 17,890 †† 57.10

PEAK DISCHARGE (BASE, 250 FT³/S, REVISED)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11- 7	0100	68.67	294	6-13	1300	73.37	1,570
11-18	0930	68.79	338	7- 7	1900	69.04	617
2-13	1700	68.49	398	9- 6	0200	69.41	684
4-16	0500	69.25	750	9-25	1700	66.61	263

†† Weighted-mean rainfall, in inches, based on three 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 (2.6 km) upstream from Harris Gully, and 11.6 miles (18.7 km) upstream from Buffalo Bayou.

DRAINAGE AREA.--88.4 mi² (229 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 7.16 ft (2.18 m) below mean sea level, adjustment of 1973; prior record unadjusted for land-surface subsidence. Prior to June 20, 1936, nonrecording gage and June 20, 1936, to Nov. 25, 1959, water-stage recorder at site 0.8 mile (1.3 km) downstream at same datum.

AVERAGE DISCHARGE.--37 years, 101 ft³/s (2.86 m³/s), 73,170 acre-ft/yr (90.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,800 ft³/s (702 m³/s) June 13, gage height, 49.90 ft (15.21 m); minimum daily, 37 ft³/s (1.05 m³/s) Dec. 25.

Period of record: Maximum discharge, 24,800 ft³/s (702 m³/s) June 13, 1973, gage height 49.90 ft (15.21 m); maximum gage height, 51.70 ft (15.76 m) Aug. 28, 1945; minimum daily discharge, 0.1 ft³/s (2.8 dm³/s) Oct. 11, 12, 1937, Mar. 14, Apr. 1, 1958.

Maximum stage since at least 1911, 56.0 ft (17.1 m) 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 (15.4 m) before channel rectification, former site, discharge, 11,100 ft³/s (314 m³/s), from current-meter measurement at Lawndale Avenue Bridge, about 8 miles (13 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	56	45	862	74	59	53	70	48	53	179	102
2	66	56	43	343	55	58	49	250	46	58	182	123
3	61	524	44	455	51	58	51	600	44	51	103	72
4	55	235	43	223	49	67	46	200	50	50	74	1,770
5	54	82	62	375	48	105	48	75	574	66	67	3,080
6	52	71	50	615	45	109	159	50	346	188	97	2,760
7	51	1,950	41	547	48	57	197	350	56	2,970	117	617
8	49	258	47	313	371	54	64	200	99	1,660	54	377
9	50	151	42	165	699	55	60	100	173	459	96	229
10	49	77	53	213	333	74	46	55	72	246	58	168
11	51	82	47	455	173	58	47	45	5,130	146	86	191
12	50	57	123	304	114	50	54	800	6,840	84	114	966
13	52	1,170	47	223	1,680	48	51	325	8,950	72	237	284
14	49	307	125	145	915	58	190	115	2,910	57	131	155
15	46	157	256	112	303	48	1,010	58	999	52	80	90
16	48	82	125	90	160	107	4,590	49	488	53	58	65
17	48	63	67	74	559	50	3,480	46	279	48	229	55
18	51	1,850	52	68	626	47	1,410	47	149	53	168	52
19	58	574	48	54	295	46	629	47	81	51	128	50
20	52	261	45	53	182	46	370	48	103	52	97	48
21	95	164	44	57	305	44	214	49	227	54	53	46
22	358	104	47	48	341	44	100	46	88	48	53	45
23	191	69	45	48	462	1,940	65	47	65	50	52	45
24	91	189	40	46	234	1,530	55	47	61	57	53	96
25	56	197	37	554	156	475	50	45	76	53	51	118
26	92	86	40	254	111	218	262	44	58	52	46	276
27	67	64	40	134	80	109	80	42	53	230	45	242
28	52	53	41	80	68	72	60	44	54	78	88	216
29	59	48	43	60	------	73	50	45	51	55	181	76
30	71	47	52	52	------	60	50	45	52	58	62	61
31	56	------	44	82	------	58	------	45	------	78	50	------
TOTAL	2,289	9,084	1,878	7,104	8,537	5,877	13,590	4,029	28,222	7,282	3,089	12,475
MEAN	73.8	303	60.6	229	305	190	453	130	941	235	99.6	416
MAX	358	1,950	256	862	1,680	1,940	4,590	800	8,950	2,970	237	3,080
MIN	46	47	37	46	45	44	46	42	44	48	45	45
AC-FT	4,540	18,020	3,730	14,090	16,930	11,660	26,960	7,990	55,980	14,440	6,130	24,740

CAL YR 1972 TOTAL 55,567 MEAN 152 MAX 4,460 MIN 37 AC-FT 110,200 ††
WTR YR 1973 TOTAL 103,456 MEAN 283 MAX 8,950 MIN 37 AC-FT 205,200 †† 62.64

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	0230	37.89	8,590	4-16	0515	38.79	9,570
11-18	1000	36.53	7,230	6-13	1400	49.90	24,800
2-13	1730	36.66	7,360	7- 7	1930	39.24	10,100
3-23	1745	35.98	6,680	9- 4	1830	36.61	7,310

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

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 (20.4 km) upstream from gage, Sims Bayou at Houston, and 19.7 miles (31.7 km) upstream from mouth.

DRAINAGE AREA.--20.2 mi² (52.3 km²).

PERIOD OF RECORD.--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.--9 years, 26.2 ft³/s (0.742 m³/s), 18,980 acre-ft/yr (23.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,220 ft³/s (120 m³/s) June 13, elevation, 55.02 ft (16.77 m); minimum daily, 2.8 ft³/s (79 dm³/s) Aug. 5.
Period of record: Maximum discharge, 4,220 ft³/s (120 m³/s) June 13, 1973, elevation, 55.02 ft (16.77 m); minimum daily, 1.5 ft³/s (42 dm³/s) 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 1973, 298 acre-ft (0.367 hm³) of ground water was used for cooling purposes and released to bayou about 300 ft (91 m) above gage. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	6.6	7.6	194	14	12	6.3	6.2	4.4	11	116	7.0
2	7.9	5.9	7.2	172	12	12	6.3	58	4.2	12	67	6.8
3	8.4	121	7.1	138	11	12	5.7	50	4.6	7.2	14	4.5
4	6.5	30	7.1	59	10	12	5.7	10	4.0	7.0	4.8	352
5	6.3	15	9.1	74	10	14	5.8	7.1	31	6.9	2.8	972
6	6.2	12	8.4	188	10	13	13	12	30	16	19	944
7	5.8	468	7.6	131	9.7	12	18	136	6.5	526	69	196
8	6.0	74	7.6	87	38	12	7.7	40	6.6	529	52	170
9	6.3	20	7.7	33	175	13	6.8	11	8.4	107	8.5	123
10	6.3	11	8.6	34	95	12	6.3	8.2	6.6	30	4.1	47
11	6.6	9.2	8.5	103	31	11	6.1	8.0	389	14	18	39
12	6.8	8.4	15	92	19	10	6.3	92	1,420	10	11	206
13	6.8	258	10	54	98	10	6.3	92	2,150	6.9	29	88
14	6.4	80	10	31	169	11	16	19	839	7.3	38	34
15	6.2	20	13	21	44	10	80	8.9	163	6.9	10	18
16	6.4	12	9.6	16	22	12	902	6.9	44	6.7	19	12
17	6.9	10	8.8	14	96	9.9	928	6.1	19	6.6	9.8	9.1
18	5.9	366	8.5	13	164	8.9	401	6.1	13	94	9.8	8.0
19	6.3	158	8.2	12	60	9.2	81	6.3	10	12	5.3	7.5
20	9.1	42	7.8	11	27	9.4	30	5.8	12	6.4	4.8	7.2
21	10	19	7.9	12	47	9.3	17	5.8	23	6.7	4.5	7.5
22	23	14	8.8	11	58	9.1	12	5.5	12	5.9	4.1	7.8
23	15	10	8.0	12	89	437	10	5.1	9.3	5.4	6.0	13
24	10	23	8.0	13	40	533	9.5	6.3	8.7	5.4	4.7	8.8
25	9.2	37	7.7	93	22	122	9.1	6.2	9.3	17	5.0	8.8
26	6.0	17	7.6	88	17	27	13	5.8	8.1	17	4.2	7.5
27	6.6	12	7.5	34	14	13	8.6	5.4	7.2	50	3.9	13
28	5.9	9.6	7.6	24	13	7.6	7.4	5.1	7.5	8.8	13	13
29	6.6	8.5	7.7	15	------	8.4	7.1	4.3	7.8	6.4	11	8.2
30	7.4	8.1	8.6	13	------	7.7	6.9	4.4	7.6	5.7	5.4	6.1
31	7.2	------	8.4	17	------	7.1	------	3.8	------	4.8	6.6	------
TOTAL	247.0	1,935.3	265.2	1,809	1,414.7	1,406.6	2,638.9	647.3	5,265.8	1,556.0	580.3	3,344.8
MEAN	7.97	64.5	8.55	58.4	50.5	45.4	88.0	20.9	176	50.2	18.7	111
MAX	23	468	15	194	175	533	928	136	2,150	529	116	972
MIN	5.8	5.9	7.1	11	9.7	7.1	5.7	3.8	4.0	4.8	2.8	4.5
AC-FT	490	3,840	526	3,590	2,810	2,790	5,230	1,280	10,440	3,090	1,150	6,630
(††)	1.17	7.33	.89	4.45	3.29	3.49	6.95	3.22	11.08	5.81	5.23	8.52

CAL YR 1972 TOTAL 8,734.7 MEAN 23.9 MAX 937 MIN 4.0 AC-FT 17,330 †† 39.64
WTR YR 1973 TOTAL 21,110.9 MEAN 57.8 MAX 2,150 MIN 2.8 AC-FT 41,870 †† 61.43

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11- 7	0230	48.97	1,000	6-13	1500	55.02	4,220
11-18	1045	47.67	667	7- 7	1930	51.02	1,810
3-23	2015	49.78	1,260	9- 6	0145	51.26	1,700
4-17	1530	51.86	2,200				

†† Weighted-mean rainfall, in inches, based on three 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 (11.3 km) upstream from mouth.

DRAINAGE AREA.--64.0 mi² (166 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 3.09 ft (0.94 m) below mean sea level, adjustment of 1973. Prior records unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--21 years, 68.8 ft³/s (1.95 m³/s), 49,850 acre-ft/yr (61.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,000 ft³/s (283 m³/s) July 7, gage height, 32.11 ft (9.79 m); minimum daily, 18 ft³/s (0.51 m³/s) May 29-31, June 2-4.
Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) July 7, 1973, gage height, 32.11 ft (9.79 m); minimum daily, 0.9 ft³/s (25 dm³/s) Aug. 7, 1955.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	20	32	568	63	39	29	27	19	26	77	23
2	33	19	31	561	39	38	28	302	18	37	268	28
3	27	366	30	385	31	37	27	433	18	25	220	21
4	26	494	31	203	31	45	25	69	18	24	48	801
5	25	69	43	115	29	159	26	38	99	29	29	2,960
6	24	43	35	346	29	155	63	31	208	87	34	2,460
7	21	2,030	29	342	28	78	127	526	31	2,480	307	539
8	20	335	34	261	158	54	37	258	25	3,720	367	181
9	20	89	32	104	594	46	30	64	38	364	61	260
10	21	48	37	125	338	73	25	35	27	100	38	94
11	21	37	35	323	129	57	24	28	1,780	47	57	82
12	21	33	101	305	70	39	24	153	6,610	36	187	449
13	21	990	56	188	231	40	23	240	4,790	30	63	264
14	23	296	78	109	595	46	205	66	3,130	30	102	93
15	22	87	107	73	178	41	635	34	431	28	44	51
16	19	50	50	53	78	55	2,430	26	120	28	38	37
17	20	39	37	44	275	45	2,790	22	57	28	68	30
18	19	1,340	34	42	564	34	1,660	21	41	26	122	28
19	19	626	36	36	228	31	332	22	35	26	40	25
20	21	161	35	36	127	33	132	23	35	25	30	23
21	37	78	34	41	151	31	74	21	80	25	26	22
22	109	58	32	32	181	29	50	21	36	25	23	23
23	72	45	30	28	289	748	37	19	30	24	23	37
24	29	95	29	31	156	1,670	33	20	31	24	24	31
25	25	198	28	253	84	410	32	20	31	119	24	26
26	26	82	27	269	60	119	70	20	30	84	25	24
27	24	54	27	104	48	65	33	20	31	217	27	24
28	22	42	29	67	45	47	28	19	30	67	25	34
29	23	37	27	44	------	41	25	18	27	30	89	24
30	24	34	42	34	------	36	25	18	26	24	43	21
31	23	------	30	35	------	33	------	18	------	27	27	------
TOTAL	894	7,895	1,239	5,157	4,829	4,374	9,079	2,632	17,882	7,862	2,556	8,715
MEAN	28.8	263	40.0	166	172	141	303	84.9	596	254	82.5	291
MAX	109	2,030	107	568	595	1,670	2,790	526	6,610	3,720	367	2,960
MIN	19	19	27	28	28	29	23	18	18	24	23	21
AC-FT	1,770	15,660	2,460	10,230	9,580	8,680	18,010	5,220	35,470	15,590	5,070	17,290
(††)	1.43	7.73	1.15	4.35	3.22	3.76	8.09	3.25	11.84	7.29	4.81	8.79

CAL YR 1972 TOTAL 31,149 MEAN 85.1 MAX 2,390 MIN 18 AC-FT 61,780 †† -
WTR YR 1973 TOTAL 73,114 MEAN 200 MAX 6,610 MIN 18 AC-FT 145,000 †† 65.71

PEAK DISCHARGE (BASE, 1,600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	0700	22.24	3,270	6-13	2000	30.65	8,600
11-18	1500	20.23	2,290	7- 7	2300	32.11	10,000
3-23	2400	21.63	2,860	9- 5	0400	24.17	3,780
4-17	1900	25.89	5,320				

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

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 (1.3 km) upstream from auxiliary gage at mouth of Berry Creek, and 1.7 miles (2.7 km) upstream from Sims Bayou.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--April 1964 to current year (gage heights only for some periods).

GAGE.--Water-stage recorder. Datum of gage is 2.72 ft (0.83 m) below mean sea level. Adjustment of 1973; prior record unadjusted for land-surface subsidence. Auxiliary water-stage recorder 0.8 mile (1.3 km) downstream at same datum. June 25, 1964, to Jan. 11, 1965, auxiliary nonrecording gage 0.8 mile (1.3 km) downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 4,500 ft³/s (127 m³/s) June 11, gage height, 20.80 ft (6.34 m); maximum gage height, 21.33 ft (6.50 m) June 11; minimum discharge not determined.
Period of record: Maximum discharge, 4,500 ft³/s (127 m³/s) June 11, 1973, gage height, 20.80 ft (6.34 m); maximum gage height, 21.33 ft (6.50 m) June 11, 1973; 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		-	-	150	-	-	-	-	-	-	-	-
2		-	-	74	-	-	-	143	-	-	-	-
3		232	-	89	-	-	-	58	-	-	-	-
4		122	-	15	-	-	-	12	-	-	-	356
5		20	-	-	-	96	-	-	111	6.0	-	430
6		18	-	-	-	50	33	-	50	36	-	217
7		378	-	-	-	15	35	143	10	426	167	49
8		28	-	-	67	-	10	21	-	487	56	20
9		-	-	-	119	-	-	-	-	29	12	-
10		-	-	-	28	-	-	-	-	-	-	-
11		-	-	-	10	-	-	-	942	-	-	-
12		-	-	-	-	-	-	-	1,950	-	-	-
13		162	-	-	70	-	-	-	327	-	-	-
14		18	101	-	39	-	76	-	76	-	38	-
15		-	59	-	12	-	164	-	25	-	20	-
16		-	20	-	-	-	482	-	-	-	-	-
17		-	-	-	76	-	598	-	-	-	-	-
18		315	-	-	54	-	268	-	-	-	-	-
19		50	-	-	15	-	59	-	-	-	-	-
20		15	-	-	-	-	15	-	-	-	-	-
21		-	-	-	-	-	-	-	-	-	-	-
22		-	-	-	-	-	-	-	-	-	-	-
23		-	-	-	-	254	-	-	-	-	-	-
24		-	-	-	-	168	-	-	-	-	-	-
25		-	-	69	-	31	-	-	-	17	-	-
26		-	-	21	-	-	-	-	-	8.0	-	-
27		-	-	-	-	-	-	-	-	94	-	-
28		-	-	-	-	-	-	-	-	16	-	-
29		-	-	-	------	-	-	-	-	-	-	-
30		-	-	-	------	-	-	-	-	-	-	-
31		------	-	-	------	-	------	-	------	-	-	------
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-
(††)	1.85	7.72	2.29	3.98	3.20	3.80	7.23	3.34	15.69	8.13	4.73	8.81

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	0200	a12.35	1,250	7-7	2300	20.88	1,260
11-18	1000	a11.50	1,020	8-7	1830	a11.39	965
4-17	1500	a15.74	1,880	9-4	1830	a13.73	1,400
6-11	2045	a21.33	4,500				

†† Weighted-mean rainfall, in inches, based on three rain gages.
a Peak gage height did not occur at same time as peak discharge.

08075730 Vince Bayou at Pasadena, Tex.

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

DRAINAGE AREA.--8.21 mi² (21.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2.54 ft (0.77 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers).

EXTREMES.--Water year 1972: Maximum discharge, 1,730 ft³/s (49.0 m³/s) May 12, gage height, 13.55 ft (4.13 m); no flow Aug. 5, 6, 18.
Water year 1973: Maximum discharge, 3,360 ft³/s (95.2 m³/s) June 11, gage height, 16.20 ft (4.94 m); minimum daily, 0.15 ft³/s (4.2 dm³/s) Apr. 11.
Period of record: Maximum discharge, 3,360 ft³/s (95.2 m³/s) June 11, 1973, gage height, 16.20 ft (4.94 m); no flow Aug. 5, 6, 18, 1972.

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

DISCHARGE, IN CUBIC 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	1.5	1.4	6.7	9.1	6.7	.92	4.0	.23	.20	.18	2.4
2	2.0	1.5	74	3.0	3.7	6.4	.50	60	.22	.23	.14	3.1
3	2.0	.29	8.4	.97	2.5	3.5	.40	5.2	.20	.60	1.4	2.0
4	2.0	.29	2.9	3.1	3.7	2.7	.45	1.1	.20	29	.03	1.0
5	2.0	.80	477	1.3	3.7	2.4	.26	.89	.19	.66	0	.50
6	2.0	.26	100	.41	5.5	1.8	.26	.80	2.6	.83	0	.50
7	2.0	.26	15	.44	4.0	1.1	.26	96	3.7	1.0	.03	.50
8	2.1	.26	11	4.5	3.4	.60	.65	12	4.0	2.1	1.1	2.0
9	2.1	1.8	10	4.6	2.7	.50	.82	7.3	3.9	1.5	1.8	1.0
10	2.1	.26	14	4.4	.29	.50	.29	76	94	19	3.3	.50
11	2.4	1.5	8.4	4.4	44	.50	.29	176	1.9	2.7	3.4	.50
12	2.4	.26	44	.88	19	.50	.49	392	12	5.9	2.1	1.0
13	1.8	4.0	13	.92	4.6	.60	5.3	50	.17	3.5	2.2	.50
14	4.3	5.2	9.1	.89	2.7	.80	5.8	23	.13	7.7	7.6	.50
15	5.5	4.9	16	.75	2.4	32	5.2	11	12	3.1	8.2	3.0
16	11	1.8	8.8	1.0	1.8	17	5.5	7.8	72	3.3	4.6	2.0
17	15	.29	18	.92	2.1	2.9	5.8	4.7	14	11	.08	1.0
18	6.3	65	6.6	1.2	4.6	.99	2.3	.95	6.3	4.1	0	1.0
19	3.5	4.6	3.6	8.7	4.3	.28	.77	.74	4.3	2.2	.05	1.0
20	11	1.5	3.2	2.6	1.5	36	1.2	.46	4.6	6.4	.13	3.0
21	4.3	.29	2.0	.65	1.2	14	7.2	.29	4.3	1.1	.11	.78
22	1.5	.29	1.7	4.5	2.4	5.4	3.5	.29	1.2	2.2	1.3	.13
23	1.2	19	.38	4.7	5.5	4.8	.49	3.5	.17	.50	10	6.3
24	1.2	3.5	.66	4.3	6.3	4.9	.88	4.4	.17	.09	12	51
25	1.2	3.5	.85	1.5	5.5	4.9	.37	4.6	.17	1.1	5.9	24
26	5.2	3.1	.80	1.6	2.4	4.7	4.0	4.0	.20	2.7	2.7	49
27	6.7	.80	1.1	.47	1.5	4.1	255	4.2	3.5	4.0	.23	32
28	4.0	1.2	6.2	1.4	1.5	4.3	40	4.8	4.0	4.9	.06	72
29	1.8	.29	7.5	38	14	4.4	7.0	2.2	3.5	4.3	1.5	5.6
30	1.5	1.8	7.4	155	------	4.4	4.8	.26	1.5	4.0	1.8	74
31	1.5	------	6.2	21	------	4.0	------	.26	------	.76	2.4	------
TOTAL	113.6	130.04	879.19	284.80	165.89	177.67	360.70	958.74	255.35	130.67	74.34	341.81
MEAN	3.66	4.33	28.4	9.19	5.72	5.73	12.0	30.9	8.51	4.22	2.40	11.4
MAX	15	65	477	155	44	36	255	392	94	29	12	74
MIN	1.2	.26	.38	.41	.29	.28	.26	.26	.13	.09	0	.13
AC-FT	225	258	1,740	565	329	352	715	1,900	506	259	147	678

CAL YR 1971 TOTAL 1,122.83 MEAN 3.08 MAX 477 MIN 0 AC-FT 2,230
WTR YR 1972 TOTAL 3,872.80 MEAN 10.6 MAX 477 MIN 0 AC-FT 7,680

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
12- 5	1500	13.07	1,480
4-27	1800	13.15	1,520
5-12	0700	13.55	1,730

08075730 Vince Bayou at Pasadena, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.9	3.0	99	4.5	2.2	2.8	3.8	1.1	4.0	26	.48
2	4.2	4.7	3.7	11	3.2	1.2	2.0	204	.60	3.6	8.2	.23
3	5.2	254	4.0	33	3.3	.57	.19	22	4.2	1.0	4.4	1.1
4	5.3	53	3.7	6.1	2.7	2.6	.48	3.8	4.6	9.5	4.6	440
5	6.3	8.1	3.7	5.2	.54	103	2.1	3.1	167	11	4.6	248
6	8.3	16	3.8	45	.60	19	20	2.4	21	52	7.3	72
7	3.3	200	3.2	28	3.2	6.1	9.0	123	4.7	626	192	5.7
8	2.7	9.4	4.2	7.9	45	4.8	1.8	8.5	5.0	172	21	4.1
9	2.4	6.8	3.5	3.8	54	4.3	1.8	3.1	30	12	5.9	3.2
10	2.0	5.6	17	14	9.6	5.0	.16	2.1	4.4	3.4	2.9	4.5
11	3.4	6.1	5.0	40	5.2	4.3	.15	3.5	776	2.3	2.0	6.1
12	1.7	5.2	40	18	4.2	4.2	1.5	32	1,310	3.2	2.6	33
13	.95	185	7.7	8.3	52	4.3	1.4	7.5	41	4.5	2.2	15
14	1.1	11	56	4.3	18	4.1	48	5.2	8.7	3.9	12	9.6
15	1.4	7.0	15	2.6	7.5	4.2	89	5.4	13	4.0	5.3	7.6
16	1.8	6.4	5.0	2.1	5.9	5.9	347	5.1	5.1	3.7	6.8	7.5
17	2.1	6.8	3.6	1.5	43	3.3	594	5.1	4.3	3.4	10	7.0
18	1.9	284	3.2	1.5	21	3.2	47	1.8	3.9	2.9	12	4.1
19	1.4	24	2.2	1.1	8.7	3.3	6.4	.54	3.2	3.3	6.0	4.5
20	1.1	7.5	5.9	1.5	7.1	3.7	4.2	.29	4.5	4.1	5.6	8.7
21	86	6.9	8.2	2.9	12	3.6	3.1	.93	9.7	2.3	2.9	8.5
22	33	6.2	2.2	2.0	15	3.5	2.7	4.7	4.9	2.6	3.9	4.0
23	6.5	4.6	2.9	1.7	15	269	3.0	5.3	4.7	3.2	5.0	29
24	4.6	22	3.2	2.0	7.0	77	3.1	5.2	66	2.8	5.9	26
25	4.2	10	3.3	59	5.6	5.6	3.4	5.0	6.3	70	5.5	8.8
26	5.7	2.2	3.7	6.9	5.4	2.4	9.2	4.7	4.0	1.9	5.9	5.0
27	4.1	1.1	3.2	5.6	4.7	1.8	3.5	4.7	3.2	113	5.9	4.6
28	1.5	.97	3.4	4.0	1.5	2.7	3.2	4.4	1.5	1.4	8.4	8.5
29	4.0	.36	3.3	3.1	-------	2.4	3.1	4.4	2.6	1.2	19	20
30	1.6	.51	5.4	2.7	-------	1.1	3.1	4.3	4.0	1.9	4.3	35
31	.45	-------	3.1	4.6	-------	2.5	-------	4.7	-------	12	3.4	-------
TOTAL	211.50	1,158.34	235.3	428.4	365.44	560.87	1,216.38	490.56	2,519.20	1,142.1	411.5	1,031.81
MEAN	6.82	38.6	7.59	13.8	13.1	18.1	40.5	15.8	84.0	36.8	13.3	34.4
MAX	86	284	56	99	54	269	594	204	1,310	626	192	440
MIN	.45	.36	2.2	1.1	.54	.57	.15	.29	.60	1.0	2.0	.23
AC-FT	420	2,300	467	850	725	1,110	2,410	973	5,000	2,270	816	2,050
(††)	1.88	7.85	2.24	4.09	3.30	3.81	6.89	4.14	15.05	7.87	4.81	9.11

CAL YR 1972 TOTAL 4,646.51 MEAN 12.7 MAX 415 MIN 0 AC-FT 9,220 †† -
WTR YR 1973 TOTAL 9,771.40 MEAN 26.8 MAX 1,310 MIN .15 AC-FT 19,380 †† 71.04

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-23	1430	12.64	1,270	7-7	1945	14.14	2,080
4-17	1345	14.78	2,470	8-7	1815	13.10	1,500
5- 2	1830	13.13	1,520	9-4	1815	13.30	1,600
6-11	2100	16.20	3,360				

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

08075770 Hunting Bayou at Interstate Highway 610 at Houston, Tex.
(Formerly Hunting Bayou at U.S. Highway 90-A, Houston, Tex.)

LOCATION (revised).--Lat 29°47'35", long 95°16'04", Harris County, on left bank at downstream side of downstream service road bridge of Interstate Highway 610 in northeast section of Houston and 8.9 miles (14.3 km) upstream from mouth.

DRAINAGE AREA.--14.6 mi² (37.8 km²).

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. Prior to Oct. 1, 1972, water-stage recorder, 1,800 ft (549 m) upstream at same datum.

AVERAGE DISCHARGE.--9 years, 20.0 ft³/s (0.566 m³/s), 14,490 acre-ft/yr (17.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,380 ft³/s (95.7 m³/s) June 13, elevation, 38.11 ft (11.62 m); minimum daily, 2.7 ft³/s (76 dm³/s) June 3.
Period of record: Maximum discharge, 3,380 ft³/s (95.7 m³/s) June 13, 1973, elevation, 38.11 ft (11.62 m); minimum daily, 0.88 ft³/s (25 dm³/s) Aug. 24, 1971.

REMARKS.--Records fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	5.0	7.9	78	24	8.8	7.6	8.3	3.0	5.9	55	30
2	7.0	5.0	7.6	62	12	8.4	7.3	87	2.9	5.2	108	22
3	5.8	134	8.3	54	10	8.3	7.1	259	2.7	4.6	78	8.0
4	5.4	51	7.2	25	9.0	9.8	6.9	26	3.1	9.6	13	206
5	5.8	14	9.2	42	8.6	20	6.6	14	49	84	8.8	458
6	7.1	16	9.6	80	8.3	29	15	12	165	354	8.1	404
7	5.4	100	6.9	70	8.8	13	30	30	13	377	21	51
8	4.1	18	8.3	52	56	9.0	11	16	13	438	28	17
9	4.1	13	7.4	26	126	8.4	11	11	40	59	8.7	11
10	4.1	10	10	39	36	9.5	8.3	11	13	20	36	13
11	3.8	9.8	8.3	46	15	7.8	7.5	11	470	12	49	25
12	3.6	10	31	41	9.5	5.9	7.2	39	1,050	8.9	27	71
13	3.5	200	16	33	150	5.9	7.2	28	1,500	7.4	37	26
14	3.4	150	24	26	115	6.8	14	13	494	6.9	13	14
15	3.2	30	35	20	20	7.3	75	10	84	6.0	10	11
16	3.1	15	15	13	10	11	540	8.9	27	7.2	8.8	9.0
17	3.4	20	10	15	33	6.2	422	8.1	18	7.6	26	8.6
18	5.3	350	9.2	19	70	5.0	196	7.2	15	5.8	37	7.7
19	9.1	92	9.0	14	25	4.9	40	6.7	14	5.3	68	7.1
20	4.5	25	9.7	12	15	4.8	24	6.4	12	5.4	12	7.6
21	17	16	9.5	16	19	4.4	17	5.9	22	5.2	8.9	7.5
22	52	15	10	12	22	4.4	16	5.5	12	4.6	6.9	6.3
23	33	11	8.2	14	58	89	14	5.3	10	4.2	6.1	8.9
24	7.8	25	6.7	12	25	154	13	5.2	8.6	4.1	5.7	16
25	6.0	39	6.0	61	16	33	12	4.9	6.7	3.9	6.3	15
26	10	17	6.1	39	12	17	79	4.5	7.5	3.9	5.6	8.7
27	13	13	5.7	17	10	11	18	4.3	8.3	12	6.1	6.5
28	7.1	10	5.7	12	8.9	10	14	4.1	7.3	7.9	5.6	6.7
29	6.2	8.6	7.1	11	------	12	11	4.0	6.9	8.0	77	5.9
30	6.5	8.0	8.5	8.2	------	9.3	11	4.0	6.5	4.1	88	5.5
31	5.5	------	8.0	7.0	------	8.7	------	3.5	------	9.3	13	------
TOTAL	273.8	1,430.4	331.1	976.2	932.1	542.6	1,648.7	663.8	4,084.5	1,497.0	881.6	1,494.0
MEAN	8.83	47.7	10.7	31.5	33.3	17.5	55.0	21.4	136	48.3	28.4	49.8
MAX	52	350	35	80	150	154	540	259	1,500	438	108	458
MIN	3.1	5.0	5.7	7.0	8.3	4.4	6.6	3.5	2.7	3.9	5.6	5.5
AC-FT	543	2,840	657	1,940	1,850	1,080	3,270	1,320	8,100	2,970	1,750	2,960
(††)	2.44	6.88	1.41	4.05	3.59	2.70	6.85	2.57	14.99	5.69	7.32	7.46

CAL YR 1972 TOTAL 9,967.3 MEAN 27.2 MAX 931 MIN 1.8 AC-FT 19,770 †† 49.84
WTR YR 1973 TOTAL 14,755.8 MEAN 40.4 MAX 1,500 MIN 2.7 AC-FT 29,270 †† 65.95

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11-18	1000	31.5	1,060	7-7	2200	33.35	1,190
4-17	1730	31.98	948	9-4	2245	32.56	1,130
6-13	1630	38.11	3,380				

†† 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, 9.0 miles (14.5 km) upstream from station 08076000, and 21 miles (34 km) upstream from Halls Bayou.

DRAINAGE AREA.--35.5 mi² (91.9 km²).

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.--8 years, 24.0 ft³/s (0.680 m³/s), 17,390 acre-ft/yr (21.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,860 ft³/s (81.0 m³/s) June 13, elevation, 89.61 ft (27.31 m); minimum daily, 3.3 ft³/s (93 dm³/s) Oct. 16, 18.
Period of record: Maximum discharge, 2,940 ft³/s (83.3 m³/s) Mar. 20, 1972, elevation, 89.75 ft (27.36 m), maximum elevation, 91.09 ft (27.76 m) Feb. 21, 1969; minimum daily discharge, 0.16 ft³/s (4.5 dm³/s) Oct. 21, 22, 1969.

REMARKS.--Records good. Records furnished by Houston Lighting and Power Company show that 2,220 acre-ft (2.74 hm³) of ground water for cooling purposes was released to bayou about 8 miles (13 km) upstream from gage during the current year. No known diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	5.2	5.8	15	11	8.1	15	12	27	47	40	6.9
2	5.9	5.6	5.5	39	11	9.7	14	13	11	17	90	10
3	4.2	6.8	5.4	49	9.2	10	12	27	7.3	13	82	6.1
4	5.2	9.3	4.6	38	8.0	10	7.1	14	6.3	10	20	60
5	3.7	4.5	4.9	32	7.6	9.1	6.7	10	262	13	9.7	321
6	6.2	4.3	5.4	59	6.7	12	9.9	8.5	845	70	8.4	794
7	5.2	25	5.1	65	7.0	14	57	14	181	134	12	259
8	3.7	13	5.6	74	59	9.8	24	12	51	439	6.7	98
9	3.7	6.7	6.2	36	327	10	22	9.5	61	152	28	49
10	4.0	4.4	8.3	36	139	13	13	7.6	54	63	18	25
11	4.3	3.4	9.9	68	45	13	9.2	7.5	416	27	12	19
12	3.8	3.4	9.9	63	19	13	9.1	16	1,490	17	8.1	32
13	3.9	194	10	39	234	7.8	8.5	14	1,760	14	25	21
14	3.8	66	20	28	482	8.0	7.1	9.0	1,130	14	17	17
15	3.6	19	49	20	136	7.6	214	11	461	11	11	13
16	3.3	10	26	19	46	8.6	972	7.1	175	10	8.0	11
17	3.4	7.4	13	16	32	8.4	1,300	6.7	69	10	8.2	10
18	3.3	460	9.5	13	112	6.6	892	6.9	32	12	6.5	10
19	3.6	244	8.7	11	50	6.1	286	7.5	21	6.8	5.8	9.1
20	4.6	86	8.2	9.8	22	5.5	140	7.0	19	6.4	5.7	9.2
21	3.7	27	6.4	12	16	5.3	76	8.3	26	10	4.6	9.2
22	79	16	5.9	12	18	4.6	42	11	18	8.7	4.6	8.4
23	105	11	5.4	11	31	29	25	11	13	13	4.5	8.2
24	14	12	4.3	8.4	25	185	21	8.2	11	8.1	4.4	8.2
25	5.6	48	4.2	48	18	123	14	12	11	8.4	8.3	14
26	7.9	24	4.6	137	13	31	143	9.2	10	7.3	6.4	45
27	11	13	5.3	51	9.6	15	84	7.0	22	27	5.8	25
28	5.6	9.8	5.5	28	7.9	16	29	6.5	10	10	7.3	57
29	11	7.1	5.5	16	------	53	15	6.4	9.4	7.1	15	24
30	11	5.7	4.4	16	------	26	11	5.0	7.7	6.3	44	14
31	6.9	------	4.8	13	------	18	------	9.5	------	6.9	10	------
TOTAL	353.1	1,351.6	277.3	1,082.2	1,902.2	696.2	4,478.6	314.4	7,216.7	1,199.0	537.0	1,993.3
MEAN	11.4	45.1	8.95	34.9	67.9	22.5	149	10.1	241	38.7	17.3	66.4
MAX	105	460	49	137	482	185	1,300	27	1,760	439	90	794
MIN	3.3	3.4	4.2	8.4	6.7	4.6	6.7	5.0	6.3	6.3	4.4	6.1
AC-FT	700	2,680	550	2,150	3,770	1,380	8,880	624	14,310	2,380	1,070	3,950
(††)	3.52	5.62	1.29	3.92	3.96	3.16	6.98	1.95	12.25	5.16	4.15	7.04

CAL YR 1972 TOTAL 8,690.8 MEAN 23.7 MAX 845 MIN 2.9 AC-FT 17,240 †† 46.08
WTR YR 1973 TOTAL 21,401.6 MEAN 58.6 MAX 1,760 MIN 3.3 AC-FT 42,450 †† 59.00

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11-18	1415	85.21	943	6-13	1445	89.61	2,860
2-13	2215	85.19	997	7- 8	0130	84.05	702
4-17	1430	88.60	2,290	9- 6	0500	85.88	1,110
6- 5	2345	87.94	1,970				

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

08076000 Greens Bayou near Houston, Tex.

LOCATION.--Lat 29°55'05", long 95°18'24", Harris County, on left bank at downstream side of bridge on U.S. Highway 59, 10.5 miles (16.9 km) northeast of Houston, 12.0 miles (19.3 km) upstream from Halls Bayou, and 23.4 miles (37.7 km) upstream from mouth.

DRAINAGE AREA.--72.7 mi² (188 km²), unadjusted for basin boundary changes.

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

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft (0.20 m) below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--21 years, 47.1 ft³/s (1.33 m³/s), 34,120 acre-ft/yr (42.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,000 ft³/s (142 m³/s) June 13, gage height, 64.70 ft (19.72 m); minimum daily, 5.8 ft³/s (164 dm³/s) Oct. 16-18.
Period of record: Maximum discharge, 7,000 ft³/s (198 m³/s) July 30, 1954, gage height, 64.75 ft (19.74 m); maximum gage height, 65.75 ft (20.04 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	13	13	83	32	22	31	28	94	82	66	41
2	15	10	13	199	23	23	26	30	25	40	169	40
3	9.4	75	12	153	18	25	23	55	14	25	131	21
4	8.6	63	11	101	15	33	16	33	12	19	40	208
5	7.7	15	17	114	14	58	13	24	140	22	20	938
6	7.7	11	15	344	13	118	25	22	1,510	488	46	1,790
7	10	217	12	259	13	68	150	45	351	787	28	623
8	7.2	47	12	147	154	38	71	32	90	1,400	17	205
9	6.3	18	14	82	746	32	50	22	90	392	24	92
10	6.7	11	16	83	366	36	31	19	86	141	92	49
11	6.7	8.5	18	177	139	38	20	19	1,490	67	97	39
12	6.6	8.5	40	150	65	30	16	87	4,200	38	25	54
13	6.3	512	28	93	220	24	16	68	3,450	27	33	45
14	6.2	360	65	67	901	29	19	24	3,170	24	26	30
15	5.9	72	331	54	306	30	355	21	803	19	20	23
16	5.8	27	78	46	116	48	2,580	19	333	14	17	18
17	5.8	17	39	40	105	33	1,960	15	142	18	14	17
18	5.8	820	28	34	289	21	2,300	14	71	16	32	17
19	7.0	599	23	33	168	17	619	14	46	14	47	16
20	10	229	21	28	83	16	280	14	68	12	15	15
21	20	133	19	42	63	14	151	13	54	11	13	14
22	217	44	15	34	68	14	90	17	36	11	12	15
23	533	29	13	26	120	83	60	16	27	17	11	17
24	145	42	12	21	90	516	48	17	23	17	9.8	26
25	14	170	12	166	57	355	38	15	21	15	9.1	46
26	13	80	12	306	40	99	520	18	21	12	17	50
27	29	43	12	109	31	43	194	13	29	26	13	31
28	14	28	12	61	25	36	70	11	20	23	17	91
29	17	20	13	36	------	129	42	12	18	16	33	40
30	27	15	14	28	------	79	30	11	29	13	73	24
31	16	------	12	26	------	49	------	12	------	10	23	------
TOTAL	1,242.7	3,737.0	952	3,142	4,280	2,156	9,844	760	16,463	3,816	1,189.9	4,635
MEAN	40.1	125	30.7	101	153	69.5	328	24.5	549	123	38.4	155
MAX	533	820	331	344	901	516	2,580	87	4,200	1,400	169	1,790
MIN	5.8	8.5	11	21	13	14	13	11	12	10	9.1	14
AC-FT	2,460	7,410	1,890	6,230	8,490	4,280	19,530	1,510	32,650	7,570	2,360	9,190
(††)	3.44	5.76	1.33	3.94	3.68	3.12	7.40	2.04	12.43	4.95	3.80	7.14

CAL YR 1972 TOTAL 24,845.5 MEAN 67.9 MAX 4,600 MIN 2.1 AC-FT 49,280 †† 45.58
WTR YR 1973 TOTAL 52,217.6 MEAN 143 MAX 4,200 MIN 5.8 AC-FT 103,600 †† 59.03

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	1530	61.00	1,580	6-13	2200	64.70	5,000
2-14	0430	58.06	1,240	7- 8	0130	61.30	2,180
4-18	0100	63.71	3,560	9- 6	0800	61.43	2,230
6- 6	0500	61.48	2,250				

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

08076500 Halls Bayou at Houston, Tex.

LOCATION.--Lat 29°51'42", long 95°20'05", Harris County, on right bank at downstream side of bridge on Jensen Drive in northeast section of Houston and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--24.7 mi² (64.0 km²), unadjusted for basin boundary changes.

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

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft (0.20 m) below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--21 years, 23.4 ft³/s (0.663 m³/s), 16,950 acre-ft/yr (20.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,550 ft³/s (101 m³/s) June 13, gage height, 60.75 ft (18.52 m); minimum daily, 4.8 ft³/s (136 dm³/s) Oct. 14-17.
Period of record: Maximum discharge, 3,780 ft³/s (107 m³/s) Mar. 21, 1972, gage height, 60.70 ft (18.50 m); maximum gage height, 60.75 ft (18.52 m) June 13, 1973; no flow at times prior to 1956.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	7.5	11	135	28	18	12	12	7.8	39	224	21
2	9.4	6.7	10	125	18	19	11	14	7.2	16	139	32
3	7.4	72	10	108	15	18	11	15	6.6	11	82	38
4	6.5	50	10	53	14	28	9.7	11	6.7	9.6	32	297
5	5.9	13	14	105	13	53	9.2	10	175	14	16	757
6	5.7	9.9	15	257	13	73	21	11	400	166	30	1,040
7	5.3	193	11	133	13	38	65	22	23	617	21	149
8	5.2	29	11	77	118	25	20	12	33	636	12	52
9	5.3	14	11	45	276	26	18	9.7	57	97	12	30
10	5.0	11	13	56	86	29	12	9.3	36	40	69	22
11	4.9	9.8	13	109	44	26	11	9.2	1,130	22	65	22
12	5.0	9.8	38	70	32	18	9.7	39	1,960	15	42	39
13	4.9	383	22	50	203	16	9.5	22	2,010	13	44	29
14	4.8	61	52	37	201	21	15	10	1,040	11	16	18
15	4.8	23	172	30	55	20	193	9.0	147	10	11	13
16	4.8	15	40	29	33	34	1,280	8.2	51	10	9.7	12
17	4.8	12	24	25	65	20	1,080	8.2	28	10	48	11
18	5.2	593	18	24	132	14	558	7.9	20	9.3	36	10
19	7.0	167	17	22	58	13	108	7.6	16	9.6	42	9.5
20	5.2	48	16	21	39	12	53	7.5	41	17	13	9.2
21	8.5	29	16	28	41	12	38	7.5	31	9.0	9.6	9.0
22	177	22	14	21	46	11	28	7.6	19	8.2	9.0	8.5
23	65	16	12	17	81	91	23	7.3	14	8.2	8.0	8.5
24	11	36	11	15	48	275	20	7.3	13	9.9	7.9	15
25	6.8	80	9.5	137	33	80	17	7.1	12	8.4	7.2	18
26	8.8	35	9.0	95	26	29	92	6.6	12	8.0	7.1	12
27	11	24	9.7	43	23	19	28	6.4	12	11	8.2	10
28	6.8	18	9.5	31	20	17	16	6.0	11	7.8	8.8	26
29	6.6	13	9.7	22	------	26	14	6.6	10	7.2	143	9.6
30	7.2	12	12	19	------	19	13	6.5	15	7.0	92	8.6
31	7.6	------	10	20	------	15	------	7.3	------	7.1	14	------
TOTAL	443.4	2,012.7	650.4	1,959	1,774	1,115	3,795.1	330.8	7,344.3	1,864.3	1,278.5	2,735.9
MEAN	14.3	67.1	21.0	63.2	63.4	36.0	127	10.7	245	60.1	41.2	91.2
MAX	177	593	172	257	276	275	1,280	39	2,010	636	224	1,040
MIN	4.8	6.7	9.0	15	13	11	9.2	6.0	6.6	7.0	7.1	8.5
AC-FT	879	3,990	1,290	3,890	3,520	2,210	7,530	656	14,570	3,700	2,540	5,430
(††)	2.77	6.47	1.62	4.09	3.36	2.93	7.67	1.15	14.54	5.69	6.28	7.97

CAL YR 1972 TOTAL 14,188.6 MEAN 38.8 MAX 2,390 MIN 4.1 AC-FT 28,140 †† -
WTR YR 1973 TOTAL 25,303.4 MEAN 69.3 MAX 2,010 MIN 4.8 AC-FT 50,190 †† 64.54

PEAK DISCHARGE (BASE, 950 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	1200	56.10	1,420	7-7	2030	56.79	1,730
4-17	1800	58.44	2,400	9-4	2330	56.24	1,530
6- 5	2400	56.06	1,660	9-6	0330	57.14	1,860
6-13	1800	60.75	3,550				

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

08076700 Greens Bayou at Ley Road, Houston, Tex.

LOCATION.--Lat 29°50'13", long 95°13'59", Harris County, on right bank at downstream side of Ley Road bridge, 300 ft (91 m) downstream from mouth of Halls Bayou, and in northeast section of Houston.

DRAINAGE AREA.--213 mi² (552 km²).

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 2.13 ft (0.65 m) below mean sea level.

EXTREMES.--Current year: Maximum discharge, 16,700 ft³/s (473 m³/s) June 13, elevation, 34.27 ft (10.45 m); minimum discharge not determined (affected by tides).
Period of record: Maximum discharge, 16,700 ft³/s (473 m³/s) June 13, 1973, elevation, 34.27 ft (10.45 m); minimum discharge not determined (affected by tides).

REMARKS.--Records fair except those below 700 ft³/s (19.8 m³/s), which are poor. Discharge computed for all storms which produce peak discharges over 700 ft³/s (19.8 m³/s). Tidal influences on the stage-discharge relationship affect discharge below about 500 ft³/s (14.2 m³/s). Discharge below 500 ft³/s (14.2 m³/s) is estimated following designated storm periods only.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	-	-	315	-	-	-		-	-	330	-
2	100	-	-	799	-	-	-		-	-	618	-
3	-	372	-	585	-	-	-		-	-	370	-
4	-	419	-	400	-	-	-		-	-	150	450
5	-	140	-	390	-	170	-		300	250	-	2,620
6	-	100	-	950	-	636	-		3,020	1,440	-	4,630
7	-	517	-	500	-	300	-		700	1,900	-	2,060
8	-	200	-	300	310	100	-		250	5,090	-	580
9	-	130	-	200	1,780	-	-		100	1,330	-	270
10	-	-	-	100	878	-	-		-	350	-	150
11	-	-	-	-	350	-	-		2,250	200	-	100
12	-	-	-	-	180	-	-		13,600	100	-	-
13	-	1,400	-	-	590	-	-		12,800	-	-	-
14	-	636	100	-	2,100	-	-		13,000	-	-	-
15	-	160	809	-	690	-	760		3,440	-	-	-
16	-	80	280	-	288	-	6,140		750	-	-	-
17	-	50	100	-	305	-	5,860		300	-	-	-
18	-	2,230	-	-	848	-	6,670		120	-	-	-
19	-	2,280	-	-	460	-	1,770		-	-	-	-
20	-	490	-	-	200	-	580		-	-	-	-
21	-	200	-	-	100	-	400		-	-	-	-
22	509	100	-	-	-	-	200		-	-	-	-
23	684	-	-	-	-	500	150		-	-	-	-
24	210	-	-	-	-	1,200	-		-	-	-	140
25	100	-	-	410	-	800	-		-	-	-	540
26	-	-	-	792	-	250	1,290		-	-	-	450
27	-	-	-	343	-	100	500		-	-	-	160
28	-	-	-	170	-	-	200		-	-	-	100
29	-	-	-	110	-------	-	100		-	-	-	-
30	-	-	-	-	-------	-	-		-	-	-	-
31	-	-------	-	-	-------	-	------		-------	-	-	------
TOTAL	-	-	-	-	-	-	-		-	-	-	-
MEAN	-	-	-	-	-	-	-		-	-	-	-
MAX	-	-	-	-	-	-	-		-	-	-	-
MIN	-	-	-	-	-	-	-		-	-	-	-
AC-FT	-	-	-	-	-	-	-		-	-	-	-

CAL YR 1972 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1973 TOTAL - MEAN - MAX - MIN - AC-FT -

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11-18	2200	18.45	4,180	6-13	2400	34.27	16,700
2-14	0400	14.28	2,580	7- 8	0800	22.56	6,140
4-16	1800	26.25	8,600	9- 6	1200	21.23	5,420
6- 6	1000	17.46	3,780				

08077000 Clear Creek near Pearland, Tex.

LOCATION.--Lat 29°35'50", long 95°17'11", Harris-Brazoria County line, at downstream side of pier of bridge on State Highway 35, 0.7 mile (1.1 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) upstream from Hickory Slough, 2.3 miles (3.7 km) north of Pearland, and about 30 miles (48 km) upstream from head of Clear Lake.

DRAINAGE AREA.--38.8 mi² (100 km²).

PERIOD OF RECORD.--July to October 1944, March to October 1946, April 1947 to December 1959, March 1963 to current year. Discharge for some high-water periods in 1944 and 1946 published in WSP 1392.

GAGE.--Water-stage recorder. Datum of gage is 26.58 ft (8.10 m) above mean sea level, adjustment of 1973; prior records unadjusted for land-surface subsidence. Prior to June 9, 1948, nonrecording gage and June 9, 1948, to Apr. 22, 1952, water-stage recorder at same site and datum 5.80 ft (1.77 m) higher.

AVERAGE DISCHARGE.--22 years (1947-59, 1963-73), 33.6 ft³/s (0.952 m³/s), 24,340 acre-ft/yr (30.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,370 ft³/s (38.8 m³/s) June 13, gage height, 17.51 ft (5.34 m); minimum daily, 0.12 ft³/s (3.4 dm³/s) Nov. 1.
Period of record: Maximum discharge, 2,170 ft³/s (61.5 m³/s) Mar. 18, 1957, gage height, 16.80 ft (5.12 m); no flow at times. Flood of June 26, 1960 (stage and discharge unknown), probably exceeded that of Mar. 18, 1957, from records of rainfall and nearby stations. Because of channel rectification in 1933, 1952, and 1968, there is no relation between historic floods and recent floods.

REMARKS.--Records good. Large area of riceland above station is irrigated with water from the Brazos River. Low flow from April to October is largely drainage from irrigated lands. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1392: 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	.12	8.4	58	15	16	10	7.3	9.8	18	36	28
2	10	.59	7.7	170	14	14	5.6	10	16	14	182	23
3	6.3	39	6.3	161	11	12	3.9	16	12	12	130	23
4	3.2	169	5.2	120	9.8	14	2.6	9.9	9.4	10	57	196
5	1.5	61	4.7	64	7.8	22	2.4	8.3	29	10	27	993
6	.82	24	4.5	111	7.1	81	4.2	6.7	48	11	17	1,060
7	.52	451	3.6	150	6.7	69	19	157	60	287	23	738
8	.34	297	3.6	145	18	35	15	147	17	1,280	86	361
9	.27	101	4.1	75	202	25	9.0	46	4.5	1,170	56	272
10	.21	42	5.7	64	184	25	5.4	27	5.9	673	31	191
11	.17	24	4.9	157	89	34	3.9	17	127	267	20	147
12	.21	17	15	174	49	18	4.1	18	1,150	107	19	164
13	.15	185	15	113	52	12	4.0	46	1,360	39	21	164
14	.14	184	22	74	103	11	9.6	27	1,300	22	19	98
15	.34	69	43	50	49	11	154	14	1,180	15	19	59
16	.31	32	23	34	26	12	810	8.7	695	14	21	31
17	.18	20	14	26	65	12	1,080	10	268	13	17	18
18	.13	343	9.5	21	221	7.3	1,230	10	106	11	20	11
19	.15	431	8.4	18	130	5.3	646	8.1	41	9.9	18	8.9
20	.15	182	7.9	15	73	5.2	266	11	34	11	16	7.4
21	.82	91	9.1	16	63	3.9	145	10	48	11	14	5.6
22	2.3	54	7.5	13	83	3.6	83	11	44	13	13	7.3
23	2.6	35	6.3	9.8	121	165	51	11	22	13	11	8.6
24	2.8	29	4.4	7.7	96	806	35	12	18	17	9.6	9.7
25	1.3	71	3.3	31	58	341	26	18	18	18	9.2	9.6
26	.63	55	2.9	88	36	132	16	25	17	28	11	10
27	.43	31	2.9	56	26	64	10	23	14	50	11	7.5
28	.35	21	2.6	38	20	33	6.2	19	12	33	11	9.6
29	1.1	15	2.4	23	------	24	5.1	6.9	19	28	42	9.8
30	.40	11	3.0	17	------	18	5.6	5.4	26	29	37	9.3
31	.21	------	3.1	14	------	14	------	4.8	------	20	31	------
TOTAL	60.03	3,084.71	264.0	2,113.5	1,835.4	2,045.3	4,667.6	751.1	6,710.6	4,253.9	1,034.8	4,680.3
MEAN	1.94	103	8.52	68.2	65.6	66.0	156	24.2	224	137	33.4	156
MAX	22	451	43	174	221	806	1,230	157	1,360	1,280	182	1,060
MIN	.13	.12	2.4	7.7	6.7	3.6	2.4	4.8	4.5	9.9	9.2	5.6
AC-FT	119	6,120	524	4,190	3,640	4,060	9,260	1,490	13,310	8,440	2,050	9,280

CAL YR 1972 TOTAL 13,075.39 MEAN 35.7 MAX 1,060 MIN .12 AC-FT 25,940
WTR YR 1973 TOTAL 31,501.24 MEAN 86.3 MAX 1,360 MIN .12 AC-FT 62,480

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	2100	12.03	623	6-13	2000	17.51	1,370
3-24	0700	13.89	901	7- 8	0900	17.05	1,290
4-18	0100	16.62	1,300	9- 6	0600	15.81	1,090

08077650 Moses Lake-Galveston Bay near Texas City, Tex.

LOCATION.--Lat 29°26'50", long 94°55'12", Galveston County, on right side of gate abutment of Texas City Flood Control Dike, one orifice located upstream and one downstream, at mouth of Moses Lake, and 4.5 miles (7.2 km) north of Texas City.

PERIOD OF RECORD.--May 1967 to current year (elevations only prior to 1973, beginning 1973 gage heights only).

GAGE.--Duplex water-stage recorder. Datum of gage is 0.49 ft (0.15 m) below mean sea level (levels by Corps of Engineers), adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height (Moses Lake), 3.8 ft (1.2 m) Mar. 23; minimum, -1.8 ft (-0.5 m) Jan. 29. Maximum gage height (Galveston Bay), 4.5 ft (1.4 m) Sept. 4, 5; minimum, -2.1 ft (-0.6 m) Jan. 29.
Period of record: Maximum elevation (Moses Lake), 3.8 ft (1.2 m) Sept. 9, 1971, and Mar. 23, 1973; minimum, -2.6 ft (-0.8 m) Mar. 12, 13, 1968. Maximum elevation (Galveston Bay), 4.7 ft (1.4 m) Feb. 14, 1969; minimum not recorded but probably occurred Mar. 12 or 13, 1968.

REMARKS.--The purpose of this station is to record gage heights of high tides in Galveston Bay and the corresponding gage heights of the water surface in Moses Lake. Moses Lake is connected to Galveston Bay by gated opening through levee. No gage heights are shown for Moses Lake until gage heights in Galveston Bay exceeds 3.0 ft (0.9 m).

MAXIMUM DAILY GAGE HEIGHT, IN FEET, GALVESTON BAY AND MOSES LAKE
WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	-	-	2.4	-	1.6	-	3.1	2.2	2.0	-	1.8	-	1.9	-	2.9	-	2.1	-	1.8	-	-	-	2.4	-
2	2.4	-	2.0	-	1.7	-	3.1	2.2	2.2	-	1.6	-	2.1	-	2.5	-	2.5	-	1.8	-	0.8	-	2.3	-
3	2.0	-	2.3	-	1.7	-	-	-	.5	-	2.1	-	2.5	-	1.5	-	2.8	-	1.6	-	1.1	-	2.7	-
4	2.2	-	2.4	-	1.8	-	-	-	.8	-	2.4	-	.6	-	2.1	-	2.5	-	1.3	-	1.3	-	4.5	2.9
5	2.0	-	2.8	-	2.2	-	-	-	.9	-	2.9	-	1.6	-	2.7	-	2.7	-	1.3	-	1.6	-	4.5	3.1
6	1.8	-	2.8	-	2.5	-	-	-	.8	-	3.8	2.9	3.1	2.5	2.8	-	1.6	-	1.0	-	1.4	-	4.3	3.3
7	1.8	-	2.2	-	2.8	-	-	-	1.4	-	1.9	-	2.6	-	2.8	-	1.4	-	1.4	-	1.5	-	-	3.0
8	1.7	-	1.8	-	2.9	-	-	-	1.2	-	2.3	-	2.2	-	2.0	-	1.8	-	1.6	-	1.5	-	-	3.0
9	1.8	-	2.3	-	2.2	-	-	-	.6	-	2.5	-	.4	-	2.0	-	2.2	-	1.4	-	1.3	-	-	-
10	2.0	-	2.2	-	1.9	-	1.7	-	1.3	-	2.7	-	.7	-	1.8	-	2.0	-	1.3	-	1.4	-	2.0	-
11	2.7	-	2.3	-	1.8	-	1.7	-	1.9	-	2.0	-	1.3	-	2.0	-	2.1	-	.9	-	1.6	-	2.1	-
12	2.6	-	2.9	-	2.3	-	.8	-	2.3	-	2.2	-	1.3	-	2.1	-	2.9	-	.8	-	1.6	-	1.8	-
13	2.5	-	2.7	-	1.9	-	1.2	-	2.3	-	2.6	-	1.0	-	2.1	-	2.8	-	1.4	-	1.6	-	-	-
14	2.2	-	1.2	-	2.2	-	1.2	-	1.9	-	2.6	-	1.8	-	2.1	-	2.4	-	1.1	-	1.7	-	-	-
15	1.9	-	1.8	-	1.5	-	1.0	-	1.1	-	2.3	-	2.4	-	1.4	-	2.3	-	1.1	-	1.4	-	-	-
16	1.7	-	1.8	-	1.4	-	1.4	-	1.7	-	2.3	-	2.4	-	1.4	-	2.2	-	1.1	-	1.7	-	-	-
17	1.7	-	3.2	1.9	2.3	-	2.0	-	2.0	-	.5	-	3.8	3.7	1.3	-	2.0	-	1.0	-	1.4	-	-	-
18	1.6	-	3.7	2.8	2.3	-	2.0	-	2.2	-	1.1	-	2.6	-	.9	-	1.7	-	1.0	-	1.3	-	-	-
19	1.5	-	2.0	-	2.2	-	1.8	-	1.8	-	.6	-	3.2	2.0	1.1	-	1.7	-	1.0	-	1.5	-	-	-
20	2.4	-	1.8	-	2.4	-	2.1	-	1.6	-	.3	-	3.7	2.0	1.3	-	1.5	-	.8	-	1.6	-	-	-
21	2.9	-	1.8	-	2.5	-	2.4	-	1.3	-	.4	-	3.5	2.0	1.4	-	1.4	-	-	-	1.9	-	-	-
22	3.0	-	1.4	-	1.6	-	1.3	-	1.4	-	2.2	-	3.1	2.0	1.5	-	1.5	-	-	-	1.8	-	-	-
23	2.9	-	1.6	-	2.4	-	1.3	-	1.4	-	4.2	3.8	2.8	-	1.5	-	1.6	-	-	-	2.1	-	-	-
24	2.0	-	2.2	-	1.6	-	1.8	-	1.3	-	3.9	3.6	2.9	-	1.3	-	1.6	-	-	-	2.0	-	-	-
25	2.2	-	2.3	-	1.8	-	2.6	-	1.3	-	1.3	-	2.4	-	1.4	-	1.6	-	-	-	2.1	-	-	-
26	3.0	-	.6	-	1.6	-	1.4	-	1.3	-	.6	-	2.0	-	1.8	-	1.6	-	-	-	2.0	-	-	-
27	2.6	-	1.0	-	2.0	-	1.7	-	1.2	-	2.1	-	.7	-	2.2	-	1.6	-	-	-	2.1	-	-	-
28	1.9	-	1.2	-	2.0	-	1.0	-	1.8	-	2.2	-	1.3	-	1.4	-	1.4	-	-	-	1.9	-	-	-
29	2.5	-	1.5	-	2.5	-	0	-	-------		2.5	-	1.5	-	1.4	-	1.3	-	-	-	2.1	-	-	-
30	2.5	-	1.0	-	2.5	-	1.1	-	-------		2.7	-	2.0	-	1.7	-	1.6	-	-	-	1.9	-	-	-
31	2.6	-	-------		3.1	2.0	2.0	-	-------		2.4	-	-------		2.3	-	-------		-	-	2.2	-	-------	

08077700 Highland Bayou at Hitchcock, Tex.

LOCATION.--Lat 29°21'12", long 95°01'49", Galveston County, at downstream side of bridge on Farm Road 2004, 0.6 mile (1.0 km) west of Hitchcock, and 7 miles (11 km) from mouth and Jones Bay.

DRAINAGE AREA.--15.6 mi² (40.4 km²).

PERIOD OF RECORD.--August 1963 to current year (elevations only prior to 1973, beginning 1973 gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 0.80 ft (0.24 m) below mean sea level, adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 10.51 ft (3.20 m) Mar. 23; minimum, -1.12 ft (-0.34 m) Jan. 29.
Period of record: Maximum gage height, 10.51 ft (3.20 m) Mar. 23, 1973; minimum unknown.
Maximum elevation since at least 1930, 14.6 ft (4.45 m) July 25, 1959, from information by local residents.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	2.37	0.95	2.56	1.63	1.58	0.45	2.71	1.57	2.11	0.85	2.16	1.39	2.22	1.65	3.06	1.97	2.40	1.34	2.20	0.77	1.05	0.42	2.90	2.15
2	2.72	1.69	2.24	1.49	1.91	.92	3.31	1.86	1.60	-.28	2.07	1.13	2.39	1.71	2.71	1.53	2.84	1.40	2.25	1.07	1.17	.44	2.73	1.94
3	2.42	1.72	2.92	2.06	1.86	.78	3.48	1.92	1.03	-.07	2.06	1.01	2.67	.97	1.97	.99	3.07	1.79	1.97	1.18	1.57	.94	3.13	2.36
4	2.63	1.80	2.94	1.97	1.88	.64	2.14	.76	1.34	.40	2.44	1.49	1.10	.12	2.34	.84	2.79	1.91	1.70	.92	1.77	1.03	7.53	2.80
5	2.46	1.97	3.04	1.82	2.30	1.33	2.48	1.54	1.39	.50	3.01	1.41	1.94	-.18	2.95	1.24	2.45	1.61	1.70	.98	1.96	.85	7.04	5.89
6	2.37	1.68	3.15	2.07	2.37	.48	2.12	1.00	1.30	.66	3.59	2.64	3.54	.92	3.01	1.79	2.41	1.35	1.50	.78	1.90	.76	6.33	3.87
7	2.28	.76	5.33	2.67	2.19	.90	2.22	1.37	1.85	.77	2.64	1.68	3.90	2.33	3.04	1.99	1.93	1.15	1.78	1.00	1.90	.75	3.87	2.37
8	1.96	1.31	3.30	1.66	2.77	1.51	1.98	.47	1.78	.90	2.60	1.39	2.44	1.39	2.62	1.53	2.21	1.53	2.04	.98	1.96	.75	3.34	2.36
9	2.04	1.22	2.93	1.91	2.10	1.21	1.60	.82	2.05	1.71	3.07	1.83	1.76	.34	2.20	1.23	2.58	1.59	1.63	.52	1.69	.66	2.98	2.16
10	2.27	1.94	2.52	.90	1.98	.55	2.15	1.50	1.95	.92	3.17	2.29	.91	-.49	2.19	1.51	2.25	1.56	1.52	.44	1.80	.58	2.62	2.02
11	2.89	1.90	2.19	1.31	1.95	1.14	2.17	1.05	2.42	.83	2.61	1.07	1.42	.08	2.27	1.62	2.61	1.45	1.16	.25	1.95	.74	2.76	1.97
12	2.94	1.91	2.73	1.92	2.29	1.02	1.29	.38	2.70	1.41	2.53	1.18	1.49	.72	1.96	1.37	6.62	2.04	1.18	.16	1.93	.93	3.20	2.00
13	2.84	1.77	3.70	2.15	1.62	.72	1.58	.42	2.76	1.47	2.99	1.67	1.41	.79	2.46	1.38	6.57	5.97	1.58	.16	2.29	1.47	3.60	1.34
14	2.61	1.95	2.15	.32	1.88	1.28	1.47	.39	2.27	.83	2.82	1.86	2.01	.97	2.33	1.37	5.97	3.38	1.58	.48	1.95	1.04	3.81	2.06
15	2.28	1.24	1.71	.87	1.63	-.46	1.46	.24	1.63	.40	2.68	1.72	2.86	1.89	1.77	1.00	3.38	2.11	1.60	.43	1.94	1.40	2.06	1.03
16	2.03	1.21	2.03	1.47	1.34	-.73	1.77	.20	1.79	.67	2.63	.40	5.67	2.17	1.69	.78	2.50	1.48	1.50	.47	3.07	1.27	1.83	.95
17	2.06	1.23	2.91	1.33	2.15	.58	2.27	.95	2.99	1.54	.70	-.05	9.54	4.20	1.49	.58	2.20	1.24	1.40	.50	2.02	1.54	1.99	.87
18	1.97	1.14	5.69	2.91	2.31	1.27	2.41	1.15	3.05	2.08	1.44	.50	8.20	6.06	1.31	.20	2.08	1.00	1.38	.48	1.86	1.17	1.87	.79
19	1.73	1.22	4.35	1.37	2.21	.76	2.13	.89	2.26	1.75	1.89	1.01	6.06	3.43	1.49	.36	2.05	1.17	1.39	.62	1.86	1.10	2.05	1.03
20	2.62	1.56	1.93	.96	2.27	.60	2.53	1.69	1.96	1.44	1.63	.81	4.06	3.04	1.60	.46	1.86	.95	1.24	.71	1.84	.77	2.25	1.14
21	3.35	2.52	2.04	.66	2.36	.48	2.71	1.45	1.68	1.10	1.76	.31	3.84	2.96	1.67	.57	1.70	.93	1.31	.83	2.22	1.16	2.21	1.17
22	3.42	2.68	1.64	.17	1.37	.06	1.59	.92	2.03	.82	2.54	1.05	3.34	2.58	1.80	.70	1.80	1.06	1.54	.89	2.12	1.07	2.29	1.16
23	3.30	1.58	1.68	.52	1.90	1.01	1.53	.90	2.03	1.67	10.51	1.84	3.12	2.10	1.88	1.01	1.98	1.47	1.81	.77	2.43	1.20	2.69	1.38
24	2.35	1.13	2.53	1.42	1.82	.27	2.14	1.09	1.93	.93	10.13	8.18	3.06	2.15	1.74	.91	2.04	1.21	1.71	.57	2.37	1.23	2.77	2.07
25	2.43	1.32	2.83	.97	1.38	.74	3.14	1.60	1.83	.77	8.18	4.22	2.75	2.02	1.86	1.02	1.90	.90	1.86	.62	2.58	1.26	2.77	2.14
26	2.98	2.29	1.06	-.20	1.49	.30	2.75	.89	1.74	.67	4.22	1.12	2.39	1.00	2.16	1.39	1.87	.73	1.72	.56	2.01	1.49	2.81	2.21
27	2.95	1.24	1.44	.68	1.54	.43	2.02	.60	1.70	.45	2.43	.59	1.00	.13	2.33	1.37	1.93	.72	1.87	.43	2.48	1.45	2.86	2.12
28	2.08	1.24	1.44	.38	1.83	.90	1.84	-.77	2.02	.70	2.45	1.60	1.61	.86	1.82	.43	1.76	.61	1.87	.53	2.47	1.66	2.52	1.28
29	2.58	1.72	1.89	1.01	2.52	.37	.55	-1.12	-------		2.73	1.93	1.92	1.38	1.83	.41	1.68	.48	1.64	.63	3.32	1.84	2.28	1.55
30	2.76	2.07	1.52	.66	2.55	1.54	1.46	-.04	-------		2.92	2.23	2.40	1.54	2.12	.78	2.00	.42	1.68	.52	3.28	1.91	2.45	1.57
31	2.73	2.03	-------		2.40	1.16	2.36	.91	-------		2.74	1.72	-------		2.53	1.11	-------		1.44	.62	2.61	1.98	-------	

08078000 Chocolate Bayou near Alvin, Tex.

LOCATION.--Lat 29°22'09", long 95°19'14", Brazoria County, on right bank 800 ft (244 m) downstream from bridge on Farm Road 1462, 5.9 miles (9.5 km) southwest of Alvin, and 6.9 miles (11.1 km) upstream from State Highway 35.

DRAINAGE AREA.--87.7 mi² (227 km²).

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 (3.14 m) above mean sea level. Prior to May 3, 1959, nonrecording gage or water-stage recorders located at various sites from 900 to 1,400 ft (274 to 427 m) upstream and at datum 3.00 ft (0.91 m) higher.

AVERAGE DISCHARGE.--24 years (1947-57, 1959-73), 104 ft³/s (2.95 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,460 ft³/s (126 m³/s) June 13, gage height, 20.82 ft (6.35 m); minimum daily, 1.0 ft³/s (28.3 dm³/s) Oct. 19.
Period of record: Maximum discharge, 7,400 ft³/s (210 m³/s) Oct. 8, 1949, gage height, 21.80 ft (6.64 m), present datum, from floodmark before channel rectification, from rating curve extended above 3,800 ft³/s (108 m³/s); no flow at times.
Maximum stage in recent years, 22.9 ft (7.0 m) July 14, 1939, former site and present datum, adjusted from floodmark 1,700 ft (518 m) to right and 550 ft (168 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	1.9	17	14	29	36	37	41	56	39	67	176
2	62	2.0	14	67	27	31	25	55	52	40	98	137
3	39	63	11	136	21	28	19	69	59	44	124	112
4	27	502	10	149	16	24	21	73	69	42	87	533
5	17	209	11	86	14	38	21	47	66	44	72	2,400
6	11	93	11	146	13	95	29	38	144	56	67	3,900
7	8.5	683	12	288	12	97	201	49	115	164	68	3,710
8	5.7	598	14	298	22	63	108	70	76	1,600	94	2,760
9	4.0	201	11	146	272	47	41	44	66	1,820	78	1,850
10	3.0	92	226	125	393	41	25	37	46	936	77	876
11	2.5	56	235	289	176	40	23	33	48	278	65	719
12	2.2	45	261	377	95	32	21	38	2,020	139	64	1,040
13	1.9	310	180	231	74	25	17	74	4,320	84	108	1,040
14	1.6	315	132	149	110	21	18	44	3,560	58	128	416
15	1.5	122	302	99	79	20	59	21	2,630	48	141	273
16	1.4	66	133	71	49	22	1,060	18	1,380	48	123	131
17	1.2	45	72	58	120	21	2,470	19	280	46	129	73
18	1.2	720	52	50	626	18	3,590	19	87	44	173	50
19	1.0	1,520	42	43	343	13	2,810	36	44	46	139	37
20	1.3	657	35	36	166	11	1,440	50	71	46	91	21
21	1.8	241	115	38	170	18	361	41	305	46	66	15
22	2.9	138	78	31	250	15	155	38	194	53	57	8.7
23	6.3	86	47	25	443	498	83	52	92	58	52	6.3
24	3.5	70	34	19	316	3,190	56	45	79	56	52	13
25	2.3	92	25	51	150	3,000	45	64	70	55	50	12
26	1.9	80	19	179	87	1,340	42	57	70	55	50	6.2
27	1.9	54	15	110	61	226	40	50	61	93	58	4.2
28	1.9	39	13	72	46	107	36	35	48	213	136	4.2
29	2.0	28	12	47	------	80	31	24	38	149	523	12
30	2.1	22	12	34	------	61	32	19	38	102	517	11
31	2.1	------	12	29	------	57	------	32	------	73	285	------
TOTAL	347.7	7,150.9	2,163	3,493	4,180	9,315	12,916	1,332	16,184	6,575	3,839	20,346.6
MEAN	11.2	238	69.8	113	149	300	431	43.0	539	212	124	678
MAX	126	1,520	302	377	626	3,190	3,590	74	4,320	1,820	523	3,900
MIN	1.0	1.9	10	14	12	11	17	18	38	39	50	4.2
AC-FT	690	14,180	4,290	6,930	8,290	18,480	25,620	2,640	32,100	13,040	7,610	40,360

CAL YR 1972 TOTAL 51,018.9 MEAN 139 MAX 2,560 MIN 1.0 AC-FT 101,200
WTR YR 1973 TOTAL 87,842.2 MEAN 241 MAX 4,320 MIN 1.0 AC-FT 174,200

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 7	1900	11.57	1,010	6-13	0800	20.82	4,460
11-19	0800	15.32	1,610	7- 9	0400	16.98	1,930
3-24	1900	20.37	3,700	9- 6	2000	20.64	4,140
4-18	1000	20.38	3,720				

08079000 Oyster Creek near Angleton, Tex.

LOCATION.--Lat 29°09'30", long 95°28'32", Brazoria County, near center of low-water channel at downstream side of bridge on State Highway 35, 2.7 miles (4.3 km) west of Angleton, 4.1 miles (6.6 km) upstream from Missouri Pacific Railroad Co. bridge, 4.5 miles (7.2 km) downstream from Styles Bayou, and about 45 miles (72 km) upstream from Gulf of Mexico.

DRAINAGE AREA.--211 mi² (546 km²).

PERIOD OF RECORD.--October 1944 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 1.31 ft (0.40 m) below mean sea level. Prior to Apr. 30, 1958, at site 500 ft (152 m) downstream at same datum.

AVERAGE DISCHARGE.--29 years, 182 ft³/s (5.15 m³/s), 131,900 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,070 ft³/s (115 m³/s) Sept. 7, gage height, 28.53 ft (8.70 m); minimum daily, 63 ft³/s (1.78 m³/s) Mar. 12.
Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) May 10, 1957, gage height, 31.45 ft (9.59 m), present site, overflow from Brazos River; minimum daily, 0.3 ft³/s (8.5 dm³/s) at times in 1955-56.
Maximum stage since about 1900, 32.2 ft (9.8 m) in December 1913; flood of Dec. 5, 1940, reached a stage of 30.9 ft (9.4 m), from information by State Highway Department. At extreme high stages the Brazos River overflows into Oyster Creek above this station.

REMARKS.--Records good. Diversions above station for irrigation. A large part of flow is water released from Harris Reservoir, capacity, 12,000 acre-ft (14.8 hm³), for industrial use below station. Harris Reservoir is supplied with water diverted from Brazos River during periods of floodflow.

COOPERATION.--Records of water released from Harris Reservoir into Oyster Creek above station furnished by Dow Chemical Co.

REVISIONS (WATER YEARS).--WSP 1392: 1947.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	524	138	138	145	166	189	214	237	132	239	146	168
2	386	137	139	147	163	172	183	219	131	225	165	168
3	266	178	136	157	158	160	164	201	131	210	194	192
4	187	307	133	177	154	151	158	183	131	200	171	296
5	155	308	136	172	151	148	142	183	135	190	162	1,310
6	141	250	141	174	148	148	150	174	150	181	153	3,570
7	132	212	145	210	146	96	323	164	134	180	149	4,050
8	128	194	144	253	150	80	301	158	131	406	150	3,960
9	125	191	141	207	286	73	212	152	132	657	152	3,680
10	125	185	170	179	448	70	163	147	137	620	169	3,380
11	137	172	285	228	414	67	133	144	143	508	167	3,050
12	139	160	253	284	327	63	126	348	1,080	395	169	2,650
13	138	270	190	256	268	64	119	603	2,570	313	345	2,220
14	136	284	158	219	239	100	114	387	2,760	253	307	1,800
15	134	236	167	186	218	103	128	222	2,600	215	358	1,520
16	133	208	166	165	204	103	553	172	2,370	191	321	1,210
17	133	187	141	172	240	106	1,620	141	2,080	181	361	922
18	136	425	129	170	552	105	2,930	131	1,600	194	424	678
19	135	813	137	190	582	106	2,960	126	1,030	187	270	494
20	134	757	136	190	474	133	2,640	122	843	177	193	380
21	135	573	135	183	378	144	2,110	119	1,130	170	131	314
22	141	403	145	175	338	152	1,440	116	1,060	167	114	283
23	142	320	152	169	462	349	903	116	853	155	101	265
24	137	262	151	164	487	2,030	585	113	636	151	103	269
25	135	246	148	171	395	2,400	411	113	484	153	143	260
26	136	228	147	201	306	2,180	367	113	402	146	145	257
27	136	204	146	202	254	1,670	398	115	345	144	144	261
28	136	182	146	194	215	1,130	366	116	303	143	147	248
29	136	166	146	184	------	714	306	115	274	144	154	232
30	137	150	146	174	------	431	262	114	253	147	172	218
31	137	------	144	169	------	278	------	118	------	144	175	------
TOTAL	5,032	8,346	4,791	5,867	8,323	13,715	20,481	5,482	24,160	7,386	6,055	38,305
MEAN	162	278	155	189	297	442	683	177	805	238	195	1,277
MAX	524	813	285	284	582	2,400	2,960	603	2,760	657	424	4,050
MIN	125	137	129	145	146	63	114	113	131	143	101	168
AC-FT	9,980	16,550	9,500	11,640	16,510	27,200	40,620	10,870	47,920	14,650	12,010	75,980
(†)	6,750	6,000	7,410	6,610	6,780	4,640	4,020	6,110	6,120	6,670	7,370	3,690

CAL YR 1972 TOTAL 65,835 MEAN 180 MAX 992 MIN 79 AC-FT 130,600 † 85,550
WTR YR 1973 TOTAL 147,943 MEAN 405 MAX 4,050 MIN 63 AC-FT 293,400 † 72,170

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-19	1400	17.77	836	6-14	0700	26.58	2,790
3-25	1000	25.65	2,430	9- 7	1300	28.53	4,070
4-18	1900	27.07	3,040				

† Water, in acre-feet, released from Harris Reservoir into Oyster Creek above gage (included in total flow past gage).

08079100 East Levee Ditch-Gulf of Mexico near Freeport, Tex.

LOCATION.--Lat 28°57'38", long 95°18'34", Brazoria County, on County Road 690, in room at left end of East Union Bayou drainage structure of East Levee, one orifice located upstream and one downstream from levee, 0.9 mile (1.4 km) above Intracoastal Waterway, and 2.4 miles (3.9 km) east of Freeport.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation (East Levee Ditch), 3.7 ft (1.1 m) Sept. 6; minimum, -1.4 ft (-0.4 m) Jan. 29. Maximum elevation (Gulf of Mexico), 4.5 ft (1.4 m) Sept. 5; minimum, -1.4 ft (-0.4 m) Jan. 29.
Period of record: Maximum elevation (East Levee Ditch), 3.7 ft (1.1 m) Sept. 6, 1973; minimum not determined. Maximum elevation (Gulf of Mexico), 5.5 ft (1.7 m) Sept. 10, 1971; minimum, -2.2 ft (-0.7 m) Feb. 3, 1970.

REMARKS.--The purpose of this station is to record elevations of high tides in the Gulf of Mexico and the corresponding 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 (0.9 m). The levee is an earthen structure about 43 miles (69 km) long with a maximum height of 22 ft (7 m) above mean sea level. Gravity drainage structures with flapper gates and pumps to remove floodwaters from behind levee are located at various points along the levee.

MAXIMUM ELEVATION, IN FEET, GULF OF MEXICO AND EAST LEVEE DITCH
WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	-	-	2.3	-	1.4	-	3.4	1.2	1.7	-	2.0	-	-	-	-	-	-	-	2.0	-	-	-	2.6	-
2	-	-	2.2	-	1.8	-	3.9	1.2	.8	-	1.7	-	-	-	-	-	-	-	2.0	-	-	-	3.0	-
3	-	-	2.2	-	1.8	-	3.4	1.4	.9	-	2.2	-	-	-	-	-	-	-	1.8	-	1.6	-	3.7	1.5
4	-	-	2.4	-	2.0	-	2.5	-	1.5	-	2.2	-	-	-	-	-	-	-	1.4	-	1.6	-	4.4	2.5
5	-	-	3.0	-	2.4	-	2.4	-	1.1	-	2.7	-	-	-	-	-	-	-	1.4	-	1.5	-	4.5	3.4
6	-	-	2.7	-	1.9	-	2.3	-	1.2	-	3.1	1.3	-	-	-	-	-	-	1.2	-	1.5	-	4.3	3.7
7	-	-	2.2	-	2.6	-	2.3	-	1.6	-	2.2	-	-	-	-	-	-	-	1.2	-	1.7	-	3.3	3.3
8	-	-	2.5	-	2.5	-	1.7	-	1.6	-	2.3	-	-	-	-	-	-	-	1.5	-	1.7	-	3.2	3.2
9	-	-	2.4	-	1.9	-	2.0	-	1.6	-	2.7	-	-	-	-	-	-	-	1.3	-	1.7	-	3.1	3.1
10	-	-	2.2	-	1.7	-	2.4	-	1.7	-	3.1	1.3	-	-	-	-	-	-	1.3	-	1.7	-	2.7	-
11	-	-	2.6	-	2.2	-	1.8	-	2.1	-	2.4	-	-	-	-	-	-	-	1.3	-	2.0	-	2.9	-
12	-	-	2.7	-	1.9	-	1.4	-	2.4	-	2.3	-	-	-	-	-	-	1.8	1.1	-	1.9	-	2.4	-
13	-	1.2	2.8	-	1.5	-	1.5	-	2.3	-	-	-	-	-	-	-	-	2.5	1.5	-	1.8	-	1.8	-
14	-	-	1.4	-	-	-	1.6	-	1.9	-	-	-	-	-	-	-	-	-	1.5	-	1.7	-	1.6	-
15	-	-	1.7	-	-	-	1.7	-	1.9	-	-	-	-	-	-	-	-	-	1.4	-	1.8	-	1.8	-
16	-	-	1.9	-	-	-	2.0	-	1.8	-	-	-	-	-	1.7	-	-	-	1.4	-	2.0	-	2.0	-
17	-	-	3.2	1.2	-	-	2.5	-	2.4	-	-	-	-	-	-	-	-	-	1.1	-	1.7	-	1.9	-
18	-	-	3.4	2.2	-	-	2.2	-	2.3	-	-	-	-	-	-	-	-	-	1.2	-	1.7	-	1.8	-
19	-	-	1.8	-	2.2	-	2.4	-	2.2	-	-	-	-	2.5	-	-	-	-	1.3	-	1.8	-	2.1	-
20	-	1.1	2.3	-	2.6	-	2.7	-	1.8	-	-	-	-	2.5	-	-	-	-	-	-	2.1	-	2.3	-
21	-	1.2	2.1	-	2.2	-	2.5	-	1.6	-	-	-	-	2.4	-	-	-	-	-	-	2.1	-	2.4	-
22	-	1.5	1.9	-	1.9	-	1.8	-	1.7	-	-	-	-	2.3	-	-	-	-	-	-	2.2	-	2.5	-
23	-	1.5	2.3	-	2.0	-	1.7	-	1.9	-	-	-	-	-	-	-	2.0	-	-	-	2.6	-	2.6	-
24	-	-	2.9	-	1.5	-	2.0	-	1.8	-	-	-	-	-	-	-	1.9	-	-	-	2.4	-	2.6	-
25	-	-	2.7	-	-	-	3.4	1.4	1.7	-	-	-	-	-	-	-	1.7	-	-	-	2.5	-	2.8	-
26	3.1	1.3	1.2	-	-	-	1.1	-	1.7	-	-	-	-	-	-	-	1.7	-	-	-	2.5	-	2.8	-
27	2.9	-	1.5	-	1.5	-	1.8	-	1.8	-	-	-	-	-	-	-	2.0	-	-	-	2.3	-	2.8	-
28	2.5	-	1.4	-	1.7	-	.1	-	1.8	-	-	-	-	-	-	-	1.8	-	-	-	2.4	-	2.5	-
29	2.5	-	1.8	-	2.4	-	.9	-	-------		-	-	-	-	-	-	1.7	-	-	-	2.5	-	2.5	-
30	2.5	-	1.4	-	2.1	-	1.3	-	-------		-	-	-	-	-	-	1.9	-	-	-	2.2	-	2.5	-
31	2.5	-	-------		2.7	-	2.3	-	-------		-	-	-------		-	-	-------		-	-	2.6	-	-------	

08079150 South Levee Ditch-Gulf of Mexico near Freeport, Tex.

LOCATION.--Lat 28°55'28", long 95°21'23", Brazoria County, on southern arm of levee, in room at right end of South Levee drainage structure, one orifice located upstream and one downstream from levee, 0.6 mile (1.0 km) upstream from Intracoastal Waterway, 0.7 mile (1.1 km) west of State Highway 1495, and 1.7 miles (2.7 km) southwest of Freeport.

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

GAGE.--Duplex water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation (South Levee Ditch), 2.7 ft (0.8 m) Sept. 10, 11; minimum not determined. Maximum elevation (Gulf of Mexico), about 4.5 ft (1.4 m) Sept. 5; minimum, 0.1 ft (0.03 m) Aug. 2.
Period of record: Maximum elevation (South Levee Ditch), 2.7 ft (0.8 m) Sept. 10, 11, 1973; minimum not determined. Maximum elevation (Gulf of Mexico), 5.8 ft (1.8 m) Sept. 10, 1971; minimum, -0.4 ft (-0.1 m) 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 (0.9 m). The levee is an earthen structure with a maximum elevation of 22 ft (7 m) above mean sea level. Gravity drainage structures with flapper gates and pumps to remove floodwaters from behind levee are located along the levee.

MAXIMUM ELEVATION, IN FEET, GULF OF MEXICO AND SOUTH LEVEE DITCH
WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	-	-	-	1.7	-	-	-	-	-	2.2	-	-	-	2.6	-	2.6	-	2.4	-	-	-	-	-
2	2.8	-	-	-	2.0	-	-	-	-	-	1.9	-	-	-	2.7	-	2.8	-	2.5	-	-	-	-	-
3	2.3	-	-	-	2.0	-	-	-	-	-	2.2	-	-	-	2.2	-	3.0	-	2.3	-	1.5	-	-	0.7
4	2.6	-	-	-	2.1	-	-	-	-	-	2.5	-	-	-	2.4	-	2.7	-	1.9	-	-	-	-	1.4
5	2.5	-	-	-	2.4	-	-	-	-	-	-	-	-	-	2.9	-	2.3	-	2.0	-	-	-	-	1.7
6	2.4	-	-	-	2.1	-	-	-	-	-	-	1.3	-	-	3.0	-	2.2	-	1.7	-	-	-	-	1.8
7	2.0	-	-	-	2.7	-	-	-	1.5	-	-	-	-	-	2.9	-	2.1	-	1.7	-	-	-	-	1.8
8	2.2	-	-	-	2.7	-	-	-	1.7	-	-	-	-	-	2.1	-	2.4	-	1.8	-	-	-	-	2.3
9	2.3	-	-	-	2.0	-	-	-	1.6	-	2.9	-	-	-	2.2	-	2.4	-	1.7	-	-	-	-	2.3
10	2.7	-	-	-	1.9	-	-	-	1.8	-	3.2	1.4	-	-	2.0	-	2.4	-	1.9	-	-	-	-	-
11	2.9	-	-	-	2.2	-	-	-	2.2	-	-	-	-	-	2.1	-	2.6	-	1.8	-	-	-	-	-
12	3.0	-	-	-	2.2	-	-	-	2.4	-	-	-	1.4	-	1.9	-	3.1	1.5	1.8	-	-	-	-	-
13	3.1	1.2	-	-	1.7	-	-	-	2.3	-	-	-	2.3	-	2.4	-	2.9	-	2.1	-	-	-	-	-
14	2.9	-	-	-	1.9	-	-	-	2.0	-	-	-	1.9	-	2.3	-	2.7	-	2.1	-	-	-	1.6	-
15	2.6	-	-	-	1.1	-	-	-	2.0	-	-	-	2.4	-	1.7	-	2.5	-	2.0	-	-	-	1.8	-
16	2.1	-	-	-	1.8	-	-	-	1.9	-	-	-	2.4	-	2.0	-	2.5	-	2.0	-	-	-	1.9	-
17	2.1	-	-	-	2.1	-	-	-	-	-	-	-	2.9	-	1.8	-	2.3	-	1.8	-	-	-	1.9	-
18	2.2	-	-	-	2.4	-	-	-	-	-	-	-	2.8	-	1.3	-	2.2	-	1.8	-	-	-	1.9	-
19	2.1	-	-	-	2.2	-	-	-	-	-	-	-	3.3	1.9	1.6	-	2.0	-	1.8	-	-	-	2.0	-
20	3.1	1.4	-	-	-	-	-	-	-	-	-	-	3.6	1.9	1.6	-	2.0	-	1.7	-	-	-	2.2	-
21	3.7	1.4	2.2	-	-	-	-	-	-	-	-	-	3.6	1.9	1.7	-	1.9	-	1.7	-	-	-	2.2	-
22	3.5	1.7	2.0	-	-	-	-	-	-	-	-	-	3.1	1.9	1.9	-	1.9	-	2.0	-	-	-	2.2	-
23	3.0	-	2.2	-	-	-	-	-	-	-	-	1.0	2.8	-	1.9	-	2.3	-	2.1	-	-	-	2.3	-
24	2.7	-	3.0	-	-	-	-	-	-	-	-	1.1	2.8	-	1.7	-	2.1	-	-	-	-	-	2.3	-
25	-	-	3.0	-	-	-	-	-	-	-	-	-	2.6	-	1.8	-	2.1	-	-	-	-	-	2.4	-
26	-	-	1.4	-	-	-	-	-	-	-	-	-	2.0	-	2.0	-	2.2	-	-	-	-	-	2.6	-
27	-	-	1.6	-	-	-	-	-	1.9	-	-	-	1.3	-	2.1	-	2.4	-	-	-	-	-	2.5	-
28	-	-	1.4	-	-	-	-	-	2.0	-	-	-	1.6	-	1.8	-	2.3	-	-	-	-	-	2.2	-
29	-	-	1.9	-	-	-	-	-	-------		-	-	1.7	-	1.9	-	2.2	-	-	-	-	-	2.3	-
30	-	-	1.5	-	-	-	-	-	-------		-	-	2.1	-	2.2	-	2.4	-	-	-	-	-	2.4	-
31	-	-	-------		-	-	-	-	-------		-	-	-------		2.8	-	-------		-	-	-	-	-------	

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 (53 m) upstream from spillway crest, 9 miles (14.5 km) southeast of Lubbock, and at mile 74.1 (119.2 km).

DRAINAGE AREA.--286 mi² (741 km²).

PERIOD OF RECORD.--December 1966 to current year.

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

EXTREMES.--Current year: Maximum contents, 5,460 acre-ft (6.73 hm³) Mar. 10, elevation, 3,015.42 ft (919.10 m); minimum, 5,350 acre-ft (6.60 hm³) May 28, elevation, 3,014.97 ft (918.96 m).
Period of record: Maximum contents, 6,120 acre-ft (7.55 hm³) June 2, 1967, elevation, 3,018.05 ft (919.90 m); minimum, 5,330 acre-ft (6.57 hm³) Oct. 31, 1967, Dec. 15, 1970, elevation, 3,014.88 ft (918.94 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 1,600 ft (488 m) 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 (42 m) and is designed to discharge 26,200 ft³/s (742 m³/s) at elevation 3,028.7 ft (923.1 m). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,390	5,390	5,390	5,380	5,390	5,380	5,390	5,380	5,380	5,370	5,400	5,370
2	5,390	5,390	5,380	5,390	5,390	5,380	5,400	5,380	5,380	5,370	5,400	5,370
3	5,390	5,390	5,380	5,380	5,380	5,380	5,390	5,380	5,380	5,370	5,390	5,370
4	5,390	5,390	5,390	5,380	5,380	5,380	5,390	5,380	5,380	5,370	5,380	5,370
5	5,390	5,380	5,380	5,390	5,380	5,380	5,390	5,380	5,380	5,370	5,380	5,360
6	5,380	5,380	5,380	5,390	5,380	5,360	5,390	5,370	5,390	5,370	5,380	5,370
7	5,380	5,380	5,380	5,400	5,380	5,380	5,390	5,360	5,390	5,370	5,390	5,380
8	5,380	5,380	5,380	5,400	5,380	5,380	5,380	5,370	5,390	5,370	5,390	5,380
9	5,380	5,360	5,380	5,400	5,380	5,390	5,380	5,380	5,390	5,370	5,390	5,380
10	5,390	5,370	5,380	5,390	5,380	5,460	5,390	5,380	5,380	5,370	5,380	5,380
11	5,390	5,380	5,380	5,380	5,380	5,420	5,390	5,380	5,390	5,370	5,380	5,380
12	5,390	5,380	5,380	5,390	5,380	5,400	5,390	5,380	5,390	5,370	5,380	5,380
13	5,390	5,360	5,380	5,390	5,380	5,380	5,390	5,380	5,390	5,380	5,380	5,380
14	5,380	5,370	5,380	5,400	5,380	5,380	5,390	5,390	5,390	5,380	5,380	5,380
15	5,380	5,380	5,380	5,390	5,380	5,390	5,400	5,390	5,380	5,380	5,380	5,380
16	5,380	5,380	5,390	5,390	5,380	5,380	5,400	5,390	5,370	5,380	5,380	5,380
17	5,380	5,380	5,390	5,390	5,380	5,380	5,390	5,390	5,370	5,400	5,380	5,380
18	5,380	5,390	5,390	5,390	5,380	5,390	5,390	5,380	5,370	5,420	5,370	5,380
19	5,380	5,390	5,390	5,390	5,380	5,380	5,380	5,380	5,360	5,410	5,370	5,380
20	5,400	5,390	5,380	5,390	5,380	5,380	5,380	5,380	5,360	5,400	5,370	5,380
21	5,410	5,390	5,380	5,390	5,380	5,390	5,380	5,380	5,360	5,390	5,370	5,380
22	5,410	5,390	5,380	5,390	5,390	5,390	5,380	5,380	5,370	5,430	5,370	5,370
23	5,400	5,390	5,380	5,390	5,400	5,390	5,380	5,380	5,370	5,410	5,360	5,370
24	5,390	5,380	5,380	5,390	5,410	5,380	5,380	5,380	5,370	5,400	5,360	5,370
25	5,390	5,370	5,380	5,390	5,400	5,370	5,440	5,380	5,370	5,400	5,370	5,370
26	5,390	5,380	5,380	5,390	5,390	5,380	5,420	5,360	5,380	5,390	5,370	5,360
27	5,390	5,380	5,380	5,390	5,390	5,380	5,400	5,360	5,380	5,380	5,370	5,360
28	5,390	5,380	5,380	5,390	5,390	5,380	5,390	5,350	5,380	5,380	5,370	5,360
29	5,380	5,380	5,380	5,390	------	5,390	5,390	5,360	5,380	5,390	5,370	5,370
30	5,390	5,390	5,380	5,390	------	5,390	5,390	5,370	5,380	5,390	5,370	5,370
31	5,390	------	5,380	5,390	------	5,390	------	5,380	------	5,420	5,370	------
(†)	3,015.11	3,015.11	3,015.10	3,015.13	3,015.11	3,015.11	3,015.12	3,015.08	3,015.07	3,015.25	3,015.06	3,015.04
(*)	+10	0	-10	+10	0	0	0	-10	0	+40	-50	0
MAX	5,410	5,390	5,390	5,400	5,410	5,460	5,440	5,390	5,390	5,430	5,400	5,380
MIN	5,380	5,360	5,380	5,380	5,380	5,360	5,380	5,350	5,360	5,370	5,360	5,360

CAL YR 1972..... * 0 MAX 5,610 MIN 5,340
WTR YR 1973..... * -10 MAX 5,460 MIN 5,350

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

08079600 Double Mountain Fork Brazos River at Justiceburg, Tex.

LOCATION.--Lat 33°02'18", long 101°11'50", Garza County, on right bank at downstream side of bridge on U.S. Highway 84 at Justiceburg, 250 ft (76 m) downstream from Panhandle and Santa Fe Railroad, and at mile 143.4 (230.7 km), measured from confluence with Salt Fork Brazos River at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA.--1,272 mi² (3,294 km²), of which 1,003 mi² (2,598 km²) 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 (677.41 m) above mean sea level.

AVERAGE DISCHARGE.--11 years (1962-73), 32.9 ft³/s (0.93 m³/s), 23,840 acre-ft/yr (29.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,290 ft³/s (36.5 m³/s) July 28, gage height, 7.29 ft (2.22 m); no flow at times.
Period of record: Maximum discharge, 49,600 ft³/s (1,400 m³/s) May 6, 1969, gage height, 19.8 ft (6.04 m), from floodmarks; no flow at times.
Maximum stages since at least 1895, 25.8 ft (7.86 m) in 1914 and 22.2 ft (6.77 m) in September 1955, from information by local resident. Flood of July 1961 reached a stage of 18.2 ft (5.55 m), from floodmark.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.99	.53	.10	1.4	5.2	1.8	.07	5.7	.02	4.0	316
2	.99	2.7	.53	.14	1.4	4.8	1.8	.03	67	.01	.53	4.3
3	.53	1.6	.53	.44	1.4	4.1	2.0	.01	.38	.01	.14	.74
4	.37	1.1	.53	.53	1.4	4.1	1.8	0	.07	.01	.03	9.3
5	.53	1.1	.44	.74	1.4	4.1	.99	0	.07	.01	.01	13
6	.37	1.1	.44	.74	1.4	3.8	.86	0	.07	.01	0	59
7	.37	1.1	.44	.99	6.4	3.2	.63	0	.03	.01	0	218
8	.30	1.1	.53	.99	21	3.2	.53	0	.02	.01	0	23
9	.30	.99	.86	.63	23	7.1	.53	0	.02	.01	.10	4.0
10	.30	.86	.99	.53	16	334	.53	0	0	.01	4.7	2.1
11	.30	.86	1.3	1.6	43	107	.53	0	0	.01	.14	1.5
12	.30	.99	.99	1.1	12	14	.53	0	0	.03	1.8	6.1
13	.30	.99	.99	1.6	5.9	8.3	.53	0	0	1.3	6.9	11
14	.30	.99	.86	7.8	5.5	4.8	.44	0	0	3.6	.30	.53
15	.30	.99	.99	18	5.5	3.2	.30	0	.37	.30	.17	.24
16	.30	.99	.74	6.4	5.9	2.9	.07	0	.30	.10	61	.10
17	.30	.74	.63	4.8	12	2.7	.05	0	.03	.55	1.8	.05
18	2.7	.86	.44	4.8	85	2.4	.05	0	.03	.99	.63	.05
19	69	.99	.30	4.1	83	2.4	.05	0	.05	.18	.44	.05
20	31	.99	.24	3.5	34	2.2	.02	0	.03	3.4	.24	.03
21	6.4	.99	.18	108	4.0	2.0	.03	0	.05	.18	.14	.02
22	2.7	.99	.18	3.2	32	1.8	.14	0	.07	.05	.29	.01
23	.74	.99	.14	1.8	36	1.6	.18	37	.10	.01	.10	.01
24	.63	.99	.14	1.8	26	1.6	.44	.03	.10	0	0	0
25	83	.99	.14	40	24	1.6	.86	0	.10	0	0	0
26	4.5	.74	.14	5.5	22	1.8	14	0	.07	0	0	.17
27	1.4	.63	.14	4.1	20	1.4	3.8	0	.07	1.3	0	.01
28	1.3	.53	.18	1.6	11	.99	.74	0	.05	133	0	0
29	4.5	.53	.18	1.4	------	1.9	.30	0	.05	263	0	0
30	3.2	.53	.14	1.4	------	69	.14	0	.05	389	0	0
31	1.8	------	.10	1.4	------	4.3	------	0	------	42	2.0	------
TOTAL	220.33	29.94	14.96	229.73	541.6	611.49	34.67	37.14	74.88	839.11	85.46	669.31
MEAN	7.11	1.00	.48	7.41	19.3	19.7	1.16	1.20	2.50	27.1	2.76	22.3
MAX	83	2.7	1.3	108	85	334	14	37	67	389	61	316
MIN	.30	.53	.10	.10	1.4	.99	.02	0	0	0	0	0
AC-FT	437	59	30	456	1,070	1,210	69	74	149	1,660	170	1,330

CAL YR 1972 TOTAL 17,279.90 MEAN 47.2 MAX 9,920 MIN 0 AC-FT 34,270
WTR YR 1973 TOTAL 3,388.62 MEAN 9.28 MAX 389 MIN 0 AC-FT 6,720

PEAK DISCHARGE (BASE, 2,100 FT³/S).--No peak above base.

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.

LOCATION.--Lat 33°00'29", long 100°10'49", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 83, 0.3 mile (0.5 km) downstream from Hitson Creek, 10 miles (16 km) south of Aspermont, and at mile 34.5 (55.5 km) measured from confluence with Salt Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA.--7,980 mi² (20,670 km²), approximately, of which 6,470 mi² (16,760 km²) is probably noncontributing.

PERIOD OF RECORD.--December 1923 to September 1934, June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,624.79 ft (495.24 m) above mean sea level. Dec. 3, 1923, to Sept. 30, 1934, nonrecording gage at site 90 ft (27 m) downstream at datum 2.0 ft (0.6 m) higher, and June 8, 1939, to Aug. 12, 1972, recording gage at present site and at datum 2.0 ft (0.6 m) higher.

AVERAGE DISCHARGE.--44 years (1924-34, 1939-73), 175 ft³/s (4.96 m³/s), 126,800 acre-ft/yr (156 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,060 ft³/s (115 m³/s) Mar. 11, gage height, about 7.4 ft (2.3 m); minimum, 0.13 ft³/s (3.7 dm³/s) July 8.
Period of record: Maximum discharge, 91,400 ft³/s (2,590 m³/s) Sept. 26, 1955, gage height, 29.5 ft (9.0 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	901	46	21	91	134	67	37	9.6	4.0	130	15
2	64	384	41	22	84	114	72	32	382	2.3	80	10
3	62	222	38	29	72	95	70	31	382	1.4	55	81
4	58	157	37	30	61	84	52	28	81	.94	38	55
5	55	124	30	30	58	78	41	26	34	.49	22	111
6	53	95	25	30	55	72	37	27	28	.35	12	280
7	53	78	25	29	61	67	37	22	20	.29	7.2	1,100
8	52	64	30	17	89	62	36	20	13	.20	5.8	853
9	50	58	30	20	80	58	35	23	9.6	.24	4.2	539
10	49	50	30	20	77	192	33	18	6.8	.24	5.4	204
11	46	48	25	20	80	2,080	30	16	5.8	.29	8.4	128
12	45	45	25	25	95	870	31	14	5.8	.29	10	76
13	43	44	30	30	126	460	33	13	4.4	10	4.9	49
14	41	41	30	33	102	287	35	16	4.0	3.8	3.1	33
15	40	38	25	37	84	212	32	17	3.5	9.3	2.1	255
16	38	37	25	35	70	154	30	16	3.3	18	3.2	137
17	37	36	25	35	68	122	30	16	3.1	53	1.5	80
18	36	37	25	68	67	97	30	13	11	24	1.2	46
19	44	34	23	66	66	80	53	10	10	3.7	1.0	33
20	108	32	24	54	64	72	46	9.2	5.8	2.3	.94	25
21	639	35	28	52	72	58	32	16	4.2	1.5	.84	20
22	1,170	38	28	155	110	49	30	28	2.9	.94	.74	16
23	539	37	26	814	159	48	28	18	2.1	.42	.74	14
24	323	44	23	347	146	53	29	12	1.8	.29	.74	12
25	216	46	23	257	126	57	28	9.2	1.7	.24	.74	9.4
26	219	45	23	212	252	46	50	8.8	1.4	.24	.74	9.8
27	193	44	22	159	272	44	44	6.8	1.3	.24	.74	33
28	196	44	22	247	179	38	36	7.2	1.2	3.0	.74	74
29	203	44	22	204	------	37	38	8.0	1.0	30	.74	29
30	197	46	21	146	------	77	42	7.2	25	104	.65	20
31	893	------	21	114	------	57	------	6.8	------	71	.65	------
TOTAL	5,814	2,948	848	3,358	2,866	5,954	1,187	532.2	1,065.3	347.00	404.00	4,347.2
MEAN	188	98.3	27.4	108	102	192	39.6	17.2	35.5	11.2	13.0	145
MAX	1,170	901	46	814	272	2,080	72	37	382	104	130	1,100
MIN	36	32	21	17	55	37	28	6.8	1.0	.20	.65	9.4
AC-FT	11,530	5,850	1,680	6,660	5,680	11,810	2,350	1,060	2,110	688	801	8,620

CAL YR 1972 TOTAL 113,461.43 MEAN 310 MAX 48,500 MIN 0 AC-FT 225,100
WTR YR 1973 TOTAL 29,670.70 MEAN 81.3 MAX 2,080 MIN .20 AC-FT 58,850

PEAK DISCHARGE (BASE, 8,800 FT³/S).--No peak above base.

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 (4.2 km) downstream from Lake Creek, 4.1 miles (6.6 km) upstream from mouth, and 14.4 miles (23.2 km) northeast of Post.

DRAINAGE AREA.--112 mi² (290 km²), of which 39.9 mi² (103 km²) is probably noncontributing.

PERIOD OF RECORD.--1959-61, occasional low-flow measurements at road crossing 4 miles (6.4 km) downstream, September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,301.6 ft (701.5 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--8 years, 1.96 ft³/s (55.5 dm³/s), 1,420 acre-ft/yr (1.75 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 280 ft³/s (7.93 m³/s) Mar. 10, gage height, 5.91 ft (1.80 m); no flow for many days.
Period of record: Maximum discharge, 15,300 ft³/s (433 m³/s) June 9, 1968, gage height, 14.98 ft (4.57 m), from rating curve extended above 740 ft³/s (21.0 m³/s) on basis of slope-area measurements of 3,020 and 15,300 ft³/s (85.5 and 433 m³/s); no flow for many days.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.79	.26	.32	.26	.60	.38	0		0		0
2	0	.50	.26	.46	.16	.38	.32	0		0		0
3	0	.35	.23	.79	.35	.46	.38	0		0		0
4	0	.26	.23	.60	.35	.66	.29	0		0		0
5	0	.26	.20	.38	.23	.32	.20	0		0		0
6	0	.26	.20	.32	.26	.26	.16	0		0		.35
7	0	.26	.20	.32	.29	.18	.14	0		0		.06
8	0	.26	.18	.26	.35	.16	.14	0		0		0
9	0	.26	.18	.20	.30	6.0	.13	0		0		0
10	0	.26	.16	.15	.25	132	.12	0		5.9		0
11	0	.26	.16	.05	.20	11	.10	0		5.1		0
12	0	.18	.46	0	.20	2.2	.10	0		0		0
13	0	.06	.55	.98	.20	1.5	.79	0		4.9		0
14	0	0	.50	1.0	.20	1.6	.60	.11		.02		0
15	0	0	.48	.72	.20	1.0	.38	.05		0		0
16	0	0	.46	.46	.20	.72	.23	0		0		0
17	0	0	.46	.35	.38	.46	.18	0		.52		0
18	0	.63	.44	.23	.42	.38	.16	0		.02		0
19	.80	.32	.42	.29	.32	.38	.20	0		0		0
20	1.6	.29	.40	.29	.50	.42	.29	0		0		0
21	11	.29	.40	5.9	.66	.42	.26	.11		0		0
22	.42	.26	.38	.42	1.5	.38	.23	.05		0		0
23	.35	.23	.36	.29	2.2	.38	.23	.01		0		0
24	.23	.50	.36	.26	2.2	.50	.35	0		0		0
25	.60	.42	.34	.66	1.0	.29	44	0		0		0
26	.55	.29	.32	.66	.95	.26	35	0		0		0
27	.35	.26	.32	.38	.79	.23	5.2	0		0		0
28	.35	.26	.32	.35	.50	.26	.72	0		9.4		0
29	.35	.26	.32	.20	------	.29	.04	0		12		0
30	2.4	.26	.38	.35	------	.32	0	0		12		0
31	.72	------	.32	.38	------	.35	------	0	------	.05		------
TOTAL	19.72	8.23	10.25	18.02	15.42	164.36	91.32	.33	0	49.91	0	.41
MEAN	.64	.27	.33	.58	.55	5.30	3.04	.011	0	1.61	0	.014
MAX	11	.79	.55	5.9	2.2	132	44	.11	0	12	0	.35
MIN	0	0	.16	0	.16	.16	0	0	0	0	0	0
AC-FT	39	16	20	36	31	326	181	.7	0	99	0	.8

CAL YR 1972 TOTAL 309.23 MEAN .84 MAX 57 MIN 0 AC-FT 613
WTR YR 1973 TOTAL 377.97 MEAN 1.04 MAX 132 MIN 0 AC-FT 750

PEAK DISCHARGE (BASE, 500 FT³/S).--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 (0.8 km) upstream from Atchison, Topeka, and Santa Fe Railway Co. bridge, and at mile 28.1 (45.2 km).

DRAINAGE AREA.--470 mi² (1,220 km²), 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 (1,018.37 m) above mean sea level.

AVERAGE DISCHARGE.--29 years (1939-53, 1956-59, 1961-73), 3.31 ft³/s (93.7 dm³/s), 2,400 acre-ft/yr (2.96 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 54 ft³/s (1.53 m³/s) Aug. 9, gage height, 2.17 ft (0.66 m); no flow most of year.
Period of record: Maximum discharge, 12,000 ft³/s (340 m³/s) June 6, 1941, gage height, 8.75 ft (2.67 m), from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of slope-area measurement of 12,000 ft³/s (340 m³/s); no flow most of time.
Maximum discharge since at least 1880, that of June 6, 1941; maximum stage, 9.38 ft (2.86 m) July 8, 1960, discharge, 9,130 ft³/s (259 m³/s), by contracted-opening measurement. A flood in 1890, stage not determined, was probably the second highest, from information by local residents.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.3	0	0	0	0	0	0	0	0	.75	0
2	0	.02	0	0	0	0	1.2	0	0	0	3.6	0
3	0	0	0	0	0	0	1.0	0	0	0	1.5	0
4	0	0	0	0	0	0	.03	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	4.1
7	0	0	0	0	0	0	0	0	0	0	0	7.1
8	0	0	0	0	0	1.0	.44	0	0	0	0	.25
9	0	0	0	0	0	1.0	0	0	0	0	8.0	0
10	0	0	0	0	0	14	0	0	0	0	.09	0
11	0	0	0	0	0	1.2	0	0	0	0	0	0
12	0	0	.02	.01	0	.02	.42	0	0	0	0	1.7
13	0	0	0	.84	0	0	.01	0	0	.25	0	0
14	0	0	0	.02	0	0	0	.46	.42	.07	0	0
15	0	0	0	0	0	0	3.2	0	0	0	0	0
16	0	0	0	0	0	0	.03	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	1.2	0	0	0	0	.53	0	0	.19	0	0
19	.03	.45	0	0	0	0	.05	0	0	0	0	0
20	1.3	.01	0	0	0	0	0	0	0	0	0	0
21	.84	.11	0	0	.03	0	0	0	0	0	0	0
22	.01	.01	0	0	1.3	0	0	4.2	0	3.4	0	0
23	0	0	0	0	1.3	0	1.4	3.5	0	0	0	0
24	0	.34	0	0	.28	0	1.2	.04	0	0	0	0
25	0	.01	0	0	0	0	1.3	0	0	0	0	0
26	.54	0	0	0	0	0	1.6	0	0	0	0	0
27	.01	0	0	0	0	0	.01	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	.06	0	------	1.4	0	0	0	.02	0	0
30	.06	0	0	0	------	4.0	0	0	0	0	0	0
31	1.9	------	0	0	------	.23	------	0	------	5.0	0	------
TOTAL	4.69	3.45	.08	.87	2.91	22.85	12.42	8.20	.42	8.93	13.94	13.15
MEAN	.15	.12	.003	.028	.10	.74	.41	.26	.014	.29	.45	.44
MAX	1.9	1.3	.06	.84	1.3	14	3.2	4.2	.42	5.0	8.0	7.1
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	9.3	6.8	.2	1.7	5.8	45	25	16	.8	18	28	26

CAL YR 1972 TOTAL 318.13 MEAN .87 MAX 65 MIN 0 AC-FT 631
WTR YR 1973 TOTAL 91.91 MEAN .25 MAX 14 MIN 0 AC-FT 182

PEAK DISCHARGE (BASE, 100 FT³/S).--No peak above base.

08080910 White River Reservoir near Spur, Tex.

LOCATION.--Lat 33°27'28", long 101°05'22", Crosby County, on right bank at intake structure at White River Dam on White River, 0.5 mile (0.8 km) downstream from Sand Creek, 1.7 miles (2.7 km) upstream from Home Creek, 13 miles (20.9 km) west of Spur, and 22.8 miles (36.7 km) upstream from Salt Fork Brazos River.

DRAINAGE AREA.--775 mi² (2,007 km²), of which 603 mi² (1,562 km²) 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, 39,150 acre-ft (48.3 hm³) Mar. 10, elevation, 2,369.50 ft (722.22 m); minimum, 32,440 acre-ft (40.0 hm³) Sept. 30, elevation, 2,365.63 ft (721.04 m).
Period of record: Maximum contents, 41,280 acre-ft (50.9 hm³) Oct. 27, 1969, elevation, 2,370.64 ft (722.57 m); minimum since reaching normal operating level in June 1969, 27,290 acre-ft (33.6 hm³) May 28, 1971, elevation, 2,362.30 ft (720.03 m).

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 3,300 ft (1,010 m) 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 (335 m) wide, located at the right end of dam and will discharge 69,000 ft³/s (1,950 m³/s) at elevation 2,391.5 ft (728.9 m). 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	2,395.0	
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)

2,365.0	31,420
2,368.0	36,450
2,370.0	40,070

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38,360	38,560	38,050	37,620	37,980	38,300	38,520	38,430	37,270	35,710	34,640	33,240
2	38,320	38,540	38,030	37,620	37,980	38,300	38,520	38,380	37,250	35,640	34,590	33,210
3	38,270	38,520	38,020	37,640	37,960	38,340	38,510	38,340	37,200	35,580	34,540	33,170
4	38,250	38,510	38,000	37,620	37,960	38,290	38,470	38,290	37,140	35,550	34,500	33,190
5	38,190	38,490	37,960	37,620	37,960	38,290	38,450	38,290	37,090	35,480	34,470	33,120
6	38,120	38,470	37,950	37,700	37,950	38,270	38,430	38,230	37,060	35,410	34,400	33,060
7	38,090	38,450	37,930	37,700	38,020	38,250	38,470	38,190	36,980	35,360	34,350	33,210
8	38,050	38,410	37,910	37,680	37,980	38,250	38,340	38,160	36,950	35,330	34,300	33,190
9	38,030	38,400	37,910	37,660	37,980	38,380	38,320	38,140	36,900	35,260	34,270	33,170
10	38,000	38,340	37,870	37,660	37,980	39,110	38,300	38,110	36,840	35,240	34,220	33,140
11	37,960	38,320	37,860	37,660	37,980	39,090	38,290	38,070	36,810	35,190	34,230	33,110
12	37,950	38,320	37,860	37,660	37,980	39,060	38,320	38,020	36,770	35,150	34,180	33,070
13	37,910	38,270	37,860	37,700	37,960	38,980	38,470	38,020	36,730	35,290	34,150	33,040
14	37,870	38,250	37,840	37,710	37,960	38,950	38,510	38,030	36,700	35,240	34,120	32,990
15	37,820	38,210	37,800	37,710	37,960	38,910	38,490	38,020	36,630	35,170	34,100	32,960
16	37,780	38,190	37,780	37,700	37,950	38,870	38,450	37,980	36,590	35,140	34,050	32,910
17	37,770	38,180	37,770	37,700	37,980	38,840	38,430	37,950	36,540	35,100	34,000	32,860
18	37,680	38,210	37,770	37,680	38,000	38,820	38,410	37,930	36,470	35,050	33,950	32,830
19	37,730	38,210	37,770	37,680	38,000	38,760	38,380	37,910	36,360	34,980	33,910	32,800
20	37,960	38,190	37,770	37,770	38,000	38,750	38,320	37,870	36,280	34,980	33,860	32,780
21	38,430	38,180	37,730	37,910	38,030	38,710	38,300	37,860	36,230	34,960	33,800	32,760
22	38,430	38,160	37,730	37,910	38,160	38,690	38,290	37,820	36,170	34,880	33,730	32,730
23	38,400	38,140	37,700	37,910	38,250	38,690	38,270	37,800	36,100	34,820	33,680	32,720
24	38,380	38,160	37,700	37,890	38,290	38,690	38,340	37,770	36,050	34,770	33,630	32,670
25	38,400	38,140	37,680	38,020	38,300	38,630	38,600	37,710	36,000	34,790	33,560	32,620
26	38,400	38,120	37,660	38,050	38,300	38,600	38,560	37,640	35,930	34,790	33,490	32,620
27	38,380	38,090	37,640	38,050	38,300	38,580	38,540	37,570	35,900	34,740	33,440	32,550
28	38,360	38,090	37,640	38,000	38,300	38,560	38,510	37,460	35,840	34,720	33,390	32,500
29	38,340	38,090	37,660	38,000	------	38,580	38,510	37,390	35,810	34,740	33,340	32,470
30	38,600	38,070	37,660	38,000	------	38,600	38,490	37,320	35,760	34,700	33,290	32,440
31	38,600	------	37,640	38,020	------	38,540	------	37,290	------	34,670	33,280	------
(†)	2,369.20	2,368.91	2,368.67	2,368.88	2,369.04	2,369.17	2,369.14	2,368.47	2,367.60	2,366.97	2,366.14	2,365.63
(*)	+180	-530	-430	+380	+280	+240	-50	-1,200	-1,530	-1,090	-1,390	-840
(††)	228	201	211	226	190	215	214	264	343	314	319	233
MAX	38,600	38,560	38,050	38,050	38,300	39,110	38,600	38,430	37,270	35,710	34,640	33,240
MIN	37,680	38,070	37,640	37,620	37,950	38,250	38,270	37,290	35,760	34,670	33,280	32,440

CAL YR 1972..... * +180 †† 2,780 MAX 40,070 MIN 33,630
WTR YR 1973..... * -5,980 †† 2,960 MAX 39,110 MIN 32,440

† 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 (4.0 km) west of Girard, and 10.0 miles (16.1 km) upstream from Salt Fork Brazos River.

DRAINAGE AREA.--294 mi² (761 km²), of which 17.3 mi² (44.8 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,006.08 ft (611.45 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 4.99 ft³/s (141 dm³/s), 3,620 acre-ft/yr (4.46 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 266 ft³/s (7.53 m³/s) Sept. 7, gage height, 9.84 ft (3.00 m); minimum, 0.12 ft³/s (3.4 dm³/s) Aug. 22-26.
Period of record: Maximum discharge, 3,600 ft³/s (102 m³/s) Aug. 31, 1966, gage height, 14.50 ft (4.42 m); 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 (6.0 m) September 1955, from information by local residents.

REMARKS.--Records good. Several small diversions upstream from gage. At end of year, flow from 108 mi² (280 km²) above this station was partly controlled by 12 floodwater-retarding structures with a total combined capacity of 28,800 acre-ft (35.5 hm³) below the flood-spillway crests, of which 24,710 acre-ft (30.5 hm³) is floodwater-retarding capacity and 4,090 acre-ft (5.04 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WRD Texas 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.2	1.6	1.6	2.5	2.4	2.2	2.7	1.4	1.8	.63	1.2
2	1.0	1.6	1.6	1.8	2.3	2.3	2.3	2.6	1.5	.86	.55	.60
3	1.0	1.4	1.6	2.3	2.2	2.3	2.5	2.6	1.2	.64	.73	.46
4	1.0	1.3	1.6	2.1	2.3	2.3	2.3	2.7	1.1	.57	.65	2.4
5	1.0	1.3	1.6	2.0	2.4	2.4	2.3	2.9	.87	.53	.49	4.1
6	.98	1.2	1.4	2.0	2.2	2.4	2.5	3.2	.83	.50	.41	3.5
7	.96	1.1	1.5	1.8	2.6	2.3	2.7	2.8	.91	.43	.35	66
8	1.0	1.2	1.7	1.5	3.1	2.2	2.6	2.7	.88	.40	.31	5.0
9	1.0	1.2	1.6	1.5	2.5	2.3	2.6	2.7	.87	.40	.30	1.2
10	1.0	1.1	1.5	1.0	2.5	36	2.6	2.5	.89	.51	.32	1.0
11	.97	1.2	1.5	1.0	2.5	14	2.8	2.4	.93	.65	.32	1.1
12	.97	1.3	1.7	1.5	2.5	6.0	2.9	2.3	.96	.77	.31	.91
13	1.0	1.4	1.3	2.2	2.2	5.4	4.4	2.5	.95	6.0	.39	.81
14	1.0	1.2	1.5	2.3	2.1	4.3	3.5	3.2	.97	11	.31	.77
15	.98	1.3	1.3	2.3	2.1	3.8	3.2	3.2	.96	2.3	.27	.79
16	.92	1.4	1.3	2.2	2.1	3.6	2.8	2.8	1.3	1.1	.30	.77
17	1.0	1.4	1.4	2.2	2.6	3.5	2.8	2.5	1.0	1.0	.23	.80
18	.96	1.9	1.5	2.0	2.8	3.5	2.8	2.3	.74	1.1	.21	.90
19	1.2	1.7	1.5	1.9	2.8	3.3	2.9	2.2	.57	.91	.21	.97
20	2.2	1.5	1.6	2.0	2.3	3.2	2.5	2.1	.51	.69	.19	.87
21	5.3	1.7	1.5	6.1	2.5	3.2	2.4	2.0	.48	.52	.17	.78
22	3.0	1.6	1.5	3.6	3.3	3.3	2.6	2.8	.47	.43	.17	.73
23	2.2	1.5	1.6	2.8	3.6	12	3.3	2.3	.47	.41	.16	.70
24	1.9	1.8	1.4	2.4	3.2	6.5	2.9	2.0	.47	.37	.15	.73
25	2.0	1.7	1.5	3.6	2.8	3.9	3.5	1.8	.45	.32	.14	.71
26	2.2	1.5	1.4	3.2	2.6	3.4	3.5	1.7	.45	.31	.14	3.4
27	2.1	1.6	1.5	2.7	2.4	3.4	3.0	1.5	.42	.34	.16	3.3
28	1.9	1.4	1.8	2.4	2.4	3.4	3.1	1.3	.44	.38	.17	1.5
29	1.9	1.6	1.9	2.4	------	3.4	2.9	1.3	.49	.69	.18	1.1
30	6.6	1.7	1.7	2.6	------	4.4	2.9	1.2	1.9	.74	.22	1.0
31	9.5	------	1.6	2.7	------	2.4	------	1.3	------	.75	.45	------
TOTAL	59.64	44.0	47.7	71.7	71.2	156.8	85.3	72.1	25.43	37.42	9.58	108.10
MEAN	1.92	1.47	1.54	2.31	2.54	5.06	2.84	2.33	.85	1.21	.31	3.60
MAX	9.5	2.2	1.9	6.1	3.6	36	4.4	3.2	1.9	11	.73	66
MIN	.85	1.1	1.3	1.0	2.1	2.2	2.2	1.2	.42	.31	.14	.46
AC-FT	118	87	95	142	141	311	169	143	50	74	19	214

CAL YR 1972 TOTAL 1,977.97 MEAN 5.40 MAX 611 MIN .18 AC-FT 3,920
WTR YR 1973 TOTAL 788.97 MEAN 2.16 MAX 66 MIN .14 AC-FT 1,560

08081000 Salt Fork Brazos River near Peacock, Tex.

LOCATION.--Lat 33°12'43", long 100°25'53", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 380, 2.9 miles (4.7 km) northwest of Peacock, 6.2 miles (10.0 km) upstream from Croton Creek, 13.0 miles (20.9 km) northwest of Aspermont, and at mile 54.3 (87.4 km) measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River (revised).

DRAINAGE AREA.--4,275 mi² (11,072 km²), of which 2,770 mi² (7,170 km²) 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 (525.57 m) above mean sea level. Prior to Sept. 19, 1964, nonrecording gage at site 2.9 miles (4.7 km) upstream at datum 19.39 ft (5.91 m) lower.

AVERAGE DISCHARGE.--10 years (1950-51, 1964-73), 43.5 ft³/s (1.23 m³/s), 31,520 acre-ft/yr (38.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,060 ft³/s (58.3 m³/s) Mar. 10, gage height, 7.67 ft (2.34 m); no flow for many days.
Period of record: Maximum discharge, 19,000 ft³/s (538 m³/s) Aug. 13, 1972, gage height, 13.75 ft (4.19 m); no flow at times. Maximum stage since at least 1939, that of Aug. 13, 1972.

REMARKS.--Records fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	211	19	14	71	76	53	51	4.0	.55	.52	0
2	12	147	16	15	67	58	47	35	31	.01	.27	2.3
3	11	108	16	26	61	50	47	33	16	0	.13	0
4	10	85	16	24	51	44	39	27	7.8	0	.06	3.3
5	9.0	69	16	23	45	39	34	27	3.5	0	.03	8.6
6	7.8	61	15	20	41	40	30	27	3.5	0	.01	22
7	7.2	49	15	15	47	32	27	24	2.9	0	0	135
8	7.2	45	16	7.0	55	31	24	21	2.1	0	0	125
9	6.7	39	16	6.0	36	29	24	15	1.7	0	0	70
10	5.8	31	16	5.0	39	280	24	12	1.7	0	0	39
11	5.4	29	15	5.0	39	1,020	24	10	1.7	0	0	20
12	5.4	29	15	6.0	49	224	24	9.2	1.3	0	0	13
13	5.4	29	15	12	61	134	59	12	.95	0	0	7.2
14	5.0	22	15	21	55	90	57	20	.64	9.8	0	4.3
15	5.0	20	15	20	45	71	35	21	.64	62	0	4.3
16	5.0	20	14	19	41	65	26	16	.95	6.2	0	4.3
17	5.0	19	15	26	47	55	24	13	.86	13	0	4.3
18	4.6	21	15	46	47	47	20	11	1.6	10	0	4.3
19	11	22	15	34	37	44	22	9.3	1.0	3.6	0	4.3
20	26	22	15	24	33	39	16	8.2	.70	1.9	0	4.3
21	106	26	15	53	37	34	16	8.6	.43	.70	0	3.7
22	172	24	15	65	58	28	14	12	.39	.47	0	3.3
23	208	22	14	109	100	77	16	17	.27	.39	0	1.9
24	88	26	13	101	85	110	19	16	.24	.39	0	1.1
25	76	26	15	104	106	84	18	13	.24	.39	0	.77
26	63	22	15	114	132	56	25	11	.21	.39	0	9.0
27	54	21	14	111	100	48	27	9.7	.18	.39	0	11
28	48	19	14	117	85	43	97	8.4	.15	.47	0	4.6
29	46	19	14	103	------	39	82	6.7	2.7	7.4	0	3.7
30	190	20	14	83	------	53	67	4.6	5.3	1.9	0	2.3
31	473	------	14	73	------	57	------	3.3	------	1.2	0	------
TOTAL	1,691.5	1,303	467	1,401.0	1,670	3,097	1,037	512.0	94.65	121.15	1.02	516.87
MEAN	54.6	43.4	15.1	45.2	59.6	99.9	34.6	16.5	3.16	3.91	.033	17.2
MAX	473	211	19	117	132	1,020	97	51	31	62	.52	135
MIN	4.6	19	13	5.0	33	28	14	3.3	.15	0	0	0
AC-FT	3,360	2,580	926	2,780	3,310	6,140	2,060	1,020	188	240	2.0	1,030

CAL YR 1972 TOTAL 32,581.14 MEAN 89.0 MAX 9,220 MIN 0 AC-FT 64,620
WTR YR 1973 TOTAL 11,912.19 MEAN 32.6 MAX 1,020 MIN 0 AC-FT 23,630

PEAK DISCHARGE (BASE, 5,000 FT³/S).--No peak above base.

08081200 Croton Creek near Jayton, Tex.

LOCATION.--Lat 33°17'21", long 100°26'00", Stonewall County, on left bank 460 ft (140 m) upstream from county road, 1.1 miles (1.8 km) upstream from mouth, and 8.6 miles (13.8 km) northeast of Jayton.

DRAINAGE AREA.--302 mi² (782 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,694.45 ft (516.47 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 15.9 ft³/s (0.450 m³/s), 11,520 acre-ft/yr (14.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 564 ft³/s (16.0 m³/s) Sept. 7, gage height, 7.69 ft (2.34 m); no flow for many days.
Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) Oct. 18, 1960, gage height, 12.40 ft (3.78 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s); no flow for many days.
Maximum stage since at least 1935, 13.5 ft (4.1 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	26	3.7	1.9	7.6	7.3	11	3.4	2.6	3.6	.63	13
2	1.2	14	3.4	2.0	6.9	6.9	9.5	2.5	7.8	2.3	.05	2.6
3	1.1	9.9	3.1	5.4	6.5	6.6	9.5	2.3	3.7	.70	.01	.10
4	1.0	7.6	2.8	5.5	6.2	6.6	8.5	2.0	1.3	.11	0	23
5	.98	6.1	2.7	4.4	5.8	6.2	7.5	2.3	.63	0	0	83
6	.85	5.5	2.2	3.5	5.8	5.8	7.0	3.7	.42	0	0	62
7	.75	4.0	2.0	2.5	7.1	5.3	6.8	2.7	.27	0	0	162
8	.75	3.7	2.1	2.0	13	4.7	7.8	2.2	.01	0	0	82
9	.74	3.4	2.3	1.5	9.1	4.6	7.2	2.1	0	0	0	19
10	.63	3.1	2.3	1.0	8.1	50	6.4	1.9	0	0	0	7.7
11	.61	3.1	2.3	2.0	7.5	47	5.8	1.6	0	0	0	4.4
12	.52	2.8	2.5	3.0	7.1	24	5.6	1.4	0	0	0	2.8
13	.52	3.5	2.5	4.6	6.2	18	13	2.1	0	0	0	1.6
14	.52	3.5	2.8	6.7	5.9	15	11	3.7	0	0	0	1.1
15	.40	3.2	2.8	6.0	5.5	12	8.0	5.1	0	0	0	4.3
16	.33	3.1	2.2	5.9	5.2	11	5.9	3.2	1.2	0	.39	2.0
17	.33	3.1	1.9	5.2	6.2	9.6	4.8	2.1	.87	0	0	1.1
18	.33	4.0	2.3	4.4	9.9	8.8	4.7	1.5	.09	1.5	0	.83
19	1.1	5.1	2.3	3.2	7.8	8.2	4.6	1.1	0	.04	0	.60
20	7.8	4.8	2.3	2.9	7.2	7.4	3.9	1.1	0	0	0	.36
21	25	5.5	2.2	27	7.2	6.9	3.9	.98	0	0	0	.16
22	32	4.9	2.0	17	12	6.3	10	5.9	0	0	0	.05
23	20	4.8	1.9	13	17	14	8.3	5.0	0	0	0	0
24	11	5.2	1.8	11	12	80	12	2.7	0	0	0	0
25	9.1	5.4	1.8	16	10	27	11	1.5	0	.02	0	0
26	9.5	4.8	1.8	15	8.9	16	9.1	.89	0	0	0	7.0
27	8.6	4.1	1.8	12	7.9	13	6.7	.64	0	0	0	3.9
28	7.0	3.5	1.8	9.6	7.3	11	5.8	.36	0	0	0	1.2
29	6.9	3.2	1.9	8.1	------	10	4.6	.28	0	4.1	0	.41
30	48	3.9	2.0	8.0	------	15	3.7	.21	0	1.2	0	.09
31	64	------	2.0	8.0	------	13	------	.24	------	.69	0	------
TOTAL	263.06	164.8	71.5	218.3	226.9	477.2	223.6	66.70	18.89	14.26	1.08	486.30
MEAN	8.49	5.49	2.31	7.04	8.10	15.4	7.45	2.15	.63	.46	.035	16.2
MAX	64	26	3.7	27	17	80	13	5.9	7.8	4.1	.63	162
MIN	.33	2.8	1.8	1.0	5.2	4.6	3.7	.21	0	0	0	0
AC-FT	522	327	142	433	450	947	444	132	37	28	2.1	965

CAL YR 1972 TOTAL 5,049.09 MEAN 13.8 MAX 1,580 MIN 0 AC-FT 10,010
WTR YR 1973 TOTAL 2,232.59 MEAN 6.12 MAX 162 MIN 0 AC-FT 4,430

PEAK DISCHARGE (BASE, 1,600 FT³/S).--No peak above base.

08081500 Salt Croton Creek near Aspermont, Tex.

LOCATION.--Lat 33°24'03", long 100°24'29", King County, on left bank 0.1 mile (0.2 km) downstream from Haystack Creek, 2.4 miles (3.9 km) downstream from Salt Flat Creek, 9.0 miles (14.5 km) upstream from Salt Fork Brazos River, and 21 miles (34 km) northwest of Aspermont.

DRAINAGE AREA.--64.3 mi² (166.5 km²).

PERIOD OF RECORD.--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 (508 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 5.86 ft³/s (0.166 m³/s), 4,250 acre-ft/yr (5.24 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 972 ft³/s (27.5 m³/s) Sept. 7, gage height, 3.13 ft (0.95 m); minimum daily, 0.21 ft³/s (5.9 dm³/s) June 20.
Period of record: Maximum discharge, 29,900 ft³/s (847 m³/s) Aug. 30, 1966, gage height, 8.75 ft (2.67 m), from rating curve extended above 240 ft³/s (6.80 m³/s) on basis of slope-area measurements of 6,910, 11,400, and 29,500 ft³/s (196, 323, and 835 m³/s); minimum daily, 0.05 ft³/s (1.42 dm³/s) June 17-22, 1967.
Flood in 1941 reached a stage of about 9 ft (3 m), 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	3.5	1.0	.99	1.4	2.0	1.5	1.4	26	.98	.45	27
2	.57	3.5	.68	2.0	1.0	1.7	1.8	.60	21	.79	.96	2.6
3	.47	2.8	.48	5.6	1.1	1.4	1.8	.45	.33	.62	1.1	1.2
4	.47	2.6	.63	2.4	1.1	1.1	1.5	2.6	.23	.45	.23	22
5	.59	2.3	.67	2.4	.99	1.4	1.6	4.1	.23	.37	.23	49
6	.33	2.0	.79	2.4	1.1	1.5	1.9	2.5	.33	.56	.33	18
7	.35	1.0	.99	3.1	4.0	1.3	1.7	1.5	.33	.60	.45	123
8	.53	1.0	.91	1.6	5.2	.83	1.8	.79	.33	.75	.45	6.6
9	.38	1.2	1.0	1.2	2.8	1.3	1.5	.79	.60	.78	.33	2.6
10	.61	.60	.65	1.2	2.5	84	1.6	.80	.79	.33	7.0	1.2
11	.51	.60	1.1	1.7	2.2	5.9	1.9	.39	.60	.45	2.0	1.2
12	.37	.79	1.4	2.2	1.5	4.3	1.9	.57	.33	1.7	.45	24
13	.47	.60	1.2	3.5	1.4	3.8	9.3	1.1	.23	1.4	.60	49
14	.38	.60	1.1	4.8	1.2	2.3	3.8	2.8	.23	.33	.60	1.7
15	.33	1.0	1.4	3.7	1.0	2.0	2.9	1.8	.23	.23	.60	.60
16	.37	.67	1.4	2.6	1.2	2.0	2.6	.79	.33	.33	1.4	.33
17	.37	.69	1.2	2.3	3.5	2.2	2.6	.62	.33	1.5	1.0	.33
18	.33	2.7	1.2	1.5	2.7	2.5	3.7	.51	.33	.60	1.0	.60
19	3.6	1.3	1.2	1.8	1.4	2.4	2.8	.56	.33	.33	.79	1.0
20	8.9	1.2	.79	1.7	1.2	2.3	1.4	.59	.21	.33	.45	1.0
21	18	2.8	.79	23	2.5	2.8	.85	.67	.38	.23	.45	1.0
22	4.2	1.2	.90	4.3	8.2	2.9	8.9	4.5	.46	.23	.60	.60
23	1.9	1.1	.79	2.4	6.5	9.1	3.2	.71	.48	.23	.45	.79
24	1.5	3.3	.67	2.3	3.7	6.1	5.2	.39	.50	.23	.45	1.0
25	1.6	.84	.68	10	2.5	1.6	7.5	.42	.80	.23	.45	.60
26	2.1	.90	.80	6.4	1.9	1.6	2.1	.45	.69	.23	.60	29
27	1.5	.74	1.1	2.8	2.0	3.5	1.3	.45	.45	.33	.60	.79
28	.97	.66	1.4	1.2	2.0	2.2	1.7	.45	.94	.45	.79	.60
29	1.2	1.5	1.4	1.7	------	2.6	1.5	.33	.71	4.0	.79	.60
30	60	1.4	1.2	2.0	------	4.9	2.0	.43	1.5	1.7	1.0	.45
31	28	------	1.1	2.2	------	1.5	------	.60	------	8.6	51	------
TOTAL	141.45	45.09	30.62	106.99	67.79	165.03	83.85	34.66	60.23	29.89	77.60	368.39
MEAN	4.56	1.50	.99	3.45	2.42	5.32	2.80	1.12	2.01	.96	2.50	12.3
MAX	60	3.5	1.4	23	8.2	84	9.3	4.5	26	8.6	51	123
MIN	.33	.60	.48	.99	.99	.83	.85	.33	.21	.23	.23	.33
AC-FT	281	89	61	212	134	327	166	69	119	59	154	731

CAL YR 1972 TOTAL 2,304.28 MEAN 6.30 MAX 634 MIN .33 AC-FT 4,570
WTR YR 1973 TOTAL 1,211.59 MEAN 3.32 MAX 123 MIN .21 AC-FT 2,400

PEAK DISCHARGE (BASE, 1,000 FT³/S).--No peak above base.

08082000 Salt Fork Brazos River near Aspermont, Tex.

LOCATION.--Lat 33°20'02", long 100°14'24", Stonewall County, on left bank 625 ft (190 m) upstream from bridge on U.S. Highway 83, 5.4 miles (8.7 km) downstream from Salt Croton Creek, 13.2 miles (21.2 km) north of Aspermont, and at mile 27.4 (44.1 km) measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River (revised).

DRAINAGE AREA.--4,830 mi² (12,510 km²), approximately, of which 2,770 mi² (7,170 km²) 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 (484.24 m) above mean sea level. Dec. 5, 1923, to Aug. 29, 1925, nonrecording gage at site 6.8 miles (10.9 km) downstream at different datum. June 15, 1939, to July 13, 1972, water-stage recorder at site 0.1 mile (0.2 km) downstream at same datum.

AVERAGE DISCHARGE.--34 years (1939-73), 125 ft³/s (3.54 m³/s), 90,560 acre-ft/yr (112 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (41.9 m³/s) Oct. 30, gage height, 6.09 ft (1.86 m); minimum, 0.04 ft³/s (1.1 dm³/s) Aug. 28.
Period of record: Maximum discharge, 52,200 ft³/s (1,480 m³/s) Sept. 25, 1955, gage height, 14.92 ft (4.55 m), from rating curve extended above 29,000 ft³/s (821 m³/s); 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 (4.4 m), and flood in November 1934 reached a stage of 13.7 ft (4.2 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	269	39	14	75	96	67	46	38	.27	5.1	65
2	24	197	35	16	69	85	61	36	58	.20	1.2	5.7
3	20	147	32	31	63	76	59	28	29	.27	.47	1.8
4	18	113	30	36	59	73	55	26	17	.27	.47	.86
5	14	97	30	33	53	69	51	26	10	.27	.20	75
6	12	87	26	28	51	64	47	31	7.2	.27	.09	152
7	10	76	25	30	53	60	47	26	5.7	.86	.09	462
8	10	69	25	21	77	51	47	23	4.6	.47	.09	220
9	10	62	26	9.0	76	46	45	21	4.1	.36	.09	128
10	8.9	54	26	8.1	69	313	44	17	3.6	.27	13	71
11	8.1	53	24	8.1	67	713	42	16	3.6	1.0	22	42
12	5.6	51	27	9.0	67	312	40	13	3.1	.72	2.7	32
13	5.7	50	27	26	66	198	79	13	3.1	.59	.72	206
14	5.2	46	25	46	65	152	67	21	3.1	.72	.27	43
15	5.1	44	25	49	64	125	65	32	2.7	.47	4.3	25
16	5.6	41	23	45	59	111	49	30	2.3	5.6	9.0	22
17	5.3	36	22	42	61	102	42	23	1.8	6.4	1.0	19
18	5.1	34	22	38	72	93	42	18	1.5	4.6	.59	8.5
19	5.3	43	22	45	68	87	40	14	1.2	1.5	.27	7.2
20	30	44	20	39	63	83	35	12	.86	.72	.20	5.7
21	311	47	19	132	64	79	32	10	.86	.47	.14	2.7
22	169	49	18	106	81	75	50	16	.86	.36	.09	3.1
23	181	47	18	86	120	87	61	28	.72	.27	.09	2.7
24	159	47	16	108	109	177	63	22	.59	.27	.09	1.8
25	115	51	16	125	101	142	63	16	.47	.20	.09	1.0
26	111	47	16	141	120	89	58	12	.36	.20	.09	41
27	93	43	16	114	128	75	49	8.6	.36	.20	.09	36
28	74	38	17	97	116	69	47	6.9	.30	.20	.06	23
29	67	36	18	99	------	63	73	7.1	.27	15	.09	10
30	369	39	16	94	------	85	59	6.1	.27	28	.14	5.7
31	736	------	15	84	------	75	------	5.6	------	5.1	.20	------
TOTAL	2,615.9	2,054	716	1,759.2	2,131	3,925	1,579	610.3	205.52	76.10	63.02	1,718.76
MEAN	84.4	68.5	23.1	56.7	76.1	127	52.6	19.7	6.85	2.45	2.03	57.3
MAX	736	269	39	141	128	713	79	46	58	28	22	462
MIN	5.1	36	15	8.1	51	46	32	5.6	.27	.20	.06	.86
AC-FT	5,190	4,070	1,420	3,490	4,230	7,790	3,130	1,210	408	151	125	3,410

CAL YR 1972 TOTAL 49,024.76 MEAN 134 MAX 11,300 MIN 0 AC-FT 97,240
WTR YR 1973 TOTAL 17,453.80 MEAN 47.8 MAX 736 MIN .06 AC-FT 34,620

PEAK DISCHARGE (BASE, 12,000 FT³/S).--No peak above base.

08082100 Stinking Creek near Aspermont, Tex.

LOCATION.--Lat 33°14'00", long 100°12'47", Stonewall County, at downstream side of bridge on Farm Road 1263, 4.9 miles (7.9 km) upstream from Salt Fork Brazos River, and 6.8 miles (10.9 km) north of Aspermont.

DRAINAGE AREA.--92.4 mi² (239 km²).

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,601.5 ft (488.1 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--8 years, 4.18 ft³/s (118 dm³/s), 3,030 acre-ft/yr (3.74 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 217 ft³/s (6.15 m³/s) Aug. 11, gage height, 5.47 ft (1.67 m); minimum, 0.10 ft³/s (2.8 dm³/s) July 7, 9.
Period of record: Maximum discharge, 1,620 ft³/s (45.9 m³/s) Aug. 13, 1972, gage height, 9.85 ft (3.00 m); no flow for many days.
Maximum stage since at least 1925, 31 ft (9 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	103	1.9	1.6	2.7	3.7	2.8	1.4	.49	.29	1.1	.56
2	1.1	41	1.9	1.5	2.4	3.5	2.5	1.2	2.6	.16	.49	.65
3	.86	13	1.9	2.3	2.5	3.3	2.5	1.1	4.4	.14	.29	.52
4	.93	8.5	1.8	2.7	2.7	3.2	2.5	1.1	.80	.13	.19	.49
5	.87	6.4	1.9	2.7	2.7	3.1	2.5	1.1	.50	.13	.18	.48
6	.83	5.3	1.8	2.5	2.6	3.1	2.3	1.1	.42	.11	.17	9.0
7	.82	5.4	1.7	2.4	3.1	3.1	2.5	1.2	.40	.12	.13	39
8	.80	4.6	1.7	2.2	4.9	3.1	4.0	1.1	.29	.11	.13	21
9	.81	4.2	1.7	2.0	4.3	3.1	3.2	.95	.28	.11	.36	8.6
10	.77	3.6	1.8	1.9	3.5	67	2.1	.89	.28	.13	3.5	2.7
11	.71	3.2	1.8	1.9	2.9	40	2.0	.77	.28	.13	67	1.3
12	.69	3.1	1.8	1.8	2.8	16	2.3	.66	.28	.18	16	1.3
13	.60	2.8	1.8	1.8	2.6	7.8	6.2	.70	.28	.25	2.5	1.3
14	.60	2.4	1.8	2.3	2.4	5.7	2.8	.77	.29	.25	.81	.62
15	.60	2.3	1.8	2.7	2.3	4.8	2.3	.88	.27	.48	.49	.61
16	.60	2.4	1.7	2.8	2.3	4.3	2.1	.88	.25	.34	.45	.58
17	.60	2.4	1.7	2.8	2.3	3.9	2.0	.84	.24	.35	.46	.51
18	.60	2.6	1.6	3.5	2.8	3.8	2.0	.82	.21	.34	.46	.50
19	1.1	2.5	1.6	2.7	3.0	3.7	17	.79	.18	.26	.46	.56
20	7.2	2.3	1.7	2.4	3.0	3.2	8.7	.67	.18	.20	.46	.43
21	44	3.1	1.8	2.6	2.8	3.1	4.9	.59	.18	.19	.48	.42
22	41	2.5	1.7	2.7	3.4	3.1	2.4	.57	.26	.16	.50	.42
23	16	2.3	1.7	2.7	7.7	3.8	2.3	.76	.20	.14	.50	.42
24	8.3	2.5	1.7	2.6	11	4.4	6.6	1.1	.20	.14	.50	.42
25	6.1	2.7	1.6	4.5	7.0	4.0	3.9	.84	.20	.14	.47	.46
26	6.1	2.4	1.8	10	4.7	3.2	5.0	.57	.18	.13	.46	3.4
27	6.4	2.2	1.8	7.4	3.8	2.8	3.0	.46	.18	.13	.46	3.9
28	3.9	2.2	1.8	4.8	3.8	2.8	2.1	.40	.16	.37	.46	1.9
29	3.3	1.9	1.8	3.7	------	2.8	1.6	.38	.22	10	.45	.72
30	23	1.9	1.7	3.5	------	4.4	1.6	.38	.31	28	.42	.53
31	133	------	1.7	3.0	------	3.6	------	.38	------	3.0	.42	------
TOTAL	313.39	244.7	54.5	94.0	102.0	227.4	107.7	25.35	15.01	46.61	100.75	103.30
MEAN	10.1	8.16	1.76	3.03	3.64	7.34	3.59	.82	.50	1.50	3.25	3.44
MAX	133	103	1.9	10	11	67	17	1.4	4.4	28	67	39
MIN	.60	1.9	1.6	1.5	2.3	2.8	1.6	.38	.16	.11	.13	.42
AC-FT	622	485	108	186	202	451	214	50	30	92	200	205

CAL YR 1972 TOTAL 2,860.38 MEAN 7.82 MAX 728 MIN 0 AC-FT 5,670
WTR YR 1973 TOTAL 1,434.71 MEAN 3.93 MAX 133 MIN .11 AC-FT 2,850

PEAK DISCHARGE (BASE, 300 FT³/S).--No peak above base.

08082180 North Croton Creek near Knox City, Tex.

LOCATION.--Lat 33°22'59", long 100°04'51", Stonewall County, on left bank 600 ft (183 m) downstream from Wedington Creek, 9.5 miles (15.3 km) upstream from Brazos River, and 15 miles (24 km) southwest of Knox City.

DRAINAGE AREA.--251 mi² (650 km²).

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,462.44 ft (445.75 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 23.6 ft³/s (0.67 m³/s), 17,100 acre-ft/yr (21.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 835 ft³/s (23.6 m³/s) Mar. 10, gage height, 11.02 ft (3.36 m), from rating curve extended as explained below; minimum, 0.09 ft³/s (2.5 dm³/s) Aug. 25, 26.
Period of record: Maximum discharge, 32,300 ft³/s (915 m³/s) Aug. 30, 1966, gage height, 32.36 ft (9.86 m), from rating curve extended above 240 ft³/s (6.80 m³/s) on basis of slope-area measurements of 4,880 ft³/s (138 m³/s), 6,530 ft³/s (185 m³/s), 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 (10 m), from information by local residents.

REMARKS.--Records good except those above 50 ft³/s (1.42 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	112	6.9	2.9	8.6	6.9	13	6.4	32	.44	2.3	.46
2	1.8	30	6.4	2.3	7.4	16	11	5.0	95	.44	1.1	.23
3	1.6	21	6.2	3.3	6.9	9.3	11	4.5	25	.40	.49	.15
4	1.6	17	5.7	3.5	6.5	11	10	4.2	6.2	.40	1.0	3.4
5	1.9	15	5.7	2.6	5.6	9.7	9.0	4.1	3.2	.40	.59	.56
6	1.8	13	4.9	10	4.5	8.7	9.0	4.5	2.2	.36	.40	29
7	1.5	11	4.6	4.5	9.0	11	9.0	4.4	1.8	.32	.38	220
8	1.5	10	4.7	3.0	12	9.0	9.2	3.9	1.6	.29	.32	31
9	1.5	10	4.6	2.0	10	8.6	8.5	3.7	1.4	.26	.29	10
10	1.4	8.6	4.5	2.0	9.5	266	7.7	3.5	1.3	.26	1.9	5.6
11	1.4	8.4	4.2	2.0	9.3	108	7.6	3.3	1.3	.35	.32	3.7
12	1.3	8.8	4.3	3.5	8.8	34	7.4	2.9	1.3	2.1	.26	8.4
13	1.3	9.8	4.2	4.1	7.9	27	19	2.7	1.2	.61	.18	111
14	1.2	8.0	4.0	4.4	7.4	23	18	2.7	1.1	57	.19	9.4
15	1.2	7.9	4.0	4.4	7.1	19	13	2.9	1.1	1.8	.19	10
16	1.2	7.9	3.8	3.3	5.9	18	10	2.9	.92	.43	.18	5.0
17	1.2	7.7	4.0	5.6	7.6	17	8.6	2.7	.85	.32	.18	3.1
18	1.1	8.6	3.7	4.3	9.9	16	8.2	2.6	.78	.56	.16	2.8
19	1.2	8.8	3.7	1.4	9.1	16	8.7	2.6	.71	.50	.16	2.3
20	2.3	7.9	3.7	8.5	8.4	14	7.0	2.4	.59	.34	.14	2.0
21	85	8.9	3.6	7.1	8.3	14	6.4	2.4	.54	.31	.14	1.7
22	60	8.6	3.5	22	11	13	5.7	2.4	.49	.28	.14	1.7
23	16	7.7	3.3	12	16	18	47	2.3	.49	.26	.12	1.8
24	8.8	8.6	3.2	8.5	15	82	24	2.3	.49	.24	.12	1.8
25	7.2	8.9	3.1	12	13	24	15	2.3	.49	.20	.09	1.5
26	6.8	7.4	3.0	18	12	15	12	2.0	.44	.18	.10	9.3
27	6.8	7.0	2.3	16	11	14	10	1.7	.44	.18	.11	22
28	6.0	6.1	2.0	11	7.4	13	8.9	1.6	.44	.18	.12	6.1
29	5.5	6.2	2.0	9.2	------	12	7.7	1.6	.44	.42	.12	2.9
30	9.5	7.2	2.0	8.7	------	19	6.8	1.6	.44	3.0	.12	2.0
31	326	------	6.3	8.7	------	18	------	1.5	------	4.0	.15	------
TOTAL	567.5	408.0	128.1	210.8	255.1	890.2	348.4	93.6	184.25	76.83	12.06	508.90
MEAN	18.3	13.6	4.13	6.80	9.11	28.7	11.6	3.02	6.14	2.48	.39	17.0
MAX	326	112	6.9	22	16	266	47	6.4	95	57	2.3	220
MIN	1.1	6.1	2.0	1.4	4.5	6.9	5.7	1.5	.44	.18	.09	.15
AC-FT	1,130	809	254	418	506	1,770	691	186	365	152	24	1,010

CAL YR 1972 TOTAL 9,927.89 MEAN 27.1 MAX 2,610 MIN .01 AC-FT 19,690
WTR YR 1973 TOTAL 3,683.74 MEAN 10.1 MAX 326 MIN .09 AC-FT 7,310

PEAK DISCHARGE (BASE, 1,000 FT³/S).--No peak above base.

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 (1.3 km) upstream from Wichita Valley Railway bridge, 1.0 mile (1.6 km) southwest of courthouse in Seymour, and at mile 833.2 (1,340.6 km).

DRAINAGE AREA.--14,490 mi² (37,529 km²), approximately, of which 9,240 mi² (23,932 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,238.97 ft (377.64 m) above mean sea level. Prior to Apr. 6, 1972, at datum 2.00 ft (0.61 m) higher.

AVERAGE DISCHARGE.--49 years (1924-73), 404 ft³/s (11.4 m³/s), 292,700 acre-ft/yr (361 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) Oct. 31, gage height, 8.65 ft (2.64 m); minimum, 0.01 ft³/s (0.28 dm³/s) Aug. 28.

Period of record: Maximum discharge, 95,400 ft³/s (2,700 m³/s) Oct. 16, 1926, gage height, 17.16 ft (5.23 m) from floodmarks, present datum, from rating curve extended above 48,000 ft³/s (1,360 m³/s) on basis of slope-area measurement of 95,400 ft³/s (2,700 m³/s); maximum gage height, 23.00 ft (7.01 m), present datum, Sept. 28, 1955, discharge, 71,200 ft³/s (2,020 m³/s); 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 (54.2 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	6,090	187	101	343	504	428	103	169	20	168	.09
2	180	3,210	182	106	288	375	286	99	459	18	128	1.2
3	163	1,940	179	165	263	304	230	104	4,150	15	139	9.5
4	147	1,340	175	155	239	256	204	98	3,250	11	94	2.2
5	137	980	169	139	217	221	199	95	2,280	8.0	103	3.7
6	121	750	162	120	205	228	198	94	1,400	15	72	222
7	115	577	157	100	202	185	175	82	897	9.5	64	528
8	106	460	155	90	210	168	161	75	657	6.6	46	822
9	102	391	149	75	220	150	150	75	494	4.2	40	1,400
10	94	325	150	64	259	844	149	70	398	3.7	31	990
11	84	285	147	64	267	1,060	148	61	295	12	19	822
12	77	272	153	80	266	3,380	137	54	236	14	66	474
13	73	253	149	122	238	1,940	190	55	204	42	84	382
14	62	223	145	183	221	1,390	173	55	192	36	27	828
15	58	220	142	188	219	1,080	251	60	156	29	51	467
16	54	211	143	170	238	851	222	62	116	192	23	233
17	51	199	140	163	238	660	164	61	97	132	94	131
18	41	223	139	163	239	559	158	57	83	83	61	174
19	38	209	130	152	224	471	535	52	72	44	15	145
20	54	200	128	142	216	396	304	68	138	64	5.4	105
21	295	211	124	201	197	347	192	65	352	59	2.2	79
22	1,120	203	123	261	204	310	162	58	279	51	.87	56
23	1,180	201	122	185	222	311	185	97	89	25	.63	44
24	745	214	118	238	247	471	659	80	55	14	.33	36
25	828	210	120	863	299	343	511	49	46	7.3	.15	30
26	619	206	115	773	336	367	483	40	38	3.7	.07	51
27	436	200	114	595	308	370	229	35	31	2.4	.02	112
28	380	191	112	485	376	309	155	35	27	1.7	.01	112
29	357	188	117	401	------	245	128	38	25	31	.09	64
30	1,770	189	107	350	------	884	123	38	23	22	.11	62
31	5,730	------	103	398	------	875	------	31	------	38	.05	------
TOTAL	15,417	20,371	4,356	7,292	7,001	19,854	7,289	2,046	16,708	1,014.1	1,334.93	8,385.69
MEAN	497	679	141	235	250	640	243	66.0	557	32.7	43.1	280
MAX	5,730	6,090	187	863	376	3,380	659	104	4,150	192	168	1,400
MIN	38	188	103	64	197	150	123	31	23	1.7	.01	.09
AC-FT	30,580	40,410	8,640	14,460	13,890	39,380	14,460	4,060	33,140	2,010	2,650	16,630

CAL YR 1972 TOTAL 198,875.66 MEAN 543 MAX 28,900 MIN 0 AC-FT 394,500
WTR YR 1973 TOTAL 111,068.72 MEAN 304 MAX 6,090 MIN .01 AC-FT 220,300

PEAK DISCHARGE (BASE, 11,000 FT³/S).--No peak above base.

08082700 Millers Creek near Munday, Tex.

LOCATION.--Lat 33°19'45", long 99°27'53", Throckmorton County, near right bank on downstream side of bridge on Farm Road 1720, 12.7 miles (20.4 km) southeast of Munday, and 25 miles (40 km) upstream from Brazos River.

DRAINAGE AREA.--113 mi² (293 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,350 ft (411 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 5.62 ft³/s (0.159 m³/s), 4,070 acre-ft/yr (5.02 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 998 ft³/s (28.3 m³/s) June 3, gage height, 14.70 ft (4.48 m); no flow for many days.
Period of record: Maximum discharge, 1,040 ft³/s (29.5 m³/s) Aug. 26, 1971, gage height, 14.75 ft (4.50 m); no flow most of time.
Maximum stage since at least 1883 occurred June 13, 1930, exceeded 18.0 ft (5.5 m); maximum stage since 1930, 18.0 ft (5.5 m) in October 1962, from information by local resident.

REMARKS.--Records poor. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	622	.27	.05	1.2	1.9	16	2.2	112	.32	.02	0
2	.06	394	.23	.19	.82	1.5	4.6	1.7	801	.30	.01	0
3	.05	62	.21	1.2	.64	1.1	3.0	1.2	893	.28	.01	0
4	.05	22	.19	.92	.52	.87	2.0	.92	461	.26	0	0
5	.03	11	.17	1.1	.44	.77	1.6	1.1	32	.24	0	0
6	.03	6.0	.15	.68	.41	8.8	1.4	7.0	9.3	.23	0	0
7	.03	3.5	.10	.30	.68	16	1.2	15	5.1	.22	0	0
8	.01	2.2	.15	.10	3.2	6.9	1.1	5.9	3.8	.21	0	0
9	.01	1.4	.15	0	5.0	2.2	.97	2.6	2.9	.20	0	0
10	.01	.90	.10	0	3.1	197	.82	1.8	2.4	.18	0	0
11	.01	.70	0	0	2.8	316	.77	1.3	2.1	.16	0	0
12	.01	.50	0	0	1.9	63	.72	.82	1.9	.14	0	0
13	0	.40	0	.20	1.3	16	1.1	.68	1.7	.13	0	.76
14	0	.35	0	.92	.92	6.9	1.6	.60	1.4	.12	0	.32
15	0	.32	0	.68	.72	4.1	32	.40	1.4	.11	0	.11
16	0	.31	0	.64	.60	3.0	51	.34	1.2	.10	0	.05
17	0	.30	.03	.64	.56	2.2	11	.29	.64	.09	0	.03
18	0	.30	.20	.48	.64	1.8	4.6	.25	1.3	.08	0	0
19	0	.30	.14	.41	.64	1.5	114	.22	79	.08	0	0
20	0	.30	.20	.41	.64	1.3	80	.20	47	.08	0	0
21	.06	.29	.23	.52	.56	1.1	13	.15	5.3	.07	0	0
22	0	.29	.17	.48	3.5	.97	4.8	.10	2.4	.07	0	0
23	.17	.29	.17	.35	12	1.1	3.4	.08	1.3	.06	0	0
24	0	.29	.08	.32	16	1.9	41	.06	.82	.06	0	0
25	0	.29	.08	14	13	1.6	43	.04	.68	.05	0	0
26	0	.29	.08	28	7.8	1.4	69	.03	.60	.05	0	0
27	.02	.28	.11	24	4.2	1.1	26	.02	.50	.04	0	0
28	0	.28	.11	12	2.6	.87	8.0	.01	.45	.04	0	0
29	0	.28	.11	4.4	------	.77	3.9	0	.40	.03	0	0
30	27	.28	.14	2.5	------	44	2.8	0	.35	.03	0	0
31	274	------	.08	1.6	------	91	------	0	------	.02	0	------
TOTAL	301.61	1,131.64	3.65	97.09	86.39	798.65	544.38	45.01	2,472.94	4.05	.04	1.27
MEAN	9.73	37.7	.12	3.13	3.09	25.8	18.1	1.45	82.4	.13	.001	.042
MAX	274	622	.27	28	16	316	114	15	893	.32	.02	.76
MIN	0	.28	0	0	.41	.77	.72	0	.35	.02	0	0
AC-FT	598	2,240	7.2	193	171	1,580	1,080	89	4,910	8.0	.08	2.5

CAL YR 1972 TOTAL 2,782.87 MEAN 7.60 MAX 622 MIN 0 AC-FT 5,520
WTR YR 1973 TOTAL 5,486.72 MEAN 15.0 MAX 893 MIN 0 AC-FT 10,880

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 1	1800	12.25	659	6- 3	0200	14.70	998
3-11	0400	9.85	438	6-19	0600	6.19	243

08083100 Clear Fork Brazos River near Roby, Tex.

LOCATION.--Lat 32°47'15", long 100°23'18", Fisher County, on right bank at downstream side of pile bent of bridge on State Highway 70, 3.0 miles (4.8 km) north of Roby, 3.2 miles (5.1 km) upstream from Cottonwood Creek, and at mile 255.7 (411.4 km).

DRAINAGE AREA.--216 mi² (559 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,885.09 ft (574.58 m) above mean sea level.

AVERAGE DISCHARGE.--11 years (1962-73), 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 428 ft³/s (12.1 m³/s) Mar. 11, gage height, 9.20 ft (2.80 m); minimum, 0.36 ft³/s (10 dm³/s) Sept. 23.
Period of record: Maximum discharge, 7,050 ft³/s (200 m³/s) Oct. 18, 1965, gage height, 21.48 ft (6.55 m); maximum gage height, 21.52 ft (6.56 m) Sept. 19, 1969; no flow at times in 1963-67.
Maximum stage since the 1890's, about 22 ft (7 m) in May and June 1935, from information by local residents.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	4.5	2.9	2.7	3.0	3.5	5.1	5.5	3.4	2.7	2.8	2.1
2	2.9	3.4	2.9	2.7	2.9	3.4	5.1	5.0	3.6	2.6	2.5	2.1
3	2.8	2.8	2.9	2.8	2.9	3.5	5.1	5.0	6.0	2.6	2.3	2.1
4	2.9	2.6	2.8	2.7	3.0	3.6	5.0	5.1	3.5	2.4	2.4	2.1
5	2.8	2.6	2.9	2.7	3.1	3.7	5.1	5.3	3.2	2.4	2.3	2.5
6	2.7	2.7	2.7	2.7	3.2	3.9	5.3	5.4	3.1	2.3	2.3	14
7	2.6	2.5	2.7	2.8	3.7	3.8	5.5	5.2	3.1	2.2	2.2	37
8	2.7	2.6	2.8	2.8	4.0	3.9	5.4	5.0	3.1	2.2	2.2	31
9	2.6	2.6	2.9	2.7	4.1	3.8	5.2	4.9	3.0	2.2	2.2	5.4
10	2.6	2.5	2.8	2.7	3.6	160	5.3	4.9	3.0	2.2	2.4	5.1
11	2.5	2.6	2.7	2.7	3.4	148	5.6	4.7	3.1	2.4	3.0	4.4
12	2.4	2.7	2.8	2.7	3.4	17	5.8	4.0	3.1	2.4	2.4	2.1
13	2.4	2.7	4.8	2.8	3.2	8.0	6.2	3.9	3.1	2.3	2.1	2.1
14	2.4	2.6	4.1	2.8	3.2	6.3	6.0	4.0	3.0	3.0	2.1	1.9
15	2.3	2.6	3.1	2.7	3.2	5.7	6.2	4.2	3.0	7.4	2.0	2.0
16	2.4	2.7	2.9	2.7	3.1	5.5	5.7	4.0	2.9	9.1	2.1	2.0
17	2.3	2.8	2.8	2.6	3.3	5.3	6.0	4.2	2.9	2.8	2.1	2.0
18	2.2	2.9	2.8	2.6	3.4	5.4	6.0	4.0	2.5	2.3	2.1	2.0
19	2.6	2.8	2.8	2.6	3.3	5.4	7.8	3.9	1.8	2.2	2.1	2.1
20	3.1	2.8	2.8	2.6	3.3	5.2	6.4	4.2	1.6	2.1	2.0	2.1
21	6.2	2.8	2.8	2.8	3.3	5.2	5.9	3.9	1.5	2.1	2.0	2.0
22	4.3	2.8	2.8	2.7	3.7	5.2	8.0	4.0	1.6	2.1	2.0	1.2
23	2.8	2.8	2.8	2.7	4.0	5.5	6.6	3.7	2.0	2.1	2.0	1.4
24	2.6	2.8	2.7	2.8	4.0	6.2	6.7	3.8	2.6	2.1	2.0	1.9
25	2.6	2.9	2.8	3.2	3.7	6.1	5.3	3.9	2.6	2.0	2.0	1.8
26	3.5	2.9	2.8	3.2	3.5	4.9	5.4	3.8	2.7	2.0	1.9	1.9
27	3.5	2.9	2.8	3.1	3.5	4.8	5.1	3.6	2.6	2.0	1.9	1.8
28	2.8	2.8	2.8	2.9	3.4	4.8	5.3	3.5	2.5	2.0	1.9	1.8
29	2.7	2.8	2.9	2.9	------	4.9	5.5	3.5	2.5	5.9	2.0	1.8
30	3.5	2.8	2.8	2.9	------	5.4	5.7	3.3	2.7	21	2.0	1.8
31	4.9	------	2.8	3.0	------	5.1	------	3.3	------	4.4	2.0	------
TOTAL	91.5	84.3	90.7	86.3	95.4	463.0	173.3	132.7	85.3	107.5	67.3	143.5
MEAN	2.95	2.81	2.93	2.78	3.41	14.9	5.78	4.28	2.84	3.47	2.17	4.78
MAX	6.2	4.5	4.8	3.2	4.1	160	8.0	5.5	6.0	21	3.0	37
MIN	2.2	2.5	2.7	2.6	2.9	3.4	5.0	3.3	1.5	2.0	1.9	1.2
AC-FT	181	167	180	171	189	918	344	263	169	213	133	285

CAL YR 1972 TOTAL 2,657.32 MEAN 7.26 MAX 638 MIN .42 AC-FT 5,270
WTR YR 1973 TOTAL 1,620.80 MEAN 4.44 MAX 160 MIN 1.2 AC-FT 3,210

PEAK DISCHARGE (BASE, 300 FT³/S).--Mar. 11 (0015) 428 ft³/s (9.20 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 (10.5 km) southeast of Sweetwater, and 8.5 miles (13.7 km) upstream from mouth.

DRAINAGE AREA.--104 mi² (269 km²).

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 (0.16 m) above mean sea level.

EXTREMES (at 1000).--Current year: Maximum contents observed, 9,150 acre-ft (11.3 hm³) May 23, 24, gage height, 2,111.1 ft (643.5 m); minimum observed, 8,150 acre-ft (10.0 hm³) Oct. 24-31, gage height, 2,109.1 ft (642.9 m).
Period of record: Maximum contents observed, 12,360 acre-ft (15.2 hm³) June 1, 1957, gage height, 2,116.70 ft (645.17 m); minimum observed, 780 acre-ft (0.96 hm³) Aug. 17, 1953, gage height, 2,082.54 ft (634.76 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 2,600 ft (792 m) 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, 74 acre-ft (91,200 m³) was used for irrigation of golf course. Emergency spillway is located just to left end of dam and has a concrete ogee-type crest 607.5 ft (185.2 m) 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 1000, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,350	8,250	8,300	8,250	8,400	8,600	8,850	9,100	9,050	8,950	8,600	8,400
2	8,350	8,250	8,300	8,250	8,400	8,600	8,850	9,100	9,050	8,900	8,600	8,350
3	8,350	8,250	8,250	8,300	8,400	8,600	8,850	9,100	9,050	8,900	8,600	8,350
4	8,300	8,250	8,250	8,300	8,400	8,600	8,850	9,100	9,050	8,850	8,600	8,350
5	8,300	8,250	8,250	8,300	8,400	8,600	8,850	9,100	9,100	8,800	8,600	8,300
6	8,300	8,250	8,250	8,300	8,400	8,600	8,850	9,100	9,100	8,800	8,600	8,300
7	8,300	8,250	8,250	8,300	8,400	8,650	8,850	9,100	9,100	8,750	8,600	8,300
8	8,300	8,250	8,250	8,300	8,400	8,650	8,850	9,100	9,100	8,750	8,600	8,300
9	8,250	8,250	8,250	8,300	8,450	8,600	8,850	9,100	9,100	8,700	8,600	8,300
10	8,250	8,200	8,250	8,300	8,450	8,800	8,850	9,100	9,100	8,700	8,550	8,300
11	8,250	8,200	8,250	8,300	8,450	8,800	8,850	9,100	9,100	8,700	8,550	8,300
12	8,250	8,200	8,300	8,300	8,450	8,800	8,850	9,100	9,100	8,700	8,550	8,300
13	8,250	8,250	8,300	8,300	8,450	8,800	8,850	9,100	9,100	8,700	8,550	8,250
14	8,250	8,250	8,300	8,350	8,450	8,800	8,850	9,100	9,100	8,700	8,500	8,250
15	8,250	8,250	8,300	8,400	8,450	8,750	8,850	9,100	9,050	8,650	8,500	8,200
16	8,250	8,250	8,300	8,400	8,450	8,750	8,850	9,100	9,050	8,650	8,500	8,550
17	8,200	8,250	8,300	8,400	8,450	8,750	8,850	9,100	9,050	8,650	8,500	8,550
18	8,200	8,250	8,300	8,400	8,500	8,750	8,950	9,100	9,050	8,650	8,500	8,600
19	8,200	8,250	8,250	8,400	8,500	8,750	9,000	9,100	9,050	8,650	8,450	8,600
20	8,200	8,250	8,250	8,400	8,500	8,750	9,000	9,100	9,050	8,650	8,450	9,050
21	8,200	8,250	8,250	8,400	8,550	8,750	9,000	9,100	9,050	8,650	8,450	9,100
22	8,200	8,250	8,250	8,350	8,550	8,750	9,050	9,100	9,000	8,600	8,400	9,100
23	8,200	8,250	8,250	8,350	8,600	8,750	9,050	9,150	9,000	8,600	8,400	9,100
24	8,150	8,250	8,250	8,350	8,600	8,800	9,100	9,150	9,000	8,600	8,400	9,100
25	8,150	8,250	8,250	8,400	8,600	8,800	9,100	9,050	9,000	8,600	8,400	9,050
26	8,150	8,250	8,250	8,400	8,600	8,800	9,100	9,050	8,950	8,600	8,400	9,050
27	8,150	8,250	8,250	8,400	8,600	8,800	9,100	9,050	8,950	8,600	8,400	9,050
28	8,150	8,250	8,250	8,400	8,600	8,800	9,100	9,050	8,950	8,600	8,400	9,050
29	8,150	8,250	8,250	8,400	------	8,800	9,100	9,050	8,950	8,600	8,400	9,000
30	8,150	8,300	8,250	8,400	------	8,800	9,100	9,050	8,950	8,600	8,400	9,000
31	8,150	------	8,250	8,400	------	8,850	------	9,000	------	8,600	8,400	------
MAX	8,350	8,300	8,300	8,400	8,600	8,850	9,100	9,150	9,100	8,950	8,600	9,100
MIN	8,150	8,200	8,250	8,250	8,400	8,600	8,850	9,000	8,950	8,600	8,400	8,200
(†)	2,109.1	2,109.4	2,109.3	2,109.6	2,110.0	2,110.5	2,111.0	2,110.8	2,110.7	2,110.0	2,109.6	2,110.8
(#)	-200	+150	-50	+150	+200	+250	+250	-100	-50	-350	-200	+600
MAX	8,350	8,300	8,300	8,400	8,600	8,850	9,100	9,150	9,100	8,950	8,600	9,100
MIN	8,150	8,200	8,250	8,250	8,400	8,600	8,850	9,000	8,950	8,600	8,400	8,200

CAL YR 1972..... # -1,000 MAX 9,300 MIN 7,860
WTR YR 1973..... # +650 MAX 9,150 MIN 8,150

† 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 (27 m) upstream from upstream bridge on U.S. Highways 83 and 277, 0.8 mile (1.3 km) south of Hawley, 7.4 miles (11.9 km) upstream from Mulberry Creek, and at mile 188.6 (303.5 km).

DRAINAGE AREA.--1,390 mi² (3,600 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,613.25 ft (491.72 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 54.2 ft³/s (1.53 m³/s), 39,270 acre-ft/yr (48.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Nov. 1, gage height, 11.05 ft (3.37 m); minimum, 4.9 ft³/s (139 dm³/s) July 26, 27.
Period of record: Maximum discharge, 6,170 ft³/s (175 m³/s) Sept. 11, 1969, gage height, 18.51 ft (5.64 m); minimum, 0.44 ft³/s (12 dm³/s) May 27, 1971.
Maximum stage since at least 1915 occurred in 1932; second highest stage, 24.2 ft (7.4 m) in 1957, from information by local residents.

REMARKS.--Records good. Lake Sweetwater, capacity, 11,900 acre-ft (14.7 hm³), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	1,050	26	24	34	38	119	39	15	15	100	12
2	10	592	25	24	33	36	62	35	16	12	50	11
3	10	231	25	28	32	35	50	34	17	11	30	12
4	10	59	25	29	32	33	43	32	33	14	20	12
5	10	35	25	29	32	33	39	32	67	12	15	16
6	9.9	31	24	28	31	32	38	32	37	9.7	12	73
7	9.6	28	24	28	31	30	39	32	27	9.1	10	566
8	9.4	26	24	28	35	29	38	31	22	8.5	10	836
9	9.9	25	25	27	36	29	38	29	23	7.0	10	244
10	9.5	24	25	27	38	84	37	28	15	7.0	10	98
11	9.1	24	25	27	39	514	38	27	14	6.7	10	114
12	9.6	24	25	27	38	853	38	26	14	10	15	27
13	9.3	24	26	31	35	906	38	26	12	15	40	19
14	9.3	24	26	32	34	169	37	30	12	20	20	17
15	8.7	24	25	33	33	101	36	30	11	50	18	15
16	8.9	24	25	34	32	83	36	29	10	30	19	14
17	8.2	24	25	35	32	68	39	29	659	20	14	13
18	8.3	25	25	34	35	57	42	27	63	15	13	13
19	9.3	25	25	32	35	52	46	25	23	14	13	13
20	11	25	25	30	35	47	54	24	18	13	12	13
21	34	26	25	29	36	44	44	23	15	13	12	12
22	168	26	25	29	59	42	104	22	14	15	12	12
23	45	25	25	28	155	43	293	23	13	25	12	12
24	24	26	24	28	113	60	411	26	12	12	12	12
25	17	26	24	50	87	161	277	23	11	6.4	12	12
26	27	26	24	96	65	109	91	19	12	5.2	12	14
27	87	26	24	75	49	68	72	18	12	4.9	12	12
28	33	25	24	54	41	48	52	16	12	10	12	12
29	24	25	24	44	------	41	47	15	12	25	12	12
30	37	26	24	38	------	200	42	15	11	80	11	12
31	485	------	24	35	------	275	------	14	------	200	11	------
TOTAL	1,172.0	2,601	767	1,093	1,287	4,320	2,340	811	1,232	695.5	571	2,260
MEAN	37.8	86.7	24.7	35.3	46.0	139	78.0	26.2	41.1	22.4	18.4	75.3
MAX	485	1,050	26	96	155	906	411	39	659	200	100	836
MIN	8.2	24	24	24	31	29	36	14	10	4.9	10	11
AC-FT	2,320	5,160	1,520	2,170	2,550	8,570	4,640	1,610	2,440	1,380	1,130	4,480

CAL YR 1972 TOTAL 14,198.79 MEAN 38.8 MAX 1,050 MIN .99 AC-FT 28,160
WTR YR 1973 TOTAL 19,149.50 MEAN 52.5 MAX 1,050 MIN 4.9 AC-FT 37,980

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 1	1100	11.05	1,220	6-17	1900	9.94	895
3-13	1400	10.53	1,070	9- 8	1030	10.12	946

08083245 Mulberry Creek near Hawley, Tex.

LOCATION.--Lat 32°34'04", long 99°47'32", Jones County, on right bank at downstream side of downstream bridge on U.S. Highways 83 and 277, 3.3 miles (5.3 km) south of Hawley, and 7.0 miles (11.3 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--205 mi² (531 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,615.98 ft (492.55 m) above mean sea level.

AVERAGE DISCHARGE.--5 years (1968-73), 7.51 ft³/s (0.213 m³/s), 5,440 acre-ft/yr (6.71 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 507 ft³/s (14.4 m³/s) Sept. 8, gage height, 8.41 ft (2.56 m); no flow for many days.
Period of record: Maximum discharge, 1,560 ft³/s (44.2 m³/s) Aug. 14, 1972, gage height, 13.61 ft (4.15 m); no flow at times each year.
Maximum stage since at least 1932, about 16.0 ft (4.9 m) in 1957, from floodmarks on right bank.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	326	.25	.10	.72	5.5	21	3.2	.13	5.2	.02	0
2	.03	36	.19	.10	.44	4.9	9.6	2.7	.12	.60	0	0
3	.03	9.6	.19	.10	.38	4.3	6.9	2.2	.14	.12	0	0
4	.03	3.4	.24	.10	.35	3.7	4.4	1.8	.13	.04	0	0
5	.03	1.6	.24	.10	.57	3.3	3.6	1.8	.14	.03	0	.82
6	.03	.90	.20	.10	.60	3.4	3.4	2.2	.16	.02	0	32
7	.03	.57	.20	.10	.84	4.1	3.4	2.5	.17	.02	0	307
8	.03	.42	.20	.10	1.4	4.3	3.4	2.2	.23	.01	0	200
9	.03	.28	.20	.10	1.8	3.5	3.0	1.8	.34	.01	0	13
10	.04	.12	.20	.10	1.6	49	2.5	1.5	.25	.01	0	4.4
11	.05	.08	.20	.10	1.6	33	2.3	1.4	.20	.01	0	3.1
12	.05	.08	.20	.10	1.5	12	2.4	1.4	1.0	.02	0	1.8
13	.07	.09	.20	1.0	1.3	6.6	2.5	1.4	.67	.03	0	.88
14	.07	.07	.20	30	1.3	4.9	2.6	2.4	.41	.03	0	.47
15	.06	.19	.20	30	1.1	4.3	2.9	2.3	.24	.03	0	.28
16	.06	.20	.20	9.4	.98	3.6	3.0	3.2	.16	.74	0	.20
17	.06	.10	.20	4.6	1.1	3.1	8.3	2.6	.14	.36	0	.15
18	.06	.13	.20	2.8	1.7	2.9	9.6	2.0	.13	.08	0	.13
19	.07	.13	.20	1.6	2.6	2.8	8.3	1.5	66	.04	0	.13
20	.09	.13	.20	1.1	2.8	2.8	13	1.2	23	.02	0	.13
21	.77	.20	.20	.91	2.5	2.8	6.6	1.2	4.3	.01	0	.13
22	6.0	.20	.20	.79	49	2.8	4.3	1.0	1.1	0	0	.13
23	6.1	.20	.10	.77	65	5.8	7.5	.79	.43	0	0	.13
24	1.5	.22	.10	.74	23	175	31	.71	.29	0	0	.13
25	.50	.23	.10	37	11	45	15	.68	.18	0	0	.13
26	4.2	.24	.10	43	8.1	14	7.8	.66	.14	0	0	10
27	2.2	.39	.10	3.0	6.4	6.5	7.2	.50	.06	0	0	9.5
28	2.5	.33	.10	.76	5.7	4.6	4.8	.34	.04	0	0	1.8
29	1.5	.29	.10	.58	------	4.2	4.1	.23	.04	0	0	.47
30	90	.29	.10	.41	------	268	3.8	.21	.04	.01	0	.26
31	312	------	.10	.53	------	126	------	.16	------	.02	0	------
TOTAL	428.22	382.68	5.41	170.19	195.38	816.7	208.2	47.78	100.38	7.46	.02	587.17
MEAN	13.8	12.8	.17	5.49	6.98	26.3	6.94	1.54	3.35	.24	.0006	19.6
MAX	312	326	.25	43	65	268	31	3.2	66	5.2	.02	307
MIN	.03	.07	.10	.10	.35	2.8	2.3	.16	.04	0	0	0
AC-FT	849	759	11	338	388	1,620	413	95	199	15	.04	1,160

CAL YR 1972 TOTAL 3,129.66 MEAN 8.55 MAX 1,270 MIN 0 AC-FT 6,210
WTR YR 1973 TOTAL 2,949.59 MEAN 8.08 MAX 326 MIN 0 AC-FT 5,850

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
11- 1	1000	7.95	486
3-30	2215	6.94	415
9- 8	0500	8.41	507

08083300 Elm Creek near Abilene, Tex.

LOCATION.--Lat 32°21'08", long 99°48'27", Taylor County, on right bank at upstream side of bridge on Farm Road 707, 2.8 miles (4.5 km) southeast of Caps, and 7.5 miles (12.1 km) southwest of Abilene.

DRAINAGE AREA.--139 mi² (360 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,804.15 ft (549.90 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--10 years, 8.59 ft³/s (0.243 m³/s), 6,220 acre-ft/yr (7.67 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 726 ft³/s (20.6 m³/s) Sept. 6, gage height, 7.07 ft (2.15 m); no flow at times.
Period of record: Maximum discharge, 1,800 ft³/s (51.0 m³/s) June 22, 1965, gage height, 14.24 ft (4.34 m); no flow at times.

REMARKS.--Records fair. Since 1921 flow largely regulated by Lake Abilene, capacity 9,790 acre-ft (12.1 hm³), 12 miles (19 km) upstream. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	20	7.5	3.7	1.7	1.4	1.9	17	5.5	.12	1.1	1.3
2	.36	5.1	7.5	3.8	1.7	1.3	1.7	22	3.7	.07	.89	1.2
3	.01	4.1	7.4	5.5	1.7	1.2	1.7	22	7.2	.07	.23	1.2
4	0	3.7	6.1	5.0	1.7	1.2	1.7	22	4.5	.12	.02	1.3
5	0	3.9	5.2	4.5	1.7	1.5	1.7	22	20	.12	0	1.2
6	0	3.9	4.6	4.7	1.7	10	1.7	22	2.8	.12	0	166
7	0	3.9	3.9	4.7	1.8	1.8	1.7	19	2.4	.12	0	32
8	0	3.7	4.0	4.3	2.0	1.2	1.7	19	2.2	6.6	0	.95
9	0	3.8	4.1	3.9	1.9	1.4	1.7	19	2.2	3.4	0	.57
10	1.3	3.9	4.0	3.7	2.0	21	1.7	19	2.8	.14	0	.46
11	3.4	3.9	3.9	2.9	2.2	4.6	1.7	19	6.0	7.3	0	.53
12	3.4	4.1	4.0	2.9	2.2	3.7	1.7	19	2.6	.54	0	.64
13	3.2	4.1	4.1	3.0	2.4	3.9	1.7	19	2.0	.06	0	.73
14	3.3	4.1	3.7	5.0	2.3	3.5	1.7	19	1.4	0	0	.75
15	3.4	4.1	3.6	7.9	2.2	6.7	1.8	19	.84	.01	.05	.71
16	3.4	4.1	3.0	5.1	2.2	4.5	2.0	19	.62	.06	.24	.75
17	3.4	4.4	2.7	4.7	2.2	4.9	3.6	20	.44	.26	.95	.66
18	3.4	4.4	2.8	3.1	2.4	4.8	3.8	20	.62	.22	.96	.72
19	2.7	4.6	2.8	2.5	2.4	4.3	16	20	.96	.18	.96	.72
20	2.0	4.7	2.8	2.7	2.3	4.0	3.7	20	.44	.13	1.0	.72
21	64	4.7	2.8	2.6	2.8	4.3	3.2	19	.62	.03	1.1	.78
22	33	4.7	2.6	2.6	36	3.9	3.2	17	.62	.02	1.1	.96
23	5.1	4.7	2.1	2.6	11	14	3.8	4.5	2.0	.03	1.1	1.1
24	5.1	4.7	2.0	2.6	2.5	4.3	38	2.2	2.0	0	1.1	1.2
25	4.9	4.7	2.6	29	1.6	3.8	4.7	24	2.0	0	1.1	1.4
26	43	5.2	3.4	17	1.4	4.1	4.2	29	1.7	0	1.1	1.7
27	10	5.5	3.4	3.1	1.4	2.8	3.7	26	1.2	0	1.1	2.1
28	6.8	5.5	3.5	1.9	1.4	2.8	3.7	24	.52	0	1.1	1.4
29	5.0	6.7	3.8	1.8	------	2.8	3.4	22	.24	0	1.3	1.1
30	4.0	7.8	4.0	1.7	------	3.6	3.2	22	.12	0	1.4	1.1
31	129	------	3.9	1.7	------	2.9	------	5.7	------	0	1.4	------
TOTAL	343.69	152.7	121.8	150.2	98.8	136.2	126.0	592.4	80.24	19.72	19.30	225.95
MEAN	11.1	5.09	3.93	4.85	3.53	4.39	4.20	19.1	2.67	.64	.62	7.53
MAX	129	20	7.5	29	36	21	38	29	20	7.3	1.4	166
MIN	0	3.7	2.0	1.7	1.4	1.2	1.7	2.2	.12	0	0	.46
AC-FT	682	303	242	298	196	270	250	1,180	159	39	38	448

CAL YR 1972 TOTAL 1,488.68 MEAN 4.07 MAX 129 MIN 0 AC-FT 2,950
WTR YR 1973 TOTAL 2,067.00 MEAN 5.66 MAX 166 MIN 0 AC-FT 4,100

08083400 Little Elm Creek near Abilene, Tex.

LOCATION.--Lat 32°23'29", long 99°51'08", Taylor County, on right bank at downstream side of bridge on Farm Road 707, 1.2 miles (1.9 km) north of Caps, and 7.2 miles (11.6 km) southwest of Abilene.

DRAINAGE AREA.--39.1 mi² (101 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,786.12 ft (544.41 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 1.92 ft³/s (54.4 dm³/s), 1,390 acre-ft/yr (1.71 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 627 ft³/s (17.8 m³/s) Sept. 7, gage height, 6.46 ft (1.97 m); no flow for many days.
Period of record: Maximum discharge, 1,380 ft³/s (39.1 m³/s) May 6, 1969, gage height, 9.68 ft (2.95 m); no flow at times each year.
Maximum stage since 1903, about 15 ft (5 m) in 1913, from information by local residents.

REMARKS.--Records good. No known diversion above station. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.6				0	.10					0
2	0	.13				0	.02					0
3	0	0				0	0					0
4	0	0				0	0					0
5	0	0				0	0					0
6	0	0				0	0					18
7	0	0				0	0					188
8	0	0				0	0					1.9
9	0	0				0	0					.05
10	0	0				0	0					0
11	0	0				0	0					0
12	0	0				0	0					0
13	0	0				0	0					0
14	0	0				0	0					0
15	0	0				0	0					0
16	0	0				0	0					0
17	0	0				0	0					0
18	0	0				0	0					0
19	0	0				0	.29					0
20	0	0				0	.54					0
21	0	0				0	.07					0
22	0	0				1.6	.01					0
23	0	0				6.4	0					0
24	0	0				.44	0					0
25	0	0				.03	0					0
26	0	0				0	.02					0
27	0	0				0	.03					0
28	0	0				0	.02					0
29	0	0			------	0	0					0
30	0	0			------	2.7	0					0
31	.32	------			------	1.2	------		------			------
TOTAL	.32	1.73	0	0	0	12.37	1.10	0	0	0	0	207.95
MEAN	.010	.058	0	0	0	.40	.037	0	0	0	0	6.93
MAX	.32	1.6	0	0	0	6.4	.54	0	0	0	0	188
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.6	3.4	0	0	0	25	2.2	0	0	0	0	412

CAL YR 1972 TOTAL 44.11 MEAN .12 MAX 2.4 MIN 0 AC-FT 87
WTR YR 1973 TOTAL 223.47 MEAN .61 MAX 188 MIN 0 AC-FT 443

PEAK DISCHARGE (BASE, 100 FT³/S).--Sept. 7 (0345) 627 ft³/s (6.46 ft).

08083420 Cat Claw Creek at Abilene, Tex.

LOCATION.--Lat 32°28'31", long 99°44'56", Taylor County, in Sears Park 320 ft (98 m) downstream from bridge on Ambler Street in Abilene and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--13.0 mi² (33.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,682.32 ft (512.77 m), Corps of Engineers benchmark.

EXTREMES.--Current year: Maximum discharge, 642 ft³/s (18.2 m³/s) Sept. 23, gage height, 5.24 ft (1.60 m); no flow for many days.
Period of record: Maximum discharge, 642 ft³/s (18.2 m³/s) Sept. 23, 1973, gage height, 5.24 ft (1.60 m); no flow for many days each year.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	6.1		0	0	0	0	0	0	0	0	.02
2	0	.34		3.9	0	0	0	0	0	0	0	0
3	0	.01		21	0	0	0	0	.34	0	0	0
4	0	0		.65	0	0	0	0	0	0	0	.03
5	0	0		.02	0	0	0	0	.12	0	0	.49
6	0	0		.11	0	13	0	0	0	0	0	160
7	0	0		4.4	4.2	.07	0	0	0	0	0	17
8	0	0		.17	1.5	0	.02	0	0	0	0	.06
9	0	0		0	.01	0	0	0	0	0	0	0
10	0	0		0	0	22	0	0	1.3	0	0	.30
11	0	0		0	0	.15	0	9.3	.34	72	0	.01
12	0	.16		0	0	0	0	1.0	0	2.9	0	0
13	0	.14		10	0	0	0	0	0	0	0	0
14	0	0		4.0	0	0	0	3.5	0	6.8	0	0
15	0	0		1.1	0	0	.68	.31	0	0	3.0	0
16	0	0		.04	0	0	.40	0	0	0	.52	0
17	0	0		0	5.1	0	14	0	0	0	0	0
18	0	.11		0	.86	0	.39	0	6.9	0	0	.29
19	.04	.01		0	.01	0	9.6	0	16	0	0	.03
20	.70	0		0	0	0	.09	0	.01	0	0	0
21	91	0		0	9.1	0	0	0	0	0	0	0
22	9.9	0		0	28	0	0	0	0	0	0	0
23	.02	0		0	1.7	7.9	.16	0	0	0	.04	64
24	0	0		.08	.06	3.3	.10	0	0	0	0	12
25	.01	0		52	0	.28	.55	0	0	0	0	.01
26	43	0		2.9	0	.07	.80	0	0	0	0	4.3
27	.66	0		.08	0	.65	.01	0	0	0	0	.78
28	.01	0		0	0	.36	0	0	0	0	0	0
29	0	0		0	------	.07	0	0	0	0	0	0
30	56	0		0	------	17	0	0	0	.10	0	0
31	106	------		0	------	.11	------	0	------	0	0	------
TOTAL	307.34	6.87	0	100.45	50.54	64.96	26.80	14.11	25.01	81.80	3.56	259.32
MEAN	9.91	.23	0	3.24	1.81	2.10	.89	.46	.83	2.64	.11	8.64
MAX	106	6.1	0	52	28	22	14	9.3	16	72	3.0	160
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	610	14	0	199	100	129	53	28	50	162	7.1	514

CAL YR 1972 TOTAL 828.72 MEAN 2.26 MAX 106 MIN 0 AC-FT 1,640
WTR YR 1973 TOTAL 940.76 MEAN 2.58 MAX 160 MIN 0 AC-FT 1,870

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1115	5.12	608	9- 6	2115	4.79	517
7-11	1600	4.78	515	9-23	2030	5.24	642

08083470 Cedar Creek at Abilene, Tex.

LOCATION.--Lat 32°26'56", long 99°43'13", Taylor County, on right bank at upstream side of North Second Street bridge and State Highway 355 at Abilene, 0.2 mile (0.3 km) downstream from Lytle Creek, 4.1 miles (6.6 km) downstream from Buttonwillow Creek, 5.9 miles (9.5 km) upstream from Rainy Creek, 7.2 miles (11.6 km) downstream from Kirby Lake, and 8.1 miles (13.0 km) upstream from mouth.

DRAINAGE AREA.--120 mi² (311 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,677.67 ft (511.35 m), corrected, above mean sea level.

EXTREMES.--Current year: Maximum discharge, 284 ft³/s (8.04 m³/s) July 11, gage height, 4.74 ft (1.44 m); no flow at times.
Period of record: Maximum discharge, 335 ft³/s (9.49 m³/s) Aug. 13, 1972, gage height, 5.11 ft (1.56 m); no flow at times.

REMARKS.--Records fair. Flow is partly regulated by Lytle Lake, capacity, 1,200 acre-ft (1.48 hm³), and Lake Kirby, capacity, 7,620 acre-ft (9.40 hm³). During the current water year, the city of Abilene pumped 49 acre-ft (60,400 m³) from Lake Kirby.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	6.6	.12	.13	.43	.61	.91	.15	.95	.04	.13	1.3
2	0	1.5	.12	2.6	.35	.58	.85	.10	.26	.08	.09	.01
3	0	.53	.12	11	.26	.51	1.3	.08	2.9	.05	.09	.58
4	0	.25	.12	3.0	.24	.49	.74	.06	.31	.04	.10	.13
5	.01	.19	.12	.61	.27	.49	.62	.15	.09	.03	.09	.53
6	0	.16	.11	.40	.28	11	.62	.18	.06	.04	.06	66
7	0	.11	.13	3.1	3.2	1.8	.57	.08	.02	.15	.06	38
8	0	.11	.14	.94	3.0	1.1	.98	.06	.04	14	.04	1.6
9	0	.11	.14	.33	1.0	.68	.58	.04	.05	4.6	.04	.38
10	0	.12	.15	.19	.58	16	.51	1.5	1.7	.20	.04	.07
11	.01	.12	.12	.18	.51	3.6	.49	8.5	.44	52	.04	.05
12	.01	.16	.19	.22	.45	1.5	.45	4.6	.05	7.3	.03	.04
13	.02	.16	.12	4.7	.42	1.0	.44	.89	.04	1.2	.03	.03
14	.02	.16	.13	5.1	.37	.77	.48	3.9	.05	8.3	.09	.02
15	.01	.16	.13	2.4	.35	.63	2.6	2.6	.03	2.4	2.2	.02
16	.01	.16	.13	.87	.36	.56	1.8	1.4	.03	.58	.75	.02
17	.01	.16	.14	.45	3.9	.50	11	.85	.03	.20	.42	.02
18	.02	.16	.16	.26	2.7	.52	2.6	.76	3.9	.13	.37	.02
19	.28	.16	.17	.19	.97	.52	10	.44	9.0	.13	.37	.01
20	.15	.16	.17	.21	.54	.47	1.4	.37	1.2	.11	.19	.01
21	54	.16	.18	.35	6.4	.43	.50	.37	.17	.09	0	.01
22	14	.16	.17	.20	18	.46	.35	.37	.11	.09	0	.01
23	.32	.16	.16	.15	5.5	7.1	.65	.76	.09	.09	0	5.7
24	.05	.12	.14	2.5	3.2	23	.73	.21	.07	.09	0	3.4
25	.02	.12	.15	37	1.6	3.9	.79	.17	.05	.08	0	.10
26	19	.12	.17	7.2	1.1	1.5	1.1	.14	.04	.30	0	2.0
27	2.3	.12	.11	2.4	.74	1.3	.32	.11	.04	.15	0	.30
28	.30	.12	.12	1.2	.63	1.0	.25	.09	.04	.23	0	.05
29	.13	.12	.13	.87	------	.85	.20	.11	.04	.10	0	.03
30	46	.12	.14	.69	------	8.4	.17	.09	.04	.73	0	.03
31	62	------	.14	.57	------	2.1	------	.09	------	.25	0	------
TOTAL	198.67	12.56	4.34	90.01	57.35	93.37	44.00	29.22	21.84	93.78	5.23	120.47
MEAN	6.41	.42	.14	2.90	2.05	3.01	1.47	.94	.73	3.03	.17	4.02
MAX	62	6.6	.19	37	18	23	11	8.5	9.0	52	2.2	66
MIN	0	.11	.11	.13	.24	.43	.17	.04	.02	.03	0	.01
AC-FT	394	25	8.6	179	114	185	87	58	43	186	10	239

CAL YR 1972 TOTAL 654.41 MEAN 1.79 MAX 85 MIN 0 AC-FT 1,300
WTR YR 1973 TOTAL 770.84 MEAN 2.11 MAX 66 MIN 0 AC-FT 1,530

08083500 Fort Phantom Hill Reservoir near Nugent, Tex.

LOCATION.--Lat 32°36'58", long 99°40'05", Jones County, at outlet gate tower near right bank, 120 ft (37 m) upstream from dam on Elm Creek, 4.3 miles (6.9 km) upstream from Clear Fork Brazos River, and 5.4 miles (8.7 km) south of Nugent.

DRAINAGE AREA.--478 mi² (1,238 km²).

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 (481.82 m) above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 65,360 acre-ft (80.6 hm³) Nov. 3-8, gage height, 52.8 ft (16.1 m); minimum, 49,440 acre-ft (61.0 hm³) Sept. 3-5, gage height, 48.1 ft (14.7 m).
Period of record: Maximum contents observed, 89,910 acre-ft (111 hm³) May 25, 1957, gage height, 58.7 ft (17.9 m); minimum observed, 19,040 acre-ft (23.5 hm³) Apr. 23-25, 1953, gage height, 34.5 ft (10.5 m).

