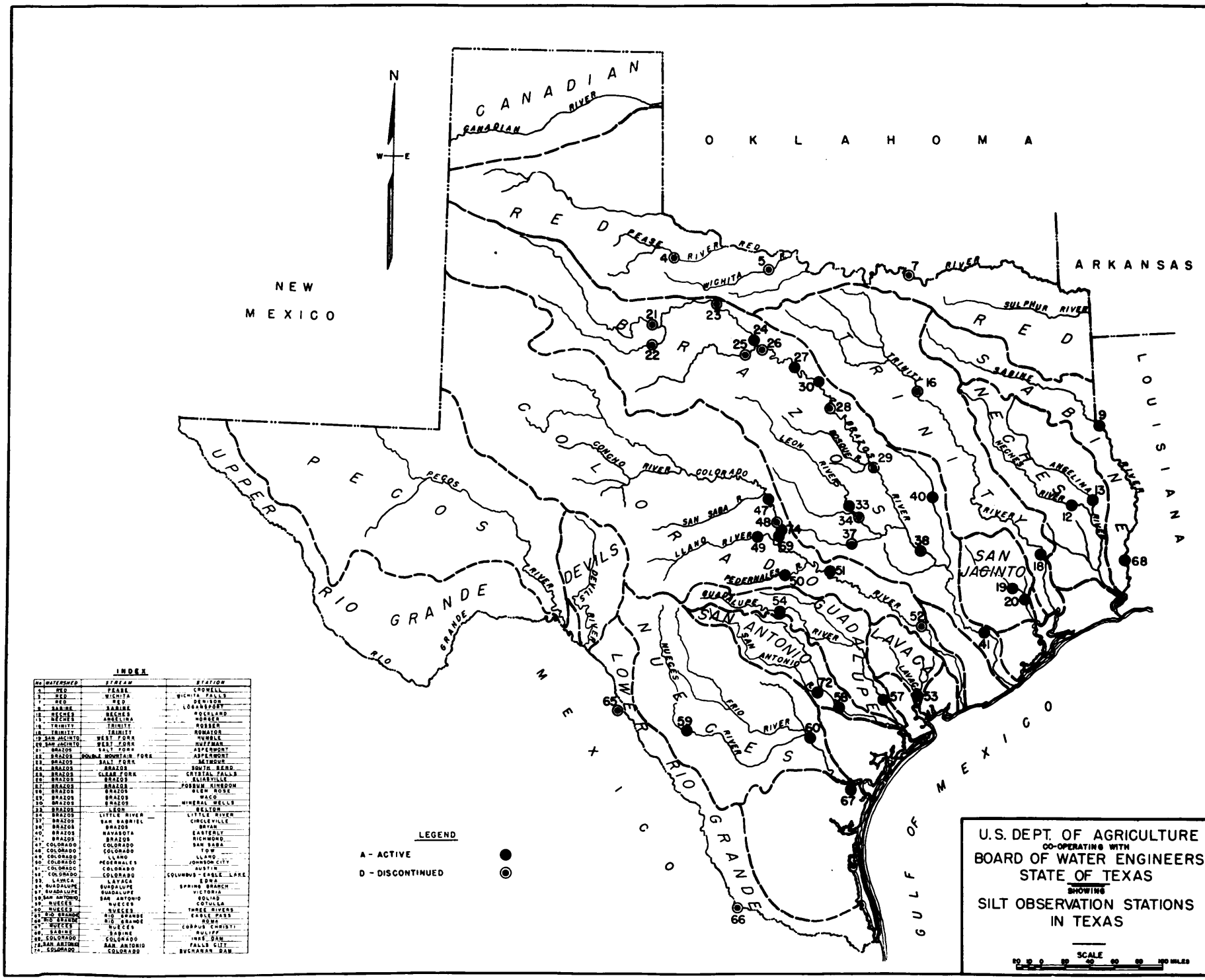

INDEX

No.	WATERSHED	STREAM	STATION
4.	RED	PEASE	CROWELL
5.	RED	WICHITA	WICHITA FALLS
7.	RED	RED	DENISON
9.	SABINE	SABINE	LOGANSPORT
12.	NECHES	NECHES	ROCKLAND
13.	NECHES	ANGELINA	HORGER
16.	TRINITY	TRINITY	ROSSER
18.	TRINITY	TRINITY	ROMAYOR
19.	SAN JACINTO	WEST FORK	HUMBLE
20.	SAN JACINTO	WEST FORK	HUFFMAN
21.	BRAZOS	SALT FORK	ASPERMONT
22.	BRAZOS	DOUBLE MOUNTAIN FORK	ASPERMONT
23.	BRAZOS	SALT FORK	SEYMOUR
24.	BRAZOS	BRAZOS	SOUTH BEND
25.	BRAZOS	CLEAR FORK	CRYSTAL FALLS
26.	BRAZOS	BRAZOS	ELIASVILLE
27.	BRAZOS	BRAZOS	POSSUM KINGDOM
28.	BRAZOS	BRAZOS	GLEN ROSE
29.	BRAZOS	BRAZOS	WACO
30.	BRAZOS	BRAZOS	MINERAL WELLS
33.	BRAZOS	LEON	BELTON
34.	BRAZOS	LITTLE RIVER	LITTLE RIVER
37.	BRAZOS	SAN GABRIEL	CIRCLEVILLE
38.	BRAZOS	BRAZOS	BRYAN
40.	BRAZOS	NAVASOTA	EASTERLY
41.	BRAZOS	BRAZOS	RICHMOND
47.	COLORADO	COLORADO	SAN SABA
48.	COLORADO	COLORADO	TOW
49.	COLORADO	LLANO	LLANO
50.	COLORADO	PEDERNALES	JOHNSON CITY
51.	COLORADO	COLORADO	AUSTIN
52.	COLORADO	COLORADO	COLUMBUS - EAGLE LAKE
53.	LAVACA	LAVACA	EDNA
54.	GUADALUPE	GUADALUPE	SPRING BRANCH
57.	GUADALUPE	GUADALUPE	VICTORIA
58.	SAN ANTONIO	SAN ANTONIO	GOLIAD
59.	NUECES	NUECES	COTULLA
60.	NUECES	NUECES	THREE RIVERS
65.	RIO GRANDE	RIO GRANDE	EAGLE PASS
66.	RIO GRANDE	RIO GRANDE	ROMA
67.	NUECES	NUECES	CORPUS CHRISTI
68.	SABINE	SABINE	BULIFF
69.	COLORADO	COLORADO	INKS DAM
70.	SAN ANTONIO	SAN ANTONIO	FALLS CITY
71.	COLORADO	COLORADO	BUCHANAN DAM

U.S. DEPT. OF AGRICULTURE
CO-OPERATING WITH
BOARD OF WATER ENGINEERS
STATE OF TEXAS
SHOWING
SILT OBSERVATION STATIONS
IN TEXAS

STATE OF TEXAS
BOARD OF WATER ENGINEERS
and
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF IRRIGATION AND WATER CONSERVATION

PROGRESS REPORT NO. 12

of

SILT LOAD OF TEXAS STREAMS

(1949 - 1950)

(The silt data contained in this report were obtained under a cooperative agreement between the Board of Water Engineers and U. S. Department of Agriculture, Soil Conservation Service, Division of Irrigation and Water Conservation.)

Austin, Texas
August, 1951

O R G A N I Z A T I O N

STATE OF TEXAS

BOARD OF WATER ENGINEERS
H. A. Beckwith, Chairman
A. P. Rollins, Member
James S. Guleke, Member

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
DIVISION OF IRRIGATION AND WATER CONSERVATION RESEARCH

Cooperating in Studies on Silt of Texas Streams

H. H. Bennett, Chief of Service
M. L. Nichols, Chief of Research
Geo. D. Clyde, Chief, Division of Irrigation Research

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont'd.)

Progress Report No. 12
of
THE SILT LOAD OF TEXAS STREAMS, 1949-1950

by

Dean W. Bloodgood, Irrigation Engineer
Division of Irrigation Research
Soil Conservation Service
U. S. Department of Agriculture

and

James E. Mortensen, Testing Engineer
Texas Board of Water Engineers

INTRODUCTION

The purpose of the silt studies is to make a determination of the characteristics of the suspended silt load of Texas streams.

The twelfth annual progress report for Silt Load of Texas Streams is one of a series that has been prepared annually since 1939. The first report of the series contained monthly and yearly data on the suspended silt load obtained at 27 various stations located on some of the streams of Texas for a period from 1899 to 1939. It also contained a description of the equipment used in obtaining the water samples, the technique used in the laboratory, and the method of computing data. The subsequent annual reports contain silt data for each station and for each water year ending on September 30.

The first silt station was established in 1924 under a cooperative agreement between Texas Board of Water Engineers and U. S. Department of Agriculture. Since that time data have been obtained at 45 stations located on 12 of the watersheds of Texas. The locations of active and discontinued stations are shown on the accompanying map.

At the close of the water year ending September 30, 1950, 23 active silt sampling stations were being operated on 11 of the principal watersheds of Texas.

The water samples collected for silt determinations were obtained by a simple, inexpensive, and easily operated device known as the Texas or Department of Agriculture sampler. This type of sampler has been in continuous use during the past 26 years in obtaining water samples for suspended silt load of Texas streams. During this long period to September 30, 1950, a total of 115,793 daily observations have been made with this type of sampler. Each observation consisted of obtaining one to three

water samples for regular river flows and extra samples during flood stage of a stream. During the water year 1949-1950, 7,457 daily observations were made at 24 stations, and 9,915 water samples were received and silt determinations made at our cooperative silt laboratory.

