TEXAS WATER COMMISSION

Joe D. Carter, Chairman O. F. Dent, Commissioner H. A. Beckwith, Commissioner

CIRCULAR NO. 62-02

DRAINAGE AREAS OF TEXAS STREAMS

SABINE RIVER BASIN AND

SABINE-NECHES COASTAL AREA

Prepared in cooperation with the U. S. Geological Survey and other Agencies

October 1962

TABLE OF CONTENTS

INTRODUCTION	1
ADMINISTRATION AND ACKNOWLEDGMENTS	1
TOPOGRAPHY	1
CONCEPTS OF DRAINAGE AREAS	2
METHOD OF DRAINAGE-AREA DETERMINATION	2
TABULATION OF DATA	5
FUNCTION OF COORDINATING OFFICE	5
SABINE RIVER BASIN	7

-

4

æ

~

TABLES OF DRAINAGE-AREA DATA

1.	Sabine	River	Basin,	Texas	and	Louisiana	8
la.	Sabine	-Neches	Coasta	1 Area	1		22

ILLUSTRATIONS

Figures

1.	Contour map of Texas showing principal physiographic provinces	3
2.	River basins and coastal areas of Texas	4

Page

INTRODUCT ION

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 noncontributing 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. <u>Selection of Maps</u>: 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 topgraphic maps, scale 1:250,000. About half of the State is mapped with largescale, modern topographic maps.

2. <u>Establishment of Boundaries</u>: 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. <u>Continuity Between Maps</u>: 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. <u>Planimetering</u>: 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.

- 5 -

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.

SABINE RIVER BASIN

The headwaters of the Sabine River are in Hunt and Collin Counties. The river flows southeasterly to the southeastern part of Panola County, then takes a southerly course, forming the boundary between Texas and Louisiana, empties into Sabine Lake, and then through Sabine Pass into the Gulf of Mexico. Elevations range from about 660 feet in the headwaters to sea level at the mouth.

The entire basin is in the Texas Gulf Coastal Plain, which is part of a great plain bordering the Atlantic Ocean and the Gulf of Mexico. The topography of the headwaters regions is generally characterized by rolling hills, and the lower part of the basin is relatively flat. The basin receives large amounts of rainfall; however, peak runoff rates are usually lower than in some other Texas basins, principally because of the low stream gradients.

About 95 percent of the drainage area was delineated on recent large-scale topographic maps. The remaining 5 percent was on small-scale topographic maps with a small part on an uncontoured Highway County map. The accuracy of the maps justified the precise methods used, and the work should be considered of permanent value.

The drainage area at the mouth (1.6 miles downstream from Cow Bayou south of Orange, Texas) is 9,733 square miles, of which 7,426 square miles is in Texas.

The following tabulation was abstracted from the report prepared for the Sabine River Compact Administration in August 1961 and entitled "Drainage Area Data for Sabine River Basin, Texas and Louisiana".

Name of stream	Point of determination drainage area	Total drainage area (sq. mi.)
Sabine River	U.S.G.S. gage 8-172, Sabine River at Greenville, Texas lat. 33°08'00", long. 96°04'35"	77.7
Caney Creek	At mouth, lat. 33°03'10", long. 95°59'30"	18.3
Sabine River	Below mouth of Caney Creek lat. 33°03'10", long. 95°59'30"	158
Caddo Fork Sabine River	At mouth, lat. 32°57'44", long. 96°07'55"	181
South Fork Sabine River	U.S.G.S. gage 8-173, South Fork Sabine River near Quinlan, Texas lat. 32°53'52", long. 96°15'11"	78.7

Table 1.--Sabine River Basin, Texas and Louisiana

4

8

4

(Continued on next page)

