Flood Stages and Discharges For Small Streams in Texas

Compilation of Data through September 1971

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

Prepared in cooperation with the Texas Highway Department and the U. S. Department of Transportation, Federal Highway Administration

Flood Stages and Discharges For Small Streams in Texas

By E. E. Schroeder

U.S. GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
Texas District
I. D. Yost, District Chief

Research Study 4-5-65-85
Interim Report No. 85-7

Compilation of Data through September 1971

U.S. GEOLOGICAL SURVEY
OPEN-FILE REPORT

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1973

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( ) Numbers in parentheses identify Highway Districts in which the stations are located.

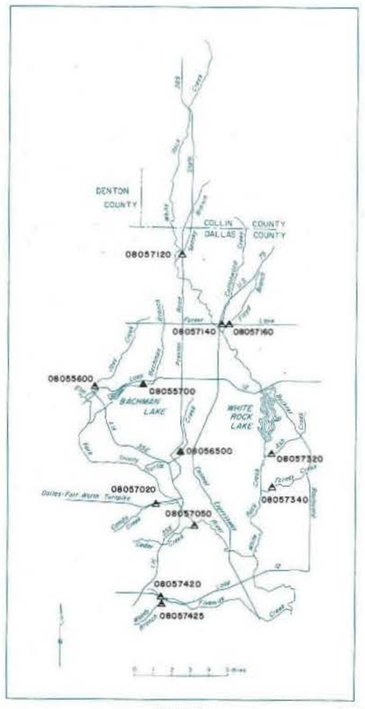
a/ Small watershed streamflow station in the U.S. Geological Survey network financed by funds from agencies other than the Texas Highway Department.

ILLUSTRATION

TABLES

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE TEXAS HIGHWAY DEPARTMENT AND THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION



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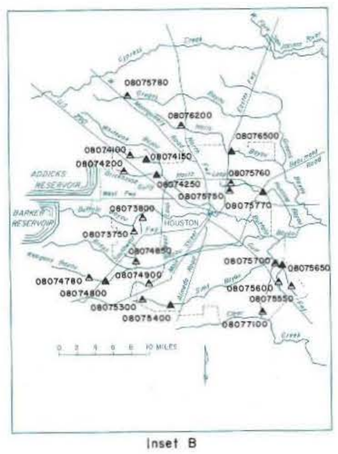

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NEW MEXICO

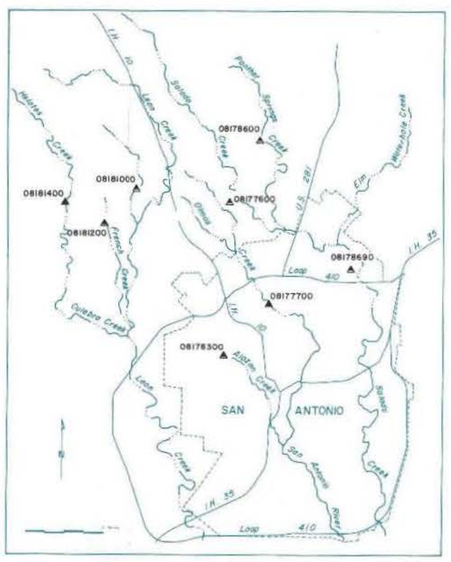
OKLAHOMA

ARKANSAS

LOUISIANA

MEXICO

GULF OF MEXICO



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EXPLANATION

07299940 ▲ Stream-gaging or reservoir-content station

08090850 ▲ Crest-stage partial-record station

9 Texas Highway District

Base compiled, with some modification, from River Basin Maps, IACWR, Subcommittee on Hydrology. (1949 ed.)

FIGURE 1

Gaging stations on small streams in Texas, September 30, 1971

50 0 50 100 MILES

FLOOD STAGES AND DISCHARGES FOR SMALL STREAMS IN TEXAS

By

E. E. Schroeder
U.S. Geological Survey

INTRODUCTION

Research Study No. 4-5-65-85, "Hydrologic Investigation of Small Drainage Areas in Texas," is a cooperative program between the Texas Highway Department and the U.S. Geological Survey. This program, which began in September 1964, is financed by funds made available for research by the Texas Highway Department and the U.S. Department of Transportation, Federal Highway Administration.

This report is the seventh in a series of interim reports that describe the objectives, planning, instrumentation, progress, and status of the project. The report includes data collected during the 1971 water year.

Program Objective

The objective of the program is to obtain basic hydrologic data that may be used to define the magnitude and frequency of floods for drainage areas of less than 20 square miles. When sufficient data have been obtained, a magnitude and frequency analysis of floods for streams of less than 20 square miles will be prepared. These data will supplement those used by Patterson (1963).

Program Planning

To accomplish the objective, a network of 150 crest-stage partial-record gages was established. These gages are distributed throughout the State to sample all hydrologic areas and flood-frequency regions as defined by Patterson (1963) and to obtain a representative sample of physical characteristics. Information for unusual peak discharges at ungaged sites is obtained as the opportunity arises.

The planning of this program is directed toward providing a useful regional flood-frequency relation for small streams as soon as the necessary data are collected. Recognizing that an annual-flood series distribution will be used, rainfall-runoff simulation techniques are being tested for possible use in extending records of annual peaks. These techniques should afford usable relations sooner than would be possible by using routine techniques such as the "index-flood method."

INSTRUMENTATION

Each gage site is equipped with one or more crest-stage gages and a stage-rainfall recorder. The crest-stage gage consists of two modified 2-inch pipe caps attached to an appropriate length of 2-inch pipe that encloses a wooden or metal rod. The upper cap contains a 1/4-inch vent hole to release trapped air, and the lower cap has six 1/4-inch intake holes that allow water to enter. The intake holes in the lower cap are designed to give optimum performance with respect to "drawdown" and "stackup." The gage is mounted in a vertical position on the flood plain.

A small amount of granulated cork is placed inside the 2-inch pipe near the bottom of the inner rod. When a rise occurs, the water entering the pipe floats the cork inside the pipe. At the maximum stage, the cork adheres to the inner rod leaving a distinct "peak mark," the elevation of which is determined from the datum to which the gage was originally set.

A typical installation consists of two crest-stage gages--one headwater gage and one tailwater gage. The headwater gage is located upstream from the culvert at a distance approximately equal to one culvert width in order to record the true water-surface elevation upstream from any drawdown-zone disturbance. The tailwater gage is located downstream from the culvert to record the water-surface elevation at the culvert outlet. The difference between the recorded headwater and tailwater peaks is known as the differential head. A peak rate of flow is determined from the differential head by standard U.S. Geological Survey methods of computation (Bodhaine, 1968).

Additional hydrologic data are obtained at each site by a stage and rainfall recorder (S-R recorder). This recorder is a small compact instrument that records, on a circular chart, the time distribution of rainfall and stage. The recorder chart makes one complete revolution each day. The instrument is ideally suited for recording a single storm between visits, but when more than one storm occurs between visits, the record is superimposed. Although the S-R recorder has limitations, sufficient data can be obtained over a period of time to satisfy the needs for the rainfall-runoff analyses.

STATUS OF THE PROGRAM

The construction phase of the program was completed during the 1967 water year. Data are being collected at 82 other small-stream stations for other projects, making a total of 232 stations available for this study. The locations of all these gages are shown on figure 1 (in pocket). All combinations of flood-frequency regions and hydrologic areas have been sampled with the exception of subregion 6-A, a low-lying coastal subregion near the Aransas Bay-Nueces Bay area. No suitable site could be found in that area. A complete list of gaging stations is included in the section "Station Data."

Figure 1

Gaging stations on small streams in Texas, September 30, 1971.

(Map is in pocket on back cover of the report)

Theoretical stage-discharge ratings have been computed for 142 stations utilizing the culvert geometry and slope in a computer program (Somers and Selner, 1965). These theoretical ratings give the stage-discharge relation from the lowest elevation controlled by the culvert to an elevation at which flow over the roadway begins. Above the roadway, the discharge is a combination of field-determined culvert flow plus the measured or computed flow over the roadway.

The stage-discharge relation for the other eight gages, which are located at bridges, will be defined by current-meter measurements or by indirect methods such as slope-area, contracted-opening, slope-conveyance, flow-over-roadway embankment, or other special studies.

One provision of the cooperative agreement is to obtain peak discharges for floods of unusual magnitude or for floods creating special problems at miscellaneous or ungaged sites. Notable flood events that occurred during the water year are listed in table 1. During the year, four miscellaneous measurements were obtained (table 2).

PROGRAM FOR THE YEAR ENDING SEPTEMBER 30, 1972

Data from existing gages will be collected and tabulated. Stage-discharge curves will be defined and extended as the need arises. Operation and maintenance will be performed as required.

Watershed characteristics as follows will be tabulated for each watershed on a 7-1/2-minute series USGS topographic map, scale 1:24,000: (1) Drainage area, (2) main-channel length measured from the gage to the drainage divide, and (3) a slope index.

There is no standard method of determining a slope index; however, the unit slope between points located 85 and 10 percent of the channel length above the gage is a significant factor when used as an independent variable in regression analysis (Benson, 1962). In these analyses, the 85-10 slope index is generally second only to drainage area in statistical significance when correlated with peak discharge.

HYDROLOGIC CONDITIONS

During the 1971 water year, annual runoff was deficient in the north, east, and central parts of the State, below average in the west, and average in the south.

Runoff at individual sites varied greatly. Several streamflow stations in the southern Edwards Plateau area recorded new peak discharges for the period of record. This occurred during the period Aug. 11-14.

No wide-spread major flooding occurred during the year. Numerous flash floods covering relatively small areas did occur. Tropical disturbances caused heavy rainfall in some coastal areas.

Table 1.--Notable flood events during the 1971 water year

Location	Date	Remarks
Lower Neches-Sabine area below Toledo Bend Reservoir	Oct. 27, 1970	Extensive flooding in poorly drained areas. National Weather Service station at Deweyville reported a 24-hour total of 18.15 inches of rainfall.
Near Knox City, Knox County	May 29, 1971	Heavy rains of 6 to 8 inches damaged railroad bed.
Northern Runnels County	June 7, 1971	An official rainfall of 5.34 inches within 3 hours caused extensive property damage in and near Winters.
Laredo	June 28, 1971	An official rainfall of 4.40 inches in 2 hours, 10 minutes caused residential flooding from Zacate and Chacon Creeks. The Rio Grande crested within 1/2 foot of the bottom of the International Bridge.
Corpus Christi and vicinity, Nueces County	Aug. 2-6, 1971	Downpours of up to 11 inches in 24 hours caused extensive flooding in Robstown, Corpus Christi, and in neighboring communities.

Table 1.--Notable flood events during the 1971 water year--Concluded

Location	Date	Remarks
Southern Edwards Plateau, southwest Texas	Aug. 11-14, 1971	Heavy rainfall, locally in excess of 15 inches between the 11th and 14th. Flooding occurred on the main stems and tributaries of the Medina, Nueces, Frio, and Sabinal Rivers. Six drowning deaths were reported.
Southeast and south-central Texas	Sept. 9-13, 1971	Hurricane Fern. Rains of up to 26 inches fell in the Coastal Bend of Texas. Heavy flooding occurred in south Texas. Two deaths were reported. Property and crop damage was reported at $30,231,000.

Table 2.--Maximum discharge at miscellaneous sites

Basin	Stream	Location	Drainage area (sq mi)	Date	Discharge (cfs)	Cfs per sq mi
Colorado	Bluff Creek tributary	Lat 31°56'59", long 99°58'15", Runnels County, at Farm Road 53 and 0.5 mile west of junction with U.S. Highway 83 at Winters, Tex.	4.48	6- 7-71	2,980	665
Colorado	Little Coyote Creek	Lat 31°57'35", long 100°01'46", Runnels County, at Farm Road 384 and 3.9 miles west of Winters, Tex.	6.31	6- 7-71	8,000	1,268
Nueces	San Rogue Creek	Lat 28°17'05", long 99°36'48", Dimmit County, at bridge on U.S. Highway 83 about 4.0 miles south of Catarina, Tex.	285	6-29-71	54,900	193
Nueces	Verde Creek	Lat 29°24'16", long 99°06'59", Medina County, 1,000 ft downstream from bridge on Farm Road 689 and 5.6 miles northeast of Hondo, Tex.	105	8-12-71	90,000	857

DATA COMPILATION

The "station data" section of this report lists the available annual peak data for watersheds of less than 20 square miles. In addition to the 150 Highway Program stations, 82 other stations are included, thereby grouping all of the available continuous data for small watersheds into one volume. These 82 stations are identified in the table of contents by (a/).

All stations are listed in downstream order by station number, which appears to the left of the station name. The number appearing to the right of the station name identifies the Highway District in which the station is located. All stations are plotted on figure 1 and are identified by number. In addition, symbols are used to identify the type of station.

Although the State contractual year ends on August 31, the water year ending on September 30 is used as the 12-month period of data collection so that reporting will be continuous with previously collected streamflow data.

Some notable floods that occurred during the period October 1, 1970, to September 30, 1971, are listed in table 1. This list includes only those floods associated with unusual amounts of rainfall or runoff or for which a special request regarding peak discharge was received. Additional details about some of the more destructive floods are contained in various reports prepared by the U.S. Geological Survey, Texas Water Development Board, U.S. Army Corps of Engineers, National Weather Service, U.S. Department of Agriculture, and others.

The measurements of peak discharge at miscellaneous small-area sites obtained during the reporting period are listed in table 2. Additional information concerning these measurements may be obtained from the files of the U.S. Geological Survey district office in Austin, Texas.

Table 3 is a tabulation of runoff and point rainfall data collected at selected gaging stations. Data for the storm that produced the maximum annual rate of runoff and data for other significant storms are listed.

DEFINITION OF TERMS

Some of the terms and abbreviations used in this report are defined as follows:

Gaging station.--a particular site on a stream where systematic observations of gage height or discharge are obtained.

Cubic foot per second (cfs).--the rate of discharge of a stream whose channel is 1 square foot in cross-sectional area and whose average velocity is 1 foot per second.

Gage height.--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. When the gage is referred to mean sea level datum, the term "elevation" is commonly used instead of gage height.

Drainage area.--area of a stream at a specified location measured in a horizontal plane, which is so enclosed by a topographic divide that direct surface runoff from precipitation normally would drain by gravity into the stream above the specified point. Drainage areas given herein include noncontributing areas unless otherwise noted.

Main-channel length.--the distance, in miles, of the main channel, extended to the watershed divide, as measured with a divider, set to a distance equal to 0.05 mile. Mile zero is at the gaging station.

Slope index.--a slope equal to the difference in elevation between the 85 and 10 percent points, in feet, divided by the main-channel distance between these points, in miles, where these points are 10 and 85 percent of the distance along the main channel upstream from the station.

Time of day.--time expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

Water year.--a 12-month period ending on September 30, identified by the year in which it ends; thus, the 12-month period ending September 30, 1971, is identified as the 1971 water year.

SELECTED REFERENCES

Benson, M. A., 1962, Factors influencing the occurrence of floods in a humid region of diverse terrain: U.S. Geol. Survey Water-Supply Paper 1580-B, 64 p.

Bodhaine, G. L., 1968, Measurements of peak discharge at culverts by indirect methods: Techniques of water-resources investigations of the U.S. Geol. Survey, book 3, ch. A3, Applications of hydraulics.

Patterson, J. L., 1963, Floods in Texas, magnitude and frequency of peak flow: Texas Water Comm. Bull. 6311.

Ruggles, F. H., Jr., 1966, Floods on small streams in Texas: U.S. Geol. Survey open-file rept. no. 89.

Schroeder, E. E., 1967, Flood stages and discharges for small streams in Texas 1966: Interim rept. no. 85-2, U.S. Geol. Survey open-file rept.

_____1969, Flood stages and discharges for small streams in Texas 1967: Interim rept. no. 85-3, U.S. Geol. Survey open-file rept.

_____1971, Flood stages and discharges for small streams in Texas 1968: Interim rept. no. 85-4, U.S. Geol. Survey open-file rept.

_____1971, Flood stages and discharges for small streams in Texas 1969: Interim rept. no. 85-5, U.S. Geol. Survey open-file rept.

_____1972, Flood stages and discharges for small streams in Texas 1970: Interim rept. no. 85-6, U.S. Geol. Survey open-file rept.

Somers, W. P., and Selner, G. I., 1965, Computations of stage-discharge relationships at culverts: U.S. Geol. Survey surface-water techniques, Hydraulic measurement and computation, book 1, ch. 8.

Table 3.--Incremental rainfall and discharge for significant storms

07307720 Cottonwood Creek tributary near Afton, Tex. (25)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 10, 1971	0255	0	0
	0300	.10	215
	0305	.35	305
	0315	.60	480
	0325	.85	630
	0335	1.50	820
	0340	1.85	860
	0345	1.95	860
	0400	2.30	670
	0500	2.45	347
	0600	2.56	215
	0700	2.56	0

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08017700 Burnett Branch near Canton, Tex. (10)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 26, 1971	0630	--	--
	0645	0	21
	0700	.70	50
	0715	1.30	111
	0720	1.35	127
	0730	1.50	135
	0745	1.65	103
	0800	1.80	82
	0830	--	44
	0845	--	26
	0850	1.80	21
	0900	1.80	--
July 27	1130	0	--
	1200	.05	--
	1230	.20	--
	1300	.25	--
	1330	.30	--
	1400	.50	--
	1500	.50	21
	1600	.50	31
	1700	.50	37
	1730	.50	21
	1800	.50	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08020800 Grace Creek tributary at Longview, Tex. (10)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 28, 1971	0400	0	--
	0430	.05	--
	0500	.55	90
	0515	.75	128
	0530	.85	206
	0545	.85	228
	0600	.85	186
	0615	.85	166
	0630	.85	128
	0645	.85	109
	0700	.85	90
	0730	.85	--
Aug. 4	1600	0	--
	1630	0	--
	1700	.50	--
	1715	.65	109
	1730	.75	228
	1745	.80	386
	1800	.85	358
	1830	1.00	278
	1900	1.15	228
	1930	1.30	186
	2000	1.50	166
	2030	1.50	147
	2100	1.50	166
	2130	1.50	128
	2145	1.50	109
	2200	1.50	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08022010 Redmon Branch near Hallsville, Tex. (19)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 27, 1970	0000	2.15	--
	0020	2.15	--
	0030	2.70	--
	0045	3.70	--
	0100	3.80	--
	0200	4.10	--
	0300	4.25	--
	0330	4.35	--
	0345	4.60	2
	0400	4.70	7
	0430	4.85	11
	0500	4.85	21
	0600	4.85	27
	0630	4.85	33
	0700	4.85	60
	0715	4.85	76
	0730	4.85	72
	0745	4.85	68
	0800	4.85	64
	0830	4.85	44
	0900	4.85	30
	1000	4.85	18
	1100	4.85	15
	1200	4.85	13
	1300	4.85	11
	1400	4.85	9
	1600	4.85	5
	1800	4.85	4
	1900	4.85	2
	2000	4.85	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08030700 Adams Bayou tributary near Deweyville, Tex. (20)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 11, 1970	0800	0	--
	1200	.09	--
	1300	.14	--
	1400	.95	--
	1500	1.70	--
	1600	2.53	--
	1700	3.34	10
	1800	4.10	25
	1900	4.28	40
	2000	4.29	56
	2100	4.30	92
	2200	4.30	132
	2300	4.30	155
	2400	4.30	165
Oct. 12	0300	4.34	210
	0600	4.35	225
	1200	4.35	257
	1800	4.35	273
	2400	4.35	273
Oct. 13	1200	4.35	245
	2400	4.35	210
Oct. 14	1200	4.35	145
	2400	4.35	115
Oct. 15	1200	4.35	97
	2400	4.35	88
Oct. 16	1200	4.35	82
	2400	4.35	75
Oct. 17	1200	4.35	64
	2400	4.35	46

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08041400 Drakes Branch near Spurger, Tex. (20)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 5, 1971	1530	0	60
	1545	.40	86
	1600	1.15	83
	1630	1.15	69
	1700	1.15	60
Sept. 10	1500	0	--
	2000	.20	--
	2100	.60	--
	2130	.65	--
	2145	1.20	60
	2200	1.30	78
	2215	1.30	86
	2230	1.30	73
	2300	1.30	64
	2330	1.30	60

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08047200 West Creek at Fort Worth, Tex. (02)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 29, 1971	1800	0	--
	1850	0	--
	1900	.30	--
	1915	1.25	--
	1930	2.35	--
	1945	2.95	--
	2000	3.15	76
	2005	3.20	92
	2010	3.20	275
	2015	3.20	500
	2020	3.20	660
	2025	3.20	860
	2030	3.20	660
	2035	3.20	530
	2040	3.20	385
	2045	3.20	310
	2050	3.20	255
	2055	3.20	195
	2100	3.20	132
	2105	3.20	115
	2110	3.20	99
	2115	3.20	92
	2120	3.20	84
	2125	3.20	76
	2130	3.20	--
	2200	3.20	--
	2300	3.30	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08053100 Jones Valley Creek tributary near Forestburg, Tex. (03)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
May 12, 1971	0125	0	--
	0130	.1	--
	0145	1.2	--
	0200	1.3	--
	0230	1.3	55
	0235	1.3	440
	0245	1.3	680
	0250	1.3	535
	0300	1.3	260
	0330	1.4	101
	0400	1.8	55
	0500	2.3	40
	0515	2.5	96
	0600	2.5	83
	0700	2.5	50
	0800	2.5	40
	0900	2.5	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08062850 Bachelor Creek near Terrell, Tex. (18)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 10, 1970	1200	0	--
	1300	.05	--
	1400	.05	--
	1430	.15	--
	1440	.20	--
	1445	.25	--
	1450	.45	--
	1455	.85	--
	1500	.85	--
	1600	.85	--
	1630	.85	12
	1700	.85	23
	1730	.85	43
	1800	.85	85
	1830	.85	225
	1900	.85	345
	2000	.85	630
	2200	.85	740
	2400	.85	780
Oct. 11	0200	.85	820
	0400	.85	780
	0600	.85	630
	0800	.85	465
	1000	.85	425
	1200	.85	265
	1400	.85	175
	1600	.85	125
	1800	.85	105
	2000	.85	105
	2200	.85	95
	2400	.85	75
Oct. 12	0200	.85	70
	0400	.85	60
	0600	.85	51
	0800	.85	47
	1000	.85	39
	1200	.85	35
	1400	.85	29
	1600	.85	26
	1800	.85	23
	2000	.85	20
	2200	.85	20
	2400	.85	14

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08062850 Bachelor Creek near Terrell, Tex. (18)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 13, 1970	0100	0.85	12
	0200	.85	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08063550 Alvarado Branch near Alvarado, Tex. (02)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 23, 1970	2230	0	--
	2245	.25	--
	2300	.75	--
	2315	1.15	46
	2330	1.85	78
	2345	1.90	226
	2400	1.95	326
Oct. 24	0015	1.95	326
	0030	2.05	296
	0045	2.05	254
	0100	2.05	212
	0200	2.15	112
	0300	2.25	66
	0400	2.25	55
	0430	2.25	46
	0500	2.25	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08067550 Welch Branch near Huntsville, Tex. (17)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
May 11, 1971	2100	0	--
	2130	1.05	--
	2145	1.80	34
	2200	2.45	47
	2215	2.65	86
	2230	2.75	108
	2300	2.90	102
	2330	3.00	114
	2400	3.05	138
May 12	0030	3.05	172
	0100	3.05	182
	0130	3.05	172
	0200	3.05	108
	0230	3.05	60
	0300	3.05	47
	0400	3.05	34

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08067750 Landrum Creek tributary near Montgomery, Tex. (12)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 23, 1970	1630	0	--
	1700	.10	0
	1710	.25	5
	1720	.55	14
	1730	1.00	45
	1740	1.50	81
	1750	1.75	53
	1800	1.90	18
	1815	1.90	14
	1830	1.90	8
	1900	1.90	3

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08077550 Cowart Creek near Friendswood, Tex. (12)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Nov. 13, 1970	1000	0	--
	1100	.40	--
	1200	1.35	--
	1300	1.50	--
	1330	1.50	--
	1400	2.00	--
	1500	2.00	157
	1600	2.00	340
	1700	2.00	436
	1800	2.00	472
	2000	2.00	491
	2400	2.00	460
Nov. 14	0600	2.00	370
	1200	2.00	292
	1800	2.00	223
	2400	2.00	163

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08085300 Humphries Draw near Haskell, Tex. (08)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
June 12, 1971	1730	0	--
	1745	.85	--
	1800	1.10	--
	1810	1.25	--
	1815	1.50	--
	1850	1.60	0
	1900	1.65	385
	2000	1.65	8
	2100	1.65	2
	2200	1.65	1
	2300	1.65	.2
	2400	1.65	0

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08089100 Elm Creek tributary near Graford, Tex. (02)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
June 16, 1971	0450	0	--
	0500	.15	--
	0510	.40	--
	0515	.60	--
	0530	.60	--
	0545	1.45	--
	0600	2.00	3.2
	0610	2.15	7.6
	0625	2.20	14
	0630	2.25	17
	0650	2.40	22
	0715	2.40	18
	0740	2.40	14
	0800	2.40	8.6
	0900	2.40	4.6
	1000	2.40	3.2

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08090850 Cidwell Branch near Granbury, Tex. (02)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 29, 1971	1745	1.85	--
	1800	2.00	--
	1815	2.30	--
	1830	2.50	--
	1845	2.60	--
	1900	2.65	--
	1915	2.70	--
	1930	2.90	50
	1945	3.30	62
	2000	3.80	81
	2015	3.85	138
	2030	3.90	211
	2045	3.95	230
	2100	4.00	220
	2115	4.00	153
	2130	4.00	95
	2145	4.00	74
	2200	4.00	74
	2215	4.00	68
	2230	4.00	62
	2245	4.00	56
	2300	4.00	50
	2330	4.00	--
	2400	4.00	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08091200 Morris Branch near Bluff Dale, Tex. (02)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
May 29, 1971	1600	0.75	--
	1630	.75	--
	1635	.75	10
	1640	.75	12
	1645	.75	15
	1650	.80	22
	1655	.85	30
	1700	1.00	34
	1705	1.10	25
	1710	1.45	25
	1715	1.60	20
	1720	1.75	15
	1725	2.00	10
	1730	2.10	--
	1740	2.25	--
	1750	2.40	--
	1800	2.45	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08093200 Bond Branch near Hillsboro, Tex. (09)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 26, 1970	1830	0	--
	1845	.10	--
	1900	.25	--
	1915	.30	34
	1930	.40	48
	1945	.40	62
	2000	.40	69
	2015	.70	90
	2030	.85	112
	2045	.90	136
	2100	1.00	112
	2115	1.00	104
	2130	1.05	97
	2145	1.05	90
	2200	1.05	76
	2230	1.05	69
	2300	1.20	62
	2400	1.20	55
Oct. 27	0030	1.20	55
	0045	1.25	62
	0100	1.45	83
	0115	1.60	97
	0130	1.75	104
	0145	1.75	104
	0200	1.75	83
	0215	1.75	69
	0230	1.75	62
	0245	1.75	55
	0300	1.75	48
	0330	1.75	34
	0400	1.75	--
Apr. 17, 1971	1700	0	--
	1715	0	--
	1730	.20	34
	1745	.45	62
	1800	.75	104
	1815	.75	168
	1830	.75	128
	1845	.75	97
	1900	.75	83
	1915	.75	76
	1930	.75	62

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08093200 Bond Branch near Hillsboro, Tex. (09)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Apr. 17, 1971--Con.	1945	0.75	55
	2000	.75	48
	2015	.75	41
	2030	.75	34
	2100	.75	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08100400 Bermuda Branch near Gatesville, Tex. (09)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 25, 1971	0500	0	--
	0505	.08	--
	0510	.16	--
	0515	.20	--
	0520	.30	--
	0525	.37	--
	0530	.38	--
	0535	.38	--
	0540	.48	--
	0545	.55	--
	0550	.70	--
	0555	1.10	--
	0600	1.35	--
	0605	1.80	<77
	0610	2.05	77
	0615	2.35	155
	0620	2.55	184
	0625	2.95	200
	0630	3.10	213
	0635	3.25	184
	0640	3.28	155
	0645	3.32	116
	0650	3.34	77
	0655	3.36	<77
	0700	3.37	--
	0715	3.45	--
	0730	3.46	--
	0745	3.53	--
	0800	3.57	--
	0830	3.67	--
	0900	3.72	--
	0930	3.72	--
	1000	3.72	--
	1030	4.05	--
	1100	4.27	--
	1130	4.60	--
	1145	5.05	--
	1200	5.40	--
	1300	5.55	--
	1400	5.70	--
	1430	5.85	--

< Less than amount shown.

