TEXAS WATER COMMISSION

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CIRCULAR NO. 63-01

DRAINAGE AREAS OF TEXAS STREAMS

TRINITY RIVER BASIN AND

TRINITY-SAN JACINTO COASTAL AREA

Prepared in cooperation with the U. S. Geological Survey

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DRAINAGE AREAS OF TEXAS STREAMS

INTRODUCTION

An accurate figure for drainage area is one of the most significant factors used in hydrologic investigations of a river basin and in the hydraulic computations for the design of structures on a stream. This report is being compiled so that drainage-area information of uniform accuracy and reliability will be available to all users of these data for any foreseeable hydraulic, hydrologic, or general engineering use.

In 1951 the Subcommittee on Hydrology, Federal Inter-Agency River Basin Committee, delegated the U. S. Corps of Engineers as the official coordinating agency for drainage areas in the Arkansas and Red River basins, and the U. S. Geological Survey as the official coordinating agency for all other river basins in Texas.

In November 1954 the data for the Red and Arkansas Rivers were published by the Corps of Engineers in a pamphlet entitled "Drainage Area Data, Arkansas, White, and Red River Basins".

ADMINISTRATION AND ACKNOWLEDGMENTS

In December 1960 the Sabine River Compact Administration requested the U. S. Geological Survey to update drainage-area determinations in the Sabine River Basin. The Administration made funds available to match the Geological Survey on a dollar for dollar basis. The work was done by the Surface Water District offices in Texas and Louisiana, and the pamphlet, "Drainage Area Data for Sabine River Basin, Texas and Louisiana" was released August 1961.

The compilation of drainage-area data for the balance of the State is a result of a cooperative agreement between the U. S. Geological Survey and the Texas Water Commission [formerly the Board of Water Engineers].

Computations were made in the District Office of the U. S. Geological Survey in Austin, Texas, under the general direction of Trigg Twichell, District Engineer of the Surface Water Branch.

The U. S. Corps of Engineers, Fort Worth District, and the U. S. Bureau of Reclamation, Austin Area Office, made field checks to verify delineation of non-contributing areas in the upper Colorado River Basin.

TOPOGRAPHY

The topography of Texas generally reflects the surface geology of the State. The northwestern part of the State is occupied by the High Plains, with a general surface gradient dipping in a southeasterly direction. Elevations range above 4,000 feet along the Texas-New Mexico state line and above 2,500 feet along the east escarpment. From the High Plains the land surface drops by successive steps,

generally in a southeasterly direction, to sea level along the coast of the Gulf of Mexico. The greatest abrupt change in elevation is along the High Plains Cap Rock Escarpment where in places the elevation of the land surface drops nearly 1,000 feet in just a few miles. In the El Paso-Trans-Pecos Region of west Texas, topographic features include the southern extension of the Rocky Mountain Range.

Figure 1 is a contour map of Texas which shows the four principal physiographic provinces: (1) the Gulf Coastal Plain, (2) the Central Lowland, (3) the Great Plains province, and (4) the Basin and Range province. These four principal physical divisions with the many subdivisions give the State a wide variety of surface aspects.

The drainage pattern of the State is unique, in that between the Rio Grande, which forms the southwestern border, and the Red River, which forms most of the northern border, lie nine large river basins which run approximately parallel courses from northwest to southeast. Of these, only two, the Brazos and Colorado Rivers, have their origin (small segment of total area) outside the State--the remaining lie wholly within the State, with the Sabine River forming a part of the eastern border along its lower reaches. With the exception of the Red and Canadian Rivers, all of the streams in Texas flow directly into the Gulf of Mexico--the Canadian River is a tributary to the Arkansas River which, along with the Red River, flows into the Mississippi River and thence into the Gulf of Mexico. River basins and coastal areas of Texas are shown on Figure 2.

CONCEPTS OF DRAINAGE AREAS

The drainage area of a stream at a specified location ordinarily may be defined as that area, measured in a horizontal plane, which is enclosed by a topographic divide such that direct surface runoff from precipitation normally would drain by gravity into the river basin above the specified point.

The concept of what constitutes noncontributing areas varies for individuals and for intended purpose of use. It is not susceptible to precise definitions because of judgment that must be used in determinations of what part of an area is totally noncontributing and what part contributes surface runoff only during extreme rainfall.

