TEXAS WATER DEVELOPMENT BOARD

REPORT 106

SUSPENDED-SEDIMENT LOAD OF TEXAS STREAMS

Compilation Report

October 1963—September 1965

By

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TEXAS WATER DEVELOPMENT BOARD

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TABLE OF CONTENTS

	Page
INTRODUCTION	1
STATUS OF SUSPENDED-SEDIMENT SAMPLING STATIONS	1
COOPERATION	1
EXPLANATION OF DATA	1
USE OF HISTORICAL SEDIMENT DEPOSITION SURVEYS	2
RECORDS OF SUSPENDED-SEDIMENT LOADS FROM SAMPLING STATIONS OPERATED BY TEXAS WATER DEVELOPMENT BOARD, 1964 AND 1965 WATER YEARS	3
Red River Basin	5
Prairie Dog Town Fork Red River Near Lakeview	5
Sulphur River Basin	6
South Sulphur River Near Cooper	6
Whiteoak Creek Near Talco	7
Sabine River Basin	8
Sabine River at Logansport	8
Neches River Basin	9
Kickapoo Creek Near Brownsboro	9
Piney Creek Near Groveton	10
Neches River Near Rockland	11
Trinity River Basin	12
Little Elm Creek Near Aubrey	12
Trinity River Near Rosser	13
Chambers Creek Near Corsicana	14
Long King Creek at Livingston	15
Trinity River at Romayor	16
San Jacinto River Basin	17
East Fork San Jacinto River Near Cleveland	17

TABLE OF CONTENTS (Cont'd.)

	Page
Brazos River Basin	18
California Creek Near Stamford	18
Brazos River Near South Bend	19
Possum Kingdom Reservoir Near Graford	20
Aquilla Creek Near Aquilla	21
North Bosque River at Hico	22
Leon River at Gatesville	23
Yegua Creek Near Somerville	24
Navasota River Near Easterly	25
Brazos River at Richmond	26
Colorado River Basin	27
Colorado River Near San Saba	27
Buchanan Reservoir Near Burnet	28
Llano River at Llano	29
Pedernales River Near Johnson City	30
Colorado River at Austin	31
Lavaca River Basin	32
Lavaca River Near Edna	32
Navidad River Near Hallettsville	33
Guadalupe River Basin	34
Guadalupe River Near Spring Branch	34
Guadalupe River at Victoria	35
San Antonio River Basin	36
Cibolo Creek Near Falls City	36
San Antonio River at Goliad	37
Nueces River Basin	38
Nueces River at Cotulla	38
Frio River at Calliham	39
Lake Corpus Christi Near Mathis	40

TABLE OF CONTENTS (Cont'd.)

Page

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM SAMPLING STATIONS OPERATED BY INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO 41

Rio Grande Basin 43

Rio Grande at El Paso 43

Rio Grande Below Rio Conchos Near Presidio 44

Rio Grande at Johnson Ranch Near Castolon 45

Rio Grande at Langtry 46

Pecos River Near Shumla 47

Rio Grande Near Del Rio 48

Rio Grande at Laredo 49

Rio Grande at Falcon Dam 50

Rio Grande at Fort Ringgold, Rio Grande City 51

Rio Grande Near Los Ebanos 52

Rio Grande Below Anzalduas Dam 53

Rio Grande Near San Benito 54

Rio Grande Near Brownsville 55

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM SAMPLING STATIONS OPERATED BY U.S. GEOLOGICAL SURVEY, QUALITY OF WATER BRANCH 57

Trinity River Basin 59

Elm Fork Trinity River Near Muenster 59

Pin Oak Creek Near Hubbard 60

Colorado River Basin 61

Colorado River at Columbus 61

FIGURE

1. Location Map Showing Suspended-Sediment Sampling Stations on Texas Streams, 1964 and 1965 Water Years 63

SUSPENDED-SEDIMENT LOAD OF TEXAS STREAMS

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INTRODUCTION

Report 106 covers the 1964 and 1965 water years, and is a supplement to Texas Water Development Board Report 45, Texas Water Commission Bulletin 6410, and Texas Board of Water Engineers Bulletin 6108. These prior publications presented the results of suspended-sediment-load measurements at permanent observation points from the beginning of record through the 1963 water year. (A water year extends from October 1 through the following September 30, and is identified by the year in which it ends.) No reconnaissance type determinations of short-period record or intermittent record are compiled.

This report was prepared under the general direction of C. R. Baskin, Chief Engineer, and Jack Stearman, Director, Basic Hydrologic Data Division. The tabulations in the report were prepared under the direction of Mike Parker, Director, Electronic Data Processing Division. Maximum, minimum, and average annual suspended-sediment loads were computed from historical data by W. A. Haydon, Sediment Section Head, Basic Hydrologic Data Division.

STATUS OF SUSPENDED-SEDIMENT SAMPLING STATIONS

During the period covered by this report, the Texas Water Commission operated 36 suspended-sediment sampling stations. The Texas Water Development Board was subsequently assigned responsibilities for State activity in this field of surface-water investigations beginning September 1, 1965, in the 1965 water year. Three stations were established and two were discontinued in the State program during this report period.

Data resulting from sediment investigations for 13 stations operated by the International Boundary and Water Commission, United States and Mexico and three stations operated by the United States Geological Survey are included in this report.

COOPERATION

The following agencies cooperated with the Texas Water Development Board in the operation of, or furnished data for, suspended-sediment-sampling stations included in this report:

Lower Colorado River Authority, Austin;

Brazos River Authority, Waco;

City of Corpus Christi; and

U.S. Geological Survey, Water Resources Division, Austin.

The International Boundary and Water Commission, United States and Mexico, furnished records for 13 stations in the Rio Grande Basin.

The U.S. Geological Survey, Water Resources Division, Austin, furnished records for two stations in the Trinity River Basin and one station in the Colorado River Basin.

EXPLANATION OF DATA

Suspended-sediment-sampling stations operated by the Texas Water Development Board at or near streamflow-measuring stations use streamflow records collected by the U.S. Geological Survey in the determination of estimated suspended-sediment loads. Those suspended-sediment-sampling stations operated by the Texas Water Development Board at Possum Kingdom Reservoir and Buchanan Reservoir, where samples are collected from releases, use computed-release records furnished by the reservoir operator in the determination of estimated suspended-sediment loads.

Samples are collected in 8-ounce narrow-neck bottles at a position approximately 1 foot below the water surface near midstream. The percentage of suspended sediment by weight obtained from the sample is

multiplied by the factor 1.102 to obtain the mean percentage of suspended sediment in the vertical profile. Laboratory determinations were equated to the corresponding streamflow in determining the total suspended-sediment load.

The Texas Water Development Board uses 62.5 pounds as the average weight of 1 cubic foot of streamflow. Temperature and total dissolved constituents affect the density of water. The average water weight selected is used for all calculations. The density of sediment used for all calculations is 70 pounds per cubic foot. It is emphasized that this implied density is an estimated average which may be expected for ultimate consolidation. Individual sediment deposits will have varying densities dependent on several factors. The assumptions of density may also be expressed as:

one acre-foot of streamflow = 1,361.25 tons, and

one acre-foot of sediment = 1,524.60 tons.

No attempt has been made to include in this report that sediment which may be moved by a flowing stream along its bottom, commonly referred to as "bed load."

Presented with the sediment data obtained for the 1964 and 1965 water years is a summary table showing maximum, minimum, and average annual suspended-sediment transport passing each gaging point for the total period of record in full water years.

Monthly streamflow quantities for 1964 and 1965 water-year data are rounded to four significant figures. Summary streamflow values for each water year are totals of the monthly figures. Monthly values of sediment conversions to acre-feet are rounded to the nearest whole number and are based on a density of 70 pounds per cubic foot. Annual values of volume in acre-feet are determined from the total tonnage measured for the year rounded to the nearest whole number. Therefore, annual volumes do not always coincide with totals of the twelve monthly values each year.