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08103450 Fleece Branch near Lampasas, Tex. (23)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
May 8, 1971	2240	0	--
	2245	.05	--
	2250	.20	--
	2255	.35	--
	2300	.60	--
	2305	.90	--
	2310	1.20	--
	2315	1.45	--
	2320	1.65	--
	2325	1.73	--
	2330	1.74	--
	2335	1.75	--
	2340	1.76	86
	2345	1.77	145
	2350	1.78	239
	2355	1.79	270
	2400	1.80	294
May 9	0000	1.80	294
	0005	1.80	298
	0010	1.80	270
	0015	1.80	233
	0020	1.80	174
	0025	1.80	108
	0030	1.80	56
	0035	1.80	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08108800 Little Branch near Bryan, Tex. (17)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
May 28, 1971	1855	0	--
	1900	.04	--
	1905	.20	--
	1910	.50	--
	1915	.70	--
	1920	.90	--
	1925	.94	--
	1930	1.10	--
	1935	1.30	--
	1940	1.42	2.8
	1945	1.46	3.4
	1950	1.52	4.5
	1955	1.62	7.5
	2000	1.65	11
	2005	1.70	30
	2010	1.78	35
	2015	1.80	41
	2020	1.82	44
	2025	1.82	48
	2030	1.82	47
	2035	1.82	45
	2040	1.82	41
	2045	1.82	38
	2050	1.82	35
	2055	1.82	32
	2100	1.82	30
	2115	1.82	22
	2130	1.82	11
	2145	1.82	8.3
	2200	1.82	6.6
	2215	1.82	4.5
	2230	1.82	3.9
	2245	1.82	3.4
	2300	1.82	2.8
	2330	1.82	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08110350 Plummers Creek at Mexia, Tex. (09)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 12, 1970	1750	0	--
	1800	.03	--
	1805	.06	--
	1810	.13	--
	1815	.40	--
	1820	.62	--
	1825	.67	--
	1830	.68	--
	1835	.70	--
	1840	.95	--
	1845	1.10	--
	1850	1.20	--
	1855	1.33	--
	1900	1.38	--
	1915	1.44	--
	1920	1.44	<150
	1925	1.44	670
	1930	1.44	965
	1935	1.44	1,060
	1940	1.44	1,180
	1945	1.44	1,430
	1950	1.44	1,450
	1955	1.44	1,420
	2000	1.44	1,360
	2005	1.44	1,320
	2010	1.44	1,250
	2015	1.44	1,170
	2020	1.44	1,090
	2025	1.44	1,030
	2030	1.46	970
	2045	1.46	775
	2100	1.46	630
	2115	1.46	525
	2120	1.46	455
	2125	1.46	(420)
	2130	1.46	(380)
	2145	1.46	(260)
	2200	1.46	(170)
	2230	1.46	<150

< Less than amount shown.
( ) Estimated.

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08114900 Seabourne Creek near Rosenberg, Tex. (12)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 9, 1971	1200	0	--
	1400	.13	--
	1900	.17	--
	2030	.24	--
	2100	.43	--
	2330	.52	--
Sept. 10	0200	.79	--
	0245	1.04	--
	0300	1.37	--
	0330	1.99	5
	0400	2.03	16
	0430	2.21	85
	0500	2.39	135
	0515	2.48	157
	0600	2.50	192
	0630	2.52	221
	0700	2.62	231
	0715	2.86	231
	0800	3.04	250
	0900	3.27	281
	1100	3.47	293
	1200	3.72	303
	1330	3.85	309
	1400	3.98	310
	1700	3.98	281
	1800	4.06	270
	1945	4.15	250
	2000	4.28	250
	2200	4.36	231
	2300	4.45	237
	2400	4.46	231
Sept. 11	0200	4.49	218
	0300	4.60	212
	0600	4.66	175
	0815	4.66	157
	0900	5.00	148
	1000	5.00	148
	1200	5.00	170
	1400	5.00	148
	1800	5.00	112
	2400	5.00	68

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08114900 Seabourne Creek near Rosenberg, Tex. (12)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 12, 1971	0800	5.00	43
	1600	5.00	30
	2400	5.00	19
Sept. 13	1200	5.00	14
	2400	5.00	10

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08116400 Dry Creek near Rosenberg, Tex. (12)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Oct. 11, 1970	0700	0	0.5
	0800	.13	13
	0815	1.00	--
	0900	1.13	37
	1000	1.24	58
	1100	1.24	114
	1200	1.53	235
	1300	1.60	350
	1400	1.88	--
	1500	2.30	494
	1600	3.88	800
	1700	4.43	950
	1800	4.73	--
	2000	4.73	1,060
	2240	4.79	--
	2300	5.35	--
	2400	5.60	1,260
Oct. 12	0100	5.75	--
	0400	5.75	1,350
	0500	5.75	1,400
	0600	5.75	1,350
	0800	5.75	1,300
	1200	5.75	1,100
	1500	5.75	950
	1700	5.75	800
	1900	5.75	550
	2100	5.75	350
	2400	5.75	195
Oct. 13	0400	5.75	130
	0800	5.75	96
	1200	5.75	75
	1600	5.75	62
	2400	5.75	46
Oct. 14	0800	5.75	39
	1200	5.75	34
	1800	5.75	26
	2400	5.75	22
Oct. 15	0800	5.75	17
	1600	5.75	12
	2400	5.75	9

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08116400 Dry Creek near Rosenberg, Tex. (12)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 4, 1971	0645	0	0.8
	0700	.27	--
	0800	.27	--
	0845	.77	--
	0900	1.82	6.2
	0915	2.32	--
	1000	2.53	26
	1100	2.57	28
	1200	2.57	99
	1300	2.73	280
	1400	2.97	326
	1500	3.03	314
	1800	3.07	180
	2100	3.07	96
	2400	3.07	59
Aug. 5	0300	3.07	38
	0600	3.07	24
	0900	3.07	18
	1200	3.07	15
	1800	3.07	13
	2400	3.07	12
Aug. 6	0900	3.07	11
Sept. 9	1200	0	4.0
	1400	.15	4.0
	1900	.20	4.0
	2100	.50	4.0
	2400	.64	4.6
Sept. 10	0200	.92	--
	0300	1.60	6.9
	0400	2.38	13
	0500	2.80	--
	0600	2.93	62
	0700	3.07	--
	0800	3.55	158
	0900	3.82	350
	1000	3.97	550
	1100	4.06	630
	1200	4.35	--
	1300	4.45	678
	1400	4.65	678

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08116400 Dry Creek near Rosenberg, Tex. (12)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 10, 1971--Con.	1600	4.65	646
	1800	4.75	536
	2100	5.05	362
	2400	5.22	302
Sept. 11	0300	5.28	245
	0600	5.45	195
	0800	5.45	--
	0900	5.85	--
	1000	5.85	142
	1200	5.85	205
	1400	5.85	220
	1600	5.85	200
	2000	5.85	122
	2400	5.85	87
Sept. 12	0800	5.85	54
	1600	5.85	60
	2400	5.85	26
Sept. 13	0800	5.85	18
	1600	5.85	14
	2400	5.85	12

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08152800 Spring Creek near Fredericksburg, Tex. (14)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 13, 1971	1830	0	--
	1835	.01	--
	1840	.03	--
	1845	.05	--
	1850	.10	--
	1855	.15	--
	1900	.21	--
	1905	.30	--
	1910	.50	--
	1915	.70	--
	1920	1.00	--
	1925	1.08	--
	1930	1.20	--
	1935	1.55	--
	1940	1.80	--
	1945	1.90	--
	1950	2.10	--
	1955	2.19	24
	2000	2.41	43
	2005	2.80	56
	2010	3.10	84
	2015	3.31	115
	2020	3.41	174
	2025	3.43	200
	2030	3.44	174
	2045	3.51	142
	2100	3.74	92
	2115	3.80	56
	2130	3.82	24
	2145	3.83	--
	2200	3.83	--

Table 3.--Incremental rainfall and discharge for significant storms--Continue

08169850 East Pecan Branch near Gonzales, Tex. (13)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
June 27, 1971	2200	0	--
	2230	.2	--
	2245	.3	--
	2305	.3	--
	2315	.5	--
	2340	.8	--
June 28	0130	.9	--
	0645	1.0	--
	0700	1.1	--
	0720	1.1	--
	0725	1.2	--
	0745	2.0	24
	0755	2.1	28
	0800	2.2	32
	0830	3.1	48
	0840	3.4	35
	0845	3.8	32
	0900	3.8	24
	0925	3.9	--
	0930	4.2	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08172100 West Elm Creek near Niederwald, Tex. (14)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Mar. 12, 1971	1645	0	--
	1655	.1	--
	1700	.2	--
	1715	.2	--
	1740	.4	--
	1800	.4	--
	1805	.8	58
	1815	1.2	65
	1900	1.2	65
	2030	1.2	65
	2300	1.2	58

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08181200 French Creek tributary near Helotes, Tex. (15)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
June 19, 1971	0940	0	--
	0945	.10	--
	1000	.15	--
	1010	.16	--
	1015	.22	--
	1030	.24	--
	1045	.40	--
	1100	.58	--
	1135	.67	--
	1225	.71	--
	1230	.79	--
	1235	.87	120
	1240	.94	132
	1300	.94	145
	1330	1.40	185
	1335	1.41	185
	1400	1.44	225
	1420	1.47	240
	1440	1.50	225
	1445	1.50	225
	1515	1.50	185
	1545	1.50	145
	1615	1.50	120

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08189600 Olmos Creek tributary near Skidmore, Tex. (16)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 31, 1971	0855	0	--
	0915	.3	--
	1115	.5	--
	1125	.8	--
	1200	.9	--
	1800	.9	--
	1900	1.0	--
	1930	1.0	--
	2000	1.5	--
	2100	1.7	--
	2330	1.9	--
Aug. 1	0615	2.1	--
	0620	2.2	--
	0630	2.8	--
	0645	3.1	--
	0915	3.2	0.4
	1000	3.2	6
	1045	3.2	35
	1245	3.2	35
	1315	3.3	49
	1345	3.3	58
	1500	3.3	58
	1520	3.8	49
	1545	4.0	49
	1700	4.1	49
	1800	4.1	35
	1930	4.1	35
	2345	4.1	15
	2400	4.2	15
Aug. 2	0100	4.5	15
	0400	4.6	9
	0700	4.6	6
	0800	4.8	6
	0900	4.9	6
	1500	4.9	3
	1550	5.0	3
	1600	5.2	1
	1645	5.7	1
	1855	5.8	1
	1905	5.9	.4
	2000	5.9	.4
Aug. 3	1200	6.0	--
	1350	6.0	--
	1410	6.3	--
	2400	6.4	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08189600 Olmos Creek tributary near Skidmore, Tex. (16)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 4, 1971	0430	6.4	--
	0500	6.5	--
	0505	6.6	--
	0800	6.7	--
	1300	6.8	--
	1400	6.9	--
	1430	6.9	0.4
	1500	7.0	3
	1545	7.0	9
	1550	7.0	15
	1600	7.3	15
	1610	7.6	15
	1645	7.9	49
	1715	7.9	74
	1730	7.9	90
	1800	7.9	100
	1830	7.9	100
	1900	8.0	90
	2000	8.0	82
	2100	8.1	74
	2200	8.1	66
	2300	8.2	58
	2400	8.2	49
Aug. 5	0120	8.2	35
	0200	8.2	35
	0400	8.2	15
	0600	8.2	15
	0800	8.2	15
	0935	8.2	9
	1000	8.8	9
	1010	9.0	9
	1030	9.2	9
	1200	9.4	9
	1540	9.5	6
	1600	9.5	6
	2000	9.5	6
	2400	9.5	6
Sept. 10	0000	0	--
	0300	0	--
	0600	.1	--
	1000	.2	--
	1105	.3	--
	1130	.6	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08189600 Olmos Creek tributary near Skidmore, Tex. (16)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 10, 1971--Con.	1200	0.8	--
	1230	1.1	--
	1245	1.2	--
	1300	1.2	0.5
	1430	1.5	.5
	1500	1.6	.5
	1600	1.9	2
	1700	2.0	2
	1800	2.2	2
	1940	2.5	4
	2020	3.1	4
	2030	3.2	4
	2050	3.4	6
	2100	3.5	6
	2115	3.6	10
	2230	4.0	19
	2240	4.1	19
	2330	4.5	113
	2400	4.6	132
Sept. 11	0045	5.0	145
	0110	5.2	156
	0130	5.4	178
	0210	5.4	182
	0230	5.5	178
	0245	5.6	178
	0330	5.9	156
	0400	6.0	145
	0445	6.0	123
	0500	6.1	113
	0600	6.2	94
	0700	6.2	77
	0745	6.3	61
	0800	6.3	52
	1000	6.5	52
	1030	6.8	45
	1035	6.9	52
	1100	7.1	69
	1115	7.2	77
	1140	7.4	94
	1255	8.2	178
	1300	8.3	178
	1330	8.4	200
	1400	8.8	227
	1430	8.9	227

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08189600 Olmos Creek tributary near Skidmore, Tex. (16)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 11, 1971--Con.	1500	9.6	240
	1530	10.5	290
	1600	10.6	365
	1620	10.7	400
	1630	10.8	627
	1700	11.0	365
	1705	11.0	365
	1730	11.2	335
	1745	11.5	312
	1800	11.6	305
	1900	12.0	290
	2000	13.2	240
	2015	12.3	227
	2100	12.6	178
	2215	13.0	167
	2245	13.2	156
	2330	13.3	145
	2400	13.5	145
Sept. 12	0100	13.6	145
	0130	13.7	132
	0200	13.8	132
	0300	14.0	113
	0400	14.1	94
	0600	14.2	69
	0800	14.2	41
	1000	14.2	19
	1400	14.2	6
	1600	14.3	6
	1630	14.3	6
	1800	14.3	6
	2400	14.3	6

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08198900 East Elm Creek near Sabinal, Tex. (15)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 11, 1971	2030	0	--
	2100	.2	--
	2115	1.4	--
	2120	1.6	--
	2300	1.8	--
Aug. 12	0100	2.2	--
	0200	2.2	--
	0520	2.2	--
	0530	2.3	0
	0535	2.5	.02
	0600	2.6	1.4
	0615	2.6	15
	0630	2.6	145
	0700	2.7	475
	0720	2.8	470
	0730	3.0	465
	0800	3.0	455
	0820	3.1	445
	1000	3.2	430
	1100	3.2	430
	1200	3.2	430
	1500	3.2	330
	1630	3.2	250
	1800	3.2	145
	2030	3.2	47
	2245	3.2	15
Aug. 13	0015	3.2	6.9
	0030	3.4	5.2
	0040	4.1	5.2
	0050	4.2	3.8
	0105	4.4	3.8
	0200	4.4	2.3
	0600	4.5	.39
	0710	4.8	.25
	0715	4.9	.25
	0730	5.0	.19
	0750	5.4	.14
	0805	6.1	.14
	0830	7.3	.08
	0900	8.1	70
	0930	9.1	1,030
	0955	9.7	1,570
	1005	9.8	1,700
	1100	9.9	3,180

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08198900 East Elm Creek near Sabinal, Tex. (15)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 13, 1971--Con.	1145	10.0	5,200
	1200	10.0	5,600
	1215	10.0	5,500
	1230	10.0	5,200
	1300	10.0	4,300
	1330	10.0	3,600
	1400	10.0	3,100
	1430	10.0	2,670
	1500	10.0	2,250
	1530	10.0	1,860
	1600	10.0	1,620
	1630	10.0	1,350
	1700	10.0	1,140
	1730	10.0	1,020
	1900	10.0	620
	2000	10.0	560
	2330	10.3	450
Aug. 14	0040	10.4	430
	0100	10.5	430
	0400	10.6	350
	0420	10.7	350
	0500	10.7	330
	0520	10.9	330
	0845	10.9	250

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08200900 Bone Creek near Hondo, Tex. (15)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 11, 1971	2200	0	--
	2230	.5	--
	2300	.8	--
	2305	1.0	(9)
	2310	1.3	40
	2315	1.5	127
	2320	1.5	155
	2325	1.6	163
	2330	1.6	170
	2335	1.7	163
	2340	1.8	140
	2345	1.9	120
	2350	2.0	108
	2355	2.0	103
	2400	2.0	96
Aug. 12	0010	2.0	77
	0020	2.0	60
	0030	2.0	43
	0040	2.0	33
	0050	2.1	26
	0100	2.1	20
	0130	2.1	14
	0145	2.2	14
	0155	2.5	12
	0200	2.6	12
	0210	2.7	12
	0215	2.7	12
	0220	2.8	(9)
	0230	3.0	--
	0300	3.2	--
	0345	3.2	--
	0400	3.4	(9)
	0410	3.7	12
	0430	4.0	29
	0455	4.5	60
	0500	4.6	90
	0515	5.5	103
	0520	--	86
	0545	--	252
	0550	--	285
	0610	--	350

( ) Estimated.

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08200900 Bone Creek near Hondo, Tex. (15)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 12, 1971--Con.	0625	--	285
	0635	--	277
	0645	--	270
	0650	--	252
	0700	--	188
	0715	5.5	112
	0730	5.8	60
	0745	5.9	52
	0750	5.9	47
	0810	6.0	52
	0830	6.0	36
	0900	6.0	20
	0930	6.0	14
	1000	6.0	(9)
	1500	6.1	--
	2345	6.1	--
Aug. 13	0045	6.2	--
	0100	6.5	--
	0200	6.6	--
	0215	6.6	(9)
	0225	6.6	23
	0235	6.6	36
	0245	6.6	43
	0255	6.7	68
	0300	6.7	73
	0335	6.7	33
	0345	6.8	26
	0400	7.1	17
	0415	7.2	14
	0500	7.5	20
	0530	7.9	26
	0550	8.1	43
	0600	8.3	43
	0620	8.4	47
	0645	8.8	40
	0715	9.2	68
	0725	9.3	86
	0730	9.3	87
	0740	9.4	86
	0800	9.5	43
	0810	9.5	40

( ) Estimated

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08200900 Bone Creek near Hondo, Tex. (15)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 13, 1971--Con.	0830	9.8	29
	0855	9.9	40
	0900	9.9	40
	0945	10.1	26
	1000	10.2	26
	1045	10.4	26
	1100	10.5	23
	1200	10.5	14
	1300	10.5	12
	1400	10.5	(9)
	1405	10.5	--

( ) Estimated.

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08207700 Lucas Creek near Pleasanton, Tex. (15)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 2, 1971	0245	0.06	--
	0300	.08	--
	0315	.09	--
	0320	.13	--
	0330	.25	--
	0345	.34	--
	0355	.48	--
	0400	.56	--
	0415	.58	--
	0430	.65	--
	0435	.67	--
	0445	.68	--
	0600	.70	--
	0630	.71	--
	0700	.77	--
	0705	.82	--
	0710	.90	--
	0715	1.07	--
	0735	1.14	--
	0745	1.18	--
	0800	1.20	--
	0915	1.31	--
	0920	1.34	--
	0945	1.36	--
	0955	1.45	--
	1000	1.47	--
	1010	1.50	--
	1100	1.54	--
	1220	1.66	--
	1315	1.76	--
	1345	1.86	--
	1430	1.96	--
	1555	1.99	--
	1645	2.02	--
	1730	2.05	--
	1745	2.06	--
	1755	2.11	--
	1800	2.12	--
	1930	2.30	--
	2015	2.30	--
	2045	2.32	--
	2235	2.36	--
	2300	2.42	--
	2345	2.43	--
	2400	2.48	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08207700 Lucas Creek near Pleasanton, Tex. (15)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 3, 1971	0010	2.60	--
	0030	2.76	--
	0040	2.79	--
	0100	2.98	--
	0110	3.02	60
	0120	3.06	68
	0200	3.06	128
	0230	3.06	160
	0300	3.06	184
	0330	3.07	184
	0400	3.07	184
	0425	3.07	172
	0430	3.09	165
	0455	3.11	148
	0500	3.12	148
	0505	3.14	144
	0510	3.16	138
	0515	3.19	134
	0600	3.21	108
	0630	3.21	94
	0645	3.21	90
	0700	3.24	90
	0715	3.26	86
	0730	3.26	82
	0740	3.30	78
	0750	3.40	78
	0800	3.55	72
	0900	3.63	68
	1100	3.63	60
	1620	3.65	--
	1630	3.69	--
	1655	3.70	--
	1700	3.81	--
	1705	3.84	--
	1800	3.84	--
	1810	3.94	--
	1930	3.99	--
	1940	4.02	--
	1950	4.18	--
	1955	4.22	--
	2000	4.34	--
	2100	4.39	--
	2200	4.42	--
	2400	4.42	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08207700 Lucas Creek near Pleasanton, Tex. (15)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 4, 1971	0330	4.42	60
	0400	4.42	138
	0430	4.42	295
	0500	4.42	480
	0530	4.62	580
	0600	4.80	680
	0615	4.96	620
	0630	5.07	540
	0645	5.11	480
	0700	5.12	440
	0710	5.12	460
	0720	5.16	540
	0800	5.16	680
	0830	5.16	1,000
	0840	5.38	1,100
	0845	5.42	1,140
	0900	5.43	1,300
	0905	5.43	1,300
	0920	5.47	1,450
	0930	5.62	1,520
	0940	6.00	1,600
	0955	6.30	1,600
	1000	6.44	1,600
	1005	6.58	1,600
	1045	6.68	1,600
	1100	6.69	1,600
	1200	6.72	1,300
	1335	6.74	1,140
	1500	6.78	1,040
	1700	6.78	880
	1800	6.78	680
	1900	6.78	540
	2000	6.78	440
	2100	6.78	280
	2200	6.78	196
	2300	6.78	160
	2400	6.78	138
Aug. 5	0200	6.78	90
	0400	6.78	82
	0600	6.78	68
	0800	6.78	60

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08207700 Lucas Creek near Pleasanton, Tex. (15)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 10, 1971	0645	0.04	--
	0730	.08	--
	0900	.16	--
	1625	.44	--
	1700	.51	--
	1725	.60	--
	1800	.64	--
	1915	.66	--
	1935	.84	--
	1945	1.16	--
	2000	1.34	--
	2015	1.37	--
	2140	1.38	--
	2200	1.45	--
	2245	1.50	--
	2400	1.51	--
Sept. 11	0045	1.60	--
	0100	1.61	--
	0440	1.61	--
	0500	1.72	--
	0545	1.88	--
	0600	1.89	--
	0630	1.90	--
	0635	1.90	--
	0700	1.93	--
	0710	1.94	--
	0725	1.94	--
	0745	1.96	--
	0805	1.98	--
	0830	2.00	--
	0930	2.10	--
	1030	2.16	--
	1845	2.20	--
	1940	2.26	72
	2000	2.33	92
	2030	2.36	96
	2100	2.40	88
	2130	2.43	80
	2200	2.47	72
	2230	2.50	--
Sept. 12	0540	2.59	--
	0550	2.82	--
	0900	2.86	--
	1100	2.88	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08211550 Pintas Creek tributary near Banquete, Tex. (16)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
July 31, 1971	0845	0	--
	0900	.10	--
	1000	.10	--
	1030	.35	--
	1500	.40	--
Aug. 1	1930	.40	--
	2010	.60	--
	2015	.70	--
	2115	.90	--
Aug. 2	1845	.90	--
	1915	1.30	--
	1945	1.35	--
Aug. 3	0100	1.35	--
	0145	1.50	--
	0200	1.65	--
	0210	2.00	--
	0230	3.10	--
	0245	3.35	--
	0350	3.60	--
	0600	3.80	--
	1215	4.00	--
	1240	4.00	--
	1300	4.70	--
	1320	4.90	--
	1730	4.90	17
	1745	4.90	60
	1800	4.90	72
	1830	4.90	76
	1835	4.90	76
	1900	5.10	76
	1920	5.30	76
	2100	5.30	76
	2300	5.30	82
	2400	5.30	82
Aug. 4	0100	5.30	86
	0300	5.30	86
	0400	5.30	82
	0500	5.30	76
	0600	5.30	72
	0700	5.30	60
	1400	5.30	60
	1500	5.30	55
	1720	5.30	55

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08211550 Pintas Creek tributary near Banquete, Tex. (16)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 4, 1971--Con.	1750	6.10	55
	1800	6.10	55
	1830	6.10	60
	1900	6.10	72
	2000	6.10	76
	2400	6.10	76
Aug. 5	0040	6.10	76
	0100	6.10	72
	0125	6.10	60
	0200	6.10	60
	0400	6.10	55
	0600	6.10	17
	0615	6.10	--
Sept. 10	1200	0	--
	1315	.2	--
	1350	.5	--
	1500	.6	--
	1600	.6	--
	1800	.7	--
	2100	.8	--
	2140	1.1	--
	2145	1.3	--
	2225	1.5	--
	2330	2.0	--
	2400	2.4	--
Sept. 11	0045	3.4	--
	0125	3.6	--
	0245	3.9	--
	0325	4.0	--
	0345	4.4	--
	0400	4.7	--
	0430	4.7	30
	0455	4.8	83
	0500	4.8	79
	0510	5.1	74
	0530	5.5	30
	0550	6.0	79
	0630	(6.2)	140
	0700	(6.4)	194
	0745	(6.8)	320
	0900	(7.3)	450
	1000	(7.7)	450

( ) Estimated.