The Texas or Department of Agriculture silt sampler is not designed or used for collecting water samples containing bed load material. It is used, however, for collecting water samples near the surface of a stream for suspended silt material. This is the type of material that contributes to most of the sediment deposited in the larger artificial lakes. The bed load material contributes mostly to a river channel and upper portion of a lake sedimentation.

All silt data compiled for the annual report have been computed for a water year October 1 to the following September 30. This is a year adopted by the Surface Water Branch, United States Geological Survey, in all of their stream measurements. It is necessary and essential to use river discharge data in connection with any silt determination, and therefore, that period has also been adopted as a year for the silt calculations.

The silt determinations are made by calculating the percentage of dry silt by weight as obtained from a water sample.

For the main purpose of the sedimentation studies of Texas streams, all calculations are based on one cubic foot of silt weighing 70 pounds.

SUMMARIZED SILT DATA

Belton Station, Leon River

This station was established September 1, 1945, and was discontinued December 31, 1949.

The average discharge of the Leon River at the Belton Station for a 4.333-year record was 339,520 acre feet. The average silt load for the same period was 353 acre feet, and the total silt load for that period was 2,285,300 tons, or 1,530 acre feet.

Easterly Station, Navasota River

The station was established January 1, 1942.

The average discharge of the Navasota River (a tributary of the Brazos River) at the Easterly Station for an 8.748-year period was 337,644 acre feet. The average silt load for the same period was 203 acre feet, and the total silt load for that period was 2,711,670 tons, or 1,780 acre feet.

South Bend Station, Brazos River

This station was established January 15, 1942. The average discharge of the Brazos River at the South Bend Station (upper portion of watershed) for an 8.71-year period was 509,083 acre feet. The average silt load for the same period was 2,669 acre feet, and the total silt load for that period was 35,435,800 tons, or 23,245 acre feet.

Richmond Station, Brazos River

The station was established at Rosenberg on June 11, 1924, and discontinued at this location on April 12, 1932. It was established at Richmond on April 13, 1932.

The average discharge of the Brazos River at the Richmond Station (lower portion of the watershed) for a 26.306-year period was 5,698,033 acre feet. The average silt load for the same period was 22,756 acre feet, and the total silt load for that period was 913,825,070 tons, or 598,611 acre feet. The data obtained at the Richmond Station are probably the longest continuous daily silt records in existence (27 years to August, 1950).

Llano Station, Llano River

The station was established August 1, 1942.

The average discharge of the Llano River (a tributary of the Colorado River and joining it between Lake Buchanan and Lake Travis) at the Llano Station for an 8.167-year period was 191,960 acre feet. The average silt load for the same period was 216 acre feet, and the total silt load for that period was 2,691,280 tons, or 1,763 acre feet.

Johnson City Station, Pedernales River

The station was established August 1, 1942.

The average discharge of the Pedernales River (a tributary of the Colorado River) at the Johnson City Station for an 8.167-year period was 93,966 acre feet. The average silt load for the same period was 122 acre feet, and the total silt load for that period was 1,520,160 tons, or 997 acre feet.

San Saba Station, Colorado River

The station was established September 11, 1930.

The average discharge of the Colorado River at the San Saba Station (located a few miles above the upper portion of Lake Buchanan) for a 20.055-year period was 1,155,407 acre feet. The average silt load for the same period was 2,996 acre feet, and the total silt load for that period was 91,609,140 tons, or 60,082 acre feet.

Spring Branch Station, Guadalupe River

The station was established January 1, 1942.

The average discharge of the Guadalupe River at the Spring Branch Station (upper portion of the watershed) for an 8.748-year period was 185,901 acre feet. The average silt load for the same period was 94 acre feet, and the total silt load for that period was 1,257,780 tons, or 819 acre feet.

Victoria Station, Guadalupe River

The station was established September 1, 1945.

The average discharge of the Guadalupe River at the Victoria Station (lower portion of the watershed) for a 5.083-year period was 1,003,860 acre feet. The average silt load for the same period was 381 acre feet, and the total silt load for that period was 2,953,340 tons, or 1,939 acre feet.

Edna Station, Lavaca River

The station was established September 1, 1945.

The average discharge of the Lavaca River at the Edna Station for a 5.083-year period was 163,036 acre feet. The average silt load for the same period was 122 acre feet, and the total silt load for that period was 943,750 tons, or 619 acre feet.

Horger Station, Angelina River

The station was established September 1, 1945.

The average discharge of the Angelina River, a tributary of the Neches River, at the Horger Station for a 5.083-year period was 2,743,086 acre feet. The average silt load for the same period was 415 acre feet, and the total silt load for that period was 3,215,790 tons, or 2,110 acre feet.

Rockland Station, Neches River

The station was established August 8, 1930.

The average discharge of the Neches River at the Rockland Station for a 20.148-year period was 2,057,137 acre feet. The average silt load for the same period was 308 acre feet, and the total silt load for that period was 9,467,120 tons, or 6,200 acre feet. This is also one of the stations with a long, continuous silt record.

Cotulla Station, Nueces River

The station was established January 1, 1942.

The average discharge of the Nueces River at the Cotulla Station for an 8.748-year period was 185,069 acre feet. The average silt load for the same period was 74 acre feet, and the total silt load for that period was 994,770 tons, or 651 acre feet.

Three Rivers Station, Nueces River

The station was established October 1, 1927.

The average discharge of the Nueces River at the Three Rivers Station for a 23-year period was 673,868 acre feet. The average silt load for the same period was 498 acre feet, and the total silt load for that period was 17,471,180 tons, or 11,457 acre feet. This is also one of the long, continuous silt records.

Logansport, La. Station, Sabine River

The station was established December 1, 1932, and discontinued December 27, 1933. It was reestablished on September 1, 1935.

The average discharge of the Sabine River at the Logansport, La. Station for a 16.156-year period was 3,028,376 acre feet. The average silt load for the same period was 728 acre feet, and the total silt load for that period was 17,957,810 tons, or 11,769 acre feet.

Goliad Station, San Antonio River

This station was established January 1, 1942.

The average discharge of the San Antonio River at the Goliad Station for an 8.748-year period was 471,709 acre feet. The average silt load for the same period was 453 acre feet, and the total silt load for that period was 6,047,140 tons, or 3,964 acre feet.

Huffman Station, San Jacinto River

The station was established September 1, 1945.

The average discharge of the San Jacinto River at Huffman (Sheldon Pumping Plant) Station near the lower portion of the watershed for a 5.083-year period was 1,784,407 acre feet. The average silt load for the same period was 648 acre feet, and the total silt load for that period was 5,027,000 tons, or 3,295 acre feet.

Humble Station, San Jacinto River

The station was established December 1, 1932, and was discontinued December 31, 1933. It was reestablished on July 1, 1937.

The average discharge of the West Fork of the San Jacinto River at the Humble Station for a 14.337-year period was 821,739 acre feet. The average silt load for the same period was 254 acre feet, and the total silt load for that period was 5,557,650 tons, or 3,639 acre feet.

Romayor Station, Trinity River

The station was established August 10, 1936.

The average discharge of the Trinity River at the Romayor Station for a 14.142-year period was 6,664,795 acre feet. The average silt load for the same period was 4,342 acre feet, and the total silt load for that period was 93,610,170 tons, or 66,405 acre feet.

Lake Possum Kingdom

The station was established January 15, 1942.

The average flow from Lake Possum Kingdom on the upper watershed area of the Brazos River through the outlet gates, turbines, and over the spillway for an 8.710-year period was 524,255 acre feet. The average silt load by-passing the lake for the same period was 76 acre feet, and the total silt load by-passing the dam for that period was 1,016,870 tons, or 665 acre feet. Lake Possum Kingdom has a capacity of 724,700 acre feet of water. During the 8.710-year period 23,245 acre feet of suspended silt entered Lake Possum at the South Bend Station. During that period 665 acre feet of silt, or 2.8%, by-passed the dam.

Lake Corpus Christi

The station was established February 2, 1942.

The average flow from Lake Corpus Christi, located on the Nueces River, during an 8.660-year period was 642,718 acre feet. The average silt load for the same period was 142 acre feet, and the total silt load for that period which by-passed the dam was 1,234 acre feet. The present capacity of Lake Corpus Christi is 39,400 acre feet.

The silt load entering Lake Corpus Christi as obtained at the Three Rivers Station for the same 8.660-year period was 3,702 acre feet. The station is located about 30 miles from the upper portion of the lake. The watershed area between the Three Rivers Station and the lake is about 1,000 square miles. This area, however, contributes a very small amount of silt to the lake. The total amount of silt being by-passed from the lake for the same 8.660-year period was 1,892,170 tons, or 1,234 acre feet, and represented 33% of the amount entering the lake.

Lake Buchanan

The station was established October 1, 1947.

The average flow from Lake Buchanan, located on the Colorado River, for a 3-year period was 486,503 acre feet. The capacity of the lake is 992,000 acre feet. The total silt load by-passing the lake for the same period was 98,740 tons or 67 acre feet. The average discharge of the Colorado River into the lake at the San Saba Station for the same 3-year period was 639,660 acre feet, and the average silt load for that period was 2,128 acre feet.

Lake Inks

The station was established August 1, 1942.