Sediment outflow for three reservoirs in Texas were obtained during this report period. Records were taken at Possum Kingdom Reservoir, Brazos River Basin; Buchanan Reservoir, Colorado River Basin; and Lake Corpus Christi, Nueces River Basin. Streamflow and sediment data are presented in three categories for the three reservoirs. First, a summary table showing ratios of reservoir capacity to reservoir inflow is presented as an indicator of reservoir trap efficiency for sediment retention. Second, a summary table and current data are given for suspended sediment passing through the reservoir. Third, suspended sediment discharged with flood releases occurring within the two-year period covered by the current tabulation is presented to indicate that portion of the annual total passing within these very brief flood periods.

Sediment and streamflow records of the Pecos River and the Rio Grande were collected by the International Boundary and Water Commission, United States and Mexico. A sediment weight of 66.7 pounds per cubic foot, or 1,452 tons per acre-foot, was used in determining suspended-sediment volume in the Rio Grande Basin.

The U.S. Geological Survey assumes a water density of 62.4 pounds per cubic foot when suspended-sediment samples contain 28,000 parts per million sediment or less. When higher concentrations are encountered, a sliding scale is used. Total suspended-sediment load is reported in tons. No volume conversions are attempted. Suspended-sediment samples were collected at the three stations operated by the U.S. Geological Survey by the depth-integration method using a U.S. D-43 sampler.

USE OF HISTORICAL SEDIMENT DEPOSITION SURVEYS

Previously run deposition surveys of Possum Kingdom Reservoir and Lake Corpus Christi provided an opportunity to correlate some aspects of sediment transport as indicated by suspended-sediment measurements. For both reservoirs, projections of correlations developed by comparing suspended-sediment measurements to deposition-survey measurements indicate that slightly smaller average annual sediment depositions have been accumulating since the surveys than for the periods covered by the surveys. Slight reductions in average streamflow into these reservoirs in this subsequent period tend to substantiate these findings.

That portion of sediment transported by a stream along its bottom, referred to as bed load, was estimated for inflows to Lake Corpus Christi and Possum Kingdom Reservoir. The U.S. Soil Conservation Service has estimated stream bed-load sediment entering Lake Corpus Christi as 10 percent of the suspended-sediment load, and that entering Possum Kingdom Reservoir as 30 percent of the suspended-sediment load.[1/] Computations made in the present study, based on comparisons of suspended-sediment loads of streamflows into and out of the reservoirs and comparisons of these with depositions within the reservoirs as surveyed, produced stream bed load sediment movement into these reservoirs as 10 and 28 percent of the suspended-sediment loads, respectively. Such comparisons were not made for Buchanan Reservoir because the single sediment accumulation survey in existence for that reservoir covers a very short period of reservoir life.

1/ Estimates reported in 1959 in Texas Board of Water Engineers Bulletin 5912, p. 8, 10.

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM SAMPLING STATIONS OPERATED BY TEXAS WATER DEVELOPMENT BOARD, 1964 AND 1965 WATER YEARS

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM

SAMPLING STATIONS OPERATED BY

TEXAS WATER DEVELOPMENT BOARD,

1964 AND 1965 WATER YEARS

PRAIRIE DOG TOWN FORK RED RIVER NEAR LAKEVIEW

Net Drainage Area: 2,023 square miles.

Location: Farm Road 657 bridge, 7.6 miles southwest of Lakeview. Flow records are from stream-gaging station at same location.

Records Available: May 1964 to date.

RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
WATER YEAR 1965					
OCTOBER	1,220	2,953	--	2	0.178
NOVEMBER	1,810	2,233	--	1	0.091
DECEMBER	364	465	--	0	0.094
JANUARY	109	5	--	0	0.003
FEBRUARY	104	7	--	0	0.005
MARCH	51	2	--	0	0.003
APRIL	1,290	64,555	--	42	3.676
MAY	68	160	--	0	0.173
JUNE	85,980	5,475,621	--	3,591	4.678
JULY	2,450	23,170	--	15	0.695
AUGUST	1,150	15,037	--	10	0.961
SEPTEMBER	6,740	301,895	--	198	3.290
SUMMARY	101,336	5,886,103	2,910	3,861	4.267

SULPHUR RIVER BASIN

SOUTH SULPHUR RIVER NEAR COOPER

Net Drainage Area: 527 square miles.

Location: State Highways 19 and 154 bridge, 5.7 miles southeast of Cooper. Flow records are from stream-gaging station at same location.

Records Available: March 1962 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	311,082	224,258	426	147	0.053
MIN	1964	97,114	106,772	203	70	0.081
AVG	3 Years	173,834	157,503	299	103	0.067
WATER YEAR 1964						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	0	0	--	0	0.000
	DECEMBER	4	0	--	0	0.000
	JANUARY	13	0	--	0	0.000
	FEBRUARY	103	29	--	0	0.021
	MARCH	9,400	18,890	--	12	0.148
	APRIL	23,020	51,083	--	34	0.163
	MAY	18,010	14,670	--	10	0.060
	JUNE	24,300	8,618	--	6	0.026
	JULY	4	0	--	0	0.000
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	22,260	13,482	--	9	0.044
	SUMMARY	97,114	106,772	203	70	0.081
WATER YEAR 1965						
	OCTOBER	448	38	--	0	0.006
	NOVEMBER	35,880	23,498	--	15	0.048
	DECEMBER	1,220	1,004	--	1	0.060
	JANUARY	24,530	41,529	--	27	0.124
	FEBRUARY	117,600	73,219	--	48	0.046
	MARCH	1,410	1,956	--	1	0.102
	APRIL	594	176	--	0	0.022
	MAY	119,600	78,510	--	51	0.048
	JUNE	3,630	1,792	--	1	0.036
	JULY	43	0	--	0	0.000
	AUGUST	27	0	--	0	0.000
	SEPTEMBER	6,100	2,536	--	2	0.031
	SUMMARY	311,082	224,258	426	147	0.053

SULPHUR RIVER BASIN

WHITEOAK CREEK NEAR TALCO

Net Drainage Area: 494 square miles.

Location: U.S. Highway 271 bridge, 2.7 miles south of Talco. Flow records are from stream-gaging station at same location.

Records Available: June 1963 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	271,783	30,830	62	20	0.008
MIN	1964	104,576	22,979	47	15	0.016
AVG	2 Years	188,180	26,904	54	18	0.011
WATER YEAR 1964						
OCTOBER		2	0	--	0	0.000
NOVEMBER		29	0	--	0	0.000
DECEMBER		164	7	--	0	0.003
JANUARY		112	0	--	0	0.000
FEBRUARY		3,160	1,071	--	1	0.025
MARCH		8,390	8,750	--	6	0.077
APRIL		42,810	5,532	--	4	0.009
MAY		5,910	1,808	--	1	0.022
JUNE		12,280	1,078	--	1	0.006
JULY		29	0	--	0	0.000
AUGUST		2,150	485	--	0	0.017
SEPTEMBER		29,540	4,248	--	3	0.011
SUMMARY		104,576	22,979	47	15	0.016
WATER YEAR 1965						
OCTOBER		1,770	233	--	0	0.010
NOVEMBER		13,740	2,124	--	1	0.011
DECEMBER		1,110	184		0	0.012
JANUARY		5,680	1,156	--	1	0.015
FEBRUARY		94,400	11,452	--	8	0.009
MARCH		7,670	643	--	0	0.006
APRIL		2,790	373	--	0	0.010
MAY		121,300	12,574	--	8	0.008
JUNE		20,410	1,491	--	1	0.005
JULY		129	6	--	0	0.003
AUGUST		14	0	--	0	0.000
SEPTEMBER		2,770	594	--	0	0.016
SUMMARY		271,783	30,830	62	20	0.008

SABINE RIVER BASIN

SABINE RIVER AT LOGANSPORT

Net Drainage Area: 4,839 square miles.