REMARKS.--Reservoir is formed by rock-faced earthfill dam 3,200 ft (975 m) 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 2,150 acre-ft (2.65 hm³) from the Clear Fork Brazos River into Fort Phantom Hill Reservoir and pumped 15,560 acre-ft (19.2 hm³) 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 (1.1 km) right of gage, is 900 ft (274 m) 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	negligible

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)

48.0	49,100	52.0	62,420
50.0	55,480	54.0	69,930

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60,290	63,150	63,890	62,780	64,260	64,620	64,620	63,890	61,710	57,860	54,180	49,750
2	59,940	64,990	63,890	63,150	64,260	64,620	64,620	63,520	61,350	57,860	54,180	49,750
3	59,940	65,360	63,890	63,150	63,890	64,260	64,620	63,520	61,350	57,520	54,180	49,440
4	59,940	65,360	63,890	63,150	63,890	64,260	64,620	63,520	61,350	57,520	53,860	49,440
5	59,580	65,360	63,890	63,150	63,890	64,260	64,260	63,520	61,350	57,180	53,860	49,440
6	59,580	65,360	63,890	63,150	63,890	64,260	64,260	63,520	61,000	57,180	53,530	50,680
7	59,580	65,360	63,890	63,150	63,890	64,260	64,260	63,520	61,000	57,180	53,530	50,990
8	59,580	65,360	63,520	63,150	63,890	64,260	64,260	63,520	61,000	56,840	53,210	51,300
9	59,230	64,990	63,520	63,150	63,890	64,260	64,260	63,151	60,650	56,840	53,210	51,300
10	59,230	64,990	63,520	63,150	63,890	64,620	64,260	63,151	60,650	56,840	52,880	51,300
11	59,230	64,990	63,520	63,150	63,890	64,620	64,260	63,151	60,290	56,500	52,880	51,300
12	58,880	64,990	63,520	63,150	63,890	64,620	63,890	63,151	60,290	56,500	52,560	51,300
13	58,880	64,990	63,520	63,150	63,890	64,620	63,890	63,151	60,290	56,500	52,560	51,300
14	58,880	64,620	63,520	63,150	63,520	64,620	63,890	63,151	60,290	56,500	52,560	50,990
15	58,880	64,620	63,520	63,150	63,520	64,620	63,890	63,151	59,940	56,500	52,230	50,990
16	58,540	64,620	63,520	63,150	63,520	64,620	63,890	63,151	59,940	56,500	52,230	50,990
17	58,540	64,620	63,150	63,150	63,520	64,620	63,890	63,151	59,940	56,160	52,230	50,990
18	58,540	64,620	63,150	63,150	63,520	64,260	63,890	63,151	59,940	56,160	52,230	50,680
19	58,540	64,620	63,150	63,150	63,520	64,260	64,260	62,780	59,580	56,160	51,920	50,680
20	58,200	64,620	63,150	63,150	63,520	64,260	64,260	62,780	59,580	56,160	51,920	50,680
21	58,200	64,620	63,150	63,150	63,150	64,260	64,260	62,780	59,580	55,820	51,610	50,370
22	59,230	64,260	63,150	63,150	63,520	64,260	64,260	62,780	59,230	55,820	51,610	50,370
23	59,230	64,260	63,150	63,150	63,890	63,890	64,260	62,780	59,230	55,480	51,300	50,370
24	59,230	64,260	63,150	63,150	64,620	64,260	64,260	62,780	58,880	55,160	50,990	50,370
25	59,230	64,260	63,150	63,520	64,620	64,260	64,260	62,420	58,880	55,160	50,990	50,370
26	59,230	64,260	62,780	64,260	64,620	64,260	64,260	62,420	58,540	54,830	50,680	50,370
27	59,580	64,260	62,780	64,260	64,620	64,260	64,260	62,060	58,540	54,830	50,370	50,370
28	59,580	64,260	62,780	64,260	64,620	64,260	63,890	62,060	58,540	54,510	50,370	50,370
29	59,580	64,260	62,780	64,260	------	64,620	63,890	62,060	58,200	54,510	50,060	50,370
30	59,580	63,890	62,780	64,260	------	64,620	63,890	61,710	58,200	54,510	50,060	50,370
31	61,350	------	62,780	64,260	------	64,620	------	61,710	------	54,510	49,750	------
(†)	1,632.48	1,633.18	1,632.88	1,633.28	1,633.38	1,633.38	1,633.18	1,632.58	1,631.58	1,630.48	1,628.98	1,629.18
(*)	+1,060	+2,540	-1,110	+1,480	+360	0	-730	-2,180	-3,510	-3,690	-4,760	+620
(††)	1,220	820	842	850	770	852	879	1,490	1,850	1,970	2,690	1,330
MAX	61,350	65,360	63,890	64,260	64,620	64,620	64,620	63,890	61,710	57,860	54,180	51,300
MIN	58,200	63,150	62,780	62,780	63,150	63,890	63,890	61,710	58,200	54,510	49,750	49,440

CAL YR 1972..... * -10,320 †† 15,990 MAX 75,960 MIN 57,860
WTR YR 1973..... * -9,920 †† 15,560 MAX 65,360 MIN 49,440

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

08084000 Clear Fork Brazos River at Nugent, Tex.

LOCATION.--Lat 32°41'24", long 99°40'09", Jones County, on right bank 33 ft (10 m) downstream from bridge on Farm Road 600 at Nugent, 2 miles (3 km) downstream from Elm Creek, 4 miles (6 km) upstream from Deadman Creek, and at mile 167.8 (270.0 km).

DRAINAGE AREA.--2,220 mi² (5,750 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,531.91 ft (466.93 m) above mean sea level (levels by Brazos River Authority). Prior to Dec. 12, 1933, nonrecording gage at site 575 ft (175 m) downstream at same datum.

AVERAGE DISCHARGE.--14 years (1924-38) prior to completion of Fort Phantom Hill Reservoir, 186 ft³/s (5.27 m³/s), 134,800 acre-ft/yr (166 hm³/yr); 35 years (1938-73) regulated, 84.8 ft³/s (2.40 m³/s), 61,440 acre-ft/yr (75.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) Nov. 1, gage height, 6.01 ft (1.83 m); minimum, 2.3 ft³/s (65 dm³/s) July 26, 27.
Period of record: Maximum discharge observed, 47,000 ft³/s (1,330 m³/s) Sept. 8, 1932, gage height, 27.05 ft (8.24 m), site then in use, from rating curve extended above 25,000 ft³/s (708 m³/s); no flow at times.
Maximum stage, 30 ft (9 m) in 1876; floods in 1900 and May 1923 reached stages of 24 and 24.5 ft (7 and 7.5 m), 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 (128 hm³). Numerous diversions above station for municipal supply and oilfield operation will materially affect low flow. Diversion records from the river above station furnished by the city of Abilene. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	678	29	25	35	44	167	48	20	14	84	8.0
2	15	354	29	26	33	42	81	43	21	24	62	9.3
3	14	323	29	31	32	41	60	41	21	15	26	8.1
4	14	107	28	33	31	39	53	38	24	13	17	8.6
5	14	60	28	34	30	38	48	37	58	16	14	11
6	14	46	27	32	30	38	45	38	53	12	12	29
7	13	40	26	32	31	37	45	37	41	9.4	11	341
8	13	36	26	30	35	37	45	36	26	8.0	11	711
9	13	33	27	28	36	37	44	35	26	8.0	11	467
10	14	31	27	28	37	74	44	34	21	6.8	11	153
11	13	31	27	27	39	275	44	33	18	7.0	12	95
12	13	30	27	25	39	545	44	33	17	7.7	12	58
13	13	30	27	30	37	810	45	31	17	9.6	26	30
14	13	29	27	32	35	377	45	33	15	11	31	23
15	13	30	27	38	34	96	50	38	14	23	17	21
16	13	30	26	51	32	77	50	36	14	38	18	17
17	13	29	26	44	32	66	54	36	233	21	15	16
18	12	30	27	39	35	59	60	35	336	18	9.1	14
19	12	29	28	35	36	55	61	33	44	18	8.7	14
20	15	29	27	31	36	52	61	32	87	13	8.7	14
21	39	30	27	28	39	50	68	31	32	8.7	8.7	15
22	143	30	27	27	75	49	53	29	21	8.0	8.7	14
23	102	29	27	26	184	49	121	29	17	21	9.1	15
24	52	30	26	26	136	111	224	30	15	10	8.8	14
25	32	30	26	101	89	179	324	32	14	5.7	8.7	15
26	39	30	26	193	69	125	102	28	14	2.5	7.6	16
27	97	29	25	115	53	78	75	24	14	2.4	7.4	30
28	69	29	25	66	48	61	64	22	15	6.4	7.5	19
29	43	29	26	50	------	53	54	21	16	19	6.8	14
30	236	29	26	41	------	197	52	20	15	40	6.8	13
31	814	------	25	36	------	422	------	20	------	168	6.9	------
TOTAL	1,936	2,300	831	1,360	1,378	4,213	2,283	1,013	1,279	584.2	503.5	2,213.0
MEAN	62.5	76.7	26.8	43.9	49.2	136	76.1	32.7	42.6	18.8	16.2	73.8
MAX	814	678	29	193	184	810	324	48	336	168	84	711
MIN	12	29	25	25	30	37	44	20	14	2.4	6.8	8.0
AC-FT	3,840	4,560	1,650	2,700	2,730	8,360	4,530	2,010	2,540	1,160	999	4,390
(††)	0	2,150	0	0	0	0	0	0	0	0	0	0

CAL YR 1972 TOTAL 16,232.3 MEAN 44.4 MAX 1,630 MIN 1.3 AC-FT 32,200 †† 6,000
WTR YR 1973 TOTAL 19,893.7 MEAN 54.5 MAX 814 MIN 2.4 AC-FT 39,460 †† 2,150

†† Diversions, in acre-feet, into Fort Phantom Hill Reservoir from river above station.

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 (1.6 km) upstream from dam, 1.7 miles (2.7 km) upstream from California Creek, and 10 miles (16 km) southeast of Haskell.

DRAINAGE AREA.--360 mi² (932 km²).

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

GAGE.--Nonrecording gage read once daily. Datum of gage is 2.77 ft (0.84 m) above mean sea level (levels by Freese, Nichols and Endress, Consulting Engineers).

EXTREMES (at 0800).--Current year: Maximum contents, 56,430 acre-ft (69.6 hm³) June 5, gage height, 1,414.7 ft (431.2 m); minimum, 41,490 acre-ft (51.2 hm³) Oct. 19-21, gage height, 1,411.3 ft (430.2 m).
Period of record: Maximum contents, 74,100 acre-ft (91.4 hm³) Sept. 9, 10, 1962, gage height, 1,416.6 ft (431.8 m); minimum since first appreciable storage in June 1954, 14,060 acre-ft (17.3 hm³) Jan. 29-31, 1957, gage height, 1,400.2 ft (426.8 m).

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 1,424 acre-ft (1.76 hm³). Gage-height record was furnished by West Texas Utilities Company from their powerplant 1.0 mile (1.6 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42,670	46,790	49,410	48,530	50,760	54,020	55,940	54,970	52,130	53,540	50,760	47,650
2	42,670	48,090	49,410	48,530	50,760	53,540	55,940	54,970	53,070	53,540	50,760	47,650
3	42,670	48,970	49,410	48,530	50,760	53,540	55,940	54,490	54,490	53,540	50,310	47,650
4	42,270	49,860	49,410	48,970	50,760	53,540	55,460	54,490	55,940	53,070	50,310	47,220
5	42,270	50,310	49,410	48,970	50,760	53,540	55,460	54,490	56,430	53,070	50,310	47,220
6	42,270	50,310	49,410	48,970	50,760	53,540	55,460	54,490	55,940	53,070	50,310	47,220
7	42,270	50,310	49,410	48,970	50,760	53,540	55,460	54,490	55,940	53,070	50,310	47,650
8	42,270	49,860	49,410	48,970	50,760	53,540	54,970	54,490	55,940	52,600	49,860	47,650
9	42,270	49,860	49,410	48,970	51,670	53,540	54,970	54,490	55,940	52,600	49,860	47,650
10	42,270	49,860	49,410	48,970	52,130	54,020	54,970	54,020	55,460	52,600	49,860	47,650
11	41,880	49,860	49,410	48,970	52,130	54,970	54,970	54,020	55,460	52,130	49,860	47,650
12	41,880	49,860	49,410	48,970	52,130	55,940	54,970	54,020	55,460	52,130	49,410	47,650
13	41,880	49,860	48,970	48,970	52,130	55,940	54,970	54,020	55,460	52,130	49,410	48,090
14	41,880	49,860	48,970	48,970	52,130	55,940	55,460	54,020	55,460	52,130	49,410	48,090
15	41,880	49,860	48,970	48,970	52,130	55,940	55,460	53,540	55,460	52,130	49,410	48,090
16	41,880	49,860	48,970	48,970	52,130	55,940	55,460	53,540	55,460	52,130	49,410	47,650
17	41,880	49,410	48,970	48,970	52,130	55,940	54,970	53,540	55,460	52,130	48,970	47,650
18	41,880	49,410	48,970	48,970	52,130	55,940	54,970	53,540	55,460	51,670	48,970	47,650
19	41,490	49,410	48,970	48,970	52,130	55,940	54,970	53,540	55,460	51,670	48,530	47,650
20	41,490	49,410	48,970	48,970	52,130	55,940	54,970	53,540	54,490	51,670	48,530	47,650
21	41,490	49,410	48,970	48,970	52,130	55,460	54,970	53,540	54,490	51,210	48,530	47,650
22	42,270	49,410	48,970	48,970	52,130	55,460	54,970	53,070	54,490	51,210	48,530	47,650
23	42,670	49,410	48,970	48,970	52,600	55,460	54,970	53,540	54,490	50,760	48,530	47,650
24	42,670	49,410	48,970	49,410	53,070	55,460	54,970	53,540	54,490	50,760	48,530	47,650
25	42,670	49,410	48,970	49,410	53,540	55,460	55,460	53,070	54,490	50,760	48,090	47,650
26	43,070	49,410	48,970	49,410	53,540	55,460	55,460	53,070	54,490	50,760	48,090	47,650
27	43,470	49,410	48,970	49,410	53,540	55,460	54,970	53,070	54,020	50,760	48,090	47,650
28	43,470	49,410	48,970	49,860	53,540	55,460	54,970	53,070	54,020	50,760	47,650	47,650
29	43,470	49,410	48,970	50,310	------	55,460	54,970	52,130	53,540	50,760	47,650	47,220
30	43,470	49,410	48,970	50,310	------	55,460	54,970	52,130	53,540	50,760	47,650	47,220
31	44,280	------	48,970	50,760	------	55,460	------	52,130	------	50,760	47,650	------
(†)	1,412.0	1,413.2	1,413.1	1,413.5	1,414.2	1,414.5	1,414.4	1,413.8	1,414.1	1,413.5	1,412.8	1,412.7
(*)	+1,610	+5,130	-440	+1,790	+3,260	+1,440	-490	-2,840	+1,410	-2,780	-3,110	-430
(††)	106	85.6	96.6	97.6	84.8	80.0	76.0	135	165	199	198	100
MAX	44,280	50,310	49,410	50,760	53,540	55,940	55,940	54,970	56,430	53,540	50,760	48,090
MIN	41,490	46,790	48,970	48,530	50,760	53,540	54,970	52,130	52,130	50,760	47,650	47,220

CAL YR 1972..... * -5,050 †† 1,627 MAX 54,020 MIN 40,720
WTR YR 1973..... * +4,550 †† 1,424 MAX 56,430 MIN 41,490

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

08084800 California Creek near Stamford, Tex.

LOCATION.--Lat 32°55'51", long 99°38'32", Jones County, near right bank at downstream side of bridge on Farm Road 142, 9 miles (14 km) east of Stamford, and 17 miles (27 km) upstream from Paint Creek.

DRAINAGE AREA.--465 mi² (1,204 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,470 ft (448 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 29.7 ft³/s (0.841 m³/s), 21,520 acre-ft/yr (26.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,500 ft³/s (99.1 m³/s) Oct. 31, gage height, 23.76 ft (7.24 m); minimum, 0.23 ft³/s (6.5 dm³/s) Sept. 4.
Period of record: Maximum discharge, 7,420 ft³/s (210 m³/s) May 6, 1969, gage height, 27.12 ft (8.27 m); no flow at times. Maximum stage since at least 1897, 29.6 ft (9.0 m) June 10, 1962 (from floodmark); flood of July 1961 (stage unknown) was second highest. Other large floods are reported to have occurred in June 1909, June 24, 1915, May 1957; flood of September 1962 reached a stage of 28.1 ft (8.6 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	3,120	14	8.1	28	38	113	15	3.2	2.0	8.5	.50
2	5.5	2,140	14	7.5	28	34	67	13	3.4	1.9	8.1	.57
3	3.8	703	15	8.5	20	29	46	11	100	1.9	5.7	.44
4	3.0	275	14	9.3	21	27	28	8.1	158	1.6	4.0	.28
5	2.6	106	13	9.0	20	22	21	8.9	192	1.4	2.4	.28
6	2.0	70	12	8.0	18	22	17	9.3	68	1.3	1.7	5.6
7	1.7	52	6.0	7.0	25	22	16	10	41	1.3	1.4	103
8	1.7	41	6.0	6.0	63	20	15	9.7	24	1.3	1.4	204
9	1.7	33	7.2	5.0	78	19	12	9.3	15	1.2	1.2	55
10	1.7	27	9.7	5.0	59	95	11	7.5	11	1.2	1.1	20
11	1.4	20	7.0	5.0	47	401	11	7.5	7.8	1.2	1.1	173
12	1.3	17	7.0	6.0	41	1,070	12	7.2	7.5	1.3	.94	159
13	1.4	17	8.5	8.0	37	414	12	6.3	6.3	7.8	.74	49
14	1.3	16	8.5	12	30	154	12	5.5	5.2	36	.65	31
15	1.2	14	7.0	21	28	88	13	5.7	4.2	19	1.1	16
16	1.2	13	7.0	29	25	58	17	5.5	4.7	13	.94	8.9
17	1.1	14	7.0	27	23	44	12	5.5	6.0	6.3	.84	6.6
18	1.1	14	7.8	27	25	36	14	5.7	6.6	3.6	.74	4.7
19	1.9	14	13	21	31	33	25	5.0	26	2.4	.74	3.2
20	2.2	15	16	18	31	26	24	4.7	96	2.0	.65	2.0
21	24	16	11	19	29	22	19	7.5	26	1.7	.65	2.2
22	156	16	7.8	18	61	21	17	5.7	13	1.4	.57	3.2
23	141	15	7.8	14	199	27	14	5.7	7.8	1.3	.50	3.0
24	40	16	7.2	13	218	65	49	5.7	5.7	1.2	.44	3.2
25	23	16	7.5	94	128	247	35	6.6	4.2	1.2	.33	2.6
26	51	16	7.2	244	87	253	27	6.3	3.8	1.2	.28	1.9
27	151	17	6.6	160	59	122	21	5.0	3.6	.94	.28	3.4
28	136	16	6.3	77	44	62	20	4.2	3.6	.84	.28	3.8
29	49	14	7.2	50	------	44	17	5.0	3.4	1.2	.28	3.4
30	358	13	11	42	------	329	16	3.4	2.8	8.0	.33	2.4
31	2,380	------	11	35	------	238	------	3.0	------	8.5	.38	------
TOTAL	3,554.9	6,876	290.3	1,013.4	1,503	4,082	733	218.5	859.8	135.18	48.26	872.17
MEAN	115	229	9.36	32.7	53.7	132	24.4	7.05	28.7	4.36	1.56	29.1
MAX	2,380	3,120	16	244	218	1,070	113	15	192	36	8.5	204
MIN	1.1	13	6.0	5.0	18	19	11	3.0	2.8	.84	.28	.28
AC-FT	7,050	13,640	576	2,010	2,980	8,100	1,450	433	1,710	268	96	1,730

CAL YR 1972 TOTAL 15,968.45 MEAN 43.6 MAX 3,120 MIN .23 AC-FT 31,670
WTR YR 1973 TOTAL 20,186.51 MEAN 55.3 MAX 3,120 MIN .28 AC-FT 40,040

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-23	0430	9.65	208	3-25	1800	10.32	269
10-27	2230	9.65	208	3-30	0900	13.44	642
10-31	1800	23.76	3,500	6- 5	1200	9.99	239
1-26	1800	10.25	262	9- 8	1000	10.00	240
2-24	0200	10.17	255	9-12	0200	10.87	325
3-12	1300	16.53	1,230				

08085500 Clear Fork Brazos River at Fort Griffin, Tex.

LOCATION (revised).--Lat 32°56'04", long 99°13'27", Shackelford County, on right bank just downstream from pier of bridge on old Fort Griffin-Throckmorton road, 0.4 mile (0.6 km) northeast of Fort Griffin, 5,100 ft (1,554 m) upstream from bridge on U.S. Highway 283, and 1.7 miles (2.7 km) upstream from Mill Creek.

DRAINAGE AREA.--3,974 mi² (10,293 km²).

PERIOD OF RECORD.--December 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,174.09 ft (357.86 m) above mean sea level. Prior to June 23, 1932, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--49 years (1924-73), 226 ft³/s (6.40 m³/s), 163,700 acre-ft/yr (202 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,450 ft³/s (154 m³/s) Nov. 1, gage height, 19.34 ft (5.89 m); minimum, 0.44 ft³/s (12 dm³/s) Sept. 5.
Period of record: Maximum discharge, 33,600 ft³/s (952 m³/s) Sept. 10, 1932, gage height, 35.09 ft (10.70 m); no flow at times. Maximum stage since 1876, 38.0 ft (11.6 m) in September 1900; flood in July 1876 was probably higher; from information by local residents.

REMARKS.--Records good. Some regulation by five major reservoirs, combined capacity, 156,700 acre-ft (193 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	4,800	51	36	192	231	1,020	117	44	24	63	2.8
2	86	4,150	51	36	168	201	543	108	44	21	144	2.0
3	59	1,980	50	52	153	183	343	101	622	18	109	1.4
4	56	1,080	49	55	145	170	252	90	354	16	101	.91
5	53	581	48	59	133	160	208	87	267	16	67	.60
6	52	333	47	64	127	160	179	78	254	16	59	42
7	48	240	46	60	129	157	167	74	179	15	50	41
8	46	189	46	50	269	160	157	71	154	13	41	32
9	44	163	45	40	277	163	147	67	128	14	34	885
10	43	149	43	30	269	188	142	62	101	14	28	791
11	42	132	42	35	239	618	138	59	75	15	24	296
12	41	118	42	40	201	1,040	133	56	62	15	19	220
13	39	108	39	45	177	1,490	134	53	57	15	15	377
14	37	98	39	50	161	1,260	128	51	56	16	12	161
15	35	85	38	55	150	909	130	51	54	20	9.9	97
16	33	73	37	60	141	425	139	52	51	19	7.0	68
17	29	65	36	85	139	330	143	52	49	19	4.9	54
18	24	64	36	103	144	272	147	55	45	21	3.4	47
19	21	62	36	104	146	248	165	53	235	23	3.7	41
20	20	62	51	97	148	222	187	52	212	24	6.1	34
21	44	61	52	92	148	198	186	53	190	27	7.5	29
22	199	60	50	82	185	183	165	51	200	27	8.2	25
23	123	58	52	77	339	173	155	51	123	23	7.7	27
24	331	58	49	73	768	195	276	51	79	20	7.5	59
25	236	56	44	185	689	241	344	51	69	17	6.5	54
26	191	55	40	535	457	404	406	50	61	14	5.0	101
27	169	55	42	1,020	339	452	293	45	51	12	3.5	138
28	198	55	42	637	269	337	182	41	42	11	2.5	48
29	320	52	41	387	------	239	152	41	34	40	9.6	41
30	670	51	42	279	------	230	134	39	29	113	6.3	38
31	1,940	------	39	218	------	1,100	------	36	------	69	3.5	------
TOTAL	5,363	15,093	1,365	4,741	6,702	12,339	6,895	1,898	3,921	727	868.8	3,753.71
MEAN	173	503	44.0	153	239	398	230	61.2	131	23.5	28.0	125
MAX	1,940	4,800	52	1,020	768	1,490	1,020	117	622	113	144	885
MIN	20	51	36	30	127	157	128	36	29	11	2.5	.60
AC-FT	10,640	29,940	2,710	9,400	13,290	24,470	13,680	3,760	7,780	1,440	1,720	7,450

CAL YR 1972 TOTAL 43,390.27 MEAN 119 MAX 4,800 MIN 0 AC-FT 86,060
WTR YR 1973 TOTAL 63,666.51 MEAN 174 MAX 4,800 MIN .60 AC-FT 126,300

PEAK DISCHARGE (BASE, 3,900 FT³/S).--Nov. 1 (1930) 5,450 ft³/s (19.34 ft).

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 (1.3 km) north of Moran, 2.3 miles (3.7 km) upstream from Post Oak Creek, and 10.8 miles (17.4 km) upstream from Hubbard Creek.

DRAINAGE AREA.--235 mi² (609 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,296.21 ft (395.08 m) above mean sea level.

AVERAGE DISCHARGE.--10 years (1963-73), 18.7 ft³/s (0.53 m³/s), 13,550 acre-ft/yr (16.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 635 ft³/s (18.0 m³/s) Sept. 7, gage height, 4.84 ft (1.48 m); no flow at times.
Period of record: Maximum discharge, 9,800 ft³/s (278 m³/s) Jan. 21, 1968, gage height, 18.86 ft (5.75 m); no flow at times.
Maximum stage since 1888, 25.6 ft (7.8 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	9.8	.20	.05	.76	1.7	.37	.15	0	0	0	0
2	.22	3.0	.15	.07	.61	1.4	.37	.08	.18	0	0	0
3	.04	1.6	.11	.28	.48	1.2	.28	.09	12	0	0	0
4	0	1.0	.11	.07	.48	.76	.21	.11	4.8	0	0	0
5	0	.80	.12	.05	.61	.76	.21	.12	2.5	0	0	0
6	0	.74	.08	.05	.48	1.7	.21	.21	3.2	0	0	4.1
7	0	.63	.09	.10	.48	1.7	.21	.17	3.4	0	0	132
8	0	.67	.10	.05	.48	3.3	.21	.16	.49	0	0	13
9	0	.65	.10	.05	.48	1.7	.21	.18	.14	0	0	2.2
10	0	.60	.10	.05	.37	2.3	.21	.11	.09	0	0	.41
11	0	.63	.10	.07	.28	15	.21	.13	.06	0	.08	.10
12	0	.70	.11	.15	.28	12	.21	.31	.05	19	1.2	.05
13	0	.64	.12	.15	.21	5.6	.94	.24	.06	5.3	.14	.02
14	0	.55	.12	.21	.21	3.7	.48	.21	.08	.36	.06	.01
15	0	.48	.11	.21	.21	2.3	.28	.26	.09	.16	.01	0
16	0	.43	.11	.10	.21	1.4	31	.14	.08	.09	0	0
17	0	.38	.11	.10	.21	1.2	11	.10	.13	.09	0	0
18	0	.47	.10	.07	.28	.94	7.2	.11	.17	.08	0	0
19	0	.38	.06	.07	.21	.76	11	.10	.19	.04	0	0
20	.56	.30	.05	.05	.21	.61	4.6	.07	.09	0	0	0
21	19	.30	.05	.05	.28	.48	2.0	.07	.03	0	0	0
22	68	.27	.06	.05	.94	.37	.61	.16	0	0	0	0
23	19	.26	.06	.05	6.9	.37	3.0	.18	0	0	0	0
24	4.5	.28	.06	.05	14	.61	5.2	.28	0	0	0	0
25	1.7	.27	.06	1.4	8.8	.48	1.7	.37	0	0	0	.04
26	3.0	.23	.06	33	5.2	.61	.37	.47	0	0	0	.15
27	55	.21	.06	26	3.3	.48	.15	.42	0	0	0	.29
28	12	.23	.07	11	2.3	.94	.15	.18	0	0	0	.14
29	5.3	.19	.10	5.2	------	.94	.10	.05	0	0	0	.07
30	1.9	.20	.14	3.0	------	.76	.10	0	0	0	0	.07
31	15	------	.09	1.4	------	.48	------	0	------	0	0	------
TOTAL	205.66	26.89	2.96	83.20	49.26	66.55	82.79	5.23	27.83	25.12	1.49	152.65
MEAN	6.63	.90	.096	2.68	1.76	2.15	2.76	.17	.93	.81	.048	5.09
MAX	68	9.8	.20	33	14	15	31	.47	12	19	1.2	132
MIN	0	.19	.05	.05	.21	.37	.10	0	0	0	0	0
AC-FT	408	53	5.9	165	98	132	164	10	55	50	3.0	303

CAL YR 1972 TOTAL 711.04 MEAN 1.94 MAX 84 MIN 0 AC-FT 1,410
WTR YR 1973 TOTAL 729.63 MEAN 2.00 MAX 132 MIN 0 AC-FT 1,450

PEAK DISCHARGE (BASE, 1,000 FT³/S).--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 (106 m) upstream from bridge on Farm Road 601, 1.8 miles (2.9 km) downstream from Deep Creek, 5.1 miles (8.2 km) upstream from Salt Prong Hubbard Creek, 8.1 miles (13.0 km) southeast of Albany, 28.1 miles (45.2 km) upstream from Hubbard Creek Dam, and at mile 40.7 (65.5 km).

DRAINAGE AREA.--461 mi² (1,194 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,224.1 ft (373.1 m) above mean sea level (Texas Highway Department survey). Prior to Mar. 20, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 38.7 ft³/s (1.10 m³/s), 28,040 acre-ft/yr (34.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 913 ft³/s (25.9 m³/s) Oct. 21, gage height, 2.77 ft (0.84 m); no flow at times.
Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) May 13, 1965, gage height, 16.17 ft (4.93 m); no flow at times.
Maximum stages since 1897, about 26 ft (8 m) in 1899 and 20.3 ft (6.2 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	50		0	2.5	7.2	2.4	.66	0	0		0
2	0	7.7		0	1.7	5.1	2.1	.28	0	0		0
3	0	3.6		.47	1.1	4.1	1.7	.23	16	0		0
4	0	1.8		1.5	.75	3.3	1.5	.21	8.2	0		0
5	0	.80		1.0	.56	2.6	1.4	.14	3.2	0		0
6	0	.21		.36	.43	5.0	1.3	.36	3.0	0		0
7	0	.03		.49	.57	7.1	1.4	.59	.96	0		173
8	0	.02		.38	1.1	13	1.3	.50	2.4	0		71
9	0	.01		.25	.98	11	1.2	.44	.62	0		6.9
10	0	0		.22	.94	15	.80	.18	.04	0		2.8
11	0	0		.29	.83	21	.80	.02	0	0		2.0
12	0	0		.24	.63	40	.80	0	0	33		1.2
13	0	0		.24	.43	27	1.0	0	0	37		.21
14	0	0		.23	.34	17	1.2	0	0	18		.06
15	0	0		.48	.25	10	1.9	0	0	2.8		.02
16	0	0		.87	.26	6.2	13	0	0	.30		0
17	0	0		.96	.21	4.0	37	0	0	.04		0
18	0	0		.77	.47	3.0	20	0	0	.01		0
19	0	0		.38	.59	2.5	19	0	0	0		0
20	0	0		.33	.56	2.0	22	0	0	0		0
21	111	0		.38	15	1.7	8.4	0	0	0		0
22	319	0		.38	44	1.3	6.2	0	0	0		0
23	65	0		.27	12	1.4	11	0	0	0		0
24	20	0		.23	39	7.4	27	0	0	0		0
25	6.0	0		8.4	36	4.9	6.9	0	0	0		0
26	6.0	0		63	28	4.0	3.1	0	0	0		0
27	55	0		81	19	8.1	2.2	0	0	0		0
28	40	0		33	12	6.6	1.3	0	0	0		0
29	12	0		20	------	4.2	1.2	0	0	0		0
30	10	0		8.7	------	2.7	1.0	0	0	0		0
31	300	------		4.2	------	2.5	------	0	------	0		------
TOTAL	944.0	64.17	0	229.02	220.20	250.9	200.10	3.61	34.42	91.15	0	257.19
MEAN	30.5	2.14	0	7.39	7.86	8.09	6.67	.12	1.15	2.94	0	8.57
MAX	319	50	0	81	44	40	37	.66	16	37	0	173
MIN	0	0	0	0	.21	1.3	.80	0	0	0	0	0
AC-FT	1,870	127	0	454	437	498	397	7.2	68	181	0	510

CAL YR 1972 TOTAL 2,701.24 MEAN 7.38 MAX 515 MIN 0 AC-FT 5,360
WTR YR 1973 TOTAL 2,294.76 MEAN 6.29 MAX 319 MIN 0 AC-FT 4,550

PEAK DISCHARGE (BASE, 2,000 FT³/S).--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 (2.7 km) southeast of Albany, and 2.0 miles (3.2 km) upstream from Salt Prong Hubbard Creek.

DRAINAGE AREA.--38.4 mi² (99.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,340.54 ft (408.60 m) above mean sea level.

AVERAGE DISCHARGE.--10 years (1963-73), 4.11 ft³/s (116 dm³/s), 2,980 acre-ft/yr (3.67 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 780 ft³/s (22.1 m³/s) Oct. 30, gage height, 5.38 ft (1.64 m); no flow at times.
Period of record: Maximum discharge, 9,520 ft³/s (270 m³/s) May 5, 1969, gage height, 19.22 ft (5.86 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of 4,570 ft³/s (129 m³/s) and contracted-opening measurement of 9,520 ft³/s (270 m³/s); no flow at times.
Historical flood information begins in 1940. Floods of June 10, 1940, and July 18, 1953, reached stages of about 21 ft (6 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	35	.55	.37	7.5	11	5.0	1.6	8.4	.26	.55	0
2	.09	12	.55	.40	5.0	7.4	4.0	1.4	1.0	.20	.55	0
3	.09	5.2	.53	1.4	4.1	6.0	3.5	1.4	5.4	.18	.67	0
4	.10	3.6	.52	.69	3.8	4.9	3.1	1.3	1.3	.19	.45	0
5	.11	3.1	.53	.47	3.4	4.7	3.1	1.3	1.8	.20	.31	0
6	.10	2.3	.46	.41	3.1	12	2.9	1.6	2.5	.32	.27	6.2
7	.09	1.7	.45	.50	4.2	10	2.9	1.2	1.3	.27	.24	22
8	.10	1.4	.43	.49	12	5.2	2.6	1.2	.92	.24	.21	2.0
9	.12	1.1	.40	.45	6.4	4.2	2.5	1.3	.80	.24	.18	.55
10	.13	.95	.40	.45	4.3	28	2.4	1.3	.84	.24	.18	.24
11	.13	.83	.40	.46	3.8	19	2.6	1.3	.83	.27	.18	.18
12	.13	.87	.38	.48	3.3	7.7	2.6	1.2	.75	4.9	.15	.13
13	.13	1.3	.38	.57	2.7	6.0	2.7	1.2	.89	1.3	.13	.11
14	.13	.82	.36	1.4	2.1	4.8	2.8	1.2	1.0	2.1	.11	.11
15	.12	.73	.35	1.7	1.8	4.0	5.9	1.2	.69	2.6	.06	.11
16	.11	.69	.35	2.7	1.9	3.6	4.6	1.2	.60	.74	.04	.11
17	.11	.67	.37	2.1	2.4	3.5	15	1.2	.55	.50	.04	.11
18	.11	.66	.40	1.7	3.6	3.4	18	1.2	.61	.35	.03	.11
19	.20	.63	.40	1.4	3.5	3.2	7.5	1.3	.57	.27	.03	.12
20	.25	.64	.41	1.3	2.8	2.9	4.4	1.2	.52	.27	.03	.13
21	7.6	.63	.40	1.5	2.7	2.7	3.6	1.1	.44	.27	.02	.12
22	7.0	.68	.40	1.6	29	2.7	3.1	1.0	.35	.27	.01	.10
23	1.5	.67	.37	1.6	55	24	3.2	.98	.31	.24	0	.11
24	.49	.72	.38	1.2	25	27	3.6	1.2	.28	.24	0	.13
25	.36	.77	.40	87	20	10	2.9	1.1	.30	.21	0	.12
26	6.3	.67	.40	76	15	4.9	2.5	1.0	.34	.21	0	.12
27	6.0	.63	.40	34	13	3.8	2.1	.85	.31	.21	0	.15
28	1.7	.61	.42	20	11	3.8	2.0	.72	.31	.21	0	.12
29	.86	.59	.45	14	------	3.9	1.9	.81	.30	2.0	0	.09
30	143	.58	.39	15	------	7.5	1.8	.88	.29	1.7	0	.09
31	76	------	.38	10	------	13	------	.92	------	1.2	0	------
TOTAL	253.24	80.74	13.01	281.34	252.4	254.8	124.8	36.36	34.50	22.40	4.44	33.36
MEAN	8.17	2.69	.42	9.08	9.01	8.22	4.16	1.17	1.15	.72	.14	1.11
MAX	143	35	.55	87	55	28	18	1.6	8.4	4.9	.67	22
MIN	.08	.58	.35	.37	1.8	2.7	1.8	.72	.28	.18	0	0
AC-FT	502	160	26	558	501	505	248	72	68	44	8.8	66

CAL YR 1972 TOTAL 493.57 MEAN 1.35 MAX 143 MIN 0 AC-FT 979
WTR YR 1973 TOTAL 1,391.39 MEAN 3.81 MAX 143 MIN 0 AC-FT 2,760

PEAK DISCHARGE (BASE, 110 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
10-30	1930	5.38	780
1-25	1645	3.67	207
3-23	2100	3.87	260

08086212 Hubbard Creek below Albany, Tex.

LOCATION.--Lat 32°43'58", long 99°08'25", Shackelford County, on left bank 0.5 mile (0.8 km) downstream from Salt Prong Hubbard Creek, 2.8 miles (4.5 km) upstream from Newcomb Creek, 4.5 miles (7.2 km) upstream from U.S. Highway 180, 9.1 miles (14.6 km) east of Albany, and at mile 35.1 (56.5 km).

DRAINAGE AREA.--621 mi² (1,608 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,184.99 ft (361.18 m) above mean sea level. Prior to June 12, 1968, water-stage recorder at site 2.1 miles (3.4 km) downstream at datum 7.63 ft (2.33 m) lower.

AVERAGE DISCHARGE.--7 years, 53.6 ft³/s (1.52 m³/s), 38,830 acre-ft/yr (47.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,240 ft³/s (35.1 m³/s) July 14, gage height, 8.00 ft (2.44 m), from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of step-backwater method; no flow for many days.
Period of record: Maximum discharge, 27,200 ft³/s (770 m³/s) Jan. 21, 1968, gage height, 25.10 ft (7.65 m), at former site and datum, from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurement of peak flow; no flow for many days.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	74	.58	.23	13	17	9.4	4.0	.14	0	1.1	0
2	0	31	.43	.24	10	16	9.1	3.4	3.2	0	.51	0
3	0	13	.43	.53	8.7	12	8.6	3.1	4.8	0	.15	0
4	0	8.7	.43	.72	7.7	11	7.2	2.9	16	0	.06	0
5	0	5.9	.43	1.4	6.8	9.9	6.5	2.7	5.7	0	.02	0
6	0	4.7	.43	2.9	6.5	11	6.1	2.7	4.1	0	.01	.57
7	0	3.8	.43	3.0	6.0	14	6.0	2.8	3.2	0	0	179
8	0	3.1	.37	3.0	6.1	14	5.7	2.7	2.9	0	0	58
9	0	2.5	.32	3.0	8.0	13	5.8	2.5	2.5	0	0	12
10	0	2.2	.32	2.9	8.0	14	5.5	2.1	1.9	0	0	4.1
11	0	1.6	.32	2.8	7.2	28	5.1	1.7	1.3	.27	0	2.4
12	0	1.5	.32	2.8	6.6	42	4.9	1.6	.74	12	0	1.6
13	0	1.5	.32	2.7	6.2	29	4.8	1.5	.63	47	0	.98
14	0	1.5	.32	2.6	5.8	19	5.1	1.5	.46	208	0	.53
15	0	1.5	.32	2.6	5.4	14	4.8	1.5	.15	52	0	.32
16	0	1.4	.32	3.4	5.1	11	4.8	1.3	.14	4.8	0	.14
17	0	1.3	.32	4.4	5.1	9.5	22	1.3	.14	2.4	0	.05
18	0	1.3	.29	4.8	5.1	8.5	21	1.3	.09	1.2	0	.01
19	0	1.3	.23	4.5	5.1	8.0	18	1.1	.04	.45	0	.02
20	0	1.2	.23	4.1	5.1	7.4	16	.97	.02	.14	0	.01
21	72	1.1	.23	3.7	5.1	6.8	11	.77	.02	.06	0	.01
22	427	1.0	.28	3.5	5.9	6.2	8.7	.64	.01	.02	0	.01
23	100	.97	.32	3.3	55	5.8	18	.48	0	.01	0	0
24	17	.97	.32	3.2	68	89	66	.23	0	.01	0	0
25	7.0	.97	.32	26	56	30	19	.24	0	0	0	0
26	6.7	.97	.32	224	39	16	10	.28	0	0	0	.04
27	65	.75	.27	147	26	11	6.8	.43	0	0	0	.07
28	49	.68	.23	69	21	10	5.4	.43	0	0	0	.03
29	15	.68	.22	36	------	9.9	4.7	.43	0	.13	0	.04
30	168	.68	.23	21	------	9.4	4.3	.29	0	.66	0	.04
31	422	------	.23	16	------	9.5	------	.05	------	1.2	0	------
TOTAL	1,348.7	171.77	10.13	605.32	413.5	511.9	330.3	46.94	48.18	330.35	1.85	259.97
MEAN	43.5	5.73	.33	19.5	14.8	16.5	11.0	1.51	1.61	10.7	.060	8.67
MAX	427	74	.58	224	68	89	66	4.0	16	208	1.1	179
MIN	0	.68	.22	.23	5.1	5.8	4.3	.05	0	0	0	0
AC-FT	2,680	341	20	1,200	820	1,020	655	93	96	655	3.7	516

CAL YR 1972 TOTAL 3,242.65 MEAN 8.86 MAX 488 MIN 0 AC-FT 6,430
WTR YR 1973 TOTAL 4,078.91 MEAN 11.2 MAX 427 MIN 0 AC-FT 8,090

PEAK DISCHARGE (BASE, 2,000 FT³/S).--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 (2.3 km) east of Farm Road 1853, 3.3 miles (5.3 km) upstream from Battle Creek, and 5.8 miles (9.3 km) south of Eolian.

DRAINAGE AREA.--25.4 mi² (65.8 km²).

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 (388 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 2.74 ft³/s (77.6 dm³/s), 1,990 acre-ft/yr (2.45 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 308 ft³/s (8.72 m³/s) Apr. 15, gage height, 5.25 ft (1.60 m); no flow at times.
Period of record: Maximum discharge, 648 ft³/s (18.4 m³/s) May 6, 1969, gage height, 12.78 ft (3.90 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.04		0	0	0	.01	.08	0	0	.25	0
2	0	0		0	0	0	0	.05	.11	0	.01	0
3	0	0		0	0	0	0	.02	52	0	0	0
4	0	0		0	0	0	0	0	1.2	0	0	0
5	0	0		0	0	0	0	0	.23	0	0	0
6	0	0		0	0	0	0	0	.32	0	0	6.8
7	0	0		0	0	0	0	.02	.07	0	0	34
8	0	0		0	0	0	0	.01	0	0	0	.86
9	0	0		0	0	0	0	0	0	0	0	.05
10	0	0		0	0	0	0	0	0	0	0	.02
11	0	0		0	0	0	0	0	0	0	0	.01
12	0	0		0	0	0	0	0	0	0	0	0
13	0	0		0	0	0	0	0	0	0	0	0
14	0	0		0	0	0	0	0	0	0	0	0
15	0	0		0	0	0	58	0	0	0	0	0
16	0	0		0	0	0	33	0	0	0	0	0
17	0	0		0	0	0	7.8	0	0	0	0	0
18	0	0		0	0	0	13	0	0	0	0	0
19	.14	0		0	0	0	29	0	0	0	0	0
20	.03	0		0	0	0	6.4	0	0	0	0	0
21	64	0		0	0	0	1.0	0	0	0	0	0
22	57	0		0	.27	0	11	0	0	0	0	0
23	.69	0		0	1.3	0	36	0	0	0	0	0
24	.07	0		0	.70	5.5	42	0	0	0	0	0
25	.02	0		24	.17	1.6	2.4	0	0	0	0	0
26	39	0		16	.05	.46	1.1	0	0	0	0	0
27	9.4	0		1.0	.01	.24	.53	0	0	0	0	0
28	.34	0		.16	0	.26	.30	0	0	0	0	0
29	.05	0		.01	------	.14	.18	0	0	0	0	0
30	39	0		0	------	.09	.12	0	0	26	0	0
31	24	------		0	------	.03	------	0	------	3.6	0	------
TOTAL	233.74	.04	0	41.17	2.50	8.32	241.84	.18	53.93	29.6	.26	41.74
MEAN	7.54	.001	0	1.33	.089	.27	8.06	.006	1.80	.95	.008	1.39
MAX	64	.04	0	24	1.3	5.5	58	.08	52	26	.25	34
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	464	.08	0	82	5.0	17	480	.4	107	59	.5	83

CAL YR 1972 TOTAL 714.69 MEAN 1.95 MAX 110 MIN 0 AC-FT 1,420
WTR YR 1973 TOTAL 653.32 MEAN 1.79 MAX 64 MIN 0 AC-FT 1,300

PEAK DISCHARGE (BASE, 200 FT³/S).--Oct. 21 (2330) 257 ft³/s (4.34 ft); Apr. 15 (2145) 308 ft³/s (5.25 ft).

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 (2.4 km) downstream from Battle Creek, 8.2 miles (13.2 km) southwest of Breckenridge, and about 13 miles (21 km) upstream from Hubbard Creek Reservoir.

DRAINAGE AREA.--298 mi² (772 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,178.42 ft (359.18 m) above mean sea level. Prior to Mar. 19, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 32.4 ft³/s (0.92 m³/s), 23,470 acre-ft/yr (28.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,600 ft³/s (73.6 m³/s) Apr. 15, gage height, 12.65 ft (3.86 m); no flow for many days.
Period of record: Maximum discharge, 8,170 ft³/s (231 m³/s) May 13, 1965, gage height, 23.30 ft (7.10 m); 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 (7.5 m).

REMARKS.--Records good. Some regulation by Lake Cisco, capacity, 25,600 acre-ft (31.6 hm³). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	43	0	.02	1.0	.91	.40	1.2	.02	0	5.9	0
2	0	12	0	.05	.75	.70	.33	.72	.02	0	1.9	0
3	0	4.1	0	.46	.60	.39	.32	.41	360	0	.76	0
4	0	1.1	.02	.04	.39	.32	.26	.34	54	0	.32	0
5	0	.47	.01	.03	.32	.32	.21	.26	14	0	.20	0
6	0	.21	.02	.02	.32	.66	.21	.30	5.1	0	.12	7.9
7	0	.09	.02	.06	.32	.43	.21	.24	1.8	0	.07	24
8	0	.07	.02	.04	.39	.29	.21	.14	.70	0	.06	12
9	0	.05	.02	.02	.33	.26	.21	.11	.28	0	.03	2.2
10	0	.02	.02	.02	.32	.54	.20	.09	.13	0	.30	.46
11	0	.02	.02	.02	.29	.36	.17	.08	.07	1.7	.18	.17
12	0	.02	.02	.02	.26	.26	.17	.07	.05	.11	.09	.02
13	0	.01	.01	0	.26	.28	.20	.06	.05	.07	.04	0
14	0	0	.01	.13	.26	.72	.26	.06	.04	7.9	.01	0
15	0	0	.01	.05	.26	.72	531	.06	.02	3.7	0	0
16	0	0	.01	.03	.26	.62	890	.06	.02	3.3	0	0
17	0	0	.01	.01	.26	.45	83	.06	.01	1.2	0	0
18	0	0	.01	0	.28	.39	122	.05	0	.49	0	0
19	0	0	.01	0	.32	.26	113	.02	0	.24	0	0
20	0	0	.01	0	.32	.23	58	.02	0	.11	0	0
21	0	0	.01	0	.26	.21	21	.02	0	.06	0	0
22	282	0	.01	0	2.3	.21	15	.02	0	.05	0	0
23	28	0	.01	0	14	.24	158	.02	0	.01	0	0
24	5.7	0	.01	0	15	5.5	278	.21	0	0	0	0
25	6.7	0	.01	77	7.4	10	50	2.1	0	0	0	0
26	130	0	.01	149	3.8	3.8	21	8.4	0	0	0	0
27	133	0	0	29	2.2	2.1	9.6	.47	0	0	0	0
28	32	0	0	10	1.5	1.6	5.3	.12	0	.20	0	0
29	11	0	.06	4.5	------	.94	2.9	.06	0	.51	0	0
30	111	0	.05	2.4	------	.66	1.8	.03	0	64	0	0
31	396	------	.03	1.5	------	.55	------	.02	------	25	0	------
TOTAL	1,135.4	61.16	.45	274.42	53.97	34.92	2,362.96	15.82	436.31	108.65	9.98	46.75
MEAN	36.6	2.04	.015	8.85	1.93	1.13	78.8	.51	14.5	3.50	.32	1.56
MAX	396	43	.06	149	15	10	890	8.4	360	64	5.9	24
MIN	0	0	0	0	.26	.21	.17	.02	0	0	0	0
AC-FT	2,250	121	.9	544	107	69	4,690	31	865	216	20	93

CAL YR 1972 TOTAL 3,646.19 MEAN 9.96 MAX 903 MIN 0 AC-FT 7,230
WTR YR 1973 TOTAL 4,540.79 MEAN 12.4 MAX 890 MIN 0 AC-FT 9,010

PEAK DISCHARGE (BASE, 2,000 FT³/S).--Apr. 15 (2230) 2,600 ft³/s (12.65 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 (1.6 km) upstream from U.S. Highway 183, 6.5 miles (10.5 km) northwest of Breckenridge, and at mile 12.6 (20.3 km).

DRAINAGE AREA.--1,107 mi² (2,867 km²).

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, 188,800 acre-ft (233 hm³) Apr. 24, 25, elevation, 1,173.0 ft (357.5 m); minimum, 171,200 acre-ft (211 hm³), Oct. 18-20, elevation, 1,171.3 ft (357.0 m).
Period of record: Maximum contents, 320,800 acre-ft (396 hm³) May 7, 1969, elevation, 1,183.2 ft (360.6 m); minimum since normal operating level was reached in May 1969, 171,200 acre-ft (211 hm³) Oct. 18-20, 1972, elevation, 1,171.3 ft (357.0 m).

REMARKS.--Reservoir is formed by rolled-fill earthen dam 5,630 ft (1,720 m) 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 (5.6 km). 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 (69.0 hm³) 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 ft³/s (850 m³/s) with a 17.5-foot (5.3-meter) head through a 22-foot-diameter (7-meter) concrete conduit. Emergency spillway is a 2,000-foot-wide (610-meter) cut through natural ground near left end of dam. Diversions during water year 1973 were as follows: 498 acre-ft (0.614 hm³) for municipal use, 2,980 acre-ft (3.67 hm³) for oilfield operation, and 2,520 acre-ft (3.11 hm³) 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	168,200
1,172.0	178,300
1,173.0	188,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174,200	182,500	180,400	178,300	182,500	184,600	183,500	187,700	183,500	178,300	180,400	175,200
2	174,200	182,500	180,400	178,300	182,500	184,600	183,500	186,700	183,500	178,300	180,400	175,200
3	174,200	182,500	180,400	178,300	182,500	184,600	183,500	186,700	184,600	178,300	180,400	175,200
4	174,200	182,500	180,400	178,300	182,500	184,600	183,500	186,700	185,600	178,300	180,400	175,200
5	174,200	182,500	179,300	178,300	182,500	184,600	183,500	186,700	184,600	177,300	180,400	174,200
6	173,200	182,500	179,300	178,300	182,500	184,600	183,500	186,700	184,600	177,300	180,400	176,300
7	173,200	182,500	179,300	178,300	182,500	184,600	183,500	186,700	184,600	177,300	180,400	176,300
8	173,200	182,500	179,300	178,300	182,500	184,600	182,500	186,700	184,600	176,300	180,400	176,300
9	173,200	182,500	179,300	178,300	182,500	184,600	182,500	186,700	183,500	176,300	179,300	176,300
10	173,200	182,500	178,300	178,300	182,500	184,600	182,500	186,700	183,500	176,300	179,300	176,300
11	173,200	182,500	178,300	178,300	182,500	183,500	182,500	186,700	183,500	176,300	179,300	176,300
12	173,200	182,500	178,300	178,300	182,500	183,500	182,500	185,600	183,500	176,300	179,300	176,300
13	173,200	181,400	178,300	179,300	182,500	183,500	182,500	185,600	182,500	176,300	179,300	176,300
14	172,200	181,400	178,300	179,300	182,500	183,500	182,500	185,600	182,500	179,300	179,300	176,300
15	172,200	181,400	178,300	179,300	182,500	183,500	183,500	185,600	182,500	179,300	178,300	176,300
16	172,200	181,400	178,300	179,300	182,500	183,500	184,600	185,600	182,500	179,300	178,300	175,200
17	172,200	181,400	178,300	180,400	182,500	182,500	185,600	185,600	182,500	179,300	178,300	175,200
18	171,200	181,400	178,300	180,400	182,500	182,500	186,700	185,600	181,400	179,300	178,300	175,200
19	171,200	180,400	178,300	180,400	182,500	182,500	186,700	184,600	181,400	179,300	178,300	174,200
20	171,200	180,400	178,300	179,300	182,500	182,500	186,700	184,600	181,400	178,300	178,300	174,200
21	175,200	180,400	178,300	179,300	182,500	182,500	186,700	184,600	180,400	178,300	178,300	174,200
22	177,300	180,400	178,300	179,300	183,500	182,500	186,700	184,600	180,400	178,300	178,300	174,200
23	177,300	180,400	178,300	179,300	183,500	183,500	187,700	184,600	180,400	178,300	178,300	174,200
24	177,300	180,400	178,300	179,300	183,500	183,500	188,800	183,500	180,400	178,300	178,300	174,200
25	177,300	180,400	178,300	180,400	183,500	182,500	188,800	184,600	180,400	177,300	177,300	174,200
26	178,300	180,400	178,300	181,400	183,500	182,500	187,700	184,600	179,300	177,300	177,300	174,200
27	178,300	180,400	178,300	182,500	184,600	182,500	187,700	184,600	179,300	177,300	177,300	173,200
28	179,300	180,400	178,300	182,500	184,600	183,500	187,700	184,600	179,300	177,300	177,300	173,200
29	179,300	180,400	178,300	182,500	------	184,600	187,700	184,600	179,300	178,300	176,300	173,200
30	180,400	180,400	178,300	182,500	------	184,600	187,700	183,500	179,300	181,400	176,300	173,200
31	182,500	------	178,300	182,500	------	184,600	------	183,500	------	181,400	176,300	------
(†)	1,172.4	1,172.2	1,172.0	1,172.4	1,172.6	1,172.6	1,172.9	1,172.5	1,172.1	1,172.3	1,171.8	1,171.5
(*)	+8,300	-2,100	-2,100	+4,200	+2,100	0	+3,100	-4,200	-4,200	+2,100	-5,100	-3,100
MAX	182,500	182,500	180,400	182,500	184,600	184,600	188,800	187,700	185,600	181,400	180,400	176,300
MIN	171,200	180,400	178,300	178,300	182,500	182,500	182,500	183,500	179,300	176,300	176,300	173,200

CAL YR 1972..... * -22,500 MAX 200,800 MIN 171,200
WTR YR 1973..... * -1,000 MAX 188,800 MIN 171,200

† 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 (2.3 km) downstream from Hubbard Creek Reservoir, 6.8 miles (10.9 km) northwest of Breckenridge, 8.2 miles (13.2 km) upstream from Gonzales Creek, and 11.2 miles (18.0 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--1,111 mi² (2,877 km²), of which 1,107 mi² (2,867 km²) 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 (332.87 m) above mean sea level. Prior to July 16, 1959, at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--7 years (1955-62) prior to completion of Hubbard Creek Dam, 170 ft³/s (4.81 m³/s), 123,200 acre-ft/yr (152 hm³/yr); 11 years (1962-73) regulated, 27.7 ft³/s (0.78 m³/s), 20,070 acre-ft/yr (24.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 112 ft³/s (3.17 m³/s) July 30, gage height, 6.59 ft (2.01 m); no flow at times.
Period of record: Maximum discharge, 34,500 ft³/s (977 m³/s) May 26, 1957, gage height, 34.00 ft (10.36 m); no flow at times.
Maximum stage since at least 1925, 34.2 ft (10.4 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.69		0	.08	.09	0	.09	0	0		
2	0	.18		0	.04	.06	0	.07	0	0		
3	0	.05		.02	.02	.04	0	.05	1.0	0		
4	0	.02		.06	.01	.04	0	.04	1.5	0		
5	0	.01		.06	.01	.02	0	.05	.74	0		
6	0	0		.05	.01	.12	0	.09	.27	0		
7	0	0		.09	.03	.11	0	.07	.07	0		
8	0	0		.06	.09	.08	0	.03	.01	0		
9	0	0		.04	.06	.08	0	.01	0	0		
10	0	0		.03	.03	.10	0	0	0	0		
11	0	0		.15	.02	.06	0	0	0	0		
12	0	0		.08	.01	.04	0	0	0	0		
13	0	0		.06	.02	.04	0	0	0	0		
14	0	0		.06	.02	.02	.01	0	0	0		
15	0	0		.07	.01	.02	.03	0	0	0		
16	0	0		.09	.01	.01	.05	0	0	0		
17	0	0		.09	.02	.01	.08	0	0	0		
18	0	0		.05	.04	.01	.09	0	0	0		
19	0	0		.04	.04	.01	.06	0	0	0		
20	0	0		.03	.04	.02	.03	0	0	0		
21	.59	0		.03	.05	.01	.02	0	0	0		
22	8.1	0		.02	.36	.01	.01	0	0	0		
23	.30	0		.01	2.7	.30	.02	0	0	0		
24	.04	0		.01	1.6	4.1	1.6	0	0	0		
25	0	0		5.6	.73	2.8	1.1	.50	0	0		
26	1.3	0		9.4	.41	.71	.80	2.7	0	0		
27	1.9	0		2.9	.21	.29	.40	.35	0	0		
28	.42	0		1.1	.13	.14	.21	.08	0	0		
29	.11	0		.46	------	.06	.12	.01	0	0		
30	.04	0		.22	------	.03	.10	0	0	14		
31	.49	------		.12	------	.01	------	0	------	.01		------
TOTAL	13.29	.95	0	21.00	6.80	9.44	4.73	4.14	3.59	14.01	0	0
MEAN	.43	.032	0	.68	.24	.30	.16	.13	.12	.45	0	0
MAX	8.1	.69	0	9.4	2.7	4.1	1.6	2.7	1.5	14	0	0
MIN	0	0	0	0	.01	.01	0	0	0	0	0	0
AC-FT	26	1.9	0	42	13	19	9.4	8.2	7.1	28	0	0

CAL YR 1972 TOTAL 29.42 MEAN .080 MAX 8.1 MIN 0 AC-FT 58
WTR YR 1973 TOTAL 77.95 MEAN .21 MAX 14 MIN 0 AC-FT 155

08087300 Clear Fork Brazos River at Eliasville, Tex.

LOCATION.--Lat 32°57'36", long 98°45'59", Young County, on right bank 30 ft (9 m) upstream from old mill dam, 180 ft (55 m) upstream from bridge on Farm Road 1974, 400 ft (122 m) northwest of Eliasville, and at mile 12.4 (20.0 km).

DRAINAGE AREA.--5,721 mi² (14,817 km²).

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 (313.26 m) above mean sea level. See WSP 1922 for history of changes prior to Dec. 18, 1961.

AVERAGE DISCHARGE.--38 years (1916-19, 1928-51, 1961-73), 372 ft³/s (10.5 m³/s), 269,500 acre-ft/yr (332 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,180 ft³/s (147 m³/s) Oct. 31, gage height, 13.40 ft (4.08 m); minimum, 0.29 ft³/s (8.5 dm³/s) Sept. 5.
Period of record: Maximum discharge, 35,800 ft³/s (1,010 m³/s) June 11, 1941, gage height, 33.45 ft (10.20 m), site and datum then in use, from rating curve extended above 23,000 ft³/s (651 m³/s); no flow at times.
Maximum stage since 1877, 35 ft (11 m) May 1, 1957, present site and datum; flood in September 1900 reached about same stage, from information by Texas Highway Department and local residents. Other floods are reported to have occurred in 1876, Apr. 27, 1890, 1932, 1941, and 1955.

REMARKS.--Records good. Regulation by eight major upstream reservoirs with a total capacity of 510,100 acre-ft (629 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	3,620	70	40	251	305	1,380	152	44	9.5	205	.34
2	83	4,580	71	40	216	263	1,130	127	87	7.7	71	.33
3	54	4,950	71	59	183	226	536	116	82	6.2	89	.32
4	40	2,910	67	57	159	201	340	103	713	4.7	103	.31
5	32	1,220	65	53	147	183	255	96	329	3.9	82	.30
6	27	560	63	55	132	176	200	93	240	2.9	65	.35
7	34	314	62	50	126	170	175	82	230	2.4	44	31
8	34	218	57	50	130	159	152	84	163	2.6	31	18
9	32	164	55	45	295	141	146	82	130	2.6	23	6.7
10	29	137	53	40	307	149	135	80	114	2.1	16	864
11	23	119	51	35	298	158	130	71	91	2.1	13	668
12	21	109	50	30	262	595	127	67	75	1.9	8.3	270
13	19	101	48	35	219	1,190	130	65	61	1.9	6.2	210
14	19	91	47	40	185	1,900	127	59	57	5.2	4.7	329
15	17	86	46	45	163	1,560	119	57	53	87	3.9	167
16	14	80	40	50	147	858	127	55	44	23	2.6	103
17	12	77	45	73	141	374	141	53	40	8.3	2.1	73
18	9.7	75	49	84	135	291	156	53	35	4.7	1.5	55
19	11	76	51	106	139	240	156	55	34	2.4	1.3	43
20	9.8	82	53	116	144	214	179	55	152	1.3	.91	37
21	69	78	54	101	145	192	205	51	190	5.7	.60	32
22	382	80	55	93	159	172	200	51	160	9.5	.48	29
23	222	74	53	84	276	165	225	49	182	16	.46	26
24	82	75	53	77	471	230	876	46	108	12	.45	19
25	258	75	55	194	955	269	520	51	71	10	.43	29
26	236	78	54	564	742	254	438	270	49	29	.41	69
27	249	76	50	913	488	445	480	77	35	16	.40	96
28	160	75	47	1,270	372	488	329	47	23	5.2	.39	167
29	137	73	50	682	------	352	210	41	18	71	.38	55
30	327	74	45	414	------	251	171	37	14	2,370	.36	32
31	4,110	------	41	313	------	359	------	37	------	1,130	.35	------
TOTAL	6,878.5	20,327	1,671	5,808	7,387	12,530	9,495	2,362	3,624	3,856.8	778.22	3,430.65
MEAN	222	678	53.9	187	264	404	317	76.2	121	124	25.1	114
MAX	4,110	4,950	71	1,270	955	1,900	1,380	270	713	2,370	205	864
MIN	9.7	73	40	30	126	141	119	37	14	1.3	.35	.30
AC-FT	13,640	40,320	3,310	11,520	14,650	24,850	18,830	4,690	7,190	7,650	1,540	6,800

CAL YR 1972 TOTAL 52,710.60 MEAN 144 MAX 4,950 MIN .20 AC-FT 104,600
WTR YR 1973 TOTAL 78,148.17 MEAN 214 MAX 4,950 MIN .30 AC-FT 155,000

PEAK DISCHARGE (BASE, 6,000 FT³/S).--No peak above base.

08088000 Brazos River near South Bend, Tex.

LOCATION (revised).--Lat 33°01'27", long 98°38'37", Young County, on left bank 265 ft (81 m) downstream from bridge on State Highway 67, 1.8 miles (2.9 km) downstream from Clear Fork Brazos River, 2.0 miles (3.2 km) northeast of South Bend, and at mile 758.3 (1,220.1 km).

DRAINAGE AREA.--21,600 mi² (55,900 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,002.98 ft (305.71 m) above mean sea level. Prior to Feb. 23, 1939, nonrecording gage at site 265 ft (81 m) upstream. Feb. 23, 1939, to Mar. 9, 1961, water-stage recorder at site 265 ft (81 m) upstream.

AVERAGE DISCHARGE.--35 years, 884 ft³/s (25.0 m³/s), 640,500 acre-ft/yr (790 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,300 ft³/s (433 m³/s) Nov. 2, gage height, 17.77 ft (5.42 m); minimum, 20 ft³/s (0.57 m³/s) Sept. 3, 4.
Period of record: Maximum discharge, 87,400 ft³/s (2,480 m³/s) May 4, 1941, gage height, 27.35 ft (8.34 m); maximum gage height, 32.70 ft (9.97 m) Aug. 29, 1957, no flow at times.
Maximum stage, 36.2 ft (11.0 m) in 1876, from information by State Highway Department and Corps of Engineers. Flood of Sept. 24, 1900, reached a stage of 29.5 ft (9.0 m), and flood of June 16, 1930, reached a stage of 35.5 ft (10.8 m), from information by local residents.

REMARKS.--Records good. Flow partly regulated by 10 major upstream reservoirs, total capacity, 554,000 acre-ft (683 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	13,600	358	190	748	698	2,220	520	42	44	606	22
2	431	12,900	344	193	701	643	1,800	456	48	39	449	22
3	378	6,940	336	252	609	738	1,150	408	938	35	169	22
4	340	4,080	324	269	530	624	781	374	4,550	33	201	22
5	310	2,630	308	273	467	538	604	356	2,970	30	170	23
6	288	1,940	296	274	418	467	517	347	1,900	29	158	31
7	268	1,480	296	279	386	426	464	284	1,410	28	128	43
8	244	1,220	288	274	390	399	434	267	926	25	111	62
9	228	1,000	276	252	591	381	405	240	605	24	93	259
10	216	845	260	150	727	407	373	213	444	26	80	907
11	206	750	264	100	637	372	354	192	308	33	71	1,710
12	202	677	268	100	599	2,320	338	187	220	31	63	863
13	196	637	268	100	538	3,410	348	158	150	30	61	811
14	188	563	260	150	491	2,810	344	142	125	33	54	648
15	179	534	252	283	433	2,290	365	129	109	65	48	504
16	176	491	256	319	395	1,760	393	120	96	86	52	672
17	176	461	256	372	384	1,280	506	111	89	72	51	473
18	164	451	256	325	398	1,050	709	106	81	66	44	322
19	150	439	248	327	403	877	529	102	74	87	44	235
20	155	450	244	345	406	772	884	96	71	88	40	204
21	207	435	229	340	400	681	1,470	96	276	69	48	215
22	662	430	230	317	405	598	942	87	336	60	42	188
23	975	416	223	305	467	544	699	103	276	54	40	168
24	1,250	412	216	395	729	731	1,220	106	260	59	36	145
25	1,170	403	215	498	1,130	811	2,070	96	145	61	32	146
26	1,070	408	212	1,330	1,090	840	1,900	219	92	71	29	184
27	1,150	394	208	2,170	896	762	1,360	122	71	62	28	307
28	940	385	204	1,940	797	889	1,150	78	61	55	27	452
29	736	376	212	1,470	------	786	803	63	52	61	27	286
30	1,000	372	215	1,100	------	627	609	52	48	1,280	25	204
31	9,940	------	209	886	------	886	------	46	------	1,780	23	------
TOTAL	24,120	56,119	8,031	15,578	16,165	30,417	25,741	5,876	16,773	4,516	3,050	10,150
MEAN	778	1,871	259	503	577	981	858	190	559	146	98.4	338
MAX	9,940	13,600	358	2,170	1,130	3,410	2,220	520	4,550	1,780	606	1,710
MIN	150	372	204	100	384	372	338	46	42	24	23	22
AC-FT	47,840	111,300	15,930	30,900	32,060	60,330	51,060	11,660	33,270	8,960	6,050	20,130

CAL YR 1972 TOTAL 288,383.4 MEAN 788 MAX 17,300 MIN 7.9 AC-FT 572,000
WTR YR 1973 TOTAL 216,536.0 MEAN 593 MAX 13,600 MIN 22 AC-FT 429,500

PEAK DISCHARGE (BASE, 11,000 FT³/S).--Nov. 2 (0700) 15,300 ft³/s (17.77 ft).

08088100 Salt Creek at Olney, Tex.

LOCATION.--Lat 33°22'13", long 98°44'40", Young County, on right bank 21 ft (6 m) downstream from bridge on State Highway 199 and 0.5 mile (0.8 km) east of Olney.

DRAINAGE AREA.--9.6 mi² (24.9 km²).

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,164.03 ft (354.80 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 3.06 ft³/s (87 dm³/s), 2,220 acre-ft/yr (2.74 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 544 ft³/s (15.4 m³/s) Oct. 30, gage height, 9.56 ft (2.91 m); no flow for many days. Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) May 12, 1972, gage height, 12.25 ft (3.73 m), from rating curve extended above 1,020 ft³/s (28.9 m³/s) on basis of indirect measurement of 11,500 ft³/s (326 m³/s); no flow at times each year. Maximum stage since at least 1908, 16.7 ft (5.1 m) in June 1915; flood in May or June 1941 reached a stage of 16 ft (5 m), from information by local residents.

REMARKS.--Records good. No diversion above station. Records furnished by the city of Olney show that during year 1,321 acre-ft (1.63 hm³) was diverted from reservoirs in the Red River Basin for municipal and industrial use, of which 336 acre-ft (0.414 hm³) was returned as sewage effluent to Salt Creek downstream from station. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 1922: 1958-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	12	.06	.05	.36	.26	.16	.15	.09	0	0	0
2	0	2.2	.06	.64	.26	.23	4.9	.12	4.1	0	0	0
3	0	.72	.06	7.8	.23	.22	1.9	.10	.65	0	0	0
4	0	.37	.06	.40	.36	.21	.43	.10	.04	0	0	0
5	0	.24	.06	.17	.53	.20	.26	.22	.27	0	0	.01
6	0	.19	.03	.10	.53	.39	.28	.19	.02	0	0	30
7	0	.14	0	0	2.5	.23	.19	.13	.01	0	0	37
8	0	.14	0	0	2.5	.19	.26	.12	0	0	0	1.3
9	0	.14	0	0	.58	.79	.18	.26	0	0	0	.07
10	0	.10	0	0	.41	40	.14	.09	0	0	4.9	.01
11	0	.10	0	0	.36	2.2	.14	.06	.16	0	1.0	0
12	0	.35	0	0	.32	1.0	.14	.06	.02	0	0	0
13	0	1.2	0	0	.27	.63	3.3	.07	1.6	0	0	.08
14	0	.13	0	.20	.22	.40	.34	.09	.14	0	0	0
15	0	.08	0	.81	.20	.31	.32	.08	.03	0	0	0
16	0	.08	0	.38	.20	.25	.24	.12	0	0	0	0
17	0	.09	0	.31	.49	.23	.28	.05	0	0	0	0
18	0	1.6	.03	.22	.62	.20	.24	.04	.05	0	0	0
19	0	.31	.06	.15	.38	.18	12	.04	.02	0	0	0
20	.02	.11	.05	.14	.26	.15	.89	.04	.01	0	0	0
21	3.0	.29	.05	.19	.23	.14	.39	.04	0	0	0	0
22	2.8	.16	.05	.15	1.3	.14	1.5	.03	.05	0	0	0
23	.01	.09	.05	.11	.99	.54	.37	.29	.01	0	0	0
24	0	1.0	.05	.09	.48	2.2	19	.05	0	0	0	0
25	0	.38	.05	43	.36	.88	1.7	.04	0	0	0	0
26	1.3	.13	.05	26	.30	.25	.77	.03	0	0	0	16
27	.31	.09	.05	4.0	.26	.20	.40	.01	0	0	0	1.1
28	.01	.06	.05	1.3	.26	.19	.26	0	0	.51	0	.01
29	0	.07	.27	.69	------	.15	.19	0	0	2.6	0	0
30	222	.08	.66	.56	------	1.5	.17	0	0	3.0	0	0
31	254	------	.08	.44	------	.42	------	0	------	.06	0	------
TOTAL	483.45	22.64	1.88	87.90	15.76	54.88	51.34	2.62	7.27	6.17	5.9	85.58
MEAN	15.6	.75	.061	2.84	.56	1.77	1.71	.085	.24	.20	.19	2.85
MAX	254	12	.66	43	2.5	40	19	.29	4.1	3.0	4.9	37
MIN	0	.06	0	0	.20	.14	.14	0	0	0	0	0
AC-FT	959	45	3.7	174	31	109	102	5.2	14	12	12	170

CAL YR 1972 TOTAL 3,533.27 MEAN 9.65 MAX 2,790 MIN 0 AC-FT 7,010
WTR YR 1973 TOTAL 825.39 MEAN 2.26 MAX 254 MIN 0 AC-FT 1,640

PEAK DISCHARGE (BASE, 200 FT³/S).--Oct. 30 (2230) 544 ft³/s (9.56 ft).

08088300 Briar Creek near Graham, Tex.

LOCATION.--Lat 33°12'43", long 98°37'06", Young County, near right bank on downstream side of bridge on Farm Road 1769, 2.5 miles (4.0 km) upstream from mouth, and 7.0 miles (11.3 km) northwest of Graham.

DRAINAGE AREA.--19.7 mi² (51.0 km²).

PERIOD OF RECORD.--April 1958 to current year. Prior to October 1965, published as Oak Creek near Graham.

GAGE.--Water-stage recorder. Altitude of gage is 1,094 ft (333 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 3.89 ft³/s (110 dm³/s), 2,820 acre-ft/yr (3.48 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 501 ft³/s (14.2 m³/s) Oct. 31, gage height, 7.73 ft (2.36 m); no flow for many days.
Period of record: Maximum discharge, 2,720 ft³/s (77.0 m³/s) Apr. 30, 1970, gage height, 12.30 ft (3.75 m); no flow most of time.
Maximum stage since at least 1900, 15.2 ft (4.6 m) in September 1955. Flood in May 1957 reached a stage of 15.0 ft (4.6 m), from information by local resident.

REMARKS.--Records good. No 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	23		0	0	.02	.13	0	0	0	.78	0
2	0	4.2		0	0	.02	.09	0	0	0	.09	0
3	0	1.6		0	0	.02	.06	0	.76	0	0	0
4	0	.71		0	0	.01	.04	0	.03	0	0	0
5	0	.37		0	0	.01	.03	0	34	0	0	.87
6	0	.21		0	0	.02	.03	0	10	0	0	20
7	0	.13		0	0	.04	.03	0	.84	0	0	14
8	0	.06		0	3.3	.09	.03	0	.13	0	0	18
9	0	.03		0	.05	.11	.03	0	0	0	0	14
10	0	.01		0	0	8.6	0	0	0	0	0	11
11	0	0		0	0	4.3	0	1.6	0	0	0	8.4
12	0	0		0	0	1.2	0	35	0	0	0	13
13	0	.02		0	0	.42	14	1.2	0	0	0	7.1
14	0	0		.21	0	.15	0	.21	0	0	0	2.8
15	0	0		1.2	0	.07	0	.03	0	0	0	1.3
16	0	0		.78	0	.03	0	0	0	0	0	.18
17	0	0		.42	0	.01	0	0	0	0	0	0
18	0	0		.33	.52	0	0	0	0	0	0	0
19	0	0		.18	.05	0	8.0	0	0	0	0	0
20	0	0		.07	0	0	0	0	0	0	0	0
21	.01	0		.04	0	0	0	0	0	0	0	0
22	45	0		.03	0	0	.11	0	0	0	0	0
23	2.7	0		.02	1.1	.24	.06	0	0	0	0	0
24	.13	0		0	.06	38	13	0	0	0	0	0
25	0	0		0	.04	6.7	.15	0	0	0	0	0
26	1.0	0		34	.04	3.3	0	0	0	0	0	9.6
27	1.5	0		8.0	.03	1.4	0	0	0	0	0	2.4
28	.52	0		2.0	.03	.86	0	0	0	0	0	.21
29	.06	0		.50	------	.52	0	0	0	3.8	0	.06
30	63	0		.10	------	.33	0	0	0	4.6	0	.01
31	303	------		.05	------	.21	------	0	------	4.1	0	------
TOTAL	416.92	30.34	0	47.93	5.22	66.68	35.79	38.04	45.76	12.5	.87	122.93
MEAN	13.4	1.01	0	1.55	.19	2.15	1.19	1.23	1.53	.40	.028	4.10
MAX	303	23	0	34	3.3	38	14	35	34	4.6	.78	20
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	827	60	0	95	10	132	71	75	91	25	1.7	244
(††)	6.30	1.20	.08	3.58	1.25	2.54	2.45	2.79	1.75	2.90	0	6.06

CAL YR 1972 TOTAL 1,803.54 MEAN 4.93 MAX 1,030 MIN 0 AC-FT 3,580 †† 26.34
WTR YR 1973 TOTAL 882.98 MEAN 2.25 MAX 303 MIN 0 AC-FT 1,630 †† 30.90

PEAK DISCHARGE (BASE, 200 FT³/S).--Oct. 31 (0900) 501 ft³/s (7.73 ft).

†† 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 (3.5 km) northwest of Graham, and 5 miles (8 km) downstream from Briar Creek.

DRAINAGE AREA.--205 mi² (531 km²).

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 (0.40 m) above mean sea level. Prior to October 1963, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 52,720 acre-ft (65.0 hm³) Apr. 25, gage height, 1,074.63 ft (327.55 m); minimum, 45,760 acre-ft (56.4 hm³) Sept. 26, gage height, 1,071.81 ft (326.69 m).
Period of record: Maximum contents, 61,120 acre-ft (75.4 hm³) Apr. 30, 1970, gage height, 1,077.77 ft (328.50 m); minimum, 30,780 acre-ft (38.0 hm³) Aug. 12, 1971, gage height, 1,065.10 ft (324.64 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 5,000 ft (1,520 m) long. It is connected with Lake Eddleman on Flint Creek by a cut channel at 1,050.0 ft (320.0 m) gage height. The uncontrolled emergency spillway is a 1,050-foot-wide (320-meter) cut at the right end of dam, with a concrete cutoff wall, and will discharge 136,500 ft³/s (3,870 m³/s) at a lake level of 1,087.5 ft (331.5 m), 12.5-foot (3.8-meter) 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 (66.2 hm³), gage height, 1,075.0 ft (327.7 m), crest of spillway. Dead storage is 8,670 acre-ft (10.7 hm³), gage height, 1,050.0 ft, (320.0 m), invert of 24-inch (0.61-meter) 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 repre-sent 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47,240	52,260	51,460	50,780	52,360	52,360	51,960	52,490	50,510	49,860	48,410	45,930
2	47,160	52,290	51,460	50,860	52,340	52,360	51,990	52,390	50,630	49,760	48,390	45,860
3	47,090	52,310	51,390	51,010	52,340	52,360	51,890	52,340	50,930	49,640	48,290	45,860
4	47,040	52,290	51,340	50,980	52,310	52,340	51,860	52,210	50,930	49,460	48,190	45,860
5	46,990	52,210	51,340	50,930	52,310	52,310	51,790	52,060	51,510	49,290	48,020	45,860
6	46,900	52,210	51,240	50,930	52,310	52,490	51,740	51,990	51,660	49,190	48,070	46,070
7	46,850	52,090	51,210	50,980	52,390	52,470	51,760	51,840	51,610	49,050	47,940	46,200
8	46,800	52,040	51,210	50,930	52,420	52,470	51,740	51,740	51,560	49,020	47,900	46,370
9	46,720	51,990	51,140	50,880	52,420	52,470	51,640	51,740	51,460	48,970	47,820	46,370
10	46,680	51,910	51,080	50,880	52,420	52,360	51,610	51,660	51,410	48,970	47,770	46,340
11	46,660	51,860	51,060	50,880	52,390	52,310	51,610	51,910	51,390	48,920	47,700	46,270
12	46,610	51,960	51,060	50,860	52,390	52,210	51,610	52,010	51,310	48,880	47,600	46,240
13	46,580	51,960	51,030	50,810	52,390	52,040	51,740	51,990	51,260	48,780	47,550	46,580
14	46,530	51,810	50,960	50,880	52,340	51,960	51,660	51,910	51,240	48,780	47,500	46,490
15	46,460	51,710	50,930	50,910	52,290	51,890	51,840	51,890	51,160	48,750	47,430	46,440
16	46,460	51,740	50,880	50,910	52,260	51,810	51,860	51,890	51,110	48,680	47,330	46,370
17	46,410	51,740	50,830	50,930	52,260	51,790	51,890	51,790	51,010	48,610	47,240	46,290
18	46,200	51,740	50,880	50,930	52,290	51,760	51,890	51,760	50,960	48,530	47,190	46,200
19	46,100	51,690	50,880	50,910	52,290	51,740	51,960	51,740	50,880	48,410	47,120	46,170
20	46,070	51,640	50,880	50,880	52,290	51,660	51,960	51,690	50,780	48,360	47,070	46,100
21	46,850	51,660	50,930	50,910	52,290	51,610	51,960	51,610	50,760	48,260	46,950	46,050
22	47,070	51,640	50,910	50,880	52,340	51,610	51,990	51,540	50,680	48,160	46,820	45,980
23	46,970	51,640	50,910	50,830	52,360	51,740	51,960	51,710	50,580	48,070	46,720	45,980
24	46,950	51,640	50,860	50,810	52,390	52,010	52,520	51,590	50,510	47,990	46,610	45,930
25	46,870	51,590	50,860	51,440	52,420	52,060	52,700	51,410	50,460	47,900	46,490	45,830
26	47,070	51,560	50,810	52,110	52,360	52,010	52,650	51,260	50,780	47,820	46,440	46,580
27	47,070	51,540	50,810	52,390	52,340	51,990	52,600	50,960	50,260	47,800	46,340	46,720
28	47,070	51,510	50,780	52,290	52,360	52,010	52,540	50,780	50,130	47,800	46,240	46,700
29	47,070	51,490	50,830	52,310	------	51,990	52,520	50,710	50,010	47,820	46,170	46,680
30	48,190	51,490	50,810	52,290	------	51,990	52,490	50,560	49,980	48,260	46,070	46,630
31	51,460	------	50,780	52,390	------	51,990	------	50,510	------	48,460	45,950	------
(†)	1,074.13	1,074.14	1,073.86	1,074.50	1,074.49	1,074.34	1,074.54	1,073.75	1,073.54	1,072.92	1,071.89	1,072.17
(*)	+4,150	+30	-710	+1,610	-30	-370	+500	-1,980	-530	-1,520	-2,510	+680
(††)	488	390	422	303	284	274	297	383	477	569	570	363
MAX	51,460	52,310	51,460	52,390	52,420	52,490	52,700	52,490	51,660	49,860	48,410	46,720
MIN	46,070	51,490	50,780	50,780	52,260	51,610	51,610	50,510	49,980	47,800	45,950	45,830

CAL YR 1972..... * +7,030 †† 5,425 MAX 58,170 MIN 40,010
WTR YR 1973..... * -680 †† 4,820 MAX 52,700 MIN 45,830

† 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 Co.

08088450 Big Cedar Creek near Ivan, Tex.

LOCATION.--Lat 32°49'39", long 98°43'25", Stephens County, on left bank at downstream side of bridge on Farm Road 717, 3.2 miles (5.1 km) south of Ivan, 8.2 miles (13.2 km) northwest of Caddo, and 11.6 miles (18.7 km) northeast of Breckenridge.

DRAINAGE AREA.--95.8 mi² (248 km²).

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

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--8 years (1965-73), 12.6 ft³/s (0.357 m³/s), 9,130 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,010 ft³/s (114 m³/s) July 30, gage height, 16.02 ft (4.88 m); no flow for long periods.
Period of record: Maximum discharge, 9,590 ft³/s (272 m³/s) July 8, 1968, gage height, 22.39 ft (6.82 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of 7,980 ft³/s (226 m³/s); no flow at times each year.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	12		0	1.9	.03	.03	.41	.03	0	20	0
2	0	2.8		0	1.7	.03	.03	.22	.02	0	8.2	0
3	0	.85		0	.77	.02	.03	.13	109	0	3.7	0
4	0	.34		0	.23	.02	.03	.08	39	0	1.7	0
5	0	.15		0	.14	.02	.03	.05	9.3	0	.72	0
6	0	.04		0	.10	.04	.03	.04	3.5	0	.28	0
7	0	.02		0	.06	.04	.03	.02	1.1	0	.08	7.9
8	0	.01		0	.04	.02	.02	.02	.52	0	.03	3.8
9	0	0		0	.06	.02	.02	.02	.27	0	.01	.84
10	0	0		0	.04	.04	.01	.01	.17	0	0	.24
11	0	0		0	.02	.05	.01	.01	.14	0	0	.07
12	0	0		0	.02	.04	.01	.10	.16	0	0	.02
13	0	0		0	.02	.03	.02	.21	.14	0	0	.02
14	0	0		0	.02	.03	.02	.10	.10	0	0	0
15	0	0		0	.02	.03	98	.05	.06	0	0	0
16	0	0		0	.02	.03	102	.03	.04	0	0	0
17	0	0		0	.02	.02	11	.02	.03	0	0	0
18	0	0		0	.02	.02	18	.01	.03	0	0	0
19	0	0		0	.03	.02	8.2	.01	.01	0	0	0
20	0	0		0	.03	.02	2.4	.01	.01	0	0	0
21	0	0		0	.03	.02	.82	.01	0	0	0	0
22	13	0		0	.03	.02	137	.01	0	0	0	0
23	1.9	0		0	.10	.03	75	.01	0	0	0	0
24	.33	0		0	.06	.03	566	.01	0	0	0	0
25	.08	0		7.7	.04	.03	40	75	0	0	0	0
26	2.9	0		24	.04	.03	11	89	0	0	0	0
27	13	0		11	.04	.03	4.1	4.1	0	0	0	0
28	1.3	0		3.5	.03	.04	1.9	.87	0	0	0	0
29	.40	0		3.0	------	.04	.99	.27	0	0	0	0
30	.16	0		2.6	------	.05	.64	.10	0	1,420	0	0
31	15	------		2.2	------	.04	------	.04	------	202	0	------
TOTAL	48.07	16.21	0	54.0	5.63	.93	1,077.37	170.97	163.63	1,622	34.72	12.89
MEAN	1.55	.54	0	1.74	.20	.030	35.9	5.52	5.45	52.3	1.12	.43
MAX	15	12	0	24	1.9	.05	566	89	109	1,420	20	7.9
MIN	0	0	0	0	.02	.02	.01	.01	0	0	0	0
AC-FT	95	32	0	107	11	1.8	2,140	339	325	3,220	69	26

CAL YR 1972 TOTAL 251.23 MEAN .69 MAX 70 MIN 0 AC-FT 498
WTR YR 1973 TOTAL 3,206.42 MEAN 8.78 MAX 1,420 MIN 0 AC-FT 6,360

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Apr. 24 (0915) 1,780 ft³/s (11.66 ft); July 30 (1800) 4,010 ft³/s (16.02 ft).

08088500 Possum Kingdom Reservoir near Graford, Tex.

LOCATION.--Lat 32°52'20", long 98°25'32", Palo Pinto County, at dam on Brazos River, 2.6 miles (4.2 km) upstream from Loving Creek, 11.3 miles (18.2 km) southwest of Graford, and at mile 687.5 (1,106.2 km).

DRAINAGE AREA.--22,550 mi² (58,400 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--March 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.10 ft (0.03 m) above mean sea level (levels by Brazos River Authority). Prior to Mar. 19, 1968, mercury U-tube in powerhouse at present site and datum.

EXTREMES.--Current year: Maximum contents, 721,100 acre-ft (889 hm³) Nov. 2, gage height, 999.81 ft (304.74 m); minimum, 588,000 acre-ft (725 hm³) July 28, gage height, 992.47 ft (302.50 m).
Period of record: Maximum contents observed, 743,700 acre-ft (917 hm³) Oct. 5, 1941, gage height, 1,001.0 ft (305.1 m); minimum observed, 273,300 acre-ft (337 hm³) Feb. 19 to Mar. 17, 1953, gage height, 967.0 ft (294.7 m).

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 (835 m). The gates are designed to carry 550,000 ft³/s (15,600 m³/s) at gage height of 1,000.0 ft (304.8 m). Powerhouse is designed for two units having a total output of 22,500 kilowatts. Usable capacity for power development, 698,900 acre-ft (862 hm³). 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 (749 hm³), 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 given 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)

992.0	580,000	996.0	651,000
993.0	597,000	998.0	687,000
994.0	615,000	1,000.0	724,700

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	692,200	717,500	691,700	666,500	671,500	676,700	680,200	673,300	658,200	648,700	612,100	601,700
2	692,600	716,700	692,600	667,200	672,800	678,000	684,700	668,100	658,600	644,500	613,700	601,500
3	693,400	716,900	692,000	664,500	674,800	679,800	685,900	666,800	660,200	640,200	614,600	601,300
4	693,000	710,400	690,200	660,900	676,600	680,900	684,300	662,200	666,800	638,000	614,600	600,600
5	691,700	713,300	687,900	658,700	675,800	682,500	682,900	662,700	682,300	635,200	614,800	601,000
6	691,300	713,300	683,400	656,200	676,700	684,700	680,900	663,600	689,100	632,100	615,000	602,600
7	691,300	709,700	679,800	656,000	678,900	683,900	681,200	664,000	690,700	629,400	615,000	602,600
8	691,700	707,400	677,100	651,500	675,300	681,200	680,200	664,500	689,400	629,400	615,000	603,300
9	690,000	707,600	677,800	648,100	671,300	678,900	678,400	662,700	688,100	626,300	615,000	603,300
10	688,500	705,500	674,400	647,600	669,400	676,700	677,800	661,300	687,000	623,600	615,000	603,500
11	688,300	704,200	671,700	647,800	671,000	678,000	677,300	660,500	686,100	620,400	614,800	606,000
12	686,800	705,700	671,300	648,500	669,500	679,400	676,000	661,400	686,500	617,700	614,600	609,600
13	685,700	705,700	670,000	649,200	670,300	684,700	675,800	662,000	685,000	614,500	614,300	612,500
14	685,700	702,900	668,100	650,300	666,800	688,500	674,400	661,800	683,400	612,800	613,700	613,900
15	683,400	699,500	664,500	651,900	664,100	690,400	678,900	662,000	680,700	610,500	612,800	615,500
16	683,000	697,800	661,400	652,800	661,300	690,400	678,000	662,300	678,200	608,000	612,300	616,800
17	680,900	695,000	660,700	653,700	658,700	690,400	677,600	662,200	675,100	604,900	611,900	617,300
18	680,300	696,000	661,100	654,100	658,700	693,200	675,500	662,700	672,200	601,700	611,600	618,200
19	679,300	695,400	661,600	653,200	660,200	690,900	674,200	661,100	669,200	598,600	611,400	619,300
20	679,800	692,800	662,300	653,500	660,900	688,100	672,600	660,900	667,000	595,100	611,400	619,700
21	681,600	690,000	661,800	654,200	661,600	685,700	673,000	659,100	667,400	592,400	610,900	619,700
22	683,200	690,700	662,500	654,400	663,200	683,800	674,200	659,100	666,300	590,900	610,300	620,200
23	683,900	691,700	663,200	653,500	664,500	682,500	674,200	658,000	665,600	590,400	609,800	620,200
24	686,300	690,000	663,200	654,600	666,300	681,800	676,900	656,400	666,100	590,200	609,100	620,600
25	688,500	690,900	664,000	654,600	669,000	682,100	676,900	658,900	664,700	590,200	608,500	620,600
26	691,300	692,000	663,600	656,600	670,800	679,600	678,200	662,200	662,700	588,700	606,400	621,800
27	690,400	690,600	664,500	660,900	672,800	677,100	678,200	662,500	660,200	588,300	604,000	622,000
28	693,000	690,400	665,200	663,400	674,400	676,700	677,500	661,600	656,400	589,200	603,700	622,200
29	694,900	689,200	666,300	666,500	------	675,800	676,400	661,100	655,700	589,900	603,300	623,300
30	697,500	690,200	665,600	668,800	------	675,300	675,100	660,900	652,400	598,300	603,100	623,800
31	705,700	------	666,300	671,200	------	676,200	------	658,200	------	608,300	602,600	------
(†)	999.00	998.17	996.85	997.12	997.30	997.40	997.34	996.40	996.08	993.63	993.31	994.49
(*)	+14,400	-15,500	-23,900	+4,900	+3,200	+1,800	-1,100	-16,900	-5,800	-44,100	-5,700	+21,200
MAX	705,700	717,500	692,600	671,200	678,900	693,200	685,900	673,300	690,700	648,700	615,000	623,800
MIN	679,300	689,200	660,700	647,600	658,700	675,300	672,600	656,400	652,400	588,300	602,600	600,600

CAL YR 1972..... * -35,100 MAX 717,500 MIN 660,700
WTR YR 1973..... * -67,500 MAX 717,500 MIN 588,300

† 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 (30 m) upstream from bridge on Farm Road 4, 300 ft (91 m) downstream from Dark Valley Creek, 6.5 miles (10.5 km) north of Palo Pinto, and at mile 667.3 (1,073.7 km).

DRAINAGE AREA.--22,760 mi² (58,950 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--January 1924 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "near Mineral Wells" 1924-33.

GAGE.--Water-stage recorder. Datum of gage is 831.23 ft (253.36 m) above mean sea level. Prior to Nov. 15, 1933, nonrecording gage at site 19 miles (31 km) downstream at datum 38.19 ft (11.64 m) lower.

AVERAGE DISCHARGE.--16 years (1924-40) prior to completion of Possum Kingdom Reservoir, 1,262 ft³/s (35.7 m³/s), 914,300 acre-ft/yr (1,130 hm³/yr); 33 years (1940-73) regulated, 988 ft³/s (28.0 m³/s), 715,800 acre-ft/yr (883 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,600 ft³/s (697 m³/s) Nov. 2, gage height, 12.85 ft (3.92 m); minimum, 17 ft³/s (0.48 m³/s) May 29.
Period of record: Maximum discharge, 95,600 ft³/s (2,710 m³/s) June 16, 1930, at site 19 miles (31 km) downstream near Mineral Wells, gage height, 30 ft (9 m), present site and datum; no flow at times.
Maximum stage occurred in 1876, from data by Corps of Engineers, and was several feet higher than flood of June 16, 1930, about 30 ft (9 m), which was the highest since at least 1876.

REMARKS.--Records good. Since 1941 flow largely regulated by Possum Kingdom Reservoir 20 miles (32 km) upstream (see preceding page). Total capacity of 12 major upstream reservoirs is 1,332,000 acre-ft (1,640 hm³).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	5,910	88	26	93	66	103	1,500	940	1,770	220	151
2	43	17,000	47	30	401	64	63	1,970	77	1,740	87	84
3	32	14,800	37	1,190	85	62	73	1,400	46	1,490	56	34
4	29	13,600	210	1,780	50	63	1,240	2,470	185	1,140	43	23
5	371	3,520	1,460	1,750	189	60	1,280	1,170	1,410	1,080	34	21
6	876	2,750	1,730	1,260	477	84	1,290	135	174	1,040	32	39
7	76	2,720	2,030	919	74	232	793	77	131	1,230	29	54
8	33	2,720	1,800	1,260	589	1,560	680	63	1,520	704	26	43
9	123	1,080	918	1,620	1,860	1,640	882	55	1,350	128	26	34
10	897	1,260	497	908	1,800	1,620	906	979	1,140	1,290	27	28
11	841	1,450	1,720	487	1,250	1,160	917	1,180	1,630	1,230	25	26
12	95	836	1,040	81	684	848	912	1,030	1,070	1,330	25	26
13	725	95	607	46	1,100	1,650	760	104	520	1,260	24	30
14	638	1,070	907	40	657	1,790	767	56	929	1,080	23	35
15	97	1,720	1,670	38	1,760	1,780	643	43	1,310	908	315	30
16	737	1,530	1,620	36	1,760	1,740	318	36	1,230	1,270	102	26
17	557	1,660	999	34	1,660	1,730	1,020	30	1,280	1,300	43	26
18	737	953	559	33	1,130	984	2,670	31	1,710	1,220	24	24
19	77	294	565	433	582	742	1,500	29	1,360	1,130	24	25
20	40	857	89	478	105	1,800	1,450	801	1,170	1,340	26	25
21	57	1,750	48	65	60	1,750	1,450	104	728	1,190	25	25
22	224	981	39	38	56	1,800	1,440	997	91	969	26	25
23	57	97	33	31	76	1,610	1,450	90	767	538	24	24
24	29	457	32	434	90	1,450	1,720	682	421	83	22	35
25	21	854	31	694	87	976	1,540	874	66	37	21	35
26	45	87	29	1,080	81	1,220	1,460	85	730	26	25	29
27	1,310	50	29	457	74	1,800	1,460	41	1,260	374	531	41
28	890	670	28	495	69	1,630	1,450	26	1,530	68	792	40
29	93	299	28	510	------	1,280	1,440	19	1,060	53	86	29
30	684	726	29	557	------	1,240	1,460	286	251	488	41	24
31	1,130	------	27	518	------	936	------	119	------	828	30	------
TOTAL	11,640	81,796	18,946	17,328	16,899	35,367	33,137	16,482	26,086	28,334	2,834	1,091
MEAN	375	2,727	611	559	604	1,141	1,105	532	870	914	91.4	36.4
MAX	1,310	17,000	2,030	1,780	1,860	1,800	2,670	2,470	1,710	1,770	792	151
MIN	21	50	27	26	50	60	63	19	46	26	21	21
AC-FT	23,090	162,200	37,580	34,370	33,520	70,150	65,730	32,690	51,740	56,200	5,620	2,160

CAL YR 1972 TOTAL 295,033 MEAN 806 MAX 17,000 MIN 16 AC-FT 585,200
WTR YR 1973 TOTAL 289,940 MEAN 794 MAX 17,000 MIN 19 AC-FT 575,100

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 (6.4 km) upstream from bridge on Farm Road 4, 4.4 miles (7.1 km) northwest of Santo, and 7.5 miles (12.1 km) upstream from Big Sunday Creek.

DRAINAGE AREA.--471 mi² (1,220 km²).

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, 48,400 acre-ft (59.7 hm³) July 30, elevation, 868.57 ft (264.74 m); minimum, 29,890 acre-ft (36.9 hm³) Jan. 24, 25, elevation, 861.01 ft (262.44 m).
Period of record: Maximum contents, 53,750 acre-ft (66.3 hm³) Mar. 20, 1968, elevation, 870.40 ft (265.30 m); minimum since first initial filling to present spillway elevation, 22,150 acre-ft (27.3 hm³) May 27, 1971, elevation, 857.00 ft (261.21 m).

REMARKS.--Lake is formed by a rock-faced earthfill dam 1,300 ft (396 m) long with a 550-foot (168-meter) 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 (0.6 m), the spillway crest 4 ft (1 m) and lengthened from 500 to 550 ft (152 to 168 m). 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 (24 km) 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	867.0	44,090
863.0	34,250	869.0	49,620
865.0	38,980		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31,450	31,800	30,680	30,060	30,440	31,500	31,370	42,680	42,290	43,640	45,310	42,000
2	31,430	31,820	30,680	30,190	30,420	31,500	31,320	42,600	42,260	43,540	44,960	42,000
3	31,370	31,800	30,660	30,270	30,440	31,480	31,410	42,600	44,550	43,540	44,710	42,000
4	31,370	31,800	30,640	30,230	30,440	31,500	31,430	42,550	44,710	43,540	44,610	41,850
5	31,350	31,710	30,620	30,190	30,440	31,800	31,430	42,520	45,010	43,380	44,470	41,930
6	31,260	31,690	30,570	30,230	30,420	31,820	31,390	42,520	44,900	43,170	44,420	42,580
7	31,240	31,630	30,550	30,270	30,500	31,870	31,410	42,520	44,740	43,100	44,420	42,890
8	31,150	31,580	30,530	30,270	30,810	31,840	31,300	42,450	44,550	43,800	44,420	42,890
9	31,130	31,540	30,500	30,230	30,870	31,800	31,280	42,450	44,470	44,040	44,420	42,890
10	30,790	31,480	30,460	30,190	30,920	31,910	31,260	42,390	44,340	46,370	44,420	42,890
11	30,740	31,410	30,460	30,250	30,940	31,910	31,260	42,390	44,280	45,850	44,280	42,860
12	30,620	31,430	30,420	30,210	30,960	31,870	31,260	42,710	44,260	44,200	44,040	42,860
13	30,530	31,350	30,400	30,210	30,920	31,870	31,280	42,840	44,340	44,200	43,990	42,730
14	30,530	31,280	30,380	30,210	30,940	31,820	31,240	42,840	44,280	44,820	43,850	42,680
15	30,460	31,220	30,360	30,210	30,890	31,800	31,520	42,840	44,230	44,630	43,750	42,520
16	30,420	31,170	30,320	30,190	30,870	31,760	31,850	42,780	44,090	44,420	43,620	42,450
17	30,380	31,110	30,290	30,230	30,870	31,710	33,570	42,760	44,010	44,420	43,510	42,450
18	30,230	31,070	30,360	30,230	30,940	31,710	37,160	42,710	44,280	44,040	43,510	42,450
19	30,210	31,000	30,290	30,210	30,920	31,650	37,620	42,630	44,660	44,040	43,380	42,450
20	30,150	30,980	30,340	30,190	30,920	31,580	37,830	42,550	44,710	43,990	43,330	42,320
21	30,250	30,940	30,320	30,230	30,940	31,540	38,000	42,420	44,630	43,850	43,330	42,210
22	30,230	30,890	30,290	30,080	31,040	31,520	38,250	42,340	44,500	43,750	43,170	42,060
23	30,170	30,870	30,230	29,930	31,150	31,540	38,740	42,320	44,280	43,620	43,100	42,290
24	30,100	30,830	30,230	29,890	31,280	31,580	42,110	42,210	44,070	43,510	43,100	42,450
25	30,040	30,810	30,170	30,060	31,430	31,520	42,520	42,520	43,990	43,380	42,940	42,450
26	30,270	30,790	30,170	30,230	31,430	31,480	42,600	42,780	43,880	43,300	42,860	42,600
27	30,320	30,760	30,190	30,360	31,480	31,430	42,650	42,650	43,750	43,330	42,730	42,680
28	30,290	30,760	30,120	30,360	31,450	31,430	42,650	42,600	43,750	43,330	42,680	42,520
29	30,270	30,720	30,190	30,400	------	31,430	42,680	42,520	43,750	43,330	42,550	42,450
30	31,560	30,700	30,150	30,400	------	31,390	42,710	42,420	43,780	48,400	42,130	42,450
31	31,820	------	30,080	30,490	------	31,390	------	42,370	------	46,060	41,980	------
(†)	861.91	861.39	861.10	861.29	861.74	861.71	866.47	866.34	866.34	867.73	866.19	866.37
(*)	+320	-1,120	-620	+410	+960	-60	+11,320	-340	+1,410	+2,280	-4,080	+470
(††)	274	197	211	182	161	195	198	252	258	359	414	306
MAX	31,820	31,820	30,680	30,490	31,480	31,910	42,710	42,840	45,010	48,400	45,310	42,890
MIN	30,040	30,700	30,080	29,890	30,420	31,390	31,240	42,210	42,260	43,100	41,980	41,850

CAL YR 1972..... * -10,390 †† 3,297 MAX 40,470 MIN 30,040
WTR YR 1973..... * +10,950 †† 3,007 MAX 48,400 MIN 29,890

† 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 (0.8 km) upstream from the Texas and Pacific Railway Co. bridge, 2.4 miles (3.9 km) downstream from Big Sunday Creek, 2.6 miles (4.2 km) northeast of Santo, 2.8 miles (4.5 km) upstream from Wusser Creek, and 7.9 miles (12.7 km) upstream from mouth.

DRAINAGE AREA.--567 mi² (1,469 km²).

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 (232.45 m) above mean sea level. Nov. 20, 1924, to Sept. 30, 1925, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years (1924-25, 1951-63) prior to regulation by Lake Palo Pinto, 90.3 ft³/s (2.56 m³/s), 65,420 acre-ft/yr (80.7 hm³/yr); 10 years (1963-73) regulated, 67.4 ft³/s (1.91 m³/s), 48,830 acre-ft/yr (60.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,710 ft³/s (133 m³/s) July 30, gage height, 10.86 ft (3.31 m); no flow Oct. 3-7, Sept. 13-16.

Period of record: Maximum discharge, 45,100 ft³/s (1,280 m³/s) May 26, 1957, gage height, 31.05 ft (9.46 m), from floodmark, from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-area measurement of 45,100 ft³/s (1,280 m³/s); 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 (15.3 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.60	3.4	5.0	.41	4.5	1.7	3.6	5.9	6.2	572	19
2	.03	.29	3.5	5.7	.50	4.4	.63	3.2	5.8	6.0	242	19
3	0	.15	3.5	7.9	.43	4.6	.40	3.1	519	5.9	123	19
4	0	.07	3.5	3.8	.37	4.4	.26	3.2	192	6.0	64	17
5	0	7.4	3.6	2.1	.37	4.4	.19	3.3	229	6.0	34	2.3
6	0	11	3.7	.73	.36	5.2	.16	3.8	221	6.3	19	5.3
7	0	4.7	4.2	.72	.89	1.8	.16	3.5	131	5.9	10	3.7
8	1.3	3.5	4.2	.58	8.8	.58	.14	3.5	71	5.3	5.0	1.0
9	13	3.6	4.2	1.2	1.8	.39	.10	3.4	41	6.6	2.5	.44
10	3.9	4.2	4.2	4.5	1.2	.58	.06	3.2	24	5.4	1.3	.21
11	16	4.2	4.3	5.1	.67	.72	.05	3.3	15	28	.90	.09
12	40	4.7	4.4	4.7	.42	.36	.04	3.8	11	17	.58	.03
13	8.5	5.4	4.2	4.9	.33	.28	.29	3.4	19	18	.41	0
14	6.0	3.1	4.4	4.8	.20	.22	2.8	3.3	17	33	.27	0
15	2.6	3.3	4.2	4.6	.14	.35	6.3	1.9	12	18	.17	0
16	2.5	3.4	4.2	4.8	.12	2.5	5.8	.60	9.6	11	.09	0
17	2.5	3.4	4.2	4.9	.18	4.5	34	.27	7.9	8.0	.03	2.5
18	2.7	3.8	4.2	5.0	.28	4.6	135	3.0	7.1	6.9	10	7.5
19	3.1	3.5	4.2	5.0	.24	4.6	31	7.0	18	6.7	14	8.0
20	3.2	3.5	4.2	5.1	.23	4.6	8.9	7.1	125	6.5	14	7.8
21	3.6	3.8	4.2	5.2	.25	4.6	4.8	7.1	30	6.5	14	9.3
22	4.6	3.5	4.0	4.8	.45	4.7	3.9	7.1	12	6.5	14	17
23	2.7	3.5	4.1	4.7	.64	5.2	4.2	7.6	8.3	6.7	13	18
24	2.8	3.9	4.2	4.8	.58	5.4	119	7.6	6.8	7.0	13	7.2
25	2.8	3.3	4.2	7.8	.43	4.6	46	7.9	6.2	6.3	18	.69
26	10	3.3	4.2	6.8	2.5	4.6	12	350	6.1	6.0	19	.30
27	3.7	3.4	4.2	2.3	4.4	4.8	5.8	38	5.9	5.9	19	.24
28	2.8	3.4	4.2	.65	4.6	5.0	4.4	12	6.0	13	19	.12
29	2.8	3.5	4.4	.44	------	5.0	3.9	7.7	6.0	51	19	.06
30	3.3	3.5	4.6	.36	------	5.1	3.8	6.6	6.2	1,940	19	7.7
31	2.6	------	4.8	.35	------	4.5	------	6.0	------	2,640	20	------
TOTAL	147.23	108.91	127.6	119.33	31.79	107.08	435.78	525.07	1,774.8	4,901.6	1,300.25	173.48
MEAN	4.75	3.63	4.12	3.85	1.14	3.45	14.5	16.9	59.2	158	41.9	5.78
MAX	40	11	4.8	7.9	8.8	5.4	135	350	519	2,640	572	19
MIN	0	.07	3.4	.35	.12	.22	.04	.27	5.8	5.3	.03	0
AC-FT	292	216	253	237	63	212	864	1,040	3,520	9,720	2,580	344

CAL YR 1972 TOTAL 4,703.83 MEAN 12.9 MAX 97 MIN 0 AC-FT 9,330
WTR YR 1973 TOTAL 9,752.92 MEAN 26.7 MAX 2,640 MIN 0 AC-FT 19,340

08090800 Brazos River near Dennis, Tex.

LOCATION.--Lat 32°36'56", long 97°55'32", Parker County, at downstream side of bridge on Farm Road 1543, 0.2 mile (0.3 km) south of Dennis, 1.0 mile (1.6 km) upstream from Patrick Creek, and at mile 589.8 (949.0 km).

DRAINAGE AREA.--24,160 mi² (62,570 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 697.67 ft (212.65 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--5 years, 946 ft³/s (26.8 m³/s), 685,400 acre-ft/yr (845 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,100 ft³/s (541 m³/s) Nov. 3, gage height, 16.03 ft (4.89 m); minimum, 11 ft³/s (0.31 m³/s) Aug. 29.
Period of record: Maximum discharge, 41,700 ft³/s (1,180 m³/s) May 8, 1969, gage height, 19.37 ft (5.90 m), from floodmarks; minimum, 3.1 ft³/s (88 dm³/s) July 19, 20, 1971.
Maximum stage since at least 1930, 31.8 ft (9.7 m) 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 capacity of 1,393,000 acre-ft (1,720 hm³). At end of year, flow from 46.5 mi² (120 km²) 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 (16.7 hm³) below the flood-spillway crests, of which 11,890 acre-ft (14.7 hm³) is floodwater-retarding capacity and 1,620 acre-ft (2.00 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	1,230	488	70	626	128	1,320	1,470	123	978	3,550	171
2	475	3,840	597	70	563	112	610	1,470	377	898	1,570	102
3	254	16,000	276	118	292	104	284	1,670	1,240	1,920	690	79
4	174	14,100	153	154	356	99	174	2,150	1,690	1,480	370	58
5	132	12,300	113	1,420	252	99	173	1,610	1,120	1,650	205	62
6	108	5,050	213	1,830	168	96	1,190	2,070	1,910	1,420	132	96
7	693	3,270	1,500	1,700	203	95	1,310	937	1,470	1,160	99	149
8	538	3,090	1,930	1,510	723	87	1,240	375	400	1,210	64	101
9	268	3,000	1,990	708	368	580	791	276	628	1,240	54	79
10	161	2,180	1,800	1,710	1,020	1,560	596	140	1,840	626	63	65
11	152	1,010	706	1,730	1,880	1,710	936	118	1,800	429	57	60
12	770	1,580	1,120	703	1,930	1,750	923	567	1,520	1,490	44	62
13	597	1,410	1,760	571	727	703	953	382	2,130	1,640	52	62
14	276	544	834	288	1,320	1,310	951	530	993	1,720	46	77
15	625	292	755	181	652	1,790	1,310	460	699	1,590	44	50
16	542	1,340	1,430	134	1,310	1,820	1,900	185	1,420	1,200	42	50
17	250	1,730	1,850	111	1,820	1,820	909	106	1,680	1,190	32	42
18	476	1,600	1,800	98	1,870	1,820	2,510	91	1,640	1,340	107	34
19	924	1,710	844	86	1,780	1,750	2,500	78	2,220	1,370	106	35
20	702	647	743	85	773	633	2,000	68	2,460	1,080	71	32
21	281	431	663	262	616	1,330	1,580	59	2,100	1,040	54	30
22	202	1,360	354	413	346	1,860	1,530	370	1,490	1,200	39	27
23	146	1,760	226	184	260	1,870	1,970	402	802	1,040	33	27
24	213	687	174	108	211	1,860	3,350	595	626	636	31	27
25	191	330	145	110	185	1,800	2,260	607	853	465	29	26
26	180	713	167	394	167	1,500	2,060	1,380	618	217	24	33
27	295	611	129	1,410	160	699	1,610	2,040	450	129	21	43
28	360	277	106	857	147	1,780	1,530	874	985	96	18	51
29	1,150	174	94	645	------	1,920	1,560	241	1,810	1,650	12	46
30	1,000	506	72	617	------	1,500	1,510	143	1,960	3,540	402	46
31	332	------	63	637	------	1,490	------	101	------	7,920	196	------
TOTAL	12,967	82,772	23,095	18,914	20,725	35,675	41,540	21,565	39,054	43,564	8,257	1,822
MEAN	418	2,759	745	610	740	1,151	1,385	696	1,302	1,405	266	60.7
MAX	1,150	16,000	1,990	1,830	1,930	1,920	3,350	2,150	2,460	7,920	3,550	171
MIN	108	174	63	70	147	87	173	59	123	96	12	26
AC-FT	25,720	164,200	45,810	37,520	41,110	70,760	82,390	42,770	77,460	86,410	16,380	3,610

CAL YR 1972 TOTAL 298,871 MEAN 817 MAX 16,000 MIN 10 AC-FT 592,800
WTR YR 1973 TOTAL 349,950 MEAN 959 MAX 16,000 MIN 12 AC-FT 694,100

08090900 Lake Granbury near Granbury, Tex.

LOCATION.--Lat 32°22'27", long 97°41'20", Hood County, at right end of spillway of DeCordova Bend Dam on Brazos River, 2.6 miles (4.2 km) upstream from Fall Creek, 7.5 miles (12.1 km) southeast of Granbury, and at mile 542.5 (872.9 km).

DRAINAGE AREA.--24,690 mi² (63,947 km²), approximately, of which 9,240 mi² (23,932 km²) 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 (189 hm³) Apr. 8, elevation, 692.96 ft (211.21 m); minimum, 133,600 acre-ft (165 hm³) Nov. 2, elevation, 690.57 ft (210.49 m).
Period of record: Maximum contents, 153,500 acre-ft (189 hm³) Dec. 30, 1969, June 18, Oct. 8, 1970, elevation, 693.00 ft (211.23 m); minimum since first filling in October 1969, 99,150 acre-ft (122 hm³) July 22, 23, 1971, elevation, 685.53 ft (208.95 m).

REMARKS.--Lake is formed by a rolled earthfill dam, 2,256 ft (688 m) long, including a 932-foot (284-meter) 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 (11- by 11-meter) and two 7- by 8-foot (2- by 2-meter) sluice gates with lowest invert at 640.0 ft (195.1 m). The flow from sluice gates goes into a bay whose outflow is controlled by two 4- by 4.5-foot (1- by 1.4-meter) sluice gates with inverts at 625.8 ft (190.7 m). 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 mi² (136 km²) above this station was partly controlled by 11 floodwater-retarding structures with a total combined capacity of 15,110 acre-ft (18.6 hm³) below the flood-spillway crests, of which 13,350 acre-ft (16.5 hm³) is floodwater-retarding capacity and 1,760 acre-ft (2.17 hm³) 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 (revised).--Capacity curve was based on data prepared by the Ambursen Engineering Corporation and furnished by the Corps of Engineers.

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

690.0	129,200	692.0	145,000
691.0	136,900	693.0	153,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148,000	141,100	149,900	146,600	148,300	148,000	144,600	145,600	145,800	146,300	147,500	143,800
2	147,200	133,600	150,000	147,400	147,800	147,900	146,200	144,300	146,200	145,200	147,200	143,900
3	146,900	139,900	149,200	147,600	147,200	147,800	146,700	143,800	151,600	145,900	146,500	143,800
4	146,700	145,200	148,300	147,800	147,400	147,800	146,900	145,800	146,900	146,700	146,500	144,100
5	146,600	150,000	149,200	150,000	147,800	147,400	146,900	148,600	150,300	146,300	146,200	144,000
6	146,500	149,400	148,100	150,100	147,800	148,400	148,700	151,700	149,300	146,800	146,100	144,200
7	146,200	148,800	148,900	148,900	149,400	148,300	151,200	148,100	151,900	148,600	146,200	144,300
8	147,100	148,900	149,700	147,800	149,400	148,600	152,000	146,700	150,100	150,200	146,200	144,400
9	147,300	149,000	149,400	146,300	149,300	148,900	149,400	146,900	149,600	151,500	146,100	144,400
10	147,400	149,400	148,200	147,200	148,800	151,200	146,700	147,000	151,600	151,700	146,100	144,300
11	147,300	149,400	148,300	147,800	149,100	150,400	146,300	147,000	151,200	151,400	145,900	144,200
12	148,500	148,500	148,400	147,100	149,700	149,200	146,700	146,300	151,600	152,000	145,800	144,100
13	149,200	148,100	148,500	147,600	148,800	147,000	148,900	145,700	150,900	151,900	145,900	143,900
14	149,800	147,200	148,200	147,200	148,500	146,300	150,100	145,900	148,800	151,600	145,800	143,800
15	150,600	146,500	147,500	146,900	148,300	147,100	150,200	145,700	149,000	150,300	145,400	143,600
16	150,400	145,900	147,900	146,800	148,800	147,800	149,500	145,700	149,300	148,800	145,200	143,300
17	149,300	146,300	147,400	146,700	149,000	148,600	150,900	145,500	147,900	148,900	145,000	143,100
18	150,300	147,400	147,900	146,900	147,500	149,200	146,100	145,300	147,300	150,500	144,700	142,800
19	150,600	148,300	148,000	146,600	148,200	150,600	144,400	145,200	146,700	150,400	144,900	142,400
20	151,200	148,500	148,500	146,700	147,800	149,100	144,500	145,000	145,700	150,000	144,700	142,000
21	152,300	148,600	147,700	146,600	148,300	148,600	145,500	144,700	145,500	149,600	144,700	141,700
22	151,200	148,800	147,100	147,300	148,800	149,400	146,100	144,900	145,700	149,600	144,400	141,500
23	148,200	149,400	147,800	147,400	148,700	150,900	147,200	145,400	144,900	149,200	143,900	141,700
24	148,300	148,100	147,100	147,200	148,400	149,400	148,200	146,700	144,700	148,100	143,800	141,300
25	148,300	147,100	147,200	148,400	148,100	147,800	145,400	147,200	145,000	147,800	143,600	140,700
26	149,700	147,400	147,000	148,400	148,000	146,900	144,000	146,200	145,200	147,200	143,300	141,800
27	148,300	148,700	146,900	151,600	147,900	145,400	143,000	146,500	144,900	146,700	143,200	141,800
28	147,800	148,800	146,700	150,200	147,800	145,900	143,800	145,500	145,700	146,700	142,900	141,300
29	148,300	148,800	146,700	149,600	------	145,800	144,300	145,800	147,300	150,200	142,900	141,200
30	148,800	149,400	146,700	148,900	------	144,700	145,000	145,700	147,900	151,100	143,700	141,000
31	146,700	------	146,700	148,800	------	144,600	------	145,700	------	149,600	143,900	------
(†)	692.20	692.53	692.20	692.45	692.33	691.95	692.00	692.09	692.35	692.55	691.87	691.51
(*)	-2,600	+2,700	-2,700	+2,100	-1,000	-3,200	+400	+700	+2,200	+1,700	-5,700	-2,900
MAX	152,300	150,000	150,000	151,600	149,700	151,200	152,000	151,700	151,900	152,000	147,500	144,400
MIN	146,200	133,600	146,700	146,300	147,200	144,600	143,000	143,800	144,700	145,200	142,900	140,700

CAL YR 1972..... * +3,400 MAX 152,600 MIN 130,600
WTR YR 1973..... * -8,300 MAX 152,300 MIN 133,600

† 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 (183 m) downstream from Georges Creek, 4.1 miles (6.6 km) upstream from Paluxy River (corrected), 6 miles (10 km) northeast of Glen Rose, and at mile 511.2 (822.5 km).

DRAINAGE AREA.--24,830 mi² (64,310 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 567.82 ft (173.07 m) above mean sea level. Prior to May 7, 1931, nonrecording gage at site 2.5 miles (4.0 km) downstream at same datum. May 7, 1931, to Sept. 30, 1957, water-stage recorder at site 2.4 miles (3.9 km) downstream at same datum, used as supplementary gage Oct. 1, 1957, to Apr. 1, 1959. Apr. 27, 1950, to Sept. 30, 1957, water-stage recorder, present gage, used as supplementary gage.

AVERAGE DISCHARGE.--50 years, 1,511 ft³/s (42.8 m³/s), 1,095,000 acre-ft/yr (1,350 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,600 ft³/s (385 m³/s) Apr. 23, gage height, 13.61 ft (4.15 m); minimum, 2.2 ft³/s (62 dm³/s) Sept. 1, 2.

Period of record: Maximum discharge, 97,600 ft³/s (2,760 m³/s) May 18, 1935, gage height, 23.68 ft (7.22 m), site then in use, from floodmarks; maximum gage height, 33.89 ft (10.33 m), 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 (8 m), and flood in May 1922 reached a stage of 29.5 ft (9.0 m), could have equaled or exceeded flood in 1957 at present site, each at site 2.4 miles (3.9 km) downstream, from information by local residents.

REMARKS.--Records good. Flow is largely regulated by 15 major reservoirs with a combined capacity of 1,538,000 acre-ft (1,900 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,190	2,300	197	119	1,020	239	1,810	1,640	173	1,630	7,760	2.9
2	1,190	6,230	196	130	1,050	241	1,350	1,950	108	1,690	3,140	43
3	868	9,550	784	190	980	233	500	2,400	854	1,290	1,980	70
4	330	12,400	938	195	476	340	177	2,040	6,930	1,670	686	67
5	258	11,300	350	152	360	249	104	1,060	3,200	1,710	400	76
6	172	9,690	198	144	243	319	132	342	4,050	1,840	370	89
7	155	4,140	194	2,410	256	360	258	2,810	1,330	658	232	104
8	125	3,060	1,230	2,550	938	230	209	3,080	476	574	112	100
9	121	3,100	1,660	1,720	826	224	2,330	714	1,900	630	59	104
10	122	3,070	2,670	1,480	488	360	2,170	310	952	728	56	92
11	119	1,640	2,030	1,500	1,720	1,970	1,830	280	1,010	980	70	89
12	119	1,290	350	1,490	1,960	2,290	1,440	1,390	2,120	1,190	64	104
13	120	3,090	1,180	854	1,770	2,700	658	2,270	2,320	1,650	64	100
14	120	1,940	1,730	512	1,760	2,020	186	1,580	4,080	1,390	64	96
15	153	574	1,190	500	1,020	1,590	868	452	1,420	3,100	59	96
16	159	1,050	658	488	994	1,590	3,240	452	1,050	2,840	59	104
17	938	1,940	1,580	340	1,130	1,600	4,440	340	1,700	1,670	56	104
18	500	1,550	1,900	214	2,670	1,600	6,990	265	2,540	896	54	103
19	350	1,390	1,370	203	2,650	1,600	4,620	221	2,080	910	54	106
20	350	1,330	616	178	1,370	1,570	3,090	183	3,180	1,490	56	107
21	350	360	714	233	826	1,560	2,350	221	3,230	1,510	56	103
22	1,910	700	966	257	440	1,570	1,840	218	1,500	1,510	56	103
23	548	1,180	360	220	476	1,590	3,020	223	1,400	1,510	54	107
24	1,460	1,340	201	209	440	2,470	10,200	246	1,160	1,510	52	123
25	165	966	195	286	430	3,900	6,360	253	630	1,470	50	111
26	175	340	187	476	420	2,390	3,850	1,260	548	770	50	110
27	756	372	133	500	350	1,590	3,370	1,870	536	488	50	131
28	798	199	124	672	240	1,770	1,860	1,940	524	488	38	122
29	630	198	125	1,050	------	1,800	1,560	616	512	1,790	15	111
30	952	199	124	1,020	------	2,740	1,550	151	658	2,060	5.7	112
31	994	------	120	1,020	------	2,080	------	197	------	9,810	3.7	------
TOTAL	16,197	86,488	24,270	21,312	27,303	44,785	72,362	30,974	52,171	51,452	15,825.4	2,889.9
MEAN	522	2,883	783	687	975	1,445	2,412	999	1,739	1,660	510	96.3
MAX	1,910	12,400	2,670	2,550	2,670	3,900	10,200	3,080	6,930	9,810	7,760	131
MIN	119	198	120	119	240	224	104	151	108	488	3.7	2.9
AC-FT	32,130	171,500	48,140	42,270	54,160	88,830	143,500	61,440	103,500	102,100	31,390	5,730

CAL YR 1972 TOTAL 328,181.0 MEAN 897 MAX 12,400 MIN 16 AC-FT 650,900
WTR YR 1973 TOTAL 446,029.3 MEAN 1,222 MAX 12,400 MIN 2.9 AC-FT 884,700

08091500 Paluxy River at Glen Rose, Tex.

LOCATION.--Lat 32°13'53", long 97°46'37", Somervell County, on left bank at downstream side of remaining pier of dismantled highway bridge, 500 ft (152 m) upstream from bridge on U.S. Highway 67, 1.0 mile (1.6 km) upstream from Cross Branch, 1.2 miles (1.9 km) southwest of Glen Rose, and 5.1 miles (8.2 km) upstream from mouth.

DRAINAGE AREA.--410 mi^2 (1,062 km^2).

PERIOD OF RECORD.--October 1923 to September 1925, May 1947 to current year. Prior to October 1965, published as Paluxy Creek at Glen Rose.

GAGE.--Water-stage recorder. Datum of gage is 609.66 ft (185.82 m) above mean sea level. Oct. 27, 1923, to Sept. 30, 1925, nonrecording gage at bridge 1.8 miles (2.9 km) downstream at datum 13.62 ft (4.15 m) lower.

AVERAGE DISCHARGE.--27 years (1924-25, 1947-73), 71.3 ft^3/s (2.02 m^3/s), 51,660 acre-ft/yr (63.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 24,600 ft^3/s (697 m^3/s) Apr. 24, gage height, 19.05 ft (5.81 m), from floodmark; minimum, 3.0 ft^3/s (85 dm^3/s) Oct. 18, 19.
Period of record: Maximum discharge, 50,000 ft^3/s (1,420 m^3/s) Oct. 4, 1959, gage height, 25.4 ft (7.7 m), from rating curve extended above 32,000 ft^3/s (906 m^3/s); no flow at times.
Maximum stage since at least 1877, 27.2 ft (8.3 m) Apr. 17, 1908, present site and datum, discharge, 59,000 ft^3/s (1,670 m^3/s), from rating curve extended as explained above. Flood of May 21, 1922, reached a stage of 26.0 ft (7.9 m), present site and datum, discharge, 53,000 ft^3/s (1,500 m^3/s), from rating curve extended as explained above. Flood in November 1918 reached about same stage as that of May 21, 1922, from information by local residents.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	45	15	12	29	40	40	268	45	38	113	9.8
2	6.7	20	15	18	27	38	40	256	43	37	71	9.5
3	6.2	15	14	52	25	37	117	232	1,840	34	50	9.4
4	6.0	14	14	31	25	36	83	220	1,030	33	41	9.2
5	5.7	12	14	28	24	36	47	199	2,810	32	37	9.2
6	5.5	12	13	24	24	119	42	192	775	45	33	15
7	5.2	12	13	30	32	128	43	182	309	35	31	18
8	5.1	11	13	26	145	70	40	178	202	37	28	31
9	5.0	11	14	23	82	52	38	160	153	47	26	25
10	4.7	10	14	22	59	72	36	154	127	59	24	19
11	4.4	10	14	24	49	70	31	141	112	39	24	17
12	4.2	12	15	23	44	64	33	135	105	50	22	16
13	4.1	44	14	23	41	54	42	123	141	46	21	15
14	4.0	21	16	24	37	47	50	117	137	33	20	14
15	3.6	15	15	24	35	43	155	110	118	66	19	13
16	3.6	14	14	23	34	42	414	104	110	60	18	13
17	3.5	14	14	23	37	40	2,620	92	110	73	17	12
18	3.2	21	14	22	39	37	1,360	85	111	43	16	12
19	4.7	18	14	21	38	36	332	74	112	34	16	12
20	4.1	17	14	21	35	36	220	68	191	30	16	12
21	24	17	14	21	37	34	168	62	112	28	15	11
22	122	17	13	20	50	34	141	60	76	27	15	10
23	16	16	13	19	65	34	2,690	54	66	25	14	11
24	12	19	13	20	55	76	9,660	52	58	24	14	16
25	9.1	19	13	43	48	62	1,180	107	54	23	12	18
26	54	17	13	65	44	47	913	889	52	22	11	15
27	46	16	13	45	42	42	398	163	47	21	11	24
28	25	15	13	36	40	40	344	86	45	22	11	18
29	18	15	13	32	------	36	320	63	43	1,060	11	14
30	16	15	13	31	------	37	288	54	41	363	11	13
31	18	------	13	30	------	38	------	48	------	673	10	------
TOTAL	457.2	514	427	856	1,242	1,577	21,885	4,728	9,175	3,159	778	441.1
MEAN	14.7	17.1	13.8	27.6	44.4	50.9	730	153	306	102	25.1	14.7
MAX	122	45	16	65	145	128	9,660	889	2,810	1,060	113	31
MIN	3.2	10	13	12	24	34	31	48	41	21	10	9.2
AC-FT	907	1,020	847	1,700	2,460	3,130	43,410	9,380	18,200	6,270	1,540	875

CAL YR 1972 TOTAL 11,754.95 MEAN 32.1 MAX 1,130 MIN .78 AC-FT 23,320
WTR YR 1973 TOTAL 45,239.30 MEAN 124 MAX 9,660 MIN 3.2 AC-FT 89,730

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
4-17	1900	11.52	7,440
4-24	about 0100	a19.05	24,600
6- 5	1430	13.43	10,500

a From floodmark.

08091900 Lake Pat Cleburne near Cleburne, Tex.

LOCATION.--Lat 32°17'20", long 97°24'54", Johnson County, at side of walkway from dam to outlet structure, near left end of Cleburne Dam on Nolan River, 2.2 miles (3.5 km) upstream from Buffalo Creek, and 4.3 miles (6.9 km) south of Cleburne.

DRAINAGE AREA.--100 mi² (259 km²).

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, 34,280 acre-ft (42.3 hm³) June 4, elevation, 738.59 ft (225.12 m); minimum, 20,900 acre-ft (25.8 hm³) Oct. 26, elevation, 730.26 ft (222.58 m).
Period of record: Maximum contents, 37,200 acre-ft (45.9 hm³) May 13, 1968, elevation, 740.10 ft (225.58 m); minimum, 18,890 acre-ft (23.3 hm³) Dec. 11-14, 1967, elevation, 728.70 ft (222.11 m).

REMARKS.--Lake is formed by a rock-faced earthfill dam 5,050 ft (1,539 m) long including a 150-foot (45.7-meter) 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)

730.0	20,560	736.0	29,630
732.0	23,320	738.0	33,180
734.0	26,340	739.0	35,060

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,810	22,720	23,040	23,090	25,980	26,150	25,890	26,330	25,850	25,950	26,280	24,790
2	21,840	22,770	23,060	23,220	25,960	26,140	26,070	26,230	25,810	25,930	26,200	24,750
3	21,810	22,770	23,070	23,520	25,980	26,140	26,070	26,150	29,850	25,900	26,150	24,720
4	21,770	22,760	23,030	23,580	25,980	26,100	26,000	26,100	30,460	25,870	26,000	24,690
5	21,770	22,750	23,100	23,610	26,000	26,100	25,960	26,200	29,420	25,870	25,950	24,630
6	21,740	22,830	22,990	23,650	26,000	26,260	26,000	26,280	27,920	25,840	25,960	24,600
7	21,700	22,890	22,970	23,800	26,420	26,230	26,000	26,250	27,140	25,890	25,920	24,580
8	21,660	22,870	22,990	23,830	26,870	26,180	25,960	26,180	26,760	26,000	25,790	24,580
9	21,630	22,870	23,000	23,830	26,580	26,150	25,900	26,120	26,520	25,980	25,760	24,570
10	21,610	22,830	23,000	23,860	26,420	26,600	25,890	26,100	26,370	25,930	25,740	24,550
11	21,600	22,800	22,990	23,890	26,340	26,450	25,890	26,310	26,310	25,920	25,710	24,520
12	21,570	22,890	23,000	23,890	26,260	26,330	25,900	27,010	26,300	25,890	25,670	24,510
13	21,560	23,000	23,020	23,930	26,250	26,260	26,000	26,640	27,700	25,840	25,650	24,510
14	21,530	22,940	23,100	24,010	26,150	26,200	26,070	26,440	27,400	25,820	25,600	24,460
15	21,490	22,930	23,070	24,080	26,120	26,150	26,680	26,280	27,100	25,920	25,540	24,440
16	21,460	22,930	23,060	24,150	26,090	26,060	26,690	26,200	26,800	25,930	25,500	24,400
17	21,420	22,920	23,060	24,200	26,100	26,030	27,660	26,140	26,500	25,920	25,470	24,350
18	21,420	23,000	23,070	24,240	26,120	26,000	27,130	26,090	26,310	25,890	25,400	24,290
19	21,370	23,000	23,090	24,270	26,140	26,010	26,790	26,060	26,310	25,840	25,370	24,260
20	21,340	22,990	23,100	24,350	26,090	25,930	26,580	26,030	26,760	25,810	25,340	24,210
21	21,410	23,020	23,090	24,360	26,100	25,920	26,470	25,980	26,560	25,780	25,310	24,180
22	21,840	23,000	23,090	24,400	26,220	25,920	26,370	25,950	26,390	25,740	25,250	24,150
23	21,820	22,990	23,100	24,390	26,280	25,960	32,670	25,930	26,280	25,680	25,220	24,330
24	21,870	23,030	23,090	24,420	26,250	26,150	31,230	26,030	26,200	25,650	25,160	24,300
25	21,750	23,060	23,100	25,240	26,220	26,090	28,510	26,140	26,150	25,640	25,110	24,290
26	22,270	23,040	23,090	25,700	26,180	26,000	27,380	26,120	26,100	25,570	25,070	24,400
27	22,430	23,070	23,070	25,870	26,150	25,950	26,850	26,070	26,070	25,530	25,020	24,440
28	22,430	23,060	23,070	25,780	26,140	25,950	26,560	25,950	26,040	25,640	24,980	24,400
29	22,450	23,060	23,100	25,810	------	25,930	26,390	25,920	26,010	26,680	24,920	24,390
30	22,490	23,040	23,100	25,840	------	25,950	26,310	25,870	26,000	26,580	24,870	24,390
31	22,600	------	23,090	25,950	------	25,900	------	25,850	------	26,450	24,820	------
(†)	731.50	731.81	731.84	733.75	733.87	733.72	733.98	733.69	733.78	734.07	733.02	732.73
(*)	+680	+440	+50	+2,860	+190	-240	+410	-460	+150	+450	-1,630	-430
(††)	224	199	200	197	169	188	174	178	182	232	292	233
MAX	22,600	23,070	23,100	25,950	26,870	26,600	32,670	27,010	30,460	26,680	26,280	24,790
MIN	21,340	22,720	22,970	23,090	25,960	25,900	25,890	25,850	25,810	25,530	24,820	24,150

CAL YR 1972..... * -3,050 †† 2,673 MAX 27,260 MIN 21,340
WTR YR 1973..... * +2,470 †† 2,468 MAX 32,670 MIN 21,340

† 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 (18 m) upstream from bridge on Farm Road 933, 0.6 mile (1.0 km) northwest of Blum, 2.8 miles (4.5 km) downstream from Mustang Creek, 3.0 miles (4.8 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 3.2 miles (5.1 km) upstream from Rock Creek.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--July 1924 to September 1925, November 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.48 ft (168.09 m) above mean sea level. July 29, 1924, to Sept. 30, 1925, and Nov. 14, 1947, to May 28, 1949, nonrecording gage at railway bridge (now abandoned) 0.5 mile (0.8 km) upstream at datum 5.0 ft (1.5 m) higher. May 29 to July 7, 1949, nonrecording gage at present site and datum then in use, 5.0 ft (1.5 m) higher than present datum.

AVERAGE DISCHARGE.--26 years (1924-25, 1948-73), 78.3 ft³/s (2.22 m³/s), 56,730 acre-ft/yr (69.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,300 ft³/s (943 m³/s) Apr. 24, gage height, 26.61 ft (8.11 m); minimum, 1.7 ft³/s (48 dm³/s) Oct. 19.
Period of record: Maximum discharge, 62,200 ft³/s (1,760 m³/s) May 7, 1969, gage height, 31.23 ft (9.52 m), from rating curve extended above 22,200 ft³/s (629 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times.
Maximum stage since at least 1887, 35.0 ft (10.7 m) 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 (21 km) upstream.

REVISIONS (WATER YEARS).--WSP 1312: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	137	13	12	94	86	46	165	15	40	82	6.1
2	3.1	79	12	35	77	85	39	144	16	37	54	6.4
3	3.4	30	12	289	66	78	165	109	2,000	34	37	6.1
4	3.7	19	10	90	62	83	85	90	7,580	31	27	5.5
5	3.7	15	12	43	61	73	57	80	3,650	29	22	6.4
6	3.2	14	11	34	61	141	47	198	1,370	29	18	7.2
7	2.6	67	11	187	81	169	53	186	513	28	15	8.2
8	3.2	26	12	96	1,460	109	55	96	258	76	13	8.9
9	3.8	17	12	49	324	93	63	75	171	47	11	7.5
10	3.7	13	12	36	195	679	45	61	118	35	9.8	6.4
11	3.8	12	12	36	158	311	36	53	97	32	9.3	5.8
12	3.8	12	13	34	140	165	35	311	91	31	8.6	6.4
13	4.2	105	17	35	129	125	58	227	3,230	30	7.8	6.1
14	4.2	37	16	39	113	109	81	140	811	25	7.7	5.8
15	3.9	20	21	38	90	93	473	95	367	329	7.5	5.8
16	3.7	16	16	35	80	89	1,080	69	228	53	7.2	5.2
17	3.4	14	14	34	79	71	649	54	159	33	7.4	5.2
18	3.3	13	13	33	86	60	898	43	119	28	6.9	5.2
19	3.6	34	14	29	81	56	439	36	103	25	6.9	5.5
20	6.8	19	14	29	79	62	287	30	4,080	22	6.8	5.2
21	19	16	13	33	74	49	191	27	392	21	6.4	5.2
22	855	17	13	29	90	43	151	24	186	19	6.1	5.2
23	36	14	13	26	156	44	3,400	22	129	18	6.1	7.2
24	12	13	12	25	131	85	16,700	22	99	17	5.8	147
25	5.7	18	12	516	112	91	2,580	96	84	17	5.5	22
26	656	15	12	703	102	70	951	109	74	16	5.5	18
27	373	13	12	131	93	50	495	47	64	16	5.5	128
28	45	12	12	104	88	46	294	38	57	15	5.5	40
29	23	12	13	74	------	46	220	23	51	254	5.2	16
30	20	12	13	62	------	45	183	18	46	141	6.1	11
31	39	------	13	65	------	52	------	16	------	123	6.1	------
TOTAL	2,158.1	841	405	2,981	4,362	3,358	29,856	2,704	26,158	1,651	428.7	524.5
MEAN	69.6	28.0	13.1	96.2	156	108	995	87.2	872	53.3	13.8	17.5
MAX	855	137	21	703	1,460	679	16,700	311	7,580	329	82	147
MIN	2.6	12	10	12	61	43	35	16	15	15	5.2	5.2
AC-FT	4,280	1,670	803	5,910	8,650	6,660	59,220	5,360	51,880	3,270	850	1,040

CAL YR 1972 TOTAL 13,293.61 MEAN 36.3 MAX 933 MIN .02 AC-FT 26,370
WTR YR 1973 TOTAL 75,427.30 MEAN 207 MAX 16,700 MIN 2.6 AC-FT 149,600

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-24	0200	26.61	33,300	6-13	0530	11.59	7,110
6- 4	1000	16.67	13,400	6-20	0900	13.76	9,710
6- 5	1630	12.79	8,550				

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 (3.4 km) upstream from Coon Creek, 3.5 miles (5.6 km) upstream from Iron Creek, 6.6 miles (10.6 km) southwest of Whitney, and at mile 442.3 (711.7 km).

DRAINAGE AREA.--26,170 mi² (67,780 km²), approximately, of which 9,240 mi² (23,930 km²) 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, 745,600 acre-ft (919 hm³) Apr. 25, elevation, 537.73 ft (163.90 m); minimum, 430,200 acre-ft (530 hm³) Oct. 17, elevation, 523.17 ft (159.46 m).
Period of record: Maximum contents, 1,980,000 acre-ft (2,440 hm³) May 29, 1957, elevation, 570.25 ft (173.81 hm³); minimum daily since power pool elevation first reached in April 1954, 250,200 acre-ft (308 hm³) Nov. 1, 1956, elevation, 509.52 ft (155.30 m).

REMARKS.--Lake is formed by concrete gravity and rolled earthfill dam 17,695 ft (5,393 m) 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 (159.1 and 174.0 m) is reserved for flood-control storage. Total spillway capacity, 684,000 ft³/s (19,370 m³/s) at elevation 573.0 ft (174.7 m), 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)

510.0	245,200	520.0	379,100	531.0	581,300
512.0	267,800	522.0	411,100	534.0	651,000
514.0	292,300	524.0	444,000	538.0	752,700
516.0	319,100	526.0	478,800	542.0	865,200
518.0	348,200	528.0	517,100	546.0	987,900
				550.0	1,121,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	439,000	456,200	541,400	531,600	563,000	619,700	626,600	654,400	645,300	628,000	637,400	585,500
2	439,500	464,200	541,400	530,300	565,200	620,100	624,800	649,800	645,300	629,700	637,400	585,500
3	439,800	476,400	543,400	533,000	567,200	620,100	624,300	645,000	657,900	631,900	632,800	585,100
4	439,500	496,700	538,200	534,100	568,900	622,000	619,900	640,000	683,600	632,600	627,100	585,100
5	438,500	514,600	535,700	534,900	570,500	622,700	619,200	634,300	706,900	635,200	620,400	585,800
6	438,500	533,600	529,500	534,100	570,500	625,500	619,200	629,700	703,800	639,000	614,800	585,800
7	438,000	541,400	524,300	537,600	570,500	627,800	619,700	627,800	691,900	640,700	610,800	585,800
8	437,000	545,700	523,500	540,600	576,800	630,200	619,200	630,000	682,300	642,400	606,700	585,800
9	435,200	551,900	524,800	539,100	579,500	630,700	616,900	629,000	677,500	642,400	602,700	584,400
10	433,400	556,400	524,800	533,600	581,700	635,900	618,000	624,300	672,100	640,200	598,400	584,400
11	432,900	559,200	524,100	529,300	583,500	639,800	621,300	622,200	666,400	633,500	598,400	584,000
12	432,200	561,400	524,100	526,200	588,300	644,100	624,100	625,000	663,500	627,800	598,400	584,000
13	431,200	567,400	522,900	529,100	594,100	649,600	626,400	629,200	666,400	622,400	598,400	584,000
14	430,900	564,700	525,400	530,500	598,000	651,000	626,400	633,100	667,400	621,500	596,900	584,000
15	430,900	561,400	525,400	531,800	600,500	650,000	630,400	634,300	664,500	627,300	597,100	582,800
16	430,900	560,100	524,100	533,000	602,500	643,800	638,100	635,000	658,800	627,100	597,100	582,800
17	430,200	560,500	524,300	533,900	605,000	638,300	644,500	636,700	654,400	623,100	596,900	583,100
18	430,700	560,800	526,400	535,500	609,400	632,100	655,700	635,900	649,600	617,100	596,900	580,800
19	433,000	559,900	529,300	535,700	615,700	631,200	657,100	634,500	651,000	610,100	596,400	578,600
20	433,000	557,100	530,800	536,700	618,700	628,500	656,600	634,500	669,600	607,800	594,800	576,400
21	434,500	557,100	530,300	537,400	620,400	627,600	653,700	633,500	669,600	608,500	593,000	574,600
22	443,100	551,700	529,900	538,200	620,400	625,500	648,800	633,500	665,700	610,400	591,200	573,300
23	445,800	551,300	531,800	538,900	619,200	624,800	666,200	634,300	660,300	612,000	589,800	575,100
24	447,000	551,700	532,000	539,300	620,100	627,100	741,900	634,300	654,700	613,200	588,700	574,200
25	447,000	552,400	532,400	543,100	621,800	630,000	743,500	634,300	648,800	614,600	588,700	574,200
26	451,600	553,000	531,200	549,400	621,100	630,000	741,700	641,200	644,300	616,400	588,300	576,800
27	453,500	554,700	531,200	551,500	620,100	629,000	718,200	646,000	640,000	615,900	587,100	578,200
28	454,800	552,100	530,500	552,800	618,500	628,500	695,400	647,200	635,000	615,900	586,900	575,700
29	455,200	547,000	530,500	554,100	------	627,300	673,600	648,100	629,500	623,600	586,700	573,500
30	456,500	543,600	531,600	556,400	------	627,800	657,900	645,500	626,600	624,300	586,000	572,700
31	453,800	------	531,600	558,800	------	627,800	------	643,800	------	629,500	586,000	------
(†)	524.58	529.27	528.70	529.98	532.63	533.03	534.28	533.70	532.98	533.10	531.21	530.61
(*)	+16,100	+89,800	-12,000	+27,200	+59,700	+9,300	+30,100	-14,100	-17,200	+2,900	-43,500	-13,300
MAX	456,500	567,400	543,400	558,800	621,800	651,000	743,500	654,400	706,900	642,400	637,400	585,800
MIN	430,200	456,200	522,900	526,200	563,000	619,700	616,900	622,200	626,600	607,800	586,000	572,700

CAL YR 1972..... * +49,300 MAX 567,400 MIN 278,800
WTR YR 1973..... * +135,000 MAX 743,500 MIN 430,200

† 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 (914 m) upstream from Iron Creek, 1.0 mile (1.6 km) downstream from Coon Creek, 3.4 miles (5.5 km) downstream from Whitney Dam, 7.5 miles (12.1 km) south of Whitney, and at mile 439.4 (707.0 km).

DRAINAGE AREA.--26,190 mi² (67,830 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 417.39 ft (127.22 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1948, nonrecording gage at site 8.3 miles (13.4 km) upstream at datum 14.67 ft (4.47 m) higher.

AVERAGE DISCHARGE.--35 years, 1,622 ft³/s (45.9 m³/s), 1,175,000 acre-ft/yr (1,449 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,500 ft³/s (581 m³/s) Apr. 24, gage height, 16.32 ft (4.97 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 23, Nov. 4, 10.
Period of record: Maximum discharge, 71,800 ft³/s (2,030 m³/s) May 18, 1949, gage height, 31.03 ft (9.46 m); minimum daily, 0.4 ft³/s (11 dm³/s) May 9, 1953. Maximum discharge since construction of Whitney Dam in 1951, 58,200 ft³/s (1,650 m³/s) May 28, 1957, gage height, 27.34 ft (8.33 m).
Maximum stage since at least 1853, 45 ft (14 m) 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 (4,390 hm³), 1,620,000 acre-ft (2,000 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	335	1,290	242	54	189	2,150	4,910	188	221	4,530	55
2	721	354	188	1,510	45	297	2,090	4,910	87	753	4,390	55
3	696	18	29	99	46	58	2,190	4,920	375	133	4,400	58
4	768	13	2,780	149	49	21	2,140	4,920	2,820	995	4,430	59
5	723	589	1,950	223	52	69	391	4,930	6,880	169	4,380	70
6	153	78	3,540	567	650	35	439	4,810	10,300	61	3,550	88
7	192	31	2,550	520	347	18	95	3,450	10,100	356	1,940	64
8	461	39	1,100	1,260	1,100	19	1,640	2,300	7,090	167	2,090	369
9	1,020	36	977	2,130	26	25	1,140	2,280	4,410	530	2,050	915
10	1,110	13	2,160	4,530	19	108	492	2,960	4,420	2,270	2,240	170
11	319	18	2,280	4,150	23	29	259	1,890	4,430	4,720	158	62
12	454	20	1,220	2,800	28	31	196	412	4,470	4,700	44	59
13	462	542	875	31	32	35	67	64	4,480	4,680	43	59
14	201	2,710	1,150	18	33	1,820	936	73	4,480	2,690	143	64
15	60	2,570	1,060	18	28	2,710	140	78	4,500	2,760	361	165
16	15	1,300	1,050	19	28	4,350	1,930	80	4,480	4,570	94	198
17	381	1,320	658	20	55	4,320	2,750	83	4,470	4,510	46	56
18	90	1,970	696	21	88	4,280	4,400	456	4,460	4,500	47	610
19	19	1,610	242	21	27	4,130	4,660	1,090	4,490	4,510	50	1,220
20	31	2,400	304	22	39	2,110	5,080	224	4,710	2,830	915	1,200
21	14	1,870	863	20	788	2,050	5,080	766	4,590	889	915	1,010
22	19	2,140	395	20	1,350	2,100	5,070	116	4,620	326	728	982
23	13	1,320	53	20	1,500	1,880	5,290	72	4,600	442	704	219
24	141	1,930	17	22	438	2,200	9,500	193	4,650	736	310	958
25	300	885	18	46	19	1,980	11,200	121	4,250	518	92	328
26	377	233	777	46	1,120	2,280	11,000	398	3,150	187	44	110
27	162	32	23	38	1,050	1,870	13,200	127	3,180	205	328	982
28	269	1,420	327	38	1,080	2,150	15,000	107	3,190	370	115	1,450
29	359	2,680	169	35	------	2,150	14,600	1,080	3,330	30	50	1,510
30	816	1,930	42	41	------	2,070	10,500	1,400	2,360	2,300	51	859
31	2,540	------	14	48	------	2,150	------	1,180	------	4,530	55	------
TOTAL	12,912	30,406	28,797	18,724	10,114	47,534	133,625	50,400	129,560	56,658	39,293	14,004
MEAN	417	1,014	929	604	361	1,533	4,454	1,626	4,319	1,828	1,268	467
MAX	2,540	2,710	3,540	4,530	1,500	4,350	15,000	4,930	10,300	4,720	4,530	1,510
MIN	13	13	14	18	19	18	67	64	87	30	43	55
AC-FT	25,610	60,310	57,120	37,140	20,060	94,280	265,000	99,970	257,000	112,400	77,940	27,780

CAL YR 1972 TOTAL 332,892 MEAN 910 MAX 5,920 MIN 13 AC-FT 660,300
WTR YR 1973 TOTAL 572,027 MEAN 1,567 MAX 15,000 MIN 13 AC-FT 1,135,000

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 (2.4 km) downstream from Missouri, Kansas, and Texas Railroad Co. bridge, 2.8 miles (4.5 km) northwest of Abbott, and 9 miles (14 km) upstream from mouth.

DRAINAGE AREA.--11.7 mi² (30.3 km²).

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft (175.26 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 8.08 ft³/s (0.229 m³/s), 9.38 in/yr (238.3 mm/yr), 5,850 acre-ft/yr (7.21 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,420 ft³/s (68.5 m³/s) Mar. 10, gage height, 10.00 ft (3.05 m); no flow at times.
Period of record: Maximum discharge, 2,720 ft³/s (77.0 m³/s) May 9, 1968, gage height, 10.50 ft (3.20 m); no flow at times each year.
Maximum stage since at least 1932, 11.1 ft (3.4 m), date unknown, from information by State Highway Department.

REMARKS.--Records good. No known diversion or regulation above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	25	.09	.19	10	5.3	3.4	7.5	99	2.0		0
2	0	4.8	.09	1.7	6.8	4.8	3.4	5.8	24	1.8		0
3	0	.98	.12	13	6.3	4.6	3.4	4.9	519	1.8		0
4	0	.32	.09	3.4	6.0	4.3	3.1	4.7	49	1.5		0
5	0	.14	.10	2.4	5.8	3.6	2.9	4.4	379	1.5		0
6	0	.14	.08	2.4	5.3	12	3.4	6.1	95	2.2		0
7	0	.82	.06	17	27	5.0	3.8	4.9	24	2.0		0
8	0	.22	.10	7.1	41	4.1	3.4	3.7	17	1.3		0
9	0	.12	.14	4.1	12	4.8	2.9	3.0	14	.65		0
10	0	.05	.14	4.1	9.5	452	2.5	2.6	13	.41		0
11	0	.03	.16	4.1	9.5	24	2.4	2.4	37	.29		0
12	0	.34	.90	3.8	8.2	15	2.4	2.6	24	.29		0
13	0	4.9	.36	4.3	7.1	19	2.7	2.0	19	.41		0
14	0	.14	4.8	4.3	5.5	14	227	1.6	15	2.6		0
15	0	.06	1.2	3.8	4.8	9.9	192	1.6	12	43		0
16	0	.06	.75	3.2	4.6	9.9	96	1.5	9.2	4.4		0
17	0	.06	.68	3.2	5.3	8.1	76	1.3	8.1	1.5		0
18	0	.98	.62	2.9	5.3	7.7	22	.99	7.2	1.1		0
19	0	.25	.62	2.2	4.8	6.6	19	.86	6.1	.75		0
20	0	.12	.56	3.4	4.1	5.5	11	.56	18	.56		0
21	0	.14	.46	3.4	4.8	5.3	13	.48	12	.35		0
22	2.7	.16	.36	2.2	8.8	5.0	72	.35	7.2	.24		0
23	.05	.10	.36	1.9	9.9	5.3	123	.41	5.9	.10		.21
24	.02	.22	.28	1.8	7.7	20	616	.56	4.9	.06		.03
25	0	.32	.28	91	6.3	6.3	48	78	4.7	.03		0
26	55	.10	.28	29	5.5	5.5	24	194	3.9	.01		3.5
27	5.6	.09	.25	15	5.0	5.0	15	2.8	3.2	0		1.2
28	.51	.06	.28	9.2	5.0	4.8	12	.86	3.0	0		.06
29	.14	.08	.36	8.0	------	4.6	9.5	.56	2.8	0		.03
30	.08	.09	.32	8.0	------	4.3	7.8	.41	2.2	0		.03
31	.05	------	.25	13	------	3.8	------	.41	------	0		------
TOTAL	64.15	40.89	15.14	273.09	241.9	690.0	1,623.0	341.85	1,438.3	70.85	0	5.06
MEAN	2.07	1.36	.49	8.81	8.64	22.3	54.1	11.0	47.9	2.29	0	.17
MAX	55	25	4.8	91	41	452	616	194	519	43	0	3.5
MIN	0	.03	.06	.19	4.1	3.6	2.4	.35	2.2	0	0	0
CFSM	.18	.12	.04	.75	.74	1.91	4.62	.94	4.09	.20	0	.01
IN.	.20	.13	.05	.87	.77	2.19	5.16	1.09	4.57	.23	0	.02
AC-FT	127	81	30	542	480	1,370	3,220	678	2,850	141	0	10

CAL YR 1972	TOTAL	842.37	MEAN	2.30	MAX	78	MIN 0	CFSM .20	IN 2.68	AC-FT 1,670
WTR YR 1973	TOTAL	4,804.23	MEAN	13.2	MAX	616	MIN 0	CFSM 1.13	IN 15.27	AC-FT 9,530

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-10	0700	10.00	2,420	5-26	0100	8.28	1,380
4-14	1600	8.32	1,430	6- 1	2000	6.62	696
4-15	2100	7.92	1,230	6- 3	1200	8.28	1,410
4-24	0100	9.20	1,940	6- 5	1900	8.55	1,550
4-24	1400	8.57	1,560				

08093500 Aquilla Creek near Aquilla, Tex.

LOCATION.--Lat 31°50'40", long 97°12'06", Hill County, on right bank 50 ft (15 m) upstream from bridge on Farm Road 1304, 1.0 mile (1.6 km) southeast of Aquilla, 1.2 miles (1.9 km) downstream from Cobb Creek, and at mile 18.2 (29.3 km).

DRAINAGE AREA.--306 mi² (793 km²).

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 (137.61 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--34 years (1939-73), 118 ft³/s (3.34 m³/s), 5.24 in/yr (133.1 mm/yr), 85,490 acre-ft/yr (105 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,700 ft³/s (360 m³/s) Apr. 24, gage height, 27.81 ft (8.48 m); minimum, 0.39 ft³/s (11 dm³/s) Sept. 12.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) May 10, 1968, gage height, 30.32 ft (9.24 m), from rating curve extended above 25,900 ft³/s (733 m³/s) on basis of slope-area measurement of 74,200 ft³/s (2,100 m³/s), adjusted to gage site; no flow at times.

Flood of Aug. 31, 1887, reached a stage of 34 ft (10 m), from information by local resident. Flood of Sept. 27, 1936, was the highest since 1887 and reached a stage of 33 ft (10 m), from floodmark; discharge, 84,500 ft³/s (2,390 m³/s) by slope-area measurement at site 9 miles (14 km) downstream and 74,200 ft³/s (2,100 m³/s) adjusted to gage site.

REMARKS.--Records good. Records furnished by the city of Hillsboro show that the city discharged 1,105 acre-ft (1.36 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	289	4.2	4.2	95	45	33	172	44	41	28	1.9
2	1.1	469	4.2	4.3	55	47	31	314	442	37	17	1.7
3	1.2	23	4.4	710	41	44	127	105	2,490	35	11	1.6
4	1.0	9.8	4.2	402	36	46	53	90	3,270	32	8.9	1.5
5	.80	6.5	4.0	31	35	43	33	86	2,040	29	8.1	1.6
6	1.2	5.2	3.6	22	33	175	31	188	7,950	28	7.4	1.4
7	2.2	5.0	3.9	444	36	95	37	140	991	26	6.3	1.4
8	2.4	4.7	4.2	515	1,150	55	37	89	221	26	6.2	1.0
9	2.5	4.2	4.2	45	307	44	33	74	125	27	5.7	1.0
10	2.6	3.8	4.4	24	85	5,630	29	66	140	27	5.4	.89
11	3.1	3.6	5.1	22	70	2,120	27	62	292	24	5.1	.61
12	4.4	3.4	5.3	19	64	165	27	66	253	23	4.9	.52
13	5.7	99	7.4	21	60	111	29	59	562	26	4.8	.66
14	6.0	41	26	24	51	121	519	51	936	66	4.5	.82
15	6.4	9.5	38	26	44	84	1,340	47	226	4,520	4.3	.72
16	7.5	5.9	15	25	40	74	3,640	46	88	1,050	4.1	.91
17	8.5	4.7	8.6	22	41	64	738	44	67	134	4.2	1.0
18	9.3	4.5	6.7	21	46	57	876	41	55	50	4.4	1.2
19	11	11	6.1	18	43	52	359	39	47	34	4.0	1.6
20	14	9.1	6.1	20	40	48	318	37	1,240	31	4.2	1.4
21	11	5.7	6.1	22	39	43	98	34	4,080	27	4.3	1.3
22	241	5.5	5.3	16	56	43	210	33	415	24	4.6	1.1
23	373	5.5	4.9	14	135	42	1,000	31	121	21	5.2	1.0
24	15	5.3	4.4	13	80	92	10,800	32	91	20	5.9	273
25	8.6	5.1	4.0	830	59	93	4,840	537	78	18	5.7	363
26	226	5.5	3.8	1,830	51	50	491	1,640	68	18	5.5	10
27	1,600	5.1	3.4	242	46	40	250	87	61	17	5.7	2,950
28	121	4.5	3.3	78	44	39	185	33	52	16	4.6	1,210
29	19	4.2	3.4	52	------	39	152	22	48	657	3.9	64
30	11	4.2	4.0	46	------	37	143	20	47	539	3.1	18
31	9.2	------	4.4	50	------	36	------	17	------	27	2.3	------
TOTAL	2,727.80	1,062.5	212.6	5,612.5	2,882	9,674	26,486	4,302	26,540	7,650	199.3	4,914.83
MEAN	88.0	35.4	6.86	181	103	312	883	139	885	247	6.43	164
MAX	1,600	469	38	1,830	1,150	5,630	10,800	1,640	7,950	4,520	28	2,950
MIN	.80	3.4	3.3	4.2	33	36	27	17	44	16	2.3	.52
AC-FT	5,410	2,110	422	11,130	5,720	19,190	52,530	8,530	52,640	15,170	395	9,750

CAL YR 1972 TOTAL 20,002.75 MEAN 54.7 MAX 2,020 MIN .80 AC-FT 39,680
WTR YR 1973 TOTAL 92,263.53 MEAN 253 MAX 10,800 MIN .52 AC-FT 183,000

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-10	2030	26.93	9,920	6- 6	0300	27.67	11,900
4-16	0300	23.54	4,800	6-21	0430	23.64	4,880
4-24	1100	27.81	12,700	7-15	1000	26.44	7,550
6- 3	2330	26.07	7,220				

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 (0.8 km) southeast of Erath County Courthouse, 1.5 miles (2.4 km) downstream from Gulf, Colorado, and Santa Fe Railway bridge, and at mile 120.3 (193.6 km).

DRAINAGE AREA.--93.2 mi² (241 km²).

PERIOD OF RECORD.--March 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,223.60 ft (372.95 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 15.6 ft³/s (0.442 m³/s), 11,300 acre-ft/yr (13.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,100 ft³/s (201 m³/s) Apr. 23, gage height, 18.40 ft (5.61 m); no flow at times.
Period of record: Maximum discharge, 12,100 ft³/s (343 m³/s) Oct. 4, 1959, gage height, 19.90 ft (6.07 m), from floodmark, from rating curve extended above 4,250 ft³/s (120 m³/s) on basis of contracted-opening measurements of 40,000 and 49,000 ft³/s (1,130 and 1,390 m³/s); no flow at times each year.
Maximum stage since at least 1854, 23.5 ft (7.2 m) May 19, 1955, from floodmarks, discharge, 49,000 ft³/s (1,390 m³/s), by contracted-opening measurement of peak flow. The flood of May 23, 1952, reached a stage of 22.2 ft (6.7 m), from floodmarks, discharge, 40,000 ft³/s (1,130 m³/s), by contracted-opening measurement of peak flow.

REMARKS.--Records good. At end of year, flow from 59.8 mi² (155 km²) above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 27,230 acre-ft (33.6 hm³) below the flood-spillway crests, of which 25,250 acre-ft (31.1 hm³) is floodwater-retarding capacity and 1,980 acre-ft (2.44 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01	.22	.01	.18	.48	.48	13	1.2	.52	36	0
2	0	0	.24	5.3	.10	.40	.40	11	1.0	.52	14	0
3	0	0	.27	10	.08	.33	4.3	9.0	293	.52	6.5	0
4	0	0	.24	.57	.08	.30	1.8	7.6	108	.48	2.6	0
5	0	0	.30	.22	.08	.22	.67	6.8	81	.48	.96	0
6	0	0	.24	.18	.08	107	.44	9.0	40	.48	.67	1.3
7	0	0	.27	.43	3.8	13	.44	8.6	18	.44	.62	.24
8	0	0	.27	.44	5.7	3.8	.33	7.2	11	2.1	.52	.08
9	0	0	.27	.30	1.9	1.9	.22	6.1	6.7	3.6	.40	.03
10	0	0	.27	.27	.48	23	.18	5.4	4.8	2.1	.33	0
11	0	0	.57	.27	.24	3.8	.18	4.9	3.4	1.2	.24	0
12	0	.10	.30	.24	.18	1.0	.18	4.6	3.0	1.0	.18	0
13	0	.57	.30	.22	.14	.62	1.6	4.1	6.8	.96	.12	0
14	0	.14	.30	.22	.10	.48	1.0	3.5	6.1	.78	.06	0
15	0	.10	.27	.20	.08	.52	59	3.0	4.0	.62	.04	0
16	0	.10	.24	.18	.08	.48	17	2.7	2.8	.52	.03	0
17	0	.10	.20	.18	.20	.44	1,090	2.3	2.1	.52	.02	0
18	0	.14	.16	.16	.48	.33	376	1.8	1.6	.48	.01	0
19	0	.20	.12	.16	.33	.33	96	1.5	16	.48	0	0
20	0	.16	.10	.14	.30	.30	34	1.2	9.9	.48	0	0
21	0	.30	.08	.14	.62	.22	18	.96	2.6	.48	0	0
22	3.9	.30	.08	.12	5.5	.20	12	.72	1.6	.44	0	0
23	.22	.20	.07	.12	2.6	1.2	1,510	1.9	1.2	.44	0	0
24	.07	.72	.06	.08	2.0	8.5	1,480	14	1.0	.44	0	.09
25	.04	.62	.06	5.3	1.5	1.4	669	35	.78	.40	0	.07
26	9.1	.27	.05	2.6	.96	.48	364	37	.67	.40	0	.02
27	.62	.24	.05	1.3	.67	.44	183	12	.67	.36	0	.12
28	.10	.18	.04	.40	.52	.40	73	6.3	.62	.75	0	.14
29	.02	.22	.04	.18	------	.33	26	3.2	.57	167	0	.07
30	.10	.22	.03	.14	------	1.3	16	2.1	.52	226	0	.03
31	.24	------	.02	.16	------	.57	------	1.4	------	162	0	------
TOTAL	14.41	4.89	5.73	30.23	28.98	173.77	6,035.22	227.88	630.63	576.99	63.30	2.19
MEAN	.46	.16	.18	.98	1.04	5.61	201	7.35	21.0	18.6	2.04	.073
MAX	9.1	.72	.57	10	5.7	107	1,510	37	293	226	36	1.3
MIN	0	0	.02	.01	.08	.20	.18	.72	.52	.36	0	0
AC-FT	29	9.7	11	60	57	345	11,970	452	1,250	1,140	126	4.3

CAL YR 1972 TOTAL 1,346.91 MEAN 3.68 MAX 280 MIN 0 AC-FT 2,670
WTR YR 1973 TOTAL 7,794.22 MEAN 21.4 MAX 1,510 MIN 0 AC-FT 15,460

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Apr. 17 (1000) 2,460 ft³/s (13.70 ft); Apr. 23 (2000) 7,100 ft³/s (18.40 ft).

08094000 Green Creek subwatershed No. 1 near Dublin, Tex.

LOCATION.--Lat 32°09'57", long 98°20'28", Erath County, near center of dam on main headwater channel of Green Creek, 0.9 mile (1.4 km) downstream from county road, 1.3 miles (2.1 km) east of Farm Road 219, and 5.5 miles (8.8 km) north of Dublin.

DRAINAGE AREA.--3.34 mi^2 (8.65 km^2).

PERIOD OF RECORD.--May 1955 to current year.

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 1,408.00 ft (429.16 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--18 years, 570 acre-ft/yr (0.703 hm^3/yr).

AVERAGE OUTFLOW.--18 years, 406 acre-ft/yr (0.501 hm^3/yr).

EXTREMES.--Current year: Maximum outflow, 15.9 ft^3/s (0.45 m^3/s) Apr. 24, gage height, 17.15 ft (5.23 m); no outflow most of time. Maximum inflow, 1,480 ft^3/s (41.9 m^3/s), average for 5-minute interval, Apr. 23, computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 709 ft^3/s (20.1 m^3/s) May 1, 1956, gage height, 23.21 ft (7.07 m); no outflow most of time each year. Maximum inflow, 11,500 ft^3/s (326 m^3/s), average for 5-minute interval, Apr. 30, 1956, computed from outflow and change in pool contents and adjusted for rainfall on pool surface during time of peak inflow; no inflow for many days each year.

REMARKS.--Records fair except those for Apr. 3-17, which are poor. The pool is formed by a rolled earthfill dam 3,000 ft (914 m) long. The dam was completed Apr. 25, 1955, and storage began shortly thereafter. The outlet structure consists of a 30-inch (762-millimeter) square concrete drop inlet that is connected to a 14-inch (356-millimeter) concrete outlet pipe. The gage height at top of the drop inlet is 11.0 ft (3.4 m). The emergency spillway is a 250-foot (7-meter) wide cut in natural ground at the right end of dam. The gage height at crest of emergency spillway is 21.8 ft (6.6 m). There is a cleanout gate valve at the end of an 8-inch (203-millimeter) pipe which connects to the lower end of the drop-inlet box at a gage height of 3.76 ft (1.15 m). The pool capacity at the crest of emergency spillway is 1,097 acre-ft (1.35 hm^3); at top of drop inlet, 223 acre-ft (0.275 hm^3); and at controlled outlet pipe, 48.0 acre-ft (59,200 m^3). 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 (0.223 hm^3) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	17.7	2.2	3.0	14.9	11.2	36.8	526	133	23.8	92.6	0	4.4
Outflow	0	0	0	0	0	0	331	299	7.7	60.7	0	0
(†)	6.8	-6.8	-6.5	13.6	6.5	24.2	212	-190	-4.9	13.0	-34.7	-15.0
(††)	3.24	1.11	.06	2.73	1.64	1.86	7.99	2.30	1.98	4.89	0	1.79

CAL YR 1972: Inflow 131 Outflow 2.7 † -78.1 †† 18.55
WTR YR 1973: Inflow 866 Outflow 698 † 18.2 †† 29.59

PEAK INFLOW (BASE, 100 FT^3/S)

DATE	TIME	DISCHARGE
4-17	about 1000	unknown
4-23	1905	*1,480
7- 9	1800	*245

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.

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 (0.8 km) upstream from Cottonwood Creek, and 1.7 miles (2.7 km) northwest of Alexander.

DRAINAGE AREA.--46.1 mi² (119 km²).

PERIOD OF RECORD.--October 1954 to April 1958 (annual maximums only), May 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,172.00 ft (357.23 m) above mean sea level. Prior to May 27, 1958, nonrecording gage and crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 6.12 ft³/s (0.173 m³/s), 1.80 in/yr (45.7 mm/yr), 4,430 acre-ft/yr (5.46 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,200 ft³/s (176 m³/s) Apr. 23, gage height, 17.40 ft (5.30 m), from floodmark; no flow at times.

Period of record: Maximum discharge, 23,900 ft³/s (677 m³/s) Apr. 30, 1956, gage height, 23.95 ft (7.30 m), from rating curve extended above 2,400 ft³/s (68.0 m³/s) on basis of contracted-opening measurement of 23,900 ft³/s (677 m³/s); no flow at times each year.

Maximum discharge since at least 1910, 55,800 ft³/s (1,580 m³/s) May 23, 1952, gage height, 28.0 ft (8.5 m), on basis of contracted-opening measurement of peak flow.

REMARKS.--Records good. At end of year, flow from 22.3 mi² (57.8 km²) above this station was partly controlled by eight floodwater-retarding structures with a total combined capacity of 7,470 acre-ft (9.21 hm³) below flood-spillway crests, of which 6,510 acre-ft (8.03 hm³) is floodwater-retarding capacity and 960 acre-ft (1.18 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS.--WRD Texas 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.4	.01	.01	.11	.38	.32	62	.70	0	4.4	
2	0	1.7	.01	.01	.09	.38	.32	59	.60	0	3.4	
3	0	.90	.01	.02	.13	.38	.32	58	28	0	2.8	
4	0	.52	.01	.01	.11	.32	.32	51	12	0	2.0	
5	0	.27	.01	1.1	.09	.38	.23	49	11	0	.90	
6	0	.20	.01	1.4	.07	53	.20	45	8.2	0	.38	
7	0	.11	.01	1.2	.06	13	.32	31	3.2	0	.13	
8	0	.07	.01	.80	14	7.0	.32	21	1.7	123	.05	
9	0	.04	.01	.80	3.8	4.4	.38	17	.90	68	.03	
10	0	.02	.01	.80	1.8	9.2	.27	12	.60	32	.02	
11	0	.02	.01	.80	.70	2.4	.23	9.4	.52	21	.02	
12	0	.01	.01	.80	.45	1.5	.32	6.7	.52	20	.02	
13	0	.03	.01	.70	.23	1.1	.38	5.2	.70	22	.02	
14	0	.02	.01	.32	.15	.60	.45	4.7	.70	17	.02	
15	0	.01	.01	.23	.17	.70	20	4.4	.60	13	.01	
16	0	.01	.01	.15	.11	.52	8.5	4.2	.32	9.4	.01	
17	0	.01	.01	.15	.15	.38	263	4.0	.23	6.2	0	
18	0	.01	.01	.11	.20	.38	43	5.7	.13	4.0	0	
19	0	.01	.01	.06	.23	.27	36	8.2	.05	2.6	0	
20	0	.01	.01	.06	.20	.27	22	8.2	.05	.90	0	
21	0	.01	.01	.04	.23	.27	17	7.8	.05	.27	0	
22	0	.01	.01	.03	1.7	.27	12	7.0	.05	.07	0	
23	0	.01	.01	.02	4.7	.32	866	8.2	.03	.02	0	
24	0	.01	.01	.01	2.2	4.0	498	9.0	.03	0	0	
25	0	.01	.01	.42	1.2	1.7	112	8.6	.02	0	0	
26	0	.01	.01	4.4	.70	.70	93	5.9	.02	0	0	
27	4.4	.01	.01	2.2	.52	.45	85	3.2	.01	0	0	
28	8.2	.01	.01	.90	.38	.45	81	1.8	.01	0	0	
29	5.7	.01	.01	.52	------	.52	77	1.2	0	0	0	
30	4.0	.01	.01	.27	------	.60	65	1.1	0	14	0	
31	3.1	------	.01	.20	------	.80	------	.80	------	13	0	------
TOTAL	25.4	6.47	.31	18.54	34.48	106.64	2,302.88	520.30	70.94	366.46	14.21	0
MEAN	.82	.22	.010	.60	1.23	3.44	76.8	16.8	2.36	11.8	.46	0
MAX	8.2	2.4	.01	4.4	14	53	866	62	28	123	4.4	0
MIN	0	.01	.01	.01	.06	.27	.20	.80	0	0	0	0
CFSM	.02	.005	.0002	.01	.03	.07	1.67	.36	.05	.26	.01	0
IN.	.02	.005	0	.01	.03	.09	1.86	.42	.06	.30	.01	0
AC-FT	50	13	.6	37	68	212	4,570	1,030	141	727	28	0

CAL YR 1972 TOTAL 3,466.63 MEAN 9.47 MAX 866 MIN 0 CFSM .21 IN 2.80 AC-FT 6,880
WTR YR 1973 TOTAL 3,466.63 MEAN 9.50 MAX 866 MIN 0 CFSM .21 IN 2.80 AC-FT 6,880

08094800 North Bosque River at Hico, Tex.

LOCATION.--Lat 31°58'39", long 98°02'05", Hamilton County, on left bank at downstream side of bridge on U.S. Highway 281 near south boundary of Hico, 2.5 miles (4.0 km) downstream from Gilmore Creek, 5.0 miles (8.0 km) upstream from Honey Creek, and at mile 92.4 (148.7 km).

DRAINAGE AREA.--357 mi² (925 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 982.46 ft (299.45 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 50.6 ft³/s (1.43 m³/s), 36,660 acre-ft/yr (45.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,880 ft³/s (251 m³/s) Apr. 24, gage height, 18.45 ft (5.62 m); minimum, 1.2 ft³/s (34 dm³/s) Oct. 11-17.
Period of record: Maximum discharge, 16,800 ft³/s (476 m³/s) May 16, 1965, gage height, 21.83 ft (6.65 m), from rating curve extended above 9,000 ft³/s (255 m³/s); no flow at times in 1962-65, 1967-68, 1971.
Maximum stage since at least 1880, 27.6 ft (8.4 m) May 23, 1952, from floodmarks, discharge, 87,800 ft³/s (2,490 m³/s), by contracted-opening measurement.

REMARKS.--Records good. At end of year, flow from 163 mi² (422 km²) above this station was partly controlled by 39 floodwater-retarding structures with a total combined capacity of 65,090 acre-ft (80.3 hm³) below the flood-spillway crests, of which 59,560 acre-ft (73.4 hm³) is floodwater-retarding capacity and 5,540 acre-ft (6.83 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.4	3.8	4.1	6.5	24	18	215	17	6.4	101	2.6
2	1.7	3.2	3.8	8.1	6.5	24	17	171	16	5.5	49	2.6
3	1.7	3.2	3.8	25	6.5	23	15	149	322	5.5	27	2.6
4	1.7	3.0	3.8	23	6.5	23	15	139	361	5.5	18	2.6
5	1.7	3.0	3.6	9.2	6.5	23	14	128	250	5.2	13	2.6
6	1.7	3.0	3.6	6.2	6.5	158	15	257	282	6.1	8.9	3.9
7	1.7	3.0	3.6	6.3	45	141	15	149	112	9.1	6.5	5.5
8	1.6	2.8	3.6	5.2	215	62	15	93	68	8.9	6.0	8.6
9	1.4	2.8	3.4	4.7	52	38	15	78	48	127	5.7	5.1
10	1.4	2.8	3.8	5.1	31	218	14	64	39	55	5.1	4.1
11	1.2	2.8	3.8	5.1	25	85	12	55	31	44	4.8	3.8
12	1.2	3.0	4.4	5.1	21	40	12	60	25	124	4.3	3.2
13	1.2	4.1	4.1	5.1	17	32	12	42	26	116	3.8	3.0
14	1.2	6.0	4.1	5.5	15	29	13	38	28	59	4.0	2.8
15	1.2	6.0	4.1	4.7	13	24	104	36	27	147	4.2	2.7
16	1.2	5.7	4.1	4.7	12	23	182	33	23	191	3.8	2.7
17	1.2	5.1	3.8	4.7	13	21	1,310	30	20	87	3.8	2.7
18	1.3	4.7	3.8	5.1	15	20	869	30	18	26	3.5	2.8
19	1.4	4.7	3.8	5.1	15	19	332	29	15	15	2.7	2.7
20	1.6	4.3	3.8	5.1	15	17	168	29	34	11	2.7	2.8
21	1.8	4.1	4.1	4.8	17	16	107	28	28	8.7	2.7	3.0
22	57	3.8	4.1	4.7	33	15	81	25	19	7.0	2.7	3.0
23	6.5	3.8	4.1	4.7	55	16	984	24	16	5.6	2.7	3.2
24	3.6	4.2	4.1	4.7	38	50	6,150	27	14	5.1	2.7	3.2
25	3.0	5.0	4.4	10	31	37	1,770	57	11	4.7	2.7	3.4
26	44	4.7	4.4	32	29	24	1,150	80	11	4.4	2.7	3.0
27	52	5.4	4.4	20	26	20	746	61	10	4.4	2.7	3.8
28	13	5.5	4.3	11	25	19	445	36	9.3	4.4	2.7	3.4
29	6.0	5.1	4.1	10	------	18	322	27	8.3	94	2.7	3.4
30	3.8	4.2	4.1	8.9	------	18	245	22	7.3	49	2.7	3.6
31	3.4	------	4.1	7.0	------	18	------	19	------	329	2.7	------
TOTAL	223.1	122.4	122.8	264.9	797.0	1,295	15,167	2,231	1,895.9	1,570.5	307.5	102.4
MEAN	7.20	4.08	3.96	8.55	28.5	41.8	506	72.0	63.2	50.7	9.92	3.41
MAX	57	6.0	4.4	32	215	218	6,150	257	361	329	101	8.6
MIN	1.2	2.8	3.4	4.1	6.5	15	12	19	7.3	4.4	2.7	2.6
AC-FT	443	243	244	525	1,580	2,570	30,080	4,430	3,760	3,120	610	203

CAL YR 1972 TOTAL 6,989.22 MEAN 19.1 MAX 395 MIN .39 AC-FT 13,860
WTR YR 1973 TOTAL 24,099.50 MEAN 66.0 MAX 6,150 MIN 1.2 AC-FT 47,800

PEAK DISCHARGE (BASE, 2,500 FT³/S).--Apr. 17 (1815) 4,070 ft³/s (11.62 ft); Apr. 24 (0400) 8,880 ft³/s (18.45 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 (0.8 km) northeast of Clifton, 2.5 miles (4.0 km) downstream from Meridian Creek, and at mile 42.0 (67.6 km).

DRAINAGE AREA.--972 mi² (2,517 km²).

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 605.43 ft (184.54 m) above mean sea level. Prior to Oct. 1, 1955, and from Apr. 23, 1957, to Mar. 26, 1958, nonrecording gage at site 1.1 miles (1.8 km) upstream at datum 17.02 ft (5.19 m) higher; Oct. 1, 1955, to Apr. 22, 1957, and Mar. 27, 1958, to Sept. 30, 1959, water-stage recorder (destroyed by floods of Apr. 27, 1957, and Oct. 4, 1959); and Oct. 1, 1959, to Jan. 1, 1961, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years (1923-67) unregulated, 195 ft³/s (5.52 m³/s), 141,300 acre-ft/yr (174 hm³/yr); 6 years (1967-73) regulated, 252 ft³/s (7.14 m³/s), 182,600 acre-ft/yr (225 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,900 ft³/s (535 m³/s) Apr. 24, gage height, 20.79 ft (6.34 m); minimum daily, 2.8 ft³/s (79 dm³/s) Oct. 20.

Period of record: Maximum discharge, 92,800 ft³/s (2,630 m³/s) Oct. 4, 1959, gage height, 34.88 ft (10.63 m), from rating curve extended above 34,000 ft³/s (963 m³/s) on basis of contracted-opening measurement of 92,800 ft³/s (2,630 m³/s); no flow at times.

Maximum stage since at least 1854, that of Oct. 4, 1959. Flood of May 9, 1922, reached a stage of about 32 ft (9.8 m), from information by local residents.

REMARKS.--Records good. The city of Clifton diverted 5.2 acre-ft (6,410 m³) of water from the river above the station for municipal use and returned 137 acre-ft (0.17 hm³) of sewage effluent below station. The city of Meridian discharged 75 acre-ft (92,480 m³) of sewage effluent into the river at about mile 56 (90.1 km). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	32	26	20	152	180	127	443	75	40	266	7.2
2	15	39	27	28	134	176	118	383	80	39	130	7.4
3	13	41	26	116	119	161	113	323	134	36	76	7.3
4	11	31	25	197	112	161	106	291	769	34	54	8.0
5	9.0	28	24	102	110	164	101	278	462	35	41	9.8
6	8.0	25	25	72	104	278	98	322	1,520	48	34	15
7	7.0	28	24	85	104	712	103	777	475	125	29	17
8	6.0	26	23	159	861	373	105	388	270	62	25	19
9	5.0	25	23	97	551	240	111	263	188	44	21	21
10	4.5	26	22	70	290	720	108	219	145	85	18	23
11	4.3	22	21	65	223	734	101	197	127	87	17	32
12	4.1	22	22	62	196	316	96	198	115	72	16	42
13	3.9	39	22	62	176	232	95	183	110	321	15	21
14	3.7	53	23	66	154	204	129	162	109	167	14	17
15	3.5	47	24	69	138	182	377	150	103	720	13	15
16	3.3	32	24	68	124	170	1,240	142	92	495	12	14
17	3.1	29	24	65	130	158	524	131	81	377	11	13
18	3.0	30	24	63	154	149	2,480	122	70	184	11	12
19	2.9	29	23	59	173	142	813	115	63	105	10	12
20	2.8	28	23	57	159	132	465	107	361	65	10	12
21	3.5	27	22	61	150	122	318	103	154	49	9.2	11
22	360	26	21	60	196	117	264	96	129	42	8.8	10
23	213	25	21	56	405	118	270	92	86	37	8.4	9.8
24	63	24	21	60	349	262	13,600	88	69	33	8.2	11
25	44	25	20	96	262	379	4,360	93	57	29	7.8	11
26	67	27	20	515	215	219	1,840	201	52	25	7.6	12
27	533	28	20	346	189	164	1,250	236	49	23	7.6	43
28	151	26	20	231	177	149	820	169	47	22	7.3	23
29	61	25	20	171	------	140	634	119	44	21	7.1	17
30	43	24	21	154	------	131	508	95	43	20	7.3	17
31	33	------	20	140	------	129	------	82	------	83	7.5	------
TOTAL	1,710.6	889	701	3,472	6,107	7,514	31,274	6,568	6,079	3,525	909.8	489.5
MEAN	55.2	29.6	22.6	112	218	242	1,042	212	203	114	29.3	16.3
MAX	533	53	27	515	861	734	13,600	777	1,520	720	266	43
MIN	2.8	22	20	20	104	117	95	82	43	20	7.1	7.2
AC-FT	3,390	1,760	1,390	6,890	12,110	14,900	62,030	13,030	12,060	6,990	1,800	971

CAL YR 1972 TOTAL 29,242.4 MEAN 79.9 MAX 1,990 MIN 2.2 AC-FT 58,000
WTR YR 1973 TOTAL 69,238.9 MEAN 190 MAX 13,600 MIN 2.8 AC-FT 137,300

PEAK DISCHARGE (BASE, 8,300 FT³/S).--Apr. 24 (1330) 18,900 ft³/s (20.79 ft).

08095200 North Bosque River at Valley Mills, Tex.

LOCATION.--Lat 31°40'10", long 97°28'09", Bosque County, on right bank at downstream side of bridge on Farm Road 56, about 0.8 mile (1.3 km) downstream from Thompson Hollow, 0.8 mile (1.3 km) north of intersection of State Highway 6 and Farm Road 56 in Valley Mills, and at mile 28.0 (45.1 km).

DRAINAGE AREA.--1,150 mi² (2,978 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 524.55 ft (159.88 m) above mean sea level. Prior to Dec. 29, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years (1959-67) unregulated, 263 ft³/s (7.45 m³/s), 190,500 acre-ft/yr (235 hm³/yr); 6 years (1967-73) regulated, 291 ft³/s (8.24 m³/s), 210,800 acre-ft/yr (260 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,600 ft³/s (527 m³/s) Apr. 24, gage height, 28.54 ft (8.70 m); minimum, 2.7 ft³/s (76 dm³/s) Oct. 20.

Period of record: Maximum discharge, 107,000 ft³/s (3,030 m³/s) Oct. 4, 1959, gage height, 40.22 ft (12.26 m), from floodmark, from rating curve extended above 28,200 ft³/s (799 m³/s) on basis of slope-area measurement of 107,000 ft³/s (3,030 m³/s); no flow Oct. 5-12, 1965.

Maximum stage since at least 1868, 43 ft (13 m) in May 1908. Floods in September 1936 and April 1945 reached a stage of about 38 ft (12 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	46	25	20	150	208	144	585	122	52	220	12
2	16	44	26	23	142	222	135	519	129	48	157	12
3	12	53	26	76	124	201	129	449	606	45	99	12
4	9.1	44	25	258	114	196	117	403	772	42	72	12
5	7.6	34	24	144	112	199	107	404	504	41	57	12
6	6.8	29	24	94	108	251	105	488	1,480	78	47	15
7	5.9	25	24	86	106	711	108	930	540	173	41	20
8	5.2	27	25	182	653	454	110	560	313	98	36	22
9	4.8	22	25	135	664	302	109	381	217	66	32	22
10	4.8	20	25	90	327	659	113	317	175	68	28	21
11	4.5	20	26	78	247	870	102	264	170	110	26	22
12	4.3	18	26	73	215	374	94	321	150	104	25	65
13	4.1	29	26	71	195	270	90	243	150	245	24	48
14	3.8	59	27	73	175	242	105	216	140	225	22	28
15	3.6	68	30	80	154	220	215	203	140	1,100	21	24
16	3.5	48	29	82	138	213	1,480	184	130	522	20	22
17	3.2	38	29	78	136	199	601	171	110	398	19	22
18	3.3	37	28	75	161	184	2,330	158	95	242	18	20
19	3.0	35	28	70	185	176	950	148	85	161	19	20
20	2.9	33	27	66	177	164	610	136	500	110	17	20
21	3.7	32	27	68	167	151	447	128	200	77	16	19
22	186	29	25	68	200	144	372	119	165	63	15	17
23	292	28	25	64	395	143	340	114	114	55	14	18
24	89	28	23	60	406	234	11,700	111	91	47	13	19
25	45	28	22	83	311	449	5,940	120	78	53	13	18
26	81	28	22	459	279	274	2,270	240	70	40	13	19
27	487	30	21	382	249	201	1,560	276	65	37	13	74
28	234	29	21	254	232	173	1,070	215	61	33	13	50
29	102	27	21	184	------	165	805	153	59	31	12	30
30	67	26	22	157	------	153	658	124	56	29	12	28
31	49	------	21	145	------	147	------	121	------	81	12	------
TOTAL	1,758.1	1,014	775	3,778	6,522	8,549	32,916	8,801	7,487	4,474	1,146	743
MEAN	56.7	33.8	25.0	122	233	276	1,097	284	250	144	37.0	24.8
MAX	487	68	30	459	664	870	11,700	930	1,480	1,100	220	74
MIN	2.9	18	21	20	106	143	90	111	56	29	12	12
AC-FT	3,490	2,010	1,540	7,490	12,940	16,960	65,290	17,460	14,850	8,870	2,270	1,470

CAL YR 1972 TOTAL 34,514.0 MEAN 94.3 MAX 2,010 MIN 2.9 AC-FT 68,460
WTR YR 1973 TOTAL 77,963.1 MEAN 214 MAX 11,700 MIN 2.9 AC-FT 154,600

PEAK DISCHARGE (BASE, 8,500 FT³/S).--Apr. 24 (1630) 18,600 ft³/s (28.54 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 (335 m) downstream from Pecan Creek, 5.2 miles (8.4 km) northeast of McGregor, and 8.2 miles (13.2 km) upstream from South Bosque River.

DRAINAGE AREA.--182 mi² (471 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 530.51 ft (161.70 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 87.8 ft³/s (2.49 m³/s), 63,610 acre-ft/yr (78.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,450 ft³/s (268 m³/s) May 25, gage height, 11.63 ft (3.54 m); minimum, 0.01 ft³/s (0.28 dm³/s) Oct. 1-3.
Period of record: Maximum discharge, 32,600 ft³/s (923 m³/s) June 16, 1964, gage height, 24.30 ft (7.41 m); 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 (8.7 m); flood in 1957 reached a stage of 28.2 ft (8.6 m); and floods in 1913 and 1942 or 1943 reached a stage of about 28 ft (9 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	110	7.8	10	112	98	62	132	93	54	18	.37
2	.01	68	7.8	12	81	94	61	113	110	49	16	.40
3	.02	22	8.1	37	76	88	65	98	2,320	44	12	.40
4	.03	15	6.8	34	74	87	57	93	1,130	41	10	.38
5	.03	12	7.1	25	71	82	52	91	326	41	8.9	.37
6	.03	13	6.5	24	68	92	55	390	381	103	7.8	1.2
7	.02	19	5.8	39	69	81	69	566	215	98	7.1	1.0
8	.03	16	6.0	45	178	74	58	146	179	57	6.0	.79
9	.02	11	6.3	40	116	71	50	120	158	57	5.0	.64
10	.02	9.4	6.6	39	102	744	45	102	153	42	4.1	.72
11	.02	8.6	6.8	39	98	188	44	94	368	35	3.7	.88
12	.02	8.9	7.7	40	96	140	43	535	532	37	3.0	.60
13	.02	17	7.8	41	89	132	42	134	296	59	2.6	.48
14	.02	20	21	45	77	123	44	108	217	38	2.4	.31
15	.03	11	28	43	72	110	123	101	179	267	2.5	.31
16	.02	10	19	41	70	123	418	91	152	128	1.9	.31
17	.02	10	15	41	83	104	119	82	133	92	1.6	.27
18	.03	12	15	40	97	97	115	75	117	52	1.7	.21
19	.02	11	15	37	83	93	97	68	102	43	1.7	.22
20	.02	10	15	38	74	84	84	61	358	37	1.1	.21
21	1.8	9.4	14	40	83	79	76	57	221	33	.88	.18
22	79	9.2	13	36	123	78	82	51	128	30	.73	.17
23	13	9.2	12	32	156	78	107	48	109	27	.60	.29
24	2.6	11	12	31	127	195	1,790	61	96	24	.52	.39
25	1.1	12	12	180	119	107	366	1,200	96	22	.47	.28
26	497	11	11	241	110	82	232	1,570	86	22	.41	.94
27	159	9.9	11	140	103	77	180	164	78	20	.40	2.9
28	21	8.8	11	105	100	76	158	111	70	17	.38	1.7
29	9.0	8.0	12	96	------	73	144	93	64	14	.34	1.8
30	6.1	7.8	12	97	------	70	138	84	60	13	.35	1.3
31	4.7	------	10	103	------	68	------	74	------	13	.36	------
TOTAL	794.75	510.2	349.1	1,811	2,707	3,688	4,976	6,713	8,527	1,609	122.54	20.02
MEAN	25.6	17.0	11.3	58.4	96.7	119	166	217	284	51.9	3.95	.67
MAX	497	110	28	241	178	744	1,790	1,570	2,320	267	18	2.9
MIN	.01	7.8	5.8	10	68	68	42	48	60	13	.34	.17
AC-FT	1,570	1,010	692	3,590	5,370	7,320	9,870	13,320	16,910	3,190	243	40

CAL YR 1972 TOTAL 11,453.44 MEAN 31.3 MAX 1,020 MIN .01 AC-FT 22,720
WTR YR 1973 TOTAL 31,827.61 MEAN 87.2 MAX 2,320 MIN .01 AC-FT 63,130

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-24	1500	10.86	8,400
5-25	2315	11.63	9,450
6- 3	2100	11.41	9,150

08095400 Hog Creek near Crawford, Tex.

LOCATION.--Lat 31°33'20", long 97°21'22", McLennan County, on downstream side of bridge on Farm Road 185, 5.6 miles (9.0 km) east of Crawford, and 9.8 miles (15.8 km) upstream from South Bosque River.

DRAINAGE AREA.--78.2 mi² (203 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 560.54 ft (170.85 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 37.3 ft³/s (1.06 m³/s), 27,020 acre-ft/yr (33.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,150 ft³/s (202 m³/s) June 3, gage height, 9.54 ft (2.91 m); minimum, 0.09 ft³/s (2.5 dm³/s) Oct. 4.
Period of record: Maximum discharge, 15,400 ft³/s (436 m³/s) Oct. 4, 1959, gage height, 14.31 ft (4.36 m); no flow at times in 1959, 1963-64, and 1971.
Maximum stage since 1900, 17.5 ft (5.3 m) Sept. 26, 1936. Flood in April or May 1957 reached a stage of 15.7 ft (4.8 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	21	3.0	2.5	35	35	23	49	35	21	9.2	.82
2	.19	9.9	2.9	3.1	27	33	23	43	36	20	8.5	.78
3	.18	5.5	2.8	9.4	24	32	31	37	1,340	18	7.8	.68
4	.11	4.7	2.9	14	24	31	24	35	402	17	7.0	.64
5	.12	3.5	3.3	11	23	29	21	36	144	16	6.2	.68
6	.14	3.3	2.8	8.5	22	34	22	157	107	82	5.8	1.5
7	.22	3.1	2.9	13	22	33	27	358	73	98	5.3	1.4
8	.29	2.5	3.1	14	63	29	24	69	60	47	4.9	1.1
9	.29	2.3	3.0	14	43	27	22	53	53	31	4.4	1.1
10	.23	2.0	3.0	12	34	309	20	45	49	22	4.7	.87
11	.21	1.8	3.5	13	32	87	19	40	133	20	4.3	.79
12	.21	2.2	4.8	13	31	55	19	289	214	58	3.5	.78
13	.21	6.3	3.5	13	29	50	18	63	108	106	2.8	.71
14	.20	10	7.1	13	25	46	19	48	76	28	2.6	.66
15	.20	6.0	6.4	13	23	41	55	45	62	110	2.3	.56
16	.16	4.2	5.5	12	23	43	132	40	52	132	2.0	.49
17	.15	3.5	4.8	12	26	39	49	35	46	45	1.9	.42
18	.16	3.8	4.3	11	29	35	42	32	41	30	2.0	.36
19	.43	3.6	4.3	10	29	33	35	30	36	24	1.8	.36
20	.49	3.5	3.9	10	27	31	31	28	188	21	1.7	.33
21	.61	3.5	3.6	12	28	29	28	25	78	20	1.5	.31
22	48	3.4	3.4	10	40	29	37	23	47	18	1.4	.28
23	15	3.4	3.2	9.6	54	29	42	23	39	17	1.2	.40
24	2.7	3.8	2.9	8.4	46	50	1,130	39	36	15	1.1	1.0
25	.96	4.4	2.8	53	43	42	167	350	34	14	.97	.62
26	109	4.3	2.7	119	40	31	92	682	32	13	.88	1.2
27	101	3.9	2.5	60	37	28	70	72	29	12	.82	5.1
28	15	3.3	2.7	40	35	28	61	48	27	11	.79	1.8
29	5.8	3.1	2.8	34	------	27	55	41	25	10	.77	.93
30	3.4	3.0	2.6	32	------	26	51	36	23	9.7	.76	.82
31	2.5	------	2.5	34	------	24	------	33	------	9.1	.97	------
TOTAL	308.33	138.8	109.5	633.5	914	1,395	2,389	2,904	3,625	1,094.8	99.86	27.49
MEAN	9.95	4.63	3.53	20.4	32.6	45.0	79.6	93.7	121	35.3	3.22	.92
MAX	109	21	7.1	119	63	309	1,130	682	1,340	132	9.2	5.1
MIN	.11	1.8	2.5	2.5	22	24	18	23	23	9.1	.76	.28
AC-FT	612	275	217	1,260	1,810	2,770	4,740	5,760	7,190	2,170	198	55

CAL YR 1972 TOTAL 4,910.72 MEAN 13.4 MAX 1,160 MIN .09 AC-FT 9,740
WTR YR 1973 TOTAL 13,639.28 MEAN 37.4 MAX 1,340 MIN .11 AC-FT 27,050

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-24	1215	8.78	6,050
5-26	0015	7.57	4,290
6- 3	2245	9.54	7,150

08095550 Waco Lake near Waco, Tex.

LOCATION.--Lat 31°34'46", long 97°11'51", McLennan County, in intake structure at Waco Dam on Bosque River, at northwest edge of city limits of Waco, and 4.6 miles (7.4 km) upstream from Brazos River.

DRAINAGE AREA.--1,652 mi² (4,279 km²).

PERIOD OF RECORD.--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, 200,100 acre-ft (247 hm³) Apr. 26, elevation, 461.16 ft (140.56 m); minimum, 139,700 acre-ft (172 hm³) Oct. 20, elevation, 453.20 ft (138.14 m).
Period of record: Maximum contents, 292,100 acre-ft (360 hm³) May 15, 1968, elevation, 470.86 ft (143.52 m); minimum since initial filling, 134,300 acre-ft (166 hm³) Sept. 20, 1965, elevation, 452.43 ft (137.90 m).

REMARKS.--Lake is formed by a rolled earthfill dam, 24,618 ft (7,504 m) long, including spillway. Lake was built for flood control and water conservation. Outlet works consist of three gate-controlled outlets, 6 by 20 ft (2 by 6 m), opening into one 20-foot-diameter (6-meter) concrete conduit and two 54-inch (1-meter) concrete pipes. Emergency spillway controlled by 14 40- by 35-foot (12- by 11-meter) tainter gates. Low-flow releases are made through two 54-inch (1-meter) valves. The water supply releases are controlled by four 54-inch (1-meter) butterfly valves. Flow into two wet wells is controlled by four 5- by 6-foot (2- by 2-meter) slide gates with lowest invert at 408.0 ft (124.4 m), 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)

452.0	131,400	462.0	207,100
454.0	145,300	464.0	224,500
456.0	159,800	466.0	242,900
458.0	174,800	468.0	262,500
460.0	190,600	470.0	283,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142,900	158,600	154,100	154,800	159,700	156,200	152,700	161,300	161,300	154,300	151,900	144,100
2	142,700	158,200	154,200	155,100	158,100	155,900	152,900	154,300	157,800	154,300	151,900	143,900
3	142,600	157,600	154,200	155,400	156,300	155,100	152,900	152,700	172,000	154,300	151,800	143,800
4	142,400	156,700	154,200	155,900	154,700	154,500	152,800	152,900	182,600	154,300	151,600	143,500
5	142,200	155,800	154,100	156,200	153,200	154,600	152,700	153,400	184,500	154,300	151,400	143,300
6	142,100	155,200	154,000	156,500	152,600	155,400	152,900	154,600	184,400	154,600	151,300	143,900
7	141,900	154,100	154,000	157,300	152,800	156,900	152,900	157,200	181,900	155,200	151,000	143,800
8	141,600	153,200	154,100	157,700	153,700	156,600	153,000	156,200	176,800	155,300	150,700	143,700
9	141,400	152,800	154,100	157,300	154,700	153,800	152,800	153,400	171,400	155,500	150,300	143,600
10	141,300	152,800	154,200	157,100	154,200	156,500	152,700	151,900	165,700	153,800	150,100	143,500
11	141,100	152,800	154,400	157,400	153,500	159,300	152,600	152,200	163,000	152,800	149,800	144,100
12	141,100	153,100	154,500	157,600	152,900	158,100	152,600	153,500	163,500	153,100	149,600	144,100
13	140,900	153,200	154,500	157,800	152,800	154,000	152,600	153,500	159,300	153,500	149,300	144,000
14	140,700	153,100	155,400	157,900	152,600	152,100	152,900	153,400	154,300	154,000	149,000	144,000
15	140,400	153,200	155,600	155,300	152,700	152,600	154,500	153,200	152,100	159,800	148,800	143,800
16	140,300	153,200	155,700	152,400	152,800	152,900	158,600	152,900	153,000	160,800	148,400	143,600
17	140,100	153,400	155,800	152,400	153,200	152,800	160,800	152,700	153,700	159,600	148,300	143,500
18	140,000	153,500	155,800	152,300	153,400	152,600	162,100	152,600	154,200	158,400	148,200	143,300
19	140,000	153,500	155,600	152,300	153,600	152,600	158,400	152,500	154,700	157,100	147,900	143,100
20	139,700	153,500	155,600	152,400	153,800	152,300	154,100	152,400	157,800	156,500	147,700	143,000
21	141,100	153,600	155,600	152,600	154,300	152,100	152,100	152,400	159,100	155,400	147,300	142,800
22	147,000	153,600	155,400	152,300	155,200	152,300	152,000	152,500	157,900	154,300	147,000	142,700
23	147,600	153,600	155,500	152,200	156,000	152,500	152,600	152,700	154,200	153,500	146,600	142,600
24	147,800	153,900	155,400	152,400	156,900	155,500	179,300	153,200	152,900	152,900	146,200	142,500
25	147,800	154,000	155,200	155,400	157,800	156,400	196,900	157,700	153,100	152,800	145,800	142,300
26	154,000	154,000	155,100	157,600	157,800	155,600	198,900	166,400	153,500	152,600	145,500	143,500
27	155,700	154,000	155,000	158,900	157,200	153,700	193,800	167,600	153,700	152,600	145,200	144,200
28	156,500	154,000	154,800	160,000	156,700	152,400	185,800	168,300	153,900	152,400	144,900	144,300
29	156,900	154,000	154,900	160,700	------	152,200	178,600	168,200	154,000	152,100	144,600	144,200
30	156,700	154,100	154,800	161,400	------	152,500	169,200	166,900	154,100	151,900	144,500	144,200
31	156,000	------	154,800	161,100	------	152,600	------	163,800	------	151,800	144,300	------
(†)	455.48	455.22	455.31	456.17	455.58	455.02	457.25	456.54	455.22	454.90	453.86	453.85
(*)	+12,700	-1,900	+700	+6,300	-4,400	-4,100	+16,600	-5,400	-9,700	-2,300	-7,500	-100
(††)	2,040	1,820	1,640	1,630	1,530	1,710	1,660	1,920	1,840	2,730	3,250	2,140
MAX	156,900	158,600	155,800	161,400	159,700	159,300	198,900	168,300	184,500	160,800	151,900	144,300
MIN	139,700	152,800	154,000	152,200	152,600	152,100	152,000	151,900	152,100	151,800	144,300	142,300

CAL YR 1972..... * -2,900 †† 25,280 MAX 165,300 MIN 139,700
WTR YR 1973..... * +900 †† 23,910 MAX 198,900 MIN 139,700

† 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 (2.9 km) downstream from Waco Lake dam, 2.8 miles (4.5 km) upstream from mouth, and 4.7 miles (7.6 km) northwest of courthouse in Waco.