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08211550 Pintas Creek tributary near Banquete, Tex. (16)--Continued

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 11, 1971--Con.	1045	(8.0)	530
	1200	(8.0)	450
	1330	(9.0)	568
	1500	(9.0)	450
	1900	(9.2)	320
	2400	(9.4)	265
Sept. 12	0300	(9.5)	230
	0500	(9.6)	194
	0615	(9.6)	169
	0700	(10.8)	194
	0815	(12.1)	250
	0900	(13.0)	290
Sept. 13	0300	(13.8)	225
	0500	(14.0)	194
	0615	(14.0)	169
	0700	(14.0)	194
	0815	(14.0)	265
	0900	(14.0)	320
Sept. 14	0130	(14.0)	265
	0600	(14.0)	194
	1000	(14.0)	126
	1200	(14.0)	98
	1600	(14.0)	79
	2100	(14.0)	70
	2400	(14.0)	30
Sept. 15	0900	(14.0)	9.9
	1000	0	--
	1100	.05	--
	1115	.15	--
	1430	.15	--
	1700	.20	--
Sept. 16	0215	.20	--
	0230	.30	--
	0425	.30	--
	0445	.95	70
	0505	1.10	79
	0605	1.15	125
	0630	1.30	152
	0700	1.30	169
	0730	1.30	169
	0800	1.30	157
	0900	1.30	136
	1000	1.35	126

( ) Estimated.

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08211550 Pintas Creek tributary near Banquete, Tex. (16)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Sept. 16, 1971--Con.	1200	1.35	130
	1400	1.35	122
	1700	1.35	102
	2000	1.35	102
	2400	1.35	88
Sept. 17	0600	1.35	79
	1000	1.35	70
Sept. 21	0505	0	--
	0520	.30	--
	0615	.30	70
	0715	.30	88
	0800	.30	112
	1000	.30	88
	1200	.30	79
	1700	.30	79
	2000	.30	70

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08454900 East Perdido Creek near Brackettville, Tex. (22)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 11, 1971	1605	0	--
	1615	.2	--
	1635	.5	--
	1845	.5	--
	1900	.6	--
	1955	.7	--
	2020	1.1	--
	2040	1.1	--
	2100	1.3	--
Aug. 12	0150	1.4	--
	0205	1.6	--
	0225	1.9	--
	0240	2.0	--
	0355	2.2	72
	0400	2.3	182
	0700	2.3	630
	0800	2.3	470
	0900	2.4	265
	1100	2.4	82
	1120	2.4	65
	1150	2.5	82
	1225	2.5	82
	1230	2.5	82
	1300	2.6	65
	1305	2.7	--
	1335	2.8	--
Aug. 13	1345	2.8	--
	1350	2.8	99
	1425	2.8	160
	1515	2.8	170
	1600	2.8	160
	1615	2.8	118
	1625	2.8	127
	1630	2.9	136
	1725	3.2	118
	1730	3.3	118
	1800	3.3	72
	1815	3.3	--

Table 3.--Incremental rainfall and discharge for significant storms--Continued

08459600 Arroyo San Bartolo at Zapata, Tex. (21)

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
June 19, 1971	1700	0	--
	1715	.4	--
June 21	1150	.4	--
	1210	.6	--
	1300	.6	--
	1305	.6	420
	1310	.6	390
	1315	.6	200
	1320	.6	--
	1325	.6	--
	1515	.6	--
	1530	.7	--
	1600	.7	--
	1605	.7	--
	1610	.7	--
	1615	.7	--
	1620	.7	200
	1625	.8	340
	1630	.9	410
	1635	1.0	340
	1640	1.0	255
	1645	1.1	--
	1650	1.2	--
	1655	1.2	--
	1700	1.3	--
	2200	1.4	--
Aug. 4	0130	0	--
	0700	.1	--
	1100	.2	--
	1525	.2	--
	1530	.3	--
	1550	.3	--
	1615	.4	--
	1630	.6	--
	1830	.6	--
	1900	.7	--
	2330	.8	--
Aug. 5	0500	.9	--
	0800	1.0	--
	0900	1.1	--
	1000	1.2	--

Table 3.--Incremental rainfall and discharge for significant storms--Concluded

08459600 Arroyo San Bartolo at Zapata, Tex. (21)--Concluded

Date	Time	Accumulated rainfall (inches)	Discharge (cfs)
Aug. 5, 1971--Con.	1030	1.3	--
	1035	1.4	--
	1045	1.5	--
	1050	1.6	--
	1055	1.7	--
	1105	1.8	--
	1110	1.8	--
	1845	1.9	--
	1900	2.1	--
	1915	2.2	--
	1930	2.2	--
	1940	2.4	--
	1950	2.6	--
	2000	3.0	--
	2005	3.2	(150)
	2010	3.5	250
	2015	(3.7)	300
	2030	(4.1)	--
	2045	(4.6)	--
	2400	(4.6)	--
Aug. 6	0400	(4.6)	--
	0800	(4.6)	--

( ) Estimated.

STATION DATA

PEAK DISCHARGES AT GAGING STATIONS

LISTED BY BASIN AND IN DOWNSTREAM ORDER

ARKANSAS RIVER BASIN

07227460 East Fork Cheyenne Creek tributary near Channing, Tex. (04)

Location.--Lat 35°40'35", long 102°16'55", Hartley County, at culvert on State Highway 354 and 2.5 miles east of Channing.

Drainage area.--0.86 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.4 miles; slope index, 96.1 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	June 25, 1965	8.40	2,260
1966	Aug. 31, 1966	a4.84	520
1967	June 29, 1967	5.18	590
1968	July 6, 1968	3.00	32
1969	July 6, 1969	3.13	36
1970	-	<2.73	<26
1971	-	<2.73	<26

a Maximum for period Dec. 30, 1965, to Sept. 30, 1966.
< Less than amount shown.

07227480 Tecovas Creek tributary near Bushland, Tex. (04)

Location.--Lat 35°15'55", long 102°00'20", Potter County at culvert on Farm Road 1061 and 5.5 miles northeast of Bushland.

Drainage area.--1.27 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.6 miles; slope index, 125 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	-	-
1967	Apr. 11, 1967	5.07	105
1968	Aug. 14, 1968	2.59	11
1969	-	<1.89	<5.5
1970	-	<1.89	<5.5
1971	-	<1.89	<5.5

< Less than amount shown.

07234150 White Woman Creek tributary near Darrouzett, Tex. (04)

Location.--Lat 36°24'00", long 100°16'30", Lipscomb County, at culvert on State Highway 305, 4.5 miles southeast of Darrouzett, and 11.9 miles north of Lipscomb.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 31, 1966	5.20	416
1967	June 10, 1967	2.81	35
1968	June 16, 1968	3.15	62
1969	Sept. 1, 1969	3.21	74
1970	July 31, 1970	2.99	46
1971	-	<2.36	<16

< Less than amount shown.

07297920 Middle Tule Draw near Tulia, Tex. (05)

Location.--Lat 34°31'46", long 101°53'30", Swisher County, at culvert on State Highway 86 and 6.5 miles west of Tulia.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	July 4, 1967	a5.39	230
1968	June 16, 1968	9.03	2,500
1969	May 7, 1969	8.09	1,850
1970	-	<5.40	<230
1971	-	<5.40	<230

a Maximum for period Jan. 12 to Sept. 30, 1967.
< Less than amount shown.

07298150 Rock Creek tributary near Silverton, Tex. (25)

Location.--Lat 34°28'40", long 101°25'50", Briscoe County, at culvert on State Highway 86 and 6.7 miles west of Silverton.

Drainage area.--13.7 sq mi, of which 11.5 sq mi is probably noncontributing.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 24, 1966	6.70	48
1967	July 13, 1967	5.27	5.5
1968	May 8, 1968	5.53	10
1969	May 16, 1969	6.33	35
1970	-	<4.99	<3.0
1971	-	<4.99	<3.0

< Less than amount shown.

07299575 North Groesbeck Creek tributary near Kirkland, Tex. (25)

Location.--Lat 34°24', long 100°03', Childress County, at culvert on Farm Road 1033, 1.4 miles north of Kirkland, and 1.5 miles upstream from North Groesbeck Creek.

Drainage area.--0.16 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.3 mile; slope index, 90.9 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 19, 1965	a5.32	12
1966	Aug. 23, 1966	8.22	74
1967	May 28, 1967	5.52	16
1968	May 8, 1968	5.59	16
1969	Aug. 26, 1969	5.88	22
1970	-	<4.37	<2.5
1971	Aug. 16, 1971	7.84	62

a Maximum for period June 4 to Sept. 30, 1965.
< Less than amount shown.

07299940 Oklahoma Draw tributary near Hedley, Tex. (25)

Location.--Lat 34°53'12", long 100°37'18", Donley County, at culvert on State Highway 203 and 2.7 miles northeast of Hedley.

Drainage area.--1.15 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.0 miles; slope index, 53 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 19, 1965	a5.25	87
1966	Apr. 25, 1966	5.20	83
1967	-	<5.09	<73
1968	May 8, 1968	5.97	162
1969	May 7, 1969	5.25	88
1970	-	<5.09	<73
1971	-	<5.09	<73

a Maximum for period June 5 to Sept. 30, 1965.
< Less than amount shown.

07301405 Doodlebug Creek near Wheeler, Tex. (25)

Location.--Lat 35°26'40", long 100°13'50", Wheeler County, at culvert on State Highway 152 and 2.5 miles southeast of Wheeler.

Drainage area.--0.19 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.7 mile; slope index, 58 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	-	a<6.68	<120
1968	Aug. 29, 1968	7.70	275
1969	Aug. 26, 1969	9.92	740
1970	Apr. 18, 1970	8.89	505
1971	-	<6.68	<120

a Maximum for period Jan. 11 to Sept. 30, 1967.
< Less than amount shown.

07307720 Cottonwood Creek tributary near Afton, Tex. (25)

Location.--Lat 33°44'20", long 100°50'30", Dickens County, at culvert on State Highway 70 and 2 miles southwest of Afton.

Drainage area.--1.09 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.9 miles; slope index, 74.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	July 5, 1967	a2.23	245
1968	May 9, 1968	3.80	660
1969	June 14, 1969	4.50	890
1970	-	<1.74	<146
1971	Aug. 10, 1971	4.42	860

a Maximum for period Dec. 6, 1966, to Sept. 30, 1967.
< Less than amount shown.

07308220 Plum Creek near Vernon, Tex. (03)

Location.--Lat 34°06'38", long 99°13'22", Wilbarger County, at culvert on Farm Road 433 and 4 miles southeast of Vernon.

Drainage area.--4.99 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.55 miles; slope index, 15.0 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Apr. 12, 1967	a6.09	265
1968	May 16, 1968	5.79	187
1969	Mar. 16, 1969	5.21	27
1970	Oct. 27, 1969	6.75	445
1971	Sept. 18, 1971	6.23	305

a Maximum for period Jan. 10 to Sept. 30, 1967.

07312140 Beaver Creek tributary near Crowell, Tex. (25)

Location.--Lat 33°58'54", long 99°41'30", Foard County, at culvert on U.S. Highway 70 and 2 miles east of Crowell.

Drainage area.--3.43 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.6 miles; slope index, 19.3 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 31, 1966	5.67	385
1967	June 26, 1967	6.37	520
1968	June 1, 1968	4.27	114
1969	Sept. 22, 1969	3.96	72
1970	Oct. 27, 1969	4.50	146
1971	-	<3.56	<38

< Less than amount shown.

07312300 Wolf Creek near Iowa Park, Tex. (03)

Location.--Lat 33°54'45", long 98°48'30", Wichita County, at culvert on Farm Road 367 and 8.5 miles southwest of Iowa Park.

Drainage area.--8.13 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.9 miles; slope index, 19.7 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 28, 1966	a10.06	(+)
1967	Apr. 12, 1967	10.80	(+)
1968	Apr. 18, 1968	3.66	b124
1969	July 22, 1969	4.95	b300
1970	Apr. 30, 1970	3.40	210
1971	Oct. 17, 1970	4.12	320

a Maximum for period July 20 to Sept. 30, 1966.
b Estimated.
+ Discharge not determined.

07314200 North Fork Little Wichita River tributary near Archer City, Tex. (03)

Location.--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.

Drainage area.--0.10 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.4 mile; slope index, 234 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Sept. 16, 1966	5.67	215
1967	Apr. 12, 1967	2.95	52
1968	July 7, 1968	4.73	152
1969	June 14, 1969	2.95	52
1970	Sept. 17, 1970	2.54	35
1971	Sept. 5, 1971	4.23	120

a No flow for the period May 25 to Sept. 30, 1965.

07315550 Farmers Creek near Saint Jo, Tex. (03)

Location.--Lat 33°42'45", long 97°33'05", Montague County, at culvert on U.S. Highway 82 and 2 miles northwest of Saint Jo.

Drainage area.--0.82 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.85 miles; slope index, 51 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 24, 1966	a3.64	31
1967	June 26, 1967	4.02	57
1968	July 1, 1968	4.70	104
1969	June 14, 1969	5.30	145
1970	May 30, 1970	5.65	173
1971	-	<3.38	<18

a Maximum for the period Aug. 4 to Sept. 30, 1966.
< Less than amount shown.

07332602 Cooper Creek near Bonham, Tex. (01)

Location.--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.

Drainage area.--6.21 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.8 miles; slope index, 23.3 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 28, 1966	19.11	3,100
1967	Sept. 6, 1967	20.26	a3,180
1968	Apr. 19, 1968	17.69	2,430
1969	May 7, 1969	17.84	a2,100
1970	Apr. 25, 1970	18.72	a2,560
1971	July 28, 1971	12.52	450

a Affected by backwater.

07336940 McKinney Bayou near Leary, Tex. (19)

Location.--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.

Drainage area.--3.33 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.45 miles; slope index, 1 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 25, 1966	15.23	220
1967	May 31, 1967	12.67	130
1968	May 10, 1968	13.08	90
1969	Jan. 31, 1969	13.06	a145
1970	May 31, 1970	12.69	a130
1971	Mar. 2, 1971	12.59	65

a Affected by backwater.

07342450 Nelson Branch near Leonard, Tex. (01)

Location.--Lat 33°21'20", long 96°13'25", Fannin County, at culvert on U.S. Highway 69, 0.4 mile southeast of Hunt-Fannin County line, and 2.2 miles southeast of Leonard.

Drainage area.--0.22 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.78 mile; slope index, 66.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 21, 1965	a10.93	16
1966	Apr. 28, 1966	16.52	300
1967	May 30, 1967	17.65	340
1968	Apr. 19, 1968	12.38	68
1969	May 7, 1969	15.35	230
1970	Apr. 25, 1970	12.74	83
1971	July 30, 1971	11.33	26

a Maximum for period June 23 to Sept. 30, 1965.

07343350 Dial Branch near Bagwell, Tex. (01)

Location.--Lat 33°37'50", long 95°10'15", Red River County, at culvert on U.S. Highway 82, 1.8 miles upstream from mouth, and 2.3 miles south of Bagwell.

Drainage area.--1.00 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.45 miles; slope index, 45 ft. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Feb. 9, 1966	16.21	660
1967	Apr. 26, 1967	17.77	880
1968	June 26, 1968	15.92	618
1969	May 8, 1969	15.53	552
1970	Apr. 25, 1970	14.55	420
1971	May 10, 1971	11.97	124

07343900 Buck Creek near Cookville, Tex. (19)

Location.--Lat 33°11'10", long 94°52'20", Titus County, at culvert on U.S. Highway 67, 1.0 mile west of Cookville, and 5.5 miles east of Mount Pleasant.

Drainage area.--0.78 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.03 miles; slope index, 87.2 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	17.08	590
1967	May 1, 1967	13.30	190
1968	Sept. 18, 1968	14.95	350
1969	May 8, 1969	15.77	440
1970	Apr. 27, 1970	15.48	405
1971	July 26, 1971	13.14	176

07344490 Dragoo Creek near Mount Pleasant, Tex. (19)

Location.--Lat 33°09'40", long 95°01'55", Titus County, at culvert on Interstate Highway 30, 1.8 miles upstream from mouth, and 3.8 miles west of Mount Pleasant.

Drainage area.--4.27 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.6 miles; slope index, 26.9 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Apr. 13, 1967	a15.03	b1,150
1968	Apr. 1, 1968	15.09	1,170
1969	May 8, 1969	15.70	b1,480
1970	Apr. 26, 1970	15.24	b1,230
1971	Feb. 13, 1971	13.09	585

a Maximum for period Jan. 1 to Sept. 30, 1967.
b Affected by backwater.

07344600 Williamson Creek near Pittsburg, Tex. (19)

Location.--Lat 33°02'55", long 94°52'35", Titus County, at culvert on Farm Road 2348 and 1.3 miles northeast of Pittsburg.

Drainage area.--7.11 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.8 miles; slope index, 20.3 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 31, 1967	a12.94	b310
1968	May 10, 1968	12.96	320
1969	May 8, 1969	13.09	b340
1970	Apr. 27, 1970	15.12	1,010
1971	-	<11.39	<135

a Maximum for period Jan. 1 to Sept. 30, 1967.
b Affected by backwater.
< Less than amount shown.

07346010 Cypress Creek tributary near Jefferson, Tex. (19)

Location.--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.

Drainage area.--0.21 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.75 mile; slope index, 75 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	13.78	129
1967	-	<10.74	<7
1968	Sept. 4, 1968	11.07	13
1969	Mar. 23, 1969	10.74	6.4
1970	Aug. 23, 1970	11.37	22
1971	Mar. 10, 1971	11.01	12

< Less than amount shown.

07346072 Taylor Branch near Smithland, Tex. (19)

Location.--Lat 32°47'20", long 94°15'02", Marion County, at culvert on State Highway 49 and 6.4 miles northeast of Jefferson.

Drainage area.--0.73 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.40 miles; slope index, 61 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	13.33	430
1967	Nov. 10, 1966	10.73	38
1968	May 9, 1968	11.30	100
1969	Mar. 23, 1969	11.79	169
1970	Apr. 26, 1970	11.32	102
1971	July 24, 1971	10.80	44

08017700 Burnett Branch near Canton, Tex. (10)

Location.--Lat 32°32'17", long 95°51'44", Van Zandt County, at culvert on State Highway 19 and 1.3 miles south of Canton.

Drainage area.--0.33 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.80 mile; slope index, 22 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	14.49	330
1967	May 31, 1967	11.14	39
1968	Oct. 16, 1967	13.05	184
1969	May 8, 1969	14.60	345
1970	May 26, 1970	11.57	66
1971	Oct. 26, 1970	12.54	135

08020800 Grace Creek tributary at Longview, Tex. (10)

Location.--Lat 32°31'02", long 94°44'23", Gregg County, at culvert on U.S. Highway 259, 1.2 miles north of Longview, and 1.7 miles upstream from mouth.

Drainage area.--5.05 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.15 miles; slope index, 28 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	July 4, 1967	a13.02	620
1968	May 9, 1968	13.15	670
1969	Apr. 17, 1969	13.73	870
1970	July 20, 1970	13.41	760
1971	Oct. 27, 1970	13.03	610

a Maximum for period Jan. 1 to Sept. 30, 1967.

SABINE RIVER BASIN

08022010 Redmon Branch near Hallsville, Tex. (19)

Location.--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.

Drainage area.--0.46 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.15 miles; slope index, 108 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	15.70	725
1967	July 4, 1967	14.81	150
1968	Apr. 1, 1968	12.90	76
1969	Mar. 23, 1969	13.03	80
1970	Nov. 17, 1969	12.54	61
1971	Oct. 27, 1970	12.90	76

SABINE RIVER BASIN

08024290 Dorsey Branch near Milam, Tex. (11)

Location.--Lat 31°30'44", long 93°50'45", Sabine County, at culvert on State Highway 87 and 5.5 miles north of Milam.

Drainage area.--0.70 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.3 miles; slope index, 2.06 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	-	<1.83	<122
1968	July 24, 1968	5.72	382
1969	May 7, 1969	3.0	136
1970	-	<1.83	<85
1971	-	<1.83	<85

< Less than amount shown.

SABINE RIVER BASIN

08028505 Moore Branch near Newton, Tex. (20)

Location.--Lat 30°53'00", long 93°40'59", Newton County, at culvert on Farm Road 1414 and 5.2 miles northeast of Newton.

Drainage area.--3.77 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.2 miles; slope index, 31.1 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<0.88	<18
1967	Apr. 13, 1967	3.13	140
1968	Apr. 9, 1968	2.83	118
1969	Feb. 21, 1969	2.82	117
1970	Dec. 6, 1969	2.63	104
1971	-	<.88	<18

a Maximum for period July 29 to Sept. 30, 1966.
< Less than amount shown.

SABINE RIVER BASIN

08030700 Adams Bayou tributary near Deweyville, Tex. (20)

Location.--Lat 30°14'53", long 93°48'56", Newton County, at culvert on State Highway 12 and 5.5 miles southwest of Deweyville.

Drainage area.--12.39 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.6 miles; slope index, 0.28 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<0.63	(+)
1967	Apr. 14, 1967	1.74	90
1968	June 22, 1968	2.94	195
1969	Feb. 21, 1969	b1.90	c95
1970	-	<.63	<44
1971	Oct. 28, 1970	4.15	c2,000

a Maximum for period Aug. 2 to Sept. 30, 1966.
b Occurred different time than peak discharge.
c Estimated.
+ Discharge not determined.
< Less than amount shown.

08031100 Bethlehem Branch near Van, Tex. (10)

Location.--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.

Drainage area.--1.09 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.9 miles; slope index, 37.8 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 23, 1966	15.83	660
1967	May 31, 1967	14.25	280
1968	May 10, 1968	14.22	270
1969	May 8, 1969	13.15	a188
1970	Dec. 28, 1969	11.59	90
	Apr. 25, 1970	11.59	90
1971	Oct. 26, 1970	12.00	132

a Affected by backwater.

08032100 Hurricane Creek tributary near Palestine, Tex. (10)

Location.--Lat 31°52'10", long 95°34'20", Anderson County, at culvert on State Highway 155 and 8.5 miles northeast of Palestine.

Drainage area.--0.39 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.3 miles; slope index, 124 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<0.92	<6
1967	Apr. 13, 1967	1.75	29
1968	May 11, 1968	1.86	32
1969	Mar. 22, 1969	1.92	34
1970	Nov. 11, 1969	2.16	46
1971	Oct. 23, 1970	2.0	37

a Maximum for period July 22 to Sept. 30, 1966.
< Less than amount shown.

08032250 One Arm Creek near Maydelle, Tex. (10)

Location.--Lat 31°48'29", long 95°17'19", Cherokee County, at culvert on U.S. Highway 84 and 1.0 mile east of Maydelle.

Drainage area.--6.01 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.45 miles; slope index, 51 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	July 2, 1967	a2.90	158
1968	June 24, 1968	5.9	670
1969	May 6, 1969	12.64	2,750
1970	Apr. 19, 1970	4.04	300
1971	-	<1.92	(+)

a Maximum for period Mar. 9 to Sept. 30, 1967.
+ Discharge not determined.
< Less than amount shown.

08032300 Squirrel Creek near Elkhart, Tex. (10)

Location.--Lat 31°37'09", long 95°30'15", Anderson County, at culvert on State Highway 294 and 4.5 miles east of Elkhart.

Drainage area.--1.57 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.84 miles; slope index, 59.4 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	-	a<1.35	<48
1968	Apr. 8, 1968	2.26	136
1969	May 6, 1969	3.33	260
1970	Apr. 19, 1970	3.28	256
1971	Aug. 3, 1971	2.55	170

a Maximum for period Mar. 8 to Sept. 30, 1967.
< Less than amount shown.

08033250 Piney Creek tributary near Pennington, Tex. (11)

Location.--Lat 31°12'12", long 95°06'58", Trinity County, at culvert on Farm Road 358 and 7.5 miles east of Pennington.

Drainage area.--1.17 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream 2.30 miles; slope index, 27 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	June 1, 1967	a2.80	134
1968	Apr. 8, 1968	4.35	265
1969	May 6, 1969	6.01	430
1970	-	<.94	<25
1971	Oct. 23, 1970	1.84	71

a Maximum for period Mar. 13 to Sept. 30, 1967.
< Less than amount shown.

08033450 Shawnee Creek tributary near Huntington, Tex. (11)

Location.--Lat 31°13'17", long 94°30'51", Angelina County, at culvert on U.S. Highway 69 and 5.3 miles southeast of Huntington.

Drainage area.--0.52 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.30 miles; slope index, 64 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<1.86	<35
1967	Oct. 4, 1966	2.31	28
1968	Apr. 8, 1968	8.63	310
1969	Mar. 15, 1969	5.56	126
1970	Mar. 4, 1970	2.40	58
1971	-	<1.86	<35

a Maximum for period Aug. 3 to Sept. 30, 1966.
< Less than amount shown.

08033480 Greenwood Creek tributary near Colmesneil, Tex. (20)

Location.--Lat 30°58'48", long 94°24'22", Tyler County, at culvert on U.S. Highway 69 and 5.2 miles north of Colmesneil.

Drainage area.--0.15 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.8 mile; slope index, 200 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<2.70	<26
1967	Apr. 10, 1967	3.37	50
1968	-	<2.70	<26
1969	May 6, 1969	3.47	55
1970	May 1, 1970	2.87	32
1971	-	<2.70	<26

a Maximum for period July 28 to Sept. 30, 1966.
< Less than amount shown.

08037300 Gingham Branch near Mount Enterprise, Tex. (10)

Location.--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.

Drainage area.--0.90 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.45 miles; slope index, 122 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	June 1, 1967	a6.92	20
1968	Apr. 8, 1968	10.31	132
1969	Mar. 15, 1969	8.44	64
1970	bMar. 4, 1970	b7.01	b25
1971	-	<6.92	<20

a Maximum for period Mar. 10 to Sept. 30, 1967.
b Revised.
< Less than amount shown.

08039900 Little Sandy Creek tributary near Jasper, Tex. (20)

Location.--Lat 30°56'39", long 93°56'16", Jasper County, at culvert on State Highway 63 and 4 miles east of Jasper.

Drainage area.--0.46 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.0 mile; slope index, 84 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	-	a<2.35	<20
1968	-	2.5	20
1969	May 6, 1969	2.60	39
1970	-	<2.35	<20
1971	-	<2.35	<20

a Maximum for period Mar. 11 to Sept. 30, 1967.
< Less than amount shown.

08041400 Drakes Branch near Spurger, Tex. (20)

Location.--Lat 30°41'02", long 94°15'32", Tyler County, at culvert on Farm Road 1013 and 5.2 miles west of Spurger.

Drainage area.--5.03 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.4 miles; slope index, 23.9 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Apr. 13, 1967	a1.87	118
1968	June 21, 1968	2.61	220
1969	May 6, 1969	5.85	1,050
1970	May 1, 1970	2.20	162
1971	Oct. 23, 1970	1.81	111

a Maximum for period Mar. 12 to Sept. 30, 1967.

08042550 West Fork Double Bayou near Anahuac, Tex. (20)

Location.--Lat 29°45'39", long 94°38'00", Chambers County, at bridge on Farm Road 562 and 3 miles southeast of Anahuac.