For this report a noncontributing area is defined as an area that contributes no direct surface runoff to a stream at any time. There may be runoff within the noncontributing area, but this runoff drains to natural surface depressions, playa lakes, and does not flow directly to the stream network that drains to the Gulf of Mexico.

The accuracy of delineating most of the noncontributing areas is considered to be a lower accuracy than that of the other work.

METHOD OF DRAINAGE-AREA DETERMINATION

Discrepancies existing in drainage-area figures determined by various agencies result in confusion. To reduce confusion and promote uniformity, the Subcommittee on Hydrology, Federal Inter-Agency River Basin Committee, recommended the procedures which were used for this report and are briefly described below:

1. Selection of Maps: First preference is the national topographic series of quadrangle maps of the U. S. Geological Survey published on the scale of 1:24,000 or 1:62,500. Second preference is advance prints or manuscript prints of the

national series of quadrangle maps, and third preference is Army Map Service topographic maps, scale 1:250,000. About half of the State is mapped with large-scale, modern topographic maps.

2. Establishment of Boundaries: The delineation of the boundary is the most important step in the process of drainage-area determinations and the biggest single factor affecting the accuracy of final results. Drainage boundaries were delineated with utmost care by personnel experienced in hydrology and cartography. Delineations were reviewed by the engineering staff of the Texas Water Commission, and for some basins by the engineering staffs of the Corps of Engineers and the Bureau of Reclamation.

3. Continuity Between Maps: An index map of the entire area was prepared to show the relative position of the different maps used. To assure accurate determinations, the maps were checked for gaps or overlaps between adjacent sheets, continuity of topographic or cultural detail between adjacent sheets, and agreement of latitude and longitude at borders of adjacent maps.

4. Planimetering: All areas and subareas within a quadrilateral were measured by planimeter. A quadrilateral encompasses the area bounded by latitude and longitude lines within a quadrangle. Actual areas within each quadrilateral have been computed accurately and are available from Smithsonian Geographical Tables, and from Bulletin 650 and other publications of the Geological Survey. Thus an exact check was provided between total planimetered area and actual area within each quadrilateral.

TABULATION OF DATA

In this report the drainage areas determined in each major river basin are tabulated in separate sections devoted to that particular basin. Within each major basin, drainage areas were determined at sites of existing and discontinued continuous-record gaging stations and partial-record gaging stations, at sites of existing and authorized major dams, and at the mouths of principal tributaries.

Points at which drainage areas were determined are tabulated sequentially in the downstream direction along the main stem, with a point on a tributary that enters between two main-stem points tabulated between them. A similar order is followed for all tributaries. The tabulation includes the name of the stream at the point where the drainage area was determined; identification of the point, such as gaging station, dam or mouth; and the latitude and longitude of the point. As an added means of identification, the permanently assigned station number is shown for each gaging station and partial-record station. These numbers were assigned using the same criteria as above for downstream direction.

Drainage areas are given in square miles. Although areas are measured to the nearest hundreth of a square mile, the areas are rounded off in the listings to the nearest square mile for areas of more than 100 square miles, to tenths for areas from 10 to 100 square miles, and to hundreths for areas of less than 10 square miles.

FUNCTION OF COORDINATING OFFICE

The U. S. Geological Survey at 807 Brazos Street, Austin, Texas, as coordinating agency, serves as a repository for work maps and computations and also serves as a clearing house for dissemination of drainage-area data.

Anyone cognizant of a significant discrepancy or contradiction between figures of drainage areas now in use should consult the Geological Survey and seek to reach an understanding and agreement between interested agencies represented in the area involved.

TRINITY RIVER BASIN

The Trinity River is formed in the northern part of the State by a number of small tributaries rising in Cooke, Montague, Clay, and Archer Counties. The main stream is formed in Dallas County by the union of the headwater tributaries. The river flows southeasterly into Trinity Bay and into the Gulf of Mexico through Galveston Bay. Elevation ranges from about 1,450 feet in the headwaters to sea level at the mouth.

The Trinity River Basin is in two geographic provinces, Central Texas and Gulf Coastal Plain. The headwaters are in two of the principal subdivisions of Central Texas--the Grand Prairie and Osage Plains regions.