Location: U.S. Highway 84 bridge at Logansport, Louisiana. Flow records are from stream-gaging station Sabine River at Logansport, Louisiana, located 4,600 feet upstream from sampling point.

Records Available: December 1932 to December 27, 1933; September 1935 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1945	5,997,000	4,502,820	931	2,953	0.055
MIN	1964	388,550	37,052	8	24	0.007
AVG	28 Years	2,425,070	782,270	162	515	0.024
WATER YEAR 1964						
OCTOBER		3,980	100	--	0	0.002
NOVEMBER		6,730	183	--	0	0.002
DECEMBER		16,030	285	--	0	0.001
JANUARY		25,520	638	--	0	0.002
FEBRUARY		38,060	833	--	1	0.002
MARCH		110,900	12,365	--	8	0.008
APRIL		89,570	13,387	--	9	0.011
MAY		69,980	8,064	--	5	0.008
JUNE		11,260	351	--	0	0.002
JULY		3,470	124	--	0	0.003
AUGUST		8,200	553	--	0	0.005
SEPTEMBER		4,850	169	--	0	0.003
SUMMARY		388,550	37,052	8	24	0.007
WATER YEAR 1965						
OCTOBER		10,530	629	--	0	0.004
NOVEMBER		6,660	147	--	0	0.002
DECEMBER		20,190	1,007	--	1	0.004
JANUARY		48,680	5,930	--	4	0.009
FEBRUARY		200,700	37,089	--	24	0.014
MARCH		222,400	29,039	--	19	0.010
APRIL		200,100	15,951	--	10	0.006
MAY		296,800	38,287	--	25	0.009
JUNE		433,900	28,755	--	19	0.005
JULY		18,600	1,351	--	1	0.005
AUGUST		5,900	195	--	0	0.002
SEPTEMBER		10,080	879	--	1	0.006
SUMMARY		1,474,540	159,259	33	104	0.008

NECHES RIVER BASIN

KICKAPOO CREEK NEAR BROWNSBORO

Net Drainage Area: 232 square miles.

Location: State Farm Road 314 bridge, 1 mile northeast of Brownsboro. Flow records are from stream-gaging station at same location.

Records Available: May 1962 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1963	36,142	1,351	6	1	0.003
MIN	1964	11,891	361	2	0	0.002
AVG	3 Years	31,116	868	4	1	0.002
WATER YEAR 1964						
OCTOBER		0	0	--	0	0.000
NOVEMBER		4	0	--	0	0.000
DECEMBER		158	0	--	0	0.000
JANUARY		687	4	--	0	0.000
FEBRUARY		1,850	23	--	0	0.001
MARCH		4,750	200	--	0	0.003
APRIL		1,450	38	--	0	0.002
MAY		2,060	76	--	0	0.003
JUNE		930	20	--	0	0.002
JULY		1	0	--	0	0.000
AUGUST		0	0	--	0	0.000
SEPTEMBER		1	0	--	0	0.000
SUMMARY		11,891	361	2	0	0.002
WATER YEAR 1965						
OCTOBER		0	0	--	0	0.000
NOVEMBER		235	12	--	0	0.004
DECEMBER		102	0	--	0	0.000
JANUARY		1,800	36	--	0	0.001
FEBRUARY		11,880	190	--	0	0.001
MARCH		3,980	24	--	0	0.000
APRIL		3,630	61	--	0	0.001
MAY		22,480	541	--	0	0.002
JUNE		1,060	26	--	0	0.002
JULY		46	1	--	0	0.002
AUGUST		0	0	--	0	0.000
SEPTEMBER		101	1	--	0	0.001
SUMMARY		45,314	892	4	1	0.001

NECHES RIVER BASIN

PINEY CREEK NEAR GROVETON

Net Drainage Area: 79 square miles

Location: State Highway 94 bridge, 6.5 miles northeast of Groveton. Flow records are from stream-gaging station at same location.

Records Available: May 1962 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1963	8,328	1,277	17	1	0.011
MIN	1965	4,532	958	13	1	0.013
AVG	3 Years	6,604	1,167	15	1	0.013
WATER YEAR 1964						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	0	0	--	0	0.000
	DECEMBER	59	12	--	0	0.015
	JANUARY	206	27	--	0	0.010
	FEBRUARY	124	9	--	0	0.005
	MARCH	806	265	--	0	0.024
	APRIL	5,300	889	--	1	0.012
	MAY	381	59	--	0	0.011
	JUNE	78	5	--	0	0.005
	JULY	0	0	--	0	0.000
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	0	0	--	0	0.000
	SUMMARY	6,954	1,266	17	1	0.013
WATER YEAR 1965						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	0	0	--	0	0.000
	DECEMBER	0	0	--	0	0.000
	JANUARY	644	271	--	0	0.031
	FEBRUARY	832	159	--	0	0.014
	MARCH	1,600	380	--	0	0.017
	APRIL	344	15	--	0	0.003
	MAY	676	44	--	0	0.005
	JUNE	92	1	--	0	0.001
	JULY	3	0	--	0	0.000
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	341	88	--	0	0.019
	SUMMARY	4,532	958	13	1	0.016

NECHES RIVER BASIN

NECHES RIVER NEAR ROCKLAND

Net Drainage Area: 3,637 square miles.

Location: U.S. Highway 69 bridge between Woodville and Lufkin. Flow records are from stream-gaging station Neches River near Rockland, located 2,200 feet downstream from sampling point.

Records Available: August 8, 1930 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1945	3,401,000	1,967,220	541	1,290	0.042
MIN	1956	333,900	34,655	10	23	0.008
AVG	35 Years	1,666,640	328,807	90	216	0.014
WATER YEAR 1964						
	OCTOBER	2,250	133	--	0	0.004
	NOVEMBER	4,320	255	--	0	0.004
	DECEMBER	17,570	1,541	--	1	0.006
	JANUARY	33,120	3,772	--	2	0.008
	FEBRUARY	39,190	3,601	--	2	0.007
	MARCH	151,400	47,491	--	31	0.023
	APRIL	157,400	29,799	--	20	0.014
	MAY	140,900	14,457	--	9	0.008
	JUNE	33,640	3,030	--	2	0.007
	JULY	4,580	186	--	0	0.003
	AUGUST	2,100	99	--	0	0.003
	SEPTEMBER	2,560	115	--	0	0.003
	SUMMARY	589,030	104,479	29	69	0.013
WATER YEAR 1965						
	OCTOBER	2,660	46	--	0	0.001
	NOVEMBER	3,910	77	--	0	0.001
	DECEMBER	15,290	873	--	1	0.004
	JANUARY	21,790	941	--	1	0.003
	FEBRUARY	75,400	11,726	--	8	0.011
	MARCH	87,000	9,743	--	6	0.008
	APRIL	142,200	16,107	--	11	0.008
	MAY	131,900	13,522	--	9	0.008
	JUNE	200,300	12,170	--	8	0.004
	JULY	14,570	598	--	0	0.003
	AUGUST	6,580	364	--	0	0.004
	SEPTEMBER	22,390	4,164	--	3	0.014
	SUMMARY	723,990	70,331	19	46	0.007

TRINITY RIVER BASIN

LITTLE ELM CREEK NEAR AUBREY

Net Drainage Area: 75.5 square miles

Location: Farm Road 1385 bridge, 5.5 miles east of Aubrey. Flow records are from stream-gaging station at same location.

Records Available: July 1964 to date.

RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
WATER YEAR 1964					
OCTOBER	0	--	--	--	--
NOVEMBER	0	--	--	--	--
DECEMBER	0	--	--	--	--
JANUARY	0	--	--	--	--
FEBRUARY	0	--	--	--	--
MARCH	1,330	--	--	--	--
APRIL	5,090	--	--	--	--
MAY	1,890	--	--	--	--
JUNE	44	--	--	--	--
JULY	0	0	--	0	0.000
AUGUST	39	1	--	0	0.002
SEPTEMBER	15,350	36,696	--	24	0.176
SUMMARY	--	--	--	--	--
WATER YEAR 1965					
OCTOBER	185	146	--	0	0.058
NOVEMBER	17,310	22,645	--	15	0.096
DECEMBER	440	317	--	0	0.053
JANUARY	1,900	2,345	--	2	0.091
FEBRUARY	5,430	10,604	--	7	0.143
MARCH	222	49	--	0	0.016
APRIL	26	0	--	0	0.000
MAY	5,750	10,543	--	7	0.135
JUNE	4,640	7,734	--	5	0.122
JULY	15	1	--	0	0.005
AUGUST	0	0	--	0	0.000
SEPTEMBER	4,670	10,601	--	7	0.167
SUMMARY	40,588	64,985	861	43	0.118

TRINITY RIVER BASIN

TRINITY RIVER NEAR ROSSER

Net Drainage Area: 8,146 square miles.

Location: State Highway 34 bridge between Rosser and Ennis. Flow records are from stream-gaging station at same location.

Records Available: November 22, 1938 to June 27, 1940; March 1953 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	4,202,000	4,808,582	590	3,154	0.084
MIN	1955	226,100	144,572	18	96	0.047
AVG	12 Years	1,438,578	970,412	119	637	0.050
WATER YEAR 1964						
OCTOBER		16,870	405	--	0	0.002
NOVEMBER		14,600	419	--	0	0.002
DECEMBER		18,050	677	--	0	0.003
JANUARY		21,860	1,074	--	1	0.004
FEBRUARY		24,660	6,899	--	5	0.021
MARCH		53,760	59,932	--	39	0.082
APRIL		66,190	81,990	--	54	0.091
MAY		37,780	17,656	--	12	0.034
JUNE		63,700	29,208	--	19	0.034
JULY		19,010	1,222	--	1	0.005
AUGUST		26,140	1,330	--	1	0.004
SEPTEMBER		253,200	179,053	--	117	0.052
SUMMARY		615,820	379,865	47	249	0.045
WATER YEAR 1965						
OCTOBER		211,900	111,672	--	73	0.039
NOVEMBER		328,200	254,628	--	161	0.055
DECEMBER		445,100	112,751	--	74	0.019
JANUARY		167,500	119,279	--	78	0.052
FEBRUARY		531,600	428,214	--	281	0.059
MARCH		233,100	60,735	--	40	0.019
APRIL		69,940	15,344	--	10	0.016
MAY		515,100	314,389	--	206	0.045
JUNE		229,800	82,002	--	54	0.026
JULY		35,330	2,721	--	2	0.006
AUGUST		30,480	925	--	1	0.002
SEPTEMBER		45,530	32,314	--	21	0.052
SUMMARY		2,843,580	1,525,974	187	1,001	0.039

TRINITY RIVER BASIN

CHAMBERS CREEK NEAR CORSICANA

Net Drainage Area: 963 square miles.

Location: State Highway 31 bridge, 5.3 miles east of Corsicana. Flow records are from stream-gaging station at same location.

Records Available: June 1963 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	253,851	267,555	278	175	0.078
MIN	1964	14,746	38,591	40	25	0.192
AVG	2 Years	134,298	153,073	159	100	0.084
WATER YEAR 1964						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	0	0	--	0	0.000
	DECEMBER	0	0	--	0	0.000
	JANUARY	92	5	--	0	0.004
	FEBRUARY	293	16	--	0	0.004
	MARCH	2,730	5,553	--	4	0.149
	APRIL	6,600	21,627	--	14	0.241
	MAY	3,270	10,269	--	7	0.231
	JUNE	1,110	1,008	--	1	0.067
	JULY	0	0	--	0	0.000
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	651	113	--	0	0.013
	SUMMARY	14,746	38,591	40	25	0.192
WATER YEAR 1965						
	OCTOBER	179	15	--	0	0.006
	NOVEMBER	12,340	31,138	--	20	0.185
	DECEMBER	1,460	158	--	0	0.008
	JANUARY	6,540	10,025	--	7	0.113
	FEBRUARY	55,920	48,471	--	32	0.064
	MARCH	10,960	9,879	--	6	0.066
	APRIL	4,890	1,170	--	1	0.018
	MAY	154,800	164,598	--	108	0.078
	JUNE	6,190	2,075	--	1	0.025
	JULY	292	25	--	0	0.006
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	10	1	--	0	0.007
	SUMMARY	253,581	267,555	278	175	0.078

TRINITY RIVER BASIN

LONG KING CREEK AT LIVINGSTON

Net Drainage Area: 141 square miles.

Location: U.S. Highway 190 bridge, 2 miles west of Livingston. Flow records are from stream-gaging station at same location.

Records Available: June 1963 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1964	32,470	38,241	271	25	0.087
MIN	1965	14,209	14,778	105	10	0.076
AVG	2 Years	23,340	26,510	188	18	0.083
WATER YEAR 1964						
	OCTOBER	39	0	--	0	0.000
	NOVEMBER	199	2	--	0	0.001
	DECEMBER	1,220	499	--	0	0.030
	JANUARY	3,510	1,377	--	1	0.029
	FEBRUARY	2,390	1,198	--	1	0.037
	MARCH	15,790	25,734	--	17	0.120
	APRIL	4,590	4,788	--	3	0.077
	MAY	4,000	4,559	--	3	0.084
	JUNE	505	53	--	0	0.008
	JULY	51	0	--	0	0.000
	AUGUST	45	0	--	0	0.000
	SEPTEMBER	131	31	--	0	0.017
	SUMMARY	32,470	38,241	271	25	0.087
WATER YEAR 1965						
	OCTOBER	20	0	--	0	0.000
	NOVEMBER	113	3	--	0	0.002
	DECEMBER	197	8	--	0	0.003
	JANUARY	229	11	--	0	0.004
	FEBRUARY	5,120	4,257	--	3	0.061
	MARCH	4,990	8,987	--	6	0.132
	APRIL	1,100	163	--	0	0.011
	MAY	2,100	1,327	--	1	0.046
	JUNE	164	11	--	0	0.005
	JULY	48	0	--	0	0.000
	AUGUST	80	11	--	0	0.010
	SEPTEMBER	48	0	--	0	0.000
	SUMMARY	14,209	14,778	105	10	0.076

TRINITY RIVER BASIN

TRINITY RIVER AT ROMAYOR

Net Drainage Area: 17,186 square miles

Location: State Highway 105 bridge, 2 miles south of Romayor. Flow records are from stream-gaging station at same location.