Drainage area.--4.43 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.15 miles; slope index, 0.5 ft per mile. (Map scale, 1:24,000)

Remarks.--This site was instrumented with a water-stage recorder during the periods March to July 1963 and November 1963 to February 1965 as part of the Houston Ship Channel Model Study.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 5, 1966	a12.22	(+)
1967	May 21, 1967	13.60	250
1968	Apr. 9, 1968	15.80	300
1969	Apr. 12, 1969	14.30	205
1970	May 15, 1970	13.73	177
1971	Oct. 11, 1970	14.75	230

a Maximum for period Aug. 5 to Sept. 30, 1966.
+ Discharge not determined.

08042700 North Creek near Jacksboro, Tex. (02)

Location.--Lat 33°16'55", long 98°17'55", Jack County, on left bank at downstream side of bridge on U.S. Highway 281, 1.5 miles upstream from Henderson Creek, 9.3 miles northwest of Jacksboro, and 14 miles upstream from mouth.

Drainage area.--21.6 sq mi.

Gage.--Recording. Datum of gage is 1,016.33 ft above mean sea level (State Highway Department bench mark).

Historical data.--Flood of Apr. 28, 1957, was the highest since at least 1915, from information by local resident.

Remarks.--Three recording and two nonrecording rain gages located in the watershed. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1956	May 3, 1956	21.58	5,700
1957	Apr. 28, 1957	24.45	6,990
1958	Nov. 4, 1957	12.56	1,760
1959	June 26, 1959	14.45	2,500
1960	Oct. 3, 1959	19.65	4,830
1961	July 16, 1961	15.23	2,840
1962	June 10, 1962	18.10	4,130
1963	Apr. 28, 1963	11.55	1,370
1964	May 29, 1964	13.60	1,360
1965	Sept. 18, 1965	16.82	2,250
1966	Apr. 23, 1966	17.38	2,790
1967	May 31, 1967	12.25	1,150
1968	Mar. 20, 1968	10.49	621
1969	May 5, 1969	16.23	2,050
1970	Apr. 30, 1970	13.84	1,670
1971	July 26, 1971	9.25	450

08044200 Walker Creek near Boyd, Tex. (02)

Location.--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.

Drainage area.--2.95 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.35 miles; slope index, 44 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 22, 1965	a12.75	270
1966	Feb. 8, 1966	13.83	450
1967	May 30, 1967	13.23	350
1968	Mar. 19, 1968	14.50	580
1969	May 7, 1969	13.48	390
1970	Mar. 2, 1970	20.11	2,990
1971	-	<11.38	<15

a Maximum for period June 16 to Sept. 30, 1965.
< Less than amount shown.

08047200 West Creek at Fort Worth, Tex. (02)

Location.--Lat 32°40'25", long 97°22'06", Tarrant County, at culvert on Bilglade Road at intersection of West Creek Drive in Fort Worth.

Drainage area.--0.31 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.85 mile; slope index, 119 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	July 14, 1965	a14.18	275
1966	Aug. 29, 1966	16.30	495
1967	May 30, 1967	13.86	250
1968	June 15, 1968	12.64	127
1969	Feb. 20, 1969	13.65	218
1970	Apr. 25, 1970	12.14	88
1971	July 29, 1971	17.04	857

a Maximum for period July 2 to Sept. 30, 1965.

08048550 Dry Branch at Blandin Street, Fort Worth, Tex. (02)

Location.--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.

Drainage area.--1.08 sq mi.

Gage.--Stage recorder.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1969	Apr. 16, 1969	a587.15	217
1970	May 30, 1970	587.75	298
1971	Aug. 15, 1971	587.16	218

a Maximum for period February to September 1969.

08048600 Dry Branch at Fain Street at Fort Worth, Tex. (02)

Location.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft upstream from culverts on Fain Street at intersection of Fain and Beach Streets in Fort Worth and 1.1 miles upstream from the mouth.

Drainage area.--2.15 sq mi.

Gage.--Recording. Datum of gage is 537.51 ft above mean sea level.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	May 6, 1969	4.58	292
1970	May 30, 1970	4.98	338
1971	Aug. 15, 1971	4.37	264

08048820 Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. (02)

Location.--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 courthouse, Fort Worth.

Drainage area.--5.64 sq mi.

Gage.--Stage recorder.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1969	May 6, 1969	a612.55	715
1970	Apr. 25, 1970	613.00	650
1971	May 29, 1971	612.71	505

a Maximum for period April to September 1969.

08048850 Little Fossil Creek at Mesquite Street at Fort Worth, Tex. (02)

Location.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles northeast of County Courthouse, and approximately 4.3 miles upstream from Big Fossil Creek.

Drainage area.--12.3 sq mi.

Gage.--Recording. Datum of gage is 548.62 ft above mean sea level.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	May 6, 1969	8.30	1,530
1970	Apr. 30, 1970	7.68	1,370
1971	Aug. 15, 1971	5.61	603

08048900 Deer Creek tributary near Crowley, Tex. (02)

Location.--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.

Drainage area.--5.86 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.4 miles; slope index, 23 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	-	a<11.51	<170
1968	Apr. 19, 1968	14.98	1,060
1969	May 7, 1969	14.53	910
1970	Mar. 2, 1970	13.64	670
1971	-	<11.51	<170

a Maximum for period Jan. 12 to Sept. 30, 1967.
< Less than amount shown.

08050200 Elm Fork Trinity River subwatershed No. 6-0 near Muenster, Tex. (03)

Location.--Lat 33°37'13", long 97°24'15", Cooke County, near center of earthfill dam on unnamed tributary of Elm Fork Trinity River, 1.0 mile west of Farm Road 373, and 2.6 miles southwest of Muenster.

Drainage area.--0.77 sq mi.

Gage.--Recording. Datum of gage is 941.75 ft above mean sea level, datum of 1929 (U.S. Soil Conservation Service bench mark).

Remarks.--Peak discharge based on maximum inflow (average for 5- or 15-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Recording rain gage located at station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1957	June 1, 1957	449
1958	May 1, 1958	688
1959	Nov. 16, 1958	34
1960	Oct. 3, 1959	842
1961	Mar. 25, 1961	51
1962	June 18, 1962	287
1963	Nov. 26, 1962	221
1964	Sept. 21, 1964	261
1965	Nov. 18, 1964	367
1966	Feb. 9, 1966	476
1967	May 30, 1967	316
1968	Mar. 20, 1968	188
1969	May 6, 1969	477
1970	Sept. 25, 1970	423
1971	Aug. 14, 1971	178

08052630 Little Elm Creek subwatershed No. 10 near Gunter, Tex. (18)

Location.--Lat 33°24'33", long 96°48'41", Grayson County, near center of dam on Walnut Fork, 1.6 miles upstream from mouth and, 4.7 miles southwest of Gunter.

Drainage area.--2.10 sq mi.

Gage.--Water-stage recorder. Datum of gage is 615.51 ft above mean sea level, datum of 1929 (U.S. Soil Conservation Service bench mark).

Topographic characteristics.--Length of main stream, 2.52 miles; slope index, 37.3 ft per mile. (Map scale, 1:24,000)

Remarks.--Peak discharge based on maximum inflow (average for 5- or 15-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Rain gage 3S located 0.25 mile southeast of dam. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1966	Apr. 28, 1966	823
1967	May 30, 1967	3,240
1968	Mar. 20, 1968	635
1969	May 14, 1969	1,370
1970	Apr. 25, 1970	1,570
1971	Aug. 24, 1971	80

08053100 Jones Valley Creek tributary near Forestburg, Tex. (03)

Location.--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.

Drainage area.--1.70 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.35 miles; slope index, 78.5 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 19, 1965	a17.80	605
1966	Feb. 9, 1966	20.15	860
1967	Sept. 7, 1967	14.66	305
1968	Mar. 19, 1968	12.23	122
1969	May 6, 1969	16.08	440
1970	Sept. 17, 1970	13.17	190
1971	Oct. 23, 1970	11.56	81

a Maximum for period June 22 to Sept. 30, 1965.

08054200 Gamble Branch near Argyle, Tex. (18)

Location.--Lat 33°04'53", long 97°11'48", Denton County, at culvert on U.S. Highway 377 and 2.8 miles south of Argyle.

Drainage area.--0.50 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.88 mile; slope index, 89 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 22, 1965	a11.56	68
1966	Apr. 29, 1966	14.17	306
1967	May 21, 1967	11.38	57
1968	May 13, 1968	14.18	310
1969	May 16, 1969	12.50	142
1970	Mar. 2, 1970	13.18	204
1971	Oct. 24, 1970	12.11	108

a Maximum for period June 18 to Sept. 30, 1965.

08055600 Joes Creek at Dallas, Tex. (18)

Location.--Lat 32°51'33", long 96°53'00", Dallas County, at bridge on State Highway 114, Dallas, and 0.9 mile upstream from mouth.

Drainage area.--7.51 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1953.

Historical data.--Since at least 1904, maximum discharge that of Oct. 8, 1962; maximum elevation, 431 ft in 1908, backwater from Trinity River.

Remarks.--Urbanizing.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1962	July 27, 1962	423.6	3,100
1963	Oct. 8, 1962	425.3	7,430
1964	Sept. 21, 1964	420.95	1,440
1965	May 10, 1965	421.30	1,520
1966	Apr. 28, 1966	426.4	6,350
1967	Apr. 21, 1967	418.50	930
1968	Aug. 13, 1968	421.18	1,500
1969	May 7, 1969	423.70	2,350
1970	May 30, 1970	422.51	1,780
1971	Aug. 14, 1971	422.87	1,940

08055700 Bachman Branch at Dallas, Tex. (18)

Location.--Lat 32°51'36", long 96°50'12", Dallas County, on left bank on downstream side of bridge on Midway Road in Dallas, 1,400 ft south of Northwest Highway, 1.5 miles upstream from Bachman Lake Dam, and 6 miles northwest of Dallas City Hall.

Drainage area.--9.58 sq mi. Area at site used prior to May 1, 1970, 10.0 sq mi.

Gage.--Water-stage recorder. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1953.

Topographic characteristics.--Length of main stream, 6.0 miles; slope index, 31.8 ft per mile. (Map scale, 1:24,000)

Historical data.--Maximum stage known since at least 1900, that of Apr. 28, 1966, from information by local residents. The second greatest flood since 1900 occurred Oct. 8, 1962.

Remarks.--This watershed is about 75 percent urbanized (1966). Six recording rain gages are located in the watershed above the station. Tabulations of significant rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1963	Oct. 8, 1962	465.6	9,200
1964	Sept. 21, 1964	459.30	3,620
1965	May 10, 1965	461.43	5,170
1966	Apr. 28, 1966	467.97	16,000
1967	Apr. 21, 1967	455.21	1,450
1968	Aug. 13, 1968	455.68	1,760
1969	May 6, 1969	464.84	8,360
1970	Sept. 2, 1970	466.24	3,130
1971	Aug. 14, 1971	467.97	3,480

08056500 Turtle Creek at Dallas, Tex. (18)

Location.--Lat 32°48'26", long 96°48'08", Dallas County, on left bank 68 ft upstream from Hall Street Dam, 210 ft upstream from Hall Street in Dallas, and 2 miles north of Dallas County Courthouse.

Drainage area.--7.98 sq mi.

Gage.--Recording. Datum of gage is 428.13 ft above mean sea level, datum of 1929.

Topographic characteristics.--Length of main stream, 5.3 miles; slope index, 37 ft per mile. (Map scale, 1:24,000)

Historical data.--Flood of Apr. 28, 1966, reached the highest stage since at least 1903.

Remarks.--Five recording rain gages installed in 1961 are located in the watershed above this station and tabulations of significant rainfall and runoff data are on file in the U.S. Geological Survey District office. The watershed is in a highly developed urban area.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1947	Aug. 27, 1947	6.8	3,350
1948	May 11, 1948	4.68	1,630
1949	May 18, 1949	6.15	2,800
1950	May 1, 1950	5.29	2,060
1951	Sept. 12, 1951	4.82	1,700
1952	May 17, 1952	5.47	2,220
1953	Apr. 23, 1953	3.54	910
1954	Apr. 12, 1954	6.40	2,980
1955	June 18, 1955	3.44	852
1956	May 1, 1956	4.84	1,740
1957	Apr. 26, 1957	7.30	3,850
1958	Apr. 26, 1958	6.54	3,070
1959	Feb. 14, 1959	4.47	1,460
1960	Oct. 1, 1959	8.10	4,650
1961	Oct. 13, 1960	4.08	1,240
1962	July 27, 1962	7.96	4,640
1963	Apr. 28, 1963	7.77	4,290
1964	Sept. 21, 1964	6.79	3,240
1965	May 10, 1965	7.97	4,520

08056500 Turtle Creek at Dallas, Tex. (18)--Concluded

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 28, 1966	10.54	12,200
1967	Apr. 21, 1967	5.14	1,790
1968	May 13, 1968	6.77	3,220
1969	May 6, 1969	9.96	8,840
1970	Oct. 12, 1969	6.68	3,130
1971	Aug. 14, 1971	5.87	2,400

08057020 Coombs Creek at Sylvan Avenue, Dallas, Tex. (18)

Location.--Lat 32°46'01", long 96°50'07", Dallas County, at bridge on Sylvan Avenue, Dallas, and 1.2 miles upstream from mouth.

Drainage area.--4.75 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1953.

Remarks.--Urbanizing.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	May 10, 1965	426.55	4,260
1966	Apr. 28, 1966	423.33	2,780
1967	June 12, 1967	420.50	1,570
1968	June 16, 1968	423.59	2,900
1969	May 6, 1969	423.72	2,960
1970	Oct. 12, 1969	422.63	2,460
1971	May 29, 1971	423.18	2,700

08057050 Cedar Creek at Bonnie View Road, Dallas, Tex. (18)

Location.--Lat 32°44'50", long 96°47'44", Dallas County, at bridge on Bonnie View Road, Dallas, and 0.9 mile upstream from mouth.

Drainage area.--9.42 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1953.

Remarks.--Urbanizing.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	May 10, 1965	404.15	7,300
1966	Apr. 28, 1966	404.04	6,260
1967	Apr. 21, 1967	398.04	2,140
1968	June 16, 1968	404.3	7,500
1969	May 6, 1969	a407.14	b4,250
1970	Oct. 12, 1969	402.15	5,290
1971	May 29, 1971	401.66	4,840

a Occurred May 8, 1969.
b Affected by backwater.

08057120 Spanky Branch at McCallum Lane, Dallas, Tex. (18)

Location.--Lat 32°57'58", long 96°48'11", Dallas County, at bridge on McCallum Lane, Dallas, and 0.5 mile upstream from mouth.

Drainage area.--6.77 sq mi.

Gage.--Crest stage only. Datum of gage is mean sea level, datum of 1929.

Historical data.--Maximum elevation known since at least 1917, that of Sept. 21, 1964, from information by local residents.

Remarks.--Rural.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1962	July 27, 1962	567.03	4,020
1963	Oct. 8, 1962	564.61	3,000
1964	Sept. 21, 1964	572.02	7,870
1965	May 10, 1965	563.91	2,650
1966	Apr. 28, 1966	569.3	5,000
1967	May 31, 1967	556.27	635
1968	Mar. 20, 1968	559.58	1,470
1969	May 6, 1969	566.69	3,680
1970	Apr. 25, 1970	560.13	1,630
1971	Aug. 14, 1971	558.93	1,330

08057140 Cottonwood Creek at Forest Lane, Dallas, Tex. (18)

Location.--Lat 32°54'33", long 96°45'54", Dallas County, at bridge on Forest Lane, Dallas, and 0.2 mile upstream from Floyd Branch.

Drainage area.--8.50 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1953.

Historical data.--Maximum elevation known since at least 1892, that of Apr. 28, 1966.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1962	July 27, 1962	509.90	5,090
1963	Oct. 8, 1962	511.74	17,400
1964	Sept. 21, 1964	510.09	6,200
1965	May 10, 1965	509.49	4,450
1966	Apr. 28, 1966	512.32	17,600
1967	May 31, 1967	509.20	4,080
1968	Aug. 13, 1968	505.51	1,380
1969	May 6, 1969	509.52	4,530
1970	May 30, 1970	508.56	3,260
1971	July 28, 1971	503.82	450

08057160 Floyd Branch at Forest Lane, Dallas, Tex. (18)

Location.--Lat 32°54'33", long 96°45'34", Dallas County, at bridge on Forest Lane, Dallas, and 0.3 mile upstream from mouth.

Drainage area.--4.17 sq mi.

Gage.--Crest stage only. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1953.

Historical data.--Maximum elevation known since at least 1909, that of Apr. 28, 1966.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1962	July 27, 1962	509.62	3,200
1963	Oct. 8, 1962	512.63	4,850
1964	Sept. 21, 1964	510.26	3,500
1965	May 10, 1965	508.87	2,850
1966	Apr. 28, 1966	514.19	8,590
1967	-	<503.65	<1,170
1968	Mar. 20, 1968	503.39	1,110
1969	May 6, 1969	509.96	3,350
1970	May 30, 1970	509.40	3,100
1971	July 28, 1971	503.90	1,240

< Less than amount shown.

08057320 Ash Creek at Highland Road, Dallas, Tex. (18)

Location.--Lat 32°48'18", long 96°43'04", Dallas County, at bridge on Highland Road, Dallas, and 0.4 mile upstream from mouth.

Drainage area.--6.92 sq mi.

Gage.--Crest stage only. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1961.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1963	Apr. 28, 1963	430.99	4,700
1964	Sept. 21, 1964	<427.28	<3,150
1965	May 10, 1965	429.74	3,600
1966	Apr. 28, 1966	431.38	5,180
1967	May 31, 1967	429.52	3,400
1968	Apr. 19, 1968	427.58	1,540
1969	May 6, 1969	423.94	4,330
1970	May 30, 1970	420.56	1,240
1971	July 28, 1971	419.75	775

< Less than amount shown.

08057340 Forney Creek at Lawnview Avenue, Dallas, Tex. (18)

Location.--Lat 32°46'45", long 96°43'02", Dallas County, at culvert on Lawnview Avenue, Dallas, and 0.8 mile upstream from mouth.

Drainage area.--1.84 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1961.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1963	Apr. 28, 1963	431.36	621
1964	Sept. 21, 1964	430.04	245
1965	May 10, 1965	431.21	566
1966	Apr. 28, 1966	435.42	1,090
1967	-	-	-
1968	Mar. 20, 1968	428.80	394
1969	May 6, 1969	435.92	1,130
1970	May 30, 1970	429.70	542
1971	Apr. 17, 1971	431.33	756

08057420 Fivemile Creek at U.S. Highway 77, Dallas, Tex. (18)

Location.--Lat 32°41'15", long 96°49'22", Dallas County, at bridge on U.S. Highway 77, Dallas, 0.2 mile upstream from Woody Branch, and 8 miles upstream from mouth.

Drainage area.--13.2 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1961.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	May 10, 1965	464.88	2,400
1966	Apr. 28, 1966	470.32	7,000
1967	June 12, 1967	459.78	1,440
1968	Sept. 24, 1968	463.70	2,880
1969	May 6, 1969	475.86	11,800
1970	May 30, 1970	469.43	6,380
1971	Oct. 26, 1970	466.78	4,840

08057425 Woody Branch at U.S. Highway 77, Dallas, Tex. (18)

Location.--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.

Drainage area.--11.5 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1961.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	May 10, 1965	469.81	3,230
1966	Apr. 28, 1966	473.55	4,540
1967	June 12, 1967	464.13	802
1968	Sept. 4, 1968	468.50	2,680
1969	May 6, 1969	481.50	7,160
1970	Apr. 25, 1970	472.34	4,120
1971	Oct. 26, 1970	474.56	4,900

08057430 Fivemile Creek at Lancaster Road, Dallas, Tex. (18)

Location.--Lat 32°40'49", long 96°47'10", Dallas County, at bridge on Lancaster Road, Dallas, and 6.7 miles upstream from mouth.

Drainage area.--37.9 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1961.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	May 10, 1965	431.7	2,520
1966	Apr. 28, 1966	437.68	9,150
1967	June 12, 1967	430.85	1,760
1968	Sept. 4, 1968	436.14	6,900
1969	May 6, 1969	442.97	15,900
1970	May 30, 1970	435.96	7,260
1971	Oct. 26, 1970	436.51	7,860

08057500 Honey Creek subwatershed No. 11 near McKinney, Tex. (18)

Location.--Lat 33°18'12", long 96°41'22", Collin County, near center of dam on unnamed tributary of Honey Creek, 1.5 miles west of Farm Road 543, and 8.4 miles northwest of McKinney.

Drainage area.--2.14 sq mi.

Gage.--Recording. Datum of gage is 629.00 ft above mean sea level, datum of 1929.

Remarks.--Peak discharge based on maximum inflow (average for 5- or 30-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Recording rain gage located at station. Tabulations of significant rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1953	May 15, 1953	268
1954	June 8, 1954	235
1955	Feb. 19, 1955	42
1956	Feb. 17, 1956	264
1957	May 21, 1957	1,630
1958	May 1, 1958	1,880
1959	July 24, 1959	156
1960	Aug. 26, 1960	320
1961	May 1, 1961	1,320
1962	Apr. 27, 1962	169
1963	May 30, 1963	546
1964	Sept. 21, 1964	1,380
1965	Nov. 18, 1964	842
1966	Apr. 30, 1966	3,380
1967	May 30, 1967	530
1968	Mar. 20, 1968	827
1969	May 17, 1969	958
1970	Apr. 25, 1970	2,000
1971	July 29, 1971	64

08058000 Honey Creek subwatershed No. 12 near McKinney, Tex. (18)

Location.--Lat 33°18'20", long 96°40'12", Collin County, near center of dam on unnamed tributary of Honey Creek, 0.5 mile west of Farm Road 543, and 7.8 miles northwest of McKinney.

Drainage area.--1.26 sq mi.

Gage.--Recording. Datum of gage is 623.00 ft above mean sea level, datum of 1929.

Remarks.--Peak discharge based on maximum inflow (average for 5- or 30-minute interval), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. One nonrecording and two recording rain gages located in the watershed above the station. Tabulations of significant rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1953	Apr. 28, 1953	a423
1954	June 15, 1954	212
1955	Oct. 23, 1954	123
1956	Feb. 17, 1956	295
1957	May 21, 1957	1,490
1958	May 1, 1958	1,410
1959	July 24, 1959	40
1960	June 8, 1960	286
1961	May 1, 1961	589
1962	Apr. 24, 1962	158
1963	May 30, 1963	663
1964	Sept. 21, 1964	850
1965	May 28, 1965	791
1966	Apr. 30, 1966	1,370
1967	May 30, 1967	907
1968	Mar. 20, 1968	624
1969	May 6, 1969	858
1970	Apr. 25, 1970	1,270
1971	July 29, 1971	34

a Unadjusted for rainfall on water surface.

08059200 Arls Branch near Westminister, Tex. (18)

Location.--Lat 33°21'20", long 96°26'35", Collin County, at culvert on State Highway 121 and 1.2 miles east of Westminister.

Drainage area.--0.52 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.00 mile; slope index, 86 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 21, 1965	a13.48	170
1966	Apr. 28, 1966	14.95	310
1967	May 30, 1967	16.97	500
1968	May 10, 1968	16.13	420
1969	May 7, 1969	14.69	287
1970	Mar. 2, 1970	15.09	325
1971	July 30, 1971	17.97	588

a Maximum for period June 23 to Sept. 30, 1965.

08061620 Duck Creek at Buckingham Road, Garland, Tex. (18)

Location.--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.

Drainage area.--8.05 sq mi.

Gage.--Stage recorder.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	May 6, 1969	a564.04	4,640
1970	May 30, 1970	562.63	2,500
1971	July 28, 1971	560.77	650

a Maximum for period March to September 1969.

08061920 South Mesquite Creek at State Highway 352, Mesquite, Tex. (18)

Location.--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.

Drainage area.--13.4 sq mi.

Gage.--Stage recorder.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	May 6, 1969	a448.12	b4,000
1970	May 30, 1970	442.63	1,170
1971	Oct. 26, 1970	439.41	761

a Maximum for period March to September 1969.
b Estimated.

08062850 Bachelor Creek near Terrell, Tex. (18)

Location.--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.

Drainage area.--13.0 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 12.0 miles; slope index, 8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 1, 1967	a13.92	430
1968	Oct. 15, 1967	15.58	1,150
1969	May 6, 1969	18.32	3,600
1970	Mar. 2, 1970	13.98	b465
1971	Oct. 11, 1970	14.71	820

a Maximum for period Jan. 31 to Sept. 30, 1967.
b Affected by backwater.

08063005 Red Oak Branch near Eustace, Tex. (10)

Location.--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.

Drainage area.--0.90 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.66 miles; slope index, 40.3 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 26, 1966	16.53	1,300
1967	Apr. 22, 1967	10.86	19
1968	May 9, 1968	15.98	700
1969	May 8, 1969	14.50	230
1970	Dec. 12, 1969	12.66	105
1971	Feb. 13, 1971	10.74	14

08063180 Briar Creek tributary near Corsicana, Tex. (18)

Location.--Lat 32°02'55", long 96°34'45", Navarro County, at culvert on Farm Road 744, 1.3 miles upstream from Briar Creek, and 7.7 miles west of Corsicana.

Drainage area.--0.72 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.28 miles; slope index, 39.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 23, 1966	13.90	560
1967	Sept. 5, 1967	13.08	390
1968	May 10, 1968	14.39	660
1969	Mar. 17, 1969	12.91	353
1970	Feb. 27, 1970	12.69	320
1971	Oct. 27, 1970	12.52	295

08063200 Pin Oak Creek near Hubbard, Tex. (09)

Location.--Lat 31°48'05", long 96°43'10", Hill County, on right bank 85 ft downstream from bridge on State Highway 171 and 5.8 miles southeast of Hubbard.

Drainage area.--17.6 sq mi.

Gage.--Recording. Datum of gage is 463.08 ft above mean sea level, datum of 1929, supplementary adjustment of 1942.

Topographic characteristics.--Length of main stream, 8.0 miles; slope index, 14.2 ft per mile. (Map scale, 1:24,000)

Historical data.--Maximum stage since at least 1900, about 17 ft in August 1919, from information by local resident.

Remarks.--Floodwater-retarding structures partially controlling 7.29 sq mi above this station were built during 1963. Six rain gages are operated in the watershed above this station. Tabulations of significant rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1958	Aug. 24, 1958	13.86	4,340
1959	June 24, 1959	13.73	4,100
1960	Oct. 4, 1959	11.52	1,810
1961	June 18, 1961	11.60	1,870
1962	Apr. 27, 1962	12.42	2,580
1963	Apr. 28, 1963	4.52	89
1964	Sept. 17, 1964	4.65	126
1965	May 14, 1965	11.15	1,230
1966	Apr. 24, 1966	11.98	2,040
1967	June 12, 1967	9.90	815
1968	May 10, 1968	13.03	3,300
1969	Apr. 4, 1969	10.33	828
1970	Sept. 17, 1970	10.48	896
1971	Oct. 23, 1970	3.51	93

08063550 Alvarado Branch near Alvarado, Tex. (02)

Location.--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.