•

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
South Fork Sabine River	At mouth, lat. 32°52'02", long. 96°08'52"	118
Sabine River	U.S.G.S. gage 8-174, Lake Tawakoni near Wills Point, Texas lat. 32°48'40", long. 95°54'56"	756
Sabine River	U.S.G.S. gage 8-175, Sabine River near Emory, Texas lat. 32°46'23", long. 95°47'56"	888
Mill Creek	At mouth, lat. 32°45'28", long. 95°45'50"	127
Sabine River	U.S.G.S. discontinued gage 8-180, Sabine River near Golden, Texas 1at. 32°43'13", 1ong. 95°38'05"	1,123
Grand Saline Creek	At mouth, lat. 32°41'04", long. 95°35'38"	93.0
Dry Creek	At mouth, lat. 32°39'49", long. 95°33'46"	33.4
Sabine River	U.S.G.S. discontinued gage 8-185, Sabine River near Mineola, Texas lat. 32°36'46", long. 95°29'08"	1,357
Lake Fork Sabine River	U.S.G.S. gage 8-190, Lake Fork Sabine River near Quitman, Texas lat. 32°45'45", long. 95°27'49"	585
Lake Fork Sabine River	At mouth, 1at. 32°36'34", long. 95°20'46"	685
Harris Creek	At mouth, lat. 32°32'58", long. 95°15'53"	120
Big Sandy Creek	U.S.G.S. gage 8-195, Big Sandy Creek near Big Sandy, Texas prior to Nov. 26, 1951	
	1at. 32°36'46", 1ong. 95°05'42" after Nov. 26, 1951	230
	1at. 32°36'12", long. 95°05'32"	231
Big Sandy Creek	At mouth, lat. 32°33'22", long. 95°04'45"	239
Sabine River	U.S.G.S. gage 8-200, Sabine River near Gladewater, Texas lat. 32°31'37", long. 94°57'36"	2,791
Prairie Creek	At mouth, lat. 32°27'58", long. 94°54'30"	66.3
Sabine River	U.S.G.S. discontinued gage 8-205, Sabine River near Longview, Texas 1at. 32°27'50", long. 94°46'46"	2,947

8

a

¢

9

ε

- 9 -

Table	1Sabine	River	Basin,	Texas	and	LouisianaContinued	
-------	---------	-------	--------	-------	-----	--------------------	--

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Rabbit Creek	At mouth, lat. 32°26'21", long. 94°47'03"	135
Mason Creek	At mouth, lat. 32°24'22", long. 94°39'16"	32.3
Clarks Creek	At mouth, lat. 32°24'12", long. 94°31'40"	29.8
Cherokee Bayou	U.S.G.S. discontinued gage 8-210, Cherokee Bayou near Elderville, Texas 1at. 32°20'30", 1ong. 94°42'01"	120
Cherokee Bayou	U.S.G.S. gage 8-215, Lake Cherokee near Longview, Texas, at dam lat. 32°21'39", long. 94°36'21", at gage lat. 32°22'37", long. 94°38'32"	158
Cherokee Bayou	At mouth, 1at. 32°23'20", 1ong. 94°30'32"	184
Hatleys Creek	At mouth, 1at. 32°23'54", 1ong. 94°29'57"	33.7
Sabine River	U.S.G.S. gage 8-220, Sabine River near Tatum, Texas lat. 32°22'11", long. 94°27'29"	3,493
Potters Creek	U.S.G.S. low-flow partial-record station 8-220.2, Potters Creek near Marshall, Texas, lat. 32°26'06", long. 94°25'28"	50.5
Potters Creek	At mouth, lat. 32°22'12", long. 94°24'14"	64.6
Eightmile Creek	U.S.G.S. low-flow partial-record station 8-220.5, Eightmile Creek near Tatum, Texas, lat. 32°22'33", long. 94°19'32"	106
Eightmile Creek	At mouth, lat. 32°19'49", long. 94°20'48"	116
Sabine River	At Lake Carthage dam site, lat. 32°17'56", long. 94°20'24"	3,720
Martin Creek	U.S.G.S. low-flow partial-record station 8-220.8, Martin Creek near Beckville, Texas, lat. 32°15'28", long. 94°21'07"	192
Martin Creek	At mouth, lat. 32°15'20", long. 94°18'43"	194
Irons Bayou	U.S.G.S. low-flow partial-record station 8-221, Irons Bayou near Cathage, Texas, lat. 32°14'03", long. 94°21'06"	104
Irons Bayou	At mouth, lat. 32°13'42", long. 94°18'32"	111