More than 60 percent of the drainage areas of the basin were delineated on recent large-scale topographic maps, and this work is considered to be of permanent value. Drainage areas for the remainder of the basin were delineated on small-scale topographic maps and may be subject to minor revisions when new large-scale maps become available. Drainage areas tabulated on the following pages were determined in April 1962.

The drainage area is 17,969 square miles at the mouth.

Drainage areas in the Trinity River Basin and the Trinity-San Jacinto Coastal Area are shown in Tables 3 and 3a on the following pages. Drainage-area determinations have been published in Circulars of the Texas Water Commission for other areas as follows:

Sabine River Basin and Sabine-Neches Coastal Area, Tables 1 and 1a, Circular No. 62-02.
Neches River Basin and Neches-Trinity Coastal Area, Tables 2 and 2a, Circular No. 62-03.
San Jacinto River Basin and San Jacinto-Brazos Coastal Area, Tables 4 and 4a, Circular No. 62-05.

Table 3.--Trinity River Basin

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
North Creek	U.S.G.S. gage 8-427, North Creek near Jacksboro lat. 33°16'55", long. 98°17'55"	21.6
West Fork Trinity River	U.S.G.S. gage 8-428, West Fork Trinity River near Jacksboro lat. 33°17'30", long. 98°04'40"	683
Lost Creek	Lake Jacksboro near Jacksboro lat. 33°14'06", long. 98°08'27"	25.6
West Fork Trinity River	U.S.G.S. gage 8-430, Bridgeport Reservoir above Bridgeport lat. 33°13'22", long. 97°49'54" at left end of dam	1,111
West Fork Trinity River	U.S.G.S. discontinued gage 8-435, West Fork Trinity River at Bridgeport 1908-1924 lat. 33°12'11", long. 97°45'30"	1,138
	1924-1930 lat. 33°12'05", long. 97°45'21"	1,143
Big Sandy Creek	Amon Carter Reservoir near Bowie lat. 33°28'08", long. 97°51'58"	99.8
Big Sandy Creek	U.S.G.S. gage 8-440, Big Sandy Creek near Bridgeport lat. 33°13'54", long. 97°41'40"	333
Big Sandy Creek	At mouth, lat. 33°11'01", long. 97°40'25"	352
West Fork Trinity River	Boyd dam site lat. 33°05'39", long. 97°35'05"	1,703
West Fork Trinity River	U.S.G.S. gage 8-445, West Fork Trinity River near Boyd 1947-1954 lat. 33°04'28", long. 97°32'18"	1,736
	1954- lat. 33°05'08", long. 97°33'30"	1,725
West Fork Trinity River	U.S.G.S. gage 8-450, Eagle Mountain Reservoir above Fort Worth lat. 32°52'39", long. 97°28'29" at right end of main dam	1,970
West Fork Trinity River	U.S.G.S. discontinued gage 8-455, West Fork Trinity River at Lake Worth Dam above Fort Worth lat. 32°47'27", long. 97°24'54"	2,064

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Clear Fork Trinity River	Lake Weatherford near Weatherford lat. 32°46'16", long. 97°40'32"	109
Clear Fork Trinity River	U.S.G.S. gage 8-460, Clear Fork Trinity River near Aledo lat. 32°38'25", long. 97°33'50"	251
Clear Fork Trinity River	C of E gage 8-465, Benbrook Reservoir near Benbrook lat. 32°39'02", long. 97°26'54" at intake structure	429
Clear Fork Trinity River	U.S.G.S. gage 8-470, Clear Fork Trinity River near Benbrook lat. 32°39'54", long. 97°26'30"	431
Clear Fork Trinity River	U.S.G.S. gage 8-475, Clear Fork Trinity River at Fort Worth lat. 32°44'02", long. 97°21'33"	518
West Fork Trinity River	U.S.G.S. gage 8-480, West Fork Trinity River at Fort Worth lat. 32°45'40", long. 97°19'55"	2,615
Marine Creek	Marine Creek Reservoir at Fort Worth lat. 32°49'26", long. 97°23'32"	9.29
Marine Creek	U.S.G.S. discontinued gage 8-485, Marine Creek at Fort Worth lat. 32°48'16", long. 97°21'48"	17.4
Big Fossil Creek	Dam site lat. 32°50'39", long. 97°16'13"	42.2
Big Fossil Creek	U.S.G.S. gage 8-488, Big Fossil Creek at Haltom City lat. 32°48'26", long. 97°14'54"	52.8
Big Fossil Creek	At mouth, lat. 32°46'48", long. 97°13'54"	74.7
Village Creek	U.S.G.S. discontinued gage 8-490, Village Creek near Handley lat. 32°41'38", long. 97°13'12"	130
Village Creek	U.S.G.S. gage 8-492, Lake Arlington at Arlington, in pumphouse near right end of dam lat. 32°43'04", long. 97°11'36"	143