Records Available: August 10, 1936 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1945	12,200,000	13,559,310	789	8,894	0.081
MIN	1956	878,900	717,536	42	470	0.060
AVG	29 Years	5,244,178	4,700,826	274	3,083	0.066
WATER YEAR 1964						
OCTOBER		23,420	1,462	--	1	0.005
NOVEMBER		31,940	3,291	--	2	0.008
DECEMBER		62,560	13,040	--	9	0.015
JANUARY		71,590	18,125	--	12	0.019
FEBRUARY		84,360	19,196	--	13	0.017
MARCH		232,100	213,773	--	140	0.068
APRIL		233,400	285,972	--	188	0.090
MAY		174,900	152,789	--	100	0.064
JUNE		118,900	71,488	--	47	0.044
JULY		32,640	2,414	--	2	0.005
AUGUST		36,770	5,058	--	3	0.010
SEPTEMBER		67,320	44,247	--	29	0.048
SUMMARY		1,169,900	830,855	48	545	0.052
WATER YEAR 1965						
OCTOBER		342,300	272,944	--	179	0.059
NOVEMBER		302,600	227,524	--	149	0.055
DECEMBER		502,100	264,717	--	174	0.039
JANUARY		285,900	264,378	--	173	0.068
FEBRUARY		805,700	812,525	--	533	0.074
MARCH		489,500	335,512	--	220	0.050
APRIL		391,300	358,211	--	235	0.067
MAY		1,168,000	1,113,882	--	731	0.070
JUNE		853,800	449,895	--	295	0.039
JULY		74,770	7,091	--	5	0.007
AUGUST		41,220	2,781	--	2	0.005
SEPTEMBER		51,060	6,031	--	4	0.009
SUMMARY		5,308,250	4,115,491	239	2,699	0.057

SAN JACINTO RIVER BASIN

EAST FORK SAN JACINTO RIVER NEAR CLEVELAND

Net Drainage Area: 325 square miles.

Location: State Highway 105 bridge about one mile southwest of Cleveland. Flow records are from stream-gaging station at same location.

Records Available: December 1952 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1958	227,500	46,257	142	30	0.015
MIN	1956	23,400	4,310	13	3	0.014
AVG	12 Years	114,614	21,291	66	14	0.014
WATER YEAR 1964						
	OCTOBER	649	14	--	0	0.002
	NOVEMBER	3,280	507	--	0	0.011
	DECEMBER	9,540	1,430	--	1	0.011
	JANUARY	10,300	1,706	--	1	0.012
	FEBRUARY	13,120	1,790	--	1	0.010
	MARCH	35,410	7,715	--	5	0.016
	APRIL	30,700	8,579	--	6	0.021
	MAY	6,230	896	--	1	0.011
	JUNE	2,940	329	--	0	0.008
	JULY	889	39	--	0	0.003
	AUGUST	855	42	--	0	0.004
	SEPTEMBER	1,260	74	--	0	0.004
	SUMMARY	115,173	23,121	71	15	0.015
WATER YEAR 1965						
	OCTOBER	707	21	--	0	0.002
	NOVEMBER	1,320	31	--	0	0.002
	DECEMBER	2,200	88	--	0	0.003
	JANUARY	2,530	144	--	0	0.004
	FEBRUARY	16,470	4,227	--	3	0.019
	MARCH	5,250	376	--	0	0.005
	APRIL	3,690	456	--	0	0.009
	MAY	4,560	1,174	--	1	0.019
	JUNE	4,380	911	--	1	0.015
	JULY	843	75	--	0	0.007
	AUGUST	801	34	--	0	0.003
	SEPTEMBER	807	34	--	0	0.003
	SUMMARY	43,558	7,571	23	5	0.013

BRAZOS RIVER BASIN

CALIFORNIA CREEK NEAR STAMFORD

Net Drainage Area: 465 square miles.

Location: Farm Road 142 bridge, 9 miles east of Stamford. Flow records are from stream-gaging station at same location.

Records Available: July 1964 to date.

RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
WATER YEAR 1964					
OCTOBER	6	--	--	--	--
NOVEMBER	46	--	--	--	--
DECEMBER	24	--	--	--	--
JANUARY	73	--	--	--	--
FEBRUARY	205	--	--	--	--
MARCH	62	--	--	--	--
APRIL	25	--	--	--	--
MAY	201	--	--	--	--
JUNE	733	--	--	--	--
JULY	0	0	--	0	0.000
AUGUST	15	0	--	0	0.000
SEPTEMBER	29	7	--	0	0.018
SUMMARY	--	--	--	--	--
WATER YEAR 1965					
OCTOBER	1	0	--	0	0.000
NOVEMBER	34	12	--	0	0.026
DECEMBER	6	0	--	0	0.000
JANUARY	5	0	--	0	0.000
FEBRUARY	9	1	--	0	0.008
MARCH	6	0	--	0	0.000
APRIL	121	38	--	0	0.023
MAY	22,170	47,658	--	31	0.158
JUNE	266	15	--	0	0.004
JULY	16	1	--	0	0.005
AUGUST	0	0	--	0	0.000
SEPTEMBER	585	503	--	0	0.063
SUMMARY	23,219	48,228	104	32	0.153

BRAZOS RIVER BASIN

BRAZOS RIVER NEAR SOUTH BEND

Net Drainage Area: 12,360 square miles.

Location: State Highway 67 bridge, 2 miles northeast of South Bend. Flow records are from stream-gaging station, at same location.

Records Available: January 15, 1942 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	2,461,000	15,257,759	1,234	10,006	1.696
MIN	1964	149,017	593,130	48	389	0.292
AVG	22 Years	580,481	4,769,151	386	3,139	0.604
WATER YEAR 1964						
OCTOBER		9,300	12,049	--	8	0.095
NOVEMBER		18,210	35,685	--	23	0.144
DECEMBER		13,600	2,614	--	2	0.014
JANUARY		6,150	1,200	--	1	0.014
FEBRUARY		24,900	84,793	--	56	0.250
MARCH		3,240	198	--	0	0.004
APRIL		3,530	937	--	1	0.019
MAY		12,450	20,601	--	14	0.122
JUNE		26,720	190,398	--	125	0.523
JULY		377	37	--	0	0.007
AUGUST		2,600	334	--	0	0.009
SEPTEMBER		27,940	244,284	--	160	0.642
SUMMARY		149,017	593,130	48	389	0.292
WATER YEAR 1965						
OCTOBER		5,090	3,779	--	2	0.055
NOVEMBER		13,470	30,350	--	20	0.166
DECEMBER		2,050	152	--	0	0.005
JANUARY		2,470	109	--	0	0.003
FEBRUARY		1,500	52	--	0	0.003
MARCH		739	2	--	0	0.000
APRIL		17,750	41,609	--	27	0.172
MAY		237,100	2,451,887	--	1,608	0.760
JUNE		26,720	123,619	--	81	0.340
JULY		1,890	537	--	0	0.021
AUGUST		24,680	973,802	--	639	2.899
SEPTEMBER		20,130	124,530	--	82	0.454
SUMMARY		353,589	3,750,428	303	2,460	0.779

BRAZOS RIVER BASIN

POSSUM KINGDOM RESERVOIR NEAR GRAFORD

Net Drainage Area: 13,310 square miles.

Location: Samples taken in tailrace and over spillway. Outflow records were obtained from computed releases as determined by Brazos River Authority. Outflow records for period October 1953 through September 1959 are streamflow as gaged at Brazos River near Palo Pinto station below Possum Kingdom Reservoir. Inflow estimates were computed by adjusting Brazos River near South Bend streamflow between that gage and Morris Sheppard Dam.

Records Available: January 15, 1942 to date except for October 1960.

RATIOS OF RESERVOIR CAPACITY TO INFLOW

	RECORD PERIOD	RESERVOIR CAPACITY[a/] ACRE-FEET	RESERVOIR INFLOW ACRE-FEET	RATIO C/I
MAX	1952	652,748	52,200	12.50
MIN	1957	623,389	2,953,200	0.21
AVG	1942-65	637,905	739,313	1.69[b/]
	1964	563,138	178,820	3.15
	1965	562,391	424,300	1.33

SEDIMENT OUTFLOW FROM RESERVOIR

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD TONS	SUSPENDED SEDIMENT LOAD ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1943	851,300	624,700	410	0.054
MIN	1964	132,730	1,086	1	0.001
AVG	1943-65[c/]	640,905	85,122	56	0.010
	1964	132,730	1,086	1	0.001
	1965	310,710	6,484	4	0.002

SEDIMENT DISCHARGED WITH FLOOD RELEASES IN 1964-65

May 16-20, 1965	123,334	3,533[d/]	2	0.002

a/ Estimates of reservoir capacity were obtained by correlating adjusted suspended-sediment measurements taken at South Bend with depletion of reservoir capacity occurring between original capacity (May 1941) and deposition survey of February 1949. This correlation was then projected forward.

b/ Average for the 24-year period.

c/ Record for 1960 incomplete and not included.

d/ Included in the 6,484 tons shown for 1965.