Table	1Sabine	River	Basin,	Texas	and	Louisiana	Continued
-------	---------	-------	--------	-------	-----	-----------	-----------

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Jackson Creek	At mouth, lat. 32°13'40", long. 94°13'54"	42.4
Sabine River	At bridge on U. S. Highway 79 lat. 32°13'28", long. 94°13'35"	4,115
Hoggs Bayou	At mouth, (two outlets) lat. 32°10'18", long. 94°12'39" lat. 32°07'43", long. 94°12'08"	34.6
Sixmile Creek	U.S.G.S. low-flow partial-record station 8-221.5, Sixmile Creek near Carthage, Texas, lat. 32°07'17", long. 94°17'24"	33.9
Sixmile Creek	At mouth, lat. 32°05'40", long. 94°12'09"	48.8
Murvaul Bayou	U.S.G.S. gage 8-222, Murvaul Lake near Gary, Texas lat. 32°02'04", long. 94°25'13"	115
Murvaul Bayou	U.S.G.S. gage 8-223, Murvaul Bayou near Gary, Texas lat. 32°02'53", long. 94°22'33"	134
Murvaul Bayou	U.S.G.S. low-flow partial-record station 8-223.5, Murvaul Bayou near Carthage, Texas, lat. 32°04'35", long. 94°14'55"	231
Murvaul Bayou	At mouth, lat. 32°04'44", long. 94°12'33"	234
Sabine River	Below mouth of Murvaul Creek lat. 32°04'47", long. 94°12'30"	4,488
Socagee Creek	U.S.G.S. gage 8-224, Socagee Creek near Carthage, Texas lat. 32°13'54", long. 94°05'31"	82.6
Socagee Creek	U.S.G.S. low-flow partial-record station 8-224.5, Socagee Creek near Deadwood, Texas, lat. 32°04'42", long. 94°07'06"	201
Socagee Creek	At mouth, lat. 32°01'17", long. 94°08'26"	213
Sabine River	U.S.G.S. gage 8-225, Sabine River at Logansport, Louisiana lat. 31°58'44", long. 94°00'58" aux. gage-lat. 31°58'20", long. 94°00'22"	4,839 4,842
Bayou Castor	U.S.G.S. partial-record station 8-226, Bayou Castor near Longstreet, Louisiana lat. 32°05'35", long. 93°55'15"	27.7

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Bushneck Bayou	U.S.G.S. low-flow partial-record station 8-227, Bushneck Bayou at Longstreet, Louisiana, lat. 32°06'05", long. 93°58'05"	26.9
Bayou Castor	U.S.G.S. gage 8-230, Bayou Castor near Logansport, Louisiana 1at. 31°58'25", long. 93°58'10"	96.5
Bayou Grand Cane	U.S.G.S. low-flow partial-record station 8-231, Bayou Grand Cane near Logansport, Louisiana 1at. 31°57'15", long. 93°57'45"	76.5
Bayou Grand Cane	At mouth, lat. 31°57'15", long. 93°57'45"	77.9
Bayou Castor	At mouth, lat. 31°56'02", long. 93°58'45"	179
Sabine River	Below mouth of Bayou Castor lat. 31°56'02", long. 93°58'45"	5,028
Clement Creek	U.S.G.S. low-flow partial-record station 8-231.5, Clement Creek near Hunter, Louisiana, lat. 31°55'00", long. 93°53'15"	44.6
Clement Creek	At mouth, lat. 31°53'49", long. 93°54'04"	46.4
Sabine River	Below mouth of Clement Creek lat. 31°53'49", long. 93°54'04"	5,110
Tenaha Creek	U.S.G.S. gage 8-232, Tenaha Creek near Shelbyville, Texas lat. 31°45'56", long. 94°05'02"	97.8
Tenaha Creek	U.S.G.S. low-flow partial-record station 8-232.2, Tenaha Creek near mouth near Shelbyville, Texas	371
	1at. 31'50'36", 10ng. 95'50'20"	300
Tenaha Creek	At mouth, 1at. 31'49'48", 10hg. 95 52 55	500
Sabine River	Below mouth of Tenaha Creek 1at. 31°49'48", 1ong. 93°52'33"	5,513
Cow Bayou	U.S.G.S. low-flow partial-record station 8-232.5, Cow Bayou near Hunter, Louisiana, lat. 31°52'05", long. 93°49'10"	29.2

ъ

.