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Village Creek	At mouth, lat. 32°46'34", long. 97°09'00"	188
West Fork Trinity River	U.S.G.S. gage 8-495, West Fork Trinity River at Grand Prairie lat. 32°45'46", long. 96°59'42"	3,065
Bear Creek	At mouth, lat. 32°46'43", long. 96°57'15"	92.8
Mountain Creek	U.S.G.S. gage 8-496, Mountain Creek near Cedar Hill lat. 32°35'03", long. 97°01'23"	119
Walnut Creek	U.S.G.S. gage 8-497, Walnut Creek near Mansfield lat. 32°34'50", long. 97°06'05"	62.8
Walnut Creek	At mouth, lat. 32°38'06", long. 96°59'48"	86.5
Mountain Creek	U.S.G.S. discontinued gage 8-500, Mountain Creek near Grand Prairie lat. 32°42'20", long. 96°58'00"	267
Mountain Creek	U.S.G.S. gage 8-500.5, Mountain Creek Lake near Grand Prairie lat. 32°43'55", long. 96°56'35"	295
Mountain Creek	U.S.G.S. gage 8-501, Mountain Creek at Grand Prairie lat. 32°44'52", long. 96°55'33"	298
Mountain Creek	At mouth, lat. 32°46'55", long. 96°55'33"	304
West Fork Trinity River	At confluence with Elm Fork Trinity River lat. 32°47'53", long. 96°53'54"	3,484
Elm Fork Trinity River	Subwatershed No. 5 near Muenster lat. 33°39'25", long. 97°29'34"	12.5
Copeland Creek	Subwatershed No. 1 near Muenster lat. 33°39'56", long. 97°29'18"	4.06
Tributary to Elm Fork Trinity River	Subwatershed No. 5-A near Muenster lat. 33°38'30", long. 97°28'46"	0.77
Waller Creek	Subwatershed No. 2 near Muenster lat. 33°39'24", long. 97°28'07"	3.34
Tributary to Elm Fork Trinity River	Subwatershed No. 5-B near Muenster lat. 33°37'49", long. 97°27'45"	1.20

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Gibson Branch	Subwatershed No. 3 near Muenster lat. 33°39'12", long. 97°26'47"	3.84
Long Branch	Subwatershed No. 4 near Muenster lat. 33°37'38", long. 97°25'19"	1.88
Tributary to Elm Fork Trinity River	U.S.G.S. gage 8-502, Elm Fork Trinity River, Subwatershed No. 6-0 near Muenster lat. 33°37'13", long. 97°24'15"	0.77
Tributary to Elm Fork Trinity River	Subwatershed No. 6-N near Muenster lat. 33°37'00", long. 97°23'39"	0.74
Tributary to Elm Fork Trinity River	Subwatershed No. 6-H near Muenster lat. 33°36'18", long. 97°23'44"	1.12
Tributary to Elm Fork Trinity River	Subwatershed No. 6-M near Muenster lat. 33°36'55", long. 97°23'02"	0.78
Elm Fork Trinity River	U.S.G.S. gage 8-503, Elm Fork Trinity River near Muenster lat. 33°36'37", long. 97°22'58"	46.0
Elm Fork Trinity River	U.S.G.S. gage 8-505, Elm Fork Trinity River near Sanger lat. 33°23'11", long. 97°05'05"	381
Isle du Bois Creek	U.S.G.S. gage 8-510, Isle du Bois Creek near Pilot Point 1949-1958 lat. 33°24'53", long. 97°00'00"	265
	1958- lat. 33°24'23", long. 97°00'45"	266
Elm Fork Trinity River	Aubrey dam site lat. 33°21'26", long. 97°02'11"	692
Clear Creek	U.S.G.S. gage 8-515, Clear Creek near Sanger, lat. 33°20'10", long. 97°10'45"	295
Elm Fork Trinity River	U.S.G.S. discontinued gage 8-520, Elm Fork Trinity River near Denton lat. 33°15'02", long. 97°02'42"	1,084
Elm Fork Trinity River	U.S.G.S. discontinued gage 8-525, Lake Dallas near Dallas lat. 33°07'00", long. 96°59'28"	1,168
Little Elm Creek	U.S.G.S. gage 8-527, Little Elm Creek near Aubrey, lat. 33°17'00", long. 96°53'33"	75.5