The average flow from Lake Inks, which is located downstream and adjacent to Lake Buchanan, for an 8.167-year period was 627,843 acre feet. The average silt load by-passing the lake for the same period was 53 acre feet. The capacity of Lake Inks is 16,200 acre feet. During the 3-year period the silt load by-passing Lake Buchanan was 67 acre feet, while at Lake Inks, immediately below it, the silt load was 65 acre feet. The total amount of silt by-passing Lake Inks for the 8.167-year period was 656,890 tons, or 432 acre feet.

Lake Austin

The station was established August 2, 1937.

The average discharge of the Colorado River at the Montopolis Bridge Station, which is located about 4 miles downstream from Lake Austin, for a 10-year period, and since the completion of Tom Miller Dam in 1940, was 1,561,564 acre feet. This flow was water released at various intervals from four lakes above the station, namely, Buchanan, Inks, Mansfield (Marshall Ford) or Travis, and Austin. The average silt load by-passing the four lakes for the 10-year period was 187 acre feet.

Cooperation

Some of the silt determinations were made possible through the splendid financial cooperation of several agencies in Texas who are interested in silt problems. Those cooperating agencies are the Brazos River Conservation and Reclamation District, the Lower Colorado River Authority, and the Water Departments of the Cities of Houston and Corpus Christi. The Water Resources Branch of the United States Geological Survey has also offered helpful and congenial cooperation in furnishing river discharge data and information.

Acknowledgements

Acknowledgements are due the silt sample collectors, some of whom have many years of continuous service, for the faithful performance of their duties in obtaining water samples every day of the year, to Mr. Ray Case for his efficient work in the cooperative silt laboratory, and to Mrs. Virginia Adcock for her excellent assistance in the office in computing, checking, compilation, and typing silt data.

SILT DATA

Brazos River Watershed
at
BELTON STATION ON LEON RIVER

for

Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	6,810	15,570	10	.167
November	3,960	2,624	2	.049
December 1/	2,860	350	0	.009
1950				
January	-	-	-	-
February	-	-	-	-
March	-	-	-	-
April	-	-	-	-
May	-	-	-	-
June	-	-	-	-
July	-	-	-	-
August	-	-	-	-
September	-	-	-	-
Totals	13,630	18,544	12	

1/ Station discontinued December 31, 1949. Totals for three-month period.

SUMMARY OF SILT DATA

for

Brazos River Watershed

Stream: LEON
Station: BELTON
Sampler: N. H. Hander

(Samples taken from Highway Bridge on State Hwy. 317) 1/

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
Sept., 1945 2/	10,380	26,320	17	.186
1945-46	663,960	1,187,070	779	.131
1946-47	362,480	280,030	216	.057
1947-48	122,110	118,520	77	.071
1948-49	298,580	654,820	429	.161
1949-50 3/	13,630	18,540	12	.100
TOTALS	1,471,140	2,285,300	1,530	

For period of 4.333 years

Average discharge in acre-feet per year	339,520
Average acre-feet of silt per year	353
Average acre-feet of silt per year per square mile of contributing watershed	.100
Average tons of silt per year	527,417
Average percent of silt by weight	.114
Drainage area in square miles (net)	3,547

1/ Prior to October 1, 1945, samples were taken from inlet to pumping plant north of Belton, located about ¼ mile upstream from bridge on U. S. Highway No. 81.

2/ One month record - station was established September 1, 1945.

3/ Station discontinued December 31, 1949. Three month record.

SILT DATA

Brazos River Watershed
at
EASTERLY STATION ON NAVASOTA RIVER

for

Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	45,750	44,560	29	.072
November	940	180	0	.014
December	2,280	1,170	1	.038
1950				
January	29,610	21,710	14	.054
February	115,320	44,940	29	.029
March	3,620	740	0	.015
April	38,060	14,170	9	.027
May	7,810	3,460	2	.033
June	10,250	5,830	4	.042
July	2,030	220	0	.008
August	230	10	0	.003
September	150	10	0	.005
Totals	256,050	137,000	88	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	256,000
Total silt for year in acre-feet - - - - - - - - - - -	88
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - -	.093
Average percent of silt by weight for year - - - - - - -	.039
Drainage area in square miles (net) - - - - - - - - - -	949

SUMMARY OF SILT DATA

for

Brazos River Watershed

Stream: NAVASOTA
Station: EASTERLY
Sampler: Goree King

(Samples were taken from bridge on U. S. Highway No. 79)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	199,750	142,600	94	.052
1942-43	84,820	59,600	39	.052
1943-44	592,670	889,340	584	.110
1944-45	556,120	607,980	400	.080
1945-46	617,980	513,050	337	.061
1946-47	441,190	193,110	127	.032
1947-48	99,160	79,980	53	.059
1948-49	105,970	89,010	58	.062
1949-50	256,050	137,000	88	.039
TOTALS	2,953,710	2,711,670	1,780	

For period of 8.748 years

Average discharge in acre-feet per year	337,644
Average acre-feet of silt per year	203
Average acre-feet of silt per year per square mile of contributing watershed	.214
Average tons of silt per year	309,976
Average percent of silt by weight	.067
Drainage area in square miles (net)	949

1/ Station was established January 1, 1942.

SILT DATA

Brazos River Watershed
at
SOUTH BEND STATION ON BRAZOS RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	41,270	261,500	172	.465
November	6,880	5,620	4	.060
December	2,200	810	1	.027
1950				
January	2,270	1,220	1	.039
February	2,890	2,710	2	.069
March	960	420	0	.032
April	42,380	310,540	204	.538
May	187,200	2,603,240	1,707	1.022
June	34,550	225,520	148	.480
July	163,100	1,587,630	1,041	.715
August	53,730	533,350	350	.729
September	150,800	1,701,880	1,116	.829
Totals	688,230	7,234,440	4,746	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 688,200

Total silt for year in acre-feet - - - - - - - - - - - 4,746

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - .384

Average percent of silt by weight for year - - - - - - .772

Drainage area in square miles (net) - - - - - - - - - - 12,360

SUMMARY OF SILT DATA

for

Brazos River Watershed

Stream: BRAZOS
Station: SOUTH BEND (Samples taken from bridge on State Highway No. 67)
Sampler: O. W. Hill

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	672,230	4,581,930	3,005	.501
1942-43	491,060	3,846,100	2,523	.575
1943-44	171,360	1,071,620	703	.459
1944-45	394,460	2,258,250	1,482	.421
1945-46	363,890	3,116,920	2,044	.629
1946-47	747,030	4,414,900	2,897	.434
1947-48	391,140	2,718,220	1,783	.510
1948-49	514,710	6,193,420	4,062	.884
1949-50	688,230	7,234,440	4,746	.772
TOTALS	4,434,110	35,435,800	23,245	

For period of 8.710 years

Average discharge in acre-feet per year	509,083
Average acre-feet of silt per year	2,669
Average acre-feet of silt per year per square mile of contributing watershed	.216
Average tons of silt per year	4,068,404
Average percent of silt by weight	.587
Drainage area in square miles (net)	12,360

1/ Station was established January 15, 1942.

SILT DATA

Brazos River Watershed
at
POSSUM KINGDOM DAM STATION ON BRAZOS RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	68,380	8,870	6	.010
November	29,060	1,670	1	.004
December	17,570	2,730	2	.011
1950				
January	9,440	960	1	.007
February	10,730	1,100	1	.008
March	16,760	1,660	1	.007
April	10,550	440	0	.003
May	41,650	2,130	1	.004
June	68,820	14,660	10	.016
July	125,280	8,330	5	.005
August	111,780	11,140	7	.007
September	122,500	6,340	4	.004
Totals	632,520	60,030	39	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 632,500

Total silt for year in acre-feet - - - - - - - - - - - - 39

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - - -----

Average percent of silt by weight for year - - - - - - - .007

Drainage area in square miles (net) - - - - - - - - - - -----

SUMMARY OF SILT DATA

for

Brazos River Watershed

Stream: BRAZOS
Station: POSSUM KINGDOM DAM (Samples taken in tailrace and over spillway)
Sampler: J. P. Cochran

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	588,030	55,070	36	.007
1942-43	851,290	625,770	410	.054
1943-44	92,040	15,590	10	.012
1944-45	307,410	51,350	32	.012
1945-46	293,110	41,250	27	.010
1946-47	946,860	75,280	49	.006
1947-48	323,380	31,060	22	.007
1948-49	531,620	61,470	40	.008
1949-50	632,520	60,030	39	.007
TOTALS	4,566,260	1,016,870	665	

For period of 8.710 years

Average discharge in acre-feet per year	524,255
Average acre-feet of silt per year	76
Average acre-feet of silt per year per square mile of contributing watershed	-----
Average tons of silt per year	116,747
Average percent of silt by weight	.016
Drainage area in square miles (net)	-----

1/ Station was established January 15, 1942.