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Cow Bayou	At mouth, lat. 31°49'02", long. 93°52'15"	49.1
Sabine River	Below mouth of Cow Bayou 1at. 31°49'02", long. 93°52'15"	5,567
Bossier Bayou	Bossier Bayou near Union Springs, Louisiana lat. 31°48'30", long. 93°47'25"	16.0
Bossier Bayou	At mouth, lat. 31°46'18", long. 93°49'22"	21.3
McDonald Bayou	McDonald Bayou near Union Springs, Louisiana lat. 31°46'50", long. 93°46'45"	5.72
Bayou Siep	U.S.G.S. low-flow partial-record station 8-233.2, Bayou Siep near Patroon, Texas lat. 31°43'13", long. 93°51'17"	56.0
Bayou Siep	At mouth, lat. 31°43'39", long. 93°48'56"	63.8
Sabine River	Below mouth of Bayou Siep lat. 31°43'39", long. 93°48'56"	5,711
Bayou San Patricio	U.S.G.S. partial-record station 8-234 Bayou San Patricio near Benson, Louisiana lat. 31°52'30", long. 93°39'30"	80.2
Bayou San Patricio	Bayou San Patricio at Converse, Louisiana lat. 31°46'55", long. 93°45'25"	128
Bayou San Patricio	U.S.G.S. gage 8-235, Bayou San Patricio near Noble, Louisiana lat. 31°43'15", long. 93°42'25"	154
Bayou San Patricio	Bayou San Patricio near Zwolle, Louisiana lat. 31°38'40", long. 93°45'25"	177
Bayou San Patricio	At mouth, lat. 31°36'51", long. 93°49'07"	186
Sabine River	Below mouth of Bayou San Patricio lat. 31°36'51", long. 93°49'07"	5,942
Bayou San Miguel	Bayou San Miguel near Mitchell, Louisiana lat. 31°46'40", long. 93°35'15"	29.3

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Little Bayou San Miguel	U.S.G.S. low-flow partial-record station 8-237, Little Bayou San Miguel near Mitchell, Louisiana lat. 31°46'00", long. 93°35'10"	33.4
Bayou San Miguel	U.S.G.S. gage 8-240, Bayou San Miguel near Zwolle, Louisiana lat. 31°39'10", long. 93°39'10"	111
Bayou Scie	U.S.G.S. partial-record station 8-240.3, Bayou Scie at Zwolle, Louisiana lat. 31°37'45", long. 93°37'40"	45.9
Bayou San Miguel	At mouth, 1at. 31°31'38", 1ong. 93°44'35"	203
Sabine River	Below mouth of Bayou San Miguel 1at. 31°31'38", 1ong. 93°44'35"	6,196
Harpoon Bayou	U.S.G.S. crest-stage partial-record station, 8-240.5, Harpoon Bayou at Many, Louisiana lat. 31°34'30", long. 93°29'45"	22.7
Blackwell Creek	U.S.G.S. gage 8-240.6, Blackwell Creek at Many, Louisiana lat. 31°34'50", long. 93°27'45"	3.16
Phillips Creek	Phillips Creek at Many, Louisiana lat. 31°34'25", long. 93°29'30"	18.9
Lewis Creek	U.S.G.S. partial-record station 8-240.8, Lewis Creek at Many, Louisiana lat. 31°35'25", long. 93°31'40"	12.5
Hurricane Creek tributary	U.S.G.S. partial-record (pond) station 8-241.6, Hurricane Creek tributary at Loring Lake near Zwolle, Louisiana lat. 31°36'05", long. 93°35'25"	1.03
Bayou La Nana	U.S.G.S. gage 8-242, Bayou La Nana near Zwolle, Louisiana lat. 31°30'56", long. 93°39'04"	130
Bayou La Nana	At mouth, lat. 31°30'49", long. 93°42'47"	149
Sabine River	Below mouth of Bayou La Nana lat. 31°30'49", long. 93°42'47"	6,348
Funks Bayou	Funks Bayou near Zwolle, Louisiana 1at. 31°29'55", long. 93°41'40"	4.34