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Elm Fork Trinity River	C of E gage 8-528, Garza-Little Elm Reservoir near Lewisville lat. 33°04'09", long. 96°57'51"	1,660
Elm Fork Trinity River	U.S.G.S. gage 8-530, Elm Fork Trinity River near Lewisville lat. 33°02'45", long. 96°57'40"	1,673
Denton Creek	U.S.G.S. gage 8-535, Denton Creek near Justin, lat. 33°07'08", long. 97°17'25"	400
Denton Creek	Dam site, lat. 33°01'47", long. 97°13'48"	600
Denton Creek	U.S.G.S. discontinued gage 8-540, Denton Creek near Roanoke lat. 33°02'23", long. 97°12'14"	616
Denton Creek	C of E gage 8-545, Grapevine Reservoir near Grapevine lat. 32°58'21", long. 97°03'22"	695
Denton Creek	U.S.G.S. gage 8-550, Denton Creek near Grapevine lat. 32°59'13", long. 97°00'45"	705
Elm Fork Trinity River	U.S.G.S. gage 8-555, Elm Fork Trinity River near Carrollton 1923-1938 and 1955- lat. 32°57'57", long. 96°56'40"	2,459
	1938-1939 lat. 32°52'08", long. 96°55'25"	2,537
	1939-1955 lat. 32°52'25", long. 96°55'51"	2,536
Elm Fork Trinity River	U.S.G.S. discontinued gage 8-560, Elm Fork Trinity River near Dallas lat. 32°49'02", long. 96°51'23"	2,576
Elm Fork Trinity River	At confluence with West Fork Trinity River, lat. 32°47'53", long. 96°53'54"	2,577
Turtle Creek	U.S.G.S. gage 8-565, Turtle Creek at Dallas, lat. 32°48'26", long. 96°48'08"	7.98
Trinity River	U.S.G.S. gage 8-570, Trinity River at Dallas, lat. 32°46'30", long. 96°49'10"	6,106
White Rock Creek	At Frankford Road lat. 32°59'53", long. 96°48'48"	25.5

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
White Rock Creek	At Dallas-Collin County line lat. 32°59'13", long. 96°48'47"	26.6
Hall Branch	At mouth lat. 32°58'53", long. 96°48'42"	2.20
White Rock Creek	U.S.G.S. gage 8-571, White Rock Creek at Keller Springs Road at Dallas lat. 32°58'13", long. 96°48'19"	29.4
White Rock Creek	At St. Louis-Southwestern Railroad Crossing lat. 32°57'56", long. 96°48'38"	30.5
Spanky Branch	U.S.G.S. gage 8-571.2, Spanky Branch at Dallas lat. 32°57'58", long. 96°48'11"	6.77
Spanky Branch	At mouth lat. 32°57'36", long. 96°48'36"	7.00
White Rock Creek	At Belt Line Road lat. 32°57'14", long. 96°48'28"	38.7
White Rock Creek	At Preston Road lat. 32°56'45", long. 96°48'12"	40.2
Rush Branch	At mouth lat. 32°56'40", long. 96°47'51"	2.61
Walton Branch	At mouth lat. 32°56'23", long. 96°47'43"	1.42
White Rock Creek	Below mouth of Walton Branch lat. 32°56'23", long. 96°47'43"	44.6
Laney Branch	At mouth lat. 32°56'07", long. 96°47'11"	0.44
White Rock Creek	At Alpha Road lat. 32°55'59", long. 96°47'15"	45.8
White Rock Creek	At Valley View Road lat. 32°55'35", long. 96°47'04"	47.2
Orr Branch	At mouth lat. 32°54'42", long. 96°46'35"	2.01
White Rock Creek	At Forest Lane lat. 32°54'35", long. 96°46'29"	50.6