SILT DATA

Brazos River Watershed
at
RICHMOND STATION ON BRAZOS RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	277,700	631,450	414	.167
November	216,900	236,060	155	.080
December	277,200	299,220	196	.079
1950				
January	285,500	240,010	157	.062
February	758,000	3,358,440	2,203	.325
March	181,400	49,240	32	.199
April	482,300	1,552,580	1,018	.236
May	402,400	699,200	459	.128
June	662,700	1,729,860	1,135	.192
July	169,300	166,900	109	.072
August	209,900	131,350	86	.046
September	263,200	449,490	295	.125
Totals	4,186,500	9,543,800	6,259	

U. S. G. S. yearly discharge in acre-feet	4,186,000
Total silt for year in acre-feet	6,259
Acre-feet of silt per year per square mile of contributing watershed	.180
Average percent of silt by weight for year	.167
Drainage area in square miles (net)	34,810

SUMMARY OF SILT DATA

for

Brazos River Watershed

Stream: BRAZOS
Station: RICHMOND (Samples taken from bridge on U. S. Highway No. 90)
Sampler: S. J. Butler

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1923-24 1/	494,900	714,220	468	.106
1924-25	1,237,300	12,676,710	8,314	.753
1925-26	8,762,800	44,939,350	29,476	.377
1926-27	5,562,600	34,377,320	21,739	.454
1927-28	3,318,400	28,163,890	18,472	.623
1928-29	6,000,000	32,284,200	21,174	.395
1929-30	5,218,900	38,686,330	25,373	.545
1930-31	5,639,000	27,766,660	18,212	.362
1931-32 2-3/	8,041,000	63,649,510	41,749	.582
1932-33	2,563,100	15,175,520	9,954	.435
1933-34	3,372,670	23,318,780	15,294	.508
1934-35	7,334,480	63,472,990	41,633	.636
1935-36	6,031,540	40,330,500	26,453	.491
1936-37	5,405,790	25,531,710	16,747	.347
1937-38	7,203,600	55,656,280	36,544	.568
1938-39	1,966,110	14,742,470	9,668	.551
1939-40	3,161,120	23,679,220	15,531	.550
1940-41	16,124,370	97,306,510	63,824	.443
1941-42	8,522,910	71,490,110	46,891	.616
1942-43	3,255,310	11,426,360	7,496	.258
1943-44	7,626,500	46,735,630	30,654	.450
1944-45	9,804,730	57,254,020	37,555	.429
1945-46	7,399,590	35,484,230	23,275	.352
1946-47	6,345,770	21,011,530	13,783	.243
1947-48	1,950,620	3,950,720	2,591	.149
1948-49	3,362,850	14,456,500	9,482	.316
1949-50	4,186,500	9,543,800	6,259	.167
TOTALS	149,892,460	913,825,070	598,611	

For period of 26.306 years

Average discharge in acre-feet per year	5,698,033
Average acre-feet of silt per year	22,756
Average acre-feet of silt per year per square mile of contributing watershed	.654
Average tons of silt per year	34,738,275
Average percent of silt by weight	.448
Drainage area in square miles (net)	34,810

1/ Station was established at Rosenberg June 11, 1924.
2/ Station was discontinued at Rosenberg April 12, 1932.
3/ Station was established at Richmond April 13, 1932.

SILT DATA

Colorado River Watershed
at
LLANO STATION ON LLANO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	10,390	1,190	1	.008
November	8,910	280	0	.002
December	9,160	560	0	.004
1950				
January	9,720	680	0	.005
February	10,080	1,050	1	.008
March	6,620	530	0	.006
April	13,040	1,760	1	.010
May	16,880	3,240	2	.014
June	5,510	450	0	.006
July	7,090	1,910	1	.020
August	3,470	190	0	.004
September	13,110	2,460	2	.014
Totals	113,980	14,300	8	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 114,000

Total silt for year in acre-feet - - - - - - - - - - - - 8

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - .002

Average percent of silt by weight for year - - - - - - .009

Drainage area in square miles (net) - - - - - - - - - 4,000

SUMMARY OF SILT DATA

for

Colorado River Watershed

Stream: LLANO
Station: LLANO
Sampler: Mrs. Tracy M. Ward

(Samples were taken at U. S. Gaging Station ⅛ mile downstream from bridge on State Highway No. 16)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 [1]	65,990	252,700	166	.281
1942-43	235,470	381,560	250	.119
1943-44	196,070	120,450	79	.045
1944-45	156,920	90,120	60	.042
1945-46	142,740	249,740	164	.129
1946-47	141,550	28,750	18	.015
1947-48	327,420	1,471,400	965	.330
1948-49	187,600	82,260	53	.032
1949-50	113,980	14,300	8	.009
TOTALS	1,567,740	2,691,280	1,763	

For period of 8.167 years

Average discharge in acre feet per year	191,960
Average acre-feet of silt per year	216
Average acre-feet of silt per year per square mile of contributing watershed	.054
Average tons of silt per year	329,531
Average percent of silt by weight	.126
Drainage area in square miles (net)	4,000

[1] Station was established August 1, 1942.

SILT DATA

Colorado River Watershed
at
JOHNSON CITY STATION ON PEDERNALES RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	1,080	80	0	.005
November	540	30	0	.004
December	1,450	180	0	.009
1950				
January	1,130	60	0	.004
February	1,740	130	0	.005
March	920	60	0	.005
April	1,400	250	0	.013
May	3,320	2,160	1	.048
June	3,390	4,970	3	.108
July	350	20	0	.004
August	1,620	1,090	1	.049
September	1,360	70	0	.004
Totals	18,290	9,100	5	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 18,300

Total silt for year in acre-feet - - - - - - - - - - - - 5

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - - .004

Average percent of silt by weight for year - - - - - - - .037

Drainage area in square miles (net) - - - - - - - - - - 947

SUMMARY OF SILT DATA

for

Colorado River Watershed

Stream: PEDERNALES
Station: JOHNSON CITY
Sampler: John W. Grisham

(Samples were taken from highway bridge on U. S. Hwy. 281, about 1½ miles north of Johnson City)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 [1]	22,630	107,030	70	.347
1942-43	79,850	150,740	99	.139
1943-44	167,700	724,550	476	.317
1944-45	187,000	191,740	126	.075
1945-46	94,140	132,430	88	.103
1946-47	128,460	107,670	71	.062
1947-48	31,690	42,340	27	.098
1948-49	37,660	54,560	35	.106
1949-50	18,290	9,100	5	.037
TOTALS	767,420	1,520,160	997	

For period of 8.167 years

Average discharge in acre-feet per year	93,966
Average acre-feet of silt per year	122
Average acre-feet of silt per year per square mile of contributing watershed	.129
Average tons of silt per year	186,134
Average percent of silt by weight	.146
Drainage area in square miles (net)	947

[1] Station was established August 1, 1942.

SILT DATA

Colorado River Watershed
at
SAN SABA STATION ON COLORADO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	48,970	224,460	147	.337
November	16,790	2,300	2	.010
December	8,140	1,900	1	.017
1950				
January	11,160	2,130	1	.014
February	24,000	23,850	16	.073
March	5,290	740	0	.010
April	35,410	88,060	58	.183
May	81,090	741,370	486	.672
June	25,920	41,430	27	.117
July	25,280	37,980	25	.110
August	14,280	2,260	1	.012
September	71,100	542,760	356	.561
Totals	367,430	1,709,240	1,120	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	367,400
Total silt for year in acre-feet - - - - - - - - - - - -	1,120
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.060
Average percent of silt by weight for year - - - - - - -	.342
Drainage area in square miles (net) - - - - - - - - - -	18,700

SUMMARY OF SILT DATA

for

Colorado River Watershed

Stream: COLORADO
Station: NEAR SAN SABA
Sampler: Robert A. Broyles

(Samples were taken from Red Bluff bridge about midway between San Saba and Lometa) 2/

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1929-30 1/	24,000	143,140	94	.439
1930-31	1,373,750	5,136,520	3,369	.275
1931-32	2,223,900	9,934,850	6,516	.328
1932-33	475,300	1,303,620	855	.201
1933-34	504,380	2,121,550	1,391	.309
1934-35	2,564,290	14,423,520	9,459	.413
1935-36	2,276,400	7,520,550	4,933	.243
1936-37	1,197,100	2,688,230	1,764	.165
1937-38	2,809,340	8,923,940	5,853	.233
1938-39	819,430	3,709,100	2,432	.333
1939-40	773,690	3,191,810	2,094	.303
1940-41	2,052,980	8,613,430	5,650	.308
1941-42	1,285,920	4,571,140	2,998	.261
1942-43	475,090	703,520	461	.109
1943-44	592,790	2,129,300	1,397	.264
1944-45	870,370	2,655,490	1,743	.224
1945-46	416,390	1,511,040	992	.267
1946-47	517,540	2,588,150	1,696	.367
1947-48	604,200	3,389,580	2,222	.412
1948-49	947,390	4,641,420	3,043	.360
1949-50	367,430	1,709,240	1,120	.342
TOTALS	23,171,680	91,609,140	60,082	

For period of 20.055 years

Average discharge in acre-feet per year	1,155,407
Average acre-feet of silt per year	2,996
Average acre-feet of silt per year per square mile of contributing watershed	.160
Average tons of silt per year	4,567,895
Average percent of silt by weight	.290
Drainage area in square miles (net)	18,700

1/ Station was established September 11, 1930.

2/ Water samples were discontinued at old Red Bluff bridge and started one-half mile upstream at the new Red Bluff bridge on May 24, 1940.