DRAINAGE AREA.--1,655 mi² (4,286 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 365.44 ft (111.39 m) above mean sea level. Prior to Jan. 21, 1960, nonrecording gage, and from Jan. 21 to Aug. 20, 1960, nonrecording gage below 11.38 ft (3.47 m) and water-stage recorder above. All gages at same site and datum. Dec. 30, 1959, to Aug. 29, 1967, auxiliary water-stage recorder 2.7 miles (4.3 km) downstream at datum 4.66 ft (1.42 m) lower. Since Aug. 30, 1967, auxiliary water-stage recorder 0.7 mile (1.1 km) downstream at datum 4.66 ft (1.42 m) lower.

AVERAGE DISCHARGE.--14 years, 469 ft³/s (13.3 m³/s), 339,800 acre-ft/yr (419 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 5,000 ft³/s (142 m³/s) Apr. 28 to May 1; maximum gage height, 15.00 ft (4.57 m) Apr. 25 (backwater from Brazos Lake); no flow at times.
Period of record: Maximum discharge, 69,000 ft³/s (1,950 m³/s) Oct. 4, 1959, gage height, 39.8 ft (12.1 m) from floodmark, from rating curve extended above 51,000 ft³/s (1,440 m³/s) on basis of computation of peak flow through gates at old Lake Waco; no flow at times in 1963-64, 1966-67, 1970, 1972, and 1973.
Maximum stage since at least 1880, 44.5 ft (13.6 m) Sept. 27, 1936, from information by local resident, discharge, 96,000 ft³/s (2,720 m³/s). Maximum stage may be the result of backwater from Brazos River because the discharge on Apr. 22, 1945, 140,000 ft³/s (3,960 m³/s), and Apr. 20, 1957, 103,000 ft³/s (2,920 m³/s), 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 poor. Backwater at times from the Brazos River and Brazos Lake. Discharge Mar. 10 to May 17 and July 10 to Sept. 3 is record of releases furnished by Corps of Engineers from Waco Lake. Flow regulated by Waco Lake (see preceding page). Records furnished by the city of Waco show that they diverted 23,920 acre-ft (29.5 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	371	2.8	81	1,320	577	125	5,000	2,160	62		
2	2.0	454	2.8	81	1,310	615	125	3,600	2,150	63		
3	1.8	475	3.0	89	1,310	671	125	1,100	1,080	63		
4	1.8	480	3.0	81	1,300	694	125	232	119	63		
5	1.8	495	3.0	81	867	320	125	384	837	62		
6	2.0	494	3.0	83	718	16	125	375	2,640	60		
7	1.8	494	3.2	94	359	12	125	375	2,710	60		
8	2.0	509	3.2	83	362	1,170	125	1,640	3,060	60		
9	2.0	150	3.2	374	534	2,230	125	2,220	3,670	60		
10	1.8	3.7	3.4	237	904	854	125	1,130	3,630	902		
11	1.8	3.2	3.4	87	903	14	125	318	3,490	696		
12	1.8	3.2	4.0	87	706	1,330	125	318	3,400	0		
13	1.8	6.3	3.7	87	549	2,500	125	318	3,490	0		
14	1.7	3.7	7.5	87	384	1,230	125	318	3,430	0		
15	1.7	3.2	4.6	1,640	244	125	125	318	1,580	0		
16	1.8	3.2	3.2	1,780	250	198	125	318	60	424		
17	2.0	3.2	3.2	202	253	250	125	272	60	1,100		
18	2.2	4.3	88	180	255	250	1,280	272	60	914		
19	2.4	3.2	178	148	256	250	3,000	272	60	588		
20	2.2	3.0	79	126	247	250	2,510	272	75	425		
21	2.8	3.2	79	127	247	173	1,240	159	131	425		
22	161	2.8	79	136	198	125	356	72	968	425		
23	4.0	2.8	79	101	207	125	125	72	1,900	425		
24	2.6	3.7	79	72	202	125	125	72	847	171		
25	2.4	3.4	79	85	244	125	125	90	60	0		
26	90	3.0	79	85	491	612	1,500	94	63	0		
27	9.0	2.8	79	85	753	1,290	4,200	70	63	0		
28	3.2	2.8	79	85	617	862	5,000	62	63	0		
29	3.2	3.0	81	85	------	234	5,000	232	63	0		
30	204	3.0	81	85	------	125	5,000	979	62	0		
31	459	------	81	659	------	125	------	1,770	------	0		------
TOTAL	979.6	3,992.7	1,280.2	7,313	15,990	17,477	31,586	22,724	41,981	7,048	0	0
MEAN	31.6	133	41.3	236	571	564	1,053	733	1,399	227	0	0
MAX	459	509	178	1,780	1,320	2,500	5,000	5,000	3,670	1,100	0	0
MIN	1.7	2.8	2.8	72	198	12	125	62	60	0	0	0
AC-FT	1,940	7,920	2,540	14,510	31,720	34,670	62,650	45,070	83,270	13,980	0	0

CAL YR 1972 TOTAL 52,309.90 MEAN 143 MAX 2,420 MIN 0 AC-FT 103,800
WTR YR 1973 TOTAL 150,371.50 MEAN 412 MAX 5,000 MIN 0 AC-FT 298,300

08096500 Brazos River at Waco, Tex.

LOCATION.--Lat 31°32'06", long 97°04'22", McLennan County, on left bank, 2.2 miles (3.5 km) downstream from bridge on La Salle Avenue (revised) in Waco, and at mile 400.7 (644.7 km).

DRAINAGE AREA.--28,530 mi² (73,890 km²), approximately, of which 9,240 mi² (23,930 km²) 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 (106.48 m) above mean sea level. Sept. 14, 1898, to Mar. 28, 1918, May 6, 1922, to Feb. 12, 1925, nonrecording gage, and May 28, 1918, to May 5, 1922, Feb. 13, 1925, to Aug. 14, 1969, water-stage recorder. Prior to Aug. 14, 1969, at site 3.9 miles (6.3 km) upstream at datum 7.46 ft (2.27 m) higher.

AVERAGE DISCHARGE.--42 years (1898-1940) unregulated, 2,560 ft³/s (72.5 m³/s), 1,855,000 acre-ft/yr (2,287 hm³/yr); 33 years (1940-73) regulated, 2,357 ft³/s (66.8 m³/s), 1,708,000 acre-ft/yr (2,106 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 32,000 ft³/s (906 m³/s) Apr. 25, gage height, 23.00 ft (7.01 m); minimum daily, 65 ft³/s (1.84 m³/s) Sept. 15.

Period of record: Maximum discharge, 246,000 ft³/s (6,967 m³/s) Sept. 27, 1936, gage height, 40.90 ft (12.47 m), 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 (10.56 m) May 28, 1885, from floodmark at site 3.9 miles (6.3 km) 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 (5,290 hm³), of which 2,194,000 acre-ft (2,710 hm³) is flood-control storage in Whitney and Waco Lakes. Records furnished by city of Waco show that during year they diverted 23,920 acre-ft (29.5 hm³) for municipal use above station, and records furnished by the Brazos River Authority show that during year they returned 19,820 acre-ft (24.4 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	4,380	1,870	249	1,490	2,230	2,470	11,800	4,270	2,500	4,150	83
2	124	2,370	1,240	292	1,480	2,420	2,420	10,500	3,980	820	4,160	85
3	262	1,290	421	2,070	1,400	1,480	2,530	7,390	4,700	894	4,060	83
4	585	766	271	1,200	1,360	1,120	2,550	5,840	12,500	667	4,050	75
5	629	648	2,700	602	1,300	886	2,260	6,220	9,010	1,010	4,100	95
6	607	823	2,070	494	933	381	767	6,570	16,700	681	3,990	172
7	416	759	3,010	966	935	620	835	6,870	19,300	487	2,110	99
8	177	648	2,520	1,630	1,700	857	563	4,280	13,900	544	2,240	79
9	236	522	1,130	2,040	2,980	1,260	1,970	4,910	9,350	573	2,220	211
10	867	151	1,010	3,660	1,550	5,160	1,300	4,360	8,770	386	2,710	610
11	894	147	2,270	4,450	1,250	8,180	835	3,270	8,920	2,810	1,700	308
12	340	131	2,330	4,150	1,090	2,010	651	3,180	10,300	4,220	396	128
13	342	245	1,300	2,140	810	3,260	550	1,200	9,500	4,490	352	87
14	441	538	1,280	415	689	2,010	601	1,070	8,000	2,770	320	79
15	343	2,770	1,560	533	465	2,740	2,630	1,020	7,000	4,740	352	65
16	243	2,410	1,300	3,270	451	5,060	4,840	1,010	6,000	8,230	404	81
17	134	1,180	1,200	359	461	4,980	5,710	2,410	5,500	6,340	348	196
18	147	1,350	836	435	455	4,640	7,460	1,790	5,000	5,180	292	77
19	308	1,930	1,050	408	489	4,690	8,870	1,100	4,810	4,970	254	372
20	170	1,580	652	373	395	3,230	8,880	1,550	7,220	3,520	241	836
21	122	2,370	303	372	466	2,980	7,520	601	7,730	2,650	645	815
22	1,500	1,880	1,150	449	1,050	2,230	6,280	836	7,900	1,360	755	655
23	460	1,920	540	368	2,000	2,290	7,110	470	7,270	976	580	675
24	349	1,340	405	413	2,050	4,440	16,100	353	6,230	774	561	247
25	128	1,950	275	1,110	1,060	2,950	28,000	889	4,820	775	356	1,050
26	1,240	856	240	4,140	550	3,210	16,400	3,790	3,510	656	281	428
27	2,320	415	772	2,340	1,980	3,540	17,200	1,850	3,460	468	214	1,240
28	1,330	188	293	721	1,970	3,430	21,000	813	3,440	512	241	3,100
29	331	1,170	380	484	------	2,900	20,200	728	3,460	535	253	1,450
30	580	2,650	524	412	------	2,460	19,400	1,870	3,320	1,080	123	1,420
31	1,170	------	227	767	------	2,360	------	3,290	------	3,520	93	------
TOTAL	17,275	39,377	35,129	41,312	32,809	90,004	217,902	101,830	225,870	69,138	42,551	14,901
MEAN	557	1,313	1,133	1,333	1,172	2,903	7,263	3,285	7,529	2,230	1,373	497
MAX	2,320	4,380	3,010	4,450	2,980	8,180	28,000	11,800	19,300	8,230	4,160	3,100
MIN	122	131	227	249	395	381	550	353	3,320	386	93	65
AC-FT	34,260	78,100	69,680	81,940	65,080	178,500	432,200	202,000	448,000	137,100	84,400	29,560

CAL YR 1972 TOTAL 404,795 MEAN 1,106 MAX 7,760 MIN 87 AC-FT 802,900
WTR YR 1973 TOTAL 928,098 MEAN 2,543 MAX 28,000 MIN 65 AC-FT 1,841,000

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 (1.6 km) upstream from South Fork Cow Bayou, and 2.1 miles (3.4 km) west of Bruceville.

DRAINAGE AREA.--5.25 mi² (13.6 km²).

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 (175.10 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--17 years, 1,530 acre-ft/yr (1.89 hm³/yr), adjusted for rainfall on pool and pool losses.

AVERAGE OUTFLOW.--17 years, 1,420 acre-ft/yr (1.75 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 28.5 ft³/s (0.81 m³/s) June 4, gage height, 20.99 ft (6.40 m); no outflow for many days. Maximum inflow, 1,280 ft³/s (36.2 m³/s), average for 5-minute interval, June 3, 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 ft³/s (64.9 m³/s) May 11, 1957, gage height, 40.16 ft (12.24 m), from rating curve extended above 35 ft³/s (0.99 m³/s) 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 ft³/s (195 m³/s), 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 (392 m) 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 (11.6 m); prior to May 11, 1957, gage height was 37.7 ft (11.5 m) 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 (0.8-meter) square uncontrolled drop-inlet structure covered with an antivortex baffle and two 8-inch (203-millimeter) square uncontrolled portholes on the downstream face. The gage height at crest of the drop inlet is 18.0 ft (5.5 m) and at the bottom of the portholes, 14.76 ft (4.50 m). The drop-inlet structure is connected to a 17-inch-diameter (432-millimeter) outlet pipe at the base of dam. There is also an 8-inch (203-millimeter) controlled water-supply outlet at a gage height of 6.07 ft (1.85 m). The pool capacity is 1,740 acre-ft (2.15 hm³) at the spillway crest, 241 acre-ft (0.297 hm³) at the crest of the drop inlet, 145 acre-ft (0.179 hm³) at the bottom of 8-inch (203-millimeter) portholes, and 13 acre-ft (16,030 m³) 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. Revised figures of monthly and yearly inflow, in acre-feet, for the water year 1972, superseding those published in WRD Texas, 1972, are given herein:

Revised 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/	2.4	118	231	187	110	20.6	3.8	8.8	1.0	1.9	0.3	2.2

CAL YR 1971: Inflow 725
WTR YR 1972: Inflow 687

1/ Inflow adjusted for outflow and rainfall on pool and pool losses.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	6.5	47.3	62.6	241	160	355	408	203	472	25.9	4.4	4.5
Outflow	0	0	36.6	185	189	304	381	245	447	6.1	23.5	0
(†)	2.0	44.3	20.1	52.7	-36.4	44.1	18.0	-57.6	9.3	-7.0	-42.0	-3.3
(††)	5.50	3.49	1.67	4.38	1.56	4.17	4.57	3.71	5.63	1.68	.07	5.54

CAL YR 1972: Inflow 452 Outflow 346 † -11.1 †† 30.79
WTR YR 1973: Inflow 1,990 Outflow 1,820 † 54.2 †† 41.97

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
3-24	0330	*768	5-25	1925	*473
4-15	2030	*302	6- 3	1650	*1,280
4-24	1245	*779			

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.

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 (152 m) downstream from confluence of North Cow Bayou and South Cow Bayou, 0.8 mile (1.3 km) north of Mooreville, and 5.0 miles (8.0 km) northwest of Chilton.

DRAINAGE AREA.--85.0 mi² (220 km²).

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 (121.79 m) above mean sea level (levels by Soil Conservation Service). Prior to June 10, 1958, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--15 years (1958-73), 36.1 ft³/s (1.02 m³/s), 26,200 acre-ft/yr (32.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,690 ft³/s (133 m³/s) June 3, gage height, 21.19 ft (6.46 m); no flow Oct. 7-21.
Period of record: Maximum discharge, 7,960 ft³/s (225 m³/s) May 11, 1957, gage height, 23.88 ft (7.28 m), and Oct. 4, 1959, gage height, 23.86 ft (7.27 m), from rating curve extended above 4,500 ft³/s (127 m³/s); no flow at times.
Maximum stage since at least 1900, 31 ft (9 m) about May 1, 1944, from information by local resident.

REMARKS.--Records good. At end of year, flow from 42.7 mi² (111 km²) above this station was partly controlled by 26 floodwater-retarding structures with a total combined capacity of 15,510 acre-ft (19.1 hm³) below the flood-spillway crests, of which 12,450 acre-ft (15.4 hm³) is floodwater-retarding capacity and 3,060 acre-ft (3.77 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	318	4.3	8.7	88	49	78	78	40	20	1.7	1.5
2	.16	73	6.2	16	70	47	76	73	50	19	1.9	1.4
3	.14	50	6.5	70	63	45	80	58	1,130	18	2.3	1.4
4	.13	37	4.5	56	58	43	71	55	706	18	2.5	1.3
5	.09	28	4.3	52	54	40	67	52	246	17	2.8	1.2
6	.05	23	3.2	49	50	51	65	63	174	17	2.8	2.2
7	0	15	3.0	78	50	50	67	70	117	14	2.9	2.0
8	0	11	4.0	69	77	43	65	57	93	12	2.9	2.0
9	0	9.4	3.6	60	63	41	63	52	83	10	2.8	1.8
10	0	6.3	3.2	55	57	190	60	46	73	8.0	2.7	1.7
11	0	6.6	4.2	56	54	80	59	41	86	6.0	2.6	20
12	0	5.9	7.4	55	53	64	58	41	336	6.4	2.5	7.2
13	0	35	9.0	56	52	59	58	39	144	6.8	2.4	5.6
14	0	9.8	127	60	47	54	67	36	98	7.2	2.3	3.1
15	0	7.2	69	59	44	50	89	35	82	6.8	2.2	1.9
16	0	6.1	51	54	42	66	173	33	71	6.8	2.2	1.4
17	0	5.5	43	53	45	49	142	31	63	5.7	2.1	1.2
18	0	7.5	36	51	49	46	108	28	53	4.7	2.0	.83
19	0	5.4	32	46	46	45	91	26	48	5.4	2.0	.87
20	0	4.2	27	44	43	45	81	20	49	6.0	1.9	.69
21	.91	4.7	23	49	46	43	76	14	50	6.0	1.8	.63
22	59	4.8	20	42	57	42	79	12	45	5.7	1.8	.54
23	2.3	4.2	17	39	64	42	80	11	41	4.1	1.7	.52
24	.27	7.7	15	37	57	1,120	403	12	37	3.0	1.6	.62
25	.16	11	13	324	54	225	150	254	36	2.1	1.6	.43
26	170	8.1	13	187	52	158	112	342	33	2.3	1.5	6.9
27	42	7.2	12	122	50	124	85	90	30	2.3	1.5	45
28	16	5.2	11	94	49	113	72	62	27	2.3	1.4	12
29	12	5.0	12	80	------	103	65	45	24	2.3	1.6	5.7
30	8.3	4.7	12	75	------	95	62	36	21	2.1	1.7	6.2
31	7.3	------	9.7	80	------	86	------	30	------	1.9	1.6	------
TOTAL	319.13	726.5	606.1	2,176.7	1,534	3,308	2,802	1,842	4,086	248.9	65.3	137.83
MEAN	10.3	24.2	19.6	70.2	54.8	107	93.4	59.4	136	8.03	2.11	4.59
MAX	170	318	127	324	88	1,120	403	342	1,130	20	2.9	45
MIN	0	4.2	3.0	8.7	42	40	58	11	21	1.9	1.4	.43
CFSM	.12	.28	.23	.83	.64	1.26	1.10	.70	1.60	.09	.02	.05
IN.	.14	.32	.27	.95	.67	1.45	1.23	.81	1.79	.11	.03	.06
AC-FT	633	1,440	1,200	4,320	3,040	6,560	5,560	3,650	8,100	494	130	273
(††)	5.18	3.32	1.79	4.35	1.52	4.00	4.09	3.49	5.97	1.43	.10	6.04

CAL YR 1972 TOTAL 5,370.51 MEAN 14.7 MAX 318 MIN 0 CFSM .17 IN 2.35 AC-FT 10,650 †† 28.52
WTR YR 1973 TOTAL 17,852.46 MEAN 48.9 MAX 1,130 MIN 0 CFSM .58 IN 7.81 AC-FT 35,410 †† 41.28

†† Weighted-mean rainfall, in inches.

08098290 Brazos River near Highbank, Tex.

LOCATION.--Lat 31°08'02", long 96°49'29", Falls County, near right bank 45 ft (14 m) downstream from bridge on Farm Road 413, 1.4 miles (2.3 km) downstream from Highbank Slough and Spring Branch, 2.6 miles (4.2 km) south of Highbank, and at mile 346.6 (557.7 km).

DRAINAGE AREA.--29,421 mi² (76,200 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 279.29 ft (85.13 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 2,711 ft³/s (76.8 m³/s), 1,964,000 acre-ft/yr (2,422 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 41,200 ft³/s (1,170 m³/s) Apr. 25, gage height, 18.29 ft (5.57 m); minimum daily, 149 ft³/s (4.22 m³/s) Sept. 18.
Period of record: Maximum discharge, 57,900 ft³/s (1,640 m³/s) May 11, 1968, gage height, 21.88 ft (6.67 m); minimum daily, 71 ft³/s (2.01 m³/s) Mar. 10, 19, 20, 26, 27, 30, 1971.
Maximum stages since at least 1909, 42 ft (13 m) in December 1913 and 40 ft (12 m) 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 (5,350 hm³), of which 2,194,000 acre-ft (2,700 hm³) is for flood control. During the year, Texas Power and Light Co. diverted 2,750 acre-ft (3.39 hm³) to Tradinghouse Reservoir above this station. At end of year, flow from 189 mi² (490 km²) above this station was partly controlled by 55 floodwater-retarding structures with a total combined capacity of 75,690 acre-ft (93.3 hm³) below the flood-spillway crests, of which 67,520 acre-ft (83.2 hm³) is floodwater-retarding capacity and 8,180 acre-ft (10.1 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	604	1,940	2,350	427	1,380	2,110	3,430	21,300	3,270	3,390	3,490	249
2	405	6,140	1,840	367	2,150	3,050	3,330	14,000	7,510	2,670	4,230	222
3	295	4,280	1,260	638	2,080	4,920	3,220	12,000	9,590	1,260	4,150	194
4	181	2,540	619	2,370	1,830	4,300	3,390	7,870	22,900	976	4,150	180
5	316	1,490	408	2,080	1,680	2,830	3,210	6,980	26,900	1,000	4,100	188
6	567	1,170	2,170	1,230	1,570	1,850	2,780	7,560	25,900	3,100	4,180	209
7	585	1,160	2,090	880	1,250	1,110	1,190	8,880	30,200	1,920	3,950	209
8	533	1,170	2,850	1,620	1,270	1,190	1,140	7,030	25,200	1,760	2,420	245
9	307	968	2,310	2,460	2,910	1,280	963	5,290	17,500	1,080	2,370	180
10	204	902	1,120	2,470	3,730	2,150	2,130	5,350	11,800	816	2,320	170
11	451	662	939	4,030	2,200	9,230	1,670	4,550	11,200	689	2,650	486
12	808	435	2,090	4,710	1,570	11,000	1,180	3,500	12,800	2,580	1,930	652
13	621	486	2,100	4,350	1,340	4,380	925	3,110	13,900	4,360	780	416
14	307	582	1,590	2,270	1,040	4,430	777	1,520	11,200	4,430	492	258
15	388	902	3,250	952	900	3,400	1,010	1,230	11,400	3,330	390	166
16	403	2,920	3,400	924	694	5,430	4,800	1,130	8,180	6,230	342	166
17	298	2,580	3,500	2,840	646	8,500	8,840	1,070	5,500	8,630	360	160
18	240	1,670	2,800	962	640	8,040	9,860	2,200	5,160	6,060	406	149
19	170	1,670	1,300	660	640	6,720	12,100	1,980	4,980	5,410	398	231
20	193	1,960	1,220	659	630	5,860	12,500	1,100	5,750	5,150	343	202
21	274	1,930	984	655	638	3,850	11,000	1,670	10,700	3,710	301	806
22	282	2,510	573	634	676	3,590	8,570	1,210	10,800	2,590	454	971
23	1,270	2,170	1,080	719	1,140	2,970	8,140	1,040	9,570	1,640	836	848
24	669	2,150	742	552	2,290	11,100	12,200	973	8,560	1,260	744	840
25	539	1,660	683	2,190	2,340	12,600	35,600	906	6,820	1,030	701	549
26	361	2,120	455	6,660	1,380	8,970	35,400	5,950	5,440	926	618	895
27	1,820	1,170	386	9,770	877	7,850	24,800	6,350	3,890	985	419	1,060
28	3,270	902	646	5,940	1,960	6,260	26,500	4,560	3,780	676	335	1,780
29	2,830	598	567	3,100	------	5,070	27,300	2,760	3,710	513	298	2,900
30	1,590	1,070	417	1,830	------	4,270	25,900	1,320	3,710	639	355	1,830
31	1,410	------	637	1,140	------	3,670	------	1,840	------	908	316	------
TOTAL	22,191	51,907	46,376	70,089	41,451	161,980	293,855	146,229	337,820	79,718	48,828	17,411
MEAN	716	1,730	1,496	2,261	1,480	5,225	9,795	4,717	11,260	2,572	1,575	580
MAX	3,270	6,140	3,500	9,770	3,730	12,600	35,600	21,300	30,200	8,630	4,230	2,900
MIN	170	435	386	367	630	1,110	777	906	3,270	513	298	149
AC-FT	44,020	103,000	91,990	139,000	82,220	321,300	582,900	290,000	670,100	158,100	96,850	34,530

CAL YR 1972 TOTAL 474,403 MEAN 1,296 MAX 11,100 MIN 119 AC-FT 941,000
WTR YR 1973 TOTAL 1,317,855 MEAN 3,611 MAX 35,600 MIN 149 AC-FT 2,614,000

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 (1.6 km) north of Burlington, and 2.5 miles (4.0 km) downstream from Keys Creek.

DRAINAGE AREA.--22.2 mi² (57.5 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 388.51 ft (118.42 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 10.6 ft³/s (0.300 m³/s), 6.48 in/yr (164.6 mm/yr), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,590 ft³/s (102 m³/s) Oct. 29, gage height, 14.19 ft (4.33 m); no flow for many days.
Period of record: Maximum discharge, 5,280 ft³/s (150 m³/s) May 16, 1965, gage height, 15.61 ft (4.76 m); no flow for many days each year.
Maximum stage since at least 1938, 17.5 ft (5.3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	22	.05	.17	7.3	.72	.06	.04	0	0	.22	0
2	.22	38	.02	10	1.4	.72	.05	.04	52	0	.02	0
3	.04	3.7	.02	159	.65	.72	53	.05	2.2	0	0	0
4	0	1.2	.04	14	.42	.66	1.8	.03	1.9	0	0	0
5	0	.55	.04	3.8	.25	.56	.40	.02	134	0	0	0
6	0	.32	.01	3.1	.21	.69	.18	16	191	72	0	0
7	0	.18	0	62	.27	.97	.48	166	2.7	4.4	0	0
8	0	.12	.01	17	12	.61	1.2	6.1	.59	49	0	0
9	0	.10	.01	2.9	13	.38	6.2	.99	.17	34	0	0
10	0	.08	.01	1.2	4.5	5.5	.96	.28	.07	1.4	0	0
11	0	.05	.07	.82	1.9	4.1	.27	.09	.10	.28	0	0
12	0	.03	.45	.87	1.3	.94	.18	.03	10	.06	0	0
13	0	118	3.2	2.2	1.1	.42	.05	.01	7.9	.01	0	0
14	0	5.4	217	11	.77	.31	.06	0	1.7	0	0	0
15	0	.98	167	12	.44	39	.11	0	.52	0	0	0
16	0	.37	5.5	3.8	.27	149	.21	0	.15	4.0	0	0
17	0	.23	1.9	2.1	1.4	8.6	16	0	.03	2.2	0	0
18	0	.95	.98	1.7	7.2	1.7	15	0	0	.11	0	0
19	0	.77	.94	1.1	2.9	.78	2.2	0	0	.01	0	0
20	0	.37	1.1	.67	1.5	.46	.79	0	85	0	0	0
21	0	.20	.93	13	3.8	.24	.42	0	26	0	0	0
22	52	.10	.58	3.2	45	.14	.38	0	1.7	0	0	0
23	14	.08	.36	.90	38	.09	.49	0	.41	0	0	0
24	1.4	.66	.24	.55	8.2	569	.51	0	.13	0	0	0
25	.35	3.3	.17	706	3.3	13	3.5	33	.05	0	0	0
26	38	1.5	.13	120	1.9	1.5	2.3	579	.02	0	0	0
27	84	.56	.08	9.8	1.2	.58	1.4	3.4	0	0	0	3.9
28	3.7	.24	.06	2.9	.83	.35	.36	.58	0	0	0	61
29	1,090	.14	.06	1.1	------	.22	.13	.13	0	0	0	2.3
30	400	.08	.12	.65	------	.17	.07	.03	0	1.6	0	.33
31	16	------	.17	4.9	------	.12	------	0	------	7.8	0	------
TOTAL	1,701.11	200.26	401.25	1,172.43	161.01	802.25	108.76	805.82	518.34	176.87	.24	67.53
MEAN	54.9	6.68	12.9	37.8	5.75	25.9	3.63	26.0	17.3	5.71	.008	2.25
MAX	1,090	118	217	706	45	569	53	579	191	72	.22	61
MIN	0	.03	0	.17	.21	.09	.05	0	0	0	0	0
AC-FT	3,370	397	796	2,330	319	1,590	216	1,600	1,030	351	.5	134
(††)	6.76	2.10	1.65	4.23	1.52	3.31	2.51	4.49	5.05	4.54	.02	3.80

CAL YR 1972 TOTAL 2,673.09 MEAN 7.30 MAX 1,090 MIN 0 AC-FT 5,300 †† 30.09
WTR YR 1973 TOTAL 6,115.87 MEAN 16.8 MAX 1,090 MIN 0 AC-FT 12,130 †† 39.98

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1900	14.19	3,590	3-24	1130	12.60	2,200
12-14	2230	10.18	856	5-26	0400	12.71	2,290
1-25	1830	11.87	1,660	6-20	1530	9.70	726

†† 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 (11.9 km) south of Ranger, and 8.7 miles (14.0 km) southeast of Eastland.

DRAINAGE AREA.--252 mi² (653 km²).

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, 28,100 acre-ft (34.6 hm³) Apr. 25, elevation, 1,375.5 ft (419.3 m); minimum, 21,510 acre-ft (26.5 hm³) Oct. 16-20, elevation, 1,371.0 ft (417.9 m).
Period of record: Maximum contents observed, 40,640 acre-ft (50.1 hm³) June 13, 1967, elevation, 1,382.2 ft (421.3 m); minimum observed since first appreciable storage, 15,880 acre-ft (19.6 hm³) Jan. 11-21, Feb. 5-7, Apr. 29, 30, 1956, elevation, 1,366.2 ft (416.4 m).

REMARKS.--Reservoir is formed by rolled-fill earthen dam 3,700 ft (1,128 m) 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 ft³/s (142 m³/s) through an 11-foot-diameter (3-meter) concrete conduit. The emergency spillway is a 1,200-foot-wide (366-meter) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,050	22,310	21,910	21,640	22,450	22,990	22,990	27,450	26,980	26,360	25,590	24,410
2	21,910	22,310	21,910	21,640	22,450	22,990	22,990	27,290	26,820	26,200	25,590	24,410
3	21,910	22,310	21,910	21,640	22,450	22,990	23,130	27,290	26,820	26,200	25,590	24,260
4	21,910	22,310	21,910	21,640	22,450	22,990	23,130	27,290	26,980	26,200	25,590	24,260
5	21,910	22,180	21,910	21,640	22,310	22,990	23,270	27,290	27,140	26,200	25,590	24,260
6	21,780	22,180	21,910	21,640	22,310	23,130	23,270	27,290	27,140	26,200	25,440	24,260
7	21,780	22,180	21,910	21,640	22,310	23,270	23,270	27,290	27,140	26,050	25,440	24,410
8	21,780	22,180	21,910	21,640	22,580	23,270	23,270	27,290	26,980	26,050	25,440	24,560
9	21,640	22,180	21,910	21,640	22,580	23,270	23,270	27,140	26,980	26,050	25,440	24,560
10	21,640	22,180	21,780	21,640	22,580	23,270	23,270	27,140	26,980	26,050	25,300	24,560
11	21,640	22,180	21,780	21,640	22,580	23,270	23,270	27,140	26,820	26,050	25,300	24,560
12	21,640	22,180	21,780	21,640	22,580	23,270	23,270	27,780	26,820	26,050	25,150	24,410
13	21,640	22,180	21,780	21,640	22,580	23,270	23,270	27,780	26,820	26,050	25,150	24,410
14	21,640	22,180	21,780	21,640	22,580	23,270	23,270	27,620	26,820	26,050	25,150	24,410
15	21,640	22,180	21,780	21,640	22,580	23,270	23,270	27,450	26,820	26,050	25,000	24,410
16	21,510	22,180	21,780	21,640	22,580	23,270	24,120	27,450	26,820	26,050	25,000	24,410
17	21,510	22,050	21,780	21,640	22,580	23,270	25,000	27,450	26,670	25,900	25,000	24,260
18	21,510	22,050	21,780	21,640	22,580	23,270	26,360	27,290	26,670	25,900	24,850	24,260
19	21,510	22,050	21,780	21,640	22,580	23,130	26,820	27,290	26,670	25,900	24,850	24,260
20	21,510	21,910	21,780	21,640	22,580	23,130	27,140	27,290	26,670	25,900	24,850	24,260
21	21,780	21,910	21,780	21,640	22,580	23,130	27,140	27,140	26,670	25,740	24,850	24,120
22	22,050	21,910	21,780	21,640	22,720	23,130	27,290	27,140	26,670	25,740	24,700	24,120
23	22,050	21,910	21,780	21,640	22,990	23,130	27,450	27,140	26,670	25,740	24,700	24,120
24	22,050	21,910	21,780	21,640	22,990	23,130	27,780	26,980	26,520	25,740	24,700	24,120
25	22,050	21,910	21,640	21,640	22,990	23,130	28,100	26,980	26,520	25,590	24,560	24,120
26	21,910	21,910	21,640	22,180	22,990	23,130	27,940	26,980	26,520	25,590	24,560	24,120
27	22,050	21,910	21,640	22,450	22,990	23,130	27,780	26,980	26,520	25,590	24,560	24,120
28	22,050	21,910	21,640	22,450	22,990	23,130	27,620	26,980	26,360	25,590	24,560	24,120
29	22,050	21,910	21,640	22,450	------	23,130	27,450	26,980	26,360	25,590	24,410	24,120
30	22,050	21,910	21,640	22,450	------	22,990	27,450	26,980	26,360	25,590	24,410	24,120
31	22,310	------	21,640	22,450	------	22,990	------	26,980	------	25,590	24,410	------
(†)	1,371.6	1,371.3	1,371.1	1,371.7	1,372.1	1,372.1	1,375.1	1,374.8	1,374.4	1,373.9	1,373.1	1,372.9
(*)	+260	-400	-270	+810	+540	0	+4,460	-470	-620	-770	-1,180	-290
(††)	180	142	152	157	130	139	130	166	199	242	262	182
MAX	22,310	22,310	21,910	22,450	22,990	23,270	28,100	27,780	27,140	26,360	25,590	24,560
MIN	21,510	21,910	21,640	21,640	22,310	22,990	22,990	26,980	26,360	25,590	24,410	24,120

CAL YR 1972..... * -5,500 †† 2,110 MAX 27,290 MIN 21,510
WTR YR 1973..... * +2,070 †† 2,080 MAX 28,100 MIN 21,510

† 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 (2.4 km) upstream from Flat Creek, 4.4 miles (7.1 km) northeast of De Leon, and 6 miles (10 km) downstream from Hog Creek.

DRAINAGE AREA.--463 mi² (1,199 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,209.93 ft (368.79 m) above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 57.2 ft³/s (1.62 m³/s), 41,440 acre-ft/yr (51.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,730 ft³/s (77.3 m³/s) Apr. 23, gage height, 13.10 ft (3.99 m); no flow at times.
Period of record: Maximum discharge, 7,540 ft³/s (214 m³/s) Jan. 21, 1968, gage height, 15.50 ft (4.72 m); no flow at times.
A stage of 19.3 ft (5.9 m) occurred in May 1908 at a point 2,000 ft (610 m) downstream from gage site and is the highest since that time, from information by local resident.

REMARKS.--Records good except those below 5 ft³/s (142 dm³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	26	.88	1.2	4.9	13	6.6	36	4.6	1.0	22	
2	0	10	.88	1.5	4.5	12	6.5	29	4.6	.84	10	
3	0	5.5	.88	7.3	4.4	12	27	22	135	.58	6.2	
4	0	3.6	.88	4.7	4.5	11	13	18	82	.50	4.1	
5	0	2.6	.98	2.8	4.3	10	7.4	16	24	.31	2.9	
6	0	1.7	.96	2.2	4.3	78	6.0	15	12	.17	2.0	
7	0	1.6	.80	2.1	5.5	47	6.0	15	8.7	.07	1.6	
8	0	1.0	.91	2.4	205	19	5.4	14	6.8	2.7	1.0	
9	0	.78	1.1	2.1	36	13	5.0	12	6.0	224	.80	
10	0	.84	1.1	1.7	17	13	4.2	11	5.2	12	.68	
11	0	.58	1.1	1.9	13	12	4.0	10	5.0	5.6	.50	
12	0	.69	1.1	1.9	12	11	4.4	237	5.2	3.3	.38	
13	0	.95	1.2	2.3	10	9.6	5.1	81	6.0	3.9	.20	
14	0	.68	1.2	3.8	8.9	9.0	5.7	42	5.8	2.1	.11	
15	0	.66	1.2	4.8	8.1	8.4	7.5	29	5.1	4.3	.05	
16	0	1.2	1.1	4.8	7.4	7.9	122	22	4.5	4.8	.01	
17	0	2.3	1.1	8.1	7.9	7.0	91	17	4.4	2.0	0	
18	0	2.1	.97	7.0	9.7	7.0	558	14	3.9	1.1	0	
19	0	1.7	1.2	9.0	10	7.0	115	12	4.0	.57	0	
20	0	1.1	1.3	3.7	9.7	7.0	95	10	11	.33	0	
21	0	.97	1.3	2.6	9.9	6.5	33	9.0	16	.15	0	
22	26	.97	1.2	2.0	34	6.5	20	8.1	6.1	.04	0	
23	14	.97	1.5	1.6	106	6.8	701	7.9	4.1	.01	0	
24	5.5	1.2	2.6	1.5	43	11	1,780	7.2	3.2	0	0	
25	1.9	1.5	1.4	44	24	12	406	7.8	2.8	0	0	
26	34	1.2	1.2	191	18	10	203	7.8	2.5	0	0	
27	63	1.2	1.1	48	15	8.6	132	8.2	2.1	0	0	
28	15	1.0	1.2	20	14	8.8	85	7.6	1.6	0	0	
29	6.8	.91	1.4	11	------	8.3	58	7.2	1.3	1.5	0	
30	3.2	.88	1.4	7.0	------	7.8	44	6.2	1.2	174	0	
31	136	------	1.2	5.4	------	7.7	------	5.5	------	360	0	------
TOTAL	305.4	76.38	36.34	409.4	651.0	407.9	4,556.8	744.5	384.7	805.87	52.53	0
MEAN	9.85	2.55	1.17	13.2	23.3	13.2	152	24.0	12.8	26.0	1.69	0
MAX	136	26	2.6	191	205	78	1,780	237	135	360	22	0
MIN	0	.58	.80	1.2	4.3	6.5	4.0	5.5	1.2	0	0	0
AC-FT	606	151	72	812	1,290	809	9,040	1,480	763	1,600	104	0

CAL YR 1972 TOTAL 2,503.85 MEAN 6.84 MAX 160 MIN 0 AC-FT 4,970
WTR YR 1973 TOTAL 8,430.82 MEAN 23.1 MAX 1,780 MIN 0 AC-FT 16,720

08099300 Sabana River near De Leon, Tex.

LOCATION (revised).--Lat 32°06'50", long 98°36'19", Comanche County, on left bank at downstream end of bridge on Farm Road 587, 0.6 mile (1.0 km) downstream from Spring Branch, 4.0 miles (6.4 km) west of De Leon, and 4.2 miles (6.8 km) upstream from Turkey Creek.

DRAINAGE AREA.--263 mi² (681 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,209.59 ft (368.68 m) above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years, 39.9 ft³/s (1.13 m³/s), 28,910 acre-ft/yr (35.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,700 ft³/s (133 m³/s) Apr. 23, gage height, 20.84 ft (6.35 m); no flow Oct. 1-18.
Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) June 12, 1967, gage height, 22.05 ft (6.72 m); no flow at times.
Maximum stage since at least 1890, 24 ft (7 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.65	.87	.65	1.4	2.7	1.7	12	1.3	1.1	13	.15
2	0	.58	.93	.77	1.1	2.8	1.0	10	1.7	.84	4.7	.15
3	0	.54	.91	3.3	1.1	2.5	1.0	8.7	59	.58	2.1	.10
4	0	.65	.82	2.3	1.2	2.3	1.4	7.5	13	.55	1.6	.05
5	0	.65	.97	1.5	1.3	2.1	1.3	6.8	59	.47	1.1	.07
6	0	.53	.82	.95	1.5	16	1.3	6.8	26	.70	.85	.78
7	0	.49	.84	.93	1.7	34	1.6	6.2	9.1	.51	.60	.73
8	0	.44	.95	1.0	4.8	12	1.7	5.4	4.9	7.4	.36	.39
9	0	.62	.99	1.0	4.3	6.1	1.7	5.3	3.1	136	.29	.28
10	0	.34	.92	1.0	2.4	4.1	1.5	4.9	2.6	8.4	.29	.22
11	0	.34	.95	1.0	1.9	3.3	1.3	5.0	2.2	3.6	.29	.24
12	0	.37	.93	.97	1.8	2.5	1.3	16	2.2	4.0	.73	.24
13	0	.58	.84	.96	1.7	2.0	1.4	5.4	2.4	4.0	.34	.23
14	0	.58	.86	1.0	2.3	2.0	1.4	4.2	2.3	4.6	.29	.18
15	0	.54	.83	1.0	1.9	2.1	1.9	4.0	2.0	4.3	.24	.19
16	0	.52	.82	1.1	1.9	2.0	3.2	3.5	1.8	2.8	.24	.19
17	0	.52	.77	1.2	2.4	1.7	62	3.4	1.7	1.7	.24	.19
18	0	.84	.70	1.2	3.0	.95	170	3.1	1.5	1.3	.24	.22
19	.12	.82	.58	1.1	2.9	.94	37	2.9	2.2	1.0	.24	.24
20	.58	.74	.58	1.1	2.3	1.1	16	2.8	2.1	.81	.16	.24
21	.41	.65	.58	1.1	2.1	1.3	10	2.6	1.9	.57	.15	.23
22	3.8	.65	.58	1.1	7.0	1.4	7.5	2.3	1.7	.40	.13	.19
23	.99	.65	.58	1.1	14	1.1	1,040	2.2	1.4	.27	.12	.54
24	.51	.72	.58	1.1	23	2.8	1,460	2.4	1.4	.17	.13	.68
25	.38	.97	.57	21	12	2.4	131	2.6	1.2	.19	.11	.29
26	16	.81	.52	23	6.9	2.3	49	2.8	1.2	.20	.11	.29
27	19	.85	.52	4.7	4.3	2.1	31	2.2	1.2	.29	.11	.52
28	2.3	.84	.52	2.3	2.9	1.9	23	2.1	1.2	.29	.11	.40
29	1.1	.83	.53	1.4	------	2.3	17	1.8	1.2	15	.11	.40
30	1.4	.86	.63	1.3	------	2.2	14	1.3	1.2	61	.14	.34
31	1.1	------	.65	1.3	------	1.9	------	1.3	------	161	.15	------
TOTAL	47.69	19.17	23.14	83.43	115.1	124.89	3,092.2	147.5	213.7	424.04	29.27	8.96
MEAN	1.54	.64	.75	2.69	4.11	4.03	103	4.76	7.12	13.7	.94	.30
MAX	19	.97	.99	23	23	34	1,460	16	59	161	13	.78
MIN	0	.34	.52	.65	1.1	.94	1.0	1.3	1.2	.17	.11	.05
AC-FT	95	38	46	165	228	248	6,130	293	424	841	58	18

CAL YR 1972 TOTAL 1,781.44 MEAN 4.87 MAX 557 MIN 0 AC-FT 3,530
WTR YR 1973 TOTAL 4,329.09 MEAN 11.9 MAX 1,460 MIN 0 AC-FT 8,590

PEAK DISCHARGE (BASE, 1,500 FT³/S).--Apr. 23 (2000) 4,700 ft³/s (20.84 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 (3.2 km) upstream from U.S. Highways 67 and 377, and 3.5 miles (5.6 km) west of Proctor.

DRAINAGE AREA.--1,265 mi² (3,276 km²).

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, 77,630 acre-ft (95.7 hm³) Apr. 26, elevation, 1,165.63 ft (355.28 m); minimum, 44,740 acre-ft (55.2 hm³) Dec. 31, elevation, 1,158.52 ft (353.12 m).
Period of record: Maximum contents, 137,500 acre-ft (170 hm³) Jan. 26, 1968, elevation, 1,174.84 ft (358.09 m); minimum since first filling of lake, 26,620 acre-ft (32.8 hm³) Sept. 14, 1967, elevation, 1,152.82 ft (351.38 m).

REMARKS.--Lake is formed by reinforced concrete gated structure and rolled earthfill section, total length 13,460 ft (4,103 m). 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 (352.3 m) 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 125 mi² (324 km²) above this station was partly controlled by 20 floodwater-retarding structures with a total combined capacity of 35,230 acre-ft (43.4 hm³) below the flood-spillway crests, of which 31,740 acre-ft (39.1 hm³) is floodwater-retarding capacity and 3,490 acre-ft (430 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 6,500 acre-ft (8.01 hm³), of which 396 acre-ft (0.488 hm³) 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 (1-meter) 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 (12- by 11-meter) tainter gates. Spillway is designed to discharge 431,800 ft³/s (12,200 m³/s) at maximum design level, elevation, 1,201.0 ft (366.1 m). 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)

1,152.0	24,570	1,164.0	69,060
1,154.0	29,790	1,166.0	79,660
1,156.0	35,840	1,168.0	91,170
1,158.0	42,790	1,170.0	103,600
1,160.0	50,620	1,172.0	116,900
1,162.0	59,390	1,174.0	131,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46,060	46,520	45,680	44,770	46,400	48,530	49,290	74,790	59,080	59,080	61,940	54,120
2	45,980	46,520	45,600	45,110	46,400	48,530	49,290	73,730	59,030	58,990	61,380	53,910
3	45,950	46,520	45,680	45,190	46,360	48,650	49,290	72,640	59,860	58,810	60,860	53,780
4	45,910	46,440	45,450	45,220	46,330	48,570	49,210	71,550	60,620	58,720	60,430	53,610
5	45,870	46,400	45,450	45,380	46,360	48,570	49,170	70,770	61,560	58,490	60,100	53,610
6	45,830	46,590	45,340	45,380	46,360	49,210	49,170	69,790	61,850	58,360	59,910	54,040
7	45,600	46,400	45,340	45,380	47,200	49,370	49,130	68,720	61,610	58,000	59,680	54,120
8	45,600	46,290	45,260	45,300	47,280	49,490	49,130	67,680	61,280	58,490	59,490	54,080
9	45,530	46,290	45,260	45,220	47,320	49,450	49,090	66,690	60,900	59,120	59,300	54,120
10	45,490	46,210	45,190	45,190	47,280	49,620	48,970	65,600	60,480	59,260	59,120	54,040
11	45,450	46,060	45,190	45,190	47,280	49,580	48,930	64,710	60,050	59,170	58,850	54,000
12	45,410	46,330	45,190	45,220	47,360	49,580	48,930	63,920	59,960	59,960	58,720	53,910
13	45,380	46,330	45,110	45,190	47,360	49,490	48,930	63,170	59,960	60,860	58,580	53,830
14	45,340	46,100	45,110	45,190	47,320	49,490	48,810	62,510	59,820	60,860	58,360	53,700
15	45,300	45,980	45,110	45,190	47,320	49,450	49,330	61,750	59,630	60,810	58,130	53,610
16	45,220	45,950	45,030	45,190	47,320	49,410	49,410	61,280	59,580	60,760	57,860	53,570
17	45,150	45,910	44,920	45,190	47,480	49,330	51,090	60,900	59,490	60,620	57,500	53,440
18	45,340	45,980	44,920	45,190	47,480	49,330	52,290	60,530	59,300	60,480	57,320	53,360
19	45,260	45,950	45,000	45,190	47,480	49,330	53,180	60,150	59,350	60,340	57,100	53,230
20	45,150	45,870	45,000	45,190	47,480	49,290	53,530	59,820	59,770	60,150	56,870	53,100
21	45,720	45,910	44,920	45,260	47,680	49,210	53,830	59,530	59,860	60,050	56,650	53,010
22	45,640	45,870	44,920	45,220	47,920	49,130	54,000	59,490	59,860	59,820	56,380	52,930
23	45,600	45,830	45,000	45,190	48,080	49,450	55,520	59,680	59,820	59,630	56,110	53,100
24	45,570	46,020	44,920	45,190	48,250	49,700	72,330	59,580	59,720	59,490	55,790	53,060
25	45,490	45,910	44,880	45,680	48,410	49,620	76,900	59,770	59,630	59,300	55,610	52,930
26	46,020	45,830	44,880	45,950	48,450	49,370	77,490	59,770	59,530	59,170	55,430	53,060
27	46,140	45,870	44,840	46,290	48,450	49,370	77,170	59,820	59,490	59,030	55,210	53,010
28	46,250	45,790	44,810	46,360	48,450	49,370	76,680	59,490	59,350	58,850	54,980	52,890
29	46,330	45,760	44,810	46,360	------	49,370	76,030	59,390	59,260	58,990	54,720	52,840
30	46,440	45,720	44,840	46,360	------	49,410	75,490	59,300	59,170	59,530	54,510	52,800
31	46,550	------	44,770	46,400	------	49,370	------	59,210	------	61,850	54,290	------
(†)	1,158.99	1,158.77	1,158.52	1,158.95	1,159.46	1,159.69	1,165.23	1,161.96	1,161.95	1,162.52	1,160.86	1,160.51
(*)	+340	-830	-950	+1,630	+2,050	+920	+26,120	-16,280	-40	+2,680	-7,560	-1,490
MAX	46,550	46,590	45,680	46,400	48,450	49,700	77,490	74,790	61,850	61,850	61,940	54,120
MIN	45,150	45,720	44,770	44,770	46,330	48,530	48,810	59,210	59,030	58,000	54,290	52,800

CAL YR 1972..... * -15,940 MAX 62,980 MIN 44,770
WTR YR 1973..... * +6,590 MAX 77,490 MIN 44,770

† 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 (152 m) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 0.3 mile (0.5 km) upstream from Walnut Creek, 2.0 miles (3.2 km) downstream from Proctor Lake, 2.1 miles (3.4 km) northeast of Hasse, and at mile 236.0 (379.7 km).

DRAINAGE AREA.--1,268 mi² (3,284 km²).

PERIOD OF RECORD.--January 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,115.01 ft (339.86 m) above mean sea level.

AVERAGE DISCHARGE.--24 years (1939-63) prior to completion of Proctor Lake, 151 ft³/s (4.28 m³/s), 109,400 acre-ft/yr (135 hm³/yr); 10 years (1963-73) regulated, 133 ft³/s (3.77 m³/s), 96,360 acre-ft/yr (119 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 574 ft³/s (16.3 m³/s) May 2, gage height, 6.47 ft (1.97 m); minimum, 0.10 ft³/s (2.8 dm³/s) Oct. 3-6.
Period of record: Maximum discharge, 38,500 ft³/s (1,090 m³/s) May 24, 1952, gage height, 21.49 ft (6.55 m); maximum gage height, 21.72 ft (6.62 m) Oct. 4, 1959; no flow at times.
Maximum stage since at least 1858, occurred in May 1908, from information by local resident. At location about 2.5 miles (4.0 km) upstream, flood of May 1908 was 9.1 ft (2.8 m) higher than that of May 24, 1952, from information by local resident.

REMARKS.--Records good. Flow regulated by Proctor Lake (station 08099400) since October 1963. Numerous diversions above station for municipal, steam powerplant operation, and other uses.

Listed below are discharge measurements, in cubic feet per second, of Walnut Creek near mouth, 0.3 mile (0.5 km) downstream from gaging station, during water year 1973:

Oct. 18	0	Feb. 27	0.68
Nov. 15	.19	Apr. 4	.58
Dec. 18	.34	July 17	.04

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.83	4.1	9.7	4.4	3.4	4.0	3.0	431	2.0	2.6	160	39
2	.80	4.1	39	5.0	3.3	3.7	3.0	565	1.9	2.2	315	38
3	.18	3.7	23	7.7	2.9	3.8	2.9	553	4.8	9.0	215	38
4	.10	3.7	22	4.2	3.2	3.7	2.9	544	4.0	24	181	39
5	.10	3.7	20	4.1	3.5	3.9	2.4	537	3.9	15	118	40
6	.35	4.0	5.4	3.9	3.3	7.7	2.7	529	3.6	26	30	31
7	3.1	3.6	4.8	4.4	5.0	4.7	3.0	524	67	40	28	4.8
8	3.2	3.8	4.8	4.1	11	4.1	2.9	518	189	32	26	4.3
9	2.8	3.7	4.5	3.9	3.9	3.8	2.8	508	192	33	26	4.1
10	2.5	3.7	5.0	3.6	3.4	4.2	2.7	497	192	33	36	3.7
11	2.6	3.6	5.1	3.6	3.5	3.7	2.6	497	190	32	41	3.0
12	2.9	3.9	5.2	3.1	3.5	3.7	3.0	482	162	36	28	3.2
13	3.1	4.2	5.2	3.0	3.4	3.4	2.6	470	44	26	28	3.0
14	2.9	3.8	4.5	3.3	3.3	3.5	2.8	400	40	6.1	27	2.8
15	3.0	3.8	4.9	3.0	3.4	3.5	4.0	345	39	6.2	36	3.2
16	3.0	3.9	4.8	3.7	3.4	3.7	4.2	272	24	5.5	52	3.2
17	2.5	3.5	4.5	3.3	3.9	3.3	22	194	4.5	5.3	52	3.2
18	2.3	4.3	4.8	3.2	4.0	3.4	8.4	183	4.0	4.0	53	3.4
19	4.5	4.1	4.6	3.7	3.5	3.4	3.8	184	3.7	8.1	53	3.1
20	4.7	3.9	4.7	3.9	3.3	3.3	3.2	186	4.2	18	53	3.0
21	4.8	4.2	4.6	3.5	4.3	3.4	3.2	105	4.0	25	52	3.8
22	7.6	3.8	4.6	3.4	6.1	3.4	3.2	4.0	4.1	24	50	22
23	4.4	3.7	4.1	2.9	5.4	3.8	33	2.4	3.9	25	49	18
24	4.4	4.6	4.2	3.0	4.5	5.5	23	3.5	4.3	26	45	19
25	4.6	3.9	4.3	6.9	4.2	3.1	178	4.7	3.7	27	26	19
26	8.3	3.8	4.4	5.0	4.2	3.0	403	4.3	3.5	30	29	19
27	5.1	4.0	3.9	3.4	3.6	2.7	401	3.0	3.1	32	31	15
28	3.8	3.3	4.4	3.0	3.9	3.2	407	3.0	2.9	31	36	3.6
29	4.2	3.9	4.4	3.0	------	2.9	404	2.6	3.4	32	43	3.3
30	3.9	4.1	4.3	3.1	------	3.1	391	2.2	3.4	35	39	3.4
31	3.7	------	4.4	3.3	------	3.1	------	2.0	------	34	40	------
TOTAL	100.26	116.4	234.1	119.6	114.3	115.7	2,331.3	8,545.7	1,211.9	685.0	1,998	399.1
MEAN	3.23	3.88	7.55	3.86	4.08	3.73	77.7	276	40.4	22.1	64.5	13.3
MAX	8.3	4.6	39	7.7	11	7.7	407	565	192	40	315	40
MIN	.10	3.3	3.9	2.9	2.9	2.7	2.4	2.0	1.9	2.2	26	2.8
AC-FT	199	231	464	237	227	229	4,620	16,950	2,400	1,360	3,960	792

CAL YR 1972 TOTAL 8,470.11 MEAN 23.1 MAX 248 MIN 0 AC-FT 16,800
WTR YR 1973 TOTAL 15,971.36 MEAN 43.8 MAX 565 MIN .10 AC-FT 31,680

08100000 Leon River near Hamilton, Tex.

LOCATION.--Lat 31°47'19", long 98°07'16", Hamilton County, on downstream side of bridge on U.S. Highway 281, 2.2 miles (3.5 km) upstream from Mesquite Creek, 3.6 miles (5.8 km) downstream from Bear Creek, 5.9 miles (9.5 km) north of Hamilton, and at mile 181.8 (292.5 km).

DRAINAGE AREA.--1,914 mi² (4,957 km²).

PERIOD OF RECORD.--January 1925 to September 1931, September 1960 to current year.

GAGE (revised).--Water-stage recorder. Datum of gage is 955.38 ft (291.20 m) above mean sea level. Jan. 7, 1925, to Sept. 30, 1931, nonrecording gage 1.4 miles (2.3 km) downstream at datum 1.87 ft (0.57 m) higher. Sept. 1 to Nov. 22, 1960, nonrecording gage at same site and 5 ft (2 m) higher datum. Nov. 22, 1960, to Sept. 30, 1972, recording gage at same site and 5 ft (2 m) higher datum.

AVERAGE DISCHARGE.--6 years (1925-31) unregulated, 130 ft³/s (3.68 m³/s), 94,180 acre-ft/yr (116 hm³/yr); 13 years (1960-73) regulated, 189 ft³/s (5.35 m³/s), 136,900 acre-ft/yr (169 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft³/s (49.6 m³/s) Apr. 24, gage height, 15.55 ft (4.74 m); minimum daily, 0.01 ft³/s (0.28 dm³/s) Sept. 25.
Period of record: Maximum discharge, 18,600 ft³/s (527 m³/s) Sept. 9, 1962, gage height, 31.93 ft (9.73 m), revised; no flow at times.
Maximum stage since at least 1858, 38.4 ft (11.7 m), revised, in May 1908 and December 1913; flood in September 1911 reached a stage of 37.0 ft (11.3 m), revised, from information by local residents. The flood in October 1959 reached a stage of 34.1 ft (10.4 m), revised.

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 mi² (114 km²) above this station was partly controlled by 14 floodwater-retarding structures with a total combined capacity of 12,810 acre-ft (15.8 hm³) below the flood-spillway crests, of which 11,610 acre-ft (14.3 hm³) is floodwater-retarding capacity and 1,200 acre-ft (1.48 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	5.7	15	8.9	17	27	30	440	12	4.2	6.1	.22
2	1.6	5.4	13	11	16	26	30	423	11	4.0	15	.64
3	1.4	4.6	13	16	15	25	29	521	15	3.7	205	1.9
4	1.2	4.5	17	18	15	25	27	550	23	3.5	191	4.2
5	1.1	4.6	26	44	15	24	26	548	22	3.2	134	4.4
6	1.0	4.7	27	36	14	51	26	563	23	3.0	124	5.0
7	.92	4.8	26	27	15	85	28	654	26	2.9	51	15
8	.92	4.3	25	20	49	101	28	590	16	5.1	6.6	28
9	.92	4.6	16	17	301	56	27	549	75	12	2.1	12
10	.92	4.8	10	16	93	263	27	528	147	65	.82	4.3
11	.74	5.5	8.5	15	48	101	26	515	150	61	.66	2.1
12	.66	5.9	8.4	12	31	54	26	505	152	30	.51	1.4
13	.46	6.6	8.4	13	27	45	27	493	159	46	.40	1.2
14	.40	6.6	9.5	14	24	41	28	484	107	53	.74	.92
15	.40	11	9.6	14	22	37	33	461	58	125	1.5	.92
16	.40	8.9	9.3	14	20	33	99	389	42	213	.64	.90
17	.40	8.9	8.9	13	20	33	59	348	37	59	.38	.66
18	.40	9.5	8.5	12	21	32	652	203	32	12	.30	.44
19	.40	8.6	8.4	11	23	31	288	181	17	4.8	.21	.26
20	.40	9.7	8.4	10	24	29	106	175	15	2.9	4.0	.17
21	.45	11	8.4	12	23	28	64	172	37	2.0	4.5	.11
22	2.8	11	8.4	10	25	27	46	160	25	1.6	5.1	.05
23	6.1	12	8.4	9.8	33	29	41	79	13	1.2	4.4	.02
24	2.9	13	8.3	10	41	102	1,110	38	9.8	1.5	3.7	.03
25	3.2	14	7.6	15	43	57	898	30	8.6	1.6	2.3	.01
26	4.7	14	7.6	20	33	47	314	29	7.3	1.1	1.8	1.5
27	5.4	15	7.6	43	28	43	441	24	6.1	1.0	3.2	5.6
28	5.6	16	8.1	45	27	37	456	19	5.2	1.0	1.6	6.4
29	12	16	8.2	30	------	35	453	17	5.0	1.1	.74	6.6
30	7.0	15	9.2	22	------	34	444	14	4.8	2.1	.46	6.0
31	5.8	------	9.0	18	------	32	------	13	------	2.1	.35	------
TOTAL	72.99	266.2	366.7	576.7	1,063	1,590	5,889	9,715	1,260.8	729.6	773.11	110.95
MEAN	2.35	8.87	11.8	18.6	38.0	51.3	196	313	42.0	23.5	24.9	3.70
MAX	12	16	27	45	301	263	1,110	654	159	213	205	28
MIN	.40	4.3	7.6	8.9	14	24	26	13	4.8	1.0	.21	.01
AC-FT	145	528	727	1,140	2,110	3,150	11,680	19,270	2,500	1,450	1,530	220

CAL YR 1972 TOTAL 17,121.69 MEAN 46.8 MAX 666 MIN .40 AC-FT 33,960
WTR YR 1973 TOTAL 22,414.05 MEAN 61.4 MAX 1,110 MIN .01 AC-FT 44,460

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 (244 m) downstream from U.S. Highway 84 bridge in Gatesville, 0.3 mile (0.5 km) downstream from Dodds Creek, 5.2 miles (8.4 km) upstream from Cottonwood Creek, and at mile 104.8 (168.6 km).

DRAINAGE AREA.--2,365 mi² (6,125 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 723.85 ft (220.63 m) above mean sea level. Oct. 1, 1950, to Feb. 8, 1951, nonrecording gage; Feb. 9, 1951, to Jan 21, 1969, water-stage recorder; all at site 800 ft (244 m) upstream at same datum.

AVERAGE DISCHARGE.--23 years, 279 ft³/s (7.90 m³/s), 202,100 acre-ft/yr (249 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,210 ft³/s (119 m³/s) June 4, gage height, 18.68 ft (5.69 m); minimum daily, 3.4 ft³/s (96 dm³/s) Oct. 15-19.
Period of record: Maximum discharge, 51,200 ft³/s (1,450 m³/s) Oct. 4, 1959, gage height, 34.14 ft (10.41 m), from rating curve extended above 41,000 ft³/s (1,160 m³/s); no flow at times in 1951-52, 1954-55, 1971.
Maximum stage since at least 1854, 35 ft (11 m) 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 522 acre-ft (0.644 hm³) was diverted above station during the water year for municipal use and 613 acre-ft (0.756 hm³) was returned to the Leon River as sewage effluent. The city of Gatesville reported that 552 acre-ft (0.681 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	23	20	12	78	96	91	527	35	19	9.3	5.0
2	6.7	29	19	15	69	89	88	515	33	17	9.1	4.9
3	6.9	22	18	35	63	85	79	495	1,590	16	8.5	4.9
4	6.8	16	18	17	56	81	72	510	1,950	14	7.8	5.1
5	5.5	13	18	76	52	76	67	609	235	13	189	6.1
6	5.1	14	18	52	50	76	68	781	140	99	189	10
7	4.5	13	17	42	51	79	78	883	107	20	146	7.7
8	4.5	12	29	57	85	140	70	750	87	13	131	7.8
9	4.2	10	27	73	93	149	69	663	77	13	77	7.9
10	4.0	10	25	72	139	586	68	591	72	11	39	9.6
11	3.6	11	24	53	244	252	63	566	105	9.9	22	24
12	3.6	9.9	24	39	137	389	61	759	208	10	14	27
13	3.5	9.9	19	33	94	178	60	549	234	92	11	21
14	3.5	10	19	33	68	133	67	534	231	81	9.0	12
15	3.4	10	16	29	56	117	207	524	220	1,200	7.9	7.8
16	3.4	9.4	12	29	49	114	509	519	149	1,300	7.2	6.2
17	3.4	12	11	30	47	101	351	477	103	446	6.4	5.5
18	3.4	12	11	32	55	93	211	433	81	266	5.9	4.9
19	3.4	12	12	31	60	88	288	345	67	119	5.7	4.8
20	3.5	14	12	30	71	84	521	252	241	73	5.6	4.5
21	13	21	13	28	69	78	246	235	193	50	5.6	4.3
22	107	19	13	34	95	74	161	226	340	37	5.5	4.2
23	26	18	12	30	119	72	135	223	119	27	5.4	4.1
24	46	18	12	27	159	166	491	204	81	24	5.3	4.1
25	21	18	12	68	142	262	1,550	458	58	18	5.0	4.0
26	191	19	11	88	124	224	1,690	648	46	16	4.9	4.8
27	63	20	11	163	117	133	605	111	39	32	4.8	8.5
28	97	19	11	124	105	111	476	69	32	14	4.9	7.9
29	69	20	11	84	------	106	540	52	27	11	5.0	10
30	36	21	12	93	------	106	532	43	23	9.7	5.1	6.9
31	22	------	12	86	------	95	------	37	------	9.9	5.2	------
TOTAL	781.7	465.2	499	1,615	2,547	4,433	9,514	13,588	6,923	4,080.5	957.6	245.5
MEAN	25.2	15.5	16.1	52.1	91.0	143	317	438	231	132	30.9	8.18
MAX	191	29	29	163	244	586	1,690	883	1,950	1,300	189	27
MIN	3.4	9.4	11	12	47	72	60	37	23	9.7	4.8	4.0
AC-FT	1,550	923	990	3,200	5,050	8,790	18,870	26,950	13,730	8,090	1,900	487

CAL YR 1972 TOTAL 28,226.9 MEAN 77.1 MAX 781 MIN 2.8 AC-FT 55,990
WTR YR 1973 TOTAL 45,649.5 MEAN 125 MAX 1,950 MIN 3.4 AC-FT 90,550

08101000 Cowhouse Creek at Pidcoke, Tex.

LOCATION.--Lat 31°17'05", long 97°53'05", Coryell County, on left bank 125 ft (38 m) downstream from bridge on Farm Road 116, 0.1 mile (0.2 km) downstream from Beehouse Creek, 0.6 mile (1.0 km) northeast of Pidcoke, and 4.9 miles (7.9 km) upstream from Table Rock Creek.

DRAINAGE AREA.--455 mi² (1,178 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.7 ft (224.5 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 93.8 ft³/s (2.66 m³/s), 67,960 acre-ft/yr (83.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,430 ft³/s (267 m³/s) June 3, gage height, 18.18 ft (5.54 m); minimum discharge, 0.05 ft³/s (1.4 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 66,200 ft³/s (1,870 m³/s) Oct. 4, 1959, gage height, 40.1 ft (12.2 m), from floodmark, from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement of 55,800 ft³/s (1,580 m³/s); no flow at times.
Maximum stage since at least 1882, that of Oct. 4, 1959, from information by local resident.

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

REVISIONS (WATER YEARS).--WSP 1712: 1955. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	5.7	1.1	1.3	12	49	34	67	48	12	15	1.5
2	.89	4.5	1.1	1.7	10	46	43	58	49	11	12	1.2
3	.70	3.2	1.1	4.5	10	43	50	47	1,670	9.5	9.9	1.0
4	.54	2.6	1.1	5.0	9.3	41	25	41	832	8.7	8.6	.82
5	.44	1.9	1.0	5.0	9.2	36	23	39	181	7.9	7.6	.80
6	.32	1.7	.92	9.7	8.6	35	28	202	120	72	6.9	24
7	.19	1.1	.88	9.2	8.7	32	48	115	96	16	6.3	20
8	.14	9.0	.88	7.9	16	42	37	76	79	10	5.6	9.0
9	.11	4.5	1.0	8.0	23	39	31	53	70	8.8	5.0	6.0
10	.10	2.4	1.1	13	31	238	27	39	64	7.7	4.0	4.4
11	.09	1.7	1.1	9.5	20	216	23	33	61	6.9	3.6	3.3
12	.08	1.4	1.1	7.4	17	79	23	131	63	6.6	3.3	2.8
13	.08	1.6	1.1	6.6	16	52	23	43	66	36	3.1	2.3
14	.07	1.5	1.5	6.3	15	43	31	30	63	38	2.9	1.9
15	.06	1.3	1.6	5.6	13	36	541	26	53	348	2.8	1.5
16	.06	1.2	1.4	5.5	12	35	584	24	47	191	2.5	1.4
17	.06	1.9	1.3	5.6	14	33	174	22	40	54	2.3	1.2
18	.06	2.0	1.3	6.0	20	29	130	19	35	28	2.1	1.2
19	.06	1.7	1.3	5.6	21	25	126	17	30	18	2.1	1.1
20	.07	1.5	1.4	5.6	25	23	97	15	30	13	1.9	1.2
21	.09	1.4	1.2	5.4	28	22	80	12	257	10	1.8	1.1
22	115	1.3	1.1	8.9	50	21	76	11	105	8.3	1.6	.96
23	32	1.2	1.0	7.7	105	22	76	9.6	50	7.2	1.5	.96
24	8.3	1.6	1.0	5.4	107	259	936	9.6	34	6.1	1.2	1.0
25	3.7	1.4	1.0	12	88	161	523	914	28	5.3	1.1	1.0
26	155	1.2	1.0	32	73	73	193	429	24	251	1.1	1.5
27	128	1.1	1.0	71	61	50	131	120	22	533	1.0	50
28	32	1.1	1.1	34	53	41	99	79	19	42	.92	7.6
29	19	1.0	1.2	21	------	52	82	61	16	22	.69	4.8
30	10	1.1	1.3	16	------	46	71	50	14	17	.66	3.2
31	7.0	------	1.3	14	------	38	------	45	------	15	1.1	------
TOTAL	525.51	64.8	35.48	356.4	876.3	1,957	4,365	2,842.2	4,266	1,820.0	120.17	158.74
MEAN	17.0	2.16	1.14	11.5	31.3	63.1	146	91.7	142	58.7	3.88	5.29
MAX	165	9.0	1.6	71	107	259	936	914	1,670	533	15	50
MIN	.06	1.0	.88	1.3	8.6	21	23	9.6	14	5.3	.66	.80
AC-FT	1,040	129	70	707	1,740	3,880	8,660	5,640	8,460	3,610	238	315

CAL YR 1972 TOTAL 11,920.76 MEAN 32.6 MAX 960 MIN 0 AC-FT 23,640
WTR YR 1973 TOTAL 17,387.60 MEAN 47.6 MAX 1,670 MIN .05 AC-FT 34,490

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-24	2045	12.07	4,370	6- 3	1900	18.18	9,430
5-25	2115	17.27	8,620	7-27	0030	11.25	3,740

08102000 Belton Lake near Belton, Tex.

LOCATION.--Lat 31°06'22", long 97°28'28", Bell County, in intake structure at Belton Dam on Leon River, 1.6 miles (2.6 km) upstream from bridge on State Highway 317, 3.5 miles (5.6 km) north of Belton, 8.9 miles (14.3 km) upstream from Nolan Creek, and at mile 16.8 (27.0 km).

DRAINAGE AREA.--3,560 mi² (9,220 km²).

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, 473,200 acre-ft (583 hm³) June 5, elevation, 596.03 ft (181.67 m); minimum, 311,000 acre-ft (383 hm³) Oct. 20, elevation, 580.71 ft (177.00 m).
Period of record: Maximum contents, 870,300 acre-ft (1,073 hm³) June 6, 1957, elevation, 620.45 ft (189.11 m); minimum since initial filling, 113,400 acre-ft (140 hm³) Dec. 16, 1956, elevation, 553.06 ft (168.57 m).

REMARKS.--Lake is formed by a rolled earthfill dam 5,524 ft (1,684 m) long including a 1,300-foot (396-meter) uncontrolled broad-crested spillway in saddle on left bank and a 418-foot (127-meter) dike. Flood-control outlet works consist of a 22-foot-diameter (7-meter) conduit controlled by three 7.0- by 22.0-foot (2.1- by 6.7-meter) electrically driven broome-type gates, elevation of invert, 483.0 ft (147.2 m). Low-flow outlet works consist of one 36- by 36-inch (914- by 914-millimeter) gated outlet discharging into flood-control conduit, elevation of invert at intake to wet well, 540.0 ft (164.6 m). Deliberate impoundment of water began Mar. 8, 1954, and main dam was completed in December 1954. Lake built for flood control and conservation. Contents prior to June 1973 based on surveys dated 1936, 1937, and 1948; contents after June 1973 based on re-survey dated 1961. Fort Hood and adjacent military installations diverted 16,480 acre-ft (20.3 hm³) of water for municipal use during the year. Small diversions above the lake for irrigation, municipal supply, and oilfield operation. During the year, the city of Temple diverted 7,210 acre-ft (8.89 hm³) 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	2,068,700
Crest of spillway	631.0	1,091,300
Top of conservation storage	594.0	447,500
Invert of lowest intake	483.0	11

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)

580.0	294,500	592.0	423,200
583.0	324,200	595.0	460,000
586.0	355,400	597.0	485,800
589.0	388,300	600.0	525,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315,500	327,600	326,100	327,500	342,600	359,400	394,000	440,400	448,700	446,600	449,500	438,600
2	315,300	328,200	326,100	328,300	343,000	359,900	394,900	442,200	448,500	446,400	448,700	438,500
3	315,200	328,100	326,300	329,200	343,200	360,600	395,600	443,300	457,100	446,300	447,500	438,100
4	314,900	328,100	326,000	329,400	343,600	361,000	395,600	444,200	468,200	446,000	447,000	438,000
5	314,700	328,100	326,000	329,700	343,900	361,400	395,800	446,000	471,500	446,300	446,500	438,100
6	314,500	328,200	325,700	330,200	344,200	362,200	396,500	449,100	468,800	446,300	446,400	438,900
7	314,100	328,100	325,400	331,100	345,200	362,600	396,700	452,000	465,400	446,300	446,300	439,300
8	313,600	327,900	325,600	331,200	346,100	363,000	397,200	454,100	462,800	446,300	446,100	439,300
9	313,500	328,000	325,500	331,300	346,300	364,000	397,300	455,800	460,300	446,100	446,300	439,100
10	313,300	327,700	325,500	331,800	346,600	370,800	397,400	457,400	456,900	446,000	446,000	438,900
11	313,300	327,500	325,500	332,000	347,000	374,800	397,500	459,500	456,100	445,800	445,800	438,600
12	313,000	327,700	325,600	331,900	347,900	375,800	397,600	460,700	456,800	445,600	445,500	438,600
13	312,700	328,200	325,400	332,200	348,700	377,500	398,000	462,200	457,600	445,400	445,300	438,400
14	312,500	327,700	327,400	332,500	348,900	378,400	399,000	463,300	458,100	445,500	445,000	438,100
15	312,300	327,100	327,300	332,800	349,200	379,700	402,800	463,500	458,400	451,400	444,700	437,800
16	311,900	327,600	327,600	332,800	349,400	380,100	408,500	463,800	456,800	455,900	444,300	437,500
17	311,800	327,500	327,200	333,200	350,400	380,200	412,300	463,200	453,900	458,900	443,800	437,300
18	311,800	327,500	327,400	333,600	350,900	380,400	413,200	461,900	451,000	458,300	443,700	436,900
19	311,400	327,200	327,400	333,600	351,400	381,500	414,300	460,600	448,700	456,300	443,300	436,300
20	311,000	327,000	328,000	334,000	351,800	381,600	415,700	459,600	448,900	454,900	443,100	436,300
21	313,200	327,000	327,400	334,200	352,500	381,800	417,400	459,500	449,200	454,000	442,800	435,900
22	315,300	326,700	327,400	334,300	353,900	382,000	418,700	459,300	449,100	452,600	442,400	435,800
23	315,300	326,600	327,400	334,400	354,900	382,400	419,800	459,600	449,200	451,400	441,800	435,700
24	315,300	326,800	327,500	334,400	355,800	388,500	422,200	459,900	448,700	450,400	441,600	435,300
25	315,100	327,000	327,400	337,900	356,700	390,100	427,100	462,600	448,400	449,600	441,200	435,200
26	319,800	326,600	327,300	338,800	357,300	391,000	430,500	467,600	447,600	449,700	440,900	437,400
27	321,700	326,800	327,300	339,800	358,100	391,500	433,700	468,800	447,400	450,600	440,400	439,700
28	322,100	326,500	327,200	340,400	358,700	392,300	435,100	468,100	447,100	450,200	440,200	439,500
29	322,900	326,400	327,300	340,700	------	392,700	436,400	467,300	447,000	449,600	439,500	439,300
30	323,000	326,300	327,500	341,100	------	393,300	438,100	464,500	446,900	449,600	439,300	439,100
31	323,400	------	327,400	341,900	------	393,700	------	460,200	------	449,600	438,900	------
(†)	581.97	582.26	582.37	583.79	585.38	588.57	592.39	594.21	593.95	594.17	593.30	593.32
(∗)	+7,600	+2,900	+1,100	+14,500	+16,800	+35,000	+44,400	+22,100	-13,300	+2,700	-10,700	+200
(††)	1,420	1,070	1,080	1,150	1,000	1,170	1,150	1,540	1,530	1,770	2,080	1,520
MAX	323,400	328,200	328,000	341,900	358,700	393,700	438,100	468,800	471,500	458,900	449,500	439,700
MIN	311,000	326,300	325,400	327,500	342,600	359,400	394,000	440,400	446,900	445,400	438,900	435,200

CAL YR 1972..... ∗ +18,900 †† 16,350 MAX 330,800 MIN 303,200
WTR YR 1973..... ∗ +123,300 †† 16,480 MAX 471,500 MIN 311,000

† 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 (427 m) upstream from bridge on Farm Road 817, 2,000 ft (610 m) upstream from concrete dam, 1.0 mile (1.6 km) upstream from bridge on U.S. Highway 81, 2.0 miles (3.2 km) northeast of Belton, 3.2 miles (5.1 km) downstream from Belton Dam, 5.0 miles (8.0 km) upstream from Nolan Creek, and at mile 13.0 (20.9 km).

DRAINAGE AREA.--3,572 mi² (9,251 km²).

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 476.68 ft (145.29 m) above mean sea level. Prior to May 21, 1931, nonrecording gage.

AVERAGE DISCHARGE.--30 years (1923-53) unregulated, 659 ft³/s (18.7 m³/s), 477,400 acre-ft/yr (589 hm³/yr); 20 years (1953-73) regulated, 572 ft³/s (16.2 m³/s), 414,400 acre-ft/yr (511 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft³/s (73.1 m³/s) May 30, 31, gage height, 6.22 ft (1.90 m); minimum daily, 1.1 ft³/s (31 dm³/s) Oct. 5.
Period of record: Maximum discharge, 56,500 ft³/s (1,600 m³/s) Apr. 22, 1945, gage height, 24.41 ft (7.44 m); no flow at times.
Flood in December 1913 reached a stage of 25 ft (8 m), and flood in September 1921 reached a stage of 21 ft (6 m), from information by local residents.

REMARKS.--Records good. The city of Temple reported that during the year 7,230 acre-ft (8.91 hm³) was diverted from gage pool for municipal use, 2,460 acre-ft (3.03 hm³) of treated sewage effluent was returned to Little Elm Creek, and 363 acre-ft (0.45 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	72	27	29	33	34	51	33	1,180	57	175	17
2	17	42	28	33	33	33	40	34	260	46	178	16
3	17	32	28	35	33	34	43	38	65	30	180	15
4	11	34	31	29	33	33	39	31	63	29	137	14
5	1.1	23	38	29	34	33	40	33	881	28	100	18
6	7.7	22	42	29	33	35	41	39	1,940	31	81	24
7	21	21	43	32	34	33	42	42	1,930	32	45	21
8	24	23	26	31	35	33	46	33	1,920	31	36	20
9	16	23	26	31	34	34	43	35	1,920	33	32	19
10	13	25	26	33	33	37	42	35	1,920	32	23	19
11	16	48	28	33	33	34	42	35	1,920	31	17	18
12	15	28	23	33	33	37	40	36	944	31	14	19
13	13	28	25	32	33	41	32	33	65	30	16	19
14	15	19	35	31	34	37	32	156	62	29	15	17
15	15	23	27	30	30	39	34	466	62	34	15	18
16	14	25	26	32	33	41	34	406	1,040	33	15	16
17	16	31	26	32	36	45	37	696	1,910	33	14	17
18	16	28	27	30	36	62	37	1,160	1,900	818	14	17
19	16	28	27	30	34	63	33	1,150	1,170	1,340	15	15
20	20	28	26	33	33	62	32	752	366	773	16	16
21	25	28	25	32	34	49	32	475	356	599	13	16
22	47	27	27	32	34	32	32	328	354	600	11	15
23	27	28	28	32	33	30	32	202	357	594	9.1	16
24	29	31	28	31	33	47	33	203	360	514	11	17
25	19	28	30	47	33	39	32	206	359	303	11	17
26	26	26	32	38	33	41	33	205	359	258	12	25
27	21	28	30	36	33	40	32	344	246	175	10	38
28	19	26	31	37	33	41	31	481	124	172	13	19
29	26	27	31	39	------	40	31	483	79	173	13	18
30	24	29	29	39	------	41	32	1,430	59	174	13	19
31	23	------	29	33	------	51	------	2,390	------	174	17	------
TOTAL	588.8	881	905	1,023	936	1,251	1,100	11,990	24,171	7,237	1,271.1	555
MEAN	19.0	29.4	29.2	33.0	33.4	40.4	36.7	387	806	233	41.0	18.5
MAX	47	72	43	47	36	63	51	2,390	1,940	1,340	180	38
MIN	1.1	19	23	29	30	30	31	31	59	28	9.1	14
AC-FT	1,170	1,750	1,800	2,030	1,860	2,480	2,180	23,780	47,940	14,350	2,520	1,100

CAL YR 1972 TOTAL 38,898.8 MEAN 106 MAX 1,940 MIN 1.1 AC-FT 77,160
WTR YR 1973 TOTAL 51,908.9 MEAN 142 MAX 2,390 MIN 1.1 AC-FT 103,000

08103800 Lampasas River near Kempner, Tex.

LOCATION.--Lat 32°04'54", long 98°00'59", Lampasas County, on left bank 800 ft (244 m) upstream from centerline of U.S. Highway 190, 0.6 mile (1.0 km) upstream from Mesquite Creek, 0.8 mile (1.3 km) west of Kempner, 0.9 mile (1.4 km) downstream from Sulphur Creek, and at mile 76.7 (123.4 km).

DRAINAGE AREA.--817 mi² (2,116 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 828.38 ft (252.49 m) above mean sea level. Prior to Aug. 4, 1967, at site 800 ft (244 m) downstream.

AVERAGE DISCHARGE.--11 years, 151 ft³/s (4.28 m³/s), 109,400 acre-ft/yr (135 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,410 ft³/s (238 m³/s) June 3, gage height, 11.44 ft (3.49 m); minimum daily, 7.4 ft³/s (210 dm³/s) Aug. 25.
Period of record: Maximum discharge, 71,000 ft³/s (2,010 m³/s) May 16, 1965, gage height, 32.98 ft (10.05 m); minimum daily, 1.4 ft³/s (40 dm³/s) July 17, 1971.
Maximum stage since at least 1871 occurred in September 1873 (stage unknown). Flood of May 13, 1957, reached a stage of 37 ft (11 m), and flood of Oct. 4, 1959, reached a stage of 34 ft (10 m), from information by local residents.

REMARKS.--Records good. Records furnished by city of Lampasas show that 1,540 acre-ft (1.90 hm³) of water was diverted from Sulphur Creek and 913 acre-ft (1.13 hm³) of sewage effluent was returned to the creek above station. At end of year, flow from 74.8 mi² (194 km²) above this station was partly controlled by nine floodwater-retarding structures with a total combined capacity of 26,090 acre-ft (32.2 hm³) below the flood-spillway crests, of which 24,700 acre-ft (30.5 hm³) is floodwater-retarding capacity and 1,390 acre-ft (1.71 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	13	13	19	36	48	97	34	17	38	9.8
2	12	17	13	16	18	36	45	91	37	15	31	8.6
3	14	15	11	32	17	35	69	79	1,290	13	24	8.4
4	12	13	12	21	17	34	46	72	659	12	22	8.5
5	11	13	13	20	18	33	41	70	133	10	19	9.0
6	11	13	12	20	17	33	45	114	79	20	17	14
7	11	12	12	20	19	32	84	404	62	24	16	21
8	11	13	12	21	28	32	61	140	52	24	14	21
9	11	11	13	18	26	31	52	94	48	24	13	16
10	11	12	15	16	22	491	48	78	44	21	13	16
11	10	11	16	16	21	109	45	69	43	19	12	15
12	11	13	16	16	21	68	43	71	46	18	11	13
13	9.8	19	14	16	21	61	42	66	47	21	11	13
14	9.7	13	21	15	20	55	108	59	52	19	11	12
15	10	12	20	13	20	54	662	58	48	483	11	11
16	10	12	14	13	21	55	713	55	42	156	10	11
17	12	13	13	14	21	50	198	51	38	86	10	12
18	11	12	13	13	25	49	146	49	34	47	9.1	12
19	11	12	15	15	24	47	130	47	36	34	10	11
20	13	12	17	15	22	43	106	40	119	28	10	12
21	18	13	15	15	28	41	94	38	547	24	10	11
22	159	14	13	14	40	42	90	40	117	22	9.8	10
23	23	13	13	13	48	42	92	36	97	21	8.8	9.9
24	19	15	13	12	46	147	114	33	72	19	7.8	12
25	17	18	13	23	44	118	297	153	55	16	7.4	12
26	293	13	13	30	41	70	287	677	47	16	8.4	13
27	92	13	13	23	39	58	136	89	39	51	8.8	34
28	35	13	14	21	38	54	117	53	32	51	8.4	23
29	23	12	15	20	------	52	106	41	30	35	8.6	16
30	19	13	13	19	------	54	100	37	23	26	9.1	15
31	17	------	13	18	------	53	------	33	------	29	9.7	------
TOTAL	939.5	401	433	551	741	2,115	4,165	3,034	4,002	1,401	408.9	410.2
MEAN	30.3	13.4	14.0	17.8	26.5	68.2	139	97.9	133	45.2	13.2	13.7
MAX	293	19	21	32	48	491	713	677	1,290	483	38	34
MIN	9.7	11	11	12	17	31	41	33	23	10	7.4	8.4
AC-FT	1,860	795	859	1,090	1,470	4,200	8,260	6,020	7,940	2,780	811	814

CAL YR 1972 TOTAL 29,896.7 MEAN 81.7 MAX 4,970 MIN 7.0 AC-FT 59,300
WTR YR 1973 TOTAL 18,601.6 MEAN 51.0 MAX 1,290 MIN 7.4 AC-FT 36,900

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Apr. 15 (1930) 5,210 ft³/s (9.40 ft); June 3 (2045) 8,410 ft³/s (11.44 ft).

08103900 South Fork Rocky Creek near Briggs, Tex.
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 30°54'41", long 98°02'12", Burnet County, on upstream side of bridge on Ranch Road 963, 6 miles (10 km) above confluence with North Fork Rocky Creek, and 7 miles (11 km) west of Briggs.

DRAINAGE AREA.--34.2 mi² (88.6 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 955.8 ft (291.3 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 10.0 ft³/s (0.283 m³/s), 3.97 in/yr (100.8 mm/yr), 7,240 acre-ft/yr (8.93 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,770 ft³/s (135 m³/s) Apr. 14, gage height, 10.22 ft (3.12 m); no flow for many days.
Period of record: Maximum discharge, 11,900 ft³/s (337 m³/s) May 16, 1965, gage height, 13.82 ft (4.21 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of 3,580 ft³/s (101 m³/s) and area-velocity study; no flow for many days each year.
Maximum stage since at least 1904, 18 ft (5 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.4	.95	2.1	17	34	31	30	51	1.9	.95	0
2	0	1.7	.95	2.6	13	32	31	26	20	1.6	.81	0
3	0	.79	.95	10	12	31	30	23	15	1.4	.58	0
4	0	.47	.95	6.7	12	31	26	22	15	1.3	.49	0
5	0	.37	.95	5.8	12	29	25	24	7.8	1.2	.47	0
6	0	.37	.86	5.6	12	29	43	83	7.2	1.1	.42	0
7	0	.29	.86	9.5	12	25	42	81	6.2	1.1	.33	0
8	0	.27	.86	9.2	23	24	31	32	5.3	1.0	.23	0
9	0	.27	.86	7.8	24	23	27	27	5.0	.90	.11	0
10	0	.29	.86	8.3	24	195	24	24	4.8	.83	.01	0
11	0	.32	.86	9.0	27	43	24	23	4.9	.77	0	0
12	0	.44	.91	8.3	26	37	24	23	15	.74	0	0
13	0	1.4	.95	9.3	24	36	23	22	14	.59	0	0
14	0	.83	16	11	21	34	326	21	7.4	.49	0	0
15	0	.70	4.8	11	21	32	51	20	5.9	7.6	0	0
16	0	.70	3.0	10	20	39	47	18	5.0	89	0	0
17	0	.70	2.8	10	24	31	44	17	4.4	6.2	0	0
18	0	.64	2.7	10	31	29	43	15	4.0	3.0	0	0
19	0	.62	2.7	8.8	27	28	37	13	3.5	2.2	0	0
20	0	.62	2.7	8.7	24	25	34	12	3.6	1.8	0	0
21	.36	.66	2.6	8.4	41	23	31	11	4.0	1.4	0	0
22	15	.70	2.4	7.6	63	23	31	9.9	3.5	1.3	0	0
23	.12	.70	2.4	7.5	55	24	33	9.6	3.1	1.1	0	0
24	0	1.1	2.4	7.5	47	350	34	13	3.0	1.1	0	0
25	0	1.5	2.4	26	42	53	69	10	3.1	.95	0	0
26	46	1.3	2.4	25	39	46	75	9.7	3.6	.93	0	0
27	5.8	1.2	2.4	19	37	43	35	7.9	3.1	6.3	0	1.6
28	1.1	1.0	2.4	15	36	41	32	6.3	2.6	2.0	0	.93
29	1.6	.95	2.4	15	------	38	30	5.7	2.3	1.2	0	.14
30	1.1	.95	2.3	15	------	38	30	5.3	2.1	.87	0	0
31	.48	------	2.1	16	------	35	------	5.0	------	.88	0	------
TOTAL	71.56	24.79	72.67	325.7	766	1,501	1,363	649.4	235.4	142.75	4.40	2.67
MEAN	2.31	.83	2.34	10.5	27.4	48.4	45.4	20.9	7.85	4.60	.14	.089
MAX	46	2.9	16	26	63	350	326	83	51	89	.95	1.6
MIN	0	.27	.86	2.1	12	23	23	5.0	2.1	.49	0	0
CFSM	.07	.02	.07	.31	.80	1.42	1.33	.61	.23	.13	.004	.003
IN.	.08	.03	.08	.35	.83	1.63	1.48	.71	.26	.16	.004	.002
AC-FT	142	49	144	646	1,520	2,980	2,700	1,290	467	283	8.7	5.3

CAL YR 1972 TOTAL 1,072.62 MEAN 2.93 MAX 199 MIN 0 CFSM .09 IN 1.17 AC-FT 2,130
WTR YR 1973 TOTAL 5,159.34 MEAN 14.1 MAX 350 MIN 0 CFSM .41 IN 5.61 AC-FT 10,230

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	0545	5.71	1,230
3-24	0315	7.95	2,700
4-14	1045	10.22	4,770

08104000 Lampasas River at Youngsport, Tex.

LOCATION.--Lat 30°57'26", long 97°42'30", Bell County, on left bank 600 ft (183 m) downstream from county road low-water crossing, 2,000 ft (610 m) downstream from bridge on county road, 0.7 mile (1.1 km) east of Youngsport, 4.5 miles (7.2 km) downstream from Rocky Creek, and at mile 40.8 (65.6 km).

DRAINAGE AREA.--1,244 mi² (3,222 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 630.88 ft (192.29 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 14, 1931, nonrecording gage, and Mar. 14, 1931, to Mar. 11, 1965, water-stage recorder at site 1,000 ft (305 m) upstream at datum 2.58 ft (0.79 m) higher.

AVERAGE DISCHARGE.--49 years, 276 ft³/s (7.82 m³/s), 200,000 acre-ft/yr (247 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,240 ft³/s (148 m³/s) June 4, gage height, 8.75 ft (2.67 m); minimum, 5.2 ft³/s (147 dm³/s) Oct. 15, 16.
Period of record: Maximum discharge, 87,900 ft³/s (2,490 m³/s) May 17, 1965, gage height, 37.7 ft (11.5 m), from floodmarks, from rating curve extended above 40,000 ft³/s (1,130 m³/s) on basis of maximum discharge of May 13, 1957, measured at highway bridge 22 miles (35 km) downstream; no flow at times in 1925, 1934, 1950-52, 1954, 1956, 1963-67, 1971.
Maximum stage since at least 1873, 45.2 ft (13.8 m) Sept. 8, 1873, from information by local residents at time the former gage was established 1,000 ft (305 m) upstream, adjusted to present site and datum.

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	208	25	30	165	286	271	334	101	67	76	7.6
2	8.0	81	24	38	151	271	258	376	229	56	72	8.5
3	8.5	49	25	85	142	251	266	265	142	53	61	10
4	8.7	41	25	76	139	246	259	239	1,660	47	54	10
5	8.4	33	25	72	138	233	230	270	428	43	46	10
6	8.5	32	24	65	137	234	232	484	258	52	42	16
7	7.4	29	24	88	137	222	332	1,460	176	88	38	21
8	6.9	29	24	96	173	210	301	563	144	62	34	23
9	6.6	28	25	92	209	214	253	411	125	59	29	24
10	6.3	27	25	87	212	1,480	229	351	114	54	24	23
11	6.3	25	25	90	202	718	220	322	127	46	22	19
12	6.4	26	28	90	203	415	217	348	157	53	22	18
13	6.3	42	28	94	198	356	212	304	152	42	20	17
14	6.2	33	56	102	190	328	591	278	139	34	18	15
15	5.6	31	96	101	181	289	608	263	127	661	16	15
16	5.3	30	55	97	179	336	1,270	243	109	634	16	15
17	5.6	28	42	97	193	287	549	234	97	272	15	14
18	5.6	28	37	97	246	255	442	216	88	154	15	14
19	5.7	28	36	93	233	240	373	203	80	111	15	13
20	6.0	27	36	91	212	221	326	189	78	94	15	13
21	10	27	35	92	256	206	289	176	414	83	15	12
22	213	28	34	86	402	200	283	163	313	72	14	11
23	104	28	32	83	481	199	289	151	190	66	12	11
24	36	30	31	83	419	1,360	301	146	160	60	10	11
25	22	32	31	160	377	536	427	144	141	55	8.9	11
26	167	30	31	224	342	394	739	454	126	50	8.6	14
27	482	31	31	188	316	353	417	308	106	58	7.4	52
28	121	28	31	164	303	333	338	175	89	109	7.4	44
29	70	25	31	155	------	314	310	136	79	90	7.0	36
30	56	26	30	156	------	303	299	117	74	76	7.1	26
31	36	------	30	162	------	299	------	104	------	106	6.4	------
TOTAL	1,453.3	1,140	1,032	3,234	6,536	11,589	11,131	9,427	6,223	3,507	753.8	534.1
MEAN	46.9	38.0	33.3	104	233	374	371	304	207	113	24.3	17.8
MAX	482	208	96	224	481	1,480	1,270	1,460	1,660	661	76	52
MIN	5.3	25	24	30	137	199	212	104	74	34	6.4	7.6
AC-FT	2,880	2,260	2,050	6,410	12,960	22,990	22,080	18,700	12,340	6,960	1,500	1,060

CAL YR 1972 TOTAL 37,722.7 MEAN 103 MAX 4,050 MIN 5.3 AC-FT 74,820
WTR YR 1973 TOTAL 56,560.2 MEAN 155 MAX 1,660 MIN 5.3 AC-FT 112,200

PEAK DISCHARGE (BASE, 5,800 FT³/S).--No peak above base.

08104050 Stillhouse Hollow Lake near Belton, Tex.

LOCATION.--Lat 31°01'20", long 97°31'57", Bell County, in intake structure at Stillhouse Hollow Dam on Lampasas River, 5 miles (8 km) southwest of Belton, and at mile 16 (26 km).

DRAINAGE AREA.--1,318 mi² (3,414 km²).

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, 243,500 acre-ft (300 hm³) Apr. 19, elevation, 623.20 ft (189.95 m); minimum, 231,700 acre-ft (286 hm³) Oct. 20, elevation, 621.37 ft (189.39 m).
Period of record: Maximum contents, 329,100 acre-ft (406 hm³) Mar. 25, 1970, elevation, 635.01 ft (193.55 m); minimum since conservation storage was reached in Apr. 12, 1969, 196,600 acre-ft (242 hm³) July 23, 1971, elevation, 615.55 ft (187.62 m).

REMARKS.--Lake is formed by a rolled earthfill dam 15,624 ft (4,762 m) long, including a 1,650-foot (503-meter) spillway and a 5,894-foot (1,796-meter) dike. 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 (4-meter) conduit controlled by two 5-foot 8-inch by 12-foot (2- by 4-meter) hydraulically operated slide gates, with invert at elevation 515.0 ft (157.0 m). Emergency spillway is an uncontrolled broad-crested weir 1,650 ft (503 m) long at crest elevation of 666.0 ft (203.0 m). 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	236,700
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)

618.0	210,900	626.0	262,300
620.0	223,100	628.0	276,400
622.0	235,700	630.0	290,800
624.0	248,800	632.0	305,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233,600	239,600	235,700	238,000	235,500	237,000	235,500	235,400	236,100	235,700	236,700	233,400
2	233,400	239,900	235,700	238,200	235,300	235,900	235,600	235,600	236,200	235,600	236,500	233,300
3	233,400	240,000	235,800	237,600	235,300	235,600	235,800	235,400	236,500	235,600	236,200	233,300
4	233,300	239,300	235,700	237,300	235,300	235,400	235,800	235,100	239,600	235,600	236,100	233,200
5	233,300	238,400	235,700	237,600	235,400	235,500	235,700	236,000	240,100	235,600	236,100	233,000
6	233,200	237,600	235,600	237,900	235,700	236,000	236,000	237,800	240,200	235,700	236,000	233,400
7	233,000	236,500	235,600	238,300	236,000	236,400	236,200	240,800	239,900	235,900	235,900	233,600
8	232,900	235,700	235,600	238,500	236,300	236,500	236,400	241,500	239,300	236,200	235,800	233,700
9	232,800	235,600	235,600	238,600	236,400	236,700	236,200	242,200	238,600	236,100	235,800	233,700
10	232,800	235,500	235,600	238,400	236,500	239,800	235,800	241,000	238,000	236,100	235,700	233,600
11	232,700	235,400	235,700	237,600	236,700	241,100	235,800	239,600	237,600	236,300	235,600	233,500
12	232,600	236,000	235,800	236,700	236,900	241,100	235,800	238,500	237,900	236,600	235,600	233,600
13	232,600	235,700	235,800	236,500	236,700	240,400	235,900	237,400	238,200	236,500	235,600	233,500
14	232,500	235,800	236,500	236,500	236,400	238,500	236,800	236,200	238,400	236,400	235,400	233,300
15	232,400	235,700	236,700	236,500	236,100	236,700	238,200	235,700	238,600	239,300	235,300	233,200
16	232,400	235,600	236,700	236,500	236,100	236,200	240,500	235,600	238,100	240,700	235,200	233,200
17	232,300	235,600	236,700	236,600	236,400	236,800	242,000	235,700	236,700	241,200	235,100	233,100
18	232,100	235,800	236,900	236,700	236,700	237,500	243,000	235,700	236,100	241,200	234,900	233,000
19	232,000	235,600	237,000	236,600	236,900	237,100	242,900	235,700	235,800	240,700	234,900	233,000
20	231,700	235,600	237,300	236,400	236,700	236,100	241,400	235,800	235,600	240,200	234,900	232,900
21	233,100	235,600	237,300	236,400	236,400	235,700	240,000	235,800	236,200	239,700	234,900	232,800
22	233,900	235,500	237,300	236,200	236,900	235,600	238,400	235,800	236,700	239,200	234,700	232,800
23	234,000	235,600	237,400	236,000	238,100	235,900	237,100	235,700	237,100	238,600	234,500	232,900
24	233,900	235,800	237,400	236,100	239,100	238,600	236,300	235,700	237,300	238,000	234,400	232,800
25	233,700	235,800	237,500	237,100	239,900	239,100	236,200	235,600	237,300	237,600	234,200	232,800
26	234,800	235,800	237,500	237,600	239,800	238,400	236,500	236,200	236,700	237,100	234,100	233,700
27	236,200	235,800	237,500	238,200	238,900	237,500	236,200	236,600	236,200	236,500	234,000	234,400
28	236,400	235,700	237,600	237,700	237,900	236,500	235,500	236,400	235,900	236,200	233,900	234,400
29	237,000	235,700	237,600	236,900	------	235,900	235,300	236,300	235,700	236,200	233,700	234,300
30	237,300	235,700	237,800	236,200	------	235,800	235,100	236,100	235,700	236,600	233,700	234,300
31	237,500	------	237,800	236,000	------	235,500	------	236,000	------	236,800	233,500	------
(†)	622.27	622.00	622.33	622.04	622.34	621.97	621.91	622.04	622.00	622.17	621.65	621.78
(‡)	+3,700	-1,800	+2,100	-1,800	+1,900	-2,400	-400	+900	-300	+1,100	-3,300	+800
MAX	237,500	240,000	237,800	238,600	239,900	241,100	243,000	242,200	240,200	241,200	236,700	234,400
MIN	231,700	235,400	235,600	236,000	235,300	235,400	235,100	235,100	235,600	235,600	233,500	232,800

CAL YR 1972..... ‡ +1,700 MAX 254,800 MIN 231,700
WTR YR 1973..... ‡ +500 MAX 243,000 MIN 231,700

† 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 (7 m) upstream from upstream bridge of three bridges on Interstate Highway 35 and U.S. Highway 81, 3.5 miles (5.6 km) downstream from Stillhouse Hollow Dam, 4.1 miles (6.6 km) southwest of Belton, and at mile 12.7 (20.4 km).

DRAINAGE AREA.--1,325 mi² (3,432 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 476.58 ft (145.26 m) above mean sea level, adjustment unknown (Texas Highway Department bench mark).

AVERAGE DISCHARGE.--10 years, 247 ft³/s (7.00 m³/s), 179,000 acre-ft/yr (221 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,680 ft³/s (47.6 m³/s) Mar. 14, gage height, 10.93 ft (3.33 m); minimum daily, 3.5 ft³/s (99 dm³/s) Oct. 11, 13-15.
Period of record: Maximum discharge, 77,900 ft³/s (2,210 m³/s) May 17, 1965, gage height, 43.58 ft (13.28 m); no flow Aug. 9, 10, 12-15, Sept. 5, 6, 1967.
Maximum stage since at least 1877, 45 ft (14 m) September 1921, from information by local residents. Flood of May 1957 reached a stage of 44.4 ft (13.5 m), discharge, 83,500 ft³/s (2,360 m³/s).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	36	5.9	9.5	395	886	293	380	168	6.4	78	5.4
2	3.9	10	6.4	199	267	878	226	378	168	5.9	78	5.4
3	3.9	8.9	6.4	595	206	532	226	378	170	5.4	78	5.4
4	3.9	305	6.4	296	107	353	224	311	170	5.9	42	5.4
5	3.9	601	6.4	10	107	335	224	277	170	5.9	6.8	5.4
6	3.9	601	6.4	8.9	107	206	204	287	170	6.4	6.4	8.2
7	3.9	598	6.4	11	124	14	204	287	293	5.4	6.0	6.5
8	3.9	433	6.4	9.5	140	190	204	279	450	5.4	5.9	6.0
9	3.9	131	6.4	9.5	140	350	291	279	450	4.9	5.9	5.9
10	3.9	8.2	7.0	265	142	171	375	958	448	4.9	5.8	5.9
11	3.5	7.6	7.0	580	142	14	281	1,210	450	4.9	5.4	5.9
12	3.9	7.0	7.6	580	237	520	208	825	239	4.9	5.9	6.3
13	3.5	10	7.6	333	330	882	245	825	7.6	4.4	6.0	6.4
14	3.5	7.6	14	143	328	1,330	275	821	7.0	4.4	6.9	6.4
15	3.5	7.0	8.8	143	328	1,320	279	517	6.4	7.6	6.4	6.4
16	3.9	7.0	8.2	143	259	493	277	305	400	4.9	6.3	5.9
17	3.9	7.0	8.2	143	194	13	187	239	695	4.4	5.9	6.1
18	3.9	7.0	8.2	143	194	12	10	168	435	166	5.9	6.4
19	3.9	7.0	8.8	168	194	490	526	168	206	307	6.8	6.4
20	3.9	7.0	8.8	190	403	751	1,150	168	208	309	5.9	6.4
21	7.6	7.0	9.5	190	565	418	1,150	168	118	309	5.8	6.4
22	17	7.0	9.5	190	433	321	1,150	168	7.0	309	5.4	6.4
23	4.9	7.0	9.5	188	14	323	982	168	6.4	309	5.4	8.9
24	4.4	7.6	9.5	145	13	333	832	168	5.9	309	5.4	8.2
25	4.4	7.0	9.5	116	13	323	632	168	187	304	5.4	6.4
26	12	7.0	9.5	68	470	632	470	168	375	310	5.4	57
27	7.0	7.0	9.5	12	886	853	660	168	375	311	5.4	47
28	5.9	5.9	9.5	313	882	856	650	166	281	180	5.2	11
29	6.4	5.9	10	526	------	702	532	166	110	78	4.6	8.8
30	7.0	5.9	10	526	------	465	438	166	7.0	79	5.1	8.2
31	5.9	------	10	529	------	395	------	166	------	79	5.9	------
TOTAL	158.9	2,873.6	257.3	6,782.4	7,620	15,361	13,405	10,900	6,783.3	3,451.0	433.2	290.4
MEAN	5.13	95.8	8.30	219	272	496	447	352	226	111	14.0	9.68
MAX	17	601	14	595	886	1,330	1,150	1,210	695	311	78	57
MIN	3.5	5.9	5.9	8.9	13	12	10	166	5.9	4.4	4.6	5.4
AC-FT	315	5,700	510	13,450	15,110	30,470	26,590	21,620	13,450	6,850	859	576

CAL YR 1972 TOTAL 39,685.5 MEAN 108 MAX 1,490 MIN 3.0 AC-FT 78,720
WTR YR 1973 TOTAL 68,316.1 MEAN 187 MAX 1,330 MIN 3.5 AC-FT 135,500

08104500 Little River near Little River, Tex.

LOCATION.--Lat 30°57'59", long 97°20'45", Bell County, on right bank 25 ft (8 m) downstream from State Highway 95, 2.4 miles (3.9 km) southeast of Little River, 5 miles (8 km) downstream from confluence of Leon and Lampasas Rivers, and at mile 95.8 (154.1 km).

DRAINAGE AREA.--5,274 mi² (13,660 km²).

PERIOD OF RECORD.--October 1923 to May 1929, August 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.11 ft (121.95 m) above mean sea level. Oct. 5, 1923, to May 27, 1929, nonrecording gage on railroad bridge 0.5 mile (0.8 km) upstream at same datum.

AVERAGE DISCHARGE.--5 years (1923-28) unregulated, 709 ft³/s (20.1 m³/s), 513,700 acre-ft/yr (633 hm³/yr); 11 years (1962-73) regulated, 880 ft³/s (24.9 m³/s), 637,600 acre/yr (786 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,240 ft³/s (148 m³/s) May 7, gage height, 17.64 ft (5.38 m); minimum daily, 23 ft³/s (0.65 m³/s) Oct. 6.
Period of record: Maximum discharge, 79,600 ft³/s (2,250 m³/s) May 17, 1965, gage height, 42.85 ft (13.06 m); minimum daily, 8.2 ft³/s (232 dm³/s) Aug. 6, 19, 1963.
Maximum stage since at least 1900, 46.8 ft (14.3 m) 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 mi² (123 km²) above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 16,850 acre-ft (20.8 hm³) below the flood-spillway crests, of which 15,430 acre-ft (19.0 hm³) is floodwater-retarding capacity and 1,420 acre-ft (1.75 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	1,920	103	118	920	1,290	540	599	1,950	138	310	68
2	41	720	105	163	587	1,280	396	836	820	133	301	51
3	39	263	103	1,290	545	1,100	441	611	363	116	288	60
4	39	288	101	825	353	619	400	551	419	109	271	58
5	35	675	97	263	341	650	389	481	616	102	148	60
6	23	678	95	230	335	594	386	962	2,370	449	134	105
7	25	678	91	389	338	318	396	2,840	2,290	193	105	181
8	40	573	101	392	493	309	394	762	2,490	146	86	97
9	43	283	99	268	535	563	417	613	2,490	135	82	84
10	39	129	97	238	496	1,090	555	869	2,480	124	77	72
11	39	103	101	790	444	428	515	1,860	2,510	114	70	69
12	41	114	107	804	451	533	378	1,150	2,220	110	61	69
13	41	329	109	720	615	1,230	397	1,140	313	109	61	70
14	39	158	428	407	598	1,420	461	1,110	222	107	73	62
15	38	120	419	374	584	2,140	583	1,420	198	463	76	56
16	38	120	185	347	549	1,160	832	944	717	396	68	60
17	37	118	158	344	468	315	616	988	2,690	229	62	61
18	36	122	153	341	668	239	595	1,530	2,590	453	67	58
19	39	116	150	329	549	434	430	1,530	1,940	1,900	65	59
20	40	112	136	368	577	1,120	1,550	1,260	714	1,290	72	48
21	45	112	138	398	972	710	1,540	810	711	991	65	63
22	636	120	129	368	1,230	522	1,550	737	495	987	53	66
23	156	112	129	344	823	525	1,450	500	463	986	62	63
24	71	118	122	335	475	1,400	1,190	503	462	977	59	83
25	68	168	120	1,050	401	718	1,150	503	489	741	61	78
26	397	129	120	1,210	485	764	923	575	840	713	58	79
27	536	114	118	465	1,310	1,180	850	557	793	668	60	2,210
28	131	112	118	431	1,300	1,170	1,030	777	548	568	58	433
29	352	107	122	871	------	1,070	765	770	332	381	62	166
30	357	103	122	871	------	751	695	1,140	162	376	55	134
31	127	------	116	871	------	611	------	2,760	------	468	64	------
TOTAL	3,628	8,814	4,292	16,214	17,442	26,253	21,814	31,688	35,697	14,672	3,134	4,823
MEAN	117	294	138	523	623	847	727	1,022	1,190	473	101	161
MAX	636	1,920	428	1,290	1,310	2,140	1,550	2,840	2,690	1,900	310	2,210
MIN	23	103	91	118	335	239	378	481	162	102	53	48
AC-FT	7,200	17,480	8,510	32,160	34,600	52,070	43,270	62,850	70,800	29,100	6,220	9,570

CAL YR 1972 TOTAL 102,871 MEAN 281 MAX 2,330 MIN 23 AC-FT 204,000
WTR YR 1973 TOTAL 188,471 MEAN 516 MAX 2,840 MIN 23 AC-FT 373,800

08104700 North Fork San Gabriel River near Georgetown, Tex.

LOCATION.--Lat 30°39'42", long 97°42'40", Williamson County, on left bank 1.5 miles (2.4 km) upstream from Middle Fork San Gabriel River, 2.7 miles (4.3 km) upstream from Interstate Highway 35, 2.7 miles (4.3 km) northwest of Georgetown, and at mile 3.3 (5.3 km).

DRAINAGE AREA.--249 mi² (645 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 689.06 ft (210.03 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 58.7 ft³/s (1.66 m³/s), 42,530 acre-ft/yr (52.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) July 15, gage height, 14.02 ft (4.27 m); minimum, 0.17 ft³/s (4.8 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) Apr. 12, 1969, gage height, 14.84 ft (4.52 m); no flow July 23-25, 1971.
Maximum stage since at least 1875, 39.5 ft (12.0 m) in September 1921. Flood in April 1957 reached a stage of 34.5 ft (10.5 m), from information by local residents.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	473	15	14	66	140	88	130	66	35	42	7.0
2	.97	46	15	17	58	134	83	260	484	32	36	6.8
3	.63	27	15	29	51	124	83	124	101	30	32	6.9
4	.64	20	14	31	50	121	83	109	82	27	29	6.5
5	.63	17	14	28	49	119	75	134	77	27	27	6.0
6	.50	15	13	26	49	118	78	342	69	26	26	9.7
7	.34	14	13	29	49	114	139	2,360	63	40	26	10
8	.34	13	14	34	57	103	103	319	58	37	22	12
9	.51	13	14	33	76	100	85	242	54	35	21	10
10	.56	12	14	33	84	409	75	204	53	29	20	10
11	.45	11	14	33	87	208	73	188	61	26	19	9.7
12	.45	11	14	33	87	124	71	212	117	23	17	8.2
13	.45	16	14	34	82	118	69	176	100	22	16	7.2
14	.34	13	18	34	75	113	145	164	72	21	15	6.4
15	.34	15	20	35	70	104	232	156	62	1,910	14	5.9
16	.34	14	25	35	67	115	144	146	54	344	14	5.2
17	.27	13	19	34	74	117	136	136	50	175	13	5.0
18	.17	13	19	34	105	102	157	129	47	99	12	4.3
19	.33	13	18	33	103	95	115	122	45	78	12	4.4
20	.29	12	17	33	90	90	100	110	43	67	11	4.6
21	5.1	12	16	33	109	85	93	107	76	62	11	4.3
22	92	13	15	32	210	83	95	96	49	56	10	4.0
23	53	12	15	30	273	83	97	92	44	52	9.5	4.7
24	19	14	15	29	193	791	198	107	42	48	9.0	6.1
25	11	15	15	51	172	232	165	103	48	45	8.0	3.9
26	10	14	15	100	158	142	293	93	54	47	7.5	15
27	94	14	15	76	146	121	159	84	48	46	7.5	192
28	33	13	15	60	142	112	132	74	42	40	7.0	57
29	67	12	15	54	------	106	125	67	38	38	7.0	26
30	25	14	14	53	------	100	124	64	36	36	7.0	18
31	15	------	14	54	------	95	------	63	------	38	9.0	------
TOTAL	433.95	914	483	1,184	2,832	4,618	3,615	6,713	2,235	3,591	516.5	476.8
MEAN	14.0	30.5	15.6	38.2	101	149	121	217	74.5	116	16.7	15.9
MAX	94	473	25	100	273	791	293	2,360	484	1,910	42	192
MIN	.17	11	13	14	49	83	69	63	36	21	7.0	3.9
AC-FT	861	1,810	958	2,350	5,620	9,160	7,170	13,320	4,430	7,120	1,020	946

CAL YR 1972 TOTAL 5,623.62 MEAN 15.4 MAX 473 MIN .12 AC-FT 11,150
WTR YR 1973 TOTAL 27,612.25 MEAN 75.7 MAX 2,360 MIN .17 AC-FT 54,770

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 1	0900	9.04	3,780	5- 7	0245	11.39	6,740
3-24	1300	9.00	3,780	7-15	1115	14.02	10,400

08104900 South Fork San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°37'32", long 97°41'27", Williamson County, on right bank at downstream side of downstream bridge of two bridges on Interstate Highway 35, 1.1 miles (1.8 km) southwest of the courthouse at Georgetown, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948, 1962-67, December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 687.72 ft (209.62 m) above mean sea level.

AVERAGE DISCHARGE.--5 years (1968-73), 34.7 ft³/s (0.98 m³/s), 25,140 acre-ft/yr (31.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,850 ft³/s (194 m³/s) July 15, gage height, 10.75 ft (3.28 m); minimum, 0.16 ft³/s (4.5 dm³/s) Oct. 19-21.
Period of record: Maximum discharge, 17,400 ft³/s (493 m³/s) June 2, 1968, gage height, 15.15 ft (4.62 m); no flow July 3-25, 1971.
Maximum stage since at least 1887, about 41 ft (12 m) on Apr. 24, 1957, from information by local residents.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	527	14	13	42	64	37	43	33	15	19	3.5
2	.55	60	14	16	40	62	35	65	53	14	18	3.4
3	.46	37	14	30	38	61	35	45	39	13	15	3.4
4	.38	30	13	27	38	60	34	39	37	12	13	3.0
5	.38	27	13	25	38	59	32	72	34	12	13	2.9
6	.38	27	13	24	38	60	36	192	30	67	13	5.5
7	.31	24	12	26	37	56	40	846	27	57	12	6.8
8	.31	22	12	28	40	54	38	161	26	29	11	6.8
9	.31	21	12	28	45	54	34	124	26	28	10	7.0
10	.31	20	13	28	45	63	31	107	26	21	9.6	7.0
11	.31	19	13	28	45	63	30	99	29	15	8.9	5.7
12	.31	19	13	27	46	54	30	101	101	14	8.2	4.9
13	.31	24	13	28	46	53	29	90	50	12	7.9	4.1
14	.31	20	26	28	44	52	30	85	35	11	7.8	3.5
15	.31	18	21	27	43	50	34	82	29	1,070	7.5	3.1
16	.25	17	17	26	43	51	36	77	26	117	6.9	3.3
17	.25	16	17	26	45	49	57	73	24	74	6.5	3.4
18	.25	16	15	26	52	47	53	69	22	40	6.0	3.5
19	.16	15	15	25	53	45	42	64	21	30	6.0	3.5
20	.16	14	16	26	50	43	37	60	20	27	6.9	3.3
21	2.2	14	16	28	53	41	34	56	21	25	7.1	3.2
22	186	14	14	25	77	41	36	52	21	23	6.1	3.0
23	10	13	14	24	100	41	36	51	20	21	5.2	2.9
24	5.4	17	14	23	78	69	38	52	19	22	4.4	3.1
25	4.1	20	14	44	71	61	67	49	22	20	4.0	3.9
26	5.5	18	14	60	67	45	49	47	29	20	3.7	9.5
27	8.6	17	14	48	65	42	42	44	24	19	3.5	189
28	7.0	15	13	42	64	41	39	41	19	19	3.3	64
29	28	14	14	39	------	41	38	38	16	18	3.1	25
30	26	13	14	41	------	40	39	36	16	16	3.4	18
31	12	------	13	41	------	39	------	34	------	18	3.9	------
TOTAL	301.45	1,128	450	927	1,443	1,601	1,148	2,994	895	1,899	253.9	409.2
MEAN	9.72	37.6	14.5	29.9	51.5	51.6	38.3	96.6	29.8	61.3	8.19	13.6
MAX	186	527	26	60	100	69	67	846	101	1,070	19	189
MIN	.16	13	12	13	37	39	29	34	16	11	3.1	2.9
AC-FT	598	2,240	893	1,840	2,860	3,180	2,280	5,940	1,780	3,770	504	812

CAL YR 1972 TOTAL 4,190.56 MEAN 11.4 MAX 527 MIN .10 AC-FT 8,310
WTR YR 1973 TOTAL 13,449.55 MEAN 36.8 MAX 1,070 MIN .16 AC-FT 26,680

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
11- 1	1000	8.99	4,310
5- 7	0430	8.60	3,820
7-15	1215	10.75	6,850

08105000 San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°39'13", long 97°39'19", Williamson County, on left bank 100 ft (30 m) downstream from Missouri-Kansas-Texas Railroad Co. bridge, 1.2 miles (1.9 km) downstream from confluence of North and South Forks, 1.8 miles (2.9 km) northeast of Georgetown, and at mile 61.3 (98.6 km).

DRAINAGE AREA.--399 mi² (1,033 km²).

PERIOD OF RECORD.--February 1924 to August 1925, July 1934 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 643.24 ft (196.06 m) above mean sea level. Feb. 27, 1924, to Aug. 31, 1925, nonrecording gage at site 1.0 mile (1.6 km) upstream at different datum.

AVERAGE DISCHARGE.--39 years (1934-73), 134 ft³/s (3.79 m³/s), 97,080 acre-ft/yr (120 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,100 ft³/s (513 m³/s) July 15, gage height, 12.70 ft (3.87 m); minimum daily, 5.1 ft³/s (144 dm³/s) Oct. 11.
Period of record: Maximum discharge, 155,000 ft³/s (4,390 m³/s) Apr. 24, 1957, gage height, 31.89 ft (9.72 m) in gage well, 34.10 ft (10.39 m) from floodmarks, from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of contracted-opening measurement of 155,000 ft³/s (4,390 m³/s); no flow at times in 1954-57.
Maximum stage since at least 1852, 36.1 ft (11.0 m) Sept. 10, 1921, present site and datum, discharge 160,000 ft³/s (4,530 m³/s), 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 (914 m) upstream. Low flow partly sustained by sewage effluent from city of Georgetown, which released 709 acre-ft (0.87 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	1,440	47	48	141	264	169	214	117	76	88	35
2	9.0	196	47	60	134	259	158	394	545	72	78	34
3	8.0	98	47	92	124	247	159	220	169	71	70	34
4	7.9	75	47	84	120	244	155	193	142	68	66	34
5	7.5	65	46	77	117	235	142	336	133	64	64	34
6	7.4	62	45	72	116	235	158	797	124	116	62	44
7	7.6	57	45	77	114	228	233	3,560	112	122	60	46
8	6.9	53	45	80	133	214	195	562	106	115	58	46
9	6.4	52	45	79	166	214	159	409	102	99	55	44
10	5.8	50	45	78	172	526	145	349	102	78	53	42
11	5.1	49	47	79	178	384	137	322	112	70	52	40
12	5.2	49	48	78	183	245	136	350	267	64	50	38
13	5.5	59	47	78	175	225	134	301	191	61	49	36
14	5.7	53	89	78	160	217	177	280	138	58	48	34
15	6.6	51	62	79	151	205	370	266	117	3,310	47	33
16	7.0	50	62	78	147	214	232	251	106	517	45	32
17	22	49	56	78	164	218	289	238	100	294	43	33
18	6.1	49	54	77	206	193	301	228	94	171	42	32
19	8.0	48	53	75	208	186	215	213	89	135	43	30
20	9.1	46	52	80	188	178	184	202	88	119	43	31
21	14	48	52	86	212	170	171	191	124	108	42	30
22	485	48	50	76	371	164	175	179	97	103	39	31
23	93	45	50	73	518	169	180	171	89	95	36	32
24	44	54	50	71	366	979	280	189	86	91	36	36
25	33	57	49	133	326	400	325	181	108	87	34	32
26	38	52	49	215	298	252	432	166	115	86	34	86
27	105	50	48	164	278	219	260	153	102	91	34	457
28	62	49	48	133	267	207	219	135	89	82	33	157
29	103	47	49	125	------	196	208	111	83	78	33	71
30	106	47	49	126	------	186	207	119	79	73	34	52
31	54	------	48	128	------	182	------	115	------	80	36	------
TOTAL	1,293.7	3,148	1,571	2,857	5,733	8,055	6,305	11,395	3,926	6,654	1,507	1,716
MEAN	41.7	105	50.7	92.2	205	260	210	368	131	215	48.6	57.2
MAX	485	1,440	89	215	518	979	432	3,560	545	3,310	88	457
MIN	5.1	45	45	48	114	164	134	111	79	58	33	30
AC-FT	2,570	6,240	3,120	5,670	11,370	15,980	12,510	22,600	7,790	13,200	2,990	3,400

CAL YR 1972 TOTAL 15,182.3 MEAN 41.5 MAX 1,440 MIN 3.3 AC-FT 30,110
WTR YR 1973 TOTAL 54,160.7 MEAN 148 MAX 3,560 MIN 5.1 AC-FT 107,400

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
11- 1	1015	8.12	7,400
5- 7	0500	9.71	10,700
7-15	1245	12.70	18,100

08105100 Berry Creek near Georgetown, Tex.

LOCATION.--Lat 30°41'28", long 97°39'21", Williamson County, on right bank at upstream side of upstream service road on Interstate Highway 35 and 2.9 miles (4.7 km) north of the county courthouse at Georgetown.

DRAINAGE AREA.--81.8 mi² (212 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 659.97 ft (201.16 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 24.2 ft³/s (0.69 m³/s), 17,530 acre-ft/yr (21.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,010 ft³/s (170 m³/s) May 7, gage height, 13.54 ft (4.13 m); minimum, 0.02 ft³/s (0.57 dm³/s) Oct. 19, 20.
Period of record: Maximum discharge, 6,370 ft³/s (180 m³/s) Jan. 21, 1968, gage height, 13.85 ft (4.22 m); no flow at times in 1967, 1971-72.
Maximum stages since at least 1921 occurred September 1921, stage, 25 ft (8 m), from information by 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	681	9.9	8.9	42	52	29	88	36	22	22	6.8
2	.67	30	9.7	9.7	36	50	28	120	111	20	15	7.3
3	.66	14	10	27	33	48	27	54	42	20	13	7.1
4	.63	10	9.9	39	32	47	26	49	40	19	12	7.1
5	.66	6.5	10	28	32	47	25	72	36	18	12	7.2
6	.65	6.5	10	26	32	47	25	228	38	18	11	8.4
7	.42	6.6	9.9	33	31	46	33	1,390	35	18	11	8.3
8	.38	6.1	9.3	46	40	43	30	100	32	19	10	8.2
9	.40	6.0	8.3	35	57	43	28	79	31	18	10	7.8
10	.37	5.8	8.2	32	63	68	26	71	30	17	10	7.8
11	.36	5.6	7.8	32	62	57	25	65	29	17	9.0	7.7
12	.36	5.5	7.8	33	52	42	24	73	86	16	9.5	7.5
13	.31	6.8	7.5	35	48	40	25	69	57	16	9.5	7.7
14	.20	7.0	10	42	42	40	34	62	42	16	8.5	7.4
15	.15	6.1	10	41	39	38	52	60	38	777	8.0	7.5
16	.12	6.0	12	38	38	40	44	57	34	72	7.5	7.5
17	.06	6.8	12	37	40	41	68	56	32	47	7.2	6.1
18	.04	8.0	12	37	70	38	72	54	31	27	6.5	7.5
19	.02	8.3	13	35	56	37	42	52	30	23	7.0	7.4
20	.09	8.5	13	36	49	35	36	50	28	20	6.9	7.1
21	.89	8.5	12	38	87	33	33	49	28	19	6.8	6.8
22	12	8.5	12	36	162	32	33	47	28	17	6.6	6.7
23	.53	8.5	12	32	126	32	35	46	27	16	6.3	7.0
24	.62	8.8	12	30	78	62	111	46	26	15	7.1	7.2
25	.64	12	11	85	65	45	80	46	28	14	6.6	6.6
26	1.2	12	11	84	58	35	444	45	33	21	6.3	26
27	1.3	11	9.8	50	54	33	69	44	31	40	5.8	193
28	1.2	10	8.9	39	52	32	56	41	27	18	5.9	40
29	177	11	8.5	35	------	31	52	39	25	14	5.8	14
30	25	10	8.5	34	------	31	51	37	24	13	6.0	11
31	5.7	------	8.7	35	------	30	------	37	------	17	7.1	------
TOTAL	233.31	941.4	314.7	1,148.6	1,576	1,295	1,663	3,326	1,115	1,424	275.9	467.7
MEAN	7.53	31.4	10.2	37.1	56.3	41.8	55.4	107	37.2	45.9	8.90	15.6
MAX	177	681	13	85	162	68	444	1,390	111	777	22	193
MIN	.02	5.5	7.5	8.9	31	30	24	37	24	13	5.8	6.1
AC-FT	463	1,870	624	2,280	3,130	2,570	3,300	6,600	2,210	2,820	547	928

CAL YR 1972 TOTAL 3,568.24 MEAN 9.75 MAX 737 MIN .02 AC-FT 7,080
WTR YR 1973 TOTAL 13,780.61 MEAN 37.8 MAX 1,390 MIN .02 AC-FT 27,330

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1315	7.89	1,220	5- 7	0345	13.54	6,010
11- 1	1115	12.34	4,590	7-15	1400	11.65	3,900
4-26	0315	8.78	1,680				

08105400 San Gabriel River near Circleville, Tex.

LOCATION.--Lat 30°37'43", long 97°28'23", Williamson County, on right bank at upstream side of county bridge, 2.3 miles (3.7 km) west of Circleville, 3.1 miles (5.0 km) upstream from bridge on State Highway 95, and at mile 47.4 (76.3 km).

DRAINAGE AREA.--591 mi² (1,531 km²). Area at site used prior to July 13, 1967, 602 mi² (1,559 km²).

PERIOD OF RECORD.--February 1924 to September 1934 (published as "at Circleville"), July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.62 ft (158.68 m) above mean sea level. Feb. 1, 1924, to Sept. 30, 1934, water-stage recorder at site 3.1 miles (5.0 km) downstream and at 15.35 ft (4.68 m) lower datum.

AVERAGE DISCHARGE.--16 years (1924-34, 1967-73), 167 ft³/s (4.73 m³/s), 121,000 acre-ft/yr (149 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,200 ft³/s (487 m³/s) May 7, gage height, 28.38 ft (8.65 m); minimum daily, 5.5 ft³/s (156 dm³/s) Oct. 14.
Period of record: Maximum discharge, 53,400 ft³/s (1,510 m³/s) May 29, 1929, gage height, 34.20 ft (10.42 m), from floodmark, former site and datum; no flow Sept. 5, 6, 8, 11, 1924, and Aug. 10-16, 1967.
Maximum stage since at least 1852, about 46 ft (14 m) present site and datum, Sept. 10, 1921 (discharge not determined). Flood of Apr. 24, 1957 (second highest since 1852), reached a stage of about 41 ft (12 m), from information by local residents.

REMARKS.--Records good. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	2,040	81	82	224	385	243	338	162	113	124	41
2	10	637	81	128	215	379	229	689	705	100	112	37
3	9.3	293	83	340	192	355	225	345	300	93	97	37
4	9.4	225	81	218	186	349	221	282	228	94	89	37
5	9.9	91	78	176	182	334	207	359	211	89	83	37
6	9.3	88	78	162	176	346	221	2,000	202	91	81	49
7	8.1	80	77	199	174	329	291	6,000	181	167	79	59
8	6.8	77	78	206	206	305	282	1,010	167	165	75	58
9	7.2	75	79	185	279	299	228	742	157	147	72	53
10	7.0	68	79	174	318	596	208	621	154	112	69	48
11	5.9	64	82	174	322	665	195	551	162	99	67	45
12	5.9	69	88	171	305	349	191	585	479	91	66	44
13	6.3	133	92	177	276	308	188	516	340	84	64	40
14	5.5	99	300	182	246	295	463	460	233	80	62	37
15	6.9	90	170	177	225	276	565	436	190	3,250	61	34
16	7.9	88	123	168	216	295	355	403	169	918	59	34
17	11	83	117	163	251	293	778	377	155	555	56	34
18	18	87	111	158	352	261	542	352	144	291	53	34
19	7.5	85	109	146	337	251	320	331	135	221	52	31
20	6.2	84	106	145	296	243	261	311	129	185	52	30
21	9.6	83	101	270	398	232	236	300	161	163	51	27
22	2,710	87	94	159	755	227	235	285	146	150	49	28
23	215	83	94	144	901	234	244	255	132	139	46	30
24	101	116	93	138	624	1,050	548	255	126	128	43	40
25	71	122	91	595	520	672	713	262	142	118	41	74
26	152	102	88	588	460	382	1,580	242	163	109	39	403
27	143	95	84	357	418	316	515	228	150	176	39	2,500
28	146	88	84	259	393	294	396	201	129	119	39	487
29	818	84	85	222	------	279	353	170	118	106	38	175
30	375	84	85	216	------	268	333	171	111	99	38	120
31	138	------	82	216	------	259	------	168	------	99	39	------
TOTAL	5,048.7	5,500	3,074	6,695	9,447	11,126	11,366	19,245	5,981	8,351	1,935	4,703
MEAN	163	183	99.2	216	337	359	379	621	199	269	62.4	157
MAX	2,710	2,040	300	595	901	1,050	1,580	6,000	705	3,250	124	2,500
MIN	5.5	64	77	82	174	227	188	168	111	80	38	27
AC-FT	10,010	10,910	6,100	13,280	18,740	22,070	22,540	38,170	11,860	16,560	3,840	9,330

CAL YR 1972 TOTAL 31,361.4 MEAN 85.7 MAX 2,960 MIN 5.1 AC-FT 62,210
WTR YR 1973 TOTAL 92,471.7 MEAN 253 MAX 6,000 MIN 5.5 AC-FT 183,400

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0645	23.32	9,700	7-15	1715	26.58	13,600
11- 1	1500	21.34	7,960	9-27	0015	17.59	5,670
5- 7	1115	28.38	17,200				

08105700 San Gabriel River at Laneport, Tex.

LOCATION.--Lat 30°41'40", long 97°16'43", Williamson County, on right bank 22 ft (7 m) downstream from county bridge, 0.2 mile (0.3 km) north of Laneport, 3.4 miles (5.5 km) downstream from Willis Creek, 7.5 miles (12.1 km) northwest of Thrall, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--729 mi² (1,888 km²).

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 412.60 ft (125.76 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 260 ft³/s (7.36 m³/s), 188,400 acre-ft/yr (232 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,600 ft³/s (329 m³/s) Oct. 22, gage height, 26.63 ft (8.12 m); minimum daily, 5.2 ft³/s (147 dm³/s) Oct. 16.
Period of record: Maximum discharge, 16,200 ft³/s (459 m³/s) Jan. 21, 1968, gage height, 30.45 ft (9.28 m); minimum daily, 0.35 ft³/s (9.9 dm³/s) July 19-26, 1971.
Maximum stages since 1910 occurred September 1921, stage, 39.6 ft (12.1 m); April 1957, stage, 34.6 ft (10.5 m); and October 1959, stage, 33.8 ft (10.3 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	1,070	114	108	279	445	260	372	228	140	116	43
2	12	1,680	112	150	264	442	242	634	604	120	117	42
3	11	317	110	250	230	409	237	442	363	115	98	40
4	10	202	110	400	222	400	229	340	278	110	89	41
5	9.4	162	105	250	157	380	218	316	297	110	84	41
6	10	150	103	200	261	383	220	1,930	344	115	82	47
7	9.8	148	98	230	205	387	305	7,240	238	169	77	64
8	8.6	130	77	250	228	346	327	1,790	220	178	75	68
9	7.4	125	56	240	329	327	254	835	210	208	70	63
10	6.7	121	159	220	396	581	224	689	200	150	67	57
11	7.6	116	103	215	396	815	211	618	190	124	64	54
12	6.8	117	109	210	378	451	205	608	482	111	62	53
13	6.3	268	131	212	351	374	203	598	483	100	61	49
14	6.1	159	319	215	306	372	948	530	312	93	59	45
15	6.0	124	498	220	270	351	1,390	505	253	618	58	42
16	5.2	119	183	210	254	428	467	481	210	2,830	56	41
17	6.7	117	159	200	268	375	1,620	455	190	570	53	41
18	11	116	152	190	433	335	1,060	429	180	315	51	40
19	15	118	152	180	418	313	479	405	170	229	51	40
20	8.1	113	146	175	357	298	365	372	160	167	51	39
21	7.0	109	134	320	453	278	318	369	190	167	51	37
22	5,440	118	130	250	860	264	310	346	180	153	48	34
23	396	113	125	180	1,110	271	316	330	160	143	46	35
24	126	136	120	170	721	1,040	731	319	150	131	43	58
25	70	259	120	400	596	1,060	1,110	341	170	122	42	49
26	261	153	118	740	532	419	2,530	324	190	115	40	40
27	350	136	115	513	484	337	655	309	180	219	39	3,950
28	151	125	113	371	459	314	455	286	160	140	39	899
29	723	117	111	293	------	297	394	262	140	114	39	211
30	1,160	115	110	273	------	283	377	246	130	102	40	138
31	199	------	109	273	------	273	------	237	------	99	43	------
TOTAL	9,059.7	6,853	4,301	8,108	11,217	13,048	16,660	22,958	7,262	8,077	1,911	6,401
MEAN	292	228	139	262	401	421	555	741	242	261	61.6	213
MAX	5,440	1,680	498	740	1,110	1,060	2,530	7,240	604	2,830	117	3,950
MIN	5.2	109	56	108	157	264	203	237	130	93	39	34
AC-FT	17,970	13,590	8,530	16,080	22,250	25,880	33,050	45,540	14,400	16,020	3,790	12,700

CAL YR 1972 TOTAL 43,628.5 MEAN 119 MAX 5,440 MIN 5.0 AC-FT 86,540
WTR YR 1973 TOTAL 115,855.7 MEAN 317 MAX 7,240 MIN 5.2 AC-FT 229,800

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	1630	26.63	11,600	5- 7	1800	26.12	11,100
11- 2	0030	19.02	5,650	7-16	0330	21.22	6,970
4-17	2130	16.00	4,000	9-27	1230	22.66	7,960
4-26	1000	17.20	4,660				

08106300 Brushy Creek near Rockdale, Tex.

LOCATION.--Lat 30°41'38", long 97°04'42", Milam County, on left bank 36 ft (11 m) upstream from bridge on Farm Road 908, 2.8 miles (4.5 km) upstream from mouth, and 5.3 miles (8.5 km) northwest of Rockdale.

DRAINAGE AREA.--504 mi² (1,305 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 325.56 ft (99.23 m) above mean sea level. Prior to Feb. 4, 1970, water-stage recorder at site 150 ft (46 m) downstream at datum 5.00 ft (1.52 m) higher. Feb. 5 to Sept. 3, 1970, nonrecording gage at site 150 ft (46 m) downstream at present datum.

AVERAGE DISCHARGE.--6 years, 183 ft³/s (5.18 m³/s), 132,600 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,390 ft³/s (124 m³/s) Oct. 24, gage height, 16.50 ft (5.03 m); maximum gage height, 21.80 ft (6.64 m) May 8 (backwater from San Gabriel River); minimum discharge, 0.59 ft³/s (17 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 8,300 ft³/s (235 m³/s), revised, Jan. 20, 1968, gage height, 31.09 ft (9.48 m); present datum, from floodmark; minimum, 0.04 ft³/s (1.1 dm³/s) Sept. 4, 1967.
Maximum stage since at least 1903, 54.5 ft (16.6 m), present datum, in September 1921, from information by local residents.
REVISIONS.--The maximum discharge for the water year 1972 has been revised to 4,450 ft³/s (126 m³/s) June 18, 1972, gage height, 16.33 ft (4.98 m), superseding figure published in WRD Texas, 1972.

REMARKS.--Records good except during periods of backwater, which are poor. At the end of year, flow from 132 mi² (342 km²) above this station was partly controlled by 43 floodwater-retarding structures with a total combined capacity of 48,000 acre-ft (59.2 hm³) below the flood-spillway crests, of which 41,860 acre-ft (51.6 hm³) is floodwater-retarding capacity and 6,140 acre-ft (7.57 hm³) 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.

REVISIONS.--Revised figures of discharge, in cubic feet per second for the high-water and backwater periods in water year 1972, superseding figures published in WRD Texas, 1972, are given herewith:

Nov. 18, 1971	3.9	June 16, 1972	33
19, 1971	938	17, 1972	2,270
Dec. 6, 1971	3,550	18, 1972	3,250

Month	Ft³/s-days	Maximum	Minimum	Mean	Runoff in acre-feet
November 1971	1,603.71	938	.49	53.5	3,180
December	11,977.7	3,550	5.7	386	23,760
June 1972	7,119.4	3,250	8.9	237	14,120
CAL YR 1971	20,159.89	3,550	.27	55.2	39,990
WTR YR 1972	33,163.08	3,550	.49	90.6	65,780

REVISED PEAK DISCHARGE (BASE, 2,000 FT³/S).--1971: Nov. 18 (2400) unknown (10.46 ft), backwater from San Gabriel River; Dec. 6 (0600) 4,130 ft³/s (13.70 ft).
1972: May 3 (1600) 4,410 ft³/s (13.97 ft), June 18 (0500) 4,450 ft³/s (16.33 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	90	56	47	163	171	88	128	38	34	22	4.6
2	5.6	302	53	263	153	169	77	113	41	32	21	4.5
3	3.4	397	51	1,150	127	166	72	105	39	30	20	5.9
4	2.5	189	49	1,050	110	148	69	90	39	28	19	4.8
5	1.9	120	48	286	104	141	64	76	48	26	18	4.4
6	1.6	87	45	186	99	253	56	100	510	283	16	4.6
7	1.4	74	44	681	97	283	114	2,000	97	209	15	5.7
8	1.3	69	44	698	101	173	137	2,300	41	57	14	9.8
9	1.4	60	42	230	192	133	92	1,530	34	328	14	8.7
10	8.1	56	42	151	387	136	76	387	31	246	13	8.6
11	2.0	52	42	131	520	202	65	230	52	137	12	6.9
12	1.5	49	44	123	408	158	61	183	162	99	12	6.1
13	1.3	218	56	123	287	117	59	214	286	69	11	5.8
14	1.1	238	70	160	196	109	120	132	187	47	11	5.2
15	1.1	97	84	165	152	102	139	110	101	39	11	5.1
16	1.1	68	160	131	127	1,090	205	97	67	36	11	5.1
17	.96	59	94	109	121	1,360	970	85	54	33	11	4.7
18	.78	54	74	102	260	248	1,930	78	46	32	9.7	4.4
19	.64	52	69	97	295	163	1,000	70	41	30	9.1	4.2
20	.64	52	69	88	203	132	283	63	37	27	8.8	4.1
21	.78	50	68	84	262	111	193	59	36	25	7.9	4.1
22	89	48	64	107	838	101	154	56	35	23	7.5	4.1
23	2,040	48	59	102	1,450	92	130	55	35	21	7.5	4.1
24	2,860	59	54	83	702	1,110	136	100	33	20	6.9	3.9
25	502	471	51	1,320	359	1,490	650	98	217	20	6.1	3.5
26	390	213	52	2,180	267	278	1,800	57	81	20	4.6	3.4
27	415	105	51	1,010	217	173	1,630	54	57	19	5.6	4.0
28	265	78	49	373	188	142	241	51	49	18	6.0	1,130
29	146	68	47	236	------	121	169	47	41	27	5.6	458
30	148	60	47	183	------	109	145	44	37	26	5.1	70
31	152	------	48	163	------	98	------	41	------	24	5.1	------
TOTAL	7,048.90	3,583	1,826	11,812	8,385	9,279	10,925	8,753	2,572	2,065	346.5	1,798.3
MEAN	227	119	58.9	381	299	299	364	282	85.7	66.6	11.2	59.9
MAX	2,860	471	160	2,180	1,450	1,490	1,930	2,300	510	328	22	1,130
MIN	.64	48	42	47	97	92	56	41	31	18	4.6	3.4
AC-FT	13,980	7,110	3,620	23,430	16,630	18,400	21,670	17,360	5,100	4,100	687	3,570

CAL YR 1972 TOTAL 31,799.73 MEAN 86.9 MAX 3,250 MIN .64 AC-FT 63,070
WTR YR 1973 TOTAL 68,393.70 MEAN 187 MAX 2,860 MIN .64 AC-FT 135,700

08106500 Little River at Cameron, Tex.

LOCATION.--Lat 30°49'53", long 96°57'01", Milam County, on right bank at site of old McCowan Bridge, 2,020 ft (616 m) upstream from bridge on U.S. Highway 77, 1.1 miles (1.8 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2 miles (3 km) southeast of Cameron, and at mile 33.6 (54.1 km).

DRAINAGE AREA.--7,088 mi² (18,358 km²).

PERIOD OF RECORD.--November 1916 to current year.

GAGE.--Water-stage recorder. Datum of gage is 281.89 ft (85.92 m) above mean sea level (levels by Corps of Engineers). Nov. 2, 1916, to Sept. 30, 1922, nonrecording gage at site 1.8 miles (2.9 km) upstream at different datum. Oct. 1, 1922, to Apr. 8, 1926, nonrecording gage at McCowan Bridge 30 ft (9 m) downstream at same datum. Apr. 9, 1926, to Oct. 9, 1933, nonrecording gage at bridge on U.S. Highway 77, 2,020 ft (616 m) downstream at datum 1.58 ft (0.48 m) lower.

AVERAGE DISCHARGE.--36 years (1917-53) unregulated, 1,807 ft³/s (51.2 m³/s), 1,309,000 acre-ft/yr (1,610 hm³/yr); 20 years (1953-73) regulated, 1,630 ft³/s (46.2 m³/s), 1,181,000 acre-ft/yr (1,460 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,400 ft³/s (408 m³/s) May 8, gage height, 28.74 ft (8.76 m); minimum daily, 34 ft³/s (0.96 m³/s) Oct. 9, 10.

Period of record: Maximum discharge, 647,000 ft³/s (18,320 m³/s) Sept. 10, 1921, gage height, 53.2 ft (16.2 m), present datum, from floodmark, from rating curve extended above 110,000 ft³/s (3,115 m³/s) on basis of slope-area measurement of 647,000 ft³/s (18,320 m³/s); 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 (14.9 m). 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 8,373 acre-ft (10.3 hm³) of water from river above gage during the year for use at their Rockdale plant. At end of year, flow from 185 mi² (47.9 km²) above this station was partly controlled by 59 floodwater-retarding structures with a total combined capacity of 67,480 acre-ft (83.2 hm³) below the flood-spillway crests, of which 59,530 acre-ft (73.4 hm³) is floodwater-retarding capacity and 7,940 acre-ft (9.79 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	659	312	270	1,320	1,740	1,060	1,260	2,700	553	682	131
2	49	3,380	302	444	1,330	1,710	986	1,250	2,440	425	576	129
3	49	2,560	297	2,000	1,050	1,700	851	1,630	1,890	378	534	131
4	47	942	294	3,560	953	1,520	853	1,180	906	352	496	124
5	45	656	289	1,720	819	1,170	815	1,050	852	332	470	124
6	44	885	274	916	751	1,450	789	1,670	1,370	351	361	147
7	41	894	267	1,150	757	1,470	871	8,050	2,720	664	302	151
8	36	870	262	1,840	777	1,070	999	13,700	2,450	692	275	324
9	34	807	239	1,190	1,100	872	915	7,160	2,510	582	241	261
10	34	552	277	825	1,490	1,040	833	2,180	2,560	637	233	211
11	40	387	300	711	1,550	2,300	893	1,900	2,580	521	226	176
12	40	307	297	1,030	1,420	1,510	870	2,640	2,680	446	203	155
13	39	690	326	1,110	1,250	1,040	755	2,130	2,990	389	197	155
14	38	1,240	366	1,120	1,210	1,500	792	1,920	1,370	329	189	145
15	38	619	1,620	934	1,090	1,690	2,520	1,780	858	294	183	132
16	39	386	1,380	844	1,020	3,600	2,190	1,970	699	2,230	183	112
17	36	337	655	747	996	3,730	3,290	1,590	875	1,960	175	104
18	36	321	502	724	1,170	1,310	8,940	1,470	2,580	851	167	102
19	36	312	466	701	1,530	918	4,920	1,880	2,660	742	162	101
20	38	305	455	662	1,250	888	1,460	1,950	2,160	1,820	158	99
21	42	292	431	730	1,160	1,380	1,910	1,800	1,110	1,380	155	97
22	1,160	280	396	1,040	2,390	1,160	1,870	1,340	1,030	1,150	149	94
23	6,220	289	367	811	3,990	974	1,850	1,230	901	1,120	140	92
24	4,040	311	344	685	3,130	2,940	1,870	1,040	805	1,100	133	90
25	928	742	323	2,640	1,690	6,500	3,270	1,070	794	1,080	125	317
26	573	781	310	8,080	1,360	2,300	3,650	1,030	920	899	117	217
27	1,210	517	295	4,870	1,260	1,350	5,150	1,010	947	878	120	985
28	1,260	402	278	1,600	1,740	1,550	1,840	983	1,000	900	119	6,310
29	789	357	274	1,170	------	1,510	1,580	1,030	942	746	120	2,080
30	5,590	327	278	1,320	------	1,440	1,330	1,060	742	550	117	1,010
31	2,370	------	278	1,300	------	1,200	------	1,280	------	520	120	------
TOTAL	24,995	21,407	12,754	46,744	39,553	54,532	59,922	71,233	49,041	24,871	7,428	14,306
MEAN	806	714	411	1,508	1,413	1,759	1,997	2,298	1,635	802	240	477
MAX	6,220	3,380	1,620	8,080	3,990	6,500	8,940	13,700	2,990	2,230	682	6,310
MIN	34	280	239	270	751	872	755	983	699	294	117	90
AC-FT	49,580	42,460	25,300	92,720	78,450	108,200	118,900	141,300	97,270	49,330	14,730	28,380

CAL YR 1972 TOTAL 191,057 MEAN 522 MAX 6,220 MIN 34 AC-FT 379,000
WTR YR 1973 TOTAL 426,786 MEAN 1,169 MAX 13,700 MIN 34 AC-FT 846,500

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 (3 km) upstream from mouth, 3 miles (5 km) southwest of Ben Arnold, and 6 miles (10 km) northwest of Cameron.

DRAINAGE AREA.--48.6 mi² (126 km²).

PERIOD OF RECORD.--October 1962 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 325.1 ft (99.1 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--11 years, 21.8 ft³/s (0.617 m³/s), 6.09 in/yr (154.7 mm/yr), 15,790 acre-ft/yr (19.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,740 ft³/s (134 m³/s) Oct. 29, gage height, 9.15 ft (2.79 m); no flow for many days.
Period of record: Maximum discharge, 7,170 ft³/s (203 m³/s) June 21, 1968, gage height, 9.45 ft (2.88 m); no flow for many days.
Maximum stage since at least 1913, 13.5 ft (4 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	18	.28	.62	26	1.8	.27	.19	.09	.01		0
2	.76	46	.22	68	5.7	1.7	.22	.13	162	0		0
3	.22	10	.19	440	2.3	1.7	32	.09	10	0		0
4	.07	3.7	.12	35	1.4	1.4	4.6	.06	2.9	0		0
5	.02	1.8	.12	12	1.0	1.2	1.2	.05	90	0		0
6	.01	.77	.10	7.6	.92	9.9	.85	39	693	29		0
7	0	.50	.11	86	.91	3.9	.94	478	12	8.2		0
8	0	.26	.18	39	33	1.7	1.4	27	2.7	2.4		0
9	0	.23	.24	10	43	1.2	2.4	4.4	1.0	38		0
10	0	.15	.18	4.1	15	16	1.8	1.4	.47	5.8		0
11	0	.12	.27	3.2	6.1	13	.75	.63	.43	1.7		0
12	0	.10	.70	3.3	3.6	3.7	.38	.48	.67	.59		0
13	0	424	4.7	5.1	2.7	1.6	.20	.14	8.2	.21		0
14	0	22	369	21	2.1	.93	.16	.05	4.8	.06		0
15	0	5.1	580	20	1.4	25	.32	.02	1.9	.02		0
16	0	2.2	18	9.3	.89	304	.41	.01	.81	.02		0
17	0	1.2	5.6	5.4	7.3	28	115	0	.34	.01		0
18	0	1.8	3.1	4.2	33	6.1	75	0	.13	0		0
19	0	2.2	2.5	2.9	11	2.6	11	0	.07	0		0
20	0	1.1	2.5	2.0	5.0	1.4	3.3	0	4.9	0		0
21	0	.78	2.0	32	11	.82	1.6	0	222	0		0
22	91	.46	1.5	14	127	.54	1.2	0	9.4	0		0
23	25	.37	1.1	4.2	88	.42	1.0	0	2.5	0		0
24	2.6	.70	.81	2.2	24	1,730	1.1	0	1.1	0		0
25	.77	7.3	.69	1,990	10	107	3.0	0	.62	0		0
26	43	4.6	.51	873	5.4	7.2	5.7	902	.34	0		0
27	125	1.9	.44	35	3.3	2.6	2.5	15	.15	0		0
28	8.5	.97	.38	14	2.2	1.5	1.1	2.7	.09	0		63
29	1,340	.62	.44	5.7	------	.94	.46	.83	.04	0		8.2
30	690	.39	.47	2.9	------	.73	.26	.31	.01	0		1.6
31	24	------	.43	4.6	------	.49	------	.09	------	0		------
TOTAL	2,351.03	559.32	996.88	3,756.32	473.22	2,279.07	270.12	1,472.58	1,232.66	86.02	0	72.8
MEAN	75.8	18.6	32.2	121	16.9	73.5	9.00	47.5	41.1	2.77	0	2.43
MAX	1,340	424	580	1,990	127	1,730	115	902	693	38	0	63
MIN	0	.10	.10	.62	.89	.42	.16	0	.01	0	0	0
CFSM	1.56	.38	.66	2.49	.35	1.51	.19	.98	.85	.06	0	.05
IN.	1.80	.43	.76	2.88	.36	1.74	.21	1.13	.94	.07	0	.06
AC-FT	4,660	1,110	1,980	7,450	939	4,520	536	2,920	2,440	171	0	144
(††)	6.79	2.23	1.45	4.28	1.78	3.48	2.47	2.75	2.96	3.09	.15	4.35

CAL YR 1972 TOTAL 4,760.92 MEAN 13.0 MAX 1,340 MIN 0 CFSM .27 IN 3.64 AC-FT 9,440 †† 28.73
WTR YR 1973 TOTAL 13,550.02 MEAN 37.1 MAX 1,990 MIN 0 CFSM .76 IN 10.37 AC-FT 26,880 †† 35.78

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1800	9.15	4,740	3-24	1130	8.40	3,360
1-25	1700	8.63	4,020	5-26	1030	7.97	2,340

†† 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 (3.9 km) downstream from Little Brazos River, 5 miles (8 km) downstream from Texas and New Orleans Railroad Co. bridge, 9 miles (14 km) southwest of Bryan, and at mile 281.1 (452.3 km).

DRAINAGE AREA.--38,400 mi² (99,500 km²), approximately, of which 9,240 mi² (23,932 km²) is probably noncontributing.

PERIOD OF RECORD.--August 1899 to December 1902, February 1918 to January 1926, June 1926 to current year. Monthly figures only for some periods, published in WSP 1312. Prior to September 1925, published as "near College Station".

GAGE.--Water-stage recorder. Datum of gage is 192.33 ft (58.62 m) above mean sea level. Aug. 1, 1899, to Dec. 31, 1902, and Feb. 23, 1918, to Sept. 17, 1925, nonrecording gage at site 7.5 miles (12.1 km) downstream at different datum. Sept. 11, 1925, to Oct. 24, 1932, nonrecording gage at site 3,000 ft (914 m) upstream at present datum.

AVERAGE DISCHARGE.--24 years (1899-1902, 1918-25, 1926-40) unregulated, 5,652 ft³/s (160 m³/s), 4,095,000 acre-ft/yr (5,049 hm³/yr); 33 years (1940-73) regulated, 5,021 ft³/s (142 m³/s), 3,638,000 acre-ft/yr (4,486 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 41,500 ft³/s (1,180 m³/s) Apr. 26, gage height, about 22.5 ft (6.9 m); minimum daily, 232 ft³/s (6.57 m³/s) Oct. 21.

Period of record: Maximum gage height, 54 ft (16 m) Sept. 12, 1921, present site and datum (discharge not determined); minimum daily discharge, 89 ft³/s (2.52 m³/s) Aug. 24, 1934.

Maximum stage since at least 1854, that of Sept. 12, 1921. Flood of Dec. 5, 1913, reached a stage of 51 ft (16 m), present site and datum, from information by Texas and New Orleans Railroad Co. at their bridge 5 miles (8 km) upstream and from comparison of maximum stages reached by floods in 1913 and 1921 at gage near College Station. Flood in 1854 reached about the same stage as flood of Dec. 5, 1913.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated by 24 major reservoirs with a combined capacity of 6,467,000 acre-ft (7,970 hm³), of which 3,791,000 acre-ft (4,670 hm³) 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 mi² (969 km²) 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 (177 hm³) below the flood-spillway crests, of which 127,050 acre-ft (157 hm³) is floodwater-retarding capacity and 16,120 acre-ft (19.9 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	790	5,870	1,160	921	3,480	3,790	4,770	28,500	3,310	4,350	1,440	531
2	774	4,250	2,690	1,120	3,380	4,210	4,220	24,800	6,000	4,040	3,510	488
3	614	10,200	2,580	1,860	3,890	4,740	3,970	20,500	10,600	3,310	4,830	440
4	480	7,150	2,200	6,070	3,550	6,360	3,870	15,500	13,200	2,220	4,820	394
5	370	4,040	1,460	7,290	3,180	5,830	3,910	11,600	22,300	1,580	4,720	436
6	272	2,680	1,090	4,870	2,870	5,320	3,760	8,600	26,900	1,630	4,730	673
7	433	2,390	1,960	4,040	2,690	4,000	3,590	10,200	29,400	3,650	4,710	888
8	619	2,260	2,700	4,610	2,500	3,500	2,510	14,500	30,500	4,000	4,490	611
9	640	2,280	3,290	5,120	2,770	2,600	2,400	21,100	25,300	3,110	3,280	528
10	545	2,020	3,020	4,690	4,990	2,400	2,400	13,100	19,000	2,930	2,810	592
11	375	1,710	2,010	4,120	5,890	4,060	2,900	8,170	14,700	2,070	2,780	482
12	270	1,380	1,720	4,810	4,550	11,600	2,800	7,020	15,700	1,620	2,860	618
13	637	1,210	2,540	5,780	3,720	10,600	2,350	6,460	20,300	2,340	2,640	885
14	859	2,850	2,880	5,830	3,210	6,840	2,000	5,400	17,200	4,650	1,560	1,020
15	575	2,720	3,050	4,370	2,800	5,840	1,800	3,810	12,500	5,010	1,010	670
16	409	1,920	7,540	2,850	2,500	5,930	3,000	3,290	11,700	4,290	824	485
17	455	3,060	5,430	2,320	2,210	11,900	5,200	3,250	8,610	8,220	727	395
18	445	3,170	4,220	3,760	2,070	12,500	10,000	2,820	7,390	8,750	702	336
19	334	2,200	3,290	2,450	2,320	9,720	18,500	3,430	8,670	6,640	765	306
20	283	1,990	2,300	1,760	2,670	7,430	18,000	4,080	8,380	6,250	720	291
21	232	2,430	2,100	1,660	2,360	6,240	16,000	3,160	9,210	7,060	643	332
22	992	2,310	1,880	1,700	2,310	5,290	13,800	3,200	11,300	5,520	566	373
23	3,450	2,780	1,450	2,110	4,300	4,520	12,100	2,740	10,600	4,360	528	960
24	7,350	2,610	1,480	1,780	6,680	7,450	10,800	2,220	9,140	3,170	926	1,020
25	5,260	2,710	1,480	3,590	5,990	24,200	12,000	2,120	8,380	2,820	1,070	961
26	2,310	2,600	1,250	18,900	4,580	22,200	32,000	2,990	7,080	2,540	980	974
27	1,800	2,980	1,060	23,000	3,490	14,600	40,000	10,100	6,140	2,080	931	1,100
28	3,620	2,140	924	17,100	2,750	10,600	36,000	8,690	5,140	2,100	717	2,910
29	4,880	1,650	904	9,590	------	10,300	31,000	6,250	4,870	1,930	630	8,020
30	9,830	1,210	1,180	5,970	------	10,300	30,000	4,550	4,590	1,560	530	6,010
31	14,000	------	914	4,380	------	6,780	------	3,160	------	1,390	488	------
TOTAL	63,903	88,770	71,752	168,421	97,700	251,650	335,650	265,310	388,110	115,190	61,937	33,729
MEAN	2,061	2,959	2,315	5,433	3,489	8,118	11,190	8,558	12,940	3,716	1,998	1,124
MAX	14,000	10,200	7,540	23,000	6,680	24,200	40,000	28,500	30,500	8,750	4,830	8,020
MIN	232	1,210	904	921	2,070	2,400	1,800	2,120	3,310	1,390	488	291
AC-FT	126,800	176,100	142,300	334,100	193,800	499,100	665,800	526,200	769,800	228,500	122,900	66,900

CAL YR 1972 TOTAL 753,334 MEAN 2,058 MAX 14,000 MIN 232 AC-FT 1,494,000
WTR YR 1973 TOTAL 1,942,122 MEAN 5,321 MAX 40,000 MIN 232 AC-FT 3,852,000

NOTE.--No gage-height record Apr. 10 to May 8.

08109700 Middle Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°20'21", long 96°54'16", Lee County, on right bank 25 ft (8 m) upstream from centerline of State Highway 21, 4.5 miles (7.2 km) upstream from West Yegua Creek, 5.0 miles (8.0 km) southwest of Dime Box, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--236 mi² (611 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 295.4 ft (90.0 m) above mean sea level (from Texas Highway Department bridge plans). June 30 to July 21, 1970, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 43.0 ft³/s (1.22 m³/s), 31,150 acre-ft/yr (38.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 430 ft³/s (12.2 m³/s) June 13, gage height, 8.57 ft (2.61 m); no flow for many days.
Period of record: Maximum discharge, 4,210 ft³/s (119 m³/s) Jan. 22, 1968, gage height, 12.45 ft (3.79 m), from rating curve extended above 2,460 ft³/s (69.7 m³/s) on basis of area-velocity study; no flow at times each year.
Maximum stage since at least 1851, 16 ft (5 m) in December 1913, from information by local residents.

REMARKS.--Records fair. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.47	2.5	.59	39	22	16	47	.27	1.6	.01	0
2	0	.31	1.5	1.4	22	19	13	26	.26	1.3	.01	0
3	0	.22	1.4	8.9	16	17	10	20	.23	1.0	0	0
4	0	.19	1.2	15	13	15	8.2	16	.27	.62	0	0
5	0	.15	1.2	15	11	14	6.7	13	.59	.51	0	0
6	0	.12	1.1	14	10	25	8.0	12	3.8	.57	0	.63
7	0	.08	.80	35	9.1	104	19	22	11	1.2	0	.14
8	0	.04	.72	48	8.6	95	21	35	43	13	0	.13
9	0	.03	.72	38	15	95	22	71	26	21	0	.04
10	0	.02	.72	31	31	68	17	98	12	11	0	0
11	0	.01	.65	22	39	41	12	93	8.4	17	0	0
12	0	0	.65	18	46	31	9.7	43	41	14	0	0
13	0	.21	.65	17	58	26	8.2	21	232	7.6	0	13
14	0	.05	.80	22	47	22	8.0	15	114	4.9	0	45
15	0	.02	1.7	24	31	19	8.0	14	68	3.6	1.6	43
16	0	.02	3.4	21	23	19	40	12	40	2.5	3.7	57
17	0	.01	2.9	17	19	34	170	9.1	18	2.1	.78	26
18	0	.01	1.2	14	24	63	160	6.9	11	1.2	.40	12
19	0	.01	1.4	11	28	51	133	4.7	7.4	.69	.40	7.1
20	0	.01	1.5	9.1	29	29	141	3.1	5.3	.66	.18	4.1
21	0	.01	1.4	9.1	38	21	179	2.5	4.2	.53	.06	1.6
22	12	.15	1.4	8.0	61	17	192	1.5	3.9	.42	.01	.72
23	.89	.19	2.0	6.7	81	14	104	1.4	3.7	.28	0	.45
24	.22	.43	1.1	5.8	90	109	44	1.1	2.9	.23	0	.36
25	.10	.65	.65	198	103	146	29	.59	2.7	.18	0	.23
26	.06	.72	.50	350	102	112	32	.50	2.6	.14	0	.19
27	.06	2.3	.59	243	61	145	62	.43	2.7	.21	0	.27
28	.04	2.5	1.1	203	31	156	76	.45	2.3	.14	0	1.2
29	.04	2.9	1.1	232	------	90	97	.35	2.2	.07	0	2.3
30	.02	3.4	.80	219	------	36	96	.27	1.8	.04	0	.64
31	.72	------	.72	97	------	22	------	.31	------	.02	0	------
TOTAL	14.15	15.23	38.07	1,953.59	1,085.7	1,677	1,741.8	591.20	671.52	108.31	7.15	216.10
MEAN	.46	.51	1.23	63.0	38.8	54.1	58.1	19.1	22.4	3.49	.23	7.20
MAX	12	3.4	3.4	350	103	156	192	98	232	21	3.7	57
MIN	0	0	.50	.59	8.6	14	6.7	.27	.23	.02	0	0
AC-FT	28	30	76	3,870	2,150	3,330	3,450	1,170	1,330	215	14	429

CAL YR 1972 TOTAL 2,998.00 MEAN 8.19 MAX 530 MIN 0 AC-FT 5,950
WTR YR 1973 TOTAL 8,119.82 MEAN 22.2 MAX 350 MIN 0 AC-FT 16,110

PEAK DISCHARGE (BASE, 500 FT³/S).--No peak above base.

08109800 East Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°24'26", long 96°49'02", Burleson County, on left bank 49 ft (15 m) upstream from centerline of State Highway 21, 0.8 mile (1.3 km) downstream from Buffalo Creek, 3.5 miles (5.6 km) north of Dime Box, and at mile 12.2 (19.6 km).

DRAINAGE AREA.--243 mi² (629 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 284.00 ft (86.56 m) above mean sea level (State Highway Department bench mark). Nov. 6 to Dec. 10, 1970, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--11 years, 46.6 ft³/s (1.32 m³/s), 33,760 acre-ft/yr (41.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,450 ft³/s (41.1 m³/s) June 13, gage height, 9.75 ft (2.97 m); no flow Oct. 13-21. Period of record: Maximum discharge, 6,600 ft³/s (187 m³/s) June 24, 1968, gage height, 12.04 ft (3.67 m); no flow at times. Maximum stage since at least 1886, 17 ft (5 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	4.1	3.6	3.3	21	17	19	44	3.7	2.2	.27	.03
2	.39	3.7	3.3	7.1	18	16	16	35	5.1	1.8	.27	.03
3	.30	2.9	3.9	25	17	15	14	30	4.1	1.7	.24	.02
4	.20	2.6	12	74	13	14	12	24	4.7	1.4	.18	.02
5	.17	2.6	4.1	97	11	13	11	19	6.2	1.1	.14	.08
6	.14	2.8	2.9	46	10	78	13	17	18	1.1	.12	1.2
7	.09	2.6	2.6	74	9.2	203	41	49	39	.92	.10	.71
8	.06	2.4	2.5	83	13	215	45	169	33	6.9	.10	.39
9	.05	2.3	2.1	125	28	117	40	791	15	6.7	.14	.30
10	.04	2.1	2.5	76	58	50	28	529	11	5.1	.10	.46
11	.02	1.9	3.0	33	97	40	20	170	15	6.0	.07	2.2
12	.01	2.0	3.7	26	85	32	16	42	94	5.8	.06	3.1
13	0	4.7	4.5	26	58	25	15	30	900	3.6	.33	2.8
14	0	6.1	6.1	36	50	23	13	23	630	2.6	.80	3.7
15	0	17	8.6	35	31	21	35	17	164	2.0	.18	14
16	0	11	7.8	28	21	20	404	13	37	3.0	.12	14
17	0	6.7	6.3	23	21	59	282	14	15	2.2	.09	8.2
18	0	4.9	5.2	18	35	91	246	11	8.2	1.6	.16	4.4
19	0	4.0	4.9	15	50	43	236	10	5.1	1.2	.30	2.8
20	0	3.3	4.3	13	45	26	294	8.3	4.1	.85	.18	1.8
21	0	3.0	4.0	15	48	19	231	7.7	3.8	.68	.12	1.1
22	6.9	3.0	3.7	15	79	16	65	7.2	3.8	.55	.07	.80
23	34	2.9	4.0	13	130	14	39	6.4	3.7	.40	.04	.64
24	61	4.0	4.0	11	141	222	36	6.2	3.6	.37	.03	.54
25	36	5.6	3.9	228	91	324	45	5.9	3.3	.25	.03	.36
26	14	12	3.5	658	40	375	122	5.8	3.2	1.3	.03	.30
27	11	19	2.9	910	26	232	166	5.1	3.0	2.7	.02	4.2
28	18	11	2.9	531	20	59	265	4.2	2.9	.54	.02	4.7
29	17	6.6	2.9	155	------	32	206	4.2	2.7	.36	.02	1.4
30	9.0	4.3	3.0	39	------	25	69	4.0	2.5	.30	.03	1.0
31	5.6	------	3.2	25	------	22	------	3.9	------	.27	.03	------
TOTAL	214.45	161.1	131.9	3,463.4	1,266.2	2,458	3,044	2,105.9	2,044.7	65.49	4.39	75.28
MEAN	6.92	5.37	4.25	112	45.2	79.3	101	67.9	68.2	2.11	.14	2.51
MAX	61	19	12	910	141	375	404	791	900	6.9	.80	14
MIN	0	1.9	2.1	3.3	9.2	13	11	3.9	2.5	.25	.02	.02
AC-FT	425	320	262	6,870	2,510	4,880	6,040	4,180	4,060	130	8.7	149

CAL YR 1972 TOTAL 4,614.25 MEAN 12.6 MAX 720 MIN 0 AC-FT 9,150
WTR YR 1973 TOTAL 15,034.81 MEAN 41.2 MAX 910 MIN 0 AC-FT 29,820

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Jan. 27 (1100) 1,000 ft³/s (9.50 ft); June 13 (1000) 1,450 ft³/s (9.75 ft).

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 (32.2 km).

DRAINAGE AREA.--1,006 mi² (2,606 km²).

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, 228,200 acre-ft (281 hm³) June 17, elevation, 243.30 ft (74.16 m); minimum, 150,900 acre-ft (186 hm³) Oct. 20, elevation, 237.18 ft (72.29 m).
Period of record: Maximum contents, 294,200 acre-ft (363 hm³) June 28, 1968, elevation, 247.56 ft (75.46 m); minimum, 117,000 acre-ft (144 hm³) Nov. 16, 1971, elevation, 233.88 ft (71.29 m).

REMARKS.--Lake is formed by a rolled earthfill dam 20,210 ft (6,160 m) long with a 4,715-foot (1,437-meter) dike, which includes a 1,250-foot (381-meter) spillway with an uncontrolled ogee weir. The low-flow outlet consists of one 10-foot-diameter (3-meter) conduit controlled by two 5- by 10-foot (2- by 3-meter) 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	239.0	171,800
234.0	118,100	240.0	184,000
235.0	127,900	242.0	210,000
236.0	138,200	244.0	238,300
237.0	148,900	246.0	268,800
238.0	160,100	248.0	301,600

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154,500	154,400	153,700	153,900	176,700	159,700	178,800	167,500	157,900	188,000	159,800	154,800
2	154,200	154,400	153,700	154,500	174,900	159,700	176,100	164,900	157,600	185,700	159,500	154,600
3	153,900	154,400	153,800	154,700	173,200	159,900	173,400	162,000	158,000	182,300	159,200	154,500
4	153,900	154,200	153,700	155,100	171,200	159,900	170,600	160,100	158,400	180,000	159,100	155,300
5	153,900	154,100	153,700	155,300	169,600	160,100	167,800	159,500	160,600	176,900	158,800	156,700
6	153,700	154,400	153,500	156,300	167,900	161,300	166,500	159,300	161,900	174,400	158,500	158,100
7	153,300	154,200	153,400	159,500	166,500	161,700	164,700	162,100	162,600	172,200	158,400	158,200
8	153,000	153,900	153,400	161,300	166,000	160,900	164,100	162,300	162,700	169,400	158,300	158,100
9	152,900	153,900	153,400	162,100	164,700	160,500	163,600	160,900	163,200	167,600	158,100	158,100
10	152,800	153,700	153,500	162,900	163,600	160,500	162,600	160,600	163,600	166,900	158,000	158,100
11	152,700	153,500	153,600	163,400	162,600	160,600	161,600	160,900	166,000	166,300	157,600	158,100
12	152,700	154,500	153,500	163,500	161,600	160,600	160,800	162,600	176,100	165,400	157,600	158,200
13	152,600	154,700	153,400	163,900	161,600	160,900	160,300	162,400	204,100	164,800	157,500	159,900
14	152,400	154,300	153,700	164,200	162,400	161,000	159,900	161,900	219,400	164,100	157,900	159,500
15	152,300	154,300	153,900	163,900	163,300	161,400	164,200	161,200	225,700	163,500	157,600	160,100
16	152,300	154,100	153,900	163,200	162,400	161,000	171,200	160,600	227,400	162,900	157,400	160,300
17	152,000	154,100	153,900	162,400	162,400	160,300	179,100	160,000	227,400	162,100	157,200	160,200
18	151,900	154,300	153,800	161,700	162,000	160,100	185,300	159,800	224,800	161,600	157,300	160,100
19	151,700	153,900	153,900	161,300	161,600	160,200	188,300	159,500	222,000	161,300	157,400	160,000
20	150,900	153,700	154,100	161,000	160,700	160,100	188,800	159,400	219,000	160,700	157,100	159,800
21	151,000	153,700	154,100	160,600	160,700	159,700	187,900	159,200	216,900	160,500	157,000	159,500
22	153,000	153,500	153,800	160,100	161,000	159,400	187,200	159,100	214,000	160,200	156,700	159,500
23	153,200	153,500	153,900	159,700	161,300	160,600	185,400	159,300	211,100	160,100	156,500	159,400
24	152,900	154,300	153,900	159,900	161,000	179,100	182,800	159,200	208,200	160,000	156,300	159,200
25	152,900	154,300	153,800	166,800	160,300	187,200	180,400	159,200	205,600	159,700	156,000	159,000
26	153,400	154,200	153,800	171,800	159,800	189,800	178,200	159,300	202,800	159,300	155,500	159,000
27	153,200	153,900	153,700	176,700	159,200	190,000	175,700	159,200	200,000	159,800	155,400	161,900
28	153,200	153,800	153,800	179,100	159,100	188,600	173,200	158,800	196,900	159,500	155,300	162,100
29	153,700	153,800	154,100	179,600	------	186,600	171,000	158,500	194,000	159,500	155,300	162,100
30	153,900	153,800	153,900	178,800	------	184,800	169,000	158,300	191,200	159,400	155,200	162,000
31	154,500	------	153,700	178,000	------	181,300	------	158,000	------	159,500	155,100	------
(†)	237.50	237.44	237.43	239.51	237.91	239.78	238.76	237.81	240.56	237.95	237.55	238.16
(*)	-200	-700	-100	+24,300	-18,900	+22,200	-12,300	-11,000	+33,200	-31,700	-4,400	+6,900
MAX	154,500	154,700	154,100	179,600	176,700	190,000	188,800	167,500	227,400	188,000	159,800	162,100
MIN	150,900	153,500	153,400	153,900	159,100	159,400	159,900	158,000	157,600	159,300	155,100	154,500

CAL YR 1972..... * +18,100 MAX 163,200 MIN 129,400
WTR YR 1973..... * +7,300 MAX 227,400 MIN 150,900

† 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 (12 m) downstream from centerline of bridge on State Highway 36, 860 ft (262 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.0 mile (1.6 km) downstream from Somerville Lake, 2.0 miles (3.2 km) south of Somerville, 5.0 miles (8.0 km) upstream from Davidson Creek, and at mile 18.4 (29.6 km).

DRAINAGE AREA.--1,008 mi² (2,611 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 199.21 ft (60.72 m) above mean sea level. Prior to Jan. 30, 1934, nonrecording gage at railway bridge 860 ft (262 m) upstream, at datum 34.30 ft (10.45 m) higher. Jan. 30, 1934, to Nov. 30, 1970, water-stage recorder at highway bridge 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--41 years (1924-65) unregulated, 290 ft³/s (8.21 m³/s), 210,100 acre-ft/yr (259 hm³/yr); 8 years (1965-73) regulated, 249 ft³/s (7.05 m³/s), 180,400 acre-ft/yr (222 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,760 ft³/s (49.8 m³/s) Apr. 6, gage height, 7.87 ft (2.40 m); maximum gage height, 7.98 ft (2.43 m) June 20; minimum daily discharge, 0.05 ft³/s (1.4 dm³/s) May 24, Sept. 26.
Period of record: Maximum discharge, 56,800 ft³/s (1,610 m³/s) July 1, 1940, gage height, 19.27 ft (5.87 m); no flow at times.
Maximum stage since at least 1875, 22 ft (7 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	12	3.6	.96	1,120	58	1,510	1,380	.1	1,510	.38	.79
2	2.7	9.5	3.4	1.2	1,110	7.6	1,530	1,360	.1	1,500	.41	.84
3	2.8	8.7	3.4	2.7	1,110	3.2	1,550	1,360	.1	1,500	.42	.83
4	2.8	8.3	3.2	2.3	1,110	2.2	1,570	1,080	.1	1,490	.39	1.2
5	3.1	5.3	3.2	1.9	1,120	1.5	1,580	367	.2	1,470	.38	12
6	3.2	4.0	3.0	2.7	1,120	2.3	1,670	14	1.9	1,450	.36	44
7	3.4	4.1	3.0	9.5	1,120	283	1,490	14	.5	1,470	.34	1.9
8	2.6	3.9	2.9	.97	1,140	628	850	325	.1	1,470	.31	.28
9	2.6	4.4	2.8	.27	1,120	666	491	673	.1	1,210	.33	.23
10	2.6	4.8	2.6	.19	1,120	471	478	575	.3	402	.32	.26
11	2.5	5.2	2.6	.19	1,120	27	485	353	189	335	.30	.19
12	2.4	5.4	2.7	.21	1,120	3.9	496	365	88	305	.28	.18
13	2.6	11	2.6	.22	713	2.4	396	364	223	259	.28	.83
14	2.9	6.4	3.4	.30	563	1.9	231	369	21	259	.28	13
15	3.2	4.8	4.5	193	624	1.2	242	376	2.0	261	.31	3.4
16	3.4	4.0	3.2	545	720	114	308	383	.2	264	.30	.96
17	3.7	4.0	3.1	556	751	332	239	274	325	229	.29	.43
18	4.2	4.1	2.8	556	752	182	58	91	854	170	.31	.25
19	4.3	3.8	2.8	463	752	102	15	57	1,530	100	.33	.16
20	4.6	3.5	2.8	323	776	98	374	1.6	1,640	32	.33	.13
21	5.0	3.7	2.7	313	767	97	800	.26	1,640	11	.30	.11
22	8.7	3.6	2.6	271	774	56	755	.09	1,630	.7	.30	.08
23	5.4	3.4	2.7	160	773	12	885	.06	1,620	.3	.28	.07
24	4.7	4.5	2.6	59	777	170	1,330	.05	1,620	.2	.27	.06
25	4.6	6.3	2.4	41	783	24	1,410	.06	1,600	.2	.27	.06
26	5.4	4.6	2.4	20	756	2.2	1,400	.06	1,600	.2	.27	.05
27	5.9	4.0	2.2	215	603	302	1,390	.07	1,590	.3	.28	2.6
28	5.8	3.8	1.2	529	319	954	1,390	.07	1,580	.3	.32	23
29	7.3	3.6	.94	682	------	1,380	1,390	.08	1,560	.2	.44	3.4
30	7.0	3.5	.85	1,040	------	1,470	1,390	.08	1,530	.3	.63	1.5
31	7.0	------	.79	1,120	------	1,490	------	.08	------	.3	.70	------
TOTAL	129.0	158.2	82.98	7,109.61	24,633	8,944.4	27,703	9,782.56	20,845.7	15,700.0	10.71	112.79
MEAN	4.16	5.27	2.68	229	880	289	923	316	695	506	.35	3.76
MAX	8.7	12	4.5	1,120	1,140	1,490	1,670	1,380	1,640	1,510	.70	44
MIN	2.4	3.4	.79	.19	319	1.2	15	.05	.10	.20	.27	.05
AC-FT	256	314	165	14,100	48,860	17,740	54,950	19,400	41,350	31,140	21	224

CAL YR 1972 TOTAL 1,236.94 MEAN 3.3 MAX 105 MIN 0 AC-FT 2,450
WTR YR 1973 TOTAL 115,211.95 MEAN 316 MAX 1,670 MIN .05 AC-FT 228,500

08110100 Davidson Creek near Lyons, Tex.

LOCATION.--Lat 30°25'10", long 96°32'24", Burleson County, on left bank 83 ft (25 m) downstream from Farm Road 60, 1.2 miles (1.9 km) downstream from Berry Creek, 2.8 miles (4.5 km) northeast of Lyons, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--195 mi² (505 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 220.26 ft (67.14 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 55.6 ft³/s (1.57 m³/s), 40,280 acre-ft/yr (49.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,800 ft³/s (306 m³/s) June 13, gage height, 17.09 ft (5.21 m); no flow at times.
Period of record: Maximum discharge, 23,200 ft³/s (657 m³/s) June 24, 1968, gage height, 18.67 ft (5.69 m); no flow at times each year.
Maximum stage since at least 1902, that of June 24, 1968. Flood in 1947 reached a stage of 17 ft (5 m), from information by local resident.

REMARKS.--Records good. During year the city of Caldwell discharged 196 acre-ft (0.242 hm³) of sewage effluent into creek 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.4	5.9	.04	18	10	13	21	1.9	3.0	.15	.02
2	0	2.0	3.6	.11	15	9.3	11	20	1.7	1.9	.36	0
3	0	1.0	2.6	19	13	8.1	9.0	20	1.7	1.1	.32	0
4	0	.38	1.9	55	12	7.2	6.9	18	30	.80	.19	0
5	0	.16	1.5	45	10	6.1	5.9	17	41	.56	.09	1.4
6	0	.16	1.0	31	9.0	274	9.3	15	185	1.5	.03	82
7	0	.09	.45	523	8.3	880	135	404	95	3.2	0	43
8	0	.02	.53	443	9.3	270	95	283	34	8.3	0	10
9	0	.02	.45	94	54	82	60	256	18	18	0	3.6
10	0	.01	.38	41	229	40	34	107	10	30	0	1.5
11	0	0	.38	26	97	33	18	31	18	11	0	.64
12	0	0	.45	32	53	20	13	42	786	4.2	0	.35
13	0	28	.31	58	44	13	10	26	5,920	2.3	.01	.22
14	0	27	2.4	205	99	9.8	8.3	20	4,550	1.2	13	.11
15	0	12	6.7	92	58	8.3	88	15	982	.89	5.1	.40
16	0	3.8	2.3	44	27	24	1,700	12	118	2.1	1.1	.53
17	0	1.4	2.2	25	41	40	1,780	10	56	3.5	.48	.29
18	0	.70	3.6	17	208	26	1,720	8.8	34	3.6	.10	.17
19	0	.38	2.2	12	106	19	701	7.4	22	1.6	.48	.07
20	0	1.0	1.3	9.3	63	10	227	6.3	18	1.0	.66	.09
21	0	.80	.98	7.4	77	6.9	90	5.7	15	.71	.23	.05
22	44	.61	.97	5.7	244	4.8	61	5.0	13	.51	.04	.03
23	149	.31	.88	5.9	213	20	48	4.4	12	.35	0	0
24	32	1.2	.80	6.1	113	1,260	41	4.0	11	.29	0	0
25	20	4.8	.78	654	53	2,030	40	4.0	9.2	.24	0	0
26	9.3	1.2	.60	1,410	28	645	160	3.8	8.2	.16	0	0
27	4.0	1.0	.40	797	17	127	162	3.2	7.3	.25	0	5.6
28	1.7	4.8	.33	211	12	46	114	2.7	6.5	.19	.02	62
29	2.6	5.7	.21	50	------	29	39	2.4	7.2	.16	13	27
30	7.4	8.5	.17	29	------	20	25	2.3	4.5	.15	1.1	6.8
31	3.6	------	.05	22	------	16	------	2.1	------	.11	.15	------
TOTAL	273.6	109.44	46.32	4,969.55	1,930.6	5,994.5	7,424.4	1,379.1	13,016.2	102.87	36.61	245.87
MEAN	8.83	3.65	1.49	160	69.0	193	247	44.5	434	3.32	1.18	8.20
MAX	149	28	6.7	1,410	244	2,030	1,780	404	5,920	30	13	82
MIN	0	0	.05	.04	8.3	4.8	5.9	2.1	1.7	.11	0	0
AC-FT	543	217	92	9,860	3,830	11,890	14,730	2,740	25,820	204	73	488

CAL YR 1972 TOTAL 3,406.34 MEAN 9.31 MAX 803 MIN 0 AC-FT 6,760
WTR YR 1973 TOTAL 35,529.06 MEAN 97.3 MAX 5,920 MIN 0 AC-FT 70,470

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-25	0900	15.06	2,660
4-16	1330	14.80	2,050
6-13	2000	17.09	10,800

08110200 Brazos River at Washington, Tex.

LOCATION.--Lat 30°21'40", long 96°09'18", Washington County, near right bank beneath floor of bridge on State Highway 90, 2.4 miles (3.9 km) upstream from Navasota River, 2.5 miles (4.0 km) north of Washington, and at mile 228.8 (368.1 km).

DRAINAGE AREA.--39,740 mi² (102,930 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1965 to current year. Gage heights collected in this vicinity since 1915 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 140.13 ft (42.71 m) above mean sea level. Auxiliary water-stage recorder 1.8 miles (2.9 km) downstream at same datum.

AVERAGE DISCHARGE.--7 years, 4,840 ft³/s (137 m³/s), 3,507,000 acre-ft/yr (4,324 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 44,600 ft³/s (1,260 m³/s) Apr. 27, gage height, 26.38 ft (8.04 m); maximum gage height, 27.31 ft (8.32 m) June 14 (backwater from Navasota River); minimum daily discharge, 416 ft³/s (11.8 m³/s) Oct. 21.
Period of record: Maximum discharge, 82,500 ft³/s (2,340 m³/s) Jan. 24, 1968, gage height, 33.60 ft (10.24 m); minimum daily, 276 ft³/s (7.82 m³/s) Feb. 17, 19, 1971.
Maximum stage since at least 1856, 62.0 ft (18.9 m) Dec. 6, 1913, from information by local residents.

REMARKS.--Records good. Backwater at times from Navasota River. Many diversions above station for irrigation, municipal, industrial, and oilfield operation. Flow is regulated by 26 major reservoirs with a total combined capacity of 6,985,000 acre-ft (8,610 hm³), of which 4,138,000 acre-ft (5,100 hm³) is for flood control. At end of year, flow from 374 mi² (969 km²) above this station was partly controlled by 115 floodwater-retarding structures with a total combined capacity of 143,360 acre-ft (177 hm³) below the flood-spillway crests, of which 127,210 acre-ft (157 hm³) is floodwater-retarding capacity and 16,150 acre-ft (19.9 hm³) 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 (2.9 km) downstream.

REVISIONS (WATER YEARS).--WRD Texas 1970: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	11,200	1,340	1,050	5,530	3,690	6,310	30,000	3,850	7,580	2,150	555
2	819	5,550	1,340	1,070	4,660	4,660	5,720	25,400	4,770	7,440	2,330	536
3	868	6,140	2,550	1,410	4,400	4,830	5,240	16,600	7,740	6,930	5,160	564
4	734	10,900	2,470	2,770	4,550	5,790	5,060	14,300	11,500	6,470	5,920	514
5	601	6,130	2,060	7,430	4,180	6,870	5,160	11,100	15,200	5,250	5,830	598
6	503	3,610	1,490	7,300	3,780	6,220	5,440	7,870	25,400	4,650	5,870	1,630
7	445	2,510	1,220	6,480	3,610	7,010	5,790	8,740	29,100	4,980	5,750	2,270
8	479	2,190	2,190	6,540	3,600	6,490	5,730	17,700	31,900	7,920	5,680	1,400
9	700	2,080	2,830	6,190	3,850	4,950	4,480	26,200	32,300	6,660	5,210	684
10	733	2,020	3,220	5,630	5,050	3,980	3,800	21,100	22,900	5,960	4,260	517
11	668	1,840	2,830	4,670	7,330	3,170	3,610	11,300	15,700	4,610	4,100	546
12	517	1,610	2,040	4,540	6,790	5,460	4,190	8,680	13,500	3,760	4,070	511
13	456	1,790	1,870	6,190	5,930	11,200	3,950	7,610	20,300	3,270	4,250	692
14	598	1,520	2,970	6,580	5,090	7,400	3,410	7,010	28,100	4,870	3,610	1,520
15	928	2,780	2,990	5,780	4,140	5,130	3,090	6,270	21,100	6,680	2,340	1,260
16	718	2,350	4,930	4,480	3,600	5,160	7,420	5,040	15,600	6,620	1,700	746
17	523	1,940	7,180	3,300	3,470	7,240	9,450	4,710	11,200	5,710	1,340	484
18	544	2,990	5,400	3,430	3,470	13,100	20,400	4,440	7,560	11,000	1,160	433
19	532	2,790	4,280	4,300	3,480	11,000	30,500	4,190	8,270	8,150	1,070	441
20	484	2,040	3,280	2,960	3,800	8,220	25,500	5,660	9,590	6,740	1,080	437
21	416	1,960	2,360	2,270	3,980	6,730	23,700	5,440	9,580	7,070	977	441
22	549	2,280	2,120	2,110	3,890	6,430	17,500	4,770	11,600	6,740	859	428
23	1,270	2,340	1,850	2,240	4,610	5,840	11,300	4,850	12,300	5,360	716	486
24	4,610	2,720	1,400	2,420	7,210	9,910	9,960	4,080	11,400	4,590	632	908
25	8,010	2,710	1,430	3,260	8,710	23,700	11,400	3,670	10,300	3,850	1,020	1,110
26	4,120	2,680	1,350	14,200	6,910	32,700	31,200	3,500	9,780	3,440	1,370	1,030
27	1,950	2,640	1,160	27,400	5,740	21,700	42,600	6,430	8,870	3,240	1,230	1,190
28	1,810	2,790	1,060	25,100	4,390	12,200	37,000	12,100	8,940	2,920	1,210	3,850
29	4,130	2,110	1,000	16,200	------	10,400	32,000	9,090	8,190	3,080	933	5,710
30	5,020	1,670	1,030	8,860	------	8,370	31,900	7,020	8,050	2,850	725	5,990
31	15,600	------	1,270	6,800	------	7,150	------	5,220	------	2,370	589	------
TOTAL	60,375	97,880	74,510	202,960	135,750	276,700	412,810	310,090	434,590	170,760	83,141	37,481
MEAN	1,948	3,263	2,404	6,547	4,848	8,926	13,760	10,000	14,490	5,508	2,682	1,249
MAX	15,600	11,200	7,180	27,400	8,710	32,700	42,600	30,000	32,300	11,000	5,920	5,990
MIN	416	1,520	1,000	1,050	3,470	3,170	3,090	3,500	3,850	2,370	589	428
AC-FT	119,800	194,100	147,800	402,600	269,300	548,800	818,800	615,100	862,000	338,700	164,900	74,340

CAL YR 1972 TOTAL 1,829,327 MEAN 4,998 MAX 15,600 MIN 416 AC-FT 3,628,000
WTR YR 1973 TOTAL 2,297,047 MEAN 6,293 MAX 42,600 MIN 416 AC-FT 4,556,000

08110300 Lake Mexia near Mexia, Tex.

LOCATION.--Lat 31°38'45", long 96°34'39", Limestone County, 550 ft (168 m) downstream from Cedar Creek, 610 ft (186 m) upstream from spillway of dam on Navasota River, 1.0 mile (1.6 km) upstream from Echo Dam, 1.6 miles (2.6 km) upstream from Jacks Creek, and 6 miles (9.7 km) southwest of Mexia.

DRAINAGE AREA.--198 mi² (513 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 420.0 ft (128.02 m) above mean sea level.

EXTREMES.--Maximum and minimum contents for the water years 1961-73 are contained in the following table:

Water year	Maximum			Minimum		
	Date	Contents (acre-feet)	Gage height (feet)	Date	Contents (acre-feet)	Gage height (feet)
1961†	Sept. 14, 1961	10,800	29.25	Sept. 12, 1961	8,000	27.22
1962	Apr. 28, 1962	12,520	30.32	Sept. 30, 1962	7,040	26.36
1963	Dec. 26, 1962	7,250	26.56	Sept. 30, 1963	4,340	22.81
1964	Mar. 20, 1964	7,370	26.67	Jan. 15, 1964	3,730	21.40
1965	Mar. 30, 1965	15,110	31.83	Nov. 3, 1964	4,210	22.54
1966	Apr. 24, 1966	16,660	32.62	Nov. 2, 1965	6,330	25.64
1967	Apr. 18, 1967	10,800	29.25	Sept. 4, 1967	7,080	26.40
1968	May 10, 1968	16,520	32.55	Sept. 14, 1968	7,800	27.06
1969	Mar. 24, 1969	11,740	29.83	Sept. 30, 1969	6,000	25.27
1970	Dec. 6, 1969	12,360	30.22	Oct. 26, 1969	5,600	24.78
1971	Oct. 24, 1970	10,460	29.04	July 23, 1971	5,290	24.36
1972	Dec. 9, 1971	16,010	32.30	Oct. 16, 1971	6,700	26.05
1973	Apr. 25, 1973	13,250	30.77	Oct. 20, 21, 1972	7,170	26.49

† Period July to September.

Period of record: Maximum contents, 16,600 acre-ft (20.5 hm³) Apr. 24, 1966, gage height, 32.62 ft (9.94 m); minimum, 3,730 acre-ft (4.60 hm³) Jan. 15, 1964, gage height, 21.40 ft (6.52 m).

REMARKS.--Lake is formed by a 1,645-foot (501-meter) earthfill dam. The 520-foot (158-meter) 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 1,456 acre-ft (1.80 hm³) for municipal use and returned 86 acre-ft (0.11 hm³) of filter plant washwater to the Navasota River below dam during water year 1973. Data regarding dam is given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Crest of dam	42.3	-
Crest of spillway	28.3	9,400
Invert of 20-inch outlet conduit	2.1	531

COOPERATION.--Capacity table computed from data furnished by Fowler and Grafe, Inc., Consulting Engineers, Dallas. Data based on preconstruction survey in 1958 and was not adjusted for borrow in the lake area. Diversions from lake for municipal use furnished by the Bistone Municipal Water Supply District.