8

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Patroon Bayou	U.S.G.S. low-flow partial-record station 8-243, Patroon Bayou near Milam, Texas lat. 31°31'42", long. 93°48'26"	130
Patroon Bayou	At mouth, lat. 31°29'03", long. 93°44'24"	149
Sabine River	Below mouth of Patroon Bayou lat. 31°29'03", long. 93°44'26"	6,505
Sabine River	U.S.G.S. gage 8-244, Sabine River near Milam, Texas lat. 31°28'01", long. 93°44'41"	6,508
Slaughter Creek	At mouth, lat. 31°26'24", long. 93°41'40"	3.84
Sabine River	Below mouth of Slaughter Creek lat. 31°26'24", long. 93°41'40"	6,519
Palo Gaucho Bayou	U.S.G.S. gage 8-245, Palo Gaucho Bayou near Hemphill, Texas lat. 31°23'10", long. 93°50'08"	123
Palo Gaucho Bayou	U.S.G.S. low-flow partial-record station 8-246, Palo Gaucho Bayou near Sabinetown, Texas lat. 31°24'56", long. 93°43'43"	176
Palo Gaucho Bayou	At mouth, lat. 31°24'47", long. 93°42'19"	193
Sabine River	Below mouth of Palo Gaucho Bayou lat. 31°24'47", long. 93°42'19"	6,713
Sabine River	U.S.G.S. discontinued gage 8-250 Sabine River at Sabinetown, Texas lat. 31°24'44", long. 93°42'19"	6,713
Bayou Negreet	U.S.G.S. low-flow partial-record station 8-252, Bayou Negreet near Negreet, Louisiana lat. 31°25'05", long. 93°38'05"	52.1
Bayou Negreet	At mouth, lat. 31°23'39", long. 93°40'19"	62.4
Sabine River	Below mouth of Bayou Negreet lat. 31°23'39", long. 93°40'19"	6,790
Caney Creek	Caney Creek near Esto, Louisiana 1at. 31°22'50", long. 93°36'55"	5.08

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Housen Bayou	U.S.G.S. low-flow partial-record station 8-252.5, Housen Bayou near Yellowpine, Texas, lat. 31°16'27", long. 93°40'42"	92.1
Housen Bayou	At mouth, 1at. 31°17'01", long. 93°39'38"	95.3
Sabine River	Below mouth of Housen Bayou lat. 31°17'01", long. 93°39'38"	6,911
Arnold Creek	Arnold Creek near Clare, Louisiana lat. 31°21'20", long. 93°36'25"	6.84
Yocum Creek	Yocum Creek at Clare, Louisiana (two outlets) lat. 31°19'45", long. 93°37'00" lat. 31°19'25", long. 93°37'00"	7.80
Caney Cr eek	Caney Creek near Toro, Louisiana lat. 31°15'50", long. 93°36'10"	9.34
Caney Creek	At mouth, 1at. 31°15'11", long. 93°36'52"	9.78
Sandy Creek	U.S.G.S. low-flow partial-record station 8-253, Sandy Creek near Yellowpine, Texas, lat. 31°14'53", long. 93°40'02"	135
Sandy Creek	At mouth, lat. 31°14'56", long. 93°37'19"	148
Sabine River	Below mouth of Sandy Creek lat. 31°14'56", long. 93°37'19"	7,104
Mill Creek	At mouth, lat. 31°12'32", long. 93°36'17"	35.6
Sabine River	Below mouth of Mill Creek lat. 31°12'32", long. 93°36'17"	7,151
Sabine River	At Toledo Bend dam site lat. 31°10'41", long. 93°34'08"	7,178
Bayou Toro	U.S.G.S. crest-stage partial record station 8-254, Bayou Toro near Florien, Louisiana lat. 31°22'50", long. 93°25'40"	74.1
Bayou Toro	U.S.G.S. gage 8-255, Bayou Toro near Toro, Louisiana lat. 31°18'25", long. 93°30'56"	144