Drainage area.--0.84 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.42 miles; slope index, 50 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a<10.63	<15
1966	Apr. 25, 1966	14.42	550
1967	Sept. 22, 1967	12.01	170
1968	May 9, 1968	14.63	590
1969	May 7, 1969	16.35	920
1970	Apr. 25, 1970	b16.95	c940
1971	Oct. 23, 1970	13.10	326

a Maximum for period July 26 to Sept. 30, 1965.
b Occurred at different time than peak discharge.
c Estimated.
< Less than amount shown.

08063620 Kings Branch near Reagor Springs, Tex. (18)

Location.--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.

Drainage area.--0.62 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.18 miles; slope index, 44 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	May 16, 1965	18.50	580
1966	Apr. 24, 1966	17.52	470
1967	-	<11.21	<12
1968	Aug. 27, 1968	15.91	305
1969	May 7, 1969	a16.80	395
1970	Apr. 25, 1970	18.92	620
1971	Aug. 26, 1971	13.37	107

a Estimated.
< Less than amount shown.

08064630 Saline Branch tributary near Bethel, Tex. (10)

Location.--Lat 31°55'46", long 95°55'58", Anderson County, at culvert on U.S. Highway 287 and 1.0 mile northwest of Bethel.

Drainage area.--0.22 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.57 mile; slope index, 93 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 9, 1966	a4.36	51
1967	Apr. 13, 1967	3.88	36
1968	Mar. 11, 1968	4.65	61
1969	Apr. 12, 1969	5.5	b92
1970	Dec. 5, 1969	4.03	41
1971	July 28, 1971	3.71	32

a Maximum for period July 20 to Sept. 30, 1966.
b Estimated.

08065320 Mayes Branch near Latexo, Tex. (11)

Location.--Lat 31°25'58", long 95°28'29", Houston County, at culvert on U.S. Highway 287 and 2.6 miles north of Latexo.

Drainage area.--4.26 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.60 miles; slope index, 36 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<1.73	(+)
1967	-	<1.73	(+)
1968	Sept. 5, 1968	5.31	236
1969	Apr. 12, 1969	5.8	335
1970	Oct. 30, 1969	5.12	202
1971	-	<4.96	<173

a Maximum for period July 26 to Sept. 30, 1966.
+ Discharge not determined.
< Less than amount shown.

08066280 Bluff Creek tributary near Livingston, Tex. (11)

Location.--Lat 30°41'52", long 94°46'58", Polk County, at culvert on U.S. Highway 190 and 9.2 miles east of Livingston.

Drainage area.--0.62 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.38 miles; slope index, 50.5 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a<1.37	<20
1966	-	<1.37	<20
1967	-	<1.37	<20
1968	June 22, 1968	4.26	145
1969	May 6, 1969	7.75	b170
1970	May 1, 1970	2.61	26
1971	Oct. 23, 1970	2.28	10

a Maximum for period Aug. 20 to Sept. 30, 1965.
b Estimated.
< Less than amount shown.

08067550 Welch Branch near Huntsville, Tex. (17)

Location.--Lat 30°38'33", long 95°40'47", Walker County, at culvert on Farm Road 1791 and 6.9 miles southwest of Huntsville.

Drainage area.--2.35 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.7 miles; slope index, 20 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a<2.46	<12
1966	Apr. 24, 1966	b5.30	127
1967	-	<2.46	<12
1968	June 21, 1968	5.09	138
1969	Apr. 12, 1969	7.83	470
1970	cMar. 17, 1970	4.34	65
1971	May 11, 1971	5.89	182

a Maximum for period Aug. 19 to Sept. 30, 1965.
b Occurred on Feb. 10, 1966, backwater from log jam in channel downstream from gage.
c Revised.
< Less than amount shown.

08067750 Landrum Creek tributary near Montgomery, Tex. (12)

Location.--Lat 30°21'03", long 95°41'50", Montgomery County, at culvert on State Highway 149 and 2.4 miles south of Montgomery.

Drainage area (revised).--0.13 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics (revised).--Length of main stream, 0.47 mile; slope index, 171 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a<1.94	(+)
1966	Apr. 24, 1966	7.88	114
1967	Sept. 21, 1967	5.13	57
1968	Mar. 10, 1968	8.82	129
1969	Apr. 27, 1969	4.86	51
1970	Apr. 10, 1970	2.74	15
1971	Oct. 11, 1970	7.28	104

a Maximum for period Aug. 18 to Sept. 30, 1965.
+ Discharge not determined.
< Less than amount shown.

08068300 Mill Creek tributary near Dobbin, Tex. (12)

Location.--Lat 30°15'37", long 95°46'14", Montgomery County, at culvert on Farm Road 1486 and 7.8 miles south of Dobbin.

Drainage area.--4.07 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.65 miles; slope index, 15 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 21, 1967	a3.50	19
1968	June 24, 1968	8.25	670
1969	Feb. 21, 1969	7.39	410
1970	-	<2.77	<10
1971	Oct. 11, 1970	5.20	90

a Maximum for period Mar. 16 to Sept. 30, 1967.
< Less than amount shown.

08069850 Bear Creek near Cleveland, Tex. (11)

Location.--Lat 30°26'58", long 95°13'11", San Jacinto County, at culvert on Farm Road 1725 and 12.9 miles northwest of Cleveland.

Drainage area.--1.46 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.25 miles; slope index, 45 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	-	a<2.58	<80
1968	June 24, 1968	4.71	290
1969	May 6, 1969	3.40	156
1970	-	<2.58	<80
1971	-	<2.58	<80

a Maximum for period Mar. 15 to Sept. 30, 1967.
< Less than amount shown.

08073750 Stoney Brook Street Ditch at Houston, Tex. (12)

Location.--Lat 29°44'05", long 95°30'22", Harris County, at culvert on Stoney Brook Street in west Houston.

Drainage area.--0.50 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1964.

Remarks.--Drainage area is urban. Impervious cover was 33 percent as of October 1966.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1967	Sept. 21, 1967	65.78	145
1968	Sept. 14, 1968	67.54	247
1969	Sept. 19, 1969	65.34	144
1970	May 21, 1970	65.68	157
1971	Oct. 11, 1970	67.21	230

08073800 Bering Ditch at Woodway Drive, Houston, Tex. (12)

Location.--Lat 29°45'22", long 95°29'44", Harris County, at bridge on Woodway Drive in west Houston.

Drainage area.--2.74 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustments of 1957 and 1959.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	53.14	91
1966	May 18, 1966	55.58	724
1967	Sept. 21, 1967	55.30	535
1968	Sept. 14, 1968	57.81	1,580
1969	Nov. 30, 1968	55.58	694
1970	May 21, 1970	55.15	1,280
1971	Oct. 11, 1970	58.47	1,900

08074100 Cole Creek at Guhn Road, Houston, Tex. (12)

Location.--Lat 29°51'24", long 95°30'55", Harris County, at bridge on Guhn Road in northwest Houston.

Drainage area.--7.05 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1957.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Feb. 16, 1965	87.06	266
1966	Apr. 14, 1966	90.39	744
1967	Apr. 13, 1967	85.79	79
1968	May 12, 1968	89.94	503
1969	Feb. 21, 1969	91.30	708
1970	May 1, 1970	89.47	321
1971	Oct. 23, 1970	91.47	522

08074150 Cole Creek at Deihl Road at Houston, Tex. (12)

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

Drainage area.--At Deihl Road, Apr. 14, 1964, to Apr. 1, 1965, 10.0 sq mi; Apr. 2 to May 17, 1965, 8.81 sq mi. At Antoine Drive, May 18 to Aug. 1, 1965, 9.94 sq mi; Aug. 2, 1965, to Sept. 1, 1966, 10.2 sq mi. At Deihl Road, Sept. 2, 1966, to Sept. 30, 1968, 8.81 sq mi. Drainage area changes caused by changes in storm sewers.

Gage.--Water-stage recorder. Datum of gage is mean sea level, datum of 1929, adjustment of 1957.

Remarks.--Station was established at Deihl Road and was temporarily relocated to Antoine Drive because of bridge construction and channel rectification. On Sept. 2, 1966, station was moved back to Deihl Road. Recording rain gage located at station.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1964	May 31, 1964	-	a400
1965	Feb. 16, 1965	78.23	338
1966	Apr. 14, 1966	c71.50	b950
1967	May 29, 1967	d71.84	160
1968	May 10, 1968	75.88	810
1969	Feb. 21, 1969	74.82	966
1970	May 15, 1970	75.38	453
1971	Oct. 23, 1970	77.21	762

a Maximum for period April to September 1964.
b Estimated.
c Backwater from Whiteoak Bayou.
d Occurred Sept. 21, 1967, backwater from channel vegetation.

08074200 Brickhouse Gully at Clarblak Street, Houston, Tex. (12)

Location.--Lat 29°49'53", long 95°31'42", Harris County, at bridge on Clarblak Street in northwest Houston.

Drainage area.--2.05 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1957.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Feb. 16, 1965	89.46	54
1966	Apr. 14, 1966	90.46	121
1967	Sept. 21, 1967	89.78	73
1968	May 10, 1968	92.58	328
1969	Feb. 21, 1969	92.30	294
1970	July 21, 1970	91.66	169
1971	Oct. 23, 1970	93.54	314

08074250 Brickhouse Gully at Costa Rica Street at Houston, Tex. (12)

Location.--Lat 29°49'40", long 95°28'09", Harris County, on right bank at downstream side of bridge at Costa Rica Street in northwest Houston and 1.0 mile upstream from Whiteoak Bayou.

Drainage area.--10.4 sq mi. Prior to May 1965, 10.5 sq mi; May to August 1965, 10.7 sq mi; August 1965 to September 1967, 10.5 sq mi. Drainage area changes caused by changes in storm sewers.

Gage.--Water-stage recorder. Datum of gage is mean sea level, datum of 1929, adjustment of 1957.

Remarks.--Recording rain gage located at station.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1964	Aug. 23, 1964	a60.08	235
1965	Sept. 22, 1965	b64.60	550
1966	Apr. 14, 1966	64.87	1,040
1967	Sept. 21, 1967	59.45	323
1968	May 10, 1968	65.94	2,280
1969	Feb. 21, 1969	61.24	1,370
1970	May 1, 1970	59.48	925
1971	Oct. 23, 1970	64.70	2,800

a Maximum for period August to September 1964.
b Backwater from construction dam.

08074780 Keegans Bayou at Keegan Road near Houston, Tex. (12)

Location.--Lat 29°39'55", long 95°35'42", Harris County, at bridge on Keegan Road about 16 miles southwest of Houston.

Drainage area.--5.77 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1957.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	81.08	94
1966	Apr. 14, 1966	83.53	206
1967	Dec. 5, 1966	80.52	59
1968	June 24, 1968	83.23	192
1969	Feb. 21, 1969	82.12	136
1970	May 21, 1970	82.11	128
1971	Oct. 11, 1970	83.02	201

08074800 Keegans Bayou at Roark Road near Houston, Tex. (12)

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

Drainage area.--9.28 sq mi. Prior to Jan. 1, 1967, 9.66 sq mi, due to drainage ditch changes.

Gage.--Water-stage recorder. Datum of gage is mean sea level, datum of 1929 through 1957 adjustment.

Remarks.--Recording rain gage located at station.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	66.43	140
1966	Apr. 14, 1966	67.64	588
1967	Jan. 13-14, 1967	a64.83	43
1968	June 23, 1968	67.89	352
1969	May 3, 1969	67.27	659
1970	May 21, 1970	69.34	547
1971	Oct. 11, 1970	71.88	751

a Occurred Sept. 21, 1967, backwater from channel vegetation.

08074850 Bintliff Ditch at Bissonnet Street, Houston, Tex. (12)

Location.--Lat 29°41'16", long 95°30'20", Harris County, at bridge on Bissonnet Street in southwest Houston.

Drainage area.--4.29 sq mi.

Gage.--Recording.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1968	Sept. 14, 1968	62.19	a1,030
1969	Sept. 15, 1969	61.75	968
1970	May 21, 1970	60.48	808
1971	Oct. 11, 1970	62.82	1,120

a Maximum for period August to September; probably peak for year.

08074900 Willow Waterhole Bayou at Landsdowne Street, Houston, Tex. (12)

Location.--Lat 29°39'01", long 95°29'11", Harris County, at bridge on Landsdowne Street in southwest Houston.

Drainage area.--11.2 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1957.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	56.88	350
1966	Apr. 14, 1966	60.00	1,300
1967	Aug. 25, 1967	57.90	450
1968	June 23, 1968	60.76	1,680
1969	Feb. 21, 1969	58.96	884
1970	May 21, 1970	59.56	844
1971	Oct. 11, 1970	61.05	1,350

08075300 Sims Bayou at Carlsbad Street, Houston, Tex. (12)

Location.--Lat 29°37'33", long 95°29'56", Harris County, at bridge on Carlsbad Street in southwest Houston.

Drainage area.--4.99 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1957.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	June 18, 1965	60.71	108
1966	Apr. 14, 1966	62.59	320
1967	Sept. 21, 1967	62.59	314
1968	June 23, 1968	63.45	470
1969	Feb. 21, 1969	61.52	a220
1970	May 21, 1970	62.43	342
1971	Oct. 11, 1970	63.77	454

a Revised.

08075400 Sims Bayou at Hiram Clarke Street at Houston, Tex. (12)

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

Drainage area.--20.2 sq mi.

Gage.--Water-stage recorder. Datum of gage is mean sea level, datum of 1929, adjustment of 1929.

Remarks.--Recording rain gage located at station.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1964	Sept. 17, 1964	a43.83	96
1965	Dec. 10, 1964	48.70	960
1966	Apr. 14, 1966	51.08	2,280
1967	Sept. 21, 1967	46.77	350
1968	June 23, 1968	52.35	2,200
1969	Feb. 21, 1969	52.08	2,280
1970	May 21, 1970	52.69	2,320
1971	Oct. 11, 1970	52.77	2,230

a Maximum for period August to September 1964.

08075550 Berry Bayou at Gilpin Street, Houston, Tex. (12)

Location.--Lat 29°38'32", long 95°13'22", Harris County, at bridge on Gilpin Street in southeast Houston.

Drainage area.--3.26 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustments of 1957 and 1959.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	34.76	290
1966	Feb. 9, 1966	34.48	607
1967	Apr. 13, 1967	31.83	235
1968	May 10, 1968	35.19	738
1969	Feb. 21, 1969	34.03	535
1970	Oct. 30, 1969	32.71	285
1971	Oct. 23, 1970	34.12	339

08075600 Berry Bayou tributary at Globe Street, Houston, Tex. (12)

Location.--Lat 29°39'00", long 95°14'48", Harris County, at bridge on Globe Street in southeast Houston.

Drainage area.--1.58 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustments of 1957 and 1959.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	37.89	145
1966	Feb. 9, 1966	39.48	308
1967	Apr. 13, 1967	37.27	114
1968	June 22, 1968	39.03	254
1969	Feb. 21, 1969	38.35	198
1970	May 31, 1970	37.15	79
1971	Oct. 23, 1970	a38.70	186

a Occurred at different time than peak discharge.

08075650 Berry Bayou at Forest Oaks Street at Houston, Tex. (12)

Location.--Lat 29°40'35", long 95°14'37", Harris County, near left bank at downstream side of Forest Oaks Street bridge in southeast Houston, 0.8 mile upstream from auxiliary gage at mouth of Berry Creek, and 1.7 miles upstream from Sims Bayou.

Drainage area.--11.1 sq mi.

Gage.--Recording. Datum of gage is mean sea level.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1964	Sept. 17, 1964	a5.90	350
1965	-	-	b800
1966	Feb. 9, 1966	c16.36	2,630
1967	Apr. 13, 1967	9.68	886
1968	May 16, 1968	d16.98	3,110
1969	Feb. 21, 1969	17.59	e1,410
1970	May 21, 1970	f16.78	816
1971	Oct. 23, 1970	15.58	1,540

a Maximum for period April to September 1964.
b Estimated.
c Occurred Apr. 14, 1966.
d Occurred June 24, 1968.
e Affected by backwater from Sims Bayou.
f Occurred on May 22, 1970.

SAN JACINTO RIVER BASIN

08075700 Berry Creek at Galveston Road, Houston, Tex. (12)

Location.--Lat 29°40'59", long 95°15'11", Harris County, at bridge on Galveston Road and 0.5 mile upstream from mouth in southeast Houston.

Drainage area.--4.86 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustments of 1957 and 1959.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	17.57	280
1966	Apr. 14, 1966	20.47	607
1967	Apr. 13, 1967	16.66	286
1968	May 10, 1968	21.56	789
1969	Feb. 21, 1969	20.29	644
1970	May 21, 1970	18.64	441
1971	Oct. 23, 1970	17.75	370

SAN JACINTO RIVER BASIN

08075750 Hunting Bayou tributary at Cavalcade Street, Houston, Tex. (12)

Location.--Lat 29°48'00", long 95°20'02", Harris County, at bridge on Cavalcade Street in northeast Houston.

Drainage area (revised).--1.20 sq mi.

Gage.--Recording.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Sept. 22, 1965	43.37	109
1966	Apr. 14, 1966	43.63	119
1967	Oct. 4, 1966	44.14	140
1968	May 10, 1968	44.38	149
1969	Jan. 16, 1969	43.10	140
1970	May 15, 1970	43.52	126
1971	Oct. 23, 1970	46.81	275

08075760 Hunting Bayou at Falls Street, Houston, Tex. (12)

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

Drainage area (revised).--3.50 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustments of 1957 and 1959.

Remarks.--Urban.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Sept. 22, 1965	41.95	236
1966	Apr. 14, 1966	40.64	485
1967	Oct. 4, 1966	42.46	399
1968	May 10, 1968	42.28	445
1969	Jan. 16, 1969	40.97	380
1970	May 15, 1970	42.24	377
1971	Oct. 23, 1970	49.50	666

08075770 Hunting Bayou at U.S. Highway 90-A at Houston, Texas. (12)

Location.--Lat 29°47'43", long 95°16'21", Harris County, on right bank 100 ft downstream from bridge on U.S. Highway 90-A, in northeast section of Houston, and 9.2 miles upstream from mouth.

Drainage area.--14.4 sq mi.

Gage.--Water-stage recorder. Datum of gage is mean sea level, datum of 1929, adjustment of 1959.

Topographic characteristics.--Length of main stream, 7.1 miles; slope index, 1.1 ft per mile. (Map scale, 1:24,000)

Remarks.--Recording rain gage located at station.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1964	Apr. 17, 1964	a24.39	166
1965	Dec. 10, 1964	26.60	355
1966	Apr. 14, 1966	31.43	1,150
1967	Oct. 5, 1966	30.44	920
1968	May 10, 1968	32.66	1,460
1969	Feb. 21, 1969	31.03	1,050
1970	May 15, 1970	30.20	880
1971	Oct. 23, 1970	36.88	2,260

a Maximum for period April to September 1964.

08075780 Greens Bayou at Cutten Road near Houston, Tex. (12)

Location.--Lat 29°56'56", long 95°31'10", Harris County, at bridge on Cutten Road and about 16.5 miles northwest of Houston.

Drainage area.--8.73 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustments of 1957 and 1959.

Remarks.--Urbanizing.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Feb. 16, 1965	115.27	151
1966	Apr. 14, 1966	117.63	514
1967	Sept. 21, 1967	118.30	468
1968	May 12, 1968	117.15	390
1969	Feb. 21, 1969	118.04	508
1970	May 30, 1970	117.13	268
1971	Oct. 23, 1970	117.38	318

08076200 Halls Bayou at Deertrail Street, Houston, Tex. (12)

Location.--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.

Drainage area.--6.31 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1961.

Remarks.--Urbanizing.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Sept. 22, 1965	81.33	130
1966	Apr. 14, 1966	83.52	614
1967	Sept. 21, 1967	85.22	710
1968	May 10, 1968	82.65	318
1969	Feb. 21, 1969	84.73	596
1970	May 15, 1970	83.94	618
1971	Oct. 23, 1970	85.14	451

SAN JACINTO RIVER BASIN

08076500 Halls Bayou at Houston, Tex. (12)

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 miles upstream from mouth.

Drainage area.--24.7 sq mi.

Gage.--Recording. Datum of gage is 0.66 ft below mean sea level, datum of 1929, adjustment of 1957.

Topographic characteristics.--Length of main stream, 19.0 miles; slope index, 4.41 ft per mile. (Map scale, 1:24,000)

Remarks.--Channel was rectified in June 1956.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1953	May 18, 1953	59.05	2,410
1954	July 30, 1954	60.65	2,020
1955	Feb. 6, 1955	56.62	1,530
1956	Jan. 22, 1956	51.53	357
1957	Apr. 29, 1957	52.51	620
1958	Oct. 15, 1957	57.09	1,280
1959	May 23, 1959	58.10	1,980
1960	June 26, 1960	58.79	2,230
1961	Sept. 12, 1961	60.50	3,400
1962	Nov. 13, 1961	58.28	2,540
1963	Nov. 27, 1962	57.02	1,870
1964	May 31, 1964	55.27	1,470
1965	Sept. 22, 1965	55.02	1,250
1966	Apr. 14, 1966	58.93	2,640
1967	Sept. 21, 1967	57.65	1,110
1968	May 10, 1968	58.26	2,340
1969	Feb. 21, 1969	58.93	2,560
1970	May 15, 1970	58.33	2,340
1971	Oct. 23, 1970	58.22	2,300

CLEAR CREEK BASIN

08077100 Clear Creek tributary at Hall Road, Houston, Tex. (12)

Location.--Lat 29°36'09", long 95°16'41", Harris County, at bridge on Hall Road in south Houston.

Drainage area.--1.33 sq mi. Prior to Oct. 1, 1966, 1.27 sq mi.

Gage.--Recording. Datum of gage is mean sea level, datum of 1929, supplementary adjustment of 1957 and 1959.

Remarks.--Urbanizing.

Annual maximum stage and discharge

Water year	Date	Elevation (ft)	Discharge (cfs)
1965	Dec. 10, 1964	a42.73	b100
1966	Feb. 9, 1966	c44.91	b150
1967	Apr. 13, 1967	d41.38	132
1968	May 10, 1968	e44.91	390
1969	May 3, 1969	a43.03	294
1970	May 21, 1970	a44.74	b450
1971	Sept. 30, 1971	42.87	291

a Occurred at different time than peak discharge, backwater from Clear Creek.
b Estimated.
c Occurred May 21, 1966, backwater from Clear Creek.
d Occurred Oct. 4, 1966, backwater from vegetation in channel.
e Occurred May 11, 1968, backwater from Clear Creek.

CLEAR CREEK BASIN

08077550 Cowart Creek near Friendswood, Tex. (12)

Location.--Lat 29°30'46", long 95°13'21", Brazoria County, at downstream side of bridge on county road and 1.7 miles southwest of Friendswood.

Drainage area.--18.0 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 8.05 miles; slope index, 4.67 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a<11.70	<130
1966	Apr. 14, 1966	18.74	948
1967	Feb. 6, 1967	14.27	307
1968	June 21, 1968	21.02	1,280
1969	Oct. 9, 1968	19.10	938
1970	May 21, 1970	19.92	1,090
1971	Nov. 30, 1970	16.06	491

a Maximum for period Aug. 25 to Sept. 30, 1965.
< Less than amount shown.

CLEAR CREEK BASIN

08077600 Clear Creek near Friendswood, Tex. (12)

Location.--Lat 29°31'02", long 95°10'42", Galveston County, at bridge on Farm Road 528 and 1.5 miles southeast of Friendswood.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Remarks.--Records are stage only.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 14, 1966	13.38	-
1967	-	10.74	-
1968	June 24, 1968	15.93	-
1969	May 17, 1969	10.92	-
1970	-	<10.74	-
1971	-	<10.74	-

< Less than amount shown.

08077700 Highland Bayou at Hitchcock, Tex. (12)

Location.--Lat 29°21'12", long 95°01'49", Galveston County, at downstream side of bridge on Farm Road 2004, 0.6 mile west of Hitchcock, and 7 miles from mouth and Jones Bay.

Drainage area.--15.6 sq mi.

Gage.--Recording. Datum of gage is mean sea level.

Remarks.--Stage record only.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1963	Sept. 25, 1963	2.54	-
1964	Feb. 5, 1964	3.33	-
1965	Dec. 10, 1964	7.70	-
1966	Dec. 18, 1965	5.49	-
1967	Nov. 11 or 12, 1966	4.54	-
1968	June 21, 1968	8.15	-
1969	Apr. 12, 1969	5.88	-
1970	Mar. 7, 1970	4.60	-
1971	Sept. 10, 1971	6.69	-

08077750 Highland Bayou tributary near Texas City, Tex. (12)

Location.--Lat 29°20'31", long 94°57'03", Galveston County, at Texas City Terminal Railway Company tracks, 600 ft downstream from mouth, and 3 miles southwest of Texas City.

Drainage area.--1.97 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Remarks.--Records are of stage only.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	May 5, 1966	3.23	-
1967	Sept. 21, 1967	4.10	-
1968	June 29, 1968	3.74	-
1969	Feb. 14, 1969	4.29	-
1970	Dec. 6, 1969	3.79	-
1971	Sept. 10, 1971	5.08	-

BRAZOS RIVER BASIN

08079570 Barnum Springs Draw near Post, Tex. (05)

Location.--Lat 33°16'54", long 101°23'30", Garza County, at culvert on Farm Road 122 and 6.4 miles north of Post.

Drainage area.--4.99 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.8 miles; slope index, 63.1 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 10, 1966	3.55	58
1967	Mar. 23, 1967	3.65	63
1968	May 31, 1968	8.40	435
1969	May 6, 1969	4.25	97
1970	May 31, 1970	4.57	117
1971	Aug. 23, 1971	5.39	175

BRAZOS RIVER BASIN

08079580 Rattlesnake Creek near Post, Tex. (05)

Location.--Lat 33°13'36", long 101°21'36", Garza County, at culvert on Farm Road 651 and 2.7 miles north of Post.

Drainage area.--2.75 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.55 miles; slope index, 67.2 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 31, 1966	4.58	196
1967	June 27, 1967	5.88	295
1968	June 8, 1968	3.62	106
1969	May 6, 1969	3.09	70
1970	May 31, 1970	3.53	60
1971	Aug. 23, 1971	13.45	1,910

08080510 Guest-Flowers Draw near Aspermont, Tex. (08)

Location.--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.

Drainage area.--2.52 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.9 miles; slope index, 23.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	June 21, 1965	a17.85	155
1966	Aug. 31, 1966	17.25	80
1967	June 9, 1967	19.57	410
1968	-	<16.75	<30
1969	Sept. 22, 1969	18.37	230
1970	Mar. 6, 1970	16.87	<100
1971	Aug. 25, 1971	17.25	80

a Maximum for period June 4 to Sept. 30, 1965.
< Less than amount shown.

08080750 Callahan Draw near Lockney, Tex. (05)

Location.--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 northwest of Lockney.

Drainage area.--37.5 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 24, 1966	3.01	106
1967	May 31, 1967	3.69	185
1968	May 9, 1968	2.95	100
1969	May 6, 1969	3.55	167
1970	-	<2.02	<5.0
1971	-	<2.02	<5.0

< Less than amount shown.