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

20.0	3,180	27.0	7,720
21.0	3,570	28.0	8,970
22.0	3,960	29.0	10,400
23.0	4,430	30.0	12,010
24.0	5,020	31.0	13,620
25.0	5,760	32.0	15,410
26.0	6,650	33.0	17,420

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, JULY TO SEPTEMBER 1961

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										-	9,260	8,380
2										-	9,230	8,340
3										-	9,200	8,310
4										-	9,170	8,280
5										-	9,130	8,270
6										-	9,100	8,230
7										-	9,060	8,210
8										-	9,030	8,160
9										-	9,060	8,120
10										-	9,030	8,080
11										-	9,000	8,060
12										-	8,970	8,080
13										-	8,930	9,430
14										9,560	8,910	10,740
15										9,530	8,860	9,810
16										9,530	8,830	9,600
17										9,460	8,810	9,530
18										9,500	8,780	9,480
19										9,500	8,740	9,460
20										9,460	8,720	9,410
21										9,260	8,680	9,400
22										9,360	8,640	9,360
23										9,510	8,600	9,360
24										9,710	8,570	9,330
25										9,610	8,530	9,310
26										9,510	8,510	9,280
27										9,460	8,480	9,240
28										9,430	8,460	9,230
29					------					9,380	8,430	9,200
30					------					9,340	8,430	9,170
31		------			------		------		------	9,300	8,410	------
(†)										-	27.55	28.14
(*)										-	-890	+760
MAX										-	9,260	10,740
MIN										-	8,410	8,060

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

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,160	9,430	9,440	9,370	9,470	9,440	9,210	9,880	9,600	9,660	8,500	7,380
2	9,160	9,540	9,440	9,400	9,470	9,440	9,180	9,660	9,560	9,570	8,470	7,340
3	9,310	9,460	9,440	9,360	9,460	9,440	9,160	9,570	9,530	9,510	8,430	7,310
4	9,330	9,430	9,470	9,370	9,440	9,430	9,140	9,530	9,940	9,470	8,380	7,280
5	9,310	9,400	9,460	9,360	9,400	9,380	9,180	9,500	10,210	9,440	8,340	7,260
6	9,300	9,360	9,460	9,340	9,370	9,370	9,180	9,470	9,730	9,400	8,320	7,240
7	9,270	9,340	9,480	9,410	9,370	9,360	9,170	9,460	9,660	9,360	8,280	7,230
8	9,260	9,330	9,510	9,460	9,370	9,380	9,160	9,430	10,190	9,330	8,260	7,340
9	9,240	9,300	9,560	9,340	9,360	9,370	9,140	9,400	10,670	9,280	8,220	7,510
10	9,260	9,280	9,580	9,310	9,340	9,980	9,140	9,370	10,210	9,240	8,180	7,470
11	9,280	9,280	9,540	9,300	9,340	9,740	9,170	9,340	9,840	9,200	8,140	7,460
12	9,700	9,280	9,480	9,270	9,330	9,600	9,140	9,300	9,640	9,180	8,110	7,440
13	9,610	9,300	9,460	9,300	9,330	9,540	9,110	9,280	9,640	9,140	8,020	7,420
14	9,540	9,280	9,560	9,300	9,330	9,530	9,100	9,230	9,580	9,080	7,940	7,400
15	9,470	9,300	9,660	9,210	9,580	9,500	9,070	9,210	9,530	9,040	7,910	7,390
16	9,440	9,260	9,710	9,210	9,710	9,480	9,030	9,180	9,500	9,010	7,880	7,360
17	9,410	9,230	10,560	9,230	9,600	9,460	9,010	9,170	9,470	8,970	7,840	7,360
18	9,360	9,230	10,610	9,240	9,870	9,440	9,040	9,130	9,440	8,930	7,800	7,340
19	9,370	9,210	10,010	9,240	9,800	9,440	9,030	9,110	9,440	8,910	7,760	7,320
20	9,340	9,200	9,730	9,230	9,660	9,500	9,000	9,080	9,410	8,870	7,720	7,280
21	9,310	9,300	9,630	9,240	9,570	9,410	8,940	9,040	9,370	8,860	7,690	7,260
22	9,300	10,210	9,570	9,280	9,530	9,400	8,980	9,010	9,330	8,830	7,670	7,230
23	9,270	10,790	9,540	9,260	9,970	9,370	9,040	8,980	9,300	8,800	7,630	7,210
24	9,260	9,830	9,510	9,270	9,860	9,380	9,310	8,940	9,270	8,760	7,600	7,180
25	9,580	9,640	9,460	9,300	9,660	9,330	9,430	8,910	9,230	8,710	7,580	7,160
26	9,660	9,570	9,440	9,500	9,560	9,310	9,400	8,900	9,360	8,680	7,550	7,150
27	9,610	9,530	9,430	9,500	9,510	9,280	12,380	8,840	9,660	8,640	7,530	7,110
28	9,560	9,480	9,440	9,500	9,460	9,270	10,840	8,910	9,870	8,620	7,480	7,090
29	9,470	9,470	9,410	9,500	------	9,300	9,840	9,910	9,930	8,580	7,460	7,060
30	9,460	9,440	9,400	9,480	------	9,270	9,870	9,740	9,810	8,540	7,430	7,130
31	9,460	------	9,370	9,470	------	9,230	------	9,610	------	8,520	7,400	------
(†)	28.34	28.33	28.28	28.35	28.34	28.18	28.63	28.45	28.59	27.64	26.70	26.45
(≠)	+290	-20	-70	+100	-10	-230	+640	-260	+200	-1,290	-1,120	-270
MAX	9,700	10,790	10,610	9,500	9,970	9,980	12,380	9,910	10,670	9,660	8,500	7,510
MIN	9,160	9,200	9,370	9,210	9,330	9,230	8,940	8,840	9,230	8,520	7,400	7,060

CAL YR 1961..... ≠ - MAX - MIN -
WTR YR 1962..... ≠ 2,040 MAX 12,380 MIN 7,060

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

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,200	6,750	6,940	7,200	6,900	6,770	6,550	6,350	6,810	6,200	5,370	4,750
2	7,160	6,720	6,970	7,170	6,910	6,770	6,530	6,330	6,790	6,200	5,340	4,740
3	7,140	6,680	6,960	7,150	6,880	6,760	6,550	6,320	6,760	6,170	5,310	4,710
4	7,120	6,670	6,960	7,180	6,860	6,940	6,590	6,300	6,740	6,140	5,290	4,700
5	7,090	6,650	6,920	7,180	6,850	6,860	6,680	6,290	6,700	6,120	5,260	4,680
6	7,080	6,650	6,900	7,160	6,860	6,850	6,690	6,820	6,670	6,080	5,220	4,650
7	7,070	6,650	6,880	7,150	6,840	6,830	6,680	6,880	6,630	6,040	5,190	4,640
8	7,110	6,610	6,880	7,140	6,820	6,820	6,680	6,850	6,610	6,010	5,180	4,620
9	7,110	6,600	6,850	7,130	6,830	6,820	6,680	6,840	6,580	5,990	5,150	4,610
10	7,090	6,570	6,840	7,140	6,830	6,820	6,660	6,810	6,560	5,960	5,120	4,590
11	7,070	6,570	6,810	7,150	6,840	6,910	6,670	6,780	6,530	5,920	5,090	4,570
12	7,060	6,540	6,790	7,100	6,820	6,910	6,620	6,760	6,510	5,890	5,060	4,560
13	7,050	6,520	6,770	7,040	6,800	6,910	6,610	6,740	6,470	5,850	5,050	4,570
14	7,010	6,500	6,770	7,020	6,790	6,860	6,610	6,700	6,440	5,840	5,040	4,570
15	6,990	6,500	6,770	7,020	6,790	6,850	6,570	6,670	6,400	5,790	5,010	4,550
16	6,990	6,490	6,760	7,010	6,770	6,880	6,540	6,650	6,460	5,760	4,990	4,540
17	6,970	6,500	6,760	7,000	6,760	6,850	6,520	6,630	6,450	5,740	4,970	4,540
18	6,960	6,470	6,760	7,110	6,830	6,850	6,520	6,620	6,440	5,700	4,950	4,530
19	6,930	6,550	6,760	7,040	6,830	6,840	6,520	6,610	6,430	5,670	4,940	4,520
20	6,940	6,590	7,120	7,000	6,820	6,810	6,510	6,680	6,440	5,660	4,920	4,500
21	6,940	6,580	7,210	6,980	6,810	6,780	6,490	6,670	6,420	5,640	4,900	4,480
22	6,920	6,560	7,200	7,040	6,790	6,760	6,490	6,650	6,380	5,600	4,880	4,460
23	6,900	6,560	7,200	6,950	6,780	6,740	6,450	6,630	6,360	5,560	4,860	4,440
24	6,880	6,560	7,220	6,930	6,770	6,690	6,450	6,610	6,340	5,550	4,830	4,420
25	6,840	6,560	7,230	6,940	6,770	6,710	6,440	6,610	6,330	5,530	4,810	4,410
26	6,820	6,720	7,210	6,940	6,750	6,680	6,420	6,580	6,300	5,510	4,790	4,400
27	6,800	6,960	7,200	6,910	6,720	6,640	6,420	6,560	6,290	5,480	4,770	4,380
28	6,830	6,960	7,210	6,910	6,840	6,630	6,440	6,760	6,270	5,470	4,740	4,370
29	6,820	6,950	7,210	6,910	------	6,620	6,410	6,770	6,240	5,450	4,720	4,360
30	6,790	6,950	7,180	6,910	------	6,610	6,370	6,800	6,210	5,420	4,720	4,340
31	6,770	------	7,170	6,910	------	6,590	------	6,810	------	5,400	4,770	------
(†)	26.11	26.28	26.49	26.24	26.18	25.93	25.69	26.15	25.51	24.51	23.58	22.81
(*)	-360	+180	+220	-260	-70	-250	-220	+440	-600	-810	-630	-430
MAX	7,200	6,960	7,230	7,200	6,910	6,940	6,690	6,880	6,810	6,200	5,370	4,750
MIN	6,770	6,470	6,760	6,910	6,720	6,590	6,370	6,290	6,210	5,400	4,720	4,340

CAL YR 1962..... * -2,200 †† - MAX 12,380 MIN 6,470
WTR YR 1963..... * -2,790 †† 1,120 MAX 7,230 MIN 4,340

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,330	3,960	3,860	3,810	5,740	6,430	7,080	6,930	6,230	5,530	4,700	4,410
2	4,310	3,950	3,860	3,800	5,740	6,450	7,080	6,810	6,200	5,500	4,680	4,390
3	4,300	3,940	3,850	3,800	5,740	6,450	7,070	6,790	6,180	5,480	4,670	4,380
4	4,290	3,940	3,840	3,790	5,810	6,450	7,060	6,770	6,150	5,450	4,640	4,360
5	4,280	3,930	3,840	3,790	5,950	6,430	7,160	6,740	6,150	5,420	4,620	4,340
6	4,270	3,920	3,830	3,780	5,980	6,420	7,140	6,760	6,130	5,380	4,600	4,330
7	4,260	3,910	3,820	3,780	5,960	6,430	7,140	6,710	6,100	5,340	4,570	4,310
8	4,250	3,940	3,810	3,780	5,960	6,440	7,090	6,750	6,050	5,310	4,540	4,290
9	4,230	3,940	3,800	3,770	5,940	6,440	7,070	6,740	6,040	5,280	4,520	4,280
10	4,210	3,930	3,820	3,750	5,940	6,440	7,050	6,700	6,010	5,240	4,490	4,270
11	4,200	3,930	3,820	3,760	5,900	6,430	7,050	6,690	5,980	5,200	4,460	4,250
12	4,180	3,920	3,810	3,750	5,960	6,410	7,050	6,660	5,940	5,180	4,440	4,220
13	4,170	3,900	3,830	3,730	6,030	6,400	7,000	6,620	5,910	5,150	4,410	4,200
14	4,160	3,890	3,820	3,730	6,120	6,400	6,970	6,590	5,890	5,120	4,390	4,190
15	4,150	3,880	3,820	3,740	6,200	6,390	6,950	6,560	5,890	5,100	4,380	4,170
16	4,130	3,880	3,810	3,800	6,230	6,370	7,000	6,540	5,910	5,060	4,400	4,320
17	4,130	3,890	3,810	3,900	6,320	6,360	6,990	6,520	5,890	5,040	4,420	4,650
18	4,120	3,880	3,800	4,310	6,490	6,360	6,970	6,510	5,870	5,000	4,410	4,650
19	4,110	3,900	3,790	4,420	6,500	7,000	6,950	6,490	5,840	4,980	4,390	4,640
20	4,090	3,910	3,840	4,430	6,520	7,280	6,940	6,460	5,810	4,960	4,360	4,620
21	4,080	3,900	3,860	4,440	6,500	7,280	6,940	6,440	5,790	4,930	4,360	4,650
22	4,060	3,900	3,860	4,440	6,490	7,260	6,920	6,420	5,760	4,900	4,370	4,640
23	4,070	3,890	3,850	4,440	6,480	7,260	6,880	6,410	5,760	4,880	4,470	4,640
24	4,060	3,880	3,850	4,430	6,480	7,260	6,860	6,390	5,720	4,840	4,530	4,640
25	4,050	3,870	3,850	4,420	6,470	7,270	6,880	6,370	5,690	4,830	4,520	4,610
26	4,050	3,870	3,850	4,410	6,460	7,220	6,940	6,350	5,660	4,810	4,510	4,600
27	4,040	3,870	3,840	4,410	6,500	7,210	6,910	6,320	5,640	4,780	4,490	4,600
28	4,020	3,890	3,840	4,390	6,440	7,200	6,860	6,300	5,600	4,780	4,480	4,580
29	4,000	3,880	3,830	4,410	6,430	7,150	6,840	6,280	5,580	4,750	4,460	4,560
30	3,990	3,870	3,820	4,800	------	7,130	6,820	6,280	5,550	4,740	4,440	4,550
31	3,990	------	3,820	5,660	------	7,110	------	6,250	------	4,720	4,420	------
(†)	22.07	21.77	21.63	24.87	25.75	26.43	26.16	25.55	24.72	23.49	22.98	23.20
(*)	-350	-120	-50	+1,840	+770	+680	-290	-570	-700	-830	-300	+130
MAX	4,330	3,960	3,860	5,660	6,520	7,280	7,160	6,830	6,230	5,530	4,700	4,650
MIN	3,990	3,870	3,790	3,730	5,740	6,360	6,820	6,250	5,550	4,720	4,360	4,170

CAL YR 1963..... * -3,350 †† - MAX 7,200 MIN 3,790
WTR YR 1964..... * -210 †† 1,280 MAX 7,280 MIN 3,730

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,540	4,230	5,110	4,900	8,860	9,570	9,780	9,410	9,610	8,900	7,810	7,050
2	4,530	4,220	5,120	4,930	8,830	9,400	9,610	9,370	9,570	8,840	7,770	7,020
3	4,520	4,210	5,120	4,910	8,820	9,380	9,570	9,360	9,530	8,820	7,730	6,980
4	4,500	4,280	5,090	4,900	8,810	9,360	9,510	9,330	9,500	8,780	7,690	6,950
5	4,460	4,310	5,060	4,900	8,810	9,310	9,530	9,280	9,780	8,760	7,640	6,930
6	4,450	4,300	5,050	4,890	8,810	9,300	9,740	9,310	9,930	8,710	7,610	6,910
7	4,430	4,290	5,040	4,870	8,800	9,260	9,600	9,280	9,700	8,660	7,590	6,880
8	4,420	4,280	5,030	4,880	8,840	9,230	9,540	9,280	9,580	8,620	7,570	6,850
9	4,400	4,280	5,050	4,880	10,190	9,230	9,500	10,070	9,530	8,580	7,540	6,820
10	4,390	4,260	5,060	4,860	10,010	9,210	9,470	12,400	9,480	8,530	7,510	6,790
11	4,380	4,260	5,050	4,840	9,980	9,210	9,470	13,140	9,460	8,510	7,480	6,760
12	4,390	4,250	5,050	4,840	9,670	9,200	9,440	10,430	9,430	8,470	7,440	6,740
13	4,380	4,240	5,030	4,830	9,570	9,200	9,410	9,770	9,400	8,430	7,400	6,700
14	4,370	4,240	5,010	4,820	9,500	9,180	9,400	10,960	9,370	8,460	7,390	6,650
15	4,370	4,230	5,000	4,820	9,480	9,170	9,360	12,190	9,330	8,430	7,360	6,620
16	4,360	4,260	5,000	4,800	9,710	9,280	9,330	14,180	9,300	8,400	7,320	6,590
17	4,340	4,250	4,990	4,780	9,710	9,300	9,270	12,700	9,270	8,360	7,290	6,570
18	4,330	4,240	4,970	4,780	9,600	9,240	9,360	10,210	9,230	8,320	7,260	6,590
19	4,310	5,040	4,960	4,770	9,540	9,210	9,310	10,030	9,200	8,270	7,220	6,570
20	4,300	5,220	4,960	4,770	9,500	9,170	9,280	10,030	9,170	8,230	7,160	6,540
21	4,280	5,220	4,950	4,950	9,460	9,140	9,260	9,730	9,140	8,210	7,110	6,610
22	4,280	5,210	4,950	8,570	9,400	9,140	9,230	9,610	9,130	8,180	7,120	6,780
23	4,270	5,200	4,960	9,100	9,610	9,140	9,210	9,570	9,160	8,140	7,110	6,860
24	4,250	5,190	4,960	9,060	10,110	9,110	9,180	9,540	9,130	8,110	7,100	6,840
25	4,240	5,180	4,950	9,080	9,880	9,140	9,140	9,510	9,100	8,070	7,070	6,810
26	4,280	5,180	4,940	9,010	9,730	9,100	9,860	9,510	9,060	8,030	7,020	6,790
27	4,280	5,170	4,920	8,980	9,600	9,080	9,660	9,510	9,030	8,000	7,000	6,770
28	4,270	5,150	4,910	8,960	9,560	9,080	9,530	12,090	8,980	7,960	7,040	6,760
29	4,260	5,160	4,920	8,930	------	13,640	9,480	11,820	8,940	7,920	7,000	6,720
30	4,250	5,130	4,910	8,920	------	14,550	9,460	10,030	8,930	7,880	6,960	6,700
31	4,240	------	4,900	8,870	------	10,640	------	9,710	------	7,840	6,930	------
(†)	22.60	24.15	23.80	27.92	28.41	29.15	28.34	28.52	27.97	27.10	26.26	26.05
(*)	-310	+890	-230	+3,970	+690	+1,080	-1,180	+250	-780	-1,090	-910	-230
MAX	4,540	5,220	5,120	9,100	10,190	14,550	9,860	14,180	9,930	8,900	7,810	7,050
MIN	4,240	4,210	4,900	4,770	8,800	9,080	9,140	9,280	8,930	7,840	6,930	6,540

CAL YR 1964..... * +1,080 †† - MAX 7,280 MIN 3,730
WTR YR 1965..... * +2,150 †† 1,380 MAX 14,550 MIN 4,210

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,680	6,350	9,100	9,370	9,460	9,640	9,200	11,850	9,300	8,670	7,550	9,140
2	6,670	6,340	9,170	9,530	9,430	9,580	9,140	10,870	9,240	8,630	7,530	9,110
3	6,660	6,470	9,170	9,500	9,410	9,540	9,170	9,930	9,200	8,600	7,500	9,080
4	6,660	7,820	9,140	9,500	9,410	9,470	9,130	9,710	9,160	8,560	7,450	9,060
5	6,650	9,610	9,140	9,480	9,380	9,370	9,100	9,610	9,130	8,520	7,420	9,030
6	6,640	9,580	9,130	9,460	9,380	9,360	9,070	9,570	9,100	8,510	7,390	9,000
7	6,630	9,510	9,100	9,440	9,380	9,330	9,040	9,540	9,060	8,470	7,370	8,960
8	6,610	9,510	9,080	9,410	9,400	9,330	9,030	9,530	9,030	8,440	7,340	8,920
9	6,610	9,660	9,070	9,410	12,460	9,330	9,010	9,500	9,010	8,410	7,300	8,930
10	6,590	9,570	9,080	9,400	10,460	9,310	8,970	9,460	8,970	8,380	7,260	8,940
11	6,580	9,500	9,110	9,370	9,770	9,310	8,970	9,460	8,920	8,330	7,350	8,920
12	6,560	9,470	9,100	9,410	9,610	9,400	8,960	9,530	8,880	8,300	11,090	8,910
13	6,550	9,430	9,080	9,380	9,540	9,400	8,930	9,510	8,860	8,260	11,780	8,880
14	6,530	9,410	9,100	9,370	9,460	9,400	8,910	9,500	8,830	8,210	10,460	8,860
15	6,520	9,400	9,060	9,340	9,510	9,400	8,900	9,480	8,810	8,170	9,770	9,730
16	6,510	9,380	9,040	9,330	9,560	9,380	8,870	9,470	8,770	8,130	9,580	11,270
17	6,490	9,360	9,040	9,310	9,540	9,360	10,040	9,470	8,740	8,100	9,510	10,190
18	6,610	9,330	9,500	9,300	9,510	9,360	12,960	9,470	8,800	8,070	9,470	9,840
19	6,580	9,310	9,780	9,360	9,480	9,340	10,370	9,610	8,880	8,030	9,430	9,640
20	6,570	9,310	9,680	9,340	9,470	9,330	9,770	10,560	8,940	7,980	9,400	9,560
21	6,540	9,300	9,540	9,380	9,460	9,300	9,670	9,970	8,930	7,930	9,360	9,510
22	6,510	9,300	9,510	9,340	9,470	9,310	9,760	9,680	8,900	7,910	9,330	9,480
23	6,490	9,280	9,470	9,330	9,480	9,230	12,170	9,570	8,870	7,870	9,310	9,470
24	6,460	9,280	9,430	9,380	9,680	9,180	16,090	9,540	8,880	7,840	9,310	9,440
25	6,440	9,270	9,400	9,410	9,660	9,170	14,520	9,500	8,860	7,820	9,300	9,410
26	6,420	9,240	9,380	9,380	9,960	9,160	12,750	9,470	8,820	7,780	9,270	9,400
27	6,410	9,210	9,380	9,380	10,240	9,140	10,360	9,460	8,810	7,730	9,240	9,530
28	6,390	9,180	9,360	9,660	9,800	9,210	9,900	9,430	8,770	7,700	9,230	9,940
29	6,370	9,140	9,340	9,640	------	9,230	10,450	9,400	8,740	7,660	9,230	9,700
30	6,360	9,130	9,360	9,560	------	9,230	10,360	9,370	8,700	7,610	9,200	9,570
31	6,360	------	9,360	9,560	------	9,230	------	9,330	------	7,580	9,170	------
(†)	25.67	28.11	28.27	28.41	28.58	28.18	28.97	28.25	27.78	26.87	28.14	28.42
(≠)	-340	+2,770	+230	+200	+240	-570	+1,130	-1,030	-630	-1,120	+1,590	+400
MAX	6,680	9,660	9,780	9,660	12,460	9,640	16,090	11,850	9,300	8,670	11,780	11,270
MIN	6,360	6,340	9,040	9,300	9,380	9,140	8,870	9,330	8,700	7,580	7,260	8,860

CAL YR 1965..... ≠ +4,460 †† - MAX 14,550 MIN 4,770
WTR YR 1966..... ≠ +2,870 †† 1,330 MAX 16,090 MIN 6,340

† Gage height, in feet, at end of month.
≠ Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,530	8,920	8,480	8,620	8,460	7,980	8,280	9,960	9,940	8,910	7,910	7,160
2	9,480	8,880	8,470	8,640	8,340	7,970	8,260	9,970	10,400	8,910	7,870	7,130
3	9,460	8,860	8,440	8,580	8,330	7,980	8,240	9,710	9,800	8,870	7,820	7,110
4	9,470	8,840	8,440	8,570	8,320	7,970	8,220	9,580	9,640	8,830	7,780	7,270
5	9,440	8,840	8,460	8,560	8,330	8,040	8,180	9,540	9,570	8,800	7,720	7,360
6	9,410	8,840	8,440	8,570	8,300	7,970	8,170	9,530	9,530	8,830	7,680	7,690
7	9,400	8,830	8,460	8,530	8,270	7,940	8,140	9,500	9,500	8,800	7,640	7,960
8	9,380	8,820	8,510	8,520	8,260	7,930	8,120	9,480	9,470	8,770	7,600	7,940
9	9,370	8,860	8,530	8,510	8,230	7,910	8,100	9,430	9,430	8,730	7,580	7,920
10	9,340	8,810	8,440	8,510	8,230	7,910	8,070	9,410	9,400	8,700	7,530	7,900
11	9,330	8,800	8,420	8,500	8,240	7,900	8,080	9,370	9,400	8,640	7,480	7,870
12	9,300	8,770	8,410	8,480	8,220	7,900	8,040	9,330	10,190	8,600	7,440	7,830
13	9,280	8,760	8,400	8,510	8,180	7,870	9,570	9,300	10,330	8,570	7,400	7,810
14	9,370	8,740	8,370	8,510	8,170	7,860	9,870	9,310	9,760	8,530	7,380	7,870
15	9,230	8,720	8,500	8,480	8,170	7,810	9,640	9,260	9,600	8,480	7,340	8,320
16	9,210	8,700	8,680	8,470	8,140	7,780	9,570	9,210	9,540	8,430	7,310	9,540
17	9,230	8,700	8,710	8,430	8,140	7,760	9,770	9,180	9,500	8,410	7,350	9,900
18	9,240	8,680	8,710	8,440	8,130	7,710	10,750	9,140	9,470	8,380	7,510	9,640
19	9,170	8,670	8,710	8,430	8,170	7,700	9,900	9,110	9,430	8,370	7,500	9,540
20	9,140	8,660	8,710	8,420	8,130	7,740	9,660	9,200	9,380	8,360	7,470	9,480
21	9,130	8,630	8,700	8,420	8,120	7,720	9,580	9,140	9,330	8,360	7,450	9,480
22	9,130	8,620	8,800	8,420	8,120	7,710	9,880	9,130	9,300	8,340	7,430	9,460
23	9,100	8,610	8,670	8,420	8,100	7,700	10,740	9,100	9,240	8,320	7,400	9,430
24	9,080	8,610	8,630	8,430	8,060	7,670	9,860	9,060	9,180	8,270	7,390	9,400
25	9,060	8,610	8,630	8,430	8,000	7,780	9,630	9,030	9,160	8,220	7,370	9,370
26	9,040	8,600	8,620	8,460	8,000	8,230	9,530	9,000	9,110	8,180	7,350	9,340
27	9,010	8,560	8,670	8,430	8,020	8,370	9,480	9,000	9,070	8,140	7,320	9,310
28	9,000	8,530	8,630	8,410	8,010	8,370	9,440	9,010	9,030	8,100	7,310	9,270
29	8,980	8,510	8,620	8,400	------	8,330	9,430	9,240	8,980	8,070	7,270	9,230
30	8,970	8,510	8,630	8,400	------	8,320	9,480	9,170	8,930	8,020	7,250	9,200
31	8,940	------	8,630	8,380	------	8,300	------	10,400	------	7,960	7,230	------
(†)	27.98	27.63	27.73	27.53	27.23	27.46	28.36	29.00	27.97	27.19	26.54	28.16
(*)	-630	-430	+120	-250	-370	+290	+1,180	+920	-1,470	-970	-730	+1,970
MAX	9,530	8,920	8,800	8,640	8,460	8,370	10,750	10,400	10,400	8,910	7,910	9,900
MIN	8,940	8,510	8,370	8,380	8,000	7,670	8,040	9,000	8,930	7,960	7,230	7,110

CAL YR 1966..... * -730 †† - MAX 16,090 MIN 7,260
WTR YR 1967..... * -370 †† 1,363 MAX 10,750 MIN 7,110

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,170	9,760	9,430	9,800	11,140	9,710	9,660	9,540	9,440	9,500	9,060	8,010
2	9,160	9,610	9,440	9,740	10,370	9,640	11,110	9,660	9,510	10,040	9,030	7,970
3	9,140	9,540	9,440	9,860	9,810	9,570	10,370	9,980	9,880	9,800	8,970	7,940
4	9,130	9,510	9,440	9,860	9,670	9,540	10,300	10,170	9,900	9,610	8,940	8,040
5	9,100	9,470	9,460	10,060	9,600	9,570	9,800	9,740	9,710	9,540	8,910	8,040
6	9,060	9,440	9,470	10,030	9,580	9,560	9,640	9,580	9,600	9,500	8,880	8,020
7	9,130	9,440	9,460	9,760	9,500	9,560	9,580	9,560	9,560	9,470	8,830	8,000
8	9,100	9,440	9,440	9,740	9,500	9,570	9,530	10,360	9,510	9,500	8,800	7,980
9	9,080	9,510	9,430	10,540	9,500	9,570	9,540	10,820	9,500	9,480	8,760	7,940
10	9,040	11,400	9,410	10,580	9,500	9,700	9,540	15,410	9,470	9,460	8,720	7,910
11	9,030	11,330	9,400	10,200	9,480	13,140	9,510	11,540	9,460	9,500	8,700	7,880
12	9,000	9,910	9,370	9,900	9,470	11,170	10,310	10,110	9,430	9,530	8,670	7,840
13	8,970	9,670	9,560	9,660	9,480	9,970	10,260	9,740	9,380	10,260	8,630	7,820
14	8,970	9,570	9,600	9,600	9,680	9,730	10,080	9,610	9,340	9,770	8,600	7,940
15	9,210	9,540	12,280	9,580	9,900	9,640	9,730	9,560	9,310	9,610	8,560	8,010
16	9,730	9,510	11,080	9,570	9,730	9,600	9,610	9,530	9,630	9,540	8,520	8,020
17	9,600	9,510	10,670	9,540	9,660	9,580	9,580	10,670	9,600	9,510	8,500	8,260
18	9,510	9,500	10,040	10,100	9,600	9,570	9,560	10,770	9,510	9,470	8,460	8,280
19	9,510	9,470	9,760	10,400	9,610	9,570	9,660	9,870	9,480	9,460	8,430	8,260
20	9,480	9,470	9,600	9,910	9,670	9,570	9,810	9,660	9,480	9,460	8,380	8,230
21	9,440	9,470	9,740	10,960	9,610	9,710	9,780	9,570	9,470	9,410	8,360	8,230
22	9,410	9,440	9,740	11,640	9,630	9,600	9,670	9,530	9,810	9,380	8,330	8,220
23	9,380	9,440	9,640	10,070	9,580	9,560	9,570	9,510	9,700	9,340	8,310	8,210
24	9,360	9,380	9,580	9,780	9,580	9,530	9,500	9,510	12,460	9,310	8,260	8,210
25	9,340	9,400	9,540	9,670	9,570	9,530	9,470	9,510	10,720	9,300	8,240	8,200
26	9,330	9,460	9,510	9,630	9,560	9,510	10,080	9,480	10,110	9,260	8,210	8,180
27	9,300	9,400	9,510	9,610	9,540	9,510	11,030	9,480	9,770	9,240	8,180	8,160
28	9,270	9,470	9,510	9,660	10,230	9,510	9,930	9,470	9,610	9,200	8,130	8,130
29	10,000	9,440	9,510	9,640	9,930	9,510	9,670	9,460	9,540	9,170	8,110	8,120
30	11,190	9,430	9,670	9,740	------	9,510	9,580	9,440	9,510	9,130	8,080	8,100
31	10,330	------	9,900	9,880	------	9,500	------	9,430	------	9,100	8,040	------
(†)	28.95	28.32	28.65	28.64	28.67	28.37	28.43	28.32	28.38	28.09	27.26	27.30
(*)	+1,130	-900	+470	-20	+50	-430	+80	-150	+80	-410	-1,060	+60
MAX	11,190	11,400	12,280	11,640	11,140	13,140	11,110	15,410	12,460	10,260	9,060	8,280
MIN	8,970	9,380	9,370	9,540	9,470	9,500	9,470	9,430	9,310	9,100	8,040	7,820

CAL YR 1967..... * +1,270 †† - MAX 12,280 MIN 7,110
WTR YR 1968..... * -1,100 †† 1,369 MAX 15,410 MIN 7,820

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,070	7,630	10,840	9,260	9,300	9,470	9,510	9,540	9,330	8,400	7,230	6,500
2	8,030	7,700	9,900	9,280	9,300	9,530	9,510	9,540	9,300	8,360	7,210	6,480
3	8,010	7,660	9,580	9,300	9,300	9,530	9,510	9,510	9,310	8,310	7,170	6,450
4	7,960	7,640	9,530	9,260	9,280	9,540	9,710	10,230	9,280	8,240	7,140	6,430
5	7,960	7,640	9,500	9,240	9,280	9,610	10,460	11,500	9,260	8,210	7,120	6,420
6	7,940	7,610	9,470	9,240	9,280	9,780	9,870	11,240	9,230	8,160	7,090	6,410
7	7,910	7,580	9,440	9,240	9,280	9,760	9,660	10,610	9,210	8,130	7,070	6,370
8	7,910	7,660	9,410	9,240	9,260	9,810	9,580	10,270	9,180	8,080	7,040	6,360
9	8,090	7,640	9,400	9,200	9,240	9,730	9,630	9,860	9,170	8,060	7,000	6,330
10	8,070	7,640	9,400	9,170	9,230	9,610	9,580	9,680	9,130	8,010	6,970	6,300
11	8,060	7,590	9,380	9,170	9,230	9,570	9,540	9,580	9,080	7,960	6,930	6,300
12	8,040	7,570	9,500	9,160	9,210	9,540	10,930	9,540	9,070	7,930	6,910	6,280
13	8,030	7,570	9,530	9,140	9,200	9,510	11,040	9,510	9,070	7,880	6,860	6,240
14	8,010	7,560	9,500	9,130	10,560	9,510	9,940	9,510	9,040	7,840	6,820	6,220
15	8,010	7,640	9,470	9,170	10,200	11,660	9,710	9,510	9,000	7,810	6,800	6,210
16	8,010	7,620	9,440	9,210	9,810	10,770	9,580	9,540	8,960	7,740	6,760	6,200
17	7,940	7,610	9,440	9,230	9,630	9,970	10,160	9,510	8,930	7,710	6,720	6,190
18	7,920	7,590	9,440	9,210	9,540	10,010	9,830	9,470	8,910	7,680	6,680	6,170
19	7,900	7,580	9,460	9,210	9,510	9,840	9,660	9,460	8,870	7,640	6,650	6,140
20	7,880	7,570	9,460	9,210	9,530	9,680	9,580	9,440	8,830	7,610	6,610	6,120
21	7,860	7,560	9,510	9,210	10,420	9,610	9,560	9,430	8,800	7,590	6,600	6,100
22	7,840	7,550	9,460	9,210	10,400	9,580	9,530	9,410	8,760	7,550	6,680	6,100
23	7,820	7,580	9,410	9,210	9,810	11,690	9,500	9,370	8,720	7,580	6,650	6,140
24	7,800	7,540	9,380	9,170	9,640	10,530	9,460	9,370	8,660	7,540	6,620	6,120
25	7,760	7,510	9,380	9,140	9,560	9,810	9,430	9,340	8,600	7,470	6,610	6,110
26	7,730	7,700	9,380	9,130	9,530	9,660	9,430	9,300	8,570	7,420	6,610	6,080
27	7,710	8,410	9,400	9,140	9,510	9,580	9,730	9,280	8,530	7,400	6,610	6,060
28	7,700	9,430	9,330	9,140	9,480	9,540	9,880	9,260	8,510	7,370	6,580	6,040
29	7,680	9,510	9,330	9,140	------	9,530	9,680	9,230	8,470	7,340	6,560	6,020
30	7,660	10,140	9,330	9,180	------	9,510	9,580	9,380	8,430	7,290	6,530	6,000
31	7,640	------	9,300	9,260	------	9,510	------	9,360	------	7,260	6,510	------
(†)	26.93	28.82	28.23	28.20	28.36	28.38	28.43	28.27	27.57	26.57	25.85	25.27
(*)	-460	+2,500	-840	-40	+220	+30	+70	-220	-930	-1,170	-750	-510
MAX	8,080	10,140	10,840	9,300	10,560	11,690	11,040	11,500	9,330	8,400	7,230	6,500
MIN	7,640	7,510	9,300	9,130	9,200	9,470	9,430	9,230	8,430	7,260	6,510	6,000

CAL YR 1968..... * -600 †† - MAX 15,410 MIN 7,510
WTR YR 1969..... * -2,100 †† 1,360 MAX 11,690 MIN 6,000

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use By Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,970	6,560	8,080	9,600	10,450	10,140	9,460	9,340	9,660	8,680	7,560	6,800
2	5,940	6,580	8,070	9,540	9,900	10,290	9,380	9,340	9,500	8,660	7,540	6,920
3	5,920	6,550	8,070	9,510	9,710	11,910	9,370	9,310	9,460	8,620	7,530	6,900
4	5,900	6,540	8,030	9,480	9,600	10,620	9,380	9,310	9,380	8,570	7,480	6,860
5	5,900	6,530	10,010	10,060	9,560	9,860	9,330	9,280	9,360	8,520	7,470	6,830
6	5,900	6,530	12,300	10,170	9,540	9,840	9,310	9,240	9,330	8,470	7,420	6,810
7	5,860	6,520	10,720	9,780	9,540	11,530	9,280	9,200	9,300	8,430	7,380	6,780
8	5,840	6,520	9,840	9,630	9,510	10,670	9,280	9,170	9,270	8,380	7,350	6,760
9	5,820	6,510	9,640	9,560	9,500	9,900	9,660	9,160	9,230	8,340	7,300	6,720
10	5,780	6,500	9,570	9,540	9,480	9,730	10,710	9,140	9,170	8,300	7,280	6,700
11	5,770	6,510	9,510	9,510	9,470	10,030	9,870	9,140	9,140	8,260	7,260	6,680
12	5,920	6,490	9,480	9,480	9,440	9,880	9,670	9,100	9,110	8,240	7,230	6,650
13	5,830	6,470	9,470	9,480	9,430	9,700	9,570	9,070	9,080	8,210	7,180	6,630
14	5,790	6,430	9,460	9,470	9,430	9,610	9,510	9,060	9,060	8,170	7,140	6,620
15	5,760	6,410	9,440	9,470	9,470	9,570	9,510	9,030	9,010	8,130	7,120	6,620
16	5,750	6,380	9,430	9,480	9,510	9,810	9,500	9,000	8,970	8,120	7,090	6,780
17	5,720	6,850	9,410	9,470	9,530	9,760	9,470	8,960	8,920	8,070	7,050	7,400
18	5,710	7,900	9,410	9,430	9,500	9,770	9,570	8,880	8,900	8,030	7,000	10,190
19	5,700	8,120	9,400	9,400	9,460	9,640	9,470	8,910	8,860	8,010	6,960	9,800
20	5,690	8,130	9,410	9,400	9,440	9,610	9,470	8,880	8,820	7,940	6,930	9,580
21	5,690	8,130	9,370	9,400	9,440	10,100	9,460	8,860	8,980	7,930	6,910	9,510
22	5,660	8,120	9,370	9,400	9,440	9,880	9,440	8,870	8,960	7,910	6,880	9,470
23	5,630	8,120	9,340	9,400	9,470	9,700	9,430	8,860	8,920	7,870	6,850	9,470
24	5,620	8,130	9,340	9,410	11,290	9,580	9,430	8,830	8,920	7,830	6,820	9,440
25	5,610	8,130	9,310	9,400	11,880	9,540	9,400	8,820	8,880	7,820	6,780	9,470
26	5,600	8,130	9,280	9,400	10,170	9,500	9,380	8,820	8,870	7,780	6,750	9,800
27	5,670	8,140	9,300	9,380	9,830	9,460	9,370	8,770	8,830	7,740	6,710	9,770
28	5,730	8,130	9,370	9,400	10,770	9,500	9,370	8,810	8,800	7,710	6,680	9,600
29	5,780	8,120	9,470	9,360	------	9,440	9,330	8,800	8,760	7,680	6,660	9,530
30	6,240	8,100	9,730	9,330	------	9,440	9,360	8,900	8,730	7,630	6,630	9,500
31	6,530	------	9,710	9,270	------	9,440	------	9,710	------	7,590	6,620	------
(†)	25.87	27.30	28.52	28.21	29.23	28.33	28.27	28.52	27.81	26.88	25.97	28.37
(*)	+530	+1,570	+1,610	-440	+1,500	-1,330	-80	+350	-980	-1,140	-970	+2,880
MAX	6,530	8,140	12,300	10,170	11,880	11,910	10,710	9,710	9,660	8,680	7,560	10,190
MIN	5,600	6,380	8,030	9,270	9,430	9,440	9,280	8,770	8,730	7,590	6,620	6,620

CAL YR 1969..... * +410 †† - MAX 12,300 MIN 5,600
WTR YR 1970..... * +3,500 †† 1,560 MAX 12,300 MIN 5,600

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,470	9,380	8,920	8,660	8,270	8,110	7,550	7,080	6,590	5,880	6,540	7,100
2	9,440	9,340	8,910	8,620	8,270	8,170	7,520	7,060	6,560	5,860	6,530	7,070
3	9,440	9,310	8,910	8,730	8,240	8,070	7,480	7,020	6,530	5,820	6,550	7,050
4	9,400	9,270	8,880	8,640	8,280	8,030	7,470	6,980	6,520	5,780	6,680	7,020
5	9,380	9,260	8,880	8,600	8,260	8,030	7,430	6,970	6,490	5,750	7,350	7,010
6	9,370	9,230	8,840	8,570	8,260	8,040	7,390	6,990	6,460	5,720	7,480	6,990
7	9,340	9,210	8,820	8,560	8,270	8,010	7,370	7,080	6,420	5,690	7,500	6,960
8	9,330	9,240	8,820	8,540	8,210	7,970	7,320	7,060	6,380	5,660	7,480	6,940
9	9,280	9,200	8,820	8,540	8,200	8,000	7,340	7,040	6,360	5,630	7,460	6,910
10	9,230	9,170	8,810	8,540	8,160	7,960	7,320	6,970	6,330	5,600	7,430	6,860
11	9,530	9,170	8,800	8,530	8,170	7,960	7,300	7,130	6,320	5,580	7,410	6,840
12	9,660	9,140	8,770	8,530	8,130	7,940	7,260	7,100	6,290	5,540	7,400	6,830
13	9,570	9,210	8,760	8,530	8,120	7,930	7,250	7,070	6,270	5,520	7,460	6,800
14	9,510	9,200	8,740	8,530	8,110	7,930	7,220	7,060	6,250	5,480	7,520	6,780
15	9,480	9,140	8,780	8,510	8,110	7,880	7,180	7,040	6,220	5,460	7,520	6,750
16	9,460	9,130	8,730	8,500	8,100	7,860	7,220	6,990	6,200	5,430	7,500	6,720
17	9,440	9,110	8,710	8,500	8,060	7,800	7,270	6,940	6,160	5,390	7,470	6,690
18	9,440	9,070	8,730	8,480	8,140	7,830	7,250	6,930	6,130	5,350	7,450	6,670
19	9,410	9,070	8,720	8,460	8,110	7,770	7,230	6,910	6,100	5,320	7,440	6,630
20	9,400	9,060	8,720	8,410	8,100	7,730	7,270	6,880	6,070	5,290	7,420	6,600
21	9,360	9,040	8,720	8,430	8,100	7,720	7,250	6,850	6,050	5,320	7,390	6,580
22	9,360	9,040	8,720	8,430	8,060	7,720	7,250	6,840	6,100	5,300	7,360	6,630
23	10,330	8,980	8,710	8,420	8,040	7,690	7,210	6,820	6,080	5,360	7,320	6,680
24	10,030	8,940	8,680	8,420	8,020	7,660	7,180	6,790	6,050	5,430	7,300	6,980
25	9,700	8,930	8,670	8,410	8,140	7,670	7,160	6,760	6,030	5,520	7,280	7,050
26	9,580	8,940	8,640	8,400	8,140	7,660	7,140	6,720	5,990	6,040	7,280	7,040
27	9,510	8,940	8,640	8,370	8,130	7,660	7,130	6,700	6,000	6,110	7,250	7,020
28	9,440	8,930	8,640	8,360	8,110	7,660	7,090	6,650	5,990	6,130	7,230	7,000
29	9,430	8,920	8,630	8,360	------	7,620	7,110	6,620	5,940	6,510	7,200	6,980
30	9,400	8,920	8,710	8,340	------	7,590	7,100	6,630	5,920	6,560	7,160	6,960
31	9,370	------	8,680	8,310	------	7,540	------	6,610	------	6,550	7,130	------
(†)	28.28	27.96	27.77	27.47	27.31	26.83	26.42	25.95	25.18	25.89	26.45	26.29
(*)	-130	-450	-240	-370	-200	-570	-440	-490	-690	+630	+580	-170
MAX	10,330	9,380	8,920	8,730	8,280	8,170	7,550	7,130	6,590	6,560	7,520	7,100
MIN	9,230	8,920	8,630	8,310	8,020	7,540	7,090	6,610	5,920	5,290	6,530	6,580

CAL YR 1970..... * -1,030 †† - MAX 11,910 MIN 6,620
WTR YR 1971..... * -2,540 †† 1,450 MAX 10,330 MIN 5,290

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

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	6,940	9,180	9,410	10,840	9,800	9,380	8,840	8,400	7,550	7,670	8,920	8,240
2	6,910	9,170	9,400	10,300	9,680	9,280	8,800	8,340	7,530	7,660	8,910	8,210
3	6,990	9,160	9,480	11,080	9,570	9,240	8,810	8,310	7,500	7,630	8,880	8,180
4	6,950	9,100	9,900	11,240	9,510	9,260	8,770	8,270	7,460	9,330	8,880	8,160
5	6,940	9,080	9,710	10,190	9,480	9,230	8,760	8,240	7,440	11,460	8,840	8,130
6	6,920	9,030	9,870	9,840	9,510	9,200	8,760	8,280	7,400	9,900	8,810	8,100
7	6,900	8,980	10,030	9,570	9,480	9,210	8,740	8,320	7,380	9,630	8,760	8,070
8	6,880	8,970	12,770	9,540	9,470	9,170	8,700	8,280	7,350	9,610	8,720	8,040
9	6,850	8,960	14,430	9,560	9,460	9,170	8,670	8,230	7,320	9,560	8,720	8,010
10	6,820	8,940	11,610	9,540	9,460	9,140	8,660	8,220	7,290	9,640	8,740	7,980
11	6,800	8,920	11,040	9,510	9,470	9,140	8,660	8,210	7,260	9,540	8,810	7,920
12	6,780	8,910	10,290	9,500	9,460	9,140	8,620	8,210	7,230	9,500	8,780	7,900
13	6,780	8,900	9,710	9,480	9,440	9,140	8,600	8,200	7,230	9,470	8,770	7,880
14	6,750	8,880	9,600	9,460	9,470	9,110	8,600	8,160	7,340	9,440	8,760	7,860
15	6,740	8,860	9,670	9,430	9,440	9,110	8,570	8,130	7,320	9,410	8,720	7,820
16	6,740	8,820	9,630	9,460	9,440	9,070	8,530	8,110	7,310	9,370	8,680	7,810
17	6,720	9,880	9,540	9,440	9,430	9,040	8,500	8,100	7,320	9,340	8,640	7,780
18	6,790	12,460	9,540	9,430	9,400	9,030	8,470	8,060	7,310	9,310	8,620	7,760
19	6,860	10,200	9,530	9,410	9,370	9,000	8,440	8,030	7,270	9,340	8,600	7,720
20	9,300	9,710	9,530	9,440	9,370	9,000	8,410	8,010	7,240	9,330	8,560	7,690
21	9,380	9,580	9,510	9,460	9,380	9,000	8,440	7,970	7,220	9,280	8,520	7,670
22	9,380	9,580	9,480	9,460	9,370	9,000	8,410	7,930	7,180	9,280	8,530	7,640
23	9,370	9,730	9,470	9,440	9,370	8,970	8,380	7,920	7,150	9,280	8,530	7,620
24	9,310	9,640	9,470	9,430	9,370	8,970	8,340	7,900	7,120	9,260	8,500	7,640
25	9,280	9,570	9,470	9,430	9,370	8,940	8,280	7,860	7,080	9,230	8,470	7,640
26	9,380	9,530	9,470	9,410	9,340	8,930	8,230	7,820	7,020	9,180	8,440	7,620
27	9,310	9,470	9,470	9,430	9,330	8,970	8,430	7,770	6,980	9,140	8,420	7,610
28	9,260	9,440	9,440	9,440	9,310	8,970	8,410	7,720	6,950	9,100	8,380	7,590
29	9,230	9,430	9,480	9,460	9,330	8,910	8,410	7,700	7,060	9,070	8,340	7,610
30	9,230	9,410	9,470	11,500	------	8,880	8,380	7,640	7,580	9,010	8,310	7,600
31	9,200	------	9,660	9,800	------	8,860	------	7,580	------	8,970	8,270	------
(†)	28.16	28.31	28.48	28.58	28.25	27.91	27.53	26.87	26.87	28.00	27.44	26.89
(*)	+2,240	+210	+250	+140	-470	-470	-480	-800	0	+1,390	-700	-670
MAX	9,380	12,460	14,430	11,500	9,800	9,380	8,840	8,400	7,580	11,460	8,920	8,240
MIN	6,720	8,820	9,400	9,410	9,310	8,860	8,230	7,580	6,950	7,630	8,270	7,590

CAL YR 1972..... * +980 †† - MAX 14,430 MIN 5,290
WTR YR 1972..... * +640 †† 1,460 MAX 14,430 MIN 6,720

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,580	9,560	9,410	9,430	9,800	9,680	9,480	9,580	10,530	9,260	9,000	7,970
2	7,560	9,960	9,400	9,440	9,700	10,170	9,480	9,530	10,500	9,230	8,960	7,930
3	7,540	9,680	9,430	10,240	9,610	9,830	9,560	9,500	10,750	9,200	8,910	7,920
4	7,520	9,580	9,380	9,960	9,580	9,660	9,570	9,470	11,400	9,170	8,870	7,900
5	7,510	9,540	9,440	9,740	9,570	9,610	9,540	9,470	12,060	9,110	8,840	7,900
6	7,480	9,560	9,360	9,640	9,560	9,640	9,560	9,600	12,350	9,770	8,810	7,920
7	7,450	9,570	9,340	10,290	9,700	9,630	9,540	9,510	10,240	9,610	8,770	7,920
8	7,420	9,470	9,340	10,080	10,140	9,610	9,540	9,510	9,770	9,540	8,730	7,900
9	7,400	9,480	9,360	9,740	9,940	9,610	9,470	9,460	9,610	9,500	8,700	7,880
10	7,380	9,430	9,360	9,640	9,730	10,740	9,440	9,470	9,560	9,470	8,660	7,870
11	7,370	9,400	9,370	9,580	9,610	10,370	9,440	9,430	9,610	9,440	8,620	8,000
12	7,360	9,460	9,380	9,560	9,610	9,830	9,430	9,430	9,910	9,460	8,600	8,010
13	7,340	9,700	9,360	9,560	9,580	9,700	9,430	9,400	10,070	9,930	8,570	8,020
14	7,310	9,570	10,880	9,560	9,530	9,610	9,470	9,370	9,900	9,640	8,500	7,980
15	7,290	9,540	10,530	9,580	9,510	10,290	10,000	9,340	9,670	9,560	8,520	7,940
16	7,260	9,510	9,880	9,570	9,500	10,740	10,840	9,330	9,560	9,530	8,500	7,930
17	7,240	9,500	9,700	9,560	9,510	9,980	10,980	9,300	9,510	9,480	8,470	7,910
18	7,240	9,510	9,640	9,540	9,500	9,710	10,590	9,270	9,480	9,470	8,430	7,880
19	7,210	9,470	9,600	9,510	9,510	9,660	9,880	9,240	9,470	9,440	8,410	7,840
20	7,170	9,440	9,610	9,530	9,500	9,570	9,710	9,210	9,700	9,400	8,380	7,810
21	7,180	9,500	9,530	9,700	9,500	9,540	9,640	9,280	9,610	9,370	8,360	7,780
22	7,590	9,470	9,510	9,660	9,560	9,530	9,600	9,210	9,540	9,330	8,320	7,760
23	7,680	9,460	9,510	9,570	9,700	9,500	10,070	9,140	9,510	9,300	8,270	7,730
24	7,670	9,500	9,480	9,560	9,700	12,590	12,880	9,240	9,480	9,260	8,230	7,720
25	7,640	9,500	9,480	12,560	9,630	10,580	12,430	9,340	9,460	9,230	8,200	7,700
26	8,780	9,470	9,460	12,250	9,580	9,800	10,110	10,070	9,430	9,200	8,140	7,810
27	10,640	9,470	9,460	10,140	9,570	9,640	9,740	9,770	9,380	9,140	8,140	7,920
28	9,830	9,460	9,410	9,670	9,540	9,600	9,630	9,580	9,360	9,110	8,110	7,900
29	9,710	9,440	9,470	9,600	------	9,560	9,570	9,540	9,310	9,060	8,060	7,870
30	9,630	9,430	9,460	9,580	------	9,560	9,570	9,500	9,280	9,040	8,030	7,940
31	9,580	------	9,430	9,680	------	9,500	------	9,470	------	9,040	8,000	------
(†)	28.43	28.32	28.32	28.50	28.40	28.37	28.42	28.35	28.22	28.05	27.22	27.18
(*)	+1,980	-150	0	+250	-140	-40	+70	-100	-190	-240	-1,040	-60
(††)	119	108	119	115	103	110	109	123	126	139	155	130
MAX	10,640	9,960	10,880	12,560	10,140	12,590	12,880	10,070	12,350	9,930	9,000	8,020
MIN	7,170	9,400	9,340	9,430	9,500	9,500	9,430	9,140	9,280	9,040	8,000	7,700

CAL YR 1972..... * -230 †† - MAX 11,500 MIN 6,950
WTR YR 1973..... * +340 †† 1,456 MAX 12,880 MIN 7,170

† Gage height, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by Bistone Municipal Water Supply District.

08110400 Navasota River near Groesbeck, Tex.

LOCATION.--Lat 31°30'45", long 96°27'03", Limestone County, on left bank 43 ft (13 m) downstream from State Highway 164, 0.4 mile (0.6 km) downstream from Pin Oak Creek, 5 miles (8 km) east of Groesbeck, and at mile 154.6 (248.8 km).

DRAINAGE AREA.--313 mi² (811 km²).

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 353.84 ft (107.85 m), revised, above mean sea level. Prior to Oct. 1, 1972, at 5.0 ft (1.5 m) higher datum.

AVERAGE DISCHARGE.--8 years, 168 ft³/s (4.76 m³/s), 121,700 acre-ft/yr (150 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,500 ft³/s (382 m³/s) June 4, gage height, 23.82 ft (7.26 m); minimum daily, 0.04 ft³/s (1.1 dm³/s) Oct. 19, 20.
Period of record: Maximum discharge, 21,500 ft³/s (609 m³/s) Apr. 25, 1966, gage height, 25.00 ft (7.62 m), revised; 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 28.7 ft (8.7 m), revised, from information by Texas Highway Department.

REMARKS.--Records good. Flow partly regulated by Lake Mexia (station 08110300) 14.4 miles (23.2 km) upstream, approximate capacity 10,000 acre-ft (12.3 hm³). Several diversions above station for irrigation, municipal supply, and oilfield operation, total amount unknown. The city of Mexia discharged 505 acre-ft (0.62 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	97	1.9	6.0	203	29	51	62	1,170	11	5.0	1.4
2	.43	116	1.4	5.4	147	181	36	55	8,030	9.5	5.5	1.4
3	.35	158	1.1	144	105	418	31	45	4,260	8.3	4.2	1.4
4	.39	135	.80	323	76	250	31	31	8,690	7.8	3.5	1.4
5	.43	72	.95	351	60	125	30	24	3,120	7.1	3.3	1.7
6	.35	46	1.2	156	47	210	28	22	3,660	15	3.3	1.9
7	.27	33	1.9	168	36	164	29	48	3,940	36	3.2	2.0
8	.22	24	1.7	554	62	70	32	39	2,190	47	3.0	2.3
9	.18	13	1.0	511	236	58	56	24	396	47	2.9	2.2
10	.14	9.7	.75	181	278	1,400	43	18	157	34	2.7	1.7
11	.10	8.3	.70	102	129	1,270	30	14	99	23	2.5	1.8
12	.09	4.0	2.8	77	78	1,050	24	12	642	78	2.5	1.7
13	.08	37	20	51	63	288	22	10	1,520	79	2.5	2.8
14	.06	63	160	49	59	156	20	8.3	627	110	2.5	2.7
15	.06	40	1,540	43	39	424	28	6.3	375	125	2.6	2.6
16	.07	27	1,410	33	26	1,960	928	5.9	195	73	2.4	2.2
17	.06	22	379	28	20	1,780	1,680	5.4	104	51	2.4	1.8
18	.05	16	121	27	17	631	2,140	5.1	68	33	2.7	1.8
19	.04	15	81	28	14	211	1,820	5.0	46	21	3.7	1.7
20	.04	17	63	23	13	125	531	4.9	295	14	3.1	1.6
21	.05	10	56	27	12	70	195	4.9	1,510	9.8	2.5	1.5
22	8.1	8.1	39	37	13	49	112	4.5	363	7.5	2.2	1.4
23	32	7.2	24	44	18	39	81	4.2	105	6.2	2.0	1.4
24	6.0	5.4	19	39	35	2,200	1,730	4.1	66	5.1	1.8	1.4
25	1.6	5.1	15	1,330	48	3,790	4,520	8.0	47	4.6	1.6	1.3
26	3.0	16	11	3,880	53	2,730	4,590	187	33	4.2	1.6	1.3
27	79	9.6	9.9	4,100	49	518	1,920	204	24	4.0	1.8	54
28	200	5.7	7.3	1,710	36	156	276	190	19	3.9	1.6	64
29	387	4.6	6.1	210	------	97	114	87	15	3.7	1.5	16
30	515	3.2	5.4	94	------	69	76	54	13	3.6	1.4	5.8
31	144	------	7.7	69	------	59	------	38	------	3.7	1.4	------
TOTAL	1,379.71	1,027.9	3,990.60	14,400.4	1,972	20,577	21,204	1,230.6	41,779	886.0	82.9	186.2
MEAN	44.5	34.3	129	465	70.4	664	707	39.7	1,393	28.6	2.67	6.21
MAX	515	158	1,540	4,100	278	3,790	4,590	204	8,690	125	5.5	64
MIN	.04	3.2	.70	5.4	12	29	20	4.1	13	3.6	1.4	1.3
AC-FT	2,740	2,040	7,920	28,560	3,910	40,810	42,060	2,440	82,870	1,760	164	369

CAL YR 1972 TOTAL 24,450.83 MEAN 66.8 MAX 2,760 MIN .01 AC-FT 48,500
WTR YR 1973 TOTAL 108,716.31 MEAN 298 MAX 8,690 MIN .04 AC-FT 215,600

08110500 Navasota River near Easterly, Tex.

LOCATION.--Lat 31°10'10", long 96°17'54", Leon-Robertson County line, near center of span at downstream side of bridge on U.S. Highway 79, 1.0 mile (1.6 km) upstream from Missouri Pacific Railroad Co. bridge, 7 miles (11 km) northeast of Easterly, and at mile 105.7 (170.1 km).

DRAINAGE AREA.--940 mi² (2,430 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 276.46 ft (84.26 m) above mean sea level. Prior to June 11, 1932, nonrecording gage at railroad bridge 1.0 mile (1.6 km) downstream at datum 24.86 ft (7.58 m) higher.

AVERAGE DISCHARGE.--36 years (1924-60) unregulated, 406 ft³/s (11.5 m³/s), 294,100 acre-ft/yr (363 hm³/yr); 13 years (1960-73) regulated, 424 ft³/s (12.0 m³/s), 307,200 acre-ft/yr (379 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,700 ft³/s (501 m³/s) Apr. 26, gage height, 18.14 ft (5.53 m); minimum daily, 0.66 ft³/s (19 dm³/s) Oct. 19, 20.
Period of record: Maximum discharge, 60,300 ft³/s (1,710 m³/s) May 2, 1944, gage height, 22.13 ft (6.75 m); no flow at times. Maximum stage since about 1845, 24 ft (7 m) in June 1899, from information by local residents, discharge, 90,000 ft³/s (2,550 m³/s), from rating curve extended above 60,000 ft³/s (1,700 m³/s).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1,480	25	19	786	199	178	490	114	52	16	3.7
2	1.0	606	21	31	784	1,950	153	301	113	44	13	3.8
3	.88	388	19	305	762	2,610	129	260	916	39	11	3.8
4	.80	315	15	791	373	2,430	119	205	8,300	33	25	3.6
5	.75	276	13	972	206	1,220	123	154	13,200	29	23	6.7
6	.73	156	11	824	156	1,410	104	175	11,500	27	16	8.9
7	.72	91	10	803	131	3,600	105	771	6,970	26	13	8.9
8	.81	64	9.4	1,010	300	3,560	110	1,290	5,480	141	11	7.2
9	.84	49	9.2	1,080	1,040	2,020	142	1,150	5,390	143	9.0	6.3
10	.82	40	11	966	1,070	755	143	438	4,620	99	8.4	5.4
11	.77	30	13	633	648	1,480	136	179	3,450	79	8.0	5.1
12	.75	23	16	250	343	1,940	108	534	1,760	64	7.2	4.9
13	.74	173	17	203	214	1,910	91	333	1,910	87	6.9	10
14	.72	502	52	178	173	1,630	89	201	2,850	412	6.7	12
15	.74	435	703	166	151	595	123	96	4,130	343	5.9	8.4
16	.70	224	1,360	159	127	495	113	73	3,850	279	5.3	6.1
17	.70	108	1,700	153	103	1,390	1,050	59	2,370	295	5.0	5.4
18	.70	70	1,800	126	89	2,290	3,490	49	621	271	5.0	5.3
19	.66	55	1,430	112	81	3,120	3,360	43	241	146	6.2	6.2
20	.66	46	248	104	74	2,440	3,210	37	188	109	5.6	6.3
21	.74	45	139	100	68	618	3,440	32	307	82	5.0	6.0
22	34	39	102	111	73	203	2,740	31	899	62	4.4	5.4
23	73	32	88	156	130	150	757	29	1,460	44	4.5	4.9
24	43	30	67	143	181	1,540	241	27	1,870	35	5.9	5.7
25	25	65	47	671	222	5,570	2,390	37	751	30	5.7	5.1
26	36	80	37	2,680	194	8,660	14,500	1,210	190	25	5.3	4.6
27	66	79	32	5,520	157	6,730	8,770	2,280	130	22	5.4	1,240
28	68	54	27	7,850	134	4,400	6,150	3,770	97	19	4.6	660
29	387	41	25	5,600	------	2,740	4,290	2,650	81	16	4.7	219
30	1,680	31	25	4,000	------	574	2,580	930	62	13	5.0	122
31	1,840	------	21	2,070	------	223	------	170	------	15	4.1	------
TOTAL	4,268.53	5,627	8,092.6	37,786	8,770	68,452	58,934	18,004	83,820	3,081	261.8	2,400.7
MEAN	138	188	261	1,219	313	2,208	1,964	581	2,794	99.4	8.45	80.0
MAX	1,840	1,480	1,800	7,850	1,070	8,660	14,500	3,770	13,200	412	25	1,240
MIN	.66	23	9.2	19	68	150	89	27	62	13	4.1	3.6
AC-FT	8,470	11,160	16,050	74,950	17,400	135,800	116,900	35,710	166,300	6,110	519	4,760

CAL YR 1972 TOTAL 48,552.37 MEAN 133 MAX 4,310 MIN .66 AC-FT 96,300
WTR YR 1973 TOTAL 299,497.63 MEAN 821 MAX 14,500 MIN .66 AC-FT 594,100

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-28	0400	16.39	8,540	4-18	1400	14.82	3,690
3- 3	2300	14.03	2,850	4-26	0400	18.14	17,700
3- 8	0200	14.91	3,790	5-28	0500	15.07	4,120
3-19	1400	14.37	3,200	6- 5	1700	18.06	17,200
3-26	1400	16.51	9,260	6-15	1700	15.34	4,420

08111000 Navasota River near Bryan, Tex.

LOCATION.--Lat 30°52'10", long 96°11'32", Brazos-Madison County line, on right bank at upstream side of bridge on U.S. Highway 190, 2.5 miles (4.0 km) upstream from Shepherd Creek, 17 miles (27 km) northeast of Bryan, and at mile 68.4 (110.1 km).

DRAINAGE AREA.--1,429 mi² (3,701 km²).

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.64 ft (68.47 m) above mean sea level.

AVERAGE DISCHARGE.--9 years (1951-60) unregulated, 437 ft³/s (12.4 m³/s), 316,600 acre-ft/yr (390 hm³/yr); 13 years (1960-73) regulated, 550 ft³/s (15.6 m³/s), 398,500 acre-ft/yr (491 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,300 ft³/s (405 m³/s) June 7, gage height, 14.53 ft (4.43 m); minimum daily, 1.4 ft³/s (40 dm³/s) Oct. 19-21.
Period of record: Maximum discharge, 38,200 ft³/s (1,080 m³/s) Apr. 29, 1966, gage height, 16.57 ft (5.05 m); no flow at times.
Maximum stage since about 1840, 19.5 ft (5.9 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	1,280	58	39	5,080	206	2,340	3,710	2,000	108	9.5	7.3
2	7.1	1,820	43	50	3,810	1,400	1,260	2,840	1,060	83	8.4	7.8
3	6.4	2,010	34	223	2,520	1,890	830	1,660	630	67	8.5	8.1
4	5.8	1,650	29	508	1,880	2,050	459	967	430	55	9.8	7.9
5	5.4	1,190	25	836	1,550	2,620	255	680	822	47	9.0	23
6	4.8	910	23	1,310	1,170	3,220	195	431	3,760	47	7.8	82
7	4.3	581	21	1,870	803	3,660	266	904	13,400	70	9.7	120
8	3.9	304	19	2,290	525	3,520	271	1,220	10,500	154	11	52
9	3.4	136	18	1,850	740	5,260	314	1,200	7,700	249	11	29
10	3.0	88	17	1,830	1,080	5,030	302	1,290	6,180	253	10	16
11	2.8	64	18	1,910	1,430	3,790	284	1,280	5,920	217	9.0	11
12	2.7	52	20	1,820	1,620	2,520	244	1,190	5,520	152	8.8	8.8
13	2.7	340	23	1,500	1,450	2,180	196	1,160	5,720	113	8.7	9.6
14	2.3	480	33	1,090	1,130	2,340	172	1,010	4,020	96	8.8	8.9
15	1.9	472	150	723	785	2,410	726	866	2,530	245	7.6	5.6
16	1.6	732	282	462	436	2,280	1,490	539	2,410	403	6.6	4.4
17	1.5	840	824	344	259	1,790	1,310	263	2,760	379	6.4	5.2
18	1.5	532	1,240	284	183	1,480	1,710	146	3,280	291	7.3	5.3
19	1.4	237	1,510	246	143	1,700	1,810	117	2,860	274	8.1	5.1
20	1.4	112	1,670	205	121	2,080	3,630	91	1,740	213	7.6	4.7
21	1.4	78	1,700	183	109	2,570	3,920	72	1,120	109	6.8	4.2
22	184	62	1,270	170	108	2,840	3,250	57	829	64	6.5	3.6
23	560	53	806	162	209	2,040	2,880	44	733	43	6.7	3.6
24	303	52	389	174	264	1,940	2,610	36	929	31	6.5	4.1
25	230	85	176	435	331	2,690	1,870	30	1,100	23	5.7	4.5
26	136	91	100	1,530	363	2,650	1,150	450	1,230	18	5.5	4.4
27	209	139	68	1,650	343	6,560	2,330	1,060	1,070	16	5.3	677
28	116	174	52	2,490	274	8,280	7,990	1,440	650	15	5.5	3,970
29	135	131	43	5,280	------	6,980	6,050	1,930	304	15	6.3	2,780
30	335	83	40	7,400	------	5,380	4,590	2,530	161	14	7.0	2,100
31	613	------	37	6,400	------	4,030	------	2,780	------	11	7.2	------
TOTAL	2,896.3	14,778	10,738	45,264	28,716	97,386	54,704	31,993	91,368	3,875	242.6	9,973.1
MEAN	93.4	493	346	1,460	1,026	3,141	1,823	1,032	3,046	125	7.83	332
MAX	613	2,010	1,700	7,400	5,080	8,280	7,990	3,710	13,400	403	11	3,970
MIN	1.4	52	17	39	108	206	172	30	161	11	5.3	3.6
AC-FT	5,740	29,310	21,300	89,780	56,960	193,200	108,500	63,460	181,200	7,690	481	19,780

CAL YR 1972 TOTAL 68,994.5 MEAN 189 MAX 4,120 MIN 1.1 AC-FT 136,900
WTR YR 1973 TOTAL 391,934.0 MEAN 1,074 MAX 13,400 MIN 1.4 AC-FT 777,400

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-30	0700	13.70	7,600	4-28	0600	14.19	8,640
3- 9	1400	13.40	5,500	6- 7	1000	14.53	14,300
3-28	0900	13.81	8,480	6-18	1100	13.12	3,330
4-20	1900	13.53	4,280	9-28	1100	13.51	4,280

08111500 Brazos River near Hempstead, Tex.

LOCATION (revised).--Lat 30°07'34", long 96°11'05", Washington-Waller County line, on right bank 1,650 ft (503 m) downstream from bridge on relocated U.S. Highway 290, 4,500 ft (1,372 m) upstream from Texas and New Orleans Railroad Co. bridge, 6.5 miles (10.5 km) northwest of Hempstead, 8 miles (13 km) upstream from Caney Creek, and at mile 193.8 (311.8 km).

DRAINAGE AREA.--42,640 mi² (110,400 km²), approximately, of which 9,240 mi² (23,900 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1938 to current year. Gage-height records collected in this vicinity at intermittent periods since 1903 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 117.90 ft (35.94 m) above mean sea level. Prior to Nov. 1, 1940, nonrecording gage at railroad bridge 4,500 ft (1,372 m) downstream at datum 5.80 ft (1.77 m) lower. Nov. 1, 1940, to Sept. 30, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years, 6,574 ft³/s (186 m³/s), 4,763,000 acre-ft/yr (5,872 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 58,100 ft³/s (1,650 m³/s) June 13, gage height, 29.97 ft (9.13 m); minimum daily, 391 ft³/s (11.1 m³/s) Oct. 14.
Period of record: Maximum discharge, 143,000 ft³/s (4,050 m³/s) May 2, 1957, gage height, 44.21 ft (13.48 m); minimum daily, 137 ft³/s (3.88 m³/s) Nov. 6, 1952.
Maximum stage since at least 1899, 56.1 ft (17.1 m) Dec. 8, 1913, present site and datum, from information by Texas and New Orleans Railroad Co., obtained at bridge 4,500 ft (1,372 m) downstream. Flood of July 4, 1899, reached a stage of 53.6 ft (16.3 m), 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 (8,630 hm³), 4,138,000 acre-ft (5,100 hm³) for flood control.

REVISIONS (WATER YEARS).--WSP 1442: Drainage area. WSP 1512: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,160	11,800	1,940	1,500	9,450	4,860	15,000	29,300	5,020	8,750	2,040	938
2	1,120	8,930	1,630	1,340	8,210	4,510	14,100	29,200	4,300	8,360	1,940	832
3	889	5,540	1,910	1,490	8,650	5,070	12,900	26,900	6,370	7,760	2,230	784
4	818	7,230	2,620	2,060	10,100	5,310	12,000	22,700	10,700	6,380	4,050	754
5	698	9,100	2,510	4,350	10,600	6,550	11,000	20,100	15,000	5,070	4,500	825
6	579	6,490	2,070	7,380	10,100	7,370	10,500	16,500	24,700	4,050	4,520	1,760
7	482	4,490	1,600	9,040	9,290	8,230	10,700	15,400	28,300	3,710	4,530	4,360
8	409	3,600	1,420	10,600	8,490	9,830	9,550	18,700	30,100	4,470	4,550	3,490
9	412	3,390	2,300	9,470	9,330	10,500	7,910	24,000	30,200	6,110	4,460	3,020
10	579	3,350	2,860	8,990	9,340	9,910	6,340	24,800	26,800	5,290	3,940	2,710
11	617	3,170	3,090	8,770	9,140	9,200	5,360	18,600	24,100	4,550	3,070	2,190
12	575	2,800	2,690	8,250	9,990	8,810	4,970	14,300	25,200	3,520	2,870	1,730
13	465	2,850	2,160	8,170	9,700	13,400	4,980	13,200	43,100	2,840	2,860	1,270
14	391	3,320	2,240	8,970	10,800	15,900	4,430	11,500	51,100	2,510	2,900	1,320
15	512	3,150	4,260	9,280	7,820	12,700	6,160	9,780	41,100	4,120	2,410	1,700
16	742	3,970	4,420	8,490	6,190	11,100	15,300	8,270	33,700	5,290	1,710	1,820
17	613	3,350	6,650	6,760	5,840	10,800	18,500	6,990	28,500	5,250	1,350	1,570
18	472	3,730	7,250	5,520	6,190	13,800	26,100	6,450	23,400	6,740	1,180	1,310
19	447	4,780	5,740	5,530	5,720	15,600	30,600	5,620	20,100	9,860	1,100	934
20	449	3,780	4,470	5,100	5,170	13,300	30,500	5,020	19,300	8,200	1,070	686
21	418	2,940	3,480	3,810	4,980	11,200	27,100	5,570	18,400	6,880	1,060	579
22	409	2,840	2,940	3,140	5,020	9,760	23,400	4,770	17,900	7,240	1,010	522
23	574	2,850	2,820	2,780	5,120	9,650	20,400	4,150	18,900	6,540	923	504
24	1,550	2,870	2,660	2,820	6,130	23,400	17,500	3,970	18,000	5,100	847	532
25	4,820	3,100	2,520	3,390	8,140	35,400	16,700	3,320	16,400	3,840	802	903
26	6,230	3,240	2,760	8,350	9,140	33,400	25,100	2,990	14,700	3,190	1,080	1,020
27	4,240	3,050	2,680	18,600	7,890	30,800	36,300	2,860	12,900	2,920	1,230	1,010
28	2,530	3,120	2,450	23,500	6,250	23,800	36,000	7,780	10,900	2,590	1,190	1,950
29	3,300	2,930	2,060	20,000	------	19,800	31,700	9,830	9,670	2,380	1,180	4,640
30	5,140	2,330	1,680	14,200	------	17,200	30,000	8,240	9,040	2,370	1,070	8,900
31	6,890	------	1,480	11,200	------	15,700	------	6,400	------	2,140	957	------
TOTAL	48,530	128,090	91,360	242,850	222,790	426,860	521,100	387,210	637,900	158,020	68,629	54,563
MEAN	1,565	4,270	2,947	7,834	7,957	13,770	17,370	12,490	21,260	5,097	2,214	1,819
MAX	6,890	11,800	7,250	23,500	10,800	35,400	36,300	29,300	51,100	9,860	4,550	8,900
MIN	391	2,330	1,420	1,340	4,980	4,510	4,430	2,860	4,300	2,140	802	504
AC-FT	96,260	254,100	181,200	481,700	441,900	846,700	1,034M	768,000	1,265M	313,400	136,100	108,200

CAL YR 1972 TOTAL 952,212 MEAN 2,602 MAX 13,400 MIN 391 AC-FT 1,889,000
WTR YR 1973 TOTAL 2,987,902 MEAN 8,186 MAX 51,100 MIN 391 AC-FT 5,927,000

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 (2 m) downstream from State Highway 36, 5.0 miles (8.0 km) southeast of Bellville, and 6.0 miles (9.7 km) upstream from Brazos River.

DRAINAGE AREA.--377 mi² (976 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 122.82 ft (37.44 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 189 ft³/s (5.35 m³/s), 136,900 acre-ft/yr (169 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 44,400 ft³/s (1,260 m³/s) June 13, gage height, 17.95 ft (5.47 m); minimum daily, 4.0 ft³/s (113 dm³/s) Oct. 19.
Period of record: Maximum discharge, 44,400 ft³/s (1,260 m³/s) June 13, 1973, gage height, 17.95 ft (5.47 m); minimum daily, 0.08 ft³/s (2.3 dm³/s) July 22, 23, 1971.
Maximum stage since 1899, 22.8 ft (6.9 m) in 1940, from information by local residents and the Texas Highway Department.
REVISIONS.--Figures of maximum discharge for the water years 1965 and 1968 have been revised to 18,400 ft³/s (521 m³/s) May 12, 1965, gage height, 15.20 ft (4.63 m), and 23,800 ft³/s (674 m³/s) June 25, 1968, gage height, 15.98 ft (4.87 m), superseding figures published in WRD Texas, 1965 and 1968 and WSP 1922 and 2122.

REMARKS.--Records fair. During the year, the city of Bellville discharged about 348 acre-ft (0.429 hm³) of sewage effluent into a tributary of Mill Creek above gage.

REVISIONS.--The figures of peak discharge for water years 1965 and 1968 have been revised as shown in the following table. They supersede figures published in WRD Texas, 1965 and 1968 and WSP 1922 and 2122.
REVISED PEAK DISCHARGE.--1965: May 12 (0630) 18,400 ft³/s (15.20 ft).
1968: May 12 (1400) 17,000 ft³/s (15.13 ft); June 25 (about 0400) 23,800 ft³/s (15.98 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	93	36	39	115	136	141	102	22	63	23	12
2	6.4	95	35	63	102	152	118	142	22	53	49	9.9
3	6.0	99	36	84	82	167	102	715	20	52	23	8.7
4	5.6	75	35	175	72	226	89	708	19	46	19	9.0
5	5.5	80	35	162	73	171	78	140	19	38	15	32
6	5.6	47	33	113	75	202	224	118	30	38	14	111
7	5.2	124	31	250	79	339	1,690	668	64	55	13	173
8	4.9	190	31	732	123	504	947	1,060	48	85	13	132
9	5.0	72	32	640	377	193	305	716	33	70	19	44
10	4.7	44	35	182	808	160	242	141	31	55	15	29
11	4.6	36	40	147	610	146	142	103	33	40	12	26
12	4.4	32	45	190	249	124	119	407	250	34	12	54
13	4.5	94	51	189	276	107	108	344	20,600	30	21	76
14	4.5	282	53	210	2,080	103	104	139	21,500	28	19	130
15	4.5	209	109	190	1,810	103	1,390	90	4,640	26	24	84
16	4.3	71	364	135	455	162	6,440	74	822	28	20	44
17	4.2	48	131	106	308	185	7,190	66	259	36	14	33
18	4.1	94	100	101	708	114	5,730	60	157	30	17	27
19	4.0	204	51	93	723	90	3,140	55	118	27	25	24
20	4.1	95	48	87	348	95	973	51	97	24	16	23
21	4.8	56	54	135	308	89	354	48	138	22	12	20
22	17	43	48	98	610	80	263	44	253	20	10	18
23	56	38	43	67	798	696	223	41	145	19	9.2	17
24	18	39	41	57	516	4,450	198	39	102	23	9.4	17
25	7.8	59	36	230	302	17,000	174	38	111	18	8.7	17
26	8.5	100	33	1,260	199	2,640	190	36	137	17	8.2	21
27	23	80	30	1,520	163	458	167	35	104	26	7.6	19
28	19	56	29	396	143	270	130	32	81	61	7.4	147
29	85	45	31	180	------	1,020	106	27	69	29	7.7	109
30	510	43	33	127	------	466	102	25	62	18	8.0	59
31	455	------	33	113	------	199	------	23	------	16	15	------
TOTAL	1,303.1	2,643	1,742	8,071	12,512	30,847	31,179	6,287	49,986	1,127	486.2	1,525.6
MEAN	42.0	88.1	56.2	260	447	995	1,039	203	1,666	36.4	15.7	50.9
MAX	510	282	364	1,520	2,080	17,000	7,190	1,060	21,500	85	49	173
MIN	4.0	32	29	39	72	80	78	23	19	16	7.4	8.7
AC-FT	2,580	5,240	3,460	16,010	24,820	61,190	61,840	12,470	99,150	2,240	964	3,030

CAL YR 1972 TOTAL 69,104.5 MEAN 189 MAX 10,400 MIN 3.8 AC-FT 137,100
WTR YR 1973 TOTAL 147,708.9 MEAN 405 MAX 21,500 MIN 4.0 AC-FT 293,000

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-14	2400	12.77	2,640	4-16	1900	13.89	9,040
3-25	0400	16.15	26,200	6-13	2100	17.95	44,400

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 (1.9 km) downstream from point of diversion, and 3.4 miles (5.5 km) south of Fulshear.

PERIOD OF RECORD.--October 1930 to September 1954, October 1957 to September 1973 (discontinued). 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 (91 m) downstream at different datum.

AVERAGE DISCHARGE.--40 years, 89.4 ft³/s (2.53 m³/s), 64,770 acre-ft/yr (79.9 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 495 ft³/s (14.0 m³/s) July 25, 1973; 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 (34.9 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0			0	0	62	365	241	95	89
2	0	0	0			0	0	62	348	296	96	89
3	0	0	0			0	0	60	339	281	142	43
4	0	0	0			0	40	58	300	246	105	0
5	0	0	0			0	81	56	181	286	108	0
6	0	0	48			0	36	7.0	44	284	111	0
7	0	0	97			0	34	25	127	258	168	0
8	0	0	97			0	34	36	130	0	203	0
9	0	0	97			0	33	37	130	0	175	0
10	0	0	96			0	32	42	130	0	163	0
11	0	0	98			0	31	77	91	0	204	0
12	0	0	37			0	31	122	0	0	114	0
13	0	0	0			0	28	118	0	104	0	0
14	0	0	0			28	30	116	0	196	54	0
15	0	0	0			49	0	118	0	193	143	0
16	0	0	0			122	0	117	0	193	179	0
17	0	0	0			120	0	115	0	202	144	0
18	0	0	0			119	0	113	0	223	104	42
19	0	0	0			122	0	135	56	247	40	94
20	0	0	0			121	0	138	56	293	25	93
21	0	0	0			117	0	145	0	390	25	90
22	0	0	0			118	0	163	0	491	47	91
23	0	0	0			81	0	161	0	463	45	90
24	48	0	0			0	0	159	74	413	55	120
25	43	0	0			0	24	169	147	495	91	151
26	0	0	0			0	51	199	201	435	90	137
27	0	46	0			0	62	196	198	288	146	140
28	0	39	0			0	42	195	195	214	181	132
29	0	0	0		------	0	40	190	192	139	182	141
30	0	0	0		------	0	61	252	189	95	182	150
31	0	------	0		------	0	------	393	------	96	163	------
TOTAL	91	85	570	0	0	997	690	3,836.0	3,493	7,062	3,580	1,692
MEAN	2.94	2.83	18.4	0	0	32.2	23.0	124	116	228	115	56.4
MAX	48	46	98	0	0	122	81	393	365	495	204	151
MIN	0	0	0	0	0	0	0	7.0	0	0	0	0
AC-FT	180	169	1,130	0	0	1,980	1,370	7,610	6,930	14,010	7,100	3,360

CAL YR 1972 TOTAL 21,412.00 MEAN 58.5 MAX 250 MIN 0 AC-FT 42,470
WTR YR 1973 TOTAL 22,096.00 MEAN 60.5 MAX 495 MIN 0 AC-FT 43,830

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 (0.8 km) upstream from previous gage, 1.2 miles (1.9 km) downstream from pump plant, and 1.7 miles (2.7 km) southwest of Richmond.

PERIOD OF RECORD.--October 1927 to September 1954, March 1956 to current year. Records for water years 1928-31, 1955-56 incomplete, yearly estimates only published in WSP 1312 and 1732.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

AVERAGE DISCHARGE.--46 years, 43.2 ft³/s (1.22 m³/s), 31,300 acre-ft/yr (38.6 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 267 ft³/s (7.56 m³/s) Nov. 15, 28, 1957; no flow for several months each year.

REMARKS.--Records fair. Water for irrigation is diverted by pumping from right bank of Brazos River 6 miles (10 km) upstream from Richmond. Figures of discharge represent water pumped from river.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	200	201	181	
2	0							0	197	200	184	
3	0							0	191	192	186	
4	0							0	193	195	182	
5	0							0	204	185	182	
6	0							0	214	181	191	
7	0							0	143	148	197	
8	0							33	117	0	195	
9	28							88	111	0	193	
10	26							114	111	0	200	
11	21							114	97	38	199	
12	21							109	0	144	143	
13	20							60	0	169	105	
14	22							0	0	169	76	
15	20							71	0	169	0	
16	46							104	0	166	0	
17	79							105	0	180	110	
18	79							111	0	183	92	
19	78							121	0	186	0	
20	61							131	73	197	62	
21	0							128	106	197	161	
22	0							119	104	194	156	
23	0							109	105	194	165	
24	0							114	160	200	169	
25	0							147	182	194	167	
26	0							180	201	190	160	
27	0							175	197	185	161	
28	0							176	213	179	162	
29	0				------			183	210	180	168	
30	0				------			196	204	180	172	
31	0	------			------		------	200	------	179	125	------
TOTAL	501	0	0	0	0	0	0	2,888	3,533	4,975	4,444	0
MEAN	16.2	0	0	0	0	0	0	93.2	118	160	143	0
MAX	79	0	0	0	0	0	0	200	214	201	200	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	994	0	0	0	0	0	0	5,730	7,010	9,870	8,810	0

CAL YR 1972 TOTAL 21,303.00 MEAN 58.2 MAX 205 MIN 0 AC-FT 42,250
WTR YR 1973 TOTAL 16,341.00 MEAN 44.8 MAX 214 MIN 0 AC-FT 32,410

08114000 Brazos River at Richmond, Tex.

LOCATION.--Lat 29°34'56", long 95°45'27", Fort Bend County, on right bank at downstream side of downstream bridge on U.S. Highway 59 in Richmond, 925 ft (282 m) downstream from Texas and New Orleans Railroad Co. bridge, and at mile 92.0 (148.0 km).

DRAINAGE AREA.--44,020 mi² (114,000 km²), approximately, of which 9,240 mi² (23,930 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 40.94 ft (12.48 m) above mean sea level. Prior to Oct. 1, 1922, various types of nonrecording gages at railroad bridge 925 ft (282 m) upstream at different datums. Oct. 1 to Sept. 30, 1922, nonrecording chain gage at Rosenberg 7.6 miles (12.2 km) upstream at datum about 4 ft (1 m) higher.

AVERAGE DISCHARGE.--20 years (1903-5, 1922-40) unregulated, 7,209 ft³/s (204 m³/s), 5,223,000 acre-ft/yr (6,440 hm³/yr); 33 years (1940-73) regulated, 7,237 ft³/s (205 m³/s), 5,243,000 acre-ft/yr (6,465 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 72,500 ft³/s (2,050 m³/s) June 15, gage height, 31.62 ft (9.64 m); minimum daily, 390 ft³/s (11.0 m³/s) Oct. 17.
Period of record: Maximum discharge, 123,000 ft³/s (3,480 m³/s) June 6, 1929, gage height, 40.6 ft (12.4 m), from floodmarks, present site and datum; minimum daily, 35 ft³/s (0.99 m³/s) Aug. 23, 1934.
Maximum stage since at least 1852, 48.2 ft (14.7 m) Dec. 10, 1913, present datum, from floodmarks on right bank 1,000 ft (305 m) 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 (13.3 m); June 13, 1885, 44.7 ft (13.6 m); July 1899, 45.6 ft (13.9 m); May 2, 1915, 43.3 ft (13.2 m); May 9, 1922, 40.9 ft (12.5 m).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	817	6,080	3,230	1,980	11,200	7,680	17,000	31,000	8,190	9,390	2,810	1,460
2	845	10,100	2,710	1,800	9,550	6,350	16,100	30,100	6,820	8,870	2,650	1,330
3	990	10,500	2,320	1,910	8,490	5,460	15,300	30,500	5,730	8,500	2,720	1,280
4	1,140	7,390	2,030	1,780	8,290	5,490	14,400	28,900	5,780	8,140	2,460	1,370
5	1,010	6,240	2,280	1,900	9,070	6,050	13,300	24,700	9,230	7,300	2,860	2,110
6	901	8,160	2,820	3,170	9,820	6,390	12,500	22,100	15,400	6,380	4,340	3,590
7	817	8,410	2,650	6,040	9,830	7,350	12,700	19,200	24,200	6,290	4,810	3,010
8	722	6,480	2,290	8,440	9,380	8,150	14,400	18,600	28,200	8,240	4,830	3,500
9	620	5,120	1,890	10,600	9,280	9,310	12,700	20,700	29,900	6,290	4,860	4,930
10	549	4,240	1,710	10,200	9,970	10,100	10,500	24,300	30,000	6,770	4,920	4,330
11	505	3,990	2,350	9,040	10,700	9,990	8,860	25,100	27,900	7,000	4,680	3,820
12	522	3,870	3,000	8,680	10,100	9,350	7,440	20,900	29,200	5,970	4,240	3,950
13	620	4,120	3,260	8,390	10,200	8,790	6,610	17,900	34,900	5,120	4,050	3,440
14	620	3,750	2,950	8,140	12,000	10,500	6,390	16,100	58,400	4,060	3,650	2,970
15	560	3,930	2,560	8,480	14,200	14,300	7,320	14,100	71,200	3,530	3,550	2,380
16	478	3,990	2,910	8,880	11,500	12,900	14,800	12,200	58,600	3,410	3,390	2,290
17	390	4,060	4,570	8,620	8,320	11,600	29,100	10,500	40,800	4,810	2,830	2,370
18	544	5,340	5,340	7,650	8,110	10,800	40,900	9,050	29,800	5,630	2,310	2,410
19	626	5,560	6,770	6,440	8,330	11,800	42,300	8,280	23,500	5,650	2,060	2,150
20	516	5,780	6,540	5,700	7,960	14,200	40,000	7,700	20,100	8,940	1,850	1,910
21	522	5,500	5,470	5,720	7,000	13,200	35,500	6,880	19,600	9,290	1,560	1,590
22	602	4,340	4,480	5,220	6,730	11,100	30,400	6,690	18,600	7,640	1,460	1,270
23	824	3,620	3,640	4,240	7,380	10,400	25,800	6,750	17,900	7,200	1,370	1,080
24	656	3,510	3,230	3,500	7,480	12,400	22,600	5,920	18,100	7,440	1,340	991
25	522	3,490	3,070	3,250	7,380	32,900	20,200	5,510	17,500	6,290	1,230	847
26	1,440	3,520	2,870	3,820	7,940	46,400	18,300	5,120	16,200	5,050	1,130	883
27	4,770	3,670	2,770	7,970	9,030	39,100	25,400	4,530	14,900	4,110	1,030	1,050
28	5,760	3,620	2,920	17,700	8,900	33,000	36,300	4,200	13,600	3,660	984	1,410
29	4,050	3,520	2,850	21,300	------	26,000	37,100	5,230	11,800	3,490	1,200	1,470
30	2,910	3,510	2,620	19,000	------	22,000	33,100	9,970	10,500	3,150	1,210	2,530
31	4,180	------	2,260	14,300	------	18,900	------	9,930	------	2,920	1,250	------
TOTAL	40,028	155,410	100,360	233,860	258,140	451,960	627,320	462,660	716,550	190,530	83,634	67,721
MEAN	1,291	5,180	3,237	7,544	9,219	14,580	20,910	14,920	23,890	6,146	2,698	2,257
MAX	5,760	10,500	6,770	21,300	14,200	46,400	42,300	31,000	71,200	9,390	4,920	4,930
MIN	390	3,490	1,710	1,780	6,730	5,460	6,390	4,200	5,730	2,920	984	847
AC-FT	79,400	308,300	199,100	463,900	512,000	896,500	1,244M	917,700	1,421M	377,900	165,900	134,300

CAL YR 1972 TOTAL 1,195,008 MEAN 3,265 MAX 23,100 MIN 390 AC-FT 2,370,000
WTR YR 1973 TOTAL 3,388,173 MEAN 9,283 MAX 71,200 MIN 390 AC-FT 6,720,000

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 (2.4 km) downstream from Coon Creek, 5.5 miles (8.8 km) north of Needville, and 10.5 miles (16.9 km) upstream from Fairchild Creek.

DRAINAGE AREA.--42.3 mi² (110 km²).

PERIOD OF RECORD.--May 1947 to June 1950, March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 59.39 ft (18.10 m) above mean sea level, adjustment of 1943. Prior to June 30, 1950, and May 29, 1959, to Mar. 29, 1960, nonrecording gage at 10 ft (3 m) higher datum. March 1952 to May 28, 1959, and Mar. 30, 1960, to Sept. 30, 1967, water-stage recorder at 10 ft (3 m) higher datum.

AVERAGE DISCHARGE.--23 years (1947-49, 1952-73), 32.9 ft³/s (0.932 m³/s), 23,840 acre-ft/yr (29.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,220 ft³/s (120 m³/s) June 13, gage height, 22.35 ft (6.81 m); minimum daily, 0.32 ft³/s (9.1 dm³/s) June 2.
Period of record: Maximum discharge, 10,400 ft³/s (295 m³/s) June 26, 1960, gage height, 23.81 ft (7.26 m), maximum gage height, 24.03 ft (7.32 m) Oct. 31, 1959; no flow at times.
Maximum stage since 1913, 24.4 ft (7.4 m) in August 1945 before channel rectification, from information by local resident.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Channel rectification was completed in April 1955. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1148: 1947. WSP 1712: 1957-58, 1959(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	.89	1.6	54	1.7	4.0	2.1	1.2	.34	3.5	5.9	3.4
2	9.4	.78	1.3	78	1.5	3.4	1.7	1.2	.32	3.0	15	3.8
3	2.6	79	1.2	242	1.4	3.0	1.6	2.4	1.4	2.7	42	6.9
4	1.4	84	.99	82	1.4	2.7	1.4	2.4	1.8	2.5	14	41
5	1.1	27	.96	55	1.2	2.4	1.1	1.7	1.7	2.5	5.7	1,500
6	.89	5.8	.98	322	1.3	2.8	1.2	1.7	1.7	2.5	8.0	2,400
7	.75	130	.86	274	1.2	2.3	3.1	94	2.1	200	8.0	633
8	.68	56	.94	150	3.3	2.2	2.6	109	3.4	350	6.0	218
9	.68	11	.95	56	233	2.4	2.1	24	3.0	100	5.0	114
10	.69	3.3	1.1	34	184	2.1	1.5	5.8	2.6	50	4.5	52
11	.65	1.8	1.1	114	63	2.0	1.4	2.4	15	30	4.2	52
12	.60	1.4	1.1	135	26	1.7	1.4	9.0	1,410	20	4.0	204
13	.61	500	1.0	104	29	1.7	1.3	11	2,540	12	25	130
14	.64	147	9.7	54	336	1.7	1.4	20	2,430	8.0	50	120
15	.59	47	30	26	102	1.7	409	2.5	650	6.0	20	82
16	.58	16	3.5	12	45	1.6	2,430	1.1	225	5.0	10	40
17	.51	6.1	1.7	6.0	217	1.6	2,030	.85	88	4.0	7.0	18
18	.56	650	1.3	4.2	425	1.5	1,120	.80	37	10	5.5	9.5
19	.55	246	1.1	3.4	132	1.4	265	.75	16	8.0	4.5	7.4
20	.55	82	1.1	2.8	70	1.6	132	.80	262	7.0	4.0	4.3
21	.62	39	.98	2.4	137	1.3	68	.80	560	6.0	3.5	3.0
22	54	19	.88	1.9	213	1.4	33	.80	150	9.0	3.2	1.6
23	127	9.5	.89	1.6	289	1,110	14	.80	70	8.0	3.0	82
24	48	6.4	.83	1.3	98	1,330	7.3	.75	40	7.0	2.8	211
25	11	43	.80	33	47	226	4.6	.72	25	7.3	2.6	219
26	3.1	36	.69	39	21	95	5.2	.64	15	7.6	2.6	202
27	2.0	14	.73	9.7	10	39	2.9	.68	10	6.7	3.0	58
28	1.4	5.5	.82	4.3	5.6	15	1.7	.58	7.0	7.8	3.8	66
29	1.4	2.8	.86	2.6	------	8.1	1.5	.47	5.0	6.9	4.9	10
30	1.3	2.0	.93	2.1	------	5.2	1.3	.40	4.0	6.1	3.3	3.1
31	1.1	------	.87	1.8	------	3.1	------	.36	------	5.9	3.1	------
TOTAL	315.95	2,272.27	71.76	1,908.1	2,695.6	2,877.9	6,549.4	299.60	8,577.36	905.0	284.1	6,495.0
MEAN	10.2	75.7	2.31	61.6	96.3	92.8	218	9.66	286	29.2	9.16	217
MAX	127	650	30	322	425	1,330	2,430	109	2,540	350	50	2,400
MIN	.51	.78	.69	1.3	1.2	1.3	1.1	.36	.32	2.5	2.6	1.6
AC-FT	627	4,510	142	3,780	5,350	5,710	12,990	594	17,010	1,800	564	12,880

CAL YR 1972 TOTAL 11,583.76 MEAN 31.6 MAX 1,600 MIN .16 AC-FT 22,980
WTR YR 1973 TOTAL 33,252.04 MEAN 91.1 MAX 2,540 MIN .32 AC-FT 65,960

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	1200	18.20	1,350	6-13	2000	22.35	4,220
3-23	2200	20.98	3,010	6-21	0400	16.35	1,120
4-16	1400	21.22	3,150	9- 6	1000	21.52	2,780

NOTE.--No gage-height record June 21 to July 24.

08116400 Dry Creek near Rosenberg, Tex.

LOCATION.--Lat 29°30'42", long 95°44'45", Fort Bend County, on right bank 38 ft (12 m) downstream from county road bridge, 5.0 miles (8.0 km) southeast of Rosenberg, and 8.2 miles (13.2 km) upstream from Smither's Lake (Lake George) spillway.

DRAINAGE AREA.--8.53 mi² (22.1 km²). See REMARKS.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 71.90 ft (21.92 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 11.1 ft³/s (0.314 m³/s), 8,040 acre-ft/yr (9.91 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 739 ft³/s (20.9 m³/s) June 13, gage height, 11.12 ft (3.39 m); no flow for many days.
Period of record: Maximum discharge, 2,410 ft³/s (68.3 m³/s) Oct. 31, 1959, gage height, 12.66 ft (3.86 m); no flow for many days each year.
Highest flood since at least 1932, that of Oct. 31, 1959, from information by local residents.

REMARKS.--Records fair. Runoff given herein includes 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	0	.07	32	.25	.61	.24	0	10	.22	.96	.66
2	.92	0	.04	32	.15	.46	.08	0	7.1	.94	.96	7.4
3	.32	25	.02	79	.08	.33	.03	0	3.9	4.6	.75	8.7
4	.11	19	.01	15	.05	.25	0	0	1.3	6.4	.61	73
5	.04	3.7	0	18	.02	.36	0	0	1.1	3.1	.39	308
6	.01	1.1	0	64	.01	.96	.01	0	19	1.6	.25	523
7	0	54	0	48	.01	.93	.08	11	17	191	.43	82
8	0	6.2	0	19	.91	.56	1.2	7.8	1.0	337	.57	17
9	.01	1.9	0	6.6	55	.54	.50	9.1	1.2	33	.48	9.7
10	.15	.64	0	6.0	22	.92	.14	24	1.2	14	.28	5.9
11	.13	.26	0	22	7.3	.51	.08	29	26	8.6	.25	4.6
12	.27	.13	0	26	3.4	.22	.04	32	329	4.9	.21	111
13	.20	71	0	15	4.8	.10	.01	21	369	3.6	8.5	22
14	.35	11	2.2	8.0	22	.07	.02	1.8	212	3.1	12	12
15	.26	3.5	13	4.3	5.0	.05	89	11	20	1.8	7.3	7.1
16	.46	1.4	3.8	2.6	1.9	.02	414	22	9.6	1.1	4.9	4.8
17	6.4	.51	1.4	1.6	44	0	302	19	4.0	.75	3.6	2.9
18	6.9	216	.59	1.1	55	0	111	17	1.6	2.5	2.5	1.7
19	6.6	36	.31	.70	13	0	22	18	.58	3.1	1.7	.76
20	7.5	7.9	.19	.50	6.2	0	11	19	3.5	2.7	1.1	.32
21	.69	4.3	.09	.32	24	0	5.5	19	178	2.7	.76	.19
22	1.3	2.1	.07	.19	31	239	3.1	16	20	4.0	.70	.10
23	9.8	1.1	.06	.10	37	204	1.6	9.8	9.4	4.2	.65	12
24	2.0	1.0	.04	.07	11	224	.90	12	12	4.0	.60	21
25	.47	4.5	.01	29	5.0	30	.50	20	14	3.4	.55	15
26	.15	3.5	0	18	2.7	9.5	.46	37	17	3.7	.52	8.9
27	.06	1.3	0	5.2	1.5	4.4	.22	29	4.6	2.8	.50	9.0
28	.03	.58	0	2.4	.91	2.1	.09	24	1.1	2.0	.50	13
29	.03	.27	0	1.1	------	1.3	.02	17	.88	2.1	.50	6.4
30	.01	.14	0	.53	------	.79	0	14	.46	1.5	.50	4.9
31	0	------	0	.33	------	.47	------	14	------	1.1	.55	------
TOTAL	47.17	478.03	21.90	458.64	354.19	722.45	963.82	453.5	1,295.52	655.51	54.07	1,293.03
MEAN	1.52	15.9	.71	14.8	12.6	23.3	32.1	14.6	43.2	21.1	1.74	43.1
MAX	9.8	216	13	79	55	239	414	37	369	337	12	523
MIN	0	0	0	.07	.01	0	0	0	.46	.22	.21	.10
AC-FT	94	948	43	910	703	1,430	1,910	900	2,570	1,300	107	2,560

CAL YR 1972 TOTAL 3,368.89 MEAN 9.20 MAX 307 MIN 0 AC-FT 6,680
WTR YR 1973 TOTAL 6,797.83 MEAN 18.6 MAX 523 MIN 0 AC-FT 13,480

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-18	1100	9.65	558	6-13	2000	11.12	739
3-23	2100	9.70	710	7- 8	0100	11.05	718
4-16	0900	9.65	654	9- 6	0900	11.00	710
6-12	1000	10.28	555				

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 (3.2 km) downstream from Big Creek, 2.1 miles (3.4 km) upstream from Cow Creek, and 7.3 miles (11.7 km) west of Rosharon.

DRAINAGE AREA.--44,340 mi² (114,800 km²), approximately, of which 9,240 mi² (23,930 km²) 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.--6 years, 7,508 ft³/s (213 m³/s), 5,440,000 acre-ft/yr (6,708 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 79,300 ft³/s (2,250 m³/s) June 15, elevation, 50.49 ft (15.39 m); minimum daily, 487 ft³/s (13.8 m³/s) Aug. 28.
Period of record: Maximum discharge, 79,900 ft³/s (2,260 m³/s) May 14, 1968, elevation, 50.74 ft (15.47 m); minimum daily, 40 ft³/s (1.13 m³/s) Apr. 7-10, 1967.
Maximum elevation since at least 1884, 56.4 ft (17.2 m) 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 (8,660 hm³), 4,138,000 acre-ft (5,100 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,130	3,710	2,970	1,850	13,200	8,360	18,100	33,000	7,310	9,260	2,460	1,010
2	1,030	6,010	2,640	2,410	10,400	7,080	16,500	31,700	5,840	8,310	2,520	1,170
3	1,000	9,860	2,240	2,300	8,850	5,810	15,500	31,500	4,670	7,850	2,610	1,100
4	1,330	9,510	1,950	2,420	7,950	5,190	14,400	31,200	3,840	7,470	2,600	1,450
5	1,420	6,510	1,750	1,910	8,080	5,410	13,300	27,300	4,810	7,010	2,190	7,450
6	1,270	6,080	2,070	2,880	9,000	5,750	12,200	23,700	9,750	6,130	2,920	21,200
7	1,160	8,770	2,320	5,180	9,510	6,260	11,700	20,800	19,300	6,080	3,960	21,000
8	1,060	8,220	2,140	7,800	9,310	7,170	13,000	18,100	27,300	16,500	4,150	14,500
9	944	5,870	1,830	10,100	9,490	8,090	13,400	19,300	30,800	16,700	4,070	9,490
10	720	4,370	1,540	11,400	10,500	9,340	10,700	22,700	31,900	11,200	4,130	6,870
11	644	3,660	1,490	10,700	11,100	9,730	8,850	25,800	30,200	7,970	4,250	5,650
12	601	3,420	2,100	10,200	10,700	9,490	7,340	23,700	35,700	6,590	3,990	5,840
13	618	3,870	2,590	9,800	9,940	9,000	6,210	19,000	47,900	5,260	3,940	6,520
14	808	4,800	2,670	9,130	11,800	8,970	5,610	16,100	66,600	4,260	3,900	4,930
15	843	3,830	2,420	8,750	14,400	12,900	5,840	13,900	77,800	3,400	3,490	3,640
16	764	3,650	2,180	9,090	14,300	14,500	12,800	11,600	77,600	2,920	3,320	2,830
17	590	3,300	2,990	9,190	10,600	12,700	32,400	9,790	67,400	3,050	3,090	2,560
18	510	4,980	4,380	8,410	10,100	11,600	49,600	8,210	48,800	4,430	2,570	2,400
19	628	8,830	5,530	7,090	9,680	11,200	51,000	7,150	33,800	4,760	2,060	2,210
20	680	6,780	6,480	5,970	8,890	13,600	46,200	6,480	25,600	5,090	1,610	1,900
21	632	5,740	5,640	5,540	7,840	14,600	40,900	5,830	24,900	8,340	1,300	1,650
22	642	4,770	4,570	5,390	7,370	12,700	35,400	5,190	23,700	7,130	1,060	1,350
23	779	3,770	3,620	4,580	8,120	11,800	29,700	5,270	20,600	6,230	880	1,130
24	1,020	3,230	3,200	3,610	8,450	20,300	25,300	5,020	19,700	6,110	772	1,210
25	817	3,210	2,920	3,010	7,750	30,300	21,800	4,350	19,400	5,960	693	1,320
26	669	3,150	2,700	3,150	7,570	47,800	19,000	3,970	18,000	4,960	568	1,220
27	1,940	3,140	2,420	4,340	8,330	45,100	21,400	3,520	16,000	4,030	540	1,130
28	4,420	3,170	2,420	13,100	9,000	38,000	33,500	3,050	14,200	3,470	487	1,140
29	4,420	3,090	2,510	21,300	------	30,700	38,600	2,760	12,300	3,180	622	1,320
30	3,160	3,000	2,400	22,200	------	24,900	36,100	5,220	10,500	2,910	824	1,290
31	2,420	------	2,110	17,800	------	21,200	------	8,030	------	2,600	985	------
TOTAL	38,669	152,300	88,790	240,600	272,230	479,550	666,350	453,240	836,220	199,160	72,561	136,480
MEAN	1,247	5,077	2,864	7,761	9,723	15,470	22,210	14,620	27,870	6,425	2,341	4,549
MAX	4,420	9,860	6,480	22,200	14,400	47,800	51,000	33,000	77,800	16,700	4,250	21,200
MIN	510	3,000	1,490	1,850	7,370	5,190	5,610	2,760	3,840	2,600	487	1,010
AC-FT	76,700	302,100	176,100	477,200	540,000	951,200	1,322M	899,000	1,659M	395,000	143,900	270,700

CAL YR 1972 TOTAL 1,143,589 MEAN 3,125 MAX 31,100 MIN 197 AC-FT 2,268,000
WTR YR 1973 TOTAL 3,636,150 MEAN 9,962 MAX 77,800 MIN 487 AC-FT 7,212,000

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 (4.0 km) downstream from Snake Creek, and 4.5 miles (7.2 km) northeast of Boling.

DRAINAGE AREA.--727 mi² (1,883 km²).

PERIOD OF RECORD.--May 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 30.81 ft (9.39 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 485 ft³/s (13.7 m³/s), 351,400 acre-ft/yr (433 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,400 ft³/s (578 m³/s) June 16, gage height, 41.87 ft (12.76 m); minimum daily, 18 ft³/s (0.510 m³/s) Dec. 9-13.
Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) June 28, 1960, gage height, 42.41 ft (12.93 m); minimum daily, 2.4 ft³/s (68 dm³/s) Nov. 27-30, 1956.
Maximum stage since at least 1900, 43.5 ft (13.3 m) in 1913 (probably December). Flood in September 1938 reached a stage of 43.3 ft (13.2 m), from information by local resident.

REMARKS.--Records good. Part of low flow is drainage from areas irrigated with diversions from Colorado River. Diversions above station for irrigation and other uses.

REVISIONS (WATER YEARS).--WSP 1712: 1958. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	48	57	49	182	484	445	170	74	252	291	837
2	362	43	44	144	125	348	406	132	71	205	319	649
3	294	104	34	258	86	232	348	107	61	178	439	421
4	247	225	28	237	66	160	258	90	69	164	485	380
5	218	89	24	167	57	120	172	111	69	145	562	3,190
6	192	60	22	444	51	100	119	208	72	143	555	7,710
7	163	51	20	831	46	93	105	359	74	635	499	7,300
8	144	48	19	909	46	90	91	555	87	5,270	502	5,190
9	130	45	18	780	181	125	140	681	85	4,680	522	4,050
10	122	46	18	598	498	164	251	438	105	3,040	519	3,660
11	103	51	18	530	551	175	454	355	211	2,380	551	3,470
12	100	50	18	589	495	157	554	347	1,380	1,710	632	3,250
13	85	300	18	606	411	134	463	304	5,160	969	910	2,940
14	72	384	19	506	642	113	325	245	11,100	590	609	2,640
15	70	328	21	396	805	91	387	189	17,200	375	485	2,410
16	75	296	20	302	819	75	2,950	158	20,200	235	457	2,220
17	68	220	20	230	905	64	7,740	142	19,700	189	463	2,010
18	58	867	26	176	1,880	188	11,500	115	17,300	174	383	1,710
19	53	1,590	29	141	1,750	296	13,300	88	13,000	173	522	1,290
20	49	1,140	28	113	1,440	255	14,300	73	8,980	171	685	895
21	43	874	25	95	1,200	273	14,100	64	6,090	173	607	605
22	65	635	23	78	1,280	231	11,700	59	4,120	208	495	413
23	158	463	21	67	1,800	1,050	8,020	59	2,660	208	435	353
24	294	357	20	62	1,660	7,210	5,220	61	1,590	226	342	2,170
25	287	273	20	71	1,340	6,510	3,470	58	1,030	270	238	1,550
26	194	231	26	87	1,100	3,940	1,920	58	776	313	172	912
27	148	187	25	116	905	2,910	729	67	632	351	135	548
28	108	137	24	185	696	2,550	439	69	509	380	121	391
29	86	101	22	211	------	1,630	321	65	401	392	140	312
30	68	77	21	247	------	885	227	69	316	337	446	286
31	56	------	19	238	------	576	------	71	------	297	940	------
TOTAL	4,507	9,320	747	9,463	21,017	31,229	100,454	5,567	133,122	24,833	14,461	63,762
MEAN	145	311	24.1	305	751	1,007	3,348	180	4,437	801	466	2,125
MAX	395	1,590	57	909	1,880	7,210	14,300	681	20,200	5,270	940	7,710
MIN	43	43	18	49	46	64	91	58	61	143	121	286
AC-FT	8,940	18,490	1,480	18,770	41,690	61,940	199,300	11,040	264,000	49,260	28,680	126,500

CAL YR 1972 TOTAL 180,313 MEAN 493 MAX 12,000 MIN 18 AC-FT 357,700
WTR YR 1973 TOTAL 418,482 MEAN 1,147 MAX 20,200 MIN 18 AC-FT 830,100

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-24	1700	29.71	8,030	7-8	1700	25.79	5,880
4-20	0100	37.36	14,400	9-6	1900	30.05	8,240
6-16	1400	41.87	20,400				

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 (2.1 km) upstream from State Highway 60, 2.0 miles (3.2 km) southwest of Wadsworth, and 13.1 miles (21.1 km) upstream from mouth (Big Boggy Cut).

DRAINAGE AREA.--10.3 mi² (26.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 13.36 ft (4.07 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 414 ft³/s (11.7 m³/s) Sept. 6, gage height, 11.90 ft (3.63 m); no flow Oct. 18-21.
Period of record: Maximum discharge, 436 ft³/s (12.3 m³/s) Oct. 11, 1970, gage height, 10.18 ft (3.10 m); maximum gage height, 11.90 ft (3.63 m) Sept. 6, 1973; no flow at times.
Maximum stages since 1901, 11.4 ft (3.5 m) May 31, 1970, and 10.9 ft (3.3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	2.5	1.9	.41	.96	5.7	.43	3.7	2.2	4.5	8.3	19
2	26	2.1	1.4	.38	.73	4.8	5.1	2.3	1.8	4.0	22	12
3	14	1.9	.97	.44	.69	4.0	2.8	1.3	2.7	3.4	22	9.0
4	9.3	1.8	.71	.49	.67	3.4	.42	.64	3.6	3.2	20	12
5	6.8	2.6	.55	.58	.61	3.0	.11	.49	3.5	2.8	17	170
6	5.2	3.9	.44	.96	.57	2.8	7.1	.33	2.8	2.8	14	391
7	3.9	3.8	.41	2.3	.44	3.1	35	.88	2.9	4.0	10	323
8	3.0	3.1	.38	3.6	.81	3.4	19	4.1	2.2	4.7	7.2	213
9	2.4	2.7	.32	3.5	11	3.3	12	3.3	2.4	4.0	5.8	117
10	1.7	2.1	.33	3.3	22	2.9	8.7	1.4	3.1	3.1	5.7	214
11	1.2	1.5	.29	4.9	16	2.4	6.2	.45	2.4	3.5	8.3	353
12	.72	1.1	.30	5.8	12	2.1	4.3	180	53	3.4	9.7	315
13	.40	1.4	.36	4.8	8.7	1.8	2.7	212	204	3.5	14	213
14	.33	1.6	.38	3.9	6.9	1.5	1.6	83	271	4.0	30	113
15	.08	3.4	.39	3.2	5.6	1.2	81	35	161	4.8	71	66
16	.02	3.8	.40	2.7	4.5	.92	124	16	89	5.8	71	42
17	.02	3.4	.38	2.3	15	.69	233	9.1	48	7.2	47	31
18	0	101	.30	1.9	48	.50	193	5.1	21	7.8	34	21
19	0	77	.29	1.7	27	.44	80	2.6	10	6.3	24	13
20	0	29	2.4	1.5	17	.38	41	1.1	9.5	5.3	17	8.8
21	0	17	10	1.3	14	.34	21	1.2	10	5.4	12	6.2
22	25	11	7.7	1.1	24	.29	14	2.9	11	5.0	8.3	4.4
23	49	9.1	5.5	.91	52	.37	9.6	3.5	9.5	4.4	6.0	3.4
24	24	7.3	4.0	.77	26	.40	6.9	1.5	7.9	4.7	4.2	2.9
25	14	6.5	2.8	1.2	17	.48	5.6	.33	5.8	5.6	2.9	3.0
26	9.9	5.6	2.0	1.4	12	.88	20	.73	5.8	5.4	2.1	3.4
27	7.4	4.7	1.3	1.8	8.9	1.0	15	.83	6.0	5.7	1.8	4.0
28	5.6	3.9	.84	2.1	7.0	.67	11	1.6	6.8	6.1	2.7	4.5
29	4.5	3.1	.58	1.8	------	.46	8.1	1.5	6.3	5.9	42	4.2
30	3.8	2.5	.51	1.5	------	.41	5.5	.98	4.8	5.8	37	3.6
31	3.1	------	.49	1.2	------	.31	------	1.5	------	6.0	30	------
TOTAL	276.37	320.4	48.62	63.74	360.08	53.94	974.16	579.36	970.0	148.1	607.0	2,695.4
MEAN	8.92	10.7	1.57	2.06	12.9	1.74	32.5	18.7	32.3	4.78	19.6	89.8
MAX	55	101	10	5.8	52	5.7	233	212	271	7.8	71	391
MIN	0	1.1	.29	.38	.44	.29	.11	.33	1.8	2.8	1.8	2.9
CFSM	.87	1.04	.15	.20	1.25	.17	3.16	1.82	3.14	.46	1.90	8.72
IN.	1.00	1.16	.18	.23	1.30	.19	3.52	2.09	3.50	.53	2.19	9.73
AC-FT	548	636	96	126	714	107	1,930	1,150	1,920	294	1,200	5,350

CAL YR 1972 TOTAL 4,215.25 MEAN 11.5 MAX 306 MIN 0 CFSM 1.12 IN 15.22 AC-FT 8,360
WTR YR 1973 TOTAL 7,097.17 MEAN 19.4 MAX 391 MIN 0 CFSM 1.88 IN 25.63 AC-FT 14,080

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-17	1400	10.20	302	9- 6	1100	11.90	414
5-12	1800	10.04	279	9-11	0700	11.58	357
6-13	2200	9.52	318				

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 (6.4 km) upstream from dam on Colorado River, 7.3 miles (11.7 km) north of Vincent, 12.5 miles (20.1 km) west of Ira, and at mile 841.0 (1,353.2 km).

DRAINAGE AREA.--3,524 mi² (9,127 km²), of which 2,590 mi² (6,708 km²) is probably noncontributing. Drainage area includes 426 mi² (1,103 km²) above Bull Creek diversion dam, of which 32 mi² (82.9 km²) 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 (6.4 km) downstream at same datum.

EXTREMES.--Current year: Maximum contents, 89,700 acre-ft (111 hm³) Oct. 1, elevation, 2,239.30 ft (682.54 m); minimum, 61,210 acre-ft (75.5 hm³) Sept. 30, elevation, 2,232.08 ft (680.34 m).
Period of record: Maximum contents, 218,600 acre-ft (270 hm³) Sept. 8, 1962, elevation, 2,259.85 ft (688.80 m); minimum since first appreciable storage, 4,960 acre-ft (6.12 hm³) May 28, 1971, elevation, 2,206.43 ft (672.52 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam, 14,500 ft (4,420 m) 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 (64,900-meter) 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 (11.6- by 16.2-meter) structure at top and decreasing to two 14- by 14-foot (4.3- by 4.3-meter) uncontrolled openings designed to discharge a total of 10,000 ft³/s (283 m³/s) at a head of 17 ft (5.2 m). Two emergency spillways, one 500-foot (152-meter) wide located at left end of dam and one 1,600-foot (488-meter) wide located at right end of dam, are designed to discharge 161,000 ft³/s (4,560 m³/s) at elevation 2,275.0 ft (693.4 m), 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)

2,232.0	60,930	2,238.0	84,070
2,235.0	71,950	2,240.0	92,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89,520	88,280	85,230	82,320	81,650	82,280	84,760	81,860	77,270	72,580	69,370	64,410
2	89,340	88,240	85,140	82,240	81,570	82,190	84,670	81,650	77,150	72,420	69,290	64,270
3	89,210	88,110	85,060	82,190	81,480	82,110	84,460	81,480	76,990	72,260	69,140	64,160
4	89,120	88,030	84,930	82,150	81,400	82,070	84,280	81,360	76,790	72,030	68,950	64,020
5	89,030	87,980	84,800	82,110	81,360	81,980	84,200	81,280	76,590	71,870	68,760	63,770
6	88,770	87,900	84,670	82,110	81,280	81,900	84,110	81,030	76,470	71,720	68,570	63,910
7	88,640	87,770	84,540	82,070	81,530	81,780	83,990	80,900	76,300	71,490	68,380	63,880
8	88,460	87,680	84,500	81,980	81,440	81,690	83,740	80,780	76,180	71,300	68,260	63,770
9	88,370	87,420	84,410	81,900	81,400	82,030	83,650	80,610	75,940	71,040	68,110	63,660
10	88,200	87,340	84,280	81,860	81,360	84,540	83,490	80,440	75,780	71,000	68,000	63,730
11	88,030	87,250	84,200	81,860	81,360	85,790	83,400	80,440	75,630	70,890	67,780	63,660
12	87,900	87,080	84,110	81,780	81,280	86,090	83,320	80,150	75,470	70,730	67,640	63,560
13	87,720	86,910	84,030	81,650	81,190	86,000	83,240	79,980	75,350	70,620	67,530	63,450
14	87,640	86,820	83,900	81,610	81,110	86,000	83,240	79,980	75,200	70,660	67,420	63,310
15	87,470	86,690	83,780	81,610	80,980	85,960	83,030	79,860	75,040	70,540	67,230	63,200
16	87,340	86,650	83,650	81,480	80,940	85,880	82,900	79,780	75,160	70,430	67,050	63,060
17	87,210	86,480	83,570	81,440	80,980	85,790	82,820	79,660	75,120	70,240	66,870	62,850
18	86,990	86,390	83,530	81,360	80,940	85,700	82,740	79,540	74,920	70,130	66,680	62,740
19	87,250	86,310	83,440	81,320	80,820	85,580	82,570	79,330	74,690	70,010	66,540	62,600
20	87,680	86,180	83,320	81,320	80,730	85,530	82,440	79,330	74,450	69,860	66,460	62,490
21	88,330	86,090	83,240	81,440	80,820	85,400	82,360	79,210	74,300	69,710	66,240	62,350
22	88,460	86,000	83,150	81,610	81,190	85,320	82,240	79,090	74,100	69,560	66,060	62,280
23	88,410	85,960	83,030	81,650	81,820	85,230	82,190	78,970	73,900	69,370	65,870	62,170
24	88,240	85,880	82,940	81,650	82,280	85,140	82,150	78,810	73,710	69,210	65,730	62,030
25	88,110	85,750	82,900	81,820	82,440	84,970	82,570	78,610	73,510	69,060	65,510	61,920
26	88,460	85,660	82,820	82,070	82,400	84,930	82,400	78,360	73,360	68,910	65,290	61,780
27	88,590	85,580	82,740	82,070	82,400	84,720	82,280	78,120	73,240	68,760	65,100	61,600
28	88,550	85,490	82,650	81,980	82,360	84,590	82,150	77,880	73,040	69,100	64,920	61,430
29	88,500	85,400	82,570	81,940	------	84,930	82,070	77,720	72,970	69,180	64,740	61,360
30	88,500	85,320	82,490	81,860	------	84,800	82,030	77,560	72,810	69,440	64,590	61,210
31	88,410	------	82,400	81,730	------	84,800	------	77,480	------	69,480	64,480	------
(†)	2,239.01	2,238.29	2,237.60	2,237.44	2,237.59	2,238.17	2,237.51	2,236.40	2,235.22	2,234.35	2,233.00	2,232.08
(*)	-1,290	-3,090	-2,920	-670	+630	+2,440	-2,770	-4,550	-4,670	-3,330	-5,000	-3,270
(††)	2,130	2,050	2,050	1,900	1,930	2,050	2,090	2,700	2,840	2,880	2,310	2,230
MAX	89,520	88,280	85,230	82,320	82,440	86,090	84,760	81,860	77,270	72,270	69,370	64,410
MIN	86,990	85,320	82,400	81,320	80,730	81,690	82,030	77,480	72,810	68,760	64,480	61,210

CAL YR 1972..... * +18,130 †† 23,070 MAX 92,490 MIN 47,860
WTR YR 1973..... * -28,490 †† 27,160 MAX 89,520 MIN 61,210

† 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 (162 m) downstream from bridge on State Highway 350, 3.8 miles (6.1 km) downstream from Bluff Creek, 4 miles (6.4 km) upstream from Willow Creek, 4.5 miles (7.2 km) southwest of Ira, and at mile 826.3 (1,329.5 km).

DRAINAGE AREA.--3,617 mi² (9,368 km²), of which 2,590 mi² (6,710 km²) 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 (650.49 m) above mean sea level. Oct. 1-30, 1947, nonrecording gage at site 75 ft (23 m) upstream at same datum.

AVERAGE DISCHARGE.--5 years (1947-52) prior to completion of Colorado River Dam, 50.5 ft³/s (1.43 m³), 36,590 acre-ft/yr (45.1 hm³/yr); 15 years (1958-73) regulated, 12.0 ft³/s (0.340 m³/s), 8,690 acre-ft/yr (10.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 ft³/s (28.9 m³/s) June 16, gage height, 6.55 ft (2.00 m); no flow at times.
Period of record: Maximum discharge, 20,500 ft³/s (581 m³/s) July 6, 1948, gage height, 21.35 ft (6.51 m), from rating curve extended above 9,600 ft³/s (272 m³/s) by conveyance-slope method; no flow at times.
Flood of June 16, 1913, gage height, 32 ft (9.8 m), was the greatest since at least that date, from information by local resident. Flood in May 1947 reached a stage of 25.1 ft (7.7 m), from floodmark at site of former bridge 269 ft (82 m) upstream from gage.

REMARKS.--Records good. Since July 1952 flow largely regulated by Lake J. B. Thomas (station 08118000) 11 miles (17.7 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	29	1.2	.83	1.8	3.1	4.7	.80	0	.04	.35	10
2	.08	14	1.2	.83	1.4	2.4	3.1	.62	0	.01	.21	.97
3	.08	6.7	1.0	1.3	1.2	2.2	2.1	.33	0	0	.15	.31
4	.08	3.7	.90	1.0	1.1	2.1	1.6	.28	0	0	.11	.15
5	.08	2.2	.93	.60	1.1	1.8	1.4	.30	0	0	.07	.07
6	.07	1.7	.50	.50	1.0	1.9	1.3	.33	0	0	.03	6.3
7	.07	1.1	.48	.40	3.6	1.6	1.4	.26	0	0	.01	5.6
8	.07	1.0	.74	.30	5.2	1.6	1.0	.25	0	0	.05	1.8
9	.07	.81	.80	.20	5.1	4.4	.99	.20	0	0	.11	.71
10	.07	1.0	.50	.20	5.0	253	.86	.15	0	20	.08	3.6
11	.06	.87	.50	.20	3.9	50	.87	.12	.07	54	.01	2.2
12	.07	.73	.87	.50	3.1	19	.98	.16	0	31	0	.55
13	.07	.59	1.1	.90	2.7	13	1.0	.10	0	18	.07	1.2
14	.06	.57	1.2	1.0	2.1	9.6	1.0	.59	0	5.0	.10	.46
15	.04	.62	1.2	1.5	1.8	8.1	.94	.56	2.1	8.0	.12	.26
16	.05	.69	1.2	1.5	1.6	6.6	1.1	.58	295	1.8	.14	.20
17	.05	.74	1.1	1.2	2.1	5.4	.84	.34	23	.48	.09	.15
18	.04	.87	1.2	1.5	6.0	4.4	.82	.22	6.8	.40	0	.12
19	4.8	.88	1.2	1.3	6.0	4.1	1.3	.17	3.6	.21	0	.10
20	9.6	.81	1.2	1.2	5.2	3.7	1.1	.11	2.1	4.2	.07	.08
21	34	.88	1.0	3.6	4.4	3.4	.78	.09	1.4	2.5	.11	.06
22	24	.75	1.0	3.6	19	3.0	3.3	.13	.97	.51	.09	.08
23	6.1	.74	.99	4.0	28	3.0	5.9	.12	.64	.15	.05	.08
24	3.2	1.3	.88	3.9	18	3.2	5.3	.16	.43	.04	0	.04
25	3.2	1.4	.88	5.5	11	3.4	3.0	.09	.30	.02	0	.03
26	34	1.3	.88	5.1	5.9	3.4	10	.06	.23	.01	0	.02
27	21	1.2	.88	7.6	4.2	3.0	7.0	0	.18	.47	0	0
28	10	.84	.88	4.1	3.6	1.4	4.0	0	.11	22	0	0
29	5.7	.96	.93	3.0	------	1.5	2.0	0	.06	11	0	0
30	4.0	1.2	.75	2.3	------	25	1.0	0	.06	1.6	0	0
31	41	------	.81	1.7	------	10	------	0	------	.98	13	------
TOTAL	201.79	79.15	28.90	61.36	155.1	458.3	70.68	7.12	337.05	182.42	15.02	35.14
MEAN	6.51	2.64	.93	1.98	5.54	14.8	2.36	.23	11.2	5.88	.48	1.17
MAX	41	29	1.2	7.6	28	253	10	.80	295	54	13	10
MIN	.04	.57	.48	.20	1.0	1.4	.78	0	0	0	0	0
AC-FT	400	157	57	122	308	909	140	14	669	362	30	70

CAL YR 1972 TOTAL 6,700.49 MEAN 18.3 MAX 2,170 MIN 0 AC-FT 13,290
WTR YR 1973 TOTAL 1,632.03 MEAN 4.47 MAX 295 MIN 0 AC-FT 3,240

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 (2.4 km) northwest of Dunn, 2.7 miles (4.3 km) upstream from Sulphur Draw, and 8.6 miles (13.8 km) upstream from mouth.

DRAINAGE AREA.--198 mi² (513 km²), of which 10 mi² (25.9 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,172.17 ft (662.08 m) above mean sea level. Prior to Apr. 21, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 13.1 ft³/s (0.371 m³/s), 9,490 acre-ft/yr (11.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,200 ft³/s (147 m³/s) June 16, gage height, 24.40 ft (7.44 m), from floodmarks; no flow for many days.
Period of record: Maximum discharge, 20,700 ft³/s (586 m³/s) Aug. 14, 1972, gage height, 31.28 ft (9.53 m) from floodmarks, from rating curve extended above 12,000 ft³/s (340 m³/s) by velocity-area study; no flow for many days each year.
Maximum discharge since at least 1881, 36,400 ft³/s (1,030 m³/s) June 19, 1939, by slope-area measurement at site 8.0 miles (12.9 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	26	3.0	2.8	2.8	3.7	4.7	3.1	3.1	2.2	.38	3.3
2	2.4	11	2.9	3.1	2.6	3.5	4.5	3.0	7.7	2.6	.34	1.3
3	2.4	5.5	2.8	3.5	2.8	3.5	3.9	3.6	5.2	2.1	.32	.63
4	2.3	4.3	2.7	3.6	2.8	3.9	3.6	4.4	2.6	1.8	.32	.48
5	2.2	3.9	2.6	3.3	2.9	3.6	3.6	4.3	2.0	1.7	.33	.41
6	1.4	3.7	2.6	3.0	3.0	3.8	4.0	5.5	2.3	1.8	.33	20
7	1.9	3.4	2.9	2.5	3.8	3.9	4.1	5.6	1.9	1.8	.32	27
8	3.0	3.6	3.0	2.0	16	4.1	3.8	6.0	1.7	1.6	.29	3.7
9	3.1	3.6	2.8	1.5	4.7	4.5	3.4	5.6	1.2	2.1	.29	2.4
10	2.9	3.4	2.7	1.0	3.6	419	3.5	5.0	1.0	3.5	.27	2.4
11	2.9	3.6	2.5	1.0	3.4	70	3.7	4.3	1.5	4.1	.26	1.8
12	3.0	3.6	2.9	1.0	3.2	25	3.9	3.9	1.4	5.4	.28	1.7
13	2.9	3.5	2.6	2.0	3.4	10	3.8	3.7	2.4	3.1	.34	5.6
14	2.7	3.5	2.5	5.1	2.9	6.8	4.3	5.0	1.5	24	.30	1.3
15	2.5	3.4	2.6	4.3	2.9	5.1	4.8	8.8	24	6.0	.21	1.0
16	2.7	3.4	2.1	3.3	2.8	4.1	4.6	4.3	1,760	2.9	.20	1.8
17	2.8	3.6	2.1	3.0	3.3	3.6	4.2	4.1	66	2.2	.20	1.6
18	2.9	3.4	2.6	2.9	5.0	3.7	4.4	3.6	17	2.0	.19	1.5
19	20	3.4	2.6	2.6	3.7	3.8	5.4	3.2	7.6	1.9	.19	1.6
20	24	3.2	2.5	3.0	3.1	3.6	5.0	3.1	4.9	2.4	.19	1.6
21	40	3.2	2.4	3.3	4.3	3.6	4.8	3.2	4.2	2.4	.17	1.6
22	21	3.4	2.3	4.6	7.2	4.1	6.5	4.4	3.8	1.9	.16	2.8
23	4.8	3.3	2.4	3.0	18	4.0	7.3	10	3.2	1.7	.15	2.3
24	3.8	3.5	2.6	2.5	13	4.1	5.2	6.1	2.8	1.6	.15	1.8
25	5.2	3.3	2.5	3.5	10	4.1	11	3.6	2.9	1.4	.13	2.1
26	18	2.8	2.5	8.8	6.8	4.1	30	2.5	2.5	1.2	.13	2.6
27	5.9	3.1	2.4	3.9	4.7	4.0	3.9	1.5	2.2	1.3	.12	5.3
28	4.3	2.8	2.5	2.9	3.9	3.4	2.9	3.0	2.0	1.2	.11	1.9
29	3.9	3.3	3.0	2.7	------	3.5	3.2	3.0	2.0	1.8	.11	1.5
30	3.8	3.6	3.1	2.8	------	6.9	3.0	1.7	2.3	.60	.11	1.4
31	158	------	2.8	2.7	------	3.8	------	1.8	------	.48	.29	------
TOTAL	359.2	135.3	81.5	95.2	146.6	634.8	161.0	130.9	1,942.9	90.78	7.18	104.42
MEAN	11.6	4.51	2.63	3.07	5.24	20.5	5.37	4.22	64.8	2.93	.23	3.48
MAX	158	26	3.1	8.8	18	419	30	10	1,760	24	.38	27
MIN	1.4	2.8	2.1	1.0	2.6	3.4	2.9	1.5	1.0	.48	.11	.41
AC-FT	712	268	162	189	291	1,260	319	260	3,850	180	14	207

CAL YR 1972 TOTAL 12,919.90 MEAN 35.3 MAX 6,990 MIN 0 AC-FT 25,630
WTR YR 1973 TOTAL 3,889.78 MEAN 10.7 MAX 1,760 MIN .11 AC-FT 7,720

PEAK DISCHARGE (BASE, 850 FT³/S).--Mar. 10 (0845) 920 ft³/s (10.14 ft); June 16 (0630) 5,200 ft³/s (24.40 ft, 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 (6.4 km) downstream from Deep Creek, 4.8 miles (7.7 km) east of Cuthbert, 8.0 miles (12.9 km) northwest of Colorado City, and at mile 810.6 (1,304.3 km).

DRAINAGE AREA.--4,028 mi² (10,433 km²), of which 2,600 mi² (6,730 km²) is probably noncontributing.

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,073.49 ft (632.00 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 35.3 ft³/s (1.00 m³/s), 25,570 acre-ft/yr (31.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,020 ft³/s (85.5 m³/s) June 16, gage height, 15.03 ft (4.58 m); no flow at times.
Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Aug. 14, 1972, gage height, 25.99 ft (7.92 m); no flow at times.
Floods in 1941 and 1946 reached a stage of 36.1 ft (11.0 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	213	7.0	7.9	9.1	13	21	9.6	6.9	2.9	8.1	24
2	6.7	44	5.1	7.8	8.1	12	18	8.5	1.6	2.9	3.6	15
3	6.1	24	5.1	9.4	7.5	11	15	6.9	4.7	2.7	2.3	5.5
4	5.8	16	5.8	9.8	7.4	10	13	6.6	4.3	2.9	1.8	2.4
5	5.4	12	6.7	9.8	7.4	9.8	13	6.5	2.6	2.3	1.2	.79
6	4.8	10	7.0	9.8	7.4	10	13	6.6	2.9	2.5	1.0	2.4
7	3.6	9.8	7.7	11	9.0	9.6	13	6.4	1.9	2.8	.77	47
8	3.2	9.3	8.4	11	18	9.1	13	5.6	1.2	2.3	.70	18
9	3.9	8.8	8.4	9.6	19	9.2	13	4.8	1.1	2.1	.66	8.6
10	4.2	8.7	8.8	9.2	14	1,030	12	3.6	.71	5.6	.48	35
11	4.2	7.7	8.0	9.0	13	471	11	3.0	.52	70	.49	34
12	4.2	7.9	8.4	8.8	12	78	12	3.6	.43	26	.45	16
13	3.9	8.9	8.4	8.9	11	44	12	3.3	.48	10	.33	36
14	3.9	8.2	8.4	10	11	33	12	4.8	.74	6.3	.25	13
15	3.4	8.2	8.0	12	9.7	27	12	7.5	.86	37	.20	5.9
16	2.9	8.5	8.8	9.7	9.2	23	11	10	1,500	16	.36	3.2
17	2.9	8.2	8.0	9.0	9.5	20	12	6.8	366	7.1	.35	2.5
18	2.9	8.6	7.4	9.0	11	18	12	5.6	37	4.1	.24	2.6
19	4.5	8.8	7.0	8.2	12	18	12	4.8	19	3.2	.14	2.2
20	34	8.8	7.0	7.6	10	16	12	4.0	13	12	.11	1.9
21	60	8.8	7.0	9.1	11	15	11	5.0	10	81	.05	1.7
22	77	8.8	7.7	10	23	14	10	3.6	8.6	10	.01	1.7
23	37	8.8	8.0	12	62	14	23	4.0	7.4	4.9	0	2.5
24	15	9.2	7.7	9.8	54	14	20	9.0	6.1	2.7	0	3.5
25	11	9.4	8.0	12	31	14	12	6.1	5.4	1.7	0	2.0
26	17	9.4	7.7	18	24	13	36	3.2	5.1	1.4	0	2.2
27	64	8.8	7.4	16	18	13	24	1.6	4.8	3.0	0	2.8
28	28	8.4	7.7	14	14	13	14	.94	4.0	4.8	0	5.6
29	16	9.1	7.8	11	------	12	12	.56	3.3	49	0	2.6
30	12	8.0	8.8	9.9	------	13	10	.69	3.8	19	0	1.5
31	236	------	8.2	9.6	------	38	------	3.5	------	8.8	.68	------
TOTAL	690.5	528.1	235.4	318.9	452.3	2,044.7	434	156.69	2,024.44	407.0	24.27	302.09
MEAN	22.3	17.6	7.59	10.3	16.2	66.0	14.5	5.05	67.5	13.1	.78	10.1
MAX	236	213	8.8	18	62	1,030	36	10	1,500	81	8.1	47
MIN	2.9	7.7	5.1	7.6	7.4	9.1	10	.56	.43	1.4	0	.79
AC-FT	1,370	1,050	467	633	897	4,060	861	311	4,020	807	48	599

CAL YR 1972 TOTAL 20,309.92 MEAN 55.5 MAX 7,960 MIN 0 AC-FT 40,280
WTR YR 1973 TOTAL 7,618.39 MEAN 20.9 MAX 1,500 MIN 0 AC-FT 15,110

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 (1,072 m) upstream from bridge on State Highway 377, 4,100 ft (1,250 m) upstream from the Texas and Pacific Railroad Co. bridge, 1.3 miles (2.1 km) downstream from bridge on Interstate Highway 20 and U.S. Highway 80, 1.6 miles (2.6 km) upstream from Lone Wolf Creek, and at mile 796.3 (1,281.2 km).

DRAINAGE AREA.--4,082 mi² (10,572 km²), approximately, of which 2,600 mi² (6,730 km²) 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 (618.79 m) above mean sea level. Nov. 28, 1923, to Aug. 31, 1925, nonrecording gage at site 1.4 miles (2.3 km) downstream at different datum. May 9 to Aug. 5, 1946, nonrecording gage at site 185 ft (56 m) upstream at present datum.

AVERAGE DISCHARGE.--6 years (1946-52) prior to completion of Lake J. B. Thomas, 85.4 ft³/s (2.42 m³/s), 61,870 acre-ft/yr (76.3 hm³/yr); 21 years (1952-73) after completion of Lake J. B. Thomas, 40.3 ft³/s (1.14 m³/s), 29,200 acre-ft/yr (36.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,280 ft³/s (64.6 m³/s) June 17, gage height, 12.99 ft (3.96 m); minimum, 0.01 ft³/s (0.28 dm³/s) May 26, 27, June 4, 7-9, 12, 15.
Period of record: Maximum discharge, 24,900 ft³/s (705 m³/s) July 6, 1948, gage height, 22.37 ft (6.82 m), from floodmark; maximum gage height, 24.89 ft (7.59 m) Aug. 14, 1972; no flow at times.
Maximum stage since at least 1910, 35.9 ft (10.9 m) June 20, 1939, present site and datum, based on floodmarks 1,000 ft (305 m) upstream and 3,740 ft (1,140 m) downstream from gage; discharge, 66,000 ft³/s (1,870 m³/s) by slope-area measurement of peak flow at site 2.5 miles (4.0 km) 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 (4.8 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	339	.57	1.3	11	19	27	10	.54	.08	12	2.4
2	.00	93	3.1	3.6	1.2	17	19	9.0	.10	.06	10	.26
3	.00	62	11	4.6	1.1	16	17	5.8	.04	.16	6.8	.50
4	.00	51	11	1.4	.73	15	14	.43	.03	.58	5.3	.36
5	.72	31	11	3.7	1.0	14	12	.38	.02	.38	4.4	.30
6	.39	23	9.6	5.6	.79	16	12	.41	.02	.48	3.9	15
7	.29	16	7.2	6.6	1.8	8.4	12	.20	.02	.29	3.4	2.8
8	.29	4.3	1.8	8.3	1.7	1.3	12	.12	.02	.32	3.1	.40
9	.29	4.3	1.4	3.8	9.2	4.0	11	.15	.02	.27	.85	.30
10	.25	13	1.9	5.2	20	1,150	10	.10	.02	.44	.74	33
11	.19	13	7.2	5.7	17	874	10	.09	.03	21	.67	80
12	.28	13	4.2	5.0	17	142	11	.15	.02	2.9	.42	30
13	.39	11	4.5	1.9	15	83	11	.09	.02	.89	.27	99
14	.29	1.1	1.4	1.6	14	45	11	.66	.02	.71	.25	39
15	.29	.71	3.4	1.2	8.5	35	18	.30	.03	.45	.48	13
16	.29	.97	3.2	1.3	1.4	30	10	.16	533	.13	.27	7.6
17	.29	.70	1.7	1.3	2.0	24	14	.06	1,210	.08	.12	5.7
18	.29	.67	.96	1.0	1.5	21	14	.05	91	.14	.13	4.7
19	19	.57	1.5	2.0	1.2	21	12	.04	42	.05	.21	4.6
20	4.7	.57	.87	1.7	1.5	19	11	.11	24	.04	.26	.80
21	5.2	.98	2.1	2.4	2.1	18	11	11	17	14	.17	.22
22	2.2	1.3	1.7	1.5	26	17	11	2.9	9.7	2.9	.19	.69
23	109	.84	1.4	9.1	56	15	12	.19	.97	4.5	.11	.34
24	92	.69	1.5	13	82	15	13	.07	.62	6.7	.34	.17
25	22	.59	1.2	17	53	17	14	.04	.51	.47	.27	.23
26	32	.50	1.4	17	28	15	15	.03	.50	25	.25	.14
27	78	.52	2.5	23	3.9	15	15	.03	.56	1.1	.42	.30
28	65	.79	1.1	18	1.9	15	16	.02	.42	15	.34	.38
29	33	.62	.98	17	------	15	17	.02	.37	58	.91	.09
30	56	.80	1.0	14	------	14	14	.02	.22	105	.49	.26
31	119	------	2.6	13	------	28	------	.05	------	23	1.3	------
TOTAL	644.84	686.52	104.98	211.8	380.52	2,738.7	406	42.67	1,931.82	285.12	58.36	342.54
MEAN	20.8	22.9	3.39	6.83	13.6	88.3	13.5	1.38	64.4	9.20	1.88	11.4
MAX	119	339	11	23	82	1,150	27	11	1,210	105	12	99
MIN	.19	.50	.57	1.0	.73	1.3	10	.02	.02	.04	.11	.09
AC-FT	1,280	1,360	208	420	755	5,430	805	85	3,830	566	116	679
(†)	942	400	397	348	474	80	.6	499	329	912	122	479

CAL YR 1972 TOTAL 19,878.11 MEAN 54.3 MAX 5,390 MIN 0 AC-FT 39,430 † 5,070
WTR YR 1973 TOTAL 7,833.87 MEAN 21.5 MAX 1,210 MIN .02 AC-FT 15,540 † 4,980

† 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 (2.7 km) upstream from Colorado City Dam on Morgan Creek, 2.2 miles (3.5 km) downstream from the Texas and Pacific Railway Co. bridge, 2.5 miles (4.0 km) upstream from mouth, and 4.0 miles (6.4 km) southwest of Colorado City.

DRAINAGE AREA.--322 mi² (834 km²), of which 32 mi² (82.9 km²) 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 (1.1 km) downstream at same datum.

EXTREMES.--Current year: Maximum contents, 22,600 acre-ft (27.9 hm³) Mar. 13, elevation, 2,063.83 ft (629.06 m); minimum, 16,250 acre-ft (20.0 hm³) Oct. 19, elevation, 2,058.41 ft (627.40 m).
Period of record: Maximum contents, 40,280 acre-ft (49.7 hm³) Sept. 7, 1962, elevation, 2,075.10 ft (632.49 m); minimum since first appreciable storage, 5,800 acre-ft (7.15 hm³) Apr. 11-13, 1950, elevation, 2,045.72 ft (623.54 m).

REMARKS.--Lake is formed by a rolled-fill earthen dam 4,800 ft (1,460 m) 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. did not pump water from Champion Creek Reservoir (station 08123600) into the lake during year. Service spillway is a double-rectangular drop inlet, located 100 ft (30 m) upstream from dam, having two uncontrolled openings 10 by 12 ft (3 by 4 m) designed to discharge a total of 5,000 ft³/s (142 m³/s). An emergency spillway 1,200 ft (366 m) wide and designed to discharge 150,000 ft³/s (4,250 m³/s) directly into the Colorado River is located 600 ft (183 m) 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)

2,058.0	15,820
2,061.0	19,120
2,064.0	22,820

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,740	20,070	19,820	19,230	18,990	19,260	22,010	21,630	20,670	19,200	19,130	17,820
2	16,680	20,300	19,790	19,250	18,980	19,250	21,980	21,540	20,620	19,200	19,100	17,800
3	16,650	20,340	19,770	19,240	18,970	19,230	21,930	21,510	20,580	19,090	19,060	17,730
4	16,630	20,360	19,760	19,230	18,960	19,230	21,880	21,480	20,550	19,050	19,020	17,700
5	16,650	20,340	19,700	19,210	18,950	19,190	21,840	21,450	20,490	19,000	18,970	17,630
6	16,610	20,320	19,670	19,210	18,950	19,180	21,820	21,430	20,450	18,950	18,900	17,890
7	16,580	20,340	19,660	19,200	18,980	19,160	21,820	21,380	20,390	18,860	18,830	18,000
8	16,550	20,280	19,640	19,180	18,970	19,130	21,740	21,340	20,330	18,810	18,770	18,060
9	16,520	20,280	19,630	19,170	18,960	19,190	21,700	21,310	20,308	18,750	18,710	18,060
10	16,480	20,260	19,600	19,190	18,950	20,860	21,680	21,250	20,270	18,740	18,680	18,090
11	16,460	20,240	19,590	19,180	18,950	22,390	21,660	21,210	20,240	18,730	18,650	18,080
12	16,440	20,220	19,570	19,180	18,920	22,490	21,650	21,180	20,187	18,700	18,600	18,090
13	16,420	20,160	19,550	19,170	18,890	22,510	21,630	21,140	20,150	18,670	18,540	18,120
14	16,380	20,150	19,550	19,160	18,890	22,510	21,630	21,160	20,120	18,620	18,510	18,090
15	16,350	20,130	19,520	19,160	18,880	22,480	21,590	21,140	20,060	18,590	18,470	18,060
16	16,330	20,100	19,520	19,170	18,850	22,450	21,550	21,120	20,020	18,540	18,430	18,020
17	16,310	20,090	19,500	19,140	18,890	22,430	21,610	21,090	19,970	18,520	18,370	17,960
18	16,260	20,070	19,480	19,120	18,880	22,400	21,600	21,070	19,850	18,470	18,330	17,930
19	16,590	20,040	19,480	19,120	18,850	22,360	21,540	20,990	19,790	18,430	18,280	17,910
20	16,800	20,010	19,460	19,140	18,850	22,350	21,490	20,970	19,760	18,380	18,220	17,880
21	17,150	19,980	19,450	19,120	18,890	22,330	21,460	20,970	19,700	18,340	18,180	17,830
22	17,520	19,950	19,420	19,090	18,970	22,300	21,550	20,990	19,610	18,300	18,120	17,810
23	17,680	19,940	19,380	19,070	19,160	22,300	21,650	20,970	19,600	18,240	18,080	17,800
24	17,710	19,940	19,390	19,070	19,240	22,260	21,650	20,920	19,540	18,180	18,010	17,750
25	17,720	19,900	19,350	19,130	19,270	22,210	21,750	20,870	19,510	18,150	17,920	17,710
26	17,810	19,890	19,350	19,130	19,280	22,170	21,730	20,800	19,460	18,340	17,860	17,660
27	18,030	19,850	19,340	19,090	19,280	22,130	21,730	20,730	19,400	18,300	17,820	17,610
28	18,130	19,840	19,320	19,060	19,280	22,120	21,700	20,660	19,354	18,390	17,750	17,580
29	18,180	19,840	19,280	19,060	------	22,110	21,680	20,620	19,310	18,920	17,700	17,550
30	18,290	19,830	19,270	19,050	------	22,100	21,660	20,580	19,270	19,190	17,640	17,510
31	18,650	------	19,250	19,030	------	22,030	------	20,670	------	19,170	17,630	------
(†)	2,060.59	2,061.60	2,061.11	2,060.92	2,061.14	2,063.39	2,063.10	2,062.30	2,061.13	2,061.04	2,059.69	2,059.58
(*)	+1,860	+1,180	-580	-220	+250	+2,750	-370	-990	-1,400	-100	-1,540	-120
(††)	67	76	76	63	54	64	87	108	163	157	169	99
MAX	18,650	20,360	19,820	19,250	19,280	22,510	22,010	21,630	20,670	19,200	19,130	18,120
MIN	16,260	19,830	19,250	19,030	18,850	19,130	21,460	20,580	19,270	18,150	17,630	17,510

CAL YR 1972..... * +3,300 †† 1,180 MAX 20,360 MIN 14,370
WTR YR 1973..... * +720 †† 1,180 MAX 22,510 MIN 16,260

† 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 (1.4 km) upstream from mouth, 4.8 miles (7.7 km) downstream from State Highway 208, and 7.2 miles (11.6 km) south of Colorado City.

DRAINAGE AREA.--203 mi² (526 km²).

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, 11,010 acre-ft (13.6 hm³) Apr. 26, elevation, 2,052.21 ft (625.51 m); minimum, 7,530 acre-ft (9.28 hm³) Oct. 19, elevation, 2,045.74 ft (623.54 m).
Period of record: Maximum contents, 27,910 acre-ft (34.4 hm³) June 19, 1966, elevation, 2,071.98 ft (631.54 m); minimum, 1,600 acre-ft (1.97 hm³) Oct. 1, 1959, elevation, 2,025.90 ft (617.49 m).

REMARKS.--Reservoir is formed by a rolled earthfill dam about 6,800 ft (2,070 m) 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 (15 m) wide and about 1,800 ft (549 m) long cut in the emergency spillway, which is 450 ft (137 m) wide and about 1,800 ft (549 m) long. The service spillway is cut 8 ft (2 m) 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 (1.23 hm³), 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)

2,045.0	7,160	2,050.0	9,740
2,047.0	8,160	2,053.0	11,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,640	7,880	7,840	7,820	7,960	8,100	10,760	10,990	10,870	10,530	10,420	9,990
2	7,640	7,880	7,840	7,840	7,960	8,100	10,760	10,970	10,870	10,520	10,420	9,980
3	7,620	7,880	7,840	7,840	7,960	8,100	10,740	10,950	10,860	10,500	10,400	9,980
4	7,620	7,880	7,840	7,840	7,960	8,100	10,720	10,950	10,860	10,490	10,390	9,960
5	7,620	7,880	7,840	7,840	7,960	8,100	10,720	10,950	10,850	10,490	10,380	9,940
6	7,600	7,880	7,830	7,840	7,970	8,100	10,720	10,950	10,830	10,460	10,370	10,090
7	7,600	7,880	7,830	7,850	8,000	8,100	10,740	10,940	10,830	10,440	10,360	10,450
8	7,590	7,880	7,830	7,840	7,990	8,100	10,710	10,930	10,820	10,430	10,330	10,470
9	7,580	7,880	7,840	7,840	7,980	8,520	10,700	10,920	10,800	10,400	10,320	10,480
10	7,580	7,880	7,830	7,860	7,980	10,690	10,690	10,910	10,800	10,400	10,300	10,500
11	7,580	7,870	7,820	7,860	7,990	10,760	10,690	10,920	10,790	10,420	10,290	10,500
12	7,570	7,880	7,820	7,860	8,000	10,780	10,690	10,890	10,780	10,410	10,280	10,580
13	7,560	7,870	7,820	7,860	8,000	10,790	10,700	10,880	10,780	10,400	10,270	10,690
14	7,560	7,860	7,820	7,870	8,000	10,790	10,710	10,900	10,760	10,390	10,260	10,730
15	7,550	7,860	7,820	7,870	8,000	10,790	10,710	10,890	10,750	10,390	10,240	10,740
16	7,540	7,860	7,820	7,880	7,990	10,790	10,700	10,890	10,740	10,380	10,230	10,730
17	7,540	7,860	7,810	7,890	8,000	10,790	10,730	10,890	10,720	10,360	10,220	10,720
18	7,540	7,860	7,820	7,900	8,010	10,790	10,740	10,870	10,710	10,340	10,210	10,710
19	7,690	7,860	7,820	7,900	8,010	10,790	10,740	10,870	10,690	10,330	10,200	10,700
20	7,720	7,860	7,820	7,900	8,010	10,790	10,740	10,860	10,660	10,320	10,190	10,690
21	7,780	7,860	7,820	7,920	8,030	10,790	10,730	10,860	10,650	10,310	10,180	10,690
22	7,780	7,850	7,830	7,920	8,070	10,780	10,740	10,870	10,640	10,290	10,150	10,680
23	7,780	7,850	7,820	7,920	8,080	10,790	10,810	10,870	10,620	10,280	10,130	10,680
24	7,780	7,850	7,820	7,920	8,080	10,790	10,830	10,870	10,610	10,270	10,110	10,670
25	7,780	7,850	7,820	7,960	8,080	10,780	10,940	10,860	10,600	10,260	10,090	10,660
26	7,810	7,860	7,820	7,960	8,080	10,770	10,990	10,840	10,580	10,290	10,070	10,650
27	7,810	7,850	7,820	7,960	8,080	10,760	10,990	10,820	10,580	10,300	10,050	10,640
28	7,820	7,850	7,820	7,950	8,090	10,760	10,980	10,800	10,560	10,340	10,040	10,620
29	7,820	7,850	7,820	7,950	------	10,760	10,980	10,790	10,550	10,370	10,020	10,610
30	7,840	7,840	7,820	7,960	------	10,760	10,990	10,780	10,550	10,420	10,010	10,600
31	7,840	------	7,820	7,960	------	10,760	------	10,850	------	10,420	10,000	------
(†)	2,046.37	2,046.37	2,046.32	2,046.60	2,046.86	2,051.79	2,052.17	2,051.94	2,051.43	2,051.20	2,050.46	2,051.52
(*)	+180	0	-20	+140	+130	+2,670	+230	-140	-300	-130	-420	+600
(††)	0	0	0	0	0	0	0	0	0	0	0	0
MAX	7,840	7,880	7,840	7,960	8,090	10,790	10,990	10,990	10,870	10,530	10,420	10,740
MIN	7,540	7,840	7,810	7,820	7,960	8,100	10,690	10,780	10,550	10,260	10,000	9,940

CAL YR 1972..... * -4,630 †† 4,570 MAX 12,450 MIN 6,720
WTR YR 1973..... * +2,940 †† 0 MAX 10,990 MIN 7,540

† 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 (4.7 km) upstream from Little Sandy Creek, 7.5 miles (12.1 km) downstream from confluence of Sulphur Springs Creek and Mustang Draw, and at mile 71.1 (114.4 km).

DRAINAGE AREA.--9,409 mi² (24,369 km²), of which 8,915 mi² (23,090 km²) 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 (731.53 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 0.81 ft³/s (22.9 dm³/s), 587 acre-ft/yr (0.724 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12 ft³/s (0.34 m³/s) Mar. 10, gage height, 2.27 ft (0.69 m); no flow for many days.
Period of record: Maximum discharge, 255 ft³/s (7.22 m³/s) Sept. 6, 1962, gage height, 5.95 ft (1.81 m); no flow most of time.
Flood of May 10, 1957, was highest known since 1932, from comparision of floods at a point 4 miles (6.4 km) downstream, from information by City Engineering Department. Flood of June 12, 1938, reached a stage of about 7.6 ft (2.3 m) 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. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1732: 1959(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.6	.75	.26	1.0	2.2	.71	.56	5.0			0
2	1.1	2.3	.75	.28	.97	2.0	.71	.39	3.6			0
3	1.0	2.2	.67	.32	.92	1.9	.59	.32	2.8			0
4	.92	2.1	.63	.30	.92	1.7	.53	.25	2.2			0
5	.79	2.0	.63	.32	.92	1.6	.47	.26	1.6			0
6	.67	2.0	.56	.34	.87	1.6	.44	.42	1.3			0
7	.63	1.9	.53	.42	1.1	1.5	.42	.28	1.1			0
8	.56	1.8	.53	.42	1.5	1.5	.39	.25	.83			0
9	.53	1.8	.50	.42	1.5	1.4	.34	.21	.67			0
10	.44	1.5	.50	.44	1.5	9.6	.32	.17	.53			0
11	.42	1.5	.50	.47	1.5	7.0	.28	.13	.50			0
12	.39	1.5	.53	.50	1.5	4.7	.28	.11	.42			.06
13	.34	1.4	.53	.53	1.3	4.7	.25	.13	.34			.30
14	.30	1.2	.53	.53	1.3	3.4	.23	.17	.30			.27
15	.26	1.1	.53	.53	1.2	2.9	.25	.34	.23			.26
16	.26	1.1	.50	.53	1.2	2.8	.18	.34	.19			.22
17	.23	1.0	.47	.53	1.3	2.6	.17	.30	.14			.19
18	.21	1.1	.47	.53	1.4	2.2	.17	.28	.11			.18
19	.25	1.1	.47	.47	1.4	2.1	.21	.25	.06			.17
20	.63	.92	.47	.50	1.3	2.0	.17	.19	.01			.16
21	2.0	1.0	.44	.92	1.5	1.7	.16	.17	0			.14
22	2.6	1.0	.42	.83	2.2	1.6	.13	.17	0			.13
23	2.2	.97	.42	.83	2.4	1.6	.55	.16	0			.12
24	2.0	.97	.39	.79	2.4	1.6	1.3	.13	0			.11
25	1.9	.92	.37	1.1	2.3	1.5	1.1	.11	0			.09
26	2.8	.87	.37	1.3	2.2	1.3	1.0	.08	0			.07
27	3.2	.83	.34	1.3	2.2	1.2	.87	.08	0			.04
28	2.9	.79	.34	1.2	2.2	1.0	.71	0	0			.01
29	2.7	.79	.32	1.1	------	1.0	.63	0	0			0
30	2.7	.79	.30	1.1	------	.92	.59	0	0			0
31	2.7	------	.28	1.1	------	.79	------	5.0	------			------
TOTAL	38.93	41.05	15.04	20.21	42.00	73.61	14.15	11.25	21.93	0	0	2.52
MEAN	1.26	1.37	.49	.65	1.50	2.37	.47	.36	.73	0	0	.084
MAX	3.2	2.6	.75	1.3	2.4	9.6	1.3	5.0	5.0	0	0	.30
MIN	.21	.79	.28	.26	.87	.79	.13	0	0	0	0	0
AC-FT	77	81	30	40	83	146	28	22	43	0	0	5.0

CAL YR 1972 TOTAL 407.35 MEAN 1.11 MAX 21 MIN 0 AC-FT 808
WTR YR 1973 TOTAL 280.69 MEAN .77 MAX 9.6 MIN 0 AC-FT 557

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 (2.4 km) downstream from Crystal Creek, 11 miles (17.7 km) south of Westbrook, 16 miles (25.7 km) southwest of Colorado City, and at mile 19.9 (32.0 km).

DRAINAGE AREA.--9,903 mi² (25,648 km²), of which 8,930 mi² (23,130 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,048.7 ft (624.44 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 23.3 ft³/s (0.660 m³/s), 16,880 acre-ft/yr (20.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,380 ft³/s (95.7 m³/s) Mar. 10, gage height, 18.21 ft (5.55 m); minimum, 0.08 ft³/s (2.27 dm³/s) Aug. 29 to Sept. 1.
Period of record: Maximum discharge, 8,780 ft³/s (249 m³/s) May 19, 1961, gage height, 21.65 ft (6.60 m); no flow at times. Maximum stage since 1908, about 24.5 ft (7.47 m) 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 (WATER YEARS).--WRD Texas 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	95	5.0	3.9	6.3	8.3	5.7	6.4	174	38	8.8	3.4
2	4.2	28	5.6	4.1	6.2	8.3	5.3	6.4	116	21	5.5	18
3	3.8	13	5.0	5.4	5.8	7.7	5.0	5.4	50	6.7	4.4	.48
4	3.5	9.8	4.7	4.5	5.8	7.4	4.7	5.2	11	2.9	4.2	7.0
5	3.5	8.8	4.8	5.8	5.7	7.1	4.7	4.8	8.0	1.2	2.6	12
6	3.4	8.0	4.1	6.0	5.8	7.1	5.0	5.0	6.0	.63	1.8	59
7	3.2	7.3	4.1	6.0	6.4	6.0	5.1	4.8	4.9	.48	1.6	293
8	3.0	6.1	4.1	5.4	8.3	6.8	4.8	4.9	4.4	.48	4.7	94
9	3.6	6.0	4.1	6.3	24	8.6	5.1	4.8	4.2	.36	3.5	50
10	3.5	5.8	4.4	6.8	14	1,820	4.7	3.4	7.2	.36	1.7	21
11	2.9	5.4	4.2	6.5	10	219	4.7	3.8	5.6	.31	1.3	19
12	1.9	5.6	4.6	5.8	9.3	58	4.5	7.3	4.3	1.1	8.0	17
13	2.4	6.1	4.3	7.2	8.0	23	4.7	4.2	3.4	4.0	5.5	52
14	2.9	5.2	4.2	9.4	7.1	16	5.6	6.4	2.8	5.1	7.3	25
15	1.7	4.5	4.7	11	6.8	13	5.6	8.7	2.7	5.2	3.8	11
16	1.7	4.6	4.5	7.6	6.7	11	4.9	17	2.5	14	1.7	5.6
17	2.0	5.1	4.4	6.0	7.3	10	9.4	11	1.8	9.7	1.2	4.7
18	1.6	5.4	4.5	5.6	7.2	10	6.3	6.3	1.6	5.4	.90	4.3
19	7.6	5.4	4.3	5.3	12	9.2	4.8	5.1	1.3	6.2	.80	3.8
20	11	5.3	4.4	4.9	10	8.5	5.0	4.5	1.0	7.6	.55	3.1
21	55	5.4	4.1	7.6	8.6	7.9	4.7	4.0	.71	4.0	.48	53
22	71	5.0	4.4	18	48	8.0	8.0	32	.55	1.5	.36	849
23	56	4.9	4.3	27	106	7.9	171	9.8	.36	.90	.46	148
24	14	5.7	4.0	9.9	40	7.5	608	7.1	.48	.63	.45	13
25	8.8	5.5	4.1	10	14	7.1	94	5.2	.36	.55	.25	7.2
26	58	5.2	4.0	14	10	8.1	71	3.5	.63	59	.17	5.0
27	74	5.9	3.9	25	9.1	7.0	15	2.6	.63	14	.13	3.8
28	43	4.6	3.7	12	8.6	6.3	10	2.3	.71	41	.10	3.1
29	14	4.7	3.6	7.6	------	6.4	7.3	2.3	.71	208	.10	2.9
30	15	5.2	2.7	6.9	------	6.2	7.2	2.2	.63	143	.08	2.8
31	93	------	3.6	6.4	------	6.0	------	5.4	------	28	.08	------
TOTAL	573.6	292.5	132.4	267.9	417.0	2,343.4	1,101.8	201.8	418.47	631.30	72.51	1,791.18
MEAN	18.5	9.75	4.27	8.64	14.9	75.6	36.7	6.51	13.9	20.4	2.34	59.7
MAX	93	95	5.6	27	106	1,820	608	32	174	208	8.8	849
MIN	1.6	4.5	2.7	3.9	5.7	6.0	4.5	2.2	.36	.31	.08	.48
AC-FT	1,140	580	263	531	827	4,650	2,190	400	830	1,250	144	3,550

CAL YR 1972 TOTAL 8,867.14 MEAN 24.2 MAX 1,280 MIN .02 AC-FT 17,590
WTR YR 1973 TOTAL 8,243.86 MEAN 22.6 MAX 1,820 MIN .08 AC-FT 16,350

PEAK DISCHARGE (BASE, 900 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	1030	18.21	3,380
4-24	0800	10.73	1,280
9-22	1615	11.26	1,400

08123850 Colorado River above Silver, Tex.

LOCATION.--Lat 32°03'37", long 100°45'56", Coke County, on right bank 25 ft (7.6 m) downstream from a Pan American Oil Company bridge, 4.7 miles (7.6 km) west of Silver, and at mile 756.6 (1,217.3 km). Prior to Oct. 4 at site 0.5 mile (0.8 km) downstream.

DRAINAGE AREA.--15,407 mi² (39,904 km²), of which 11,600 mi² (30,000 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,907.66 ft (581.45 m) above mean sea level. Prior to Oct. 4, 1972, water-stage recorder at site 0.5 mile (0.8 km) downstream at same datum.

AVERAGE DISCHARGE.--6 years, 69.1 ft³/s (1.96 m³/s), 50,060 acre-ft/yr (61.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,590 ft³/s (130 m³/s) Mar. 10, gage height, 11.06 ft (3.37 m); minimum, 0.14 ft³/s (3.96 dm³/s) Aug. 31 to Sept. 3.
Period of record: Maximum discharge, 12,900 ft³/s (365 m³/s) May 29, 1971, gage height, 17.68 ft (5.39 m) at former site; 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	705	14	9.4	28	31	37	27	184	5.7	85	.19
2	24	413	13	9.5	27	27	43	23	147	11	43	.19
3	22	149	14	13	27	28	40	21	82	21	31	5.5
4	20	88	13	13	24	32	36	20	37	11	25	12
5	20	65	13	14	21	31	35	19	19	6.8	21	5.5
6	20	54	17	15	18	30	35	18	15	4.3	17	14
7	19	45	18	17	18	28	34	15	12	2.9	14	256
8	17	41	19	16	18	28	30	13	9.6	2.1	13	278
9	15	37	19	17	19	27	29	12	7.9	1.6	12	84
10	14	29	16	17	28	2,800	31	11	6.5	1.3	13	57
11	13	26	14	21	30	3,280	32	10	5.9	2.0	11	38
12	12	28	12	20	32	1,110	31	8.6	6.2	2.4	9.8	64
13	8.8	28	12	19	32	281	30	8.1	8.0	2.5	7.0	308
14	11	26	12	20	31	132	32	9.8	5.5	5.2	10	168
15	9.4	27	13	21	30	89	31	12	4.1	10	9.4	82
16	9.3	24	12	24	29	71	30	12	3.2	8.3	7.4	41
17	9.4	21	13	22	29	61	35	14	212	6.1	5.1	27
18	8.4	20	12	19	27	55	39	18	1,220	13	3.9	20
19	102	19	11	17	24	48	42	12	132	8.5	2.9	17
20	107	18	11	17	22	46	35	9.7	58	11	2.3	14
21	58	18	10	18	27	46	31	7.9	41	12	1.8	14
22	152	17	9.5	18	28	43	40	6.5	35	8.3	1.4	141
23	104	17	8.9	21	64	42	373	11	30	4.8	.94	691
24	75	17	8.8	37	91	40	1,260	21	26	3.5	.68	80
25	94	16	9.5	29	85	37	320	14	20	5.4	.50	27
26	65	17	9.4	30	67	37	299	10	14	8.1	.68	15
27	131	15	9.7	35	52	39	104	7.4	11	329	1.0	12
28	99	15	10	40	43	37	48	5.0	9.0	278	.85	11
29	92	15	10	38	------	37	40	4.1	7.3	272	.74	9.4
30	61	14	10	34	------	48	32	3.5	6.2	542	.62	8.4
31	261	------	9.7	32	------	38	------	2.9	------	424	.33	------
TOTAL	1,679.3	2,024	383.5	672.9	971	8,679	3,234	386.5	2,374.4	2,023.8	352.34	2,500.18
MEAN	54.2	67.5	12.4	21.7	34.7	280	108	12.5	79.1	65.3	11.4	83.3
MAX	261	705	19	40	91	3,280	1,260	27	1,220	542	85	691
MIN	8.4	14	8.8	9.4	18	27	29	2.9	3.2	1.3	.33	.19
AC-FT	3,330	4,010	761	1,330	1,930	17,210	6,410	767	4,710	4,010	699	4,960

CAL YR 1972 TOTAL 30,736.77 MEAN 84.0 MAX 4,450 MIN 0 AC-FT 60,970
WTR YR 1973 TOTAL 25,280.92 MEAN 69.3 MAX 3,280 MIN .19 AC-FT 50,140

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 (3.5 km) west of Robert Lee, and at mile 715 (1,150.4 km).

DRAINAGE AREA.--15,740 mi² (40,770 km²), approximately, of which 11,600 mi² (30,040 km²) 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, 142,800 acre-ft (176 hm³) May 1, elevation, 1,862.07 ft (567.56 m); minimum, 120,600 acre-ft (149 hm³) Oct. 18, elevation, 1,858.13 ft (566.36 m).
Period of record: Maximum contents, 142,800 acre-ft (176 hm³) May 1, 1973, elevation, 1,862.07 ft (567.56 m); minimum since first appreciable storage in June 1969, not recorded but about 330 acre-ft (0.407 hm³) 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 (6,710 m) 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 (61.6 hm³) 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 (9-meter) concrete conduit. The emergency spillway is a 3,200-foot-wide (975-meter) 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)

1,858.0	119,900	1,861.0	136,400
1,859.0	125,400	1,863.0	148,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122,800	125,800	125,900	123,800	124,600	125,500	138,600	142,700	138,300	137,800	137,100	131,600
2	122,600	127,000	125,800	123,800	124,600	125,500	138,600	142,600	138,600	137,600	137,000	131,600
3	122,400	127,400	125,700	123,800	124,600	125,400	138,500	142,200	138,700	137,500	136,900	131,300
4	122,300	127,700	125,500	123,800	124,700	125,400	138,400	142,100	138,900	137,400	136,800	130,800
5	122,200	127,700	125,300	123,800	124,600	125,400	138,400	142,200	138,800	137,200	136,600	130,800
6	122,000	127,700	125,300	123,700	124,600	125,600	138,200	142,200	138,700	137,000	136,500	130,800
7	122,000	127,600	125,200	123,700	124,600	125,600	138,200	141,900	138,500	136,700	136,500	130,800
8	121,900	127,600	125,100	123,600	124,600	125,600	138,000	141,900	138,300	136,600	136,300	132,100
9	121,900	127,600	125,100	123,600	124,600	125,600	137,800	141,700	138,100	136,400	136,200	132,600
10	121,700	127,500	125,100	123,600	124,600	127,900	137,700	141,500	138,000	136,100	136,000	132,700
11	121,500	127,500	125,000	123,600	124,600	135,000	137,600	141,400	137,800	136,400	135,900	132,900
12	121,400	127,400	125,000	123,500	124,600	137,400	137,700	141,300	137,800	136,100	135,900	133,200
13	121,300	127,400	125,000	123,500	124,600	138,200	137,700	141,000	137,700	136,000	135,800	133,900
14	121,100	127,300	124,700	123,500	124,500	138,200	137,600	140,900	137,600	135,900	135,700	134,300
15	120,900	127,200	124,600	123,500	124,500	138,200	137,600	140,900	137,500	135,800	135,500	134,300
16	120,900	127,100	124,400	123,700	124,100	138,300	137,500	140,800	137,400	135,800	135,300	134,300
17	120,700	127,000	124,400	123,800	124,200	138,200	137,500	140,700	137,200	135,600	135,100	134,100
18	120,600	126,900	124,400	124,000	124,200	138,100	137,600	140,700	139,100	135,400	135,000	134,000
19	121,300	126,800	124,400	124,000	124,100	138,200	137,600	140,400	139,300	135,200	134,900	133,900
20	121,600	126,800	124,400	124,600	124,000	138,100	137,700	140,400	139,200	135,000	134,800	133,900
21	122,500	126,700	124,300	124,500	124,000	138,000	137,600	140,200	139,100	134,700	134,400	134,100
22	122,600	126,600	124,200	124,500	124,400	138,000	137,600	140,000	139,000	134,500	134,100	134,100
23	122,800	126,500	124,100	124,500	124,400	138,500	138,500	140,000	138,900	134,300	133,500	135,000
24	122,700	126,400	124,000	124,500	124,400	138,900	140,500	139,900	138,700	134,200	133,300	135,100
25	122,800	126,300	124,000	124,500	124,500	138,700	142,100	139,700	138,600	134,300	133,000	135,100
26	123,800	126,200	124,000	124,600	124,900	138,300	142,500	139,400	138,500	134,100	132,800	135,100
27	124,100	126,100	124,000	124,700	125,000	138,100	142,500	138,900	138,400	134,300	132,700	134,900
28	124,400	126,100	123,900	124,700	125,000	137,900	142,500	138,600	138,300	134,600	132,400	134,600
29	124,700	126,000	123,900	124,700	------	138,500	142,700	138,500	138,100	135,100	132,200	134,400
30	124,600	126,000	123,900	124,700	------	139,100	142,700	138,300	138,000	135,800	132,000	134,300
31	124,600	------	123,800	124,700	------	138,900	------	138,200	------	136,900	131,800	------
(†)	1,858.86	1,859.10	1,858.71	1,858.88	1,858.93	1,861.42	1,862.05	1,861.30	1,861.26	1,861.08	1,860.17	1,860.62
(*)	+1,700	+1,400	-2,200	+900	+300	+13,900	+3,800	-4,500	-200	-1,100	-5,100	+2,500
(††)	1,830	1,070	1,360	868	776	931	1,370	1,800	1,660	1,450	2,470	1,620
MAX	124,700	127,700	125,900	124,700	125,000	139,100	142,700	142,700	139,300	137,800	137,100	135,100
MIN	120,600	125,800	123,800	123,500	124,000	125,400	137,500	138,200	137,200	134,100	131,800	130,800

CAL YR 1972..... * +24,300 †† 22,700 MAX 127,700 MIN 83,060
WTR YR 1973..... * +11,400 †† 17,200 MAX 142,700 MIN 120,600

† 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 (58 m) upstream from bridge on State Highway 208 in Robert Lee, 0.4 mile (0.6 km) upstream from Mountain Creek, 2.7 miles (4.3 km) downstream from Messbox Creek, 3.7 miles (6.0 km) downstream from Robert Lee Dam, and at mile 712 (1,146 km).

DRAINAGE AREA.--15,770 mi² (40,840 km²), of which 11,600 mi² (30,000 km²) 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 (540.01 m) above mean sea level. Prior to Dec. 31, 1927, nonrecording gage at site 9 miles (14.5 km) 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 (61 m) downstream at same datum.

AVERAGE DISCHARGE.--19 years (1924-27, 1939-55) prior to completion of Robert Lee Dam, 207 ft³/s (5.86 m³/s), 150,000 acre-ft/yr (185 hm³/yr); 5 years (1968-73) regulated, 1.83 ft³/s (51.8 dm³/s), 1,330 acre-ft/yr (1.64 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 499 ft³/s (14.1 m³/s) Aug. 21, gage height, 5.22 ft (1.59 m); no flow June 12 to July 9.
Period of record: Maximum discharge, 32,500 ft³/s (920 m³/s) Sept. 6, 1926, gage height, 20.20 ft (6.16 m), site and datum then in use, from rating curve extended above 15,000 ft³/s (425 m³/s); no flow at times.
Maximum stage since at least 1907, 26.7 ft (8.1 m) Oct. 13, 1957, from floodmarks. Flood in April 1922 reached a stage of 25.5 ft (7.8 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	3.4	.98	.14	.13	1.1	.46	.39	.02	0	1.9	.03
2	.10	1.7	.98	.17	.19	.98	.53	.28	.02	0	1.4	.03
3	.03	.98	1.3	.53	.19	.90	.93	.25	.01	0	1.0	.02
4	.03	.98	1.3	.52	.19	.76	.83	.14	.01	0	.92	.01
5	.03	.98	1.6	.34	.19	.76	.67	.11	.01	0	.82	.01
6	.03	.96	3.1	.21	.25	1.2	.64	.14	.01	0	.74	.29
7	.03	.98	1.6	.33	.32	1.6	.69	.24	.01	0	.60	.37
8	.03	.76	1.6	.31	.70	1.7	.73	.19	.02	0	.37	.20
9	.03	.63	1.6	.18	.76	1.7	.88	.18	.03	0	.42	.25
10	.03	1.3	1.6	.05	.60	5.5	.62	.19	.03	90	.47	.36
11	.03	.79	.98	.05	.59	1.4	.44	.18	.03	74	.40	.23
12	.03	.76	.59	.05	.59	.40	.55	.42	0	4.4	.41	.65
13	.02	1.1	.45	.06	.59	.20	.55	.40	0	1.3	.40	3.8
14	.02	1.3	.76	.07	.59	.45	.52	.46	0	.95	.40	.94
15	.02	1.0	.68	.07	.59	.17	.68	.45	0	1.2	33	.48
16	.02	.98	.76	.05	.59	.14	.83	.32	0	.67	22	.34
17	.02	.98	.59	.05	.76	.20	.97	.18	0	.57	2.4	.17
18	.02	.98	.59	.05	.76	.25	1.2	.11	0	.50	1.0	.16
19	1.2	.98	.44	.05	.76	.25	.75	.09	0	.47	.56	.21
20	.98	.98	.34	.05	.76	.39	.64	.07	0	.39	.36	.11
21	5.1	.98	.34	.19	1.1	.45	.62	.07	0	.33	139	.17
22	3.1	.98	.25	.18	2.4	.45	.47	.05	0	.32	11	.78
23	1.5	.98	.25	.05	2.7	.46	1.4	.03	0	.24	1.1	.38
24	.76	.98	.25	.05	1.1	.47	2.5	.03	0	.30	.37	.24
25	.76	1.6	.25	.35	.98	.68	1.2	.03	0	.31	.15	.17
26	26	1.6	.25	.67	.98	.55	1.3	.06	0	2.0	.09	.14
27	5.1	1.6	.19	.19	.98	.49	1.0	.07	0	2.8	.06	.15
28	3.4	1.6	.19	.15	1.1	.48	.65	.05	0	1.7	.04	.12
29	2.2	.98	.19	.04	------	.46	.40	.05	0	1.3	.03	.10
30	2.1	.59	.19	.03	------	.49	.40	.04	0	2.2	.02	.09
31	3.8	------	.19	.04	------	.55	------	.03	------	2.7	.03	------
TOTAL	56.66	34.41	24.38	5.27	21.44	25.58	24.05	5.30	.20	188.65	221.46	11.00
MEAN	1.83	1.15	.79	.17	.77	.83	.80	.17	.007	6.09	7.14	.37
MAX	26	3.4	3.1	.67	2.7	5.5	2.5	.46	.03	90	139	3.8
MIN	.02	.59	.19	.03	.13	.14	.40	.03	0	0	.02	.01
AC-FT	112	68	48	10	43	51	48	11	.4	374	439	22

CAL YR 1972 TOTAL 730.87 MEAN 2.00 MAX 189 MIN 0 AC-FT 1,450
WTR YR 1973 TOTAL 618.40 MEAN 1.69 MAX 139 MIN 0 AC-FT 1,230

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 (3.1 km) upstream from dam on Oak Creek, 2.5 miles (4.0 km) southeast of Blackwell, 14 miles (23 km) north of Bronte, and 20 miles (32 km) upstream from mouth.

DRAINAGE AREA.--244 mi² (632 km²).

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, 27,750 acre-ft (34.2 hm³) May 23-27, elevation, 1,994.4 ft (607.9 m); minimum, 22,650 acre-ft (27.9 hm³) Oct. 18-20, elevation, 1,991.4 ft (607.0 m).
Period of record: Maximum contents observed, 49,100 acre-ft (60.5 hm³) Oct. 13, 1957, elevation, 2,003.80 ft (610.76 m); minimum observed, 7,060 acre-ft (8.71 hm³) Aug. 1, 1953, elevation, 1,976.2 ft (602.3 m).

REMARKS.--Reservoir is formed by a rolled-fill earthen dam 3,800 ft (1,158 m) long. Uncontrolled service spillway is a cut channel 300 ft (91 m) wide located to right of dam. Emergency spillway is channel 800 ft (244 m) 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. During 1973, West Texas Utilities diverted 24,295 acre-ft (30.0 hm³) from the reservoir for power plant operation and returned 23,821 acre-ft (29.4 hm³), or a total consumptive use of 474 acre-ft (0.584 hm³). Service outlet can release water to Oak Creek through 24-inch (610-millimeter) 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
1,995.0	28,850

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,280	23,770	23,770	23,600	23,770	24,260	25,610	27,380	27,380	26,840	25,960	24,260
2	23,280	23,770	23,770	23,600	23,770	24,260	25,610	27,380	27,380	26,840	25,780	24,100
3	23,280	23,930	23,770	23,600	23,770	24,430	25,610	27,380	27,560	26,840	25,780	24,100
4	23,130	23,930	23,770	23,600	23,770	24,430	25,610	27,380	27,560	26,660	25,780	24,100
5	23,130	23,930	23,770	23,600	23,770	24,430	25,610	27,380	27,560	26,660	25,610	24,100
6	23,130	23,930	23,770	23,600	23,770	24,430	25,610	27,560	27,560	26,660	25,610	24,100
7	23,130	23,930	23,770	23,600	23,770	24,430	25,610	27,560	27,380	26,660	25,610	24,260
8	22,970	23,930	23,770	23,600	23,770	24,430	25,610	27,560	27,380	26,480	25,440	24,260
9	22,970	23,930	23,770	23,600	23,770	24,430	25,610	27,560	27,380	26,480	25,440	24,260
10	22,970	23,930	23,770	23,600	23,770	24,600	25,610	27,560	27,380	26,480	25,440	24,260
11	22,970	23,930	23,770	23,600	23,770	24,760	25,610	27,380	27,380	26,480	25,260	24,260
12	22,970	23,930	23,770	23,600	23,770	24,760	25,780	27,380	27,380	26,480	25,260	24,260
13	22,810	23,930	23,770	23,600	23,770	24,760	25,780	27,380	27,380	26,480	25,260	24,430
14	22,810	23,930	23,600	23,600	23,770	24,930	25,780	27,380	27,380	26,480	25,260	24,430
15	22,810	23,930	23,600	23,770	23,770	24,930	25,780	27,380	27,380	26,310	25,090	24,260
16	22,810	23,930	23,600	23,770	23,770	24,930	25,960	27,380	27,380	26,310	25,090	24,260
17	22,810	23,930	23,600	23,770	23,770	24,930	25,960	27,380	27,380	26,310	25,090	24,260
18	22,650	23,930	23,600	23,770	23,930	24,930	25,960	27,380	27,380	26,310	24,930	24,260
19	22,650	23,930	23,600	23,770	23,930	25,090	26,140	27,380	27,380	26,310	24,930	24,100
20	22,650	23,930	23,600	23,770	23,930	25,090	26,140	27,380	27,190	26,140	24,930	24,100
21	22,970	23,930	23,600	23,770	23,930	25,090	26,140	27,560	27,190	26,140	24,760	24,100
22	22,970	23,930	23,600	23,770	23,930	25,090	26,140	27,560	27,190	26,140	24,760	24,100
23	22,970	23,930	23,600	23,770	24,100	25,090	26,140	27,750	27,010	25,960	24,760	24,100
24	22,970	23,930	23,600	23,600	24,100	25,260	27,010	27,750	27,010	25,960	24,600	24,100
25	22,970	23,930	23,600	23,770	24,100	25,260	27,010	27,750	27,010	25,960	24,600	23,930
26	23,130	23,930	23,600	23,770	24,260	25,260	27,190	27,750	27,010	25,780	24,600	23,930
27	23,130	23,930	23,600	23,770	24,260	25,260	27,380	27,750	26,840	25,960	24,430	23,930
28	23,130	23,930	23,600	23,770	24,260	25,260	27,380	27,560	26,840	25,960	24,430	23,930
29	23,280	23,930	23,600	23,770	------	25,260	27,380	27,560	26,840	25,960	24,430	23,770
30	23,280	23,930	23,600	23,770	------	25,440	27,380	27,560	26,840	25,960	24,260	23,770
31	23,280	------	23,600	23,770	------	25,440	------	27,380	------	25,960	24,260	------
(†)	1,991.8	1,992.2	1,992.0	1,992.1	1,992.4	1,993.1	1,994.2	1,994.2	1,993.9	1,993.4	1,992.4	1,992.1
(*)	0	+650	-330	+170	+490	+1,180	+1,940	0	-540	-880	-1,700	-490
(††)	429	412	180	54	57	55	131	433	347	499	479	457
MAX	23,280	23,930	23,770	23,770	24,260	25,440	27,380	27,750	27,560	26,840	25,960	24,430
MIN	22,650	23,770	23,600	23,600	23,770	24,260	25,610	27,380	26,840	25,780	24,260	23,770

CAL YR 1972..... * -2,540 †† 4,820 MAX 26,140 MIN 22,180
WTR YR 1973..... * +490 †† 3,530 MAX 27,750 MIN 22,650

† 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 (610 m) upstream from Elm Creek, and at mile 659.4 (1,061.0 km).

DRAINAGE AREA.--16,840 mi² (43,620 km²), approximately, of which 11,600 mi² (30,040 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 1,593.74 ft (485.77 m) above mean sea level. Prior to Nov. 29, 1930, nonrecording gages at several sites upstream within 1.0 mile (1.6 km) of present site at various datums.

AVERAGE DISCHARGE.--61 years (1907-68) prior to completion of Robert Lee Dam, 336 ft³/s (9.52 m³/s), 243,400 acre-ft/yr (300 hm³/yr); 5 years (1968-73) partially regulated, 41.4 ft³/s (1.17 m³/s), 29,990 acre-ft/yr (37.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,230 ft³/s (63.2 m³/s) Sept. 13, gage height, 4.70 ft (1.43 m); minimum, 1.2 ft³/s (34 dm³/s) Sept. 4.

Period of record: Maximum discharge, 75,400 ft³/s (2,140 m³/s) Sept. 18, 1936, gage height, 28.6 ft (8.7 m); no flow at times.

Maximum stage since at least 1882, about 36 ft (11 m) 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 (9.8 m), 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 (1,300 hm³). At end of year, flow from 130 mi² (337 km²) above this station was partly controlled by 24 floodwater-retarding structures with a total combined capacity of 28,980 acre-ft (35.7 hm³) below the flood-spillway crests, of which 26,120 acre-ft (32.2 hm³) is floodwater-retarding capacity and 2,860 acre-ft (3.53 hm³) is sediment-pool capacity. One struc-ture was built during the current year and has a capacity below flood-spillway crests of 1,510 acre-ft (1.86 hm³), of which 151 acre-ft (0.186 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	207	27	22	26	41	77	62	8.6	10	50	3.1
2	7.1	158	27	24	27	40	76	57	21	10	26	2.8
3	6.0	119	27	33	26	38	68	49	201	7.1	18	1.9
4	4.5	92	26	32	26	36	54	42	144	7.5	14	1.4
5	4.2	76	25	36	26	35	47	36	83	8.1	11	4.0
6	4.4	67	25	35	26	37	44	38	68	9.2	9.2	11
7	4.4	59	23	37	27	35	43	35	50	7.4	8.0	11
8	4.5	53	23	35	33	32	41	32	38	5.4	7.2	6.6
9	5.3	47	24	34	30	32	34	30	31	5.4	6.7	18
10	6.2	41	25	33	27	41	35	25	25	5.1	6.2	16
11	5.1	39	24	32	27	42	34	25	22	5.2	6.0	13
12	5.5	37	23	31	27	42	33	25	22	6.5	5.6	16
13	5.7	38	24	32	25	38	33	22	25	5.9	5.1	803
14	5.3	35	24	33	25	35	34	22	22	10	4.8	446
15	5.5	33	24	33	24	36	40	23	20	167	4.7	75
16	5.4	33	23	33	24	33	40	23	22	78	4.3	35
17	4.9	33	23	33	29	30	59	23	463	29	4.1	22
18	4.7	33	24	33	33	28	105	23	154	16	3.8	16
19	4.3	33	25	31	33	27	66	21	100	11	3.8	12
20	17	32	26	28	34	26	52	18	70	8.3	3.3	11
21	85	31	25	26	38	26	45	17	53	6.9	3.3	12
22	184	29	24	25	52	26	46	16	38	4.8	3.2	11
23	95	29	24	25	56	26	201	16	30	4.4	2.8	24
24	51	31	23	24	48	28	636	25	21	4.1	4.2	35
25	34	31	23	37	45	81	354	29	20	2.9	15	18
26	71	30	23	42	43	75	251	25	17	211	8.6	20
27	192	30	23	43	43	64	202	18	16	172	5.5	16
28	138	30	23	41	42	51	124	15	16	29	3.3	14
29	75	29	23	35	------	44	88	13	15	16	2.5	13
30	63	27	22	31	------	39	71	11	13	44	2.6	12
31	132	------	22	30	------	38	------	10	------	128	2.8	------
TOTAL	1,236.9	1,562	747	999	922	1,202	3,033	926	1,828.6	1,035.2	255.6	1,699.8
MEAN	39.9	52.1	24.1	32.2	32.9	38.8	101	26.6	61.0	33.4	8.25	56.7
MAX	192	207	27	43	56	81	636	62	463	211	50	803
MIN	4.2	27	22	22	24	26	33	10	8.6	2.9	2.5	1.4
AC-FT	2,450	3,100	1,480	1,980	1,830	2,380	6,020	1,840	3,630	2,050	507	3,370

CAL YR 1972 TOTAL 10,295.97 MEAN 28.1 MAX 1,480 MIN 0 AC-FT 20,420
WTR YR 1973 TOTAL 15,347.10 MEAN 42.0 MAX 803 MIN 1.4 AC-FT 30,440

08127000 Elm Creek at Ballinger, Tex.

LOCATION.--Lat 31°44'57", long 99°56'51", Runnels County, on right bank 1,000 ft (305 m) upstream from storage dam at Ballinger and 1.2 miles (1.9 km) upstream from mouth.

DRAINAGE AREA.--471 mi² (1,220 km²).

PERIOD OF RECORD.--April 1932 to current year.

GAGE.--Water-stage recorder and masonry dam control. Datum of gage is 1,617.72 ft (493.08 m) above mean sea level.

AVERAGE DISCHARGE.--41 years, 47.2 ft³/s (1.34 m³/s), 34,200 acre-ft/yr (42.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,890 ft³/s (138 m³/s) June 17, gage height, 6.37 ft (1.94 m); minimum, 0.47 ft³/s (13 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 50,000 ft³/s (1,420 m³/s) Oct. 13, 1957, gage height, 14.20 ft (4.33 m), from floodmark; no flow at times.
Flood in August 1906 reached a stage of 14.5 ft (4.42 m), 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 ft³/s (2.83 m³/s), 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 556 acre-ft (0.686 hm³) from Lake Winters, capacity, 3,060 acre-ft (3.77 hm³), and the city of Ballinger diverted about 4 acre-ft (4,930 m³) 1.0 mile (1.6 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	213	18	28	25	33	22	23	4.2	4.4	66	1.4
2	1.6	119	17	28	27	33	20	17	12	4.1	39	1.2
3	1.4	70	17	28	28	30	16	13	869	3.6	22	1.2
4	1.2	54	17	35	26	28	17	11	660	3.3	17	1.6
5	1.1	43	17	42	27	28	19	11	251	3.1	13	2.6
6	.96	40	17	28	27	27	20	10	118	3.7	14	5.3
7	.77	35	17	28	28	35	18	8.9	85	3.3	12	16
8	.77	35	17	28	27	34	14	8.4	43	2.9	11	27
9	.74	32	18	28	28	35	17	7.8	23	65	9.1	17
10	.68	33	18	28	22	38	17	7.4	16	9.0	8.4	15
11	.65	33	17	28	21	74	17	7.9	13	47	12	59
12	.66	33	17	28	21	57	17	6.7	27	191	10	24
13	.68	27	21	28	19	41	17	7.8	32	100	8.4	21
14	.69	21	22	34	19	38	17	8.4	34	37	8.4	14
15	.66	21	20	40	17	33	21	8.4	19	36	8.0	11
16	.59	22	21	42	17	28	19	8.4	16	29	6.6	11
17	.56	22	19	42	22	27	61	8.4	2,050	15	6.2	9.9
18	.55	22	18	37	28	26	108	7.6	284	10	5.4	8.4
19	19	22	20	35	35	25	50	6.6	100	8.1	4.3	8.0
20	162	22	26	31	31	26	34	5.5	48	6.7	4.4	8.4
21	212	21	23	16	33	24	31	5.6	26	5.5	4.1	7.9
22	456	21	23	28	48	23	75	5.4	15	5.4	3.3	8.4
23	79	22	20	22	79	26	396	61	9.7	5.4	2.7	9.2
24	29	22	22	22	81	95	1,130	46	7.7	5.0	2.0	8.4
25	18	21	22	34	64	69	295	11	6.7	4.4	1.6	8.4
26	245	22	21	56	52	39	348	6.8	6.6	191	1.4	23
27	225	22	28	55	45	30	121	5.1	6.0	31	1.3	290
28	104	21	29	38	39	25	63	4.3	5.4	12	1.3	64
29	66	22	30	34	------	24	39	4.4	5.0	9.2	1.5	27
30	60	21	26	29	------	22	29	4.3	4.8	92	1.5	17
31	77	------	28	24	------	20	------	4.2	------	173	1.4	------
TOTAL	1,768.16	1,134	646	1,004	936	1,093	3,068	351.3	4,797.1	1,116.1	307.3	726.3
MEAN	57.0	37.8	20.8	32.4	33.4	35.3	102	11.3	160	36.0	9.91	24.2
MAX	456	213	30	56	81	95	1,130	61	2,050	191	66	290
MIN	.55	21	17	16	17	20	14	4.2	4.2	2.9	1.3	1.2
AC-FT	3,510	2,250	1,280	1,990	1,860	2,170	6,090	697	9,520	2,210	610	1,440

CAL YR 1972 TOTAL 8,571.23 MEAN 23.4 MAX 834 MIN .07 AC-FT 17,000
WTR YR 1973 TOTAL 16,947.26 MEAN 46.4 MAX 2,050 MIN .55 AC-FT 33,610

PEAK DISCHARGE (BASE, 2,100 FT³/S).--Apr. 24 (0430) 2,170 ft³/s (5.43 ft); June 17 (0745) 4,890 ft³/s (6.37 ft).

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 (26 m) downstream from point of diversion, and 100 ft (30 m) 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 (614.79 m) above mean sea level.

AVERAGE DISCHARGE.--33 years (1940-73), 6.90 ft³/s (0.20 m³/s), 5,000 acre-ft/yr (6.16 hm³/yr).

EXTREMES.--Period of record: Maximum daily diversion for irrigation (excluding floodflow), 21 ft³/s (0.59 m³/s) 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 (183 m) upstream from station at Christoval (station 08128000).

REVISIONS (WATER YEARS).--WSP 1312: 1940-46.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.1	5.4	7.2	7.2	2.8	2.6	5.8	4.6	4.6	5.2	5.0
2	2.6	1.7	5.2	7.2	7.2	3.2	2.6	5.8	6.0	4.9	5.3	5.2
3	2.5	1.8	5.5	7.2	7.2	3.0	4.0	6.0	4.3	5.5	5.2	5.9
4	2.4	3.4	5.2	7.2	7.4	4.0	4.3	5.6	3.6	5.6	5.1	5.9
5	2.5	2.7	4.7	7.2	7.4	4.1	4.6	5.1	5.3	5.6	5.1	6.0
6	3.0	1.9	4.5	7.2	7.4	4.6	4.6	4.9	4.9	5.6	5.0	7.3
7	5.9	2.0	4.5	7.2	7.2	4.5	6.0	5.0	4.7	5.5	4.9	4.9
8	5.8	2.6	4.5	7.2	7.1	4.4	7.7	5.0	4.5	5.4	5.0	4.5
9	3.5	1.5	4.5	7.2	7.1	4.3	8.2	4.9	4.2	5.0	5.4	4.4
10	2.7	4.1	4.5	7.2	7.1	4.4	5.0	4.4	3.9	4.7	5.5	4.3
11	2.3	4.4	4.6	7.2	7.1	4.2	5.2	6.4	3.8	4.6	5.4	4.1
12	4.2	1.6	4.7	7.1	7.0	3.9	7.0	5.1	4.7	4.7	5.0	4.0
13	4.2	2.2	4.7	7.1	7.1	3.5	9.8	4.5	5.6	4.9	5.0	4.0
14	3.3	2.4	4.7	7.2	7.2	3.4	9.2	4.3	5.6	4.9	4.8	4.3
15	2.9	2.4	4.7	7.4	7.2	3.3	8.4	4.0	5.4	5.1	4.7	4.3
16	5.4	2.1	4.9	7.2	7.2	3.2	8.4	3.8	5.2	5.1	4.6	4.2
17	4.9	2.1	4.9	7.2	7.2	3.2	8.8	4.4	5.1	5.1	4.5	3.9
18	4.5	2.2	4.7	7.2	7.2	3.1	7.7	5.1	5.0	5.0	4.4	4.0
19	4.5	2.4	4.6	7.2	7.2	2.9	4.5	5.1	5.0	5.0	4.3	3.9
20	4.5	2.4	7.9	7.6	7.2	2.6	4.9	5.2	4.9	5.0	4.1	3.8
21	3.4	3.5	8.4	7.4	7.4	2.4	4.9	4.9	4.7	4.9	4.2	3.7
22	1.6	4.2	8.2	7.2	5.7	2.2	4.5	4.7	4.7	4.9	4.2	3.7
23	3.8	4.0	7.9	7.4	4.0	1.8	4.3	4.7	4.7	4.7	4.8	3.6
24	3.8	3.1	7.7	7.4	3.7	2.1	3.7	4.7	4.7	4.7	6.1	3.3
25	3.8	3.2	7.7	7.6	3.4	2.5	3.6	4.6	4.7	4.3	6.1	2.7
26	3.7	5.1	7.7	7.4	3.1	1.8	3.6	4.6	4.6	4.2	6.0	2.8
27	3.7	5.2	7.6	7.4	3.0	1.6	4.6	4.4	4.6	4.1	5.8	2.8
28	3.7	5.4	7.6	7.6	2.8	1.5	5.2	4.4	4.5	4.1	5.8	2.8
29	3.4	5.4	7.4	7.4	------	1.2	4.0	4.3	4.0	4.0	5.7	2.8
30	3.0	5.4	7.2	7.4	------	1.8	4.5	5.2	4.3	4.0	5.4	2.9
31	2.3	------	7.2	7.2	------	2.5	------	4.7	------	4.5	5.2	------
TOTAL	110.8	92.5	183.5	225.8	177.0	94.0	166.4	151.6	141.8	150.2	157.8	125.0
MEAN	3.57	3.08	5.92	7.28	6.32	3.03	5.55	4.89	4.73	4.85	5.09	4.17
MAX	5.9	5.4	8.4	7.6	7.4	4.6	9.8	6.4	6.0	5.6	6.1	7.3
MIN	1.6	1.5	4.5	7.1	2.8	1.2	2.6	3.8	3.6	4.0	4.1	2.7
AC-FT	220	183	364	448	351	186	330	301	281	298	313	248

CAL YR 1972 TOTAL 2,321.9 MEAN 6.34 MAX 13 MIN 1.5 AC-FT 4,610
WTR YR 1973 TOTAL 1,776.4 MEAN 4.87 MAX 9.8 MIN 1.2 AC-FT 3,520

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 (15.3 km) upstream from Twin Buttes Dam, and at mile 23.7 (38.1 km).

DRAINAGE AREA.--409 mi² (1,059 km²), of which 65 mi² (168 km²) 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 (612.72 m) above mean sea level. Prior to July 17, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 31.2 ft³/s (0.88 m³/s), 22,600 acre-ft/yr (27.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 45 ft³/s (1.27 m³/s) Sept. 6, gage height, 2.14 ft (0.65 m); minimum, 7.6 ft³/s (2.15 dm³/s) Sept. 3-6.
Period of record: Maximum discharge, 100,000 ft³/s (2,830 m³/s) July 23, 1938, gage height, 21.95 ft (6.69 m) from floodmarks, from rating curve extended above 15,100 ft³/s (428 m³/s) on basis of slope-area measurement of 80,100 ft³/s (2,270 m³/s); no flow Feb. 28, Mar. 1, 1955.
Maximum stage since 1882, about 23 ft (7 m) Aug. 6, 1906, discharge 115,000 ft³/s (3,260 m³/s), 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 (183 m) upstream from station.

REVISIONS (WATER YEARS).--WSP 1118: 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	24	20	16	16	21	24	20	14	12	11	9.7
2	22	25	20	16	16	21	24	19	13	12	11	9.4
3	22	24	20	17	16	21	23	19	17	11	11	8.3
4	22	23	20	17	16	22	23	19	16	10	11	8.2
5	22	24	20	17	15	22	22	21	18	10	11	8.2
6	22	25	20	17	15	22	22	21	15	10	11	18
7	18	25	20	17	16	22	21	21	15	11	11	15
8	19	24	20	17	16	22	18	20	14	11	10	14
9	21	25	20	17	16	21	18	21	14	11	10	15
10	23	23	20	17	16	21	21	21	15	11	9.8	16
11	23	22	20	16	16	21	22	19	15	12	9.7	16
12	20	25	20	16	16	21	20	21	14	12	11	16
13	20	24	20	17	16	21	17	21	14	12	11	16
14	21	24	20	17	16	21	18	18	13	12	10	16
15	21	24	20	17	15	21	19	16	13	15	10	16
16	18	24	20	17	15	21	18	17	13	13	11	17
17	19	24	20	18	15	21	21	17	13	13	10	17
18	19	25	20	17	15	21	19	16	12	12	11	17
19	19	24	19	17	15	20	22	16	13	12	13	17
20	19	24	17	18	15	20	22	16	13	11	12	18
21	20	23	15	17	23	20	22	15	13	11	12	18
22	22	22	15	18	18	20	22	15	13	11	12	18
23	20	22	15	17	19	20	23	16	13	11	11	17
24	21	23	16	17	20	23	24	16	13	11	9.0	17
25	22	23	16	20	20	26	23	16	13	12	9.2	17
26	23	20	16	17	21	26	22	15	13	12	9.6	22
27	22	20	16	16	21	25	21	15	13	13	9.6	18
28	22	20	16	16	21	25	21	15	12	12	9.4	18
29	23	20	16	16	------	25	22	15	13	12	9.6	18
30	24	20	16	16	------	25	21	13	13	13	9.8	19
31	25	------	16	16	------	24	------	14	------	13	9.5	------
TOTAL	661	695	569	524	475	682	635	544	413	364	326.2	469.8
MEAN	21.3	23.2	18.4	16.9	17.0	22.0	21.2	17.5	13.8	11.7	10.5	15.7
MAX	25	25	20	20	23	26	24	21	18	15	13	22
MIN	18	20	15	16	15	20	17	13	12	10	9.0	8.2
AC-FT	1,310	1,380	1,130	1,040	942	1,350	1,260	1,080	819	722	647	932

CAL YR 1972 TOTAL 7,379.0 MEAN 20.2 MAX 28 MIN 12 AC-FT 14,640
WTR YR 1973 TOTAL 6,358.0 MEAN 17.4 MAX 26 MIN 8.2 AC-FT 12,610

PEAK DISCHARGE (BASE, 160 FT³/S).--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 (0.5 km) upstream from East Rocky Creek, 0.5 mile (0.8 km) southwest of Tullos Ranch headquarters, 6.7 miles (10.8 km) northwest of Tankersley, and at mile 20.9 (33.6 km).