SILT DATA

Colorado River Watershed
at
INKS DAM STATION ON COLORADO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft	pct.
1949				
October	38,070	1,650	1	.003
November	42,600	1,500	1	.003
December	--	--	0	--
1950				
January	--	--	0	--
February	--	--	0	--
March	27,620	1,800	1	.005
April	31,550	1,990	1	.005
May	30,100	820	1	.002
June	47,620	1,510	1	.002
July	29,220	1,460	1	.004
August	44,020	1,290	1	.002
September	28,540	2,220	1	.006
Totals	319,340	14,240	9	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 319,300

Total silt for year in acre-feet - - - - - - - - - - - - 9

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - ----

Average percent of silt by weight for year - - - - - - - .003

Drainage area in square miles (net) - - - - - - - - - - ----

SUMMARY OF SILT DATA

for

Colorado River Watershed

Stream: COLORADO
Station: INKS DAM (Samples were taken from tailrace)
Sampler: Lloyd Myers

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	285,200	41,270	27	.011
1942-43	662,460	67,090	44	.007
1943-44	768,040	127,980	84	.012
1944-45	751,950	157,540	104	.015
1945-46	678,460	134,030	88	.015
1946-47	498,980	27,870	20	.004
1947-48	580,500	56,700	38	.007
1948-49	582,660	30,170	18	.004
1949-50	319,340	14,240	9	.003
TOTALS	5,127,590	656,890	432	

For period of 8.167 years

Average discharge in acre-feet per year	627,843
Average acre-feet of silt per year	53
Average acre-feet of silt per year per square mile of contributing watershed	----
Average tons of silt per year	80,432
Average percent of silt by weight	.009
Drainage area in square miles (net)	----

1/ Station was established August 1, 1942.

SILT DATA

Colorado River Watershed
at
BUCHANAN DAM STATION ON COLORADO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	38,070	2,590	2	.005
November	42,600	2,500	2	.004
December	--	--	0	--
1950				
January	--	--	0	--
February	--	--	0	--
March	27,620	1,640	1	.004
April	31,550	2,540	2	.006
May	30,100	2,540	2	.006
June	47,620	1,400	1	.002
July	29,220	1,310	1	.003
August	44,020	1,570	1	.003
September	28,540	820	1	.002
Totals	319,340	16,910	13	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	319,300
Total silt for year in acre-feet - - - - - - - - - - - -	13
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	----
Average percent of silt by weight for year - - - - - - -	.004
Drainage area in square miles (net) - - - - - - - - - - -	----

SUMMARY OF SILT DATA

for

Colorado River Watershed

Stream: COLORADO
Station: BUCHANAN DAM (Samples taken at power house)
Sampler: Lloyd Myers

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1947-48 1/	576,440	46,530	30	.006
1948-49	563,730	35,300	24	.005
1949-50	319,340	16,910	13	.004
TOTALS	1,459,510	98,740	67	

For period of 3.000 years

Average discharge in acre-feet per year	486,503
Average acre-feet of silt per year	22
Average acre-feet of silt per year per square mile of contributing watershed	----
Average tons of silt per year	32,913
Average percent of silt by weight	.005
Drainage area in square miles (net)	----

1/ Station was established October 1, 1947.

SILT DATA

Colorado River Watershed
at
AUSTIN STATION ON COLORADO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	74,720	8,850	6	.009
November	77,320	2,830	2	.003
December	75,300	5,600	4	.005
1950				
January	54,380	4,030	3	.005
February	52,590	4,210	3	.006
March	44,280	2,040	1	.003
April	50,910	5,650	4	.008
May	101,000	8,250	5	.006
June	112,300	17,740	12	.012
July	115,500	6,240	4	.004
August	100,600	3,970	3	.003
September	55,630	2,290	2	.003
Totals	914,530	71,700	49	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	914,500
Total silt for year in acre-feet - - - - - - - - - - - -	49
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.002
Average percent of silt by weight for year - - - - - - -	.006
Drainage area in square miles (net) - - - - - - - - - - -	26,260

SUMMARY OF SILT DATA

for

Colorado River Watershed

Stream: COLORADO
Station: AUSTIN (Samples taken from Montopolis Bridge)
Sampler: Mrs. G. L. Pliler

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1936-37 1/	48,040	1,830	1	.003
1937-38 *	3,609,570	8,881,220	5,826	.181
1938-39 2/	986,630	735,150	481	.055
1939-40 *	1,334,120	906,750	596	.050
1940-41	3,869,250	979,240	642	.019
1941-42	986,440	121,570	80	.009
1942-43	1,787,770	328,050	215	.013
1943-44	1,392,380	186,590	122	.010
1944-45	1,750,770	444,540	292	.019
1945-46	1,554,930	256,770	170	.012
1946-47	1,523,070	234,770	155	.011
1947-48	957,750	122,060	82	.009
1948-49	878,750	104,440	67	.009
1949-50	914,530	71,700	49	.006
TOTALS	21,594,000	13,374,680	8,778	

For period of 13.164 years

Average discharge in acre-feet per year	1,640,383
Average acre-feet of silt per year	667
Average acre-feet of silt per year per square mile of contributing watershed	.025
Average tons of silt per year	1,016,004
Average percent of silt by weight	.046
Drainage area in square miles (net)	26,260

1/ Station was established August 2, 1937, and samples taken from Congress Avenue bridge.

2/ Samples taken from Montopolis bridge.

* Rehabilitation of the old Austin Dam (now termed Tom Miller Dam) was started August 1, 1938. This construction at times doubtless distorted the silt load of samples which were taken from 1½ to 4 miles downstream therefrom. Rehabilitation was completed and the impounding of water was begun on January 7, 1940.

SILT DATA

Guadalupe River Watershed
at
SPRING BRANCH STATION ON GUADALUPE RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	4,770	410	0	.006
November	4,190	350	0	.006
December	4,850	390	0	.006
1950				
January	5,280	740	0	.010
February	5,920	430	0	.005
March	4,940	490	0	.007
April	6,700	2,800	2	.031
May	11,260	23,360	15	.152
June	6,330	1,530	1	.018
July	5,000	3,690	2	.054
August	1,910	150	0	.006
September	2,530	90	0	.003
Totals	63,680	34,430	20	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - - 63,680

Total silt for year in acre-feet - - - - - - - - - - - - - 20

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - - - .014

Average percent of silt by weight for year - - - - - - - - .040

Drainage area in square miles (net) - - - - - - - - - - - 1,432

SUMMARY OF SILT DATA

for

Guadalupe River Watershed

Stream: GUADALUPE
Station: SPRING BRANCH
Sampler: Alfred Beierle

(Samples taken 4 miles southeast of Spring Branch from bridge on old Highway No. 46)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	167,150	164,150	108	.072
1942-43	145,610	79,630	52	.040
1943-44	272,850	401,650	262	.108
1944-45	304,860	190,830	126	.046
1945-46	185,080	148,700	96	.059
1946-47	307,960	128,040	84	.031
1947-48	59,460	60,110	38	.074
1948-49	119,610	50,240	33	.031
1949-50	63,680	34,430	20	.040
TOTALS	1,626,260	1,257,780	819	

For period of 8.748 years

Average discharge in acre-feet per year	185,901
Average acre-feet of silt per year	94
Average acre-feet of silt per year per square mile of contributing watershed	.066
Average tons of silt per year	143,779
Average percent of silt by weight	.057
Drainage area in square miles (net)	1,432

1/ Station was established January 1, 1942.

SILT DATA

Guadalupe River Watershed
at
VICTORIA STATION ON GUADALUPE RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	167,900	210,600	138	.092
November	50,820	9,050	6	.013
December	60,920	18,120	12	.022
1950				
January	43,500	4,690	3	.008
February	49,980	6,780	4	.010
March	41,510	5,580	4	.010
April	76,460	75,430	49	.072
May	55,990	15,400	10	.020
June	139,200	77,280	51	.041
July	36,140	5,050	3	.010
August	22,650	1,190	1	.004
September	22,680	860	1	.003
Totals	767,750	430,030	282	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 767,800

Total silt for year in acre-feet - - - - - - - - - - - - 282

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - - .053

Average percent of silt by weight for year - - - - - - - .041

Drainage area in square miles (net) - - - - - - - - - - 5,311

SUMMARY OF SILT DATA

for

Guadalupe River Watershed

Stream: GUADALUPE
Station: VICTORIA (Samples taken from bridge on U. S. Highway No. 59)
Sampler: A. E. Anders

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1944-45 1/	38,430	19,480	13	.037
1945-46	1,319,520	949,130	624	.053
1946-47	1,595,300	777,690	511	.036
1947-48	509,960	169,560	111	.024
1948-49	871,660	607,450	398	.051
1949-50	767,750	430,030	282	.041
TOTALS	5,102,620	2,953,340	1,939	

For period of 5.083 years

Average discharge in acre-feet per year	1,003,860
Average acre-feet of silt per year	381
Average acre-feet of silt per year per square mile of contributing watershed	.072
Average tons of silt per year	581,023
Average percent of silt by weight	.043
Drainage area in square miles (net)	5,311

1/ Station was established September 1, 1945. Record for one month.

SILT DATA

Lavaca River Watershed
at
EDNA STATION ON LAVACA RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	23,720	44,470	29	.138
November	2,280	140	0	.005
December	27,140	27,180	18	.074
1950				
January	7,120	4,180	3	.043
February	5,940	3,610	2	.045
March	2,670	380	0	.010
April	6,650	14,510	10	.160
May	4,850	12,220	8	.185
June	8,010	11,320	7	.104
July	1,760	1,420	1	.059
August	400	30	0	.006
September	410	30	0	.005
Totals	90,950	119,490	78	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	90,970
Total silt for year in acre-feet - - - - - - - - - - -	78
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - -	.088
Average percent of silt by weight for year - - - - - - -	.096
Drainage area in square miles (net) - - - - - - - - -	887

SUMMARY OF SILT DATA

for

Lavaca River Watershed

Stream: LAVACA
Station: EDNA
Sampler: Mrs. Ida Berryhill

(Samples taken from bridge on U.S. Highway No. 59 between Victoria and Edna)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1944-45 1/	980	570	0	----
1945-46	266,330	327,240	215	.090
1946-47	250,340	192,850	126	.057
1947-48	114,240	98,200	66	.063
1948-49	105,870	205,400	134	.143
1949-50	90,950	119,490	78	.096
TOTALS	828,710	943,750	619	

For period of 5.083 years

Average discharge in acre-feet per year	163,036
Average acre-feet of silt per year	122
Average acre-feet of silt per year per square mile of contributing watershed	.138
Average tons of silt per year	185,668
Average percent of silt by weight	.084
Drainage area in square miles (net)	887

1/ Station established September 1, 1945.