BRAZOS RIVER BASIN

08080918 Red Mud Creek near Spur, Tex. (25)

Location.--Lat 33°19'24", long 100°55'18", Dickens County, at culvert on Farm Road 1081 and 11 miles southwest of Spur.

Drainage area.--65.1 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 23 miles; slope index, 16.1 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 24, 1966	15.14	4,340
1967	July 4, 1967	11.70	1,850
1968	June 16, 1968	14.13	2,900
1969	May 16, 1969	10.44	1,520
1970	Oct. 27, 1969	8.66	1,100
1971	Sept. 23, 1971	10.12	1,450

BRAZOS RIVER BASIN

08082900 North Elm Creek near Throckmorton, Tex. (03)

Location.--Lat 33°10'50", long 99°22'05", Throckmorton County, at culvert on State Highway 24 and 11.3 miles west of Throckmorton.

Drainage area.--3.58 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.0 miles; slope index, 36.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Apr. 30, 1966	26.28	1,350
1967	-	<22.84	<160
1968	May 12, 1968	23.21	264
1969	May 5, 1969	24.50	650
1970	-	<23.07	<200
1971	Aug. 15, 1971	23.77	398

a No flow for period June 3 to Sept. 30, 1965.
< Less than amount shown.

08085300 Humphries Draw near Haskell, Tex. (08)

Location.--Lat 33°10'40", long 99°34'30", Haskell County, at culvert on State Highway 24 and 9.3 miles east of Haskell.

Drainage area.--3.53 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.27 miles; slope index, 21.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 19, 1965	a14.38	(+)
1966	Aug. 25, 1966	16.31	820
1967	July 20, 1967	17.29	1,150
1968	Jan. 21, 1968	17.65	1,250
1969	May 7, 1969	18.80	1,650
1970	Mar. 7, 1970	16.93	1,000
1971	Aug. 15, 1971	19.41	1,840

a Maximum for period June 3 to Sept. 30, 1965.
+ Discharge not determined.

08086260 Pecan Creek near Eolian, Tex. (23)

Location.--Lat 32°35'01", long 99°01'57", Stephens County, at county road crossing 1.4 miles east of Farm Road 1853, 3.3 miles upstream from Battle Creek, and 5.8 miles south of Eolian.

Drainage area.--25.4 sq mi.

Gage.--Recording. Altitude of gage is 1,274 ft, from AMS topographic map.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	July 19, 1967	5.85	335
1968	Apr. 18, 1968	11.26	580
1969	May 6, 1969	12.78	648
1970	Dec. 28, 1969	5.49	320
1971	May 29, 1971	7.25	400

BRAZOS RIVER BASIN

08088100 Salt Creek at Olney, Tex. (03)

Location.--Lat 33°22'13", long 98°44'40", Young County, on right bank 21 ft downstream from bridge on State Highway 199 and 0.5 mile east of Olney.

Drainage area.--9.6 sq mi.

Gage.--Recording. Datum of gage is 1,164.03 ft above mean sea level, datum of 1929.

Historical data.--Maximum stage since at least 1908, 16.7 ft in June 1915, from information by local residents.

Remarks.--Rain gage at site.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1958	Sept. 16, 1958	8.18	345
1959	June 22, 1959	7.30	264
1960	Oct. 3, 1959	10.16	1,040
1961	Sept. 12, 1961	5.95	162
1962	Nov. 22, 1961	9.66	485
1963	Nov. 26, 1962	9.32	360
1964	May 29, 1964	10.05	498
1965	May 10, 1965	6.62	148
1966	Apr. 29, 1966	12.14	11,500
1967	Sept. 18, 1967	9.74	625
1968	Jan. 21, 1968	8.83	273
1969	May 5, 1969	11.67	2,640
1970	Apr. 30, 1970	9.55	370
1971	Aug. 26, 1971	9.41	362

BRAZOS RIVER BASIN

08088300 Briar Creek near Graham, Tex. (03)

Location.--Lat 33°12'40", long 98°37'05", Young County, on downstream side of bridge on Farm Road 1769, 2.5 miles upstream from mouth, and 7 miles northwest of Graham.

Drainage area.--19.7 sq mi.

Gage.--Recording.

Historical data.--Maximum stage since at least 1900, 15.2 ft in September 1955; flood in May 1957 reached a stage of 15.0 ft, from information by local residents.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1959	June 23, 1959	4.08	207
1960	Oct. 3, 1959	9.02	649
1961	Oct. 18, 1960	8.42	555
1962	June 10, 1962	10.50	750
1963	Apr. 27, 1963	5.10	268
1964	May 30, 1964	6.47	390
1965	Nov. 19, 1964	7.14	444
1966	Apr. 23, 1966	11.42	723
1967	July 19, 1967	8.62	516
1968	Mar. 13, 1968	4.50	220
1969	Sept. 23, 1969	8.22	543
1970	Apr. 30, 1970	12.30	2,720
1971	Aug. 24, 1971	11.50	1,840

08089100 Elm Creek tributary near Graford, Tex. (02)

Location.--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.

Drainage area.--1.07 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.9 miles; slope index, 68.5 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Apr. 30, 1966	12.71	40
1967	May 20, 1967	12.21	33
1968	Mar. 20, 1968	11.15	16
1969	Mar. 23, 1969	11.69	25
1970	Dec. 29, 1969	11.41	21
1971	Oct. 16, 1970	10.21	5.0

a No flow for period June 22 to Sept. 30, 1965.

08090850 Cidwell Branch near Granbury, Tex. (02)

Location.--Lat 32°35'41", long 97°46'24", Hood County, at culvert on State Highway 51 and 10.5 miles north of Granbury.

Drainage area.--3.37 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.65 miles; slope index, 49 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 29, 1966	16.65	540
1967	-	<11.16	<37
1968	May 10, 1968	14.44	290
1969	May 6, 1969	11.36	48
1970	Oct. 11, 1969	13.43	198
1971	July 29, 1971	13.80	230

< Less than amount shown.

08091200 Morris Branch near Bluff Dale, Tex. (02)

Location.--Lat 32°21'25", long 98°00'00", Erath County, at culvert on U.S. Highway 377 and 1.2 miles east of Bluff Dale.

Drainage area.--0.06 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.23 mile; slope index, 382 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a<11.44	<25
1966	Apr. 29, 1966	13.71	107
1967	May 11, 1967	11.76	35
1968	Aug. 14, 1968	12.54	61
1969	Apr. 12, 1969	10.63	7.4
1970	Oct. 11, 1969	11.99	45
1971	July 29, 1971	13.55	104

a Maximum for period June 10 to Sept. 30, 1965.
< Less than amount shown.

08091700 Panter Branch near Tolar, Tex. (02)

Location.--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.

Drainage area.--7.82 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.0 miles; slope index, 49 ft per mile. (Map scale, 1:24,000).

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 29, 1966	14.49	880
1967	May 20, 1967	16.9	1,650
1968	May 9, 1968	21.70	3,800
1969	May 7, 1969	13.50	610
1970	Oct. 11, 1969	13.61	640
1971	July 29, 1971	14.53	890

08093200 Bond Branch near Hillsboro, Tex. (09)

Location.--Lat 32°02'20", long 97°06'30", Hill County, at culvert on U.S. Highway 77 and 2.3 miles northeast of Hillsboro.

Drainage area.--0.36 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.85 mile; slope index, 70.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	June 24, 1965	14.19	305
1966	Apr. 25, 1966	14.00	285
1967	May 1, 1967	11.0	34
1968	May 9, 1968	15.91	505
1969	May 7, 1969	13.09	197
1970	Mar. 3, 1970	11.18	44
1971	Apr. 17, 1971	12.83	168

08093400 Cobb Creek near Abbott, Tex. (09)

Location.--Lat 31°55'11", long 97°05'57", Hill County, at downstream side of bridge on service road on downstream side of Interstate Highway 35, 1.5 miles downstream from Missouri, Kansas and Texas Railroad Co. bridge, 2.8 miles northwest of Abbott, and 9 miles upstream from mouth.

Drainage area.--11.7 sq mi.

Gage.--Recording. Datum of gage is 575.00 ft above mean sea level, datum of 1929.

Topographic characteristics.--Length of main stream, 10.7 miles; slope index, 20.7 ft per mile. (Map scale, 1:24,000)

Remarks.--Maximum stage since at least 1932, 11.1 ft, date unknown, from information by Texas Highway Department.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 31, 1967	7.85	785
1968	May 9, 1968	10.50	2,720
1969	May 7, 1969	7.77	880
1970	Mar. 3, 1970	7.45	760
1971	May 29, 1971	9.65	1,900

08094000 Green Creek subwatershed No. 1 near Dublin, Tex. (02)

Location.--Lat 32°09'57", long 98°20'28", Erath County, near center of dam on main headwater channel of Green Creek, 0.9 mile downstream from county road, 1.3 miles east of Farm Road 219, and 5.5 miles north of Dublin.

Drainage area.--3.34 sq mi.

Gage.--Recording. Datum of gage is 1,408.00 ft above mean sea level, datum of 1929 (levels by U.S. Soil Conservation Service).

Remarks.--Peaks are based on maximum inflow (average for 5- or 15-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. No adjustment made for reservoir losses. One recording rain gage is located in the watershed above the station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1955	May 18, 1955	3,630
1956	May 1, 1956	11,500
1957	Apr. 26, 1957	887
1958	July 22, 1958	748
1959	June 26, 1959	498
1960	Oct. 3, 1959	1,540
1961	July 9, 1961	261
1962	Sept. 7, 1962	516
1963	Apr. 28, 1963	621
1964	Sept. 21, 1964	2,090
1965	May 15, 1965	365
1966	Apr. 30, 1966	645
1967	Sept. 14, 1967	102
1968	May 12, 1968	3,540
1969	July 27, 1969	604
1970	Mar. 13, 1970	248
1971	May 29, 1971	4,050

08095220 South Bosque River near McGregor, Tex. (09)

Location.--Lat 31°23'22", long 97°22'54", McLennan County, on downstream side of bridge on State Highway 317 and 3.8 miles south of McGregor.

Drainage area.--15.9 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.14 miles; slope index, 28.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Apr. 22, 1967	2.73	178
1968	May 10, 1968	9.56	3,900
1969	Apr. 12, 1969	6.05	1,430
1970	Mar. 6, 1970	5.69	1,240
1971	July 25, 1971	9.18	3,580

08095250 Willow Branch at McGregor, Tex. (09)

Location.--Lat 31°26'25", long 97°25'15", McLennan County, at culvert on U.S. Highway 84 and on west edge of McGregor.

Drainage area.--2.52 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.55 miles; slope index, 19.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 18, 1966	a5.54	367
1967	Apr. 22, 1967	4.90	238
1968	July 8, 1968	5.39	337
1969	Apr. 12, 1969	5.63	385
1970	Mar. 16, 1970	4.98	255
1971	July 30, 1971	6.59	610

a Maximum for period July to September 1966.

08096550 Box Branch at Robinson, Tex. (09)

Location.--Lat 31°29'35", long 97°08'45", McLennan County, at culvert on Loop 340 in Robinson and 4.9 miles south of Waco.

Drainage area.--0.40 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.80 mile; slope index, 60 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	May 1, 1966	12.90	460
1967	-	<9.78	<20
1968	June 24, 1968	10.93	150
1969	-	<9.78	<29
1970	-	<9.78	<29
1971	July 27, 1971	11.14	179

a No flow for period August to September 1965.
< Less than amount shown.

08096800 Cow Bayou subwatershed No. 4 near Bruceville, Tex. (09)

Location.--Lat 31°20'10", long 97°15'50", McLennan County, near center of dam on Foster Branch, 1.0 mile upstream from South Fork Cow Bayou, and 2.1 miles west of Bruceville.

Drainage area.--5.25 sq mi.

Gage.--Recording. Datum of gage is 574.46 ft above mean sea level, datum of 1929 (levels by U.S. Soil Conservation Service).

Remarks.--Peak discharge based on maximum inflow (average for 5- or 15-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Recording rain gage located at station. Tabulations of significant storm rainfall and runoff are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1957	May 11, 1957	6,900
1958	Oct. 14, 1957	1,510
1959	June 23, 1959	1,690
1960	Oct. 4, 1959	1,400
1961	June 8, 1961	628
1962	June 30, 1962	293
1963	Oct. 26, 1962	19
1964	June 16, 1964	151
1965	May 16, 1965	1,780
1966	Feb. 9, 1966	1,830
1967	Sept. 17, 1967	36
1968	May 10, 1968	2,340
1969	Mar. 23, 1969	481
1970	Mar. 16, 1970	550
1971	Apr. 18, 1971	1,680

08098300 Little Pond Creek at Burlington, Tex. (17)

Location.--Lat 31°01'35", long 96°59'17", Milam County, on left bank 80 ft downstream from bridge on U.S. Highway 77, 1.0 mile north of Burlington, and 2.5 miles downstream from Keys Creek.

Drainage area.--22.2 sq mi.

Gage.--Water-stage recorder. Datum of gage is 388.51 ft above mean sea level, datum of 1929.

Historical data.--Maximum stage since at least 1938, 17.5 ft in 1950, from information by local residents.

Remarks.--Three recording rain gages are located in the watershed. Data from these gages are on file in the U.S. Geological Survey Austin Field Unit office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1963	Nov. 27, 1962	7.50	418
1964	Sept. 24, 1964	10.09	745
1965	May 16, 1965	15.61	5,980
1966	Apr. 25, 1966	13.02	2,550
1967	May 1, 1967	9.82	748
1968	May 10, 1968	a14.60	4,250
1969	Apr. 12, 1969	14.72	4,530
1970	Mar. 7, 1970	11.67	1,560
1971	May 9, 1971	13.06	2,600

a Occurred June 24, 1968.

08099350 Sabana River tributary near De Leon, Tex. (23)

Location.--Lat 32°06'44", long 98°33'58", Comanche County, 13 ft upstream from culvert on Farm Road 587 and 1.6 miles west of De Leon.

Drainage area.--0.52 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.02 miles; slope index, 55.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 29, 1966	a7.56	51
1967	Sept. 21, 1967	7.97	68
1968	Jan. 20, 1968	7.22	41
1969	Aug. 25, 1969	3.92	47
1970	Mar. 7, 1970	3.66	36
1971	May 27, 1971	4.15	56

a Maximum for period February to September 1966.

08100100 Eidson Creek near Hamilton, Tex. (09)

Location.--Lat 31°46'10", long 98°07'25", Hamilton County, at culvert on U.S. Highway 281 and 4.6 miles north of Hamilton.

Drainage area.--2.91 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.03 miles; slope index, 55 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Oct. 18, 1965	10.06	150
1967	June 12, 1967	10.00	138
1968	May 27, 1968	12.63	900
1969	Aug. 4, 1969	10.08	155
1970	May 31, 1970	10.51	259
1971	Sept. 23, 1971	10.18	180

a No flow for period August to September 1965.

BRAZOS RIVER BASIN

08100400 Bermuda Branch near Gatesville, Tex. (09)

Location.--Lat 31°32'26", long 97°47'53", Coryell County, at culvert on State Highway 36 and 8 miles northwest of Gatesville.

Drainage area.--0.50 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.17 miles; slope index, 168 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	-	a0
1967	-	<5.63	<46
1968	Jan. 21, 1968	5.6	44
1969	Feb. 21, 1969	5.79	60
1970	Nov. 1, 1969	5.74	56
1971	July 25, 1971	6.79	213

a No flow for period July to September 1966.
< Less than amount shown.

BRAZOS RIVER BASIN

08100800 Hoffman Branch near Hamilton, Tex. (09)

Location.--Lat 31°35'01", long 98°11'45", Hamilton County, at culvert on Farm Road 2414 and 9.3 miles southwest of Hamilton.

Drainage area.--5.56 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.50 miles; slope index, 49 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 18, 1966	11.71	a50
1967	July 1, 1967	5.59	17
1968	Jan. 21, 1968	9.19	620
1969	May 7, 1969	8.04	510
1970	Sept. 2, 1970	12.17	1,570
1971	July 28, 1971	12.75	a1,400

a Discharge estimated, culvert was partially plugged with debris.

08102900 School Branch near Lampasas, Tex. (23)

Location.--Lat 31°13'48", long 98°09'25", Lampasas County, at culvert on Farm Road 1690 and 11.5 miles north of Lampasas.

Drainage area.--0.90 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.95 mile; slope index, 58 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 12, 1966	a5.36	83
1967	May 1, 1967	4.88	53
1968	May 25, 1968	5.40	88
1969	May 7, 1969	4.95	55
1970	-	<4.76	<50
1971	-	<4.76	<50

a Maximum for period July to September 1966.
< Less than amount shown.

08103450 Fleece Branch near Lampasas, Tex. (23)

Location.--Lat 31°05'46", long 98°12'30", Lampasas County, at culvert on U.S. Highways 183 and 190, 0.7 mile upstream from Burleson Creek, and 2.8 miles northwest of Lampasas.

Drainage area.--1.08 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.00 miles; slope index, 100 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	June 19, 1966	15.18	980
1967	-	<9.81	<60
1968	July 8, 1968	10.17	101
1969	Apr. 12, 1969	12.33	425
1970	Mar. 6, 1970	10.57	124
1971	May 9, 1971	12.01	b298

a No flow for period August to September 1965.
b Discharge estimated, culvert was partially plugged with debris.
< Less than amount shown.

08104850 South Fork San Gabriel River near Bertram, Tex. (14)

Location.--Lat 30°43'14", long 98°06'15", Burnet County, on downstream side of bridge on Farm Road 243 and 3.4 miles southwest of Bertram.

Drainage area.--8.84 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.8 miles; slope index, 40 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 1, 1967	3.93	(+)
1968	May 17, 1968	12.14	(+)
1969	Apr. 12, 1969	6.68	(+)
1970	Mar. 6, 1970	6.92	(+)
1971	July 30, 1971	6.28	(+)

+ Discharge not determined.

08105900 Avery Branch near Taylor, Tex. (14)

Location.--Lat 30°29'11", long 97°27'27", Williamson County, at culvert on Farm Road 973 and 6.4 miles southwest of Taylor.

Drainage area.--3.42 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.25 miles; slope index, 12.9 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 27, 1966	a6.20	280
1967	May 2, 1967	7.21	595
1968	Nov. 10, 1967	7.03	535
1969	Apr. 12, 1969	7.55	710
1970	May 15, 1970	7.55	710
1971	Oct. 23, 1970	6.46	352

a Maximum for period July to September 1966.

08108800 Little Branch near Bryan, Tex. (17)

Location.--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.

Drainage area.--0.14 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.43 mile; slope index, 108 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	May 1, 1966	13.33	99
1967	Oct. 14, 1966	13.03	87
1968	July 9, 1968	13.08	88
1969	Apr. 13, 1969	12.36	60
1970	May 24, 1970	11.73	39
1971	-	12.01	48

a No flow for period August to September 1965.

08110350 Plummers Creek at Mexia, Tex. (09)

Location.--Lat 31°40', long 96°30', Limestone County, at culvert on State Highway 14 and at southwest city limits of Mexia.

Drainage area.--4.42 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.2 miles; slope index, 14.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Apr. 18, 1966	15.34	2,000
1967	Sept. 7, 1967	11.65	570
1968	May 10, 1968	14.92	1,830
1969	Apr. 12, 1969	11.95	680
1970	Dec. 6, 1970	12.49	870
1971	Oct. 12, 1970	14.01	1,450

a No flow for period August to September 1965.

08111100 Winkleman Creek near Brenham, Tex. (17)

Location.--Lat 30°15'19", long 96°15'44", Washington County, at culvert on State Highway 90 and 10.7 miles northeast of Brenham.

Drainage area.--0.75 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.28 miles; slope index, 37.5 ft per mile (revised). (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Feb. 27, 1966	10.53	95
1967	-	<9.81	<30
1968	July 9, 1968	13.27	500
1969	Apr. 12, 1969	12.75	390
1970	Sept. 2, 1970	12.04	270
1971	Oct. 11, 1970	12.58	364

a No flow for period August to September 1965.
< Less than amount shown.

08114900 Seabourne Creek near Rosenberg, Tex. (12)

Location.--Lat 29°31'27", long 95°48'29", Fort Bend County, at culvert on State Highway 36 and 2.4 miles south of Rosenberg.

Drainage area.--5.70 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.3 miles; slope index, 3.24 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 9, 1966	a4.92	310
1967	Aug. 25, 1967	4.82	160
1968	June 23, 1968	6.21	295
1969	May 16, 1969	6.78	355
1970	May 1, 1970	4.21	112
1971	Sept. 10, 1971	6.37	310

a Maximum for period Aug. 12 to Sept. 30, 1966.

BRAZOS RIVER BASIN

08116400 Dry Creek near Rosenberg, Tex. (12)

Location.--Lat 29°30'42", long 95°44'45", Fort Bend County, on right bank, 38 ft downstream from county road bridge, 5 miles southeast of Rosenberg, and 8.2 miles upstream from Smithers Lake spillway.

Drainage area.--8.53 sq mi.

Gage.--Recording. Datum of gage is 71.90 ft above mean sea level, datum of 1929, supplementary adjustment of 1943.

Historical data.--Highest flood since at least 1932, Oct. 31, 1959, from information by local residents.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1959	Apr. 11, 1959	8.00	504
1960	Oct. 31, 1959	12.66	2,410
1961	June 19, 1961	11.13	1,120
1962	Nov. 13, 1961	6.88	348
1963	Jan. 17, 1963	9.83	762
1964	Mar. 19, 1964	8.13	386
1965	Feb. 16, 1965	10.30	860
1966	Apr. 14, 1966	10.96	900
1967	Aug. 25, 1967	6.56	338
1968	June 24, 1968	10.30	860
1969	May 16, 1969	11.29	975
1970	Sept. 1, 1970	9.10	466
1971	Oct. 12, 1970	12.26	1,400

SAN BERNARD RIVER BASIN

08117800 Mound Creek tributary at Guy, Tex. (12)

Location.--Lat 29°20'49", long 95°46'30", Fort Bend County, at culvert on State Highway 36 and 0.2 mile southeast of Guy.

Drainage area.--1.48 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.80 miles; slope index, 3.3 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<1.58	(+)
1967	-	<1.58	(+)
1968	-	<1.58	(+)
1969	-	<1.58	(+)
1970	-	<1.58	(+)
1971	Oct. 11, 1970	2.28	206

a Maximum for period July 12 to Sept. 30, 1966.
+ Discharge not determined.
< Less than amount shown.

08123620 Sulphur Springs Draw near Wellman, Tex. (05)

Location.--Lat 33°04'36", long 102°27'54", Terry County, at culvert on Farm Road 402 and 3 miles northwest of Wellman.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 24, 1966	7.41	240
1967	June 25, 1967	4.01	102
1968	July 1, 1968	3.32	69
1969	-	<2.05	<11
1970	-	<2.05	<11
1971	June 5, 1971	3.78	91

< Less than amount shown.

08123750 Coahoma Draw tributary near Big Spring, Tex. (08)

Location.--Lat 32°21'17", long 101°24'18", Howard County, at culvert on State Highway 350 and 8.5 miles northeast of Big Spring.

Drainage area.--2.38 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.42 miles; slope index, 32.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 21, 1965	a4.05	265
1966	Apr. 30, 1966	3.47	185
1967	July 20, 1967	5.54	480
1968	June 15, 1968	4.47	328
1969	June 9, 1969	6.12	870
1970	May 30, 1970	6.11	840
1971	Aug. 8, 1971	5.89	520

a Maximum for period June to September 1965.

COLORADO RIVER BASIN

08123760 Bull Creek tributary near Forsan, Tex. (08)

Location.--Lat 32°08'23", long 101°10'53", Howard County, at culvert on Farm Road 2183 and 11.4 miles east of Forsan.

Drainage area.--0.40 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.9 mile; slope index, 128 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 30, 1966	a8.23	140
1967	-	-	0
1968	-	<6.02	<25
1969	-	<6.02	<25
1970	-	<6.02	<25
1971	Aug. 11, 1971	8.74	175

a Maximum for period February to September 1966.
< Less than amount shown.

COLORADO RIVER BASIN

08123920 Bitter Creek near Silver, Tex. (07)

Location.--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.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	July 19, 1967	3.24	98
1968	May 10, 1968	6.42	370
1969	-	<2.10	<32
1970	-	<2.10	<32
1971	June 22, 1971	10.42	850

< Less than amount shown.

COLORADO RIVER BASIN

08125450 Salt Creek tributary near Hylton, Tex. (08)

Location.--Lat 32°07'57", long 100°14'02", Nolan County, at culvert on Farm Road 1170 and 1.8 miles west of Hylton.

Drainage area.--0.25 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.72 mile; slope index, 185 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 30, 1966	a5.14	36
1967	July 19, 1967	8.18	155
1968	Aug. 14, 1968	7.41	120
1969	May 4, 1969	7.40	119
1970	Sept. 26, 1970	5.32	41
1971	Aug. 1, 1971	6.84	96

a Maximum for period February to September 1966.

COLORADO RIVER BASIN

08127100 Dry Creek near Christoval, Tex. (07)

Location.--Lat 31°05'21", long 100°20'56", Tom Green County, at culvert on Farm Road 2084 and 11.4 miles southeast of Christoval.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Aug. 12, 1965	a1.77	<200
1966	Sept. 18, 1966	3.64	285
1967	July 20, 1967	4.64	470
1968	-	<1.41	<200
1969	-	<1.41	<200
1970	Dec. 29, 1969	1.73	<200
1971	May 29, 1971	7.26	1,050

a Maximum for period June to September 1965.
< Less than amount shown.

08133300 Quarry Creek near Sterling City, Tex. (07)

Location.--Lat 31°50'48", long 101°09'18", Sterling County, at culvert on State Highway 158 and 9.8 miles west of Sterling City.

Drainage area.--3.25 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.0 miles; slope index, 95 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 18, 1965	a4.73	170
1966	Oct. 17, 1965	4.81	190
1967	June 2, 1967	4.83	195
1968	May 10, 1968	4.57	130
1969	Sept. 9, 1969	5.65	420
1970	Sept. 14, 1970	4.50	116
1971	Sept. 21, 1971	5.48	380

a Maximum for period June to September 1965.

08133800 Broome Creek near Broome, Tex. (07)

Location.--Lat 31°46'05", long 100°51'09", Sterling County, at culvert on U.S. Highway 87 and 1.1 miles northwest of Broome.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	Sept. 18, 1965	a2.81	150
1966	Oct. 17, 1965	2.87	160
1967	Mar. 20, 1967	2.60	115
1968	-	<2.37	<84
1969	Apr. 12, 1969	2.60	107
1970	-	<2.37	<84
1971	-	<2.37	b50

a Maximum for period June to September 1965.
b Estimated.
< Less than amount shown.

08134300 Nolke Station Creek near San Angelo, Tex. (07)

Location.--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.

Drainage area.--0.59 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.72 miles; slope index, 67 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	May 17, 1965	7.58	281
1966	Apr. 30, 1966	6.16	170
1967	Mar. 22, 1967	3.89	42
1968	-	<2.74	<20
1969	Aug. 26, 1969	3.01	<20
1970	-	<2.74	<20
1971	Aug. 10, 1971	7.80	300

< Less than amount shown.