DRAINAGE AREA.--2,436 mi² (6,309 km²), of which 1,055 mi² (2,732 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,986.47 ft (605.48 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 7.32 ft³/s (0.21 m³/s), 5,300 acre-ft/yr (6.53 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 183 ft³/s (5.18 m³/s) July 12, gage height, 7.49 ft (2.28 m); no flow for many days.
Period of record: Maximum discharge, 9,300 ft³/s (263 m³/s) May 1, 1966, gage height, 19.46 ft (5.93 m), from rating curve extended above 4,000 ft³/s (113 m³/s); no flow at times.
Maximum stage since 1900, 29.5 ft (9.0 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	4.0	5.0	3.1	3.7	4.3	3.2	3.1	1.5	.13	.29	
2	1.6	4.0	4.7	3.2	3.3	4.3	3.1	3.2	.94	.09	.28	
3	1.5	4.1	4.7	3.3	3.1	4.3	2.9	3.4	1.4	.04	.20	
4	1.5	3.5	4.7	3.4	2.9	4.0	2.9	3.4	.84	.04	.16	
5	1.4	3.7	4.7	3.4	2.9	4.0	2.9	3.4	.54	.03	.10	
6	1.3	4.0	4.7	3.4	2.9	4.2	2.9	3.4	.54	.02	.07	
7	1.0	3.8	4.3	3.4	3.4	4.3	2.6	3.1	.42	.01	.06	
8	1.0	3.7	4.3	3.4	4.7	4.0	2.6	2.7	.28	.01	.04	
9	1.2	4.0	4.3	3.4	4.7	4.0	2.6	2.5	.24	.01	.02	
10	1.3	4.0	4.3	3.3	4.7	4.4	2.6	2.4	.24	0	.01	
11	1.3	4.0	4.3	3.1	4.7	4.0	2.6	2.3	.24	.08	.01	
12	1.3	4.0	4.3	3.1	4.5	3.7	3.0	2.4	.24	55	.01	
13	1.3	4.3	4.0	3.1	4.3	3.3	2.6	2.2	.29	11	0	
14	1.3	4.3	4.0	2.7	3.8	3.4	2.4	2.0	.33	4.5	0	
15	1.2	4.3	4.0	2.6	3.7	3.8	2.9	2.2	.25	2.5	0	
16	1.3	4.7	4.0	2.4	3.7	3.8	9.4	2.2	.15	1.5	0	
17	1.5	4.7	4.0	2.4	3.7	4.0	7.4	2.2	.10	1.3	0	
18	1.6	4.7	3.7	2.4	3.4	3.1	4.8	2.2	.10	1.3	0	
19	1.3	4.7	3.7	2.4	3.4	3.1	4.0	1.7	.19	.94	0	
20	1.7	5.0	3.7	2.3	3.4	3.1	3.7	2.1	.71	.61	0	
21	5.4	5.0	3.7	2.3	3.7	3.1	3.5	2.4	.92	.45	0	
22	3.7	5.0	3.7	2.3	4.9	3.3	3.4	1.8	.98	.29	0	
23	3.1	5.4	3.4	2.2	5.4	3.4	3.4	.87	.63	.20	0	
24	2.6	5.6	3.4	2.2	5.0	3.4	3.1	1.2	.61	.13	0	
25	2.6	5.8	3.4	2.9	5.0	3.4	3.3	.84	.62	.06	0	
26	4.1	5.8	3.4	3.1	5.0	3.4	3.6	.60	.61	.06	0	
27	4.1	5.4	3.4	3.9	4.7	2.9	3.1	.39	.92	.10	0	
28	3.4	5.4	3.1	4.3	4.3	2.9	3.0	.34	.41	.09	0	
29	3.4	5.0	3.1	4.0	------	2.6	3.4	.34	.23	.07	0	
30	3.7	5.0	3.1	4.0	------	2.9	3.3	.31	.18	.14	0	
31	4.0	------	3.1	3.9	------	3.4	------	.24	------	.24	0	------
TOTAL	67.5	136.9	122.2	94.9	112.9	111.8	104.2	68.63	15.17	80.94	1.25	0
MEAN	2.18	4.56	3.94	3.06	4.03	3.61	3.47	1.96	.51	2.61	.040	0
MAX	5.4	5.8	5.0	4.3	5.4	4.4	9.4	3.4	1.5	55	.29	0
MIN	1.0	3.5	3.1	2.2	2.9	2.6	2.4	.24	.10	0	0	0
AC-FT	134	272	242	188	224	222	207	120	30	161	2.5	0

CAL YR 1972 TOTAL 1,737.44 MEAN 4.75 MAX 305 MIN 0 AC-FT 3,450
WTR YR 1973 TOTAL 908.39 MEAN 2.49 MAX 55 MIN 0 AC-FT 1,800

PEAK DISCHARGE (BASE, 1,700 FT³/S).--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 (2.3 km) south of Tankersley, and 2.5 miles (4.0 km) upstream from Dove Creek.

DRAINAGE AREA.--424 mi² (1,098 km²), of which 28 mi² (72.5 km²) 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 (598.85 m) above mean sea level. Prior to Nov. 10, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 10.7 ft³/s (0.30 m³/s), 7,750 acre-ft/yr (9.56 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 35 ft³/s (0.99 m³/s) Oct. 21, gage height, 4.36 ft (1.33 m); minimum, 0.22 ft³/s (6.2 dm³/s) Sept. 6.
Period of record: Maximum discharge, 30,400 ft³/s (861 m³/s) Aug. 12, 1971, gage height, 16.57 ft (5.05 m); 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 (5.6 m). At former gage (Spring Creek near Tankersley) 8 miles (13 m) downstream, the flood of Oct. 3, 1959, 82,100 ft³/s (2,330 m³/s), was found to be about 3 ft (1 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	15	13	12	15	19	13	6.3	1.9	3.4	.44	.31
2	10	13	14	13	15	17	13	6.6	4.5	1.5	.93	.34
3	11	12	14	18	16	19	11	5.1	11	.57	1.5	.33
4	11	12	13	16	16	17	8.7	5.0	7.2	.39	5.8	.31
5	11	12	13	16	16	18	8.8	4.2	11	.33	4.9	.27
6	11	13	10	15	16	21	9.9	5.3	7.7	.29	4.0	.89
7	11	13	11	15	17	17	13	3.6	5.7	.28	1.7	1.2
8	11	13	12	15	19	17	11	5.4	4.8	.28	.91	12
9	11	13	13	15	20	16	12	4.5	5.4	.26	.61	13
10	11	12	13	14	20	21	11	2.3	4.9	.26	.50	14
11	11	12	13	14	20	17	11	1.3	4.8	.35	1.0	13
12	11	14	14	14	18	18	11	2.6	6.0	.33	1.4	12
13	11	15	14	14	16	17	11	5.2	6.0	.31	1.4	9.2
14	11	14	14	14	16	13	11	6.8	6.7	.26	1.4	9.0
15	11	14	14	14	16	12	10	7.5	4.8	.26	1.2	9.5
16	11	14	14	14	16	14	8.0	9.3	3.6	.26	.85	8.4
17	11	14	13	14	18	15	11	5.6	3.6	4.3	.64	8.7
18	9.9	15	14	14	19	15	13	4.9	2.7	3.2	.56	9.0
19	8.5	16	14	14	19	15	13	3.1	2.9	3.5	.50	9.1
20	9.9	16	14	15	16	14	12	5.1	5.3	2.4	.44	9.0
21	30	16	12	12	20	14	12	9.0	8.2	1.2	.40	9.6
22	21	17	12	12	23	14	12	6.8	5.1	.82	.35	12
23	16	17	11	13	21	15	12	4.6	3.8	.58	.31	7.3
24	13	17	12	12	20	14	12	3.6	2.8	.38	.28	8.0
25	13	16	12	17	19	11	11	2.8	4.1	.30	.28	7.5
26	16	14	13	18	20	10	11	2.7	4.4	.31	.26	7.2
27	17	14	13	15	20	10	8.8	2.6	5.0	.36	.29	8.0
28	15	13	12	12	20	9.5	9.6	3.0	3.9	.31	.31	8.0
29	14	13	13	13	------	6.8	9.5	3.6	5.0	.26	.31	7.9
30	19	13	12	13	------	9.7	8.2	2.5	2.4	.27	.31	7.4
31	18	------	12	16	------	13	------	2.2	------	.31	.28	------
TOTAL	404.3	422	398	443	507	459.0	328.5	143.1	155.2	27.83	34.06	222.45
MEAN	13.0	14.1	12.8	14.3	18.1	14.8	11.0	4.62	5.17	.90	1.10	7.42
MAX	30	17	14	18	23	21	13	9.3	11	4.3	5.8	14
MIN	8.5	12	10	12	15	6.8	8.0	1.3	1.9	.26	.26	.27
AC-FT	802	837	789	879	1,010	910	652	284	308	55	68	441

CAL YR 1972 TOTAL 3,982.69 MEAN 10.9 MAX 32 MIN .45 AC-FT 7,900
WTR YR 1973 TOTAL 3,544.44 MEAN 9.71 MAX 30 MIN .26 AC-FT 7,030

PEAK DISCHARGE (BASE, 400 FT³/S).--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 (0.6 km) west of Knickerbocker, and 5.4 miles (8.7 km) upstream from mouth.

DRAINAGE AREA.--229 mi² (593 km²), of which 31 mi² (80.3 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 2,001.45 ft (610.04 m) above mean sea level. Prior to Nov. 10, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years, 10.6 ft³/s (0.30 m³/s), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 116 ft³/s (3.29 m³/s) Sept. 6, gage height, 5.10 ft (1.55 m); minimum, 0.31 ft³/s (8.8 dm³/s) July 29.
Period of record: Maximum discharge, 17,500 ft³/s (496 m³/s) Aug. 12, 1971, gage height, 20.66 ft (6.30 m); no flow at times. Maximum stage since at least 1882, 30.4 ft (9.3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	17	15	10	11	9.4	10	2.5	9.8	5.6	7.0
2	10	13	16	15	10	10	9.4	12	3.2	11	5.2	7.5
3	10	14	16	16	10	10	8.2	13	9.7	9.0	5.8	6.9
4	10	14	16	15	12	11	8.8	9.0	3.4	8.1	5.4	6.9
5	13	14	16	15	14	10	9.3	7.6	5.7	6.7	6.0	5.4
6	12	14	15	15	13	11	10	6.2	3.2	5.4	6.3	22
7	11	14	15	15	13	10	11	4.6	3.2	5.8	4.5	31
8	10	14	15	15	15	10	10	4.2	2.6	6.7	1.9	8.4
9	11	14	15	15	14	11	9.6	4.2	1.9	6.5	2.7	6.6
10	10	14	15	15	14	12	9.0	3.9	4.5	4.9	3.6	6.9
11	10	14	15	15	14	11	9.0	4.4	4.1	5.8	5.8	6.9
12	8.3	16	16	13	13	11	10	8.6	4.0	6.3	6.3	6.9
13	5.4	17	16	12	12	11	11	7.3	3.8	5.8	6.7	6.9
14	4.7	17	16	12	11	12	9.1	9.4	3.4	5.4	6.8	7.3
15	4.9	17	15	12	11	12	12	10	3.1	3.3	6.8	7.6
16	4.3	17	15	8.6	11	12	10	9.2	3.8	2.9	6.3	7.9
17	4.3	17	15	7.9	11	12	12	7.9	6.9	5.6	4.7	8.1
18	4.9	17	15	9.0	11	11	11	6.9	11	5.2	5.0	8.1
19	4.9	17	15	8.8	11	11	10	9.0	12	5.2	6.9	8.6
20	6.1	17	15	8.7	11	11	9.8	11	11	3.9	6.9	8.3
21	15	17	15	9.0	12	11	10	9.5	12	4.9	7.1	8.7
22	15	17	15	9.3	13	11	11	8.9	8.8	4.5	6.9	13
23	12	17	15	10	12	9.2	9.8	7.3	15	4.9	6.9	10
24	12	17	15	10	11	10	9.8	9.1	12	3.5	6.9	9.3
25	12	17	15	12	11	10	9.0	6.5	9.5	3.1	7.8	8.8
26	13	17	14	12	11	8.7	9.2	7.8	10	2.6	7.2	9.8
27	14	17	14	11	11	8.2	9.0	7.7	10	6.4	5.8	12
28	13	17	14	10	11	7.6	9.2	8.1	11	4.5	6.7	9.8
29	13	17	15	11	------	7.4	10	2.9	12	.87	6.3	9.8
30	13	17	15	11	------	8.3	10	.90	11	1.3	5.9	12
31	15	------	15	11	------	8.0	------	2.4	------	3.3	6.4	------
TOTAL	312.8	475	471	374.3	333	319.4	295.6	229.50	214.3	163.17	183.1	288.4
MEAN	10.1	15.8	15.2	12.1	11.9	10.3	9.85	7.40	7.14	5.26	5.91	9.61
MAX	15	17	17	16	15	12	12	13	15	11	7.8	31
MIN	4.3	13	14	7.9	10	7.4	8.2	.90	1.9	.87	1.9	5.4
AC-FT	620	942	934	742	661	634	586	455	425	324	363	572

CAL YR 1972 TOTAL 4,208.95 MEAN 11.5 MAX 184 MIN .74 AC-FT 8,350
WTR YR 1973 TOTAL 3,659.57 MEAN 10.0 MAX 31 MIN .87 AC-FT 7,260

PEAK DISCHARGE (BASE, 100 FT³/S).--Sept. 6 (2200) 116 ft³/s (5.10 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 (6.1 km) upstream from Lake Nasworthy Dam, 8.1 miles (13.0 km) southwest of San Angelo, and at mile 75.0 (120.7 km).

DRAINAGE AREA.--3,724 mi² (9,645 km²), of which 1,178 mi² (3,051 km²) 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, 90,430 acre-ft (112 hm³) Apr. 25, elevation, 1,926.18 ft (587.10 m); minimum, 67,830 acre-ft (83.6 hm³) Sept. 5, elevation, 1,920.33 ft (585.32 m).
Period of record: Maximum contents, 101,100 acre-ft (125 hm³) Feb. 29, 1972, elevation, 1,928.28 ft (587.74 m); minimum since first appreciable storage, 2,120 acre-ft (2.61 hm³) Apr. 15, 1971.

REMARKS.--Reservoir is formed by a rolled earthfill dam, 8.1 miles (13.0 km) long including a 200-foot (61-meter) uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of three 15.5-foot (4.7-meter) concrete conduits, each is controlled by a 12- by 15-foot (8- by 5-meter) fixed wheel gate and a 12- by 15-foot (8- by 5-meter) radial gate, located in Middle Concho-Spring Creek pool. Low-flow releases will be made through 2- by 2-foot (0.6- by 0.6-meter) 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 (5.18-kilometer) equalizing channel. At a lake elevation of 1,925 ft (587 m) 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 given 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.

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81,080	82,390	82,960	83,820	85,750	88,250	89,460	90,260	86,210	80,610	73,360	68,540
2	81,080	82,420	82,950	84,040	85,790	88,330	89,370	90,140	85,980	80,220	73,260	68,450
3	81,060	82,330	82,950	84,060	85,840	88,410	89,330	90,150	86,210	79,870	73,220	68,350
4	81,050	82,360	83,010	84,120	85,870	88,440	89,230	90,090	86,200	79,430	73,130	68,120
5	81,010	82,390	82,970	84,200	85,950	88,480	89,230	90,080	86,230	79,030	73,020	67,830
6	80,990	82,370	82,970	84,280	85,990	88,740	89,440	90,040	86,140	78,600	72,940	68,540
7	80,990	82,370	83,010	84,370	86,200	88,780	89,450	89,850	85,940	78,310	72,760	68,980
8	80,990	82,400	83,010	84,370	86,430	88,770	89,360	89,820	85,680	77,990	72,540	69,010
9	80,990	82,340	83,050	84,400	86,530	88,840	89,320	89,660	85,460	77,670	72,360	68,990
10	80,950	82,380	83,090	84,520	86,560	89,080	89,310	89,600	85,170	77,210	72,190	69,110
11	80,950	82,420	83,140	84,540	86,630	89,080	89,290	89,540	84,960	77,530	72,120	69,100
12	80,950	82,580	83,150	84,660	86,680	89,120	89,320	89,700	84,770	77,380	71,950	69,120
13	80,910	82,500	83,190	84,660	87,040	89,160	89,360	89,620	84,540	77,230	71,800	69,090
14	80,860	82,500	83,270	84,740	86,750	89,170	89,440	89,660	84,250	77,160	71,650	69,060
15	80,860	82,530	83,230	84,780	86,830	89,170	89,650	89,540	84,010	77,010	71,510	69,040
16	80,860	82,530	83,270	84,860	86,860	89,230	89,700	89,410	83,810	76,830	71,360	69,020
17	80,830	82,530	83,300	85,010	86,990	89,230	90,090	89,260	83,650	76,720	71,190	68,950
18	80,730	82,530	83,380	84,970	87,080	89,220	90,290	89,090	83,450	76,500	71,040	68,920
19	80,690	82,520	83,420	85,060	87,120	89,210	90,220	88,910	83,370	76,320	70,860	68,900
20	80,640	82,560	83,470	85,250	87,200	89,250	90,210	88,780	83,170	76,220	70,710	68,840
21	81,210	82,570	83,510	85,090	87,450	89,300	90,250	88,520	82,930	75,940	70,620	69,140
22	81,430	82,650	83,620	85,060	87,780	89,300	90,300	88,420	82,700	75,600	70,400	69,140
23	81,430	82,690	83,560	85,130	87,830	89,430	90,340	88,450	82,410	75,270	70,180	69,090
24	81,420	82,850	83,610	85,250	87,910	89,560	90,340	88,360	82,240	74,900	69,870	69,100
25	81,390	82,770	83,610	85,550	87,990	89,450	90,430	88,230	82,100	74,530	69,620	69,040
26	81,580	82,810	83,690	85,640	88,030	89,500	90,310	88,040	81,930	74,190	69,380	69,120
27	81,670	82,810	83,760	85,620	88,120	89,490	90,330	87,740	81,730	73,910	69,160	69,110
28	81,710	82,800	83,800	85,620	88,240	89,440	90,320	87,610	81,460	73,630	69,000	69,070
29	81,750	82,880	83,840	85,700	------	89,480	90,310	87,390	81,180	73,380	68,860	69,050
30	81,990	82,920	83,820	85,740	------	89,540	90,360	86,950	80,880	73,340	68,750	69,050
31	82,390	------	83,820	85,810	------	89,420	------	86,470	------	73,380	68,630	------
(†)	1,926.45	1,926.25	1,926.18	1,926.31	1,926.35	1,926.30	1,926.30	1,925.86	1,925.79	1,925.57	1,925.12	1,925.90
(*)	1,924.20	1,924.36	1,924.60	1,925.08	1,925.66	1,925.95	1,926.17	1,925.30	1,923.91	1,921.90	1,920.57	1,920.57
(††)	+1,240	+530	+900	+1,990	+2,430	+1,180	+940	-3,890	-5,590	-7,500	-4,750	+420
MAX	82,390	82,920	83,840	85,810	88,240	89,560	90,430	90,260	86,230	80,610	73,360	69,140
MIN	80,680	82,330	82,950	83,820	85,750	88,250	89,230	86,470	80,880	73,340	68,630	67,830

CAL YR 1972..... †† -15,830 MAX 101,100 MIN 78,650
WTR YR 1973..... †† -12,100 MAX 90,430 MIN 67,830

† 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 (61 m) upstream from U.S. Highway 277, 3.6 miles (5.8 km) upstream from mouth, and 10.5 miles (16.9 km) south of San Angelo.

DRAINAGE AREA.--83.2 mi² (215 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,930.72 ft (588.48 m) above mean sea level. Prior to Apr. 30, 1968, at site 1.2 miles (1.9 km) downstream at datum 20.21 ft (6.16 m) lower.

AVERAGE DISCHARGE.--12 years, 0.76 ft³/s (22 dm³/s), 551 acre-ft/yr (0.679 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2.1 ft³/s (59 dm³/s) Feb. 22, gage height, 0.61 ft (0.19 m); no flow for many days.
Period of record: Maximum discharge, 6,780 ft³/s (192 m³/s) Sept. 24, 1964, gage height, 11.15 ft (3.40 m), site and datum then in use, from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of slope-area measurement of 30,500 ft³/s (864 m³/s); no flow most of time each year.
Maximum stage since at least 1908, 14.36 ft (4.38 m), former site and datum, Sept. 15, 1936, discharge, 30,500 ft³/s (864 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	.54	.18	.04				
2					0	.54	.18	.04				
3					0	.33	.13	.03				
4					0	.25	.07	.03				
5					0	.33	.06	.03				
6					0	.97	.13	.03				
7					0	.60	.54	.02				
8					0	.30	.43	.02				
9					0	.20	.09	.01				
10					0	1.0	.06	0				
11					0	.60	.06	0				
12					0	.30	.06	0				
13					0	.20	.06	0				
14					0	.20	.06	0				
15					0	.20	.13	0				
16					0	.20	.33	0				
17					.01	.20	.80	0				
18					.03	.20	.80	0				
19					.03	.20	.54	0				
20					.03	.20	.43	0				
21					.05	.20	.25	0				
22					.66	.20	.13	0				
23					1.7	.80	.09	0				
24					.97	.60	.07	0				
25					.66	.50	.06	0				
26					.54	.43	.05	0				
27					.54	.18	.05	0				
28					.43	.18	.05	0				
29					------	.18	.05	0				
30					------	.25	.04	0				
31		------			------	.25	------	0	------			------
TOTAL	0	0	0	0	5.65	11.33	5.98	.25	0	0	0	0
MEAN	0	0	0	0	.20	.37	.20	.008	0	0	0	0
MAX	0	0	0	0	1.7	1.0	.80	.04	0	0	0	0
MIN	0	0	0	0	0	.18	.04	0	0	0	0	0
AC-FT	0	0	0	0	11	22	12	.5	0	0	0	0

CAL YR 1972 TOTAL 179.69 MEAN .49 MAX 68 MIN 0 AC-FT 356
WTR YR 1973 TOTAL 23.21 MEAN .064 MAX 1.7 MIN 0 AC-FT 46

PEAK DISCHARGE (BASE, 100 FT³/S).--No peak above base.

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 (579 m) downstream from U.S. Highway 87, 4.3 miles (6.9 km) south of San Angelo, and 7.0 miles (11.3 km) 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 (565.50 m) above mean sea level (Bureau of Reclamation reference mark).

EXTREMES.--Period of record: Maximum daily discharge, 101 ft³/s (2.86 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0						0	5.7	65	67	.57	3.2
2	0						0	5.1	51	71	.57	2.9
3	0						0	7.0	35	72	.51	2.8
4	.02						0	9.4	15	72	.50	3.0
5	.78						0	9.4	16	71	.48	3.7
6	1.1						0	10	26	69	.38	9.3
7	1.7						0	15	36	66	3.9	3.7
8	5.7						0	23	44	65	5.3	1.0
9	5.7						.34	30	41	65	12	.59
10	1.9						12	36	32	66	14	.50
11	.17						9.4	36	40	54	13	.40
12	.17						7.7	37	49	36	13	.39
13	.27						6.7	36	51	36	13	.43
14	.38						.63	32	59	36	13	.51
15	.27						1.8	29	59	31	12	.63
16	.63						.27	23	65	26	7.8	.51
17	1.1						.63	22	11	26	2.3	.50
18	.38						.08	21	22	27	2.5	.49
19	0						.03	21	42	34	2.5	.43
20	0						0	21	49	40	2.7	.38
21	0						0	21	57	42	2.7	.10
22	0						0	22	59	45	2.9	.02
23	0						0	22	46	51	9.0	.01
24	0						1.9	18	37	68	9.3	.10
25	0						.63	17	44	71	8.7	.18
26	0						6.0	17	47	80	3.0	6.5
27	0						6.3	24	56	75	1.1	6.6
28	0						6.3	42	57	65	2.4	5.6
29	0				------		6.0	57	64	55	4.0	5.2
30	0				------		6.0	62	68	47	4.1	5.0
31	0	------			------		------	68	------	3.8	3.3	------
TOTAL	20.27	0	0	0	0	0	72.71	708.6	1,343	1,632.8	170.51	64.67
MEAN	.65	0	0	0	0	0	2.42	23.8	44.8	52.7	5.50	2.16
MAX	5.7	0	0	0	0	0	12	68	68	80	14	9.3
MIN	0	0	0	0	0	0	0	5.1	11	3.8	.38	.01
AC-FT	40	0	0	0	0	0	144	1,380	2,660	3,240	338	128

CAL YR 1972 TOTAL 5,530.17 MEAN 15.1 MAX 101 MIN 0 AC-FT 10,970
WTR YR 1973 TOTAL 4,102.56 MEAN 11.2 MAX 80 MIN 0 AC-FT 8,140

08132000 Lake Nasworthy near San Angelo, Tex.

LOCATION.--Lat 31°23'19", long 100°28'41", Tom Green County, on left bank 250 ft (76 m) upstream from Nasworthy Dam on South Concho River, 3.8 miles (6.1 km) downstream from Twin Buttes Dam, 6 miles (9.7 km) southwest of San Angelo, and at mile 68.9 (110.9 km).

DRAINAGE AREA.--3,833 mi² (9,927 km²), of which 3,724 mi² (9,645 km²) is above Twin Buttes Reservoir and 1,178 mi² (3,051 km²) 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 (560.83 m) above mean sea level.

EXTREMES.--Current year: Maximum contents, 11,450 acre-ft (14.1 hm³) Mar. 6, gage height, 31.61 ft (9.63 m); minimum, 10,290 acre-ft (12.7 hm³) May 14, gage height, 30.87 ft (9.41 m).
Period of record: Maximum contents, 26,900 acre-ft (33.2 hm³) Sept. 15, 1936, gage height, 38.36 ft (11.69 m); minimum, 209 acre-ft (0.26 hm³) Aug. 22, 1964, gage height, 13.21 ft (4.03 m).

REMARKS (revised).--Lake is formed by 6,090-foot (1,860-meter) dam having a 5,590-foot (1,700-meter) earthen section, an emergency earthen spillway 300 ft (91.4 m) long, and a concrete service spillway with a bank of fifteen 18- by 25-foot (5.5- by 7.6-meter) 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 (1.47 hm³) of silt was deposited from March 1930 to December 1938 and an additional 1,023 acre-ft (1.26 hm³) was deposited from December 1938 to May 1953, making a total siltation of 2,214 acre-ft (2.73 hm³). 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 given in the following table:

	Gage height (feet)	Capacity (acre-feet)
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)

30.8	10,190	31.4	11,110
31.1	10,630	31.7	11,590

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,010	11,050	10,850	10,760	11,030	11,410	11,190	10,850	10,460	10,390	10,710	10,570
2	11,000	11,010	10,850	10,810	11,010	11,410	11,160	10,790	10,400	10,370	10,660	10,570
3	10,980	11,010	10,850	10,850	11,010	11,400	11,130	10,760	10,490	10,440	10,610	10,550
4	10,970	11,010	10,840	10,850	11,010	11,380	11,090	10,710	10,440	10,500	10,550	10,610
5	10,920	11,010	10,820	10,870	11,010	11,380	11,080	10,680	10,400	10,520	10,500	10,580
6	10,900	11,000	10,810	10,890	11,010	11,430	11,170	10,630	10,370	10,500	10,470	11,090
7	10,870	10,980	10,820	10,890	11,060	11,430	11,160	10,530	10,370	10,470	10,440	11,190
8	10,850	10,970	10,810	10,870	11,140	11,380	11,140	10,500	10,370	10,490	10,440	11,190
9	10,820	10,950	10,820	10,870	11,140	11,400	11,090	10,440	10,390	10,490	10,460	11,160
10	10,790	10,950	10,790	10,900	11,140	11,430	11,060	10,430	10,470	10,490	10,470	11,210
11	10,760	10,950	10,810	10,920	11,160	11,430	11,030	10,470	10,490	10,500	10,580	11,210
12	10,740	10,950	10,810	10,920	11,160	11,430	11,010	10,460	10,500	10,460	10,630	11,190
13	10,730	10,930	10,810	10,920	11,140	11,400	11,000	10,330	10,500	10,370	10,650	11,160
14	10,710	10,920	10,810	10,930	11,130	11,380	11,030	10,320	10,490	10,370	10,630	11,130
15	10,680	10,920	10,790	10,930	11,110	11,370	11,060	10,330	10,470	10,410	10,580	11,110
16	10,660	10,900	10,790	10,950	11,110	11,370	11,050	10,360	10,460	10,440	10,570	11,110
17	10,650	10,900	10,790	10,970	11,170	11,350	11,190	10,390	10,460	10,440	10,550	11,030
18	10,570	10,900	10,790	10,970	11,190	11,350	11,190	10,430	10,400	10,410	10,530	11,010
19	10,550	10,890	10,810	10,970	11,160	11,300	11,190	10,500	10,460	10,400	10,530	11,000
20	10,530	10,890	10,820	10,970	11,190	11,290	11,190	10,550	10,570	10,400	10,520	10,950
21	10,840	10,870	10,820	10,950	11,290	11,270	11,190	10,580	10,610	10,410	10,500	10,950
22	10,820	10,870	10,820	10,930	11,370	11,270	11,160	10,610	10,630	10,460	10,500	10,950
23	10,790	10,870	10,810	10,920	11,380	11,330	11,160	10,710	10,650	10,520	10,490	10,930
24	10,770	10,870	10,810	10,950	11,400	11,300	11,130	10,680	10,690	10,570	10,500	10,950
25	10,760	10,870	10,790	11,050	11,410	11,250	11,110	10,630	10,610	10,610	10,530	10,890
26	10,840	10,870	10,810	11,050	11,400	11,250	11,050	10,580	10,530	10,660	10,580	10,850
27	10,820	10,850	10,790	11,050	11,400	11,240	11,010	10,490	10,520	10,710	10,630	10,810
28	10,820	10,850	10,790	11,030	11,430	11,220	10,980	10,370	10,520	10,740	10,610	10,760
29	10,820	10,850	10,790	11,060	------	11,220	10,950	10,300	10,490	10,790	10,600	10,710
30	10,850	10,850	10,790	11,060	------	11,220	10,900	10,390	10,440	10,770	10,580	10,680
31	10,930	------	10,770	11,060	------	11,190	------	10,520	------	10,730	10,570	------
(†)	1,871.29	1,871.24	1,871.19	1,871.37	1,871.60	1,871.45	1,871.27	1,871.03	1,870.98	1,871.16	1,871.06	1,871.13
(*)	-130	-80	-80	+290	+370	-240	-290	-380	-80	+290	-160	+110
MAX	11,010	11,050	10,850	11,060	11,430	11,430	11,190	10,850	10,690	10,790	10,710	11,210
MIN	10,530	10,850	10,770	10,760	11,010	11,190	10,900	10,300	10,370	10,370	10,440	10,550

CAL YR 1972..... * +250 MAX 11,400 MIN 10,330
WTR YR 1973..... * -380 MAX 11,430 MIN 10,300

† 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 (30 m) upstream from bridge on State Highway 163, 0.3 mile (0.5 km) south of Sterling City, 3.5 miles (5.6 km) downstream from Lacy Creek, 4 miles (6.4 km) upstream from Sterling Creek, and at mile 55.3 (89.0 km).

DRAINAGE AREA.--605 mi² (1,567 km²), of which 66 mi² (171 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,242.36 ft (683.47 m) above mean sea level. Prior to Dec. 6, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 9.46 ft³/s (0.268 m³/s), 6,850 acre-ft/yr (8.45 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,280 ft³/s (234 m³/s) Mar. 10, gage height, 20.20 ft (6.16 m); no flow most of time.
Period of record: Maximum discharge, 16,300 ft³/s (462 m³/s) July 6, 1948, gage height, 23.70 ft (7.22 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	.38	.78				
2						0	.16	.56				
3						0	.04	.42				
4						0	0	.31				
5						0	.02	.28				
6						0	.04	.25				
7						0	0	.72				
8						0	0	.51				
9						0	.53	.25				
10						2,110	.22	.16				
11						101	.04	.46				
12						14	0	.31				
13						6.5	0	.46				
14						3.8	0	.51				
15						2.4	.07	.46				
16						1.8	.18	.38				
17						1.2	.12	.31				
18						.92	.42	.20				
19						.78	.56	.03				
20						1.1	.20	0				
21						.46	.03	0				
22						.34	0	0				
23						.38	9.2	0				
24						1.3	164	0				
25						1.0	30	0				
26						.42	8.8	0				
27						.34	3.8	0				
28						.14	1.7	0				
29					------	.12	1.2	0				
30					------	.38	.85	0				
31		------			------	.42	------	0	------			------
TOTAL	0	0	0	0	0	2,248.80	222.56	7.36	0	0	0	0
MEAN	0	0	0	0	0	72.5	7.42	.24	0	0	0	0
MAX	0	0	0	0	0	2,110	164	.78	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	4,460	441	15	0	0	0	0

CAL YR 1972 TOTAL 287.98 MEAN .79 MAX 131 MIN 0 AC-FT 571
WTR YR 1973 TOTAL 2,478.72 MEAN 6.79 MAX 2,110 MIN 0 AC-FT 4,920

PEAK DISCHARGE (BASE, 300 FT³/S).--Mar. 10 (1000) 8,280 ft³/s (20.20 ft); Apr. 24 (0300) 461 ft³/s (8.64 ft).

08134000 North Concho River near Carlsbad, Tex.

LOCATION.--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 (2.1 km) southeast of Carlsbad, 1.7 miles (2.7 km) upstream from Mule Creek, 4.7 miles (7.6 km) upstream from Grape Creek, 12 miles (19.3 km) northeast of San Angelo Dam, and at mile 22.9 (36.8 km).

DRAINAGE AREA.--1,249 mi² (3,235 km²), of which 105 mi² (272 km²) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,968.02 ft (599.85 m) 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 (4.0 km) upstream at datum 32.76 ft (9.99 km) higher.

AVERAGE DISCHARGE.--49 years, 37.7 ft³/s (1.07 m³/s), 27,310 acre-ft/yr (33.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,340 ft³/s (123 m³/s) Mar. 11, gage height, 11.06 ft (3.61 m); no flow at times.
Period of record: Maximum discharge, 94,600 ft³/s (2,680 m³/s) Sept. 26, 1936, gage height, 16.0 ft (4.88 m) at former site, 29.1 ft (8.87 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04					0	1.9	2.0	0	0		
2	.03					0	1.9	1.6	0	0		
3	.02					0	1.2	.74	.08	0		
4	.01					0	1.0	.91	.05	0		
5	0					0	.67	.74	.04	0		
6	0					0	.54	1.3	.02	0		
7	0					0	.60	1.1	.01	0		
8	0					0	.82	.74	0	0		
9	0					0	.74	.54	0	0		
10	0					542	.60	.35	0	0		
11	0					986	.43	.23	0	15		
12	0					74	.43	.31	0	3.1		
13	0					33	.48	.39	0	.07		
14	0					21	.60	.48	0	12		
15	0					13	.74	.54	0	.55		
16	0					9.1	1.2	.43	0	.11		
17	0					5.9	2.6	.39	0	.06		
18	0					3.7	2.0	.23	0	.03		
19	0					3.4	1.3	.17	0	.01		
20	0					3.0	1.1	.13	0	0		
21	.03					2.8	.91	.11	0	0		
22	.04					2.4	.91	.08	0	0		
23	.02					2.4	1.5	.08	0	0		
24	.01					3.0	12	.06	0	0		
25	0					2.0	73	.05	0	0		
26	.03					1.9	31	.03	0	0		
27	.03					2.0	14	0	0	0		
28	.02					2.6	7.0	0	0	0		
29	.01				------	3.0	3.7	0	0	0		
30	.01				------	3.0	2.4	0	0	0		
31	.01	------			------	2.0	------	0	------	0		------
TOTAL	.31	0	0	0	0	1,721.2	167.27	13.73	.20	30.93	0	0
MEAN	.010	0	0	0	0	55.5	5.58	.44	.007	1.00	0	0
MAX	.04	0	0	0	0	986	73	2.0	.08	15	0	0
MIN	0	0	0	0	0	0	.43	0	0	0	0	0
AC-FT	.6	0	0	0	0	3,410	332	27	.4	61	0	0

CAL YR 1972 TOTAL 1,114.71 MEAN 3.05 MAX 798 MIN 0 AC-FT 2,210
WTR YR 1973 TOTAL 1,933.64 MEAN 5.30 MAX 986 MIN 0 AC-FT 3,840

PEAK DISCHARGE (BASE, 1,500 FT³/S).--Mar. 11 (0130) 4,430 ft³/s (11.85 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 (5.0 km) northwest of San Angelo, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--1,488 mi² (3,854 km²), of which 105 mi² (272 km²) 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, 9,940 acre-ft (12.3 hm³) Mar. 14, elevation, 1,869.65 ft (569.87 m); minimum, 7,150 acre-ft (8.82 hm³) Feb. 5-8, elevation, 1,866.08 ft (568.78 m).
Period of record: Maximum contents, 174,100 acre-ft (215 hm³) Oct. 14, 1957, elevation, 1,916.47 ft (584.14 m); 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 (12,462 m) 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 (2.3 by 4.4 m), opening into two 18-foot-diameter (6-meter) concrete conduits and two 30-inch (762-millimeter) 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 (351 m) long designed to discharge 356,000 ft³/s (10,080 m³/s) at maximum design level, elevation, 1,958.0 ft (596.8 m). Since February 1973, capacity based on survey made in 1962. 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	392,700
Top of conservation storage	1,908.0	115,700
Inverts to wet well for 30-inch outlets	1,878.5	20,900
Inverts of six gate-controlled outlets	1,840.0	0

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)

1,860.0	3,650	1,868.0	8,560
1,862.0	4,670	1,870.0	10,250
1,864.0	5,820	1,872.0	12,230
1,866.0	7,100	1,874.0	14,560

CONTENTS IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,810	8,690	8,430	8,240	7,180	7,210	9,680	9,610	9,110	8,740	8,630	8,000
2	8,7 0	8,680	8,420	8,220	7,170	7,210	9,660	9,580	9,100	8,700	8,600	7,980
3	8,770	8,670	8,420	8,260	7,170	7,210	9,620	9,560	9,140	8,690	8,580	7,960
4	8,760	8,660	8,420	8,250	7,160	7,200	9,600	9,550	9,130	8,660	8,560	7,940
5	8,730	8,660	8,410	8,260	7,150	7,200	9,570	9,530	9,120	8,650	8,530	7,910
6	8,720	8,650	8,390	8,270	7,150	7,200	9,580	9,530	9,100	8,610	8,510	8,060
7	8,710	8,640	8,370	8,270	7,150	7,200	9,570	9,490	9,080	8,590	8,490	8,100
8	8,690	8,630	8,370	8,260	7,150	7,190	9,540	9,470	9,050	8,580	8,470	8,100
9	8,6 0	8,610	8,370	8,260	7,190	7,190	9,520	9,440	9,050	8,560	8,450	8,100
10	8,660	8,600	8,370	8,260	7,190	7,200	9,490	9,420	9,070	8,650	8,440	8,140
11	8,640	8,590	8,370	8,260	7,180	9,600	9,490	9,450	9,060	8,890	8,430	8,130
12	8,640	8,600	8,350	8,260	7,180	9,790	9,480	9,460	9,050	8,880	8,410	8,130
13	8,620	8,580	8,340	8,260	7,170	9,850	9,470	9,430	9,020	8,870	8,390	8,110
14	8,600	8,560	8,330	8,260	7,170	9,870	9,470	9,420	9,010	8,860	8,370	8,100
15	8,600	8,550	8,330	8,260	7,160	9,880	9,520	9,420	8,980	8,850	8,350	8,080
16	8,590	8,550	8,310	8,250	7,160	9,870	9,510	9,400	8,990	8,830	8,330	8,070
17	8,570	8,530	8,300	8,260	7,170	9,860	9,550	9,380	8,970	8,820	8,310	8,060
18	8,550	8,520	8,300	8,250	7,170	9,850	9,550	9,370	8,950	8,790	8,280	8,050
19	8,530	8,510	8,300	8,250	7,170	9,830	9,540	9,350	8,930	8,770	8,260	8,030
20	8,530	8,500	8,300	8,250	7,170	9,820	9,520	9,360	8,940	8,740	8,250	8,010
21	8,650	8,490	8,290	8,240	7,200	9,810	9,520	9,330	8,920	8,720	8,230	8,020
22	8,640	8,480	8,280	8,230	7,220	9,800	9,510	9,320	8,900	8,690	8,210	8,000
23	8,630	8,480	8,280	8,210	7,220	9,810	9,510	9,320	8,890	8,670	8,180	8,000
24	8,610	8,480	8,280	8,220	7,220	9,810	9,490	9,310	8,870	8,650	8,160	7,990
25	8,600	8,470	8,270	8,270	7,220	9,760	9,520	9,300	8,870	8,620	8,130	7,970
26	8,640	8,460	8,260	8,260	7,220	9,750	9,590	9,280	8,850	8,630	8,100	7,970
27	8,640	8,450	8,250	8,260	7,220	9,730	9,620	9,230	8,830	8,610	8,080	7,940
28	8,640	8,440	8,260	8,240	7,220	9,710	9,620	9,200	8,800	8,600	8,060	7,930
29	8,630	8,440	8,260	8,240	------	9,710	9,620	9,180	8,790	8,580	8,050	7,920
30	8,670	8,430	8,250	8,230	------	9,710	9,620	9,140	8,770	8,650	8,030	7,910
31	8,700	------	8,240	8,220	------	9,680	------	9,100	------	8,650	8,010	------
(†)	1,866.70	1,866.37	1,866.14	1,866.11	1,866.17	1,869.35	1,869.27	1,868.65	1,868.25	1,868.10	1,867.27	1,867.14
(*)	-130	-270	-190	-20	-1,000	+2,460	-60	-520	-330	-120	-640	-100
MAX	8,810	8,690	8,430	8,270	7,220	9,880	9,680	9,610	9,140	8,890	8,630	8,140
MIN	8,530	8,430	8,240	8,210	7,150	7,190	9,470	9,100	8,770	8,560	8,010	7,910

CAL YR 1972..... * -1,670 MAX 9,900 MIN 7,110
WTR YR 1973..... * -920 MAX 9,880 MIN 7,150

† 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 (5.1 km) upstream from confluence with South Concho River, and 3.4 miles (5.5 km) downstream from San Angelo Dam.

DRAINAGE AREA.--1,507 mi² (3,903 km²), of which 105 mi² (272 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1915 to June 1928, Feburary 129 to September 1931, July 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,813.42 ft (552.73 m) 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 (2.6 km) downstream at datum 11.02 ft (3.36 m) lower. Feb. 12, 1929, to Sept. 30, 1931, water-stage recorder at site 1.6 miles (2.6 km) downstream at datum 13.02 ft (3.97 m) lower.

AVERAGE DISCHARGE.-17 years (1916-27, 1929-31, 1947-51) prior to completion of San Angelo Dam, 54.5 ft³/s (1.54 m³/s), 39,490 acre-ft/yr (48.7 hm³/yr); 22 years (1951-73) regulated, 10.6 ft³/s (0.30 m³/s), 7,680 acre-ft/yr (9.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 189 ft³/s (5.35 m³/s) Sept. 6, gage height, 2.47 ft (0.75 m); minimum, 0.01 ft³/s (0.28 dm³/s) Aug. 26, 27.

Period of record: Maximum discharge, about 47,000 ft³/s (1,330 m³/s) June 13, 1930, gage height, 22.52 ft (6.86 m) site and datum then in use; no flow at times.

Flood of Sept. 17, 1936, reached a stage of 34.6 ft (10.5 m), from floodmarks, discharge 184,000 ft³/s (5,210 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	4.1	.47	.26	.30	.40	.58	.30	.14	.16	.90	.03
2	.26	1.1	.38	1.2	.30	.35	.47	.23	.11	.12	.32	.06
3	.29	.86	.33	4.2	.28	.40	.38	.20	19	.09	.20	.17
4	.27	.73	.37	1.3	.26	.35	.34	.19	1.8	.08	.15	.13
5	.26	.60	.47	.49	.29	.54	.38	.20	.38	.07	.13	.09
6	.26	.62	.38	.47	.32	6.5	.97	.21	.19	.06	.10	42
7	.26	.55	.38	3.1	1.4	1.2	.79	.15	.14	.05	.10	26
8	.30	.53	.41	2.6	2.8	.52	.50	.15	.12	.04	.08	4.4
9	.35	.58	.46	2.6	2.0	.39	.42	.14	.12	.13	.08	1.3
10	.32	.54	.49	2.6	1.3	7.5	.41	.13	.27	.52	.07	24
11	.30	.53	.49	2.5	.50	1.3	.40	.46	.35	18	1.8	5.3
12	.26	1.2	.52	2.1	.38	.48	.36	3.8	.25	1.6	1.6	2.1
13	.25	1.2	.60	.80	.32	.38	.30	1.1	.17	.37	.26	3.0
14	.21	.55	.51	.46	.32	.26	.31	.63	.13	.27	.13	1.7
15	.18	.40	.44	.40	.32	.26	5.5	.52	.47	.23	.10	1.1
16	.20	.46	.43	.39	.32	.25	2.9	.29	1.2	.20	.08	.98
17	.24	.60	.46	.39	2.5	.22	15	.22	4.8	.16	.06	.65
18	.26	.49	.61	.37	2.0	.21	2.9	.20	1.2	.13	.04	.47
19	.21	.44	.60	.33	.61	.24	.79	.17	.52	.10	.04	.40
20	.24	.40	.40	.32	.41	.21	.45	.22	11	.08	.04	.40
21	35	.49	.32	.30	5.7	.24	.39	.26	9.1	.07	.04	.45
22	6.0	.46	.26	.31	8.6	.26	.34	.12	1.1	.06	.03	1.1
23	1.2	.43	.32	.39	2.2	1.6	.34	.15	.40	.04	.03	.56
24	.67	.65	.40	.75	.70	2.4	.41	.17	.30	.04	.02	.43
25	.52	.56	.40	7.1	.50	.65	.45	.10	.33	.04	.01	.35
26	6.8	.43	.40	2.7	.42	.38	.48	.08	.48	.09	.01	.49
27	2.9	.40	.40	.83	.40	.44	.32	.06	.41	.20	.01	.55
28	.99	.40	.32	.44	.40	.39	.32	.04	.31	.10	.02	.35
29	.74	.43	.40	.41	------	.36	.30	.05	.25	.08	.02	.30
30	17	.49	.49	.39	------	2.6	.27	.06	.20	37	.02	.26
31	29	------	.31	.37	------	.99	------	.07	------	6.8	.02	------
TOTAL	106.00	21.22	13.22	40.87	35.85	32.27	37.77	10.67	55.24	66.98	6.51	119.12
MEAN	3.42	.71	.43	1.32	1.28	1.04	1.26	.34	1.84	2.16	.21	3.97
MAX	35	4.1	.61	7.1	8.6	7.5	15	3.8	19	37	1.8	42
MIN	.18	.40	.26	.26	.26	.21	.27	.04	.11	.04	.01	.03
AC-FT	210	42	26	81	71	64	75	21	110	133	13	236

CAL YR 1972 TOTAL 567.24 MEAN 1.55 MAX 49 MIN 0 AC-FT 1,130
WTR YR 1973 TOTAL 545.72 MEAN 1.50 MAX 42 MIN .01 AC-FT 1,080

08136000 Concho River at San Angelo, Tex.

LOCATION.--Lat 31°27'16", long 100°24'37", Tom Green County, on left bank 0.4 mile (0.6 km) downstream from confluence of North Concho and South Concho Rivers, 1.8 miles (2.9 km) southeast of Tom Green County Courthouse, and at mile 60.9 (98.0 km).

DRAINAGE AREA.--5,380 mi² (13,934 km²), of which 1,283 mi² (3,323 km²) 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 (541.57 m) 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 years (1915-62) prior to construction of Twin Buttes Dam, 158 ft³/s (4.47 m³/s), 114,500 acre-ft/yr (141 hm³/yr); 11 years (1962-73) regulated, 3.98 ft³/s (113 dm³/s), 2,880 acre-ft/yr (3.55 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Sept. 6, gage height, 4.65 ft (1.42 m); minimum, 0.06 ft³/s (1.7 dm³/s) May 10, 11.

Period of record: Maximum discharge, 230,000 ft³/s (6,510 m³/s) Sept. 17, 1936, gage height, 46.6 ft (14.2 m), from floodmarks, from rating curve extended above 105,000 ft³/s (2,970 m³/s) on basis of slope-area measurements of 167,000 and 230,000 ft³/s (4,730 and 6,510 m³/s); no flow at times in 1921, 1952-53, 1965, 1971.

Maximum stage since 1853, 47.5 ft (14.5 m) Aug. 6, 1906, discharge, about 246,000 ft³/s (6,970 m³/s), 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 11,370 acre-ft (14.0 hm³), of which 3,340 acre-ft (4.12 hm³) 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 (10 km) downstream from gage, and none is returned directly to the stream. Flow is regulated by Twin Buttes Reservoir (station 08131200) and 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	32	.24	.96	.98	5.9	.08	.11	.08	.14	7.1	.32
2	.19	7.6	.61	.71	.59	5.3	.08	.10	.08	.14	5.3	.28
3	.30	3.6	3.3	12	.17	4.5	.08	.09	7.3	.13	3.0	.12
4	.21	3.0	7.2	6.6	.82	3.4	.08	.08	6.0	.12	.70	.12
5	.18	3.0	5.2	4.0	.60	2.8	.08	.08	2.8	.12	1.5	.12
6	.16	3.0	3.2	3.2	.14	19	.20	.08	1.0	.37	1.4	187
7	.16	2.5	2.4	8.5	1.8	7.0	.13	.07	.14	.15	.42	141
8	1.2	3.3	1.7	3.0	10	5.0	.15	.08	.14	.14	.34	31
9	5.8	3.0	.16	1.3	16	4.0	.11	.07	.08	.13	.35	17
10	6.6	.50	.14	2.0	9.1	29	.13	.07	.10	.13	3.3	62
11	7.6	.22	.15	2.9	5.2	15	.12	.14	.12	29	1.9	33
12	8.9	1.4	.15	3.5	5.1	8.0	.12	.36	.11	12	1.6	8.3
13	9.2	4.2	.13	3.9	4.7	6.3	.11	.11	.11	5.6	1.4	3.4
14	4.8	1.3	.12	3.0	3.9	2.5	.10	.18	.11	3.7	.75	3.0
15	3.1	.14	.13	1.8	2.9	2.7	.42	.17	.12	8.1	.14	2.0
16	2.7	.19	1.3	.18	2.7	1.6	.18	.11	.79	9.1	.12	1.8
17	2.2	.16	5.3	.19	6.9	.63	41	.12	1.6	6.2	.12	4.6
18	1.6	.17	8.5	.28	8.8	.59	21	.10	.34	2.3	.13	4.6
19	.70	.16	5.6	.13	4.8	.19	8.6	.12	.24	.40	.14	2.8
20	.21	1.4	3.2	.52	1.9	.19	4.5	.11	33	.34	.15	.93
21	97	7.0	3.3	1.6	14	.12	1.6	.10	33	.32	.19	.16
22	36	8.9	3.6	.13	33	.10	.12	.09	7.9	.37	.18	.54
23	8.6	8.3	4.8	.13	19	.29	.10	.40	3.0	.35	.14	.74
24	6.1	5.5	5.8	.17	8.3	2.0	.09	.65	2.0	.29	.16	1.8
25	3.9	3.9	7.4	10	6.0	1.1	.08	.12	.36	.28	.28	2.3
26	18	2.9	8.1	9.1	5.0	.77	.13	.19	.31	.46	.14	3.9
27	16	2.6	6.8	5.5	4.8	.12	.12	.10	.26	.41	.14	5.9
28	7.1	2.5	9.0	2.4	4.3	.10	.09	.08	.15	.31	.12	5.0
29	5.2	2.8	6.7	2.4	------	.10	.09	.08	.15	.34	.12	6.1
30	26	1.6	3.3	2.5	------	.09	.08	.08	.15	100	.12	8.6
31	86	------	2.4	3.2	------	.08	------	.08	------	15	.16	------
TOTAL	365.90	116.84	109.93	95.80	181.50	128.47	79.77	4.32	101.54	196.44	31.61	538.43
MEAN	11.8	3.89	3.55	3.09	6.48	4.14	2.66	.14	3.38	6.34	1.02	17.9
MAX	97	32	9.0	12	33	29	41	.65	33	100	7.1	187
MIN	.16	.14	.12	.13	.14	.08	.08	.07	.08	.12	.12	.12
AC-FT	726	232	218	190	360	255	158	8.6	201	390	63	1,070

CAL YR 1972 TOTAL 1,887.57 MEAN 5.16 MAX 152 MIN .03 AC-FT 3,740
WTR YR 1973 TOTAL 1,950.55 MEAN 5.34 MAX 187 MIN .07 AC-FT 3,870

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 (0.8 km) north of Concho County Courthouse in Paint Rock, 2.7 miles (4.3 km) downstream from Kickapoo Creek, and at mile 19.6 (31.5 km).

DRAINAGE AREA.--6,415 mi² (16,615 km²), of which 1,283 mi² (3,323 km²) 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 (479.86 m) 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 ft³/s (5.95 m³/s), 152,100 acre-ft/yr (188 hm³/yr); 11 years (1962-73) regulated, 28.0 ft³/s (0.79 m³/s), 20,290 acre-ft/yr (25.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 318 ft³/s (9.01 m³/s) Sept. 8, gage height, 13.43 ft (4.09 m); minimum, 1.1 ft³/s (31 dm³/s) July 9.
Period of record: Maximum discharge, 301,000 ft³/s (8,520 m³/s) Sept. 17, 1936, gage height, 43.4 ft (13.2 m), from floodmarks, from rating curve extended above 98,000 ft³/s (2,780 m³/s) on basis of slope-area measurements of 144,000 and 301,000 ft³/s (4,080 and 8,520 m³/s); 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 (12.2 m), and flood in August 1906 reached a stage of 39.5 ft (12.0 m), from information by local resident.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	84	38	35	36	45	24	23	7.8	6.7	82	10
2	32	129	37	39	35	41	26	22	6.8	5.8	49	10
3	31	77	37	46	33	41	24	21	21	5.1	31	10
4	30	56	38	45	34	40	21	20	25	4.1	24	10
5	30	46	38	42	34	39	22	18	15	3.6	19	11
6	30	42	36	42	33	44	25	18	12	8.6	17	80
7	29	39	35	46	36	42	27	18	9.8	5.0	16	179
8	29	37	39	44	48	40	26	17	8.6	2.1	15	247
9	29	38	40	41	42	48	25	16	8.5	1.4	15	127
10	28	38	40	40	38	54	25	15	9.2	2.1	47	74
11	29	40	38	41	39	51	25	16	8.5	9.3	51	53
12	29	42	38	41	47	48	23	23	7.5	7.5	35	45
13	26	40	37	41	44	58	23	18	7.6	5.5	17	87
14	25	38	38	41	39	51	22	15	7.7	16	17	56
15	26	38	36	41	38	46	23	14	6.5	6.9	18	41
16	31	38	35	42	36	44	26	15	20	7.1	17	33
17	36	39	35	43	39	39	37	15	135	5.5	14	30
18	37	40	35	41	42	37	37	15	33	5.0	13	28
19	32	40	32	39	41	36	33	14	18	4.8	12	27
20	31	38	31	38	39	35	48	14	13	4.4	12	27
21	67	37	34	36	49	34	42	18	11	4.0	11	26
22	110	36	36	36	68	35	36	16	11	3.3	10	27
23	123	36	35	38	64	36	32	13	11	3.0	9.3	28
24	82	41	34	34	70	37	30	12	15	2.9	8.1	27
25	58	44	34	46	68	33	27	15	17	2.8	7.4	26
26	60	43	33	49	56	29	28	15	15	4.1	7.8	28
27	66	41	32	45	49	29	25	12	13	5.4	9.8	26
28	52	39	35	39	46	29	26	12	10	8.7	11	25
29	56	37	40	40	------	27	25	10	8.9	7.0	10	24
30	52	38	35	39	------	30	23	8.9	8.0	6.8	11	23
31	48	------	33	39	------	26	------	8.3	------	11	10	------
TOTAL	1,377	1,371	1,114	1,261	1,235	1,224	836	487.2	500.4	175.5	626.4	1,445
MEAN	44.4	45.7	35.9	40.7	44.1	39.5	27.9	15.7	16.7	5.66	20.2	48.2
MAX	123	129	40	49	70	58	48	23	135	16	82	247
MIN	25	36	31	33	33	26	21	8.3	6.5	1.4	7.4	10
AC-FT	2,730	2,720	2,210	2,500	2,450	2,430	1,660	966	993	348	1,240	2,870

CAL YR 1972 TOTAL 12,196.9 MEAN 33.3 MAX 238 MIN 4.0 AC-FT 24,190
WTR YR 1973 TOTAL 11,652.5 MEAN 31.9 MAX 247 MIN 1.4 AC-FT 23,110

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 (1.9 km) upstream from Bois d'Arc Creek, 1.8 miles (2.9 km) northeast of Stacy, 24 miles (39 km) downstream from Concho River, and at mile 604.8 (973.1 km).

DRAINAGE AREA.--24,040 mi² (62,260 km²), of which 12,880 mi² (33,360 km²) 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 (425.09 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--5 years, 193 ft³/s (5.47 m³/s), 139,800 acre-ft/yr (172 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,200 ft³/s (90.6 m³/s) Apr. 24, gage height, 8.35 ft (2.55 m); minimum, 4.6 ft³/s (130 dm³/s) Sept. 4.
Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) May 10, 1968, gage height, 13.14 ft (4.01 m); minimum, 0.55 ft³/s (16 dm³/s) May 29, 1971.
Maximum discharge since at least 1882, 356,000 ft³/s (10,100 m³/s) Sept. 18, 1936, gage height, 64.59 ft (19.69 m), on basis of slope-area measurement of peak flow. The flood of Sept. 18, 1936, was 4 ft (1 m) higher than the 1906 flood and 7 to 8 ft (2.1 to 2.4 m) 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 257 mi² (666 km²) above this station was partly controlled by 39 floodwater-retarding structures with a total combined capacity of 57,990 acre-ft (71.5 hm³) below the flood-spillway crests, of which 53,510 acre-ft (66.0 hm³) is floodwater-retarding capacity and 4,480 acre-ft (5.52 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 1,510 acre-ft (1.86 hm³), of which 151 acre-ft (0.186 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	182	114	117	125	179	89	243	61	44	374	10
2	25	473	113	120	121	172	83	218	59	64	414	9.9
3	21	514	114	117	119	162	112	197	83	52	298	7.6
4	18	345	115	117	115	151	113	184	1,280	45	202	5.5
5	17	253	112	120	112	144	100	169	1,230	38	146	7.3
6	15	201	112	124	111	143	89	159	790	34	112	74
7	15	167	111	131	116	142	80	164	165	30	85	237
8	14	147	109	127	136	142	69	156	114	29	67	244
9	13	129	107	124	138	136	65	141	56	29	55	277
10	13	122	112	124	146	141	66	139	31	25	53	213
11	13	111	114	120	139	148	59	174	61	31	45	150
12	12	106	113	117	131	167	55	135	32	99	49	116
13	12	101	117	131	124	189	57	127	27	219	97	104
14	11	105	114	124	134	174	54	124	24	515	75	787
15	12	110	116	117	134	165	59	121	31	253	51	611
16	11	106	117	122	127	146	59	118	40	271	35	227
17	9.5	107	116	126	124	139	72	110	1,680	342	26	121
18	9.9	104	113	127	127	127	72	107	2,160	196	22	79
19	12	104	111	130	131	116	161	106	496	131	21	59
20	14	113	109	121	144	107	174	101	256	97	20	49
21	18	112	109	104	161	104	121	117	150	97	17	41
22	369	109	109	115	177	94	113	112	138	61	14	40
23	837	104	110	110	197	94	117	105	88	42	11	37
24	392	105	117	101	249	95	1,750	193	61	36	9.6	36
25	243	103	116	124	254	89	1,690	162	52	35	8.7	37
26	179	110	114	121	258	166	1,180	112	40	38	7.4	54
27	276	116	112	132	228	192	1,040	96	66	160	6.0	85
28	571	126	111	162	199	161	641	91	34	635	5.3	317
29	368	124	109	165	------	135	453	83	24	268	5.9	202
30	233	116	105	147	------	110	332	72	29	192	6.4	124
31	194	------	115	135	------	94	------	61	------	156	7.4	------
TOTAL	3,966.4	4,725	3,486	3,872	4,277	4,324	9,125	4,197	9,358	4,264	2,345.7	4,361.3
MEAN	128	158	112	125	153	139	304	135	312	138	75.7	145
MAX	837	514	117	165	258	192	1,750	243	2,160	635	414	787
MIN	9.5	101	105	101	111	89	54	61	24	25	5.3	5.5
AC-FT	7,870	9,370	6,910	7,680	8,480	8,580	18,100	8,320	18,560	8,460	4,650	8,650

CAL YR 1972 TOTAL 36,465.4 MEAN 99.6 MAX 1,730 MIN 2.2 AC-FT 72,330
WTR YR 1973 TOTAL 58,301.4 MEAN 160 MAX 2,160 MIN 5.3 AC-FT 115,600

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 (2.9 km) upstream from East Fork, and 4.3 miles (6.9 km) north of Trickham.

DRAINAGE AREA.--21.8 mi² (56.5 km²), of which 6.5 mi² (16.8 km²) is above sites 5, 5-A, and 6.

PERIOD OF RECORD.--April 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,462.00 ft (445.62 m) above mean sea level.

AVERAGE INFLOW.--8 years, 2,410 acre-ft/yr (2.97 hm³/yr).

AVERAGE OUTFLOW.--8 years, 2,260 acre-ft/yr (2.79 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 106 ft³/s (3.00 m³/s) Apr. 24, gage height, 7.93 ft (2.42 m); no outflow for many days. Maximum inflow, 696 ft³/s (19.7 m³/s), average for 5-minute interval, Apr. 23, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 230 ft³/s (6.51 m³/s) Sept. 24, 1971, gage height, 13.58 ft (4.14 m); no outflow for many days. Maximum inflow, 1,540 ft³/s (43.6 m³/s), 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 (972 m) long, including a 400-foot (122-meter) wide emergency spillway. The outlet structure is a 3.5- by 11.0-foot (1.1- by 3.4-meter) concrete drop inlet connected to a 42-inch (1,066-millimeter) concrete outlet pipe. The top of the structure is open and at 12.68 ft (3.86 m) gage height. There are four 5.25-foot (1.60-meter) rectangular notches in the drop inlet, two on each side divided by a 6-inch (152-millimeter) concrete web, with crests at 8.68 ft (2.65 m) gage height. In addition, there are six portholes in the drop inlet, 2 ft (0.6 m) wide by 1 ft (0.3 m) high, the bottoms being at 5.02 ft (1.53 m) gage height. A 12-inch (305-millimeter) controlled water-supply outlet pipe, invert at gage height, 1.18 ft (0.36 m), is connected to the drop inlet. Pool capacity is 3,022 acre-ft (3.73 hm³) at the emergency spillway crest, 548 acre-ft (0.676 hm³) at the crest of drop inlet, 230 acre-ft (0.284 hm³) at the bottom of portholes, and 78.1 acre-ft (96,300 m³) at invert of 8-inch (203-millimeter) controlled outlet pipe. The area and capacity tables are based on a Soil Conservation Service survey of Aug. 24, 1972. At end of year, flow from 6.52 mi² (16.9 km²) above this station was partly controlled by three floodwater-retarding structures (built in 1961) with a total combined capacity of 1,660 acre-ft (2.05 hm³) below the flood-spillway crests, of which 1,460 acre-ft (1.80 hm³) is floodwater-retarding capacity and 200 acre-ft (0.247 hm³) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	28.6	0.6	0.3	3.0	19.6	10.7	628	35.4	10.8	0.8	0.1	4.0
Outflow	0	0	0	0	0	0	470	119	29.8	0	0	0
(†)	21.8	-8.7	-5.3	1.4	17.6	.9	158	-117	-38.4	-15.6	-16.4	-3.0
(††)	2.67	.63	.04	2.90	2.79	1.80	5.16	.76	1.74	2.83	.20	3.26

CAL YR 1972: Inflow 270 Outflow 136 † -39.8 †† 19.83
WTR YR 1973: Inflow 742 Outflow 619 † -5.0 †† 24.78

PEAK INFLOW (BASE, 500 FT³/S).--Apr. 23 (2000) *696 ft³/s.

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.

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 (2.4 km) upstream from mouth, 4.5 miles (7.2 km) southwest of Bangs, and 7.1 miles (11.4 km) north of Trickham.

DRAINAGE AREA.--4.02 mi² (10.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,500.01 ft (457.20 m) above mean sea level.

AVERAGE INFLOW.--12 years, 530 acre-ft/yr (0.653 hm³/yr).

AVERAGE OUTFLOW.--12 years, 419 acre-ft/yr (0.517 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 33.6 ft³/s (0.95 m³/s) Apr. 24, gage height, 20.58 ft (6.27 m); no outflow for many days. Maximum inflow, 350 ft³/s (9.91 m³/s), average for 5-minute interval, Apr. 23, computed and adjusted as explained below; no inflow most of time.
Period of record: Maximum outflow, 39.9 ft³/s (1.13 m³/s) Sept. 24, 1971, gage height, 25.04 ft (7.63 m); no outflow most of time each year. Maximum inflow, 1,630 ft³/s (46.2 m³/s), 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 (631 m) long with a 150-foot (46-meter) wide earthen spillway at the right end of dam. The crest of emergency spillway is at gage height 27.1 ft (8.3 m). The dam was completed in November 1960. The outlet structure consists of a 2- by 4-foot (0.6- by 1-meter) uncontrolled concrete drop-inlet structure that is connected to a 19-inch (483-millimeter) concrete outlet pipe. There are four openings in the top of the drop inlet; the dimensions are 1 by 2 ft (0.3 by 0.6 m) at the upstream and downstream sides, and 1 by 4 ft (0.3 by 1 m) on the right and left sides; the crest of these openings is at gage height 18.2 ft (5.5 m). There is also a sluice gate at the end of an 8-inch (203-millimeter) pipe that is connected to the upstream side of the drop-inlet structure. Gage height at invert of 8-inch (203-millimeter) pipe is 10.7 ft (3.3 m). 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	21.9	0.8	1.6	4.8	12.6	6.4	178	0.1	1.9	2.1	0	11.3
Outflow	0	0	0	0	0	0	147	0	0	0	0	0
(†)	12.0	-7.0	-4.6	2.5	10.3	-2.1	27.9	-18.4	13.3	-13.5	-15.8	4.4
(††)	2.92	.78	.06	3.04	2.71	1.82	4.96	.78	1.87	2.61	.89	4.06

CAL YR 1972: Inflow 154 Outflow 67.4 † -36.7 †† 21.92
WTR YR 1973: Inflow 242 Outflow 147 † -17.6 †† 26.50

PEAK INFLOW (BASE, 150 FT³/S).--Apr. 23 (2155) *350 ft³/s.

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.

08137500 Mukewater Creek at Trickham, Tex.

LOCATION.--Lat 31°35'24", long 99°13'36", Coleman County, on left bank at Trickham, 750 ft (229 m) upstream from bridge on Farm Road 1176, 2.9 miles (4.7 km) upstream from Hay Creek, 6.9 miles (11.1 km) upstream from mouth, and 11.8 miles (19.0 km) southeast of Santa Anna.

DRAINAGE AREA.--70.0 mi² (181 km²).

PERIOD OF RECORD.--August 1951 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,394.54 ft (425.06 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--22 years, 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) Apr. 23, gage height, 7.01 ft (2.14 m); no flow for many days. Period of record: Maximum discharge, 15,000 ft³/s (425 m³/s) May 1, 1956, gage height, 15.83 ft (4.82 m), from rating curve extended above 5,600 ft³/s (159 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times. Maximum stage since at least 1919, 18 ft (5 m) in 1927, from information by local resident.

REMARKS.--Records good. At end of year, flow from 27.6 mi² (71.5 km²) above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 5,790 acre-ft (7.14 hm³) below the flood-spillway crests, of which 5,180 acre-ft (6.39 hm³) is floodwater-retarding capacity and 607 acre-ft (0.748 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	.01	0	1.1	0			
2					0	0	0	1.1	0			
3					0	0	0	1.1	.74			
4					0	0	0	1.1	.16			
5					0	0	0	1.1	.02			
6					0	0	0	1.3	0			
7					0	0	0	1.1	0			
8					9.5	0	0	1.1	0			
9					.43	0	0	1.1	0			
10					.11	2.7	0	1.3	0			
11					.02	1.4	0	1.1	0			
12					0	.37	0	.48	0			
13					0	.04	0	.29	0			
14					0	.02	0	.48	0			
15					0	0	0	.74	0			
16					0	0	0	1.1	0			
17					0	0	64	.74	0			
18					0	0	26	.48	0			
19					0	0	1.8	.48	0			
20					0	0	.28	.29	0			
21					0	0	.05	.16	0			
22					.08	0	108	.08	0			
23					1.9	0	327	.08	0			
24					1.8	0	542	.08	0			
25					.53	0	134	.08	0			
26					.24	0	48	.08	0			
27					.15	.01	15	.04	0			
28					.04	.01	6.6	.02	0			
29					------	.02	2.5	.16	0			
30					------	.03	1.5	.16	0			
31		------			------	0	------	.04	------			------
TOTAL	0	0	0	0	14.80	4.61	1,276.73	18.56	.92	0	0	0
MEAN	0	0	0	0	.53	.15	42.6	.60	.031	0	0	0
MAX	0	0	0	0	9.5	2.7	542	1.3	.74	0	0	0
MIN	0	0	0	0	0	0	0	.02	0	0	0	0
AC-FT	0	0	0	0	29	9.1	2,530	37	1.8	0	0	0
(††)	2.63	.64	.05	2.93	2.80	2.07	5.22	.76	1.81	3.09	.34	3.38

CAL YR 1972 TOTAL 440.80 MEAN 1.20 MAX 220 MIN 0 AC-FT 874 †† 19.87
WTR YR 1973 TOTAL 1,315.62 MEAN 3.60 MAX 542 MIN 0 AC-FT 2,610 †† 25.72

†† Weighted-mean rainfall, in inches.

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 (0.5 km) south of Winchell, 5.9 miles (9.5 km), revised, downstream from Home Creek, and at mile 560.7 (902.2 km).

DRAINAGE AREA.--24,580 mi² (63,660 km²), approximately, of which 12,880 mi² (33,360 km²) 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 (385.53 m) above mean sea level. November 1923 to September 1934, non-recording gage at site 4.2 miles (6.8 km) downstream at datum 10.14 ft (3.09 m) lower. Jan. 13, 1939, to Mar. 24, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--39 years (1924-34, 1939-68) prior to completion of Robert Lee Dam, 628 ft³/s (17.8 m³/s), 455,000 acre-ft/yr (561 hm³/yr); 5 years (1968-73) partially regulated, 223 ft³/s (6.32 m³/s), 161,600 acre-ft/yr (199 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,470 ft³/s (212 m³/s) Apr. 24, gage height, 13.53 ft (4.12 m); no flow Sept. 5.
Period of record: Maximum discharge, 76,100 ft³/s (2,160 m³/s) Oct. 15, 1930, gage height, 51.8 ft (15.8 m), present site and datum; no flow at times.
Highest stages since 1882 were 62.2 ft (19.0 m) Sept. 19, 1936, and 56.2 ft (17.1 m) Aug. 8, 1906, at railway bridge 1,000 ft (305 m) 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 (2.61 km³). At end of year, flow from 453 mi² (1,173 km²) above this station was partly controlled by 80 floodwater-retarding structures with a total combined capacity of 102,050 acre-ft (126 hm³) below the flood-spillway crests, of which 93,740 acre-ft (116 hm³) is floodwater-retarding capacity and 8,310 acre-ft (10.2 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 1,512 acre-ft (1.86 hm³), of which 151 acre-ft (0.186 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	192	95	74	117	168	100	305	40	59	166	2.0
2	46	176	90	87	111	152	93	251	35	52	118	1.8
3	41	401	89	102	103	142	84	213	75	46	191	.95
4	38	419	87	95	99	135	87	183	236	40	155	.12
5	35	305	87	94	94	127	113	159	1,140	35	116	0
6	32	241	82	104	92	129	110	142	771	30	82	472
7	30	196	82	116	98	124	106	123	396	27	61	1,100
8	29	166	82	117	162	117	93	109	252	22	47	304
9	28	145	82	116	128	116	82	98	197	19	38	222
10	26	130	81	113	110	124	79	93	154	16	31	237
11	26	117	81	117	109	126	78	175	118	16	25	204
12	24	112	84	110	112	120	78	343	95	15	22	146
13	23	109	85	103	104	128	74	106	94	14	27	135
14	22	100	87	107	96	151	76	119	72	34	18	108
15	22	95	85	105	95	151	79	95	63	310	40	664
16	21	98	85	100	101	143	94	87	66	176	35	431
17	20	97	84	97	103	131	147	81	753	152	27	221
18	20	95	84	100	105	119	268	74	1,870	181	19	137
19	19	93	84	104	104	109	127	71	1,070	114	14	94
20	18	92	84	104	102	101	156	67	845	73	14	70
21	22	93	81	99	118	92	209	64	398	51	14	56
22	52	93	79	94	145	87	155	60	287	38	12	47
23	275	92	76	86	167	88	919	56	238	29	11	42
24	586	95	76	84	165	93	4,510	53	170	22	9.4	38
25	339	93	79	104	194	91	2,690	54	128	18	7.7	34
26	290	90	81	107	211	84	2,380	56	103	19	6.1	55
27	250	89	79	110	208	101	1,160	112	89	32	5.3	63
28	243	90	77	109	191	181	792	88	78	27	4.6	48
29	470	98	77	124	------	157	529	66	76	214	3.7	188
30	330	97	75	140	------	133	384	55	69	213	2.3	193
31	239	------	73	127	------	112	------	47	------	314	1.9	------
TOTAL	3,669	4,309	2,553	3,249	3,544	3,832	15,852	3,605	9,978	2,408	1,324.0	5,313.87
MEAN	118	144	82.4	105	127	124	528	116	333	77.7	42.7	177
MAX	586	419	95	140	211	181	4,510	343	1,870	314	191	1,100
MIN	18	89	73	74	92	84	74	47	35	14	1.9	0
AC-FT	7,2 0	8,550	5,060	6,440	7,030	7,600	31,440	7,150	19,790	4,780	2,630	10,540

CAL YR 1972 TOTAL 32,642.23 MEAN 89.2 MAX 870 MIN 0 AC-FT 64,750
WTR YR 1973 TOTAL 59,636.87 MEAN 163 MAX 4,510 MIN 0 AC-FT 118,300

PEAK DISCHARGE (BASE, 12,000 FT³/S).--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 (4.5 km) southeast of Placid.

DRAINAGE AREA.--3.42 mi² (8.86 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,500.00 ft (457.20 m) above mean sea level. Prior to Dec. 1, 1953, nonrecording gage at same site and datum.

AVERAGE INFLOW.--20 years, 418 acre-ft/yr (0.515 hm³/yr).

AVERAGE OUTFLOW.--20 years, 270 acre-ft/yr (0.333 hm³/yr).

EXTREMES.--Current year: No outflow during year. Maximum inflow, 321 ft³/s (9.09 m³/s), average for 5-minute interval, Sept. 6, 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 ft³/s (0.85 m³/s) May 19, 1955, gage height, 20.79 ft (6.34 m); no outflow most of time each year. Maximum inflow, 3,060 ft³/s (86.7 m³/s), 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 fair. The pool is formed by an earthfill dam comprised of two sections; the main section is 2,600 ft (792 m) long and the second section is 2,400 ft (732 m) long. An emergency spillway 250 ft (76 m) 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 (6.7 m). The dam was completed and storage began in October 1953. The outlet works consist of an uncontrolled 2.5-foot (0.8-meter) square concrete drop-inlet structure, gage height at crest, 13.0 ft (4.0 m), connected to a 17-inch (432-millimeter) concrete outlet pipe. Invert at bottom of outlet pipe is at gage height 5.5 ft (1.7 m). There is also an 8-inch (203-millimeter) controlled water-supply outlet pipe connected to the drop inlet at a gage height of 5.5 ft (1.7 m). Pool capacity is 886 acre-ft (1.09 hm³) at the crest of emergency spillway, 125 acre-ft (144,000 m³) at crest of drop inlet, and 7.1 acre-ft (8,750 m³) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	4.1	1.1	0	2.0	1.6	0.7	32.9	0.4	15.0	5.9	0	47.0
Outflow	0	0	0	0	0	0	0	0	0	0	0	0
(†)	-1.7	-3.6	-3.1	1.4	.1	-3.3	28.1	-11.2	6.8	-6.1	-11.6	37.2
(††)	1.80	.34	0	2.95	1.55	1.30	2.39	.72	2.87	2.56	0	5.05

CAL YR 1972: Inflow 27.5 Outflow 0 † -95.7 †† 13.20
WTR YR 1973: Inflow 111 Outflow 0 † 33.0 †† 21.53

PEAK INFLOW (BASE, 100 FT³/S)

DATE	TIME	DISCHARGE
4-25	2025	*251
6-20	1740	*136
9- 6	2050	*321

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches, at subwatershed.
* Average for 5-minute interval.

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 (2.4 km) upstream from Dry Prong Deep Creek, and 2.3 miles (3.7 km) southeast of Mercury.

DRAINAGE AREA.--43.9 mi² (114 km²).

PERIOD OF RECORD.--October 1953 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,325.64 ft (404.06 m) above mean sea level. Prior to Nov. 25, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 6.14 ft³/s (0.174 m³/s), 4,450 acre-ft/yr (5.49 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft³/s (49.3 m³/s) Sept. 6, gage height, 12.59 ft (3.84 m); no flow for many days.
Period of record: Maximum discharge, 5,500 ft³/s (156 m³/s) Oct. 4, 1953, gage height, 18.27 ft (5.57 m), from floodmarks; no flow most of time.
Maximum stage since at least 1890, 21.3 ft (6.5 m) July 23, 1938, discharge, 33,600 ft³/s (952 m³/s), by slope-area measurement of peak flow. Flood in 1906 reached at stage of 21 ft (6 m), from information by local resident.

REMARKS.--Records good. At end of year, flow from 19.9 mi² (51.5 km²) above this station was partly controlled by five floodwater-retarding structures with a total combined capacity of 5,660 acre-ft (6.98 hm³) below the flood-spillway crests, of which 5,050 acre-ft (6.23 hm³) is floodwater-retarding capacity and 610 acre-ft (0.752 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0		0	0	.29	0
2							0		0	0	0	0
3							0		0	0	0	0
4							0		0	0	0	0
5							0		0	0	0	0
6							0		0	0	0	317
7							0		0	0	0	20
8							0		0	0	0	6.6
9							0		0	0	0	4.6
10							0		0	0	0	1.8
11							0		0	0	0	.22
12							0		0	0	0	0
13							0		0	0	0	0
14							0		0	0	0	0
15							0		0	0	0	0
16							0		0	0	0	0
17							0		0	0	0	0
18							0		0	0	0	0
19							0		3.6	0	0	0
20							0		81	0	0	0
21							0		5.1	0	0	0
22							0		.03	0	0	0
23							45		0	0	0	0
24							17		0	0	0	0
25							17		0	0	0	0
26							75		0	96	0	.89
27							.97		0	17	0	.76
28							.02		0	.23	0	0
29					------		0		0	0	0	0
30					------		0		0	51	0	0
31		------			------		------		------	4.5	0	------
TOTAL	0	0	0	0	0	0	154.99	0	89.73	168.73	.29	351.87
MEAN	0	0	0	0	0	0	5.17	0	2.99	5.44	.009	11.7
MAX	0	0	0	0	0	0	75	0	81	96	.29	317
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	307	0	178	335	.6	698

CAL YR 1972 TOTAL 64.07 MEAN .18 MAX 7.0 MIN 0 AC-FT 127
WTR YR 1973 TOTAL 765.61 MEAN 2.10 MAX 317 MIN 0 AC-FT 1,520

08140600 Lake Clyde near Clyde, Tex.

LOCATION.--Lat 32°19'05", long 99°28'43", Callahan County, at Clyde pump station, 0.6 mile (1.0 km) west of dam on North Prong Pecan Bayou, 2.1 miles (3.4 km) downstream from bridge on Farm Road 604, and 7.0 miles (11.3 km) southeast of Clyde.

DRAINAGE AREA.--37.9 mi² (98.2 km²).

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, 3,370 acre-ft (4.16 hm³) Sept. 9-13, elevation, 1,866.0 ft (568.8 m); minimum, 2,560 acre-ft (3.16 hm³) Sept. 2-5, elevation, 1,863.4 ft (568.0 m).
Period of record: Maximum contents, about 4,200 acre-ft (5.18 hm³) May 31, 1970, elevation, 1,868.3 ft (569.5 m); minimum, 2,560 acre-ft (3.16 hm³) Sept. 2-5, 1973, elevation, 1,863.4 ft (568.0 m).

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 (1,220 m) long. The service spillway is an uncontrolled 3.5- by 10.5-foot (1.1- by 3.2-meter) reinforced concrete drop inlet connected to a 42-inch (1.07-meter) concrete outlet pipe. A 14-inch (0.356-meter) controlled drain pipe is connected to the drop inlet. There are four 4.83- by 3.50-foot (1.47- by 1.07-meter) rectangular slots, two on each side divided by a 10-inch (0.254-meter) concrete web. The emergency spillway, located at left end of dam, has two 200-foot-wide (61-meter) excavated channels separated by a dike. The city of Clyde began diverting water for municipal use in September 1973. Data regarding dam and lake are given 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 lake elevations and diversions 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,710	2,830	2,830	2,740	2,980	3,140	3,200	3,170	3,010	2,920	2,800	2,590
2	2,710	2,830	2,830	2,740	2,980	3,140	3,200	3,170	3,010	2,920	2,800	2,560
3	2,710	2,830	2,800	2,740	2,980	3,140	3,200	3,170	3,010	2,920	2,800	2,560
4	2,710	2,830	2,800	2,740	2,980	3,140	3,200	3,170	3,010	2,920	2,800	2,560
5	2,710	2,830	2,800	2,740	2,980	3,140	3,200	3,170	3,040	2,920	2,770	2,560
6	2,680	2,830	2,800	2,740	2,980	3,170	3,200	3,140	3,040	2,890	2,770	2,590
7	2,680	2,860	2,800	2,740	2,980	3,200	3,200	3,140	3,040	2,890	2,770	3,200
8	2,680	2,860	2,800	2,770	2,980	3,200	3,200	3,140	3,040	2,920	2,740	3,200
9	2,680	2,860	2,800	2,770	2,980	3,200	3,200	3,140	3,040	2,920	2,740	3,370
10	2,680	2,860	2,800	2,770	2,980	3,200	3,200	3,140	3,040	2,920	2,740	3,370
11	2,710	2,860	2,800	2,770	2,980	3,240	3,200	3,110	3,040	2,890	2,740	3,370
12	2,710	2,860	2,800	2,770	2,980	3,240	3,200	3,110	3,040	2,890	2,710	3,370
13	2,710	2,860	2,800	2,800	2,980	3,240	3,170	3,110	3,040	2,890	2,710	3,370
14	2,710	2,860	2,800	2,800	2,980	3,240	3,170	3,140	3,040	2,890	2,710	3,340
15	2,710	2,830	2,770	2,800	2,980	3,240	3,170	3,140	3,040	2,890	2,710	3,340
16	2,740	2,830	2,770	2,800	2,980	3,240	3,170	3,140	3,040	2,890	2,710	3,340
17	2,740	2,830	2,770	2,800	2,980	3,240	3,170	3,140	3,010	2,890	2,680	3,340
18	2,740	2,830	2,770	2,830	3,010	3,240	3,200	3,110	3,010	2,860	2,680	3,300
19	2,740	2,830	2,770	2,830	3,010	3,240	3,200	3,110	3,010	2,860	2,680	3,300
20	2,740	2,830	2,770	2,830	3,010	3,240	3,200	3,110	3,010	2,860	2,680	3,300
21	2,770	2,830	2,770	2,830	3,040	3,240	3,200	3,110	3,010	2,860	2,680	3,300
22	2,770	2,830	2,770	2,830	3,080	3,200	3,200	3,110	2,980	2,830	2,650	3,300
23	2,770	2,830	2,770	2,830	3,080	3,200	3,200	3,110	2,980	2,830	2,650	3,300
24	2,770	2,830	2,770	2,830	3,110	3,200	3,200	3,110	2,980	2,830	2,650	3,300
25	2,770	2,830	2,770	2,860	3,110	3,200	3,200	3,080	2,980	2,800	2,650	3,300
26	2,800	2,830	2,770	2,890	3,140	3,200	3,200	3,080	2,980	2,800	2,620	3,300
27	2,800	2,830	2,770	2,920	3,140	3,200	3,200	3,080	2,950	2,800	2,620	3,300
28	2,800	2,830	2,770	2,950	3,140	3,240	3,200	3,040	2,950	2,800	2,620	3,300
29	2,800	2,830	2,770	2,980	------	3,240	3,200	3,040	2,950	2,770	2,590	3,300
30	2,800	2,830	2,770	2,980	------	3,200	3,200	3,040	2,920	2,770	2,590	3,300
31	2,800	------	2,770	2,980	------	3,200	------	3,040	------	2,800	2,590	------
(†)	1,864.2	1,864.3	1,864.1	1,864.8	1,865.3	1,865.5	1,865.5	1,865.0	1,864.6	1,864.2	1,863.5	1,865.8
(*)	+90	+30	-60	+210	+160	+60	0	-160	-120	-120	-210	+710
(††)	0	0	0	0	0	0	0	0	0	0	0	3.7
MAX	2,800	2,860	2,830	2,980	3,140	3,240	3,200	3,170	3,040	2,920	2,800	3,370
MIN	2,680	2,830	2,770	2,740	2,980	3,140	3,170	3,040	2,920	2,770	2,590	2,560

CAL YR 1972..... * -880 †† 0 MAX 3,650 MIN 2,680
WTR YR 1973..... * +590 †† 3.7 MAX 3,370 MIN 2,560

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

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 miles (1.6 km) downstream from Turkey Creek, and 4.3 miles (6.9 km) south of Cross Cut.

DRAINAGE AREA.--532 mi² (1,378 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,453.35 ft (442.98 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 31.9 ft³/s (0.903 m³/s), 23,110 acre-ft/yr (28.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,510 ft³/s (99.4 m³/s) Apr. 24, gage height, 11.88 ft (3.62 m); no flow at times. Period of record: Maximum discharge, 7,330 ft³/s (208 m³/s) Oct. 19, 1971, gage height, 19.68 ft (6.00 m); no flow at times. Flood in 1908 reached a stage of 26.5 ft (8.1 m) 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 mi² (508 km²) above this station was partly controlled by 31 floodwater-retarding structures with a total combined capacity of 41,350 acre-ft (51.0 hm³) below the flood-spillway crests, of which 38,370 acre-ft (47.3 hm³) is floodwater-retarding capacity and 2,990 acre-ft (3.69 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02		0	5.0	12	1.6	20	.01	0	27	0
2	0	.02		0	3.8	9.9	.96	15	.01	0	12	0
3	0	.01		.04	2.9	8.3	.43	12	193	0	7.3	0
4	0	.01		.04	1.8	7.2	.22	9.2	79	0	4.4	0
5	0	.01		.04	1.3	5.7	.10	7.6	30	0	2.6	0
6	0	.01		.04	.72	5.3	.06	6.6	15	0	1.5	0
7	0	0		.06	.77	6.0	.05	5.3	9.7	0	.71	0
8	0	0		.06	3.0	13	.06	5.0	6.2	0	.28	0
9	0	0		.06	1.8	16	.05	4.4	4.1	45	.09	0
10	0	0		.06	1.1	12	.04	3.7	3.3	11	.01	0
11	0	0		.06	.97	9.4	.04	3.3	3.1	3.9	0	0
12	0	0		.05	.71	20	.04	8.8	2.1	2.4	0	0
13	0	0		.04	.36	20	.04	8.6	1.3	3.2	0	0
14	0	0		.04	.13	14	.04	6.9	1.8	2.4	0	0
15	0	0		.04	.13	9.6	.06	5.5	1.6	1.4	0	0
16	0	0		.04	.13	7.4	302	6.6	.84	.81	0	0
17	0	0		.04	.13	6.0	82	4.9	.58	.27	0	0
18	0	0		.04	.13	4.9	213	3.4	.48	.27	0	0
19	0	0		.04	.13	4.1	75	2.6	.24	.17	0	0
20	0	0		.04	.13	3.4	38	2.0	.10	.06	0	0
21	0	0		.04	.13	2.5	23	1.3	.02	.01	0	0
22	0	0		.03	2.7	1.8	16	.68	.01	0	0	0
23	0	0		.02	5.6	1.5	101	.26	0	0	0	0
24	0	0		.02	22	2.4	1,790	.19	0	0	0	0
25	0	0		2.1	34	2.1	325	.15	0	0	0	0
26	3.4	0		4.4	23	1.8	154	.13	0	0	0	.14
27	6.3	0		.71	17	1.2	100	.12	0	0	0	.80
28	.81	0		13	13	4.1	59	.06	0	5.6	0	.09
29	.58	0		16	------	5.6	38	.02	0	5.3	0	.02
30	.13	0		11	------	3.8	28	.02	0	2.8	0	.01
31	.06	------		7.3	------	2.3	------	.02	------	103	0	------
TOTAL	11.28	.08	0	55.45	142.57	223.3	3,347.79	144.35	352.49	187.59	55.89	1.06
MEAN	.36	.003	0	1.79	5.09	7.20	112	4.66	11.7	6.05	1.80	.035
MAX	6.3	.02	0	16	34	20	1,790	20	193	103	27	.80
MIN	0	0	0	0	.13	1.2	.04	.02	0	0	0	0
AC-FT	22	.2	0	110	283	443	6,640	286	699	372	111	2.1

CAL YR 1972 TOTAL 1,030.18 MEAN 2.81 MAX 295 MIN 0 AC-FT 2,040
WTR YR 1973 TOTAL 4,521.85 MEAN 12.4 MAX 1,790 MIN 0 AC-FT 8,970

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Apr. 24 (0530) 3,510 ft³/s (11.88 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 (2.3 km) downstream from Turtle Bayou, 7.4 miles (11.9 km) downstream from Lake Coleman, and 10.8 miles (17.4 km) north of Coleman.

DRAINAGE AREA.--333 mi² (862 km²), of which 299 mi² (774 km²) 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 (485.34 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 23.6 ft³/s (0.668 m³/s), 17,100 acre-ft/yr (21.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 133 ft³/s (3.77 m³/s) Apr. 24, gage height, 2.12 ft (0.65 m); no flow for many days.
Period of record: Maximum discharge, 5,020 ft³/s (142 m³/s) May 6, 1969, gage height, 9.08 ft (2.77 m); 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 (49.3 hm³) at service spillway; elevation, 1,717.5 ft (523.5 m). The city of Coleman has a permit to divert 11,200 acre-ft (13.8 hm³) per year for municipal use from Lake Coleman; no diversions during year. At end of year, flow from 22.0 mi² (57.0 km²) 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 (8.41 hm³) below flood-spillway crests, of which 6,560 acre-ft (8.09 hm³) is floodwater-retarding capacity and 260 acre-ft (0.321 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	.69	0	2.8		0	.38	
2					0	.82	0	2.4		0	.15	
3					0	.73	0	1.6		0	.02	
4					0	.50	0	.98		0	0	
5					0	.37	0	.77		0	0	
6					0	.51	0	.70		0	0	
7					0	.45	0	.54		0	0	
8					0	.50	0	.42		0	0	
9					0	1.2	0	.33		0	0	
10					0	1.3	0	.27		0	0	
11					0	.81	0	.18		0	0	
12					0	.89	0	.13		3.2	0	
13					0	1.3	0	.13		4.5	0	
14					0	.73	0	.08		.54	0	
15					0	.40	14	.09		.06	0	
16					0	.18	26	.09		0	0	
17					0	.07	42	.07		0	0	
18					0	0	70	.03		0	0	
19					0	0	19	0		0	0	
20					0	0	8.0	0		0	0	
21					0	0	4.2	0		0	0	
22					0	0	3.2	0		0	0	
23					0	0	8.3	0		0	0	
24					0	0	89	0		0	0	
25					0	0	29	0		0	0	
26					0	0	18	0		6.9	0	
27					.04	0	14	0		102	0	
28					.59	0	8.4	0		22	0	
29					------	0	7.4	0		3.6	0	
30					------	0	4.2	0		.92	0	
31		------			------	0	------	0	------	.40	0	------
TOTAL	0	0	0	0	.63	11.45	364.7	11.61	0	144.12	.55	0
MEAN	0	0	0	0	.023	.37	12.2	.37	0	4.65	.018	0
MAX	0	0	0	0	.59	1.3	89	2.8	0	102	.38	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	1.2	23	723	23	0	286	1.1	0

CAL YR 1972 TOTAL 435.54 MEAN 1.19 MAX 25 MIN 0 AC-FT 864
WTR YR 1973 TOTAL 533.06 MEAN 1.46 MAX 102 MIN 0 AC-FT 1,060

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 (9.0 km) north of Valera, and 8.8 miles (14.2 km) west of Coleman.

DRAINAGE AREA.--48 mi² (124 km²), 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, 7,440 acre-ft (9.17 hm³) June 3-5, elevation, 1,897.51 ft (578.36 m); minimum, 6,040 acre-ft (7.45 hm³) Apr. 14, elevation, 1,894.12 ft (577.33 m).
Period of record: Maximum contents, 12,790 acre-ft (15.8 hm³) May 1, 1956, elevation, 1,906.86 ft (581.21 m); minimum since first appreciable storage in June 1951, 2,910 acre-ft (3.59 hm³) Sept. 19, 1964, elevation, 1,883.26 ft (574.02 m).

REMARKS.--Lake is formed by a rolled earthfill dam 6,800 ft (2,073 m) 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 615 acre-ft (0.758 hm³) 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 (152-meter) 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)

1,888.0	4,050	1,898.0	7,660
1,890.0	4,630	1,900.0	8,640
1,892.0	5,270	1,902.0	9,710
1,894.0	5,990	1,904.0	10,900
1,896.0	6,780	1,906.0	12,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,6[illegible]0	6,650	6,440	6,290	6,260	6,240	6,140	7,260	7,070	7,280	7,090	6,660
2	6,670	6,650	6,440	6,310	6,250	6,240	6,130	7,260	7,090	7,260	7,080	6,650
3	6,660	6,640	6,440	6,310	6,250	6,240	6,120	7,260	7,440	7,250	7,060	6,630
4	6,650	6,630	6,440	6,310	6,250	6,230	6,110	7,260	7,440	7,240	7,050	6,630
5	6,640	6,630	6,430	6,310	6,240	6,240	6,100	7,270	7,440	7,220	7,040	6,620
6	6,630	6,620	6,420	6,300	6,240	6,240	6,100	7,280	7,430	7,210	7,030	6,680
7	6,610	6,610	6,420	6,310	6,240	6,240	6,090	7,270	7,410	7,200	7,000	6,680
8	6,600	6,600	6,410	6,300	6,240	6,230	6,080	7,270	7,410	7,200	6,990	6,670
9	6,590	6,590	6,410	6,290	6,240	6,230	6,070	7,260	7,390	7,200	6,980	6,670
10	6,5[illegible]0	6,590	6,400	6,290	6,240	6,230	6,060	7,250	7,380	7,200	6,970	6,660
11	6,570	6,580	6,400	6,290	6,230	6,240	6,050	7,250	7,370	7,190	6,960	6,650
12	6,560	6,580	6,390	6,290	6,220	6,230	6,040	7,240	7,360	7,180	6,950	6,650
13	6,560	6,570	6,390	6,290	6,220	6,230	6,030	7,240	7,350	7,170	6,930	6,640
14	6,550	6,550	6,380	6,280	6,210	6,220	6,040	7,240	7,350	7,170	6,920	6,630
15	6,540	6,550	6,370	6,270	6,200	6,210	6,130	7,240	7,330	7,170	6,910	6,620
16	6,530	6,540	6,370	6,270	6,200	6,200	6,140	7,230	7,340	7,150	6,890	6,610
17	6,510	6,540	6,360	6,270	6,210	6,190	6,250	7,230	7,330	7,150	6,870	6,590
18	6,510	6,530	6,360	6,270	6,210	6,190	6,280	7,220	7,310	7,130	6,860	6,580
19	6,500	6,520	6,350	6,260	6,210	6,180	6,270	7,210	7,300	7,120	6,850	6,570
20	6,500	6,520	6,350	6,260	6,220	6,170	6,270	7,190	7,390	7,100	6,840	6,560
21	6,660	6,510	6,340	6,260	6,220	6,170	6,270	7,180	7,390	7,090	6,820	6,550
22	6,700	6,500	6,340	6,260	6,250	6,160	6,320	7,180	7,380	7,070	6,810	6,540
23	6,690	6,500	6,330	6,250	6,240	6,150	6,930	7,180	7,360	7,060	6,790	6,530
24	6,6[illegible]0	6,490	6,320	6,250	6,240	6,160	7,060	7,180	7,350	7,030	6,770	6,520
25	6,670	6,480	6,320	6,290	6,240	6,170	7,110	7,180	7,350	7,030	6,750	6,510
26	6,6[illegible]0	6,480	6,320	6,290	6,240	6,170	7,160	7,170	7,340	7,120	6,730	6,820
27	6,6[illegible]0	6,480	6,310	6,280	6,240	6,170	7,190	7,160	7,330	7,130	6,720	6,830
28	6,6[illegible]0	6,470	6,310	6,270	6,240	6,170	7,210	7,140	7,310	7,120	6,710	6,820
29	6,680	6,460	6,310	6,270	------	6,160	7,230	7,110	7,300	7,110	6,700	6,810
30	6,670	6,460	6,300	6,260	------	6,160	7,250	7,100	7,300	7,110	6,680	6,800
31	6,660	------	6,300	6,260	------	6,150	------	7,090	------	7,100	6,670	------
(†)	1,895.71	1,895.20	1,894.80	1,894.70	1,894.65	1,894.43	1,897.09	1,896.72	1,897.19	1,896.74	1,895.73	1,896.05
(‡)	-40	-200	-160	-40	-20	-90	+1,100	-160	+210	-200	-430	+130
(††)	66	33	35	28	29	35	36	57	76	83	80	57
MAX	6,700	6,650	6,440	6,310	6,260	6,240	7,250	7,280	7,440	7,280	7,090	6,830
MIN	6,500	6,460	6,300	6,250	6,200	6,150	6,030	7,090	7,070	7,030	6,670	6,510

CAL YR 1972..... ‡ -2,360 †† 640 MAX 8,660 MIN 6,300
WTR YR 1973..... ‡ +100 †† 615 MAX 7,440 MIN 6,030

† 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 (762 m) downstream from Farm Road 503, 1.6 miles (2.6 km) downstream from Hords Creek Dam, 5.7 miles (9.2 km) north of Valera, 7.0 miles (11.3 km) west of Coleman, and at mile 21.8 (35.1 km).

DRAINAGE AREA.--53 mi² (137 km²), approximately, of which 48 mi² (124 km²) 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 (554.70 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--26 years, 1.75 ft³/s (50 dm³/s), 1,270 acre-ft/yr (1.57 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 72 ft³/s (2.04 m³/s) Sept. 26, gage height, 3.24 ft (0.99 m); no flow for many days.
Period of record: Maximum discharge, 3,860 ft³/s (109 m³/s) Apr. 30, 1956, gage height, 14.73 ft (4.49 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s); no flow at times each year.
Maximum stage since 1900, 23.0 ft (7.0 m) July 3, 1932, from information by local residents (discharge not determined). Flood in July or September 1900 reached a stage 3.7 ft (1.1 m) higher than that of July 1932, 12 miles (19 km) downstream from station, from information by local residents.

REMARKS.--Records good. Flow regulated by Hords Creek Lake (station 08141000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.30	.07	.05	.25	.62	.21	.53	.02	.03	.06	0
2	.18	.28	.07	.08	.24	.41	.21	.40	.01	.01	.03	0
3	.14	.24	.07	.24	.24	.57	.19	.38	.90	0	.02	0
4	.13	.24	.07	.14	.24	.46	.19	.36	.14	0	.02	0
5	.09	.26	.09	.12	.24	.46	.20	.37	.08	0	.01	0
6	.09	.24	.07	.11	.24	.57	.21	.41	.07	0	.01	0
7	.09	.22	.06	.15	.49	.36	.54	.34	.06	0	0	0
8	.09	.22	.05	.12	.79	.46	.62	.31	.04	0	0	.01
9	.09	.26	.05	.12	.48	.41	.59	.27	.03	0	0	.05
10	.08	.25	.05	.12	.46	.74	.58	.24	.04	0	0	.01
11	.07	.21	.05	.12	.41	.41	.62	.22	.05	0	0	.01
12	.05	.20	.05	.12	.44	.41	.62	.21	.04	0	0	.06
13	.08	.20	.05	.12	.39	.41	.57	.20	.04	0	0	.07
14	.06	.15	.06	.12	.43	.36	.63	.25	.04	0	0	.07
15	.07	.14	.07	.12	.36	.36	1.0	.26	.03	0	0	.09
16	.08	.15	.05	.12	.38	.32	.76	.21	.02	0	0	.11
17	.08	.15	.07	.12	.68	.28	1.8	.18	.02	0	0	.02
18	.06	.16	.07	.09	.68	.24	.92	.16	.01	0	0	.03
19	.30	.15	.07	.09	.54	.21	.74	.13	0	0	0	.05
20	.33	.12	.07	.09	.54	.21	.48	.10	1.0	0	0	.02
21	4.0	.14	.06	.07	.84	.21	.41	.08	1.1	0	0	.01
22	1.4	.12	.07	.07	1.4	.21	.67	.07	.16	0	0	.01
23	.52	.13	.06	.07	1.1	.21	6.4	.15	.08	0	0	.01
24	.41	.18	.06	.07	.80	.21	2.9	.11	.06	0	0	.01
25	.38	.13	.07	.89	.76	.21	1.2	.09	.06	0	0	.02
26	.58	.11	.08	.65	.74	.24	1.5	.09	.10	3.1	0	13
27	.52	.10	.09	.40	.68	.21	.93	.05	.08	1.1	0	1.7
28	.41	.09	.08	.28	.68	.21	.78	.03	.05	.08	0	.35
29	.38	.07	.08	.28	------	.24	.62	.03	.03	.03	0	.21
30	.36	.07	.06	.29	------	.24	.61	.04	.03	.04	0	.17
31	.32	------	.05	.28	------	.22	------	.03	------	.06	0	------
TOTAL	11.65	5.28	2.02	5.71	15.52	10.68	27.70	6.30	4.39	4.45	.15	16.09
MEAN	.38	.18	.065	.18	.55	.34	.92	.20	.15	.14	.005	.54
MAX	4.0	.30	.09	.89	1.4	.74	6.4	.53	1.1	3.1	.06	13
MIN	.05	.07	.05	.05	.24	.21	.19	.03	0	0	0	0
AC-FT	23	10	4.0	11	31	21	55	12	8.7	8.8	.3	32

CAL YR 1972 TOTAL 92.80 MEAN .25 MAX 4.0 MIN 0 AC-FT 184
WTR YR 1973 TOTAL 109.94 MEAN .30 MAX 13 MIN 0 AC-FT 218

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 (30 m) upstream from bridge on Farm Road 2125, 6,000 ft (1,830 m) downstream from Brownwood Dam, and 7 miles (11 km) north of Brownwood.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,403.96 ft (427.93 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 26.6 ft³/s (0.75 m³/s), 19,270 acre-ft/yr (23.8 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 77 ft³/s (2.18 m³/s) July 17, 1957; minimum daily, 0.40 ft³/s (11 dm³/s) 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 in the 1971, 1972, and 1973 water years, 876, 554, and 249 acre-ft (1.08, 0.683, and 0.307 hm³), respectively, were pumped from the canal upstream from the gage for irrigation. Their records also show that of the total flow from the canal passing gage during the 1973 water year, 7,020 acre-ft (8.66 hm³) was used for municipal and industrial supply and 2,920 acre-ft (3.60 hm³) was used for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	18	11	11	12	9.2	9.8	9.7	40	43	9.0	54
2	17	13	11	11	10	9.2	10	9.6	38	50	3.9	54
3	17	8.7	11	11	9.9	9.1	10	8.4	31	58	11	52
4	20	20	11	11	9.9	9.0	10	11	28	56	24	45
5	25	19	11	11	9.9	9.0	10	11	23	55	23	52
6	28	11	10	11	9.8	9.1	10	11	23	49	3.5	47
7	28	11	9.7	11	9.8	9.1	11	11	29	48	13	27
8	28	5.7	9.7	11	9.8	9.0	10	11	34	49	34	22
9	26	9.0	9.7	11	9.8	9.0	11	13	37	49	38	22
10	26	20	9.6	11	9.8	9.1	13	19	32	49	37	22
11	35	20	9.6	11	9.8	9.0	18	20	30	50	35	13
12	40	20	9.6	11	9.8	9.0	18	21	30	50	26	14
13	38	13	9.5	11	9.8	9.0	19	23	33	47	34	15
14	33	9.3	9.4	11	9.8	7.7	19	21	32	39	47	15
15	29	11	11	11	9.8	9.3	19	18	31	31	53	19
16	27	11	12	12	9.4	9.1	16	19	29	29	53	21
17	26	11	12	13	9.3	9.3	13	21	28	30	53	23
18	26	11	12	12	9.2	9.4	11	24	34	32	52	28
19	24	11	12	12	9.0	9.3	11	29	47	33	48	28
20	16	11	12	12	9.0	9.8	11	23	52	35	54	28
21	14	11	12	12	9.0	9.8	11	33	39	37	60	30
22	14	11	12	12	9.0	9.9	10	43	30	37	60	32
23	13	11	12	12	9.0	9.9	10	45	23	43	57	25
24	6.9	11	12	12	8.9	9.7	11	46	18	48	58	16
25	7.3	11	12	12	8.9	9.6	11	47	23	47	58	14
26	16	11	14	12	8.9	9.7	10	47	31	48	57	14
27	17	11	19	12	8.9	9.9	10	47	35	48	57	14
28	18	10	16	12	8.9	9.9	9.9	40	36	45	56	14
29	19	11	13	12	------	9.9	9.9	35	46	42	56	12
30	18	11	12	12	------	9.7	9.7	40	45	40	56	11
31	18	------	12	12	------	9.6	------	40	------	25	55	------
TOTAL	691.2	372.7	358.8	358	267.1	289.3	362.3	796.7	987	1,342	1,281.4	783
MEAN	22.3	12.4	11.6	11.5	9.54	9.33	12.1	25.7	32.9	43.3	41.3	26.1
MAX	40	20	19	13	12	9.9	19	47	52	58	60	54
MIN	6.9	5.7	9.4	11	8.9	7.7	9.7	8.4	18	25	3.5	11
AC-FT	1,370	739	712	710	530	574	719	1,580	1,960	2,660	2,540	1,550

CAL YR 1972 TOTAL 8,755.5 MEAN 23.9 MAX 59 MIN 2.5 AC-FT 17,370
WTR YR 1973 TOTAL 7,889.5 MEAN 21.6 MAX 60 MIN 3.5 AC-FT 15,650

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 0.2 mile (0.4 km) downstream from Jim Ned Creek, 8 miles (13 km) north of Brownwood, and at mile 57.1 (91.9 km).

DRAINAGE AREA.--1,535 mi² (3,976 km²).

PERIOD OF RECORD.--July 1933 to June 1934, April 1935 to September 1940, 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 (0.15 m) below mean sea level. Prior to November 1944, nonrecording gages or water-stage recorder at various sites at dam at same datum.

EXTREMES (at 1800).--Current year: Maximum contents observed, 115,100 acre-ft (142 hm³) Apr. 27 to May 5, gage height, 1,420.9 ft (433.1 m); minimum, 97,300 acre-ft (120 hm³) Sept. 29, 30, gage height, 1,417.9 ft (432.2 m).
Period of record: Maximum contents, 192,300 acre-ft (237 hm³) May 2, 1956, gage height, 1,431.4 ft (436.3 m); minimum, 11,900 acre-ft (14.7 hm³) July 15, 1934, gage height, 1,389.5 ft (423.5 m).

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 (482 m) long. The uncontrolled emergency spillway is a broad-crested weir 479 ft (146 m) long, located 800 ft (244 m) to left of dam. Lake can be drained by two 12-foot (4-meter), horseshoe-shaped, reinforced concrete conduits. Water is withdrawn for irrigation through a 5-foot (2-meter) 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 mi² (881 km²) above this station and below Lake Coleman, conservative capacity, 40,000 acre-ft (49.3 hm³) was partly controlled by 55 floodwater-retarding structures with a total combined capacity of 75,960 acre-ft (93.7 hm³) below the flood-spillway crests, of which 70,720 acre-ft (87.2 hm³) is floodwater-retarding capacity and 5,240 acre-ft (6.46 hm³) 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:

	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)

1,417.0	92,430
1,421.0	115,700

CONTENTS, IN ACRE-FEET, AT 1800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112,700	109,700	106,700	104,900	105,500	105,500	104,900	115,100	111,500	109,100	107,300	100,100
2	112,700	109,700	106,700	104,900	105,500	105,500	104,900	115,100	110,900	109,100	107,300	99,530
3	112,100	109,700	106,700	104,900	105,500	105,500	104,300	115,100	112,100	109,100	107,300	99,530
4	112,100	109,700	106,700	104,900	105,500	105,500	104,300	115,100	112,700	108,500	107,300	98,970
5	112,100	109,100	106,100	104,900	105,500	105,500	104,300	115,100	112,700	108,500	106,700	98,970
6	111,500	109,100	106,100	104,900	104,900	105,500	104,300	114,500	112,700	107,900	106,700	99,530
7	111,500	109,100	106,100	104,900	104,900	105,500	103,700	114,500	112,700	107,900	106,700	99,530
8	111,500	109,100	106,100	104,900	104,900	105,500	103,700	114,500	112,700	107,900	106,100	99,530
9	110,900	109,100	106,100	104,900	104,900	105,500	103,700	114,500	112,700	107,900	106,100	99,530
10	110,900	108,500	106,100	104,900	104,900	105,500	103,700	114,500	112,700	107,900	106,100	99,530
11	110,900	108,500	106,100	104,900	104,900	105,500	103,700	114,500	112,700	107,900	105,500	99,530
12	110,300	108,500	106,100	104,900	104,900	105,500	103,100	113,900	112,700	107,900	105,500	98,970
13	110,300	108,500	106,100	104,900	104,900	105,500	103,100	113,900	112,100	107,900	104,900	98,970
14	110,300	108,500	106,100	104,900	104,900	105,500	103,100	113,900	112,100	107,900	104,900	98,970
15	109,700	108,500	106,100	104,900	104,900	105,500	103,100	113,900	112,100	107,900	104,300	98,970
16	109,700	108,500	106,100	104,900	104,900	105,500	103,700	113,300	112,100	107,900	104,300	98,410
17	109,700	107,900	105,500	104,900	104,900	105,500	105,500	113,300	111,500	107,300	103,700	98,410
18	109,700	107,900	105,500	104,900	104,900	105,500	105,500	113,300	111,500	107,300	103,700	98,410
19	109,700	107,900	105,500	104,900	104,900	105,500	106,700	113,300	111,500	107,300	103,700	98,410
20	109,100	107,900	105,500	104,900	104,900	105,500	106,700	112,700	111,500	106,700	103,100	98,410
21	109,100	107,900	105,500	104,900	104,900	104,900	106,700	112,700	110,900	106,700	103,100	97,850
22	109,100	107,300	105,500	104,900	105,500	104,900	106,700	112,700	110,900	106,100	102,500	97,850
23	109,100	107,300	105,500	104,900	105,500	104,900	106,700	112,700	110,900	106,100	102,500	97,850
24	109,100	107,300	105,500	104,900	105,500	104,900	111,500	112,700	110,900	106,100	101,900	97,300
25	109,100	107,300	104,900	105,500	105,500	104,900	113,900	112,700	110,300	106,100	101,900	97,300
26	109,100	107,300	104,900	105,500	105,500	104,900	114,500	112,100	110,300	106,100	101,300	97,300
27	109,700	107,300	104,900	105,500	105,500	104,900	115,100	112,100	110,300	106,100	101,300	97,850
28	109,700	106,700	104,900	105,500	105,500	104,900	115,100	112,100	109,700	106,100	100,700	97,850
29	109,700	106,700	104,900	105,500	------	104,900	115,100	111,500	109,700	105,500	100,700	97,300
30	109,700	106,700	104,900	105,500	------	104,900	115,100	111,500	109,700	105,500	100,100	97,300
31	109,700	------	104,900	105,500	------	104,900	------	111,500	------	107,300	100,100	------
(†)	1,420.0	1,419.5	1,419.2	1,419.3	1,419.3	1,419.2	1,420.9	1,420.3	1,420.0	1,419.6	1,418.4	1,417.9
(*)	-3,000	-3,000	-1,800	+600	0	-600	+10,200	-3,600	-1,800	-2,400	-7,200	-2,800
MAX	112,700	109,700	106,700	105,500	105,500	105,500	115,100	115,100	112,700	109,100	107,300	100,100
MIN	109,100	106,700	104,900	104,900	104,900	104,900	103,100	111,500	109,700	105,500	100,100	97,300

CAL YR 1972..... * -39,200 MAX 144,100 MIN 104,900
WTR YR 1973..... * -15,400 MAX 115,100 MIN 97,300

† 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 (153 m) upstream from city dam, 6.3 miles (10.1 km) downstream from Salt Creek, 10 miles (16 km) downstream from Lake Brownwood, and at mile 47.5 (76.4 km).

DRAINAGE AREA.--1,614 mi² (4,180 km²).

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 (401.90 m) 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 ft³/s (7.11 m³/s), 181,800 acre-ft/yr (224 hm³/yr); 41 years (1932-73) regulated, 131 ft³/s (3.71 m³/s), 94,910 acre-ft/yr (117 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 196 ft³/s (5.55 m³/s) Apr. 24, gage height, 1.47 ft (0.45 m); no flow Aug. 16-28. Period of record: Maximum discharge, 31,600 ft³/s (895 m³/s) Oct. 14, 1930, gage height, 16.92 ft (5.16 m); no flow at times. Maximum stage, 21.7 ft (6.6 m) 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 ft³/s (6,660 m³/s) 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 (16.1 km) upstream. At end of year, flow from 20.8 mi² (53.9 km²) 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 (6.50 hm³) below the flood-spillway crests, of which 4,720 acre-ft (5.82 hm³) is floodwater-retarding capacity and 549 acre-ft (0.677 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.2	4.8	2.9	4.7	2.7	1.6	7.4	.19	.79	7.6	.03
2	1.1	3.9	4.1	3.9	4.4	2.7	1.4	7.7	.14	.52	3.0	.03
3	1.1	3.9	4.1	8.0	4.2	2.4	1.3	6.5	2.2	.32	1.7	.02
4	1.1	3.1	3.6	6.4	4.2	2.4	.79	6.7	10	.17	1.1	.02
5	1.3	2.7	3.6	4.8	4.2	2.2	.58	7.0	5.0	.16	1.2	.01
6	1.5	2.7	5.6	4.0	4.2	6.3	.61	7.3	3.0	.29	1.0	.25
7	1.5	2.3	4.6	4.3	17	6.5	1.0	6.9	3.0	.32	.58	.38
8	.85	2.0	4.6	4.3	28	4.4	2.5	4.9	2.4	.24	.24	.30
9	.46	2.6	4.8	4.1	5.6	3.2	2.9	2.4	2.6	.16	.16	.24
10	.25	2.8	5.6	4.0	3.8	3.2	2.5	2.2	3.5	.12	.10	.16
11	.16	2.7	5.1	4.7	3.3	3.3	2.9	2.8	3.5	.12	.08	.32
12	.13	3.9	5.4	4.8	3.0	2.6	3.1	3.8	2.3	.29	.04	.77
13	.11	4.3	5.4	4.9	2.8	2.3	2.8	2.9	1.6	.41	.03	1.1
14	.09	3.3	5.2	5.1	2.6	2.2	2.3	2.9	1.1	.35	.01	.77
15	.08	3.2	5.8	4.9	2.4	2.2	4.0	3.7	.69	.43	.02	.74
16	.06	3.6	5.1	4.8	2.2	2.0	8.4	4.2	.52	.49	0	1.9
17	.03	3.4	4.7	5.1	3.0	1.9	76	3.6	.41	.45	0	3.3
18	.02	3.8	5.0	5.1	4.7	2.2	34	2.1	.33	.32	0	2.9
19	.01	3.9	5.5	4.8	3.9	2.5	10	1.7	.29	.13	0	2.0
20	.01	3.6	4.4	5.4	3.2	2.0	6.7	.98	.33	.06	0	1.7
21	.18	3.7	4.1	5.3	3.1	1.6	5.5	.55	2.3	.04	0	1.7
22	8.3	3.9	3.4	4.4	5.0	1.7	5.4	.35	4.9	.03	0	1.5
23	6.0	3.4	3.3	4.3	7.1	2.0	6.9	.70	3.5	.03	0	1.9
24	3.8	3.4	3.3	4.1	5.2	4.5	78	1.3	2.5	.02	0	2.8
25	3.1	4.5	3.6	17	3.7	2.9	31	1.3	2.3	.02	0	2.2
26	37	4.1	3.3	17	3.0	1.7	13	.92	2.3	.03	0	2.4
27	23	4.0	2.8	7.9	2.5	1.5	7.5	1.4	1.8	.68	0	4.9
28	7.9	4.0	2.9	5.4	2.5	2.0	6.1	1.0	1.3	1.4	0	3.7
29	5.6	3.9	3.1	4.0	------	1.8	6.1	.54	.93	1.2	.02	2.5
30	4.1	4.6	3.6	3.9	------	1.7	6.7	.31	.98	17	.02	2.0
31	3.4	------	3.0	4.3	------	1.6	------	.24	------	51	.02	------
TOTAL	113.64	104.4	133.4	173.9	143.5	82.2	331.58	96.29	65.91	77.59	16.92	42.54
MEAN	3.67	3.48	4.30	5.61	5.13	2.65	11.1	3.11	2.20	2.50	.55	1.42
MAX	37	4.6	5.8	17	28	6.5	78	7.7	10	51	7.6	4.9
MIN	.01	2.0	2.8	2.9	2.2	1.5	.58	.24	.14	.02	0	.01
AC-FT	225	207	265	345	285	163	658	191	131	154	34	84

CAL YR 1972 TOTAL 4,980.59 MEAN 13.6 MAX 207 MIN .01 AC-FT 9,880
WTR YR 1973 TOTAL 1,381.87 MEAN 3.79 MAX 78 MIN 0 AC-FT 2,740

08143600 Pecan Bayou near Mullin, Tex.

LOCATION.--Lat 31°31'02", long 98°44'25", Mills County, on right bank 44 ft (13 m) downstream from bridge on Farm Road 573, 0.6 mile (1.0 km) downstream from Blanket Creek, 5.5 miles (8.8 km) southwest of Mullin, and 10 miles (16 km) upstream from Colorado River.

DRAINAGE AREA.--2,034 mi² (5,268 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,202.93 ft (366.65 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 176 ft³/s (4.98 m³/s), 127,500 acre-ft/yr (157 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,310 ft³/s (37.1 m³/s) Apr. 24, gage height, 5.83 ft (1.78 m); minimum, 0.63 ft³/s (18 dm³/s) Aug. 15.
Period of record: Maximum discharge, 13,700 ft³/s (388 m³/s) Jan. 23, 1968, gage height, 29.26 ft (8.92 m); minimum, 0.03 ft³/s (0.85 dm³/s) July 16, 1971.

REMARKS.--Records good. Flow regulated by Lake Brownwood 47 miles (76 km) upstream (see station 08143000). At end of year, flow from 123 mi² (319 km²) 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 (34.0 hm³) below the flood-spillway crests, of which 25,080 acre-ft (30.9 hm³) is floodwater-retarding capacity and 2,480 acre-ft (3.06 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	20	15	19	17	17	15	23	4.5	7.4	92	4.1
2	13	19	16	18	19	16	14	21	4.1	7.4	37	4.8
3	12	18	15	27	18	17	13	19	4.0	6.3	22	4.6
4	11	18	15	52	18	17	14	17	38	4.4	14	4.4
5	11	17	15	31	16	14	13	15	36	3.4	10	3.4
6	10	15	15	25	13	17	13	15	33	14	7.7	8.2
7	8.9	14	15	23	13	37	12	21	23	14	6.9	35
8	8.4	18	14	21	252	32	14	19	17	5.8	7.6	39
9	8.4	16	15	22	120	23	14	15	16	4.4	7.1	27
10	10	15	15	19	44	17	12	14	11	5.8	4.8	22
11	10	14	15	18	30	20	11	13	17	7.9	4.1	19
12	10	13	15	18	25	21	12	13	24	37	4.1	16
13	10	14	16	19	23	16	12	14	27	49	3.1	15
14	10	15	16	19	19	15	15	14	23	35	1.2	9.5
15	10	22	16	18	16	16	19	17	21	103	.97	6.2
16	10	20	16	20	14	14	28	18	20	34	2.3	4.7
17	11	17	17	18	14	12	83	19	17	19	2.2	5.0
18	11	15	15	17	16	8.7	361	16	14	19	1.9	6.5
19	11	16	15	15	27	9.0	79	13	11	18	2.1	7.6
20	8.8	16	15	16	25	9.9	40	11	15	14	3.0	9.0
21	13	14	15	17	24	11	32	7.6	18	10	5.7	8.2
22	42	14	18	15	24	11	24	6.5	34	9.5	10	7.4
23	53	14	18	15	47	11	112	4.4	29	11	7.9	5.9
24	28	17	16	15	50	16	506	2.8	28	11	4.6	20
25	21	17	16	34	32	34	293	1.7	26	9.3	2.6	39
26	28	20	16	100	25	20	94	2.5	21	8.6	2.2	27
27	193	19	18	54	21	15	60	10	19	89	2.4	57
28	64	18	17	31	18	18	43	10	13	70	2.0	43
29	31	17	19	24	------	24	31	8.4	10	28	1.8	22
30	22	16	20	20	------	19	26	6.3	9.4	20	7.1	16
31	18	------	21	18	------	16	------	4.8	------	152	4.7	------
TOTAL	721.5	498	500	778	980	543.6	2,015	392.0	583.0	827.2	285.07	496.5
MEAN	23.3	16.6	16.1	25.1	35.0	17.5	67.2	12.6	19.4	26.7	9.20	16.6
MAX	193	22	21	100	252	37	506	23	38	152	92	57
MIN	8.4	13	14	15	13	8.7	11	1.7	4.0	3.4	.97	3.4
AC-FT	1,430	988	992	1,540	1,940	1,080	4,000	778	1,160	1,640	565	985

CAL YR 1972 TOTAL 11,167.91 MEAN 30.5 MAX 193 MIN .45 AC-FT 22,150
WTR YR 1973 TOTAL 8,619.87 MEAN 23.6 MAX 506 MIN .97 AC-FT 17,100

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 (7.6 km) downstream from headgates.

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

GAGE.--Water-stage recorder. Datum of gage is 1,878.06 ft (572.43 m) above mean sea level. Prior to July 23, 1940, nonrecording gage at site 2,000 ft (610 m) upstream at datum 4.99 ft (1.52 m) higher.

AVERAGE DISCHARGE.--49 years, 13.4 ft³/s (0.38 m³/s), 9,710 acre-ft/yr (12.0 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge (exclusive of times canal submerged by water of San Saba River), 50 ft³/s (1.42 m³/s) 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 (7.6 km) upstream from Menard for irrigation near Menard. Ten acres (4.0 hm²) are irrigated from canal above station. First diversion was about 1890.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	4.0	2.9	23	2.5	.54	0	23	19	6.7	16	15
2	9.3	3.9	2.7	23	2.1	.54	0	22	19	13	16	15
3	9.3	3.7	2.7	24	1.9	.54	0	22	17	19	16	15
4	9.3	3.0	7.1	24	1.8	.49	0	21	8.9	19	16	15
5	8.3	2.6	14	24	1.6	.16	0	22	8.5	18	16	15
6	7.4	2.6	13	23	1.6	0	6.9	23	7.2	18	16	17
7	8.0	2.4	13	24	1.5	0	12	23	7.2	16	16	16
8	8.0	2.2	13	24	1.5	0	16	22	7.4	18	16	15
9	9.0	2.1	14	23	1.1	0	15	22	7.8	18	16	5.6
10	24	3.4	14	9.1	1.0	0	20	22	7.6	17	16	1.8
11	24	2.9	14	7.6	1.2	0	20	22	7.6	17	15	.13
12	24	2.2	15	8.0	1.2	0	21	23	7.4	17	15	0
13	24	1.5	16	8.3	1.2	0	21	23	7.4	17	15	0
14	25	1.2	16	8.5	1.2	0	20	23	7.2	17	15	0
15	25	1.1	15	8.5	1.2	0	20	24	7.4	17	15	0
16	24	.92	15	8.3	1.2	0	21	23	7.4	18	14	0
17	24	.84	15	8.2	1.5	0	22	16	7.4	18	15	0
18	24	.68	15	8.0	1.2	0	18	23	7.4	18	15	0
19	24	.60	15	7.8	1.2	0	17	23	7.2	17	16	0
20	25	.80	15	7.8	1.2	0	17	22	6.7	16	16	0
21	25	1.4	14	7.4	1.2	0	17	22	5.8	17	16	0
22	26	1.2	14	6.4	1.2	0	17	22	5.6	17	11	11
23	26	1.5	13	4.5	1.2	0	14	22	5.4	16	12	17
24	26	2.4	13	3.9	1.2	0	.53	22	5.3	17	15	17
25	25	1.9	13	3.9	.92	0	0	21	5.6	17	15	19
26	26	1.6	13	3.4	.16	0	0	20	5.3	17	14	22
27	26	1.3	12	3.3	.32	0	10	20	5.1	17	15	23
28	26	1.1	12	2.9	.60	0	23	19	5.0	18	16	4.6
29	26	1.1	16	2.6	------	0	23	19	5.0	18	15	3.7
30	23	1.6	22	2.6	------	0	22	19	4.5	17	16	.12
31	3.9	------	23	2.5	------	0	------	19	------	16	15	------
TOTAL	603.6	57.74	412.4	345.5	35.70	2.27	393.43	669	235.3	521.7	471	247.95
MEAN	19.5	1.92	13.3	11.1	1.28	.073	13.1	21.6	7.84	16.8	15.2	8.27
MAX	26	4.0	23	24	2.5	.54	23	24	19	19	16	23
MIN	3.9	.60	2.7	2.5	.16	0	0	16	4.5	6.7	11	0
AC-FT	1,200	115	818	685	71	4.5	780	1,330	467	1,030	934	492

CAL YR 1972 TOTAL 5,295.94 MEAN 14.5 MAX 26 MIN 0 AC-FT 10,500
WTR YR 1973 TOTAL 3,995.59 MEAN 10.9 MAX 26 MIN 0 AC-FT 7,930

08144500 San Saba River at Menard, Tex.

LOCATION.--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 (1.8 km) downstream from Las Moras Creek, 1.9 miles (3.1 km) upstream from Volkmann Draw, and at mile 110.4 (177.6 km).

DRAINAGE AREA.--1,151 mi² (2,981 km²).

PERIOD OF RECORD.--September 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,863.05 ft (567.86 m) above mean sea level. Sept. 14, 1915, to Mar. 12, 1924, nonrecording gage at site 635 ft (194 m) downstream at datum 2.20 ft (0.67 m) lower. Mar. 13, 1924, to Feb. 21, 1939, nonrecording gage at site 1,000 ft (305 m) upstream at datum 2.00 ft (0.61 m) 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 (73 m) to right at present datum. Feb. 8, 1962, to Jan. 22, 1963, nonrecording gage at site 600 ft (183 m) downstream at present datum.

AVERAGE DISCHARGE.--58 years, 60.5 ft³/s (1.71 m³/s), 43,830 acre-ft/yr (54.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 217 ft³/s (6.15 m³/s) June 3, gage height, 5.87 ft (1.79 m); minimum, 0.14 ft³/s (4.0 dm³/s) June 3.
Period of record: Maximum discharge, 130,000 ft³/s (3,680 m³/s) July 23, 1938, gage height, 22.2 ft (6.8 m) present site and datum, from floodmark, from rating curve extended above 60,000 ft³/s (1,700 m³/s) on basis of slope-area measurements of 68,600 and 130,000 ft³/s (1,940 and 3,680 m³/s); no flow at times caused by upstream diversion to Noyes Canal (station 08144000). Maximum stage since at least 1880, 23.3 ft (7.1 m) 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 4.5 miles (7.2 km), revised, 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 (1,350 hm²) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	30	34	13	36	37	36	10	3.2	35	14	5.3
2	21	32	35	21	35	34	36	9.3	2.1	17	15	4.8
3	20	33	36	26	36	33	34	8.1	64	9.0	13	4.8
4	21	33	33	24	36	32	33	7.4	67	7.9	11	4.0
5	22	35	22	21	36	32	33	7.0	46	6.8	10	4.9
6	25	36	20	19	36	36	32	8.3	29	6.0	9.7	7.8
7	25	35	19	20	36	36	25	11	27	5.1	9.2	18
8	26	34	20	19	40	35	19	9.5	23	4.5	8.3	23
9	26	35	20	18	42	33	18	7.9	23	4.8	7.5	30
10	16	32	20	28	41	36	15	7.4	26	2.0	6.7	37
11	4.6	33	20	33	40	36	9.9	7.1	28	4.3	6.4	29
12	3.9	35	20	32	39	34	10	7.3	31	5.7	5.4	28
13	4.1	37	19	30	39	34	11	8.3	33	5.7	4.9	28
14	5.7	36	19	30	38	34	12	9.5	30	5.7	5.2	27
15	6.3	35	18	30	37	33	18	11	27	6.8	4.9	26
16	6.7	36	18	29	35	33	24	10	25	17	4.4	24
17	7.6	37	18	29	37	33	28	10	31	19	3.5	22
18	7.9	37	19	30	37	33	26	7.6	34	11	3.9	25
19	9.2	38	20	29	37	33	23	6.9	46	10	4.9	24
20	8.6	37	19	29	35	33	21	6.8	55	8.8	6.0	25
21	11	37	19	28	39	33	19	6.7	49	7.2	6.0	23
22	13	37	18	29	44	33	18	7.0	41	6.1	6.3	16
23	13	37	21	30	45	35	19	6.5	29	5.3	5.4	3.1
24	9.6	37	24	32	42	38	41	6.7	31	4.6	4.1	.73
25	7.0	40	24	42	39	37	48	6.4	37	5.1	3.7	.42
26	13	41	24	44	38	35	49	6.6	34	5.0	3.4	2.7
27	21	39	24	43	37	34	40	5.3	27	8.3	2.8	7.9
28	15	38	25	39	37	35	13	4.4	29	9.5	4.1	24
29	12	37	25	37	------	35	9.1	4.1	33	11	6.4	31
30	10	37	16	36	------	36	9.0	4.1	37	8.7	5.1	32
31	29	------	14	36	------	36	------	3.8	------	10	5.5	------
TOTAL	440.2	1,076	683	906	1,069	1,067	729.0	232.0	997.3	272.9	206.7	538.45
MEAN	14.2	35.9	22.0	29.2	38.2	34.4	24.3	7.48	33.2	8.80	6.67	17.9
MAX	29	41	36	44	45	38	49	11	67	35	15	37
MIN	3.9	30	14	13	35	32	9.0	3.8	2.1	2.0	2.8	.42
AC-FT	873	2,130	1,350	1,800	2,120	2,120	1,450	460	1,980	541	410	1,070

CAL YR 1972 TOTAL 7,671.69 MEAN 21.0 MAX 206 MIN .12 AC-FT 15,220
WTR YR 1973 TOTAL 8,217.55 MEAN 22.5 MAX 67 MIN .42 AC-FT 16,300

PEAK DISCHARGE (BASE, 670 FT³/S).--No peak above base.

08144800 Brady Creek near Eden, Tex.

LOCATION.--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 (1.3 km) downstream from Fitzgerald Creek, 2.2 miles (3.5 km) south of Eden, 2.4 miles (3.9 km) upstream from Hardin Branch, and at mile 69.3 (111.5 km).

DRAINAGE AREA.--97 mi² (251 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,000.95 ft (609.89 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 0.70 ft³/s (19.8 dm³/s), 507 acre-ft/yr (0.625 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 410 ft³/s (11.6 m³/s) June 3, gage height, 3.07 ft (0.94 m); no flow Aug. 25-30.
Period of record: Maximum discharge, 5,110 ft³/s (145 m³/s) Apr. 28, 1966, gage height, 7.08 ft (2.16 m); no flow for many days each year.
Maximum stage since at least 1884, 15.8 ft (4.8 m) in July 1938, from information by local resident.

REMARKS.--Records good above 1.0 ft³/s (28 dm³/s) and fair below. At end of year, flow from 65.0 mi² (168 km²) above this station was partly controlled by five floodwater-retarding structures with a total combined capacity of 22,900 acre-ft (28.2 hm³) below the flood-spillway crests, of which 22,190 acre-ft (27.4 hm³) is floodwater-retarding capacity and 715 acre-ft (0.882 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.58	.72	.31	.39	.48	.26	.52	.16	.31	.28	.04
2	.31	.63	.61	.59	.34	.44	.24	.44	.16	.29	.37	.05
3	.31	.63	.84	1.0	.37	.35	.26	.44	85	.27	.23	.05
4	.31	.59	.67	.58	.35	.31	.26	.44	11	.24	.16	.04
5	.31	.58	.64	.50	.42	.54	.27	.44	1.5	.16	.14	.12
6	.34	.63	.68	.38	.38	.59	.38	.49	.39	.18	.14	1.9
7	.35	.59	.68	.43	.48	.50	.56	.48	.10	.17	.14	.47
8	.35	.56	.68	.43	1.0	.39	.38	.44	.07	.12	.11	.12
9	.35	1.1	.68	.39	.83	.39	.30	.35	.08	.12	.10	.05
10	.35	1.0	.68	.40	.76	.51	.24	.33	.12	.12	.10	.04
11	.33	.79	.66	.53	.58	.43	.24	.32	.10	.15	.08	.02
12	.31	.82	.58	.51	.62	.39	.28	.32	.11	.20	.05	.02
13	.31	.89	.58	.57	.73	.38	.31	.32	.15	.19	.04	.03
14	.31	.68	.54	.57	.51	.35	.53	.32	.16	.14	.04	.04
15	.31	.79	.52	.53	.42	.35	1.3	.38	.14	.28	.04	.03
16	.30	.79	.45	.49	.42	.37	.96	.34	.61	.51	.04	.02
17	.27	.79	.45	.49	.53	.39	1.6	.40	2.3	.46	.04	.03
18	.27	.82	.40	.50	.68	.36	.96	.33	.70	.34	.03	.01
19	.25	.80	.39	.41	.66	.37	.55	.34	.47	.21	.02	.02
20	.27	.79	.52	.39	.61	.39	.39	.27	.33	.16	.02	.02
21	.59	.79	.46	.34	.89	.39	.33	.30	.31	.14	.02	.02
22	.93	.80	.34	.30	1.5	.39	.53	.28	.28	.13	.02	.01
23	.64	.99	.41	.37	1.0	.43	.70	.28	.31	.14	.02	.02
24	.52	1.1	.37	.39	.62	.87	2.0	.43	.31	.14	.02	.03
25	.54	1.1	.35	1.5	.43	.44	1.1	.33	.40	.12	0	.03
26	1.1	.93	.32	1.2	.44	.44	.71	.27	.49	.16	0	.19
27	1.2	.79	.32	.70	1.1	.33	.53	.19	.43	.36	0	.30
28	.84	.79	.31	.50	.62	.27	.48	.14	.31	.26	0	.11
29	.79	.79	.40	.57	------	.53	.45	.16	.31	.22	0	.07
30	.70	.79	.41	.72	------	.39	.45	.16	.31	.14	0	2.3
31	.59	------	.31	.50	------	.27	------	.16	------	.23	.02	------
TOTAL	14.66	23.72	15.97	17.09	17.68	13.03	17.55	10.41	107.11	6.66	2.27	6.20
MEAN	.47	.79	.52	.55	.63	.42	.59	.34	3.57	.21	.073	.21
MAX	1.2	1.1	.84	1.5	1.5	.87	2.0	.52	85	.51	.37	2.3
MIN	.25	.56	.31	.30	.34	.27	.24	.14	.07	.12	0	.01
AC-FT	29	47	32	34	35	26	35	21	212	13	4.5	12

CAL YR 1972 TOTAL 366.39 MEAN 1.01 MAX 105 MIN 0 AC-FT 731
WTR YR 1973 TOTAL 252.35 MEAN .69 MAX 85 MIN 0 AC-FT 501

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 (85 m) upstream from Farm Road 3022 over Brady Creek Dam on Brady Creek, 3.0 miles (4.8 km) west of Brady, and at mile 34.1 (54.9 km).

DRAINAGE AREA.--513 mi² (1,329 km²).

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

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

EXTREMES.--Current year: Maximum contents, 27,010 acre-ft (33.3 hm³) Oct. 1, elevation, 1,741.24 ft (530.73 m); minimum, 23,600 acre-ft (29.1 hm³) Sept. 26, elevation, 1,739.34 ft (530.15 m).
Period of record: Maximum contents, 40,880 acre-ft (50.4 hm³) Sept. 24, 1971, elevation, 1,747.70 ft (532.70 m); minimum since first appreciable storage, 1,030 acre-ft (1.27 hm³) Sept. 18, 1964, elevation, 1,710.4 ft (521.3 m).

REMARKS.--Reservoir is formed by a compacted earthfill dam 8,400 ft (2,560 m) 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 (2- by 2-meter) concrete box conduit through the dam. Service spillway is designed to discharge 4,000 ft³/s (113 m³/s) with a 19.4-foot (5.9-meter) head. The emergency spillway is a cut channel 1,000 ft (305 m) wide located at right end of dam. Service outlet is a 36-inch (0.91-meter) cast-iron pipe extending through the embankment, and is equipped with three sluice gates with 3- by 3-foot (1- by 1-meter) openings at elevations 1,712.0 ft (521.8 m), 1,727.0 ft (526.4 m), and 1,733.0 ft (528.2 m). At end of year, flow from 263 mi² (681 km²) above this station was partly controlled by 35 floodwater-retarding structures with a total combined capacity of 82,180 acre-ft (101 hm³) below the flood-spillway crests, of which 77,950 acre-ft (96.1 hm³) is floodwater-retarding capacity and 4,230 acre-ft (5.22 hm³) 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 (531-meter) 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)

1,739.0	23,020
1,740.0	24,740
1,742.0	28,450

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26,950	26,500	25,920	25,570	25,830	26,150	25,830	25,930	24,850	25,970	25,190	23,910
2	26,890	26,480	25,900	25,750	25,810	26,150	25,830	25,880	24,790	25,930	25,160	23,880
3	26,870	26,460	25,900	25,740	25,790	26,170	25,750	25,860	25,460	25,920	25,100	23,850
4	26,850	26,440	25,880	25,740	25,770	26,150	25,680	25,830	25,540	25,900	25,050	23,790
5	26,840	26,420	25,880	25,740	25,770	26,150	25,660	25,830	25,550	25,860	25,030	23,780
6	26,820	26,410	25,840	25,740	25,770	26,190	25,770	25,860	25,550	25,790	24,990	24,090
7	26,760	26,390	25,830	25,750	25,880	26,190	25,770	25,840	25,540	25,740	24,960	24,070
8	26,740	26,330	25,810	25,740	25,920	26,170	25,740	25,810	25,500	25,700	24,880	24,050
9	26,720	26,320	25,810	25,720	25,900	26,170	25,680	25,770	25,480	25,640	24,870	24,030
10	26,660	26,300	25,790	25,770	25,880	26,190	25,630	25,750	25,460	25,660	24,830	24,050
11	26,650	26,260	25,790	25,770	25,880	26,170	25,630	25,810	25,460	25,640	24,780	24,030
12	26,630	26,320	25,770	25,740	25,900	26,150	25,630	25,750	25,460	25,610	24,710	24,020
13	26,610	26,260	25,750	25,750	25,900	26,130	25,630	25,700	25,450	25,550	24,690	23,980
14	26,590	26,190	25,750	25,750	25,880	26,120	25,680	25,680	25,430	25,540	24,650	23,970
15	26,570	26,170	25,740	25,750	25,880	26,100	25,830	25,660	25,390	25,520	24,620	23,930
16	26,530	26,130	25,720	25,770	25,860	26,060	25,810	25,630	25,610	25,500	24,570	23,910
17	26,510	26,120	25,720	25,770	25,920	26,030	25,920	25,590	25,740	25,460	24,520	23,860
18	26,480	26,120	25,720	25,770	25,920	26,010	25,920	25,550	25,810	25,450	24,500	23,830
19	26,370	26,080	25,720	25,770	25,930	25,990	25,920	25,520	25,990	25,390	24,460	23,790
20	26,330	26,060	25,740	25,750	25,920	25,950	25,920	25,480	26,210	25,360	24,430	23,780
21	26,500	26,060	25,720	25,740	25,990	25,920	25,920	25,450	26,220	25,320	24,400	23,740
22	26,530	26,040	25,700	25,740	26,060	25,920	25,950	25,430	26,220	25,280	24,360	23,710
23	26,480	26,010	25,680	25,720	26,080	26,010	25,970	25,450	26,210	25,210	24,310	23,670
24	26,440	26,040	25,680	25,750	26,080	26,010	26,060	25,430	26,190	25,170	24,260	23,660
25	26,420	26,030	25,660	25,920	26,080	25,930	26,060	25,410	26,150	25,140	24,190	23,620
26	26,570	25,970	25,660	25,900	26,120	25,920	26,030	25,370	26,120	25,260	24,140	23,830
27	26,550	25,970	25,630	25,920	26,120	25,920	25,990	25,300	26,100	25,260	24,120	23,790
28	26,550	25,950	25,630	25,860	26,130	25,920	25,950	25,210	26,080	25,230	24,050	23,760
29	26,570	25,930	25,640	25,840	------	25,900	25,950	25,170	26,040	25,190	24,020	23,740
30	26,550	25,930	25,610	25,830	------	25,900	25,930	25,120	26,010	25,250	23,980	23,710
31	26,550	------	25,590	25,860	------	25,840	------	25,080	------	25,230	23,950	------
(†)	1,741.00	1,740.66	1,740.47	1,740.62	1,740.77	1,740.61	1,740.66	1,740.19	1,740.70	1,740.27	1,739.54	1,739.40
(*)	-460	-620	-340	+270	+270	-290	+90	-850	+930	-780	-1,280	-240
MAX	26,950	26,500	25,920	25,920	26,130	26,190	26,060	25,930	26,220	25,970	25,190	24,090
MIN	26,330	25,930	25,590	25,570	25,770	25,840	25,630	25,080	24,790	25,140	23,950	23,620

CAL YR 1972..... * -4,960 MAX 30,570 MIN 25,590
WTR YR 1973..... * -3,300 MAX 26,950 MIN 23,620

† 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 (0.6 km) downstream from Live Oak Creek, and at mile 29.5 (47.5 km).

DRAINAGE AREA.--575 mi² (1,489 km²).

PERIOD OF RECORD.--May 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,646.50 ft (501.85 m) above mean sea level. Prior to July 9, 1940, nonrecording gage at site 3,600 ft (1,100 m) upstream at datum 8.24 ft (2.51 m) higher.

AVERAGE DISCHARGE.--23 years (1939-62) prior to completion of Brady Creek Reservoir, 25.2 ft³/s (0.714 m³/s), 18,240 acre-ft/yr (22.5 hm³/yr); 11 years (1962-73) regulated, 11.5 ft³/s (0.326 m³/s), 8,330 acre-ft/yr (10.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 76 ft³/s (2.15 m³/s) June 3, gage height, 6.79 ft (2.07 m); minimum, 0.03 ft³/s (0.85 dm³/s) May 31 to June 3.

Period of record: Maximum discharge, 39,100 ft³/s (1,110 m³/s) Sept. 10, 1952, gage height, 24.80 ft (7.56 m); no flow at times.

Maximum stage since at least 1882, 29.1 ft (8.9 m) July 23, 1938, present site and datum, discharge at site 5 miles (8 km) downstream, 86,000 ft³/s (2,440 m³/s) by slope-area measurement. Flood of Oct. 6, 1930 (second highest since 1882), reached a stage of 25.9 ft (7.9 m), discharge, 50,300 ft³/s (1,420 m³/s), 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 no sewage effluent was returned to Brady Creek downstream from the gage during the water year 1973. Flow largely controlled since May 22, 1963, by Brady Creek Reservoir (station 08144900). At end of year, flow from 24.2 mi² (62.7 km²) 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 (8.83 hm³) below flood-spillway crests, of which 6,440 acre-ft (7.94 hm³) is floodwater-retarding capacity and 720 acre-ft (0.888 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WSP 1512: 1941(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.05	.08	.20	.64	.82	.50	.31	.03	.53	.96	.04
2	.04	.05	.08	1.5	.60	.80	.56	.29	.03	.52	.58	.04
3	.04	.04	.08	2.3	.60	.86	.56	.29	19	.46	.35	.04
4	.04	.04	.08	.55	.60	.86	.53	.25	2.8	.43	.26	.04
5	.04	.04	.09	.42	.60	.88	.53	.25	1.7	.40	.20	.08
6	.04	.05	.09	.27	.63	1.7	1.2	.55	.99	.39	.16	6.8
7	.04	.05	.10	.94	.90	.95	1.3	.50	.65	.35	.13	1.0
8	.04	.05	.11	.30	1.8	.87	.98	.29	.50	.33	.10	.36
9	.04	.06	.11	.22	1.9	.81	.84	.25	.48	1.8	.09	.24
10	.05	.06	.12	.19	1.4	2.0	.72	.25	.85	.35	.08	.17
11	.05	.07	.12	.24	1.1	.99	.64	.27	.65	.20	.07	.13
12	.05	.10	.13	.29	.92	1.1	.64	.41	1.1	.16	.06	.11
13	.06	.07	.12	.41	.86	1.0	.68	.31	.89	.14	.05	.09
14	.06	.06	.12	.32	.78	.87	.76	.29	.79	.13	.05	.08
15	.06	.06	.14	.24	.69	.88	2.7	.35	.73	.49	.04	.08
16	.06	.05	.13	.22	.64	.87	1.4	.34	.70	.41	.04	.08
17	.06	.06	.14	.22	1.2	.83	2.4	.30	22	.25	.04	.07
18	.05	.06	.15	.20	1.1	.80	.98	.28	2.7	.18	.04	.07
19	.05	.06	.18	.19	1.0	.77	.72	.26	1.9	.15	.04	.07
20	.05	.06	.20	.19	.88	.73	.53	.24	18	.12	.04	.07
21	.35	.06	.16	.19	2.2	.76	.44	.26	9.0	.11	.04	.07
22	.88	.04	.17	.17	2.8	.88	.41	.22	2.3	.10	.04	.07
23	.06	.04	.19	.17	1.6	1.7	.44	.29	1.4	.09	.04	.07
24	.04	.06	.20	.17	1.4	2.7	.44	.29	1.2	.08	.04	.07
25	.04	.12	.21	4.7	1.3	1.3	.44	.20	.97	.07	.04	.07
26	1.9	.07	.19	1.7	1.3	.88	.44	.18	.85	3.2	.04	5.2
27	.28	.06	.19	1.2	.98	1.0	.41	.13	.78	1.2	.04	1.4
28	.09	.06	.19	.86	.87	.93	.38	.09	.69	.37	.04	.75
29	.05	.07	.21	.75	------	.68	.31	.05	.61	.24	.05	.63
30	.05	.08	.21	.65	------	.64	.31	.04	.58	7.0	.06	.42
31	.06	------	.20	.64	------	.53	------	.03	------	1.9	.05	------
TOTAL	4.76	1.80	4.49	20.61	31.29	31.39	23.19	8.06	94.87	22.15	3.86	18.41
MEAN	.15	.060	.14	.66	1.12	1.01	.77	.26	3.16	.71	.12	.61
MAX	1.9	.12	.21	4.7	2.8	2.7	2.7	.55	22	7.0	.96	6.8
MIN	.04	.04	.08	.17	.60	.53	.31	.03	.03	.07	.04	.04
AC-FT	9.4	3.6	8.9	41	62	62	46	16	188	44	7.7	37

CAL YR 1972 TOTAL 625.80 MEAN 1.71 MAX 54 MIN .03 AC-FT 1,240
WTR YR 1973 TOTAL 264.88 MEAN .73 MAX 22 MIN .03 AC-FT 525

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 (1.9 km) north of San Saba, 2.7 miles (4.3 km) upstream from Mill Creek, 4.8 miles (7.7 km) downstream from China Creek, and at mile 16.6 (26.7 km).

DRAINAGE AREA.--3,042 mi² (7,879 km²).

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 (354.23 m) 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 (847 m) to right of main-channel gage used for floodflows.

AVERAGE DISCHARGE.--58 years, 238 ft³/s (6.74 m³/s), 172,400 acre-ft/yr (213 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,050 ft³/s (29.7 m³/s) June 21, gage height, 6.73 ft (2.05 m); minimum, 27 ft³/s (0.76 m³/s) Aug. 31.

Period of record: Maximum discharge, 203,000 ft³/s (5,750 m³/s) July 23, 1938, gage height, 39.3 ft (12.0 m), present site and datum, from rating curve extended above 41,000 ft³/s (1,160 m³/s) on basis of slope-area measurement of 203,000 ft³/s (5,750 m³/s); 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 (11.2 m) 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 (111 hm³). At end of year, flow from 83.4 mi² (216 km²) above this station and below Brady Creek Reservoir was partly controlled by 17 floodwater-retarding structures with a total combined capacity of 19,630 acre-ft (24.2 hm³) below flood-spillway crests, of which 17,870 acre-ft (22.0 hm³) is floodwater-retarding capacity and 1,760 acre-ft (2.17 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 2,282 acre-ft (2.81 hm³), of which 121 acre-ft (0.149 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	120	111	95	131	182	133	137	59	105	119	29
2	100	117	110	96	126	173	127	130	59	98	139	31
3	96	118	110	117	121	167	125	119	175	91	103	33
4	96	108	108	125	119	158	120	113	178	87	84	35
5	95	108	108	128	116	155	117	108	374	86	74	33
6	92	109	106	119	115	161	119	114	225	87	70	68
7	91	109	104	129	114	225	134	145	161	81	66	159
8	90	108	104	128	121	265	154	132	130	76	62	102
9	90	108	105	121	134	200	145	120	114	75	55	90
10	89	108	104	114	149	186	130	112	104	74	51	72
11	88	108	105	114	152	187	125	108	96	76	52	70
12	87	110	107	114	152	193	121	107	102	73	55	68
13	88	117	106	111	159	174	119	101	111	70	59	70
14	85	117	107	113	152	163	123	105	130	66	55	68
15	84	116	106	113	144	156	138	112	117	67	48	67
16	81	111	106	112	140	151	198	104	105	73	46	71
17	79	109	106	112	140	145	224	98	207	89	44	69
18	79	110	107	111	152	141	202	96	398	98	43	69
19	77	110	110	107	162	141	216	94	198	136	44	65
20	79	110	110	107	154	136	184	92	281	93	43	63
21	82	111	108	113	157	132	165	88	628	75	44	62
22	100	111	107	107	180	130	153	83	406	65	39	60
23	102	112	105	99	278	132	147	76	249	65	38	59
24	105	115	104	96	306	142	165	74	191	62	37	59
25	99	118	103	124	261	144	207	75	163	60	36	61
26	112	117	100	183	227	146	553	78	148	66	36	66
27	131	116	101	196	208	135	177	78	138	128	35	86
28	154	111	100	161	190	134	143	71	128	100	35	93
29	132	111	101	149	------	136	139	69	118	91	33	96
30	124	112	100	140	------	140	137	64	110	75	32	84
31	123	------	97	134	------	133	------	60	------	68	30	------
TOTAL	3,034	3,365	3,266	3,788	4,560	4,963	4,940	3,063	5,603	2,556	1,707	2,058
MEAN	97.9	112	105	122	163	160	165	98.8	187	82.5	55.1	68.6
MAX	154	120	111	196	306	265	553	145	628	136	139	159
MIN	77	108	97	95	114	130	117	60	59	60	30	29
AC-FT	6,020	6,670	6,480	7,510	9,040	9,840	9,800	6,080	11,110	5,070	3,390	4,080

CAL YR 1972 TOTAL 52,341 MEAN 143 MAX 1,190 MIN 42 AC-FT 103,800
WTR YR 1973 TOTAL 42,903 MEAN 118 MAX 628 MIN 29 AC-FT 85,100

PEAK DISCHARGE (BASE, 3,000 FT³/S).--No peak above base.

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 (8.4 km) downstream from San Saba River, 9.2 miles (14.8 km) east of San Saba, and at mile 474.3 (763.1 km).

DRAINAGE AREA.--30,600 mi² (79,250 km²), approximately, of which 12,880 mi² (33,360 km²) 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 (334.13 m) above mean sea level. See WSP 1922 for history of changes prior to May 23, 1940.

AVERAGE DISCHARGE.--55 years (1916-19, 1920-22, 1923-73), 1,278 ft³/s (36.2 m³/s), 925,900 acre-ft/yr (1.14 km³/yr).

EXTREMES.--Current year: Maximum discharge, 7,080 ft³/s (201 m³/s) Apr. 25, gage height, 9.50 ft (2.90 m); minimum, 36 ft³/s (1.02 m³/s) Sept. 1-3.
Period of record: Maximum discharge, 224,000 ft³/s (6,340 m³/s) July 23, 1938, gage height, 63.2 ft (19.3 m), 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 (17.8 m) Sept. 25, 1900, discharge, 184,000 ft³/s (5,210 m³/s), 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 (3.01 km³). At end of year, flow from 821 mi² (2,126 km²) above this station was partly controlled by 164 floodwater-retarding structures with a total combined capacity of 194,520 acre-ft (240 hm³) below the flood-spillway crests, of which 178,130 acre-ft (220 hm³) is floodwater-retarding capacity and 16,390 acre-ft (20.2 hm³) is sediment-pool capacity. Four of these structures were built during the current year and have a total combined capacity below flood-spillway crests of 7,271 acre-ft (8.97 hm³), of which 582 acre-ft (0.718 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	490	227	192	303	463	288	694	109	206	973	40
2	217	401	233	197	296	435	271	594	92	198	712	37
3	194	353	231	249	275	403	244	496	439	182	461	37
4	180	321	228	257	267	371	225	425	632	157	297	41
5	168	565	224	286	258	354	213	377	359	138	361	42
6	167	532	212	284	249	352	215	355	945	146	309	68
7	167	442	213	276	245	354	236	412	977	131	259	161
8	158	375	209	281	259	474	271	361	691	114	206	1,450
9	156	328	209	273	481	436	277	298	490	113	166	756
10	153	295	209	270	516	376	246	259	367	120	124	465
11	147	274	208	275	399	348	226	237	300	111	115	373
12	145	262	213	268	335	352	213	225	280	107	111	375
13	140	261	213	262	317	352	205	416	321	96	107	336
14	136	250	217	261	312	327	212	357	256	90	103	270
15	134	233	217	249	296	306	267	238	240	139	96	238
16	133	226	219	247	275	313	317	225	207	326	77	254
17	126	222	218	252	275	323	338	208	173	596	65	749
18	123	222	219	246	288	306	650	189	589	351	60	481
19	120	224	222	238	299	293	845	183	1,700	327	58	309
20	120	221	224	233	304	271	621	170	1,640	376	58	204
21	135	219	221	239	311	253	429	158	1,640	261	58	154
22	174	218	217	246	359	244	387	145	1,130	200	62	127
23	173	219	213	231	457	242	427	130	722	164	58	116
24	236	224	210	218	563	297	1,620	116	572	133	56	109
25	482	230	209	308	567	334	6,050	114	490	107	54	96
26	658	230	202	436	507	295	3,730	114	402	238	52	108
27	586	230	198	507	485	278	2,590	107	335	315	48	165
28	725	225	195	424	480	252	1,390	96	289	496	46	223
29	521	220	204	346	------	248	1,070	92	261	398	45	246
30	504	220	200	310	------	311	837	139	229	235	43	189
31	611	------	195	305	------	333	------	131	------	583	42	------
TOTAL	7,935	8,732	6,629	8,666	9,978	10,296	24,910	8,061	16,877	7,154	5,282	8,219
MEAN	256	291	214	280	356	332	830	260	563	231	170	274
MAX	725	565	233	507	567	474	6,050	694	1,700	596	973	1,450
MIN	120	218	195	192	245	242	205	92	92	90	42	37
AC-FT	15,740	17,320	13,150	17,190	19,790	20,420	49,410	15,990	33,480	14,190	10,480	16,300

CAL YR 1972 TOTAL 105,326 MEAN 288 MAX 1,740 MIN 33 AC-FT 208,900
WTR YR 1973 TOTAL 122,739 MEAN 336 MAX 6,050 MIN 37 AC-FT 243,500

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 (2.1 km) upstream from bridge on State Highway 29, 11 miles (17.7 km) west of Burnet, and at mile 413.6 (665.5 km).

DRAINAGE AREA.--31,250 mi² (80,940 km²), approximately, of which 12,880 mi² (33,360 km²) 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 (0.15 m) 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, 816,000 acre-ft (1,010 hm³) Oct. 1, gage height, 1,012.0 ft (308.5 m); minimum, 619,400 acre-ft (764 hm³) Sept. 25, 26, gage height, 1,001.8 ft (305.3 m).
Period of record: Maximum contents, 1,010,000 acre-ft (1,250 hm³) Jan. 24, 1968, gage height, 1,020.8 ft (311.1 m); minimum after initial filling of lake in July 1938, 340,800 acre-ft (420 hm³) Sept. 8-10, 1952, gage height, 983.4 ft (299.7 m).

REMARKS.--Lake is formed by two reinforced concrete multiple-arch sections, three banks of tainter gates, and a 1,100-foot (335-meter) 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 ft³/s (23.8 m³/s) at a head of 120 ft (37 m). Twelve major reservoirs, with a combined capacity of 2,438,000 acre-ft (3,010 hm³) of which 1,091,000 acre-ft (1,350 hm³) 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 given 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)

1,001.0	605,000
1,006.0	697,000
1,012.0	816,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	816,000	793,000	789,000	777,000	731,200	739,000	761,000	793,000	749,000	749,000	697,000	644,600
2	813,900	793,000	791,000	779,000	731,200	741,000	763,000	793,000	745,000	747,000	697,000	641,000
3	813,900	793,000	791,000	779,000	731,200	741,000	763,000	793,000	745,000	743,000	697,000	639,200
4	813,900	793,000	791,000	775,000	731,200	743,000	763,000	795,000	743,000	741,000	697,000	637,400
5	811,800	795,000	795,000	775,000	731,200	743,000	763,000	795,000	741,000	739,000	697,000	635,600
6	807,600	795,000	787,000	771,000	731,200	745,000	765,000	799,200	743,000	735,000	697,000	637,400
7	807,600	795,000	785,000	769,000	733,100	745,000	765,000	799,200	743,000	733,100	697,000	637,400
8	805,500	795,000	785,000	765,000	735,000	745,000	765,000	799,200	743,000	733,100	697,000	637,400
9	801,300	797,100	785,000	759,000	731,200	747,000	761,000	799,200	745,000	733,100	695,100	639,200
10	799,200	797,100	783,000	755,000	731,200	749,000	757,000	799,200	745,000	731,200	695,100	639,200
11	795,000	797,100	781,000	749,000	731,200	751,000	755,000	793,000	747,000	729,300	693,200	639,200
12	795,000	797,100	781,000	745,000	733,100	751,000	753,000	791,000	749,000	727,400	693,200	635,600
13	793,000	799,200	779,000	739,000	733,100	751,000	751,000	791,000	747,000	723,600	691,300	632,000
14	791,000	797,100	781,000	735,000	733,100	753,000	753,000	791,000	745,000	719,800	691,300	630,200
15	789,000	797,100	777,000	733,100	735,000	753,000	753,000	789,000	743,000	723,600	689,400	630,200
16	787,000	799,200	775,000	733,100	735,000	753,000	755,000	787,000	743,000	723,600	687,500	630,200
17	785,000	799,200	773,000	735,000	733,100	753,000	755,000	783,000	743,000	721,700	685,600	630,200
18	783,000	799,200	773,000	735,000	733,100	755,000	755,000	779,000	743,000	719,800	685,600	630,200
19	781,000	799,200	775,000	735,000	733,100	755,000	755,000	775,000	745,000	717,900	685,600	630,200
20	781,000	797,100	775,000	735,000	731,200	755,000	753,000	771,000	749,000	714,100	679,900	630,200
21	783,000	799,200	775,000	737,000	731,200	755,000	755,000	765,000	751,000	710,300	676,100	626,600
22	783,000	795,000	775,000	737,000	733,100	755,000	755,000	763,000	755,000	706,500	674,200	626,600
23	783,000	795,000	775,000	737,000	735,000	757,000	755,000	763,000	755,000	704,600	670,400	624,800
24	783,000	793,000	775,000	737,000	735,000	757,000	757,000	761,000	757,000	700,800	666,600	623,000
25	783,000	793,000	777,000	735,000	737,000	759,000	767,000	761,000	759,000	698,900	662,800	619,400
26	787,000	793,000	777,000	735,000	737,000	759,000	777,000	759,000	759,000	697,000	662,800	619,400
27	787,000	793,000	777,000	735,000	737,000	759,000	783,000	759,000	759,000	695,100	660,900	621,200
28	789,000	793,000	775,000	731,200	739,000	759,000	787,000	757,000	757,000	693,200	657,200	621,200
29	789,000	791,000	775,000	731,200	------	759,000	789,000	755,000	755,000	693,200	653,600	621,200
30	789,000	791,000	777,000	729,300	------	761,000	791,000	753,000	753,000	693,200	651,800	621,200
31	791,000	------	777,000	729,300	------	761,000	------	751,000	------	695,100	650,000	------
(†)	1,010.8	1,010.8	1,010.1	1,007.7	1,008.2	1,009.3	1,010.8	1,008.8	1,008.9	1,005.9	1,003.5	1,001.9
(*)	-25,000	0	-14,000	-47,700	+9,700	+22,000	+30,000	-40,000	+2,000	-57,900	-45,100	-28,800
MAX	816,000	799,200	795,000	779,000	739,000	761,000	791,000	799,200	759,000	749,000	697,000	644,600
MIN	781,000	791,000	773,000	729,300	731,200	739,000	751,000	751,000	741,000	693,200	650,000	619,400

CAL YR 1972..... * -194,300 MAX 975,900 MIN 773,000
WTR YR 1973..... * -194,800 MAX 816,000 MIN 619,400

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

08148500 North Llano River near Junction, Tex.

LOCATION.--Lat 30°31'06", long 99°48'39", Kimble County, on left bank 1,000 ft (305 m) upstream from remains of old Wilson Dam, 2.1 miles (3.4 km) northwest of Junction, and 4 miles (6 km) upstream from confluence with South Llano River.

DRAINAGE AREA.--914 mi² (2,367 km²).

PERIOD OF RECORD.--September 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,699.92 ft (518.14 m) above mean sea level. Prior to Aug. 1, 1925, nonrecording gage at site 550 ft (168 m) downstream at same datum. Aug. 1, 1925, to Sept. 15, 1936, water-stage recorder 520 ft (158 m) downstream at same datum. Sept. 16, 1936, to June 22, 1940, nonrecording gages at various sites at same datum.

AVERAGE DISCHARGE.--58 years, 64.5 ft³/s (1.83 m³/s), 46,730 acre-ft/yr (57.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,900 ft³/s (139 m³/s) July 31, gage height, 6.30 ft (1.92 m); minimum, 4.7 ft³/s (133 dm³/s) July 25.
Period of record: Maximum discharge, 94,800 ft³/s (2,680 m³/s) Sept. 16, 1936, gage height, 29.2 ft (8.9 m), present site, based on gage height relation curve, from rating curve extended above 68,000 ft³/s (1,930 m³/s) on basis of slope-area measurement of 94,800 ft³/s (2,680 m³/s); 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 (8 m) in 1889, from information by local resident.

REMARKS.--Records good. Diversions for irrigation of about 500 acres (202 hm²) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	36	30	25	27	46	32	29	14	10	434	11
2	46	35	30	26	26	45	31	28	13	9.5	131	11
3	44	34	29	29	27	43	31	27	14	7.9	85	9.9
4	43	34	29	28	26	42	30	27	15	7.5	68	8.5
5	42	33	29	27	26	42	30	27	14	7.5	56	9.2
6	41	33	28	27	26	44	32	30	13	6.6	46	12
7	39	32	29	28	27	43	34	31	12	6.4	40	14
8	39	32	29	27	34	41	32	29	11	6.3	35	14
9	38	31	29	27	35	41	31	28	12	6.3	32	15
10	37	31	29	27	34	46	30	26	15	6.9	29	15
11	36	31	29	28	34	43	30	25	18	6.6	27	15
12	35	31	30	27	33	41	30	29	21	6.5	26	14
13	34	31	29	27	33	40	31	30	20	6.4	23	14
14	34	31	29	27	31	39	31	30	18	6.7	22	13
15	33	31	29	26	30	39	35	30	16	6.8	21	12
16	32	31	29	25	30	38	38	29	15	9.8	19	11
17	32	31	28	24	33	37	38	28	14	16	17	11
18	32	31	28	24	33	37	36	26	13	13	16	10
19	31	31	28	25	34	36	34	25	12	11	16	10
20	32	31	27	24	32	35	33	23	13	10	15	9.8
21	36	31	26	23	38	35	33	22	13	8.8	15	9.2
22	47	31	27	23	45	35	33	21	12	8.4	14	9.5
23	41	31	27	23	47	36	33	21	12	7.0	13	9.7
24	38	33	26	23	47	36	33	21	13	6.2	13	9.3
25	36	32	27	34	47	36	31	21	17	5.4	12	9.2
26	40	31	27	33	47	34	30	19	15	5.7	12	10
27	41	31	26	32	47	33	30	19	14	6.4	11	12
28	39	30	26	29	46	36	29	17	13	6.3	11	12
29	38	30	25	28	------	34	29	17	13	6.7	12	12
30	37	30	25	27	------	35	29	16	12	21	12	12
31	37	------	25	27	------	33	------	15	------	1,130	11	------
TOTAL	1,178	951	864	830	975	1,201	959	766	427	1,379.6	1,294	344.3
MEAN	38.0	31.7	27.9	26.8	34.8	38.7	32.0	24.7	14.2	44.5	41.7	11.5
MAX	48	36	30	34	47	46	38	31	21	1,130	434	15
MIN	31	30	25	23	26	33	29	15	11	5.4	11	8.5
AC-FT	2,340	1,890	1,710	1,650	1,930	2,380	1,900	1,520	847	2,740	2,570	683

CAL YR 1972 TOTAL 12,684.3 MEAN 34.7 MAX 1,180 MIN 4.2 AC-FT 25,160
WTR YR 1973 TOTAL 11,168.9 MEAN 30.6 MAX 1,130 MIN 5.4 AC-FT 22,150

PEAK DISCHARGE (BASE, 1,200 FT³/S).--July 31 (1500) 4,900 ft³/s (6.30 ft).

08150000 Llano River near Junction, Tex.

LOCATION.--Lat 30°29'51", long 99°43'24", Kimble County, on right bank 600 ft (183 m) north of Farm Road 2169, 0.5 mile (0.8 km) downstream from point where slough diverts floodwater from main channel, 3 miles (5 km) east of Junction, 3.8 miles (6.1 km) downstream from confluence of North Llano and South Llano Rivers, 4.3 miles (6.9 km) upstream from Johnson Fork, and at mile 106.7 (171.7 km).

DRAINAGE AREA.--1,874 mi² (4,854 km²).

PERIOD OF RECORD.--September 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,630.32 ft (496.92 m) 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 (1,620 m) upstream at datum 6.0 ft (1.8 m) higher. Since Aug. 18, 1944, gage at site 5,330 ft (1,620 m) upstream has been used as a supplementary gage for stages above 5 ft (2 m).

AVERAGE DISCHARGE.--58 years, 183 ft³/s (5.18 m³/s), 132,600 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,570 ft³/s (186 m³/s) July 31, gage height, 5.98 ft (1.82 m); minimum, 76 ft³/s (2.15 dm³/s) July 7, 8, 13, 14.
Period of record: Maximum discharge, 319,000 ft³/s (9,030 m³/s) June 14, 1935, gage height, 41.4 ft (12.6 m) at supplementary gage, from floodmarks, from rating curve extended above 54,000 ft³/s (1,530 m³/s) on basis of slope-area measurements of 154,000 and 319,000 ft³/s (4,360 and 9,030 m³/s); minimum, 3.1 ft³/s (88 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	133	124	120	115	136	122	113	86	91	1,130	95
2	151	131	123	121	112	133	125	113	84	88	394	94
3	149	131	124	128	111	133	121	112	87	85	281	93
4	148	130	123	124	110	131	120	110	90	85	242	92
5	146	129	124	123	110	129	121	111	86	82	219	91
6	146	131	121	121	110	131	126	115	86	81	199	98
7	142	127	122	123	111	128	128	115	86	80	184	104
8	142	127	123	121	126	127	124	110	83	82	172	103
9	141	126	124	120	134	126	120	107	85	86	161	98
10	139	124	124	121	126	135	119	105	94	93	152	98
11	137	126	123	123	124	136	119	104	97	89	145	96
12	135	127	124	120	123	130	120	113	111	84	140	94
13	135	126	123	120	121	129	123	114	107	80	133	94
14	134	123	123	119	118	127	124	109	101	78	131	93
15	134	125	123	119	116	125	131	109	98	91	126	93
16	132	127	123	117	115	124	133	108	96	92	122	92
17	131	127	122	116	124	123	133	106	94	108	118	91
18	131	127	123	116	125	123	129	103	92	102	115	89
19	128	127	123	115	118	121	123	101	89	93	114	86
20	132	127	123	116	114	119	123	101	99	91	113	87
21	137	127	121	112	128	120	119	98	100	88	111	86
22	154	127	120	113	146	120	116	94	95	87	108	85
23	146	127	121	113	145	124	117	94	92	86	106	86
24	140	132	120	113	142	126	116	96	94	84	103	87
25	138	129	120	140	139	121	115	99	104	83	101	84
26	142	127	120	138	138	119	112	95	103	85	100	86
27	145	127	120	129	138	119	110	90	97	112	100	89
28	142	124	120	122	137	130	109	87	95	96	98	87
29	142	124	120	118	------	134	112	86	92	92	101	85
30	141	124	120	117	------	131	113	86	93	123	98	85
31	139	------	117	116	------	126	------	85	------	1,720	97	------
TOTAL	4,352	3,819	3,781	3,734	3,476	3,936	3,623	3,189	2,816	4,417	5,514	2,741
MEAN	140	127	122	120	124	127	121	103	93.9	142	178	91.4
MAX	154	133	124	140	146	136	133	115	111	1,720	1,130	104
MIN	128	123	117	112	110	119	109	85	83	78	97	84
AC-FT	8,630	7,570	7,500	7,410	6,890	7,810	7,190	6,330	5,590	8,760	10,940	5,440

CAL YR 1972 TOTAL 53,732 MEAN 147 MAX 3,600 MIN 73 AC-FT 106,600
WTR YR 1973 TOTAL 45,398 MEAN 124 MAX 1,720 MIN 78 AC-FT 90,050

PEAK DISCHARGE (BASE, 1,500 FT³/S).--July 31 (1830) 6,570 ft³/s (5.98 ft).

08150700 Llano River near Mason, Tex.

LOCATION (revised).--Lat 30°39'35", long 99°06'29", Mason County, on right bank 98 ft (30 m) downstream from downstream bridge on U.S. Highway 87, 1.0 mile (1.6 km) upstream from Beaver Creek, 9.1 miles (14.6 km) southeast of Mason, 10.2 miles (16.4 km) downstream from James River, and at mile 54.5 (87.7 km).

DRAINAGE AREA.--3,280 mi² (8,500 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,230.36 ft (375.01 m) above mean sea level. Prior to Jan. 19, 1971, at site 190 ft (58 m) upstream at same datum.

AVERAGE DISCHARGE.--5 years, 269 ft³/s (7.62 m³/s), 194,900 acre-ft/yr (240 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 ft³/s (340 m³/s) July 31, gage height, 8.94 ft (2.72 m); minimum, 82 ft³/s (2.32 m³/s) July 26.

Period of record: Maximum discharge, 55,700 ft³/s (1,580 m³/s) Oct. 5, 1969, gage height, 18.53 ft (5.65 m), from slope-area measurement of peak flow with backwater from Beaver Creek as indicated from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of step-backwater analysis at gage heights 14.34 and 22.16 ft (4.37 and 6.75 m); minimum, 16 ft³/s (0.45 m³/s) July 23, 1971.

Maximum flood since at least 1875 occurred June 14, 1935, 388,000 ft³/s (11,000 m³/s), revised, based on slope-area measurement of peak flow at site 17.0 miles (44.0 km) downstream.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	202	165	150	173	260	196	161	96	130	3,310	123
2	189	191	165	170	168	252	191	159	96	124	1,620	116
3	183	183	165	220	168	250	186	157	99	120	751	109
4	180	179	165	220	166	244	186	154	106	115	384	103
5	177	176	166	200	164	239	186	150	123	106	288	97
6	175	174	165	190	166	244	191	154	121	103	249	107
7	170	176	161	180	166	250	216	168	106	103	227	147
8	168	174	163	170	199	237	198	165	99	100	210	141
9	167	170	165	170	235	229	191	161	99	106	200	139
10	165	168	168	170	237	231	184	146	110	123	193	132
11	162	170	168	165	243	234	174	142	767	130	187	123
12	159	172	167	165	243	229	172	157	1,720	132	183	118
13	156	190	168	165	234	226	179	152	376	116	180	117
14	157	181	168	160	219	218	182	148	239	105	181	114
15	155	176	168	160	207	216	184	146	189	156	178	110
16	154	170	165	160	202	221	214	144	164	156	172	110
17	149	168	163	155	217	216	221	140	608	146	166	108
18	153	169	162	155	244	206	218	133	230	130	160	108
19	152	170	165	155	244	204	201	127	173	128	155	106
20	151	170	163	150	231	198	186	120	206	124	152	104
21	160	170	160	150	258	196	177	116	209	112	148	103
22	187	169	156	150	406	201	172	114	176	103	143	102
23	190	169	154	150	483	206	177	110	166	97	140	101
24	187	180	154	160	362	216	177	116	156	91	132	104
25	176	183	154	204	320	211	177	116	160	89	125	101
26	186	176	152	253	295	204	174	114	172	89	123	110
27	219	173	152	229	279	196	168	120	171	125	121	129
28	202	168	152	202	269	191	161	108	162	211	121	126
29	191	165	150	184	------	201	161	101	147	146	120	124
30	191	165	150	179	------	208	161	97	139	125	121	115
31	189	------	150	175	------	204	------	96	------	3,350	125	------
TOTAL	5,401	5,247	4,989	5,466	6,798	6,838	5,561	4,192	7,385	6,991	10,565	3,447
MEAN	174	175	161	176	243	221	185	135	246	226	341	115
MAX	219	202	168	253	483	260	221	168	1,720	3,350	3,310	147
MIN	149	165	150	150	164	191	161	96	96	89	120	97
AC-FT	10,710	10,410	9,900	10,840	13,480	13,560	11,030	8,310	14,650	13,870	20,960	6,840

CAL YR 1972 TOTAL 72,007 MEAN 197 MAX 3,190 MIN 68 AC-FT 142,800
WTR YR 1973 TOTAL 72,880 MEAN 200 MAX 3,350 MIN 89 AC-FT 144,600

PEAK DISCHARGE (BASE, 3,000 FT³/S).--June 11 (2300) 8,440 ft³/s (7.95 ft); July 31 (0900) 12,000 ft³/s (8.94 ft).

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 (2.3 km) upstream from Llano River, 6.4 miles (10.3 km) downstream from Spring Creek, and 11.1 miles (17.9 km) southeast of Mason.

DRAINAGE AREA.--218 mi² (565 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,253.24 ft (381.99 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 18.2 ft³/s (0.515 m³/s), 13,190 acre-ft/yr (16.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,260 ft³/s (35.7 m³/s) July 31, gage height, 4.72 ft (1.44 m); minimum, 0.32 ft³/s (9.1 dm³/s) Sept. 3.
Period of record: Maximum discharge, 23,200 ft³/s (657 m³/s) May 16, 1965, gage height, 13.58 ft (4.14 m), from rating curve extended above 7,400 ft³/s (210 m³/s) on basis of slope-area measurement at gage height 12.50 ft (3.81 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	4.2	2.0	1.5	2.4	9.0	3.4	2.8	.53	2.1	264	.38
2	1.0	3.6	2.0	1.8	2.2	7.6	3.2	2.6	.48	1.6	54	.35
3	.89	3.7	1.8	4.9	2.1	6.8	3.4	2.4	.56	1.4	19	.34
4	.79	2.8	2.0	6.3	2.1	6.4	3.6	2.2	.59	1.1	11	.35
5	.74	2.2	2.0	4.4	2.0	5.9	3.4	2.0	3.0	.97	7.2	.35
6	.73	2.2	1.8	3.2	2.1	6.0	4.2	2.6	3.4	1.0	5.3	.69
7	.75	2.1	2.0	2.9	2.2	5.4	7.7	4.8	1.6	1.3	3.9	3.0
8	.75	2.0	2.0	2.9	4.7	4.8	7.1	9.2	1.1	1.4	3.0	6.6
9	.74	1.9	2.0	2.8	12	4.7	4.6	4.2	.85	1.5	2.4	3.4
10	.69	1.7	2.3	2.8	9.6	6.1	3.8	2.9	.76	2.5	2.2	2.4
11	.69	1.6	2.5	2.8	22	6.6	3.4	2.6	1.3	3.4	1.8	2.0
12	.72	1.7	2.8	2.7	47	5.4	3.4	2.5	2.9	2.0	1.5	1.8
13	.75	3.0	2.9	3.1	38	4.6	3.4	2.4	6.0	1.2	1.3	1.5
14	.74	3.1	2.9	2.9	24	4.4	3.6	2.2	4.0	.93	1.2	1.3
15	.69	3.2	2.8	2.6	17	4.3	4.3	2.1	2.2	.96	1.1	1.3
16	.69	2.6	2.5	2.4	13	4.2	4.3	.65	2.2	5.6	1.1	1.1
17	.69	2.2	2.3	2.4	11	4.2	5.2	1.7	8.8	6.4	.94	1.1
18	.64	2.1	2.2	2.3	9.7	4.0	6.8	1.4	9.1	2.9	.93	1.1
19	.64	2.2	2.2	2.1	11	3.5	6.1	1.1	4.0	1.7	.90	.99
20	.68	2.4	2.1	2.0	8.4	3.3	4.1	.87	3.9	1.2	1.0	.93
21	.75	2.4	1.9	2.1	10	3.3	3.1	.70	8.6	.88	.98	.93
22	1.0	2.4	1.8	1.9	32	3.4	3.0	.59	11	.72	.92	.93
23	3.4	2.4	1.6	1.9	46	3.8	3.2	.59	4.3	.68	.82	.93
24	3.6	3.1	1.5	1.8	30	5.2	4.1	.58	3.1	.60	.66	.90
25	2.4	3.5	1.5	9.0	19	5.5	4.4	4.3	4.1	.59	.58	.87
26	2.6	3.7	1.5	20	14	4.2	3.7	4.2	12	.58	.54	1.4
27	3.5	2.9	1.5	8.8	12	3.6	3.2	2.2	13	.65	.54	4.8
28	5.0	2.3	1.5	4.7	10	4.9	2.8	1.3	5.2	.53	.53	11
29	4.1	2.0	1.6	3.3	------	8.0	2.5	.88	3.3	.42	.49	5.3
30	3.4	2.1	1.6	2.9	------	6.8	2.6	.69	2.6	1.5	.46	3.2
31	3.3	------	1.6	2.6	------	4.0	------	.58	------	267	.44	------
TOTAL	48.26	77.3	62.7	117.8	415.5	159.9	121.6	69.83	124.47	315.31	390.73	61.24
MEAN	1.56	2.58	2.02	3.80	14.8	5.16	4.05	2.25	4.15	10.2	12.6	2.04
MAX	5.0	4.2	2.9	20	47	9.0	7.7	9.2	13	267	264	11
MIN	.64	1.6	1.5	1.5	2.0	3.3	2.5	.58	.48	.42	.44	.34
AC-FT	96	153	124	234	824	317	241	139	247	625	775	121

CAL YR 1972 TOTAL 2,138.10 MEAN 5.84 MAX 181 MIN .10 AC-FT 4,240
WTR YR 1973 TOTAL 1,964.64 MEAN 5.38 MAX 267 MIN .34 AC-FT 3,900

PEAK DISCHARGE (BASE, 1,000 FT³/S).--July 31 (1130) 1,260 ft³/s (4.72 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 (0.6 km) downstream from bridge on State Highway 16, 7 miles (11 km) upstream from Little Llano River, and at mile 24.2 (38.9 km).

DRAINAGE AREA.--4,233 mi² (10,963 km²).

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 970.01 ft (295.66 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 326 ft³/s (9.23 m³/s), 236,200 acre-ft/yr (291 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) Aug. 1, gage height, 9.11 ft (2.78 m); minimum, 27 ft³/s (0.76 m³/s) June 4, caused by manipulation of gates at city dam 0.4 mile (0.6 km) upstream.
Period of record: Maximum discharge, 232,000 ft³/s (6,570 m³/s) Sept. 10, 1952, gage height, 32.6 ft (9.9 m), from rating curve extended above 129,000 ft³/s (3,650 m³/s) on basis of slope-area measurement of 232,000 ft³/s (6,570 m³/s); no flow at times in 1952-56, 1964.
Maximum stage since at least 1879, 41.5 ft (12.6 m) June 14, 1935, discharge, 380,000 ft³/s (10,800 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	200	160	158	158	330	240	175	69	123	4,960	103
2	205	199	161	169	154	315	224	172	69	110	2,560	108
3	191	204	162	200	148	307	224	166	68	103	1,430	98
4	181	184	161	199	149	296	218	159	72	96	879	91
5	176	174	163	208	148	285	218	148	79	89	632	89
6	169	172	160	196	148	282	247	164	77	89	515	122
7	166	167	159	191	158	282	282	357	93	99	432	129
8	163	165	158	184	206	296	304	237	81	107	380	135
9	160	160	160	177	270	274	304	211	70	111	339	158
10	155	153	166	172	307	267	260	183	66	105	304	148
11	152	152	169	169	315	264	234	159	77	104	277	141
12	148	162	172	170	311	264	224	152	1,470	113	253	128
13	145	170	171	174	296	257	221	156	795	119	237	131
14	143	169	183	169	271	247	218	161	467	107	215	119
15	140	171	172	165	244	237	230	158	302	139	202	107
16	138	163	169	157	221	230	274	155	222	130	191	104
17	135	159	168	155	227	224	319	149	248	186	178	100
18	133	161	167	154	289	227	346	140	541	164	168	96
19	129	161	168	146	326	212	326	130	280	134	161	95
20	127	161	170	150	307	200	282	120	197	118	154	95
21	147	159	165	134	330	194	244	107	237	110	148	94
22	194	161	162	127	584	189	224	96	274	100	140	91
23	174	161	158	122	793	194	221	98	202	87	134	90
24	182	172	156	129	625	224	244	152	183	77	124	84
25	180	178	156	198	491	215	247	148	183	71	116	79
26	245	182	156	315	419	206	244	112	186	76	108	111
27	230	177	155	316	375	203	212	100	184	82	104	144
28	239	172	155	252	346	203	194	87	184	106	102	125
29	231	166	162	215	------	212	183	85	161	183	103	115
30	224	162	158	184	------	227	177	77	142	377	117	119
31	209	------	157	173	------	234	------	71	------	1,590	112	------
TOTAL	5,426	5,097	5,059	5,628	8,616	7,597	7,385	4,585	7,279	5,205	15,775	3,349
MEAN	175	170	163	182	308	245	246	148	243	168	509	112
MAX	245	204	183	316	793	330	346	357	1,470	1,590	4,960	158
MIN	127	152	155	122	148	189	177	71	66	71	102	79
AC-FT	10,760	10,110	10,030	11,160	17,090	15,070	14,650	9,090	14,440	10,320	31,290	6,640

CAL YR 1972 TOTAL 86,496 MEAN 236 MAX 2,660 MIN 58 AC-FT 171,600
WTR YR 1973 TOTAL 81,001 MEAN 222 MAX 4,960 MIN 66 AC-FT 160,700

PEAK DISCHARGE (BASE, 7,500 FT³/S).--Aug. 1 (0100) 11,400 ft³/s (9.11 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 (6.3 km) upstream from Lake Lyndon B. Johnson, and 7.3 miles (11.7 km) south of Kingsland.

DRAINAGE AREA.--327 mi² (847 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 862.31 ft (262.83 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 58.6 ft³/s (1.66 m³/s), 42,460 acre-ft/yr (52.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,560 ft³/s (72.5 m³/s) May 7, gage height, 8.22 ft (2.51 m); no flow Sept. 5.
Period of record: Maximum discharge, 13,800 ft³/s (391 m³/s) Oct. 19, 1971, gage height, 13.50 ft (4.11 m); 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 (10.4 m), discharge 163,000 ft³/s (4,620 m³/s), from slope-area measurement at gage site.

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	20	16	11	33	86	26	22	8.8	11	370	1.2
2	3.8	21	15	17	29	75	27	20	19	7.8	129	.61
3	3.7	19	15	27	28	71	32	18	13	6.1	70	.28
4	3.7	17	15	28	27	69	26	18	18	5.4	48	.02
5	3.7	15	15	26	25	66	25	19	19	4.3	41	0
6	3.7	13	14	21	22	59	39	71	19	7.4	32	2.5
7	3.7	11	13	23	20	57	86	1,040	16	146	26	6.6
8	3.7	10	13	20	30	55	62	134	15	35	20	11
9	3.7	9.8	13	19	48	53	43	39	13	26	17	7.7
10	3.4	9.3	14	19	57	376	34	15	10	16	13	5.2
11	3.7	8.8	15	19	59	166	30	14	13	16	10	4.4
12	3.7	9.3	16	19	59	107	28	16	71	14	8.3	3.4
13	3.7	32	16	20	57	89	28	14	57	13	6.9	4.0
14	3.7	32	18	20	50	80	27	12	35	12	5.5	3.2
15	3.7	28	18	20	46	78	35	11	26	754	6.3	2.5
16	3.4	25	15	18	43	86	38	10	19	177	4.4	2.5
17	3.4	21	14	18	48	78	30	9.8	16	119	3.2	2.6
18	3.4	20	13	17	73	69	32	8.8	15	71	3.1	2.5
19	3.1	19	12	16	83	64	30	8.3	13	55	2.8	2.2
20	3.4	18	12	15	71	62	26	7.8	20	49	2.8	1.9
21	4.7	17	12	13	80	59	22	6.5	19	41	2.8	1.5
22	52	15	11	12	328	57	21	6.1	15	34	2.8	1.2
23	20	15	11	12	430	57	21	8.3	11	27	2.5	1.2
24	15	29	11	11	214	186	23	11	11	23	2.5	1.2
25	13	29	11	38	154	71	23	7.8	27	20	2.5	.95
26	59	26	11	218	122	46	32	8.3	43	17	2.5	.96
27	400	22	11	104	101	41	28	7.4	35	37	2.3	40
28	46	18	10	62	98	39	23	6.1	27	26	2.3	57
29	25	18	11	50	------	37	21	6.1	19	18	2.3	24
30	20	17	11	39	------	35	21	6.1	15	30	4.0	23
31	17	------	11	35	------	30	------	6.1	------	414	2.3	------
TOTAL	744.2	564.2	413	987	2,435	2,504	939	1,587.5	657.8	2,232.0	848.1	215.32
MEAN	24.0	18.8	13.3	31.8	87.0	80.8	31.3	51.2	21.9	72.0	27.4	7.18
MAX	400	32	18	218	430	376	86	1,040	71	754	370	57
MIN	3.1	8.8	10	11	20	30	21	6.1	8.8	4.3	2.3	0
AC-FT	1,480	1,120	819	1,960	4,830	4,970	1,860	3,150	1,300	4,430	1,680	427

CAL YR 1972 TOTAL 17,163.30 MEAN 46.9 MAX 1,740 MIN .90 AC-FT 34,040
WTR YR 1973 TOTAL 14,127.12 MEAN 38.7 MAX 1,040 MIN 0 AC-FT 28,020

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5- 7	0400	8.22	2,560
7-15	0600	7.87	2,060
7-31	2000	7.14	1,020

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 (0.3 km) downstream from Towhead Creek, 1.1 miles (1.8 km) northeast of Johnson City, 3.4 miles (5.5 km) downstream from Buffalo Creek, and at mile 48.2 (77.6 km).

DRAINAGE AREA.--947 mi² (2,453 km²).

PERIOD OF RECORD.--May 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,096.70 ft (334.27 m) 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 (110 m) downstream at same datum.

AVERAGE DISCHARGE.--34 years, 158 ft³/s (4.47 m³/s), 114,500 acre-ft/yr (141 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 21,400 ft³/s (606 m³/s) July 15, gage height, 15.33 ft (4.67 m); minimum daily, 18 ft³/s (0.51 m³/s) Oct. 14, 19, 20.

Period of record: Maximum discharge, 441,000 ft³/s (12,500 m³/s) Sept. 11, 1952, gage height, 42.5 ft (13.0 m), from floodmark, from rating curve extended above 116,000 ft³/s (3,290 m³/s) on basis of slope-area measurement of 441,000 ft³/s (12,500 m³/s); no flow at times in 1951-52, 1954, 1956-57, 1963-64, 1967-68, 1971.

Maximum stage since at least 1859, 42.5 ft (13.0 m) Sept. 11, 1952; flood of July 1869 reached a stage of 33 ft (10 m), from information by local residents.

REMARKS.--Records good. Some diversions above station for irrigation. At end of year, flow from 15.6 mi² (40.4 km²) above this station was partly controlled by four floodwater-retarding structures with a total combined capacity of 5,160 acre-ft (6.36 hm³) below the flood-spillway crests, of which 4,590 acre-ft (5.66 hm³) is floodwater-retarding capacity and 570 acre-ft (0.703 hm³) 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 614 acre-ft (0.757 hm³) of sewage effluent into the river. Records furnished by the city of Johnson City show that 118 acre-ft (0.146 hm³) of water was diverted from pool at gage and 161 acre-ft (0.199 hm³) of 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	51	42	33	80	152	108	124	63	211	1,000	97
2	27	49	39	44	62	146	100	133	119	190	503	73
3	27	46	39	64	57	143	95	116	116	171	350	62
4	26	42	37	64	57	137	90	95	1,080	161	273	61
5	26	39	38	62	57	132	89	123	322	152	247	61
6	24	39	37	52	56	123	118	222	142	143	227	71
7	24	36	37	54	56	121	254	3,140	98	424	207	89
8	25	34	34	48	59	116	165	417	76	201	180	161
9	24	31	38	49	88	116	133	207	67	903	168	118
10	23	29	38	50	97	998	115	157	122	500	157	93
11	22	30	39	47	107	379	106	140	179	275	151	82
12	22	33	40	43	103	187	107	135	3,710	203	141	74
13	20	90	41	43	89	155	107	132	1,130	169	134	72
14	18	106	38	50	80	143	111	119	449	151	134	65
15	20	65	38	48	76	138	139	109	266	4,530	126	76
16	19	48	39	48	71	134	157	106	198	2,660	118	64
17	20	44	38	47	93	131	142	98	203	1,380	114	67
18	21	41	39	44	125	115	134	93	254	867	107	71
19	18	40	39	44	127	109	128	86	163	682	107	63
20	18	39	37	44	113	104	114	80	919	587	112	59
21	21	36	36	41	184	101	107	74	925	512	108	56
22	76	38	34	38	492	98	107	67	339	453	102	55
23	69	39	31	36	488	104	108	64	223	410	93	53
24	52	70	32	40	264	258	119	62	201	380	85	59
25	37	72	34	124	211	208	138	79	398	354	78	68
26	43	68	34	316	179	133	207	92	1,730	396	74	75
27	145	55	33	100	165	119	162	75	568	369	71	339
28	132	44	35	60	154	117	118	57	343	396	70	199
29	80	44	34	85	------	173	107	53	269	247	71	123
30	62	42	34	77	------	139	107	50	236	228	71	101
31	56	------	34	89	------	119	------	44	------	986	97	------
TOTAL	1,225	1,440	1,138	1,984	3,790	5,348	3,792	6,549	14,908	19,291	5,476	2,707
MEAN	39.5	48.0	36.7	64.0	135	173	126	211	497	622	177	90.2
MAX	145	106	42	316	492	998	254	3,140	3,710	4,530	1,000	339
MIN	18	29	31	33	56	98	89	44	63	143	70	53
AC-FT	2,430	2,860	2,260	3,940	7,520	10,610	7,520	12,990	29,570	38,260	10,860	5,370

CAL YR 1972 TOTAL 44,591 MEAN 122 MAX 3,470 MIN 18 AC-FT 88,450
WTR YR 1973 TOTAL 67,648 MEAN 185 MAX 4,530 MIN 18 AC-FT 134,200

PEAK DISCHARGE (BASE, 4,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
5- 7	0300	14.06	13,100
6-12	0345	12.94	7,520
7-15	0730	15.33	21,400

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 (11.7 km) downstream from Sandy Creek, 12 miles (19.3 km) northwest of Austin, and at mile 318.0 (511.7 km).

DRAINAGE AREA.--38,130 mi² (98,760 km²), approximately, of which 12,880 mi² ((33,360 km²) 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 (0.04 m) 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, 1,192,000 acre-ft (1,470 hm³) Aug. 2, gage height, 682.0 ft (207.9 m); minimum, 973,800 acre-ft (1,200 hm³) Oct. 2-4, gage height, 669.8 ft (204.2 m).
Period of record: Maximum contents, 1,770,000 acre-ft (2,180 hm³) May 18, 1957, gage height, 707.4 ft (215.6 m); minimum, 332,600 acre-ft (410 hm³) Aug. 13, 14, 1951, gage height, 614.2 ft (187.2 m).

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 (207.6 and 217.6 m) is 778,000 acre-ft (959 hm³) 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 given 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	976.9	1,016	1,040	1,073	1,136	1,184	1,172	1,162	1,132	1,147	1,190	1,145
2	973.8	1,021	1,040	1,076	1,138	1,186	1,172	1,160	1,130	1,150	1,192	1,141
3	973.8	1,026	1,042	1,078	1,138	1,188	1,176	1,158	1,130	1,148	1,190	1,139
4	973.8	1,026	1,042	1,082	1,138	1,190	1,172	1,152	1,130	1,145	1,190	1,139
5	976.9	1,026	1,044	1,084	1,138	1,190	1,172	1,154	1,132	1,147	1,186	1,139
6	978.5	1,026	1,048	1,091	1,139	1,188	1,170	1,162	1,132	1,145	1,184	1,141
7	976.9	1,028	1,051	1,094	1,143	1,184	1,170	1,178	1,123	1,145	1,180	1,141
8	976.9	1,026	1,049	1,096	1,147	1,186	1,172	1,178	1,120	1,150	1,178	1,139
9	980.1	1,028	1,051	1,100	1,143	1,184	1,172	1,176	1,116	1,148	1,174	1,139
10	981.7	1,028	1,053	1,102	1,141	1,190	1,172	1,180	1,112	1,150	1,172	1,139
11	983.3	1,028	1,057	1,103	1,139	1,190	1,172	1,180	1,112	1,152	1,170	1,139
12	985.0	1,032	1,058	1,103	1,138	1,188	1,168	1,176	1,127	1,152	1,170	1,141
13	986.6	1,030	1,058	1,105	1,136	1,186	1,170	1,172	1,136	1,150	1,166	1,139
14	988.2	1,030	1,062	1,107	1,138	1,190	1,172	1,170	1,139	1,152	1,164	1,141
15	989.8	1,030	1,064	1,109	1,139	1,180	1,174	1,170	1,141	1,168	1,162	1,141
16	989.8	1,030	1,066	1,111	1,141	1,178	1,174	1,170	1,145	1,170	1,162	1,141
17	991.4	1,030	1,066	1,111	1,147	1,174	1,176	1,166	1,147	1,174	1,160	1,141
18	994.6	1,030	1,067	1,111	1,148	1,172	1,174	1,164	1,145	1,176	1,158	1,141
19	994.6	1,032	1,067	1,111	1,152	1,172	1,176	1,164	1,145	1,180	1,156	1,141
20	994.6	1,034	1,069	1,111	1,156	1,170	1,176	1,164	1,143	1,178	1,156	1,141
21	994.6	1,034	1,067	1,112	1,158	1,168	1,178	1,166	1,141	1,182	1,156	1,139
22	1,003	1,034	1,069	1,112	1,160	1,168	1,180	1,162	1,139	1,180	1,154	1,138
23	1,003	1,034	1,069	1,112	1,166	1,168	1,180	1,160	1,138	1,180	1,154	1,134
24	1,003	1,037	1,069	1,114	1,168	1,176	1,176	1,156	1,136	1,180	1,152	1,132
25	1,003	1,039	1,069	1,123	1,174	1,176	1,176	1,152	1,141	1,182	1,150	1,130
26	1,006	1,039	1,069	1,125	1,180	1,174	1,174	1,148	1,141	1,184	1,148	1,132
27	1,006	1,037	1,069	1,127	1,180	1,172	1,172	1,145	1,145	1,182	1,145	1,138
28	1,006	1,040	1,071	1,130	1,182	1,174	1,168	1,139	1,147	1,180	1,145	1,138
29	1,008	1,040	1,075	1,130	------	1,174	1,168	1,136	1,147	1,178	1,143	1,138
30	1,010	1,040	1,073	1,134	------	1,172	1,164	1,132	1,148	1,178	1,143	1,139
31	1,010	------	1,073	1,134	------	1,172	------	1,134	------	1,182	1,143	------
(†)	672.00	673.83	675.62	679.03	681.48	681.00	680.60	678.95	679.80	681.50	679.47	679.27
(*)	+33.1	+30.0	+33.0	+61.0	+48.0	-10.0	-8.0	-30.0	+14.0	+34.0	-39.0	-4.0
MAX	1,010	1,040	1,075	1,134	1,182	1,190	1,180	1,180	1,148	1,184	1,192	1,145
MIN	973.8	1,016	1,040	1,073	1,136	1,168	1,164	1,132	1,112	1,145	1,143	1,130

CAL YR 1972..... * +7.0 MAX 1,192 MIN 973.8
WTR YR 1973..... * +162.1 MAX 1,192 MIN 973.8

† 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 (61 m) upstream from bridge at East 38th Street in Austin, 1.1 miles (1.8 km) upstream from West Branch of Waller Creek, and 3.3 miles (5.3 km) upstream from Colorado River.

DRAINAGE AREA.--2.31 mi² (5.98 km²).