8

\$

4

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Bayou Toro	U.S.G.S. low-flow partial-record station 8-256, Bayou Toro south of Toro, Louisiana	
	lat. 31°14'35", long. 93°32'45"	187
Bayou Toro	At mouth, lat. 31°11'07", long. 93°33'09"	199
Sabine River	Below mouth of Bayou Toro lat. 31°11'07", long. 93°33'09"	7,377
Sandy Creek	U.S.G.S. low-flow partial-record station 8-257, Sandy Creek near Burr Ferry, Louisiana	
	1at. 31°08'30", 1ong. 93°31'10"	33.7
Sandy Creek	At mouth, lat. 31°08'03", long. 93°32'36"	35.4
Sabine River	Below mouth of Sandy Creek lat. 31°08'03", long. 93°32'36"	7,428
Indian Creek	At mouth, lat. 31°04'29", long. 93°31'39"	6.67
Pearl Creek	U.S.G.S. low-flow partial-record station 8-259, Pearl Creek at Burr Ferry, Louisiana	18 0
Deem1 Creek	$\frac{1}{100} = \frac{1}{100} = \frac{1}$	18.6
rearl Creek	AL MOULI, 1ac. 51 05 54 , 10hg. 95 51 10	10.0
Sabine River	Below mouth of Pearl Creek 1at. 31°03'54", long. 93°31'10"	7,482
Sabine River	U.S.G.S. gage 8-260, Sabine River below Toledo Bend near Burkeville, Texas lat. 31°03'51", long. 93°31'09"	7,482
Red Bank Creek	U.S.G.S. low-flow partial-record station 8-262, Red Bank Creek at Evans, Louisiana	
	1at. 30°59'30", 1ong. 93°29'55"	17.2
Red Bank Creek	At mouth, lat. 31°01'11", long. 93°31'21"	22.2
Sabine River	Below mouth of Red Bank Creek lat. 31°01'11", long. 93°31'21"	7,533
Damrel Creek	Damrel Creek near Evans, Louisiana lat. 30°57'40", long. 93°30'20"	4.42

Name of stream	Point of determination of drainage area	Total drainage area
E		(sq. mi.)
Mill Creek	Mill Creek at Evans, Louisiana lat. 30°56'40", long. 93°30'25"	6.30
Moore Branch	Moore Branch near Evans, Louisiana lat. 30°56'00", long. 93°30'10"	4.01
Little Cow Creek	U.S.G.S. low-flow partial-record station 8-265, Little Cow Creek near Burkeville, Texas lat. 30°58'23", long. 93°36'18"	112
Little Cow Creek	U.S.G.S. low-flow partial-record station 8-266, Little Cow Creek near mouth near Burkeville, Texas lat. 30°55'37", long. 93°33'04"	128
Little Cow Creek	At mouth, lat. 30°55'14", long. 93°33'05"	128
Sabine River	Below mouth of Little Cow Creek lat. 30°55'14", long. 93°33'05"	7,707
West Anacoco Creek	U.S.G.S. crest-stage partial-record station 8-267, West Anacoco Creek near Hornbeck, Louisiana lat. 31°18'00", long. 93°22'10"	26.9
East Anacoco Creek	U.S.G.S. partial-record station 8-272, East Anacoco Creek near Anacoco, Louisiana lat. 31°13'30", long. 93°19'50"	40.6
Bayou Anacoco	Upper Anacoco Lake dam site 1at. 31°10'40", 1ong. 93°21'30"	115
Bayou Anacoco	U.S.G.S. gage 8-275, Bayou Anacoco near Leesville, Louisiana lat. 31°09'35", long. 93°21'05"	118
Prairie Creek	U.S.G.S. crest-stage partial-record station 8-275.5, Prairie Creek near Leesville, Louisiana lat. 31°10'40", long. 93°16'30"	33.5
Bayou Anacoco	Anacoco Lake at spillway lat. 31°05'40", long. 93°23'25"	199
Bayou Anacoco	U.S.G.S. gage 8-280, Bayou Anacoco near Rosepine, Louisiana lat. 30°57'10", long. 93°21'10"	355
		1