BRAZOS RIVER BASIN

AQUILLA CREEK NEAR AQUILLA

Net Drainage Area: 306 square miles.

Location: Farm Road 1304 bridge, 1 mile southeast of Aquilla. Flow records are from stream-gaging station at same location.

Records Available: June 1963 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	107,742	597,462	1,952	392	0.407
MIN	1964	7,278	21,438	70	14	0.216
AVG	2 Years	57,510	309,450	1,011	203	0.395
WATER YEAR 1964						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	0	0	--	0	0.000
	DECEMBER	0	0	--	0	0.000
	JANUARY	231	267	--	0	0.085
	FEBRUARY	173	9	--	0	0.004
	MARCH	1,430	7,995	--	5	0.411
	APRIL	445	71	--	0	0.012
	MAY	68	50	--	0	0.054
	JUNE	31	2	--	0	0.005
	JULY	0	0	--	0	0.000
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	4,900	13,044	--	9	0.196
	SUMMARY	7,278	21,438	70	14	0.216
WATER YEAR 1965						
	OCTOBER	33	68	--	0	0.151
	NOVEMBER	12,990	70,021	--	46	0.396
	DECEMBER	168	6	--	0	0.003
	JANUARY	3,270	14,643	--	10	0.329
	FEBRUARY	14,910	56,854	--	37	0.280
	MARCH	1,210	132	--	0	0.008
	APRIL	714	1,077	--	1	0.111
	MAY	73,040	453,315	--	297	0.456
	JUNE	1,090	171	--	0	0.012
	JULY	46	0	--	0	0.000
	AUGUST	24	0	--	0	0.000
	SEPTEMBER	247	1,175	--	1	0.349
	SUMMARY	107,742	597,462	1952	392	0.407

BRAZOS RIVER BASIN

NORTH BOSQUE RIVER AT HICO

Net Drainage Area: 357 square miles

Location: U.S. Highway 281 bridge near south boundary of Hico. Flow records are from stream-gaging station at same location.

Records Available: April 1962 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	56,940	83,719	235	55	0.108
MIN	1963	17,106	40,345	113	26	0.173
AVG	3 Years	32,843	62,204	174	41	0.139
WATER YEAR 1964						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	949	593	--	0	0.046
	DECEMBER	45	0	--	0	0.000
	JANUARY	1,650	2,203	--	1	0.098
	FEBRUARY	1,360	2,741	--	2	0.148
	MARCH	1,060	198	--	0	0.014
	APRIL	8,250	31,954	--	21	0.285
	MAY	309	13	--	0	0.003
	JUNE	67	4	--	0	0.004
	JULY	4	0	--	0	0.000
	AUGUST	380	635	--	0	0.123
	SEPTEMBER	10,410	24,207	--	16	0.111
	SUMMARY	24,484	62,548	175	41	0.188
WATER YEAR 1965						
	OCTOBER	1,890	1,658	--	1	0.064
	NOVEMBER	8,080	16,116	--	11	0.147
	DECEMBER	375	3	--	0	0.001
	JANUARY	866	117	--	0	0.010
	FEBRUARY	7,570	21,120	--	14	0.205
	MARCH	964	28	--	0	0.002
	APRIL	789	40	--	0	0.004
	MAY	34,390	44,545	--	29	0.095
	JUNE	1,580	67	--	0	0.003
	JULY	151	4	--	0	0.002
	AUGUST	269	21	--	0	0.006
	SEPTEMBER	16	0	--	0	0.000
	SUMMARY	59,940	83,719	235	55	0.108

BRAZOS RIVER BASIN

LEON RIVER AT GATESVILLE

Net Drainage Area: 2,365 square miles.

Location: U.S. Highway 84 bridge, 1 mile west of Gatesville. Flow records are from stream-gaging station at same location.

Records Available: March 1953 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	574,700	1,029,708	435	675	0.132
MIN	1954	34,570	74,210	31	49	0.158
AVG	11 Years	228,487	354,261	150	232	0.114
WATER YEAR 1964						
OCTOBER		44	0	--	0	0.000
NOVEMBER		2,560	4,222	--	3	0.121
DECEMBER		1,080	31	--	0	0.002
JANUARY		1,060	60	--	0	0.004
FEBRUARY		9,900	2,201	--	1	0.016
MARCH		8,900	12,948	--	8	0.107
APRIL		19,030	56,690	--	37	0.219
MAY		7,650	4,479	--	3	0.043
JUNE		7,580	12,181	--	8	0.118
JULY		61	1	--	0	0.001
AUGUST		10,000	41,164	--	27	0.302
SEPTEMBER		31,750	99,689	--	65	0.231
SUMMARY		99,615	233,666	99	153	0.172
WATER YEAR 1965						
OCTOBER		43,910	37,698	--	25	0.063
NOVEMBER		41,250	50,878	--	33	0.091
DECEMBER		25,360	3,941	--	3	0.011
JANUARY		20,820	5,078	--	3	0.018
FEBRUARY		59,960	89,978	--	59	0.110
MARCH		11,360	1,237	--	1	0.008
APRIL		6,690	728	--	0	0.008
MAY		189,200	253,081	--	166	0.098
JUNE		43,820	20,337	--	13	0.034
JULY		42,180	19,325	--	13	0.034
AUGUST		27,290	9,413	--	6	0.025
SEPTEMBER		5,740	10,757	--	7	0.138
SUMMARY		517,580	502,341	212	329	0.071

BRAZOS RIVER BASIN

YEGUA CREEK NEAR SOMERVILLE

Net Drainage Area: 1,008 square miles.

Location: State Highway 36 bridge, 2 miles south of Somerville. Flow records are from stream-gaging station at same location.

Records Available: June 1962 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	311,890	44,145	44	29	0.010
MIN	1964	30,076	9,050	9	6	0.022
AVG	3 Years	170,466	25,145	25	16	0.018
WATER YEAR 1964						
	OCTOBER	0	0	--	0	0.000
	NOVEMBER	340	142	--	0	0.031
	DECEMBER	1,440	545	--	0	0.028
	JANUARY	1,060	408	--	0	0.028
	FEBRUARY	3,680	886	--	1	0.018
	MARCH	13,490	3,633	--	2	0.020
	APRIL	2,850	801	--	1	0.021
	MAY	2,820	952	--	1	0.025
	JUNE	2,180	942	--	1	0.032
	JULY	6	0	--	0	0.000
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	2,210	741	--	0	0.025
	SUMMARY	30,076	9,050	9	6	0.022
WATER YEAR 1965						
	OCTOBER	4,150	823	--	1	0.015
	NOVEMBER	1,990	522	--	0	0.019
	DECEMBER	3,490	639	--	0	0.013
	JANUARY	5,040	1,352	--	1	0.020
	FEBRUARY	73,520	7,882	--	5	0.008
	MARCH	4,460	319	--	0	0.005
	APRIL	3,590	591	--	0	0.012
	MAY	188,200	28,601	--	19	0.011
	JUNE	26,330	3,166	--	2	0.009
	JULY	317	24	--	0	0.006
	AUGUST	735	211	--	0	0.021
	SEPTEMBER	68	15	--	0	0.016
	SUMMARY	311,890	44,145	44	29	0.010

BRAZOS RIVER BASIN

NAVASOTA RIVER NEAR EASTERLY

Net Drainage Area: 940 square miles.

Location: U.S. Highway 79 bridge, 7 miles northeast of Easterly. Flow records are from stream-gaging station at same location.