PERIOD OF RECORD.--April 1955 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 555.44 ft (169.30 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 1.66 ft³/s (47.0 dm³/s), 9.76 in/yr (247.9 mm/yr), 1,200 acre-ft/yr (1.48 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 830 ft³/s (23.5 m³/s) Sept. 26, gage height, 6.20 ft (1.89 m); minimum daily, 0.10 ft³/s (2.8 dm³/s) Oct. 7.
Period of record: Maximum discharge, 1,970 ft³/s (55.8 m³/s) Oct. 29, 1960, gage height, 7.77 ft (2.37 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	3.9	.21	2.6	.55	2.1	.34	1.7	.24	.56	.46	.41
2	.11	.22	.19	13	.46	.58	.42	.48	.42	.24	.49	.41
3	.11	1.9	.19	8.3	.40	.51	1.7	.31	.50	.51	.52	.39
4	.16	.19	.20	.56	.31	.45	.31	.29	5.3	.55	.48	.15
5	.12	.19	.21	.70	.28	.46	.28	2.4	2.0	.57	.48	.11
6	.12	.37	.22	.70	.27	5.9	8.4	.96	.62	26	.21	3.7
7	.10	.15	.18	4.4	.36	.51	.64	10	.66	.64	.45	1.3
8	.11	.15	.21	.54	4.2	.47	.39	.42	.53	34	.50	.21
9	.12	.14	.19	.48	5.2	.99	.38	.30	1.8	5.1	.49	.14
10	.12	.13	.75	1.1	1.1	2.3	.31	.28	.56	.71	.53	.14
11	.14	.16	1.9	1.8	.87	.44	.30	.28	13	.71	1.7	.14
12	.20	.14	1.7	1.4	.70	.41	.31	1.9	15	.68	.49	.18
13	.18	13	.25	.96	.56	.40	.30	.28	.61	.65	.17	.12
14	.15	.21	2.9	.66	.47	.38	.74	.26	.81	.62	.52	.15
15	.11	.21	.28	.48	.44	2.2	13	.27	.62	1.1	.46	.12
16	.14	.20	.22	.39	.40	11	.65	.27	.62	1.5	.49	.13
17	.11	.19	.23	.35	7.0	.57	15	.25	.51	.54	.51	.13
18	.13	.26	.22	.34	1.2	.50	.87	.25	.24	.62	.24	.12
19	.25	.19	.22	.35	.67	.46	.63	.27	.55	.65	.39	.13
20	.12	.18	.22	5.4	.57	.40	.49	.24	9.7	.65	.18	.13
21	6.1	.70	.20	.84	8.0	.41	.69	.25	.94	.55	.43	.11
22	50	.17	.20	.37	7.8	.39	1.2	.25	.60	.81	.49	.11
23	.21	.18	.21	.40	1.4	3.5	.57	.24	.58	.26	.51	.16
24	.17	8.0	.20	1.0	.94	10	.51	.23	1.0	.49	.47	.13
25	.16	.36	.20	16	.76	.51	1.5	.63	13	.79	.44	.13
26	6.5	.21	.20	1.2	.69	.47	3.3	.23	.78	.55	.46	51
27	.22	.20	.20	.88	.61	.47	.40	.20	.64	.53	.17	51
28	.20	.17	.21	.62	.58	.46	.39	.19	.61	.50	.40	.88
29	.19	.19	.22	.62	------	.40	.36	.25	.57	.45	.17	.32
30	.16	.21	.20	.56	------	.59	.35	.22	.57	.21	.43	.27
31	.21	------	.19	2.4	------	.37	------	.21	------	.28	.18	------
TOTAL	66.84	32.47	12.92	69.40	46.79	48.60	54.73	24.31	73.58	82.02	13.91	112.42
MEAN	2.16	1.08	.42	2.24	1.67	1.57	1.82	.78	2.45	2.65	.45	3.75
MAX	50	13	2.9	16	8.0	11	15	10	15	34	1.7	51
MIN	.10	.13	.18	.34	.27	.37	.28	.19	.24	.21	.17	.11
CFSM	.94	.47	.18	.97	.72	.68	.79	.34	1.06	1.15	.19	1.62
IN.	1.08	.52	.21	1.12	.75	.78	.88	.39	1.18	1.32	.22	1.81
AC-FT	133	64	26	138	93	96	109	48	146	163	28	223
(††)	4.40	2.94	.90	4.30	2.68	2.84	3.39	1.53	5.49	4.34	.27	7.02

CAL YR 1972 TOTAL 523.95 MEAN 1.43 MAX 82 MIN .08 CFSM .62 IN 8.44 AC-FT 1,040 †† 32.16
WTR YR 1973 TOTAL 637.99 MEAN 1.75 MAX 51 MIN .10 CFSM .76 IN 10.27 AC-FT 1,270 †† 40.10

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
10-22	0530	5.34	454
7- 6	0600	5.91	690
9-26	2100	6.20	830

†† 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 (15 m) upstream from bridge on East 23d Street in Austin, and 2.1 miles (3.4 km) upstream from Colorado River.

DRAINAGE AREA.--4.13 mi² (10.7 km²).

PERIOD OF RECORD.--December 1954 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 509.95 ft (155.43 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 3.59 ft³/s (102 dm³/s), 11.80 in/yr (299.7 mm/yr), 2,600 acre-ft/yr (3.21 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,460 ft³/s (41.3 m³/s) Sept. 26, gage height, 5.94 ft (1.81 m); minimum daily, 0.56 ft³/s (16 dm³/s) Sept. 18.
Period of record: Maximum discharge, 3,710 ft³/s (105 m³/s) Oct. 29, 1960, gage height, 7.96 ft (2.43 m); minimum daily, 0.2 ft³/s (5.7 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	9.1	.68	5.8	1.8	3.8	1.1	6.2	.92	1.0	1.2	.81
2	.74	1.0	.66	26	1.3	1.4	1.6	1.4	.72	.95	1.2	.80
3	.68	4.6	.67	14	1.1	1.3	2.6	1.1	1.8	.93	1.3	.83
4	.86	.75	.64	1.4	1.0	1.2	1.0	1.1	9.3	1.1	1.2	.70
5	.75	.74	.79	1.8	1.0	1.3	1.7	4.2	7.0	1.1	1.1	.62
6	.80	1.6	.68	1.9	1.1	12	16	4.9	1.2	52	1.2	7.6
7	.59	.82	.75	9.6	1.5	1.7	1.5	13	1.1	1.5	1.4	5.0
8	.59	.89	.86	1.4	8.6	1.4	1.1	1.3	1.0	62	1.0	.82
9	.68	.94	.72	1.3	9.6	2.9	1.2	1.2	10	8.0	1.0	.61
10	.75	.69	2.2	2.9	3.0	4.9	1.3	1.2	1.0	1.5	1.1	.65
11	.86	.67	4.5	3.8	2.3	1.2	.99	1.2	25	1.5	1.8	.60
12	.74	3.0	4.1	2.7	1.8	1.3	1.0	5.4	27	1.3	.92	.72
13	.77	20	.91	2.2	1.5	1.3	1.0	.91	1.5	1.2	.82	.68
14	.74	.69	6.0	1.5	1.3	1.6	2.2	.88	1.3	1.1	.94	.74
15	.69	.73	.98	1.4	1.2	8.0	25	.90	1.4	2.1	1.1	.60
16	.70	.68	.87	1.4	1.2	18	1.5	.91	1.1	4.1	1.1	.60
17	.71	.73	.84	1.3	13	1.5	34	.84	1.0	1.1	1.1	.67
18	.90	1.0	.87	1.2	2.5	1.3	2.3	.86	1.2	1.3	.78	.56
19	.73	.65	1.0	1.1	1.6	1.5	1.8	.85	1.3	1.4	.70	.61
20	.75	.73	.87	9.9	1.5	1.3	1.5	.79	29	1.3	.77	.57
21	17	2.5	.96	1.9	15	1.2	1.9	.83	2.4	1.1	.83	.65
22	92	.73	.81	1.1	14	1.2	2.6	.83	1.3	1.2	1.0	.58
23	1.1	.75	.80	1.2	3.0	7.1	1.7	.80	1.1	.95	.97	.87
24	.88	15	.76	2.2	2.1	19	1.5	.97	2.3	.94	1.1	.76
25	.91	.93	.74	29	1.9	1.3	4.5	1.8	23	1.2	.96	.66
26	13	.65	.76	2.4	2.0	1.4	4.2	.83	1.5	1.1	.94	113
27	1.1	.82	.79	1.8	2.0	1.3	1.2	.72	1.3	1.0	.87	92
28	.79	.73	.80	1.3	1.7	1.3	1.2	.76	1.3	.96	1.0	3.3
29	.83	.79	.84	1.5	------	1.3	1.1	1.4	1.1	.89	.90	1.1
30	.96	.74	.74	1.8	------	1.7	1.2	.94	1.0	1.2	.91	.94
31	.98	------	.71	4.9	------	1.1	------	.99	------	1.0	.83	------
TOTAL	144.22	73.65	38.30	141.7	99.6	106.8	121.49	60.01	160.14	158.02	32.04	238.65
MEAN	4.65	2.46	1.24	4.57	3.56	3.45	4.05	1.94	5.34	5.10	1.03	7.96
MAX	92	20	6.0	29	15	19	34	13	29	62	1.8	113
MIN	.59	.65	.64	1.1	1.0	1.1	.99	.72	.72	.89	.70	.56
CFSM	1.13	.60	.30	1.11	.86	.84	.98	.47	1.29	1.23	.25	1.93
IN.	1.30	.66	.34	1.28	.90	.96	1.09	.54	1.44	1.42	.29	2.15
AC-FT	286	146	76	281	198	212	241	119	318	313	64	473
(††)	4.29	2.88	.91	4.36	2.48	2.84	3.51	1.49	5.86	4.26	.16	7.09

CAL YR 1972 TOTAL 1,154.21 MEAN 3.15 MAX 132 MIN .59 CFSM .76 IN 10.40 AC-FT 2,290 †† 31.79
WTR YR 1973 TOTAL 1,374.62 MEAN 3.77 MAX 113 MIN .56 CFSM .91 IN 12.38 AC-FT 2,730 †† 40.13

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
10-22	0500	5.34	1,110
7- 6	0545	5.38	1,130
9-26	2030	5.94	1,460

†† 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 (305 m) upstream from upstream bridge on U.S. Highway 183 in Austin, 1.4 miles (2.3 km) downstream from Town Lake Dam, and at mile 290.3 (467.1 km).

DRAINAGE AREA.--38,400 mi² (99,500 km²), approximately, of which 12,880 mi² (33,360 km²) 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 (122.61 m) above mean sea level. Prior to June 19, 1939, all records collected at or near Congress Avenue Bridge 3.9 miles (6.3 km) upstream at datum 19.6 ft (6.0 m) higher; prior to June 18, 1915, nonrecording gages, recording gages thereafter; June 20, 1939, to Oct. 16, 1963, at site 1,000 ft (305 m) downstream from present site at datum 5.0 ft (1.5 m) higher.

AVERAGE DISCHARGE.--38 years (1898-1936) unregulated, 2,711 ft³/s (76.8 m³/s), 1,964,000 acre-ft/yr (2,420 hm³/yr); 37 years (1936-73) regulated, 2,014 ft³/s (57.0 m³/s), 1,459,000 acre-ft/yr (1,800 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,800 ft³/s (476 m³/s) Oct. 22, gage height, 14.54 ft (4.43 m); minimum daily, 10 ft³/s (0.28 m³/s) Dec. 17.

Period of record: Maximum discharge, 481,000 ft³/s (13,600 m³/s) June 15, 1935, gage height, 50 ft (15 m), present site and datum, from floodmark; minimum daily, 10 ft³/s (0.28 m³/s) Dec. 17, 1972.

Maximum stage since at least 1833, 51 ft (16 m) 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 except those for period of no gage-height record, which are fair. 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 (5,720 hm³). The city of Austin reported that 61,450 acre-ft (75.8 hm³) was diverted for municipal use above station and 32,150 acre-ft (39.6 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	628	250	183	145	2,050	439	546	2,420	2,500	2,000	2,330	2,100
2	565	290	135	366	1,710	317	345	2,380	2,570	2,020	3,010	2,190
3	598	250	124	319	185	399	1,230	2,090	1,900	2,180	2,400	1,890
4	576	145	146	512	201	445	1,320	1,820	2,230	2,300	2,480	1,690
5	603	92	95	351	817	275	768	723	2,200	2,200	1,890	175
6	592	80	457	923	218	332	1,510	334	2,370	2,670	1,760	240
7	600	210	974	1,310	201	338	527	2,600	2,110	1,680	2,450	181
8	1,560	390	82	1,290	1,210	237	1,380	2,540	2,230	1,040	2,820	1,000
9	60	250	137	1,430	1,820	959	2,200	2,360	2,200	2,150	2,310	779
10	693	175	135	2,110	2,000	1,440	2,210	1,680	2,150	2,230	2,460	1,560
11	110	120	165	2,130	2,010	1,420	2,600	3,760	2,350	1,880	1,680	708
12	469	400	109	1,970	2,000	1,690	2,690	3,400	3,310	1,530	1,360	1,780
13	298	265	365	2,120	1,710	2,030	2,300	2,470	1,430	1,910	1,550	2,790
14	218	310	115	1,990	409	2,390	188	2,300	389	2,580	1,480	691
15	29	260	622	1,440	159	2,450	470	3,200	323	2,120	1,480	117
16	217	160	397	279	312	2,710	946	3,070	264	2,020	1,690	180
17	183	150	10	241	280	2,240	1,900	3,190	276	1,850	1,730	277
18	20	130	36	273	453	1,610	1,440	2,970	1,450	1,810	1,340	116
19	25	115	400	244	244	1,880	2,120	3,400	1,630	1,980	1,510	136
20	71	105	138	370	573	1,340	1,580	3,860	2,480	2,300	1,800	604
21	98	165	82	282	562	1,270	898	3,370	2,630	2,010	2,370	1,320
22	3,770	100	133	191	428	481	382	3,190	2,380	2,000	2,080	2,040
23	284	89	140	179	710	283	904	3,170	1,990	1,700	2,050	1,960
24	230	450	143	431	677	1,250	2,290	3,270	1,950	1,700	1,820	1,820
25	250	335	82	1,410	324	266	2,320	3,310	1,450	2,220	1,790	1,540
26	260	250	134	582	638	1,190	2,570	3,350	1,370	2,150	1,840	2,960
27	265	180	84	565	709	905	2,230	3,680	538	2,150	2,170	2,770
28	225	135	140	753	604	1,070	2,050	2,670	1,710	1,730	1,750	280
29	195	110	140	1,560	------	1,090	1,400	2,690	1,760	1,600	2,060	172
30	160	150	85	2,040	------	1,200	2,440	1,990	2,270	1,840	1,230	169
31	148	------	177	2,040	------	1,070	------	1,780	------	428	1,450	------
TOTAL	14,000	6,111	6,165	29,846	23,214	35,016	45,754	83,037	54,410	59,978	60,140	34,235
MEAN	452	204	199	963	829	1,130	1,525	2,679	1,814	1,935	1,940	1,141
MAX	3,770	450	974	2,130	2,050	2,710	2,690	3,860	3,310	2,670	3,010	2,960
MIN	20	80	10	145	159	237	188	334	264	428	1,230	116
AC-FT	27,770	12,120	12,230	59,200	46,040	69,450	90,750	164,700	107,900	119,000	119,300	67,910

CAL YR 1972 TOTAL 366,935 MEAN 1,003 MAX 3,770 MIN 10 AC-FT 727,800
WTR YR 1973 TOTAL 451,906 MEAN 1,238 MAX 3,860 MIN 10 AC-FT 896,400

NOTE.--No gage-height record Oct. 24 to Nov. 30.

08158600 Walnut Creek at Webberville Road, Austin, Tex.

LOCATION.--Lat 30°16'59", long 97°39'17", Travis County, on left bank 190 ft (58 m) downstream from bridge on Farm Road 969, 0.8 mile (1.3 km) downstream from Little Walnut Creek, 2.8 miles (4.5 km) upstream from Colorado River, and 5.2 miles (8.4 km) east of the Capitol at Austin.

DRAINAGE AREA.--51.3 mi² (133 km²).

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 425.96 ft (129.83 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 19.3 ft³/s (0.547 m³/s), 13,980 acre-ft/yr (17.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,140 ft³/s (146 m³/s) Sept. 27, gage height, 19.05 ft (5.81 m); minimum, 0.63 ft³/s (18 dm³/s) Oct. 18, 19.
Period of record: Maximum discharge, 6,020 ft³/s (170 m³/s) May 15, 1970, gage height, 23.69 ft (7.22 m); no flow at times in 1967, 1971.
Maximum stage since at least 1891, 24 ft (7 m) June 15, 1935 (backwater from Colorado River); a flood in 1919 reached a stage of 22 ft (7 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	21	9.0	12	26	37	19	15	3.1	2.7	4.3	1.2
2	.78	11	8.9	60	21	32	18	13	3.2	2.7	3.4	1.0
3	.81	13	8.9	82	20	30	30	11	2.1	6.2	3.0	1.0
4	.77	9.1	8.3	32	20	28	19	11	14	4.3	2.6	1.0
5	.70	8.4	8.2	28	18	26	17	13	33	3.7	2.4	1.0
6	.76	9.0	7.6	25	17	49	46	21	18	266	2.5	13
7	.70	8.3	7.1	45	17	29	30	249	4.2	19	2.2	2.8
8	.70	7.8	8.2	27	31	26	22	31	2.9	338	2.0	2.4
9	.70	8.1	8.2	24	45	27	19	22	8.2	176	11	1.7
10	.70	7.7	8.4	24	40	40	17	19	8.1	35	9.8	1.5
11	.70	7.5	12	26	39	25	17	18	53	23	2.8	1.2
12	.70	7.5	15	26	36	22	16	22	91	17	3.0	1.2
13	.70	80	12	27	33	22	15	14	16	14	2.3	1.2
14	.70	12	19	25	28	21	16	13	9.8	12	2.2	1.2
15	.64	9.9	14	22	26	23	96	12	7.7	12	9.0	1.2
16	.70	9.2	11	21	25	122	30	12	6.1	13	2.8	1.2
17	.69	8.5	11	20	55	44	252	11	5.4	10	2.0	1.2
18	.63	8.9	11	19	47	39	43	9.9	3.9	8.3	1.9	.82
19	.63	7.8	11	17	33	37	29	8.9	3.7	7.2	2.1	1.5
20	.69	7.5	11	23	28	35	25	8.0	22	6.4	1.8	.72
21	1.3	8.0	9.9	33	79	34	23	7.4	8.6	5.9	1.2	.82
22	829	7.8	9.3	18	121	33	27	6.7	5.2	5.2	1.2	1.0
23	20	7.0	9.0	16	70	40	24	6.8	4.1	4.8	1.2	.93
24	8.0	35	8.5	16	51	139	22	5.8	3.9	5.0	1.1	.93
25	5.9	16	8.2	128	44	34	21	8.5	52	4.5	1.1	.82
26	21	11	8.1	48	39	28	41	7.9	15	4.8	1.1	26
27	11	11	7.9	38	36	26	16	5.2	6.6	8.9	1.2	1,390
28	8.0	9.8	8.5	31	34	26	15	3.6	5.0	7.0	4.0	62
29	7.5	10	8.7	28	------	24	14	3.1	4.2	4.5	1.4	18
30	6.9	9.3	8.2	28	------	23	14	3.0	4.4	3.9	1.4	12
31	6.4	------	7.6	29	------	22	------	2.9	------	4.8	1.6	------
TOTAL	939.26	387.1	303.7	998	1,079	1,143	993	594.7	424.4	1,035.8	89.6	1,550.54
MEAN	30.3	12.9	9.80	32.2	38.5	36.9	33.1	19.2	14.1	33.4	2.89	51.7
MAX	829	80	19	128	121	139	252	249	91	338	11	1,390
MIN	.63	7.0	7.1	12	17	21	14	2.9	2.1	2.7	1.1	.72
AC-FT	1,860	768	602	1,980	2,140	2,270	1,970	1,180	842	2,050	178	3,080

CAL YR 1972 TOTAL 5,327.64 MEAN 14.6 MAX 845 MIN .63 AC-FT 10,570
WTR YR 1973 TOTAL 9,538.10 MEAN 26.1 MAX 1,390 MIN .63 AC-FT 18,920

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0800	16.73	3,230	6- 6	0730	13.50	2,150
3-24	0530	8.98	686	7- 8	1645	10.41	1,170
4-17	1130	11.05	1,360	9-27	0130	19.05	5,140
5- 7	0430	9.55	936				

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 (244 m) downstream from Farm Road 685, 1.6 miles (2.6 km) northeast of Pflugerville, and 1.9 miles (3.1 km) downstream from Missouri-Kansas-Texas Railroad.

DRAINAGE AREA.--4.61 mi² (11.9 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 670.61 ft (204.40 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 1.88 ft³/s (53.2 dm³/s), 5.54 in/yr (140.7 mm/yr), 1,360 acre-ft/yr (1.67 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 698 ft³/s (19.8 m³/s) Oct. 22, gage height, 4.65 ft (1.42 m); no flow for many days.
Period of record: Maximum discharge, 1,760 ft³/s (49.8 m³/s) June 16, 1964, gage height, 6.92 ft (2.11 m); 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.47	.62	.62	2.7	4.5	1.6	1.5	.25	.04	.02	0
2	0	.63	.62	4.0	2.2	3.8	1.5	1.4	.25	.03	.01	0
3	0	.49	.62	10	2.0	3.3	1.5	1.1	.25	.05	0	0
4	0	.49	.62	3.7	2.0	3.2	1.2	.98	.21	.04	0	0
5	0	.49	.62	3.6	1.8	2.7	.98	1.0	.39	.03	0	0
6	0	.49	.62	3.3	1.8	12	3.9	1.9	.32	.03	0	0
7	0	.43	.62	5.7	1.8	4.1	3.4	57	.23	.03	0	0
8	0	.38	.62	3.7	3.1	3.0	2.2	3.6	.17	1.1	0	0
9	0	.38	.62	2.7	4.1	3.2	1.8	2.6	.22	.20	0	0
10	0	.38	.62	2.6	6.5	8.0	1.4	2.1	.20	.07	0	0
11	0	.38	.62	2.9	7.3	3.2	1.2	1.8	.31	.06	0	0
12	0	.40	1.1	2.9	6.0	2.6	1.2	2.0	.39	.05	0	0
13	0	3.0	1.2	4.5	4.5	2.4	1.2	1.7	.24	.04	0	0
14	0	.64	1.6	4.0	3.1	2.3	1.2	1.5	.19	.04	0	0
15	0	.55	1.7	3.3	2.7	2.4	6.0	1.3	.17	.03	0	0
16	0	.53	1.2	2.9	2.6	16	2.7	1.1	.14	.04	0	0
17	0	.49	1.1	2.9	7.6	3.7	16	.95	.13	.04	0	0
18	0	.49	1.1	2.6	7.3	3.0	4.3	.79	.10	.03	0	0
19	0	.47	1.1	2.2	4.7	2.6	3.0	.62	.10	.03	0	0
20	0	.43	1.1	2.5	3.6	2.3	2.4	.61	.11	.03	0	0
21	0	.43	1.1	3.6	12	2.0	2.0	.54	.14	.03	0	0
22	86	.43	.89	1.9	22	2.0	2.4	.49	.10	.03	0	0
23	.27	.43	.84	1.7	11	3.1	2.6	.49	.09	.02	0	0
24	.10	1.0	.79	1.6	7.7	25	8.2	.49	.08	.02	0	0
25	.08	1.3	.79	23	6.0	3.9	4.4	.49	.22	.02	0	0
26	.23	.89	.79	8.0	4.9	2.9	4.6	.46	.14	.02	0	2.6
27	.21	.87	.70	5.3	4.1	2.7	2.2	.36	.08	.02	0	57
28	.18	.71	.70	3.5	3.7	2.6	1.9	.29	.07	.02	0	.59
29	.18	.62	.70	2.9	------	2.6	1.7	.28	.06	.02	0	.24
30	.18	.62	.70	2.9	------	2.4	1.7	.25	.06	.01	0	.18
31	.18	------	.70	2.9	------	2.1	------	.25	------	.02	0	------
TOTAL	87.61	19.31	26.72	127.92	148.8	139.6	90.38	89.94	5.41	2.24	.03	60.61
MEAN	2.83	.64	.86	4.13	5.31	4.50	3.01	2.90	.18	.072	.001	2.02
MAX	86	3.0	1.7	23	22	25	16	57	.39	1.1	.02	57
MIN	0	.38	.62	.62	1.8	2.0	.98	.25	.06	.01	0	0
CFSM	.61	.14	.19	.90	1.15	.98	.65	.63	.04	.02	.0002	.44
IN.	.71	.16	.22	1.03	1.20	1.13	.73	.73	.04	.02	0	.49
AC-FT	174	38	53	254	295	277	179	178	11	4.4	.06	120
(††)	5.69	2.04	.67	3.67	2.12	3.38	3.35	2.04	2.98	2.39	.49	7.50

CAL YR 1972 TOTAL 325.70 MEAN .89 MAX 86 MIN 0 CFSM .19 IN 2.63 AC-FT 646 †† 27.41
WTR YR 1973 TOTAL 798.57 MEAN 2.19 MAX 86 MIN 0 CFSM .48 IN 6.44 AC-FT 1,580 †† 36.32

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
10-22	0645	4.65	698
5- 7	0215	3.81	431
9-27	0915	3.84	438

†† 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 (122 m) upstream from bridge on State Highway 71, 0.3 mile (0.5 km) upstream from Gills Creek, 1.1 miles (1.8 km) downstream from Piney Creek, and at mile 236.8 (381.0 km).

DRAINAGE AREA.--39,400 mi² (102,000 km²), approximately, of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--March 1960 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 307.38 ft (93.69 m) above mean sea level. Prior to May 10, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 1,985 ft³/s (56.2 m³/s), 1,438,000 acre-ft/yr (1,770 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,490 ft³/s (269 m³/s) Sept. 28, gage height, 10.52 ft (3.21 m); minimum daily, 177 ft³/s (5.01 m³/s) Oct. 21.
Period of record: Maximum discharge, 79,600 ft³/s (2,250 m³/s) Oct. 29, 1960, gage height, 34.45 ft (10.50 m); minimum daily, 75 ft³/s (2.12 m³/s) Apr. 1, 1964.
Maximum stage since at least 1845, 60.3 ft (18.4 m) July 7 or 8, 1869. Flood of June 16, 1935, reached a stage of 57.0 ft (17.4 m), and flood of Dec. 4, 1913, reached a stage of 53.3 ft (16.2 m), 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, 16.1 acre-ft (0.020 hm³) was diverted above this station by pumping into Decker Lake. The Lower Colorado River Authority reported that during the water year, 3,354 acre-ft (4.14 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	842	261	264	237	2,270	885	1,230	2,500	2,010	2,370	1,240	1,670
2	721	261	255	254	2,280	758	838	2,560	2,600	2,210	2,000	2,250
3	725	345	269	767	1,970	686	619	2,570	2,520	2,350	3,080	2,260
4	692	354	246	1,180	771	665	1,050	2,260	2,160	2,430	2,570	2,130
5	702	343	240	748	474	693	1,350	2,070	2,420	2,540	2,670	1,810
6	704	293	235	609	791	584	1,120	1,150	2,710	2,600	2,120	1,110
7	683	275	231	857	650	624	1,490	1,090	2,630	3,210	2,020	529
8	667	264	835	1,660	453	619	1,150	3,190	2,350	2,250	2,670	446
9	1,370	251	578	1,470	1,150	516	1,280	2,800	2,490	2,790	2,910	595
10	850	451	289	1,580	2,220	836	2,250	2,560	2,420	3,560	2,640	977
11	346	293	249	2,230	2,560	1,550	2,210	2,080	2,530	2,810	2,560	1,440
12	722	308	283	2,360	2,510	1,640	2,650	3,810	3,640	2,370	1,990	1,160
13	314	293	290	2,300	2,410	1,800	2,760	3,350	5,510	1,970	1,630	1,800
14	472	605	286	2,480	2,110	2,180	2,500	2,710	2,550	2,140	1,810	2,870
15	403	532	418	2,380	937	2,600	891	2,560	1,190	2,800	1,740	1,250
16	336	482	525	1,840	573	3,710	906	3,110	819	2,380	1,550	755
17	238	308	553	786	520	3,980	1,280	3,120	669	2,400	1,840	429
18	245	273	421	530	724	2,590	5,770	3,200	576	2,180	1,880	353
19	279	261	227	478	942	1,900	2,310	3,020	1,140	2,110	1,610	429
20	220	254	292	432	646	2,000	2,410	3,460	1,690	2,310	1,600	340
21	177	242	362	410	689	1,620	2,080	3,720	2,660	2,500	2,070	337
22	334	237	251	570	1,640	1,450	1,200	3,320	2,950	2,170	2,460	1,110
23	4,210	291	229	397	2,420	892	1,040	3,170	2,620	2,180	2,280	2,020
24	1,110	274	230	356	1,540	1,870	903	3,100	2,260	1,950	2,210	2,090
25	584	449	232	786	1,190	2,970	2,290	3,220	2,260	1,880	1,950	1,980
26	426	586	226	3,930	854	1,020	2,530	3,370	2,100	2,420	1,990	1,800
27	338	376	219	1,390	965	1,120	2,830	3,410	1,910	2,470	2,040	4,390
28	369	312	215	879	990	1,140	2,490	3,490	1,210	2,490	2,260	7,140
29	305	287	214	1,000	------	1,300	2,280	2,790	1,660	1,740	2,170	1,460
30	271	288	210	1,730	------	1,350	1,620	2,730	2,180	1,830	2,440	772
31	255	------	211	2,220	------	1,320	------	2,190	------	2,000	1,190	------
TOTAL	19,910	10,049	9,585	38,846	37,249	46,868	55,327	87,680	66,434	73,410	65,190	47,702
MEAN	642	335	309	1,253	1,330	1,512	1,844	2,828	2,214	2,368	2,103	1,590
MAX	4,210	605	835	3,930	2,560	3,980	5,770	3,810	5,510	3,560	3,080	7,140
MIN	177	237	210	237	453	516	619	1,090	576	1,740	1,190	337
AC-FT	39,490	19,930	19,010	77,050	73,880	92,960	109,700	173,900	131,800	145,600	129,300	94,620

CAL YR 1972 TOTAL 441,860 MEAN 1,207 MAX 4,670 MIN 177 AC-FT 876,400
WTR YR 1973 TOTAL 558,250 MEAN 1,529 MAX 7,140 MIN 177 AC-FT 1,107,000

08159500 Colorado River at Smithville, Tex.

LOCATION.--Lat 30°00'43", long 97°09'43", Bastrop County, on right bank 28 ft (9 m) downstream from bridge on State Highway 71 in Smithville, 500 ft (152 m) downstream from Gazley Creek, 3.9 miles (6.3 km) downstream from Alum Creek, and at mile 212.1 (341.3 km).

DRAINAGE AREA.--39,880 mi² (103,290 km²), approximately, of which 12,880 mi² (33,360 km³) 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.

GAGE.--Water-stage recorder. Datum of gage is 270.14 ft (82.34 m) 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 (110 m) downstream at same datum.

AVERAGE DISCHARGE.--6 years (1930-36) unregulated, 3,968 ft³/s (112 m³/s), 2,875,000 acre-ft/yr (3,545 hm³/yr); 37 years (1936-73) regulated, 2,446 ft³/s (69.3 m³/s), 1,772,000 acre-ft/yr (2,185 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,800 ft³/s (306 m³/s) June 13, gage height, 8.89 ft (2.71 m); minimum daily, 185 ft³/s (5.24 m³/s) Dec. 31.

Period of record: Maximum discharge, 305,000 ft³/s (8,640 m³/s) June 16, 1935, gage height, 42.5 ft (13.0 m), from floodmarks, from rating curve extended above 209,000 ft³/s (5,920 m³/s) on basis of slope-area measurement of 305,000 ft³/s (8,640 m³/s); minimum, 76 ft³/s (2.15 m³/s) 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 (14.4 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	899	291	303	200	2,180	1,160	1,410	2,450	2,140	2,420	1,990	1,470
2	805	277	274	218	2,220	1,060	1,210	2,830	2,800	2,630	1,160	2,030
3	740	286	274	255	2,170	975	773	2,940	2,650	2,470	2,930	2,380
4	725	340	280	1,090	1,450	861	612	2,640	2,400	2,510	2,680	2,180
5	723	355	259	802	837	881	1,330	2,550	2,580	2,800	2,620	2,240
6	712	351	249	703	708	905	1,480	1,930	2,800	2,630	2,370	1,750
7	717	305	242	629	1,120	785	1,140	1,400	3,180	3,380	2,070	928
8	678	281	296	1,340	767	911	1,780	2,890	2,640	2,830	2,260	644
9	689	265	867	1,700	733	799	900	3,200	2,770	2,390	2,960	546
10	1,460	280	463	1,670	1,960	772	2,340	2,880	2,640	4,430	2,590	966
11	685	403	307	2,040	2,390	1,360	2,210	2,320	2,780	2,770	2,720	1,060
12	517	300	271	2,270	2,520	1,810	2,720	3,540	4,740	2,430	2,210	1,740
13	630	342	303	2,450	2,540	1,760	2,700	4,020	9,150	2,130	1,810	1,220
14	363	323	299	2,310	3,120	2,070	2,830	2,790	5,550	1,810	1,720	3,080
15	483	539	347	2,360	1,700	2,630	1,720	2,950	2,230	2,370	2,040	2,210
16	422	507	394	2,310	1,080	2,940	1,040	2,890	1,130	2,370	1,560	1,130
17	345	394	593	1,430	824	5,130	1,430	3,130	754	2,210	1,730	751
18	245	316	547	868	1,010	2,970	4,960	3,410	560	2,110	1,840	528
19	219	281	390	742	1,290	2,260	3,700	3,090	495	1,980	1,840	452
20	258	262	245	697	1,160	2,100	2,490	3,410	1,640	1,920	1,570	510
21	217	253	356	642	889	2,000	2,630	3,860	2,350	2,450	1,770	409
22	234	245	335	690	1,610	1,600	1,800	3,560	3,160	1,940	2,380	521
23	2,670	245	255	716	2,810	1,420	1,440	3,340	3,030	2,050	2,290	1,620
24	2,190	309	232	585	2,250	2,500	846	3,190	2,710	1,940	2,260	1,990
25	766	298	226	1,140	1,530	5,330	1,820	3,330	2,590	1,930	2,090	2,010
26	543	500	224	3,960	1,310	2,040	2,670	3,420	2,570	2,150	1,890	1,830
27	433	457	211	2,530	1,100	1,030	2,920	3,520	2,300	2,450	2,280	2,690
28	362	364	205	1,130	1,220	1,510	2,940	3,910	1,960	2,850	2,190	8,230
29	399	319	203	1,010	------	1,540	2,660	2,900	1,190	1,780	2,100	3,080
30	329	299	199	1,340	------	1,660	2,060	3,000	2,410	1,930	2,980	1,360
31	296	------	185	2,120	------	1,440	------	2,540	------	2,010	1,370	------
TOTAL	20,754	9,987	9,834	41,947	44,498	56,209	60,561	93,830	79,899	74,070	66,270	51,555
MEAN	669	333	317	1,353	1,589	1,813	2,019	3,027	2,663	2,389	2,138	1,719
MAX	2,670	539	867	3,960	3,120	5,330	4,960	4,020	9,150	4,430	2,980	8,230
MIN	217	245	185	200	708	772	612	1,400	495	1,780	1,160	409
AC-FT	41,170	19,810	19,510	83,200	88,260	111,500	120,100	186,100	158,500	146,900	131,400	102,300

CAL YR 1972 TOTAL 470,263 MEAN 1,285 MAX 6,950 MIN 185 AC-FT 932,800
WTR YR 1973 TOTAL 609,414 MEAN 1,670 MAX 9,150 MIN 185 AC-FT 1,209,000

08160800 Redgate Creek near Columbus, Tex.

LOCATION.--Lat 29°47'56", long 96°31'55", Colorado County, on left bank 68 ft (21 m) downstream from bridge on Farm Road 109, 1.8 miles (2.9 km) upstream from Cummins Creek, and 7.0 miles (11.3 km) north of Columbus.

DRAINAGE AREA.--17.3 mi² (44.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 210.82 ft (64.26 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 5.15 ft³/s (0.146 m³/s), 4.04 in/yr (102.6 mm/yr), 3,730 acre-ft/yr (4.60 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,080 ft³/s (116 m³/s) June 13, gage height, 14.40 ft (4.39 m); minimum, 0.03 ft³/s (0.85 dm³/s) Oct. 11.
Period of record: Maximum discharge, 4,200 ft³/s (119 m³/s) Oct. 23, 1971, gage height, 14.60 ft (4.45 m), from rating curve extended above 2,170 ft³/s (61.5 m³/s) 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 (7.1 m) in late June or early July 1940, from information by Texas Highway Department and local resident.

REMARKS.--Records good except those for September, which are poor. No known diversion above station.

REVISIONS.--WRD Texas 1969: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.49	.28	.79	1.1	1.9	2.5	4.1	.62	1.0	.24	.80
2	.14	.31	.28	.81	.97	2.1	1.7	220	.59	.90	.29	.40
3	.14	.50	.28	1.7	.92	1.8	1.2	45	.50	.96	.28	.20
4	.12	.37	.28	.79	.92	1.7	1.1	15	.51	1.1	.22	.20
5	.14	.28	.28	.70	.92	1.6	1.2	8.0	2.1	.81	.19	5.0
6	.15	.51	.28	1.3	.92	13	64	4.0	2.4	.80	.21	25
7	.06	.72	.24	3.4	.94	3.6	25	50	.75	1.1	.19	20
8	.04	.31	.28	1.2	2.1	2.1	6.2	4.5	.59	1.3	.19	5.0
9	.04	.30	.33	.73	10	1.9	4.7	3.4	.66	.79	.20	2.0
10	.04	.28	.48	.77	4.5	2.0	2.9	2.4	.64	.65	.18	1.2
11	.03	.27	.62	1.7	2.0	1.7	2.5	2.3	3.7	.57	.16	1.0
12	.04	.29	.54	1.2	1.5	1.5	2.2	15	40	.51	.43	2.0
13	.05	4.2	.48	1.2	21	1.5	2.1	4.2	1,180	.44	.35	5.0
14	.07	.53	.62	1.1	4.7	1.6	2.4	2.3	137	.42	.26	15
15	.07	.34	.62	.94	1.9	1.7	305	1.9	22	.42	.35	6.0
16	.06	.30	.42	.84	1.5	2.7	120	1.7	8.2	.52	.23	2.5
17	.06	.28	.33	.82	19	1.7	238	1.5	5.4	.54	.20	1.2
18	.07	.82	.36	.82	8.6	1.4	36	1.4	3.8	.41	.26	.80
19	.07	.46	.39	.75	3.2	1.5	18	1.3	2.9	.38	.24	.65
20	.07	.32	.42	.83	2.0	1.6	12	1.2	3.4	.32	.18	.55
21	.25	.28	.45	1.8	11	1.3	11	1.1	13	.30	.16	.50
22	3.4	.26	.43	.75	15	1.3	9.0	1.1	4.9	.27	.15	.45
23	.61	.26	.41	.63	9.0	17	8.5	1.0	3.2	.25	.15	.42
24	.32	.82	.41	.62	3.3	700	7.1	1.0	2.4	.26	.15	.38
25	.27	.92	.39	37	2.2	125	6.2	1.0	4.2	.25	.14	.36
26	.49	.42	.39	4.0	1.8	35	11	.95	3.0	.23	.14	.33
27	.41	.36	.39	1.9	1.7	20	5.5	.89	1.9	1.5	.14	1.2
28	.33	.28	.39	1.3	1.6	200	4.4	.67	1.5	.78	.59	1.2
29	3.4	.26	.46	1.1	------	20	4.1	.62	1.3	.33	.61	.42
30	.56	.28	.46	1.1	------	8.0	4.1	.62	1.1	.25	.25	.36
31	.35	------	.40	1.1	------	5.0	------	.62	------	.23	.50	------
TOTAL	12.00	16.02	12.39	73.69	134.29	1,181.2	919.6	398.77	1,452.26	18.59	7.83	100.12
MEAN	.39	.53	.40	2.38	4.80	38.1	30.7	12.9	48.4	.60	.25	3.34
MAX	3.4	4.2	.62	37	21	700	305	220	1,180	1.5	.61	25
MIN	.03	.26	.24	.62	.92	1.3	1.1	.62	.50	.23	.14	.20
CFSM	.02	.03	.02	.14	.28	2.20	1.77	.75	2.80	.03	.01	.19
IN.	.03	.03	.03	.16	.29	2.54	1.98	.86	3.12	.04	.02	.22
AC-FT	24	32	25	146	266	2,340	1,820	791	2,880	37	16	199

CAL YR 1972 TOTAL 2,278.06 MEAN 6.22 MAX 480 MIN 0 CFSM .36 IN 4.90 AC-FT 4,520
WTR YR 1973 TOTAL 4,326.76 MEAN 11.9 MAX 1,180 MIN .03 CFSM .69 IN 9.30 AC-FT 8,580

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
	about			4-17	1300	8.25	1,540
3-24	1300	10.98	2,590	5- 2	1300	7.10	1,140
4-15	0900	7.75	1,360	6-13	0500	14.40	4,080

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 (104 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.6 miles (4.2 km) downstream from Cummins Creek, and at mile 135.1 (217.4 km).

DRAINAGE AREA.--41,070 mi² (106,400 km²), approximately, of which 12,880 mi² (33,360 km²) is probably noncontributing; 41,170 mi² (106,600 km²), 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 (37 km) 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.

GAGE.--Water-stage recorder. Datum of gage is 155.52 ft (47.40 m) above mean sea level. Prior to May 1, 1919, various nonrecording gages at sites in the immediate vicinity at datum 3.00 ft (0.91 m) lower. May 1, 1919, to Nov. 23, 1930, water-stage recorder at site about 300 ft (91 m) downstream at datum 3.00 ft (0.91 m) lower. Sept. 17, 1930, to June 12, 1939 (Oct. 1, 1930, to May 31, 1939, used herein), water-stage recorder at site 23 miles (37 km) 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 ft³/s (108 m³/s), 2,760,000 acre-ft/yr (3,403 hm³/yr); 37 years (1936-73) regulated, 2,893 ft³/s (81.9 m³/s), 2,096,000 acre-ft/yr (2,484 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 62,700 ft³/s (1,780 m³/s) June 13, gage height, 27.87 ft (8.49 m); minimum daily, 244 ft³/s (6.91 m³/s) Dec. 31.
Period of record: Maximum discharge, 190,000 ft³/s (5,380 m³/s) June 18, 1935, gage height, 38.5 ft (11.7 m), present site and datum, computed on basis of records for station near Eagle Lake; minimum, 93 ft³/s (2.63 m³/s) Sept. 1, 1918.
Maximum stage since at least 1852, 41.6 ft (12.7 m), 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 mi² (189 km²) above this station was partly controlled by 20 floodwater-retarding structures with a total combined capacity of 28,290 acre-ft (34.9 hm³) below the flood-spillway crests, of which 25,570 acre-ft (31.5 hm³) is floodwater-retarding capacity and 2,720 acre-ft (3.35 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010	836	377	247	2,010	1,360	2,000	2,520	2,560	2,360	2,110	1,980
2	913	628	341	246	2,280	1,370	1,850	3,590	2,130	2,470	2,400	1,360
3	913	498	332	269	2,320	1,270	1,700	5,190	2,260	2,820	1,960	1,710
4	835	440	312	356	2,310	1,150	1,320	3,380	2,450	2,710	2,200	2,180
5	768	399	296	424	1,910	1,080	1,090	2,840	2,370	2,790	2,850	2,170
6	731	465	293	1,080	1,230	1,080	1,440	2,590	2,380	2,840	2,610	2,480
7	708	587	283	1,190	953	1,280	3,360	2,660	2,620	2,930	2,620	2,200
8	681	460	276	2,490	958	1,130	2,330	2,230	2,870	3,300	2,230	1,430
9	683	383	276	1,890	1,180	975	2,190	2,130	2,620	3,240	2,080	966
10	661	343	316	1,900	1,370	990	1,590	3,190	2,420	2,680	2,740	804
11	800	323	803	1,720	1,950	888	1,810	2,880	2,850	3,770	2,820	759
12	1,060	316	583	1,810	2,730	953	2,320	2,700	7,930	3,340	2,740	1,130
13	707	515	417	2,290	3,240	1,590	2,530	4,780	45,600	2,930	2,670	1,470
14	524	574	342	2,470	9,140	1,720	2,710	4,570	51,700	2,680	2,370	1,680
15	588	516	356	2,350	5,980	1,900	10,900	3,160	20,400	2,500	2,030	2,730
16	415	445	417	2,470	3,030	2,330	22,700	2,960	6,010	2,440	2,050	2,630
17	417	634	355	2,460	1,860	2,690	18,700	2,720	3,910	2,870	2,010	1,470
18	395	677	442	1,790	2,390	4,150	12,900	3,040	3,130	2,640	1,830	1,110
19	339	557	620	1,100	2,290	3,310	7,720	3,180	2,770	2,550	1,740	795
20	290	423	642	792	1,900	2,550	6,220	3,020	2,550	2,420	1,660	651
21	262	350	501	688	1,730	2,070	3,750	3,100	8,490	2,350	1,650	588
22	325	318	347	604	2,180	2,080	3,540	3,450	4,490	2,380	1,650	597
23	358	304	311	552	3,440	1,870	2,960	3,390	3,990	2,440	2,110	546
24	615	310	389	560	3,940	9,410	2,220	3,160	3,670	2,240	2,310	750
25	2,630	325	310	887	3,120	20,100	1,860	3,050	3,430	2,200	2,230	1,740
26	1,320	357	274	7,210	2,100	10,300	1,910	3,080	3,220	2,030	2,130	1,890
27	894	356	261	6,270	1,710	4,540	3,010	3,150	3,250	2,080	1,900	1,850
28	698	544	258	3,920	1,400	2,760	3,020	3,210	2,930	2,670	1,990	2,420
29	1,320	562	258	1,980	------	3,390	3,090	3,410	2,710	2,880	2,120	5,340
30	3,500	442	256	1,460	------	2,380	2,780	2,880	2,590	2,620	2,200	4,310
31	1,420	------	244	1,410	------	2,250	------	2,810	------	2,080	2,510	------
TOTAL	26,780	13,887	11,488	54,885	70,651	94,916	135,520	98,020	210,300	82,250	68,520	51,736
MEAN	864	463	371	1,770	2,523	3,062	4,517	3,162	7,010	2,653	2,210	1,725
MAX	3,500	836	803	7,210	9,140	20,100	22,700	5,190	51,700	3,770	2,850	5,340
MIN	262	304	244	246	953	888	1,090	2,130	2,130	2,030	1,650	546
AC-FT	53,120	27,540	22,790	108,900	140,100	188,300	268,800	194,400	417,100	163,100	135,900	102,600

CAL YR 1972 TOTAL 573,774 MEAN 1,568 MAX 17,800 MIN 244 AC-FT 1,138,000
WTR YR 1973 TOTAL 918,953 MEAN 2,518 MAX 51,700 MIN 244 AC-FT 1,823,000

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 (335 m) downstream from Texas and New Orleans Railroad Co. bridge, 12 miles (19 km) upstream from Jones Creek, and at mile 66.6 (107.2 km).

DRAINAGE AREA.--41,380 mi² (107,200 km²), approximately, of which 12,880 mi² (33,360 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is 65.42 ft (19.94 m) above mean sea level. Prior to Oct. 1, 1938, various types of recording and nonrecording gages 800 ft (244 m) upstream at different datum. Oct. 1, 1938, to June 1, 1966, nonrecording gage 100 ft (30 m) upstream at present datum.

AVERAGE DISCHARGE.--5 years (1919-21, 1922-25) unregulated, 3,680 ft³/s (104 m³/s), 2,666,000 acre-ft/yr (3,287 hm³/yr); 35 years (1938-73) regulated, 2,648 ft³/s (75.0 m³/s), 1,918,000 acre-ft/yr (2,365 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 59,400 ft³/s (1,680 m³/s) June 15, gage height, 32.25 ft (9.83 m); minimum daily, 366 ft³/s (10.4 m³/s) Sept. 25.

Period of record: Maximum discharge observed, 100,000 ft³/s (2,830 m³/s) July 3, 1940, gage height, 35.99 ft (10.97 m); no flow Aug. 6, 1925 (result of pumping).

Maximum stage since at least 1869, 38.9 ft (11.9 m) 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 (11.6 m), present datum, furnished by National Weather Service, discharge, 159,000 ft³/s (4,500 m³/s), from rating curve defined by current-meter measurements below 145,000 ft³/s (4,110 m³/s). Flood of July 30, 1938, reached a stage of 37.4 ft (11.4 m), present datum, observed by Geological Survey engineers, discharge, 145,000 ft³/s (4,110 m³/s).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	974	1,650	571	394	1,470	1,590	2,380	2,970	1,760	1,610	1,360	2,040
2	879	991	516	378	1,780	1,430	2,130	2,780	1,660	1,430	1,520	2,060
3	700	769	487	390	2,190	1,420	1,810	3,490	1,360	1,830	1,840	1,340
4	596	656	465	390	2,270	1,360	1,740	5,150	1,260	1,920	1,390	1,450
5	564	580	458	426	2,280	1,250	1,540	3,660	1,600	1,830	1,470	2,690
6	597	544	447	550	2,050	1,140	1,330	3,110	1,750	1,830	2,210	3,990
7	591	518	441	808	1,480	1,060	1,460	2,840	1,640	2,010	1,940	3,940
8	613	560	429	1,080	1,140	1,230	3,560	2,830	1,780	3,000	1,930	3,010
9	565	566	429	1,910	1,060	1,220	2,720	2,500	2,090	3,230	1,660	2,120
10	544	521	426	1,890	1,170	1,030	2,230	2,120	2,170	3,180	1,610	1,550
11	540	492	426	1,740	1,310	978	1,890	2,820	2,120	2,440	2,190	1,540
12	532	469	542	1,660	1,600	930	1,690	2,690	7,260	2,910	2,460	4,730
13	828	512	698	1,620	2,570	839	2,230	2,830	21,200	2,780	2,630	2,890
14	727	517	611	2,010	3,380	1,280	2,320	4,490	44,900	2,170	2,290	2,900
15	554	547	554	2,200	7,840	1,650	2,870	4,640	57,400	1,820	2,080	2,610
16	514	567	501	2,200	6,080	1,800	16,200	3,310	36,600	1,520	1,820	3,000
17	492	547	493	2,300	3,610	2,140	27,900	2,760	10,400	1,520	1,940	3,050
18	433	646	510	2,280	2,470	2,530	27,700	2,420	6,100	1,890	2,040	1,960
19	452	724	503	1,940	2,700	3,730	18,300	2,500	4,340	1,660	1,880	1,470
20	443	680	520	1,360	2,560	3,440	9,600	2,580	3,390	1,590	1,920	1,040
21	410	587	620	998	2,220	2,630	7,650	2,480	3,510	1,440	1,860	801
22	436	529	620	840	2,020	2,120	5,110	2,440	8,580	1,380	1,680	610
23	430	484	535	752	2,540	4,000	4,560	2,630	5,170	1,550	1,550	566
24	394	472	462	690	3,520	6,250	3,920	2,620	4,050	1,610	1,690	484
25	404	471	448	670	4,030	14,400	3,100	2,360	3,590	1,380	1,910	366
26	1,840	465	471	1,280	3,340	17,600	2,730	2,190	3,290	1,430	1,810	905
27	1,580	455	444	6,680	2,370	9,920	2,490	2,200	2,970	1,410	1,760	1,350
28	1,000	458	412	6,150	1,870	5,220	3,300	2,250	2,840	1,540	1,580	1,430
29	777	450	399	4,230	------	3,340	3,250	2,300	2,520	1,880	1,580	1,760
30	796	570	399	2,330	------	3,590	3,300	2,300	2,170	2,130	1,820	4,130
31	2,850	------	390	1,640	------	2,750	------	2,050	------	1,940	1,970	------
TOTAL	23,055	17,997	15,227	53,786	72,920	103,867	171,010	88,310	249,470	59,860	57,390	61,782
MEAN	744	600	491	1,735	2,604	3,351	5,700	2,849	8,316	1,931	1,851	2,059
MAX	2,850	1,650	698	6,680	7,840	17,600	27,900	5,150	57,400	3,230	2,630	4,730
MIN	394	450	390	378	1,060	839	1,330	2,050	1,260	1,380	1,360	366
AC-FT	45,730	35,700	30,200	106,700	144,600	206,000	339,200	175,200	494,800	118,700	113,800	122,500

CAL YR 1972 TOTAL 507,496 MEAN 1,387 MAX 22,900 MIN 390 AC-FT 1,007,000
WTR YR 1973 TOTAL 974,674 MEAN 2,670 MAX 57,400 MIN 366 AC-FT 1,933,000

08162500 Colorado River near Bay City, Tex.

LOCATION.--Lat 28°58'26", long 96°00'44", Matagorda County, on right bank 6,300 ft (1,920 m) downstream from bridge on State Highway 35, 7,100 ft (2,164 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.8 miles (4.5 km) west of Bay City, and at mile 32.5 (52.3 km).

DRAINAGE AREA.--41,650 mi² (107,900 km²), approximately, of which 12,880 mi² (33,360 km²) 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.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. July 2-6, 1940, nonrecording gage at highway bridge, 6,300 ft (1,920 m) upstream at datum 30.60 ft (9.33 m) lower.

AVERAGE DISCHARGE.--25 years (1948-73), 2,285 ft³/s (64.7 m³/s), 1,655,000 acre-ft/yr (2,041 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 60,800 ft³/s (1,720 m³/s) June 15, elevation, 38.70 ft (11.80 m); minimum daily, 31 ft³/s (0.88 m³/s) Sept. 22.

Period of record: Maximum discharge, 84,100 ft³/s (2,380 m³/s) June 26, 1960; maximum elevation, 48.2 ft (14.7 m), present datum, July 4, 1940, at site 6,300 ft (1,920 m) upstream at bridge on State Highway 35, observed by Corps of Engineers, elevation, 46.6 ft (14.2 m), adjusted to present site; no flow at times in 1951-53, 1956.

Maximum elevation since 1869, 56.1 ft (17.1 m) 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 (16.9 m); June 1929, 55.0 ft (16.8 m); June 22, 1935, 54.6 ft (16.6 m); Oct. 5, 1936, 52.2 ft (15.9 m); Aug. 2, 1938, 53.4 ft (16.3 m); Nov. 27, 1940, 47.6 ft (14.5 m). All above flood data from information by Texas and New Orleans Railroad Co. and adjusted to present site.

REMARKS.--Records fair except those for January and those below 2,500 ft³/s (70.8 m³/s) during March through August, which are poor. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,150	2,400	309	410	1,700	1,880	2,140	2,850	1,070	1,030	825	1,620
2	1,000	1,440	561	400	1,450	1,590	1,960	2,550	940	420	775	1,920
3	662	1,170	550	400	1,960	1,490	1,560	2,550	800	100	1,060	1,450
4	336	1,820	483	400	2,180	1,460	1,140	4,700	588	440	1,240	2,010
5	454	1,330	456	400	2,220	1,410	1,020	4,000	415	725	500	4,630
6	545	889	445	450	2,200	1,300	1,130	2,900	845	500	1,520	11,400
7	604	747	413	600	1,860	1,160	1,300	2,220	1,040	625	1,620	10,400
8	720	692	412	800	1,310	1,100	2,180	2,460	940	2,160	1,480	7,360
9	593	710	446	1,200	1,100	1,570	3,200	2,370	1,200	2,160	1,150	3,870
10	332	657	443	1,800	1,680	1,530	2,220	1,850	1,590	2,720	1,000	3,360
11	567	582	427	1,900	2,500	1,330	1,880	1,780	1,680	1,620	1,280	3,650
12	531	553	436	1,800	1,490	1,300	1,650	3,250	3,640	1,060	1,700	6,750
13	612	733	644	1,700	2,030	1,220	1,850	3,350	16,000	1,880	2,160	6,860
14	850	859	698	1,600	2,550	1,190	1,930	3,550	41,100	1,060	2,600	3,680
15	823	761	601	2,000	5,150	1,780	2,550	4,900	57,000	775	2,740	3,300
16	674	692	528	2,200	6,360	2,220	9,240	3,700	50,700	500	1,960	2,880
17	523	631	484	2,200	4,400	2,240	33,200	2,600	17,300	355	1,730	2,830
18	578	918	549	2,300	3,450	2,610	31,800	2,030	8,200	440	1,960	1,920
19	552	1,670	528	2,300	3,450	2,680	21,300	1,780	5,900	310	1,880	855
20	547	1,060	300	1,800	2,850	3,960	10,400	1,850	3,450	500	1,700	631
21	555	875	584	1,400	2,420	3,080	8,100	1,850	3,320	370	1,620	191
22	598	690	680	1,100	2,330	2,490	5,800	1,650	6,270	370	1,560	31
23	897	617	680	900	3,300	2,520	4,400	1,720	6,040	220	1,240	59
24	789	566	588	800	3,700	10,100	3,900	1,850	3,750	800	875	1,150
25	622	564	510	700	4,000	11,700	3,650	1,720	3,000	600	1,160	738
26	842	569	535	1,500	3,850	19,100	3,200	1,560	2,640	1,000	1,280	254
27	1,930	798	448	3,500	2,850	11,900	2,850	1,490	2,340	750	1,120	493
28	1,360	603	415	7,000	2,030	6,940	2,500	1,520	1,820	625	1,120	576
29	1,020	529	415	5,000	------	3,880	3,200	1,560	1,590	800	975	680
30	853	550	458	2,950	------	3,140	3,050	1,620	1,700	1,060	1,180	1,940
31	1,650	------	420	2,030	------	2,900	------	1,490	------	1,240	1,340	------
TOTAL	23,769	26,675	15,446	53,540	76,370	112,770	174,300	75,270	246,868	27,215	44,350	87,488
MEAN	767	889	498	1,727	2,728	3,638	5,810	2,428	8,229	878	1,431	2,916
MAX	1,930	2,400	698	7,000	6,360	19,100	33,200	4,900	57,000	2,720	2,740	11,400
MIN	332	529	300	400	1,100	1,100	1,020	1,490	415	100	500	31
AC-FT	47,150	52,910	30,640	106,200	151,500	223,700	345,700	149,300	489,700	53,980	87,970	173,500

CAL YR 1972 TOTAL 420,346.4 MEAN 1,148 MAX 23,400 MIN 2.0 AC-FT 833,800
WTR YR 1973 TOTAL 964,061.0 MEAN 2,641 MAX 57,000 MIN 31 AC-FT 1,912,000

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 (1.6 km) downstream from Juanita Creek, and 2.4 miles (3.9 km) southeast of Midfield.

DRAINAGE AREA.--145 mi² (376 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5.38 ft (1.64 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 7,590 ft³/s (215 m³/s) Sept. 11, gage height, 31.11 ft (9.48 m); minimum, 3.7 ft³/s (105 dm³/s) Mar. 20.
Period of record: Maximum discharge, 7,590 ft³/s (215 m³/s) Sept. 11, 1973, gage height, 31.11 ft (9.48 m); minimum, 2.2 ft³/s (62 dm³/s) Feb. 1, 2, 1971.
Maximum stages since 1885, 37 ft (11 m) in September 1960 and 35 ft (11 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	14	9.3	6.2	13	31	11	21	50	42	68	220
2	68	12	8.1	6.2	9.2	23	9.2	37	45	38	138	191
3	46	331	7.6	33	7.3	20	10	55	33	46	217	144
4	36	1,020	6.8	31	6.5	16	23	61	30	44	157	126
5	37	580	6.3	34	6.3	14	42	48	31	42	110	1,140
6	44	234	6.6	60	5.8	12	72	42	37	43	106	3,860
7	31	119	6.7	174	5.4	9.9	190	53	67	45	91	3,830
8	23	70	7.8	169	25	8.5	118	55	64	50	74	2,720
9	15	45	7.8	99	185	7.4	67	42	65	57	67	1,550
10	12	28	7.6	57	311	7.0	50	29	108	72	66	1,170
11	13	18	7.3	81	185	6.4	18	34	111	64	105	4,330
12	12	14	8.8	174	94	5.6	10	1,350	1,410	64	81	6,760
13	13	207	8.4	133	61	5.2	25	2,970	4,120	68	117	4,720
14	13	247	8.2	88	46	4.9	23	1,080	3,990	64	167	2,920
15	11	120	9.2	63	32	4.9	394	286	2,790	65	174	1,370
16	8.7	55	8.6	42	22	4.7	1,100	133	1,990	62	146	628
17	7.2	32	9.2	31	112	4.2	4,010	81	1,350	60	125	575
18	6.6	104	7.3	24	732	4.1	5,440	53	508	60	91	308
19	8.0	345	6.2	18	440	4.2	3,330	45	187	54	74	175
20	13	226	5.6	15	204	4.2	1,840	37	105	49	68	116
21	15	106	5.6	13	148	4.6	564	30	1,170	49	50	80
22	41	61	6.0	10	322	7.6	254	31	724	54	35	61
23	158	37	6.4	8.0	832	41	154	43	292	61	29	117
24	177	28	5.7	6.8	528	304	98	45	457	89	19	485
25	72	32	5.4	12	237	489	66	51	284	87	28	267
26	36	39	5.3	23	129	192	158	61	154	170	36	148
27	26	32	4.9	40	74	81	69	70	99	182	39	90
28	20	20	4.9	27	46	42	51	70	68	125	110	71
29	16	14	5.2	19	------	32	30	57	56	110	116	58
30	15	11	6.5	15	------	21	24	61	49	77	183	50
31	19	------	6.0	15	------	15	------	54	------	72	265	------
TOTAL	1,144.5	4,201	215.3	1,527.2	4,818.5	1,426.4	18,250.2	7,085	20,444	2,165	3,152	38,280
MEAN	36.9	140	6.95	49.3	172	46.0	608	229	681	69.8	102	1,276
MAX	177	1,020	9.3	174	832	489	5,440	2,970	4,120	182	265	6,760
MIN	6.6	11	4.9	6.2	5.4	4.1	9.2	21	30	38	19	50
CFSM	.25	.97	.05	.34	1.19	.32	4.19	1.58	4.70	.48	.70	8.80
IN.	.29	1.08	.06	.39	1.24	.37	4.68	1.82	5.24	.56	.81	9.82
AC-FT	2,270	8,330	427	3,030	9,560	2,830	36,200	14,050	40,550	4,290	6,250	75,930

CAL YR 1972 TOTAL 35,484.7 MEAN 97.0 MAX 3,200 MIN 4.4 CFSM .67 IN 9.10 AC-FT 70,380
WTR YR 1973 TOTAL 102,709.1 MEAN 281 MAX 6,760 MIN 4.1 CFSM 1.94 IN 26.35 AC-FT 203,700

PEAK DISCHARGE (BASE, 1,000 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 4	1000	19.86	1,100	6-21	1300	21.74	1,380
4-18	0200	30.36	6,310	9- 6	2200	28.82	4,370
5-13	0300	27.60	3,430	9-11	2400	31.11	7,590
6-14	0300	28.81	4,360				

08163500 Lavaca River at Hallettsville, Tex.

LOCATION.--Lat 29°26'35", long 96°56'39", Lavaca County, on left bank 75 ft (23 m) downstream from bridge on U.S. Highway 77 in Hallettsville and 0.7 mile (1.1 km) downstream from Campbell Branch.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 186.72 ft (56.91 m) 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 (1.9 m). Apr. 20, 1960, to June 2, 1961, movable nonrecording gage. All gages at same site and datum.

AVERAGE DISCHARGE.--34 years, 45.6 ft³/s (1.29 m³/s), 33,040 acre-ft/yr (40.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,200 ft³/s (657 m³/s) June 13, gage height, 30.52 ft (9.30 m); minimum, 1.5 ft³/s (42 dm³/s) Oct. 10, 11.
Period of record: Maximum discharge, 93,100 ft³/s (2,640 m³/s) June 30, 1940, gage height, 40.60 ft (12.37 m), from floodmarks, from rating curve extended above 23,000 ft³/s (651 m³/s) 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 (10.0 m) 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 (2.6 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	4.2	2.9	5.9	11	14	17	34	6.9	21	54	6.1
2	2.3	4.0	2.9	7.1	11	14	15	42	6.8	19	29	5.9
3	2.6	4.1	2.8	11	10	13	14	44	6.9	20	11	5.8
4	2.6	4.2	2.9	11	9.7	12	13	35	6.8	21	8.6	5.8
5	1.9	3.7	3.2	10	9.4	11	12	31	8.8	20	8.2	6.1
6	1.9	4.3	3.2	9.4	9.2	37	53	31	9.8	16	8.0	6.0
7	2.2	3.9	3.2	10	9.0	59	313	32	8.9	39	8.0	5.8
8	1.7	3.7	3.2	11	12	19	49	31	9.1	449	8.0	5.7
9	1.7	3.5	3.4	10	19	16	29	29	8.0	43	8.5	5.7
10	1.7	3.3	4.1	8.9	36	15	22	26	7.4	29	7.8	6.9
11	1.7	3.1	4.9	9.0	32	14	19	25	969	23	7.9	5.9
12	1.7	3.3	5.2	8.4	24	12	18	428	4,700	21	8.2	5.4
13	1.9	16	5.0	8.5	17	11	18	99	10,000	19	8.1	6.7
14	1.9	10	5.8	8.3	14	11	24	27	639	18	12	383
15	1.9	4.8	5.6	7.7	12	10	5,960	19	194	16	19	27
16	1.9	3.4	4.9	7.3	11	9.5	3,050	16	60	17	8.2	15
17	2.0	2.6	4.5	7.0	24	14	1,410	14	33	17	7.6	13
18	1.9	3.2	4.5	6.6	112	11	470	13	22	16	7.6	12
19	1.8	3.0	4.5	6.1	37	8.5	112	12	17	15	7.1	11
20	1.9	2.8	4.4	5.8	23	8.0	73	11	508	14	6.8	11
21	2.7	3.0	4.4	5.4	19	7.8	57	10	700	13	6.7	10
22	4.8	2.7	4.3	4.7	59	7.5	54	9.8	91	13	6.5	9.7
23	7.6	2.9	4.0	4.5	156	190	52	9.4	40	13	6.6	9.8
24	5.9	5.0	3.7	4.7	36	1,310	51	9.3	33	12	6.4	9.6
25	3.7	5.1	3.6	92	25	142	46	8.9	45	13	6.3	9.2
26	3.6	4.4	3.4	130	19	38	54	8.3	137	12	6.1	9.1
27	3.5	4.0	3.2	29	16	28	51	8.1	89	11	6.2	9.6
28	3.3	3.5	3.3	19	14	23	38	7.6	34	10	7.4	9.7
29	6.2	3.2	3.7	15	------	27	35	6.9	27	9.6	6.8	9.6
30	4.4	3.0	3.9	13	------	25	34	6.7	22	8.8	7.9	9.4
31	4.0	------	3.7	12	------	19	------	6.6	------	8.3	6.4	------
TOTAL	89.4	127.9	122.3	498.3	786.3	2,136.3	12,163	1,090.6	18,439.3	976.7	316.9	645.5
MEAN	2.88	4.26	3.95	16.1	28.1	68.9	405	35.2	615	31.5	10.2	21.5
MAX	7.6	16	5.8	130	156	1,310	5,960	428	10,000	449	54	383
MIN	1.7	2.6	2.8	4.5	9.0	7.5	12	6.6	6.8	8.3	6.1	5.4
AC-FT	177	254	243	988	1,560	4,240	24,130	2,160	36,570	1,940	629	1,280

CAL YR 1972 TOTAL 21,199.3 MEAN 57.9 MAX 7,270 MIN 1.7 AC-FT 42,050
WTR YR 1973 TOTAL 37,392.5 MEAN 102 MAX 10,000 MIN 1.7 AC-FT 74,170

PEAK DISCHARGE (BASE, 2,300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-24	1500	18.48	3,140	6-11	1930	19.98	4,280
4-15	1000	26.73	13,200	6-12	1400	24.11	8,750
4-16	0700	21.31	5,510	6-13	0900	30.52	23,200
4-17	1930	17.47	2,480	6-20	2200	17.51	2,510

08164000 Lavaca River near Edna, Tex.

LOCATION.--Lat 28°57'35", long 96°41'10", Jackson County, at downstream side near center of upstream bridge of two bridges on U.S. Highway 59, 660 ft (201 m) upstream from Texas and New Orleans Railroad Co. bridge, and 2.8 miles (4.5 km) southwest of Edna.

DRAINAGE AREA (revised).--817 mi² (2,116 km²).

PERIOD OF RECORD.--August 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.88 ft (4.23 m) 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 (34 m) downstream; Apr. 4, 1957, to Mar. 21, 1961, nonrecording gage; all at same datum.

AVERAGE DISCHARGE.--35 years, 302 ft³/s (8.55 m³/s), 218,800 acre-ft/yr (270 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 59,900 ft³/s (1,700 m³/s) June 14, gage height, 30.99 ft (9.45 m); minimum, 28 ft³/s (0.79 m³/s) Oct. 15, 17-19.
Period of record: Maximum discharge, 73,000 ft³/s (2,070 m³/s) July 1, 1940, gage height, 32.51 ft (9.91 m); no flow at times.
Maximum stage since at least 1880, 33.8 ft (10.3 m) May 25, 1936, discharge, 83,400 ft³/s (2,360 m³/s), 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 1973: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	57	35	35	55	97	234	327	114	331	148	157
2	38	45	34	37	50	88	206	305	111	295	165	173
3	35	42	33	42	47	83	188	1,950	109	270	320	148
4	34	40	34	44	45	79	171	2,230	112	249	244	130
5	34	38	33	50	43	74	157	524	106	231	179	604
6	33	38	34	72	42	71	164	379	273	216	163	435
7	31	39	33	99	40	69	591	334	310	215	151	224
8	31	37	34	81	41	80	1,060	338	144	1,340	143	172
9	31	36	35	62	68	113	527	287	119	3,260	140	144
10	31	36	35	58	85	77	277	251	109	1,140	142	170
11	30	35	37	67	105	66	214	232	107	425	149	722
12	30	34	37	73	108	60	185	1,510	2,970	327	138	495
13	30	49	36	71	93	58	168	3,610	14,300	277	140	262
14	29	53	38	63	81	57	161	1,760	53,000	249	137	283
15	29	52	40	57	66	54	178	480	41,200	232	142	339
16	29	54	37	53	58	60	2,450	320	15,500	221	209	696
17	29	42	37	49	82	56	15,900	257	4,070	212	198	526
18	29	45	37	46	407	48	27,000	224	916	206	223	238
19	29	42	36	43	480	48	14,200	201	639	199	280	164
20	29	37	36	42	317	49	5,660	182	589	192	189	133
21	32	36	36	40	176	46	1,110	167	2,090	185	161	191
22	35	35	36	38	221	45	704	155	3,850	179	142	131
23	34	34	37	37	678	771	588	148	3,510	180	132	104
24	34	36	35	36	619	10,100	521	145	919	180	122	99
25	38	39	35	41	360	12,900	464	140	1,060	174	115	103
26	39	39	34	142	186	5,370	973	137	1,250	168	114	99
27	37	38	33	302	133	935	1,800	133	1,120	162	112	90
28	35	39	33	201	110	451	792	130	694	167	110	90
29	88	36	33	95	------	360	439	123	479	163	114	84
30	121	35	33	71	------	308	361	118	386	152	126	83
31	88	------	33	61	------	270	------	117	------	149	183	------
TOTAL	1,215	1,218	1,089	2,208	4,796	32,943	77,443	17,214	150,156	11,946	5,031	7,289
MEAN	39.2	40.6	35.1	71.2	171	1,063	2,581	555	5,005	385	162	243
MAX	121	57	40	302	678	12,900	27,000	3,610	53,000	3,260	320	722
MIN	29	34	33	35	40	45	157	117	106	149	110	83
AC-FT	2,410	2,420	2,160	4,380	9,510	65,340	153,600	34,140	297,800	23,690	9,980	14,460

CAL YR 1972 TOTAL 153,316 MEAN 419 MAX 13,700 MIN 29 AC-FT 304,100
WTR YR 1973 TOTAL 312,548 MEAN 856 MAX 53,000 MIN 29 AC-FT 619,900

PEAK DISCHARGE (BASE, 4,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-24	2300	25.76	19,100	6-14	1700	30.99	59,900
4-18	1000	27.39	28,600	6-23	0400	19.55	4,550

08164300 Navidad River near Hallettsville, Tex.

LOCATION.--Lat 29°28'00", long 96°48'45", Lavaca County, on right bank 28 ft (9 m) downstream from bridge on U.S. Highway 90-A, 0.8 mile (1.3 km) downstream from Mixons Creek, 1.2 miles (1.9 km) southwest of Sublime, and 8 miles (13 km) northeast of Hallettsville.

DRAINAGE AREA.--332 mi² (860 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 159.28 ft (48.55 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 140 ft³/s (3.96 m³/s), 101,400 acre-ft/yr (125 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,400 ft³/s (804 m³/s) June 13, gage height, 32.91 ft (10.03 m); minimum, 8.0 ft³/s (227 dm³/s) for all or part of each day Oct. 15-20.
Period of record: Maximum discharge, 28,400 ft³/s (804 m³/s) June 13, 1973, gage height, 32.91 ft (10.03 m); no flow Aug. 5-7, 22, Sept. 2-16, 1964.
Maximum stage since at least 1860, 40 ft (12 m) in June 1940; flood in July 1936 reached a stage of 39 ft (12 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	14	16	19	32	42	67	109	27	98	181	17
2	10	13	16	21	28	43	61	234	26	88	163	15
3	9.8	15	16	29	26	41	57	1,290	25	82	43	14
4	9.4	15	17	34	26	39	50	201	25	91	30	14
5	9.3	14	17	30	26	37	47	129	43	85	26	37
6	9.3	14	17	27	25	92	93	115	233	71	25	163
7	9.0	17	16	27	26	178	628	112	60	671	24	104
8	8.3	14	16	33	26	52	167	112	38	503	23	40
9	8.3	14	17	33	41	43	90	90	46	138	24	32
10	8.3	14	18	27	86	41	73	79	39	88	27	41
11	8.3	14	19	26	72	38	65	74	669	75	23	45
12	8.4	14	19	27	60	34	61	92	6,480	66	22	32
13	8.3	31	21	27	46	33	57	162	18,600	59	28	31
14	8.4	36	21	27	42	33	67	86	17,300	54	26	316
15	8.3	21	21	27	47	32	5,880	67	2,250	51	39	122
16	8.0	17	22	25	34	30	13,400	62	319	51	29	54
17	8.1	16	20	24	54	45	6,490	59	246	54	23	40
18	8.0	17	19	23	164	33	4,260	54	206	51	23	34
19	8.0	18	19	22	104	30	802	52	177	46	23	30
20	8.0	16	23	21	59	29	290	49	172	44	22	29
21	9.1	15	23	21	51	28	248	46	2,840	41	20	31
22	12	15	19	19	111	27	222	44	2,430	38	18	26
23	21	15	19	18	342	150	205	42	274	39	17	25
24	16	16	18	17	127	1,010	191	40	210	38	16	25
25	11	20	17	120	71	2,610	169	39	207	34	15	24
26	11	19	17	442	56	260	340	38	252	31	14	23
27	13	18	16	93	48	118	267	37	195	29	14	22
28	14	17	17	51	44	96	153	33	149	35	14	25
29	17	16	18	37	------	272	122	29	124	35	15	26
30	22	16	19	33	------	107	114	28	111	28	23	23
31	17	------	19	33	------	78	------	27	------	26	22	------
TOTAL	336.6	511	572	1,413	1,874	5,701	34,736	3,631	53,773	2,840	1,012	1,460
MEAN	10.9	17.0	18.5	45.6	66.9	184	1,158	117	1,792	91.6	32.6	48.7
MAX	22	36	23	442	342	2,610	13,400	1,290	18,600	671	181	316
MIN	8.0	13	16	17	25	27	47	27	25	26	14	14
AC-FT	668	1,010	1,130	2,800	3,720	11,310	68,900	7,200	106,700	5,630	2,010	2,900

CAL YR 1972 TOTAL 68,481.9 MEAN 187 MAX 11,800 MIN 7.4 AC-FT 135,800
WTR YR 1973 TOTAL 107,859.6 MEAN 296 MAX 18,600 MIN 8.0 AC-FT 213,900

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-25	1400	20.41	3,260	6-13	2200	32.91	28,400
4-16	1300	28.44	14,500	6-22	0100	21.92	4,240

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 (52 m) upstream from Texas and New Orleans Railroad Co. bridge, 0.2 mile (0.3 km) downstream from Sandy Creek, and 2.5 miles (4.0 km) southwest of Ganado.

DRAINAGE AREA (revised).--1,062 mi² (2,751 km²).

PERIOD OF RECORD.--May 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.62 ft (4.15 m) above mean sea level (levels by Corps of Engineers). Prior to May 7, 1958, nonrecording gage at site 70 ft (21 m) downstream at same datum. Mar. 7, 1958, to Mar. 22, 1961, nonrecording gages at same site and datum.

AVERAGE DISCHARGE.--34 years, 541 ft³/s (15.3 m³/s), 392,000 acre-ft/yr (483 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 88,000 ft³/s (2,490 m³/s) June 15, gage height, 39.8 ft (12.1 m); minimum, 23 ft³/s (0.65 m³/s) Oct. 20.
Period of record: Maximum discharge, 88,000 ft³/s (2,490 m³/s) June 15, 1973, gage height, 39.8 ft (12.1 m); no flow at times in 1955-56, 1967.
Maximum stage since at least 1876, 39.8 ft (12.1 m) May 27, 1936, and June 15, 1973, from information by local resident, Texas and New Orleans Railroad Co., and Texas Highway Department. Discharge, 94,000 ft³/s (2,660 m³/s) May 27, 1936, from rating curve extended above 57,000 ft³/s (1,610 m³/s).

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 (0.3 km) upstream from gaging station, during water year 1973:

Oct. 5	91.0
Nov. 8	26.4
Dec. 13	.23
Jan. 9	34.3

REVISIONS.--WRD Texas 1973: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	84	27	27	63	149	305	353	85	341	218	561
2	184	67	27	29	57	130	245	332	87	283	385	450
3	135	59	27	43	53	119	218	816	89	246	1,010	295
4	122	53	26	53	48	112	189	1,550	80	219	616	226
5	118	45	26	116	45	101	154	722	78	209	383	1,610
6	115	43	26	228	43	94	151	309	185	210	284	3,260
7	106	47	26	460	43	85	647	255	640	392	223	3,470
8	89	53	26	527	43	237	1,810	337	262	2,550	198	2,790
9	79	44	26	354	111	132	783	355	158	3,170	199	1,520
10	65	40	26	212	296	94	402	226	178	1,130	198	917
11	56	33	28	184	316	79	258	193	329	586	269	2,660
12	51	30	29	219	237	72	202	2,780	5,690	368	272	5,420
13	49	80	28	250	165	68	169	5,570	19,400	267	269	6,500
14	50	132	28	217	200	64	150	2,550	62,000	216	282	6,260
15	31	130	32	171	160	61	308	909	83,300	195	504	5,300
16	28	109	33	133	135	127	4,840	521	47,600	180	668	3,660
17	28	76	31	109	149	328	13,200	296	18,700	176	433	2,330
18	30	138	31	91	878	221	28,400	199	8,130	179	842	1,260
19	25	121	31	76	1,120	136	27,700	155	3,110	187	2,300	694
20	25	134	30	64	727	95	16,200	135	1,580	193	1,350	448
21	28	99	28	53	449	75	8,450	123	3,020	205	892	301
22	61	71	27	44	649	63	3,190	116	6,350	194	635	223
23	106	55	32	39	1,480	819	1,560	111	6,310	189	380	186
24	124	52	31	35	1,580	9,260	1,070	107	3,950	219	247	190
25	102	67	26	49	879	16,800	843	103	1,870	331	201	172
26	74	66	25	126	455	13,300	927	107	1,710	302	161	163
27	56	61	25	719	267	6,970	1,000	115	1,290	314	147	148
28	44	50	24	305	189	1,890	872	100	868	386	127	134
29	78	39	25	148	------	786	534	94	601	376	139	142
30	96	30	25	104	------	690	422	89	437	289	177	140
31	79	------	24	76	------	461	------	85	------	250	341	------
TOTAL	2,443	2,108	856	5,261	10,837	53,618	115,199	19,713	278,087	14,352	14,350	51,430
MEAN	78.8	70.3	27.6	170	387	1,730	3,840	636	9,270	463	463	1,714
MAX	209	138	33	719	1,580	16,800	28,400	5,570	83,300	3,170	2,300	6,500
MIN	25	30	24	27	43	61	150	85	78	176	127	134
AC-FT	4,850	4,180	1,700	10,440	21,500	106,400	228,500	39,100	551,600	28,470	28,460	102,000

CAL YR 1972 TOTAL 232,526 MEAN 635 MAX 19,900 MIN 24 AC-FT 461,200
WTR YR 1973 TOTAL 568,254 MEAN 1,557 MAX 83,300 MIN 24 AC-FT 1,127,000

PEAK DISCHARGE (BASE, 5,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-25	1500	29.70	17,800	6-15	0900	39.8	88,000
4-18	2100	33.24	32,700	6-22	2300	25.55	7,150
5-13	1100	23.90	5,960	9-13	1700	24.91	6,640

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 (0.5 km) upstream from Southern Pacific Railroad bridge, 2.0 miles (3.2 km) southwest of Inez, and 3.6 miles (5.8 km) upstream from Casa Blanca Creek.

DRAINAGE AREA.--91.7 mi² (238 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 29.16 ft (8.89 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,110 ft³/s (145 m³/s) June 14, gage height, 19.91 ft (6.07 m); minimum, 0.36 ft³/s (10 dm³/s) Oct. 19-21.
Period of record: Maximum discharge, 5,110 ft³/s (145 m³/s) June 14, 1973, gage height, 19.91 ft (6.07 m); no flow May 22, 23, May 26 to June 17, 1971.
Maximum stage since 1903, 24.5 ft (7.5 m) 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 (7.1 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	8.2	1.5	1.8	5.9	16	6.0	8.1	2.6	17	3.3	2.2
2	5.4	6.1	1.4	1.8	4.9	12	4.8	7.5	3.2	12	3.3	2.0
3	4.4	5.0	1.4	2.7	4.3	9.9	4.7	6.7	2.5	9.5	3.0	1.8
4	3.5	4.1	1.4	2.1	3.7	8.3	4.9	6.6	2.0	7.9	2.8	1.8
5	2.8	3.4	1.4	2.2	3.4	6.8	4.0	7.6	2.0	7.0	2.6	80
6	2.4	3.0	1.4	3.5	3.2	6.0	12	7.5	2.4	6.1	2.7	20
7	1.9	2.6	1.3	6.3	2.9	5.6	106	6.2	2.4	5.7	2.7	6.6
8	1.4	2.0	1.3	15	5.3	4.8	101	4.8	2.3	5.6	2.5	5.5
9	1.1	1.7	1.4	14	13	4.6	46	4.0	3.0	6.3	2.5	4.2
10	.74	1.4	1.7	11	76	4.4	23	3.6	3.2	5.8	2.2	50
11	.48	1.2	1.8	10	62	3.8	13	3.5	3.2	5.0	2.8	202
12	.48	1.2	1.7	14	35	3.3	8.8	21	470	4.6	2.1	123
13	.48	5.6	1.5	20	22	3.3	6.3	71	3,110	5.2	2.1	55
14	.48	14	1.8	20	15	3.2	4.7	29	3,380	4.7	2.5	27
15	.42	10	1.5	15	11	3.2	5.8	15	1,510	3.9	2.9	16
16	.42	6.5	1.3	11	8.2	5.6	715	9.4	376	3.6	2.4	57
17	.42	4.9	1.2	8.2	17	3.8	2,850	7.1	156	3.4	15	551
18	.42	4.9	1.2	6.7	252	3.6	1,640	5.6	96	3.3	35	134
19	.40	4.1	1.3	5.5	164	3.2	312	4.7	66	3.2	20	61
20	.36	3.3	1.3	4.7	90	2.8	142	3.9	50	3.3	10	39
21	.46	2.7	1.3	4.0	61	2.7	91	3.5	73	3.3	5.0	26
22	1.1	2.3	1.3	3.5	108	2.4	64	3.2	107	3.2	3.0	19
23	.97	1.8	1.2	3.0	337	3.0	47	3.1	85	3.0	2.6	20
24	.82	2.7	1.1	2.8	160	280	35	3.1	61	2.8	2.4	32
25	.66	2.8	1.1	4.4	83	178	27	3.1	73	2.9	2.2	22
26	.63	2.6	1.0	31	49	59	20	3.0	434	3.1	2.0	17
27	.67	3.0	1.0	42	31	28	15	3.2	210	7.6	2.0	14
28	.67	2.8	1.0	24	22	17	12	3.2	98	6.9	10	14
29	6.0	2.2	1.1	15	------	12	10	2.7	52	4.4	5.0	12
30	8.7	1.8	1.1	9.8	------	9.3	8.9	2.1	29	3.7	3.0	10
31	14	------	1.1	7.4	------	7.5	------	1.9	------	3.1	2.6	------
TOTAL	69.68	117.9	41.1	322.4	1,649.8	713.1	6,339.9	264.9	10,464.8	167.1	162.2	1,625.1
MEAN	2.25	3.93	1.33	10.4	58.9	23.0	211	8.55	349	5.39	5.23	54.2
MAX	14	14	1.8	42	337	280	2,850	71	3,380	17	35	551
MIN	.36	1.2	1.0	1.8	2.9	2.4	4.0	1.9	2.0	2.8	2.0	1.8
CFSM	.02	.04	.01	.11	.64	.25	2.30	.09	3.81	.06	.06	.59
IN.	.03	.05	.02	.13	.67	.29	2.57	.11	4.25	.07	.07	.66
AC-FT	138	234	82	639	3,270	1,410	12,580	525	20,760	331	322	3,220

CAL YR 1972 TOTAL 14,219.06 MEAN 38.8 MAX 3,610 MIN .26 CFSM .42 IN 5.77 AC-FT 28,200
WTR YR 1973 TOTAL 21,937.98 MEAN 60.1 MAX 3,380 MIN .36 CFSM .66 IN 8.90 AC-FT 43,510

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-23	1400	10.57	424	6-14	0200	19.91	5,110
3-24	1400	10.76	462	6-26	1400	11.42	594
4-17	0500	18.08	3,560	9-17	1400	12.12	765

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 (0.2 km) downstream from confluence of Lone Tree Creek and Arroyo Palo Alto, 1.2 miles (1.9 km) upstream from Ninemile Creek, and 4.4 miles (7.1 km) northeast of Placedo.

DRAINAGE AREA.--68.3 mi² (177 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5.58 ft (1.70 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,250 ft³/s (234 m³/s) June 13, gage height, 25.96 ft (7.91 m); minimum, 0.12 ft³/s (3.4 dm³/s) Mar. 11-14, 22.
Period of record: Maximum discharge, 8,250 ft³/s (234 m³/s) June 13, 1973, gage height, 25.96 ft (7.91 m); no flow Sept. 8, 9, 1971.
Maximum stage since 1930, 31.9 ft (9.7 m) in September 1967 and 30.4 ft (9.3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	56	.93	.48	1.4	3.1	1.9	1.8	1.1	5.3	2.6	1.6
2	12	26	.70	.65	.97	2.4	2.0	1.8	.7	3.8	2.2	1.2
3	6.9	15	.48	.90	.70	1.8	2.3	1.7	.6	2.7	2.4	.65
4	4.2	13	.48	.68	.72	1.5	2.1	1.6	.6	2.1	2.7	.68
5	2.9	9.2	.48	7.2	.72	1.0	2.1	1.6	.6	2.0	3.1	619
6	2.0	6.8	.61	47	.79	.79	24	1.6	.8	1.8	2.4	488
7	1.4	5.7	.60	56	.91	.63	203	1.6	.7	1.5	1.9	63
8	1.0	4.3	.68	50	1.5	.40	65	1.5	1.2	1.4	1.6	18
9	.83	2.9	1.0	25	18	.27	23	1.4	2.3	1.3	1.4	4.3
10	.72	2.4	.96	14	51	.17	9.2	1.4	1.6	1.3	1.3	95
11	.68	2.4	.96	14	29	.12	3.9	1.3	2.6	1.2	1.2	2,220
12	.54	1.8	1.1	27	15	.12	2.4	5.9	1,590	1.2	1.9	1,310
13	.59	177	1.0	22	7.6	.12	1.7	8.5	5,730	1.2	2.6	235
14	.57	87	.96	12	4.7	.17	1.3	15	5,500	1.2	1.7	62
15	.45	28	1.1	6.7	2.9	.22	3.2	4.4	952	1.2	1.6	26
16	.38	11	.90	4.4	2.0	.24	850	2.9	141	1.1	1.6	63
17	.38	5.8	.84	2.9	39	.27	2,120	1.5	52	1.1	4.3	507
18	.34	43	.84	1.9	313	.15	1,300	1.2	26	1.1	15	176
19	.27	35	.84	1.4	108	.34	186	.99	13	.96	26	61
20	.24	15	.84	1.2	45	.78	66	.96	7.2	.96	21	30
21	.56	7.0	.90	.82	36	.55	34	.96	33	.96	8.2	16
22	1.0	4.6	.84	2.6	190	.35	21	.96	44	.96	3.1	8.2
23	5.9	2.9	.84	5.3	429	.64	13	.96	21	1.2	2.2	5.2
24	8.2	3.6	.83	2.8	106	.68	7.7	.96	10	1.0	1.7	3.3
25	5.2	20	.72	21	42	.70	5.3	.96	23	.91	1.3	2.3
26	2.9	19	.84	24	21	.92	3.9	.96	857	.90	.90	1.9
27	1.9	10	.84	19	11	1.1	3.1	.96	206	.73	.61	49
28	1.2	5.1	.84	7.7	5.1	1.3	2.3	.82	56	1.5	10	32
29	2,140	2.7	.90	3.9	------	1.6	1.9	.72	25	1.8	8.2	7.4
30	1,090	1.6	.71	2.1	------	1.7	1.9	4.9	11	6.1	6.0	3.6
31	160	------	.57	1.6	------	1.9	------	2.1	------	4.8	3.3	------
TOTAL	3,474.25	623.8	25.13	386.23	1,483.01	26.03	4,963.2	73.91	15,310.0	55.28	144.01	6,110.33
MEAN	112	20.8	.81	12.5	53.0	.84	165	2.38	510	1.78	4.65	204
MAX	2,140	177	1.1	56	429	3.1	2,120	15	5,730	6.1	26	2,220
MIN	.24	1.6	.48	.48	.70	.12	1.3	.72	.60	.73	.61	.65
CFSM	1.64	.30	.01	.18	.78	.01	2.42	.03	7.47	.03	.07	2.99
IN.	1.89	.34	.01	.21	.81	.01	2.70	.04	8.34	.03	.08	3.33
AC-FT	6,890	1,240	50	766	2,940	52	9,840	147	30,370	110	286	12,120

CAL YR 1972 TOTAL 23,291.32 MEAN 63.6 MAX 4,200 MIN .15 CFSM .93 IN 12.69 AC-FT 46,200
WTR YR 1973 TOTAL 32,675.18 MEAN 89.5 MAX 5,730 MIN .12 CFSM 1.31 IN 17.80 AC-FT 64,810

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1500	21.40	3,430	6-13	1700	25.96	8,250
4-16	1900	19.11	1,980	6-26	1000	17.57	1,280
4-17	1900	21.59	3,580	9- 5	2100	17.48	1,250
6-12	2100	22.02	3,930	9-11	0800	20.27	2,670

08165300 North Fork Guadalupe River near Hunt, Tex.

LOCATION.--Lat 30°03'36", long 99°23'40", Kerr County, on right bank 410 ft (125 m) downstream from Ranch Road 1340, 1.3 miles (2.1 km) downstream from Bear Creek, 3.7 miles (6.0 km) west of Hunt, and 4.1 miles (6.6 km) upstream from Honey Creek.

DRAINAGE AREA.--168 mi² (435 km²).

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

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,800.10 ft (548.67 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 30.0 ft³/s (0.850 m³/s), 21,740 acre-ft/yr (26.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 55 ft³/s (1.56 m³/s) July 8, gage height, 4.86 ft (1.48 m); minimum, 3.3 ft³/s (93 dm³/s) May 18, 19.

Period of record: Maximum discharge, 17,800 ft³/s (504 m³/s) Aug. 13, 1971, gage height, 22.86 ft (6.97 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurements of 7,460 and 17,800 ft³/s (211 and 504 m³/s); minimum, 0.68 ft³/s (19 dm³/s) May 30, 1969.

Maximum stage since at least 1900 occurred July 1, 1932, gage height 37.3 ft (11.4 m), discharge, 140,000 ft³/s (3,960 m³/s), by slope-area measurements, combined flow of North Fork Guadalupe River 5 miles (8 km) upstream and Bear Creek 2 miles (3 km) 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/yr (25,100 m³/yr) on a game preserve.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	23	22	21	23	20	23	14	15	39	19
2	24	21	23	23	21	22	20	22	14	15	46	18
3	24	20	23	25	20	22	20	20	12	15	43	18
4	24	20	23	24	20	22	20	19	16	15	37	18
5	23	20	23	24	20	21	20	19	15	15	33	18
6	23	20	22	23	20	21	21	20	17	14	30	19
7	23	21	22	23	20	20	22	21	15	14	28	22
8	23	21	22	23	21	20	21	23	13	31	27	21
9	23	21	23	23	23	20	21	18	12	41	25	20
10	23	21	23	22	21	23	20	17	13	33	24	20
11	23	22	23	22	21	24	20	18	17	31	24	19
12	23	23	23	22	21	22	21	23	22	31	23	19
13	23	26	23	22	21	21	21	22	20	28	24	19
14	23	23	23	22	20	20	22	19	17	25	34	20
15	23	22	23	22	20	20	24	18	16	36	26	20
16	23	22	22	22	19	21	22	18	16	35	23	19
17	23	22	22	22	21	22	22	17	16	30	23	18
18	23	22	22	22	22	21	23	13	15	28	22	19
19	23	22	23	21	22	20	21	11	15	25	22	21
20	22	22	23	21	21	20	21	14	18	24	22	20
21	22	22	23	21	22	20	20	14	18	24	21	18
22	25	22	23	22	27	20	20	13	16	22	21	18
23	24	21	23	21	28	20	21	14	15	21	20	18
24	23	27	23	21	26	24	21	14	16	21	20	18
25	23	26	23	28	25	22	21	14	20	20	20	18
26	23	25	23	28	24	20	20	14	20	20	20	17
27	24	24	23	23	24	21	19	14	18	21	20	20
28	24	24	23	21	23	24	19	13	17	23	21	20
29	23	23	25	21	------	25	19	13	15	20	19	18
30	22	23	23	21	------	23	19	13	15	21	20	18
31	21	------	22	21	------	21	------	13	------	28	20	------
TOTAL	717	669	708	698	614	665	621	524	483	742	797	570
MEAN	23.1	22.3	22.8	22.5	21.9	21.5	20.7	16.9	16.1	23.9	25.7	19.0
MAX	25	27	25	28	28	25	24	23	22	41	46	22
MIN	21	20	22	21	19	20	19	11	12	14	19	17
AC-FT	1,420	1,330	1,400	1,380	1,220	1,320	1,230	1,040	958	1,470	1,580	1,130

CAL YR 1972 TOTAL 9,812 MEAN 26.8 MAX 405 MIN 12 AC-FT 19,460
WTR YR 1973 TOTAL 7,808 MEAN 21.4 MAX 46 MIN 11 AC-FT 15,490

PEAK DISCHARGE (BASE, 500 FT³/S).--No peak above base.

08165500 Guadalupe River at Hunt, Tex.

LOCATION (revised).--Lat 30°04'08", long 99°19'23", Kerr County, on right bank 56 ft (17 m) upstream and 137 ft (42 m) right of right end of bridge on State Highway 39, 0.6 mile (1.0 km) downstream from confluence of North and South Forks of Guadalupe River, 0.8 mile (1.3 km) east of Hunt, and at mile 430.9 (693.3 km).

DRAINAGE AREA.--288 mi² (746 km²).

PERIOD OF RECORD.--October 1941 to September 1949, discharge not computed above 600 ft³/s (17.0 m³/s), 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 (525.1 m) above mean sea level.

AVERAGE DISCHARGE.--8 years (1965-73), 58.2 ft³/s (1.65 m³/s), 42,170 acre-ft/yr (52.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,770 ft³/s (50.1 m³/s) July 8, gage height, 6.94 ft (2.12 m); minimum, 12 ft³/s (0.34 m³/s) May 25, 26.
Period of record: Maximum discharge, 47,000 ft³/s (1,330 m³/s) Aug. 13, 1966, gage height, 21.4 ft (6.5 m), from floodmark, from rating curve extended above 3,700 ft³/s (105 m³/s) on basis of channel geometry and flow-over-dam measurement of peak flow; minimum, 6.9 ft³/s (195 dm³/s) June 17, 1948.
Maximum stage since 1900, 36.6 ft (11.2 m) July 2, 1932, from information by local residents, discharge 206,000 ft³/s (5,830 m³/s), determined by slope-area measurement 4.5 miles (7.2 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	47	40	40	41	47	41	50	30	33	71	35
2	42	42	40	41	38	45	41	51	29	32	73	34
3	42	42	41	49	37	44	40	39	27	30	68	34
4	43	41	41	45	38	44	39	35	29	28	64	34
5	43	40	41	43	38	43	38	36	27	23	60	34
6	43	41	39	42	38	44	42	40	33	27	58	39
7	43	42	38	43	39	42	46	38	30	28	55	51
8	41	40	39	43	41	41	41	36	27	342	53	48
9	41	40	41	40	44	41	39	36	24	167	52	43
10	41	47	41	39	41	40	38	30	25	90	46	38
11	41	43	40	40	40	41	38	34	35	67	43	36
12	41	50	41	40	40	43	39	44	71	65	43	35
13	40	50	41	39	40	53	40	41	52	60	42	35
14	39	44	39	40	39	42	41	36	41	53	49	43
15	40	41	40	38	38	40	45	34	37	85	48	41
16	37	41	38	38	37	40	44	32	35	84	42	38
17	37	40	38	40	40	39	43	24	35	70	41	38
18	37	41	39	39	44	40	45	23	35	62	40	37
19	38	41	41	38	42	39	36	26	34	57	39	36
20	38	39	41	38	40	39	44	28	38	54	40	40
21	40	39	41	38	46	39	39	30	46	52	39	37
22	48	39	38	36	58	38	36	30	37	49	37	35
23	43	39	38	36	60	40	40	28	34	46	36	36
24	41	48	40	36	54	46	41	28	37	45	35	35
25	41	47	39	51	51	43	40	21	49	43	34	34
26	44	42	39	57	50	38	34	29	51	42	34	34
27	50	41	39	48	48	38	35	29	43	42	34	38
28	46	40	40	43	46	43	31	25	38	44	34	37
29	45	40	42	39	------	55	30	24	35	43	36	35
30	45	40	42	38	------	51	38	24	34	43	36	35
31	44	------	43	40	------	45	------	24	------	73	36	------
TOTAL	1,296	1,267	1,240	1,277	1,208	1,323	1,184	1,005	1,098	1,979	1,418	1,125
MEAN	41.8	42.2	40.0	41.2	43.1	42.7	39.5	32.4	36.6	63.8	45.7	37.5
MAX	50	50	43	57	60	55	46	51	71	342	73	51
MIN	37	39	38	36	37	38	30	21	24	23	34	34
AC-FT	2,570	2,510	2,460	2,530	2,400	2,620	2,350	1,990	2,180	3,930	2,810	2,230

CAL YR 1972 TOTAL 18,372 MEAN 50.2 MAX 850 MIN 26 AC-FT 36,440
WTR YR 1973 TOTAL 15,420 MEAN 42.2 MAX 342 MIN 21 AC-FT 30,590

PEAK DISCHARGE (BASE, 1,000 FT³/S).--July 8 (1615) 1,770 ft³/s (6.94 ft).

08166000 Johnson Creek near Ingram, Tex.

LOCATION.--Lat 30°06'00", long 99°16'58", Kerr County, on right bank 1.6 miles (2.6 km) upstream from Henderson Branch, 3.4 miles (5.5 km) northwest of Ingram, 3.8 miles (6.1 km) upstream from mouth, and 9.2 miles (14.8 km) northwest of Kerrville.

DRAINAGE AREA.--114 mi² (295 km²).

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 (524.65 m) above mean sea level.

AVERAGE DISCHARGE.--30 years, 14.5 ft³/s (0.411 m³/s), 10,510 acre-ft/yr (13.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 863 ft³/s (24.4 m³/s) July 31, gage height, 3.95 ft (1.20 m); minimum, 5.0 ft³/s (142 dm³/s) May 31, June 1.
Period of record: Maximum discharge, 95,900 ft³/s (2,720 m³/s) Oct. 4, 1959, gage height, 24.25 ft (7.39 m), from rating curve extend above 4,400 ft³/s (125 m³/s) on basis of slope-area measurements of 9,100 and 16,000 ft³/s (258 and 453 m³/s) and conveyance study; minimum daily, 0.4 ft³/s (11 dm³/s) July 26, 27, 1956.
Maximum stage since at least 1852, 35 ft (11 m) July 2, 1932, from information by local resident; discharge 138,000 ft³/s (3,910 m³/s) by slope-area measurement at point 0.5 mile (0.8 km) downstream from State fish hatchery and 6 or 7 miles (10 or 11 km) upstream from gage. Flood of June 14, 1935, reached a stage of 31 or 32 ft (9 or 10 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	13	12	13	16	14	12	6.8	18	110	18
2	13	16	13	14	13	15	14	12	8.6	19	192	18
3	14	14	14	18	13	16	14	12	8.9	17	64	18
4	14	13	14	15	13	15	13	12	11	16	48	17
5	13	13	14	14	13	15	13	12	9.7	15	42	16
6	14	15	13	14	16	14	16	14	11	15	37	22
7	13	13	13	14	14	14	17	13	8.2	15	33	24
8	12	12	13	14	16	14	15	14	7.1	18	32	21
9	13	12	14	13	15	14	14	13	8.5	21	30	20
10	13	12	14	13	13	18	16	11	15	17	28	20
11	13	12	13	15	14	15	14	11	15	17	26	22
12	13	14	14	13	14	15	14	16	140	17	25	20
13	13	19	14	13	13	16	15	13	60	16	24	19
14	12	13	15	13	13	14	16	12	32	15	26	20
15	12	12	14	13	13	14	17	11	24	31	25	17
16	12	13	12	13	12	13	16	10	19	24	24	17
17	13	13	12	14	16	13	17	10	19	20	22	17
18	13	13	13	13	17	13	16	7.6	18	19	23	16
19	11	13	13	13	15	14	15	8.2	16	18	23	15
20	12	12	12	13	16	13	14	8.8	23	17	23	16
21	13	12	13	12	19	13	13	9.1	24	17	22	18
22	16	13	12	12	21	13	14	8.3	18	15	22	16
23	13	13	12	12	21	14	15	6.8	18	15	21	18
24	13	20	13	12	17	17	16	7.1	18	15	19	17
25	12	16	12	19	17	14	15	6.6	25	14	19	16
26	15	14	13	18	17	14	14	7.5	27	14	19	17
27	17	13	12	16	16	13	14	7.7	22	18	19	20
28	14	13	13	14	16	16	13	6.7	19	16	19	17
29	14	13	14	13	------	17	12	6.3	19	14	19	16
30	13	13	13	13	------	16	12	6.8	18	16	19	16
31	14	------	12	14	------	14	------	5.8	------	265	19	------
TOTAL	410	410	406	429	426	452	438	311.3	668.8	784	1,074	544
MEAN	13.2	13.7	13.1	13.8	15.2	14.6	14.6	10.0	22.3	25.3	34.6	18.1
MAX	17	20	15	19	21	18	17	16	140	265	192	24
MIN	11	12	12	12	12	13	12	5.8	6.8	14	19	15
AC-FT	813	813	805	851	845	897	869	617	1,330	1,560	2,130	1,080

CAL YR 1972 TOTAL 5,522.6 MEAN 15.1 MAX 85 MIN 7.7 AC-FT 10,950
WTR YR 1973 TOTAL 6,353.1 MEAN 17.4 MAX 265 MIN 5.8 AC-FT 12,600

PEAK DISCHARGE (BASE, 50 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-12	0745	2.94	320
7-31	1445	3.95	863
8- 2	0200	3.35	530

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 (0.2 km) downstream from Cypress Creek, and at mile 396.6 (638.1 km).

DRAINAGE AREA.--838 mi² (2,170 km²).

PERIOD OF RECORD.--May 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,372.05 ft (418.20 m) above mean sea level. Prior to Nov. 27, 1939, nonrecording gage.

AVERAGE DISCHARGE.--34 years, 149 ft³/s (4.22 m³/s), 108,000 acre-ft/yr (133 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,180 ft³/s (232 m³/s) July 15, gage height, 15.10 ft (4.60 m); minimum, 88 ft³/s (2.49 m³/s) May 30 to June 1.
Period of record: Maximum discharge, 111,000 ft³/s (3,140 m³/s) Oct. 4, 1959, gage height, 33.15 ft (10.10 m), from rating curve extended above 65,000 ft³/s (1,840 m³/s) on basis of slope-area measurement of 182,000 ft³/s (5,150 m³/s), gage height, 38.4 ft (11.7 m), made at former gaging station "near Comfort" 5 miles upstream; no flow at times in 1952-57, 1963-64.
Maximum stage since at least 1848, 40.3 ft (12.3 m) in July 1869, from report by Corps of Engineers. Flood of July 1, 1932, reached a stage of 38.4 ft (11.7 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	117	109	100	122	201	158	146	94	136	654	135
2	105	118	110	107	119	192	155	152	172	131	448	133
3	104	114	110	123	118	185	155	146	110	127	385	129
4	105	110	110	121	116	184	146	140	107	124	299	125
5	104	106	108	116	118	181	143	134	102	119	268	120
6	105	107	107	110	119	188	170	143	100	112	251	125
7	106	108	103	108	119	181	226	149	95	116	240	155
8	102	105	105	108	126	177	186	138	95	180	224	157
9	102	103	105	108	135	178	167	131	92	1,050	216	150
10	102	101	108	107	134	218	155	128	91	523	209	143
11	101	104	108	106	133	216	152	129	121	321	197	136
12	100	117	110	107	131	187	152	147	503	257	190	132
13	99	278	108	108	128	189	152	153	455	230	188	131
14	99	136	110	104	125	196	158	139	251	213	192	241
15	97	122	107	104	122	182	214	132	182	1,610	183	171
16	98	111	105	102	122	178	198	128	152	1,860	182	157
17	97	108	104	103	131	164	186	124	161	873	176	156
18	97	109	105	104	145	161	182	124	137	651	168	138
19	96	109	105	103	148	163	174	112	131	526	166	132
20	96	108	104	101	141	161	164	108	129	433	163	127
21	100	108	104	101	165	157	152	108	156	381	158	129
22	204	107	101	99	228	155	161	105	148	340	153	126
23	141	106	101	96	264	159	164	105	131	308	147	123
24	117	131	99	97	253	199	167	106	125	287	140	131
25	108	139	99	130	233	189	178	104	212	271	137	129
26	112	126	100	164	220	170	190	106	280	258	135	131
27	157	119	99	158	207	156	152	100	213	242	133	200
28	129	113	99	145	199	153	143	96	176	242	133	162
29	122	108	100	125	------	183	140	93	156	227	137	142
30	120	109	102	124	------	189	140	90	142	219	157	134
31	118	------	100	120	------	174	------	88	------	304	150	------
TOTAL	3,450	3,557	3,245	3,509	4,321	5,566	4,980	3,804	5,019	12,671	6,579	4,300
MEAN	111	119	105	113	154	180	166	123	167	409	212	143
MAX	204	278	110	164	264	218	226	153	503	1,860	654	241
MIN	96	101	99	96	116	153	140	88	91	112	133	120
AC-FT	6,840	7,060	6,440	6,960	8,570	11,040	9,880	7,550	9,960	25,130	13,050	8,530

CAL YR 1972 TOTAL 74,898 MEAN 205 MAX 3,440 MIN 74 AC-FT 148,600
WTR YR 1973 TOTAL 61,001 MEAN 167 MAX 1,860 MIN 88 AC-FT 121,000

PEAK DISCHARGE (BASE, 2,600 FT³/S).--July 15 (0700) 8,180 ft³/s (15.10 ft); July 16 (0400) 6,560 ft³/s (14.04 ft).

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 (25 m) downstream from bridge on Ranch Road 311, 1.9 miles (3.1 km) southeast of Spring Branch Post Office, 7.5 miles (12.1 km) downstream from Curry Creek, and at mile 334.4 (538.0 km).

DRAINAGE AREA.--1,315 mi² (3,406 km²).

PERIOD OF RECORD.--June 1922 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 948.10 ft (288.98 m) above mean sea level.

AVERAGE DISCHARGE.--51 years, 272 ft³/s (7.70 m³/s), 197,100 acre-ft/yr (243 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 47,900 ft³/s (1,360 m³/s) July 16, gage height, 32.48 ft (9.90 m); minimum, 141 ft³/s (3.99 m³/s) Oct. 16-21.
Period of record: Maximum discharge, 121,000 ft³/s (3,430 m³/s) July 3, 1932, gage height, 42.10 ft (12.83 m) from rating curve extended above 70,000 ft³/s (1,980 m³/s); no flow at times in 1951-52, 1954-56, and 1963-64.
Maximum stage since at least 1859, about 53 ft (16 m) in 1869; flood in July 1900 reached a stage of about 49 ft (15 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	604	201	166	290	466	350	366	172	497	1,240	332
2	156	248	201	172	276	458	332	410	175	462	1,160	308
3	153	228	201	192	270	442	329	374	231	442	960	298
4	151	220	201	207	262	430	304	350	204	414	850	287
5	151	201	198	214	262	422	294	340	198	398	770	273
6	151	198	195	207	259	414	304	358	189	382	725	270
7	151	186	189	201	259	410	382	374	183	358	680	304
8	151	180	189	192	262	402	390	362	175	675	650	346
9	151	180	189	189	273	394	343	329	169	1,400	618	326
10	148	175	189	189	280	390	318	312	177	1,370	587	304
11	146	169	189	192	284	434	315	304	192	850	560	294
12	146	172	189	189	287	414	315	304	2,460	715	528	287
13	146	346	192	189	287	390	315	301	1,290	628	510	290
14	143	386	189	195	280	382	318	308	775	578	492	562
15	143	266	189	198	266	378	366	294	587	7,310	484	434
16	141	231	180	195	259	370	410	280	497	19,700	466	366
17	141	214	177	195	262	346	446	276	488	5,880	450	358
18	141	207	177	195	290	336	556	273	492	3,180	430	346
19	141	204	177	195	308	336	474	270	398	2,480	418	315
20	141	198	180	195	308	329	446	248	366	2,070	410	298
21	143	195	180	192	326	326	426	231	450	1,770	398	290
22	904	192	175	189	438	322	414	224	406	1,550	382	284
23	437	192	175	186	551	318	418	217	378	1,380	362	280
24	282	214	172	180	542	386	426	210	358	1,230	346	343
25	207	276	169	228	528	414	434	214	454	1,120	332	304
26	186	270	166	394	506	370	406	214	1,120	1,020	322	330
27	183	248	166	370	484	350	410	210	775	966	315	2,400
28	207	231	166	332	470	343	374	198	646	1,090	308	930
29	201	214	166	312	------	340	362	183	582	885	304	670
30	195	207	166	298	------	354	362	175	533	815	326	574
31	192	------	166	294	------	358	------	169	------	978	350	------
TOTAL	6,070	7,052	5,659	6,842	9,369	11,824	11,339	8,678	15,120	62,593	16,733	13,003
MEAN	196	235	183	221	335	381	378	280	504	2,019	540	433
MAX	904	604	201	394	551	466	556	410	2,460	19,700	1,240	2,400
MIN	141	169	166	166	259	318	294	169	169	358	304	270
AC-FT	12,040	13,990	11,220	13,570	18,580	23,450	22,490	17,210	29,990	124,200	33,190	25,790

CAL YR 1972 TOTAL 132,730 MEAN 363 MAX 5,400 MIN 129 AC-FT 263,300
WTR YR 1973 TOTAL 174,282 MEAN 477 MAX 19,700 MIN 141 AC-FT 345,700

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-12	0400	9.64	4,780
7-16	0900	32.48	47,900
9-27	0400	8.90	4,110

08167600 Rebecca Creek near Spring Branch, Tex.

LOCATION.--Lat 29°55'06", long 98°22'10", Comal County, on right bank 72 ft (22 m) upstream from private road crossing, 2.9 miles (4.7 km) upstream from mouth, 3.7 miles (6.0 km) northeast of Spring Branch Post Office, and 6.3 miles (10.1 km) south of Twin Sisters.

DRAINAGE AREA.--10.9 mi² (28.2 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 985.55 ft (300.40 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--13 years, 5.29 ft³/s (0.15 m³/s), 3,830 acre-ft/yr (4.72 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,720 ft³/s (134 m³/s) July 16, gage height, 6.4 ft (2.0 m); minimum, 0.56 ft³/s (16 dm³/s) Oct. 19-21.
Period of record: Maximum discharge, 9,300 ft³/s (263 m³/s) Oct. 18, 1965, gage height, 7.97 ft (2.43 m), from rating curve extended above 420 ft³/s (11.9 m³/s) on basis of critical-depth measurement of 4,340 ft³/s (123 m³/s); no flow in 1963-65, 1967, 1971.
Maximum stage since at least 1885, 25.5 ft (7.8 m) in September 1952. Flood in 1947 or 1948 reached a stage of 4 or 5 ft (1.2 or 1.5 m) 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 mi² (8.11 km²) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	28	6.7	3.3	8.1	12	3.8	3.6	2.2	8.8	9.2	3.1
2	.95	8.9	6.7	3.8	8.1	12	3.8	4.1	2.1	8.2	8.7	2.6
3	.74	7.4	6.7	6.7	7.4	12	3.4	3.3	2.0	7.3	7.8	2.5
4	.74	7.4	6.7	6.7	7.4	12	3.3	3.3	2.2	6.6	7.4	2.4
5	.74	6.7	6.7	6.7	7.4	12	3.3	3.3	2.1	6.0	7.2	2.1
6	.74	6.7	6.7	6.0	7.4	12	3.8	3.3	2.1	5.6	6.7	2.8
7	.74	6.0	6.7	5.4	6.7	11	3.9	8.0	2.1	5.7	6.4	3.4
8	.74	5.4	6.7	5.4	6.0	11	3.0	5.3	2.0	14	6.0	3.7
9	.74	5.4	6.7	5.4	6.0	9.7	2.6	4.7	1.8	16	6.0	2.9
10	.74	6.0	7.4	5.4	6.0	8.9	2.9	4.3	1.8	11	5.7	2.5
11	.74	6.0	7.4	6.0	6.7	8.1	2.9	4.3	5.4	9.6	5.4	2.5
12	.74	6.0	7.4	6.0	6.7	8.1	2.9	3.8	152	8.8	4.8	2.5
13	.74	14	7.4	6.0	7.4	7.4	2.9	3.8	24	8.1	4.7	4.6
14	.74	8.9	6.7	6.0	7.4	6.7	2.9	3.8	19	7.4	4.3	6.3
15	.74	8.1	6.0	6.7	7.4	6.3	5.1	3.8	14	9.0	4.5	3.5
16	.74	8.1	6.0	6.7	7.4	6.0	4.5	3.3	13	637	4.8	3.3
17	.74	8.1	6.0	6.7	7.4	6.0	4.8	3.3	12	72	4.7	3.0
18	.74	7.4	6.0	6.7	7.4	5.8	5.4	3.3	11	46	4.2	2.5
19	.56	6.7	6.0	6.7	7.4	5.4	5.4	3.3	9.7	34	3.8	2.1
20	.56	6.0	6.0	6.7	7.4	5.4	4.8	3.3	8.9	28	3.8	2.1
21	.74	6.0	5.4	5.4	9.7	5.4	4.8	3.4	8.9	24	3.8	2.1
22	9.8	5.4	5.4	4.8	16	5.4	4.3	3.3	8.9	20	3.8	2.1
23	2.5	5.4	4.8	4.3	18	5.4	4.3	3.3	8.3	18	3.8	2.1
24	1.8	10	4.3	3.8	17	5.2	3.8	3.3	7.4	16	3.8	2.1
25	1.8	12	3.8	12	16	4.4	3.8	3.3	9.7	14	3.5	1.9
26	1.8	11	3.8	14	14	4.3	3.8	3.3	15	13	3.3	9.0
27	1.8	9.7	3.8	12	14	4.3	3.3	3.0	13	12	3.0	60
28	1.8	7.4	3.8	8.9	12	4.3	3.3	2.6	12	12	2.7	14
29	1.8	6.7	3.8	8.9	------	4.3	3.3	2.5	11	9.7	2.6	11
30	1.8	6.7	3.3	8.9	------	3.8	3.3	2.5	10	9.2	2.9	9.8
31	1.8	------	3.3	8.9	------	3.8	------	2.5	------	9.1	2.9	------
TOTAL	42.30	247.5	178.1	210.9	259.8	228.4	113.4	112.2	393.6	1,106.1	152.2	174.5
MEAN	1.36	8.25	5.75	6.80	9.28	7.37	3.78	3.62	13.1	35.7	4.91	5.82
MAX	9.8	28	7.4	14	18	12	5.4	8.0	152	637	9.2	60
MIN	.56	5.4	3.3	3.3	6.0	3.8	2.6	2.5	1.8	5.6	2.6	1.9
AC-FT	84	491	353	418	515	453	225	223	781	2,190	302	346

CAL YR 1972 TOTAL 2,263.99 MEAN 6.19 MAX 378 MIN .40 AC-FT 4,490
WTR YR 1973 TOTAL 3,219.00 MEAN 8.82 MAX 637 MIN .56 AC-FT 6,380

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 1	0700	2.73	125	7-16	0545	6.40	4,720
6-12	0130	4.16	1,210	9-27	0530	2.73	125

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 (19 km) northwest of New Braunfels, and at mile 303.0 (487.5 km).

DRAINAGE AREA.--1,432 mi² (3,709 km²).

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, 459,000 acre-ft (566 hm³) July 18, elevation, 917.35 ft (279.61 m); minimum, 343,700 acre-ft (424 hm³) Oct. 20, elevation, 903.64 ft (275.43 m).
Period of record: Maximum contents, 459,000 acre-ft (566 hm³) July 18, 1973, elevation, 917.35 ft (279.61 m); minimum observed since conservation pool first reached in April 1968, 343,700 acre-ft (424 hm³) Aug. 1, 1971, elevation, 903.64 ft (275.43 m).

REMARKS.--Small diversions above the lake for irrigation. Lake is formed by a rolled earthfill dam 6,830 ft (2,082 m) long, consisting of the main dam 4,410 ft (1,344 m) long, an earthen dike 210 ft (64 m) long, a 1,260-foot (384-meter) long uncontrolled broad-crested type spillway, and a 950-foot (290-meter) concrete and earthen nonoverflow section. Flood-control outlet works consist of a 10-foot-diameter (3-meter) conduit controlled by two 5-foot 8-inches by 10-foot (2- by 3-meter) hydraulically-operated slide gates, elevation of invert, 775.0 ft (236.2 m). 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. 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	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	913.0	420,100
905.0	354,200	915.0	437,700
907.0	370,000	917.0	455,800
909.0	386,200	918.0	465,000
911.0	403,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349,800	349,400	356,100	358,700	363,000	370,700	372,600	376,400	359,700	383,700	406,100	379,600
2	349,200	349,500	356,200	359,000	363,000	371,100	372,500	376,100	359,700	383,500	404,500	379,100
3	349,100	350,100	356,600	359,000	363,200	371,500	372,300	375,600	359,700	383,300	402,800	378,700
4	348,700	350,200	356,800	359,100	363,400	371,700	371,900	375,200	359,600	383,200	400,800	378,300
5	348,500	350,400	357,100	359,200	363,600	372,100	371,500	374,900	359,700	382,900	398,700	377,500
6	348,200	350,800	357,000	359,400	363,800	372,300	371,800	375,200	359,700	382,500	396,800	376,700
7	347,800	350,700	357,100	359,400	364,100	372,400	371,700	375,000	359,500	382,400	395,400	376,800
8	347,500	350,800	357,200	359,300	364,600	372,500	371,700	374,700	359,300	385,000	394,000	376,400
9	347,200	350,900	357,500	359,300	364,600	372,800	371,300	374,200	359,200	387,300	392,900	376,200
10	346,900	351,000	357,700	359,700	364,600	372,700	371,000	373,800	359,100	389,400	392,300	375,700
11	346,600	350,900	357,900	359,600	364,800	372,800	370,800	373,400	361,600	390,300	391,800	375,300
12	346,300	351,800	358,100	359,500	365,200	372,900	370,700	373,300	371,400	390,000	391,300	374,800
13	346,100	352,200	358,300	359,600	365,600	373,000	370,600	372,400	372,800	389,500	390,800	375,400
14	345,800	352,500	358,200	359,500	365,500	373,000	370,500	371,700	374,600	389,200	390,300	375,200
15	345,500	352,700	358,600	359,700	365,400	373,600	372,200	371,000	375,600	398,700	389,500	375,200
16	345,200	352,900	358,500	359,800	365,200	373,400	372,500	370,500	376,300	448,100	389,000	375,000
17	344,900	353,100	358,500	360,000	365,400	373,300	373,400	370,100	377,100	457,600	388,200	374,300
18	344,500	353,300	358,600	360,000	365,400	373,200	374,000	369,500	377,500	458,500	387,400	373,800
19	344,000	353,300	359,000	360,100	365,400	373,200	374,400	368,700	378,000	455,800	386,800	372,800
20	343,700	353,300	359,500	360,100	365,400	373,000	374,700	368,200	378,700	453,200	386,000	372,100
21	344,100	353,500	359,400	360,100	366,000	372,800	375,000	367,600	379,000	450,800	385,100	371,500
22	346,000	353,500	359,400	359,900	366,800	372,600	375,200	366,800	378,900	446,100	384,300	370,500
23	346,900	353,900	359,400	359,900	367,400	372,800	375,600	366,200	378,800	442,000	383,300	369,900
24	347,100	354,600	359,400	360,100	368,100	373,600	376,000	365,500	379,100	436,800	382,800	368,900
25	347,200	354,900	359,000	360,900	368,800	373,400	376,400	364,900	380,500	432,400	382,400	368,100
26	347,300	355,100	358,900	361,400	369,200	373,300	376,600	364,400	382,100	426,400	382,000	369,000
27	347,300	355,500	358,700	361,900	369,800	373,200	376,300	363,800	382,800	421,700	381,500	374,800
28	347,400	355,600	358,800	362,000	370,100	373,100	376,200	362,800	383,400	416,200	380,900	376,600
29	347,600	355,700	358,800	362,100	------	373,000	376,200	361,900	383,800	410,600	380,600	377,100
30	347,700	355,900	358,700	362,400	------	373,000	376,200	361,100	383,800	407,500	380,200	377,600
31	348,200	------	358,500	362,800	------	373,000	------	360,100	------	406,600	379,900	------
(†)	904.23	905.22	905.55	906.10	907.02	907.37	907.77	905.76	908.70	911.43	908.23	907.95
(*)	-1,900	+7,700	+2,600	+4,300	+7,300	+2,900	+3,000	-16,100	+23,700	+22,800	-26,700	-2,300
MAX	349,800	355,900	359,500	362,800	370,100	373,600	376,600	376,400	383,800	458,500	406,100	379,600
MIN	343,700	349,400	356,100	358,700	363,000	370,700	370,500	360,100	359,100	382,400	379,900	368,100

CAL YR 1972..... * -26,200 MAX 431,900 MIN 343,700
WTR YR 1973..... * +27,500 MAX 458,500 MIN 343,700

† 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 (61 m) upstream from Horseshoe Falls, 0.8 mile (1.3 km) north of Sattler, 1.8 miles (2.9 km) downstream from Canyon Dam, 2.3 miles (3.7 km) upstream from Heiser Hollow, 11.2 miles (18.0 km) north of New Braunfels, and at mile 301.2 (484.6 km).

DRAINAGE AREA.--1,436 mi² (3,719 km²), 1,432 mi² (3,709 km²) 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 (226.23 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--11 years (1962-73), 280 ft³/s (7.93 m³/s), 202,900 acre-ft/yr (250 hm³/yr) since regulation began at Canyon Lake.

EXTREMES.--Current year: Maximum discharge, 4,770 ft³/s (135 m³/s) July 20, gage height, 8.04 ft (2.45 m); minimum, 50 ft³/s (1.42 m³/s) July 11.

Period of record: Maximum discharge, 20,800 ft³/s (589 m³/s) Oct. 29, 1960, gage height, 12.20 ft (3.72 m). Maximum discharge since closure of Canyon Dam on July 21, 1962, 4,770 ft³/s (135 m³/s) July 20, 1973, gage height, 7.69 ft (2.45 m); 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 (12 m); maximum stage since at least 1904, 39 ft (12 m) 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 (2.9 km) upstream. Small diversions above station for irrigation.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	103	105	212	215	370	446	508	400	642	1,620	540
2	233	103	103	212	215	370	446	628	211	627	1,800	540
3	233	103	103	215	215	370	440	636	210	603	1,800	540
4	233	103	103	215	215	370	440	599	210	597	1,800	540
5	230	103	103	215	215	370	446	620	210	596	1,800	538
6	230	103	103	215	215	405	446	618	210	596	1,580	533
7	230	103	103	215	215	440	446	629	210	596	1,430	533
8	230	103	103	215	215	440	440	618	210	602	1,290	533
9	227	103	103	212	215	440	440	618	210	603	1,140	533
10	227	103	103	212	215	446	440	618	210	561	1,010	533
11	227	103	103	212	215	446	440	612	214	667	813	533
12	227	105	103	212	215	446	446	610	255	948	820	533
13	227	111	103	212	218	446	446	610	231	990	820	538
14	227	105	103	212	271	440	446	610	225	1,000	820	540
15	227	105	103	212	360	440	464	607	224	1,000	820	540
16	227	105	103	212	360	440	452	599	224	1,080	816	540
17	227	105	103	212	365	440	484	596	224	1,580	820	582
18	227	105	103	212	365	440	464	589	224	3,030	820	682
19	227	105	103	212	365	440	464	589	224	3,840	820	682
20	149	105	103	212	365	440	464	589	222	3,400	820	682
21	83	105	103	212	365	440	458	589	338	3,910	820	682
22	90	105	151	212	365	440	458	589	480	3,890	812	682
23	83	105	210	212	365	440	452	589	568	3,860	810	682
24	95	105	210	212	365	452	452	589	572	3,870	640	684
25	107	105	210	215	370	446	452	589	560	3,900	505	690
26	107	105	210	215	370	446	452	589	561	3,890	519	698
27	109	105	210	215	370	446	477	589	561	3,890	530	297
28	188	105	210	215	370	446	512	589	561	3,870	540	226
29	97	105	210	215	------	446	512	589	601	3,870	541	437
30	99	105	210	215	------	446	512	589	642	2,670	542	407
31	99	------	210	215	------	446	------	589	------	1,440	540	------
TOTAL	5,655	3,134	4,206	6,611	8,189	13,333	13,737	18,582	10,002	62,618	30,258	16,700
MEAN	182	104	136	213	292	430	458	599	333	2,020	976	557
MAX	233	111	210	215	370	452	512	636	642	3,910	1,800	698
MIN	83	103	103	212	215	370	440	508	210	561	505	226
AC-FT	11,220	6,220	8,340	13,110	16,240	26,450	27,250	36,860	19,840	124,200	60,020	33,120

CAL YR 1972 TOTAL 152,723 MEAN 417 MAX 3,520 MIN 16 AC-FT 302,900
WTR YR 1973 TOTAL 193,025 MEAN 529 MAX 3,910 MIN 83 AC-FT 382,900

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 (1.8 km) upstream from Comal River, 21.9 miles (35.2 km) downstream from Canyon Lake, and at mile 281.1 (452.3 km).

DRAINAGE AREA.--1,518 mi² (3,932 km²).

PERIOD OF RECORD.--December 1927 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 586.65 ft (178.81 m) above mean sea level.

AVERAGE DISCHARGE.--34 years (1928-62) prior to regulation by Canyon Lake, 372 ft³/s (10.5 m³/s), 269,500 acre-ft/yr (332 hm³/yr); 11 years (1962-73) since regulation began at Canyon Lake, 360 ft³/s (10.2 m³/s), 260,800 acre-ft/yr (322 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,330 ft³/s (208 m³/s) Sept. 27, gage height, 7.81 ft (2.38 m); minimum, 117 ft³/s (3.31 m³/s) Oct. 21.
Period of record: Maximum discharge, 101,000 ft³/s (2,860 m³/s) June 15, 1935, gage height, 32.95 ft (10.04 m); no flow July 8, 9, July 17 to Aug. 20, 1956.
Maximum stage since at least 1845, 38 ft (12 m) 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, flow largely regulated by Canyon Lake (station 08167700) 21.9 miles (35.2 km) upstream.

REVISIONS.--WSP 898: 1935. WSP 1562: 1932. WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	155	160	252	299	492	533	632	593	751	1,900	617
2	287	155	160	252	299	485	530	670	324	740	2,110	616
3	287	164	155	258	293	485	527	761	317	698	2,100	613
4	287	160	155	258	293	478	522	687	317	693	2,100	613
5	287	155	155	258	293	478	522	719	315	686	2,100	614
6	287	151	151	258	293	492	541	718	311	684	1,980	624
7	287	146	151	263	287	530	530	744	308	681	1,770	624
8	287	146	151	263	293	538	525	719	305	785	1,590	624
9	287	146	151	263	293	538	520	713	306	898	1,190	617
10	281	146	151	269	287	530	518	709	305	774	1,130	617
11	281	146	151	269	287	522	518	710	350	767	878	618
12	281	151	151	263	287	522	518	707	959	1,150	877	618
13	281	196	146	263	317	522	518	702	518	1,200	877	626
14	281	180	146	269	317	515	520	700	448	1,200	884	625
15	281	175	142	269	428	530	657	695	416	1,210	880	617
16	281	164	142	275	435	536	726	683	397	1,860	880	621
17	281	160	142	275	456	529	1,000	675	383	1,840	879	617
18	281	160	142	275	456	527	817	669	375	3,030	878	743
19	275	155	142	275	456	521	743	668	367	3,940	880	746
20	269	151	142	275	456	516	693	668	364	3,620	877	747
21	146	151	138	269	478	515	663	666	400	4,110	872	747
22	240	146	142	263	492	515	644	665	539	4,040	870	746
23	135	146	240	263	515	525	633	666	635	4,020	868	746
24	128	169	252	258	515	584	625	664	647	4,000	799	745
25	142	175	252	281	508	555	618	661	704	4,040	591	743
26	146	169	252	299	500	549	619	659	759	4,010	607	758
27	146	169	252	299	492	546	613	655	730	4,000	611	2,460
28	243	164	252	299	492	546	647	648	710	3,980	624	433
29	135	164	258	299	------	542	642	646	711	3,960	624	654
30	135	160	252	299	------	541	639	643	759	3,310	622	588
31	135	------	252	299	------	536	------	642	------	1,810	622	------
TOTAL	7,387	4,775	5,528	8,430	10,817	16,240	18,321	21,164	14,572	68,487	34,470	21,377
MEAN	238	159	178	272	386	524	611	683	486	2,209	1,112	713
MAX	287	196	258	299	515	584	1,000	761	959	4,110	2,110	2,460
MIN	128	146	138	252	287	478	518	632	305	681	591	433
AC-FT	14,650	9,470	10,960	16,720	21,460	32,210	36,340	41,980	28,900	135,800	68,370	42,400

CAL YR 1972 TOTAL 199,636 MEAN 545 MAX 13,300 MIN 128 AC-FT 396,000
WTR YR 1973 TOTAL 231,568 MEAN 634 MAX 4,110 MIN 128 AC-FT 459,300

08169000 Comal River at New Braunfels, Tex.

LOCATION.--Lat 29°42'21", long 98°07'20", Comal County, on right bank 200 ft (61 m) upstream from San Antonio Street viaduct in New Braunfels and 1.1 miles (1.8 km) upstream from mouth.

DRAINAGE AREA.--130 mi² (337 km²). 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 (177.64 m) above mean sea level.

AVERAGE DISCHARGE.--41 years (1932-73), 286 ft³/s (8.10 m³/s), 207,200 acre-ft/yr (255 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,030 ft³/s (227 m³/s) Sept. 27, gage height, 15.03 ft (4.58 m), from rating curve extended above 13,000 ft³/s (368 m³/s) as explained below; minimum daily, 294 ft³/s (8.33 m³/s) Oct. 15, 18-20.
Period of record: Maximum discharge, 60,800 ft³/s (1,720 m³/s) May 11, 1972, gage height, 36.55 ft (11.14 m), from floodmark, from rating curve extended above 13,000 ft³/s (368 m³/s) 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 (11.25 m), from painted and dated marks in old Remmert Brewery half a mile (0.8 km) downstream; the flood of Oct. 17, 1870, reached a stage of 37.65 ft (11.48 m) at same site (probably some backwater from Guadalupe River).

REMARKS.--Records good. 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 (1.6 km) upstream, except during periods of local rain. Diurnal fluctuations from steam powerplant half a mile (0.8 km) upstream.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	326	326	326	326	345	335	370	340	380	407	385
2	312	312	326	330	322	340	340	370	345	380	407	390
3	308	322	326	330	322	340	335	370	345	375	402	385
4	308	312	322	326	317	340	330	370	345	375	402	385
5	304	312	326	326	317	340	330	370	335	375	402	380
6	304	312	322	322	312	340	355	375	335	375	402	390
7	304	312	326	326	312	345	345	375	335	385	396	390
8	304	312	326	322	317	340	335	370	326	635	396	390
9	304	312	322	322	317	340	335	370	330	1,340	412	390
10	299	308	322	322	317	335	335	370	330	440	390	385
11	299	312	322	326	317	340	335	370	365	402	390	385
12	299	312	322	322	317	350	335	370	1,690	396	390	380
13	299	350	322	322	317	345	335	370	456	396	396	396
14	299	317	322	322	317	345	335	375	370	396	390	390
15	294	317	322	322	317	345	578	370	360	396	396	390
16	304	317	322	322	317	345	539	365	360	500	396	396
17	299	317	322	322	330	340	429	365	365	510	385	440
18	294	322	322	322	330	335	396	365	365	418	385	396
19	294	326	322	326	326	330	370	365	360	446	390	390
20	294	322	322	326	322	330	380	370	360	440	396	396
21	317	322	322	326	350	330	375	370	365	456	385	385
22	414	322	322	326	370	330	375	365	365	451	385	390
23	308	326	322	322	360	335	375	360	365	451	390	390
24	304	340	322	322	345	350	375	365	365	451	385	390
25	304	330	322	370	340	345	370	360	506	451	385	396
26	304	330	322	345	340	340	370	360	468	451	390	422
27	304	330	317	330	340	340	370	365	385	440	390	3,140
28	308	326	317	326	340	335	370	355	385	446	385	605
29	308	326	322	326	------	335	370	355	380	446	396	484
30	308	326	322	326	------	330	370	355	380	429	396	434
31	308	------	322	326	------	330	------	355	------	402	390	------
TOTAL	9,513	9,630	9,996	10,129	9,174	10,510	11,127	11,360	12,381	14,234	12,207	14,865
MEAN	307	321	322	327	328	339	371	366	413	459	394	496
MAX	414	350	326	370	370	350	578	375	1,690	1,340	412	3,140
MIN	294	308	317	322	312	330	330	355	326	375	385	380
AC-FT	18,870	19,100	19,830	20,090	18,200	20,850	22,070	22,530	24,560	28,230	24,210	29,480

CAL YR 1972 TOTAL 133,378 MEAN 364 MAX 14,400 MIN 242 AC-FT 264,600
WTR YR 1973 TOTAL 135,126 MEAN 370 MAX 3,140 MIN 294 AC-FT 268,000

PEAK DISCHARGE (BASE, 1,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-12	0500	10.15	4,000
7- 9	0100	10.72	4,420
9-27	0600	15.03	8,030

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 (1.1 km) downstream from bridge on Interstate Highway 35 and U.S. Highway 81, 1.2 miles (1.9 km) southeast of courthouse in San Marcos, and 2.1 miles (3.4 km) upstream from Blanco River.

DRAINAGE AREA.--93.0 mi² (241 km²). 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 (163.62 m) above mean sea level. June 10, 1915, to Jan. 19, 1916, nonrecording gage at site 1.2 miles (1.9 km) upstream, and Mar. 13, 1916, to Sept. 7, 1921, water-stage recorder near present site, datum relations unknown.

AVERAGE DISCHARGE.--17 years (1956-73), 159 ft³/s (4.50 m³/s), 115,200 acre-ft/yr (142 hm³/yr).

EXTREMES.--Current year: Maximum daily spring discharge, 275 ft³/s (7.79 m³/s) July 17; maximum gage height, 10.67 ft (3.25 m) July 16 (flood runoff); minimum daily spring discharge, 128 ft³/s (3.62 m³/s) Oct. 18-20.
Period of record: Maximum daily spring discharge, 298 ft³/s (8.44 m³/s) Jan. 22-24, 1968; maximum discharge, 76,600 ft³/s (2,170 m³/s) May 15, 1970, gage height, 35.12 ft (10.70 m); minimum daily spring discharge, 46 ft³/s (1.30 m³/s) Aug. 15, 16, 1956.
Maximum stage since at least 1913, 38.6 ft (11.76 m) Sept. 10, 1921 (from floodmark), present datum (backwater from Blanco River).

REMARKS.--Records good. Flow slightly regulated by utilities dam about 1.5 miles (2.4 km) upstream. Entire flow of river is from San Marcos Springs, about 1.8 miles (2.9 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	142	161	161	167	191	208	212	203	223	234	210
2	141	143	161	161	169	191	208	212	204	222	233	210
3	135	144	161	161	171	192	208	211	206	221	230	208
4	132	142	160	160	174	192	207	211	206	218	230	207
5	134	142	160	160	174	192	206	213	207	218	230	209
6	133	142	161	161	175	191	210	215	204	217	229	208
7	135	143	160	163	175	191	207	221	199	219	228	208
8	134	144	160	160	177	191	206	217	198	223	227	206
9	133	142	161	159	175	192	203	215	200	239	225	204
10	132	141	162	160	174	194	201	213	199	235	227	204
11	129	143	162	161	175	191	200	213	201	234	225	202
12	129	144	163	161	175	190	202	215	231	230	224	200
13	129	144	163	162	177	191	203	213	241	229	224	199
14	129	147	163	162	178	190	203	212	236	229	224	199
15	129	145	161	162	176	191	204	211	233	229	222	198
16	129	145	162	162	175	198	204	211	225	257	219	199
17	129	147	162	161	177	198	204	209	224	275	221	198
18	128	149	162	160	178	199	206	210	223	272	221	197
19	128	149	162	160	178	199	208	211	222	266	219	194
20	128	149	161	162	178	199	206	211	221	253	218	193
21	129	151	160	164	187	198	206	208	224	247	219	192
22	138	151	159	163	189	198	206	208	222	243	218	192
23	147	151	160	163	189	201	207	209	219	239	218	192
24	147	156	159	164	188	212	208	210	221	236	215	191
25	146	159	160	166	189	210	208	210	227	233	215	190
26	146	159	159	167	190	210	211	210	229	233	215	188
27	145	159	157	167	191	209	212	209	231	231	213	211
28	144	159	160	166	191	208	210	206	225	231	212	215
29	144	160	160	163	------	208	210	204	224	231	213	209
30	144	160	160	164	------	208	211	202	223	230	212	208
31	143	------	160	165	------	208	------	202	------	230	208	------
TOTAL	4,210	4,452	4,982	5,031	5,012	6,133	6,193	6,534	6,528	7,293	6,868	6,041
MEAN	136	148	161	162	179	198	206	211	218	235	222	201
MAX	147	160	163	167	191	212	212	221	241	275	234	215
MIN	128	141	157	159	167	190	200	202	198	217	208	188
AC-FT	8,350	8,830	9,880	9,980	9,940	12,160	12,280	12,960	12,950	14,470	13,620	11,980

CAL YR 1972 TOTAL 58,817 MEAN 161 MAX 200 MIN 128 AC-FT 116,700
WTR YR 1973 TOTAL 69,277 MEAN 190 MAX 275 MIN 128 AC-FT 137,400

08171000 Blanco River at Wimberley, Tex.

LOCATION.--Lat 29°59'33", long 98°05'28", Hays County, on left bank 1,000 ft (305 m) upstream from bridge on State Highway 12, 1,200 ft (366 m) downstream from Cypress Creek, 0.3 mile (0.5 km) southeast of Wimberley, and at mile 29.4 (47.3 km).

DRAINAGE AREA.--355 mi² (919 km²).

PERIOD OF RECORD.--August 1924 to September 1926, June 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 802.23 ft (244.52 m) above mean sea level. Aug. 6, 1924, to Sept. 30, 1926, nonrecording gage at site 30 ft (9 m) upstream at same datum.

AVERAGE DISCHARGE.--47 years, 115 ft³/s (3.26 m³/s), 83,320 acre-ft/yr (103 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,200 ft³/s (487 m³/s) July 15, gage height, 12.5 ft (3.8 m), from floodmark; minimum, 23 ft³/s (0.65 m³/s) Oct. 19, 20.
Period of record: Maximum discharge, 113,000 ft³/s (3,200 m³/s) May 28, 1929, gage height, 31.10 ft (9.48 m), from floodmarks, from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurements of 95,000 and 113,000 ft³/s (2,690 and 3,200 m³/s); minimum, 0.6 ft³/s (17 dm³/s) Aug. 16, 1956.
Maximum stage since at least 1869, that of May 28, 1929; flood in July 1869 reached a stage of 23 ft (7 m), from information by local residents.

REMARKS.--Records good except those for period of no gage-height record July 14-16, which are fair. Numerous small diversions above station. At end of year, flow from 0.61 mi² (1.58 km²) above this station was partly controlled by one floodwater-retarding structure with a capacity of 201 acre-ft (0.25 hm³) below the flood-spillway crest, of which 185 acre-ft (0.23 hm³) is floodwater-retarding capacity and 16 acre-ft (19,700 m³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	444	83	76	186	318	153	283	114	552	525	114
2	34	204	83	80	175	311	148	281	110	513	381	107
3	34	104	83	82	167	297	147	280	108	480	334	102
4	33	87	83	84	162	290	148	252	253	465	310	98
5	32	79	83	86	162	279	141	250	214	450	292	95
6	31	75	81	86	158	276	149	271	140	425	280	96
7	30	71	79	90	155	262	174	366	124	415	266	104
8	28	69	81	92	163	251	182	288	114	600	251	130
9	28	68	81	94	170	247	155	256	114	1,330	238	139
10	27	66	80	98	175	245	145	242	105	514	225	115
11	27	65	79	102	173	241	143	236	134	432	214	102
12	27	64	79	100	177	226	141	232	4,430	389	204	98
13	26	76	79	102	179	220	141	221	1,150	356	194	104
14	26	84	78	102	169	217	143	208	716	340	190	117
15	26	94	76	103	158	213	319	201	579	8,300	181	112
16	25	84	74	103	154	212	255	195	502	3,700	170	116
17	25	81	74	103	167	201	311	189	465	1,580	163	103
18	25	80	74	103	194	190	362	183	450	1,080	157	98
19	24	78	74	103	202	188	324	175	400	897	151	95
20	24	76	74	104	195	180	296	166	380	781	149	92
21	26	74	74	103	214	172	281	158	802	700	148	90
22	667	72	74	104	314	169	275	152	552	628	137	87
23	214	72	73	101	408	172	277	146	486	573	131	85
24	94	86	72	99	378	211	283	144	470	526	125	84
25	67	89	69	119	361	235	283	140	596	486	122	87
26	63	87	69	251	344	191	413	138	970	450	117	99
27	59	88	67	231	330	176	355	136	752	418	119	683
28	57	87	69	201	322	172	298	128	668	478	114	341
29	54	85	69	183	------	174	289	121	620	389	112	197
30	49	85	66	184	------	168	285	115	574	356	110	153
31	48	------	70	188	------	160	------	114	------	394	111	------
TOTAL	1,964	2,874	2,350	3,657	6,112	6,864	7,016	6,267	17,092	28,997	6,221	4,043
MEAN	63.4	95.8	75.8	118	218	221	234	202	570	935	201	135
MAX	667	444	83	251	408	318	413	366	4,430	8,300	525	683
MIN	24	64	66	76	154	160	141	114	105	340	110	84
AC-FT	3,900	5,700	4,660	7,250	12,120	13,610	13,920	12,430	33,900	57,520	12,340	8,020

CAL YR 1972 TOTAL 32,729 MEAN 89.4 MAX 1,200 MIN 24 AC-FT 64,920
WTR YR 1973 TOTAL 93,457 MEAN 256 MAX 8,300 MIN 24 AC-FT 185,400

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	1300	4.83	3,180		about		
6-12	0900	10.34	12,400	7-15	1000	12.50	17,200
7- 9	0600	4.27	2,750				

08171300 Blanco River near Kyle, Tex.

LOCATION.--Lat 29°58'45", long 97°54'35", Hays County, on left bank 800 ft (244 m) downstream from Tarbutton Ranch House (Hatchett Ranch), 2.2 miles (3.5 km) southwest of Kyle, 4.2 miles (6.8 km) downstream from Halifax Creek, and 6.3 miles (10.1 km) upstream from bridge on U.S. Highway 81.

DRAINAGE AREA.--412 mi² (1,067 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 620.12 ft (189.01 m) above mean sea level, Corps of Engineers bench mark.

AVERAGE DISCHARGE.--17 years, 142 ft³/s (4.02 m³/s), 102,900 acre-ft/yr (127 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,200 ft³/s (629 m³/s) July 15, gage height, 22.0 ft (6.7 m), from floodmark; minimum, 6.8 ft³/s (193 dm³/s) Oct. 20.
Period of record: Maximum discharge, 98,000 ft³/s (2,780 m³/s) May 2, 1958, gage height, 36.3 ft (11.1 m), from floodmark, from rating curve extended above 37,000 ft³/s (1,050 m³/s) on basis of slope-area measurement of 139,000 ft³/s (3,940 m³/s) and slope-conveyance study; no flow at times in 1956-57, 1963-65, 1967, 1971.
Maximum stage since at least 1882, about 40 ft (12 m) in May 1929, from information by local residents, discharge, 139,000 ft³/s (3,940 m³/s). Flood of Sept. 11, 1952, reached a stage of 38.0 ft (11.6 m), discharge, 115,000 ft³/s (3,260 m³/s).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	219	73	53	183	317	161	283	103	421	523	103
2	14	338	72	62	173	310	157	271	105	388	411	101
3	14	111	72	74	162	296	155	276	97	358	343	95
4	13	75	70	75	159	287	149	243	257	333	312	91
5	13	65	71	77	157	275	150	235	205	315	292	89
6	13	58	69	77	154	270	160	241	150	295	276	89
7	12	52	66	81	151	256	164	374	117	279	262	91
8	12	47	68	82	157	240	193	300	107	633	246	120
9	11	46	68	84	164	234	164	250	102	1,390	231	124
10	11	44	68	91	169	237	150	230	107	698	218	114
11	9.9	43	69	97	167	227	145	220	148	546	206	96
12	9.4	43	70	93	171	214	145	216	5,440	478	195	89
13	9.2	63	66	98	176	206	144	205	1,480	431	185	87
14	8.9	56	67	105	170	202	147	193	788	393	181	131
15	8.8	72	64	107	157	197	320	183	620	4,050	175	95
16	9.0	70	61	108	152	231	332	178	523	3,680	165	109
17	8.2	64	60	110	166	196	393	175	462	2,040	157	98
18	8.0	63	60	110	181	185	438	170	444	1,250	152	88
19	7.6	60	62	110	200	182	406	163	388	1,010	145	85
20	7.2	57	61	109	191	176	351	155	365	873	140	83
21	9.9	57	60	110	207	169	326	147	625	773	140	79
22	501	55	58	107	291	165	317	140	443	690	132	76
23	354	53	58	108	410	174	317	135	364	629	125	74
24	103	80	57	105	399	246	322	132	345	574	118	74
25	57	85	55	130	374	247	319	129	462	524	114	72
26	45	81	54	208	352	211	354	130	813	483	111	79
27	43	80	52	239	332	187	421	124	665	450	107	1,040
28	37	79	52	201	321	180	305	119	552	488	110	621
29	34	76	54	183	------	179	288	112	496	423	104	350
30	30	74	53	179	------	179	283	105	456	372	104	279
31	27	------	50	184	------	168	------	102	------	386	101	------
TOTAL	1,455.1	2,366	1,940	3,557	6,046	6,843	7,676	5,936	17,229	25,653	6,081	4,722
MEAN	46.9	78.9	62.6	115	216	221	256	191	574	828	196	157
MAX	501	338	73	239	410	317	438	374	5,440	4,050	523	1,040
MIN	7.2	43	50	53	151	165	144	102	97	279	101	72
AC-FT	2,890	4,690	3,850	7,060	11,990	13,570	15,230	11,770	34,170	50,880	12,060	9,370

CAL YR 1972 TOTAL 27,347.1 MEAN 74.7 MAX 1,930 MIN 7.2 AC-FT 54,240
WTR YR 1973 TOTAL 89,504.1 MEAN 245 MAX 5,440 MIN 7.2 AC-FT 177,500

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	1800	10.22	2,340	7-15	1730	a22.00	22,200
6-12	1300	18.94	14,900	9-27	0900	9.95	2,040
7- 8	2400	10.30	2,290				

a From floodmark.

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 (119 m) downstream from bridge on State Highway 80, 1.0 mile (1.6 km) south of Luling, and 9.4 miles (15.1 km) upstream from Plum Creek.

DRAINAGE AREA.--838 mi² (2,170 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 322.05 ft (98.16 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 340 ft³/s (9.63 m³/s), 246,300 acre-ft/yr (304 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,750 ft³/s (219 m³/s) June 13, gage height, 27.42 ft (8.36 m); minimum, 132 ft³/s (3.74 m³/s) Oct. 18.
Period of record: Maximum discharge, 57,000 ft³/s (1,610 m³/s) Sept. 12, 1952, gage height, 34.95 ft (10.65 m); minimum daily, 43 ft³/s (1.22 m³/s) Aug. 12, 1951.
Maximum stage since at least 1859, 40.4 ft (12.3 m) in 1869 or 1870, from information by State Highway Department. Flood of May 29, 1929, reached a stage of 37.1 ft (11.3 m) and is the second highest known.

REMARKS.--Records good. At end of year, flow from 71.3 mi² (185 km²) above this station was partly controlled by 17 floodwater-retarding structures with a total combined capacity of 20,930 acre-ft (25.8 hm³) below the flood-spillway crests, of which 18,250 acre-ft (22.5 hm³) is floodwater-retarding capacity and 2,680 acre-ft (3.30 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	187	219	201	348	554	406	604	317	746	688	362
2	149	226	219	211	344	546	393	596	320	708	789	363
3	149	478	220	277	336	536	385	574	328	672	703	362
4	144	299	220	339	327	525	377	565	320	641	643	352
5	142	245	215	268	322	507	370	538	425	618	614	347
6	143	229	215	252	317	496	400	532	442	594	596	351
7	142	219	210	282	314	483	611	565	389	594	582	354
8	142	208	210	296	319	471	461	660	336	629	569	358
9	142	203	212	253	339	459	431	595	322	3,480	550	368
10	142	198	214	240	380	455	402	540	315	2,430	537	374
11	141	196	217	246	370	452	377	513	914	1,270	528	376
12	140	197	220	244	363	438	367	508	3,810	1,060	516	346
13	139	275	220	243	391	429	364	495	6,520	940	503	335
14	139	309	217	248	498	418	366	480	2,850	841	492	378
15	138	219	213	254	399	412	801	465	1,310	790	491	345
16	139	205	208	255	347	908	3,250	451	1,060	2,700	475	324
17	136	211	206	259	363	608	1,270	441	916	4,220	460	330
18	135	206	207	258	537	473	1,150	434	823	2,140	453	322
19	133	202	207	254	478	433	872	427	767	1,460	464	305
20	135	197	207	252	448	409	775	422	784	1,260	441	303
21	140	194	202	298	453	394	682	412	1,210	1,140	428	299
22	215	193	195	304	816	381	645	391	883	1,050	425	296
23	508	191	194	263	960	397	615	382	749	980	416	295
24	546	206	196	254	761	2,280	605	377	721	917	409	293
25	305	251	194	298	678	1,050	601	375	986	862	397	288
26	236	265	192	527	627	618	1,290	372	1,200	818	393	284
27	210	246	186	433	595	530	833	368	1,120	780	390	1,920
28	196	236	186	453	569	476	787	355	975	752	382	3,170
29	225	229	192	401	------	448	659	341	857	771	373	1,210
30	190	224	194	358	------	432	615	331	792	720	374	930
31	184	------	191	344	------	421	------	323	------	702	370	------
TOTAL	5,775	6,944	6,398	9,065	12,999	17,439	21,160	14,432	32,761	37,285	15,451	15,940
MEAN	186	231	206	292	464	563	705	466	1,092	1,203	498	531
MAX	546	478	220	527	960	2,280	3,250	660	6,520	4,220	789	3,170
MIN	133	187	186	201	314	381	364	323	315	594	370	284
AC-FT	11,450	13,770	12,690	17,980	25,780	34,590	41,970	28,630	64,980	73,950	30,650	31,620

CAL YR 1972 TOTAL 130,287 MEAN 356 MAX 23,700 MIN 133 AC-FT 258,400
WTR YR 1973 TOTAL 195,649 MEAN 536 MAX 6,520 MIN 133 AC-FT 388,100

PEAK DISCHARGE (BASE, 2,900 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-24	1500	20.97	3,540	7- 9	1900	25.57	5,860
4-16	1000	23.31	4,460	7-16	2000	24.42	5,050
6-13	1100	27.42	7,750	9-28	0100	25.07	5,460

08172400 Plum Creek at Lockhart, Tex.

LOCATION.--Lat 29°55'22", long 97°40'44", Caldwell County, on right bank 548 ft (167 m) upstream from bridge on U.S. Highway 183, 2.7 miles (4.3 km) north of Lockhart, 3.7 miles (6.0 km) upstream from Town Creek, 4.5 miles (7.2 km) downstream from Brushy Creek, and at mile 30.4 (48.9 km).

DRAINAGE AREA.--112 mi² (290 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 431.19 ft (131.43 m) above mean sea level. Apr. 30, 1959, to July 25, 1968, at site 548 ft (167 m) downstream at present datum.

AVERAGE DISCHARGE.--14 years, 37.8 ft³/s (1.07 m³/s), 27,390 acre-ft/yr (33.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,800 ft³/s (79.3 m³/s) June 12, gage height, 15.20 ft (4.63 m); no flow at times.
Period of record: Maximum discharge, 26,600 ft³/s (753 m³/s) Oct. 29, 1960, gage height, 20.62 ft (6.28 m); no flow for several days each year.
Maximum stage since at least 1905, 22 ft (7 m) in June 1936 at present site; flood in 1951 reached a stage of 20 ft (6 m) at present site, from information by local resident.

REMARKS.--Records good. No known diversion above station. At end of year, flow from 62.0 mi² (160.6 km²) above this station was partly controlled by 15 floodwater-retarding structures with a total combined capacity of 24,760 acre-ft (30.5 hm³) below the flood-spillway crests, of which 22,470 acre-ft (27.7 hm³) is floodwater-retarding capacity and 2,290 acre-ft (2.82 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 784 acre-ft (0.967 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.09	.16	6.7	20	19	15	.86	13	4.0	0
2	0	0	.05	.37	5.8	18	17	15	.90	11	3.2	.41
3	0	0	.03	46	4.8	16	15	13	.74	9.3	2.6	.11
4	0	0	.02	20	4.3	15	13	11	54	7.7	2.2	.05
5	0	0	.01	8.3	3.7	14	12	8.9	55	6.7	2.0	.03
6	0	0	.96	5.8	3.5	13	17	8.4	54	5.5	1.5	.02
7	0	0	1.3	28	3.6	12	49	75	24	4.4	1.3	.02
8	0	0	1.3	18	4.7	9.7	30	53	12	4.3	1.2	.02
9	0	0	1.3	7.8	10	8.8	22	30	6.8	735	1.1	.01
10	0	0	1.6	5.5	37	8.8	16	19	6.2	201	1.1	0
11	0	0	1.7	4.7	27	8.7	14	14	105	134	1.2	0
12	0	0	2.0	4.6	20	6.9	12	11	1,650	104	1.1	0
13	0	21	3.8	5.7	214	6.0	11	10	1,310	79	1.5	0
14	0	8.7	3.2	18	199	5.5	11	8.1	461	56	32	0
15	0	2.3	1.9	12	33	5.2	29	6.3	328	44	18	0
16	0	.75	1.6	7.6	20	205	161	5.1	231	36	.82	0
17	0	.27	1.2	5.5	62	72	231	4.4	164	48	.33	0
18	0	.08	.95	4.6	85	40	397	3.7	124	36	.22	0
19	0	.02	.90	4.6	54	26	228	3.1	86	27	.21	0
20	0	.01	.99	4.6	37	19	125	2.8	64	20	.15	0
21	0	0	1.2	9.6	112	15	69	2.3	45	17	.12	0
22	31	0	1.1	5.7	201	12	52	2.0	31	15	.10	0
23	14	0	.82	3.8	170	24	43	1.6	23	13	.10	0
24	1.3	.01	.57	2.8	85	912	38	1.4	18	11	.07	0
25	.16	11	.38	135	55	267	33	1.3	59	9.5	.06	0
26	.05	5.9	.25	70	37	145	29	1.2	116	8.4	.06	0
27	.03	2.5	.16	33	30	82	24	.96	56	7.4	.04	410
28	.01	1.2	.13	20	24	55	19	.76	36	6.7	.02	139
29	0	.74	.09	14	------	40	16	.72	24	5.3	.01	56
30	0	.23	.07	9.7	------	31	15	.74	18	4.3	0	29
31	0	------	.06	7.7	------	24	------	.74	------	4.2	0	------
TOTAL	46.55	54.71	29.73	523.13	1,459.1	2,136.6	1,767	330.52	5,163.50	1,683.7	76.31	634.67
MEAN	1.50	1.82	.96	16.9	52.1	68.9	58.9	10.7	172	54.3	2.46	21.2
MAX	31	21	3.8	135	214	912	397	75	1,650	735	32	410
MIN	0	0	.01	.16	3.5	5.2	11	.72	.74	4.2	0	0
AC-FT	92	109	59	1,040	2,890	4,240	3,500	656	10,240	3,340	151	1,260

CAL YR 1972 TOTAL 1,692.18 MEAN 4.62 MAX 1,130 MIN 0 AC-FT 3,360
WTR YR 1973 TOTAL 13,905.52 MEAN 38.1 MAX 1,650 MIN 0 AC-FT 27,580

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-24	1000	14.96	2,460
6-12	1600	15.20	2,800
6-13	1200	15.09	2,640

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 (1.9 km) upstream from West Fork, 1.9 miles (3.1 km) upstream from Southern Pacific Railroad Co. bridge, 2.2 miles (3.5 km) upstream from McNeil Creek, 3.0 miles (4.8 km) northeast of Luling, and at mile 7.3 (11.7 km).

DRAINAGE AREA.--309 mi² (800 km²).

PERIOD OF RECORD.--March 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 326.57 ft (99.54 m) above mean sea level.

AVERAGE DISCHARGE.--43 years, 92.3 ft³/s (2.61 m³/s), 66,870 acre-ft/yr (82.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,020 ft³/s (142 m³/s) June 12, gage height, 16.45 ft (5.01 m); minimum, 0.17 ft³/s (4.8 dm³/s) Aug. 24, 27-29.
Period of record: Maximum discharge, 78,500 ft³/s (2,220 m³/s) July 1, 1936, gage height, 25.7 ft (7.8 m), from floodmarks, from rating curve extended above 37,500 ft³/s (1,060 m³/s); 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. Low flow slightly regulated by oilfield operation above station. At end of year, flow from 103 mi² (267 km²) above this station was partly controlled by 23 floodwater-retarding structures with a total combined capacity of 40,080 acre-ft (49.4 hm³) below the flood-spillway crests, of which 36,540 acre-ft (45.1 hm³) is floodwater-retarding capacity and 3,540 acre-ft (4.36 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,919 acre-ft (2.37 hm³) of which 144 acre-ft (0.178 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.7	5.9	6.0	17	42	57	38	1.4	32	9.5	1.7
2	2.4	4.7	5.6	6.5	15	37	50	40	5.4	25	6.1	1.6
3	2.4	4.7	5.6	25	14	34	43	40	2.6	21	3.8	1.4
4	1.6	4.7	5.6	80	13	30	36	28	1.0	18	2.5	1.3
5	1.4	4.7	5.6	30	12	28	31	24	65	15	2.2	1.4
6	1.4	4.4	5.6	15	12	26	34	23	102	11	2.1	.38
7	1.6	4.4	5.6	20	11	23	79	33	54	9.5	1.9	1.0
8	1.8	4.4	5.6	40	12	21	74	107	25	8.4	1.7	4.7
9	1.8	4.1	6.2	20	19	20	57	62	14	338	1.6	3.9
10	1.8	4.4	6.6	15	34	20	46	38	10	594	1.4	1.8
11	1.8	4.4	7.0	12	42	20	34	26	301	200	1.3	1.9
12	1.8	4.7	7.9	11	38	19	30	22	3,370	153	1.9	1.6
13	2.0	15	7.9	15	40	17	28	30	3,700	126	1.4	1.8
14	2.4	49	8.4	30	345	16	26	17	2,280	103	8.6	46
15	2.4	27	10	20	94	14	114	12	690	84	37	12
16	2.4	13	8.4	16	49	138	1,120	9.4	355	72	15	5.8
17	2.4	8.8	6.6	15	44	264	378	7.7	242	67	3.3	5.2
18	2.4	6.6	6.6	14	122	78	561	6.8	190	75	2.1	4.9
19	2.4	5.9	6.6	13	97	50	399	5.9	145	62	2.0	4.5
20	2.7	5.6	6.6	12	72	42	225	5.1	117	50	1.7	4.2
21	2.7	5.6	6.6	11	58	31	137	4.4	125	45	1.4	4.1
22	8.2	5.6	6.6	16	209	25	101	3.9	74	39	1.0	3.9
23	24	5.6	6.5	16	368	25	84	3.4	55	33	.85	3.5
24	11	5.6	6.5	12	159	1,150	75	3.0	46	29	.54	3.6
25	5.9	15	6.5	35	100	1,650	69	2.8	53	25	.27	3.8
26	5.0	16	6.5	218	68	363	65	2.6	193	21	.32	3.7
27	5.0	17	6.5	77	52	171	62	2.4	139	18	.22	129
28	5.0	11	6.0	45	44	116	53	1.6	77	16	.22	518
29	4.7	8.4	6.0	34	------	89	45	1.2	56	11	.38	139
30	4.7	5.9	6.0	24	------	73	40	1.0	42	9.1	1.4	88
31	4.7	------	6.0	20	------	66	------	.94	------	8.9	2.0	------
TOTAL	122.5	280.9	203.6	923.5	2,160	4,698	4,153	602.14	12,530.4	2,318.9	115.70	1,003.68
MEAN	3.95	9.36	6.57	29.8	77.1	152	138	19.4	418	74.8	3.73	33.5
MAX	24	49	10	218	368	1,650	1,120	107	3,700	594	37	518
MIN	1.4	4.1	5.6	6.0	11	14	26	.94	1.0	8.4	.22	.38
AC-FT	243	557	404	1,830	4,280	9,320	8,240	1,190	24,850	4,600	229	1,990

CAL YR 1972 TOTAL 22,176.60 MEAN 60.6 MAX 12,200 MIN 1.1 AC-FT 43,990
WTR YR 1973 TOTAL 29,112.32 MEAN 79.8 MAX 3,700 MIN .22 AC-FT 57,740

PEAK DISCHARGE (BASE, 2,300 FT³/S).--June 12 (2000) 5,020 ft³/s (16.45 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 (2.1 km) downstream from Mitchell Creek, 3.1 miles (5.0 km) southwest of Dilworth, 6.4 miles (10.3 km) upstream from mouth, and 8.5 miles (13.7 km) southeast of Gonzales.

DRAINAGE AREA.--460 mi² (1,191 km²).

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 (65.08 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 143 ft³/s (4.05 m³/s), 103,600 acre-ft/yr (128 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,500 ft³/s (552 m³/s) June 13, gage height, 30.58 ft (9.32 m); no flow Oct. 8-22.
Period of record: Maximum discharge, 28,000 ft³/s (793 m³/s) May 12, 1972, gage height, 32.00 ft (9.75 m); no flow at times in 1959-67, 1969-73.
Maximum stage since at least 1840, 35.3 ft (10.8 m) in June 1940. A stage of 32.8 ft (10.0 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	23	2.0	2.1	11	18	33	35	5.6	29	3.9	3.0
2	.42	13	2.9	2.7	8.7	16	26	46	5.3	25	4.1	2.0
3	.25	8.3	2.8	5.3	7.5	14	23	630	4.9	22	5.7	1.6
4	.13	5.8	2.5	5.6	6.6	13	21	504	4.4	22	5.0	1.4
5	.04	4.8	2.3	5.5	6.1	12	19	173	4.3	21	4.2	1.4
6	.01	4.1	1.9	5.8	5.8	13	29	55	14	18	3.3	1.4
7	.01	3.4	4.0	7.8	5.4	14	300	44	23	412	3.5	1.6
8	0	2.9	2.6	33	5.6	21	398	41	20	1,300	4.3	2.0
9	0	2.7	1.9	67	7.3	18	125	34	12	449	3.3	1.9
10	0	2.5	1.8	28	36	13	42	28	7.2	86	2.9	1.5
11	0	2.2	1.8	14	124	11	26	25	6.6	38	2.7	2.1
12	0	2.2	2.0	9.8	59	10	20	531	1,260	21	2.5	5.7
13	0	4.1	2.1	8.2	33	9.4	18	857	11,000	15	2.5	5.0
14	0	5.9	2.3	7.3	26	9.1	17	823	12,600	12	3.2	526
15	0	4.7	2.3	6.9	217	8.8	2,800	160	4,990	11	10	166
16	0	5.0	2.1	6.5	61	8.8	9,560	51	2,470	36	4.4	27
17	0	3.5	2.1	5.9	36	8.2	6,900	34	291	38	3.1	13
18	0	3.2	2.1	5.0	156	8.3	4,580	27	72	47	3.2	8.3
19	0	3.0	2.3	4.5	247	7.9	2,720	23	47	17	3.1	6.4
20	0	2.5	2.4	4.1	105	7.6	843	21	55	11	2.9	5.6
21	0	2.3	2.6	4.7	47	7.3	147	19	573	8.9	2.7	5.0
22	0	2.2	2.1	5.7	102	7.2	82	17	282	8.1	2.6	4.4
23	2.1	2.0	1.8	3.6	499	220	67	15	87	7.3	2.5	4.1
24	11	2.4	2.0	3.2	548	1,860	58	15	50	6.7	2.1	4.0
25	5.0	3.5	2.2	103	150	2,920	52	13	60	6.2	1.5	3.8
26	3.7	3.2	2.1	739	40	4,010	600	12	287	5.8	1.3	3.7
27	3.4	2.7	1.9	995	25	1,510	227	11	226	5.4	1.2	4.2
28	3.1	3.0	1.9	229	20	166	103	9.3	94	4.9	1.1	33
29	3.5	2.3	2.0	36	------	178	53	8.5	53	4.7	1.1	556
30	143	2.1	2.1	19	------	97	40	7.3	37	4.2	1.1	326
31	87	------	1.9	13	------	48	------	6.3	------	4.0	2.8	------
TOTAL	263.56	132.5	68.8	2,386.2	2,595.0	11,264.6	29,929	4,275.4	34,641.3	2,696.2	97.8	1,727.1
MEAN	8.50	4.42	2.22	77.0	92.7	363	998	138	1,155	87.0	3.15	57.6
MAX	143	23	4.0	995	548	4,010	9,560	857	12,600	1,300	10	556
MIN	0	2.0	1.8	2.1	5.4	7.2	17	6.3	4.3	4.0	1.1	1.4
AC-FT	523	263	136	4,730	5,150	22,340	59,360	8,480	68,710	5,350	194	3,430

CAL YR 1972 TOTAL 60,002.92 MEAN 164 MAX 18,100 MIN 0 AC-FT 119,000
WTR YR 1973 TOTAL 90,077.46 MEAN 247 MAX 12,600 MIN 0 AC-FT 178,700

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-26	0900	26.82	4,250	6-13	2100	30.58	19,500
4-16	1500	29.15	11,600	7- 8	0100	23.03	2,210

08175000 Sandies Creek near Westhoff, Tex.

LOCATION.--Lat 29°12'54", long 97°26'57", De Witt County, on left bank 100 ft (30 m) downstream from bridge on county highway, 1.9 miles (3.1 km) upstream from Birds Creek, 2.0 miles (3.2 km) northeast of Westhoff, and at mile 20.4 (32.8 km).

DRAINAGE AREA.--549 mi² (1,422 km²).

PERIOD OF RECORD.--March 1930 to November 1934, August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 178.27 ft (54.34 m) above mean sea level. Prior to Nov. 9, 1934, water-stage recorder at site 150 ft (46 m) upstream at datum 0.86 ft (0.26 m) higher. Aug. 10, 1959, to Feb. 2, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--18 years, 121 ft³/s (3.43 m³/s), 87,660 acre-ft/yr (108 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,800 ft³/s (646 m³/s) June 13, gage height, 26.97 ft (8.22 m); minimum, 2.8 ft³/s (79 dm³/s) Oct. 13, 14.
Period of record: Maximum discharge, 79,700 ft³/s (2,260 m³/s) Sept. 22, 1967, gage height, 32.34 ft (9.86 m), from rating curve extended above 21,000 ft³/s (595 m³/s) on basis of slope-area measurement of 92,700 ft³/s (2,630 m³/s); no flow at times.
Maximum discharge since at least 1864, 92,700 ft³/s (2,630 m³/s) July 2, 1936, gage height, 33.1 ft (10.1 m), 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 (7.9 m), present site and datum, from information by local residents.

REMARKS.--Records good. No known diversions above station. Recording rain gage located at station.

REVISIONS.--WRD Texas 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	7.9	8.0	8.6	9.6	19	20	21	10	81	14	13
2	9.3	7.8	7.6	9.2	8.5	17	18	20	10	53	25	12
3	7.5	7.1	7.6	10	8.2	15	15	142	10	41	27	11
4	6.2	7.0	7.6	11	8.7	14	14	402	9.7	34	18	11
5	5.5	7.8	7.3	12	8.8	14	13	258	9.1	46	15	10
6	5.0	8.0	7.2	13	8.6	14	22	82	9.8	40	12	8.9
7	4.4	7.7	7.2	16	8.6	13	55	41	9.5	30	11	8.0
8	4.5	6.7	6.7	18	8.8	13	67	28	13	26	11	8.4
9	4.5	5.7	6.4	17	14	14	44	22	17	24	11	11
10	3.8	5.1	7.4	15	32	13	38	20	15	21	8.6	12
11	3.4	4.4	8.1	14	54	12	25	18	129	20	8.4	25
12	3.0	4.8	8.3	13	49	11	18	306	1,160	19	8.4	22
13	2.9	7.1	8.4	12	33	11	15	550	12,600	17	10	25
14	2.8	9.7	8.5	11	22	11	14	468	16,700	16	11	56
15	6.5	11	8.5	11	16	10	136	119	6,960	15	9.8	164
16	6.2	9.6	8.5	11	14	11	2,260	50	3,020	16	9.9	38
17	5.2	7.7	8.4	10	20	11	6,530	31	999	20	12	26
18	5.1	6.8	8.4	10	78	11	6,290	24	209	51	19	30
19	4.3	8.3	8.6	9.4	121	11	3,540	20	95	64	15	19
20	3.3	7.9	8.7	9.9	76	11	1,450	18	100	40	12	14
21	3.4	7.8	8.6	9.8	51	10	545	16	697	26	11	12
22	4.7	8.2	8.2	9.2	81	9.8	135	15	901	21	10	11
23	5.7	7.0	8.0	8.8	295	14	74	13	798	18	8.9	9.9
24	14	6.8	7.7	8.2	293	140	54	12	372	16	8.2	9.1
25	9.8	7.7	8.8	24	201	496	44	12	183	15	8.0	8.4
26	8.4	9.5	8.6	54	82	696	37	12	463	13	7.8	7.8
27	8.6	11	8.2	53	36	482	31	12	970	14	7.4	45
28	7.2	10	8.2	38	24	126	27	12	1,290	13	7.4	104
29	7.4	9.6	7.9	24	------	47	24	11	744	12	7.7	63
30	8.1	8.6	8.0	16	------	31	22	10	201	12	8.7	34
31	8.1	------	8.0	12	------	24	------	10	------	11	10	------
TOTAL	191.8	234.3	247.6	498.1	1,661.8	2,331.8	21,577	2,775	48,704.1	845	363.2	828.5
MEAN	6.19	7.81	7.99	16.1	59.4	75.2	719	89.5	1,623	27.3	11.7	27.6
MAX	14	11	8.8	54	295	696	6,530	550	16,700	81	27	164
MIN	2.8	4.4	6.4	8.2	8.2	9.8	13	10	9.1	11	7.4	7.8
AC-FT	380	465	491	988	3,300	4,630	42,800	5,500	96,600	1,680	720	1,640

CAL YR 1972 TOTAL 70,615.0 MEAN 193 MAX 16,900 MIN 1.4 AC-FT 140,100
WTR YR 1973 TOTAL 80,258.2 MEAN 220 MAX 16,700 MIN 2.8 AC-FT 159,200

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
4-18	0300	23.05	7,080
6-13	2400	26.97	22,800
6-28	1000	15.24	1,350

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 (3.4 km) upstream from Gohlke Creek, 2.4 miles (3.9 km) southwest of Cuero, 4.2 miles (6.8 km) downstream from Sandies Creek, and at mile 100.6 (161.9 km).

DRAINAGE AREA.--4,934 mi² (12,779 km²).

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 (11.4 km) upstream, upstream from Sandies Creek, from 1941 to 1966 are contained in reports of the National Weather Service and at present site since June 12, 1968.

GAGE.--Water-stage recorder. Datum of gage is 128.64 ft (39.21 m) above mean sea level. Dec. 26, 1902, to June 1903, nonrecording gage at site 7.1 miles (11.4 km) upstream at different datum, gage heights moved to the site 3.3 miles (5.3 km) upstream from present site before computation; July 1903 to December 1906 nonrecording gage 3.3 miles (5.3 km) upstream at different datum; Aug. 19, 1916, to Dec. 16, 1935, water-stage recorder at site 5.0 miles (8.0 km) downstream at datum 3.19 ft (0.97 m) lower.

AVERAGE DISCHARGE.--29 years (1903-6, 1916-18, 1920-35, 1964-73), 1,454 ft³/s (41.2 m³/s), 1,053,000 acre-ft/yr (1,300 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 36,300 ft³/s (1,030 m³/s) June 15, gage height, 31.97 ft (9.74 m); minimum, 608 ft³/s (17.2 m³/s) Oct. 20.

Period of record: Maximum discharge, 101,000 ft³/s (2,860 m³/s) May 30, 1929, gage height, 35.2 ft (10.7 m), site and datum then in use, from rating curve extended above 45,000 ft³/s (1,270 m³/s); maximum gage height, 36.90 ft (11.25 m) May 14, 1972; minimum daily discharge, 79 ft³/s (2.24 m³/s) Aug. 13, 14, 1967.

Maximum stage since at least 1900, probably occurred July 2, 1936, 44.33 ft (13.51 m), present site and datum, from information furnished by Texas Highway Department. Other floods at this station occurred Mar. 1, 1903, 43.0 ft (13.1 m), at different site and datum; Oct. 4, 1913, 37.57 ft (11.45 m), at different site and datum; Dec. 6, 1913, 34.57 ft (10.54 m), at different site and datum; Oct. 20, 1919, 32.2 ft (9.8 m), site and datum then in use; May 30, 1929, 35.2 ft (10.7 m), site and datum then in use; June 21, 1961, 37.0 ft (11.3 m), 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 (41.4 hm³). At end of year, flow from 176 mi² (456 km²) above this station was partly controlled by 42 floodwater-retarding structures with a total combined capacity of 62,120 acre-ft (76.6 hm³) below the flood-spillway crests, of which 55,750 acre-ft (68.7 hm³) is floodwater-retarding capacity and 6,370 acre-ft (7.85 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crests of 1,919 acre-ft (2.37 hm³) of which 144 acre-ft (0.178 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	813	827	767	837	1,060	1,570	1,520	1,990	1,450	2,630	5,100	1,600
2	817	742	773	826	1,060	1,540	1,490	2,060	1,450	2,470	3,840	1,580
3	804	751	774	876	1,060	1,520	1,460	2,830	1,400	2,350	3,150	1,580
4	784	777	760	950	1,040	1,480	1,460	2,910	1,250	2,260	3,420	1,490
5	782	929	762	970	988	1,490	1,550	2,760	1,170	2,200	3,360	1,500
6	790	839	740	1,060	1,020	1,460	1,360	2,270	1,180	2,140	3,310	1,480
7	784	780	758	995	1,030	1,460	1,560	2,040	1,320	2,090	3,500	1,490
8	781	754	740	950	990	1,400	2,090	2,020	1,320	2,750	2,940	1,490
9	771	742	763	1,060	1,110	1,440	2,240	2,040	1,230	3,100	2,720	1,500
10	770	730	738	1,140	1,080	1,470	1,820	2,070	1,180	2,780	2,810	1,590
11	772	703	750	983	1,140	1,410	1,660	1,970	1,200	5,850	2,630	1,580
12	768	702	757	873	1,250	1,410	1,330	2,460	5,590	6,320	2,400	1,600
13	766	745	762	884	1,170	1,420	1,360	4,460	13,000	3,810	2,360	1,590
14	772	734	763	918	1,160	1,380	1,440	3,400	21,800	2,920	2,250	1,950
15	750	846	762	884	1,190	1,410	2,240	2,800	34,400	2,720	2,150	2,280
16	751	919	763	922	1,860	1,400	11,600	2,060	32,100	2,720	2,110	2,250
17	762	793	754	995	1,440	1,400	15,600	1,840	23,800	2,880	2,070	2,540
18	839	774	750	935	1,430	2,140	20,100	1,750	12,700	4,350	2,050	1,890
19	752	755	741	879	1,730	1,930	21,600	1,700	3,170	5,970	2,060	1,850
20	670	766	762	920	1,990	1,510	18,000	1,680	2,640	5,860	1,990	1,820
21	734	744	748	919	1,690	1,440	9,500	1,670	3,120	5,590	1,930	1,740
22	740	719	760	941	1,530	1,400	3,540	1,650	4,500	5,650	1,910	1,720
23	812	732	754	889	1,920	2,790	2,660	1,630	4,450	5,420	1,890	1,710
24	1,040	745	742	871	3,050	2,960	2,380	1,560	3,290	5,510	1,860	1,700
25	1,080	760	732	959	3,160	5,320	2,110	1,570	2,760	5,480	1,850	1,680
26	999	808	772	1,200	2,310	8,310	2,530	1,560	2,990	5,410	1,830	1,620
27	826	817	803	1,900	1,870	9,190	2,990	1,530	4,400	5,340	1,700	1,610
28	772	832	751	2,310	1,680	5,040	2,960	1,510	5,340	5,330	1,480	2,630
29	814	795	799	1,540	------	2,210	2,460	1,520	4,500	5,270	1,480	7,070
30	844	790	819	1,210	------	1,960	2,210	1,450	3,220	5,190	1,600	9,900
31	1,060	------	808	1,100	------	1,760	------	1,440	------	5,200	1,610	------
TOTAL	25,219	23,350	23,627	32,696	42,008	72,620	144,820	64,200	201,920	127,560	75,360	66,030
MEAN	814	778	762	1,055	1,500	2,343	4,827	2,071	6,731	4,115	2,431	2,201
MAX	1,080	929	819	2,310	3,160	9,190	21,600	4,460	34,400	6,320	5,100	9,900
MIN	670	702	732	826	988	1,380	1,330	1,440	1,170	2,090	1,480	1,480
AC-FT	50,020	46,310	46,860	64,850	83,320	144,000	287,300	127,300	400,500	253,000	149,500	131,000

CAL YR 1972 TOTAL 770,568 MEAN 2,105 MAX 56,800 MIN 596 AC-FT 1,528,000
WTR YR 1973 TOTAL 899,410 MEAN 2,464 MAX 34,400 MIN 670 AC-FT 1,784,000

PEAK DISCHARGE (BASE, 7,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-27	0800	17.37	9,470
4-19	0900	26.95	22,100
6-15	1900	31.97	36,300

08176500 Guadalupe River at Victoria, Tex.

LOCATION.--Lat 28°47'34", long 97°00'46", 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 (396 m) upstream from Southern Pacific Railroad Co. bridge, 15 miles (24.1 km) upstream from Coleto Creek, and at mile 50.7 (81.6 km).

DRAINAGE AREA.--5,198 mi² (13,460 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 29.15 ft (8.88 m) above mean sea level.

AVERAGE DISCHARGE.--38 years (1935-73), 1,635 ft³/s (46.3 m³/s), 1,185,000 acre-ft/yr (1,461 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,100 ft³/s (937 m³/s) June 17, gage height, 29.33 ft (8.94 m); minimum, 684 ft³/s (19.4 m³/s) Oct. 20.
Period of record: Maximum discharge, 179,000 ft³/s (5,070 m³/s) July 3, 1936, gage height, 31.22 ft (9.52 m); minimum daily, 14 ft³/s (0.40 m³/s) 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 (9.2 m), 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 discharged 5,200 acre-ft (6.41 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	951	1,140	877	880	1,160	1,750	1,860	2,380	1,580	3,430	5,300	1,760
2	902	893	851	901	1,150	1,680	1,700	2,260	1,570	3,030	4,990	1,760
3	896	849	860	911	1,140	1,660	1,660	2,630	1,550	2,850	3,770	1,750
4	862	837	853	967	1,130	1,630	1,630	3,080	1,490	2,680	3,530	1,720
5	851	909	847	1,030	1,110	1,600	1,650	3,080	1,380	2,580	3,710	1,700
6	849	1,010	833	1,100	1,060	1,590	1,770	2,810	1,410	2,490	3,590	1,690
7	852	902	821	1,150	1,090	1,580	1,790	2,340	1,340	2,420	3,670	1,660
8	843	854	834	1,050	1,130	1,570	1,980	2,190	1,470	2,590	3,650	1,680
9	847	837	829	1,040	1,180	1,500	2,270	2,160	1,420	3,410	3,000	1,660
10	813	827	842	1,190	1,320	1,580	2,180	2,170	1,340	3,190	3,020	1,810
11	815	791	820	1,190	1,250	1,560	1,820	2,160	1,330	3,830	3,000	2,140
12	804	775	838	1,050	1,270	1,510	1,720	2,240	4,200	6,360	2,760	2,030
13	802	870	838	990	1,360	1,510	1,420	3,540	14,300	5,660	2,600	1,810
14	804	839	852	995	1,250	1,500	1,530	4,140	19,300	3,730	2,530	1,790
15	805	838	845	999	1,260	1,500	1,690	3,450	20,000	3,150	2,410	2,270
16	790	1,010	844	974	1,450	1,510	6,400	2,630	27,200	3,000	2,330	2,460
17	788	974	839	1,010	1,890	1,480	14,600	2,090	31,900	3,010	2,280	3,160
18	833	891	828	1,110	1,850	1,610	17,000	1,960	26,600	3,410	2,330	2,650
19	867	853	825	936	1,780	2,190	18,200	1,880	14,100	5,070	2,290	2,060
20	763	851	823	977	1,980	1,780	19,500	1,840	4,710	5,990	2,200	2,000
21	763	846	847	993	2,040	1,580	18,400	1,810	3,940	5,780	2,140	1,920
22	797	805	826	991	1,910	1,510	9,790	1,790	4,620	5,690	2,110	1,870
23	785	796	840	1,010	2,130	3,110	4,100	1,780	5,370	5,650	2,080	1,850
24	943	847	809	933	2,520	5,720	3,170	1,740	4,750	5,530	2,050	1,840
25	1,130	858	798	1,030	3,320	3,980	2,700	1,730	3,970	5,590	2,020	1,820
26	1,160	861	776	1,130	2,970	6,090	2,530	1,730	4,610	5,540	2,010	1,790
27	1,040	897	853	1,490	2,190	7,980	3,120	1,720	4,320	5,470	1,970	1,830
28	888	903	861	2,120	1,880	7,890	3,300	1,660	5,530	5,440	1,900	1,910
29	2,190	902	803	2,110	------	3,910	3,130	1,650	5,500	5,400	1,690	3,840
30	1,390	887	861	1,460	------	2,310	2,600	1,630	4,530	5,340	1,740	7,440
31	1,100	------	865	1,260	------	2,090	------	1,580	------	5,280	1,790	------
TOTAL	28,923	26,352	25,938	34,977	45,770	78,460	155,210	69,850	225,330	132,590	84,360	65,670
MEAN	933	878	837	1,128	1,635	2,531	5,174	2,253	7,511	4,277	2,721	2,189
MAX	2,190	1,140	877	2,120	3,320	7,980	19,500	4,140	31,900	6,360	5,300	7,440
MIN	763	775	776	880	1,060	1,480	1,420	1,580	1,330	2,420	1,690	1,660
AC-FT	57,370	52,270	51,450	69,380	90,780	155,600	307,900	138,500	446,900	263,000	167,300	130,300

CAL YR 1972 TOTAL 812,009 MEAN 2,219 MAX 52,200 MIN 630 AC-FT 1,611,000
WTR YR 1973 TOTAL 973,430 MEAN 2,667 MAX 31,900 MIN 763 AC-FT 1,931,000

PEAK DISCHARGE (BASE, 7,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
3-28	0100	22.55	8,430
4-20	1500	28.46	19,800
6-17	0800	29.33	33,100

08177000 Coleto Creek near Schroeder, Tex.

LOCATION.--Lat 28°49'53", long 97°11'10", Goliad-Victoria County line, on left bank 373 ft (114 m) downstream from bridge on Farm Road 622, 2.5 miles (4.0 km) northeast of Schroeder, 4.2 miles (6.8 km) downstream from confluence of Twelvemile and Fifteenmile Creeks, 9.1 miles (14.6 km) upstream from Perdido Creek, 11.1 miles (17.9 km) west of Victoria, and at mile 21.8 (35.1 km).

DRAINAGE AREA.--369 mi² (956 km²).

PERIOD OF RECORD.--January 1930 to December 1933, October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 87.59 ft (26.70 m) above mean sea level. Prior to Dec. 31, 1933, nonrecording gage at site 0.7 mile (1.1 km) 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 (1.0 km) downstream at same datum. Jan. 18, 1955, to Sept. 21, 1967, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--24 years, 92.2 ft³/s (2.61 m³/s), 66,800 acre-ft/yr (82.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 34,800 ft³/s (986 m³/s) June 13, gage height, 18.96 ft (5.78 m); minimum, 6.0 ft³/s (170 dm³/s) Oct. 19, 20.

Period of record: Maximum discharge, 122,000 ft³/s (3,460 m³/s) Sept. 21, 1967, gage height, 33.47 ft (10.20 m) from floodmark, from rating curve extended above 28,000 ft³/s (793 m³/s) 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 (7.9 m), discharge, 63,700 ft³/s (1,800 m³/s), and October 1925, 23.0 ft (7.0 m), discharge, 46,700 ft³/s (1,320 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	15	7.8	9.2	14	27	20	55	16	92	34	57
2	18	13	8.1	10	13	27	19	53	16	86	80	60
3	16	12	8.7	14	12	26	18	50	15	82	135	44
4	14	11	8.4	12	12	25	15	43	15	80	63	39
5	13	10	8.8	14	12	23	14	41	16	71	42	39
6	13	11	8.1	16	12	25	34	44	30	66	39	37
7	11	11	8.0	18	13	22	144	43	25	62	37	35
8	10	9.2	8.3	16	16	21	96	38	20	68	46	35
9	10	9.1	8.8	13	39	22	46	35	20	71	37	34
10	9.9	7.8	10	13	36	23	31	33	18	60	33	36
11	9.3	7.5	10	16	25	21	25	34	32	56	31	78
12	9.1	8.3	10	16	21	19	22	65	10,600	53	32	49
13	9.0	16	9.5	16	19	21	22	48	16,400	50	44	45
14	8.8	13	10	15	16	21	23	35	3,000	48	48	41
15	8.4	9.6	9.9	14	14	20	325	30	762	47	48	124
16	8.2	9.1	9.0	13	14	17	6,960	29	322	47	37	387
17	8.2	8.3	8.6	14	49	15	4,350	28	202	45	34	1,890
18	7.9	9.3	9.2	13	125	15	2,340	27	159	44	79	307
19	7.0	8.2	9.8	12	58	16	384	26	140	42	51	119
20	6.7	7.3	10	13	37	18	193	25	150	42	37	84
21	12	7.6	9.6	12	49	16	149	24	305	41	32	67
22	13	7.6	9.2	10	126	16	137	23	473	40	29	56
23	11	7.4	9.3	9.4	167	361	129	23	187	41	28	50
24	8.9	13	8.7	9.1	90	517	110	23	169	40	27	47
25	8.0	15	8.7	34	50	162	96	23	1,280	39	26	45
26	8.7	13	8.2	54	36	75	82	23	3,260	38	26	42
27	8.8	12	7.8	30	31	43	68	22	437	38	29	489
28	8.5	9.7	8.4	20	27	34	61	20	195	36	28	278
29	198	8.7	9.4	16	------	30	56	19	130	34	27	109
30	41	8.0	9.3	15	------	27	55	17	107	33	120	71
31	20	------	8.5	15	------	24	------	16	------	32	110	------
TOTAL	558.4	307.7	278.1	501.7	1,133	1,729	16,024	1,015	38,501	1,624	1,469	4,794
MEAN	18.0	10.3	8.97	16.2	40.5	55.8	534	32.7	1,283	52.4	47.4	160
MAX	198	16	10	54	167	517	6,960	65	16,400	92	135	1,890
MIN	6.7	7.3	7.8	9.1	12	15	14	16	15	32	26	34
AC-FT	1,110	610	552	995	2,250	3,430	31,780	2,010	76,370	3,220	2,910	9,510

CAL YR 1972 TOTAL 33,483.7 MEAN 91.5 MAX 9,190 MIN 4.1 AC-FT 66,410
WTR YR 1973 TOTAL 67,934.9 MEAN 186 MAX 16,400 MIN 6.7 AC-FT 134,700

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	1300	a14.72	18,200	6-13	1400	18.96	34,800
4-17	2000	a11.33	8,560	6-26	0100	11.04	7,890
6-12	1300	16.57	25,000	9-17	1000	a8.96	3,380

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 (9 m) downstream from low-water bridge on Dresden Drive at San Antonio, 0.15 mile (0.24 km) west of intersection of Blanco Road and Dresden Drive, and 4.0 miles (6.4 km) upstream from Olmos Dam.

DRAINAGE AREA.--21.2 mi² (54.9 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 726.10 ft (221.32 m) above mean sea level.

AVERAGE DISHCARGE.--5 years, 4.33 ft³/s (123 dm³/s), 2.77 inches/yr (70.4 mm/yr), 3,140 acre-ft/yr (3.87 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,600 ft³/s (130 m³/s) Sept. 26, gage height, 12.40 ft (3.78 m), from floodmark; minimum, 0.01 ft³/s (0.28 dm³/s) Sept. 5, 6.
Period of record: Maximum discharge, 5,420 ft³/s (153 m³/s) May 7, 1972, gage height, 13.20 ft (4.02 m), 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 (2.6 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	21	.24	.53	.36	.71	.41	.41	.16	.41	.86	.05
2	.15	.84	.27	4.6	.32	.68	.62	2.2	.13	.34	.34	.05
3	.16	.82	.31	7.0	.32	.71	4.2	.54	.12	.87	.24	.05
4	.15	.48	.28	.57	.32	.57	.34	.52	.12	.52	.23	.05
5	.18	.32	.35	1.2	.50	.57	.33	.47	.12	.26	.36	.03
6	.20	.27	.24	.57	.36	.57	18	37	.10	.39	.31	13
7	.22	.21	.24	1.0	.45	.57	1.4	4.8	.07	24	.17	78
8	.27	.20	.28	.41	7.1	.57	.30	.66	.06	94	.10	5.7
9	.30	.20	.28	.28	6.1	.74	.23	.90	.27	20	.08	1.1
10	.28	.17	.29	.39	2.0	2.2	.25	.90	.68	1.9	.08	.95
11	.28	.11	.43	.85	.86	.57	.27	1.1	45	.99	.08	.60
12	.28	.55	.53	.57	.48	.42	.14	158	531	.79	.08	.51
13	.28	7.8	.41	.31	8.1	.40	.59	2.7	7.3	.60	.22	2.5
14	.20	.24	.32	.28	1.3	.40	4.1	2.0	1.6	.60	.27	6.3
15	.10	.20	.31	.28	.56	1.2	229	1.5	.57	11	.18	.34
16	.07	.20	.24	.28	.40	3.6	20	1.3	.37	200	.14	300
17	.07	.22	.20	.29	13	.55	216	1.1	1.9	11	.08	11
18	.05	.26	.24	.34	2.0	.44	7.0	1.4	.38	2.1	.09	2.5
19	.04	.28	.26	.29	.89	.42	2.9	1.0	.27	1.1	.12	1.4
20	.05	.28	.28	.59	1.2	.45	1.1	.89	1.6	1.0	.11	.84
21	.07	.29	.25	.31	19	.40	.67	.96	5.7	.85	.08	.70
22	26	.21	.24	.26	13	.36	.60	.99	.50	.85	.09	.41
23	.32	.33	.24	.25	2.2	.68	.84	1.1	.41	.85	.12	2.2
24	.07	9.0	.21	.79	1.1	29	.88	.63	3.1	.85	.08	.71
25	.13	.86	.20	21	.77	1.8	.85	.41	227	.85	.08	.41
26	.22	.36	.21	1.3	.71	1.2	1.0	.38	19	.85	.08	542
27	.40	.24	.22	.50	.71	.64	.50	.37	2.8	.85	.08	719
28	.16	.24	.22	.31	.71	.59	.39	.37	1.5	.76	.09	8.0
29	.16	.24	.22	.28	------	1.3	.47	.26	.77	.55	.11	3.2
30	.13	.24	.23	.29	------	.46	.61	.31	.52	.22	.07	1.9
31	.17	------	.24	.45	------	.43	------	.18	------	1.2	.05	------
TOTAL	31.29	46.66	8.48	46.37	84.82	53.20	513.99	225.35	853.12	380.55	5.07	1,703.50
MEAN	1.01	1.56	.27	1.50	3.03	1.72	17.1	7.27	28.4	12.3	.16	56.8
MAX	26	21	.53	21	19	29	229	158	531	200	.86	719
MIN	.04	.11	.20	.25	.32	.36	.14	.18	.06	.22	.05	.03
CFSM	.05	.07	.01	.07	.14	.08	.81	.34	1.34	.58	.008	2.68
IN.	.05	.08	.01	.08	.15	.09	.90	.40	1.50	.67	.008	2.99
AC-FT	62	93	17	92	168	106	1,020	447	1,690	755	10	3,380
(††)	1.60	2.99	.43	2.87	2.85	2.15	6.39	2.78	9.52	5.50	.97	12.37

CAL YR 1972 TOTAL 2,031.29 MEAN 5.55 MAX 1,350 MIN .03 CFSM .26 IN 3.56 AC-FT 4,030 †† 31.29
WTR YR 1973 TOTAL 3,952.40 MEAN 10.8 MAX 719 MIN .03 CFSM .51 IN 6.94 AC-FT 7,840 †† 50.42

PEAK DISCHARGE (BASE, 400 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-15	1900	8.68	1,610	7-16	1415	6.81	674
4-17	1200	8.00	1,250	9- 7	1830	6.35	505
5-12	0300	7.80	1,150	9-16	1415	8.71	1,630
6-12	0730	a10.00	2,500	9-26	2245	a12.40	4,600
6-25	1315	7.28	890				

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

08178000 San Antonio River at San Antonio, Tex.

LOCATION.--Lat 29°24'34", long 98°29'41", Bexar County, on left bank 143 ft (44 m) downstream from South Alamo Street Bridge in San Antonio, 2.1 miles (3.4 km) upstream from San Pedro Creek, and at mile 230.6 (371.1 km).

DRAINAGE AREA.--41.8 mi² (108 km²). 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 (184.48 m) above mean sea level. Jan. 26, 1915, to Feb. 27, 1916, nonrecording gage at site 1.3 miles (2.1 km), revised, upstream at different datum. Feb. 28, 1916, to Apr. 7, 1920, nonrecording gage at site 1.1 miles (1.8 km), revised, 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 (2.13 m) higher datum. Apr. 25, 1967, to May 13, 1969, water-stage recorder at site 307 ft (94 m) downstream at same datum.

AVERAGE DISCHARGE.--48 years, 50.4 ft³/s (1.43 m³/s), 36,510 acre-ft/yr (45.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,090 ft³/s (172 m³/s) Sept. 27, gage height, 14.78 ft (4.50 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of computed discharge of 14,400 ft³/s (408 m³/s) by Corps of Engineers; minimum, 0.08 ft³/s (2.3 dm³/s) Oct. 23.

Period of record: Maximum discharge, 15,300 ft³/s (433 m³/s) Sept. 10, 1921, gage height, 20.14 ft (6.14 m), from floodmark at former site and datum, from rating curve extended above 2,000 ft³/s (56.6 m³/s) 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.

REMARKS.--Records good. Floodflow is regulated by Olmos flood-control reservoir, capacity, 15,500 acre-ft (19.1 hm³) about 8.5 miles (13.7 km) 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, WRD Texas 1972: 1971(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	109	24	34	25	40	30	88	15	85	157	79
2	18	13	25	64	27	41	30	164	15	119	113	77
3	16	32	23	77	30	43	35	77	14	85	106	78
4	16	14	24	36	27	41	30	85	41	79	104	82
5	16	13	24	36	25	43	35	84	34	75	100	76
6	16	15	24	17	25	42	110	87	27	71	99	131
7	14	13	24	28	29	40	70	225	25	253	98	338
8	13	13	25	25	57	39	40	88	19	546	95	285
9	14	13	26	25	65	40	35	81	15	367	92	88
10	16	13	25	25	42	45	30	78	20	105	90	85
11	16	13	27	30	30	37	30	75	363	93	88	86
12	14	16	29	27	30	34	30	579	808	105	86	81
13	16	124	26	25	74	34	30	122	543	87	79	123
14	16	26	26	25	32	31	30	90	31	85	87	108
15	13	25	24	25	29	32	640	84	38	184	83	83
16	15	25	24	25	27	43	486	80	39	520	80	624
17	15	25	23	25	104	34	332	78	43	237	81	411
18	11	25	25	25	46	33	213	72	41	112	85	124
19	14	24	25	30	33	34	93	69	40	119	80	138
20	14	26	26	110	36	31	92	63	103	119	81	161
21	14	25	28	80	173	31	94	59	101	122	76	148
22	222	23	22	40	124	30	95	42	62	123	73	138
23	19	27	27	30	49	39	99	34	41	126	62	148
24	14	96	28	25	39	99	95	42	102	122	65	146
25	20	51	27	150	38	51	105	40	516	121	63	137
26	21	20	30	100	40	33	111	38	395	129	62	734
27	21	22	28	60	38	35	87	34	93	112	78	2,000
28	22	24	29	30	39	33	86	33	72	109	82	1,030
29	21	23	30	25	------	34	85	32	82	107	76	423
30	25	24	28	25	------	40	89	18	89	105	80	181
31	24	------	26	25	------	30	------	10	------	111	80	------
TOTAL	720	912	802	1,304	1,333	1,212	3,367	2,751	3,827	4,733	2,681	8,343
MEAN	23.2	30.4	25.9	42.1	47.6	39.1	112	88.7	128	153	86.5	278
MAX	222	124	30	150	173	99	640	579	808	546	157	2,000
MIN	11	13	22	17	25	30	30	10	14	71	62	76
AC-FT	1,430	1,810	1,590	2,590	2,640	2,400	6,680	5,460	7,590	9,390	5,320	16,550

CAL YR 1972 TOTAL 13,658.2 MEAN 37.3 MAX 1,510 MIN 7.5 AC-FT 27,090
WTR YR 1973 TOTAL 31,985.0 MEAN 87.6 MAX 2,000 MIN 10 AC-FT 63,440

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 (1.6 km) west of Northeast School, 1.2 miles (1.9 km) upstream from Perrin-Beitel Creek, and 2.7 miles (4.3 km) east of San Antonio International Airport.

DRAINAGE AREA.--137 mi² (355 km²).