Table 1.--Sabine River Basin, Texas and Louisiana--Continued

Name of stream	Point of determination of drainage area	Total drainage area (sg. mi.)
Bayou Anacoco	U.S.G.S. low-flow partial-record station 8-282, Bayou Anacoco near Knight, Louisiana	
	lat. 30°52'15", long. 93°30'55"	415
Bayou Anacoco	At mouth, lat. 30°52'07", long. 93°33'30"	431
Sabine River	Below mouth of Bayou Anacoco lat. 30°52'07", long. 93°33'30"	8,155
Trout Creek	U.S.G.S. low-flow partial-record station 8-283, Trout Creek near Merryville, Louisiana lat. 30°47'55", long. 93°32'00"	16.9
Trout Creek	At mouth, lat, 30°48'35", long, 93°33'36"	28.9
Sabine River	Below mouth of Trout Creek lat. 30°48'35", long. 93°33'36"	8,192
Bridge Creek	Bridge Creek near Merryville, Louisiana lat. 30°47'10", long. 93°32'15"	13.8
Bridge Creek	At mouth, lat. 30°47'30", long. 93°34'45"	16.3
Sabine River	U.S.G.S. gage 8-285, Sabine River near Bon Wier, Texas lat. 30°44'49", long. 93°36'30"	8,229
Quicksand Creek	U.S.G.S. low-flow partial-record station 8-285.1, Quicksand Creek near Bon Wier, Texas, lat. 30°44'49", long. 93°47'06"	65.1
Quicksand Creek	At mouth, 1at. 30°44'30", 1ong. 93°37'10"	65.2
Sabine River	Below mouth of Quicksand Creek lat. 30°44'30", long. 93°37'10"	8,295
Caney Creek	U.S.G.S. low-flow partial-record station 8-285.2, Caney Creek near Bon Wier, Texas, lat. 30°44'30", long. 93°38'00"	46.2
Caney Creek	At mouth, 1at. 30°43'35", 1ong. 93°36'59"	48.3
Sabine River	Below mouth of Caney Creek lat. 30°43'35", long. 93°36'59"	8,344
Davis Creek	U.S.G.S. low-flow partial-record station 8-285.5, Davis Creek near Bon Wier, Texas, lat. 30°41'22", long. 93°39'52"	27.1

G.

٦

- 19 - 1

Table	1	-Sabine	River	Basin,	Texas	and	Louisiana-	-Continued
-------	---	---------	-------	--------	-------	-----	------------	------------

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Davis Creek	At mouth, lat. 30°40'39", long. 93°38'05"	34.7
Sabine River	Below mouth of Davis Creek lat. 30°40'39", long. 93°38'05"	8,383
Hoosier Creek	U.S.G.S. gage 8-287, Hoosier Creek near Merryville, Louisiana lat. 30°43'32", long. 93°33'36"	13.1
Unnamed Creek	Unnamed Creek at Merryville, Louisiana lat. 30°45'25", long. 93°32'20"	7.66
Pullem Branch	Pullem Branch near Merryville, Louisiana lat. 30°42'45", long. 93°33'40"	4.81
Hoosier Creek	At mouth, 1at. 30°42'20", 1ong. 93°35'05"	45.9
Cypress Creek	U.S.G.S. low-flow partial-record station 8-288, Cypress Creek near Bivens, Louisiana	
	lat. 30°40'00", long. 93°35'10"	15.4
Cypress Creek	At mouth, 1at. 30°40'30", long. 93°35'35"	18.1
Bivens Branch	Bivens Branch at Bivens, Louisiana 1at. 30°38'30", 1ong. 93°35'45"	2.60
Bivens Branch	At mouth, lat. 30°38'30", long. 93°37'20"	4.18
Old River	At mouth, 1at. 30°38'08", 1ong. 93°40'48"	83.8
Sabine River	Below mouth of Old River lat. 30°38'08", long. 93°40'48"	8,485
Big Cow Creek	U.S.G.S. low-flow partial-record station 8-290, Big Cow Creek at Farrsville, Texas, lat. 30°58'54", long. 93°48'42"	19.9
Hunters Creek	U.S.G.S. low-flow partial-record station 8-291, Hunters Creek near Farrsville, Texas, lat. 30°58'04", long. 93°51'15"	12.9
Melhomes Creek	U.S.G.S. low-flow partial-record station 8-292, Melhomes Creek near Jasper, Texas, 1at. 30°57'04", long. 93°55'00"	15.8
Bishop Creek	U.S.G.S. low-flow partial-record station 8-293, Bishop Creek near Jasper, Texas lat. 30°57'00", long. 93°55'10"	2.97