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Tributary to White Rock Creek	At mouth lat. 32°54'22", long. 96°46'13"	0.18
Cottonwood Creek	U.S.G.S. gage 8-571.4, Cottonwood Creek at Forest Lane at Dallas lat. 32°54'33", long. 96°45'54"	8.50
Floyd Branch	U.S.G.S. gage 8-571.6, Floyd Branch at Forest Lane at Dallas lat. 32°54'33", long. 96°45'34"	4.17
Floyd Branch	At mouth lat. 32°54'26", long. 96°45'49"	4.22
Cottonwood Creek	At mouth lat. 32°54'06", long. 96°45'56"	12.8
White Rock Creek	At Texas and New Orleans Railroad Bridge lat. 32°54'04", long. 96°45'54"	64.1
Gifford Branch	At mouth lat. 32°53'52", long. 96°45'46"	1.29
White Rock Creek	U.S.G.S. gage 8-572, White Rock Creek at Greenville Ave. at Dallas lat. 32°53'21", long. 96°45'23"	66.4
White Rock Creek	At Fair Oaks Ave. lat. 32°52'50", long. 96°44'54"	70.0
White Rock Creek	At Skillman Ave. lat. 32°52'03", long. 96°44'20"	73.1
White Rock Creek	At Northwest Highway (Loop 12) lat. 32°51'30", long. 96°43'29"	83.0
White Rock Creek	U.S.G.S. gage 8-573, White Rock Creek at White Rock Lake at Dallas lat. 32°48'54", long. 96°43'28"	100
Ash Creek	U.S.G.S. gage 8-573.2, Ash Creek at Highland Road at Dallas lat. 32°48'18", long. 96°43'04"	6.92
Forney Creek	U.S.G.S. gage 8-573.4, Forney Creek at Lawnview Ave. at Dallas lat. 32°46'45", long. 96°43'02"	1.84
White Rock Creek	At mouth lat. 32°43'25", long. 96°44'02"	136

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Trinity River	At South Loop 12 below Dallas lat. 32°42'27", long. 96°44'08"	6,278
Ten Mile Creek	At mouth lat. 32°34'11", long. 96°34'29"	105
Honey Creek	Subwatershed No. 8-G near McKinney lat. 33°23'06", long. 96°43'20"	3.96
Tributary to Honey Creek	Subwatershed No. 8-C near McKinney lat. 33°21'55", long. 96°43'34"	2.10
Tributary to Honey Creek	Subwatershed No. 8-H near McKinney lat. 33°21'56", long. 96°42'29"	2.18
Tributary to Honey Creek	Subwatershed No. 8-D near McKinney lat. 33°21'54", long. 96°42'02"	1.46
Tributary to Honey Creek	Subwatershed No. 8-E near McKinney lat. 33°20'58", long. 96°41'50"	1.93
Tributary to Honey Creek	Subwatershed No. 8-F near McKinney lat. 33°20'19", long. 96°41'10"	1.45
Tributary to Honey Creek	Subwatershed No. 9 near McKinney lat. 33°18'58", long. 96°41'29"	1.37
Tributary to Honey Creek	Subwatershed No. 10 near McKinney lat. 33°19'08", long. 96°40'45"	1.25
Tributary to Honey Creek	U.S.G.S. gage 8-575, Honey Creek Subwatershed No. 11 near McKinney lat. 33°18'12", long. 96°41'22"	2.14
Tributary to Honey Creek	U.S.G.S. gage 8-580, Honey Creek Subwatershed No. 12 near McKinney lat. 33°18'20", long. 96°40'12"	1.26
Tributary to Honey Creek	Subwatershed No. 13 near McKinney lat. 33°17'21", long. 96°40'31"	0.89
Tributary to Honey Creek	Subwatershed No. 14 near McKinney lat. 33°17'39", long. 96°39'33"	0.91
Honey Creek	U.S.G.S. gage 8-585, Honey Creek near McKinney lat. 33°16'42", long. 96°39'27"	39.0
East Fork Trinity River	U.S.G.S. gage 8-590, East Fork Trinity River near McKinney lat. 33°12'13", long. 96°35'44"	190