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

GAGE.--Water-stage recorder with concrete control. Datum of gage is 684.60 ft (208.67 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 9.52 ft³/s (0.270 m³/s), 0.94 in/yr (23.9 mm/yr), 6,900 acre-ft/yr (8.51 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,100 ft³/s (484 m³/s) July 16, gage height, 13.16 ft (4.01 m), from rating curve extended above 8,000 ft³/s (227 m³/s) as explained below; no flow May 30, June 6.
Period of record: Maximum discharge, 24,900 ft³/s (705 m³/s) May 12, 1972, gage height, 15.22 ft (4.64 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of slope-area measurement of peak flow; no flow at times.
Maximum stage since at least 1853, 23 to 24 ft (7 to 7 m) in October 1913. Flood in September 1921 reached a stage of 18 ft (5 m), and flood of Sept. 27, 1946, reached a stage of 18.2 ft (5.5 m), 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 22.4 mi² (58.0 km²) above this station was partly controlled by three floodwater-retarding structures with a total combined capacity of 8,450 acre-ft (10.4 hm³) below the flood-spillway crests, of which 7,970 acre-ft (9.83 hm³) is floodwater-retarding capacity and 480 acre-ft (0.592 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 4,180 acre-ft (5.15 hm³) of which 196 acre-ft (0.242 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	1.6	.71	.38	2.1	3.1	2.1	1.3	.47	2.6	4.8	.53
2	.41	1.9	.29	1.4	1.0	1.9	2.1	1.3	.34	2.2	3.5	.24
3	1.0	2.7	.11	3.1	.90	1.3	2.3	.90	.06	2.1	1.8	.61
4	.89	.84	.05	2.6	.31	.63	.98	.69	.01	2.4	1.3	.68
5	.41	.26	1.5	1.1	.59	1.4	.69	.57	.01	2.1	1.5	1.6
6	.41	.31	1.6	1.1	1.0	3.8	6.8	.71	0	1.9	1.8	4.8
7	.41	1.2	1.8	.52	.60	2.6	6.0	1.2	.03	19	.90	3.7
8	.23	.60	1.8	.41	2.3	1.1	4.1	.50	.06	315	.75	15
9	.31	.20	.46	.93	3.7	1.1	1.7	.45	.07	41	.52	2.2
10	1.1	.45	.14	.41	3.7	.63	.81	.41	.13	11	.60	1.3
11	.64	.23	.10	1.4	2.7	.63	.63	.41	11	6.1	.63	.97
12	.76	.30	.17	1.7	2.0	.52	1.3	.81	1,250	4.0	.47	6.2
13	.71	5.3	.50	.68	1.1	.83	1.7	.53	52	3.1	4.5	8.1
14	.52	1.9	1.2	.23	1.1	1.7	2.6	.39	7.0	2.4	7.4	5.3
15	.31	.87	1.5	.23	.71	1.3	131	.53	3.5	4.9	1.8	3.8
16	.31	.70	.73	.31	1.1	1.8	170	1.1	2.5	3,770	2.5	595
17	.31	1.3	.31	.63	3.6	1.2	364	.99	3.0	442	2.3	85
18	.52	1.2	.25	.52	2.0	.63	141	.92	1.6	54	2.7	11
19	.23	.49	.51	1.7	1.5	.77	9.7	.75	1.1	24	2.4	7.1
20	.23	.12	.94	.75	2.8	1.9	5.0	.78	4.1	9.9	2.8	5.3
21	.31	1.4	1.8	3.4	11	4.5	3.4	1.0	6.4	6.6	2.5	4.3
22	2.1	1.3	2.7	.54	7.4	1.3	2.9	.82	2.0	4.9	2.2	3.6
23	.52	.51	.43	.76	5.3	1.2	2.5	.83	1.6	4.0	.48	2.8
24	1.6	1.7	.31	.70	2.2	3.8	2.5	.86	1.7	3.1	.41	2.6
25	.1	.94	.32	9.9	1.2	1.3	4.0	.36	466	3.0	.34	2.3
26	.63	.22	.29	3.6	1.0	1.5	3.7	.09	168	2.6	.65	277
27	.71	.08	.31	.99	1.4	2.6	1.8	.04	13	2.4	1.1	4,420
28	.64	.80	.34	.31	1.6	4.3	1.5	.01	6.2	2.3	2.2	90
29	.23	.57	1.6	1.2	------	4.8	1.3	.01	3.8	2.0	4.8	24
30	.22	2.1	.75	1.3	------	2.0	1.3	0	3.1	2.1	4.0	15
31	.22	------	.25	1.2	------	2.0	------	.21	------	2.1	.38	------
TOTAL	18.32	32.09	23.77	44.00	65.91	58.14	879.41	19.47	2,008.78	4,754.8	64.63	5,600.03
MEAN	.59	1.07	.77	1.42	2.35	1.88	29.3	.63	67.0	153	2.08	187
MAX	2.1	5.3	2.7	9.9	11	4.8	364	1.3	1,250	3,770	7.4	4,420
MIN	.22	.08	.05	.23	.31	.52	.63	0	0	1.9	.38	.24
CFSM	.004	.008	.006	.01	.02	.01	.21	.005	.49	1.12	.02	1.37
IN.	.004	.008	.006	.01	.02	.02	.24	.005	.55	1.29	.02	1.52
AC-FT	36	64	47	87	131	115	1,740	39	3,980	9,430	128	11,110

CAL YR 1972 TOTAL 8,140.18 MEAN 22.2 MAX 4,140 MIN .05 CFSM .16 IN 2.21 AC-FT 16,150
WTR YR 1973 TOTAL 13,569.35 MEAN 37.2 MAX 4,420 MIN 0 CFSM .27 IN 3.68 AC-FT 26,910

PEAK DISCHARGE (BASE, 150 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0045	6.52	708	7- 8	1645	7.04	1,050
4-17	1730	7.42	1,440	7-16	1415	13.16	17,100
6-12	1100	9.12	4,700	9-16	1445	7.65	1,740
6-25	1715	7.41	1,430	9-27	0200	12.91	16,200

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 (2.3 km) east of Brooks Air Force Base, and 3.3 miles (5.3 km) upstream from Rosillo Creek.

DRAINAGE AREA.--189 mi² (490 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 526.95 ft (160.61 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 35.6 ft³/s (1.01 m³/s), 25,790 acre-ft/yr (31.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,100 ft³/s (371 m³/s) Sept. 27, gage height, 28.83 ft (8.79 m); minimum, 17 ft³/s (0.48 m³/s) Oct. 10, 11.
Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) Sept. 27, 1973, gage height, 28.83 ft (8.79 m); no flow Aug. 13, 1967.
Maximum stage since at least 1941, that of Sept. 27, 1973. Floods of Sept. 27, 1946, and Aug. 15, 1960, were about equal magnitude. Flood of Aug. 15, 1960, reached a stage of 26.8 ft (8.2 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	33	19	31	24	24	20	25	19	51	45	27
2	18	29	19	43	23	24	20	35	20	51	85	25
3	18	23	20	72	25	24	23	41	22	57	37	24
4	18	28	20	34	24	23	21	26	22	58	33	23
5	18	22	20	25	23	22	20	24	21	47	32	22
6	19	20	21	24	23	22	87	21	22	45	32	37
7	19	20	21	27	24	22	112	37	21	49	31	118
8	18	19	22	23	24	23	32	28	21	720	29	369
9	19	19	23	21	60	22	24	22	21	1,410	28	55
10	17	19	23	21	44	24	22	21	22	116	28	34
11	18	18	24	24	35	24	21	24	67	68	28	29
12	18	19	26	24	29	22	20	198	1,290	60	29	28
13	18	98	25	22	89	21	20	42	802	54	29	29
14	18	37	23	21	44	21	21	26	83	51	39	43
15	18	21	22	21	27	24	527	24	59	60	47	38
16	19	19	22	20	26	48	726	22	50	1,150	31	710
17	19	18	23	20	56	25	143	22	45	2,400	30	958
18	19	18	24	20	67	22	420	22	44	190	43	83
19	19	18	28	22	36	21	82	21	42	106	36	51
20	19	18	25	27	31	20	42	21	60	72	31	46
21	18	18	23	142	120	20	33	21	150	56	29	53
22	47	18	24	40	153	21	31	21	60	49	28	38
23	45	18	23	27	94	27	30	21	46	44	26	37
24	32	60	25	24	36	103	29	21	47	41	26	34
25	20	53	24	146	30	36	28	22	954	38	25	33
26	20	25	23	114	27	24	64	23	1,040	36	24	211
27	20	21	22	36	25	22	36	22	121	36	28	8,080
28	20	19	23	27	24	21	28	21	68	35	36	560
29	21	19	23	24	------	21	26	21	61	34	44	131
30	19	19	23	25	------	26	25	20	55	33	38	84
31	18	------	24	24	------	23	------	20	------	33	31	------
TOTAL	637	786	707	1,171	1,259	822	2,733	935	5,355	7,250	1,058	12,010
MEAN	20.5	26.2	22.8	37.8	45.0	26.5	91.1	30.2	179	234	34.1	400
MAX	47	98	28	146	153	103	726	198	1,290	2,400	85	8,080
MIN	17	18	19	20	23	20	20	20	19	33	24	22
AC-FT	1,260	1,560	1,400	2,320	2,500	1,630	5,420	1,850	10,620	14,380	2,100	23,820

CAL YR 1972 TOTAL 18,752 MEAN 51.2 MAX 3,470 MIN 11 AC-FT 37,190
WTR YR 1973 TOTAL 34,723 MEAN 95.1 MAX 8,080 MIN 17 AC-FT 68,870

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0800	13.35	1,100	7- 9	0500	15.78	2,040
4-18	0900	12.39	788	7-17	0100	22.95	5,940
6-12	2300	17.48	2,820	9-16	2300	18.46	3,230
6-26	0100	16.56	2,400	9-27	1100	28.83	13,100

08179000 Medina River near Pipe Creek, Tex.

LOCATION.--Lat 29°40'33", long 98°58'34", Bandera County, on left bank 600 ft (183 m) upstream from Bandera Falls, 0.6 mile (1.0 km) upstream from Red Bluff Creek, and 4.1 miles (6.6 km) southwest of Pipe Creek.

DRAINAGE AREA.--474 mi² (1,228 km²).

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 (325.33 m) above mean sea level, unadjusted. December 1922 to June 1935, water-stage recorder at site 1.9 miles (3.1 km) upstream at different datum.

AVERAGE DISCHARGE.--33 years (1922-34, 1952-73), 122 ft³/s (3.46 m³/s), 88,390 acre-ft/yr (109 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 72,900 ft³/s (2,060 m³/s) July 15, gage height, 37.3 ft (11.4 m), from floodmark; minimum, 66 ft³/s (1.87 m³/s) Dec. 31, Jan. 1.
Period of record: Maximum discharge, 72,900 ft³/s (2,060 m³/s) July 15, 1973, gage height, 37.3 ft (11.4 m), from floodmark, from rating curve extended above 32,000 ft³/s (906 m³/s) on basis of slope-area measurement of 64,000 ft³/s (1,810 m³/s); minimum, 0.2 ft³/s (5.7 dm³/s) July 14-16, 1956.
Maximum stage since at least 1880, about 43 ft (13 m) in 1919, present site and datum, from information by local resident.

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

REVISIONS (WATER YEARS).--WSP 1312: 1925(M). WSP 1923: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	100	90	66	94	179	128	145	108	240	790	205
2	106	100	90	75	92	176	131	140	194	228	664	195
3	106	100	90	82	92	171	128	133	160	222	602	188
4	104	98	86	79	90	166	124	126	145	219	543	182
5	102	94	90	79	90	166	115	128	136	213	517	176
6	100	96	86	77	90	168	136	131	128	207	493	188
7	98	94	84	75	90	166	140	163	122	201	469	205
8	96	92	88	73	96	163	128	145	117	1,260	449	195
9	94	90	88	71	100	160	124	138	113	1,990	425	182
10	92	88	88	79	100	168	124	133	115	796	413	176
11	92	88	86	79	100	168	126	133	170	600	402	170
12	90	90	88	75	100	160	124	155	1,990	514	384	166
13	88	164	86	73	100	160	124	148	790	462	374	162
14	88	104	84	73	100	158	126	140	495	438	360	274
15	88	96	82	71	98	155	143	133	406	23,000	352	202
16	86	106	80	71	96	153	153	131	351	10,000	342	186
17	86	100	79	71	104	150	173	128	322	4,800	332	180
18	86	92	75	71	111	148	155	128	304	2,800	310	166
19	82	96	75	70	111	145	153	128	280	2,000	300	162
20	80	94	75	73	108	143	145	128	263	1,650	291	158
21	92	94	73	71	119	143	145	124	253	1,440	282	154
22	690	92	70	70	145	143	145	117	231	1,270	273	152
23	147	92	71	70	171	145	145	108	219	1,150	258	150
24	122	108	75	70	190	153	150	108	219	1,040	246	146
25	111	106	75	98	187	145	148	108	301	950	235	146
26	108	100	75	100	184	145	158	111	394	880	228	148
27	111	98	73	100	182	140	148	106	332	820	222	508
28	113	94	73	98	179	140	145	100	297	795	220	282
29	111	92	75	94	------	140	143	98	273	728	218	220
30	108	92	73	94	------	138	143	94	256	682	220	198
31	104	------	68	94	------	133	------	90	------	741	212	------
TOTAL	3,687	2,950	2,491	2,442	3,319	4,788	4,170	3,898	9,484	62,336	11,426	5,822
MEAN	119	98.3	80.4	78.8	119	154	139	126	316	2,011	369	194
MAX	690	164	90	100	190	179	173	163	1,990	23,000	790	508
MIN	80	88	68	66	90	133	115	90	108	201	212	146
AC-FT	7,310	5,850	4,940	4,840	6,580	9,500	8,270	7,730	18,810	123,600	22,660	11,550

CAL YR 1972 TOTAL 62,626 MEAN 171 MAX 2,920 MIN 44 AC-FT 124,200
WTR YR 1973 TOTAL 116,813 MEAN 320 MAX 23,000 MIN 66 AC-FT 231,700

PEAK DISCHARGE (BASE, 1,600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0800	8.20	1,980		about		
6-12	1400	10.22	3,840	7-15	0500	a37.3	72,900
7- 8	2100	11.15	4,860		about		
7- 9	0530	10.30	3,930	7-16	1000	a26.1	33,700

a From floodmark.
NOTE.--No gage-height record July 15-19.

08179100 Red Bluff Creek near Pipe Creek, Tex.

LOCATION.--Lat 29°40'51", long 98°57'19", Bandera County, on left bank 0.8 mile (1.3 km) upstream from bridge on Farm Road 1283, 1.8 miles (2.9 km) downstream from Pipe Creek, 1.9 miles (3.1 km) upstream from mouth, and 3.2 miles (5.1 km) south of town of Pipe Creek.

DRAINAGE AREA.--56.3 mi² (146 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,107.2 ft (337.5 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--17 years, 11.4 ft³/s (0.323 m³/s), 8,260 acre-ft/yr (10.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) July 15, gage height, 12.60 ft (3.84 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) as explained below; no flow for many days.
Period of record: Maximum discharge, 46,900 ft³/s (1,330 m³/s) Sept. 27, 1964, gage height, 22.64 ft (6.90 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) 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 (5 m) was reached in July 1937. Flood in October 1953 reached a stage of 13.8 ft (4.2 m).

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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0				0	9.8	.21	19	0	20	65	5.4
2	0				0	9.1	.10	15	0	17	57	1.3
3	0				0	8.7	0	12	0	14	52	.71
4	0				0	8.6	.12	11	0	13	49	.76
5	0				0	7.5	.05	11	0	13	46	.64
6	0				0	7.0	1.1	13	0	11	44	24
7	0				0	5.7	3.9	38	0	9.5	42	12
8	0				0	5.2	.52	16	0	130	39	4.3
9	0				0	4.9	.21	11	0	125	38	1.1
10	0				0	6.8	.15	9.8	0	100	37	.44
11	0				0	5.6	.09	9.7	0	83	35	.13
12	0				0	4.3	.06	9.7	191	72	34	.01
13	0				0	4.3	.06	7.6	60	62	33	0
14	0				0	3.7	.07	6.5	40	57	32	0
15	0				0	3.0	2.5	6.1	29	1,950	30	.17
16	0				0	2.5	6.7	5.7	23	2,660	29	224
17	0				0	2.0	88	5.0	22	882	28	84
18	0				0	1.9	55	4.4	19	539	26	60
19	0				0	1.6	51	3.7	13	381	25	50
20	0				0	.97	45	2.9	11	298	23	45
21	0				0	.95	40	2.1	11	240	21	43
22	29				1.7	.77	38	1.6	7.6	198	14	37
23	.03				5.7	1.4	36	1.4	6.6	165	8.5	35
24	0				6.7	4.0	36	1.5	7.4	136	7.6	32
25	0				7.2	1.8	32	1.3	23	112	5.2	28
26	0				7.7	.77	35	1.5	40	95	3.2	45
27	0				8.3	.62	26	.86	32	120	2.9	104
28	0				9.3	.57	23	.47	28	103	1.7	84
29	0				------	.63	21	.25	24	80	3.2	69
30	0				------	.37	21	.07	21	70	3.0	62
31	0	------			------	.17	------	0	------	76	4.6	------
TOTAL	29.03	0	0	0	46.6	115.22	562.84	228.15	608.6	8,831.5	838.9	1,052.96
MEAN	.94	0	0	0	1.66	3.72	18.8	7.36	20.3	285	27.1	35.1
MAX	29	0	0	0	9.3	9.8	88	38	191	2,660	65	224
MIN	0	0	0	0	0	.17	0	0	0	9.5	1.7	0
AC-FT	58	0	0	0	92	229	1,120	453	1,210	17,520	1,660	2,090

CAL YR 1972 TOTAL 1,328.87 MEAN 3.63 MAX 258 MIN 0 AC-FT 2,640
WTR YR 1973 TOTAL 12,313.80 MEAN 33.7 MAX 2,660 MIN 0 AC-FT 24,420

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-17	1030	4.73	278	7-16	1300	11.23	7,960
6-12	0300	5.86	670	7-27	2000	4.70	456
7- 8	0730	4.76	285	9-16	1230	6.67	1,640
7-15	0500	12.60	10,900				

08179500 Medina Lake near San Antonio, Tex.

LOCATION.--Lat 29°32'24", long 98°56'01", Medina County, at gate operating platform, 576 ft (176 m) from left end of Medina Dam on Medina River, 4.2 miles (6.8 km) upstream from Medina diversion dam, 13 miles (20.9 km) north of Castroville, 28 miles (45.1 km) west of San Antonio, and at mile 70.4 (113 km).

DRAINAGE AREA.--634 mi² (1,640 km²).

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 (2.38 m) below mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents, 285,900 acre-ft (353 hm³) July 15, gage height, 1,077.5 ft (328.4 m) from floodmark; minimum observed, 236,900 acre-ft (292 hm³) Feb. 12, 17, 18, gage height, 1,068.9 ft (325.8 m).
Period of record: Maximum contents observed, 288,800 acre-ft (356 hm³) Sept. 16, 1919, gage height, 1,078.0 ft (328.6 m); minimum observed since lake first filled, 780 acre-ft (0.96 hm³) about Apr. 11, 1948, gage height, 944.0 ft (287.7 m).

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 (268 m) long with a 3-foot-wide (1-meter) 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 (60,700 hm²). Maximum irrigated, 35,200 acres (14,200 hm²) in 1946; 10,719 acres (4,338 hm²) irrigated in 1973. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251,700	248,800	244,700	240,900	237,900	238,400	240,400	247,600	247,600	255,700	257,500	254,600
2	251,100	248,800	244,700	240,900	237,900	238,400	240,400	248,200	247,600	255,700	257,500	254,600
3	251,100	249,400	244,700	240,900	237,900	238,900	240,400	248,200	247,600	255,700	256,900	254,600
4	251,100	248,800	244,700	240,900	237,900	238,900	240,400	248,200	247,600	255,700	256,900	254,600
5	250,500	248,800	244,700	240,900	237,900	238,900	240,400	248,200	247,100	255,200	256,300	254,000
6	250,500	248,200	244,200	240,900	237,400	239,400	240,400	248,200	247,100	255,200	256,300	254,000
7	250,500	248,200	244,200	240,900	237,400	239,400	240,400	248,200	247,100	255,200	256,300	254,600
8	250,000	248,200	244,200	240,900	237,400	239,400	240,400	248,800	246,500	256,900	256,300	254,600
9	250,000	247,600	243,600	240,900	237,400	239,400	240,400	248,800	246,500	259,800	256,300	254,600
10	250,000	247,600	243,600	240,400	237,400	239,400	240,400	248,800	246,500	259,200	255,700	254,600
11	249,400	247,600	243,600	240,400	237,400	239,400	240,400	248,800	247,100	258,600	255,700	254,600
12	249,400	247,100	243,600	239,900	236,900	239,900	240,400	248,800	250,500	258,100	255,700	254,600
13	249,400	247,100	243,600	239,900	237,400	239,900	240,400	249,400	254,000	257,500	255,700	254,000
14	249,400	247,100	243,600	239,400	237,400	239,900	240,400	249,400	255,200	256,900	255,700	254,000
15	248,800	247,100	243,000	239,400	237,400	239,900	240,900	249,400	255,700	285,900	255,700	258,600
16	248,800	247,100	243,000	239,400	237,400	239,900	241,900	249,400	256,300	280,600	255,200	262,700
17	248,800	246,500	243,000	239,400	236,900	240,400	243,600	249,400	256,300	271,400	255,200	259,800
18	248,200	246,500	242,400	239,400	236,900	240,400	244,200	249,400	256,300	265,600	255,200	258,100
19	248,200	246,500	242,400	238,900	237,400	239,900	244,700	249,400	256,300	263,300	255,200	256,900
20	248,200	246,500	242,400	238,900	237,400	239,900	245,300	249,400	256,300	261,500	255,200	256,300
21	247,600	246,500	242,400	238,900	237,400	239,900	245,900	248,800	256,300	261,000	255,200	255,700
22	249,400	246,500	242,400	238,900	237,400	239,900	245,900	248,800	255,700	259,800	255,200	255,200
23	250,000	245,900	241,900	238,400	237,400	240,400	246,500	248,800	255,700	259,200	255,200	255,200
24	250,000	245,900	241,900	238,400	237,900	240,400	246,500	248,800	255,700	259,200	254,600	255,200
25	250,000	245,900	241,900	238,900	237,900	240,400	247,100	248,800	255,700	258,600	254,600	254,600
26	250,000	245,900	241,400	238,400	238,400	240,400	247,100	248,800	255,700	258,100	254,600	254,600
27	249,400	245,900	241,400	238,400	238,400	240,400	247,600	248,800	256,300	258,100	254,600	255,200
28	249,400	245,900	241,400	238,400	238,400	240,400	247,600	248,200	256,300	258,100	254,600	255,700
29	249,400	245,900	241,400	238,400	------	240,400	247,600	248,200	256,300	257,500	254,600	255,700
30	249,400	245,300	240,900	238,400	------	240,400	247,600	248,200	256,300	257,500	254,600	255,700
31	249,400	------	240,900	238,400	------	240,400	------	248,200	------	257,500	254,600	------
(†)	1,071.2	1,070.5	1,069.7	1,069.2	1,069.2	1,069.6	1,070.9	1,071.0	1,072.4	1,072.6	1,072.1	1,072.3
(*)	-2,300	-4,100	-4,400	-2,500	0	+2,000	+7,200	+600	+8,100	+1,200	-2,900	+1,100
MAX	251,700	249,400	244,700	240,900	238,400	240,400	247,600	249,400	256,300	285,900	257,500	262,700
MIN	247,600	245,300	240,900	238,400	236,900	238,400	240,400	247,600	246,500	255,200	254,600	254,000

CAL YR 1972..... * -13,700 MAX 259,800 MIN 235,900
WTR YR 1973..... * +4,000 MAX 285,900 MIN 236,900

† 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 (16 m) upstream from center pier of double-barrel flume, 350 ft (107 m) downstream from county highway bridge, 1,900 ft (579 m) downstream from head of canal and diversion dam, 4.6 miles (7.4 km) downstream from Medina Dam, 4.7 miles (7.6 km) north of Riomedina, and 25 miles (40 km) northwest of San Antonio.

PERIOD OF RECORD.--March 1922 to May 1934, July 1957 to current year.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--27 years (1922-33, 1957-73), 39.7 ft³/s (1.12 m³/s), 28,760 acre-ft/yr (35.5 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 216 ft³/s (6.12 m³/s) 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 (579 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	5.8	.08	11	28	9.4	28	6.0	141	30	.08	29
2	51	.03	.08	.16	28	.11	28	34	143	20	.07	11
3	29	.02	.08	.11	28	.08	28	28	144	.12	26	16
4	34	0	.09	.09	28	.08	28	28	147	.11	39	40
5	44	0	19	.12	28	.08	28	28	144	15	38	36
6	52	0	28	.14	28	.09	7.3	8.3	138	28	36	35
7	66	8.4	28	.14	28	10	0	6.9	135	28	35	25
8	53	27	18	.14	16	28	0	41	132	12	35	20
9	63	27	.06	.13	.04	28	0	60	137	.05	38	12
10	63	27	.10	.11	.02	10	0	76	117	.04	46	31
11	63	27	.09	.11	.01	.09	0	76	97	10	24	37
12	62	26	.09	.14	.01	8.5	0	12	26	40	28	38
13	62	26	.08	.14	.04	28	0	0	0	50	47	39
14	59	26	.08	.12	.11	28	0	0	0	28	51	40
15	59	26	10	.11	.15	32	0	12	0	15	26	26
16	67	26	28	.14	.15	27	0	28	0	6.8	27	7.0
17	75	17	28	.17	.12	.08	0	35	0	3.2	27	.02
18	73	.01	28	.12	.03	.06	0	53	0	1.6	27	.03
19	72	.01	20	.15	.02	13	0	69	18	.69	27	.09
20	73	0	.08	.16	.05	36	0	74	27	.20	27	.02
21	74	0	.10	.14	.08	46	0	92	.08	0	35	.02
22	47	0	.09	27	.03	57	0	128	.07	0	39	.02
23	25	0	.08	40	0	34	0	139	.09	34	43	.02
24	26	.02	18	31	0	4.5	0	124	.10	42	53	.04
25	26	0	29	9.9	0	.11	0	119	.13	29	59	.05
26	10	0	28	.08	0	.11	0	122	.04	36	66	.23
27	.01	0	40	.09	18	.11	0	124	.03	49	64	.01
28	0	18	42	.22	32	.13	0	136	.02	37	57	.05
29	10	29	29	8.8	------	12	0	143	9.6	27	54	.12
30	33	19	29	28	------	37	0	144	57	36	45	.12
31	28	------	28	28	------	32	------	142	------	28	41	------
TOTAL	1,423.01	335.29	451.18	186.73	262.86	481.53	147.3	2,088.2	1,613.16	606.81	1,160.15	442.84
MEAN	45.9	11.2	14.6	6.02	9.39	15.5	4.91	67.4	53.8	19.6	37.4	14.8
MAX	75	29	42	40	32	57	28	144	147	50	66	40
MIN	0	0	.06	.08	0	.06	0	0	0	0	.07	.01
AC-FT	2,820	665	895	370	521	955	292	4,140	3,200	1,200	2,300	878

CAL YR 1972 TOTAL 17,364.80 MEAN 47.4 MAX 196 MIN 0 AC-FT 34,440
WTR YR 1973 TOTAL 9,199.06 MEAN 25.2 MAX 147 MIN 0 AC-FT 18,250

NOTE.--No gage-height record Apr. 5 to May 15.

08180500 Medina River near Riomedina, Tex.

LOCATION.--Lat 29°29'53", long 98°54'16", Medina County, on left bank 233 ft (71 m) upstream from bridge at Haby's Crossing, 0.9 mile (1.4 km) downstream from Bexar, Medina, and Atascosa Counties Water Control and Improvement District No. 1 diversion dam, 4.2 mile (6.8 km) northwest of Riomedina, 10.0 miles (16.1 km) north of Castroville, 10.4 miles (16.7 km) upstream from San Geronimo Creek, and at mile 66.4 (106.8 km).

DRAINAGE AREA.--650 mi² (1,684 km²), 634 mi² (1,642 km²) above dam forming Medina Lake.

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 September 1973 (discontinued).

GAGE (revised).--Nonrecording gage. Datum of gage is 857.6 ft (261.4 m) 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 (1.4 km) upstream at different datum. January 1953 to July 15, 1973, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--32 years, 49.0 ft³/s (1.39 m³/s), 35,500 acre-ft/yr (43.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,600 ft³/s (810 m³/s) July 15, gage height, 23.2 ft (7.1 m), from floodmark; minimum, 30 ft³/s (0.85 m³/s) Jan. 23, 24.
Period of record: Maximum discharge, 28,600 ft³/s (810 m³/s) July 15, 1973, gage height, 23.2 ft (7.1 m), from floodmark; no flow at times.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Flow regulated by Medina Lake (station 08179500) 5 miles (8 km) upstream and diversion dam 0.9 mile (1.4 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	75	78	64	34	60	50	105	33	301	1,100	174
2	41	86	81	80	34	66	52	70	32	295	1,050	177
3	49	89	82	81	32	92	57	74	32	301	928	180
4	60	87	81	78	34	98	46	74	32	283	726	160
5	49	86	70	80	34	109	49	75	33	258	670	154
6	45	87	55	76	34	87	65	91	32	230	618	138
7	40	81	45	78	37	82	75	107	32	212	572	189
8	37	60	60	75	43	62	76	69	33	506	534	189
9	37	60	80	75	60	61	70	56	33	1,510	502	171
10	37	60	82	76	66	74	74	44	33	1,390	485	162
11	35	60	80	76	82	84	75	41	35	1,060	471	149
12	35	61	81	74	92	80	75	71	58	836	446	128
13	35	69	80	75	81	64	76	109	111	668	408	122
14	35	60	81	75	78	60	80	110	250	597	394	122
15	35	60	74	75	66	62	151	91	334	21,400	394	120
16	35	61	51	76	66	56	146	76	370	24,700	387	6,100
17	35	65	51	76	70	78	163	74	394	11,700	356	2,060
18	34	84	54	76	70	82	151	62	385	5,780	327	1,100
19	33	84	59	75	70	78	143	50	352	3,850	321	822
20	33	82	80	76	76	50	137	42	331	3,120	309	569
21	35	84	78	74	86	40	128	41	340	2,500	294	464
22	34	81	78	59	109	31	124	38	313	1,990	276	387
23	33	84	78	33	109	33	120	38	286	1,750	249	324
24	32	89	68	31	109	70	118	37	280	1,650	213	306
25	33	86	49	69	98	70	116	37	334	1,500	189	270
26	33	84	51	81	98	70	112	37	409	1,300	174	249
27	34	86	41	82	98	72	107	36	418	1,200	168	436
28	68	74	32	78	45	75	109	36	406	1,150	162	580
29	82	56	41	70	------	69	110	35	376	1,070	160	492
30	60	57	49	50	------	49	112	34	295	982	171	460
31	62	------	41	48	------	45	------	33	------	1,000	177	------
TOTAL	1,313	2,238	2,011	2,192	1,911	2,109	2,967	1,893	6,402	95,089	13,231	16,954
MEAN	42.4	74.6	64.9	70.7	68.3	68.0	98.9	61.1	213	3,067	427	565
MAX	82	89	82	82	109	109	163	110	418	24,700	1,100	6,100
MIN	32	56	32	31	32	31	46	33	32	212	160	120
AC-FT	2,600	4,440	3,990	4,350	3,790	4,180	5,890	3,750	12,700	188,600	26,240	33,630

CAL YR 1972 TOTAL 36,836 MEAN 101 MAX 1,500 MIN 26 AC-FT 73,060
WTR YR 1973 TOTAL 148,310 MEAN 406 MAX 24,700 MIN 31 AC-FT 294,200

NOTE.--No gage-height record Feb. 1 to Mar. 7, July 15-26.

08180800 Medina River near Somerset, Tex.

LOCATION.--Lat 29°15'45", long 98°34'56", Bexar County, on left bank 300 ft (91 m) upstream from bridge on State Highway 16, 2.1 miles (3.4 km) upstream from Elm Creek, 4.9 miles (7.9 km) downstream from Medio Creek, 5.2 miles (8.4 km) northeast of Somerset, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--967 mi² (2,505 km²), 634 mi² (1,642 km²) above dam forming Medina Lake.

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

GAGE.--Water-stage recorder. Datum of gage is 493.56 ft (150.44 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 30,500 ft³/s (864 m³/s) July 17, gage height, 29.39 ft (8.96 m); minimum, 44 ft³/s (1.25 m³/s) June 8, 9.
Period of record: Maximum discharge, 30,500 ft³/s (864 m³/s) July 17, 1973, gage height, 29.39 ft (8.96 m); minimum, 21 ft³/s (0.59 m³/s) July 23, 24, 1971.
Maximum stage since about 1890, that of July 17, 1973.

REMARKS.--Records good. Flow regulated by Medina Lake (station 08179500) 56 miles (90 km) upstream and by Medina Diversion Lake, capacity, 4,500 acre-ft (5.55 hm³). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	91	91	75	96	121	96	157	53	354	1,050	252
2	72	98	90	90	92	111	83	155	53	328	1,130	246
3	81	95	101	110	87	120	86	145	50	324	1,110	244
4	74	106	104	114	83	118	91	131	49	325	995	254
5	71	102	105	110	81	118	91	123	47	313	895	233
6	77	98	115	106	81	117	86	121	47	301	833	221
7	74	100	116	105	81	118	98	122	48	271	778	234
8	71	105	96	104	92	118	106	134	45	262	722	260
9	67	94	82	103	99	116	112	125	46	378	675	254
10	63	84	97	103	108	109	112	106	47	725	643	249
11	63	77	123	105	111	103	107	95	49	1,080	614	245
12	64	76	115	105	110	110	104	93	317	1,010	602	227
13	62	80	112	103	112	113	106	98	290	857	579	214
14	60	89	116	102	202	112	109	110	137	723	558	208
15	61	93	120	100	127	100	236	124	161	656	532	202
16	62	83	114	100	114	101	505	130	242	10,400	532	253
17	61	82	103	103	118	100	375	115	292	24,800	510	5,560
18	61	81	84	109	123	92	666	105	324	12,500	489	2,990
19	61	91	80	112	119	104	378	98	337	7,450	466	1,640
20	63	109	82	107	114	112	288	84	344	4,960	447	1,170
21	63	112	87	107	128	110	248	75	325	3,730	427	947
22	74	107	107	107	177	89	225	68	338	2,950	412	810
23	82	113	107	108	205	81	208	65	320	2,460	384	706
24	78	125	103	106	161	86	197	64	308	2,110	363	626
25	69	125	103	105	140	95	193	63	393	1,840	335	564
26	68	120	92	128	131	110	200	63	616	1,660	308	583
27	73	114	78	120	131	110	186	61	428	1,480	291	3,450
28	68	108	76	123	126	110	173	61	415	1,340	273	1,380
29	69	115	74	120	------	110	160	59	405	1,270	275	968
30	78	107	70	110	------	112	156	55	399	1,180	262	862
31	90	------	70	105	------	111	------	54	------	1,090	257	------
TOTAL	2,155	2,980	3,013	3,305	3,349	3,337	5,781	3,059	6,925	89,127	17,747	26,052
MEAN	69.5	99.3	97.2	107	120	108	193	98.7	231	2,875	572	868
MAX	90	125	123	128	205	121	666	157	616	24,800	1,130	5,560
MIN	60	76	70	75	81	81	83	54	45	262	257	202
AC-FT	4,270	5,910	5,980	6,560	6,640	6,620	11,470	6,070	13,740	176,800	35,200	51,670

CAL YR 1972 TOTAL 59,388 MEAN 162 MAX 1,810 MIN 57 AC-FT 117,800
WTR YR 1973 TOTAL 166,830 MEAN 457 MAX 24,800 MIN 45 AC-FT 330,900

08181400 Helotes Creek at Helotes, Tex.

LOCATION.--Lat 29°34'42", long 98°41'29", Bexar County, 42 ft (13 m) left of and 44 ft (13 m) downstream from centerline of bridge on State Highway 16, 0.1 mile (0.2 km) northwest of Helotes, and 8.6 miles (13.8 km) upstream from mouth.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,014.82 ft (309.32 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 5.10 ft³/s (0.144 m³/s), 4.61 in/yr (117.1 mm/yr), 3,690 acre-ft/yr (4.55 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,680 ft³/s (217 m³/s) July 16, gage height, 10.8 ft (3.3 m), from floodmark; no flow at times.
Period of record: Maximum discharge, 7,680 ft³/s (217 m³/s) July 16, 1973, gage height, 10.8 ft (3.3 m), from floodmark, from rating curve extended above 5,000 ft³/s (142 m³/s); no flow most of time.
Maximum stage since 1923, 13.7 ft (4.2 m) in 1927, from information by local resident.
REVISIONS.--Figures of maximum discharge for the water years 1970 and 1972 have been revised to 2,040 ft³/s (57.8 m³/s) May 26, 1970, gage height, 5.43 ft (1.66 m), and 1,740 ft³/s (49.3 m³/s) May 7, 1972, gage height, 5.10 ft (1.55 m), superseding figures published in WRD Texas, 1970 and 1972.

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 1970: 1969(M). WRD Texas 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	23	2.4	0	4.3	9.9	4.4	21	1.8	23	17	1.4
2	0	4.1	2.3	.27	3.0	8.8	3.9	18	1.7	19	15	1.4
3	0	4.1	2.1	.83	2.8	6.1	3.9	15	1.2	14	13	1.0
4	0	3.0	1.6	.10	2.3	6.3	3.8	11	1.2	12	12	.72
5	0	2.3	1.9	0	2.4	5.8	3.6	12	.94	9.8	11	.40
6	0	2.3	1.5	0	2.4	5.6	5.7	12	.88	8.4	10	3.1
7	0	1.5	1.8	0	2.0	5.1	5.4	12	.48	7.6	9.2	5.1
8	0	2.1	1.4	0	2.9	5.1	4.5	8.5	.27	150	9.2	3.1
9	0	1.8	1.4	0	2.5	4.8	4.4	7.5	.37	99	8.0	1.6
10	0	1.1	1.3	.31	3.0	5.0	3.9	7.5	.82	74	8.0	1.1
11	0	.98	1.3	.33	2.7	4.7	3.9	7.5	1.6	58	7.5	.68
12	0	1.5	1.5	.17	2.3	4.8	3.9	18	81	46	7.0	.38
13	0	19	1.1	.11	2.1	4.9	3.8	7.0	19	38	6.8	.22
14	0	4.7	.90	.05	1.8	4.7	4.3	6.5	12	36	7.0	1.5
15	0	5.1	.81	0	1.9	5.2	176	5.6	8.0	43	7.1	.48
16	0	5.2	.66	0	1.6	4.7	115	5.6	6.2	950	6.5	213
17	0	5.2	.65	.11	3.1	3.5	167	5.6	28	264	4.9	72
18	0	4.9	.72	0	3.0	3.2	130	5.2	11	196	5.1	44
19	0	4.1	.57	0	3.0	3.0	103	4.8	8.0	135	4.8	31
20	0	4.4	.26	0	2.8	3.0	77	4.5	8.0	94	5.0	26
21	.01	3.9	.18	0	4.4	3.0	63	4.5	6.3	67	4.5	22
22	5.8	3.4	.06	0	6.5	2.7	52	4.2	5.2	50	4.2	19
23	.88	2.9	.13	0	10	2.9	48	3.2	5.0	40	3.6	25
24	.17	5.1	0	0	11	5.2	43	3.3	5.0	33	3.3	21
25	0	4.1	0	3.1	12	3.6	38	3.0	54	29	3.0	19
26	0	2.2	0	3.7	12	3.2	32	3.0	79	26	3.0	105
27	0	2.5	0	3.7	9.6	3.0	27	2.6	63	23	2.7	174
28	0	2.3	0	3.1	11	10	24	2.3	46	21	2.4	138
29	0	2.6	0	3.5	------	7.6	23	2.0	35	19	2.4	90
30	0	2.4	0	3.3	------	5.5	22	2.0	28	14	2.4	63
31	0	------	0	3.2	------	4.3	------	1.8	------	19	2.2	------
TOTAL	6.86	131.78	26.54	25.88	128.4	155.2	1,199.4	226.7	518.96	2,617.8	207.8	1,084.18
MEAN	.22	4.39	.86	.83	4.59	5.01	40.0	7.31	17.3	84.4	6.70	36.1
MAX	5.8	23	2.4	3.7	12	10	176	21	81	950	17	213
MIN	0	.98	0	0	1.6	2.7	3.6	1.8	.27	7.6	2.2	.22
CFSM	.01	.29	.06	.06	.31	.33	2.67	.49	1.15	5.63	.45	2.41
IN.	.02	.33	.07	.06	.32	.38	2.97	.56	1.29	6.49	.52	2.69
AC-FT	14	261	53	51	255	308	2,380	450	1,030	5,190	412	2,150
(††)	2.76	4.62	.37	2.93	2.70	2.72	7.86	1.43	9.41	10.74	.65	12.26

CAL YR 1972 TOTAL 1,029.43 MEAN 2.81 MAX 179 MIN 0 CFSM .19 IN 2.55 AC-FT 2,040 †† 38.32
WTR YR 1973 TOTAL 6,329.50 MEAN 17.3 MAX 950 MIN 0 CFSM 1.15 IN 15.70 AC-FT 12,550 †† 58.45

PEAK DISCHARGE (BASE, 140 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-15	0530	4.26	984	7-16	0730	a10.8	7,680
4-17	0930	3.45	435	9-16	1030	4.44	1,150
6-12	0445	3.10	290	9-26	2115	4.48	1,180
7- 8	0645	4.07	826				

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

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 (39 m) downstream from centerline of bridge on Billy Mitchell Road at Kelly Air Force Base, 0.15 mile (0.24 km) upstream from mouth, and 2.0 miles (3.2 km) southeast of intersection of U.S. Highway 90 West and Loop 13.

DRAINAGE AREA.--1.19 mi² (3.08 km²).

PERIOD OF RECORD.--March 1969 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 657.57 ft (200.43 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 314 ft³/s (8.89 m³/s) Sept. 26, gage height, 3.45 ft (1.05 m); no flow at times.
Period of record: Maximum discharge, 555 ft³/s (15.7 m³/s) May 14, 1970, gage height, 4.44 ft (1.35 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of formula, $Q=CLH^{3/2}$; no flow at times each year.
No historical flood information is available.

REMARKS.--Records fair. Recording rain gage located at station with one additional rain gage located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	3.6	.02	0	.01	.02	.06	.06	.02	.02	.14	.02
2	.02	.01	.02	.14	0	.02	.06	.62	.02	.42	.06	.02
3	.02	.02	.02	1.9	0	.02	.02	.06	.02	.21	.06	.02
4	.02	.02	.02	0	.01	.02	.02	.06	.02	.09	.06	.02
5	.02	.02	.02	0	0	.02	.02	.06	.02	.14	.06	.02
6	.02	.02	.02	0	0	.02	3.6	.06	0	.14	.02	2.6
7	.02	.02	.02	0	0	.02	.14	.06	0	.15	.02	2.6
8	.02	.02	.02	0	.71	.02	.06	.06	0	13	.02	.65
9	.02	.02	.02	0	.52	.02	.06	.06	.28	3.3	.02	.06
10	.02	.02	.01	0	.03	.02	.41	.06	.01	.14	.02	.06
11	.02	.02	.01	0	0	.02	.41	.09	2.7	.06	.02	.14
12	.02	.02	.01	0	0	.02	.14	1.2	27	.06	.02	.06
13	.02	1.6	.01	0	11	.02	.14	.14	.06	.06	.02	.14
14	.02	.02	0	0	0	.19	.14	.06	.06	.03	.01	.06
15	.01	.02	0	0	0	.38	21	.06	.02	1.9	.02	.06
16	0	.02	0	0	0	.01	.33	.06	.02	5.0	.02	11
17	0	.02	0	0	2.4	.02	.91	.06	0	.97	.03	.14
18	0	.02	0	0	.03	.02	.06	.06	.01	1.0	.14	.06
19	0	.02	0	0	.02	.02	.06	.02	.02	1.3	.14	.06
20	0	.02	0	0	.01	.02	.02	.02	1.4	1.6	.06	.06
21	0	.02	0	0	3.9	.02	.02	.02	2.0	.41	.02	.06
22	2.0	.02	0	0	2.7	.02	.02	.02	.08	.06	.02	.06
23	0	.02	.02	0	.04	.02	.02	.02	.06	.03	.02	.06
24	0	2.6	0	0	.02	1.3	.02	.02	.61	.03	.02	.06
25	0	.04	0	5.4	.02	.02	.27	.02	23	.06	.02	.06
26	.01	.02	0	0	.02	.03	.14	.02	.55	.06	.02	25
27	.02	.02	0	0	.02	.02	.06	.02	.08	.06	.02	37
28	.02	.02	.02	0	.02	.03	.06	.02	.02	.06	.02	1.0
29	.02	.02	.02	0	------	.20	.06	.02	.02	.06	.66	.60
30	.01	.02	0	0	------	.25	.06	.02	.02	.06	.77	.60
31	.01	------	0	.02	------	.06	------	.02	------	.27	.05	------
TOTAL	2.38	8.35	.28	7.46	21.48	2.89	28.39	3.15	58.12	30.75	2.60	82.35
MEAN	.077	.28	.009	.24	.77	.093	.95	.10	1.94	.99	.084	2.75
MAX	2.0	3.6	.02	5.4	11	1.3	21	1.2	27	13	.77	37
MIN	0	.01	0	0	0	.01	.02	.02	0	.02	.01	.02
CFSM	.06	.24	.008	.20	.65	.08	.80	.08	1.63	.83	.07	2.31
IN.	.07	.26	.008	.23	.67	.09	.89	.10	1.82	.96	.08	2.57
AC-FT	4.7	17	.6	15	43	5.7	56	6.2	115	61	5.2	163
(††)	1.19	1.91	.15	1.93	3.23	.85	3.81	.84	8.05	4.08	1.33	10.46

CAL YR 1972 TOTAL 137.22 MEAN .37 MAX 22 MIN 0 CFSM .31 IN 4.29 AC-FT 272 †† 27.15
WTR YR 1973 TOTAL 248.20 MEAN .68 MAX 37 MIN 0 CFSM .57 IN 7.76 AC-FT 492 †† 37.83

PEAK DISCHARGE (BASE, 90 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-13	1200	2.49	136	7- 8	1930	2.51	139
4-15	0445	2.68	168	9-16	1315	2.53	142
6-12	0245	3.12	247	9-26	2200	3.45	314
6-25	1215	2.46	131				

†† 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 (10.9 km) upstream from mouth.

DRAINAGE AREA.--1,317 mi² (3,411 km²), 634 mi² (1,642 km²) 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 ft³/s (1.42 m³/s) 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 (133.8 m) above mean sea level (levels by Corps of Engineers). October 1929 to December 1930 nonrecording gage at Losoya 1.5 miles (2.4 km) downstream at different datum.

AVERAGE DISCHARGE.--34 years (1939-73), 128 ft³/s (3.62 m³/s), 92,740 acre-ft/yr (114 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,900 ft³/s (903 m³/s) July 17, gage height, 43.59 ft (13.29 m); minimum, 78 ft³/s (2.21 m³/s) June 8.
Period of record: Maximum discharge, 31,900 ft³/s (903 m³/s) July 17, 1973, gage height, 43.59 ft (13.29 m); minimum daily, 3.3 ft³/s (93 dm³/s) Apr. 18, Nov. 1, 1956, Jan. 24, 1957.
Maximum stage 55 ft (17 m) 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 (97 km) upstream, and diversion dam reservoir, capacity, 4,500 acre-ft (5.55 hm³). 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 1973 the city released approximately 8,620 acre-ft (10.6 hm³) of sewage effluent from Mitchell Lake into river above gage during periods of high water, and 14,910 acre-ft (18.4 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	167	135	117	137	174	126	213	100	454	1,230	301
2	109	166	132	127	130	160	117	213	101	398	1,270	288
3	115	147	143	166	128	171	120	209	93	402	1,290	283
4	113	149	150	172	121	175	119	181	92	389	1,180	293
5	110	148	149	164	119	169	119	175	93	372	1,050	280
6	116	145	151	157	116	168	135	173	90	358	966	267
7	112	145	145	155	113	165	164	175	91	329	904	309
8	106	145	139	153	118	166	144	177	88	386	839	341
9	105	142	125	151	155	164	145	178	88	876	797	305
10	100	127	127	148	165	152	146	163	103	781	755	295
11	99	119	144	152	157	143	139	155	112	1,130	718	291
12	100	119	154	155	153	144	142	161	1,090	1,160	696	277
13	98	143	150	153	184	159	143	153	982	1,010	669	261
14	95	125	154	147	355	158	145	152	364	851	647	265
15	93	129	154	148	193	148	961	168	237	906	609	255
16	94	123	152	148	167	152	2,120	170	290	4,360	598	313
17	96	123	145	148	179	136	1,220	163	322	28,300	571	4,190
18	94	124	130	151	200	130	1,800	153	355	18,400	548	4,810
19	93	123	126	148	184	140	844	147	365	9,150	522	2,290
20	92	138	127	146	172	150	460	134	417	5,800	503	1,600
21	96	143	128	152	255	148	361	127	433	4,360	483	1,230
22	133	144	143	144	555	131	312	121	383	3,550	468	1,020
23	143	143	148	144	468	124	279	117	356	2,980	440	883
24	119	175	143	140	247	180	264	116	337	2,570	413	780
25	104	186	143	198	205	144	256	117	740	2,240	386	708
26	105	167	139	232	191	142	269	118	1,850	2,000	357	662
27	105	159	123	173	184	148	247	113	731	1,790	338	12,400
28	104	153	122	163	181	148	226	109	563	1,620	322	4,620
29	103	153	119	156	------	148	214	106	509	1,490	319	1,750
30	110	151	112	154	------	147	211	104	489	1,400	343	1,250
31	133	------	109	148	------	143	------	102	------	1,290	314	------
TOTAL	3,305	4,321	4,261	4,810	5,532	4,727	11,948	4,663	11,864	101,102	20,545	42,817
MEAN	107	144	137	155	198	152	398	150	395	3,261	663	1,427
MAX	143	186	154	232	555	180	2,120	213	1,850	28,300	1,290	12,400
MIN	92	119	109	117	113	124	117	102	88	329	314	255
AC-FT	6,560	8,570	8,450	9,540	10,970	9,380	23,700	9,250	23,530	200,500	40,750	84,930

CAL YR 1972 TOTAL 86,769 MEAN 237 MAX 4,170 MIN 82 AC-FT 172,100
WTR YR 1973 TOTAL 219,895 MEAN 602 MAX 28,300 MIN 88 AC-FT 436,200

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0800	17.52	2,460	7-17	1400	43.59	31,900
4-18	1200	17.23	2,370	9-17	2100	26.09	9,600
6-26	0700	16.82	2,250	9-27	1300	32.56	16,800

08181800 San Antonio River near Elmendorf, Tex.

LOCATION.--Lat 29°14'15", long 98°21'43", Bexar County, on left bank 2,000 ft (610 m) downstream from Braunig Plant Lake and 2.2 miles (3.5 km) southwest of Elmendorf.

DRAINAGE AREA.--1,743 mi² (4,514 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 392.50 ft (119.63 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 392 ft³/s (11.1 m³/s), 284,000 acre-ft/yr (350 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Sept. 27, gage height, 47.60 ft (14.51 m); minimum, 158 ft³/s (4.47 m³/s) June 1.
Period of record: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Sept. 27, 1973, gage height, 47.60 ft (14.51 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 24-26, 1963.
Maximum stage since at least 1900, 61 ft (19 m) in 1946. Second highest was 53 ft (16 m) 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 (332 hm³). 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 11,870 acre-ft (14.6 hm³) of sewage effluent was discharged into the San Antonio River from the Salado Creek Plant and 96,340 acre-ft (119 hm³) from the Rilling Road Plant, about 7.5 and 15.5 miles (12.1 and 24.9 km), respectively, upstream from this station; records furnished by the San Antonio City Public Service Board show that at pump plant 1,700 ft (518 m) upstream from this station, 5,370 acre-ft (6.62 hm³) was pumped into Braunig Plant Lake and 230 acre-ft (0.28 hm³) was pumped into Calaveras Lake. During year, 1,790 acre-ft (2.21 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	496	338	317	361	418	359	507	260	821	1,490	656
2	267	468	328	416	343	407	354	559	308	748	1,560	628
3	274	367	325	609	334	407	381	567	293	782	1,500	615
4	280	351	342	441	327	407	372	474	270	765	1,420	621
5	273	314	347	391	333	414	363	451	238	728	1,300	635
6	277	311	355	358	335	414	575	455	239	718	1,230	681
7	267	316	347	366	335	410	723	542	235	680	1,180	973
8	250	306	346	380	347	408	431	564	221	1,580	1,110	2,130
9	255	304	329	372	569	407	401	486	254	4,910	1,030	804
10	263	288	317	358	506	409	414	441	313	1,630	990	688
11	271	272	348	381	415	396	388	393	833	1,350	943	674
12	278	262	382	382	398	385	380	874	5,350	1,410	914	662
13	276	591	377	342	609	409	389	702	4,530	1,270	931	638
14	261	401	368	340	731	409	395	443	2,500	1,160	936	741
15	254	337	368	349	447	397	2,280	457	1,000	1,230	964	660
16	259	329	355	355	401	517	5,130	456	600	2,390	899	1,210
17	271	324	347	356	538	417	2,440	446	700	23,700	883	4,730
18	265	320	347	359	629	380	2,260	429	900	25,100	893	6,320
19	252	312	341	354	454	377	1,510	412	1,100	10,800	866	2,890
20	254	327	335	352	430	396	830	388	1,250	6,750	816	1,830
21	251	341	346	560	757	392	688	386	1,400	5,020	799	1,510
22	534	343	345	413	1,160	378	627	351	1,100	4,020	772	1,270
23	490	333	349	352	1,040	386	597	307	900	3,330	750	1,140
24	312	516	344	348	558	879	589	295	800	2,810	706	1,050
25	288	575	340	756	451	492	574	315	2,500	2,380	683	990
26	283	399	340	816	437	398	753	355	5,000	2,090	655	933
27	275	369	340	418	431	404	588	342	1,500	1,930	652	27,600
28	265	344	319	395	422	396	536	329	1,010	1,780	665	14,500
29	259	348	307	376	------	399	501	297	898	1,670	723	3,200
30	267	348	300	379	------	399	511	259	862	1,610	716	1,840
31	297	------	289	374	------	389	------	243	------	1,530	673	------
TOTAL	8,837	10,912	10,561	12,765	14,098	13,096	26,339	13,525	37,364	116,692	29,649	82,819
MEAN	285	364	341	412	504	422	878	436	1,245	3,764	956	2,761
MAX	534	591	382	816	1,160	879	5,130	874	5,350	25,100	1,560	27,600
MIN	250	262	289	317	327	377	354	243	221	680	652	615
AC-FT	17,530	21,640	20,950	25,320	27,960	25,980	52,240	26,830	74,110	231,500	58,810	164,300

CAL YR 1972 TOTAL 182,931 MEAN 500 MAX 9,460 MIN 140 AC-FT 362,800
WTR YR 1973 TOTAL 376,657 MEAN 1,032 MAX 27,600 MIN 221 AC-FT 747,100

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	0400	26.84	6,100	7-17	2200	45.68	33,700
6-12	1600	30.03	8,020	9- 8	0400	21.01	3,350
6-26	unknown	a30.70	8,490	9-18	0500	29.54	7,720
7- 9	0800	27.65	6,590	9-27	1700	47.60	40,000

a From floodmark.

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 (0.8 km) north of Sayer, 9.1 miles (14.6 km) north of Elmendorf, and 9.2 miles (14.8 km) upstream from mouth.

DRAINAGE AREA.--7.01 mi^2 (18.16 km^2).

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

GAGE.--Water-stage recorder and concrete drop-inlet control. Datum of gage is 516.06 ft (157.30 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--16 years (1957-73), 1,090 acre-ft/yr (1.34 hm^3/yr).

AVERAGE OUTFLOW.--16 years (1957-73), 976 acre-ft/yr (1.20 hm^3/yr).

EXTREMES.--Current year: Maximum outflow, 2,900 ft^3/s (82.1 m^3/s) Sept. 27, gage height, 36.14 ft (11.02 m), from floodmark, from rating curve extended as explained below; no outflow most of year. Maximum inflow, about 4,400 ft^3/s (125 m^3/s), average for 5-minute interval, Sept. 27, estimated on basis of rainfall record, floodmark, and change-in-contents study; no inflow for many days.

Period of record: Maximum outflow, 2,900 ft^3/s (82.1 m^3/s) Sept. 27, 1973, gage height, 36.14 ft (11.02 m) from floodmark, from rating curve extended above 45 ft^3/s (1.27 m^3/s) on basis of flow-over-spillway measurement (includes two spillways) of 2,850 ft^3/s (80.7 m^3/s) plus flow through the drop inlet; no outflow for many days each year. Maximum inflow, 4,400 ft^3/s (125 m^3/s), average for 5-minute interval, Sept. 27, 1973, estimated on basis of rainfall records, floodmark, and change-in-contents study; no inflow at times.

REMARKS.--Records good except those for Mar. 24, Apr. 15, Sept. 26-28, which are poor. Pool is formed by an earthfill dam that was completed Dec. 15, 1956. The outlet structure is a 36-inch (914-millimeter) square concrete drop inlet connected to a 17-inch (432-millimeter) concrete outlet pipe. The top of the drop inlet is at a gage height of 18.00 ft (5.49 m); the bottom of four 8- by 8-inch (203- by 203-millimeter) uncontrolled openings are at a gage height of 14.80 ft (4.51 m); the right emergency spillway is at a gage height of 34.3 ft (10.5 m); the left emergency spillway is at a gage height of 34.5 ft (10.5 m). A controlled 8-inch (203-millimeter) sluice gate is located in the upstream face of the drop-inlet structure at a gage height of 8.52 ft (2.60 m). Pool capacity, 1,640 acre-ft (2.02 hm^3) at spillway crest, 107 acre-ft (0.132 hm^3) at top of the drop inlet, and 4.2 acre-ft (5,180 m^3) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	0	0	0	0.9	143	84.3	563	2.5	1,040	235	25.1	3,270
Outflow	0	0	0	0	99.6	78.3	552	.4	774	458	12.0	1,940
(†)	-4.0	-2.0	-1.6	.4	41.3	-.3	.2	-9.9	248	-241	4.2	1,380
(††)	1.50	1.42	0	2.35	2.86	2.35	3.95	.85	10.06	3.15	3.83	10.08

CAL YR 1972: Inflow 1,620 Outflow 1,580 † -38.0 †† 22.22
WTR YR 1973: Inflow 5,360 Outflow 3,910 † 1,420 †† 42.40

PEAK INFLOW (BASE, 100 FT^3/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
2-13	1430	*896	6-25	1310	*1,650
3-24	unknown	*280	7-16	1110	*494
4-15	unknown	*960	9-16	1555	*431
6-12	0450	*1,400	9-27	unknown	**4,400

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches, at station.
* Average for 5-minute interval.
** No gage-height record, inflow estimated.
NOTE.--No gage-height record, Sept. 26-28.

08183500 San Antonio River near Falls City, Tex.

LOCATION.--Lat 28°57'05", long 98°03'50", Karnes County, on left bank 23 ft (7 m) downstream from bridge on Farm Road 791, 0.9 mile (1.4 km) upstream from Scared Dog Creek, 3.6 miles (5.8 km) southwest of Falls City, and at mile 150.5 (242.2 km).

DRAINAGE AREA.--2,113 mi² (5,473 km²).

PERIOD OF RECORD.--April 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 285.49 ft (87.02 m) above mean sea level.

AVERAGE DISCHARGE.--48 years, 337 ft³/s (9.54 m³/s), 244,200 acre-ft/yr (301 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,400 ft³/s (691 m³/s) Sept. 29, gage height, 27.26 ft (8.31 m); minimum, 236 ft³/s (6.68 m³/s) June 10.
Period of record: Maximum discharge, 47,400 ft³/s (1,342 m³/s) Sept. 29, 1946, gage height, 33.80 ft (10.30 m), from floodmark; minimum, 15 ft³/s (0.42 m³/s) 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 (8.7 m), 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 June, July, and September 11,230 acre-ft (13.8 hm³) was released into Calaveras Creek from Calaveras Lake. At end of year, flow from 28.6 mi² (74.1 km²) above this station was partly controlled by four floodwater-retarding structures with a total combined capacity of 10,320 acre-ft (12.7 hm³) below the flood-spillway crests, of which 9,640 acre-ft (11.9 hm³) is floodwater-retarding capacity and 680 acre-ft (0.838 hm³) is sediment-pool capacity. One structure was built during the current year and has a total capacity below flood-spillway crest of 4,180 acre-ft (5.15 hm³), of which 196 acre-ft (0.242 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316	292	327	295	372	441	384	521	272	1,010	1,820	734
2	282	372	324	289	359	428	360	526	256	919	1,750	664
3	269	557	319	356	341	421	338	520	290	828	1,750	626
4	279	384	312	538	329	412	345	615	305	805	1,750	594
5	287	382	316	552	325	416	369	511	300	813	1,680	581
6	288	342	323	418	316	409	366	474	303	761	1,560	594
7	283	315	331	387	324	416	407	468	263	740	1,430	606
8	287	322	341	359	328	412	819	500	257	702	1,350	930
9	270	318	335	376	335	409	513	605	253	1,200	1,290	1,790
10	256	312	332	383	500	410	398	507	245	2,340	1,180	1,450
11	267	307	311	370	548	405	409	479	313	3,130	1,120	772
12	271	290	316	369	464	406	392	438	3,600	2,080	1,060	692
13	284	279	351	385	412	377	377	652	4,710	1,580	1,010	699
14	286	423	386	363	444	388	383	948	6,300	1,470	1,020	746
15	280	520	363	343	826	400	391	498	4,510	1,340	1,020	723
16	268	349	359	339	553	394	1,820	471	1,490	1,260	1,050	763
17	261	315	355	353	428	445	2,970	472	655	1,630	987	1,120
18	274	309	347	353	438	460	3,660	463	644	4,590	957	2,350
19	271	306	341	357	695	384	3,110	448	675	15,600	952	3,930
20	268	301	346	359	529	361	2,400	431	960	19,700	952	5,010
21	265	295	332	355	460	376	1,360	416	1,800	15,300	878	3,340
22	263	317	340	458	600	380	838	398	1,580	8,860	850	2,140
23	365	323	347	506	1,170	378	719	396	1,220	5,450	815	1,660
24	637	330	357	379	1,290	378	650	352	808	4,060	788	1,420
25	377	382	350	352	755	728	634	310	3,000	3,430	737	1,270
26	306	643	343	491	521	668	612	315	4,470	2,960	699	1,170
27	294	457	336	967	458	417	721	353	5,150	2,570	663	5,460
28	285	367	343	549	450	396	686	355	5,800	2,320	635	13,100
29	284	335	332	405	------	390	576	333	2,780	2,160	663	22,500
30	274	331	312	375	------	386	528	328	1,210	2,010	740	16,900
31	265	------	300	370	------	383	------	288	------	1,890	772	------
TOTAL	9,162	10,775	10,427	12,751	14,570	13,074	27,535	14,391	54,419	113,508	33,928	94,334
MEAN	296	359	336	411	520	422	918	464	1,814	3,662	1,094	3,144
MAX	637	643	386	967	1,290	728	3,660	948	6,300	19,700	1,820	22,500
MIN	256	279	300	289	316	361	338	288	245	702	635	581
AC-FT	18,170	21,370	20,680	25,290	28,900	25,930	54,620	28,540	107,900	225,100	67,300	187,100

CAL YR 1972 TOTAL 189,245 MEAN 517 MAX 7,310 MIN 156 AC-FT 375,400
WTR YR 1973 TOTAL 408,874 MEAN 1,120 MAX 22,500 MIN 245 AC-FT 811,000

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-18	1300	6.38	3,750	7-11	1300	5.82	3,270
6-12	1400	10.53	6,170	7-20	0900	25.22	20,100
6-14	1200	11.17	6,620	9- 9	2000	4.12	2,080
6-21	1200	3.88	1,900	9-20	0600	9.25	5,350
6-25	1800	10.10	5,870	9-29	1800	27.26	24,400
6-28	0400	10.97	6,480				

08183900 Cibolo Creek near Boerne, Tex.

LOCATION.--Lat 29°46'26", long 98°41'50", Kendall County, on left bank 0.6 mile (1.0 km) upstream from Southern Pacific Lines bridge, 0.9 mile (1.4 km) downstream from Menger Creek, and 2.5 miles (4.0 km) southeast of Boerne.

DRAINAGE AREA.--68.4 mi² (177 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,339.61 ft (408.31 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 24.7 ft³/s (0.700 m³/s), 17,900 acre-ft/yr (22.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,600 ft³/s (385 m³/s) July 15, gage height, 13.5 ft (4.1 m), from floodmark, from rating curve extended as explained below; minimum, 3.6 ft³/s (102 dm³/s) Oct. 14.
Period of record: Maximum discharge, 36,400 ft³/s (1,030 m³/s) Sept. 27, 1964, gage height, 19.15 ft (5.84 m), from floodmark, from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement at 12,000 ft³/s (340 m³/s) and contracted-opening measurement of 36,400 ft³/s (1,030 m³/s); 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 (5.0 m), discharge, 25,600 ft³/s (725 m³/s), in 1952, from information by local residents.
REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WRD Texas indicated.

WRD	Water year	Date	Discharge (ft³/s)	Gage height (feet)
1966	1966	Apr. 25, 1966	940	4.40
1968	1968	May 11, 1968	3,190	6.37
1969	1969	Apr. 11, 1969	797	4.21
1971	1971	Aug. 13, 1971	6,800	9.5
1972	1972	May 10, 1972	3,690	6.78

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

REVISIONS (WATER YEARS).--WRD Texas 1970: 1965(P). Revised figures of discharge, in cubic feet per second, for high-water periods in water years 1964, 1965, and 1971, superseding those published in WRD Texas, 1964, 1965, and 1971 are given below:

Sept. 27, 1964..... 3,830
Apr. 6, 1965..... 1,240
May 16, 1965..... 2,890
Aug. 12, 1971..... 1,400
Aug. 13, 1971..... 1,450
Sept. 22, 1971..... 437
Sept. 23, 1971..... 517

Month	Ft³/s-days	Maximum	Minimum	Mean	Runoff in acre-feet
September 1964.....	3,912	3,830	0	130	7,760
WTR YR 1964.....	5,175.5	3,830	0	14.1	10,270
CAL YR 1964.....	5,588.6	3,830	0	15.3	11,080
April 1965.....	3,239	1,240	12	108	6,420
May.....	6,027	2,890	25	194	11,950
WTR YR 1965.....	13,384.2	2,890	.7	36.7	26,550
CAL YR 1965.....	13,890.5	2,890	.7	38.1	27,550
August 1971.....	4,179.37	1,450	0	135	8,290
September.....	1,402	517	14	50.1	2,980
WTR YR 1971.....	6,366.89	1,450	0	17.4	12,630
CAL YR 1971.....	11,907.49	1,450	0	32.6	23,620

REVISED PEAK DISCHARGE.--1965: Apr. 6 (0030) 7,350 ft³/s (9.96 ft); Apr. 26 (2300) 900 ft³/s (4.35 ft); May 30 (1400) 678 ft³/s (4.03 ft); June 5 (1400) 1,260 ft³/s (4.76 ft).
1966: Apr. 25 (0100) 940 ft³/s (4.40 ft); May 23 (2200) 530 ft³/s (3.78 ft).
1968: Jan. 20 (0530) 1,430 ft³/s (4.93 ft); Apr. 9 (0530) 648 ft³/s (3.98 ft); Apr. 12 (1530) 1,260 ft³/s (4.76 ft); Apr. 22 (1000) 600 ft³/s (3.90 ft); May 11 (1230) 3,190 ft³/s (6.37 ft).
1969: Apr. 11 (1000) 797 ft³/s (4.21 ft).
1970: Dec. 5 (0645) 1,540 ft³/s (5.03 ft); Mar. 6 (2015) 1,080 ft³/s (4.57 ft); May 15 (0115) 860 ft³/s (4.30 ft); May 23 (2015) 916 ft³/s (4.37 ft).
1971: Aug. 12 (0400) 4,430 ft³/s (7.4 ft); Aug. 13 (1400) 6,800 ft³/s (9.5 ft); Sept. 22 (2300) 4,890 ft³/s (7.81 ft).
1972: Oct. 4 (0730) 535 ft³/s (3.79 ft); Oct. 19 (2345) 1,150 ft³/s (4.64 ft); May 7 (1030) 1,370 ft³/s (4.87 ft); May 10 (1400) 3,690 ft³/s (6.78 ft).

08183900 Cibolo Creek near Boerne, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	13	11	8.8	21	54	30	53	45	72	120	29
2	6.0	10	11	13	20	50	30	51	24	66	98	28
3	6.0	9.5	11	20	19	48	39	50	18	63	87	27
4	6.0	8.8	12	13	19	46	30	52	17	59	80	26
5	6.0	8.8	12	12	19	44	29	52	15	55	78	24
6	6.0	9.9	12	11	20	46	79	63	13	51	73	32
7	6.0	11	11	11	20	41	53	81	11	46	68	41
8	5.6	11	12	11	22	39	34	53	9.8	659	62	36
9	4.9	11	13	10	25	39	30	53	9.6	223	59	32
10	4.9	10	13	11	23	66	29	48	10	140	57	32
11	4.9	9.9	13	13	24	45	28	47	21	110	55	40
12	4.7	10	13	12	22	39	28	44	776	92	51	37
13	4.5	38	12	12	22	40	29	39	105	79	48	40
14	4.4	15	12	13	20	39	33	37	59	70	47	61
15	4.5	12	11	13	20	36	78	33	46	1,780	46	39
16	5.2	11	11	13	20	37	55	35	39	2,020	44	80
17	5.2	11	10	13	28	32	135	40	108	731	42	49
18	5.2	11	10	14	33	32	77	47	52	470	41	31
19	4.9	11	11	13	31	32	61	43	42	341	41	26
20	4.9	10	11	14	28	30	54	39	48	256	37	23
21	5.9	9.9	9.8	14	66	31	51	37	50	218	37	26
22	204	9.6	9.0	14	86	30	53	36	43	192	34	26
23	27	9.4	9.3	13	75	33	58	34	39	169	33	30
24	16	27	8.9	13	65	76	64	37	41	152	32	25
25	12	15	8.3	76	61	33	64	34	183	139	30	22
26	11	11	8.8	33	58	29	66	35	178	128	30	103
27	12	12	8.5	24	53	29	50	28	117	283	30	218
28	11	11	8.6	20	53	36	50	26	97	158	29	94
29	11	11	9.4	20	------	31	49	26	86	120	30	67
30	11	11	9.2	20	------	31	50	23	78	108	30	59
31	9.9	------	8.5	21	------	31	------	22	------	123	30	------
TOTAL	436.6	368.8	330.3	518.8	973	1,225	1,516	1,298	2,380.4	9,173	1,579	1,403
MEAN	14.1	12.3	10.7	16.7	34.8	39.5	50.5	41.9	79.3	296	50.9	46.8
MAX	204	38	13	76	86	76	135	81	776	2,020	120	218
MIN	4.4	8.8	8.3	8.8	19	29	28	22	9.6	46	29	22
AC-FT	866	732	655	1,030	1,930	2,430	3,010	2,570	4,720	18,190	3,130	2,780

CAL YR 1972 TOTAL 8,400.6 MEAN 23.0 MAX 489 MIN 4.3 AC-FT 16,660
WTR YR 1973 TOTAL 21,201.9 MEAN 58.1 MAX 2,020 MIN 4.4 AC-FT 42,050

PEAK DISCHARGE (BASE, 450 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0415	4.03	678	7-15	0630	a13.5	13,600
6-12	0200	6.90	3,830	7-16	0545	7.31	4,320
6-25	1700	3.65	465	7-27	1815	5.20	1,740
7- 8	0515	6.70	3,590	9-26	2045	4.13	741

a From floodmark.

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 (1.0 km) downstream from Missouri-Kansas-Texas Railroad Co. bridge and 0.9 mile (1.4 km) upstream from bridge on Interstate Highway 35 at Selma.

DRAINAGE AREA.--274 mi² (710 km²).

PERIOD OF RECORD.--March 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 728.34 ft (222.00 m) above mean sea level.

AVERAGE DISCHARGE.--27 years, 15.4 ft³/s (0.436 m³/s), 11,160 acre-ft/yr (13.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 65,000 ft³/s (1,840 m³/s) July 16, gage height, 26.2 ft (8.0 m), from floodmark, from rating curve extended above 16,000 ft³/s (453 m³/s) as explained below; no flow most of time.
Period of record: Maximum discharge, 65,000 ft³/s (1,840 m³/s) July 16, 1973, gage height, 26.2 ft (8.0 m), from floodmark, from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of field estimate of 54,000 ft³/s (1,530 m³/s) and contracted-opening measurement of 65,000 ft³/s (1,840 m³/s).
Maximum stage since at least 1869, that of July 16, 1973. A stage of 26 ft (8 m) occurred 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0		0	0	76	0
2							0		0	0	82	0
3							0		0	0	56	0
4							0		0	0	34	0
5							0		0	0	18	0
6							0		0	0	9.3	0
7							0		0	0	2.2	0
8							0		0	360	.68	0
9							0		0	1,120	.20	0
10							0		0	276	.13	0
11							0		0	153	.11	0
12							0		1,110	103	.10	0
13							0		415	68	.08	0
14							0		93	43	.08	0
15							1.8		19	409	.07	0
16							3.8		2.5	22,500	.06	8.5
17							.01		.66	2,550	.06	1.4
18							0		.19	1,120	.04	.06
19							0		.11	753	.03	.05
20							0		.10	553	.01	.05
21							0		.11	425	0	.06
22							0		.09	343	0	.04
23							0		.08	287	0	.03
24							0		.07	242	0	.01
25							0		.16	204	0	0
26							0		.12	171	0	39
27							0		.09	143	0	1,730
28							0		.07	159	0	362
29					------		0		.05	186	0	144
30					------		0		.03	113	0	79
31		------			------		------		------	87	0	------
TOTAL	0	0	0	0	0	0	5.61	0	1,641.43	32,368.0	279.15	2,364.20
MEAN	0	0	0	0	0	0	.19	0	54.7	1,044	9.00	78.8
MAX	0	0	0	0	0	0	3.8	0	1,110	22,500	82	1,730
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	11	0	3,260	64,200	554	4,690

CAL YR 1972 TOTAL 19,288.65 MEAN 52.7 MAX 13,300 MIN 0 AC-FT 38,260
WTR YR 1973 TOTAL 36,658.39 MEAN 100 MAX 22,500 MIN 0 AC-FT 72,710

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-12	1200	7.88	3,260	7-16	1500	a26.2	65,000
7- 8	2300	7.77	3,120	7-28	2100	4.59	311
7-15	2300	8.26	3,760	9-27	0100	8.90	4,660

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 (9.2 km) northeast of Falls City, and 10.4 miles (16.7 km) upstream from mouth.

DRAINAGE AREA.--827 mi² (2,142 km²).

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 (80.55 m) above mean sea level. Nov. 4, 1930, to Aug. 4, 1940, water-stage recorder at site 1,600 ft (488 m) upstream at datum 0.56 ft (0.17 m) higher. Aug. 5 to Sept. 13, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years, 117 ft³/s (3.31 m³/s), 84,770 acre-ft/yr (105 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,300 ft³/s (943 m³/s) Sept. 28, gage height, 35.44 ft (10.80 m); minimum, 12 ft³/s (0.34 m³/s) Oct. 19.
Period of record: Maximum discharge, 33,600 ft³/s (952 m³/s) July 6, 1942, gage height, 34.45 ft (10.50 m); no flow July 30, 31, Aug. 4-22, 1956, Aug. 1, 1971.
Maximum stage since at least 1890, that of Sept. 28, 1973. In October 1913, a stage of 35 ft (11 m) occurred, discharge about 35,000 ft³/s (991 m³/s).

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 mi² (74.9 km²) above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 8,920 acre-ft (11.0 hm³) below the flood-spillway crests, of which 7,760 acre-ft (9.57 hm³) is floodwater-retarding capacity and 1,160 acre-ft (1.43 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	30	29	39	46	42	62	30	162	211	97
2	26	28	29	31	36	44	37	59	28	137	190	62
3	25	30	28	34	33	42	35	76	28	119	203	57
4	24	28	28	36	32	40	35	107	28	108	169	55
5	24	29	28	42	31	39	32	72	28	94	154	55
6	25	29	29	46	31	38	36	63	34	83	140	53
7	24	30	28	46	30	38	71	61	28	75	126	54
8	23	29	28	44	35	37	196	58	26	77	116	57
9	23	27	27	39	41	35	92	55	26	716	104	87
10	22	26	28	38	46	34	61	54	27	3,220	93	111
11	20	25	28	39	50	33	50	51	175	872	92	85
12	20	25	29	36	58	32	43	75	5,770	376	85	69
13	20	29	29	33	57	32	39	131	6,230	270	84	60
14	20	30	30	32	151	33	36	89	3,080	208	121	58
15	19	38	30	33	206	33	40	54	517	172	130	72
16	18	39	29	33	55	33	3,840	45	262	187	81	922
17	17	38	29	33	50	110	4,450	42	178	2,290	75	2,020
18	18	34	28	32	47	113	1,520	40	141	12,000	74	1,400
19	14	31	28	31	59	57	674	39	117	2,810	70	385
20	15	29	29	31	73	46	235	37	135	1,230	72	320
21	17	28	29	30	65	41	152	37	1,130	828	69	263
22	18	28	28	31	103	35	117	36	457	655	67	212
23	21	28	27	32	324	38	97	36	161	542	64	155
24	24	31	27	36	268	68	85	34	136	464	61	126
25	21	33	27	39	118	564	78	33	2,440	406	60	110
26	22	31	27	40	76	167	95	33	6,020	355	61	94
27	24	32	28	54	59	75	205	33	4,000	319	59	2,520
28	23	36	28	87	50	52	93	33	461	284	62	27,300
29	23	34	29	66	------	45	79	32	292	253	109	9,470
30	26	32	27	52	------	44	71	31	201	266	97	1,040
31	29	------	27	44	------	48	------	30	------	261	147	------
TOTAL	673	915	876	1,229	2,223	2,092	12,636	1,638	32,186	29,839	3,246	47,369
MEAN	21.7	30.5	28.3	39.6	79.4	67.5	421	52.8	1,073	963	105	1,579
MAX	29	39	30	87	324	564	4,450	131	6,230	12,000	211	27,300
MIN	14	25	27	29	30	32	32	30	26	75	59	53
AC-FT	1,330	1,810	1,740	2,440	4,410	4,150	25,060	3,250	63,840	59,190	6,440	93,960

CAL YR 1972 TOTAL 82,609 MEAN 226 MAX 15,300 MIN 11 AC-FT 163,900
WTR YR 1973 TOTAL 134,922 MEAN 370 MAX 27,300 MIN 14 AC-FT 267,600

PEAK DISCHARGE (BASE, 3,600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	2200	20.72	6,720	7-18	0900	27.20	15,100
6-12	1800	24.54	11,200	9-16	2400	16.49	3,640
6-26	0100	21.48	7,440	9-28	1500	35.44	33,300
7-10	1100	17.28	4,070				

08186500 Ecleto Creek near Runge, Tex.

LOCATION.--Lat 28°55'12", long 97°46'19", Karnes County, on left bank 55 ft (17 m) downstream from Farm Road 81, 215 ft (66 m) left of left end of bridge, 2.6 miles (4.2 km) upstream from Salt Branch, 4.5 miles (7.2 km) northwest of Runge, and 5.2 miles (8.4 km) upstream from mouth.

DRAINAGE AREA.--239 mi² (619 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 215.03 ft (65.54 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 36.4 ft³/s (1.03 m³/s), 26,370 acre-ft/yr (32.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,530 ft³/s (128 m³/s) June 14, gage height, 19.33 ft (5.89 m); minimum, 0.03 ft³/s (0.85 dm³/s) Oct. 31.

Period of record: Maximum discharge, 58,400 ft³/s (1,650 m³/s) Sept. 22, 1967, gage height, 33.3 ft (10.1 m) from floodmark, from rating curve extended above 7,300 ft³/s (207 m³/s) 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 (10 m), discharge, 71,000 ft³/s (2,010 m³/s). A stage of 32 ft (10 m), discharge, 39,000 ft³/s (1,100 m³/s), occurred in September 1952, from information by local residents.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.04	.08	.18	.25	3.4	2.0	5.4	.6	19	3.9	2.0
2	.70	.04	.08	.23	.20	2.7	1.2	4.7	.6	15	45	1.9
3	.70	.04	.08	.26	.20	2.1	.86	4.1	.4	14	10	1.5
4	.70	.04	.08	.21	.20	1.6	.55	3.7	.3	13	3.2	1.2
5	.65	.04	.08	.20	.20	1.3	.39	3.5	.4	11	2.4	1.0
6	.61	.04	.08	.21	.20	1.1	.87	3.8	.4	11	2.2	1.0
7	.60	.04	.08	.24	.20	1.0	1.9	4.8	.3	10	2.3	1.0
8	.60	.04	.08	.18	.36	1.0	2.2	4.1	.2	9.3	2.5	1.1
9	.60	.04	.08	.16	.44	.80	2.3	3.2	.2	8.7	2.5	1.1
10	.60	.04	.11	.16	.29	.60	3.4	2.7	.6	8.1	3.3	1.9
11	.60	.04	.11	.23	.23	.50	4.2	2.4	.6	7.7	2.7	2.2
12	.65	.04	.10	.26	.20	.40	3.3	11	1,060	7.1	2.9	2.0
13	.68	.13	.10	.20	.20	.46	2.3	7.6	2,570	6.6	2.5	1.7
14	.70	.13	.10	.25	.25	.48	1.8	4.4	3,880	6.6	49	1.7
15	.64	.13	.10	.25	.25	.39	1.8	3.9	1,320	6.5	6.0	1.5
16	.55	.10	.10	.25	.25	.33	766	6.4	126	6.3	3.0	170
17	.56	.10	.10	.25	.40	.35	1,770	4.8	34	5.8	2.5	689
18	.60	.10	.10	.25	.42	.30	1,200	3.4	21	5.5	3.3	34
19	.56	.10	.10	.25	.30	.20	229	2.3	16	5.3	3.7	14
20	.40	.10	.10	.28	.29	.16	51	1.9	18	5.3	2.0	8.9
21	.43	.10	.15	.32	.33	.16	22	1.5	93	5.1	1.6	6.3
22	.38	.10	.16	.30	2.9	.16	15	1.2	27	5.1	1.3	5.1
23	.34	.10	.16	.27	52	1.1	11	1.1	18	4.9	1.3	4.4
24	.30	.10	.16	.26	28	3.7	9.0	.83	14	4.7	1.2	3.9
25	.30	.10	.16	.51	11	19	7.8	.77	900	4.1	1.3	3.3
26	.30	.08	.16	.29	7.6	31	9.0	.68	2,530	3.9	1.1	3.0
27	.35	.08	.13	.22	5.7	21	6.9	.59	1,590	3.6	1.1	31
28	.34	.08	.14	.18	4.5	11	6.1	.60	300	3.2	1.5	30
29	.22	.08	.16	.16	------	6.2	14	.60	44	3.1	2.6	15
30	.06	.08	.16	.18	------	4.2	7.3	.60	26	3.3	2.9	11
31	.03	------	.16	.23	------	2.9	------	.60	------	3.3	3.4	------
TOTAL	15.45	2.27	3.54	7.42	117.36	119.59	4,153.17	97.17	14,591.6	226.1	174.2	1,051.7
MEAN	.50	.076	.11	.24	4.19	3.86	138	3.13	486	7.29	5.62	35.1
MAX	.70	.13	.16	.51	52	31	1,770	11	3,880	19	49	689
MIN	.03	.04	.08	.16	.20	.16	.39	.59	.20	3.1	1.1	1.0
AC-FT	31	4.5	7.0	15	233	237	8,240	193	28,940	448	346	2,090

CAL YR 1972 TOTAL 8,540.82 MEAN 23.3 MAX 2,390 MIN 0 AC-FT 16,940
WTR YR 1973 TOTAL 20,559.57 MEAN 56.3 MAX 3,880 MIN .03 AC-FT 40,780

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-17	1700	14.04	2,260	6-26	0930	15.42	2,770
6-14	0730	19.33	4,530	9-17	0230	12.06	1,620

NOTE.--Backwater from San Antonio River July 19-23, Sept. 28-30.

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 (274 m) upstream from State Highway 72, and 3.9 miles (6.3 km) southwest of Kenedy.

DRAINAGE AREA.--3.29 mi² (8.52 km²).

PERIOD OF RECORD.--October 1954 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete drop-inlet control. Datum of gage is 350.00 ft (106.68 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--19 years, 426 acre-ft/yr (0.525 hm³/yr).

AVERAGE OUTFLOW.--19 years, 190 acre-ft/yr (0.234 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 12.8 ft³/s (0.36 m³/s) June 13, gage height,19.7 ft (6.0 m) from floodmark; no outflow for most of year. Maximum inflow, about 1,000 ft³/s (28.3 m³/s), average for 5-minute interval, June 1, 2, computed and adjusted as explained below; no inflow for many days.
Period of record: Maximum outflow, 2,360 ft³/s (66.8 m³/s) Sept. 21, 1967, gage height, 30.06 ft (9.16 m), 31.0 ft (9.4 m) from floodmarks at spillway, from rating curves extended above 200 ft³/s (5.66 m³/s) on basis of flow-through-culvert measurement; no outflow for most of time each year. Maximum inflow, 5,260 ft³/s (149 m³/s), 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 except those for period of no gage-height record, which are poor. 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 (701 m) long, with an earthen spillway at left end of dam at gage height 27.7 ft (8.4 m). The outlet structure is a 2.5-foot (0.8-meter) square concrete drop inlet connected to a 12-inch (305-millimeter) concrete outlet pipe. The top of the drop inlet is at gage height 18.0 ft (5.5 m); the 12-inch (305-millimeter) outlet pipe is at gage height 9.2 ft (2.8 m). There is a 10-inch (254-millimeter) auxiliary pipe opening into the upstream face of the drop inlet at gage height 16.0 ft (4.9 m). There is also an 8-inch (203-millimeter) controlled emergency outlet pipe opening into the upstream face of the drop inlet at gage height 9.2 ft (2.8 m). Pool capacity is 905 acre-ft (1.12 hm³) at the spillway crest, 220 acre-ft (0.271 hm³) at top of the drop inlet, 150 acre-ft (0.185 hm³) at bottom of the 10-inch (254-millimeter) uncontrolled pipe, and 23.2 acre-ft (28,600 m³) at bottom of the 8-inch (203-millimeter) controlled outlet. The dam was built by the Soil Conservation 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	0	0	0	0	0	0	156	0	235	8.0	2.6	6.3
Outflow	0	0	0	0	0	0	.3	0	83.3	27.3	0	0
(†)	-19.2	-7.1	-5.2	0	0	0	135	-42.8	113	-71.5	-31.6	-19.7
(††)	.63	1.03	0	.96	2.05	.50	5.78	.65	8.69	.65	2.51	3.18

CAL YR 1972: Inflow 101 Outflow 0 † -17.6 †† 19.06
WTR YR 1973: Inflow 408 Outflow 111 † 50.9 †† 26.63

PEAK INFLOW (BASE, 100 FT³/S)

DATE	TIME	DISCHARGE
4-16	0705	*583
6-12	unknown	**1,000
6-25	unknown	**200

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches.
* Average for 5-minute interval.
** No gage-height record. Peak discharge estimated on basis of peak mark, rainfall records, and comparison with station 08187900.

NOTE.--No gage-height record June 12 to July 2. Lake dry or water below intakes Dec. 15 to Apr. 16.

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 (7.4 km) upstream from Dry Escondido Creek, and 9.6 miles (15.4 km) upstream from mouth.

DRAINAGE AREA.--72.4 mi² (188 km²).

PERIOD OF RECORD.--July 1954 to September 1973 (discontinued).

GAGE.--Water-stage recorder and V-notch sharp-crested weir installed Nov. 11, 1971. Datum of gage is 246.40 ft (75.10 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 13.5 ft³/s (0.382 m³/s), 2.53 in/yr (64.3 mm/yr), 9,780 acre-ft/yr (12.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,720 ft³/s (219 m³/s) June 12, gage height, 22.69 ft (6.92 m); no flow at times.
Period of record: Maximum discharge, 37,000 ft³/s (1,050 m³/s) Sept. 22, 1967, gage height, 25.48 ft (7.77 m), from floodmark, from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of contracted-opening, flow-over-road, and flow-through-culverts measurement of peak flow; no flow for many days in 1954-67, 1969-73.
Maximum stage since at least 1887, that of Sept. 22, 1967. Flood of Aug. 29, 1946, reached a stage of 24.2 ft (7.4 m), 21,500 ft³/s (609 m³/s) from information by local residents.

REMARKS.--Records good. At end of year, flow from 41.7 mi² (108.0 km²) above this station was partly controlled by 11 floodwater-retarding structures with a total combined capacity of 16,510 acre-ft (20.4 hm³) below flood-spillway crests, of which 14,110 acre-ft (17.4 hm³) is floodwater-retarding capacity and 2,400 acre-ft (2.96 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 2,440 acre-ft (3.01 hm³) of which 200 acre-ft (0.247 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	.02	.02	.04	.03	.04	.03	2.7	1.3	70	.49	.08
2	1.1	.02	.03	.04	.03	.06	.01	2.5	.96	62	4.2	.06
3	.44	.03	.03	.06	.03	.05	.01	2.3	.53	59	2.2	.06
4	.20	.02	.03	.05	.03	.05	.02	2.1	.15	72	4.3	.04
5	.09	.02	.05	.05	.03	.05	.01	2.9	2.1	47	4.2	.03
6	.05	.03	.03	.05	.03	.05	.17	3.4	9.7	36	4.1	.02
7	.04	.02	.02	.06	.04	.05	.14	3.7	.04	32	4.0	.03
8	.03	.02	.02	.05	.05	.08	.05	4.5	0	29	2.7	.03
9	.03	.02	.03	.04	.09	.07	.02	5.1	0	27	1.3	.04
10	.03	.02	.03	.04	.07	.07	.02	4.3	0	22	1.1	.03
11	.03	.02	.03	.05	.05	.05	.01	0	0	14	.31	.03
12	.02	.03	.03	.04	.04	.05	.02	3.7	2,330	8.8	.16	.03
13	.02	.04	.03	.03	.03	.05	.03	15	566	5.7	.16	.03
14	.02	.03	.03	.03	.04	.06	.02	8.3	358	4.2	.16	.04
15	.03	.02	.03	.03	.04	.05	.03	8.5	312	3.2	.16	.03
16	.02	.02	.03	.03	.04	.04	745	8.1	241	2.7	.16	6.0
17	.02	.02	.02	.03	.12	.05	758	9.3	210	2.2	.16	6.4
18	.02	.03	.03	.03	.11	.04	251	9.4	189	1.7	.20	1.4
19	.02	.03	.03	.04	.06	.04	188	7.9	160	1.4	.17	.56
20	.02	.03	.03	.04	.05	.04	116	5.1	158	1.2	.16	.29
21	.02	.02	.03	.04	.08	.04	89	4.9	156	1.0	.14	.05
22	.03	.02	.03	.03	.13	.04	81	4.4	134	.86	.10	.01
23	.02	.02	.03	.03	.87	.08	62	4.0	118	.83	.11	0
24	.02	.08	.03	.03	1.1	.08	42	3.4	109	.78	.09	0
25	.01	.06	.03	.08	.20	.05	29	3.0	822	.69	.09	0
26	.02	.03	.03	.07	.06	.04	23	2.6	396	.64	.11	0
27	.02	.03	.03	.04	.05	.04	9.8	2.2	231	.59	.09	57
28	.03	.02	.03	.03	.04	.04	6.1	1.5	188	.57	.06	16
29	.07	.02	.04	.03	------	.05	4.0	1.4	124	.46	.08	2.4
30	.05	.02	.05	.03	------	.05	2.8	1.4	88	.41	.16	.83
31	.03	------	.03	.03	------	.04	------	1.3	------	.38	.12	------
TOTAL	4.85	.81	.94	1.27	3.54	1.59	2,407.29	138.9	6,904.78	508.31	31.54	91.52
MEAN	.16	.027	.030	.041	.13	.051	80.2	4.48	230	16.4	1.02	3.05
MAX	2.3	.08	.05	.08	1.1	.08	758	15	2,330	72	4.3	57
MIN	.01	.02	.02	.03	.03	.04	.01	0	0	.38	.06	0
CFSM	.002	.0004	.0004	.0006	.002	.0007	1.11	.06	3.18	.23	.01	.04
IN.	.002	0	0	0	.001	0	1.24	.07	3.55	.26	.02	.05
AC-FT	9.6	1.6	1.9	2.5	7.0	3.2	4,770	276	13,700	1,010	63	182

CAL YR 1972 TOTAL 783.71 MEAN 2.14 MAX 148 MIN 0 CFSM .03 IN .40 AC-FT 1,550
WTR YR 1973 TOTAL 10,095.34 MEAN 27.7 MAX 2,330 MIN 0 CFSM .38 IN 5.19 AC-FT 20,020

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 (0.8 km) upstream from bridge on Farm Road 792, 3 miles (5 km) north of Kenedy, and 5.0 miles (8.0 km) upstream from Escondido Creek.

DRAINAGE AREA.--8.43 mi² (21.8 km²).

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 (86.90 m) above mean sea level.

AVERAGE INFLOW.--15 years, 955 acre-ft/yr (1.18 hm³/yr).

AVERAGE OUTFLOW.--15 years, 827 acre-ft/yr (1.02 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 91.5 ft³/s (2.59 m³/s) June 13, gage height, 23.62 ft (7.20 m); no outflow most of year. Maximum inflow, 2,720 ft³/s (77.0 m³/s), average for 5-minute interval, June 13, computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 8,030 ft³/s (227 m³/s) Sept. 21, 1967, gage height, 36.36 ft (11.08 m) from floodmark at gage; 36.3 ft (11.1 m) from floodmarks at spillways, from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of flow-over-spillway measurement (includes two spillways) of 7,900 ft³/s (224 m³/s) plus flow through the drop inlet; no outflow for most of time each year. Maximum inflow, 18,000 ft³/s (510 m³/s), 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 (792 m) long with emergency spillways at both the left and right end of the dam. The outlet structure is a 3-foot (1-meter) square concrete drop inlet connected to a 28-inch (711-millimeter) concrete outlet pipe. Four 10-inch (254-millimeter) 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 (4.78 m). The top of the drop inlet is at gage height 18.00 ft (5.49 m). The two emergency spillways (both left and right) are at gage height 32.8 ft (10.0 m). The lower drain valve is an 8-inch-diameter (203-millimeter) cleanout gate at the bottom of the drop-inlet structure at a gage height of 9.4 ft (2.9 m). The pool capacity is 2,670 acre-ft (3.29 hm³) at the spillway crests, 236 acre-ft (0.291 hm³) at top of the drop inlet, 140 acre-ft (0.173 hm³) at the bottom of portholes, and 29.9 acre-ft (36,900 m³) at the 8-inch (203-millimeter) 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 1972 TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	2.1	2.9	3.1	7.2	11.5	5.7	274	2.4	902	3.0	8.9	39.6
Outflow	0	0	0	0	0	0	206	0	877	10.0	0	5.5
(†)	-6.5	-1.1	-.3	5.0	9.6	-2.4	67.4	-19.7	34.5	-32.2	-2.3	25.9
(††)	.32	.82	.18	1.30	2.21	.90	7.00	.40	11.65	.60	5.06	4.68

CAL YR 1972: Inflow 78.4 Outflow 0 † -21.7 †† 19.38
WTR YR 1973: Inflow 1,260 Outflow 1,100 † 77.9 †† 35.12

PEAK INFLOW (BASE, 100 FT³/S)

DATE	TIME	DISCHARGE
4-16	0740	*622
6-13	0330	*2,720
6-25	1925	*303

1/ Inflow adjusted for rainfall on pool and pool losses.
† Change in contents, in acre-feet.
†† Rainfall, in inches, at station.
* Average for 5-minute interval.

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 (1.9 km) southeast of courthouse in Goliad, 11.7 miles (18.8 km) upstream from Manahuilla Creek, and at mile 66.5 (107.0 km).

DRAINAGE AREA.--3,921 mi² (10,155 km²).

PERIOD OF RECORD.--June 1924 to March 1929, February 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 91.08 ft (27.76 m) above mean sea level. Prior to Mar. 31, 1929, nonrecording gage at Texas and New Orleans Railroad Co. bridge 0.9 mile (1.4 km) upstream at same datum.

AVERAGE DISCHARGE.--38 years (1924-28, 1939-73), 584 ft³/s (16.5 m³/s), 423,100 acre-ft/yr (522 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,900 ft³/s (422 m³/s) July 24, gage height, 34.53 ft (10.52 m); minimum, 282 ft³/s (7.99 m³/s) June 12.

Period of record: Maximum discharge, 138,000 ft³/s (3,910 m³/s) Sept. 23, 1967, gage height, 53.7 ft (16.4 m), from floodmark, from rating curve extended above 26,000 ft³/s (736 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 1.2 ft³/s (34 dm³/s) June 16, 1956.

Maximum stage since 1869, that of Sept. 23, 1967. Flood of July 9, 1942, reached a stage of 44.9 ft (13.7 m); 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 127 mi² (329 km²) above this station was partly controlled by 25 floodwater-retarding structures with a total combined capacity of 44,650 acre-ft (55.1 hm³) below the flood-spillway crests, of which 39,750 acre-ft (49.0 hm³) is floodwater-retarding capacity and 4,900 acre-ft (6.04 hm³) is sediment-pool capacity. Two structures were built during the current year and have a total combined capacity below flood-spillway crest of 6,620 acre-ft (8.16 hm³), of which 396 acre-ft (0.49 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	748	393	408	347	401	572	428	751	386	7,990	2,490	926
2	538	376	399	331	386	539	427	696	340	3,170	2,350	963
3	453	390	399	334	380	523	407	677	307	1,620	2,560	872
4	414	496	397	327	353	501	373	663	297	1,450	2,170	807
5	390	644	388	392	336	485	341	706	329	1,360	2,020	773
6	397	502	382	579	323	470	436	743	377	1,280	1,960	749
7	400	490	381	590	316	468	453	634	371	1,220	1,860	738
8	398	448	393	472	314	460	411	594	360	1,160	1,700	747
9	390	424	399	424	345	466	725	580	309	1,110	1,580	780
10	391	428	409	393	347	461	981	631	292	1,180	1,510	1,090
11	375	423	403	406	349	450	593	683	291	2,540	1,520	1,710
12	359	415	399	412	536	445	452	615	1,590	4,370	1,430	1,350
13	367	425	379	398	607	443	443	625	6,020	4,500	1,310	900
14	373	401	376	391	506	441	410	602	8,870	3,180	1,250	830
15	386	387	407	404	441	406	396	925	11,000	2,020	1,260	874
16	390	537	439	384	746	411	891	910	13,400	1,780	1,230	903
17	384	638	429	352	1,000	431	3,880	633	13,700	1,620	1,210	3,290
18	369	478	423	347	696	426	5,950	602	9,390	1,780	1,230	4,140
19	362	426	420	356	517	638	7,960	593	2,650	3,780	1,200	3,500
20	374	412	409	358	539	572	8,670	588	1,380	6,400	1,110	3,430
21	378	406	397	357	811	444	6,930	566	1,420	8,970	1,090	3,980
22	382	399	395	353	695	396	3,680	537	2,260	11,000	1,070	4,950
23	378	393	386	348	670	427	1,600	512	3,470	13,100	1,010	4,420
24	374	427	382	471	1,080	453	1,150	493	2,640	14,700	979	2,470
25	514	440	387	606	1,590	436	1,000	482	2,410	14,200	945	1,680
26	726	438	392	446	1,430	771	976	435	5,600	10,900	916	1,440
27	523	518	386	386	937	1,320	994	394	6,790	6,440	875	1,740
28	439	742	381	609	657	885	939	386	9,150	4,350	853	2,620
29	5,010	568	377	1,030	------	527	990	424	11,200	3,530	840	5,410
30	1,450	450	381	635	------	454	860	424	11,000	3,020	455	9,250
31	453	------	369	454	------	436	------	399	------	2,690	993	------
TOTAL	18,895	13,914	12,272	13,692	17,310	16,161	53,751	18,503	127,599	146,410	43,386	67,332
MEAN	610	464	396	442	618	521	1,792	597	4,253	4,723	1,400	2,244
MAX	5,010	742	439	1,030	1,590	1,320	8,670	925	13,700	14,700	2,560	9,250
MIN	359	376	369	327	314	395	341	386	291	1,110	840	738
AC-FT	37,480	27,600	24,340	27,160	34,330	32,060	106,600	36,700	253,100	290,400	86,060	133,600

CAL YR 1972 TOTAL 313,611 MEAN 857 MAX 12,700 MIN 201 AC-FT 622,000
WTR YR 1973 TOTAL 549,225 MEAN 1,505 MAX 14,700 MIN 291 AC-FT 1,089,000

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1000	24.76	6,200	7-13	0200	20.14	4,700
4-20	0800	27.79	8,790	7-24	1900	34.53	14,900
6-17	0200	33.75	14,200	9-17	2200	19.79	4,590
6-23	1300	16.76	3,580	9-22	2000	20.93	5,140
6-29	2200	31.18	11,500				

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 (158 m) upstream from State Highway 185, 1,900 ft (579 m) downstream from pumping station on Goff Bayou, and 1.1 miles (1.8 km) 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 (7.17 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 92.1 ft³/s (2.61 m³/s), 66,730 acre-ft/yr (82.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 311 ft³/s (8.81 m³/s) July 7, 1968; no flow at times in 1968-73.

REMARKS.--Records fair. Flow diverted from Guadalupe River 550 ft (168 m) 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 (14.3 km) to the pumping station on Goff Bayou 1,900 ft (579 m) upstream from flume No. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	53	33	9.0	21	38	22	101	286	277	261	200
2	132	53	39	19	27	38	45	88	294	274	256	186
3	135	52	41	31	25	36	84	92	295	250	246	156
4	93	22	45	36	22	40	86	103	290	237	225	146
5	46	19	30	13	18	29	114	103	267	236	236	67
6	118	13	18	6.4	14	36	99	99	208	223	232	24
7	109	3.6	18	9.6	22	43	47	86	134	220	207	25
8	106	14	18	10	26	37	46	96	124	232	197	27
9	111	16	18	7.5	27	36	45	136	108	232	186	41
10	111	13	18	12	29	35	43	163	109	242	187	46
11	103	15	18	10	10	35	51	205	111	268	187	41
12	99	7.9	18	17	14	57	54	100	64	257	167	50
13	87	.70	12	19	32	69	65	69	20	247	192	25
14	70	20	18	15	36	69	72	134	0	248	180	28
15	69	40	25	11	37	78	59	191	23	269	170	27
16	70	29	35	11	18	54	52	191	72	270	160	59
17	96	13	30	12	0	44	48	222	121	265	139	56
18	103	4.0	38	15	0	41	22	219	163	255	118	59
19	102	12	41	25	0	43	12	197	216	256	108	59
20	80	9.0	23	18	0	36	1.2	204	209	251	107	60
21	80	0	15	19	0	1.8	8.6	225	224	246	114	60
22	0	3.3	12	43	0	28	1.5	214	199	215	113	79
23	0	9.2	12	55	8.8	44	24	194	130	243	139	92
24	100	12	5.4	31	32	65	91	142	128	242	159	93
25	84	10	14	24	38	81	114	148	127	249	179	118
26	64	17	14	21	58	134	104	170	125	250	199	117
27	52	11	9.3	15	72	118	115	169	163	212	209	116
28	52	10	9.2	21	54	58	114	200	175	247	216	103
29	53	8.3	8.4	25	------	46	147	235	216	247	217	112
30	53	10	16	23	------	23	145	270	258	253	217	113
31	53	------	1.7	19	------	22	------	283	------	259	193	------
TOTAL	2,720	500.00	653.0	602.5	640.8	1,514.8	1,931.3	5,049	4,859	7,672	5,716	2,385
MEAN	87.7	16.7	21.1	19.4	22.9	48.9	64.4	163	162	247	184	79.5
MAX	135	53	45	55	72	134	147	283	295	277	261	200
MIN	46	0	1.7	6.4	0	1.8	1.2	69	0	212	107	24
AC-FT	5,400	992	1,300	1,200	1,270	3,000	3,830	10,010	9,640	15,220	11,340	4,730

CAL YR 1972 TOTAL 33,469.00 MEAN 91.4 MAX 269 MIN 0 AC-FT 66,390
WTR YR 1973 TOTAL 34,243.40 MEAN 93.8 MAX 295 MIN 0 AC-FT 67,920

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 (1,128 m) downstream from State Highway 185, 4,200 ft (1,280 m) downstream from streamflow station 08188600, and 1.4 miles (2.3 km) north of Long Mott.

PERIOD OF RECORD.--October 1971 to June 1972 (monthly discharge only), July 1972 to current year.

GAGE.--Deflection-vane recorder, water-stage recorder, and Parshall flume. Datum of gage is 22.37 ft (6.82 m) above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 259 ft^3/s (7.33 m^3/s) July 2, 1973; no flow at times in 1972-73.

REMARKS.--Records fair. Flow diverted from Guadalupe River 550 ft (168 m) 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 (14.3 km) to the pumping station on Goff Bayou 1,900 ft (579 m) upstream from flume No. 1. Diversions to the Union Carbide Co. between flumes 1 (station 08188600) and 2 during the water year 1973, were 13,490 acre-ft (16.6 hm^3).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	14	20	0	3.9	0	22	101	249	236	230	169
2	131	14	34	15	7.4	0	39	88	240	259	221	162
3	119	14	34	20	5.6	0	84	92	241	247	204	146
4	93	14	34	20	3.7	0	86	103	235	231	176	130
5	35	14	21	10	5.9	0	98	103	208	223	185	55
6	111	4.0	0	0	4.9	0	42	99	176	201	186	11
7	107	1.0	0	0	21	0	0	86	134	200	173	7.5
8	104	14	0	0	26	0	0	82	124	205	174	4.4
9	106	16	0	0	27	0	0	98	108	205	165	20
10	106	9.8	0	0	25	0	0	119	109	198	166	34
11	102	3.0	0	0	10	0	0	152	111	229	164	14
12	100	1.1	0	0	10	15	0	61	64	236	149	32
13	85	.90	0	0	18	30	20	17	20	225	168	20
14	68	6.0	0	0	8.0	30	30	87	0	230	175	14
15	66	14	7.0	0	9.4	30	15	145	23	253	160	14
16	66	7.2	14	0	3.7	20	10	146	72	253	152	47
17	71	4.0	15	0	0	0	0	168	121	251	131	45
18	68	.10	18	8.2	0	0	10	187	163	241	107	45
19	62	1.4	22	9.3	0	0	12	193	216	240	108	45
20	62	1.0	12	9.0	0	0	0	200	209	234	107	45
21	62	.20	0	5.8	0	0	0	217	167	228	114	45
22	62	0	0	22	0	0	0	212	152	202	113	65
23	62	0	0	37	8.0	0	24	194	130	229	139	76
24	52	0	0	15	30	15	52	142	128	228	151	77
25	36	0	0	4.9	30	40	79	132	127	235	161	102
26	21	0	0	5.0	30	72	71	119	125	234	180	115
27	14	0	0	7.9	30	95	84	122	158	200	188	110
28	14	0	0	5.9	10	36	85	150	175	232	196	101
29	14	0	0	4.1	------	46	108	188	194	234	198	109
30	14	0	0	2.4	------	23	109	226	222	232	197	108
31	14	------	0	5.3	------	22	------	227	------	227	170	------
TOTAL	2,156	153.70	231.0	206.8	327.5	474	1,080	4,256	4,401	7,078	5,108	1,967.9
MEAN	69.5	5.12	7.45	6.67	11.7	15.3	36.0	137	147	228	165	65.6
MAX	131	16	34	37	30	95	109	227	249	259	230	169
MIN	14	0	0	0	0	0	0	17	0	198	107	4.4
AC-FT	4,280	305	458	410	650	940	2,140	8,440	8,730	14,040	10,130	3,900

CAL YR 1972 TOTAL 26,352.70 MEAN 72.0 MAX 211 MIN 0 AC-FT 52,270
WTR YR 1973 TOTAL 27,439.90 MEAN 75.2 MAX 259 MIN 0 AC-FT 54,430

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 (168 m) downstream from Calhoun County Irrigation Canal intake, 0.4 mile (0.6 km) downstream from San Antonio River, 3.5 miles (5.6 km) north of Tivoli, and 10.2 miles (16.4 km) upstream from mouth.

DRAINAGE AREA.--10,128 mi² (26,232 km²).

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is 0.04 ft (0.01 m) above mean sea level.

EXTREMES: above Barrier.--Current year: Maximum gage height, 9.5 ft (2.9 m) June 14; minimum, 3.1 ft (0.9 m) Dec. 27.
Period of record: Maximum gage height, 13.7 ft (4.2 m) Sept. 22, 1967; minimum, 1.5 ft (0.5 m) Mar. 16, 1967.
below Barrier.--Current year: Maximum gage height, 9.4 ft (2.9 m) June 14, 15; minimum, 3.0 ft (0.9 m) Dec. 27.
Period of record: Maximum gage height, 13.6 ft (4.1 m) Sept. 22, 1967; minimum, 0.5 ft (0.2 m) 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 (3.4 m), 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 304 mi² (787 km²) above this station was partly controlled by 67 floodwater-retarding structures with a total combined capacity of 106,770 acre-ft (132 hm³) below the flood-spillway crests, of which 95,500 acre-ft (118 hm³) is floodwater-retarding capacity and 11,270 acre-ft (13.9 hm³) is sediment-pool capacity. Four structures were built during the current year and have a total combined capacity below flood-spillway crests of 8,540 acre-ft (10.5 hm³), of which 540 acre-ft (0.67 hm³) 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.

MAXIMUM DAILY GAGE HEIGHT, IN FEET, UPSTREAM AND DOWNSTREAM FROM SALT WATER BARRIER,
WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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	6.8	7.8	7.8	4.1	4.0	3.7	3.6	5.4	5.3	6.7	6.7	6.2	6.1	7.1	7.0	5.1	5.0	8.0	7.9	7.7	7.6	6.3	6.2
2	6.4	6.2	7.7	7.7	3.9	3.8	4.0	3.9	5.1	5.0	6.3	6.2	6.0	6.0	6.9	6.8	5.2	5.2	8.0	8.0	7.7	7.6	6.3	6.2
3	5.9	5.7	7.2	7.2	3.7	3.6	4.0	3.9	4.9	4.8	5.9	5.9	6.0	5.9	6.6	6.4	5.2	5.2	8.0	8.0	7.6	7.6	6.3	6.2
4	5.3	5.2	6.6	6.5	3.7	3.6	3.9	3.8	4.8	4.6	5.8	5.7	5.6	5.6	6.3	6.2	5.1	5.1	8.0	7.9	7.6	7.5	6.3	6.1
5	5.0	4.9	6.1	6.0	3.8	3.7	3.8	3.7	4.6	4.5	5.7	5.6	5.5	5.4	6.3	6.2	5.0	4.9	7.8	7.8	7.5	7.5	6.2	6.1
6	4.7	4.6	5.8	5.8	3.8	3.7	3.7	3.6	4.5	4.4	5.7	5.6	5.5	5.5	6.5	6.4	4.8	4.7	7.7	7.6	7.5	7.5	6.2	6.1
7	4.4	4.3	5.8	5.8	3.5	3.4	4.0	3.9	4.3	4.2	5.6	5.5	5.7	5.7	6.5	6.4	4.5	4.4	7.5	7.4	7.5	7.4	6.1	6.0
8	3.9	3.9	5.4	5.3	3.6	3.5	4.3	4.2	4.2	4.1	5.5	5.5	5.9	5.8	6.4	6.3	4.4	4.3	7.3	7.3	7.4	7.4	6.1	6.0
9	3.8	3.8	5.2	5.1	3.6	3.5	4.3	4.2	4.2	4.1	5.5	5.4	5.7	5.6	6.3	6.2	4.5	4.4	7.2	7.1	7.4	7.3	6.0	5.9
10	3.7	3.6	5.0	4.9	3.6	3.5	4.2	4.1	4.4	4.3	5.5	5.4	5.6	5.5	6.1	6.0	4.5	4.5	7.1	7.0	7.4	7.3	6.1	6.0
11	3.7	3.6	4.7	4.6	3.5	3.4	4.1	4.0	4.6	4.5	5.4	5.3	6.0	5.9	6.1	6.0	4.7	4.6	6.9	6.8	7.3	7.2	7.1	7.0
12	3.7	3.6	4.6	4.5	3.5	3.4	4.2	4.1	4.7	4.6	5.3	5.3	6.0	5.9	6.1	6.0	6.7	6.6	7.2	7.1	7.3	7.2	7.5	7.4
13	3.7	3.7	4.6	4.5	3.5	3.4	4.2	4.1	4.9	4.8	5.4	5.4	5.8	5.7	6.2	6.1	8.0	7.9	7.5	7.4	7.3	7.2	7.5	7.4
14	3.7	3.7	4.4	4.3	3.5	3.3	4.2	4.1	5.0	4.9	5.4	5.3	5.5	5.5	6.2	6.1	9.5	9.4	7.6	7.5	7.2	7.1	7.4	7.3
15	3.6	3.6	4.1	4.0	3.4	3.3	4.1	4.0	5.0	4.9	5.4	5.4	5.6	5.6	6.1	6.0	9.4	9.4	7.6	7.5	7.2	7.1	7.0	6.9
16	3.5	3.4	4.0	4.0	3.3	3.2	4.0	3.9	4.9	4.8	5.3	5.3	5.7	5.7	6.4	6.3	8.9	8.9	7.6	7.5	7.0	6.9	6.7	6.6
17	3.5	3.4	4.2	4.2	3.4	3.3	4.0	3.9	5.3	5.2	5.1	5.0	7.4	7.3	6.5	6.4	9.0	8.9	7.6	7.5	6.9	6.8	7.1	7.0
18	3.5	3.4	4.6	4.5	3.5	3.4	4.0	3.9	6.1	6.0	5.0	4.9	7.9	7.8	6.5	6.4	9.3	9.2	7.5	7.4	7.2	7.1	7.5	7.4
19	3.3	3.2	4.6	4.6	3.6	3.5	4.0	3.9	6.2	6.1	5.0	4.9	8.1	8.0	6.2	6.1	9.3	9.2	7.3	7.2	7.2	7.1	7.7	7.6
20	3.3	3.3	4.3	4.3	3.6	3.5	4.3	4.2	6.1	6.0	5.2	5.1	8.2	8.1	6.0	5.9	9.2	9.1	7.5	7.4	7.1	7.0	7.7	7.6
21	4.0	4.0	4.0	4.0	3.4	3.3	4.2	4.1	5.9	5.8	5.4	5.3	8.3	8.2	5.8	5.8	8.9	8.8	7.6	7.5	7.1	7.0	7.8	7.6
22	4.0	4.0	3.8	3.7	3.3	3.2	4.0	3.9	6.3	6.2	5.4	5.3	8.4	8.3	5.7	5.6	8.2	8.1	7.7	7.6	6.9	6.8	7.8	7.6
23	3.9	3.9	3.7	3.7	3.4	3.3	3.8	3.7	6.5	6.4	5.5	5.4	8.4	8.3	5.7	5.6	7.8	7.7	7.7	7.6	6.7	6.6	7.8	7.7
24	3.5	3.4	3.8	3.7	3.3	3.2	3.8	3.7	6.5	6.4	5.6	5.6	8.3	8.1	5.6	5.5	7.7	7.6	7.8	7.7	6.6	6.5	7.8	7.7
25	3.5	3.4	3.9	3.8	3.2	3.1	4.0	3.9	6.6	6.5	5.6	5.6	8.1	8.0	5.5	5.4	7.8	7.7	8.0	7.9	6.5	6.4	7.8	7.7
26	3.8	3.8	3.8	3.8	3.2	3.1	4.5	4.4	6.9	6.8	5.6	5.6	7.9	7.8	5.5	5.4	7.8	7.7	8.1	8.0	6.4	6.3	7.8	7.7
27	4.3	4.3	3.8	3.8	3.1	3.0	4.5	4.4	7.0	6.9	5.8	5.8	7.6	7.5	5.5	5.4	7.8	7.7	8.2	8.1	6.4	6.3	7.8	7.7
28	4.3	4.2	3.7	3.6	3.4	3.3	4.6	4.5	7.0	6.9	6.5	6.5	7.3	7.2	5.2	5.1	7.8	7.7	8.2	8.1	6.3	6.2	7.6	7.5
29	6.2	6.0	4.1	4.0	3.6	3.5	5.0	4.9	-------		6.6	6.6	7.2	7.1	4.9	4.9	7.8	7.7	8.1	8.0	6.3	6.2	7.7	7.6
30	7.5	7.5	4.2	4.1	3.7	3.6	5.6	5.5	-------		6.5	6.5	7.1	7.0	4.9	4.8	7.9	7.8	8.0	7.9	6.2	6.1	7.7	7.6
31	7.8	7.8	-------		3.7	3.6	5.6	5.5	-------		6.3	6.2	-------		5.0	5.0	-------		7.8	7.8	6.2	6.1	-------	

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 (5.8 km) upstream from Alameda Creek, 8.1 miles (13.0 km) east of Refugio, and 11.9 miles (19.1 km) upstream from mouth.

DRAINAGE AREA.--87.8 mi² (227 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 17.25 ft (5.26 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,730 ft³/s (49.0 m³/s) June 16, gage height, 14.68 ft (4.47 m); no flow for many days.
Period of record: Maximum discharge, 6,300 ft³/s (178 m³/s) Sept. 12, 1971, gage height, 21.00 ft (6.40 m), from rating curve extended above 3,800 ft³/s (108 m³/s); no flow at times each year.
Maximum stage since early 1920's, 22 ft (7 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	.01	.66	0	1.2	13	.02	6.9	0	391	.06	13
2	109	.07	.52	0	1.1	9.2	.01	7.8	0	289	.25	17
3	62	.08	.49	0	.50	29	.01	6.0	0	206	.51	20
4	32	.13	.35	0	.26	44	.01	6.1	0	153	.25	11
5	18	.10	.26	.16	.15	34	0	4.6	0	116	.18	10
6	11	.08	.18	.51	.08	18	.51	3.6	0	84	.23	17
7	7.2	.08	.18	.60	.05	9.1	4.4	3.2	0	67	.10	7.9
8	5.3	.08	.13	.53	.12	5.4	7.1	2.7	0	57	.05	4.2
9	4.2	.06	.15	.48	1.3	3.9	4.6	2.0	0	48	.02	2.7
10	3.4	.04	.15	.36	5.1	3.1	3.2	1.5	0	37	.01	2.7
11	2.9	.03	.13	.32	4.9	2.5	2.2	1.2	0	26	.15	83
12	2.4	.02	.09	.31	2.9	2.1	1.6	1.3	1.9	16	.10	152
13	2.1	.30	.08	.36	2.1	1.7	1.6	1.2	203	9.5	.69	73
14	1.8	.68	.12	.53	1.5	1.6	9.7	1.1	813	6.5	1.4	55
15	1.5	1.4	.14	.41	1.1	1.5	12	.66	1,530	4.8	5.9	65
16	1.2	.71	.09	.31	.62	1.3	13	.38	1,600	3.8	1.7	54
17	.96	.37	.07	.23	.52	1.1	86	.22	1,120	2.9	2.6	572
18	.72	.26	.08	.16	12	1.0	231	.13	743	2.4	48	858
19	.48	.20	.08	.09	25	.79	145	.06	517	2.0	88	714
20	.30	.25	.08	.08	21	.58	97	.03	385	1.8	56	502
21	.27	.41	.09	.05	16	.41	68	.01	336	1.5	73	384
22	.23	.34	.05	.02	21	.28	54	0	254	1.2	85	356
23	.18	.31	.03	.01	37	.28	43	0	161	.85	42	347
24	.18	.54	.01	0	46	.30	33	0	104	.69	22	296
25	.17	1.1	0	.13	43	.23	24	0	261	.45	11	234
26	.12	2.0	0	1.0	38	.16	16	0	527	.41	5.7	158
27	.06	1.7	0	1.8	31	.14	11	0	534	.41	3.5	195
28	.04	1.4	0	2.7	21	.14	8.2	0	497	.25	2.9	381
29	.04	1.2	0	2.4	------	.09	6.4	0	569	.15	5.8	336
30	.03	.89	0	1.8	------	.06	5.5	0	512	.08	31	310
31	.02	------	0	1.4	------	.04	------	0	------	.05	25	------
TOTAL	444.80	14.84	4.21	16.75	334.50	185.00	888.06	50.69	10,667.9	1,529.74	513.10	6,230.5
MEAN	14.3	.49	.14	.54	11.9	5.97	29.6	1.64	356	49.3	16.6	208
MAX	177	2.0	.66	2.7	46	44	231	7.8	1,600	391	88	858
MIN	.02	.01	0	0	.05	.04	0	0	0	.05	.01	2.7
CFSM	.16	.006	.002	.006	.14	.07	.34	.02	4.05	.56	.19	2.37
IN.	.19	.006	.001	.007	.14	.08	.38	.02	4.52	.65	.22	2.64
AC-FT	882	29	8.4	33	663	367	1,760	101	21,160	3,030	1,020	12,360

CAL YR 1972 TOTAL 23,744.75 MEAN 64.9 MAX 1,710 MIN 0 CFSM .74 IN 10.06 AC-FT 47,100
WTR YR 1973 TOTAL 20,880.09 MEAN 57.2 MAX 1,600 MIN 0 CFSM .65 IN 8.85 AC-FT 41,420

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-16	0100	14.68	1,730
6-29	1300	10.82	584
9-18	1200	12.09	880

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 (13 km) northeast of Beeville, and 9 miles (14 km) upstream from Parker Hollow Creek.

DRAINAGE AREA.--204 mi² (528 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 163.00 ft (49.68 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 23.7 ft³/s (0.671 m³/s), 17,170 acre-ft/yr (21.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Oct. 29, gage height, 11.12 ft (3.39 m); no flow at times.
Period of record: Maximum discharge, 105,000 ft³/s (2,970 m³/s) Sept. 22, 1967, gage height, 38.68 ft (11.79 m), from floodmark, from rating curve extended above 30,000 ft³/s (850 m³/s) 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 (9 m), discharge, 25,500 ft³/s (722 m³/s) occurred in September 1919, from information by local resident.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	7.8	.39	.05	.29	3.2	.03	3.2	0	9.8	.30	.41
2	10	5.9	.46	.05	.22	2.6	.03	2.2	0	7.9	.36	.20
3	8.0	4.7	.46	.38	.10	2.4	.04	1.2	0	6.4	.70	.03
4	6.5	3.8	.46	.46	.10	2.1	0	.76	0	5.2	.80	.07
5	5.8	3.1	.35	.52	.10	1.8	0	.61	.01	4.7	.53	.03
6	4.3	2.6	.29	.71	.10	2.0	2.5	.61	41	3.8	.53	.01
7	3.5	2.2	.24	.74	.10	1.7	3.1	.46	4.8	9.0	.22	.01
8	2.2	1.5	.18	.61	.12	1.8	1.6	.35	2.1	12	.17	.01
9	1.5	1.0	.20	.35	1.0	1.8	.99	.24	1.1	5.1	.13	.01
10	1.2	.83	.26	.24	1.4	1.8	.51	.15	.23	3.8	2.7	.01
11	1.0	.68	.35	.24	1.4	1.8	.25	.15	.32	2.6	1.7	.87
12	.76	.61	.35	.24	1.2	1.5	.12	.24	25	1.9	.83	.63
13	.61	1.4	.35	.24	.83	1.5	.05	.24	306	1.8	4.0	.52
14	.46	1.4	.35	.28	.44	1.3	.05	.10	119	1.2	15	.23
15	.35	.49	.35	.24	.33	1.2	.05	.10	29	1.2	6.0	.28
16	.24	.69	.29	.22	.19	.44	18	.10	16	1.1	4.0	6.6
17	.24	.48	.29	.24	.48	.13	426	.05	9.6	1.1	2.0	18
18	.15	.49	.24	.24	1.8	.14	319	.05	6.8	1.1	1.1	9.6
19	.10	.46	.24	.17	2.2	.14	54	.05	4.5	.91	.73	13
20	.05	.46	.24	.10	1.9	.10	21	.05	3.7	.69	.59	6.1
21	.05	.46	.28	.17	1.6	.08	13	.03	55	.70	.38	2.5
22	.03	.46	.15	.24	2.8	.03	9.0	.03	48	.71	.22	1.1
23	.03	.46	.15	.24	4.9	.11	7.0	.03	24	.68	.22	.69
24	.03	1.1	.11	.24	2.9	.23	5.5	.03	16	.61	.11	.43
25	.03	1.1	.11	.80	2.4	.20	4.6	.03	315	1.1	.06	.42
26	.01	1.3	.10	1.5	2.2	.19	3.8	.03	665	2.6	.06	.33
27	.01	1.3	.10	1.7	4.2	.10	7.5	.03	130	1.1	.03	82
28	.01	.86	.10	.80	3.9	.08	11	.03	34	.69	.01	253
29	537	.41	.13	.54	------	.05	6.1	.02	19	.54	.01	37
30	61	.36	.14	.31	------	.05	4.3	0	14	.38	.02	14
31	12	------	.08	.24	------	.05	------	0	------	.31	.11	------
TOTAL	672.16	48.80	7.79	13.10	39.20	30.62	919.12	11.17	1,889.16	90.72	43.62	448.09
MEAN	21.7	1.63	.25	.42	1.40	.99	30.6	.36	63.0	2.93	1.41	14.9
MAX	537	7.8	.46	1.7	4.9	3.2	426	3.2	665	12	15	253
MIN	.01	.36	.08	.05	.10	.03	0	0	0	.31	.01	.01
AC-FT	1,330	97	15	26	78	61	1,820	22	3,750	180	87	889

CAL YR 1972 TOTAL 2,661.62 MEAN 7.27 MAX 537 MIN 0 AC-FT 5,280
WTR YR 1973 TOTAL 4,213.55 MEAN 11.5 MAX 665 MIN 0 AC-FT 8,360

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1300	11.12	1,200	6-13	1700	9.44	612
4-17	1000	9.66	678	6-26	1500	10.05	795
4-18	0900	9.17	531				

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 (171 m) upstream from Missouri Pacific Railroad Co. bridge, and 0.2 mile (0.3 km) southwest of Refugio.

DRAINAGE AREA.--690 mi² (1,787 km²).

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.00 ft (0.30 m) above mean sea level. Prior to Nov. 25, 1958, nonrecording gage at site 59 ft (18 m) downstream at same datum. Nov. 26, 1958, to Apr. 18, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years, 108 ft³/s (3.06 m³/s), 78,250 acre-ft/yr (96.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft³/s (343 m³/s) June 27, gage height, 28.67 ft (8.74 m); minimum, 6.9 ft³/s (195 dm³/s) June 5-9.
Period of record: Maximum discharge, 79,000 ft³/s (2,240 m³/s) Sept. 12, 1971, gage height, 38.25 ft (11.66 m); minimum observed, 0.7 ft³/s (20 dm³/s) 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 (11.1 m), discharge, 60,200 ft³/s (1,700 m³/s). Flood of July 7, 1942, reached a stage of 33.3 ft (10.1 m), discharge, 41,700 ft³/s (1,180 m³/s). Floods in August 1914 and May 17, 1938, reached a stage of 32.3 ft (9.8 m), from information by local residents.

REMARKS.--Records fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	287	24	16	20	35	14	24	7.6	282	36	62
2	102	148	24	15	18	30	14	22	7.6	211	40	51
3	77	104	23	16	16	28	14	20	7.3	179	38	39
4	62	83	23	16	15	26	13	19	7.3	155	36	34
5	52	69	22	17	15	25	13	17	7.2	136	35	31
6	46	59	22	17	15	23	24	17	7.0	120	34	29
7	42	52	21	17	15	22	72	17	7.2	107	33	28
8	38	46	20	17	15	22	244	15	6.9	98	32	27
9	35	42	20	17	19	21	103	14	7.1	92	31	26
10	33	39	20	18	17	21	53	13	8.0	100	34	28
11	31	36	20	20	32	19	34	13	203	87	33	39
12	30	35	20	19	42	18	26	16	1,240	75	39	42
13	28	39	19	18	31	18	23	13	5,180	69	35	60
14	26	36	19	20	25	18	21	14	9,440	64	66	110
15	25	37	19	21	21	18	20	12	7,550	61	113	53
16	24	36	19	20	18	18	45	11	2,810	57	83	500
17	23	32	18	19	22	16	902	11	722	55	154	2,140
18	22	31	18	18	39	16	757	11	310	52	377	2,410
19	21	29	18	17	167	16	460	9.9	200	49	324	953
20	21	27	18	17	105	16	216	9.4	262	48	130	339
21	23	25	18	16	70	16	124	9.1	609	46	71	292
22	21	25	17	16	75	15	86	8.8	371	45	50	183
23	21	25	17	17	271	16	67	8.7	288	43	41	114
24	20	27	17	16	318	17	53	8.8	199	42	37	87
25	19	28	16	22	143	17	43	8.7	1,930	41	34	71
26	19	50	17	48	85	16	36	8.8	8,050	43	32	61
27	19	52	16	98	57	15	29	8.6	9,830	43	30	1,850
28	19	38	16	61	42	15	25	8.3	4,460	40	32	3,190
29	215	31	16	40	------	15	22	8.1	1,240	39	90	1,970
30	2,600	26	16	28	------	15	22	7.9	479	37	55	539
31	1,440	------	16	23	------	15	------	7.7	------	37	44	------
TOTAL	5,307	1,594	589	740	1,728	598	3,575	391.8	55,446.2	2,553	2,219	15,358
MEAN	171	53.1	19.0	23.9	61.7	19.3	119	12.6	1,848	82.4	71.6	512
MAX	2,600	287	24	98	318	35	902	24	9,830	282	377	3,190
MIN	19	25	16	15	15	15	13	7.7	6.9	37	30	26
AC-FT	10,530	3,160	1,170	1,470	3,430	1,190	7,090	777	110,000	5,060	4,400	30,460

CAL YR 1972 TOTAL 72,629.0 MEAN 198 MAX 7,950 MIN 11 AC-FT 144,100
WTR YR 1973 TOTAL 90,099.0 MEAN 247 MAX 9,830 MIN 6.9 AC-FT 178,700

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	1700	19.50	3,380	6-27	0100	28.67	12,100
4-17	1800	11.90	1,200	9-18	0900	17.02	2,610
6-14	1800	28.46	11,300	9-28	1200	19.20	3,270

08189700 Aransas River near Skidmore, Tex.

LOCATION.--Lat 28°16'56", long 97°37'14", Bee County, on right bank 160 ft (49 m) downstream from centerline of county road bridge, 3.8 miles (6.1 km) downstream from confluence of West Aransas and Poesta Creeks, and 4.4 miles (7.1 km) northeast of Skidmore.

DRAINAGE AREA.--247 mi² (640 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 72.37 ft (22.06 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 57.9 ft³/s (1.64 m³/s), 41,950 acre-ft/yr (51.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,100 ft³/s (258 m³/s) June 25, gage height, 25.91 ft (7.90 m); minimum, 0.95 ft³/s (26.9 dm³/s) May 31, June 1.
Period of record: Maximum discharge, 82,800 ft³/s (2,340 m³/s) Sept. 22, 1967, gage height, 42.22 ft (12.87 m), from floodmark, from rating curve extended above 14,000 ft³/s (396 m³/s) 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 (10 m), discharge, 19,600 ft³/s (555 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	5.8	2.9	2.7	3.0	2.6	2.4	2.8	1.0	24	4.7	15
2	9.1	5.6	2.9	2.7	3.0	2.6	2.3	2.8	1.0	20	4.6	5.9
3	7.7	5.0	3.0	2.7	2.9	2.6	2.2	2.7	1.1	19	4.9	4.5
4	6.9	4.5	3.2	2.8	2.8	2.9	2.0	2.6	1.1	68	19	4.1
5	6.4	4.8	3.2	3.1	2.8	3.0	2.0	2.5	1.1	36	27	3.9
6	6.1	4.8	3.0	3.4	2.8	3.0	2.8	2.4	225	18	9.6	3.7
7	5.6	4.5	2.9	3.5	2.9	2.8	25	2.5	69	13	5.4	3.7
8	5.3	4.4	2.8	3.8	3.1	2.9	13	2.4	13	111	4.7	3.8
9	4.8	4.5	2.9	3.9	3.5	2.9	4.9	2.2	5.9	47	4.5	3.8
10	4.1	4.2	3.1	3.5	4.0	3.1	3.0	2.2	4.1	20	5.1	3.7
11	3.8	4.4	3.2	3.3	5.7	2.8	2.4	2.1	3.5	12	6.4	334
12	3.7	4.2	3.2	3.1	4.2	2.6	2.2	2.6	477	9.7	5.4	250
13	3.7	4.6	3.1	4.3	3.7	2.5	2.3	2.5	2,950	8.4	7.8	49
14	3.7	5.4	3.0	4.0	3.4	2.5	2.4	3.5	1,080	7.5	15	19
15	3.7	6.5	3.0	3.4	3.3	2.6	2.5	2.3	119	7.4	65	51
16	3.7	4.4	2.8	3.4	2.9	2.6	5.2	1.8	48	6.9	12	108
17	3.6	3.9	2.7	3.4	3.5	2.4	95	1.7	29	6.6	11	409
18	3.6	3.9	3.3	3.4	4.8	2.3	19	1.7	22	6.5	5.8	127
19	3.6	3.8	3.2	3.4	7.7	2.2	8.8	1.7	17	6.2	7.9	50
20	3.4	3.7	3.3	3.3	4.6	2.4	5.3	1.7	207	5.9	6.4	27
21	3.5	3.8	3.2	3.2	3.8	2.6	4.3	1.6	724	5.6	4.5	19
22	3.7	3.7	3.1	3.2	4.0	2.5	3.9	1.5	357	5.6	4.0	13
23	3.8	4.1	2.9	3.0	6.3	2.7	3.8	1.5	71	5.3	3.9	11
24	3.7	5.1	2.6	2.8	6.9	3.1	3.7	1.5	39	5.4	3.8	8.9
25	3.7	6.9	2.6	3.8	4.0	2.9	3.6	1.5	4,880	6.6	3.7	8.7
26	3.6	6.8	2.7	9.5	3.1	2.5	3.5	1.4	3,620	8.1	3.7	8.5
27	3.6	4.3	2.6	6.4	2.8	2.5	4.0	1.5	233	6.1	3.6	10
28	3.7	3.4	2.6	3.9	2.7	2.4	3.7	1.4	81	5.3	3.9	219
29	4.3	3.1	2.7	3.2	------	2.5	3.0	1.3	46	5.0	4.6	96
30	6.4	3.0	2.8	3.0	------	2.5	2.8	1.2	32	4.8	6.7	40
31	8.3	------	2.7	2.8	------	2.6	------	1.0	------	4.7	20	------
TOTAL	152.8	137.1	91.2	111.9	108.2	82.1	241.0	62.1	15,357.8	515.6	294.6	1,910.2
MEAN	4.93	4.57	2.94	3.61	3.86	2.65	8.03	2.00	512	16.6	9.50	63.7
MAX	12	6.9	3.3	9.5	7.7	3.1	95	3.5	4,880	111	65	409
MIN	3.4	3.0	2.6	2.7	2.7	2.2	2.0	1.0	1.0	4.7	3.6	3.7
AC-FT	303	272	181	222	215	163	478	123	30,460	1,020	584	3,790

CAL YR 1972 TOTAL 14,298.9 MEAN 39.1 MAX 4,010 MIN 1.6 AC-FT 28,360
WTR YR 1973 TOTAL 19,064.6 MEAN 52.2 MAX 4,880 MIN 1.0 AC-FT 37,810

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-13	1900	20.37	4,480	9-11	1200	9.53	615
6-21	0200	13.89	1,590	9-17	0500	10.53	786
6-25	2400	25.91	9,100				

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 (0.3 km) upstream from Missouri Pacific Railroad bridge, and 0.8 mile (1.3 km) northeast of Sinton.

DRAINAGE AREA.--128 mi² (332 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 18.74 ft (5.71 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,530 ft³/s (157 m³/s) June 26, gage height, 23.08 ft (7.03 m); no flow part of each day Aug. 25-27.
Period of record: Maximum discharge, 22,300 ft³/s (632 m³/s) Sept. 12, 1971, gage height, 29.10 ft (8.87 m), from rating curve extended above 13,400 ft³/s (379 m³/s); no flow part of each day Aug. 25-27, 1973.
Maximum stages since about 1910, 30.27 ft (9.23 m) Sept. 22, 1967, and 28.8 ft (8.8 m) 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 (WATER YEARS).--WRD Texas 1972: 1971(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	15	.86	2.0	.80	1.3	.53	.13	.4	49	.21	1.0
2	24	7.6	.86	1.7	.78	.91	.53	.13	.5	28	4.4	.21
3	17	5.1	1.7	1.6	1.8	.64	.55	.08	.4	21	.28	.08
4	12	3.7	1.5	1.9	.87	.60	.41	.08	.4	12	.28	.06
5	9.3	3.0	1.0	2.3	.79	.60	.14	.10	4.6	12	.21	.05
6	6.7	2.5	.83	3.0	1.0	.58	3.8	.12	390	16	.16	.02
7	4.5	2.1	1.1	1.9	1.6	.46	1.8	.11	301	7.0	.16	.03
8	3.6	1.9	1.1	1.8	3.0	.59	.75	.08	51	3.7	.21	.05
9	2.6	1.6	2.1	2.0	4.7	.60	.41	.09	24	2.1	.21	.08
10	2.2	1.3	1.7	1.2	.87	.63	.33	.11	13	1.0	3.3	.28
11	1.2	2.3	1.2	1.9	.56	.61	.47	.12	17	.64	31	119
12	.84	1.9	1.1	.40	.89	.42	.50	2.1	217	.44	7.4	81
13	.91	3.2	1.4	.28	2.1	.36	.66	.28	1,080	.35	2.4	38
14	1.6	1.6	2.0	.30	1.1	.61	.56	.20	2,080	.28	4.7	87
15	1.1	1.2	1.7	.57	.79	.63	.52	.13	858	.21	32	99
16	.91	1.1	2.0	1.8	.86	.58	1.3	.15	243	.28	8.6	102
17	.88	1.6	1.4	1.3	2.6	.59	.77	.16	60	.28	19	403
18	1.6	1.7	1.3	.82	1.3	.65	.27	.21	29	.21	70	274
19	.95	2.1	1.6	1.2	1.1	.62	.15	.26	14	.16	24	169
20	.84	1.9	1.8	1.1	.89	.65	.10	.30	92	.12	9.0	85
21	1.5	1.7	1.8	.96	2.6	.56	.08	.35	558	.12	3.8	56
22	2.0	1.0	1.4	1.9	4.5	.59	.08	.32	250	.12	.76	37
23	1.1	3.3	1.5	1.6	12	.73	.34	.29	104	.12	.21	23
24	.94	3.3	1.8	1.6	9.4	.51	.13	.32	217	.12	.05	14
25	.99	2.3	1.9	6.9	5.8	.47	.13	.35	2,650	4.3	.02	9.0
26	.98	1.7	1.2	10	4.1	.46	.06	.37	4,750	1.8	.01	5.6
27	1.2	2.0	1.1	6.3	2.5	.46	.05	.29	2,200	.35	.21	16
28	2.2	2.1	1.6	3.8	1.5	.51	.06	.32	671	.28	12	83
29	3.6	1.1	2.6	1.7	------	.64	.08	.40	250	.21	28	70
30	117	1.0	2.0	1.2	------	.62	.10	.40	105	.16	7.9	39
31	45	------	1.5	.99	------	.53	------	.39	------	.21	5.9	------
TOTAL	304.24	81.9	46.65	66.02	70.80	18.71	15.66	8.74	17,230.3	162.56	276.38	1,811.46
MEAN	9.81	2.73	1.50	2.13	2.53	.60	.52	.28	574	5.24	8.92	60.4
MAX	117	15	2.6	10	12	1.3	3.8	2.1	4,750	49	70	403
MIN	.84	1.0	.83	.28	.56	.36	.05	.08	.40	.12	.01	.02
CFSM	.08	.02	.01	.02	.02	.005	.004	.002	4.48	.04	.07	.47
IN.	.09	.02	.01	.02	.02	.005	.004	.002	5.01	.05	.08	.53
AC-FT	603	162	93	131	140	37	31	17	34,180	322	548	3,590

CAL YR 1972 TOTAL 14,733.41 MEAN 40.3 MAX 2,140 MIN .53 CFSM .31 IN 4.28 AC-FT 29,220
WTR YR 1973 TOTAL 20,093.42 MEAN 55.1 MAX 4,750 MIN .01 CFSM .43 IN 5.84 AC-FT 39,860

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6- 6	1700	8.83	658	6-21	0900	8.90	668
6-14	0600	17.70	2,300	6-26	0700	23.08	5,530

08190000 Nueces River at Laguna, Tex.

LOCATION.--Lat 29°25'41", long 99°59'46", Uvalde County, on right bank 0.5 mile (0.8 km) downstream from Sycamore Creek, 1.0 mile (1.6 km) northeast of Laguna, and at mile 395.4 (636.2 km).

DRAINAGE AREA.--764 mi² (1,979 km²).

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,119.72 ft (341.29 m) above mean sea level. Prior to Jan. 26, 1925, nonrecording gage at site 2 miles (3 km) downstream at different datum.

AVERAGE DISCHARGE.--50 years, 145 ft³/s (4.11 m³/s), 105,100 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,040 ft³/s (228 m³/s) June 11, gage height, 8.27 ft (2.52 m); minimum, 48 ft³/s (1.36 m³/s) June 2.

Period of record: Maximum discharge, 307,000 ft³/s (8,690 m³/s) Sept. 24, 1955, gage height, 29.95 ft (9.13 m) in gage well, 32.7 ft (10.0 m) from floodmarks, from rating curve extended above 40,000 ft³/s (1,130 m³/s) on basis of float measurement of 110,000 ft³/s (3,120 m³/s) and slope-area measurements of 213,000 and 307,000 ft³/s (6,030 and 8,690 m³/s); minimum, 2.6 ft³/s (74 dm³/s) 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 (9 m), discharge, 210,000 ft³/s (5,950 m³/s); flood of Sept. 21, 1923, reached a stage of about 26.5 ft (8.1 m), discharge, 160,000 ft³/s (4,530 m³/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	122	105	93	93	122	104	87	52	140	216	106
2	163	121	105	96	92	120	103	85	81	128	208	103
3	159	121	105	99	91	119	101	82	78	123	196	101
4	157	120	105	96	89	116	99	79	70	115	183	98
5	156	120	105	95	88	114	98	79	67	108	175	93
6	151	120	103	95	88	112	104	81	60	102	168	111
7	145	119	103	95	89	109	107	80	58	98	160	124
8	142	117	105	95	94	108	102	78	55	230	155	109
9	139	116	105	95	97	106	99	74	52	396	149	100
10	136	115	105	96	95	109	96	73	52	275	144	101
11	130	112	105	95	93	108	95	72	2,120	226	140	100
12	130	114	104	95	93	106	97	83	1,210	187	137	101
13	130	114	104	93	91	106	98	77	544	160	148	98
14	131	111	102	92	88	105	103	73	271	144	153	96
15	130	110	100	92	88	104	124	71	180	1,450	142	94
16	134	110	100	92	87	102	137	71	139	812	137	94
17	130	110	100	92	93	101	121	69	124	575	138	93
18	129	111	100	91	94	100	110	69	122	437	138	92
19	128	110	100	90	92	100	104	72	123	356	133	92
20	127	109	99	90	92	100	101	69	150	345	129	92
21	136	111	95	89	106	99	97	65	188	319	127	91
22	139	114	95	88	127	100	98	64	172	290	124	91
23	131	115	95	88	137	101	100	61	151	267	120	93
24	126	119	95	89	132	118	98	60	155	251	117	93
25	125	114	95	113	130	110	94	60	223	234	114	92
26	127	111	95	112	128	106	92	60	261	228	113	103
27	130	110	95	103	125	104	90	58	227	213	109	111
28	126	108	95	99	123	105	88	55	196	201	108	111
29	129	107	95	97	------	104	87	55	172	193	116	103
30	129	106	92	95	------	107	88	52	153	185	111	98
31	126	------	92	94	------	104	------	52	------	193	109	------
TOTAL	4,240	3,417	3,099	2,944	2,835	3,325	3,035	2,166	7,506	8,981	4,417	2,984
MEAN	137	114	100	95.0	101	107	101	69.9	250	290	142	99.5
MAX	169	122	105	113	137	122	137	87	2,120	1,450	216	124
MIN	125	106	92	88	87	99	87	52	52	98	108	91
AC-FT	8,410	6,780	6,150	5,840	5,620	6,600	6,020	4,300	14,890	17,810	8,760	5,920

CAL YR 1972 TOTAL 64,369 MEAN 176 MAX 3,370 MIN 68 AC-FT 127,700
WTR YR 1973 TOTAL 48,949 MEAN 134 MAX 2,120 MIN 52 AC-FT 97,090

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-11	0600	8.27	8,040	7- 8	2100	3.92	732
6-12	1300	5.43	3,280	7-15	1030	5.76	3,770

08190500 West Nueces River near Brackettville, Tex.

LOCATION.--Lat 29°28'55", long 100°14'20", Kinney County, at Wilson Ranch, 9 miles (14 km) downstream from Loss Creek, 11 miles (18 km) upstream from Liveoak Creek, 15.8 miles (25.4 km) northeast of Brackettville, and at mile 40.2 (64.7 km).

DRAINAGE AREA.--700 mi² (1,813 km²).

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 (404.41 m) above mean sea level. Prior to Mar. 14, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years, 36.8 ft³/s (1.04 m³/s), 26,660 acre-ft/yr (32.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,130 ft³/s (88.6 m³/s) June 11, gage height, 7.48 ft (2.28 m); no flow at times.
Period of record: Maximum discharge, 246,000 ft³/s (6,970 m³/s) Sept. 20, 1964, gage height, 31.3 ft (9.5 m), from floodmark, from rating curve extended above 4,500 ft³/s (127 m³/s) on basis of slope-area measurements of 10,000, 51,000, 150,000 and 246,000 ft³/s (283, 1,440, 4,250, and 6,970 m³/s); no flow most of time.
Maximum stage since at least 1879, about 40 ft (12 m) June 14, 1935, discharge, 550,000 ft³/s (15,600 m³/s), based on slope-area measurements of 580,000 ft³/s (16,400 m³/s) at site 33 miles (53 km) upstream from gage and 536,000 ft³/s (15,200 m³/s) at site 24 miles (39 km) downstream from gage, present site and datum, from gage-height relation of 1935 and 1955 flood peaks at site 0.6 mile (1.0 km) upstream. Flood in 1900 reached a stage of about 34 ft (10 m), and flood of Sept. 24, 1955, reached a stage of 27.1 ft (8.3 m); from floodmark at present site, discharge, 150,000 ft³/s (4,250 m³/s), by slope-area measurement.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s) and fair below. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16				0	.27	0	.06	0	8.4	9.6	1.2
2	.14				0	.22	0	.03	0	7.5	9.0	.99
3	.12				0	.19	0	0	0	6.9	8.2	.80
4	.12				0	.15	0	0	0	6.2	7.8	.71
5	.10				0	.13	0	0	0	5.7	7.4	.51
6	.08				0	.11	0	0	0	5.2	7.2	.89
7	.07				0	.08	0	0	0	4.7	6.8	1.1
8	.05				0	.07	0	0	0	399	6.4	.74
9	.05				0	.06	0	0	0	136	6.0	.60
10	.04				0	.07	0	0	0	67	5.8	.51
11	.03				0	.04	0	0	874	47	5.5	.50
12	.02				0	.02	0	0	193	37	5.2	.49
13	.02				0	.01	0	0	111	30	4.9	.68
14	.01				0	0	0	0	88	25	4.7	.80
15	.01				0	0	.10	0	67	115	4.5	.58
16	.01				0	0	.36	0	52	69	4.1	.51
17	0				.01	0	.71	0	37	96	3.9	.42
18	0				.01	0	.89	0	24	73	3.8	.32
19	0				0	0	.86	0	15	57	3.6	.30
20	0				0	0	.72	0	17	45	3.4	.27
21	0				.04	0	.60	0	16	37	3.2	.20
22	.01				.09	0	.48	0	14	31	2.9	.17
23	0				.17	0	.43	0	11	27	2.6	.21
24	0				.38	0	.34	0	9.9	23	2.5	.16
25	0				.53	0	.27	0	9.8	20	2.3	.11
26	0				.49	0	.19	0	10	18	2.2	.18
27	0				.40	0	.12	0	11	15	2.0	.53
28	0				.34	0	.10	0	11	13	1.9	3.1
29	0				------	0	.08	0	9.9	12	1.8	4.4
30	.01				------	0	.07	0	9.2	10	1.7	4.7
31	0	------			------	0	------	0	------	10	1.3	------
TOTAL	1.05	0	0	0	2.46	1.42	6.32	.09	1,589.8	1,456.6	142.2	26.68
MEAN	.034	0	0	0	.088	.046	.21	.003	53.0	47.0	4.59	.89
MAX	.16	0	0	0	.53	.27	.89	.06	874	399	9.6	4.7
MIN	0	0	0	0	0	0	0	0	0	4.7	1.3	.11
AC-FT	2.1	0	0	0	4.9	2.8	13	.2	3,150	2,890	282	53

CAL YR 1972 TOTAL 20,442.23 MEAN 55.9 MAX 16,200 MIN 0 AC-FT 40,550
WTR YR 1973 TOTAL 3,226.62 MEAN 8.84 MAX 874 MIN 0 AC-FT 6,400

PEAK DISCHARGE (BASE, 1,000 FT³/S).--June 11 (0730) 3,130 ft³/s (7.48 ft); July 8 (1630) 1,680 ft³/s (6.34 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 (9.2 km) upstream from bridge on U.S. Highway 83, 8.8 miles (14.2 km) southwest of Uvalde, 18.2 miles (29.3 km) downstream from West Nueces River, and at mile 366.0 (588.9 km).

DRAINAGE AREA.--1,947 mi² (5,043 km²).

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 (242.66 m) above mean sea level. Oct. 4, 1927, to Apr. 30, 1939, water-stage recorder at site 6.2 miles (10.0 km) upstream at different datum.

AVERAGE DISCHARGE.--34 years, 102 ft³/s (2.89 m³/s), 73,900 acre-ft/yr (91.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,790 ft³/s (50.7 m³/s) July 15, gage height, 5.30 ft (1.62 m); minimum, 28 ft³/s (0.79 m³/s) May 28, June 7-9, 11.
Period of record: Maximum discharge, 189,000 ft³/s (5,350 m³/s) Sept. 24, 1955, gage height, 24.61 ft (7.50 m), from floodmark, from rating curve extended above 34,000 ft³/s (963 m³/s) 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 (12.3 m) June 14, 1935, from floodmarks, discharge at former site, 616,000 ft³/s (17,400 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	67	52	44	36	36	39	35	36	129	138	70
2	115	68	52	46	36	36	39	34	32	117	154	69
3	112	68	52	45	37	36	38	33	31	109	141	68
4	111	67	53	44	36	36	38	34	31	103	135	67
5	109	66	52	44	36	37	38	35	34	99	130	64
6	107	66	51	42	37	36	42	35	36	93	125	74
7	108	64	52	42	37	37	39	33	29	89	121	68
8	104	63	52	42	38	38	36	33	29	92	115	64
9	101	62	52	42	36	39	37	34	29	162	111	64
10	99	61	51	42	36	41	38	35	30	249	109	63
11	96	61	50	41	36	39	38	38	346	230	108	64
12	93	61	50	41	36	40	38	39	474	213	105	62
13	86	57	50	41	36	40	39	36	669	185	102	61
14	81	59	50	41	36	40	40	36	289	162	101	59
15	79	59	49	41	36	40	49	34	184	667	112	59
16	76	57	48	41	36	38	40	34	132	1,020	104	63
17	72	57	48	41	38	40	42	34	101	605	96	57
18	72	57	48	39	36	41	40	33	84	453	91	57
19	68	57	48	40	36	40	39	32	74	366	91	57
20	68	57	48	38	37	40	39	32	81	337	86	57
21	69	56	45	36	41	41	38	32	84	286	84	57
22	68	55	48	37	41	42	39	32	94	249	82	56
23	71	57	47	38	38	43	39	32	102	226	80	57
24	74	58	46	38	38	41	38	33	105	205	79	56
25	74	53	46	44	38	39	38	33	120	189	77	55
26	73	54	46	39	37	39	37	33	164	179	75	56
27	71	54	46	36	37	41	36	31	194	168	74	54
28	70	52	46	35	38	40	37	30	180	158	73	53
29	70	53	46	38	------	40	37	30	159	147	73	53
30	72	52	43	38	------	39	38	31	145	141	70	53
31	72	------	44	38	------	39	------	31	------	137	69	------
TOTAL	2,661	1,778	1,511	1,254	1,036	1,214	1,165	1,037	4,098	7,565	3,111	1,817
MEAN	85.8	59.3	48.7	40.5	37.0	39.2	38.8	33.5	137	244	100	60.6
MAX	120	68	53	46	41	43	49	39	669	1,020	154	74
MIN	68	52	43	35	36	36	36	30	29	89	69	53
AC-FT	5,280	3,530	3,000	2,490	2,050	2,410	2,310	2,060	8,130	15,010	6,170	3,600

CAL YR 1972 TOTAL 58,397 MEAN 160 MAX 18,500 MIN 32 AC-FT 115,800
WTR YR 1973 TOTAL 28,247 MEAN 77.4 MAX 1,020 MIN 29 AC-FT 56,030

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-11	1930	4.83	1,180	7-10	0230	3.79	271
6-13	0130	4.78	1,110	7-15	2130	5.30	1,790

08193000 Nueces River near Asherton, Tex.

LOCATION.--Lat 28°30'00", long 99°40'55", Dimmit County, on right bank 28 ft (9 m) downstream from bridge on Farm Road 190, 0.1 mile (0.2 km) downstream from El Moro Creek, 5.5 miles (8.8 km) northeast of Asherton, and at mile 288.3 (463.9 km).

DRAINAGE AREA.--4,082 mi² (10,572 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 470.92 ft (143.54 m) above mean sea level. Prior to Feb. 2, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 178 ft³/s (5.04 m³/s), 129,000 acre-ft/yr (159 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 707 ft³/s (20.0 m³/s) July 18, gage height, 8.72 ft (2.66 m); no flow at times.
Period of record: Maximum discharge, 28,500 ft³/s (807 m³/s) Oct. 6, 1959, gage height, 30.88 ft (9.41 m); no flow for many days each year.
Maximum stage since at least 1900, 33 ft (10 m) 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 (9.36 hm³), 13 miles (21 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	.09	.06	2.5	22	39	3.5	.22		0	128	24
2	71	.01	.07	2.3	20	38	2.7	.11		0	120	29
3	70	0	.09	2.5	18	37	2.0	.05		0	106	29
4	65	0	.10	24	18	37	1.2	.04		0	98	26
5	62	0	.17	33	18	36	.56	.01		0	95	20
6	56	0	.22	29	18	35	.52	.01		0	90	17
7	53	0	.21	25	19	35	.42	.01		0	81	25
8	46	.01	.21	22	19	34	.23	0		3.2	75	54
9	47	.02	.26	22	23	33	.04	0		90	73	74
10	52	.02	.37	20	30	32	0	0		104	70	64
11	44	.01	.52	19	33	29	0	0		75	65	59
12	33	0	.60	19	33	24	0	0		78	59	52
13	19	0	.65	21	32	22	0	0		119	64	46
14	12	0	.72	24	28	21	.01	0		132	50	43
15	8.2	0	.77	28	23	21	.06	0		142	45	42
16	10	0	.74	30	22	20	.08	0		211	50	91
17	7.4	0	.80	25	23	20	.06	0		555	46	112
18	3.6	0	.82	20	26	22	11	0		641	46	50
19	1.6	0	1.0	15	27	20	26	0		604	44	44
20	.61	0	1.3	13	30	19	27	0		580	46	43
21	.36	.01	1.4	13	41	15	23	0		485	42	40
22	.29	.02	1.4	14	50	11	20	0		390	40	38
23	.18	.11	1.4	15	56	9.8	19	0		321	38	37
24	.17	.33	1.5	14	50	9.3	17	0		278	35	37
25	.12	.30	1.7	15	45	6.9	14	0		247	31	37
26	.13	.18	1.6	15	42	6.9	9.9	0		226	23	37
27	.19	.12	1.7	19	41	8.3	6.3	0		206	19	38
28	.22	.08	2.1	21	39	9.1	3.3	0		188	17	32
29	.22	.06	2.2	22	------	7.8	1.6	0		170	15	27
30	.22	.06	2.1	22	------	6.7	.50	0		154	20	26
31	.20	------	2.1	22	------	4.9	------	0	------	140	22	------
TOTAL	743.71	1.43	28.88	588.3	846	669.7	189.98	.45	0	6,139.2	1,753	1,293
MEAN	24.0	.048	.93	19.0	30.2	21.6	6.33	.015	0	198	56.5	43.1
MAX	80	.33	2.2	33	56	39	27	.22	0	641	128	112
MIN	.12	0	.06	2.3	18	4.9	0	0	0	0	15	17
AC-FT	1,480	2.8	57	1,170	1,680	1,330	377	.9	0	12,180	3,480	2,560

CAL YR 1972 TOTAL 34,727.64 MEAN 94.9 MAX 4,870 MIN 0 AC-FT 68,880
WTR YR 1973 TOTAL 12,253.65 MEAN 33.6 MAX 641 MIN 0 AC-FT 24,310

PEAK DISCHARGE (BASE, 2,000 FT³/S).--No peak above base.

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 (0.5 km) upstream from Missouri Pacific Railroad Co. bridge, 0.8 mile (1.3 km) south of Cotulla, 1.2 miles (1.9 km) upstream from Lind Dam, and at mile 235.7 (379.2 km).

DRAINAGE AREA.--5,260 mi² (13,620 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 368.08 ft (112.19 m) above mean sea level. Oct. 31, 1923, to Aug. 3, 1924, nonrecording gage at approximate site of present gage at datum 7.28 ft (2.22 m) higher. Aug. 4, 1924, to Nov. 19, 1934, nonrecording gage at site 5,000 ft (1,520 m) downstream at datum 8.42 ft (2.57 m) 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.--49 years (1924-73), 278 ft³/s (7.87 m³/s), 201,400 acre-ft/yr (248 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,780 ft³/s (192 m³/s) Sept. 29, gage height, 16.05 ft (4.89 m); no flow May 10 to July 7.

Period of record: Maximum discharge, 82,600 ft³/s (2,340 m³/s) June 18, 1935, gage height, 32.4 ft (9.9 m), from floodmarks, from rating curve extended above 43,000 ft³/s (1,220 m³/s) 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 (9.1 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	.19	.33	.32	11	37	.74	4.0		0	126	17
2	86	.13	.36	.60	14	35	1.0	2.6		0	117	15
3	78	.12	.37	.62	15	33	1.4	1.1		0	105	14
4	64	.12	.49	.62	17	32	1.3	.56		0	92	15
5	60	.15	.58	.62	16	32	1.3	.40		0	79	17
6	55	.15	.57	.69	15	29	2.7	.27		0	69	20
7	53	.12	.52	.75	13	28	2.6	.16		0	66	24
8	51	.12	.58	.37	15	27	1.6	.06		36	65	25
9	43	.14	.72	.26	16	26	1.1	.01		114	62	21
10	41	.12	.72	.23	13	25	.79	0		31	56	22
11	36	.15	.64	.89	15	23	.72	0		10	56	45
12	36	.18	.27	13	15	23	.68	0		36	53	69
13	41	.15	.18	14	18	23	.62	0		64	55	61
14	39	.10	.17	14	24	20	.53	0		79	41	52
15	32	.07	.14	12	26	20	.52	0		101	41	56
16	26	.05	.12	11	27	20	16	0		124	44	57
17	17	.08	.12	13	32	18	8.1	0		142	32	101
18	12	.13	.12	16	25	17	4.0	0		206	31	79
19	7.4	.12	.12	19	22	15	.95	0		394	34	130
20	5.2	.12	.25	20	25	11	.47	0		661	32	77
21	5.2	.15	.23	18	30	9.4	.34	0		674	32	62
22	4.4	.17	.17	15	34	13	.29	0		663	34	56
23	2.3	.30	.17	12	33	19	.26	0		558	35	51
24	1.4	.86	.17	9.8	41	15	.23	0		420	32	49
25	1.0	.64	.17	13	47	13	7.6	0		321	28	43
26	.78	.40	.17	9.1	47	8.9	9.1	0		263	26	41
27	.68	.34	.20	8.2	42	6.7	7.8	0		224	24	728
28	.47	.26	.23	8.2	38	5.3	6.9	0		203	41	1,910
29	.50	.23	.26	9.0	------	3.4	6.3	0		185	29	6,100
30	.36	.27	.29	9.4	------	1.7	5.3	0		165	26	5,020
31	.31	------	.29	9.7	------	.71	------	0	------	140	20	------
TOTAL	889.00	6.13	9.72	259.37	686	590.11	91.24	9.16	0	5,814	1,583	14,977
MEAN	28.7	.20	.31	8.37	24.5	19.0	3.04	.30	0	188	51.1	499
MAX	89	.86	.72	20	47	37	16	4.0	0	674	126	6,100
MIN	.31	.05	.12	.23	11	.71	.23	0	0	0	20	14
AC-FT	1,760	12	19	514	1,360	1,170	181	18	0	11,530	3,140	29,710

CAL YR 1972 TOTAL 33,071.86 MEAN 90.4 MAX 3,590 MIN 0 AC-FT 65,600
WTR YR 1973 TOTAL 24,914.73 MEAN 68.3 MAX 6,100 MIN 0 AC-FT 49,420

PEAK DISCHARGE (BASE, 2,500 FT³/S).--Sept. 29 (1500) 6,780 ft³/s (16.05 ft).

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 (18 km) upstream from Nueces River, and 22 miles (35 km) northwest of Freer.

DRAINAGE AREA.--469 mi² (1,215 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 298 ft (91 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--11 years, 79.4 ft³/s (2.25 m³/s), 57,530 acre-ft/yr (70.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,670 ft³/s (75.6 m³/s) Sept. 29, gage height, 19.21 ft (5.86 m); no flow for many days.
Period of record: Maximum discharge, 82,000 ft³/s (2,320 m³/s) Oct. 17, 1971, gage height, 26.87 ft (8.19 m), from rating curve extended above 21,000 ft³/s (595 m³/s) on basis of flow-through-culverts, contracted-opening, and flow-over-road determination of 82,000 ft³/s (2,320 m³/s); no flow for many days each year.
Maximum stage since at least 1946 that of Oct. 17, 1971. Second highest stage, 26 ft (8 m), discharge 65,200 ft³/s (1,850 m³/s), occurred in 1954, from information by State Highway Department.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0		0	.01	.01	13	0		0	4.8	0	37
2	3.0		0	.02	0	6.4	0		0	2.8	0	6.5
3	2.0		0	.02	0	4.3	0		0	1.6	0	3.4
4	1.0		0	.02	0	2.6	0		0	2.7	0	1.6
5	.80		0	.02	0	1.4	0		0	5.3	0	.66
6	.60		0	.02	0	.80	1.5		0	2.1	0	.38
7	.50		0	.02	0	.47	.50		0	.85	0	.33
8	.40		0	.02	0	.35	.02		0	.47	0	.25
9	.30		0	.02	0	.21	.01		0	.42	0	.13
10	.20		0	.01	0	.14	.01		22	.27	0	1.0
11	.10		0	.03	0	.09	.01		251	.12	0	48
12	.09		.01	.03	0	.09	.01		22	.05	0	70
13	.08		.01	.04	0	.09	.03		6.0	.22	0	20
14	.07		.01	.04	0	.08	.07		2.9	.19	0	5.1
15	.06		.01	.04	0	.07	.01		1.4	.10	0	123
16	.05		.01	.04	0	.05	.14		.60	.05	0	523
17	.04		.01	.03	.06	.03	.11		.20	.18	0	524
18	.03		.01	.03	.03	.02	.07		.06	6.4	0	488
19	.02		.01	.02	.01	.01	.05		.01	2.1	0	238
20	.02		.01	.02	.33	.01	.04		.40	.79	0	109
21	.01		.01	.02	11	.01	.02		1.0	.31	4.9	51
22	.01		.01	.01	48	.01	.02		1.6	.10	2.6	15
23	.01		.01	.01	98	.01	.01		4.6	.03	.45	8.4
24	0		.01	0	49	.01	.01		23	0	.13	5.9
25	0		.01	.03	34	.01	.01		223	0	.02	3.7
26	0		.01	.03	30	0	0		459	0	0	3.0
27	0		.01	.03	197	0	0		172	0	0	446
28	0		0	.03	78	0	0		107	0	0	1,450
29	0		.01	.02	------	0	0		30	0	54	2,240
30	0		.01	.02	------	0	0		8.3	0	566	1,780
31	0	------	.01	.02	------	0	------		------	0	358	------
TOTAL	14.39	0	.19	.72	545.44	30.26	2.65	0	1,336.07	31.95	986.10	8,202.35
MEAN	.46	0	.006	.023	19.5	.98	.088	0	44.5	1.03	31.8	273
MAX	5.0	0	.01	.04	197	13	1.5	0	459	6.4	566	2,240
MIN	0	0	0	0	0	0	0	0	0	0	0	.13
AC-FT	29	0	.4	1.4	1,080	60	5.3	0	2,650	63	1,960	16,270

CAL YR 1972 TOTAL 24,561.89 MEAN 67.1 MAX 5,410 MIN 0 AC-FT 48,720
WTR YR 1973 TOTAL 11,150.12 MEAN 30.5 MAX 2,240 MIN 0 AC-FT 22,120

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-26	1000	13.80	590	9-16	1900	13.90	690
8-30	1900	14.97	804	9-29	2000	19.21	2,670

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 (2.9 km) upstream from Kings Branch, 10.5 miles (16.9 km) south of Tilden, and at mile 141.2 (227.2 km).

DRAINAGE AREA.--8,192 mi² (21,217 km²).

PERIOD OF RECORD.--November 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.5 ft (55.9 m) above mean sea level.

AVERAGE DISCHARGE.--30 years (1943-73), 450 ft³/s (12.7 m³/s), 326,000 acre-ft/yr (402 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,000 ft³/s (142 m³/s) Sept. 28, gage height, 18.22 ft (5.55 m); minimum, 0.34 ft³/s (9.6 dm³/s) May 31, June 3, 10.
Period of record: Maximum discharge, 76,500 ft³/s (2,170 m³/s) Sept. 24, 1967, gage height, 26.57 ft (8.10 m); 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 (8.06 m), discharge, 70,000 ft³/s (1,980 m³/s). Floods in June 1935 reached a stage of 23.7 ft (7.2 m) and in July 1942 about 22 ft (7 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	708	21	.68	1.0	12	316	4.9	4.2	.42	86	196	466
2	364	6.7	.64	.94	9.8	197	3.7	4.3	.43	45	167	561
3	223	3.1	.77	.99	7.7	87	2.7	5.0	.39	25	143	279
4	202	1.4	.73	.97	6.4	65	1.4	6.7	.44	16	126	143
5	163	.90	.80	1.0	6.2	56	.86	7.7	.58	8.5	114	93
6	119	.87	.81	.91	7.2	52	1.3	7.0	.73	5.7	107	41
7	97	.73	.73	1.1	8.7	48	2.1	6.1	.47	4.4	95	21
8	82	.75	.73	.83	11	45	1.8	5.8	.42	5.2	86	23
9	73	.73	.68	.83	16	42	.86	4.9	.42	4.2	76	12
10	65	.68	.73	.92	18	36	.86	4.2	.56	3.0	68	8.4
11	60	.73	.86	.87	19	31	.86	3.3	.75	2.0	64	7.5
12	55	.71	1.0	.93	21	30	.65	3.4	5.9	1.3	62	12
13	49	.70	.84	.87	23	29	.86	2.5	118	21	61	42
14	44	.54	1.7	.87	21	28	1.0	1.7	83	40	61	100
15	40	.51	1.0	.95	17	25	1.0	1.2	17	20	59	82
16	39	.51	1.0	.85	15	24	1.0	.87	6.1	19	55	96
17	41	.52	1.0	.87	18	22	2.5	.98	3.9	59	52	453
18	38	.53	.91	.83	24	21	144	1.8	2.4	84	45	697
19	32	.53	.89	.76	31	20	33	3.4	1.2	108	42	761
20	27	.51	1.0	.73	42	18	21	5.1	25	130	44	826
21	23	.53	.88	.75	49	15	26	5.9	266	184	34	879
22	18	.51	.79	1.3	54	13	18	5.9	53	313	28	919
23	14	.57	.84	11	98	13	15	5.8	36	436	28	527
24	11	.86	.86	16	257	12	12	4.7	21	487	29	176
25	8.5	.86	.93	22	448	9.6	9.9	3.2	127	510	26	103
26	6.4	.81	.86	22	372	7.4	8.4	2.0	333	501	23	77
27	5.1	.81	.86	19	208	5.7	6.9	1.3	444	434	22	1,520
28	4.3	.71	.93	17	146	6.4	5.6	.74	559	343	21	4,750
29	3.5	.73	1.0	17	------	8.3	5.1	.56	395	278	21	4,370
30	3.1	.65	.98	16	------	7.6	4.4	.46	178	232	34	3,560
31	49	------	1.0	14	------	6.2	------	.42	------	201	118	------
TOTAL	2,666.9	49.69	27.43	174.07	1,966.0	1,296.2	337.65	111.13	2,680.11	4,606.3	2,107	21,604.9
MEAN	86.0	1.66	.88	5.62	70.2	41.8	11.3	3.58	89.3	149	68.0	720
MAX	708	21	1.7	22	448	316	144	7.7	559	510	196	4,750
MIN	3.1	.51	.64	.73	6.2	5.7	.65	.42	.39	1.3	21	7.5
AC-FT	5,290	99	54	345	3,900	2,570	670	220	5,320	9,140	4,180	42,850

CAL YR 1972 TOTAL 77,960.15 MEAN 213 MAX 4,510 MIN .05 AC-FT 154,600
WTR YR 1973 TOTAL 37,627.38 MEAN 103 MAX 4,750 MIN .39 AC-FT 74,630

PEAK DISCHARGE (BASE, 1,800 FT³/S).--Sept. 28 (1300) 5,000 ft³/s (18.22 ft).

08194600 Nueces River at Simmons, Tex.

LOCATION.--Lat 28°25'16", long 98°17'03", Live Oak County, on right bank 58 ft (18 m) upstream from centerline of county road, 714 ft (218 m) to right of right abutment of county road bridge, 1.1 miles (1.8 km) north of Simmons, 1.5 miles (2.4 km) upstream from Lang Creek, 10.1 miles (16.3 km) upstream from Frio River, and at mile 113.7 (182.9 km).

DRAINAGE AREA.--8,561 mi² (22,173 km²).

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 119.63 ft (36.46 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 621 ft³/s (17.6 m³/s), 449,900 acre-ft/yr (555 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,050 ft³/s (115 m³/s) Sept. 30, gage height, 24.07 ft (7.34 m) occurred on rise preceding peak of Oct. 10, 1973; maximum independent peak discharge, 1,170 ft³/s (33.1 m³/s) June 25; maximum independent gage height, 18.20 ft (5.55 m) June 16, affected by backwater; no flow June 8, 9.
Period of record: Maximum discharge, 72,000 ft³/s (2,040 m³/s) Sept. 25, 1967, gage height, 43.21 ft (13.17 m); no flow at times.
Maximum stage since at least 1875, 43.5 ft (13.3 m), discharge 75,800 ft³/s (2,150 m³/s), in September 1919; floods in June 1935 and July 1942 reached a stage of 42.0 ft (12.8 m), discharge 58,500 ft³/s (1,660 m³/s), from information by local residents.

REMARKS.--Records good except for periods of backwater June 14-18, 26-30, July 24-28, which are fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711	38	2.2	2.4	15	159	8.8	5.7	.16	162	214	180
2	503	23	2.3	2.7	13	248	7.9	5.1	.08	94	200	470
3	243	12	2.6	3.4	11	131	7.3	4.5	.05	60	169	459
4	184	7.7	2.6	2.9	9.2	80	5.8	4.0	.03	40	149	203
5	170	6.4	2.7	2.9	8.2	64	4.9	4.2	.01	28	133	134
6	136	5.7	2.7	3.2	7.4	56	8.9	7.9	.01	18	123	87
7	108	5.0	2.4	3.7	7.4	51	11	8.5	.01	11	113	47
8	89	4.3	2.4	3.5	8.3	49	6.1	6.6	0	7.9	101	47
9	76	4.2	2.4	2.7	13	46	5.4	5.4	0	6.6	91	37
10	67	4.1	2.7	2.6	13	44	4.6	4.5	.05	6.6	82	18
11	62	3.3	2.8	3.2	16	36	3.8	4.2	1.5	5.4	76	50
12	56	3.3	3.1	3.6	17	32	3.4	5.4	34	4.0	72	8.4
13	51	3.6	3.0	3.0	18	31	3.2	4.0	173	2.8	76	8.8
14	46	2.9	2.7	2.6	19	31	3.0	3.2	235	13	67	45
15	42	2.6	2.9	2.4	19	29	3.0	2.6	324	45	68	101
16	37	2.6	2.8	2.4	16	27	9.0	2.1	106	29	66	100
17	36	2.6	3.8	2.4	18	25	6.6	1.9	50	24	66	159
18	37	2.7	3.9	2.3	20	23	135	1.6	16	64	61	548
19	34	2.7	3.4	2.1	20	23	141	1.3	4.7	90	51	712
20	30	2.6	3.2	1.9	26	22	45	.90	13	114	46	788
21	26	2.5	3.0	1.6	39	21	26	.62	667	139	47	841
22	22	2.9	2.6	2.4	48	18	30	1.2	433	199	38	892
23	18	3.0	2.7	1.2	54	18	24	3.5	116	326	29	877
24	15	4.7	2.4	.90	105	17	20	5.1	122	403	26	372
25	13	4.8	2.4	16	264	14	20	4.9	889	421	27	167
26	11	3.7	2.3	21	352	13	14	3.9	578	405	24	113
27	10	3.4	2.2	21	252	11	11	3.0	367	334	21	585
28	8.8	3.0	2.2	19	150	9.6	8.9	1.9	458	317	20	1,800
29	11	2.6	2.4	17	------	9.0	7.2	1.1	504	298	19	2,850
30	9.8	2.4	2.7	16	------	9.9	6.3	.54	252	251	19	3,880
31	7.5	------	2.6	17	------	9.9	------	.29	------	216	30	------
TOTAL	2,870.1	172.3	84.1	189.00	1,558.5	1,357.4	591.1	109.65	5,343.60	4,134.3	2,324	16,579.2
MEAN	92.6	5.74	2.71	6.10	55.7	43.8	19.7	3.54	178	133	75.0	553
MAX	711	38	3.9	21	352	248	141	8.5	889	421	214	3,880
MIN	7.5	2.4	2.2	.90	7.4	9.0	3.0	.29	0	2.8	19	8.4
AC-FT	5,690	342	167	375	3,090	2,690	1,170	217	10,600	8,200	4,610	32,880

CAL YR 1972 TOTAL 75,317.90 MEAN 206 MAX 4,000 MIN 1.0 AC-FT 149,400
WTR YR 1973 TOTAL 35,313.25 MEAN 96.7 MAX 3,880 MIN 0 AC-FT 70,040

PEAK DISCHARGE (BASE, 2,000 FT³/S).--No peak above base.

08195000 Frio River at Concan, Tex.

LOCATION.--Lat 29°29'18", long 99°42'16", Uvalde County, on left bank 0.7 mile (1.1 km) southeast of Concan Post Office, 15 miles (24 km) upstream from Dry Frio River, and at mile 224.1 (360.6 km).

DRAINAGE AREA.--405 mi² (1,049 km²).

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 (366.89 m) above mean sea level. Oct. 26, 1923, to July 28, 1924, nonrecording gage at site 86 ft (26 m) upstream at datum 5.08 ft (1.55 m) 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 (40 m) downstream at present datum.

AVERAGE DISCHARGE.--48 years (1924-29, 1930-73), 105 ft³/s (2.97 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 40,100 ft³/s (1,140 m³/s) July 15, gage height, 19.60 ft (5.97 m); minimum, 45 ft³/s (1.27 m³/s) May 31.
Period of record: Maximum discharge, 162,000 ft³/s (4,590 m³/s) July 1, 1932, gage height, 34.44 ft (10.50 m), from floodmarks, from rating curve extended above 44,000 ft³/s (1,250 m³/s) on basis of flow-over-dam measurement of 56,600 ft³/s (1,600 m³/s) and slope-area measurement of 162,000 ft³/s (4,590 m³/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	128	103	86	81	103	95	97	1,260	183	498	142
2	195	125	103	89	80	101	94	94	253	178	394	140
3	190	122	101	90	80	101	91	91	122	175	357	137
4	185	121	101	88	80	101	91	89	96	168	339	133
5	175	118	100	88	79	101	91	89	85	161	328	129
6	170	119	97	86	80	95	98	92	90	152	316	135
7	165	117	98	86	80	95	99	98	85	145	302	144
8	161	116	98	86	83	94	94	92	74	2,120	290	137
9	161	115	98	87	84	98	91	83	71	1,020	280	130
10	157	113	97	87	83	105	92	80	75	834	266	125
11	153	114	95	85	82	94	93	81	316	630	258	126
12	152	113	94	84	80	96	94	94	1,790	447	246	126
13	149	125	95	83	80	95	95	82	412	378	234	121
14	146	115	96	83	78	94	101	78	287	335	231	128
15	145	115	92	83	79	95	117	77	250	8,400	220	125
16	141	115	92	83	80	96	121	76	233	1,750	217	124
17	141	114	91	82	83	94	115	71	239	1,190	210	122
18	138	111	91	80	84	95	105	66	228	933	200	119
19	135	109	91	80	83	94	101	67	210	800	195	118
20	135	108	90	79	81	93	101	66	227	704	191	118
21	141	108	88	74	90	94	101	65	215	634	186	116
22	155	108	88	75	97	96	103	63	193	581	175	115
23	138	109	88	75	100	99	105	64	183	540	169	131
24	133	117	88	77	99	102	106	64	194	503	164	127
25	129	109	89	97	101	97	102	63	225	474	164	119
26	132	107	88	92	101	98	100	63	230	441	161	117
27	133	105	88	84	101	98	95	58	219	428	157	132
28	129	105	88	80	102	95	95	55	210	408	152	124
29	129	105	88	83	------	97	96	53	198	382	151	119
30	130	105	85	83	------	98	98	51	190	360	148	116
31	129	------	86	83	------	96	------	47	------	690	144	------
TOTAL	4,672	3,411	2,887	2,598	2,411	3,010	2,980	2,309	8,460	26,144	7,343	3,795
MEAN	151	114	93.1	83.8	86.1	97.1	99.3	74.5	282	843	237	127
MAX	200	128	103	97	102	105	121	98	1,790	8,400	498	144
MIN	129	105	85	74	78	93	91	47	71	145	144	115
AC-FT	9,270	6,770	5,730	5,150	4,780	5,970	5,910	4,580	16,780	51,860	14,560	7,530

CAL YR 1972 TOTAL 52,842 MEAN 144 MAX 1,480 MIN 64 AC-FT 104,800
WTR YR 1973 TOTAL 70,020 MEAN 192 MAX 8,400 MIN 47 AC-FT 138,900

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6- 1	1100	8.17	5,790	7-10	1200	5.26	1,010
6-11	1200	5.07	795	7-15	0700	19.60	40,100
6-12	1000	7.58	4,620	7-31	1630	6.00	1,940
7- 8	1530	9.67	9,180				

08196000 Dry Frio River near Reagan Wells, Tex.

LOCATION (revised).--Lat 29°30'16", long 99°46'52", Uvalde County, on right bank 2.3 miles (3.7 km) upstream from bridge on U.S. Highway 83, 3.1 miles (5.0 km) upstream from Rocky Creek, and 4.3 miles (6.9 km) southeast of Reagan Wells.

DRAINAGE AREA.--117 mi² (303 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,335.2 ft (407.0 m) above mean sea level, adjustment unknown.

AVERAGE DISCHARGE.--21 years, 33.3 ft³/s (0.943 m³/s), 24,130 acre-ft/yr (29.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,000 ft³/s (538 m³/s) June 12, gage height, 18.25 ft (5.56 m); minimum, 10 ft³/s (0.28 m³/s) Jan. 1, 21-24, May 31, June 1.
Period of record: Maximum discharge, 123,000 ft³/s (3,480 m³/s) Aug. 13, 1966, gage height, 27.6 ft (8.4 m), from floodmark, from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of slope-area measurements of 11,400, 30,700, 64,700, and 123,000 ft³/s (323, 869, 1,830, and 3,480 m³/s); no flow at times.
Maximum stage since at least 1875 occurred in 1880, about 33 ft (10 m). Flood of June 14, 1935, reached a stage of 26.0 ft (7.9 m), discharge at site 2.6 miles (4.2 km) upstream, 64,700 ft³/s (1,830 m³/s), and that of July 1, 1932, reached a stage of 23 ft (7 m), discharge at site 2.0 miles (3.2 km) upstream, 30,700 ft³/s (869 m³/s), from information by local residents.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Several small diversions above station.

REVISIONS (WATER YEARS).--WSP 1712: 1953. WSP 1923: 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	18	13	10	16	29	17	28	16	100	163	42
2	35	17	13	12	15	28	16	27	16	95	131	40
3	32	17	13	13	14	27	16	24	16	90	118	39
4	31	16	13	12	13	26	16	23	16	86	110	38
5	30	16	14	12	13	26	16	23	16	83	104	36
6	29	17	13	12	13	25	17	24	16	80	98	44
7	27	16	13	12	14	24	19	23	15	80	87	52
8	26	16	13	12	16	23	17	21	14	500	83	44
9	25	15	13	12	17	23	16	20	14	250	80	41
10	24	14	13	13	16	27	15	20	14	180	78	38
11	23	14	13	13	15	24	15	21	613	150	75	37
12	22	15	13	13	15	22	16	26	2,620	125	72	37
13	21	16	13	12	15	23	16	24	442	110	71	36
14	21	16	13	12	15	22	18	21	243	100	125	44
15	20	15	13	12	14	21	24	19	141	2,000	77	41
16	20	14	12	12	13	20	36	19	168	700	71	38
17	20	14	12	12	16	18	39	18	165	500	67	35
18	20	14	12	12	16	18	41	18	160	400	65	34
19	19	14	12	12	16	19	38	17	150	340	63	33
20	18	13	12	11	16	18	36	16	150	278	60	33
21	20	13	12	10	21	18	34	16	140	252	59	33
22	28	13	12	10	31	18	33	15	130	236	56	32
23	22	14	11	10	38	20	33	15	125	214	54	43
24	20	18	11	10	32	23	33	16	140	197	52	44
25	19	17	11	23	31	20	30	16	150	180	50	40
26	20	16	11	24	30	19	30	16	140	167	48	40
27	20	15	11	19	29	18	29	14	130	159	47	61
28	20	14	11	17	29	18	29	13	120	148	46	59
29	20	14	12	17	------	18	28	12	112	139	47	52
30	20	13	12	16	------	19	28	11	106	130	46	48
31	19	------	11	16	------	18	------	11	------	145	45	------
TOTAL	727	454	381	413	539	672	751	587	6,298	8,214	2,348	1,234
MEAN	23.5	15.1	12.3	13.3	19.3	21.7	25.0	18.9	210	265	75.7	41.1
MAX	36	18	14	24	38	29	41	28	2,620	2,000	163	61
MIN	18	13	11	10	13	18	15	11	14	80	45	32
AC-FT	1,440	901	756	819	1,070	1,330	1,490	1,160	12,490	16,290	4,660	2,450

CAL YR 1972 TOTAL 8,026.7 MEAN 21.9 MAX 456 MIN 6.0 AC-FT 15,920
WTR YR 1973 TOTAL 22,618.0 MEAN 62.0 MAX 2,620 MIN 10 AC-FT 44,860

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-11	1130	5.02	1,310	7-15	unknown	16.34	15,200
6-12	0830	18.25	19,000	8-14	0230	3.19	320
			about				
7- 8	unknown	unknown	5,000				

NOTE.--No gage-height record June 17 to July 19.

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 (1.6 km) upstream from crossing of old Uvalde-Sabinal road, 5.0 miles (8.0 km) downstream from Dry Frio River, 5.7 miles (9.2 km) downstream from bridge on U.S. Highway 90, and 7.4 miles (11.9 km) northeast of Uvalde.

DRAINAGE AREA.--661 mi² (1,712 km²).

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 (268.98 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 25.6 ft³/s (0.725 m³/s), 18,550 acre-ft/yr (22.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 34,100 ft³/s (966 m³/s) July 15, gage height, 16.47 ft (5.02 m); no flow most of time.
Period of record: Maximum discharge, 88,500 ft³/s (2,510 m³/s) Aug. 13, 1966, gage height, 23.88 ft (7.28 m), from floodmark, from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of slope-area measurements of 24,400, 53,000, and 88,500 ft³/s (691, 1,500, and 2,510 m³/s); no flow most of time.
Maximum stage since at least 1887, about 35 ft (11 m) in 1894. Flood of July 1, 1932, reached a stage of about 30 ft (9 m). 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0	430	
2									69	0	182	
3									1.8	0	129	
4									0	0	101	
5									0	0	82	
6									0	0	64	
7									0	0	45	
8									0	484	26	
9									0	910	11	
10									0	289	5.1	
11									0	251	2.6	
12									4,150	151	1.9	
13									741	109	1.7	
14									98	90	1.4	
15									38	8,070	1.3	
16									10	2,670	1.1	
17									2.4	1,210	.92	
18									1.1	744	.84	
19									.54	587	.74	
20									.35	487	.69	
21									.15	411	.55	
22									0	349	.48	
23									0	298	.40	
24									0	259	.30	
25									0	227	.20	
26									0	203	.13	
27									0	180	.07	
28									0	161	0	
29					------				0	144	0	
30					------				0	127	0	
31		------			------		------		------	110	0	------
TOTAL	0	0	0	0	0	0	0	0	5,112.34	18,521	1,090.42	0
MEAN	0	0	0	0	0	0	0	0	170	597	35.2	0
MAX	0	0	0	0	0	0	0	0	4,150	8,070	430	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	10,140	36,740	2,160	0

CAL YR 1972 TOTAL 3,669.03 MEAN 10.0 MAX 1,410 MIN 0 AC-FT 7,280
WTR YR 1973 TOTAL 24,723.76 MEAN 67.7 MAX 8,070 MIN 0 AC-FT 49,040

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-12	1430	13.31	19,200
7- 8	2200	8.27	4,670
7-15	1400	16.47	34,100

08198000 Sabinal River near Sabinal, Tex.

LOCATION.--Lat 29°29'35", long 99°29'49", Uvalde County, on right bank 108 ft (33 m) upstream from concrete dam, 2.3 miles (3.7 km) downstream from mouth of Onion Creek, and 12.5 miles (20.1 km) north of Sabinal.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,131.20 ft (344.79 m) above mean sea level. Prior to Apr. 9, 1971, at site 0.3 mile (0.5 km) downstream at same datum.

AVERAGE DISCHARGE.--31 years, 47.1 ft³/s (1.33 m³/s), 34,120 acre-ft/yr (42.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 36,500 ft³/s (1,030 m³/s) July 15, gage height, 24.0 ft (7.3 m), from floodmark; minimum, 27 ft³/s (0.76 m³/s) Dec. 31, Jan. 21, 22.
Period of record: Maximum discharge, 55,200 ft³/s (1,560 m³/s) June 17, 1958, gage height, 28.3 ft (8.6 m), from floodmark at present site, from rating curve extended above 6,900 ft³/s (195 m³/s) on basis of slope-area measurement of 55,200 ft³/s (1,560 m³/s); no flow at times.
Maximum stage since at least 1892, about 33 ft (10 m) 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 (19 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	54	44	29	35	42	40	56	330	167	420	118
2	82	54	44	29	33	42	40	55	152	159	376	112
3	80	54	44	34	33	43	40	50	84	154	355	109
4	80	54	44	34	33	43	40	50	68	151	337	105
5	78	53	44	35	32	44	38	50	59	144	321	99
6	78	52	39	34	32	42	48	53	55	138	310	104
7	74	52	38	34	32	42	49	56	49	133	292	117
8	74	50	39	33	31	42	43	63	44	5,000	278	105
9	74	50	40	32	30	42	40	56	43	2,000	272	98
10	70	49	40	32	30	47	40	54	44	916	262	94
11	67	48	38	32	30	48	40	53	93	746	251	90
12	68	48	39	32	30	44	40	63	712	639	244	89
13	66	56	40	32	30	44	40	56	287	576	235	88
14	64	55	40	32	29	42	41	52	190	532	228	97
15	64	52	40	32	29	42	59	52	163	7,970	224	95
16	62	51	38	32	29	40	64	50	151	2,330	216	89
17	62	52	37	32	30	39	120	50	147	1,420	206	86
18	62	52	37	32	30	39	71	46	139	1,110	196	84
19	59	50	37	30	31	40	67	44	131	951	192	80
20	58	46	37	30	32	40	64	45	138	847	184	78
21	60	46	35	27	36	40	61	44	129	768	175	78
22	74	46	35	27	42	40	61	42	119	694	167	76
23	68	46	35	29	48	41	65	40	115	632	157	75
24	62	52	35	29	50	49	64	41	117	585	151	74
25	60	52	34	36	49	46	62	42	179	547	145	72
26	61	50	34	39	46	44	59	42	213	521	139	72
27	62	47	32	38	44	44	54	40	199	491	136	177
28	62	46	32	37	42	44	54	37	187	466	133	96
29	62	44	32	35	------	42	54	35	181	440	133	84
30	62	44	30	34	------	42	55	35	175	411	133	78
31	58	------	28	36	------	42	------	34	------	434	123	------
TOTAL	2,095	1,505	1,161	1,009	978	1,321	1,613	1,486	4,693	32,072	6,991	2,819
MEAN	67.6	50.2	37.5	32.5	34.9	42.6	53.8	47.9	156	1,035	226	94.0
MAX	82	56	44	39	50	49	120	63	712	7,970	420	177
MIN	58	44	28	27	29	39	38	34	43	133	123	72
AC-FT	4,160	2,990	2,300	2,000	1,940	2,620	3,200	2,950	9,310	63,610	13,870	5,590

CAL YR 1972 TOTAL 23,032 MEAN 62.9 MAX 1,740 MIN 20 AC-FT 45,680
WTR YR 1973 TOTAL 57,743 MEAN 158 MAX 7,970 MIN 27 AC-FT 114,500

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-17	0730	6.28	624	7-15	0700	a24.0	36,500
6- 1	1400	7.00	1,400	7-16	1330	8.58	4,080
6-12	0600	7.37	1,920	9-27	0100	5.91	352
7- 8	about 1030	a18.3	20,600				

a From floodmark.

08198500 Sabinal River at Sabinal, Tex.

LOCATION.--Lat 29°18'47", long 99°28'46", Uvalde County, on left bank 80 ft (24 m) downstream from bridge on U.S. Highway 90, 1,100 ft (335 m) downstream from Southern Pacific Lines railroad bridge, 0.8 mile (1.3 km) west of Sabinal, and 5.8 miles (9.3 km) upstream from Ranchero Creek.

DRAINAGE AREA.--247 mi² (640 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 882.17 ft (268.89 m) 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 (24 m) upstream at same datum.

AVERAGE DISCHARGE.--21 years, 29.3 ft³/s (0.830 m³/s), 21,230 acre-ft/yr (26.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 45,200 ft³/s (1,280 m³/s) July 15, gage height, 27.9 ft (8.5 m), from floodmark; minimum, 0.67 ft³/s (19 dm³/s) May 30, 31, June 1.

Period of record: Maximum discharge, 73,300 ft³/s (2,080 m³/s) June 17, 1958, gage height, 33.3 ft (10.1 m); no flow at times.

Maximum stage since at least 1890, 40 ft (12 m) Aug. 24, 1919, from information by local residents. Flood of July 2, 1932, reached a stage of 31 ft (9 m), discharge, 60,000 ft³/s (1,700 m³/s), 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 (21 to 24 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	2.8	2.1	1.6	1.5	1.5	1.2	1.2	1.0	96	441	38
2	3.7	2.8	2.2	1.7	1.5	1.4	1.3	1.2	.79	90	363	33
3	3.7	2.8	2.2	1.8	1.5	1.4	1.3	1.1	.72	82	313	30
4	3.6	2.8	2.2	1.6	1.5	1.3	1.3	1.0	.74	79	280	26
5	3.4	2.6	2.2	1.6	1.5	1.3	1.3	1.0	.72	72	254	22
6	3.3	2.6	2.1	1.6	1.5	1.2	1.5	1.1	.74	64	236	22
7	3.1	2.6	2.1	1.6	1.5	1.2	1.3	1.1	.72	58	219	32
8	3.1	2.4	2.1	1.5	1.5	1.2	1.1	1.0	.75	3,220	200	32
9	3.0	2.4	2.1	1.4	1.5	1.2	1.1	1.0	.87	3,050	185	25
10	3.0	2.4	2.1	1.4	1.5	1.2	1.1	.98	.93	1,070	172	20
11	3.0	2.4	2.1	1.4	1.4	1.1	1.1	.98	1.0	838	159	18
12	3.0	2.4	2.1	1.3	1.4	1.1	1.1	1.2	1,360	714	149	17
13	3.0	2.6	2.1	1.3	1.4	1.2	1.1	1.1	349	610	139	14
14	2.9	2.9	2.1	1.3	1.4	1.1	1.2	1.0	158	538	129	11
15	2.9	2.8	2.0	1.3	1.4	1.1	1.9	.98	106	7,880	122	10
16	2.9	2.5	2.0	1.3	1.4	1.1	1.4	.98	84	2,750	114	14
17	2.8	2.6	1.9	1.3	1.4	1.1	1.3	.98	72	1,750	106	11
18	2.8	2.5	1.9	1.3	1.4	1.1	1.4	.97	64	1,360	99	11
19	2.6	2.4	1.9	1.3	1.4	1.1	1.4	.92	56	1,160	92	10
20	2.8	2.4	1.9	1.3	1.4	1.0	1.4	.91	56	1,040	88	9.2
21	3.1	2.4	1.9	1.6	1.6	1.1	1.4	.89	56	849	82	8.1
22	3.8	2.4	2.1	1.7	1.6	1.0	1.3	.87	46	828	74	7.5
23	3.3	2.4	1.8	1.7	1.5	1.1	1.4	.87	40	744	68	7.1
24	3.3	2.6	1.8	1.7	1.5	1.4	1.4	.89	39	676	62	6.5
25	3.1	2.4	1.7	1.9	1.5	1.2	1.4	.92	66	615	57	6.2
26	3.0	2.3	1.7	1.7	1.5	1.2	1.3	.86	133	565	54	6.6
27	2.9	2.2	1.7	1.6	1.5	1.2	1.2	.76	131	518	50	8.4
28	2.8	2.2	1.7	1.5	1.5	1.2	1.2	.72	117	481	47	6.3
29	2.8	2.1	1.7	1.6	------	1.3	1.2	.74	106	436	52	13
30	2.8	2.2	1.7	1.6	------	1.3	1.2	.71	102	404	49	11
31	2.8	------	1.6	1.5	------	1.3	------	.68	------	412	44	------
TOTAL	96.1	74.9	60.8	47.0	41.2	37.2	38.8	29.61	3,149.98	33,049	4,499	485.9
MEAN	3.10	2.50	1.96	1.52	1.47	1.20	1.29	.96	105	1,066	145	16.2
MAX	3.8	2.9	2.2	1.9	1.6	1.5	1.9	1.2	1,360	7,880	441	38
MIN	2.6	2.1	1.6	1.3	1.4	1.0	1.1	.68	.72	58	44	6.2
AC-FT	191	149	121	93	82	74	77	59	6,250	65,550	8,920	964

CAL YR 1972 TOTAL 3,595.70 MEAN 9.8 MAX 1,460 MIN 1.3 AC-FT 7,130
WTR YR 1973 TOTAL 41,609.49 MEAN 114 MAX 7,880 MIN .68 AC-FT 82,530

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-12	1130	14.08	6,410	7-15	1200	a27.9	45,200
6-26	1800	5.64	143	7-16	1830	12.15	4,110
7- 8	2130	22.77	25,900				

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 (140 m) downstream from bridge on Ranch Road 462, 6.3 miles (10.1 km) southeast of Tarpley, and 16.6 miles (26.7 km) northwest of Hondo.

DRAINAGE AREA.--86.2 mi² (223 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,169.1 ft (356.3 m) above mean sea level (Magnolia Oil Co. bench mark).

AVERAGE DISCHARGE.--21 years, 34.9 ft³/s (0.988 m³/s), 25,290 acre-ft/yr (31.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 57,200 ft³/s (1,620 m³/s) July 15, gage height, 25.7 ft (7.8 m), from floodmark, from rating curve extended above 2,600 ft³/s (73.6 m³/s) as explained below; minimum, 10 ft³/s (0.283 m³/s) Jan. 21-24.
Period of record: Maximum discharge, 69,800 ft³/s (1,980 m³/s) June 17, 1958, gage height, 28.2 ft (8.6 m), from floodmark, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of slope-area measurements of 18,600 and 69,800 ft³/s (527 and 1,980 m³/s); 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 (8 m), 58,500 ft³/s (1,660 m³/s), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	21	14	12	15	64	27	38	38	132	190	45
2	36	21	14	13	14	61	27	39	38	130	172	44
3	35	20	14	14	14	61	26	35	32	127	157	43
4	34	19	14	12	14	61	24	35	30	120	146	40
5	33	19	14	12	14	58	24	35	28	113	135	38
6	33	19	14	12	15	56	30	38	27	106	130	42
7	33	19	14	12	15	53	30	40	24	101	122	43
8	32	18	15	12	16	50	24	35	23	242	115	39
9	32	18	15	12	16	50	23	33	23	241	110	36
10	31	17	15	13	16	56	23	33	23	197	103	36
11	30	17	15	13	15	47	22	33	34	181	96	34
12	29	17	15	12	15	43	23	58	1,440	169	91	34
13	28	25	15	12	15	44	23	40	288	154	86	33
14	27	19	15	12	15	43	23	38	218	146	84	44
15	26	17	14	11	15	40	41	35	187	6,810	82	34
16	25	16	13	11	15	40	40	35	166	2,090	76	36
17	25	16	13	12	19	38	88	35	152	1,190	72	34
18	24	16	13	12	19	38	51	36	138	884	68	31
19	23	16	13	11	19	38	50	34	132	695	66	30
20	23	16	13	11	19	35	47	33	130	570	62	29
21	27	16	12	10	29	34	45	32	120	492	62	28
22	54	15	12	10	42	35	45	31	110	438	59	28
23	28	16	12	10	54	40	48	31	103	378	58	27
24	24	21	12	10	61	44	50	31	103	345	56	26
25	24	17	12	16	61	34	45	31	152	310	53	25
26	25	16	12	13	61	32	45	32	149	278	53	28
27	24	16	12	13	61	32	39	29	140	257	53	80
28	23	15	12	12	61	35	39	26	135	237	50	44
29	23	15	12	12	------	34	40	25	132	211	48	33
30	23	15	12	13	------	32	42	24	132	197	48	30
31	23	------	11	14	------	30	------	23	------	243	48	------
TOTAL	893	528	413	374	745	1,358	1,104	1,053	4,447	17,784	2,751	1,094
MEAN	28.8	17.6	13.3	12.1	26.6	43.8	36.8	34.0	148	574	88.7	36.5
MAX	54	25	15	16	61	64	88	58	1,440	6,810	190	80
MIN	23	15	11	10	14	30	22	23	23	101	48	25
AC-FT	1,770	1,050	819	742	1,480	2,690	2,190	2,090	8,820	35,270	5,460	2,170

CAL YR 1972 TOTAL 15,748.0 MEAN 43.0 MAX 1,380 MIN 4.8 AC-FT 31,240
WTR YR 1973 TOTAL 32,544.0 MEAN 89.2 MAX 6,810 MIN 10 AC-FT 64,550

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-17	0730	3.26	516	7-15	0500	a25.7	57,200
6-12	0730	10.82	9,690	7-16	1200	8.34	6,110
7- 8	1800	3.56	702				

a From floodmark.