08134400 Gravel Pit Creek near San Angelo, Tex. (07)

Location.--Lat 31°27'54", long 100°31'17", Tom Green County, at culvert on Farm Road 2288 and 5 miles west of San Angelo.

Drainage area.--0.19 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.55 mile; slope index, 80 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	June 4, 1965	a2.09	24
1966	Aug. 24, 1966	2.79	41
1967	Sept. 4, 1967	2.15	25
1968	Apr. 10, 1968	1.63	15
1969	Aug. 26, 1969	1.30	<30
1970	Dec. 28, 1969	1.07	<30
1971	Aug. 1, 1971	3.49	62

a Maximum for period May to September 1965.
< Less than amount shown.

08136200 Puddle Creek near Veribest, Tex. (07)

Location.--Lat 31°30'38", long 100°09'31", Tom Green County, at culvert on Farm Road 1692 and 6.2 miles northeast of Veribest.

Drainage area.--12.05 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.7 miles; slope index, 15.5 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	July 31, 1966	a5.70	72
1967	July 19, 1967	5.46	50
1968	May 9, 1968	5.11	<50
1969	Sept. 9, 1969	6.35	115
1970	Mar. 7, 1970	5.63	67
1971	July 25, 1971	6.38	127

a Maximum for period February to September 1966.
< Less than amount shown.

08136300 Frog Pond Creek near Eden, Tex. (07)

Location.--Lat 31°14'21", long 99°59'54", Concho County, at culvert on U.S. Highway 87 and 9.4 miles west of Eden.

Drainage area.--1.96 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.8 miles; slope index, 53.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Aug. 17, 1967	3.69	318
1968	Apr. 9, 1968	2.52	86
1969	Sept. 11, 1969	4.82	490
1970	-	1.77	<20
1971	-	<1.77	<10

< Less than amount shown.

08136900 Mukewater Creek subwatershed No. 10A
near Trickham, Tex. (23)

Location.--Lat 31°39'01", long 99°13'30", Coleman County, near center of dam on Mukewater Creek, 1.8 miles upstream from East Fork, and 4.3 miles north of Trickham.

Drainage area.--21.8 sq mi.

Gage.--Recording. Datum of gage is 1,462.00 ft above mean sea level, datum of 1929.

Remarks.--Peak discharge based on maximum inflow (average for 5-minute interval), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. There are eight rain gages (two recording and six nonrecording) located in watershed. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1966	Sept. 9, 1966	806
1967	Sept. 15, 1967	1,300
1968	Mar. 20, 1968	1,540
1969	Sept. 11, 1969	649
1970	Aug. 31, 1970	429
1971	Sept. 23, 1971	1,030

08137000 Mukewater Creek subwatershed No. 9
near Trickham, Tex. (23)

Location.--Lat 31°41'40", long 99°12'18", Coleman County, near center of dam on tributary to East Fork Mukewater Creek, 1.5 miles upstream from mouth, 4.5 miles southwest of Bangs, and 7.1 miles north of Trickham.

Drainage area.--4.02 sq mi.

Gage.--Recording. Datum of gage is 1,500.01 ft above mean sea level, datum of 1929.

Topographic characteristics.--Length of main stream, 3.6 miles; slope index, 20.4 ft per mile. (Map scale, 1:24,000)

Remarks.--Peak discharge based on maximum inflow (average for 5- or 15-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Recording rain gage located at station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1961	June 5, 1961	a1,440
1962	Oct. 9, 1961	44
1963	May 22, 1963	186
1964	Apr. 23, 1964	1,170
1965	Nov. 17, 1964	838
1966	Nov. 8, 1965	267
1967	Sept. 15, 1967	b380
1968	Mar. 20, 1968	853
1969	Sept. 10, 1969	460
1970	June 1, 1970	205
1971	Sept. 23, 1971	621

a Maximum for period January to September 1961.
b Estimated.

08139000 Deep Creek subwatershed No. 3 near Placid, Tex. (23)

Location.--Lat 31°17'10", long 99°09'25", McCulloch County, near right of dam on tributary to Deep Creek and 2.8 miles southeast of Placid.

Drainage area.--3.42 sq mi.

Gage.--Water-stage recorder. Datum of gage is 1,500.00 ft above mean sea level, datum of 1929. Prior to Dec. 1, 1953, staff gage at same site and datum.

Remarks.--Peak discharge based on maximum inflow (average for 5- or 15-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Recording rain gage located at station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1954	Oct. 4, 1953	742
1955	May 18, 1955	1,800
1956	Aug. 28, 1956	218
1957	May 12, 1957	1,160
1958	Mar. 6, 1958	448
1959	June 3, 1959	938
1960	Oct. 4, 1959	a280
1961	June 5, 1961	235
1962	June 26, 1962	154
1963	May 30, 1963	208
1964	Sept. 27, 1964	681
1965	Feb. 8, 1965	322
1966	Sept. 15, 1966	280
1967	May 20, 1967	203
1968	Jan. 20, 1968	315
1969	May 6, 1969	736
1970	Oct. 4, 1970	109
1971	July 26, 1971	3,060

a Estimated.

08140000 Deep Creek subwatershed No. 8 (Dry Prong Deep Creek) near Mercury, Tex. (23)

Location.--Lat 31°23'05", long 99°08'30", McCulloch County, near center of dam on Dry Prong Deep Creek, 1.9 miles southeast of Mercury, and 3.5 miles upstream from mouth.

Drainage area.--5.41 sq mi.

Gage.--Recording. Datum of gage is 1,377.13 ft above mean sea level, datum of 1929 (levels by U.S. Soil Conservation Service).

Remarks.--Peak discharges based on maximum inflow (average for 5- to 30-minute intervals) computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. Recording rain gage located at station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1952	Apr. 18, 1952	ab500
1953	May 12, 1953	ab900
1954	Oct. 4, 1953	1,570
1955	May 17, 1955	2,550
1956	Aug. 28, 1956	557
1957	May 12, 1957	894
1958	Nov. 2, 1957	521
1959	June 3, 1959	332
1960	Oct. 3, 1959	a323
1961	Dec. 7, 1960	217
1962	Nov. 2, 1961	b100
1963	May 5, 1963	408
1964	Sept. 21, 1964	5,660
1965	May 16, 1965	241
1966	Sept. 18, 1966	90
1967	Sept. 16, 1967	687
1968	Jan. 20, 1968	b200
1969	May 6, 1969	296
1970	Mar. 6, 1970	32
1971	Aug. 1, 1971	3,560

a Unadjusted for rainfall on water surface.
b Estimated.

08140500 Dry Prong Deep Creek near Mercury, Tex. (23)

Location.--Lat 31°24'10", long 99°08'10", McCulloch County, near center of span on downstream side of bridge on Farm Road 502, 1.3 miles southeast of Mercury, 1.7 miles downstream from floodwater-retarding structure, and 1.8 miles upstream from mouth.

Drainage area.--8.31 sq mi.

Gage.--Recording. Datum of gage is 1,339.02 ft above mean sea level, datum of 1929.

Historical data.--Flood of May 17, 1955, is the highest since at least 1924, from information by local resident.

Remarks.--In December 1951, one floodwater-retarding structure was built on the creek at a site 1.7 miles upstream from this station. This structure has a total floodwater-retarding capacity of 1,410 acre-ft below flood-spillway crest, and partly controls the flow from 4.32 sq mi above this station. Two recording rain gages are located in the watershed above the station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1938	July 23, 1938	8.7	-
1952	Apr. 18, 1952	5.80	105
1953	May 12, 1953	5.30	293
1954	Oct. 4, 1953	7.94	776
1955	May 17, 1955	9.00	2,000
1956	May 1, 1956	7.20	960
1957	May 12, 1957	6.46	664
1958	Nov. 2, 1957	4.85	253
1959	June 4, 1959	4.95	274
1960	Oct. 3, 1959	4.65	226
1961	Feb. 5, 1961	3.91	129
1962	Oct. 9, 1961	4.32	182
1963	May 5, 1963	5.72	425
1964	Sept. 21, 1964	9.00	1,970
1965	Feb. 8, 1965	4.09	144

08140500 Dry Prong Deep Creek
near Mercury, Tex. (23)--Continued

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 15, 1966	4.85	258
1967	Sept. 16, 1967	6.70	729
1968	Jan. 20, 1968	4.85	247
1969	Aug. 23, 1969	6.95	851
1970	Dec. 29, 1970	3.27	33
1971	Aug. 1, 1971	6.76	779

08141100 McCall Branch near Coleman, Tex. (23)

Location.--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.

Drainage area.--2.17 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.33 miles; slope index, 54.3 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	June 18, 1966	a4.78	440
1967	Sept. 15, 1967	3.97	230
1968	Jan. 20, 1968	5.24	710
1969	June 12, 1969	4.76	605
1970	June 1, 1970	4.46	<600
1971	Sept. 22, 1971	3.85	410

a Maximum for period March to September 1966.
< Less than amount shown.

08143700 Brown's Creek tributary near Goldthwaite, Tex. (23)

Location.--Lat 31°31'01", long 98°34'00", Mills County, at culvert on State Highway 16 and 4.6 miles north of Goldthwaite.

Drainage area.--2.48 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.75 miles; slope index, 90.8 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 29, 1966	a4.48	230
1967	-	<3.36	<20
1968	May 10, 1968	3.46	76
1969	Sept. 11, 1969	4.55	241
1970	Oct. 4, 1969	6.34	600
1971	Aug. 2, 1971	3.86	136

a Maximum for period February to September 1966.
< Less than amount shown.

08145100 Brady Creek tributary near Brady, Tex. (23)

Location.--Lat 31°05'05", long 99°17'33", McCulloch County, at culvert on Farm Road 734 and 4.3 miles southeast of Brady.

Drainage area.--4.05 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.76 miles; slope index, 29.9 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 20, 1967	4.14	218
1968	Jan. 20, 1968	3.51	140
1969	Sept. 10, 1969	2.84	60
1970	Mar. 6, 1970	2.66	40
1971	Sept. 24, 1971	14.73	3,970

08150200 Llano River tributary near London, Tex. (07)

Location.--Lat 30°38'22", long 99°35'52", Kimble County, at culvert on U.S. Highway 377 and 2.7 miles south of London.

Drainage area.--0.58 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.3 miles; slope index, 168 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 28, 1966	a5.21	10
1967	July 20, 1967	5.49	21
1968	Jan. 20, 1968	5.38	17
1969	Aug. 27, 1969	5.52	22
1970	Feb. 24, 1970	5.03	<20
1971	July 26, 1971	6.44	84

a Maximum for period February to September 1966.
< Less than amount shown.

08150900 Stone Creek tributary near Art, Tex. (14)

Location.--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.

Drainage area.--0.40 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.25 miles; slope index, 45.7 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 11, 1966	a3.88	45
1967	-	<2.98	<20
1968	May 11, 1968	4.66	82
1969	July 27, 1969	5.44	127
1970	Oct. 4, 1969	6.43	194
1971	Sept. 22, 1971	6.78	218

a Maximum for period February to September 1966.
< Less than amount shown.

08151300 Johnson Creek near Valley Spring, Tex. (14)

Location.--Lat 30°51'38", long 98°49'52", Llano County, at culvert on Farm Road 734, 0.8 mile west of Valley Spring, and 12 miles west of Llano.

Drainage area.--5.66 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 5.72 miles; slope index, 68.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 20, 1967	3.22	190
1968	July 9, 1968	4.96	750
1969	May 15, 1969	3.56	270
1970	Sept. 16, 1970	4.36	520
1971	May 8, 1971	3.67	330

08152700 Little Flatrock Creek near Marble Falls, Tex. (14)

Location.--Lat 30°30'52", long 98°18'44", Burnet County, at culvert on State Highway 71 and 4.8 miles southwest of Marble Falls.

Drainage area.--3.20 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.2 miles; slope index, 37.9 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	-	a0
1967	-	<4.80	<50
1968	Jan. 21, 1968	7.15	680
1969	May 7, 1969	5.26	126
1970	May 26, 1970	9.72	1,690
1971	-	<4.80	<50

a No flow for period July to September 1966.
< Less than amount shown.

08152800 Spring Creek near Fredericksburg, Tex. (14)

Location.--Lat 30°18'10", long 99°03'20", Gillespie County, on downstream side of bridge on U.S. Highway 290 and 11 miles west of Fredericksburg.

Drainage area.--15.2 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.15 miles; slope index, 43.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	May 21, 1967	3.38	110
1968	May 10, 1968	4.37	620
1969	May 8, 1969	4.36	610
1970	Oct. 12, 1969	4.37	615
1971	Aug. 13, 1971	3.68	200

08153100 Cane Branch at Stonewall, Tex. (14)

Location.--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.

Drainage area.--1.37 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.35 miles; slope index, 59 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Sept. 10, 1966	9.91	24
1967	Sept. 15, 1967	10.92	74
1968	July 13, 1968	11.78	135
1969	Apr. 10, 1969	9.88	22
1970	-	<9.82	<20
1971	-	<9.82	<20

a No flow for period August to September 1965.
< Less than amount shown.

08157000 Waller Creek at 38th Street at Austin, Tex. (14)

Location.--Lat 30°17'49", long 97°43'36", Travis County, on right bank 200 ft upstream from bridge on East 38th Street at Austin, 1.1 miles upstream from West Branch of Waller Creek, and 3.3 miles upstream from Colorado River.

Drainage area.--2.31 sq mi.

Gage.--Recording. Datum of gage is 555.44 ft above mean sea level, datum of 1929, Fort Worth supplementary adjustment of 1942.

Topographic characteristics.--Length of main stream, 4.3 miles; slope index, 45.8 ft per mile. (Map scale, 1:24,000)

Remarks.--This station operated as research project for runoff from urban areas. Two standard and one recording rain gages located in watershed. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1956	May 1, 1956	3.94	a108
1957	May 26, 1957	5.75	596
1958	Oct. 14, 1957	5.54	518
1959	Sept. 23, 1959	5.41	468
1960	Oct. 4, 1959	4.67	251
1961	Oct. 29, 1960	7.77	1,970
1962	June 10, 1962	7.11	1,420
1963	June 18, 1963	4.72	263
1964	Sept. 27, 1964	7.01	1,340
1965	May 16, 1965	6.15	805
1966	Aug. 11, 1966	5.75	618
1967	Apr. 23, 1967	5.72	604
1968	Oct. 15, 1967	6.03	745
1969	Aug. 14, 1969	5.07	361
1970	May 15, 1970	5.31	444
1971	Aug. 4, 1971	5.68	587

a Maximum for period Apr. 1 to Sept. 30, 1956.

08157500 Waller Creek at 23d Street at Austin, Tex. (14)

Location.--Lat 30°17'08", long 97°44'01", Travis County, on San Jacinto Boulevard, 50 ft upstream from bridge on East 23d Street at Austin, and 2.1 miles upstream from Colorado River.

Drainage area.--4.13 sq mi.

Gage.--Recording. Datum of gage is 509.95 ft above mean sea level, datum of 1929, Fort Worth supplementary adjustment of 1942.

Topographic characteristics.--Length of main stream, 5.3 miles; slope index, 45.5 ft per mile. (Map scale, 1:24,000)

Remarks.--Three recording and three nonrecording rain gages located in watershed. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1951	June 12, 1951	-	a2,010
1954	Oct. 23, 1953	8.0	-
1955	May 18, 1955	b5.40	1,640
1956	May 1, 1956	3.90	615
1957	June 12, 1957	5.85	2,050
1958	Apr. 26, 1958	5.47	1,700
1959	Sept. 23, 1959	5.71	1,910
1960	Oct. 4, 1959	4.11	726
1961	Oct. 29, 1960	7.96	3,710
1962	June 3, 1962	6.40	2,270
1963	June 18, 1963	4.70	1,070
1964	Sept. 27, 1964	7.08	2,280
1965	May 16, 1965	7.12	2,320
1966	Aug. 11, 1966	6.25	1,680
1967	Apr. 23, 1967	4.96	900
1968	May 27, 1968	5.54	1,220
1969	May 8, 1969	5.75	1,350
1970	May 15, 1970	4.35	610
1971	June 21, 1971	6.08	1,560

a Peak discharge determined by slope-area measurement half a mile downstream from gage.
b Maximum for period January to September 1955.

08158900 Fox Branch near Oak Hill, Tex. (14)

Location.--Lat 30°14'00", long 97°52'25", 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.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	-	a0
1966	Sept. 8, 1966	10.15	11
1967	Sept. 4, 1967	13.81	249
1968	Oct. 15, 1967	11.53	82
1969	Aug. 27, 1969	10.71	34
1970	Oct. 12, 1969	11.11	56
1971	July 26, 1971	10.72	34

a No flow for period August to September 1965.

08159150 Wilbarger Creek near Pflugerville, Tex. (14)

Location.--Lat 30°27'16", long 97°36'02", Travis County, on left bank 131 ft downstream from county road (Pfluger Lane), 800 ft downstream from Farm Road 685, 1.6 miles northeast of Pflugerville, and 1.9 miles downstream from Missouri-Kansas-Texas Railroad.

Drainage area.--4.61 sq mi.

Gage.--Water-stage recorder. Datum of gage is 670.61 ft above mean sea level, datum of 1929.

Remarks.--Three recording rain gages located in the watershed. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1964	June 16, 1964	6.92	1,760
1965	Feb. 16, 1965	4.75	737
1966	Apr. 24, 1966	3.67	396
1967	May 1, 1967	3.76	418
1968	Jan. 18, 1968	4.27	559
1969	Apr. 12, 1969	4.03	488
1970	May 15, 1970	4.48	633
1971	Oct. 23, 1971	4.42	611

08159450 Reeds Creek near Bastrop, Tex. (14)

Location.--Lat 30°00'26", long 97°15'03", Bastrop County, on downstream side of bridge on Farm Road 2571 and 8.3 miles southeast of Bastrop.

Drainage area.--5.22 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.65 miles; slope index, 38.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	May 11, 1965	9.4	a4,000
1967	Sept. 21, 1967	3.28	600
1968	Jan. 22, 1968	4.16	1,060
1969	-	<2.28	<330
1970	-	<2.38	<660
1971	-	<2.38	<660

a Computation of flow through culvert and over roadway.
< Less than amount shown.

08160800 Redgate Creek near Columbus, Tex. (13)

Location.--Lat 29°47'56", long 96°31'55", Colorado County, on left bank, 68 ft downstream from bridge on Farm Road 109, 1.8 miles upstream from Cummins Creek, and 7 miles north of Columbus.

Drainage area.--17.3 sq mi.

Gage.--Recording. Datum of gage is 210.82 ft above mean sea level.

Remarks.--No known diversion above station.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1962	June 30, 1962	6.95	1,060
1963	Feb. 18, 1963	4.45	391
1964	Mar. 19, 1964	4.95	508
1965	Jan. 22, 1965	14.20	3,990
1966	Nov. 8, 1965	5.75	655
1967	Sept. 15, 1967	7.68	1,130
1968	May 27, 1968	12.03	2,900
1969	Feb. 21, 1969	11.12	2,630
1970	Sept. 2, 1970	7.89	1,260
1971	Oct. 23, 1971	14.60	4,200

08161580 Dry Branch tributary near Altair, Tex. (13)

Location.--Lat 29°34'39", long 96°28'16", Colorado County, at culvert on State Highway 71 and 0.9 mile northwest of Altair.

Drainage area.--0.68 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.15 miles; slope index, 20 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	-	a<0.13	(+)
1967	Sept. 21, 1967	1.45	54
1968	June 23, 1968	2.27	188
1969	Feb. 21, 1969	1.59	75
1970	Mar. 17, 1970	.54	<20
1971	Sept. 10, 1971	2.61	240

a Maximum for period Aug. 10 to Sept. 30, 1966.
+ Discharge not determined.
< Less than amount shown.

08166300 Turtle Creek tributary near Kerrville, Tex. (15)

Location.--Lat 29°58'11", long 99°11'02", Kerr County, at culvert on Farm Road 2771 and 5.9 miles south of Kerrville.

Drainage area.--0.46 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.02 miles; slope index, 191 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	May 22, 1966	a8.82	81
1967	Sept. 15, 1967	8.81	80
1968	Oct. 14, 1967	8.66	74
1969	Apr. 12, 1969	6.47	20
1970	Oct. 5, 1969	10.67	(+)
1971	Aug. 12, 1971	10.80	(+)

a Maximum for period Mar. 17 to Sept. 30, 1966.
+ Discharge not determined.

08167600 Rebecca Creek near Spring Branch, Tex. (15)

Location.--Lat 29°55'06", long 98°22'10", Comal County, on right bank 72 ft upstream from private road crossing, 2.9 miles upstream from mouth, and 3.7 miles northeast of Spring Branch.

Drainage area.--10.9 sq mi.

Gage.--Recording. Datum of gage is 985.55 ft above mean sea level, datum of 1929.

Topographic characteristics.--Length of main stream, 3.9 miles; slope index, 45.5 ft per mile. (Map scale, 1:24,000)

Historical data.--Maximum stage since at least 1885, 25.5 ft in September 1952, from information by local residents.

Remarks.--Rain gage at site.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1961	Oct. 29, 1960	6.18	4,340
1962	Apr. 27, 1962	2.12	3.8
1963	Apr. 5, 1963	6.20	4,340
1964	Mar. 18, 1964	2.99	249
1965	May 11, 1965	7.70	8,500
1966	Oct. 18, 1965	7.97	9,300
1967	Sept. 4, 1967	4.09	1,130
1968	Jan. 18, 1968	6.00	3,970
1969	Apr. 12, 1969	3.16	357
1970	May 23, 1970	4.22	1,270
1971	Oct. 23, 1971	2.28	14

08168720 Trough Creek near New Braunfels, Tex. (15)

Location.--Lat 29°46'20", long 98°15'55", Comal County, at culvert on State Highway 46 and 11 miles northwest of New Braunfels.

Drainage area (revised).--0.48 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.25 miles; slope index, 152 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	May 16, 1965	a10.0	386
1966	Dec. 2, 1965	8.59	236
1967	-	<6.47	<20
1968	Jan. 18, 1968	8.73	255
1969	-	<6.47	<20
1970	Mar. 6, 1970	7.08	86
1971	-	<6.47	<20

a Maximum for period Aug. 17 to Sept. 30, 1965.
< Less than amount shown.

08168750 West Prong Dry Comal Creek tributary near New Braunfels, Tex. (15)

Location.--Lat 29°42'48", long 98°17'26", Comal County, at culvert on Farm Road 1863 and 10.3 miles west of New Braunfels.

Drainage area.--0.32 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.95 mile; slope index, 206 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	June 18, 1966	a6.37	<100
1967	-	<6.37	<100
1968	Jan. 18, 1968	6.71	140
1969	-	<6.37	<100
1970	-	<6.37	<100
1971	-	<6.37	<100

a Maximum for period June 18 to Sept. 30, 1966.
< Less than amount shown.

08169750 Walnut Branch at Seguin, Tex. (15)

Location.--Lat 29°34'47", long 97°58'46", Guadalupe County, at culvert on U.S. Highway 90 (West Kingsbury Street) at Seguin.

Drainage area.--5.46 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.75 miles; slope index, 14 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 21, 1967	6.08	1,030
1968	Jan. 19, 1968	5.60	780
1969	Feb. 14, 1969	4.07	180
1970	May 27, 1970	4.61	345
1971	Aug. 3, 1971	4.50	300

08169850 East Pecan Branch near Gonzales, Tex. (13)

Location.--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.

Drainage area.--0.24 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.87 mile; slope index, 111 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	May 4, 1966	6.88	73
1967	Sept. 22, 1967	8.91	165
1968	June 23, 1968	6.02	a43
1969	Apr. 11, 1969	5.71	a33
1970	Oct. 5, 1969	7.72	110
1971	June 28, 1971	6.19	48

a Not previously published.

08172100 West Elm Creek near Niederwald, Tex. (14)

Location.--Lat 29°59'04", long 97°44'39", Caldwell County, at culvert on Farm Road 2001 and 2.3 miles southwest of Niederwald.

Drainage area.--0.44 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.84 mile; slope index, 106 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Dec. 2, 1965	6.84	261
1967	Sept. 21, 1967	4.45	40
1968	Jan. 20, 1968	5.57	127
1969	May 14, 1969	7.39	330
1970	May 15, 1970	9.96	700
1971	Mar. 12, 1971	4.82	65

08176200 Irish Creek near Cuero, Tex. (13)

Location.--Lat 29°08'02", long 97°12'10", DeWitt County, at bridge on Farm Road 1447 and 6.2 miles northeast of Cuero.

Drainage area.--15.5 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.8 miles; slope index, 15 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 21, 1967	7.86	4,650
1968	May 12, 1968	8.01	(+)
1969	Apr. 9, 1969	6.83	(+)
1970	May 15, 1970	2.86	(+)
1971	Sept. 11, 1971	3.19	(+)

+ Discharge not determined.

08176600 Threemile Creek near Cuero, Tex. (13)

Location.--Lat 29°02'00", long 97°20'52", DeWitt County, at culvert on Farm Road 2718 and 5.2 miles southwest of Cuero.

Drainage area.--0.48 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.80 mile; slope index, 37 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	May 5, 1966	a6.62	22
1967	Sept. 21, 1967	11.71	1,140
1968	May 11, 1968	8.70	116
1969	-	<6.32	<9
1970	Mar. 15, 1970	6.65	22
1971	Sept. 11, 1971	7.40	50

a Maximum for period Feb. 9 to Sept. 30, 1966.
< Less than amount shown.

08177600 Olmos Creek tributary at Farm Road 1535, Shavano Park, Tex. (15)

Location.--Lat 29°34'35", long 98°32'45", Bexar County, at culvert on Farm Road 1535 at Shavano Park.

Drainage area.--0.33 sq mi.

Gage.--Stage-rainfall (dual-digital) and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.33 miles; slope index, 75.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	May 16, 1969	2.94	a27
1970	May 26, 1970	3.05	a42
1971	-	<3.04	<40

a Not previously published.
< Less than amount shown.

08177700 Olmos Creek at Dresden Drive at
San Antonio, Tex. (15)

Location.--Lat 29°29'56", long 98°30'36", Bexar County, on right bank 30 ft downstream from low-water bridge on Dresden Drive at San Antonio, 0.15 mile west of intersection of Blanco Road and Dresden Drive, and 4 miles upstream from Olmos Dam.

Drainage area.--21.2 sq mi.

Gage.--Recording. Datum of gage is 726.10 ft above mean sea level.

Topographic characteristics.--Length of main stream, 11.63 miles; slope index, 26.9 ft per mile. (Map scale, 1:24,000)

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1968	Sept. 5, 1968	a4.76	154
1969	Aug. 24, 1969	6.86	620
1970	Oct. 5, 1969	6.53	519
1971	Aug. 3, 1971	6.20	282

a Maximum for period June to September.

08178300 Alazan Creek at St. Cloud Street,
San Antonio, Tex. (15)

Location.--Lat 29°27'29", long 98°32'59", Bexar County, at bridge on St. Cloud Street at San Antonio.

Drainage area.--3.26 sq mi.