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Sister Grove Creek	U.S.G.S. gage 8-595, Sister Grove Creek near Princeton lat. 33°11'35", long. 96°28'32"	113
East Fork Trinity River	U.S.G.S. discontinued gage 8-600, East Fork Trinity River above Pilot Grove Creek near Lavon lat. 33°01'23", long. 96°28'32" (Note.--Same location as station 8-610)	328
Indian Creek	At mouth lat. 33°12'55", long. 96°24'07"	120
Pilot Grove Creek	Below mouth of Indian Creek lat. 33°12'55", long. 96°24'07"	205
East Fork Trinity River	C of E gage 8-605, Lavon Reservoir near Lavon, lat. 33°01'55", long. 96°28'41"	770
East Fork Trinity River	U.S.G.S. gage 8-610, East Fork Trinity River near Lavon lat. 33°01'23", long. 96°28'32"	773
East Fork Trinity River	U.S.G.S. discontinued gage 8-615, East Fork Trinity River near Rockwall lat. 32°55'28", long. 96°30'06"	839
East Fork Trinity River	Forney dam site lat. 32°48'08", long. 96°30'30"	1,071
Duck Creek	U.S.G.S. gage 8-617, Duck Creek near Garland lat. 32°50'00", long. 96°35'45"	31.6
East Fork Trinity River	U.S.G.S. gage 8-620, East Fork Trinity River near Crandall lat. 32°38'20", long. 96°29'15"	1,256
East Fork Trinity River	At mouth lat. 32°29'55", long. 96°30'05"	1,314
Trinity River	U.S.G.S. gage 8-625, Trinity River near Rosser lat. 32°25'35", long. 96°27'45"	8,146
Trinity River	At State Highway 31 lat. 32°08'52", long. 96°06'08"	8,537
Big Brushy Creek	At mouth lat. 32°33'30", long. 96°20'20"	107

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Kings Creek	At mouth lat. 32°23'00", long. 96°11'19"	330
Cedar Creek	U.S.G.S. gage 8-630, Cedar Creek near Mabank lat. 32°19'45", long. 96°10'05"	733
Cedar Creek	Cedar Creek Reservoir near Trinidad lat. 32°10'48", long. 96°04'16"	1,007
Cedar Creek	At mouth lat. 32°04'54", long. 96°05'03"	1,090
Bynum Creek	At mouth lat. 31°55'21", long. 96°49'25"	31.4
White Rock Creek	At mouth lat. 31°55'50", long. 96°47'47"	76.3
Ash Creek	At mouth lat. 31°56'33", long. 96°45'59"	212
Richland Creek	Navarro Mills Reservoir near Corsicana lat. 31°57'07", long. 96°41'55"	320
Richland Creek	U.S.G.S. gage 8-631, Richland Creek near Dawson lat. 31°56'18", long. 96°40'52"	333
Pin Oak Creek	U.S.G.S. gage 8-632, Pin Oak Creek near Hubbard lat. 31°48'05", long. 96°43'10"	17.6
Richland Creek	U.S.G.S. gage 8-635, Richland Creek near Richland lat. 31°56'55", long. 96°25'15"	734
Chambers Creek	Italy dam site lat. 32°13'35", long. 96°52'40"	361
South Prong Waxahachie Creek	Lake Waxahachie near Waxahachie lat. 32°20'30", long. 96°48'20"	30.5
Waxahachie Creek	Bardwell dam site lat. 32°15'30", long. 96°38'40"	176
Chambers Creek	U.S.G.S. discontinued gage 8-640, Chambers Creek near Emhouse lat. 32°13'10", long. 96°35'55"	803