Records Available: January 1942 to date except for missing periods, February through September 1954, April through August 1958, and June through August 1959.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1944	592,700	889,340	946	583	0.110
MIN	1963	11,199	3,078	3	2	0.020
AVG	20 Years	276,713	212,022	226	139	0.056
WATER YEAR 1964						
	OCTOBER	74	1	--	0	0.001
	NOVEMBER	103	0	--	0	0.000
	DECEMBER	284	8	--	0	0.002
	JANUARY	586	31	--	0	0.004
	FEBRUARY	1,200	125	--	0	0.008
	MARCH	5,060	2,263	--	1	0.033
	APRIL	4,590	3,479	--	2	0.056
	MAY	1,440	782	--	1	0.040
	JUNE	176	9	--	0	0.004
	JULY	23	0	--	0	0.000
	AUGUST	2,000	297	--	0	0.011
	SEPTEMBER	3,120	1,459	--	1	0.034
	SUMMARY	18,656	8,454	9	6	0.033
WATER YEAR 1965						
	OCTOBER	270	50	--	0	0.014
	NOVEMBER	1,320	263	--	0	0.015
	DECEMBER	328	56	--	0	0.013
	JANUARY	32,780	25,322	--	17	0.057
	FEBRUARY	38,030	12,200	--	8	0.024
	MARCH	31,450	34,699	--	23	0.081
	APRIL	88,560	21,674	--	14	0.018
	MAY	319,400	63,795	--	42	0.015
	JUNE	28,920	4,999	--	3	0.013
	JULY	812	62	--	0	0.006
	AUGUST	151	4	--	0	0.002
	SEPTEMBER	384	27	--	0	0.005
	SUMMARY	542,405	163,151	174	107	0.022

BRAZOS RIVER BASIN

BRAZOS RIVER AT RICHMOND

Net Drainage Area: 34,780 square miles.

Location: U.S. Highway 59 bridge on northeast edge of Richmond. Flow records are from stream-gaging station at same location. Samples were obtained upriver near Rosenberg prior to April 13, 1932.

Records Available: June 11, 1924 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1941	16,120,000	97,306,510	2,798	63,824	0.443
MIN	1951	1,027,000	1,079,170	31	708	0.077
AVG	1925-65	5,237,800	26,725,833	760	17,510	0.370
WATER YEAR 1964						
	OCTOBER	52,400	11,455	--	8	0.016
	NOVEMBER	63,630	14,140	--	9	0.016
	DECEMBER	66,370	14,639	--	10	0.016
	JANUARY	53,810	12,313	--	8	0.017
	FEBRUARY	117,100	92,878	--	61	0.058
	MARCH	213,900	367,338	--	241	0.126
	APRIL	97,930	71,230	--	47	0.053
	MAY	163,200	188,645	--	124	0.085
	JUNE	148,800	568,578	--	373	0.281
	JULY	82,900	21,979	--	14	0.019
	AUGUST	33,840	2,013	--	1	0.004
	SEPTEMBER	151,200	484,909	--	318	0.236
	SUMMARY	1,245,080	1,850,117	53	1,214	0.109
WATER YEAR 1965						
	OCTOBER	181,500	202,465	--	133	0.082
	NOVEMBER	247,900	357,771	--	235	0.106
	DECEMBER	167,200	57,042	--	37	0.025
	JANUARY	482,200	3,382,355	--	2,218	0.515
	FEBRUARY	1,016,000	4,578,537	--	3,003	0.331
	MARCH	383,200	266,579	--	175	0.051
	APRIL	437,000	953,649	--	625	0.160
	MAY	2,668,000	5,140,682	--	3,372	0.142
	JUNE	1,187,000	3,623,318	--	2,377	0.224
	JULY	323,400	183,275	--	120	0.042
	AUGUST	227,900	65,473	--	43	0.021
	SEPTEMBER	109,000	65,597	--	43	0.044
	SUMMARY	7,430,300	18,876,743	543	12,381	0.187

COLORADO RIVER BASIN

COLORADO RIVER NEAR SAN SABA

Net Drainage Area: 18,700 square miles.

Location: U.S. Highway 190 bridge, 9.2 miles east of San Saba. Flow records are from stream-gaging station at same location.

Records Available: September 11, 1930 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1935	2,564,000	14,423,520	771	9,460	0.413
MIN	1943	475,100	703,520	109	461	0.109
AVG	35 Years	980,557	3,633,916	194	2,384	0.272
WATER YEAR 1964						
	OCTOBER	1,980	150	--	0	0.006
	NOVEMBER	12,880	19,746	--	13	0.113
	DECEMBER	6,120	221	--	0	0.003
	JANUARY	5,270	190	--	0	0.003
	FEBRUARY	13,680	2,958	--	2	0.016
	MARCH	21,690	22,332	--	15	0.076
	APRIL	64,510	265,954	--	174	0.303
	MAY	18,150	3,309	--	2	0.013
	JUNE	18,330	7,919	--	5	0.032
	JULY	127	5	--	0	0.003
	AUGUST	7,880	9,603	--	6	0.090
	SEPTEMBER	261,300	1,050,614	--	689	0.295
	SUMMARY	431,917	1,383,001	74	907	0.235
WATER YEAR 1965						
	OCTOBER	34,690	23,302	--	15	0.049
	NOVEMBER	56,430	102,165	--	67	0.133
	DECEMBER	17,240	953	--	1	0.004
	JANUARY	22,010	12,778	--	8	0.043
	FEBRUARY	45,860	28,927	--	19	0.046
	MARCH	17,800	1,015	--	1	0.004
	APRIL	12,550	5,568	--	4	0.033
	MAY	501,200	1,193,613	--	783	0.175
	JUNE	71,740	65,111	--	43	0.067
	JULY	8,960	824	--	1	0.007
	AUGUST	4,890	410	--	0	0.006
	SEPTEMBER	18,760	13,752	--	9	0.054
	SUMMARY	812,130	1,448,418	77	950	0.131

COLORADO RIVER BASIN

BUCHANAN RESERVOIR NEAR BURNET

Net Drainage Area: 19,350 square miles

Location: Tailrace at Buchanan Dam, 10 miles west of Burnet. Outflow records were obtained from computed releases as determined by Lower Colorado River Authority. Inflow records were obtained by combining computed releases with daily reservoir content changes.

Records Available: October 1947 to date.

RATIOS OF RESERVOIR CAPACITY TO INFLOW

	RECORD PERIOD	RESERVOIR CAPACITY[a] ACRE-FEET	RESERVOIR INFLOW ACRE-FEET	RATIO C/I
MAX	1962	891,600	263,600	3.38
MIN	1957	908,800	2,527,000	0.36
AVG	1948-65	911,280	688,798	1.82[b]
	1964	885,200	469,600	1.88
	1965	882,000	899,700	0.98

SEDIMENT OUTFLOW FROM RESERVOIR

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	2,485,000	124,833	82	0.004
MIN	1963	280,281	2,407	2	0.001
AVG	1948-65	680,422	28,588	19	0.003
	1964	424,558	4,289	3	0.001
	1965	683,890	10,601	7	0.001
SEDIMENT DISCHARGED WITH FLOOD RELEASES IN 1964-65					
May 14-27, 1965		459,435[c]	6,843	4	0.001

[a] Estimates of reservoir capacity from U.S. Bureau of Reclamation projections as presented in the report "The Lower Colorado River Authority" dated November 1960, Volume I.

[b] Average for the 18-year period.

[c] Combined release from turbines, floodgates, and spillway as computed by the Lower Colorado River Authority. This flood discharge is included in the 683,890 acre-feet shown for 1965.

COLORADO RIVER BASIN

LLANO RIVER AT LLANO

Net Drainage Area: 4,233 square miles.