Gage.--Stage-rainfall (dual-digital) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.45 miles; slope index, 63.7 ft per mile. (Map scale, 1:24,000)

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	Aug. 24, 1969	11.59	1,560
1970	Oct. 5, 1969	11.64	1,590
1971	Sept. 22, 1971	8.0	406

08178600 Panther Springs Creek at Farm Road 2696 near San Antonio, Tex. (15)

Location.--Lat 29°37'31", long 98°31'06", Bexar County, at culvert on Farm Road 2696 and 5.5 miles north of San Antonio.

Drainage area.--9.54 sq mi.

Gage.--Stage-rainfall (dual-digital) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.55 miles; slope index, 41.6 ft per mile. (Map scale, 1:24,000)

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	May 16, 1969	9.84	4,450
1970	May 26, 1970	5.92	245
1971	Aug. 4, 1971	6.55	457

08178690 Salado Creek tributary at Bitters Road, San Antonio, Tex. (15)

Location.--Lat 29°31'36", long 98°26'25", Bexar County, at culvert on Bitters Road at San Antonio.

Drainage area.--0.26 sq mi.

Gage.--Stage-rainfall (dual-digital) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.68 mile; slope index, 29.6 ft per mile. (Map scale, 1:24,000)

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	June 4, 1969	3.89	46
1970	May 26, 1970	7.60	238
1971	Sept. 22, 1971	3.87	45

08178900 Bandera Creek tributary near Bandera, Tex. (15)

Location.--Lat 29°50'51", long 99°06'12", Bandera County, at culvert on Farm Road 689 and 10 miles north of Bandera.

Drainage area.--0.27 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.92 mile; slope index, 244 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 25, 1966	a6.29	<80
1967	Sept. 15, 1967	6.38	<80
1968	Oct. 15, 1967	6.98	116
1969	June 24, 1969	<6.26	<80
1970	Oct. 12, 1969	6.98	116
1971	Aug. 12, 1971	6.48	<80

a Maximum for period Mar. 16 to Sept. 30, 1966.
< Less than amount shown.

08179200 Medina River tributary near Pipe Creek, Tex. (15)

Location.--Lat 29°38'12", long 98°56'13", Bandera County, at culvert on Farm Road 1283 and 6.8 miles south of Pipe Creek.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 17, 1966	a4.12	<30
1967	Sept. 3, 1967	7.17	220
1968	Apr. 1, 1968	4.59	150
1969	Apr. 12, 1969	4.28	<30
1970	Oct. 5, 1969	4.50	60
1971	Sept. 21, 1971	7.83	270

a Maximum for period Mar. 17 to Sept. 30, 1966.
< Less than amount shown.

08181000 Leon Creek tributary at Farm Road 1604, San Antonio, Tex. (15)

Location.--Lat 29°35'14", long 98°37'40", Bexar County, at culvert on Farm Road 1604, at San Antonio.

Drainage area.--5.57 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Remarks.--This station operated as research project for runoff from urban areas.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	-	<3.04	a<23
1970	May 26, 1970	7.93	a1,200
1971	Aug. 2, 1971	2.95	11

a Not previously published.
< Less than amount shown.

08181200 French Creek tributary near Helotes, Tex. (15)

Location.--Lat 29°33'43", long 98°39'26", Bexar County, at culvert on Farm Road 1604 and 2.2 miles east of Helotes.

Drainage area.--1.08 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.07 miles; slope index, 76.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 27, 1966	a5.91	107
1967	-	<5.89	<104
1968	Jan. 17, 1968	7.03	255
1969	May 16, 1969	5.86	54
1970	May 26, 1970	6.81	223
1971	June 19, 1971	6.92	240

a Maximum for period Mar. 15 to Sept. 30, 1966.
< Less than amount shown.

08181400 Helotes Creek at Helotes, Tex. (15)

Location.--Lat 29°34'42", long 98°41'29", Bexar County, on left bank 13 ft downstream from centerline of bridge on State Highway 16, 0.1 mile northwest of Helotes, and 8.6 miles upstream from mouth.

Drainage area.--14.9 sq mi.

Gage.--Recording. Datum of gage is 1,014.82 ft above mean sea level.

Topographic characteristics.--Length of main stream, 9.35 miles; slope index, 49.5 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1968	June 2, 1968	a2.18	47
1969	May 16, 1969	3.10	184
1970	May 26, 1970	5.43	3,180
1971	Aug. 13, 1971	3.24	346

a Maximum for period June to September 1968.

08182400 Calaveras Creek subwatershed No. 6 near Elmendorf, Tex. (15)

Location.--Lat 29°22'53", long 98°17'34", Bexar County, near center of dam on Chupaderas Creek, tributary to Calaveras Creek, 0.4 mile north of Sayer, 9.1 miles north of Elmendorf, and 9.2 miles upstream from mouth.

Drainage area.--7.01 sq mi.

Gage.--Recording. Datum of gage is 516.06 ft above mean sea level, datum of 1929 (levels by U.S. Soil Conservation Service).

Remarks.--Peak discharge based on maximum inflow (average for 5-minute intervals), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. There are two recording rain gages, one at the station and one in the watershed. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1957	Sept. 25, 1957	3,750
1958	May 3, 1958	1,900
1959	Apr. 11, 1959	266
1960	Oct. 4, 1959	443
1961	June 18, 1961	827
1962	Nov. 13, 1961	385
1963	Apr. 4, 1963	13
1964	Feb. 3, 1964	1,810
1965	May 18, 1965	3,330
1966	Dec. 3, 1965	501
1967	Sept. 22, 1967	1,500
1968	Jan. 18, 1968	4,270
1969	Feb. 14, 1969	327
1970	May 28, 1970	725
1971	Aug. 3, 1971	994

08187000 Escondido Creek subwatershed No. 1 near Kenedy, Tex. (16)

Location.--Lat 28°46'41", long 97°53'41", Karnes County, near center of dam on unnamed fork of Panther Creek, 900 ft upstream from State Highway 72, and 3.9 miles southwest of Kenedy.

Drainage area.--3.29 sq mi.

Gage.--Recording. Datum of gage is 350.00 ft above mean sea level, datum of 1929 (levels by U.S. Soil Conservation Service).

Remarks.--Peaks are based on maximum inflow (average for 5- or 15-minute interval), computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. No adjustment made for reservoir losses. There are two recording rain gages located in the watershed, one of which is at the station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1955	Aug. 11, 1955	2,100
1956	June 19, 1956	486
1957	May 27, 1957	a1,800
1958	May 3, 1958	1,700
1959	Sept. 29, 1959	181
1960	July 17, 1960	a817
1961	Oct. 25, 1960	4,990
1962	June 1, 1962	745
1963	Nov. 27, 1962	1,300
1964	Aug. 8, 1964	809
1965	Jan. 21, 1965	1,550
1966	Oct. 18, 1965	157
1967	Sept. 21, 1967	2,910
1968	May 7, 1968	1,640
1969	May 4, 1969	401
1970	May 31, 1970	605
1971	Sept. 10, 1971	407

a Not adjusted for rainfall on water surface.

08187900 Escondido Creek subwatershed No. 11 (Dry Escondido Creek) near Kenedy, Tex. (16)

Location.--Lat 28°51'39", long 97°50'39", Karnes County, near center of dam on Dry Escondido Creek, 0.5 mile upstream from bridge on Farm Road 792, 3 miles north of Kenedy, and 5 miles upstream from Escondido Creek.

Drainage area.--8.43 sq mi.

Gage.--Water-stage recorder. Datum of gage is 285.12 ft above mean sea level, datum of 1929.

Remarks.--Peak discharge based on maximum inflow (average for 5- or 15-minute intervals) computed from outflow and change in reservoir contents, adjusted for rainfall on the reservoir surface during time of peak inflow. There are two recording rain gages located in the watershed, one of which is at the station. Tabulations of significant storm rainfall and runoff data are on file in the U.S. Geological Survey District office.

Annual maximum discharge

Water year	Date	Discharge (cfs)
1958	Sept. 22, 1958	1,540
1959	June 5, 1959	122
1960	Oct. 4, 1959	54
1961	Oct. 25, 1960	750
1962	June 2, 1962	722
1963	June 26, 1962	1,190
1964	Feb. 3, 1964	435
1965	May 19, 1965	4,950
1966	Sept. 17, 1966	334
1967	Sept. 21, 1967	8,030
1968	May 12, 1968	765
1969	May 4, 1969	175
1970	June 1, 1970	1,310
1971	Sept. 12, 1971	36

GUADALUPE RIVER BASIN

08188400 Baugh Creek at Goliad, Tex. (16)

Location.--Lat 28°39'50", long 97°25'05", Goliad County, at culvert on U.S. Highway 59 and 1.5 miles west of Goliad.

Drainage area.--3.02 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.85 miles; slope index, 32 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 20, 1966	5.50	360
1967	Sept. 21, 1967	7.73	1,000
1968	Oct. 15, 1967	5.79	460
1969	Apr. 11, 1969	4.66	250
1970	June 25, 1970	5.54	150
1971	Sept. 10, 1971	5.38	130

ARANSAS RIVER BASIN

08189600 Olmos Creek tributary near Skidmore, Tex. (16)

Location.--Lat 28°15'27", long 97°44'15", Bee County, at culvert on Farm Road 797 and 3.4 miles west of Skidmore.

Drainage area.--0.58 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.4 miles; slope index, 8.57 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 25, 1966	a8.00	235
1967	Sept. 22, 1967	8.71	325
1968	May 11, 1968	9.01	(+)
1969	Oct. 3, 1968	6.56	80
1970	May 24, 1970	6.52	78
1971	Sept. 12, 1971	9.01	(+)

a Maximum for period Feb. 8, 1966, to Sept. 30, 1966.
+ Discharge not determined.

08194550 Plant Creek near Tilden, Tex. (15)

Location.--Lat 28°24'04", long 98°32'58", McMullen County, at culvert on State Highway 16 and 4 miles south of Tilden.

Drainage area.--0.36 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.66 mile; slope index, 77.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Nov. 11, 1965	7.30	32
1967	Sept. 22, 1967	10.06	220
1968	May 7, 1968	7.36	34
1969	Apr. 11, 1969	<7.28	<5
1970	May 15, 1970	7.79	60
1971	Sept. 11, 1971	7.60	44

< Less than amount shown.

08198900 East Elm Creek near Sabinal, Tex. (15)

Location.--Lat 29°18'36", long 99°23'50", Medina County, at bridge on U.S. Highway 90 and 4 miles east of Sabinal.

Drainage area.--10.58 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 7.8 miles; slope index, 16.9 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 3, 1967	a1.09	b6.7
1968	Jan. 19, 1968	1.81	b150
1969	May 3, 1969	1.89	b195
1970	May 15, 1970	2.29	b400
1971	Aug. 13, 1971	7.18	5,600

a Maximum for period Dec. 22, 1966, to Sept. 30, 1967.
b Not previously published.

NUECES RIVER BASIN

08200900 Bone Creek near Hondo, Tex. (15)

Location.--Lat 29°33'16", long 99°06'12", Medina County, at culvert on Farm Road 689 and 14 miles north of Hondo.

Drainage area.--0.19 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.42 mile; slope index, 291 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 25, 1966	3.22	<10
1967	Sept. 22, 1967	3.97	29
1968	Jan. 19, 1968	3.49	15
1969	May 16, 1969	4.14	36
1970	Oct. 5, 1969	5.76	102
1971	Aug. 12, 1971	9.77	350

< Less than amount shown.

NUECES RIVER BASIN

08203500 Leona River tributary near Uvalde, Tex. (22)

Location.--Lat 29°17'30", long 99°45'31", Uvalde County, at culvert on U.S. Highway 83 and 5.2 miles north of Uvalde.

Drainage area.--1.21 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.03 miles; slope index, 20.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 13, 1966	a6.67	<20
1967	Apr. 13, 1967	6.69	<20
1968	-	<6.65	<20
1969	-	<6.65	<20
1970	Oct. 5, 1969	6.85	39
1971	Aug. 12, 1971	6.80	34

a Maximum for period Feb. 3 to Sept. 30, 1966.
< Less than amount shown.

08207200 Rutledge Hollow Creek at Poteet, Tex. (15)

Location.--Lat 29°02'29", long 98°34'41", Atascosa County, at culvert on Farm Road 476 (School Road) at Poteet.

Drainage area (revised).--9.33 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.25 miles; slope index, 27.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 22, 1967	8.69	1,800
1968	May 11, 1968	8.95	2,300
1969	Nov. 30, 1968	4.31	52
1970	May 28, 1970	5.30	a215
1971	Aug. 12, 1971	8.56	1,650

a Not previously published.

08207700 Lucas Creek near Pleasanton, Tex. (15)

Location.--Lat 29°00'52", long 98°22'47", Atascosa County, at bridge on State Highway 97 and 8 miles northeast of Pleasanton.

Drainage area.--32.8 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 10.7 miles; slope index, 13.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 22, 1967	12.97	2,970
1968	May 11, 1968	13.25	3,500
1969	May 12, 1969	11.56	1,550
1970	May 28, 1970	11.67	1,520
1971	Aug. 12, 1971	11.75	1,650

PETRONILLA CREEK BASIN

08211550 Pintas Creek tributary near Banquete, Tex. (16)

Location.--Lat 27°42'36", long 97°49'57", Nueces County, at culvert on Farm Road 666 and 7 miles south of Banquete.

Drainage area.--3.28 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 3.6 miles; slope index, 6.87 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	May 5, 1966	a8.43	84
1967	Sept. 21, 1967	10.40	1,300
1968	July 11, 1968	8.07	37
1969	Feb. 13, 1969	8.93	130
1970	Aug. 3, 1970	<7.90	<5
1971	Sept. 12, 1971	10.10	568

a Maximum for period Mar. 8 to Sept. 30, 1966.
< Less than amount shown.

SAN FERNANDO CREEK BASIN

08212300 Tranquitas Creek at Kingsville, Tex. (16)

Location.--Lat 27°31'33", long 97°52'02", Kleberg County, at bridge on U.S. Highway 77, Business Route at Kingsville, 4.9 miles upstream from San Fernando Creek, and 5.9 miles downstream from Tranquitas Dam.

Drainage area.--48.5 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Remarks.--Stage only station.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	May 16, 1965	a3.9	-
1966	Apr. 8, 1966	3.6	-
1967	Sept. 23, 1967	4.51	-
1968	May 6, 1968	3.36	-
1969	Oct. 4, 1968	2.53	-
1970	May 13, 1970	3.73	-
1971	Aug. 5, 1971	2.96	-

a Maximum for period April to September 1965.

SAN FERNANDO CREEK BASIN

08212320 North Las Animas Creek tributary near Freer, Tex. (21)

Location.--Lat 27°47'07", long 98°37'03", Duval County, at culvert on State Highway 16 and 6.8 miles south of Freer.

Drainage area (revised).--0.07 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 0.40 mile; slope index, 56.7 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1969	-	<3.74	a720
1970	June 14, 1970	<3.74	a720
1971	Sept. 11, 1971	4.61	52

a Not previously published.
< Less than amount shown.

RIO GRANDE BASIN

08365600 McKelligon Canyon at El Paso, Tex. (24)

Location.--Lat 31°49'20", long 106°28'09", El Paso County, on left bank 120 ft south of McKelligon Canyon Drive, 0.2 mile west of Alabama Avenue, 0.5 mile south of crest of Sugarloaf Mountain, 1.6 miles west of U.S. Highway 54, and 4.5 miles north of El Paso Post Office.

Drainage area.--2.3 sq mi, approximately.

Gage.--Recording. Altitude of gage is 4,257.33 ft above mean sea level (levels by city of El Paso).

Topographic characteristics.--Length of main stream, 3.2 miles; slope index, 440 ft per mile. (Map scale, 1:24,000)

Remarks.--No flow except Sept. 11, 12, 1958. Floodflow controlled by four small reservoirs upstream, with a total capacity of about 95 acre-feet.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1958	Sept. 11, 1958	-	a76
1959			0
1960			0
1961			
1962			0
1963			0
1964			0
1965			0
1966			0
1967			
1968			0
1969			0
1970			0
1971			0
			0

a Maximum for period June to September 1958.

08365800 Government Ditch at El Paso, Tex. (24)

Location.--Lat 31°47'02", long 106°26'04", El Paso County, at intersection of Montana and Houston Streets and 2 miles northeast of the business center of El Paso.

Drainage area.--6.4 sq mi, approximately.

Gage.--Recording. Altitude of gage is 3,740 ft (from topographic map).

Topographic characteristics.--Length of main stream, 3.5 miles; slope index, 106 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1958	Sept. 11, 1958	a2.64	550
1959	Aug. 5, 1959	.70	58
1960	July 14, 1960	.84	78
1961	Sept. 8, 1961	2.18	374
1962	Sept. 2, 1962	1.93	299
1963	Aug. 18, 1963	.66	53
1964	Sept. 11, 1964	2.06	338
1965	Sept. 6, 1965	1.44	179
1966	Sept. 23, 1966	2.03	329
1967	July 29, 1967	1.46	184
1968	July 6, 1968	2.13	359
1969	May 22, 1969	.86	81
1970	July 25, 1970	1.35	162
1971	July 2, 1971	2.60	540

a Maximum for period June to September 1958.

08370200 Camp Rice Arroyo tributary near Fort Hancock, Tex. (24)

Location.--Lat 31°17'51", long 105°48'52", Hudspeth County, at culvert on Interstate Highway 10 and 1.6 miles east of Fort Hancock.

Drainage area.--2.35 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.5 miles; slope index, 74 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	June 27, 1966	a5.35	62
1967	Sept. 17, 1967	6.31	165
1968	Aug. 22, 1968	6.03	130
1969	-	<5.06	<40
1970	Aug. 4, 1970	5.59	85
1971	-	<5.06	<40

a Maximum for period April to September 1966.
< Less than amount shown.

08370800 Wildhorse Creek tributary near Van Horn, Tex. (24)

Location.--Lat 31°02'55", long 104°40'12", Culberson County, at culvert on U.S. Highway 80 and 9.5 miles east of Van Horn.

Drainage area.--0.74 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.28 miles; slope index, 100 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 22, 1966	a5.38	190
1967	-	<4.37	<55
1968	-	<4.37	<55
1969	July 9, 1969	4.86	104
1970	June 7, 1970	5.81	260
1971	July 24, 1971	4.87	105

a Maximum for period April to September 1966.
< Less than amount shown.

08377600 Rio Grande tributary near Langtry, Tex. (22)

Location.--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.

Drainage area.--0.32 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.0 mile; slope index, 133 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Sept. 9, 1966	a7.05	120
1967	-	<4.18	<20
1968	July 2, 1968	8.08	59
1969	Apr. 17, 1969	9.60	141
1970	Sept. 25, 1970	8.10	59
1971	Aug. 15, 1971	8.92	98

a Maximum for period January to September 1966.
< Less than amount shown.

08407800 Delaware River tributary near Orla, Tex. (24)

Location.--Lat 31°55'46", long 104°28'52", Reeves County, at culvert on State Highway 652 and 36 miles west of Orla.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Aug. 21, 1966	11.52	1,700
1967	-	<3.11	<50
1968	-	<3.11	<50
1969	Sept. 22, 1969	4.17	<50
1970	Oct. 21, 1969	4.46	<50
1971	Aug. 15, 1971	5.26	54

< Less than amount shown.

08436800 Courtney Creek tributary near Fort Stockton, Tex. (06)

Location.--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.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	June 12, 1966	a2.82	45
1967	June 14, 1967	2.49	31
1968	Aug. 30, 1968	2.79	44
1969	Apr. 12, 1969	2.28	23
1970	Oct. 6, 1969	2.91	50
1971	May 28, 1971	2.44	29

a Maximum for period January to September 1966.

08437550 Lake Leon tributary near Fort Stockton, Tex. (06)

Location.--Lat 30°54'04", long 103°02'50", Pecos County, at culvert on U.S. Highway 290 and 10 miles west of Fort Stockton.

Drainage area.--1.59 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.6 miles; slope index, 45.8 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	a7.25	740
1967	May 29, 1967	8.01	980
1968	Aug. 30, 1968	6.27	360
1969	July 22, 1969	5.51	230
1970	Oct. 27, 1969	6.16	170
1971	Aug. 15, 1971	7.37	770

a Maximum for period January to September 1966.

08437650 Monument Draw tributary at Pyote, Tex. (06)

Location.--Lat 31°33'33", long 103°07'43", Ward County, at culvert on Spur 247 and 2.1 miles northwest of Pyote.

Drainage area.--

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	July 12, 1966	a3.22	30
1967	July 20, 1967	1.71	5.5
1968	Sept. 22, 1968	3.10	27
1969	Apr. 12, 1969	2.02	9.4
1970	June 22, 1970	1.39	<5
1971	Aug. 15, 1971	2.37	15

a Maximum for period January to September 1966.
< Less than amount shown.

08444400 Three Mile Mesa Creek near Fort Stockton, Tex. (06)

Location.--Lat 30°50'16", long 102°50'26", Pecos County, at culvert on State Highway 285 and 4.6 miles southeast of Fort Stockton.

Drainage area.--1.04 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.95 miles; slope index, 87 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	June 10, 1965	a2.84	76
1966	Apr. 24, 1966	2.71	69
1967	May 29, 1967	2.43	45
1968	Sept. 21, 1968	2.88	84
1969	Apr. 12, 1969	2.77	74
1970	May 14, 1970	3.02	96
1971	Aug. 15, 1971	3.21	(†)

a Maximum for period June to September 1965.
† Discharge not determined.

08447200 Howards Creek tributary near Ozona, Tex. (07)

Location.--Lat 30°41'18", long 101°20'51", Crockett County, at culvert on U.S. Highway 290 and 8.7 miles west of Ozona.

Drainage area.--7.53 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 7.75 miles; slope index, 39.6 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	June 13, 1967	a4.20	<200
1968	May 11, 1968	3.32	<200
1969	Apr. 12, 1969	4.95	<200
1970	Oct. 27, 1969	<2.97	<200
1971	Aug. 1, 1971	6.54	1,460

a Maximum for period Jan. 11 to Sept. 30, 1967.
< Less than amount shown.

08448800 Sonora Field Creek at Sonora, Tex. (07)

Location.--Lat 30°34'40", long 100°38'54", Sutton County, at culvert on U.S. Highway 277 at Sonora.

Drainage area.--2.60 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 2.4 miles; slope index, 54.2 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1965	-	a2.39	<50
1966	May 29, 1966	5.44	510
1967	Apr. 17, 1967	3.72	96
1968	May 10, 1968	5.07	410
1969	Apr. 11, 1969	3.35	<50
1970	Oct. 27, 1969	5.32	480
1971	May 29, 1971	b3.26	<50

a Maximum for period June to September 1965.
b Maximum for period October 1970 to July 1971.
< Less than amount shown.

08449470 Rough Canyon tributary near Del Rio, Tex. (22)

Location.--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.

Drainage area.--7.90 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 6.3 miles; slope index, 44.2 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1967	Sept. 2, 1967	6.80	710
1968	Apr. 18, 1968	5.80	240
1969	Oct. 3, 1968	4.13	115
1970	Oct. 4, 1969	12.70	2,800
1971	Aug. 11, 1971	13.08	2,950

08449600 Evans Creek tributary near Del Rio, Tex. (22)

Location.--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.

Drainage area.--0.39 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.1 miles; slope index, 112 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 25, 1966	a3.49	48
1967	Oct. 5, 1966	2.81	17
1968	June 17, 1968	3.95	78
1969	Apr. 11, 1969	4.76	138
1970	Oct. 27, 1969	4.93	154
1971	Aug. 11, 1971	6.73	313

a Maximum for period January to September 1966.

08453100 Zorro Creek near Del Rio, Tex. (22)

Location.--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.

Drainage area.--10.02 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 7.9 miles; slope index, 18.4 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	a9.53	800
1967	Sept. 17, 1967	<7.28	<100
1968	-	<7.28	<100
1969	Apr. 11, 1969	11.85	b2,000
1970	Oct. 5, 1969	b8.30	b300
1971	Aug. 12, 1971	7.50	400

a Maximum for period Feb. 2 to Sept. 30, 1966.
b Revised.
< Less than amount shown.

08454900 East Perdido Creek near Brackettville, Tex. (22)

Location.--Lat 29°20'50", long 100°34'32", Kinney County, at culvert on U.S. Highway 90 and 9.7 miles northwest of Brackettville.

Drainage area.--3.39 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 4.15 miles; slope index, 24.1 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 24, 1966	6.84	200
1967	-	<5.29	<30
1968	-	<5.29	<30
1969	Apr. 12, 1969	7.47	234
1970	Oct. 27, 1969	5.72	57
1971	Aug. 12, 1971	10.51	630

< Less than amount shown.

08459600 Arroyo San Bartolo at Zapata, Tex. (21)

Location.--Lat 26°55'39", long 99°17'20", Zapata County, at culvert on U.S. Highway 83 and 1.0 mile north of Zapata.

Drainage area.--0.61 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.1 miles; slope index, 119 ft per mile. (Map scale, 1:62,500)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 14, 1966	a5.64	550
1967	May 16, 1967	10.9	570
1968	Apr. 29, 1968	2.40	118
1969	May 11, 1969	8.41	620
1970	May 23, 1970	6.38	420
1971	Aug. 5, 1971	5.22	300

a Maximum for period Feb. 17 to Sept. 30, 1966.

08466100 Rio Grande tributary near Rio Grande City, Tex. (21)

Location.--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.

Drainage area.--1.20 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.23 miles; slope index, 62.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	June 19, 1966	a4.61	100
1967	Sept. 22, 1967	4.79	125
1968	-	<3.99	<50
1969	-	<3.99	<50
1970	Aug. 23, 1970	4.67	108
1971	Sept. 12, 1971	4.34	64

a Maximum for period Feb. 16 to Sept. 30, 1966.
< Less than amount shown.

08466200 Rio Grande tributary near Sullivan City, Tex. (21)

Location.--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.

Drainage area.--0.40 sq mi.

Gage.--Stage-rainfall (S-R) recorder and crest-stage gage.

Topographic characteristics.--Length of main stream, 1.4 miles; slope index, 39.4 ft per mile. (Map scale, 1:24,000)

Annual maximum stage and discharge

Water year	Date	Gage height (ft)	Discharge (cfs)
1966	Apr. 19, 1966	a6.63	20
1967	Aug. 24, 1967	7.42	47
1968	June 19, 1968	6.69	22
1969	bJune 3, 1969	b8.23	b81
1970	May 15, 1970	7.16	37
1971	Feb. 25, 1971	8.69	100

a Maximum for period Feb. 16 to Sept. 30, 1966.
b Revised.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE TEXAS HIGHWAY DEPARTMENT AND THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION

Inset A

Inset B

Inset C

NEW MEXICO

OKLAHOMA

ARKANSAS

LOUISIANA

MEXICO

GULF OF MEXICO

EXPLANATION

07299940 ▲ Stream-gaging or reservoir-content station

08090850 ▲ Crest-stage partial-record station

9 Texas Highway District

Base compiled, with some modification, from River Basin Maps, IACWR, Subcommittee on Hydrology. (1949 ed.)

FIGURE 1

Gaging stations on small streams in Texas, September 30, 1971