SILT DATA

Neches River Watershed
at
HORGER STATION ON ANGELINA RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	172,200	45,990	30	.020
November	99,770	6,380	4	.005
December	275,200	48,420	32	.013
1950				
January	759,700	98,430	65	.010
February	650,200	41,780	27	.005
March	372,800	31,300	21	.006
April	137,100	33,070	22	.018
May	469,700	76,320	50	.012
June	628,700	89,640	59	.010
July	72,510	7,930	5	.008
August	24,200	1,290	1	.004
September	27,940	890	1	.002
Totals	3,690,020	481,440	317	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	3,690,000
Total silt for year in acre-feet - - - - - - - - - - - -	317
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.090
Average percent of silt by weight for year - - - - - - -	.010
Drainage area in square miles (net) - - - - - - - - - - -	3,435

SUMMARY OF SILT DATA

for

Neches River Watershed

Stream: ANGELINA
Station: HORGER
Sampler: D. W. Moye

(Samples taken from bridge on State Highway No. 63 between Zavalla and Jasper)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1944-45 1/	19,470	11,020	7	.042
1945-46	3,869,300	1,826,050	1,198	.035
1946-47	3,200,750	393,530	259	.009
1947-48	1,619,040	227,070	149	.010
1948-49	1,544,530	276,680	180	.013
1949-50	3,690,020	481,440	317	.010
TOTALS	13,943,110	3,215,790	2,110	

For period of 5.083 years

Average discharge in acre-feet per year	2,743,086
Average acre-feet of silt per year	415
Average acre-feet of silt per year per square mile of contributing watershed	.121
Average tons of silt per year	632,656
Average percent of silt by weight	.017
Drainage area in square miles (net)	3,435

1/ Station was established September 1, 1945.

SILT DATA

Neches River Watershed
at
ROCKLAND STATION ON NECHES RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	140,700	43,820	29	.023
November	89,900	3,800	2	.003
December	208,100	23,180	15	.008
1950				
January	510,600	55,030	36	.008
February	545,600	39,480	26	.005
March	320,000	29,910	20	.007
April	105,600	27,240	18	.019
May	342,000	58,080	38	.012
June	497,400	45,330	30	.007
July	39,430	3,250	2	.006
August	13,870	560	0	.003
September	11,240	560	0	.004
Totals	2,824,440	330,240	216	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	2,824,000
Total silt for year in acre-feet - - - - - - - - - - - -	216
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.065
Average percent of silt by weight for year - - - - - - -	.009
Drainage area in square miles (net) - - - - - - - - - -	3,539

SUMMARY OF SILT DATA

for

Neches River Watershed

Stream: NECHES
Station: ROCKLAND
Sampler: George W. Jones

(Samples were taken from bridge on U. S. Highway 69 between Woodville and Lufkin)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1929-30 [1]	10,620	290	0	.002
1930-31	1,490,250	229,220	151	.011
1931-32	2,560,930	193,940	128	.006
1932-33	1,395,940	144,700	95	.008
1933-34	1,552,630	174,070	112	.008
1934-35	2,601,910	297,100	194	.008
1935-36	1,040,600	140,280	91	.010
1936-37	928,420	110,180	71	.009
1937-38	1,400,070	225,940	147	.012
1938-39	854,380	140,590	91	.012
1939-40	1,097,590	227,590	149	.015
1940-41	3,578,370	586,140	384	.012
1941-42	2,522,390	550,920	361	.016
1942-43	748,520	316,090	207	.031
1943-44	3,230,410	1,865,580	1,223	.042
1944-45	3,396,060	1,967,220	1,290	.043
1945-46	3,534,920	1,285,240	845	.027
1946-47	3,255,520	379,210	249	.009
1947-48	1,250,360	118,760	77	.007
1948-49	1,172,870	183,820	119	.012
1949-50	3,824,440	330,240	216	.009
TOTALS	41,447,200	9,467,120	6,200	

For period of 20.148 years

Average discharge in acre-feet per year	2,057,137
Average acre-feet of silt per year	308
Average acre-feet of silt per year per square mile of contributing watershed	.087
Average tons of silt per year	469,879
Average percent of silt by weight	.017
Drainage area in square miles (net)	3,539

[1] Station was established August 8, 1930.

SILT DATA

Nueces River Watershed
at
COTULLA STATION ON NUECES RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	8,380	4,520	3	.040
November	470	30	0	.005
December	290	30	0	.008
1950				
January	10	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	3,170	670	0	.016
June	21,160	5,400	4	.019
July	3,910	1,110	1	.021
August	560	70	0	.009
September	19,810	6,720	4	.025
Totals	57,760	18,550	12	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	57,760
Total silt for year in acre-feet - - - - - - - - - - - -	12
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.002
Average percent of silt by weight for year - - - - - - -	.024
Drainage area in square miles (net) - - - - - - - - - -	5,260

SUMMARY OF SILT DATA

for

Nueces River Watershed

Stream: NUECES
Station: COTULLA (Samples taken from highway bridge in Cotulla)
Sampler: J. G. Jennings

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 [1]	141,380	64,130	42	.033
1942-43	64,240	33,270	22	.038
1943-44	482,520	367,860	241	.056
1944-45	82,440	65,460	43	.058
1945-46	347,610	284,210	186	.060
1946-47	92,610	16,550	11	.013
1947-48	72,900	29,100	19	.029
1948-49	277,520	115,640	75	.031
1949-50	57,760	18,550	12	.024
TOTALS	1,618,980	994,770	651	

For period of 8.748 years

Average discharge in acre-feet per year	185,069
Average acre-feet of silt per year	74
Average acre-feet of silt per year per square mile of contributing watershed	.014
Average tons of silt per year	113,714
Average percent of silt by weight	.045
Drainage area in square miles (net)	5,260

[1] Station was established January 1, 1942.

SILT DATA

Nueces River Watershed
at
THREE RIVERS STATION ON NUECES RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	34,270	63,400	42	.136
November	9,530	5,090	3	.039
December	19,980	30,290	20	.111
1950				
January	1,500	180	0	.009
February	1,670	300	0	.013
March	1,000	130	0	.010
April	4,060	11,280	7	.204
May	55,550	140,720	92	.186
June	112,200	93,810	62	.061
July	14,110	19,860	13	.103
August	180	60	0	.024
September	12,250	20,720	14	.124
Totals	266,300	385,840	253	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 266,300

Total silt for year in acre-feet - - - - - - - - - - - - 253

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - - .016

Average percent of silt by weight for year - - - - - - - .106

Drainage area in square miles (net) - - - - - - - - - - 15,600

SUMMARY OF SILT DATA

for

Nueces River Watershed

Stream: NUECES
Station: NEAR THREE RIVERS
Sampler: Carl Franze

(Samples were taken 2 mi. south of Three Rivers from railroad bridge, except at extreme low stage when samples were taken at low dam)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1927-28 1/	318,930	617,920	405	.142
1928-29	741,300	1,303,600	855	.129
1929-30	596,510	721,440	473	.089
1930-31	455,880	443,420	291	.071
1931-32	1,006,200	581,880	381	.042
1932-33	287,120	275,050	179	.070
1933-34	253,800	668,320	438	.193
1934-35	2,547,150	2,383,630	1,565	.069
1935-36	768,200	752,320	494	.072
1936-37	318,050	142,270	94	.033
1937-38	479,730	771,540	506	.118
1938-39	306,600	450,960	297	.108
1939-40	840,190	1,035,600	679	.091
1940-41	1,300,860	1,635,320	1,073	.092
1941-42	1,107,790	987,340	648	.065
1942-43	260,470	323,990	213	.091
1943-44	700,090	668,660	439	.070
1944-45	297,070	590,010	387	.146
1945-46	927,400	1,134,770	744	.090
1946-47	810,070	578,310	379	.052
1947-48	128,330	253,400	164	.145
1948-49	780,920	765,590	500	.072
1949-50	266,300	385,840	253	.106
TOTALS	15,498,960	17,471,180	11,457	

For period of 23.000 years

Average discharge in acre-feet per year	673,868
Average acre-feet of silt per year	498
Average acre-feet of silt per year per square mile of contributing watershed	.032
Average tons of silt per year	759,617
Average percent of silt by weight	.083
Drainage area in square miles (net)	15,600

1/ Station was established October 1, 1927.