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Chambers Creek	U.S.G.S. gage 8-645, Chambers Creek near Corsicana lat. 32°06'30", long. 96°22'15"	963
Elm Creek	Lake Halbert near Corsicana lat. 32°04'40", long. 96°24'30"	12.0
Chambers Creek	At mouth lat. 31°58'26", long. 96°11'57"	1,070
Richland Creek	Dam site near mouth lat. 31°57'05", long. 96°05'52"	1,957
Tehuacana Creek	Dam site lat. 31°54'46", long. 96°08'17"	336
Catfish Creek	U.S.G.S. gage 8-648, Catfish Creek near Tennessee Colony lat. 31°52'52", long. 95°52'07"	207
Trinity River	Tennessee Colony dam site lat. 31°46'21", long. 95°56'13"	12,643
Trinity River	U.S.G.S. gage 8-650, Trinity River near Oakwood lat. 31°38'50", long. 95°47'20"	12,833
Upper Keechi Creek	Dam site lat. 31°35'50", long. 95°54'42"	136
Upper Keechi Creek	U.S.G.S. gage 8-652, Upper Keechi Creek near Oakwood lat. 31°34'20", long. 95°53'05"	150
Upper Keechi Creek	At Farm Road 542 lat. 31°24'20", long. 95°45'50"	487
Upper Keechi Creek	At mouth lat. 31°23'10", long. 95°41'35"	511
Elkhart Creek	Dam site lat. 31°24'40", long. 95°39'20"	80.4
Little Elkhart Creek	Dam site lat. 31°23'45", long. 95°37'00"	52.4
Hurricane Bayou	Dam site lat. 31°20'05", long. 95°36'00"	92.2

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Lower Keechi Creek	Dam site lat. 31°09'55", long. 95°48'20"	158
Trinity River	U.S.G.S. gage 8-655, Trinity River near Midway lat. 31°04'40", long. 95°42'00"	14,450
Bedias Creek	Dam site lat. 30°52'50", long. 95°47'10"	309
Larrisons Creek	At mouth lat. 30°54'35", long. 95°42'45"	67.9
South Bedias Creek	At mouth lat. 30°54'05", long. 95°41'30"	133
Bedias Creek	At mouth lat. 30°55'50", long. 95°36'55"	565
Trinity River	Below mouth of Bedias Creek lat. 30°55'50", long. 95°36'55"	15,226
Nelsons Creek	Dam site lat. 30°51'15", long. 95°32'30"	68.4
Harmons Creek	Dam site lat. 30°49'17", long. 95°29'03"	91.6
Trinity River	U.S.G.S. gage 8-660, Trinity River at Riverside lat. 30°51'35", long. 95°23'54"	15,589
White Rock Creek	Mustang dam site lat. 31°10'45", long. 95°20'10"	73.6
Gail Creek	Dam site lat. 31°09'35", long. 95°24'30"	62.8
Caney Creek	Dam site lat. 30°58'06", long. 95°12'55"	66.0
White Rock Creek	At mouth lat. 30°54'19", long. 95°15'55"	510
Kickapoo Creek	At mouth lat. 30°47'00", long. 95°07'52"	148
Trinity River	Livingston dam site lat. 30°38'02", long. 95°00'56"	16,583

Table 3.--Trinity River Basin--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Long King Creek	Dam site lat. 30°45'17", long. 94°56'05"	130
Long King Creek	At mouth lat. 30°34'19", long. 94°57'18"	225
Menard Creek	At mouth lat. 30°29'15", long. 94°50'28"	167
Big Creek	At mouth lat. 30°27'33", long. 94°52'28"	93.2
Trinity River	U.S.G.S. gage 8-665, Trinity River at Romayor lat. 30°25'30", long. 94°51'02"	17,186
Trinity River	Capers Ridge dam site lat. 30°12'58", long. 94°49'22"	17,374
Trinity River	U.S.G.S. gage 8-670, Trinity River at Liberty lat. 30°03'27", long. 94°49'05"	17,468
Whites Bayou	At mouth lat. 29°50'15", long. 94°39'18"	103
Turtle Bayou	At mouth lat. 29°49'25", long. 94°40'27"	180
Turtle Bay	At mouth lat. 29°49'29", long. 94°44'23"	199
Trinity River	At mouth (The Trinity River discharges into Trinity Bay at the main channel outlet lat. 29°46'20", long. 94°41'18", at the mouth of Red Bayou lat. 29°45'54", long. 94°47'46", and at intervening bayous and passes between the mouth of the main channel and the mouth of Red Bayou.)	17,969

Table 3a.--Trinity-San Jacinto Coastal Area

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Coastal area	Intervening coastal area from mouth of Trinity River to mouth of Cedar Bayou	12.9
Cedar Bayou	At mouth lat. 29°40'29", long. 94°55'56"	204
Coastal area	Intervening coastal area from mouth of Cedar Bayou to mouth of San Jacinto River	30.0
Coastal area	Total intervening coastal area from mouth of Trinity River to mouth of San Jacinto River	247