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 (0.5 km) downstream from county road low-water crossing, 3.1 miles (5.0 km) north of Hondo, and 7.8 miles (12.6 km) upstream from Verde Creek.

DRAINAGE AREA.--142 mi² (368 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 897.87 ft (273.67 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 16.2 ft³/s (0.459 m³/s), 11,740 acre-ft/yr (14.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 46,900 ft³/s (1,330 m³/s) July 15, gage height, 16.4 ft (5.0 m), from floodmark; no flow at times.
Period of record: Maximum discharge, 46,900 ft³/s (1,330 m³/s) July 15, 1973, gage height, 16.4 ft (5.0 m), from floodmark, from rating curve extended above 9,800 ft³/s (278 m³/s) on basis of contracted-opening measurement of peak flow; no flow most of time.
Maximum stage since at least 1875, 21 ft (6 m) in September 1919, from information by local resident. Other floods occurred in July 1932, 18 ft (5 m) and June 17, 1958, 17 ft (5 m).

REMARKS.--Records good except those below 4 ft³/s (113 dm³/s), which are fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.05	.03	.01	.01	.01	0		0	0	58	.65
2	.10	.05	.03	.01	.01	.01	0		0	0	16	.65
3	.10	.05	.03	.01	.01	.01	0		0	0	4.6	.65
4	.10	.05	.03	.01	.01	.01	0		0	0	1.4	.65
5	.10	.05	.03	.01	.01	.01	0		0	0	.90	.65
6	.10	.05	.03	.01	.01	.01	0		0	0	.80	.60
7	.05	.05	.03	.01	.01	.01	0		0	0	.75	.60
8	.05	.05	.03	.01	.01	.01	0		0	792	.75	.60
9	.05	.05	.03	.01	.01	.01	0		0	211	.75	.60
10	.05	.05	.03	.01	.01	.01	0		0	43	.75	.60
11	.05	.05	.03	0	.01	.01	0		0	23	.75	.60
12	.05	.05	.03	0	.01	.01	0		1,280	13	.75	.60
13	.05	.05	.02	0	.01	.01	0		180	5.5	.75	.60
14	.05	.05	.02	0	.01	.01	0		73	1.4	.75	.60
15	.05	.05	.02	0	.01	.01	.03		41	7,130	.75	.60
16	.05	.05	.02	0	.01	0	.10		17	4,000	.70	2.6
17	.05	.05	.02	0	.01	0	.31		6.1	912	.70	1.0
18	.05	.05	.02	0	.01	0	.30		1.6	614	.70	.65
19	.05	.04	.02	0	.01	0	.11		.55	464	.70	.60
20	.05	.04	.02	0	.01	0	.03		.24	367	.70	.60
21	.05	.04	.02	0	.02	0	.02		.03	280	.70	.60
22	.10	.04	.02	0	.02	0	.01		.01	227	.70	.60
23	.10	.04	.01	0	.02	0	.01		.01	181	.70	.60
24	.10	.04	.01	0	.02	0	.01		.51	145	.70	.60
25	.10	.04	.01	.02	.02	0	.01		1.7	107	.70	.60
26	.10	.04	.01	.02	.01	0	.01		.98	83	.65	.60
27	.10	.04	.01	.02	.01	0	.01		.48	64	.65	.60
28	.10	.04	.01	.02	.01	0	.01		.16	49	.65	.60
29	.10	.04	.01	.02	------	0	.01		.03	30	.65	.60
30	.10	.04	.01	.01	------	0	.01		.02	16	.65	.60
31	.10	------	.01	.01	------	0	------		------	19	.65	------
TOTAL	2.35	1.38	.65	.22	.33	.15	.99	0	1,603.42	15,776.9	99.35	20.70
MEAN	.076	.046	.021	.007	.012	.005	.033	0	53.4	509	3.20	.69
MAX	.10	.05	.03	.02	.02	.01	.31	0	1,280	7,130	58	2.6
MIN	.05	.04	.01	0	.01	0	0	0	0	0	.65	.60
AC-FT	4.7	2.7	1.3	.4	.7	.3	2.0	0	3,180	31,290	197	41

CAL YR 1972 TOTAL 4,538.43 MEAN 12.4 MAX 1,080 MIN 0 AC-FT 9,000
WTR YR 1973 TOTAL 17,506.44 MEAN 48.0 MAX 7,130 MIN 0 AC-FT 34,720

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-12	1100	8.52	10,500	7-15	0730	a16.4	46,900
7- 8	1930	7.15	6,620	7-16	1600	a9.4	13,400

a From floodmark.

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 (61 m) upstream from county road crossing, 4.5 miles (7.2 km) downstream from Cascade Creek, and 7.9 miles (12.7 km) southeast of Utopia.

DRAINAGE AREA.--43.1 mi² (112 km²).

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 (385.8 m) above mean sea level, adjustment unknown (Magnolia Oil Co. bench mark).

AVERAGE DISCHARGE.--12 years, 18.4 ft³/s (0.521 m³/s), 13,330 acre-ft/yr (16.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 38,500 ft³/s (1,090 m³/s) July 15, gage height, 14.4 ft (4.4 m), from floodmark, from rating curve extended as explained below; minimum, 3.4 ft³/s (96 dm³/s) Jan. 12.
Period of record: Maximum discharge, 38,500 ft³/s (1,090 m³/s) July 15, 1973, gage height, 14.4 ft (4.4 m), from floodmark, from rating curve extended above 910 ft³/s (25.8 m³/s) on basis of flow over and around end of dam field estimate of 14,100 ft³/s (399 m³/s) and slope-area measurement of 52,600 ft³/s (1,490 m³/s); no flow for many days in 1963-64.
Maximum stage since at least 1901, 16.4 ft (5.0 m) June 17, 1958, from floodmarks, discharge, 52,600 ft³/s (1,490 m³/s), by slope-area measurement of peak flow.

REMARKS.--Records good except those above 1,000 ft³/s (28.3 m³/s), which are fair. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	13	7.9	4.8	5.7	18	11	17	15	45	87	19
2	30	13	7.9	5.3	5.7	17	12	16	10	42	78	17
3	29	12	7.6	6.3	5.7	17	11	15	9.3	42	69	17
4	29	11	7.4	4.9	5.7	17	11	15	10	40	63	17
5	27	11	7.4	4.9	5.7	16	11	15	9.9	38	60	16
6	27	11	7.5	4.8	5.7	16	17	16	10	37	56	18
7	26	11	7.4	4.6	5.7	16	14	19	8.7	35	54	18
8	25	10	7.4	4.6	7.1	15	11	15	8.5	358	52	16
9	24	10	7.4	4.7	7.3	15	11	14	8.2	235	50	15
10	23	9.7	7.5	5.3	6.4	21	10	13	8.2	172	48	15
11	22	9.6	6.9	5.0	6.2	17	10	13	14	143	46	15
12	20	10	7.3	4.5	6.1	16	10	24	169	124	44	14
13	19	18	6.9	4.7	6.1	16	10	15	69	111	40	14
14	19	11	6.9	4.6	5.7	16	11	13	56	101	38	19
15	18	9.9	6.7	4.4	5.7	16	23	12	51	3,200	38	15
16	18	9.6	6.5	4.3	5.7	15	21	12	46	828	37	15
17	18	9.6	6.2	4.3	7.7	15	24	12	44	490	35	15
18	17	9.5	6.1	4.3	7.0	15	21	11	39	388	34	13
19	16	8.7	6.0	4.0	6.5	15	21	11	36	310	32	12
20	16	8.4	5.7	4.0	6.5	15	20	11	38	265	30	12
21	17	8.4	4.9	3.8	9.9	14	20	10	34	230	29	12
22	30	8.4	4.9	3.8	14	14	20	9.6	32	200	27	11
23	17	8.5	4.9	4.0	15	14	20	9.0	30	180	26	12
24	16	13	4.9	4.0	15	17	20	9.3	35	152	25	12
25	15	9.9	4.9	9.0	16	14	20	9.6	56	140	24	11
26	16	9.0	4.9	6.6	17	13	19	9.5	58	124	23	46
27	16	9.0	4.9	5.9	17	13	17	8.7	55	114	21	49
28	15	8.2	4.9	5.3	17	13	17	7.9	52	108	20	20
29	15	7.9	4.8	5.3	------	13	17	7.6	50	102	21	17
30	15	7.9	4.6	5.3	------	13	17	7.3	48	96	20	17
31	14	------	4.6	5.6	------	12	------	6.9	------	111	20	------
TOTAL	639	306.2	193.8	152.9	244.8	474	477	384.4	1,109.8	8,561	1,247	519
MEAN	20.6	10.2	6.25	4.93	8.74	15.3	15.9	12.4	37.0	276	40.2	17.3
MAX	30	18	7.9	9.0	17	21	24	24	169	3,200	87	49
MIN	14	7.9	4.6	3.8	5.7	12	10	6.9	8.2	35	20	11
AC-FT	1,270	607	384	303	486	940	946	762	2,200	16,980	2,470	1,030

CAL YR 1972 TOTAL 9,792.4 MEAN 26.8 MAX 2,180 MIN 3.0 AC-FT 19,420
WTR YR 1973 TOTAL 14,308.9 MEAN 39.2 MAX 3,200 MIN 3.8 AC-FT 28,380

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-12	0730	3.25	610	7-16	1000	5.23	3,240
7- 8	1530	4.44	1,910	9-26	2215	3.36	698
7-15	0330	a14.4	38,500				

a From floodmark.

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 (4.7 km) north of D'Hanis and 8.0 miles (12.9 km) downstream from Rocky Creek.

DRAINAGE AREA.--168 mi² (435 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 900.88 ft (274.59 m) above mean sea level. Prior to October 1970, published as "at Crook Ranch, near D'Hanis".

AVERAGE DISCHARGE.--12 years (1961-73), 11.5 ft³/s (0.326 m³/s), 8,330 acre-ft/yr (10.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30,500 ft³/s (864 m³/s) July 15, gage height, 26.0 ft (7.9 m), from floodmark, from rating curve extended above 16,000 ft³/s (453 m³/s) as explained below; no flow most of time.
Period of record: Maximum discharge, 30,500 ft³/s (864 m³/s) July 15, 1973, gage height, 26.0 ft (7.9 m), from floodmark, from rating curve extended above 16,000 ft³/s (453 m³/s) on the basis of slope-area measurement of 35,800 ft³/s (1,010 m³/s); no flow most of time.
Maximum stage since at least 1852, 35.7 ft (10.9 m) May 31, 1935, present site and datum, from information by local resident. Other floods occurred Aug. 31, 1894, 33 ft (10 m); September 1919, 28 ft (9 m); July 2, 1932, 28.2 ft (8.6 m), discharge, 35,800 ft³/s (1,010 m³/s), by slope-area measurement; June 17, 1958, 32.4 ft (9.9 m); 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 (8.8 km) upstream from gage (see station 08202500 for records prior to water year 1965). Observations of no flow were made Oct. 11, Nov. 14, Dec. 19, 1972, Jan. 23, Feb. 28, Apr. 3, May 10, and Aug. 21, 1973, and discharge measurements of 0.90 and 70.9 ft³/s (25 dm³/s and 2.01 m³/s) were made June 13 and July 9, 1973, after which this site was discontinued.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0	.33	0
2									0	0	.10	0
3									0	0	.01	0
4									0	0	0	0
5									0	0	0	0
6									0	0	0	0
7									0	0	0	0
8									0	14	0	0
9									0	169	0	0
10									0	12	0	0
11									0	1.6	0	0
12									171	.54	0	0
13									11	.15	0	0
14									.70	0	0	0
15									.15	4,420	0	0
16									0	2,470	0	.08
17									0	535	0	.01
18									0	292	0	0
19									0	202	0	0
20									0	155	0	0
21									0	112	0	0
22									0	69	0	0
23									0	36	0	0
24									0	14	0	0
25									0	3.6	0	0
26									0	1.6	0	0
27									0	.87	0	0
28									0	.49	0	0
29					------				0	.28	0	0
30					------				0	.15	0	0
31		------			------		------		------	.77	0	------
TOTAL	0	0	0	0	0	0	0	0	182.85	8,510.05	.44	.09
MEAN	0	0	0	0	0	0	0	0	6.10	275	.014	.003
MAX	0	0	0	0	0	0	0	0	171	4,420	.33	.08
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	363	16,880	.9	.2

CAL YR 1972 TOTAL 2,851.33 MEAN 7.79 MAX 2,370 MIN 0 AC-FT 5,660
WTR YR 1973 TOTAL 8,693.43 MEAN 23.8 MAX 4,420 MIN 0 AC-FT 17,240

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-12	1400	10.44	1,000	7-15	0900	a26.0	30,500
7- 8	2400	a9.83	655	7-16	1600	a17.3	11,600

a From floodmark.

08205500 Frio River near Derby, Tex.

LOCATION (revised).--Lat 28°44'10", long 99°08'45", Frio County, on right bank 17 ft (5 m) downstream from centerline of railroad tracks, 35 ft (11 m) right of the Missouri Pacific Railroad Co. bridge abutment 167 ft (51 m) downstream from Interstate Highway 35, 917 ft (280 m) downstream from Leona River, 2.4 miles (3.9 km) south of Derby, and at mile 122.4 (196.9 km).

DRAINAGE AREA.--3,493 mi² (9,047 km²).

PERIOD OF RECORD.--August 1915 to current year.

GAGE (revised).--Water-stage recorder and concrete control. Datum of gage is 449.11 ft (136.89 m) 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 same site and datum. Mar. 7, 1940, to May 4, 1972, water-stage recorder, and May 5 to Nov. 1, 1972, nonrecording gage at site 167 ft (51 m) upstream at same datum.

AVERAGE DISCHARGE.--58 years, 131 ft³/s (3.71 m³/s), 94,910 acre-ft/yr (117 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,700 ft³/s (700 m³/s) July 18, gage height, 15.42 ft (4.70 m), from floodmark; minimum, 3.1 ft³/s (88 dm³/s) June 5.
Period of record: Maximum discharge, 230,000 ft³/s (6,510 m³/s) July 4, 1932, gage height, 29.45 ft (8.98 m), from floodmarks, from rating curve extended above 76,000 ft³/s (2,150 m³/s), revised, 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 fair. 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	23	25	35	42	50	41	36	8.9	121	654	105
2	53	23	25	37	39	46	43	35	7.2	115	739	101
3	53	23	25	36	37	45	77	35	6.7	102	765	89
4	37	23	25	35	37	45	47	35	6.2	99	614	81
5	24	23	25	35	36	45	40	35	5.0	97	526	72
6	24	23	25	37	35	46	39	36	5.0	89	477	69
7	24	23	25	38	35	44	44	36	6.8	85	443	64
8	24	23	25	38	37	43	47	35	6.2	111	408	70
9	24	23	26	36	41	45	42	35	5.9	596	379	76
10	24	22	26	36	38	45	45	34	8.8	2,640	349	80
11	24	22	26	35	39	44	51	34	8.0	4,100	326	79
12	24	22	28	35	41	43	53	33	10	2,470	302	71
13	24	22	28	35	41	44	52	32	365	1,180	281	70
14	24	17	30	36	41	40	50	33	2,660	792	262	68
15	24	17	33	36	40	40	51	30	2,910	672	248	70
16	24	17	32	38	40	40	153	29	615	1,700	241	65
17	24	17	32	39	41	40	362	28	291	11,100	225	412
18	24	17	30	42	42	40	211	27	175	21,700	209	1,790
19	24	17	29	42	40	40	297	26	121	9,820	201	755
20	24	17	30	40	41	40	203	25	95	5,130	185	262
21	24	17	33	36	45	40	123	22	94	3,700	168	165
22	24	16	33	34	51	40	91	21	81	2,940	159	131
23	24	16	33	34	58	40	75	19	69	2,350	142	98
24	24	16	35	34	61	39	67	18	75	1,860	132	88
25	24	16	35	36	62	41	61	14	89	1,460	119	86
26	24	22	35	36	60	44	55	14	86	1,140	114	93
27	24	28	35	36	55	49	54	12	90	952	106	1,220
28	24	29	33	41	50	46	48	12	140	844	105	4,480
29	24	28	33	45	------	43	45	13	151	756	103	3,600
30	23	26	33	46	------	41	38	12	133	706	106	518
31	23	------	33	43	------	40	------	10	------	656	111	------
TOTAL	849	628	921	1,162	1,225	1,328	2,605	816	8,324.7	80,083	9,199	14,928
MEAN	27.4	20.9	29.7	37.5	43.8	42.8	86.8	26.3	277	2,583	297	498
MAX	60	29	35	46	62	50	362	36	2,910	21,700	765	4,480
MIN	23	16	25	34	35	39	38	10	5.0	85	103	64
AC-FT	1,680	1,250	1,830	2,300	2,430	2,630	5,170	1,620	16,510	158,800	18,250	29,610

CAL YR 1972 TOTAL 27,413.92 MEAN 74.9 MAX 1,920 MIN 0 AC-FT 54,380
WTR YR 1973 TOTAL 122,068.70 MEAN 334 MAX 21,700 MIN 5.0 AC-FT 242,100

PEAK DISCHARGE (BASE, 1,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-14	2400	8.50	3,880	9-18	2000	6.30	2,320
7-11	0900	9.00	4,560	9-28	2100	9.58	5,640
7-18	1000	a15.42	24,700				

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 (8 m) downstream from State Highway 16, 0.3 mile (0.5 km) upstream from mouth of Bruce Branch, 0.9 mile (1.4 km) downstream from mouth of Far Live Oak Creek, 3 miles (5 km) upstream from San Patricio Creek, 7 miles (11 km) downstream from Clear Creek, 8.7 miles (14.0 km) north of Tilden, and 13 miles (21 km) upstream from mouth.

DRAINAGE AREA.--793 mi² (2,054 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 242.95 ft (74.05 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 61.5 ft³/s (1.74 m³/s), 44,560 acre-ft/yr (54.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) Sept. 29, gage height, 23.96 ft (7.30 m); no flow at times.
Period of record: Maximum discharge, 13,700 ft³/s (388 m³/s) Sept. 22, 1967, gage height, 25.99 ft (7.92 m); no flow at times in 1964-67, 1969-73.
Maximum stage since 1919, 32.6 ft (9.9 m) in 1942; stage of 1919 flood not known, from information by local residents.

REMARKS.--Records good. 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 (84 km) upstream (amounts unknown).

REVISIONS (WATER YEARS).--WRD Texas 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.01	.05	.03	.03	2.5	1.1	7.1	0	6.4	.65	.9
2	.04	.01	.05	.03	.03	1.8	.67	4.8	0	5.4	1.1	.5
3	.03	.02	.06	.03	.03	1.4	1.4	3.0	0	4.1	.84	.2
4	.03	.02	.06	.03	.04	1.2	.36	1.9	0	3.3	.56	0
5	.02	.02	.06	.03	.04	.84	.15	1.3	.03	2.5	.42	0
6	.02	.02	.06	.03	.04	.65	1.3	.97	.09	2.1	.37	0
7	.01	.02	.05	.03	.04	.45	1.3	.62	.03	1.9	.40	33
8	.01	.02	.05	.03	.05	.32	.88	.33	.03	163	.36	4.9
9	.02	.02	.05	.03	.05	.25	.37	.18	.03	32	.33	.2
10	.02	.02	.05	.03	.05	.14	.57	.12	.03	6.8	.34	.1
11	.02	.03	.05	.03	.03	.13	.60	.07	.03	3.2	.31	.1
12	.02	.03	.05	.03	.02	.11	.36	.07	610	2.2	.42	.1
13	.02	.02	.05	.03	.02	.09	.24	.05	1,450	1.4	.23	.1
14	.02	.02	.05	.03	.02	.08	.14	.03	1,270	1.2	.21	.1
15	.01	.02	.05	.03	.02	.07	1.7	.03	509	.94	.17	.1
16	.01	.02	.04	.02	.02	.07	125	.02	67	10	.13	.4
17	.01	.02	.03	.02	.42	.03	126	.01	23	22	2.0	102
18	0	.02	.03	.02	.17	.04	101	.01	14	6.0	2.3	246
19	0	.02	.03	.01	.04	.04	34	0	9.2	162	.41	99
20	.01	.02	.03	.01	.35	.04	64	.06	25	42	.19	14
21	.02	.02	.02	.02	4.9	.04	26	.18	11	14	.14	9.7
22	.02	.02	.02	.02	25	.04	13	.09	6.9	7.3	.11	8.7
23	.02	.03	.03	.02	14	.04	8.1	.05	5.8	4.8	.09	4.4
24	.02	.06	.03	.03	5.8	.04	5.4	.04	99	3.0	.09	2.9
25	.02	.05	.03	.06	4.2	.04	99	.03	515	2.0	.08	2.0
26	.02	.04	.03	.04	5.9	.04	163	.02	188	1.8	.08	1.7
27	.02	.04	.03	.03	5.2	.06	17	.02	47	1.1	.08	1,310
28	.02	.04	.03	.03	3.6	.07	6.0	0	16	.91	.08	3,150
29	.02	.04	.04	.03	------	2.3	2.7	0	8.9	.78	9.5	9,370
30	.02	.04	.03	.03	------	2.3	8.0	0	7.8	.65	17	3,440
31	.01	------	.02	.04	------	1.5	------	0	------	.66	3.0	------
TOTAL	.61	.78	1.26	.88	70.11	16.72	809.34	21.10	4,882.87	515.44	41.99	17,801.1
MEAN	.020	.026	.041	.028	2.50	.54	27.0	.68	163	16.6	1.35	593
MAX	.08	.06	.06	.06	25	2.5	163	7.1	1,450	163	17	9,370
MIN	0	.01	.02	.01	.02	.03	.14	0	0	.65	.08	0
AC-FT	1.2	1.5	2.5	1.7	139	33	1,610	42	9,690	1,020	83	35,310

CAL YR 1972 TOTAL 4,400.46 MEAN 12.0 MAX 960 MIN 0 AC-FT 8,730
WTR YR 1973 TOTAL 24,162.20 MEAN 66.2 MAX 9,370 MIN 0 AC-FT 47,930

PEAK DISCHARGE (BASE, 900 FT³/S).--June 13 (2300) 1,750 ft³/s (12.11 ft); Sept. 29 (0900) 10,400 ft³/s (23.96 ft).

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 (1.0 km) upstream from bridge on Farm Road 99, 0.8 mile (1.3 km) north of Calliham, 10.7 miles (17.2 km) downstream from San Miguel Creek, and at mile 20.8 (33.5 km).

DRAINAGE AREA.--5,491 mi² (14,222 km²).

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 (46.78 m) above mean sea level. Prior to Apr. 30, 1926, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years (1924-25, 1932-73), 240 ft³/s (6.80 m³/s), 173,900 acre-ft/yr (214 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,500 ft³/s (269 m³/s) July 23, gage height, 29.75 ft (9.07 m); minimum, 9.2 ft³/s (261 dm³/s) June 7-11.
Period of record: Maximum discharge, 80,200 ft³/s (2,270 m³/s) July 6, 1932, gage height, 39.2 ft (11.9 m), from floodmarks, from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of contracted-opening measurement and flow-over-road measurement of 42,400 ft³/s (1,200 m³/s); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	29	28	34	35	83	37	55	13	158	1,060	155
2	207	26	29	35	37	71	38	59	12	174	916	172
3	135	25	32	36	43	61	38	54	11	170	812	149
4	85	25	31	35	42	54	35	49	10	156	731	123
5	65	25	29	36	39	49	34	44	11	142	653	115
6	55	22	27	38	36	47	38	41	13	130	653	106
7	46	21	25	40	35	45	50	39	11	121	692	114
8	38	21	25	41	35	44	51	37	9.8	190	644	445
9	36	20	25	36	37	44	39	37	9.6	209	516	167
10	34	19	26	36	35	44	35	36	9.5	156	415	94
11	33	19	26	40	34	42	31	36	88	130	355	80
12	32	22	27	41	37	41	31	38	759	187	319	81
13	32	23	27	39	38	41	33	36	1,610	365	296	84
14	31	23	29	39	36	41	32	33	1,370	551	270	105
15	31	24	29	38	35	39	31	34	955	870	251	90
16	28	25	29	37	35	39	174	33	253	1,440	237	87
17	26	25	29	37	41	37	796	31	299	1,880	228	81
18	25	25	29	37	45	36	768	30	472	1,780	223	199
19	24	24	31	37	42	36	223	29	704	1,260	211	375
20	24	23	33	38	44	36	228	29	1,150	1,040	187	282
21	24	23	33	38	49	36	282	28	1,320	1,290	188	389
22	24	23	31	39	73	37	220	28	752	3,700	177	578
23	23	23	31	40	156	38	220	26	215	8,940	166	767
24	21	25	31	39	182	38	167	24	408	8,490	156	560
25	19	25	30	41	180	36	121	23	1,740	6,660	148	181
26	20	25	33	40	133	36	277	22	1,750	4,540	141	130
27	21	26	33	38	121	35	152	20	574	2,880	133	1,180
28	23	28	35	36	97	35	88	19	288	2,080	126	3,090
29	24	28	35	36	------	35	66	17	229	1,750	127	4,480
30	25	28	35	35	------	35	56	16	180	1,490	194	8,510
31	29	------	34	36	------	34	------	14	------	1,250	219	------
TOTAL	1,438	720	927	1,168	1,752	1,325	4,391	1,017	15,225.9	54,179	11,444	22,969
MEAN	46.4	24.0	29.9	37.7	62.6	42.7	146	32.8	508	1,748	369	766
MAX	207	29	35	41	182	83	796	59	1,750	8,940	1,060	8,510
MIN	19	19	25	34	34	34	31	14	9.5	121	126	80
AC-FT	2,850	1,430	1,840	2,320	3,480	2,630	8,710	2,020	30,200	107,500	22,700	45,560

CAL YR 1972 TOTAL 35,681.3 MEAN 97.5 MAX 4,210 MIN 3.4 AC-FT 70,770
WTR YR 1973 TOTAL 116,555.9 MEAN 319 MAX 8,940 MIN 9.5 AC-FT 231,200

PEAK DISCHARGE (BASE, 2,700 FT³/S).--July 23 (2100) 9,500 ft³/s (29.75 ft); Sept. 30 (1200) 9,140 ft³/s (29.56 ft).

08208000 Atascosa River at Whitsett, Tex.

LOCATION.--Lat 28°37'18", long 98°17'02", Live Oak County, on right bank 1,000 ft (305 m) upstream from bridge on Farm Road 99, 1.1 miles (1.8 km) southwest of Whitsett, 3.9 miles (6.3 km) downstream from La Parita Creek, and at mile 13.1 (21.1 km).

DRAINAGE AREA.--1,171 mi² (3,033 km²).

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 (48.48 m) above mean sea level. Prior to May 8, 1926, nonrecording gage at bridge 1,200 ft (366 m) downstream at datum 1.38 ft (0.42 m) higher.

AVERAGE DISCHARGE.--42 years (1924-25, 1932-73), 137 ft³/s (3.88 m³/s), 99,260 acre-ft/yr (122 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,000 ft³/s (510 m³/s) June 14, gage height, 33.6 ft (10.2 m), from floodmark; minimum, 3.4 ft³/s (96 dm³/s) Oct. 21, 22, 25, gage height, 3.82 ft (1.16 m).
Period of record: Maximum discharge, 121,000 ft³/s (3,430 m³/s) Sept. 23, 1967, gage height, 41.3 ft (12.6 m), from floodmark, from rating curve extended above 24,000 ft³/s (680 m³/s) 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 (12 m), discharge, 106,000 ft³/s (3,000 m³/s), occurred in September 1919.

REMARKS.--Records good except those for period of no gage-height record, which are fair. 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 1973 water year no water was released into the Atascosa River from the Campbellton water wells 12 miles (19 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	8.3	5.8	5.6	9.7	22	9.9	27	8.7	186	17	72
2	28	6.4	5.8	6.2	9.6	19	9.3	25	8.5	144	51	60
3	21	5.6	5.6	7.5	8.8	17	8.8	24	8.8	124	128	33
4	16	5.3	5.3	8.9	8.3	16	8.2	23	8.4	112	89	22
5	14	5.8	5.3	10	8.1	15	7.9	22	8.0	96	37	17
6	12	5.3	4.8	10	8.2	14	10	21	94	83	24	14
7	10	5.0	4.8	9.3	8.3	14	18	21	222	75	19	14
8	9.8	4.8	4.8	9.3	8.7	13	17	19	65	74	17	190
9	8.3	4.8	4.8	9.7	11	12	19	19	27	95	17	674
10	7.6	5.0	5.0	9.6	23	12	18	18	18	95	15	544
11	7.0	5.0	5.6	9.5	24	11	14	17	25	80	15	116
12	6.7	5.0	7.0	9.9	25	11	12	24	944	70	14	78
13	6.4	5.0	6.7	10	22	11	11	46	8,690	60	13	55
14	6.1	5.0	6.7	9.3	17	11	10	48	17,000	55	14	103
15	5.8	4.8	6.4	8.8	14	10	16	31	15,900	50	16	78
16	5.6	5.0	6.4	8.3	12	11	270	25	8,310	45	15	38
17	5.3	5.6	5.8	8.0	13	11	1,080	22	2,480	55	15	115
18	5.0	5.3	5.8	7.6	25	11	1,920	19	1,120	40	16	100
19	5.0	5.0	5.8	7.3	30	10	1,070	17	470	70	15	90
20	4.8	5.0	5.8	7.2	31	9.9	176	16	286	90	19	110
21	4.6	5.0	5.7	6.9	31	9.5	84	15	1,420	70	16	130
22	4.6	5.0	5.6	6.8	105	9.1	60	14	2,430	50	17	100
23	4.6	5.8	5.6	6.4	305	9.2	46	12	1,250	40	17	80
24	4.6	6.7	5.8	6.1	445	9.1	39	13	386	30	14	70
25	4.3	8.3	5.6	7.2	144	8.8	36	12	2,490	26	12	60
26	5.0	8.6	5.6	11	56	9.1	33	12	8,010	24	11	50
27	4.8	11	5.5	14	33	13	46	11	9,110	22	11	500
28	4.8	8.6	5.3	16	25	16	39	10	4,040	21	10	1,200
29	4.8	7.0	5.3	12	------	14	33	9.8	1,380	20	13	3,400
30	4.8	6.4	5.3	11	------	11	30	9.4	271	18	18	5,000
31	5.0	------	5.1	10	------	11	------	9.0	------	18	122	------
TOTAL	278.3	179.4	174.4	279.4	1,460.7	380.7	5,151.1	611.2	86,480.4	2,038	827	13,113
MEAN	8.98	5.98	5.63	9.01	52.2	12.3	172	19.7	2,883	65.7	26.7	437
MAX	42	11	7.0	16	445	22	1,920	48	17,000	186	128	5,000
MIN	4.3	4.8	4.8	5.6	8.1	8.8	7.9	9.0	8.0	18	10	14
AC-FT	552	356	346	554	2,900	755	10,220	1,210	171,500	4,040	1,640	26,010

CAL YR 1972 TOTAL 35,773.0 MEAN 97.7 MAX 4,750 MIN 1.7 AC-FT 70,960
WTR YR 1973 TOTAL 110,973.6 MEAN 304 MAX 17,000 MIN 4.3 AC-FT 220,100

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-18	0600	20.64	2,050	6-27	0300	a29.6	10,600
6-14	2000	a33.6	18,000	9-30	unknown	a25.72	5,420
6-22	1400	21.16	2,560				

a From floodmark.
NOTE.--No gage-height record June 13-20.

08210000 Nueces River near Three Rivers, Tex.

LOCATION.--Lat 28°26'10", long 98°11'06", Live Oak County, on left bank 100 ft (30 m) downstream from Missouri Pacific Railroad bridge, 0.2 mile (0.3 km) downstream from Frio River, 1.7 miles (2.7 km) south of Three Rivers, and at mile 102.6 (165.1 km).

DRAINAGE AREA.--15,600 mi² (40,400 km²).

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 (30.82 m) above mean sea level. Prior to Apr. 5, 1932, nonrecording gage at railroad bridge 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--58 years, 858 ft³/s (24.3 m³/s), 621,600 acre-ft/yr (766 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,400 ft³/s (379 m³/s) June 16, gage height, 36.09 ft (11.00 m); minimum daily, 13 ft³/s (0.37 m³/s) June 5.
Period of record: Maximum discharge, 141,000 ft³/s (3,990 m³/s) Sept. 23, 1967, gage height, 49.21 ft (15.00 m); 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,050	55	39	46	57	242	54	82	19	630	1,340	340
2	916	68	39	47	54	337	56	81	17	463	1,270	602
3	518	49	41	49	56	257	55	78	15	392	1,090	693
4	324	42	43	50	58	163	52	72	14	370	1,040	411
5	273	40	41	51	55	134	48	67	13	316	877	279
6	228	39	39	54	52	119	55	64	14	270	798	230
7	183	36	38	56	49	109	67	63	139	239	804	179
8	150	34	37	55	52	104	75	60	155	219	799	318
9	130	33	38	55	57	99	67	56	62	349	701	684
10	117	32	39	52	56	96	59	53	38	259	587	906
11	107	32	40	55	66	88	55	52	53	230	513	499
12	100	32	40	57	71	82	49	53	1,090	217	465	204
13	93	34	42	56	76	80	47	62	4,660	352	443	205
14	87	34	43	55	73	78	48	86	9,040	512	412	511
15	81	33	43	53	68	77	46	74	11,800	705	384	486
16	75	34	43	52	62	73	341	61	12,800	1,070	361	517
17	71	35	43	51	66	72	1,820	53	10,100	1,530	342	295
18	70	36	44	50	74	68	3,520	48	4,930	1,820	356	712
19	66	35	44	50	83	67	2,850	45	917	1,640	317	1,360
20	61	34	45	50	92	66	1,120	44	1,130	1,240	296	1,240
21	58	34	45	49	108	64	435	41	2,370	1,130	284	1,180
22	54	34	45	48	141	62	336	40	3,280	1,840	258	1,300
23	49	36	44	50	305	64	272	38	2,630	3,850	237	1,540
24	44	42	44	49	580	64	235	39	1,300	6,590	218	1,270
25	40	41	44	54	717	60	174	38	3,830	8,240	204	569
26	39	40	44	67	610	57	164	37	8,150	7,840	192	335
27	38	38	45	69	462	55	304	34	9,500	5,870	179	1,380
28	38	40	46	69	317	57	150	31	9,800	3,370	166	4,520
29	52	41	47	65	------	60	113	28	8,210	2,250	174	6,440
30	41	40	47	60	------	57	92	25	2,970	1,840	176	8,990
31	40	------	45	58	------	55	------	22	------	1,560	331	------
TOTAL	5,193	1,153	1,317	1,682	4,517	3,066	12,759	1,627	109,046	57,203	15,614	38,195
MEAN	168	38.4	42.5	54.3	161	98.9	425	52.5	3,635	1,845	504	1,273
MAX	1,050	68	47	69	717	337	3,520	86	12,800	8,240	1,340	8,990
MIN	38	32	37	46	49	55	46	22	13	217	166	179
AC-FT	10,300	2,290	2,610	3,340	8,960	6,080	25,310	3,230	216,300	113,500	30,970	75,760

CAL YR 1972 TOTAL 145,858 MEAN 399 MAX 5,200 MIN 12 AC-FT 289,300
WTR YR 1973 TOTAL 251,372 MEAN 689 MAX 12,800 MIN 13 AC-FT 498,600

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-16	0200	36.09	13,400
6-28	0800	32.62	9,950
7-25	1800	29.85	8,460

08210400 Lagarto Creek near George West, Tex.

LOCATION.--Lat 28°03'34", long 98°05'48", Live Oak County, near right bank 75 ft (23 m) downstream from bridge on U.S. Highway 281, 0.6 mile (1.0 km) upstream from Dix Hollow, and 19.3 miles (31.1 km) south of George West.

DRAINAGE AREA.--155 mi² (401 km²).

PERIOD OF RECORD.--April 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 197.77 ft (60.28 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 153 ft³/s (4.33 m³/s) June 25, gage height, 7.25 ft (2.21 m); no flow for many days.
Period of record: Maximum discharge, 1,900 ft³/s (53.8 m³/s) May 13, 1972, gage height, 12.20 ft (3.72 m); no flow for many days.
Maximum stage since about 1887, 25.1 ft (7.7 m), discharge, 33,500 ft³/s (949 m³/s) Oct. 17, 1971. Second highest stage, 24.3 ft (7.4 m), discharge, 29,500 ft³/s (835 m³/s) occurred Sept. 12, 1971. The third and fourth highest floods occurred in 1914 and September 1967 (stages unknown).

REMARKS.--Records fair. No known regulation or diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0								0			0
2	0								0			0
3	0								0			0
4	0								0			0
5	0								0			0
6	0								0			0
7	0								0			0
8	0								0			0
9	0								0			0
10	0								0			0
11	0								0			0
12	0								0			0
13	0								.73			0
14	0								0			0
15	0								0			0
16	0								0			0
17	0								0			16
18	0								0			3.6
19	0								0			.22
20	0								0			0
21	0								0			0
22	0								0			0
23	0								0			0
24	0								13			0
25	0								50			0
26	0								16			0
27	0								5.2			1.7
28	0								.71			25
29	0				------				.04			9.3
30	1.7				------				0			2.3
31	1.3	------			------		------		------			------
TOTAL	3.0	0	0	0	0	0	0	0	85.68	0	0	58.12
MEAN	.097	0	0	0	0	0	0	0	2.86	0	0	1.94
MAX	1.7	0	0	0	0	0	0	0	50	0	0	25
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	6.0	0	0	0	0	0	0	0	170	0	0	115

WTR YR 1973 TOTAL 146.80 MEAN .40 MAX 50 MIN 0 AC-FT 291

PEAK DISCHARGE (BASE, 50 FT³/S).--June 24 (2000) 66 ft³/s (6.30 ft); June 25 (1700) 153 ft³/s (7.25 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 (1.0 km) upstream from bridge on State Highway 359, and 4.5 miles (7.2 km) southwest of Mathis.

DRAINAGE AREA.--16,656 mi² (43,139 km²).

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 (0.3 km) upstream at datum 0.52 ft (0.16 m) higher. Oct. 1, 1957, to Apr. 3, 1961, nonrecording gage near left end of Mathis Dam 0.2 mile (0.3 km) upstream at present datum.

EXTREMES (at 0600).--Current year: Maximum contents, 276,200 acre-ft (341 hm³) Aug. 2, Sept. 17, 18, 21, 24, 25, 27, 28; maximum elevation, 94.25 ft (28.73 m) Sept. 17; minimum contents, 242,400 acre-ft (299 hm³) Apr. 14, 15; minimum elevation, 92.39 ft (28.16 m) Apr. 15.
Period of record: Maximum contents, 320,000 acre-ft (395 hm³) Sept. 22, 1967, and Sept. 12, 1971; maximum elevation, 94.82 ft (28.90 m) Sept. 22, 1967; minimum contents, 14,740 acre-ft (18.2 hm³) May 5, 1951, elevation, 67.62 ft (20.61 m).

REMARKS.--Mathis Dam was completed and storage began July 24, 1934. The original capacity at spillway crest, elevation, 74.5 ft (22.7 m) of 54,000 acre-ft (66.6 hm³) had decreased to 39,400 acre-ft (48.6 hm³) 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 (1,807 m) long, with two spillways. On the 1,320-foot (402-meter) north spillway there are 33 gates which are operated by movable hydraulic lifts. The 27 gates on the 1,080-foot (329-meter) south spillway are electrically operated from the control tower. Gates were repaired and modified in August 1966; each gate is 37.5 ft (11.4 m) wide. Water for municipal supply for the city of Corpus Christi is released through 4.0-foot-diameter (1-meter) cylinder valve and three 2.5- by 4-foot (0.8- by 1-meter) rectangular openings and is diverted from river at Calallen 35 miles (56 km) downstream. The city of Alice withdrew 2,890 acre-ft (3.56 hm³) 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 gates (when closed) on north spillway	94.3	278,200
Top of gates (when closed) on south spillway	94.0	272,400
Crest of spillways	88.0	170,200
Invert of three 2.5- by 4-foot rectangular openings	55.5	646

COOPERATION.--Capacity curve, from an October 1972 survey, and 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	235,300	94.0	272,400
93.0	253,400	95.0	292,100

CONTENTS, IN ACRE-FEET, AT 0600, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270,400	272,400	259,000	247,900	246,100	247,900	246,100	260,900	251,600	272,400	274,300	266,600
2	272,400	268,500	259,000	249,700	244,200	249,700	246,100	262,800	249,700	272,400	276,200	266,600
3	272,400	268,500	257,100	247,900	246,100	249,700	247,900	264,700	249,700	274,300	274,300	268,500
4	272,400	268,500	257,100	247,900	244,200	251,600	246,100	262,800	249,700	274,300	274,300	268,500
5	274,300	266,600	257,100	247,900	244,200	249,700	244,200	262,800	249,700	272,400	274,300	270,400
6	274,300	266,600	260,900	249,700	244,200	249,700	244,200	260,900	253,400	272,400	272,400	266,600
7	272,400	268,500	257,100	249,700	244,200	251,600	246,100	260,900	249,700	272,400	274,300	264,700
8	272,400	266,600	255,300	249,700	249,700	251,600	246,100	262,800	251,600	272,400	274,300	264,700
9	272,400	264,700	255,300	249,700	247,900	251,600	246,100	260,900	249,700	270,400	274,300	264,700
10	272,400	266,600	255,300	249,700	246,100	251,600	246,100	260,900	249,700	270,400	274,300	266,600
11	272,400	266,600	255,300	251,600	244,200	251,600	244,200	260,900	249,700	270,400	274,300	270,400
12	272,400	264,700	255,300	249,700	244,200	251,600	244,200	262,800	253,400	268,500	274,300	270,400
13	272,400	264,700	255,300	249,700	244,200	249,700	244,200	260,900	259,000	270,400	274,300	270,400
14	270,400	266,600	253,400	249,700	246,100	249,700	242,400	260,900	270,400	270,400	274,300	270,400
15	270,400	264,700	253,400	247,900	244,200	249,700	242,400	260,900	272,400	270,400	274,300	272,400
16	270,400	262,800	255,300	249,700	244,200	253,400	244,200	260,900	272,400	270,400	272,400	272,400
17	268,500	262,800	253,400	247,900	244,200	249,700	246,100	259,000	272,400	270,400	274,300	276,200
18	268,500	262,800	253,400	247,900	246,100	249,700	249,700	259,000	272,400	270,400	272,400	276,200
19	268,500	260,900	253,400	247,900	244,200	247,900	255,300	257,100	272,400	272,400	272,400	274,300
20	268,500	260,900	251,600	247,900	244,200	249,700	260,900	257,100	272,400	274,300	272,400	274,300
21	266,600	260,900	253,400	246,100	246,100	247,900	262,800	255,300	272,400	272,400	272,400	276,200
22	266,600	262,800	251,600	246,100	244,200	246,100	262,800	257,100	272,400	272,400	270,400	274,300
23	268,500	260,900	249,700	247,900	246,100	246,100	264,700	255,300	272,400	272,400	270,400	274,300
24	268,500	260,900	249,700	246,100	246,100	247,900	264,700	255,300	274,300	270,400	270,400	276,200
25	268,500	260,900	249,700	249,700	246,100	246,100	264,700	255,300	272,400	272,400	268,500	276,200
26	266,600	260,900	251,600	247,900	246,100	246,100	264,700	253,400	272,400	272,400	268,500	274,300
27	264,700	260,900	249,700	247,900	247,900	246,100	264,700	253,400	270,400	274,300	266,600	276,200
28	264,700	262,800	249,700	249,700	247,900	246,100	264,700	255,300	272,400	274,300	266,600	276,200
29	268,500	260,900	247,900	246,100	------	246,100	262,800	253,400	272,400	274,300	266,600	272,400
30	268,500	259,000	247,900	246,100	------	246,100	260,900	253,400	274,300	274,300	266,600	272,400
31	268,500	------	249,700	244,200	------	246,100	------	251,600	------	274,300	266,600	------
(†)	93.76	93.31	92.75	92.53	92.73	92.58	93.45	92.91	94.10	94.08	93.70	94.01
(*)	-3,900	-9,500	-9,300	-5,500	+3,700	-1,800	+14,800	-9,300	+22,700	0	-7,700	+5,800
MAX	274,300	272,400	260,900	251,600	249,700	253,400	264,700	264,700	274,300	274,300	276,200	276,200
MIN	264,700	259,000	247,900	244,200	244,200	246,100	242,400	251,600	249,700	268,500	266,600	264,700

CAL YR 1972..... * -24,600 MAX 276,200 MIN 247,900
WTR YR 1973..... * 0 MAX 276,200 MIN 242,400

† 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 (2 m) downstream from pier of bridge on State Highway 359, 200 ft (61 m) downstream from Texas and New Orleans Railroad Co. bridge, 0.6 mile (1.0 km) downstream from Wesley E. Seale Dam, 4 miles (6 km) southwest of Mathis, and at mile 46.7 (75.1 km).

DRAINAGE AREA.--16,660 mi² (43,150 km²).

PERIOD OF RECORD.--August 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 27.53 ft (8.39 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 866 ft³/s (24.5 m³/s), 627,400 acre-ft/yr (774 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,500 ft³/s (694 m³/s) June 25, gage height, 31.62 ft (9.64 m); minimum daily, 64 ft³/s (1.81 m³/s) Jan. 23.
Period of record: Maximum discharge, 138,000 ft³/s (3,910 m³/s) Sept. 24, 1967, gage height, 47.7 ft (14.5 m), from floodmark; minimum daily, 6.8 ft³/s (193 dm³/s) Aug. 15, 1940.
Maximum stage since at least 1888, that of Sept. 24, 1967. A stage of about 40 ft (12 m) 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 (1.0 km) 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 (55 km) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	351	112	109	111	85	106	103	140	2,180	1,470	213
2	223	129	112	111	107	86	111	114	140	399	1,700	213
3	267	142	112	118	107	85	141	134	140	519	1,670	213
4	284	133	112	110	107	85	118	110	142	584	1,340	313
5	263	113	112	109	107	85	110	110	143	448	622	929
6	252	106	222	111	107	88	107	110	133	401	394	387
7	307	168	123	116	99	89	101	116	122	390	409	217
8	185	125	113	119	161	98	132	117	110	373	441	208
9	163	114	111	111	178	98	106	135	103	356	494	206
10	154	142	131	110	108	107	100	135	103	357	515	224
11	153	113	123	160	98	113	98	135	277	352	523	233
12	155	113	119	119	97	113	98	182	251	296	514	207
13	155	155	112	111	97	114	98	144	304	299	539	205
14	117	179	118	110	92	97	98	131	2,800	336	547	230
15	117	116	180	109	100	81	98	125	8,790	388	501	308
16	112	113	130	109	100	231	98	119	11,100	558	485	443
17	111	110	113	109	103	112	69	118	12,900	750	462	1,550
18	111	172	112	97	103	99	93	115	10,900	943	417	990
19	164	126	112	111	102	97	129	147	4,510	1,010	415	629
20	119	112	112	120	101	99	100	150	3,900	1,550	401	1,120
21	110	163	201	241	96	98	94	142	3,620	1,490	394	1,090
22	136	135	126	128	96	98	94	139	3,290	572	403	1,100
23	124	113	113	64	95	98	94	140	2,270	3,650	370	1,140
24	116	137	111	107	94	159	94	139	4,080	3,700	367	1,120
25	118	159	111	152	94	122	95	146	13,000	6,310	366	1,080
26	159	117	118	119	94	101	161	146	8,990	6,630	364	814
27	116	113	110	136	88	98	217	144	7,880	7,210	363	1,890
28	108	140	110	255	85	100	81	145	8,900	4,650	363	4,320
29	126	117	110	132	------	104	78	145	10,200	2,390	275	5,820
30	121	113	111	117	------	106	96	138	7,160	1,780	216	6,400
31	106	------	110	110	------	105	------	155	------	1,490	215	------
TOTAL	4,985	4,139	3,822	3,840	2,927	3,251	3,215	4,129	126,398	52,361	17,555	33,812
MEAN	161	138	123	124	105	105	107	133	4,213	1,689	566	1,127
MAX	307	351	222	255	178	231	217	182	13,000	7,210	1,700	6,400
MIN	106	106	110	64	85	81	69	103	103	296	215	205
AC-FT	9,890	8,210	7,580	7,620	5,810	6,450	6,380	8,190	250,700	103,900	34,820	67,070

CAL YR 1972 TOTAL 150,368 MEAN 411 MAX 6,730 MIN 84 AC-FT 298,300
WTR YR 1973 TOTAL 260,434 MEAN 714 MAX 13,000 MIN 64 AC-FT 516,600

08211520 Oso Creek at Corpus Christi, Tex.

LOCATION.--Lat 27°42'40", long 97°30'06", Nueces County, on left downstream end of bridge on Farm Road 763, 1.5 miles (2.4 km) south of intersection of Farm Roads 763 and 665, 1.6 miles (2.6 km) downstream from mouth of West Oso Creek, and 1.9 miles (3.1 km) southwest of intersection of Farm Road 665 and State Highway 357.

DRAINAGE AREA.--90.3 mi² (234 km²).

PERIOD OF RECORD.--September 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.91 ft (0.58 m) below mean sea level.

EXTREMES.--Maximum discharge during period September 1972, 690 ft³/s (19.5 m³/s) Sept. 27, gage height, 13.64 ft (4.16 m); minimum, 1.6 ft³/s (45 dm³/s) Sept. 20, 21.
Water year 1973: Maximum discharge, 2,760 ft³/s (78.2 m³/s) June 14, gage height, 20.88 ft (6.36 m); minimum, 0.25 ft³/s (7.1 dm³/s) Aug. 26, 27.
Period of record: Maximum discharge, 2,760 ft³/s (78.2 m³/s) June 14, 1973, gage height, 20.88 ft (6.36 m); minimum, 0.25 ft³/s (7.1 dm³/s) Aug. 26, 27, 1973.
Maximum stage since 1919, about 24.5 ft (7.5 m), May 1968, from information by local resident.

REMARKS.--Records good. No known diversions above station. An undetermined amount of water from oilfield operations enters stream upstream at various points. 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, SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7												
8												
9												3.7
10												2.6
11												2.2
12												2.0
13												2.4
14												10
15												4.7
16												3.0
17												3.4
18												2.9
19												2.4
20												1.8
21												2.3
22												20
23												7.7
24												403
25												374
26												161
27												396
28												195
29												96
30					------							45
31		------			------		------		------			------
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-
CFSM	-	-	-	-	-	-	-	-	-	-	-	-
IN.	-	-	-	-	-	-	-	-	-	-	-	-
AC-FT	-	-	-	-	-	-	-	-	-	-	-	-

08211520 Oso Creek at Corpus Christi, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	3.4	2.9	2.7	3.1	2.7	1.9	2.0	1.9	20	.86	.62
2	10	3.8	3.2	2.9	2.6	2.9	2.0	1.9	1.7	14	2.3	3.0
3	6.3	5.9	3.2	3.4	2.7	3.1	2.1	1.4	1.7	24	15	1.6
4	5.1	4.2	3.0	3.5	3.1	2.5	1.7	1.4	1.5	26	2.4	1.2
5	4.2	3.4	3.2	6.2	3.1	2.5	1.8	1.9	1.9	25	5.9	1.1
6	4.2	3.4	3.0	5.4	3.1	2.5	4.5	1.9	18	8.7	3.7	.94
7	4.0	2.9	2.8	4.6	3.3	2.1	4.7	1.7	73	5.7	1.7	.91
8	3.6	3.0	2.8	4.1	3.1	2.1	2.7	1.3	4.2	4.2	1.2	.80
9	3.6	2.9	2.9	6.4	4.7	2.4	3.2	1.3	2.8	3.1	.98	.63
10	4.0	2.9	3.0	5.7	3.4	2.6	2.2	1.4	2.2	2.9	13	.58
11	3.2	3.8	2.6	5.8	2.6	2.0	1.9	1.4	2.7	2.3	4.0	52
12	3.4	3.8	3.0	4.6	3.3	2.3	2.1	4.3	103	1.9	45	206
13	3.0	4.4	3.0	3.8	3.3	2.4	3.0	2.3	976	1.6	14	100
14	3.2	3.0	3.1	3.5	2.9	3.0	2.8	2.3	1,760	1.5	3.3	1,060
15	3.4	2.9	3.1	2.9	2.8	2.9	2.7	2.7	320	1.6	2.6	1,120
16	3.2	3.2	2.8	2.9	3.0	2.6	2.7	2.0	77	1.6	1.6	712
17	3.0	3.0	2.9	2.9	3.7	2.2	2.8	1.9	26	1.5	1.9	1,110
18	3.0	3.2	3.5	3.0	3.8	2.0	2.5	1.7	13	1.3	6.6	1,150
19	3.4	3.2	3.7	3.1	3.0	2.4	2.6	1.6	9.0	1.1	2.3	293
20	3.8	3.0	3.8	3.3	2.9	2.4	2.4	1.8	8.7	.99	1.2	134
21	4.2	4.1	3.6	3.0	3.7	2.3	2.5	2.0	173	.96	1.7	59
22	4.2	3.6	3.2	2.8	6.6	2.4	2.2	1.8	135	.89	1.2	29
23	3.6	5.1	3.4	2.7	4.7	2.9	2.3	1.8	77	.86	.80	16
24	3.0	5.4	3.4	2.4	4.1	2.8	2.3	2.3	499	.82	.59	10
25	3.2	4.0	3.3	5.6	4.5	2.0	2.2	2.4	2,110	.84	.44	6.8
26	3.2	3.6	3.2	3.5	3.4	2.0	2.2	2.0	1,650	.88	.34	5.2
27	3.2	4.2	3.4	3.6	2.7	2.0	1.9	1.9	623	.90	13	59
28	3.3	3.6	3.9	3.5	2.6	2.1	1.7	1.8	214	.87	7.4	117
29	4.2	3.2	4.0	2.9	------	2.3	1.9	1.6	89	.83	1.6	80
30	3.8	3.0	4.3	2.9	------	2.3	2.0	1.4	40	.85	1.4	29
31	3.4	------	3.4	3.1	------	2.2	------	1.8	------	.89	.84	------
TOTAL	136.9	109.1	100.6	116.7	95.8	74.9	73.5	59.0	9,014.3	158.58	158.85	6,359.38
MEAN	4.42	3.64	3.25	3.76	3.42	2.42	2.45	1.90	300	5.12	5.12	212
MAX	20	5.9	4.3	6.4	6.6	3.1	4.7	4.3	2,110	26	45	1,150
MIN	3.0	2.9	2.6	2.4	2.6	2.0	1.7	1.3	1.5	.82	.34	.58
CFSM	.05	.04	.04	.04	.04	.03	.03	.02	3.32	.06	.06	2.35
IN.	.06	.04	.04	.05	.04	.03	.03	.02	3.71	.07	.07	2.62
AC-FT	272	216	200	231	190	149	146	117	17,880	315	315	12,610

CAL YR 1972	TOTAL -	MEAN -	MAX -	MIN -	CFSM -	IN -	AC-FT -
WTR YR 1973	TOTAL 16,457.61	MEAN 45.1	MAX 2,110	MIN .34	CFSM .50	IN 6.78	AC-FT 32,640

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-14	0200	20.88	2,760	9-16	2000	13.45	861
6-25	2200	19.79	2,440	9-17	2300	18.64	2,090
9-14	2100	17.83	1,860	9-19	0100	10.20	384
9-15	1630	14.55	1,070				

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 (165 m) downstream from Texas and New Orleans Railroad Co. bridge, and 3.2 miles (5.1 km) upstream from confluence with Chiltipin Creek.

DRAINAGE AREA.--319 mi² (826 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 189.60 ft (57.79 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 15.8 ft³/s (0.448 m³/s), 11,450 acre-ft/yr (14.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 150 ft³/s (4.25 m³/s) Sept. 28, gage height, 4.91 ft (1.50 m); no flow most of time.
Period of record: Maximum discharge, 19,200 ft³/s (544 m³/s) Oct. 17, 1971, gage height, 17.70 ft (5.40 m); no flow most of time each year.
Maximum stage since at least 1928, 18.2 ft (5.5 m) April 1949, equivalent gage height in channel modified in 1955, 17.2 ft (5.2 m), from information by local residents.

REMARKS.--Records good. At end of year, flow from 170 mi² (440 km²) above this station was partly controlled by 10 floodwater-retarding structures with a total combined capacity of 37,750 acre-ft (46.5 hm³) below the flood-spillway crests, of which 35,980 acre-ft (44.4 hm³) is floodwater-retarding capacity and 1,770 acre-ft (2.18 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WRD Texas 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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			0
8									0			0
9									0			0
10									0			0
11									0			0
12									0			0
13									0			0
14									0			.23
15									0			25
16									0			12
17									0			6.7
18									0			3.1
19									0			2.9
20									0			16
21									0			7.6
22									0			1.6
23									0			.65
24									10			.17
25									50			.08
26									10			.07
27									.93			7.5
28									.07			60
29					------				0			11
30					------				0			2.5
31		------			------		------		------			------
TOTAL	0	0	0	0	0	0	0	0	71.00	0	0	157.10
MEAN	0	0	0	0	0	0	0	0	2.37	0	0	5.24
MAX	0	0	0	0	0	0	0	0	50	0	0	60
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	141	0	0	312

CAL YR 1972 TOTAL 400.61 MEAN 1.09 MAX 97 MIN 0 AC-FT 795
WTR YR 1973 TOTAL 228.10 MEAN .62 MAX 60 MIN 0 AC-FT 452

PEAK DISCHARGE (BASE, 250 FT³/S).--No peak above base.

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 (2.9 km) upstream from confluence of Chiltipin and San Diego Creeks, and 2.6 miles (4.2 km) northeast of Alice.

DRAINAGE AREA.--150 mi² (388 km²).

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, 1,930 acre-ft (2.38 hm³) Sept. 28, 29, elevation, 194.56 ft (59.30 m); minimum, 165 acre-ft (0.20 hm³) Aug. 29, elevation, 189.79 ft (57.85 m).
Period of record: Maximum contents, 4,780 acre-ft (5.89 hm³) Sept. 12, 1971, elevation, 198.83 ft (60.60 m), from floodmark; minimum, 14 acre-ft (17,260 m³) Feb. 3, 1965, elevation, 185.67 ft (56.59 m).

REMARKS.--Lake is formed by Alice Dam, which has a total length of 11,525 ft (3,513 m) including 4,275 ft (1,303 m) of west protective levee, a 1,000-foot (305-meter) temporary weir between the main embankment and the west protective levee, rolled earthfill west embankment 3,470 ft (1,060 m) long, concrete siphon spillway 22.5 ft (6.9 m) wide, and concrete main spillway 414 ft (126 m) wide, and rolled earthfill east embankment 2,343 ft (714 m) long. Service spillway is a concrete siphon type, 22.5 ft (6.9 m) wide with two 3,200 gallons per minute (202 dm³/s) pumps. Main spillway is concrete, 414 ft (126 m) wide with thirteen 30-foot (9-meter) wide slots for gates. Emergency spillway is 50 wood gates 20 ft (6 m) wide by 3.5 ft (1.1 m) high, resting on concrete. Rolled earthfilled embankments are 15 ft (4 m) thick on top with varying bottom widths. The levee is a rolled earthfill embankment 8 ft (2 m) 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 mi² (190 km²) above this station was partly controlled by six floodwater-retarding structures with a total combined capacity of 15,690 acre-ft (19.3 hm³) below the flood-spillway crests, of which 14,780 acre-ft (18.2 hm³) is floodwater-retarding capacity and 912 acre-ft (1.12 hm³) 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 3,510 acre-ft (4.33 hm³) for municipal use, and records furnished by city of Corpus Christi show that 2,890 acre-ft (3.56 hm³) 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)

189.5	127	192.0	754
190.0	195	193.0	1,160
190.5	288	194.0	1,640
191.0	423	195.0	2,180

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,4 0	899	462	183	275	529	669	708	406	1,260	298	185
2	1,460	888	444	194	271	535	666	718	389	1,240	286	185
3	1,430	880	435	194	266	545	680	704	380	1,220	266	186
4	1,420	856	426	203	273	555	666	697	372	1,200	250	185
5	1,400	837	438	210	273	568	659	697	372	1,170	226	176
6	1,370	833	409	213	273	568	701	690	369	1,150	210	169
7	1,340	814	394	221	275	571	711	683	363	1,130	189	166
8	1,320	806	386	225	286	584	722	666	363	1,100	188	168
9	1,300	791	375	228	300	581	711	655	366	1,060	179	169
10	1,280	780	358	237	300	598	704	635	383	1,030	172	169
11	1,250	758	349	252	315	594	704	631	397	1,000	172	180
12	1,230	736	338	246	323	594	715	641	394	968	169	183
13	1,210	729	333	246	333	611	722	635	409	919	179	235
14	1,190	697	325	234	330	621	722	631	409	884	180	275
15	1,170	683	312	226	330	628	725	621	409	856	182	776
16	1,140	666	288	226	338	638	743	614	409	818	185	1,160
17	1,130	655	279	218	375	628	751	608	406	788	185	1,250
18	1,090	635	273	223	383	624	758	604	397	758	186	1,360
19	1,070	618	273	223	394	631	754	584	391	722	186	1,360
20	1,060	608	264	237	406	638	743	565	423	690	189	1,510
21	1,040	604	248	234	429	631	751	542	429	652	189	1,530
22	1,030	575	232	234	459	631	743	519	438	618	188	1,520
23	1,000	571	225	228	475	659	743	500	444	584	182	1,500
24	980	571	213	234	478	680	740	491	565	545	177	1,480
25	964	558	205	246	484	666	740	487	1,270	532	170	1,460
26	943	542	191	248	500	662	740	481	1,340	507	169	1,430
27	927	535	180	256	516	659	718	472	1,340	466	166	1,870
28	911	510	176	256	523	666	715	459	1,320	432	166	1,930
29	951	494	176	256	------	662	708	447	1,300	394	180	1,920
30	947	472	177	264	------	673	708	429	1,270	363	185	1,910
31	923	------	180	271	------	676	------	417	------	328	185	------
(†)	92.44	91.16	89.90	90.42	91.32	91.78	91.87	90.98	93.25	90.66	89.93	94.53
(*)	-567	-451	-292	+91	+252	+153	+32	-291	+853	-942	-143	+1,725
MAX	1,480	899	462	271	523	680	758	718	1,340	1,260	298	1,930
MIN	911	472	176	183	266	529	659	417	363	328	166	166

CAL YR 1972..... * -2,240 MAX 2,420 MIN 176
WTR YR 1973..... * +420 MAX 1,930 MIN 166

† 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 (10 m) downstream from downstream bridge of two bridges on State Highways 44 and 359, 0.5 mile (0.8 km) downstream from confluence of San Diego and Chiltipin Creeks, 2.3 miles (3.7 km) upstream from head of Pintas Creek, and 2.7 miles (4.3 km) northeast of Alice.

DRAINAGE AREA.--507 mi² (1,313 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 161.68 ft (49.28 m) above mean sea level.

AVERAGE DISCHARGE.--8 years (1965-73), 41.2 ft³/s (1.17 m³/s), 29,850 acre-ft/yr (36.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 892 ft³/s (25.3 m³/s) June 25, gage height, 6.06 ft (1.85 m); no flow part of Dec. 27.
Period of record: Maximum discharge, 26,800 ft³/s (759 m³/s) Sept. 12, 1971, gage height, 16.51 ft (5.03 m); no flow part of each day Aug. 23-26, Sept. 14, 1965, several days in June, July, and August 1967, and part of Dec. 27, 1972.
Maximum stage since at least 1949, that of Sept. 12, 1971. Other high stages for this period are 15.86 ft (4.83 m) Sept. 23, 1967, discharge, 16,900 ft³/s (479 m³/s); 15.5 ft (4.7 m) Sept. 9, 1962, discharge, 14,600 ft³/s (413 m³/s) from field estimate; 14.2 ft (4.3 m) 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 (3.7 km) 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 2,650 acre-ft (3.27 hm³) of sewage effluent into San Diego Creek 1.3 miles (2.1 km) upstream, which comprises most of the low flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	1.3	2.3	1.3	2.8	1.6	.45	1.1	2.6	4.2	4.8	2.0
2	3.0	.91	.76	1.6	2.7	1.6	1.0	.82	2.6	2.6	6.2	2.1
3	2.2	1.1	1.2	1.5	2.6	1.8	1.2	1.8	3.5	2.1	6.5	2.1
4	2.1	1.2	1.3	1.3	2.5	1.5	1.1	2.5	2.4	2.3	5.0	2.3
5	2.2	.94	1.3	2.0	2.6	1.7	1.2	2.0	2.6	.93	4.2	2.4
6	2.2	1.1	1.2	1.6	2.0	1.6	3.0	2.2	2.7	.29	4.0	2.1
7	2.1	.80	1.0	1.7	1.7	1.6	4.3	2.0	3.3	.58	3.7	2.7
8	2.2	.80	1.4	1.6	1.8	1.6	2.2	1.7	3.9	1.3	3.7	3.0
9	2.2	.76	1.4	1.6	2.7	1.5	1.8	1.7	4.4	4.1	4.8	2.6
10	2.2	.76	1.4	1.7	2.5	1.5	1.6	1.2	4.5	3.9	6.6	3.0
11	2.3	.92	1.4	2.3	2.1	1.4	1.4	1.6	9.7	3.3	3.5	3.8
12	2.0	1.3	1.4	2.7	2.2	1.4	1.5	1.3	22	3.7	1.9	3.0
13	2.2	1.6	1.5	2.6	2.3	1.4	1.6	1.8	33	4.1	2.4	3.5
14	1.9	.99	1.5	2.5	2.0	1.8	2.1	1.2	41	4.5	3.0	35
15	2.5	.84	1.5	2.3	1.8	1.5	2.4	.74	6.6	4.7	3.3	422
16	2.2	.88	1.3	2.1	1.9	1.2	2.5	.90	1.7	4.3	3.0	119
17	2.2	1.1	1.4	1.9	3.6	1.1	2.0	1.3	1.5	3.7	2.7	50
18	2.1	1.1	1.6	1.8	3.6	1.1	2.2	2.4	1.4	3.2	3.0	50
19	2.3	1.1	1.7	1.7	3.1	1.3	2.0	1.4	1.7	3.2	2.4	30
20	2.0	1.1	1.4	1.6	2.8	1.2	2.0	.90	3.4	4.1	2.6	135
21	2.3	1.2	1.0	1.6	2.8	1.3	1.4	2.2	6.2	3.7	2.6	179
22	2.3	1.3	.34	1.7	4.0	1.2	1.7	1.8	13	4.5	2.4	27
23	2.6	1.4	1.6	1.4	5.9	1.7	1.2	.81	4.0	3.3	2.2	12
24	2.7	1.8	1.6	1.5	2.6	1.0	1.1	1.7	34	2.2	2.7	6.4
25	1.8	1.6	1.3	2.7	2.0	1.2	1.3	.95	522	3.5	3.1	4.4
26	1.8	1.3	.87	3.3	2.5	1.4	1.4	1.4	298	5.3	2.8	3.9
27	1.9	1.3	.43	3.5	1.6	1.1	.90	1.3	43	4.5	2.9	123
28	1.9	.91	1.2	3.1	1.8	1.1	1.8	2.3	24	4.7	2.8	195
29	1.8	.88	1.4	2.9	------	1.4	2.7	2.0	16	4.3	2.6	33
30	1.3	1.7	1.4	2.6	------	1.2	2.5	2.1	8.3	4.5	2.5	12
31	1.3	------	1.3	2.7	------	.67	------	3.1	------	4.9	2.2	------
TOTAL	68.0	33.99	40.40	64.4	72.5	42.67	53.55	50.22	1,123.0	106.50	106.1	1,471.3
MEAN	2.19	1.13	1.30	2.08	2.59	1.38	1.79	1.62	37.4	3.44	3.42	49.0
MAX	4.2	1.8	2.3	3.5	5.9	1.8	4.3	3.1	522	5.3	6.6	422
MIN	1.3	.76	.34	1.3	1.6	.67	.45	.74	1.4	.29	1.9	2.0
AC-FT	135	67	80	128	144	85	106	100	2,230	211	210	2,920

CAL YR 1972 TOTAL 2,558.19 MEAN 6.99 MAX 663 MIN .34 AC-FT 5,070
WTR YR 1973 TOTAL 3,232.63 MEAN 8.86 MAX 522 MIN .29 AC-FT 6,410

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 (4.2 km) north of Falfurrias.

DRAINAGE AREA.--480 mi² (1,243 km²), of which 4.5 mi² (11.7 km²) 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 (35.53 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 8.52 ft³/s (0.241 m³/s), 6,170 acre-ft/yr (7.61 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 657 ft³/s (18.6 m³/s) Sept. 15, gage height, 8.84 ft (2.69 m); no flow most of time.
Period of record: Maximum discharge, 5,300 ft³/s (150 m³/s) Sept. 13, 1971, gage height, 12.66 ft (3.86 m); no flow at times in 1970-73.
Maximum stage since at least 1929, 15.0 ft (4.6 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0		0	2.0	0	.21
2							0		0	2.5	0	.06
3							0		0	1.7	1.2	.02
4							0		0	.54	.51	.01
5							0		0	.12	.06	0
6							0		0	.03	.02	0
7							0		0	.02	0	0
8							0		0	.01	0	0
9							0		0	0	0	0
10							0		0	0	0	0
11							0		0	0	0	1.9
12							0		0	0	0	1.3
13							0		.07	0	0	2.4
14							0		4.3	0	0	408
15							0		.98	0	0	516
16							.44		.09	0	0	289
17							2.0		.03	0	0	229
18							.55		0	0	0	129
19							.17		0	0	0	27
20							.05		2.5	0	0	45
21							.02		76	0	0	24
22							0		187	0	0	11
23							0		282	0	0	4.5
24							0		89	0	0	2.4
25							0		305	0	0	1.1
26							0		337	0	0	.47
27							0		248	0	0	119
28							0		31	0	.02	145
29					------		0		15	0	3.0	28
30					------		0		7.1	0	1.1	22
31		------			------		------		------	0	.46	------
TOTAL	0	0	0	0	0	0	3.23	0	1,585.07	6.92	6.37	2,006.37
MEAN	0	0	0	0	0	0	.11	0	52.8	.22	.21	66.9
MAX	0	0	0	0	0	0	2.0	0	337	2.5	3.0	516
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	6.4	0	3,140	14	13	3,980

CAL YR 1972 TOTAL 1,182.83 MEAN 3.23 MAX 288 MIN 0 AC-FT 2,350
WTR YR 1973 TOTAL 3,607.96 MEAN 9.88 MAX 516 MIN 0 AC-FT 7,160

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-22	0300	6.84	241	9-15	0300	8.84	657
6-23	1500	7.90	398	9-27	1900	5.88	206
6-26	2200	8.46	532				

08363840 Rio Grande at Vinton Bridge near Anthony, Tex.

LOCATION.--Lat 31°57'32", long 106°36'17", El Paso County, on right bank 40 ft (12 m) downstream from Farm Road 273, 480 ft (146 m) west of U.S. Highway 80, and 2.8 miles (4.5 km) south of Anthony.

DRAINAGE AREA.--28,680 mi² (74,280 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 3,766.72 ft (1,148.10 m) above mean sea level. Prior to May 31, 1972, on left bank at same datum.

EXTREMES.--Current year: Maximum discharge, 2,710 ft³/s (76.7 m³/s) Aug. 30, gage height, 5.69 ft (1.73 m); minimum daily, 2.6 ft³/s (74 dm³/s) Jan. 28.
Period of record: Maximum discharge, 2,710 ft³/s (76.7 m³/s) Aug. 30, 1973, gage height, 5.69 ft (1.73 m); minimum daily, 2.6 ft³/s) Jan. 28, 1973.

REMARKS.--Records good. Flow regulated by Caballo Reservoir, capacity, 344,000 acre-ft, (424 hm³), 1958 survey, and Elephant Butte Reservoir, capacity, 2,137,000 acre-ft (2,630 hm³), 1959 survey, both in New Mexico. During year, about 407,000 acre-ft (502 hm³) was diverted for irrigation above station and below Caballo Reservoir. Diversions for irrigation for the 1972 water year should have been 152,500 acre-ft (188 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	24	12	12	6.7	9.9	429	508	530	878	460	825
2	30	23	12	12	4.0	12	468	411	556	993	424	1,030
3	29	23	12	15	5.3	11	499	350	534	938	301	993
4	30	23	12	19	6.7	12	451	345	495	831	517	786
5	26	23	12	18	7.5	12	385	363	455	786	738	678
6	24	22	15	18	5.8	12	372	402	407	905	872	641
7	19	19	16	13	6.7	9.9	341	477	411	921	1,070	583
8	22	19	16	9.9	9.9	6.7	363	429	451	821	1,050	592
9	22	19	16	9.1	8.3	6.2	407	385	416	905	1,260	733
10	20	19	16	9.1	6.7	6.2	323	398	473	943	1,110	888
11	18	19	15	8.3	8.3	7.5	284	490	623	836	1,130	1,060
12	12	19	19	6.7	8.3	196	253	468	627	776	1,260	705
13	11	18	13	6.7	6.7	149	240	526	583	742	1,210	669
14	9.1	18	16	8.3	6.7	253	284	530	696	715	1,330	751
15	7.5	17	12	11	5.8	363	367	539	669	1,470	1,340	781
16	7.5	15	14	7.5	6.2	411	455	473	600	1,320	1,400	826
17	6.7	17	19	6.7	6.2	380	433	429	641	883	1,420	710
18	9.1	16	26	8.3	6.7	455	429	332	587	831	1,400	636
19	18	20	18	6.2	6.7	451	458	240	521	771	1,210	574
20	140	14	18	8.3	9.1	442	490	191	490	468	1,310	552
21	428	12	18	11	9.1	464	495	152	650	297	1,320	521
22	279	12	17	9.9	11	570	526	129	696	292	1,020	570
23	144	12	17	6.2	12	556	578	118	701	386	781	623
24	65	14	16	5.3	14	512	512	176	715	781	761	556
25	42	13	16	5.8	16	460	451	226	724	786	872	446
26	45	12	16	4.0	14	446	455	262	636	641	993	372
27	39	13	17	3.1	14	446	464	429	578	565	1,150	297
28	30	12	16	2.6	12	438	468	512	719	517	1,160	306
29	25	12	16	3.1	------	433	548	446	659	650	938	279
30	24	11	17	4.9	------	464	605	407	696	556	1,690	299
31	25	------	16	5.3	------	429	------	446	------	517	1,050	------
TOTAL	1,638.9	510	491	274.3	240.4	8,423.4	12,843	11,589	17,539	23,721	32,537	19,282
MEAN	52.9	17.0	15.8	8.85	8.59	272	428	374	585	765	1,050	643
MAX	428	24	26	19	16	570	605	539	724	1,470	1,690	1,060
MIN	6.7	11	12	2.6	4.0	6.2	240	118	407	292	301	279
AC-FT	3,250	1,010	974	544	477	16,710	25,470	22,990	34,790	47,050	64,540	38,250

CAL YR 1972 TOTAL 61,615.9 MEAN 168 MAX 903 MIN 6.7 AC-FT 122,200
WTR YR 1973 TOTAL 129,089.0 MEAN 354 MAX 1,690 MIN 2.6 AC-FT 256,000

08365540 Northgage Reservoir at El Paso, Tex.

LOCATION.--Lat 31°52'32", long 106°26'37", El Paso County, on top of dam directly over outlet tunnel and 1.0 mile (1.6 km) northwest of intersection of Dyer Street (U.S. Highway 54) and Hondo Pass Road in El Paso.

DRAINAGE AREA.--6.89 mi² (17.8 km²), of which 3.42 mi² (8.86 km²) is upstream from Transmountain Reservoir.

PERIOD OF RECORD.--March to September 1973.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, city of El Paso datum.

EXTREMES.--Maximum outflow and maximum inflow during period March to September 1973, no outflow or significant inflow during period.

REMARKS.--Records good. The dam was completed in 1972. The pool is formed by an earthfill dam 3,500 ft (1,067 m) long with a 150-foot (46-meter) wide earthen spillway having a concrete crest at elevation 4,044 ft (1,233 m) at the left end. The outlet structure is a 3.0- by 6.5-foot (0.9- by 2.0-meter) concrete drop inlet connecting to a 27-inch (711-millimeter) concrete outlet pipe. There are three ports, 2.25-foot (0.69-meter) wide by 0.50-foot (0.15-meter) high, on the front of the structure. Near the closed top of the structure are two ports, one on each side, 6.5-foot (2.0-meter) wide by 2.5-foot (0.8-meter) high and each protected by a trash guard. A recording rain gage is located at the station. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	4,056.0	-
Emergency spillway	4,044.70	1,121
Outlet ports on each side of drop inlet	4,019.00	225
Top port on front of drop inlet	4,015.90	144
Middle port on front of drop inlet	4,012.40	65.5
Bottom port on front of drop inlet	4,008.89	11.2

POOL WATER BUDGET, IN ACRE-FEET, MARCH TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow	-	-	-	-	-	0	0	0	0	0	0	0
Outflow	-	-	-	-	-	0	0	0	0	0	0	0
(††)	-	-	-	-	-	-	0	0	.30	3.53	.10	0

CAL YR 1972: Inflow - Outflow - †† -
WTR YR 1973: Inflow - Outflow - †† -

PEAK INFLOW (BASE, 50 FT³/S).--No peak above base.

†† Rainfall, in inches.

08365545 Range Reservoir at El Paso, Tex.

LOCATION.--Lat 31°52'56", long 106°25'27", El Paso County, on top of dam directly over outlet tunnel and 0.4 mile (0.6 km) north of intersection of Range Road and Dyer Street (U.S. Highway 54) in El Paso.

DRAINAGE AREA.--11.89 mi² (30.80 km²), of which 6.89 mi² (17.85 km²) is upstream from Northgate Reservoir.

PERIOD OF RECORD.--March to September 1973.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, city of El Paso datum.

EXTREMES.--Maximum outflow during period, 5.50 ft³/s (156 dm³/s) Aug. 1, gage height, 4.71 ft (1.44 m); no outflow most of period. Maximum inflow during period, 179 ft³/s (5.07 m³/s), average for 15-minute interval, Aug. 1, computed from change in pool contents and adjusted for outflow and rainfall on the pool surface during the time of the peak inflow; no inflow most of period.

REMARKS.--Records fair. The dam was completed in 1972. The pool is formed by an earthfill dam 7,405 ft (2,257 m) long with a 150-foot (46-meter) wide earthen spillway having a concrete crest at elevation 3,924.20 ft (1,196.10 m) at the right end. The outlet structure is a 3.0- by 6.5-foot (0.9- by 2.0-meter) concrete drop inlet connected to a 27-inch (711-millimeter) concrete outlet pipe. There are two ports, 2.25-foot (0.69-meter) wide by 0.50-foot (0.15-meter) high, on the front of the structure. Near the closed top of the structure are two ports, one on each side, 6.5-foot (2.0-meter) wide by 2.5-foot (0.8-meter) high and each protected by a trash guard. A recording rain gage is at the station. Data regarding dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	3,935.2	-
Emergency spillway	3,924.20	1,119
Outlet ports on each side of drop inlet	3,911.00	204
Top port on front of drop inlet	3,906.54	51.5
Bottom port on front of drop inlet	3,902.96	2.36

POOL WATER BUDGET, IN ACRE-FEET, MARCH TO SEPTEMBER 1973

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow	-	-	-	-	-	0	0	0	0	15.1	17.9	0
Outflow	-	-	-	-	-	0	0	0	0	7.4	6.9	0
(††)	-	-	-	-	-	-	0	0	.25	3.43	.10	0

CAL YR 1972: Inflow - Outflow - †† -
WTR YR 1973: Inflow - Outflow - †† -

PEAK INFLOW (BASE, 100 FT³/S).--Aug. 1 (0115) *179 ft³/s.

†† Rainfall, in inches.
* Average for 15-minute interval.

08365600 McKelligon Canyon at El Paso, Tex.

LOCATION.--Lat 31°49'20", long 106°28'09", El Paso County, on left bank 120 ft (37 m) south of McKelligon Canyon Drive, 0.2 mile (0.3 km) west of Alabama Avenue, 0.5 mile (0.8 km) south of crest of Sugarloaf Mountain, 1.6 miles (2.6 km) west of U.S. Highway 54, and 4.5 miles (7.2 km) north of El Paso Post Office.

DRAINAGE AREA.--2.3 mi² (6.0 km²), 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 (1,297.63 m) above mean sea level (levels by city of El Paso).

AVERAGE DISCHARGE.--16 years, 0.012 ft³/s (0.340 dm³/s), 8.69 acre-ft/yr (10,700 m³/yr).

EXTREMES.--Current year: Maximum discharge, 306 ft³/s (8.67 m³/s) July 14, gage height, 5.66 ft (1.73 m); no flow most of time.
Period of record: Maximum discharge, 306 ft³/s (8.67 m³/s) July 14, 1973, gage height, 5.66 ft (1.73 m); no flow except Sept. 11, 12, 1958, July 14-18, 1973.

REMARKS.--Records good. Floodflow controlled by four small reservoirs upstream with a total capacity of about 95 acre-ft (0.117 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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										25		
15										32		
16										.24		
17										.24		
18										.12		
19										0		
20										0		
21										0		
22										0		
23										0		
24										0		
25										0		
26										0		
27										0		
28										0		
29					------					0		
30					------					0		
31		------			------		------		------	0		------
TOTAL	0	0	0	0	0	0	0	0	0	57.60	0	0
MEAN	0	0	0	0	0	0	0	0	0	1.86	0	0
MAX	0	0	0	0	0	0	0	0	0	32	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	114	0	0

CAL YR 1972 TOTAL 0.00 MEAN .000 MAX 32 MIN 0 AC-FT 0
WTR YR 1973 TOTAL 57.60 MEAN .16 MAX 32 MIN 0 AC-FT 114

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 (3.2 km) northeast of the business center of El Paso.

DRAINAGE AREA.--6.4 mi² (16.6 km²), approximately.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,740 ft (1,140 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 0.17 ft³/s (4.81 dm³/s), 123 acre-ft/yr (0.152 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 347 ft³/s (9.83 m³/s) July 14, gage height, 2.09 ft (0.64 m); no flow most of time.
Period of record: Maximum discharge, 550 ft³/s (15.6 m³/s) Sept. 11, 1958, gage height, 2.64 ft (0.80 m), from rating curve extended above 148 ft³/s (4.19 m³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0		0	0	0	4.6	
2	0	0	0	.44	0	0		0	0	0	0	
3	0	0	0	.01	0	0		0	0	0	0	
4	0	0	0	0	0	0		0	0	0	0	
5	0	0	0	0	0	0		0	0	0	0	
6	0	0	0	3.2	0	0		0	0	0	0	
7	0	0	0	.04	3.1	0		0	0	0	0	
8	0	0	0	0	4.1	0		0	0	0	0	
9	0	0	0	0	0	2.2		0	0	0	0	
10	0	0	0	.91	0	5.4		0	0	0	0	
11	0	0	0	0	0	0		0	0	0	0	
12	0	.31	0	0	0	0		0	0	0	0	
13	0	0	0	0	0	.60		6.8	7.5	0	0	
14	0	0	0	0	.20	0		.10	.10	51	0	
15	0	0	0	0	0	0		0	0	24	0	
16	0	0	0	0	0	0		0	0	.05	0	
17	0	0	0	0	0	0		0	0	6.2	0	
18	.18	0	0	0	0	0		0	0	.60	0	
19	.29	0	0	0	0	0		0	0	0	0	
20	11	0	0	.36	.60	0		0	0	0	0	
21	.34	0	0	0	3.1	0		0	0	0	0	
22	0	0	0	0	6.8	0		0	0	0	0	
23	0	0	0	0	0	4.1		0	0	0	0	
24	0	.17	0	0	0	0		0	0	0	0	
25	0	0	0	0	0	0		0	0	0	0	
26	0	0	0	0	0	0		0	0	0	0	
27	0	0	0	0	0	0		0	0	0	0	
28	0	0	0	0	0	0		0	0	1.2	0	
29	0	0	.86	0	------	0		0	0	8.6	0	
30	0	0	0	0	------	0		0	0	.01	0	
31	1.0	------	0	.35	------	0	------	0	------	.25	0	------
TOTAL	12.81	.48	.86	5.31	17.90	12.30	0	6.90	7.60	91.91	4.6	0
MEAN	.41	.016	.028	.17	.64	.40	0	.22	.25	2.96	.15	0
MAX	11	.31	.86	3.2	6.8	5.4	0	6.8	7.5	51	4.6	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	25	1.0	1.7	11	36	24	0	14	15	182	9.1	0

CAL YR 1972 TOTAL 114.41 MEAN .31 MAX 34 MIN 0 AC-FT 227
WTR YR 1973 TOTAL 160.67 MEAN .44 MAX 51 MIN 0 AC-FT 319

PEAK DISCHARGE (BASE, 40 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-20	1000	0.97	98	7-14	2015	2.09	347
5-13	1830	.95	94	7-17	1745	.79	71
6-13	1615	1.15	126	7-29	0745	.60	44

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 (2.1 km) north of Presidio, and 2.3 miles (3.7 km) upstream from mouth.

DRAINAGE AREA.--276 mi² (715 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,645.87 ft (806.46 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,190 ft³/s (90.3 m³/s) Aug. 1, gage height, 4.09 ft (1.25 m); no flow most of time.
Period of record: Maximum discharge, 7,540 ft³/s (214 m³/s) July 13, 1972, gage height, 5.20 ft (1.58 m); no flow most of time.
Maximum stage since about 1900, 12 ft (3.66 m) in 1944, from information by local resident and Texas Highway Department.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	687	205
2										0	0	0
3										0	0	0
4										0	0	0
5										0	0	0
6										0	0	0
7										0	0	0
8										0	0	0
9										0	0	0
10										0	0	0
11										0	0	0
12										0	0	0
13										0	0	0
14										0	0	0
15										129	0	0
16										.51	0	0
17										0	0	0
18										219	0	0
19										0	0	0
20										0	0	0
21										0	0	0
22										0	0	0
23										0	0	0
24										0	0	0
25										0	0	0
26										0	0	0
27										0	0	0
28										0	0	0
29					------					90	0	0
30					------					0	0	0
31		------			------		------		------	83	0	------
TOTAL	0	0	0	0	0	0	0	0	0	521.51	687	205
MEAN	0	0	0	0	0	0	0	0	0	16.8	22.2	6.83
MAX	0	0	0	0	0	0	0	0	0	219	687	205
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	1,030	1,360	407

CAL YR 1972 TOTAL 1,356.20 MEAN 3.71 MAX 476 MIN 0 AC-FT 2,690
WTR YR 1973 TOTAL 1,413.51 MEAN 3.87 MAX 687 MIN 0 AC-FT 2,800

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
7-15	2300	4.06	3,100	8-1	0400	4.09	3,190
7-18	0500	3.81	2,410	9-1	0700	3.24	1,170
7-31	2000	3.34	1,360				

08376300 Sanderson Canyon at Sanderson, Tex.

LOCATION.--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 (1.6 km) south of Sanderson, 2.9 miles (4.7 km) downstream from Three Mile Draw, and 30 miles (48.3 km) upstream from mouth.

DRAINAGE AREA.--195 mi² (505 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,706.35 ft (824.90 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 13.7 ft³/s (0.388 m³/s), 9,930 acre-ft/yr (12.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,360 ft³/s (237 m³/s) July 20, gage height, 5.28 ft (1.61 m); no flow most of time.
Period of record: Maximum discharge, 32,600 ft³/s (923 m³/s) Sept. 18, 1969, gage height, 9.18 ft (2.80 m); no flow most of time.
Maximum flood since at least 1935, 14.2 ft (4.33 m) June 11, 1965; discharge about 100,000 ft³/s (2,830 m³/s) by combining two slope-area measurements within 4 miles (6.4 km) upstream from gage. The next highest flood occurred in 1935, about 20,000 ft³/s (566 m³/s) 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 1972 TO SEPTEMBER 1973

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		0
8										0		0
9										0		0
10										0		0
11						—				919		0
12						—				0		250
13						—				0		0
14						—				0		0
15						—				0		0
16						—				0		0
17						—				0		0
18						—				0		0
19										0		0
20										1,280		0
21										0		0
22										0		0
23										0		0
24										0		0
25										0		0
26										0		0
27										141		0
28										137		0
29					------					0		0
30					------					0		0
31		------			------		------		------	0		------
TOTAL	0	0	0	0	0	0	0	0	0	2,477	0	250
MEAN	0	0	0	0	0	0	0	0	0	79.9	0	8.33
MAX	0	0	0	0	0	0	0	0	0	1,280	0	250
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	4,910	0	496

CAL YR 1972 TOTAL 3,017.67 MEAN 8.25 MAX 588 MIN 0 AC-FT 5,990
WTR YR 1973 TOTAL 2,727.00 MEAN 7.47 MAX 1,280 MIN 0 AC-FT 5,410

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
7-11	0100	3.55	3,050	7-27	2200	3.31	2,490
7-11	1600	4.29	6,000	9-12	1900	3.57	3,090
7-20	0400	5.28	8,360				

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 (0.3 km) downstream from Red Bluff Draw, 1.6 miles (2.6 km) northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 miles (8.4 km) north of the New Mexico-Texas State line, and 5.6 miles (9.0 km) upstream from Delaware River.

DRAINAGE AREA.--19,540 mi² (50,610 km²), approximately (contributing area).

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,850.05 ft (868.70 m) above mean sea level.

AVERAGE DISCHARGE.--36 years, 189 ft³/s (5.35 m³/s), 136,900 acre-ft/yr (169 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,400 ft³/s (39.6 m³/s) May 22, gage height, 6.85 ft (2.09 m); minimum, 18 ft³/s (0.51 m³/s) Apr. 20.

Period of record: Maximum discharge, 111,000 ft³/s (3,140 m³/s) Aug. 23, 1966, gage height, 33.32 ft (10.16 m), from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.19 ft³/s (5.4 dm³/s) 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 (8.5 m), 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 (81,750 hm²), 1959 determination.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	48	50	60	41	43	35	32	831	40	76	65
2	32	62	51	55	43	41	28	36	340	38	54	67
3	32	52	51	51	42	44	24	32	173	42	46	52
4	37	44	50	52	35	45	27	34	127	48	46	43
5	47	39	51	53	32	42	27	89	113	45	48	38
6	47	36	48	56	32	42	22	96	105	38	43	36
7	46	36	48	54	34	42	22	75	100	42	42	53
8	38	35	50	54	39	44	21	55	92	68	51	65
9	35	32	48	54	39	42	21	350	75	49	56	50
10	33	28	47	53	45	46	25	554	60	40	88	63
11	33	29	50	50	44	50	27	884	59	32	46	43
12	36	28	52	49	36	62	32	633	56	29	45	47
13	37	25	51	49	33	64	42	643	56	50	46	37
14	37	30	52	49	32	55	36	676	56	67	60	35
15	43	42	53	47	34	56	27	739	56	49	52	58
16	38	48	51	47	31	56	28	917	59	56	46	86
17	43	49	52	46	30	52	30	1,180	59	53	43	56
18	44	54	52	46	30	50	28	1,180	55	45	38	62
19	41	59	51	45	30	47	27	1,380	52	42	38	54
20	47	60	51	45	30	46	23	1,320	56	39	36	50
21	56	62	52	40	34	71	32	1,240	52	47	35	49
22	88	61	52	36	42	70	50	1,370	49	68	36	49
23	79	60	53	35	41	54	34	1,180	47	44	38	49
24	64	58	50	35	56	46	32	784	41	53	38	47
25	62	54	51	36	56	38	53	820	65	47	34	46
26	61	58	50	38	47	65	48	825	136	42	39	50
27	53	59	52	40	45	54	33	800	201	36	46	49
28	55	53	52	39	44	59	40	825	136	36	32	49
29	51	51	54	42	------	66	36	831	72	38	32	45
30	49	50	56	40	------	50	32	841	52	141	31	46
31	47	------	58	40	------	38	------	857	------	134	123	------
TOTAL	1,443	1,402	1,589	1,436	1,077	1,580	942	21,278	3,431	1,598	1,484	1,539
MEAN	46.5	46.7	51.3	46.3	38.5	51.0	31.4	686	114	51.5	47.9	51.3
MAX	88	62	58	60	56	71	53	1,380	831	141	123	86
MIN	32	25	47	35	30	38	21	32	41	29	31	35
AC-FT	2,860	2,780	3,150	2,850	2,140	3,130	1,870	42,200	6,810	3,170	2,940	3,050

CAL YR 1972 TOTAL 21,777.9 MEAN 59.5 MAX 1,700 MIN 1.8 AC-FT 43,200
WTR YR 1973 TOTAL 38,799 MEAN 106 MAX 1,380 MIN 21 AC-FT 76,960

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 (3.4 km) northwest of the New Mexico-Texas State line, 3.6 miles (5.8 km) southwest of Red Bluff, 3.7 miles (6.0 km) upstream from mouth, and 14 miles (23 km) south of Malaga.

DRAINAGE AREA.--689 mi² (1,785 km²).

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 (884.12 m) above mean sea level. Prior to May 1914, at site 3 miles (5 km) upstream at different datum. May 1914 to June 1915 at site 2.5 miles (4.0 km) downstream at different datum.

AVERAGE DISCHARGE.--36 years (1938-73), 14.0 ft³/s (0.396 m³/s), 10,140 acre-ft/yr (12.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 ft³/s (28.6 m³/s) Aug. 31, gage height, 4.10 ft (1.25 m); no flow at times.
Period of record: Maximum discharge, 81,400 ft³/s (2,310 m³/s) Oct. 2, 1955, gage height, 27.0 ft (8.2 m), from floodmark, from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurements at gage heights 8.65, 12.84, 18.00, and 27.0 ft (2.64, 3.91, 5.49, and 8.2 m); 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 (5.49 m), from floodmark.

REMARKS.--Records poor. One small upstream diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.5	2.6	2.3	2.9	2.7	2.6	2.0	.90	0	.72	6.7
2	2.4	2.5	2.5	2.9	2.7	2.6	2.6	1.8	.87	0	.31	3.5
3	2.4	2.5	2.5	2.9	2.7	2.4	2.5	1.8	.77	0	.13	.44
4	2.4	2.5	2.4	2.7	2.7	2.4	2.5	1.9	.58	0	.02	.43
5	2.4	2.5	2.2	2.6	2.8	2.4	2.7	2.2	.44	0	0	.19
6	2.5	2.4	2.1	3.5	2.7	1.9	2.8	2.1	.41	0	0	.01
7	2.5	2.4	2.1	3.9	3.0	2.1	2.8	2.0	.38	0	.39	0
8	2.5	2.2	2.5	3.5	4.1	2.1	2.6	1.7	.39	0	.06	0
9	2.3	2.2	2.7	2.9	3.8	2.3	2.7	1.6	.33	0	0	.62
10	2.1	2.2	2.7	2.8	3.0	2.9	2.7	1.5	.29	0	9.9	19
11	2.0	2.2	2.7	2.8	2.9	2.5	2.8	1.5	.30	0	2.2	15
12	2.0	2.4	2.7	2.9	2.8	2.4	2.9	1.4	.31	0	.42	3.8
13	2.2	2.3	2.7	2.8	2.6	2.3	5.0	1.7	.32	0	.19	1.4
14	2.1	2.3	2.7	2.8	2.5	2.1	4.2	2.5	.36	5.5	0	.69
15	2.2	2.4	2.7	2.9	2.5	2.1	2.8	3.2	.25	4.5	0	54
16	2.4	2.4	2.7	2.9	2.5	2.1	2.7	3.0	.11	1.0	0	22
17	2.4	2.5	2.7	2.9	2.9	2.1	2.7	2.5	.02	.22	0	6.6
18	2.2	2.8	2.7	2.8	2.8	2.1	2.8	2.0	0	3.3	0	3.3
19	2.0	2.8	2.8	2.7	2.6	2.1	2.4	1.6	0	12	0	1.9
20	3.7	2.6	2.7	3.0	2.6	2.2	2.4	1.4	0	1.2	0	1.2
21	4.4	2.7	2.7	3.0	3.5	2.3	2.4	1.4	0	.45	0	.99
22	3.5	2.7	2.7	2.9	6.4	2.1	2.4	1.6	0	.21	0	.90
23	3.0	2.8	2.6	2.9	5.4	2.0	2.4	1.4	0	.05	0	.75
24	2.9	3.1	2.3	2.9	4.3	2.0	2.4	1.2	0	0	0	.67
25	2.9	3.0	2.3	2.9	3.3	2.3	2.4	.97	0	0	0	.56
26	3.2	2.6	2.4	2.9	2.9	2.9	2.4	.74	0	.12	0	.45
27	3.0	2.5	2.4	2.7	2.9	2.8	2.4	.62	0	0	0	.32
28	2.7	2.4	2.5	2.6	2.9	2.9	2.4	.54	0	0	0	.35
29	2.5	2.5	2.5	2.6	------	2.8	2.4	.62	0	0	0	.41
30	2.4	2.6	2.4	2.8	------	2.5	2.3	.65	0	19	0	.48
31	2.6	------	2.3	2.9	------	2.6	------	.71	------	4.8	100	------
TOTAL	80.2	75.5	78.5	89.6	88.7	73.0	81.1	49.85	7.03	52.35	114.34	146.66
MEAN	2.59	2.52	2.53	2.89	3.17	2.35	2.70	1.61	.23	1.69	3.69	4.89
MAX	4.4	3.1	2.8	3.9	6.4	2.9	5.0	3.2	.90	19	100	54
MIN	2.0	2.2	2.1	2.3	2.5	1.9	2.3	.54	0	0	0	0
AC-FT	159	150	156	178	176	145	161	99	14	104	227	291

CAL YR 1972 TOTAL 2,840.39 MEAN 7.76 MAX 632 MIN 0 AC-FT 5,630
WTR YR 1973 TOTAL 936.83 MEAN 2.57 MAX 100 MIN 0 AC-FT 1,860

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 (4.8 km) upstream from Salt (Screwbean) Draw, and 4.5 miles (7.2 km) north of Orla.

DRAINAGE AREA.--20,720 mi² (53,660 km²), 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 0.43 ft (0.13 m), revised, below mean sea level.

EXTREMES (at 2400).--Current year: Maximum contents observed, 86,300 acre-ft (106 hm³) June 4, gage height, 2,813.4 ft (857.5 m); minimum observed, 44,900 acre-ft (55.4 hm³) Oct. 7, gage height, 2,802.3 ft (854.1 m).
Period of record: Maximum contents observed, 352,000 acre-ft (434 hm³) Sept. 27, 28, 1941, gage height, 2,846.2 ft (867.5 m), observed on nonrecording gage at service spillway, affected by variable drawdown due to flow through tainter gates); minimum observed, 11,080 acre-ft (13.7 hm³) May 13, 1948, gage height, 2,781.4 ft (847.8 m).

REMARKS.--Reservoir is formed by a rock-faced earthfill dam 9,200 ft (2,800 m) long. Dam completed and storage began in September 1936. The concrete service spillway is equipped with 12 tainter gates 25 ft (8 m) wide by 15 ft (5 m) high. The emergency spillway, located on the right bank, is 790 ft (241 m) 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 (190 hm³). 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)

2,802.0	44,000	2,811.0	75,500
2,805.0	53,000	2,814.0	89,000
2,808.0	63,500		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45,200	46,100	47,300	49,100	51,500	53,350	55,450	49,700	84,500	75,500	72,300	58,250
2	45,200	46,100	47,300	49,100	51,800	53,700	55,450	49,700	85,400	75,500	72,300	57,550
3	45,200	46,100	47,600	49,400	51,800	53,700	55,100	49,700	85,850	75,100	72,300	56,850
4	45,200	46,100	47,600	49,400	51,800	53,700	54,400	49,400	86,300	75,100	71,900	56,150
5	45,200	46,100	47,600	49,400	51,800	53,700	53,700	49,400	85,850	75,100	71,900	55,450
6	45,200	46,100	47,600	49,400	51,800	53,700	53,000	49,400	85,850	74,700	71,900	54,750
7	44,900	46,100	47,600	49,700	52,100	54,050	52,700	49,400	85,850	74,700	71,500	54,050
8	45,200	46,100	47,600	49,700	52,100	54,050	52,400	49,400	85,400	74,300	71,500	53,350
9	45,200	46,400	47,600	49,700	52,100	54,050	52,100	49,400	84,950	74,300	71,500	53,350
10	45,200	46,400	47,600	50,000	52,100	54,050	51,800	50,000	84,500	73,900	71,500	53,350
11	45,200	46,400	47,900	50,300	52,100	54,050	51,500	50,900	84,050	73,500	71,100	54,050
12	45,200	46,400	47,900	50,300	52,100	54,400	51,200	52,400	83,600	72,700	71,100	54,050
13	45,200	46,400	47,900	50,600	52,400	54,400	50,900	53,000	82,700	72,300	71,100	54,050
14	45,200	46,400	47,900	50,600	52,400	54,400	50,600	53,700	81,800	71,500	71,100	54,050
15	45,200	46,400	48,200	50,600	52,400	54,400	50,600	54,750	81,800	73,500	70,300	54,050
16	45,200	46,400	48,200	50,600	52,400	54,750	50,600	56,150	81,350	73,100	69,500	54,050
17	45,200	46,400	48,200	50,900	52,400	54,750	50,600	57,900	80,900	72,700	69,100	54,050
18	45,200	46,400	48,200	50,900	52,700	54,750	50,300	60,000	80,450	72,700	68,700	54,400
19	45,200	46,400	48,200	50,900	52,700	54,750	50,300	61,750	79,550	72,700	68,300	54,400
20	45,200	46,400	48,200	50,900	52,700	54,750	50,300	64,700	78,650	72,700	67,900	54,400
21	45,200	46,400	48,200	51,200	52,700	55,100	50,300	67,100	77,750	72,300	67,500	54,400
22	45,200	46,400	48,200	51,200	52,700	55,100	50,300	69,900	77,300	72,300	66,300	54,400
23	45,200	46,400	48,500	51,200	53,000	55,100	50,300	76,400	76,850	72,300	65,500	54,400
24	45,200	46,700	48,500	51,200	53,000	55,100	50,000	73,400	76,400	71,900	64,700	54,050
25	45,200	46,700	48,500	51,500	53,350	55,100	50,000	75,950	75,950	71,500	63,900	54,050
26	45,200	46,700	48,800	51,500	53,350	55,100	50,000	76,850	75,500	71,500	63,150	53,700
27	45,500	47,000	48,800	51,500	53,350	55,450	50,000	77,750	75,500	71,900	62,100	53,700
28	45,800	47,000	48,800	51,500	53,350	55,450	49,700	79,100	75,500	71,900	61,400	53,350
29	45,800	47,000	49,100	51,500	------	55,450	49,700	80,450	75,500	71,900	60,700	53,350
30	45,800	47,300	49,100	51,500	------	55,450	49,700	81,800	75,500	71,900	59,650	53,350
31	45,800	------	49,100	51,500	------	55,450	------	81,800	------	71,900	58,950	------
(†)	2,802.6	2,803.1	2,803.7	2,804.5	2,805.1	2,805.7	2,803.9	2,812.4	2,811.0	2,810.1	2,806.7	2,805.1
(*)	+900	+1,500	+1,800	+2,400	+1,850	+2,100	-5,750	+32,100	-6,300	-3,600	-12,950	-5,600
MAX	45,800	47,300	49,100	51,500	53,350	55,450	55,450	81,800	86,300	75,500	72,300	58,250
MIN	44,900	46,100	47,300	49,100	51,500	53,350	49,700	49,400	75,500	71,500	58,950	53,350

CAL YR 1972..... * +5,350 MAX 49,100 MIN 23,000
WTR YR 1973..... * +8,450 MAX 86,300 MIN 44,900

† 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 (8.8 km) downstream from Salt (Screwbean) Draw, 5.9 miles (9.5 km) northeast of Orla, and 8.5 miles (13.7 km) downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 mi² (54,930 km²), approximately (contributing area).

PERIOD OF RECORD.--May 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,730.86 ft (832.37 m) above mean sea level. Prior to Nov. 16, 1969, at site 6.9 miles (11.1 km) downstream at datum 12.81 ft (3.90 m) lower.

AVERAGE DISCHARGE.--36 years, 186 ft³/s (5.27 m³/s), 134,800 acre-ft/yr (166 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft³/s (49.6 m³/s) July 15, gage height, 11.62 ft (3.54 m); minimum, 6.2 ft³/s (176 dm³/s) Apr. 2.
Period of record: Maximum discharge, 23,700 ft³/s (671 m³/s) Sept. 29, 1941, gage height, 20.74 ft (6.32 m), 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	22	18	11	8.3	14	6.7	30	50	101	39	461
2	29	21	19	9.8	8.3	14	11	29	52	104	38	452
3	29	24	20	9.1	7.8	13	372	30	52	105	39	450
4	32	22	17	10	8.1	12	352	31	53	104	37	446
5	32	23	18	11	8.7	11	237	49	52	103	37	441
6	31	24	17	11	8.2	11	235	49	66	98	37	438
7	30	23	17	12	8.2	12	234	48	183	92	42	445
8	30	22	17	14	8.6	13	230	50	198	84	48	446
9	30	24	18	13	9.1	13	232	66	202	75	57	200
10	31	23	17	12	9.8	13	233	196	203	171	40	134
11	29	24	17	12	10	13	232	195	211	604	38	246
12	27	24	17	11	10	14	232	200	486	542	37	97
13	25	25	16	11	11	13	211	198	387	367	37	85
14	23	22	15	10	9.8	11	44	201	200	397	44	79
15	22	23	15	10	10	9.1	43	202	192	947	385	136
16	21	22	15	9.8	9.1	9.8	42	204	190	313	357	153
17	22	22	14	9.1	9.8	9.1	44	203	186	168	218	105
18	23	23	14	8.2	9.8	8.2	46	202	183	354	211	89
19	20	23	14	8.2	10	8.2	47	35	199	62	214	84
20	18	24	13	7.7	10	8.2	48	17	419	46	212	80
21	19	20	11	8.6	11	7.2	49	20	439	45	228	79
22	23	19	11	8.6	16	7.7	51	20	366	66	432	79
23	23	18	10	8.6	35	8.4	53	22	218	52	442	78
24	20	19	10	8.2	26	8.6	54	46	227	50	439	108
25	17	20	9.8	8.2	18	8.6	54	48	202	51	438	103
26	18	21	9.8	8.2	16	8.2	51	49	101	51	435	182
27	19	20	9.9	9.1	14	6.7	52	47	114	49	435	183
28	22	19	10	8.2	13	6.7	54	47	73	46	433	92
29	18	18	12	8.2	------	7.2	55	48	77	44	439	76
30	21	18	12	7.3	------	7.2	54	48	94	44	440	74
31	23	------	11	8.6	------	7.7	------	48	------	42	442	------
TOTAL	755	652	444.5	301.7	333.6	313.8	3,658.7	2,678	5,675	5,377	6,770	6,121
MEAN	24.4	21.7	14.3	9.73	11.9	10.1	122	86.4	189	173	218	204
MAX	32	25	20	14	35	14	372	204	486	947	442	461
MIN	17	18	9.8	7.3	7.8	6.7	6.7	17	50	42	37	74
AC-FT	1,500	1,290	882	598	662	622	7,260	5,310	11,260	10,670	13,430	12,140

CAL YR 1972 TOTAL 20,686.5 MEAN 56.5 MAX 602 MIN 9.8 AC-FT 41,030
WTR YR 1973 TOTAL 33,080.3 MEAN 90.6 MAX 947 MIN 6.7 AC-FT 65,610

08414000 Pecos River near Mentone, Tex.

LOCATION.--Lat 31°40'07", long 103°37'34", Reeves-Loving County line, on right bank at downstream side of bridge on State Highway 302 and 3.0 miles (4.8 km) southwest of Mentone.

DRAINAGE AREA.--21,650 mi² (56,070 km²), 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 June 1973 (discontinued; converted to a partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 2,647.55 ft (806.97 m) above mean sea level. Nonrecording gage prior to Dec. 10, 1968, and at different datum prior to Sept. 25, 1968.

EXTREMES.--Maximum discharge during period October 1972 to June 1973, 476 ft³/s (13.5 m³/s) June 14; maximum gage height, 10.20 ft (3.11 m) June 22; minimum discharge, 4.2 ft³/s (119 dm³/s) Mar. 23.
Period of record: Maximum discharge, 5,690 ft³/s (161 m³/s) Aug. 12, 1925, gage height, 12.70 ft (3.87 m), datum then in use; minimum, 0.08 ft³/s (2.3 dm³/s) May 20, 1969.

REMARKS.--Records poor. 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, OCTOBER 1972 TO JUNE 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	18	11	8.3	10	6.0	55	46			
2	29	20	18	10	7.7	10	5.0	43	49			
3	30	21	17	10	7.7	10	21	30	51			
4	30	24	17	9.6	8.3	9.6	323	30	52			
5	30	22	17	8.9	7.7	9.6	288	30	52			
6	30	21	17	9.6	7.7	9.6	232	42	53			
7	29	22	18	10	7.1	9.6	232	47	56			
8	30	20	17	11	8.3	8.3	232	51	172			
9	31	20	17	12	8.9	9.6	233	53	191			
10	31	21	17	13	8.9	12	233	61	200			
11	28	23	17	13	9.6	13	233	170	207			
12	28	21	17	11	11	12	233	194	216			
13	26	21	16	9.6	10	12	233	195	426			
14	25	21	15	8.3	8.9	12	150	197	408			
15	23	22	15	8.3	8.9	8.3	43	197	222			
16	20	21	16	7.7	9.6	7.7	43	198	193			
17	20	21	16	7.7	9.6	8.3	43	200	183			
18	21	22	14	7.7	8.9	8.3	43	201	186			
19	18	22	13	7.1	9.6	8.3	43	198	202			
20	18	21	13	6.5	8.9	7.7	46	64	216			
21	20	21	13	7.7	10	6.5	47	26	390			
22	24	20	13	7.7	13	5.0	49	20	430			
23	21	19	12	7.7	15	5.0	49	20	384			
24	17	17	12	7.1	24	6.5	50	23	221			
25	19	19	11	7.1	43	7.7	49	37	200			
26	20	21	10	7.1	24	6.0	49	45	181			
27	18	21	10	7.1	15	6.0	49	45	102			
28	18	21	9.6	7.1	11	6.0	52	45	82			
29	19	20	9.6	7.7	------	6.0	52	45	71			
30	20	19	10	8.9	------	7.1	55	45	74			
31	20	------	11	8.9	------	7.1	------	45	------			------
TOTAL	742	624	446.2	276.1	330.6	264.8	3,416.0	2,652	5,516			
MEAN	23.9	20.8	14.4	8.91	11.8	8.54	114	85.5	184			
MAX	31	24	18	13	43	13	323	201	430			
MIN	17	17	9.6	6.5	7.1	5.0	5.0	20	46			
AC-FT	1,470	1,240	885	548	656	525	6,780	5,260	10,940			

CAL YR 1972 TOTAL 24,585.9 MEAN 67.2 MAX 1,890 MIN 7.7 AC-FT 48,770
WTR YR 1973 TOTAL - MEAN - MAX - MIN - AC-FT -

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 (183 m) upstream from low-water crossing on State Highway 118, about 2,000 ft (610 m) upstream from Jones Creek, and 6.8 miles (10.9 km) west of Fort Davis.

DRAINAGE AREA.--52.4 mi² (136 km²).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is about 5,200 ft (1,580 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 1.91 ft³/s (54.1 dm³/s), 1,380 acre-ft/yr (1.70 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6.6 ft³/s (187 dm³/s) Sept. 15, gage height, 3.44 ft (1.05 m); no flow most of year.
Period of record: Maximum discharge, 2,530 ft³/s (71.6 m³/s) Aug. 31, 1966, gage height, 8.03 ft (2.45 m); no flow at times.
Maximum stage since at least 1925, about 10 ft (3 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3											0
2	2.6											0
3	2.8											0
4	2.6											0
5	2.6											0
6	3.1											0
7	3.1											0
8	3.1											0
9	2.8											0
10	2.8											0
11	2.8											.12
12	2.3											0
13	1.9											0
14	1.7											.34
15	1.5											2.0
16	1.1											0
17	.70											0
18	.60											0
19	.60											0
20	1.5											0
21	1.1											0
22	.51											0
23	.24											0
24	.19											0
25	.19											0
26	.24											0
27	.12											0
28	.07											0
29	.06				------							0
30	.06				------							0
31	.03	------			------		------		------			------
TOTAL	45.31	0	0	0	0	0	0	0	0	0	0	2.46
MEAN	1.46	0	0	0	0	0	0	0	0	0	0	.082
MAX	3.1	0	0	0	0	0	0	0	0	0	0	2.0
MIN	.03	0	0	0	0	0	0	0	0	0	0	0
AC-FT	90	0	0	0	0	0	0	0	0	0	0	4.9

CAL YR 1972 TOTAL 1,819.35 MEAN 4.97 MAX 264 MIN 0 AC-FT 3,610
WTR YR 1973 TOTAL 47.77 MEAN .13 MAX 3.1 MIN 0 AC-FT 95

PEAK DISCHARGE (BASE, 1,000 FT³/S).--No peak above base.

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 (1.1 km) upstream from Frazier Canyon, and 9.0 miles (14.5 km) northeast of Fort Davis.

DRAINAGE AREA.--227 mi² (588 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,459.22 ft (1,359.17 m) above mean sea level.

AVERAGE DISCHARGE.--11 years (1962-73), 4.48 ft³/s (127 dm³/s), 3,250 acre-ft/yr (4.01 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,880 ft³/s (81.6 m³/s) July 30, gage height, 6.98 ft (2.13 m); no flow at times.
Period of record: Maximum discharge, 3,700 ft³/s (105 m³/s) June 26, 1962, and June 10, 1964; maximum gage height, 7.85 ft (2.39 m) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	3.8	2.8	2.2	1.7	1.4	.49	.29	.06	0	13	.22
2	8.7	3.6	2.8	2.5	1.6	1.2	.49	.29	.06	0	6.7	.22
3	7.8	3.4	2.6	2.5	1.6	1.2	.49	.29	.04	0	4.1	.22
4	7.1	3.3	2.5	2.5	1.6	1.3	.49	.29	.04	0	2.5	.25
5	6.5	3.4	2.5	2.2	1.4	1.2	.55	.29	.04	0	1.6	.29
6	6.1	3.3	2.2	2.2	1.4	1.1	.55	.29	.04	0	1.1	.33
7	5.9	2.9	2.5	2.3	1.6	1.1	.55	.29	.03	0	.69	.69
8	5.9	2.9	2.5	2.2	2.3	.95	.49	.29	.03	0	.55	.77
9	5.7	2.9	2.5	2.0	2.3	.95	.55	.25	.03	0	.43	.69
10	5.5	2.8	2.3	2.2	2.3	1.1	.49	.25	.03	0	.38	.69
11	5.3	2.9	2.5	2.0	2.0	1.1	.49	.25	.02	0	.33	80
12	4.9	2.9	2.5	2.0	1.7	.95	.49	.25	.02	0	.29	15
13	4.7	2.8	2.5	1.9	1.5	1.1	.49	.22	.03	0	.25	4.3
14	4.7	2.6	2.5	1.9	1.4	1.1	.49	.22	.03	0	.25	2.3
15	4.5	2.8	2.2	1.7	1.4	1.1	.43	.25	.02	3.7	.22	5.1
16	4.7	2.5	2.2	1.9	1.4	1.1	.49	.25	.02	.04	.19	2.6
17	4.5	2.5	2.2	1.7	1.7	1.1	.49	.19	.02	19	.19	1.4
18	4.0	2.5	2.3	1.7	1.6	1.1	.43	.16	.01	37	.19	.77
19	4.1	2.5	2.3	1.6	1.4	.95	.43	.16	.01	67	.19	.62
20	5.9	2.6	2.3	1.7	1.4	.95	.38	.16	.01	9.8	.19	.55
21	6.9	2.6	2.2	1.6	2.5	1.2	.38	.13	.01	2.4	.19	.49
22	4.5	2.6	2.2	1.5	3.6	1.1	.38	.13	.01	2.2	.19	14
23	3.8	2.9	2.0	1.5	2.9	.95	.38	.11	.01	1.9	.19	6.6
24	4.0	3.1	2.0	1.5	2.2	.77	.38	.11	.01	1.6	.16	2.0
25	4.0	2.8	2.0	1.7	1.7	.69	.33	.09	.01	1.6	.13	.86
26	4.5	2.6	2.0	1.7	1.5	.62	.33	.09	.01	1.5	.11	.55
27	4.0	2.6	2.3	1.5	1.5	.62	.29	.09	0	95	.09	.43
28	3.8	2.6	2.3	1.4	1.5	.55	.29	.09	0	12	.09	.43
29	3.8	2.8	2.3	1.5	------	.49	.29	.07	0	24	.11	.38
30	4.1	2.8	2.0	1.6	------	.49	.33	.06	0	355	.19	.33
31	4.0	------	2.0	1.7	------	.43	------	.06	------	65	.22	------
TOTAL	163.4	86.3	72.0	58.1	50.7	29.96	13.13	5.96	.65	698.74	35.01	143.08
MEAN	5.27	2.88	2.32	1.87	1.81	.97	.44	.19	.022	22.5	1.13	4.77
MAX	9.5	3.8	2.8	2.5	3.6	1.4	.55	.29	.06	355	13	80
MIN	3.8	2.5	2.0	1.4	1.4	.43	.29	.06	0	0	.09	.22
AC-FT	324	171	143	115	101	59	26	12	1.3	1,390	69	284

CAL YR 1972 TOTAL 3,359.46 MEAN 9.18 MAX 386 MIN 0 AC-FT 6,660
WTR YR 1973 TOTAL 1,357.03 MEAN 3.72 MAX 355 MIN 0 AC-FT 2,690

PEAK DISCHARGE (BASE, 1,300 FT³/S).--July 30 (2000) 2,880 ft³/s (6.98 ft).

08435600 Paisano Creek near Alpine, Tex.

LOCATION.--Lat 30°21'30", long 103°42'48", Brewster County, on right bank 200 ft (61 m) upstream from bridge on Farm Road 1703 and 3.4 miles (5.5 km) west of Alpine.

DRAINAGE AREA.--27.9 mi² (72.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,614.80 ft (1,406.59 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 316 ft³/s (8.95 m³/s) July 14, gage height, 1.35 ft (0.41 m); no flow most of time.
Period of record: Maximum discharge, 3,530 ft³/s (100 m³/s) Aug. 14, 1971, gage height, 4.73 ft (1.44 m); no flow most of time.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0		0
2	0									0		0
3	0									0		0
4	0									0		0
5	0									0		0
6	0									0		0
7	0									0		0
8	0									0		0
9	0									0		0
10	0									0		0
11	0									0		.21
12	0									0		0
13	0									0		0
14	0									11		0
15	0									0		0
16	0									0		0
17	0									0		0
18	0									0		0
19	1.4									0		0
20	.18									0		0
21	0									0		0
22	0									0		0
23	0									0		0
24	0									0		0
25	0									0		0
26	0									0		0
27	0									6.9		0
28	0									0		0
29	0				------					0		0
30	0				------					0		0
31	0	------			------		------		------	0		------
TOTAL	1.58	0	0	0	0	0	0	0	0	17.9	0	.21
MEAN	.051	0	0	0	0	0	0	0	0	.58	0	.007
MAX	1.4	0	0	0	0	0	0	0	0	11	0	.21
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	3.1	0	0	0	0	0	0	0	0	36	0	.4

CAL YR 1972 TOTAL 241.98 MEAN .66 MAX 145 MIN 0 AC-FT 480
WTR YR 1973 TOTAL 19.69 MEAN .054 MAX 11 MIN 0 AC-FT 39

PEAK DISCHARGE (BASE, 50 FT³/S).--July 14 (1500) 316 ft³/s (1.35 ft); July 27 (1530) 71 ft³/s (0.82 ft).

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 mi² (46.9 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,489.49 ft (1,368.40 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 452 ft³/s (12.8 m³/s) July 27, gage height, 3.23 ft (0.98 m); no flow most of time.
Period of record: Maximum discharge, 452 ft³/s (12.8 m³/s) July 27, 1973, gage height, 3.23 ft (0.98 m); no flow most of time.

REMARKS.--Records good. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	.95	.22
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	0
8	0									0	0	0
9	0									0	0	0
10	0									0	0	0
11	0									0	0	0
12	0									0	0	0
13	0									0	0	0
14	0									10	0	0
15	0									.43	0	0
16	0									.11	0	0
17	0									0	0	0
18	0									.65	0	0
19	0									0	0	0
20	.05									0	0	0
21	.01									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									35	0	0
28	0									.48	0	0
29	0				------					.24	0	0
30	0				------					0	0	0
31	0	------			------		------		------	0	0	------
TOTAL	.06	0	0	0	0	0	0	0	0	46.91	.95	.22
MEAN	.002	0	0	0	0	0	0	0	0	1.51	.031	.007
MAX	.05	0	0	0	0	0	0	0	0	35	.95	.22
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.1	0	0	0	0	0	0	0	0	93	1.9	.4

CAL YR 1972 TOTAL 0.87 MEAN .002 MAX 2.6 MIN 0 AC-FT 1.7
WTR YR 1973 TOTAL 48.14 MEAN .13 MAX 35 MIN 0 AC-FT 95

PEAK DISCHARGE (BASE, 10 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
7-14	1600	2.11	140
7-27	1130	3.23	452
8- 1	1140	.98	11

08435660 West Moss Creek near Alpine, Tex.

LOCATION.--Lat 30°20'10", long 103°38'24", Brewster County, on right bank 0.3 mile (0.5 km) upstream from State Highway 118 and 1.8 miles (2.9 km) south of Alpine.

DRAINAGE AREA.--11.3 mi² (29.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 4,577.72 ft (1,395.29 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 349 ft³/s (9.88 m³/s) July 19, gage height, 3.35 ft (1.02 m); no flow most of time.
Period of record: Maximum discharge, 349 ft³/s (9.88 m³/s) July 19, 1973, gage height, 3.35 ft (1.02 m); no flow most of time.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0									0	.01	.72
2	0									0	0	.05
3	0									0	0	0
4	0									0	0	0
5	0									0	0	0
6	0									0	0	0
7	0									0	0	.33
8	0									0	0	0
9	0									0	0	0
10	0									0	0	0
11	0									0	0	0
12	0									0	0	0
13	0									1.6	0	0
14	0									6.2	0	0
15	0									.28	0	0
16	0									.03	0	0
17	0									0	0	0
18	0									1.5	0	0
19	0									22	0	0
20	.06									.03	0	0
21	.04									0	0	0
22	0									0	0	0
23	0									0	0	0
24	0									0	0	0
25	0									0	0	0
26	.29									0	0	0
27	0									3.1	0	0
28	0									6.7	0	0
29	0				------					7.7	1.4	0
30	0				------					0	0	0
31	0	------			------		------		------	0	3.0	------
TOTAL	.39	0	0	0	0	0	0	0	0	49.14	4.41	1.10
MEAN	.013	0	0	0	0	0	0	0	0	1.59	.14	.037
MAX	.29	0	0	0	0	0	0	0	0	22	3.0	.72
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.8	0	0	0	0	0	0	0	0	97	8.7	2.2

CAL YR 1972 TOTAL 59.19 MEAN .16 MAX 12 MIN 0 AC-FT 117
WTR YR 1973 TOTAL 55.04 MEAN .15 MAX 22 MIN 0 AC-FT 109

PEAK DISCHARGE (BASE, 20 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
7-13	1935	2.29	122	7-28	2335	2.96	249
7-14	1635	2.15	102	8-29	1550	1.50	39
7-19	1540	3.35	349	8-31	1800	1.82	65
7-27	1555	1.63	48				

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 (61 m) north of the end of Farm Road 1703, 4.7 miles (7.6 km) northwest of Alpine, and 9.2 miles (14.8 km) upstream from Paisano Creek.

DRAINAGE AREA.--29.7 mi² (76.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is about 4,660 ft (1,420 m).

AVERAGE DISCHARGE.--5 years, 0.031 ft³/s (0.878 dm³/s), 22 acre-ft/yr (27,100 m³/yr).

EXTREMES.--Current year: Maximum discharge, 82 ft³/s (2.32 m³/s) July 18, gage height, 1.30 ft (0.40 m); no flow most of time.
Period of record: Maximum discharge, 570 ft³/s (16.1 m³/s) Sept. 21, 1972, gage height, 2.70 ft (0.82 m); no flow most of time.

REMARKS.--Records poor. No known diversions or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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										.13		
16										0		
17										0		
18										3.6		
19										0		
20										0		
21										0		
22										0		
23										0		
24										0		
25										0		
26										0		
27										0		
28										0		
29					------					0		
30					------					0		
31		------			------		------		------	0		------
TOTAL	0	0	0	0	0	0	0	0	0	3.73	0	0
MEAN	0	0	0	0	0	0	0	0	0	.12	0	0
MAX	0	0	0	0	0	0	0	0	0	3.6	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	7.4	0	0

CAL YR 1972 TOTAL 45.02 MEAN .12 MAX 20 MIN 0 AC-FT 89
WTR YR 1973 TOTAL 3.73 MEAN .010 MAX 3.6 MIN 0 AC-FT 7.4

PEAK DISCHARGE (BASE, 50 FT³/S).--July 18 (0300) 82 ft³/s (1.30 ft).

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 (29.6 km) northwest of Fort Stockton.

DRAINAGE AREA.--1,182 mi² (3,061 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,846.86 ft (867.72 m) above mean sea level (Texas Highway Department bridge plans). Jan. 22 to Sept. 30, 1969, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--9 years, 2.88 ft³/s (81.6 dm³/s), 2,090 acre-ft/yr (2.58 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 596 ft³/s (16.9 m³/s) July 18, gage height, 7.04 ft (2.15 m); no flow most of year.
Period of record: Maximum discharge, 12,600 ft³/s (3.57 m³/s) June 15, 1967, gage height, 15.20 ft (4.63 m); no flow most of time.
Maximum stage occurred in 1954, stage 19.6 ft (6.0 m). Discharge for flood of Sept. 4, 1925, 4,070 ft³/s (115 m³/s), by slope-area measurement, at a site 8 miles (12.9 km) upstream on U.S. Highway 290.

REMARKS.--Records poor. No known regulation or diversion.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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		.09
7										0		15
8										0		0
9										0		0
10										0		0
11										0		0
12										0		0
13										0		0
14										0		0
15										0		0
16										0		0
17										7.2		0
18										93		0
19										1.2		0
20										0		0
21										0		0
22										0		0
23										0		0
24										0		0
25										0		0
26										0		0
27										0		0
28										0		0
29					------					0		0
30					------					0		0
31		------			------		------		------	0		------
TOTAL	0	0	0	0	0	0	0	0	0	101.4	0	15.09
MEAN	0	0	0	0	0	0	0	0	0	3.27	0	.50
MAX	0	0	0	0	0	0	0	0	0	93	0	15
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	201	0	30

CAL YR 1972 TOTAL 1,999.77 MEAN 5.46 MAX 641 MIN 0 AC-FT 3,970
WTR YR 1973 TOTAL 116.49 MEAN .32 MAX 93 MIN 0 AC-FT 231

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
7-17	2100	6.24	200
7-18	1900	7.04	596
9- 7	0100	6.21	195

08446500 Pecos River near Girvin, Tex.

LOCATION.--Lat 31°06'40", long 102°25'00", Pecos County, on right bank 2.4 miles (3.9 km) upstream from Comanche Creek, 2.6 miles (4.2 km) northwest of Girvin, and 7.8 miles (12.6 km) upstream from bridge on U.S. Highway 67.

DRAINAGE AREA.--29,560 mi² (76,560 km²), approximately for contributing area of supplementary gage 7.8 miles (12.6 km) 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, and now used only for flows exceeding about 1,400 ft³/s (39.6 m³/s), 7.8 miles (12.6 km) downstream at datum 2,269.65 ft (691.79 m) above mean sea level.

AVERAGE DISCHARGE.--34 years, 98.3 ft³/s (2.78 m³/s), 71,220 acre-ft/yr (87.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,330 ft³/s (37.7 m³/s) June 18, gage height, 4.15 ft (1.26 m); minimum daily, 3.6 ft³/s (102 dm³/s) July 14.
Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) Oct. 5, 1941, gage height, 20.49 ft (6.25 m), at supplementary gage; minimum daily, 2.2 ft³/s (62.3 dm³/s) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	37	19	28	27	31	23	25	9.4	5.8	37	21
2	23	36	19	28	26	30	23	24	8.0	5.3	36	19
3	20	31	19	30	27	27	22	23	7.4	5.3	26	14
4	18	28	19	30	26	27	22	22	6.3	5.8	33	14
5	17	25	19	30	26	27	22	21	6.3	5.8	26	14
6	17	24	19	30	26	27	22	21	5.8	5.8	22	17
7	16	23	19	28	27	26	22	20	5.8	5.8	24	33
8	16	23	19	27	28	27	22	19	5.8	5.8	30	36
9	15	23	20	25	28	28	22	18	5.8	5.8	28	31
10	15	22	20	24	28	34	21	17	5.8	6.8	25	36
11	14	21	21	26	28	62	21	16	5.8	30	22	26
12	14	22	21	26	28	63	35	15	5.8	14	21	27
13	14	22	22	26	28	51	74	14	5.8	4.3	22	26
14	13	21	22	27	28	38	72	14	5.3	3.6	23	23
15	13	20	23	28	28	36	55	13	5.3	19	21	23
16	13	20	23	28	27	32	39	12	6.8	25	19	21
17	13	20	23	28	28	31	32	12	5.8	14	18	21
18	12	20	24	28	28	30	28	12	5.8	617	17	21
19	13	21	24	28	28	30	24	11	5.8	167	16	20
20	17	20	25	28	30	28	24	10	5.8	131	16	21
21	21	20	24	30	31	27	24	18	26	92	15	21
22	20	20	24	28	33	25	30	46	32	59	15	21
23	21	19	23	30	33	25	33	36	20	77	15	20
24	23	19	22	28	33	25	26	20	13	95	14	31
25	24	20	21	27	32	25	22	14	8.7	85	15	38
26	23	20	21	27	32	25	25	11	7.4	65	15	33
27	24	20	20	27	32	24	26	8.7	6.3	52	18	32
28	25	20	21	26	31	24	26	13	5.8	40	39	32
29	25	20	26	26	------	24	26	16	5.3	33	28	32
30	24	20	28	26	------	23	26	15	5.8	27	23	28
31	23	------	28	26	------	23	------	13	------	24	22	------
TOTAL	570	677	678	854	807	955	889	549.7	254.7	1,731.9	701	752
MEAN	18.4	22.6	21.9	27.5	28.8	30.8	29.6	17.7	8.49	55.9	22.6	25.1
MAX	25	37	28	30	33	63	74	46	32	617	39	38
MIN	12	19	19	24	26	23	21	8.7	5.3	3.6	14	14
AC-FT	1,130	1,340	1,340	1,690	1,600	1,890	1,760	1,090	505	3,440	1,390	1,490

CAL YR 1972 TOTAL 9,841.4 MEAN 26.9 MAX 253 MIN 8.0 AC-FT 19,520
WTR YR 1973 TOTAL 9,419.3 MEAN 25.8 MAX 617 MIN 3.6 AC-FT 18,680

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 (3.2 km) 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, 27 years (1922-24, 1939-40, 1942-57, 1964-73), 10.1 ft^3/s (0.29 m^3/s), 7,320 acre-ft/yr (9.03 hm^3/yr). 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, 25 years (1939-40, 1942-57, 1964-73), 9.01 ft^3/s (0.26 m^3/s), 6,530 acre-ft/yr (8.05 hm^3/yr).

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, 29 years (1922-25, 1939-40, 1941-57, 1964-73), 32.4 ft^3/s (0.92 m^3/s), 23,470 acre-ft/yr (28.9 hm^3/yr). 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, 25 years (1939-40, 1942-57, 1964-73), 4.20 ft^3/s (119 dm^3/s), 3,040 acre-ft/yr (3.75 hm^3/yr). 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 (20.1 km) downstream from headgates. Period of record, March 1922 to July 1925, August 1939 to September 1957, March 1964 to current year. Average discharge, 28 years (1923-24, 1939-57, 1964-73), 33.8 ft^3/s (0.96 m^3/s), 24,490 acre-ft/yr (30.2 hm^3/yr). 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, 24 years (1942-57, 1964-73), 13.4 ft^3/s (0.38 m^3/s), 9,710 acre-ft/yr (12.0 hm^3/yr).

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, 25 years (1940-41, 1942-57, 1964-73), 11.3 ft^3/s (0.32 m^3/s), 8,190 acre-ft/yr (10.1 hm^3/yr).

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, 25 years (1939-40, 1942-57, 1964-73), 22.7 ft^3/s (0.64 m^3/s), 16,450 acre-ft/yr (20.3 hm^3/yr).

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 1972 TO SEPTEMBER 1973

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	0	3.1	453	0
November	0	7.7	458	0
December	0	8.8	285	4.6
CAL YR 1972	1,520	5,140	5,690	21
January	0	1.5	0	11
February	0	0	0	3.8
March	0	0	0	3.7
April	2.5	2.2	811	90
May	236	0	233	96
June	155	684	1,050	88
July	.9	1,620	1,830	20
August	260	1,160	1,080	39
September	287	594	1,810	22
WTR YR 1973	941	4,080	8,010	378

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	0	2,030	137	689
November	0	1.4	0	263
December	0	0	0	152
CAL YR 1972	11,030	5,940	1,520	5,690
January	0	0	0	0
February	0	0	0	0
March	2.3	20	5.7	0
April	1,610	614	574	0
May	755	457	84	0
June	2,480	1,100	725	0
July	1,460	708	363	0
August	1,840	651	201	0
September	5,370	880	785	0
WTR YR 1973	13,510	*6,460	2,880	1,100

† 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).

* Does not include 38 acre-ft diverted from canal 75 ft upstream.

08449000 Devils River near Juno, Tex.

LOCATION.--Lat 29°57'48", long 101°08'42", Val Verde County, on left bank 500 ft (152 m) downstream from Walter Baker ranchhouse, 2 miles (3.2 km) upstream from Phillips Creek, and 13.5 miles (21.7 km) southwest of Juno.

DRAINAGE AREA.--2,730 mi² (7,070 km²).

PERIOD OF RECORD.--June 1925 to September 1949, September 1952 to September 1963 (miscellaneous measurements or low-flow partial-record only), October 1963 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,489.7 ft (454.1 m) above mean sea level.

AVERAGE DISCHARGE.--34 years (1925-49, 1963-73), 188 ft³/s (5.32 m³/s), 136,200 acre-ft/yr (168 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,440 ft³/s (211 m³/s) Oct. 21, gage height, 8.33 ft (2.54 m); minimum, 50 ft³/s (1.42 m³/s) Sept. 6.
Period of record: Maximum discharge, 370,000 ft³/s (10,500 m³/s) Sept. 1, 1932, gage height, 33.8 ft (10.3 m) from floodmarks, from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of slope-area measurements of 44,700, 104,000, 245,000, and 370,000 ft³/s (1,270, 2,950, 6,940, and 10,500 m³/s); minimum, 9.5 ft³/s (269 dm³/s) July 5, 1969 (result of temporary unknown obstruction upstream).
Maximum stage since at least 1882, 35.0 ft (10.7 m) June 28, 1954, from floodmark, discharge, 393,000 ft³/s (11,100 m³/s), from information by local resident.

REMARKS.--Records good. No known diversion upstream from station. At end of year, flow from 158 mi² (409 km²) above this station was partly controlled by 13 floodwater-retarding structures with a total combined capacity of 37,860 acre-ft (46.7 hm³) below the flood-spillway crests, of which 36,050 acre-ft (44.4 hm³) is floodwater-retarding capacity and 1,810 acre-ft (2.23 hm³) 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 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	165	126	110	102	95	88	82	68	68	64	56
2	163	162	124	112	102	93	87	276	68	67	65	55
3	158	160	124	112	101	94	85	93	68	66	62	54
4	154	157	123	110	102	93	85	89	69	65	61	54
5	151	155	124	110	102	93	85	89	71	64	60	53
6	148	155	121	108	100	92	87	88	69	64	60	69
7	146	151	120	111	101	91	86	84	68	63	60	67
8	145	146	122	109	109	93	85	81	68	63	59	61
9	143	147	121	109	101	91	84	79	70	64	59	58
10	139	145	120	109	99	94	83	80	70	64	59	58
11	138	143	119	109	99	91	85	80	72	63	59	58
12	138	146	119	108	100	90	86	80	73	62	58	56
13	137	142	118	109	99	92	86	78	70	61	58	56
14	136	140	116	108	96	90	86	79	69	72	58	56
15	136	140	114	108	95	90	88	78	69	69	58	56
16	135	140	113	108	95	88	83	78	69	66	57	56
17	135	139	113	109	96	88	90	78	69	68	56	55
18	134	139	114	107	95	89	81	76	68	65	56	55
19	130	137	114	107	94	89	83	76	73	64	58	55
20	131	135	114	109	94	88	82	76	80	62	58	55
21	984	133	112	106	98	87	82	73	78	61	57	53
22	968	131	112	107	98	88	81	72	72	60	56	55
23	310	133	112	106	96	91	81	73	72	60	55	53
24	246	134	111	106	95	92	81	73	72	61	55	53
25	220	131	111	108	94	88	81	72	71	60	55	53
26	208	130	112	106	94	88	80	71	72	60	55	53
27	197	131	112	106	94	88	79	69	71	59	55	53
28	189	128	112	103	94	95	79	68	69	59	55	52
29	183	128	113	102	------	89	81	69	67	59	56	52
30	179	127	111	102	------	90	82	68	68	59	56	52
31	173	------	110	104	------	87	------	68	------	67	56	------
TOTAL	6,723	4,250	3,607	3,338	2,745	2,807	2,512	2,596	2,113	1,965	1,796	1,672
MEAN	217	142	116	108	98.0	90.5	83.7	83.7	70.4	63.4	57.9	55.7
MAX	984	165	126	112	109	95	90	276	80	72	65	69
MIN	130	127	110	102	94	87	79	68	67	59	55	52
AC-FT	13,340	8,430	7,150	6,620	5,440	5,570	4,980	5,150	4,190	3,900	3,560	3,320

CAL YR 1972 TOTAL 146,432 MEAN 400 MAX 56,500 MIN 68 AC-FT 290,400
WTR YR 1973 TOTAL 36,124 MEAN 99.0 MAX 984 MIN 52 AC-FT 71,650

PEAK DISCHARGE (BASE, 500 FT³/S).--Oct. 21 (2115) 7,440 ft³/s (8.33 ft); May 2 (0645) 1,190 ft³/s (4.68 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. Also given are measurements at stations operated to define changes in water quality with discharge. Most of the measurements of low flow were made during periods when streamflow was 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 1973

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)	1953-73	2-28-73 7-11-73	1.20 .51
		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, 1952-73	2-12-73 7- 2-73	2.38 .91
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	1964-73	1- 9-73 7- 3-73	2.71 0
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)	1947-73	1- 9-73 7- 3-73	1.43 1.44
07307500	Quitaque Creek near Quitaque, Tex.	Lat 34°14'24", long 101°07'03", Floyd County, at 0.7 mile upstream from Turkey Creek, 1.8 miles downstream from Wilson Creek, and 9.7 miles southwest of Quitaque (revised).	h293	1945-59*, 1960-73	2-27-73 7-26-73	2.46 .99
07307660 r/	North Pease River near Kirkland, Tex.	Lat 34°16'06", long 100°10'19", Cottle County, at ranch road crossing, 0.6 mile south of Buckle L ranch house, and 11.5 miles southwest of Kirkland.	-	1973	5- 1-73 5-21-73 6-12-73 7- 3-73 7-24-73 8-14-73 9-26-73	32.7 .90 4.91 .05 0 1.43 117
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, 1943-73	2- 6-73 7-24-73	1.53 1.17
07307780 r/	Middle Pease River near Kirkland, Tex.	Lat 34°14'17", long 100°07'46", Cottle County, 0.3 mile upstream from mouth and 10.5 miles southwest of Kirkland.	-	1973	5- 1-73 5-21-73 6-12-73 7- 2-73 7-24-73 8-14-73 9-27-73	24.4 4.02 4.50 .15 .54 2.56 13.8
07308400 r/	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	1968-73	11- 8-72 12- 5-72 1- 8-73 2-12-73 3-20-73 4-25-73 5-31-73 7-25-73 8-14-73 9-12-73	1.43 a.30 0 .76 1.32 26.8 a.10 0 a.10 a.50

* Operated as a continuous-record station.
a Estimated.
c Not applicable.
h Of which 258 sq mi is probably noncontributing.
r Station operated to define variation in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Red River Basin--Continued				
07316230 r/	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	1968-73	10-25-72	0.01
					11-28-72	.18
					1- 4-73	7.46
					2-13-73	3.86
					3-27-73	1.57
					5- 8-73	7.84
					6- 6-73	15.0
					7-18-73	.84
					8-15-73	.02
					9-18-73	.16
07343480 r/	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, 1969-73	2- 6-73	181
					6-23-73	39.3
					7- 4-73	7.53
					8-31-73	3.64
07343850 r/	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, 1969-73	6-22-73	89.1
					7- 4-73	12.6
					7-26-73	23.9
					8-30-73	.61
07346160	Frazier Creek near McLeod, Tex.	Lat 32°54'37", long 94°07'16", Cass County, at bridge on Farm Road 125 and 3.3 miles southwest of McLeod.	199	1964-73	7-11-73	12.4
					8-21-73	0
		Sabine River Basin				
08018950 r/	Dry Creek near Quitman, Tex.	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	1967-73	10-11-72	.86
					12-19-72	55.4
					1-30-73	60.0
					4-27-73	260
					5-31-73	3.02
					7- 3-73	2.40
					8-22-73	1.00
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)	1963-73	10-11-72	.99
					7- 3-73	.77
					8-22-73	0
		Neches River Basin				
08031300	Flat Creek below Lake Athens near Athens, Tex. (formerly Flat Creek Reservoir)	Lat 32°12'19", long 95°43'29", Henderson County, downstream from Flat Creek Dam and 7.7 miles east of Athens.	21.6	1963-73	10- 3-72	a.001
08033600 r/	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.	-	1968-73	10- 4-72	.14
					11-14-72	9.12
					12- 6-72	6.04
					1- 4-73	8.50
					2- 7-73	6.30
					3-14-73	12.6
					4-20-73	21.3
					5-24-73	2.78
					7- 3-73	4.31
					8- 1-73	4.24
					9- 5-74	167
		Trinity River Basin				
08065950 r/	Nelson Creek near Riverside, Tex.	Lat 30°53'40", long 95°30'51", Walker County, at bridge (revised) 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, 1970-73	10-25-72	2.25
					4-18-73	339
					6- 6-73	27.6
08065975 r/	Harmon Creek near Huntsville, Tex.	Lat 30°49'12", long 95°29'09", Walker County, at end of county road, 2.2 miles east of Farm Road 980, 7.6 miles northeast of Huntsville, and 9 miles southwest of Riverside.	89.2	1973	10-25-72	6.29
					12-19-72	13.3
					2-13-73	16.2
					4-18-73	183
					6- 6-73	16.6
					8-28-73	6.17

a Estimated.
c Not applicable.
r Station operated to define variations in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Trinity River Basin--Continued				
08066050 r/	West Carolina Creek near Oakhurst, Tex.	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 (discontinued).	15.2	1949, 1966-73	10-10-72	0
					11-13-72	2.21
					12-11-72	.30
					1-15-73	6.42
					2-22-73	2.05
					3-26-73	16.5
					5- 7-73	138
					6- 4-73	2.46
					7- 9-73	5.60
					8-20-73	.64
08066140 r/	Tantabogue Creek near Trinity, Tex.	Lat 31°03'51", long 95°25'26", Trinity County, at bridge on State Highway 19 and 9.4 miles north of Trinity (discontinued).	61.3	1949, 1966-73	10-10-72	0
					11-13-72	329
					12-11-72	190
					1-15-73	40.0
					3-26-73	61.1
					6- 4-73	1.23
					7- 9-73	4.02
					8-20-73	.61
08066145 r/	Caney Creek near Groveton, Tex.	Lat 30°59'14", long 95°12'52", Trinity County, at county road crossing and 7.3 miles southwest of Groveton (discontinued).	41.4	1966-73	10-11-72	.18
					6- 4-73	8.50
					7- 9-73	3.68
					8-21-73	.52
08066180 r/	Rocky Creek near Onalaska, Tex.	Lat 30°52'02", long 95°03'42", Polk County, at end of county road and 5.4 miles northeast of Onalaska (discontinued).	40.6	1966-73	10-11-72	0
					11-14-72	2.32
					1-16-73	8.31
					2-21-73	.12
					3-28-73	13.9
					6- 6-73	55.0
					8-21-73	.93
08066210 r/	Long King Creek near Goodrich, Tex.	Lat 30°36'16", long 94°57'26", Polk County, at bridge on Farm Road 1988, 0.7 mile west of Goodrich, and 4.5 miles upstream from mouth.	220	1973	10-26-72	6.65
					2-14-73	3,460
					4-17-73	3,780
					4-19-73	1,340
					6- 7-73	73.0
					8-29-73	27.2
08066800 r/	Gaylor Creek near Moss Hill, Tex.	Lat 30°16'55", long 94°51'36", Liberty County, at bridge on county road and 7.5 miles northwest of Moss Hill (discontinued).	32.3	1966-73	10- 4-72	0
					11-16-72	1.82
					4- 2-73	7.27
					6- 7-73	.38
					7-13-73	7.99
					8-23-73	1.20
		San Jacinto River Basin				
08067900 r/	Lake Creek near Conroe, Tex.	Lat 30°15'12", long 95°34'43", Montgomery County, at bridge on county road and 8.3 miles southwest of Conroe.	291	1969-73	10- 6-72	14.0
					11-20-72	986
					12-20-72	101
					1-25-73	105
					2-28-73	130
					4- 4-73	50.2
					5-11-73	766
					7-19-73	25.2
					8-24-73	8.43
					9-25-73	18.7
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, 1970-73	8-22-73	44.8
08068750 r/	Cypress Creek near Cypress, Tex.	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	1970-73	10-27-72	26.0
					2- 5-73	12.3
					4-26-73	100
					8-22-73	16.1
					8-30-73	39.6
08069200 r/	Cypress Creek near Humble, Tex.	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	1970-73	2- 5-73	29.9
					8-22-73	27.6
					8-30-73	71.8

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Discharge measurements made at low-flow partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		San Jacinto River Basin--Continued				
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, 1969-73	8-23-73	56.0
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	1970-73	8-23-73 9-20-73	32.4 60.3
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	1970-73	8-23-73	44.7
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, 1973-73	8-23-73	17.0
08074550 r/	Little Whiteoak Bayou at Houston, Tex.	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	1971-73	12-27-72 1-31-73 4-11-73 5- 4-73 6- 9-73 9-17-73	3.83 6.46 7.85 6.78 154 8.64
08075100 r/	Brays Bayou at Scott Street at Houston, Tex.	Lat 29°42'35", long 95°21'23", Harris County, at bridge on Scott Street, Houston.	106	1971-73	12-11-72 1-31-73 3-14-73 4-24-73	53.3 65.3 83.8 112
08076900 r/	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 (discontinued).	23.5	1963-64, 1971-73	1-22-73 2- 6-73 4-16-73 4-18-73 4-19-73 5-16-73 8-13-73	13.3 6.97 726 980 402 7.58 6.04
		Clear Creek Basin				
08077510 r/	Clear Creek above Turkey Creek near Friendswood, Tex.	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 (discontinued).	87.2	1971-73	11- 6-72 1-23-73 3-13-73 4-25-73 5-17-73	82.0 23.9 27.5 40.6 16.8
08077620 r/	Armand Bayou near Genoa, Tex.	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 (discontinued).	18.2	1968, 1971-73	11-29-72 3-13-73 4-16-73 5-29-73 8-15-73	5.26 5.68 936 1.75 7.40
		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, 1967-73	10- 4-72 11- 8-72 12-13-72 1-16-73 2-21-73 3-27-73 5- 1-73 6- 6-73 7-17-73 8-22-73	20.6 12.4 13.2 11.4 13.7 14.4 12.6 15.6 12.7 7.37
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, 1969-73	10- 4-72 11- 8-72 12-13-72 1-16-73 2-21-73 3-27-73 5- 1-73 6- 6-73 7-17-73 8-22-73	16.1 11.7 14.2 13.9 6.40 11.2 10.5 9.07 9.36 2.99
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)	1951-73	10-26-72 1- 4-73 4-25-73 7-12-73	.40 .43 1.49 a.02

a Estimated.
c Not applicable.
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Discharge measurements made at low-flow partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
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, 1967-73	11- 1-72	27.4
					11-28-72	a.38
					1- 3-73	2.24
					2- 6-73	4.00
					3-14-73	56.8
					4-25-73	5.38
					5-29-73	a.15
					7-12-73	0
					8-14-73	0
					9-18-73	0
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.	-	1967-73	11- 1-72	61.2
					11-28-72	a.55
					1- 3-73	3.18
					2- 6-73	8.23
					3-13-73	89.6
					4-25-73	8.29
					5-29-73	a.12
					7-12-73	0
					8-14-73	0
					9-18-73	0
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.	-	1965-73	11- 2-72	63.2
					11-29-72	10.7
					1- 4-73	9.40
					2- 6-73	19.4
					3-13-73	133
					4-25-73	20.6
					5-29-73	5.46
					7-13-73	.40
					8-14-73	a.15
					9-16-73	.70
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.	-	1959-73	11-14-72	a.06
					12-22-72	a.10
					1-16-73	.33
					2- 7-73	.12
					3- 7-73	a.07
					5-29-73	0
					7-11-73	0
					8-14-73	0
					9-19-73	0
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.	-	1959-73	11-14-72	1.76
					12-22-72	1.69
					1-16-73	5.22
					2- 7-73	3.26
					3- 7-73	3.00
					5-29-73	.19
					7-11-73	a.04
					8-14-73	0
					9-19-73	.39
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)	1957-73	11-15-72	.82
					12-19-72	1.04
					1-18-73	1.19
					2- 6-73	.90
					3- 6-73	2.00
					3-28-73	1.53
					4-20-73	.70
					5- 8-73	.62
					5-31-73	.54
					6-19-73	a.08
					7-10-73	.21
					8- 1-73	.68
					8-22-73	.45
					9-12-73	.65

a Estimated.
c Not applicable.

Discharge measurements made at low-flow partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
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)	1957-73	11-15-72	0.41
					12-19-72	.43
					1-18-73	.56
					2- 6-73	.56
					3- 6-73	.64
					3-28-73	.60
					4-20-73	.33
					5- 8-73	.27
					5-31-73	.16
					6-19-73	.30
					7-10-73	.19
					8- 1-73	.23
					8-22-73	.09
					9-12-73	.18
08082950 r/	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.	-	1969-73	10-18-72	0
					11-20-72	0
					12-20-72	0
					1-30-73	28.8
					2-27-73	34.1
					4- 4-73	12.6
					5- 8-73	4.39
					6-12-73	.70
					7-17-73	0
					8-21-73	0
					9-25-73	0
08083000 r/	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	1969-73	10-18-72	148
					11-20-72	384
					12-20-72	188
					1-30-73	607
					2-27-73	439
					4- 3-73	562
					5- 8-73	198
					6-12-73	300
					7-17-73	59.7
					8-21-73	44.5
					9-25-73	96.2
08084100 r/	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	1968-73	10- 3-72	12.9
					11- 3-72	26.2
					12- 5-72	16.5
					1-17-73	21.0
					2-27-73	26.6
					3-28-73	33.8
					5- 1-73	11.6
					6- 6-73	6.27
					7-11-73	1.52
					8-15-73	.45
					9-18-73	3.14
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*, 1967-73	10- 4-72	0
					11- 2-72	0
					1-17-73	0
					3-28-73	2.04
					7-11-73	0
					9- 7-73	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	1963-73	10- 4-72	0
					11- 2-72	0
					1-17-73	0
					3-28-73	2.29
					7-11-73	0
					9- 7-73	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*, 1969-73	10- 4-72	0
					11- 2-72	.38
					1-17-73	0
					3-28-73	.91
					7-11-73	0
					9- 7-73	.86

* Operated as a continuous-record station.
c Not applicable.
r Station operated to define variations in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
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	1963-73	10- 3-72 11- 1-72 1-17-73 3-29-73 7-11-73 9- 7-73	0 0 0 .79 0 2.12
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*, 1964-73	10- 3-72 11- 2-72 1-18-73 2-21-73 3-29-73 7-11-73 9- 7-73	0 15.6 0 3.88 5.88 0 16.5
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*, 1967-73	10- 3-72 11- 2-72 1-18-73 3-29-73 7-11-73 9- 7-73	0 0 0 .35 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, 1968-73	10- 3-72 11- 1-72 1-17-73 3-29-73 7-11-73 9- 7-73	0 7.52 0 .18 0 14.9
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*, 1969-73	10- 4-72 11- 2-72 1-17-73 3-29-73 7-11-73 9- 7-73	0 0 0 0 0 0
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 (discontinued).	(c)	1924, 1931, 1957-73	10- 5-72 11- 8-72 12-15-72 1-17-73 3- 2-73 4- 4-73 5- 2-73 6- 6-73 7-11-73 8-15-73	3.68 2.74 2.49 2.57 3.00 2.91 11.7 3.12 3.45 2.87
08103400	Sulphur Creek below Hancock Springs at Lampasas, Tex.	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 (discontinued).	(c)	1901-2, 1906, 1911, 1924, 1931, 1957-73	10- 5-72 11- 8-72 12-15-72 1-17-73 3- 2-73 4- 4-73 5- 2-73 6- 6-73 7-11-73 8-15-73	26.6 9.39 11.0 10.6 11.6 9.96 18.7 10.2 10.9 8.76
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 (discontinued).	(c)	1901-2, 1906, 1910, 1957-73	1-17-73 4- 4-73	1.38 1.36
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 (discontinued).	(c)	1958-73	1-17-73 4- 4-73	12.1 16.7
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 (discontinued).	133	1948, 1950-73	2- 1-73 5-16-73 7-30-73 8-29-73	74.1 39.1 5.88 2.45

* Operated as a continuous-record station.
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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Brazos River Basin--Continued				
08104300	Salado Springs at Salado, Tex.	Lat 30°56'50", long 97°31'51", Bell County, downstream from springs at Salado (discontinued).	(c)	1902-3, 1934, 1948, 1950-73	2- 1-73 5-16-73 7-30-73 8-29-73	32.8 37.2 24.2 20.5
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 (discontinued).	121	1964-73	12-29-72 7-31-73	20.2 23.3
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 (discontinued).	167	1948, 1964-73	10-10-72 6-29-73 7-25-73	n2.50 n18.6 n5.90
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, 1964-73	10-10-72 6-29-73 7-25-73	.92 12.0 4.60
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	1964-73	10-11-72 6-29-73 7-25-73	0 6.31 .25
		San Bernard River Basin				
08117700 r/	San Bernard River near West Columbia, Tex.	Lat 29°09'37", long 95°45'56", Brazoria County, at bridge on Farm Road 1301 and 7.6 miles west of West Columbia.	-	1949, 1970-71, 1973	1-30-73 3- 2-73 5-11-73 7-20-73 8-23-73 9-28-73	238 476 416 173 384 415
		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, 1959-73	10-14-72 11-18-72 12-23-72 1-27-73 3- 5-73 4- 6-73 5-15-73 6-20-73 7-20-73 8-27-73	11.0 13.9 12.7 11.0 13.8 11.6 14.3 12.6 11.3 10.6
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)	1963-73	10-14-72 11-18-72 12-18-72 2- 1-73 3- 5-73 4- 6-73 5- 9-73 6- 9-73 7-17-73 8-28-73 9-24-73	3.68 4.33 3.73 3.47 3.72 2.62 4.10 3.48 3.56 3.55 4.10
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.	-	1970-73	1- 9-73 2- 1-73 3-17-73	19.5 15.1 15.4
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, 1958-73	1-25-73 6-12-73	21.3 17.0
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, 1959-73	1-23-73 6-21-73	10.7 9.73

c Not applicable.
n Includes sewage effluent.
r Station operated to define variations in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Colorado River Basin--Continued				
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, 1959-73	1-24-73 6- 3-73	21.9 10.8
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, 1959-73	1-24-73 6-13-73	20.7 42.5
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	1919-73	12- 1-72 2-28-73 5-29-73 9-13-73	28.2 149 7.09 1.27
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*, 1919-73	12- 1-72 2-28-73 5-29-73 9-13-73	75.0 69.0 119 87.4
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 (discontinued).	-	1958, 1962-73	11-29-72 2-27-73 3-21-73 5-29-73 6-29-73 9-13-73	48.9 194 78.3 36.0 138 9.87
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 (discontinued).	-	1958, 1962-73	11-29-72 2-27-73 3-21-73 5-29-73 6-29-73 9-13-73	0 58.1 .21 0 23.1 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, 1962-73	11-29-72 2-27-73 3-21-73 5-29-73 6-29-73 9-13-73	9.60 115 24.2 10.6 126 4.83
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 (discontinued).	284	1964-73	11-29-72 4- 4-73 6-21-73 6-29-73 8-27-73	.66 8.39 7.70 16.9 .01
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 (discontinued).	59.3	1964-73	11-29-72 4- 4-73 6-29-73 8-27-73	.32 1.04 .60 .02
		Cashs Creek Basin				
08162650 r/	Cashs Creek near Blessing, Tex.	Lat 28°48'38", long 96°11'51", Matagorda County, at bridge on county road and 4.4 miles southeast of Blessing.	14.8	1969-73	10- 3-72 10-13-72 10-18-72 11- 7-72 12-12-73 1-18-73 2-21-73 3-28-73 4-18-73 5- 2-73 6- 6-73 7-12-73 8-13-73 9-20-73	4.70 1.24 0 4.94 .36 .46 15.0 1.21 691 3.19 1.91 2.18 5.80 18.8

* Operated as a continuous-record station.
c Not applicable.
r Station operated to define variations in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		East Carancahua Creek Basin				
08162700 r/	East Carancahua Creek near Blessing, Tex.	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, 1970-73	10- 3-72	19.1
					10-13-72	3.12
					10-18-72	1.12
					11- 7-72	37.4
					12-12-72	2.25
					1-18-73	5.64
					2-21-73	65.2
					3-28-73	6.75
					4-18-73	3,120
					5- 2-73	9.21
					6- 6-73	11.5
					7-12-73	9.05
					8-13-73	31.0
					9-20-73	131
08162800 r/	West Carancahua Creek near LaWard, Tex.	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, 1970-73	10- 3-72	10.0
					10-11-72	3.82
					10-18-72	6.04
					11- 8-72	7.37
					12-12-72	0
					1-18-73	1.51
					2-22-73	40.4
					3-28-73	.96
					4-18-73	1,230
					5- 2-73	.88
					6- 6-73	4.01
					7-12-73	6.83
					8-13-73	31.4
					9-21-73	32.5
		Chocolate Bayou Basin				
08164850 r/	Chocolate Bayou near Port Lavaca, Tex.	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, 1970-73	10- 4-72	5.06
					10-12-72	a.23
					10-18-72	a.12
					11- 6-72	30.6
					12-13-72	.36
					1-16-73	2.80
					2-20-73	47.4
					3-27-73	a.17
					5- 1-73	.91
					6- 5-73	a.25
					7-11-73	.61
					8-14-73	4.40
					9-18-73	156
		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)	1944-73	10- 2-72	25.5
					11- 1-72	31.3
					12- 1-72	40.6
					1- 2-73	19.1
					1-31-73	58.0
					3- 1-73	81.6
					3-30-73	79.2
					5- 1-73	88.2
					6- 4-73	70.6
					7- 2-73	86.8
					8- 1-73	84.8
					9- 4-73	85.1
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.	-	1962-73	1- 2-73	0
					7- 2-73	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.	-	1962-73	1- 2-73	0
					7- 2-73	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.	-	1962-73	1- 2-73	2.98
					7- 2-73	3.30

a Estimated.
c Not applicable.
r Station operated to define variations in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Salt Creek Basin				
08189100 r/	Salt Creek near Refugio, Tex.	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, 1970-73	10- 4-72	7.56
					11- 8-72	a.02
					12-13-72	0
					1-17-73	a.02
					2-20-73	1.07
					3-27-73	0
					4-30-73	3.08
					6- 4-73	0
					6-13-73	34.4
					7-10-73	.82
					8-14-73	0
					9-18-73	106
		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*, 1966-73	10-12-72	29.8
					11- 3-72	30.8
					11-29-72	29.2
					12-29-72	32.7
					1-29-73	32.0
					2-28-73	33.2
					3-29-73	30.6
					4-27-73	34.6
					6- 1-73	17.8
					7- 2-73	26.0
					7-31-73	38.4
					8-24-73	32.3
					9-25-73	40.7
		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.	-	1969-73	10-22-72	.10
					11- 9-72	.09
					12-17-72	.08
					1-31-73	.08
					2-28-73	.12
					3-31-73	.11
					4-20-73	.09
					5-21-73	.08
					5-23-73	.09
					6-30-73	.08
					7-31-73	.08
					8-19-73	.08
					9-12-73	.09
08414000 r/	Pecos River near Mentone, Tex.	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.	21,650	1922-26*, 1968, 1968-73*	7-25-73	45.8
					8-28-73	428
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*, 1967-73	11- 2-72	7.27
					12- 7-72	5.31
					1-18-73	5.72
					2-27-73	5.36
					4- 5-73	5.32
					5-10-73	5.63
					6-13-73	4.96
					7-18-73	15.4
					8-21-73	9.40
					9-26-73	7.22
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*, 1941-73	1-18-73	3.10
					7-18-73	3.57
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*, 1966-73	11- 2-72	30.6
					12- 7-72	30.7
					1-18-73	32.2
					2-27-73	28.1
					4- 5-73	29.0
					5-10-73	28.7
					6-12-73	29.4
					7-18-73	29.2
					8-21-73	33.4
					9-26-73	31.3

* Operated as a continuous-record station.
a Estimated.
c Not applicable.
r Station operated to define variations in water quality with discharge; 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 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Rio Grande Basin--Continued				
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*, 1965-73	1-17-73 7-24-73	0 0
08447000 r/	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*, 1969-73	10-17-72 11-14-72 12-18-72 1-23-73 2-26-73 4-19-73 5-23-73 6-21-73 7-27-73 8-30-73	19.2 28.6 33.4 36.4 37.8 41.7 13.7 25.8 70.8 11.4
08456300	Las Moras Springs at Brackettville, Tex.	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, 1951-73	10- 3-72 10-18-72 11-14-72 11-28-72 12-12-72 1- 9-73 1-23-73 2- 6-73 2-21-73 3- 6-73 3-20-73 4- 3-73 4-24-73 5-22-73 6- 5-73 6-19-73 7-24-73 8- 8-73 8-21-73 9- 5-73 9-18-73	42.1 26.7 17.5 15.5 13.9 12.3 10.7 8.30 12.2 12.3 10.0 10.3 13.6 5.09 5.83 32.4 54.0 35.8 36.5 32.3 31.1

* Operated as a continuous-record station.
c Not applicable.
k Records for the current year furnished by International Boundary and Water Commission.
r Station operated to define variations in water quality with discharge; water-quality records for the current year are published in Part 2 of this report.

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 1973

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.	e1.60	1965-73	1973	<2.73	<26
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.	c1.27	1966-73	1973	<1.89	<5.5
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.	-	1966-73	10-31-72	3.56	172
		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.	-	1967-73	1973	<5.40	<230
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.	c13.7	1966-73	8- 7-73	5.92	24
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.	c.16	1966-73	6- 2-73	8.57	78
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	1966-73	9- 5-73	5.40	100
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 (discontinued).	.19	1967-73	4-24-73	g9.50	645
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.	c1.09	1967-73	3-10-73	2.10	217
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.	c4.99	1967-73	9- 6-73	9.29	1,270
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.	c3.43	1966-73	3-10-73	3.98	75
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.	c8.13	1966-73	3-23-73	5.20	490
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.	c.10	1966-73	7-29-73	3.50	78
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	1967-73	3-24-73	9.05	(†)
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.	bc.21	1966-73	9-27-73	k18.41	2,550
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 (discontinued).	3.33	1966-73	10-31-72	k11.47	43

† Discharge not determined.
< Less than.
a Equipped with stage-rainfall recorder.
b Estimated.
c Not previously published.
e Revised.
g Maximum for period October 1972 to April 1973.
k Affected by backwater.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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 southeast of Hunt-Fannin county line, and 2.2 miles southeast of Leonard.	c0.22	1966-73	3- 3-73	13.13	100
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 (discontinued).	c1.00	1966-73	4-24-73	16.34	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.	c.78	1966-73	4-24-73	14.72	322
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 upstream from mouth, and 3.8 miles west of Mount Pleasant.	c4.27	1967-73	4-24-73	k14.95	1,260
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 northeast of Pittsburg.	c7.11	1967-73	4-24-73	k15.21	933
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.	.21	1966-73	4-24-73	13.38	107
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	1966-73	4-24-73	12.83	332
		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	1966-73	4-24-73	14.06	287
08020800	Grace Creek tributary at Longview, Tex. a/	Lat 32°31'02", long 94°44'23", Gregg County, at culvert on Spur 502, 1.2 miles north of Longview, and 1.7 miles upstream from mouth (discontinued).	5.05	1967-73	4-24-73	15.56	1,620
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 (discontinued).	c.46	1966-73	7- 7-73	15.25	280
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.	c.70	1967-73	3-24-73	3.15	147
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.	c3.77	1967-73	5- 7-73	4.30	240
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.	c12.4	1967-73	4-24-73	2.64	152
		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.	c1.09	1966-73	2- 8-73	k14.03	300
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.	c.39	1967-73	6- 4-73	3.47	99
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.	c6.01	1967-73	4-19-70 1971 1972 4-17-73	e5.39 (f) (f) 5.7	e700 e<200 e<200 640

< Less than.
a Equipped with stage-rainfall recorder.
c Not previously published.
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 1973--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					
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.	c1.57	1967-73	9- 5-73	2.78	195
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	1967-73	5- 6-69 3-24-73	6.01 5.94	e610 545
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	1967-73	4-17-73	7.31	170
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.	c.15	1967-73	3-15-73	3.35	50
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.	c.90	1967-73	11- 7-72	7.56	36
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.	c.46	1967-73	7-26-73	2.69	44
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.	c5.03	1967-73	5- 6-73	3.94	470
		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.	e6.25	1967-73	4-18-73	17.61	737
		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 (discontinued).	2.95	1965-73	4-15-73	16.36	1,000
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	1965-73	7- 6-73	15.30	345
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	1969-73	6-19-73	588.88	490
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	1969-73	6- 3-73	613.76	586
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	1967-73	6- 4-73	15.69	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.	c1.70	1966-73	7-30-73	11.76	93
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	1966-73	3-10-73	11.97	100
08055580	Joes Creek at Royal Lane, Dallas, Tex.	Lat 32°53'43", long 96°41'36", Dallas County, at culvert on Royal Lane in northwest Dallas and 4.9 miles upstream from mouth.	1.94	1973	5-11-73	513.69	2,460
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	1962-73	5-11-73	425.77	2,870
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	1965-73	7- 7-73	424.50	3,320

a Equipped with stage-rainfall recorder.
c Not previously published.
e Revised.
m Equipped with stage recorder.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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	1965-73	6- 4-73	404.87	5,140
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	1962-73	6-19-73	562.28	2,180
08057130	Rush Branch at Arapaho Road, Dallas, Tex. a/	Lat 32°57'45", long 96°47'44", Dallas County, near drop-inlet structure at upstream side of Arapaho Road in north Dallas.	1.22	1973	6-19-73	595.16	504
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	1962-73	6-19-73	507.49	2,280
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	1962-73	6-19-73	508.17	2,610
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	1963-73	6- 3-73	425.45	6,180
08057415	Elam Creek at Seco Boulevard, Dallas, Tex. a/	Lat 32°44'14", long 96°41'36", Dallas County, at bridge on Seco Boulevard in southeast Dallas.	1.25	1973	6- 3-73	467.66	1,290
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.	13.2	1965-73	6- 4-73	473.20	9,240
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.	11.5	1965-73	6- 4-73	475.75	5,310
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.	37.9	1965-73	6- 4-73	437.54	10,900
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.	c.52	1965-73	9-27-73	17.20	520
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	1969-73	6-19-73	562.49	2,320
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.	13.4	1969-73	6- 4-73	446.93	5,850
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 (discontinued).	e13.0	1967-73	4-24-73	14.87	900
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.	c.90	1966-73	6- 3-73	16.46	1,300
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.	c.72	1966-73	4-15-73	13.77	545
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	1966-73	4-24-73	16.65	743

a Equipped with stage-rainfall recorder.
c Not previously published.
e Revised.
m Equipped with stage recorder.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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.	0.62	1965-73	4-24-73	16.24	332
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.	c.22	1967-73	3-24-73	6.20	118
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	1967-73	9-13-73	b5.4	255
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.	c.62	1967-73	4-17-73	2.91	41
		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	1966-73	3-24-73	8.53	1,210
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.	.13	1966-73	6-13-73	7.36	106
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	1967-73	6-13-73	11.08	2,350
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	1967-73	6-13-73	10.93	2,100
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 (temporarily discontinued May 23, 1973, due to bridge construction and channel changes).	2.77	1965-73	11-18-72	r56.51	r902
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	1965-73	6-13-73	93.69	412
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	1968-73	6-13-73	62.92	1,130
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	1965-73	6-11-73	36.11	658
08075760	Hunting Bayou at Falls Street, Houston, Tex. a/ z/	Lat 29°48'22", long 95°19'50", Harris County, at bridge on Falls Street in northeast Houston.	3.50	1965-73	6-13-73	46.70	778
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	1965-73	6-13-73	118.27	520
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	1965-73	6-13-73	85.07	992
		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	1965-73	6-11-73	p45.50	b400
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	1966-73	6-13-73	22.47	1,490
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.	-	1966-73	6-13-73	19.27	(†)

† Discharge not determined.
a Equipped with stage-rainfall recorder.
b Estimated.
c Not previously published.
p Occurred at different time than peak discharge.
r Maximum for period Oct. 1, 1972, to May 23, 1973; probably exceeded on June 13, 1973.
z Water-quality records for the current year are published in Part 2 of this report.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		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 (discontinued).	1.97	1966-73	3-24-73	s5.35	(†)
		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	1963-73	7-26-73	.54	(†)
08079570	Barnum Springs Draw near Post, Tex. a/	Lat 33°16'54", long 101°23'30", Garza County, at culvert on State Highway 207 (revised) and 6.4 miles north of Post.	c4.99	1966-73	7-30-73	5.92	214
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.	c2.75	1966-73	3-10-73	2.74	48
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.	c2.52	1966-73	3-10-73	17.80	145
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#, 1965-73	7-20-73	.93	<100
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	1966-73	8- 7-73	2.93	98
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	1966-73	3-10-73	6.63	635
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.	c3.58	1966-73	11- 1-72	25.08	842
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.	c3.53	1966-73	6- 1-73	18.24	1,450
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.	c1.07	1966-73	7-29-73	12.60	39
08090850	Cidwell Branch near Granbury, Tex. a/	Lat 32°35'41", long 97°46'24", Parker County at culvert on State Highway 51 and 10.5 10.5 (revised) north of Granbury.	3.37	1966-73	6- 5-73	11.09	34
08091100	South Paluxy River near Stephenville, Tex. a/	Lat 32°18'07", long 98°11'13", Erath County, at culvert on U.S. Highway 281 and 6 miles north of Stephenville.	2.16	1973	4-23-73	17.31	1,080
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 (discontinued).	7.82	1966-73	4-23-73	17.72	1,990
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 (discontinued).	c.36	1965-73	3-10-73	14.45	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.	-	1967-73	6- 3-73	9.89	4,170
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.	-	1966-73	10-26-72	5.05	267

† Discharge not determined.
\# Operated as a continuous-record station.
< Less than.
a Equipped with stage-rainfall recorder.
b Estimated.
c Not previously published.
s Maximum during period Oct. 1, 1972, to Aug. 8, 1973.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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.	0.40	1966-73	6- 3-73	11.36	209
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.	c.52	1966-73	4-24-73	5.92	150
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	1966-73	7-15-73	11.95	670
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	1966-73	6- 4-73	6.62	185
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	1966-73	4-24-73	5.60	6.9
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	1966-73	1973	<4.76	<50
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	1967-73	6-15-73	6.41	(†)
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.	-	1966-73	10-22-72	6.74	440
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	1966-73	3-24-73	11.79	41
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	1966-73	6- 1-73	13.55	1,270
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	1966-73	3-24-73	15.16	870
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.	c5.70	1967-73	e4-27-72 6-13-73	6.25 7.61	300 480
		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	1967-73	4-17-73	2.71	168
		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.	-	1966-73	10-21-72	<1.87	5
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.	c2.38	1966-73	7-14-73	3.14	148
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	1966-73	4-23-73	6.97	53
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.	-	1967-73	9-22-73	<2.14	5
08125450	Salt Creek tributary near Hylton, Tex. a/	Lat 32°07'57", long 100°14'02", Nolan County, at culvert on Farm Road 1170 and 1.8 miles west of Hylton.	.25	1966-73	4-23-73	5.21	38

† Discharge not determined.
< Less than.
a Equipped with stage-rainfall recorder.
c Not previously published.
e Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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.	-	1965-73	9- 6-73	3.70	295
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	1966-73	3-10-73	9.29	2,120
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.	-	1969-73	9-12-73	<3.14	10
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	1965-73	6-11-73	3.86	41
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	1966-73	7-11-73	1.45	12
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.	c12.0	1966-73	7-14-73	5.34	39
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.	c1.96	1967-73	6- 3-73	1.61	3
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	1966-73	4-23-73	<3.45	10
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.	c2.48	1967-73	6- 3-73	<3.36	10
08145100	Brady Creek tributary near Brady, Tex. a/	Lat 31°05'05", long 99°17'33", McCulloch County, at culvert on State Highway 71 (revised) and 4.3 miles southeast of Brady.	c4.05	1967-73	7-30-73	<2.55	10
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	1966-73	7-31-73	5.98	48
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.	.40	1966-73	6-12-73	3.96	46
08151300	Johnson Creek near Valley Spring, Tex. a/	Lat 30°51'38", long 98°49'52", Llano County, at culvert on State Highway 71 (revised), 0.8 mile west of Valley Spring, and 12 miles west of Llano.	5.66	1967-73	6-12-73	2.07	5
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.	-	1966-73	5- 6-73	6.06	332
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.	-	1967-73	7-15-73	4.28	547
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	1966-73	7-15-73	12.92	225
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.	-	1966-73	10-21-72	11.07	54
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	1965-73	1973	<2.38	<660

< Less than.
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c Not previously published.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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.	0.68	1967-73	6-13-73	3.93	495
		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.	.46	1966-73	7-31-73	7.07	53
08168720	Trough Creek near New Braunfels, Tex. a/	Lat 29°46'20", long 98°15'58", Comal County, at culvert on State Highway 46 and 9.8 miles (revised) northwest of New Braunfels.	.48	1966-73	6-12-73	7.55	128
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	1966-73	9-27-73	7.76	247
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	1967-73	9-27-73	9.10	3,150
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	1966-73	4-15-73	6.53	60
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.	.44	1965-73	3-24-73	6.18	185
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	1967-73	5-12-68 4-12-69 5-15-70 9-11-71 5-10-72 3-23-73	8.01 6.83 2.86 3.19 8.21 7.76	c5,300 c2,450 c174 c228 c6,000 4,250
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	1966-73	5-11-68 6-11-73	8.70 7.60	c116 57
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	1969-73	9-26-73	6.26	303
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	1969-73	9-26-73	12.54	2,070
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	1969-73	6-12-73	7.63	2,000
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	1967-73	9-26-73	7.31	222
08178736	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.	c.45	1972-73	5- 7-72 9-26-73	7.21 8.50	c274 434
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	1966-73	7-15-73	6.56	70
08179200	Medina River tributary near Pipe Creek, Tex. a/	Lat 29°38'20", long 98°56'18", Bandera County, at culvert on Farm Road 1283 and 5.8 miles (revised) south of Pipe Creek.	c.30	1966-73	7-16-73	5.71	131
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	1969-73	7-16-73	10.91	1,790

a Equipped with stage-rainfall recorder.
c Not previously published.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--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					
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	1966-73	7-16-73	8.94	590
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	1966-73	10-28-72	8.41	1,230
		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	1966-73	6-25-73	8.46	293
		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	1965-73	9-27-73	7.99	73
08198900	East Elm Creek near Sabinal, Tex. a/	Lat 29°18'49", long 99°23'58", Medina County, at bridge on U.S. Highway 90 and 4.1 miles (revised) east of Sabinal.	c10.6	1967-73	7-15-73	2.39	450
08200900	Bone Creek near Hondo, Tex. a/	Lat 29°33'17", long 99°06'12", Medina County, at culvert on Farm Road 689 and 14.8 miles (revised) north of Hondo.	.19	1966-73	6-11-73	6.56	143
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.	c1.21	1966-73	1973	-	0
08207200	Rutledge Hollow Creek at Poteet, Tex. a/	Lat 29°02'35", long 98°34'22", Atascosa County, at culvert on Farm Road 476 (School Road) at Poteet.	9.33	1966-73	6-12-73	7.21	760
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.	32.8	1966-73	6-12-73	11.83	1,700
		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	1966-73	6-25-73	9.80	265
		San Fernando Creek Basin					
08212300	Tranquitas Creek at Kingsville, Tex. a/	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.	48.5	1965-73	6-25-73	3.99	(†)
08212320	North Las Animas Creek tributary near Freer, Tex. a/	Lat 27°47'04", long 98°37'05", Duval County, at culvert on State Highway 16 and 6.7 miles (revised) south of Freer.	.07	1969-73	11-18-72	4.27	35
		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.	c2.35	1966-73	7-17-73	4.91	9
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 (discontinued).	.74	1966-73	1973	-	0
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.	c.32	1966-73	9- 7-73	<6.00	10
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.	-	1966-73	9- 6-73	3.75	16
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.	-	1966-73	2-22-73	2.06	15

† Discharge not determined.
< Less than.
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c Not previously published.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Rio Grande Basin--Continued					
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.	c1.59	1966-73	4-17-73	5.16	188
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.	-	1966-73	1973	-	0
08444400	Three Mile Mesa Creek near Fort Stockton, Tex. a/	Lat 30°50'16", long 102°50'26", Pecos County, at culvert on U.S. Highway 285 (revised) and 4.6 miles southeast of Fort Stockton.	c1.04	1966-73	7-19-73	4.60	350
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	1967-73	7-14-73	<2.97	20
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.	c.46	1971-73	7-31-73	9.26	20
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.	c7.90	1967-73	6-11-73	4.27	140
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.	c.39	1966-73	8- 1-73	3.88	73
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.	c10.0	1966-73	7- 8-73	6.95	170
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.	c3.39	1966-73	1973	-	0
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	1966-73	10-25-72	k6.0	552
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.	1.20	1966-73	9-14-73	4.68	108
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.	.40	1966-73	9-14-73	9.52	144

< Less than.
a Equipped with stage-rainfall recorder.
c Not previously published.
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 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Sabine River Basin				
Sabine River (Taintor Gate Release Channel)	Gulf of Mexico	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 and about 15 miles northeast of Burkeville, Tex.	-	1972	3-13-73 5-22-73 7- 3-73 7-31-73	74.6 74.1 75.2 70.1
		Trinity River Basin				
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.	-	1972	9-19-73	58.3
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 miles northwest of Arlington, Tex.	-	1972	9-19-73 9-22-73	70.5 59.6
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.	-	1972	9-21-73	128
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.	-	1972	9-22-73	133
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.	-	1972	9-22-73	179
		Goose Creek Basin				
Goose Creek (formerly station 08067520)	Gulf of Mexico	Lat 29°48'00", long 95°00'15", Harris County, at bridge on Interstate Highway 10 and 0.7 mile southeast of McNair, Tex.	6.70	1963-65, 1971-72#	4-16-73 4-18-73 5- 4-73	251 400 7.16
		San Jacinto River Basin				
San Jacinto River	Gulf of Mexico	Lat 29°47'30", long 95°03'42", Harris County, at bridge on Market Street Road, 250 ft below bridge on Interstate Highway 10 and 1.9 miles south of Highlands, Tex.	-	-	6-15-73	98,200
Clodine Ditch	Buffalo Bayou	Lat 29°45'20", long 95°38'43", Harris County, at bridge on county road entering Barker Reservoir and 2 miles south of Addicks, Tex.	-	1964, 1966, 1968	5-25-72 4-20-73 4-23-73	c14.1 248 44.5
Little Vince Bayou (formerly station 08075740)	San Jacinto River	Lat 29°42'38", long 95°12'08", Harris County, at bridge on East Eagle Street, Pasadena, Tex.	4.33	1963-65, 1971-72#	4-17-73 5- 4-73 5-22-73 6- 5-73	358 2.64 .22 203
Greens Bayou	Buffalo Bayou	Lat 29°53'30", long 95°14'17", Harris County, at bridge on Lake Houston Parkway and about 11 miles northeast of Houston, Tex.	-	1963, 1971-72	2- 7-73 5-16-73	20.8 19.7
Halls Bayou	Greens Bayou	Lat 29°50'52", long 95°15'42", Harris County, at bridge on East Houston Road at Houston, Tex.	-	1963, 1971-72	2- 7-73 5-16-73	21.8 17.1
		Clear Creek Basin				
Clear Creek	Gulf of Mexico	Lat 29°31'16", long 95°06'09", Harris-Galveston County line, at bridge on State Highway 3 at League City, Tex.	-	-	6-14-73	5,950
		Dickinson Bayou Basin				
Dickinson Bayou (formerly station 08077640)	Gulf of Mexico	Lat 29°26'09", long 95°10'11", Galveston County, at bridge on Farm Road 517 and about 5.0 miles east of Alvin, Tex.	15.7	1963-65, 1971-72#	4-16-73 5-28-73	387 6.82
Dickinson Bayou	.....do.....	Lat 29°27'22", long 95°02'51", Galveston County, at bridge on State Highway 3 at Dickinson, Tex.	-	-	6-14-73	2,710

Operated as a low-flow partial-record station.
c Not previously published.

Discharge measurements made at miscellaneous sites during water year 1973--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.	-	1968-72	11-15-72 2-27-73 4- 4-73	0.19 .68 .58
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, 1969-72	10- 5-72 10-26-72 5-17-73 6- 5-73 6-25-73 7-10-73 7-26-73 8-31-73 9-27-73	0 142 167 283 0 0 322 147 126
South Texas Water Co.'s canal	.....do.....	Lat 29°27'07", long 95°29'30", Fort Bend County, at concrete flume over Oyster Creek, 1 mile west of Juliff, and 2.5 miles below pumps.	-	1939, 1948-49, 1951-52, 1956, 1958, 1963-72	10- 5-72 5-17-73 6- 5-73 6-21-73 7-27-73 8- 3-73 8-31-73 9-27-73	0 339 490 368 468 295 293 0
		Colorado River Basin				
Beals Creek	Colorado River	Lat 32°15'26", long 101°25'01", Howard County, 50 ft upstream from bridge on 11th Place at Big Spring, Tex.	-	-	5- 1-73	4.38
Do.....	.....do.....	Lat 32°14'56", long 101°21'38", Howard County, 150 ft downstream from bridge on Moss Lake Road and 6.3 miles east of Big Spring, Tex.	-	-	5- 1-73	5.22
Do.....	.....do.....	Lat 32°12'32", long 101°12'52", Howard County, 300 ft upstream from bridge on Farm Road 821 and 15 miles east of Big Spring, Tex.	-	-	5- 1-73	4.39
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, 1970-72	5-25-73	1.36
San Angelo Lake 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 Lake and about 50 ft above North Concho River at San Angelo, Tex.	-	1959-72	10-25-72 11-24-72 12-30-72 2- 3-73 4-12-73 5-21-73 6-26-73 7-30-73 9- 4-73	a.05 a.07 a.08 a.22 a.02 a.02 a.02 a.01 a.06
Baker Spring	San Saba River	Lat 31°12'11", long 98°54'38", San Saba County, 3.8 miles southwest of Algerita, Tex.	-	1938, 1952, 1957	6- 4-73	2.34
		Little Robin Slough Basin				
Little Robin Slough	Matagorda Bay	Lat 28°44'00", long 96°03'20", Matagorda County, at county road and 6.0 miles northwest of Matagorda, Tex.	-	1969, 1971	10-12-72	d.51
		Mad Island Slough Basin				
West Branch Mad Island Slough	Mad Island Slough	Lat 28°42'09", long 96°07'29", Matagorda County, at bridge on county road and 3.5 miles southeast of Collegeport, Tex.	-	1971	10-11-72	d4.13
		Oyster Lake Basin				
Unnamed Tributary	Oyster Lake	Lat 28°38'45", long 96°08'52", Matagorda County, at bridge on private road and 5.5 miles south of Collegeport, Tex.	-	1971	10-12-72 10-18-72	d14.0 d1.75
		Matagorda Bay Basin				
Unnamed Tributary	Matagorda Bay	Lat 28°39'18", long 96°11'35", Matagorda County, at bridge on county road and 5.0 miles south of Collegeport, Tex.	-	1971	10-12-72 10-18-72	d5.32 d10.7
		Tres Palacios Bay Basin				
Willow Dam Slough	Tres Palacios Bay	Lat 28°46'00", long 96°07'35", Matagorda County, at culvert on Farm Road 1095 and 4.3 miles northeast of Collegeport, Tex.	-	1971	10-12-72 10-17-72 10-18-72	0 0 0
Johnsons Timber Slough	Tres Palacios Creek	Lat 28°47'02", long 96°07'44", Matagorda County at culvert on Farm Road 521 and 5.2 miles northeast of Collegeport, Tex.	-	1971	10-11-72 10-18-72	d.41 ad.08

a Estimated.
d Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Turtle Creek Basin				
Turtle Creek	Turtle Bay	Lat 28°46'18", long 96°14'04", Matagorda County, at county road and 4.0 miles north of Palacios, Tex.	-	1969, 1971	10-12-72 10-18-72	d2.73 d2.65
		East Carancahua Creek Basin				
Lunis Creek	West Carancahua Creek	Lat 28°54'48", long 96°23'41", Jackson County, at bridge on county road and 6.3 miles east of La Ward, Tex.	-	1971	10-11-72 10-16-72 10-17-72 10-18-72	0 0 0 0
		Keller Creek Basin				
Keller Creek	Keller Bay	Lat 28°50'37", long 96°29'00", Jackson County, at bridge on Farm Road 616 and 1.2 miles west of La Ward, Tex.	-	1967-68, 1970-71	10-12-72 10-13-72 10-16-72 10-17-72 10-18-72	0 0 0 0 0
		Huisache Creek Basin				
Huisache Creek	Huisache Cove	Lat 28°49'23", long 96°32'32", Jackson County, at bridge on county road, 50 yards east of Farm Road 1593, and 1.2 miles south of Lolita, Tex.	-	1967-68, 1971	10-12-72 10-16-72 10-17-72 10-18-72	0 0 0 0
		Swan Lake Basin				
Unnamed Drainage Ditch	Swan Lake	Lat 28°44'10", long 96°33'12", Jackson County, at culvert on Farm Road 1593 and 4.3 miles north of Point Comfort, Tex.	-	1971	10-12-72 10-18-72	d.49 d.28
		Lavaca River Basin				
Mustang Creek	Navidad River	Lat 29°02'32", long 96°28'11", Jackson County, at bridge on Farm Road 1157 and 2.8 miles east of Ganado, Tex.	-	1970-71	10-11-72 10-18-72	d37.4 d12.4
		Garcitas Creek Basin				
Casa Blanca Creek	Garcitas Creek	Lat 28°51'35", long 96°48'47", Victoria County, at bridge on county road and 3.4 miles southwest of Inez, Tex.	-	1971	10-12-72 10-16-72 10-17-72 10-18-72	0 0 0 0
Marcado Creek	.....do.....	Lat 28°49'10", long 96°46'22", Victoria County, at bridge on private road and 6.0 miles southwest of Inez, Tex.	-	1971	10-12-72	d1.25
Arenosa Creek	.....do.....	Lat 28°54'46", long 96°46'24", Jackson-Victoria County line, at bridge on U.S. Highway 59 and 1.1 miles northeast of Inez, Tex.	-	1965-71	10-12-72 10-18-72	d3.56 ad.25
Dry Creek	Arenosa Creek	Lat 28°55'21", long 96°45'18", Victoria County, at bridge on U.S. Highway 59 and 2.4 miles northeast of Inez, Tex.	-	1968, 1971	10-11-72 10-16-72 10-17-72 10-18-72	0 0 0 0
		Coloma Creek Basin				
East Coloma Creek	Coloma Creek	Lat 28°30'06", long 96°38'47", Calhoun County, at bridge on State Highway 238 and 7.8 miles south of Port Lavaca, Tex.	-	1969, 1971	10-11-72 10-18-72	d13.6 13.4
West Coloma Creek	.....do.....	Lat 28°28'41", long 96°40'10", Calhoun County, at bridge on State Highway 238 and 5.2 miles northeast of Seadrift, Tex.	-	1969, 1971	10-16-72	0
		San Antonio Bay Basin				
Drain	San Antonio Bay	Lat 28°23'03", long 96°41'50", Calhoun County, 0.2 mile upstream from mouth, 1.0 mile southeast of Swan Point, and 2.1 miles south of Seadrift, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Do.....	.....do.....	Lat 28°23'38", long 96°42'00", Calhoun County, 0.4 mile upstream from mouth, 0.8 mile northeast of Swan Point, and 1.4 miles south of Seadrift, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Do.....	.....do.....	Lat 28°24'09", long 96°41'42", Calhoun County, at county road, 0.7 mile upstream from mouth, 1.2 miles southeast of Seadrift, and 1.4 miles northeast of Swan Point, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Seadrift Drain	Seadrift Creek	Lat 28°24'47", long 96°41'58", Calhoun County, at State Highway 185, 100 ft north of Missouri Pacific Railroad Co. tracks, 0.4 mile upstream from Seadrift Creek, and 0.7 mile east of Seadrift.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Seadrift Creek	San Antonio Bay	Lat 28°25'02", long 96°42'36", Calhoun County, north of Seadrift, 200 ft east of county road, and 0.4 mile upstream from Seadrift drain.	-	1971	8- 1-73 8- 6-73 8- 8-73	d3.05 d3.28 d3.80

a Estimated.
d Water-quality records for the current year are published in Part 2 of this report.

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		San Antonio Bay Basin--Continued				
Drain	San Antonio Bay	Lat 28°24'55", long 96°43'55", Calhoun County, at end of county road, 0.6 mile upstream from mouth, 1.3 miles east of Seadrift, and 1.6 miles south of intersection of State Highways 185 and 238.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
		Guadalupe River Basin				
San Antonio Springs	San Antonio River	Lat 29°27'56", long 98°28'04", Bexar County, just above Hildebrandt Street, San Antonio, Tex.	-	1951-52, 1959-62	7-27-73	87.4
San Geronimo Creek	Medina River	Lat 29°31'17", long 98°48'54", Medina County, at Farm Road 471.	-	1971-72	7-16-73	6,720
Guadalupe River	Guadalupe Bay	Lat 28°28'42", long 96°51'42", Refugio-Calhoun County line, at bridge on State Highway 35 and 2 miles northeast of Tivoli, Tex.	-	1951, 1968	8- 2-73 8- 9-73	df10,400 df6,160
		Townsend Bayou Basin				
Unnamed Tributary	Townsend Bayou	Lat 28°28'32", long 96°52'03", Refugio County, at culvert on State Highway 35, 0.3 mile west of Guadalupe River, and 1.9 miles northeast of Tivoli, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Drain	.....do.....	Lat 28°28'02", long 96°52'50", Refugio County, at culvert on State Highway 35, 0.3 mile northeast of Missouri Pacific Railroad Co. tracks, and 1.0 mile north of Tivoli, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Miller Creek	.....do.....	Lat 28°27'00", long 96°52'24", Refugio County, 0.9 mile east of Tivoli and 3.4 miles north of intersection of State Highway 113 and Farm Road 3035.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
		Hynes Bay Basin				
Drain	Hynes Bay	Lat 28°25'08", long 96°52'14", Refugio County, at culvert on county road, 0.5 mile north of intersection with State Highway 113, 1.3 miles east of Maudlowe, and 2.7 miles southeast of Tivoli, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Do.....	.....do.....	Lat 28°22'22", long 96°50'18", Refugio County, at culvert on Farm Road 2040, 1.0 mile upstream from mouth, and 1.1 miles south of Austwell, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Do.....	.....do.....	Lat 28°21'49", long 96°49'09", Refugio County, at culvert on Farm Road 2040, 1.5 miles west of McDowell Point, and 2.3 miles southeast of Austwell, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
Unnamed Tributary	.....do.....	Lat 28°21'42", long 96°47'42", Refugio County, 0.2 mile upstream from mouth and 0.2 mile south of McDowell Point, Tex.	-	1971	8- 1-73 8- 6-73 8- 7-73 8- 8-73	0 0 0 0
		Nueces River Basin				
Middle Verde Creek	Verde Creek	Lat 29°34'05", long 99°05'48", Medina County, at bridge on Farm Road 689 and 16.6 miles north of Hondo, Tex.	-	-	4-12-73	a17
		Rio Grande Basin				
La Union East Canal	Rio Grande	Lat 32°00'15", long 106°39'08", Dona Ana County, N. Mex., at headgate of main canal and 2.8 miles west of Anthony, Tex.	-	1969-72	10- 2-72 11- 9-72 12-12-72 1-23-73 3-13-73 4-17-73 5-15-73 6-18-73 7- 9-73 8-13-73 9-10-73	0 0 0 0 0 76.0 79.1 64.8 165 153 128
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.	-	1969-72	10- 2-72 11- 9-72 12-13-72 1-23-73 3-12-73 4-17-73 5-15-73 6-19-73 8-13-73 9-10-73	0 0 0 0 0 0 0 0 1.06 2.06

a Estimated.
d Water-quality records for the current year are published in Part 2 of this report.
f At this stage, river inundates ten channels on flood plain, which includes the following named bayous: Hog, Frenchman, Schwing, and Goff.

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Rio Grande Basin--Continued				
La Union West Canal	Rio Grande	Lat 32°00'15", long 106°39'12", Dona Ana County, N. Mex., at headgate of the main canal and 2.8 miles west of Anthony, Tex.	-	1969-72	10- 2-72	0
					11- 9-72	0
					12-12-72	0
					1-23-73	0
					3-13-73	0
					4-17-73	59.2
					5-15-73	50.6
					6-18-73	60.3
					7- 9-73	140
					8-13-73	154
					9-10-73	94.1
Nemexas Drain	.....do.....	Lat 31°57'22", long 106°38'12", Dona Ana County, at Farm Road 273 and 0.5 mile east of La Union, N. Mex.	-	1969-72	10- 2-72	.80
					11- 9-72	.58
					12-13-72	.81
					1-23-73	.70
					3-12-73	.23
					4-17-73	3.33
					5-15-73	5.16
					6-18-73	10.1
					7- 9-73	13.0
					8-13-73	12.7
					9-10-73	13.8
West Drain	.....do.....	Lat 31°57'07", long 106°39'29", Dona Ana County, at Farm Road 273 and 0.7 mile west of La Union, N. Mex.	-	1969-72	10- 2-72	.40
					11- 9-72	.26
					12-13-72	.55
					1-23-73	.61
					3-12-73	.08
					4-17-73	4.46
					5-15-73	12.0
					6-18-73	9.29
					7- 9-73	13.2
					8-13-73	47.4
					9-10-73	18.3
Montoya West Drain	.....do.....	Lat 31°48'10", long 106°34'21", Dona Ana County, at downstream end of culvert under Sunland Park Airport runway at Sunland Park, N. Mex.	-	-	6-18-73	1.15
					7-10-73	1.37
					8-14-73	1.93
					9-11-73	3.66
Montoya Drain	.....do.....	Lat 31°48'50", long 106°34'12", El Paso County, at Frontera Road in Upper Rio Grande Valley at El Paso, Tex.	-	1969-72	10- 2-72	13.7
					11- 9-72	12.8
					12-13-72	15.4
					1-23-73	12.6
					3-13-73	9.12
					4-17-73	24.4
					5-14-73	23.2
					6-18-73	31.7
					7-10-73	42.9
					8-14-73	50.2
					9-11-73	73.6
Cibolo Creek	.....do.....	Lat 29°55'46", long 104°19'28", Presidio County, at Cieneguita Ranch road crossing 7.5 miles north of Shafter, Tex.	-	-	7- 7-73	0
Do.....	.....do.....	Lat 29°52'54", long 104°20'26", Presidio County, 600 ft upstream from Osa Creek and 5.2 miles upstream from Shafter, Tex.	-	-	7- 7-73	.16
Osa Creek	Cibolo Creek	Lat 29°52'59", long 104°21'16", Presidio County, 0.8 mile upstream from mouth and 4.5 miles northwest of Shafter, Tex.	-	-	7- 7-73	.43
Unnamed Tributary	.....do.....	Lat 29°51'59", long 104°20'27", Presidio County, 1,000 ft upstream from mouth and 4.1 miles northwest of Shafter, Tex.	-	-	7- 7-73	.23
Sierra Alto Creek	.....do.....	Lat 29°51'41", long 104°19'30", Presidio County, 200 ft upstream from mouth and 3.3 miles north of Shafter, Tex.	-	-	7- 7-73	0
Cibolo Creek	Rio Grande	Lat 29°50'52", long 104°19'06", Presidio County, 500 ft downstream from unnamed tributary and 2.3 miles north of Shafter, Tex.	-	-	7-21-73	.62
Do.....	.....do.....	Lat 29°48'58", long 104°18'11", Presidio County, 0.3 mile downstream from bridge on U.S. Highway 67 at Shafter, Tex.	-	-	7- 8-73	0
Do.....	.....do.....	Lat 29°48'53", long 104°18'19", Presidio County, at low-water crossing in Shafter, Tex.	-	-	7-21-73	1.66

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Rio Grande Basin--Continued				
Cibolo Creek	Rio Grande	Lat 29°48'22", long 104°18'32", Presidio County, 500 ft upstream from low-water crossing and 1.0 mile south of Shafter, Tex.	-	-	7- 7-73	1.03
Do	do	Lat 29°47'57", long 104°18'40", Presidio County, 1.0 mile downstream from county road crossing and 2.1 miles south of Shafter, Tex.	-	-	7- 8-73	0
Do	do	Lat 29°45'48", long 104°18'26", Presidio County, 5.2 miles downstream from Shafter, Tex.	-	-	7-21-73	.86
Do	do	Lat 29°44'00", long 104°17'20", Presidio County, 500 ft upstream from unnamed tributary and 7.5 miles south of Shafter, Tex.	-	-	7-20-73	0
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- 3-72	24.7
					10-18-72	25.2
					11-14-72	25.0
					11-28-72	24.2
					12-12-72	24.3
					1- 9-73	22.9
					1-23-73	23.6
					2- 6-73	23.5
					3- 6-73	21.7
					3-20-73	21.0
					4- 3-73	19.7
					4-24-73	18.6
					5-22-73	17.8
					6- 5-73	17.6
					6-19-73	16.2
					7-24-73	20.3
					8- 8-73	14.4
					8-21-73	13.6
					9- 5-73	13.6
					9-18-73	13.9
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- 3-72	15.3
					10-18-72	11.7
					11-14-72	10.4
					11-28-72	10.3
					12-12-72	4.73
					1- 9-73	2.93
					1-23-73	1.01
					2- 6-73	3.00
					3- 6-73	1.76
					3-20-73	2.0
					4- 3-73	1.2
					4-24-73	0
					5-22-73	0
					6- 5-73	4.29
					7-19-73	13.7
					7-24-73	11.2
					8- 8-73	13.5
					8-21-73	15.0
					9- 5-73	17.9
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U. S. DEPARTMENT OF THE INTERIOR
Geological Survey
Federal Building
300 East 8th Avenue
Austin, Texas 78701