SILT DATA

Nueces River Watershed
at
CORPUS CHRISTI DAM STATION ON NUECES RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	28,220	2,670	2	.007
November	15,090	910	1	.004
December	18,360	5,630	4	.023
1950				
January	3,860	440	0	.008
February	2,360	230	0	.007
March	2,420	280	0	.009
April	2,710	620	0	.017
May	40,070	5,320	3	.010
June	116,300	11,400	7	.007
July	9,000	1,160	1	.009
August	4,260	310	0	.005
September	3,720	190	0	.004
Totals	246,370	29,160	18	

U. S. G. S. yearly discharge in acre-feet - - - - - - - - 246,400

Total silt for year in acre-feet - - - - - - - - - - - - 18

Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - - ----

Average percent of silt by weight for year - - - - - - - .009

Drainage area in square miles (net) - - - - - - - - - - - ----

SUMMARY OF SILT DATA

for

Nueces River Watershed

Stream: NUECES
Station: CORPUS CHRISTI DAM (Samples taken below and adjacent to outlet gates)
Sampler: Eddie Wright

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	1,202,820	546,500	358	.033
1942-43	249,640	44,790	29	.013
1943-44	740,310	323,550	212	.032
1944-45	273,820	125,070	81	.034
1945-46	936,910	350,430	231	.027
1946-47	921,510	244,730	160	.020
1947-48	107,320	15,170	8	.010
1948-49	887,240	212,770	137	.018
1949-50	246,370	29,160	18	.009
TOTALS	5,565,940	1,892,170	1,234	

For period of 8.660 years

Average discharge in acre-feet per year	642,718
Average acre-feet of silt per year	142
Average acre-feet of silt per year per square mile of contributing watershed	----
Average tons of silt per year	218,495
Average percent of silt by weight	.025
Drainage area in square miles (net)	----

1/ Station was established February 2, 1942.

SILT DATA

Sabine River Watershed
at
LOGANSPORT STATION ON SABINE RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	262,900	42,960	28	.012
November	213,800	38,980	26	.013
December	106,200	7,830	5	.005
1950				
January	656,500	47,870	31	.005
February	997,100	91,980	60	.007
March	473,700	131,030	86	.020
April	132,600	12,300	8	.007
May	699,600	98,510	63	.010
June	413,700	439,490	288	.078
July	98,470	7,910	5	.006
August	104,700	8,000	5	.006
September	65,860	7,520	5	.008
Totals	4,225,130	934,380	610	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	4,225,000
Total silt for year in acre-feet - - - - - - - - - - - -	610
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.126
Average percent of silt by weight for year - - - - - - -	.016
Drainage area in square miles (net) - - - - - - - - - -	4,858

SUMMARY OF SILT DATA

for

Sabine River Watershed

Stream: SABINE
Station: LOGANSPORT, LA.
Sampler: R. E. Davenport

(Samples were taken from U.S. Highway 84 bridge in downtown Logansport, La.)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1932-33 1/	2,545,700	503,740	330	.015
1933-34 2/	69,200	5,780	4	.006
1934-35 3/	13,910	400	0	.002
1935-36	841,410	137,020	89	.012
1936-37	1,689,660	270,430	176	.012
1937-38	3,155,000	537,990	353	.013
1938-39	1,325,580	291,500	190	.016
1939-40	1,302,990	458,990	301	.026
1940-41	4,876,180	825,330	541	.012
1941-42	3,817,160	1,439,880	944	.028
1942-43	1,716,620	999,370	655	.043
1943-44	4,193,070	3,002,050	1,969	.053
1944-45	5,996,730	4,502,820	2,953	.055
1945-46	5,137,000	2,650,320	1,738	.038
1946-47	3,318,320	553,900	363	.012
1947-48	2,820,560	452,390	298	.012
1948-49	1,882,220	391,520	255	.015
1949-50	4,225,130	934,380	610	.016
TOTALS	48,926,440	17,957,810	11,769	

For period of 16.156 years

Average discharge in acre-feet per year	3,028,376
Average acre-feet of silt per year	728
Average acre-feet of silt per year per square mile of contributing watershed	.150
Average tons of silt per year	1,111,526
Average percent of silt by weight	.027
Drainage area in square miles (net)	4,858

1/ Station was established December 1, 1932.
2/ Station was discontinued December 27, 1933.
3/ Station was reestablished September 1, 1935.

SILT DATA

San Antonio River Watershed
at
GOLIAD STATION ON SAN ANTONIO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	73,450	182,790	120	.183
November	18,590	4,540	3	.018
December	26,160	18,790	12	.053
1950				
January	16,590	3,400	2	.015
February	12,310	1,310	1	.008
March	14,220	1,940	1	.010
April	16,230	10,830	7	.049
May	14,000	10,480	7	.055
June	36,750	65,820	43	.132
July	11,590	5,060	3	.032
August	13,120	3,820	3	.021
September	10,680	1,780	1	.012
Totals	263,690	310,560	203	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	263,700
Total silt for year in acre-feet - - - - - - - - - - - -	203
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.052
Average percent of silt by weight for year - - - - - - -	.087
Drainage area in square miles (net) - - - - - - - - - - -	3,918

SUMMARY OF SILT DATA

for

San Antonio River Watershed

Stream: SAN ANTONIO
Station: GOLIAD
Sampler: Polo Perez

(Samples were taken near Goliad from bridge on State Hwy. No. 29)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1941-42 1/	699,580	848,340	556	.089
1942-43	453,180	581,740	382	.094
1943-44	365,060	725,630	475	.146
1944-45	352,460	567,440	371	.118
1945-46	663,080	1,387,180	910	.154
1946-47	699,560	719,770	472	.076
1947-48	226,510	237,020	155	.077
1948-49	403,390	669,460	440	.122
1949-50	263,690	310,560	203	.087
TOTALS	4,126,510	6,047,140	3,964	

For period of 8.748 years

Average discharge in acre-feet per year	471,709
Average acre-feet of silt per year	453
Average acre-feet of silt per year per square mile of contributing watershed	.116
Average tons of silt per year	691,260
Average percent of silt by weight	.108
Drainage area in square miles (net)	3,918

1/ Station was established January 1, 1942.

SILT DATA

San Jacinto River Watershed
at
HUFFMAN STATION ON SAN JACINTO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	683,600	238,440	156	.026
November	24,130	1,240	1	.004
December	321,000	126,540	83	.029
1950				
January	397,600	110,060	72	.020
February	368,900	104,140	68	.021
March	98,250	18,930	12	.014
April	108,400	69,600	46	.047
May	179,600	52,600	34	.022
June	457,000	209,180	137	.034
July	37,120	6,320	4	.013
August	10,700	760	0	.005
September	11,880	960	1	.006
Totals	2,698,180	938,770	614	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	2,698,000
Total silt for year in acre-feet - - - - - - - - - - - -	614
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.220
Average percent of silt by weight for year - - - - - - -	.026
Drainage area in square miles (net) - - - - - - - - - -	2,791

SUMMARY OF SILT DATA

for

San Jacinto River Watershed

Stream: SAN JACINTO
Station: HUFFMAN (Samples were taken at Sheldon Pumping Plant, City of Houston)
Sampler: Phil Baker Scott

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1944-45 1/	221,940	163,730	107	.054
1945-46	2,246,700	1,345,020	881	.044
1946-47	2,466,540	2,096,730	1,377	.062
1947-48	499,740	108,300	70	.016
1948-49	937,040	374,450	246	.029
1949-50	2,698,180	938,770	614	.026
TOTALS	9,070,140	5,027,000	3,295	

For period of 5.083 years

Average discharge in acre-feet per year	1,784,407
Average acre-feet of silt per year	648
Average acre-feet of silt per year per square mile of contributing watershed	.232
Average tons of silt per year	988,983
Average percent of silt by weight	.041
Drainage area in square miles (net)	2,791

1/ Station was established September 1, 1945.

SILT DATA

San Jacinto River Watershed
at
HUMBLE STATION ON SAN JACINTO RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	2,120	820	1	.028
November	3,900	300	0	.006
December	3,750	1,420	1	.028
1950				
January	18,120	6,130	4	.025
February	90,220	33,430	22	.027
March	161,300	33,320	22	.015
April	157,700	65,770	43	.031
May	25,700	5,950	4	.017
June	7,640	2,050	1	.020
July	14,230	2,310	2	.012
August	9,770	660	0	.005
September	7,920	310	0	.003
Totals	502,370	152,470	100	

U.S. G. S. yearly discharge in acre-feet	502,400
Total silt for year in acre-feet	100
Acre-feet of silt per year per square mile of contributing watershed	.055
Average percent of silt by weight for year	.022
Drainage area in square miles (net)	1,811

SUMMARY OF SILT DATA

for

San Jacinto River Watershed

Stream: WEST FORK OF SAN JACINTO
Station: NEAR HUMBLE
Sampler: L. C. Clark

(Samples were taken from highway bridge about 2 miles north of Humble)

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1932-33 1/	253,210	144,800	93	.042
1933-34 2/	7,450	520	0	.005
1936-37 3/	12,450	1,370	1	.008
1937-38	491,940	150,650	97	.022
1938-39	319,500	120,660	77	.028
1939-40	282,680	162,070	105	.042
1940-41	2,566,090	896,050	588	.026
1941-42	909,180	373,670	245	.030
1942-43	545,760	290,820	191	.039
1943-44	881,200	660,570	434	.055
1944-45	1,577,380	1,241,490	815	.058
1945-46	1,320,330	774,810	509	.043
1946-47	1,325,000	345,140	228	.019
1947-48	284,340	41,140	25	.011
1948-49	502,390	201,420	131	.029
1949-50	502,370	152,470	100	.022
TOTALS	11,781,270	5,557,650	3,639	

For period of 14.337 years

Average discharge in acre-feet per year	821,739
Average acre-feet of silt per year	254
Average acre-feet of silt per year per square mile of contributing watershed	.140
Average tons of silt per year	387,644
Average percent of silt by weight	.035
Drainage area in square miles (net)	1,811

1/ Station was established December 1, 1932.
2/ Station was discontinued December 31, 1933.
3/ Station was reestablished July 1, 1937.