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Big Cow Creek	U.S.G.S. low-flow partial-record station 8-294, Big Cow Creek at dam site near Newton, Texas lat. 30°51'05", long. 93°47'46"	122
Big Cow Creek	U.S.G.S. gage 8-295, Big Cow Creek near Newton, Texas lat. 30°49'10", long. 93°47'05"	128
Big Cow Creek	U.S.G.S. low-flow partial-record station 8-296, Big Cow Creek near Belgrade, Texas, lat. 30°34'14", long. 93°44'00"	342
Big Cow Creek	At mouth (three outlets) lat. 30°34'22", long. 93°43'42" lat. 30°34'04", long. 93°43'41" lat. 30°34'02", long. 93°43'41"	345
Sabine River	Below mouth of Big Cow Creek lat. 30°34'02", long. 93°43'41"	8,916
Brushy Creek	U.S.G.S. partial-record station 8-297, Brushy Creek at Bancroft, Louisiana lat. 30°33'35", long. 93°40'50"	25.9
Brushy Creek	At mouth, lat. 30°30'47", long. 93°42'23"	31.1
Sabine River	Below mouth of Brushy Creek lat. 30°30'47", long. 93°42'23"	8,957
Caney Creek	Caney Creek near Bancroft, Louisiana 1at. 30°30'25", long. 93°41'08"	16.0
Shoats Creek	Shoats Creek near Fields, Louisiana lat. 30°26'20", long. 93°41'15"	8.54
Nichols Creek	U.S.G.S. low-flow partial-record station 8-297.5, Nichols Creek near Buna, Texas lat. 30°28'20", long. 93°48'20"	54.4
Nichols Creek	Nichols Creek near Deweyville, Texas lat. 30°25'20", long. 93°47'05"	68.0
Nichols Creek	At mouth, lat. 30°23'08", long. 93°45'45"	78.9
Sabine River	Below mouth of Nichols Creek lat. 30°23'03", long. 93°45'32"	9,120
Cypress Creek	U.S.G.S. gage 8-300, Cypress Creek near Buna, Texas lat. 30°25'52", long. 93°54'28"	69.2

Table	1Sabine	River	Basin,	Texas	and	Louisiana	Continued
-------	---------	-------	--------	-------	-----	-----------	-----------

Name of stream	Point of determination of drainage area	Total drainage area (sq. mi.)
Cypress Creek	U.S.G.S. low-flow partial-record station 8-303, Cypress Creek near Deweyville, Texas, lat. 30°20'43", long. 93°48'16"	146
Cypress Creek	At mouth, lat. 30°20'02", long. 93°45'58"	160
Sabine River	Below mouth of Cypress Creek lat. 30°19'59", long. 93°45'56"	9,292
Sabine River	U.S.G.S. gage 8-305, Sabine River near Ruliff, Texas, after Mar. 1, 1941: lat. 30°18'13", long. 93°44'37" prior to Mar. 1, 1941: lat. 30°17'23", long. 93°42'17"	9,329 9,340
Cow Bayou	U.S.G.S. gage 8-310, Cow Bayou near Mauriceville, Texas lat. 30°11'10", long. 93°54'30"	83.3
Cow Bayou	At mouth (two outlets) lat. 30°01'18", long. 93°44'42" lat. 30°01'04", long. 93°45'19"	174
Sabine River	Below mouth of Cow Bayou lat. 30°01'00", long. 93°45'15"	9,732
Sabine River	At mouth, lat. 29°59'49", long. 93°46'10"	9,733

Table la.--Sabine-Neches Coastal Area