SILT DATA

Trinity River Watershed
at
ROMAYOR STATION ON TRINITY RIVER

for
Water Year 1949-1950
(October 1, 1949 to September 30, 1950)

Month	Discharge of Stream	Silt Load of Stream		Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1949				
October	724,900	380,340	249	.039
November	241,100	111,150	73	.034
December	421,100	251,520	165	.044
1950				
January	852,400	696,280	457	.060
February	1,670,000	1,334,380	875	.059
March	705,500	458,410	301	.048
April	554,300	476,690	313	.063
May	1,201,000	887,050	582	.054
June	800,900	564,780	370	.052
July	249,000	120,330	79	.036
August	230,700	107,830	71	.034
September	366,900	150,230	99	.030
Totals	8,017,800	5,538,990	3,634	

U. S. G. S. yearly discharge in acre-feet - - - - - - - -	8,018,000
Total silt for year in acre-feet - - - - - - - - - - - -	3,634
Acre-feet of silt per year per square mile of contributing watershed - - - - - - - - - - - -	.211
Average percent of silt by weight for year - - - - - - -	.051
Drainage area in square miles (net) - - - - - - - - - -	17,192

SUMMARY OF SILT DATA

for

Trinity River Watershed

Stream: TRINITY
Station: ROMAYOR (Samples taken from the railroad bridge)
Sampler: Claud Allen

Water Year	Discharge of Stream	Silt Load of Stream		Average Percentage of Dry Silt by Weight
	ac.-ft.	tons	ac.-ft.	pct.
1935-36 1/	42,130	5,220	4	.009
1936-37	3,900,920	3,481,600	2,285	.066
1937-38	6,753,160	6,741,220	4,423	.073
1938-39	2,165,150	3,199,280	2,099	.109
1939-40	3,218,170	4,999,040	3,280	.114
1940-41	12,258,630	9,657,990	6,335	.058
1941-42	9,901,100	9,447,990	6,197	.070
1942-43	4,298,370	4,914,950	3,224	.084
1943-44	7,588,430	11,433,850	7,501	.111
1944-45	12,202,840	13,559,310	8,893	.082
1945-46	8,391,500	8,643,330	5,670	.076
1946-47	7,009,180	5,290,980	3,468	.055
1947-48	4,476,720	3,284,720	2,154	.054
1948-49	4,029,430	3,411,700	2,238	.062
1949-50	8,017,800	5,538,990	3,634	.051
TOTALS	94,253,530	93,610,170	61,405	

For period of 14.142 years

Average discharge in acre-feet per year	6,664,795
Average acre-feet of silt per year	4,342
Average acre-feet of silt per year per square mile of contributing watershed	.253
Average tons of silt per year	6,619,302
Average percent of silt by weight	.073
Drainage area in square miles (net)	17,192

1/ Station was established August 10, 1936.

SUMMARY OF SILT DATA FOR SOME OF THE MAJOR TEXAS STREAMS

(For Water Year Ending September 30, 1950)

Water-shed	Stream	Silt Station	Years Samples Taken	Total Length Record	Average Runoff of Stream	Average Amount of Silt		Amt. of Silt per Sq. Mi. Watershed	Silt by Weight	Net Drainage Area
				years	ac-ft	ac-ft	tons	ac-ft	per-cent	sq.mi.
Brazos	Salt Fork	Aspermont 1/	1924-25	1.238	111,100	2,818	4,297,420	1.272	2.842	2,216
Brazos	Salt Fork	Seymour 1/	1924-30	6.107	398,864	6,501	9,912,150	1.238	1.826	5,250
Brazos	Dbl.Mt. Fork	Aspermont 1/	1924-33	9.244	135,280	2,665	4,062,400	1.765	2.206	1,510
Brazos	Clear Fork	Crystal Falls 1/	1925-29	3.307	214,440	568	866,020	.131	.297	4,320
Brazos	Clear Fork	Eliasville 1/	1924-25	1.244	177,240	529	808,630	.092	.335	5,740
Brazos	Little River	Little River 1/	1924-29	4.962	419,870	752	1,147,190	.143	.201	5,253
Brazos	San Gabriel	Circleville 1/	1924-29	5.403	110,744	222	339,590	.369	.225	602
Brazos	Leon	Belton 2/	1945-50	4.333	339,520	353	527,417	.100	.114	3,547
Brazos	Navasota	Easterly	1942-50	8.748	337,644	203	309,976	.214	.067	949
Brazos	Brazos	South Bend	1942-50	8.710	509,083	2,669	4,068,404	.216	.587	12,360
Brazos	Brazos	Possum King.Dam	1942-50	8.710	524,255	76	116,747	----	.016	----
Brazos	Brazos	Mineral Wells 1/	1924-34	10.332	953,550	6,506	9,920,060	.468	.764	13,910
Brazos	Brazos	Glen Rose 1/	1924-29	4.588	1,181,370	8,378	12,773,810	.537	.794	15,600
Brazos	Brazos	Waco 1/	1924-33	9.254	1,717,130	10,325	15,742,010	.536	.673	19,260
Brazos	Brazos	Bryan 1/	1899-02	3.419	4,156,736	39,117	----	1.340	.941*	29,190
Brazos	Brazos	Richmond	1924-50	26.306	5,698,033	22,756	34,738,275	.654	.448	34,810
Colorado	Llano	Llano	1942-50	8.167	191,960	216	329,531	.054	.126	4,000
Colorado	Pedernales	Johnson City	1942-50	8.167	93,966	122	186,134	.129	.146	947
Colorado	Colorado	San Saba	1930-50	20.055	1,155,407	2,996	4,567,895	.160	.290	18,700
Colorado	Colorado	Tow 1/	1927-32	5.162	1,245,440	3,360	5,122,520	.174	.302	19,300
Colorado	Colorado	Inks Dam	1942-50	8.167	627,843	53	80,432	----	.009	----
Colorado	Colorado	Buchanan Dam	1947-50	3.000	486,503	22	32,913	----	.005	----
Colorado	Colorado	Austin	1937-50	13.164	1,640,383	667	1,016,004	.025	.046	26,260
Colorado	Colorado	Columbus-E. Lake 3/	30-33;37-41	6.997	3,167,710	5,898	8,991,960	.202	.209	29,140
Guadalupe	Guadalupe	Spring Branch	1942-50	8.748	185,901	94	143,779	.066	.057	1,432
Guadalupe	Guadalupe	Victoria	1945-50	5.083	1,003,860	381	581,023	.072	.043	5,311

* Percent of silt by volume.
1/ Silt by months and summary data prior to 1940 contained in Progress Report No. 1.
2/ Station discontinued December 31, 1949.
3/ Station discontinued October 31, 1941.

SUMMARY OF SILT DATA (Continued)

Watershed	Stream	Silt Station	Years Samples Taken	Total Length Record	Average Runoff of Stream	Average Amount of Silt		Amt. of Silt per Sq. Mi. Watershed	Silt by Weight	Net Drainage Area
				years	ac-ft	ac-ft	tons	ac-ft	per-cent	sq.mi.
Lavaca	Lavaca	Edna	1945-50	5.083	163,036	122	185,668	.138	.084	887
Neches	Angelina	Horger	1945-50	5.083	2,743,086	415	632,656	.121	.017	3,435
Neches	Neches	Rockland	1930-50	20.148	2,057,137	308	469,879	.087	.017	3,539
Nueces	Nueces	Cotulla	1942-50	8.748	185,069	74	113,714	.014	.045	5,260
Nueces	Nueces	Three Rivers	1927-50	23.000	673,868	498	759,617	.032	.083	15,600
Nueces	Nueces	Corpus Chr. Dam	1942-50	8.660	642,718	142	218,495	----	.025	----
Rio Grande	Rio Grande	Eagle Pass 4/	1934-43	9.068	3,180,057	9,776	14,904,545	.078	.344	125,260
Rio Grande	Rio Grande	Roma 4/	1929-43	14.184	4,166,619	12,588	19,192,311	.080	.338	157,204
Red	Pease	Crowell 5/	1942-47	5.002	113,411	992	1,512,834	.412.	.980	2,410
Red	Wichita	Wichita Falls 1/	1900-02	2.014	566,420	5,516	----	1.776	.974*	3,105
Red	Red	Denison 1/	30-33;36-39	6.260	3,326,780	13,640	20,793,380	.415	.459	32,840
Sabine	Sabine	Logansport,La.	32-33;35-50	16.156	3,028,376	728	1,111,526	.150	.027	4,858
Sabine	Sabine	Ruliff 6/	1945-46	1.083	11,408,860	3,124	5,771,404	.331	.037	9,440
San Antonio	San Antonio	Falls City 1/	1927-33	5.967	127,120	142	216,730	.069	.125	2,070
San Antonio	San Antonio	Goliad	1942-50	8.748	471,709	453	691,260	.116	.108	3,918
San Jacinto	West Fork	Humble	32-33;37-50	14.337	821,739	254	387,644	.140	.035	1,811
San Jacinto	San Jacinto	Huffman	1945-50	5.083	1,784,407	648	988,983	.232	.041	2,791
Trinity	Trinity	Rosser 7/	1938-40	1.598	760,700	986	1,504,920	.122	.145	8,057
Trinity	Trinity	Romayor	1936-50	14.142	6,664,795	4,342	6,619,302	.253	.073	17,192

* Percent of silt by volume.

1/ Silt by months and summary data prior to 1940 contained in Progress Report No. 1.

4/ Station discontinued May 31, 1943.

5/ Station discontinued June 30, 1947.

6/ Station established September 1, 1945 and discontinued September 30, 1946.

7/ Station discontinued June 27, 1940.