Location: State Highway 16 bridge in downtown Llano. Flow records are from stream-gaging station Llano River at Llano, 0.4 mile downstream.

Records Available: August 1942 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1952	285,200	5,551,820	1,312	3,641	1.430
MIN	1962	104,700	1,503	0	0	0.001
AVG	21 Years	208,541	514,900	122	34	0.181
WATER YEAR 1964						
OCTOBER		3,850	39	--	0	0.001
NOVEMBER		8,950	981	--	1	0.008
DECEMBER		5,800	98	--	0	0.001
JANUARY		6,050	95	--	0	0.001
FEBRUARY		9,290	290	--	0	0.002
MARCH		11,080	3,623	--	2	0.024
APRIL		6,720	180	--	0	0.002
MAY		6,960	354	--	0	0.004
JUNE		1,810	38	--	0	0.002
JULY		161	0	--	0	0.000
AUGUST		14,760	3,157	--	2	0.016
SEPTEMBER		177,100	471,378	--	309	0.196
SUMMARY		252,531	480,233	113	315	0.140
WATER YEAR 1965						
OCTOBER		27,440	1,340	--	1	0.004
NOVEMBER		23,680	1,226	--	1	0.004
DECEMBER		11,640	198	--	0	0.001
JANUARY		11,110	111	--	0	0.001
FEBRUARY		43,700	17,305	--	11	0.029
MARCH		13,960	349	--	0	0.002
APRIL		9,780	171	--	0	0.001
MAY		85,750	99,377	--	65	0.085
JUNE		20,550	826	--	1	0.003
JULY		6,310	220	--	0	0.003
AUGUST		3,930	130	--	0	0.002
SEPTEMBER		5,790	929	--	1	0.012
SUMMARY		263,640	122,182	29	80	0.034

COLORADO RIVER BASIN

PEDERNALES RIVER NEAR JOHNSON CITY

Net Drainage Area: 947 square miles.

Location: U.S. Highway 281 bridge about 1.1 miles northeast of Johnson City. Flow records are from stream-gaging station at same location.

Records Available: August 1942 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1952	414,400	12,645,548	13,353	8,294	2.242
MIN	1956	2,990	199	0	0	0.005
AVG	22 Years	105,846	720,685	761	473	0.500
WATER YEAR 1964						
	OCTOBER	804	27	--	0	0.002
	NOVEMBER	7,460	13,328	--	9	0.131
	DECEMBER	1,420	44	--	0	0.002
	JANUARY	2,980	964	--	1	0.024
	FEBRUARY	3,950	310	--	0	0.006
	MARCH	10,850	25,921	--	17	0.176
	APRIL	2,760	204	--	0	0.005
	MAY	1,000	26	--	0	0.002
	JUNE	271	5	--	0	0.001
	JULY	9	0	--	0	0.000
	AUGUST	5	0	--	0	0.000
	SEPTEMBER	7,450	3,715	--	2	0.037
	SUMMARY	38,959	44,544	48	29	0.084
WATER YEAR 1965						
	OCTOBER	1,150	23	--	0	0.001
	NOVEMBER	2,950	242	--	0	0.006
	DECEMBER	998	23	--	0	0.002
	JANUARY	887	16	--	0	0.001
	FEBRUARY	18,640	49,412	--	32	0.195
	MARCH	2,740	48	--	0	0.001
	APRIL	6,210	8,829	--	6	0.104
	MAY	49,840	182,565	--	120	0.269
	JUNE	24,850	82,562	--	54	0.244
	JULY	2,280	27	--	0	0.001
	AUGUST	612	5	--	0	0.001
	SEPTEMBER	21,660	72,619	--	48	0.246
	SUMMARY	132,817	396,371	419	260	0.219

COLORADO RIVER BASIN

COLORADO RIVER AT AUSTIN

Net Drainage Area: 26,500 square miles.

Location: U.S. Highway 183 bridge. Flow records are from stream-gaging station Colorado River at Austin, 1,000 feet upstream from bridge.

Records Available: August 2, 1937 to date except for May through September in 1962, and November 1963 through June 1964. Record reflects changing development above Austin. Comparison of record is made for period following closure of Town Lake Dam in Austin.

RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX 1961	1,811,630	117,006	4	77	0.005
MIN 1965	1,067,510	70,018	3	46	0.005
AVG 4 Years a/	1,549,590	88,234	3	58	0.004
WATER YEAR 1964					
OCTOBER	9,670	1,686	--	1	0.013
NOVEMBER	2,470	--	--	--	--
DECEMBER	2,700	--	--	--	--
JANUARY	3,800	--	--	--	--
FEBRUARY	2,860	--	--	--	--
MARCH	3,380	--	--	--	--
APRIL	66,080	--	--	--	--
MAY	98,300	--	--	--	--
JUNE	110,100	--	--	--	--
JULY	96,440	4,979	--	3	0.004
AUGUST	72,080	2,819	--	2	0.003
SEPTEMBER	61,690	2,628	--	2	0.003
SUMMARY	--	--	--	--	--
WATER YEAR 1965					
OCTOBER	8,090	873	--	1	0.008
NOVEMBER	6,620	1,316	--	1	0.015
DECEMBER	5,020	511	--	0	0.007
JANUARY	16,770	1,485	--	1	0.007
FEBRUARY	43,670	3,369	--	2	0.006
MARCH	16,350	2,117	--	1	0.010
APRIL	52,370	3,148	--	2	0.004
MAY	256,100	16,121	--	11	0.005
JUNE	385,400	13,325	--	9	0.003
JULY	114,000	11,820	--	8	0.008
AUGUST	87,090	10,504	--	7	0.009
SEPTEMBER	76,030	5,429	--	4	0.005
SUMMARY	1,067,510	70,018	3	46	0.005

a/ 1962 and 1964 records incomplete.

LAVACA RIVER BASIN

LAVACA RIVER NEAR EDNA

Net Drainage Area: 887 square miles.

Location: U.S. Highway 59 bridge, 2.8 miles southwest of Edna. Flow records are from stream-gaging station at same location.

Records Available: September 1945 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1958	372,100	432,669	488	284	0.085
MIN	1956	4,440	4,672	5	3	0.077
AVG	20 Years	170,718	163,294	184	107	0.070
WATER YEAR 1964						
	OCTOBER	312	16	--	0	0.004
	NOVEMBER	1,180	342	--	0	0.021
	DECEMBER	2,390	606	--	0	0.019
	JANUARY	2,240	1,985	--	1	0.065
	FEBRUARY	4,210	3,094	--	2	0.054
	MARCH	5,480	9,372	--	6	0.126
	APRIL	4,420	8,791	--	6	0.146
	MAY	1,870	896	--	1	0.035
	JUNE	17,590	25,010	--	16	0.104
	JULY	1,080	73	--	0	0.005
	AUGUST	1,630	1,888	--	1	0.085
	SEPTEMBER	11,480	5,544	--	4	0.035
	SUMMARY	53,882	57,617	65	38	0.079
WATER YEAR 1965						
	OCTOBER	2,520	148	--	0	0.004
	NOVEMBER	636	14	--	0	0.002
	DECEMBER	917	34	--	0	0.003
	JANUARY	36,600	49,929	--	33	0.100
	FEBRUARY	55,890	100,829	--	66	0.133
	MARCH	5,090	735	--	0	0.011
	APRIL	4,240	2,310	--	2	0.040
	MAY	99,660	93,148	--	61	0.069
	JUNE	40,830	36,404	--	24	0.065
	JULY	3,020	643	--	0	0.016
	AUGUST	1,980	475	--	0	0.018
	SEPTEMBER	1,240	201	--	0	0.012
	SUMMARY	252,623	284,870	321	187	0.083

LAVACA RIVER BASIN

NAVIDAD RIVER NEAR HALLETTSVILLE

Net Drainage Area: 333 square miles.

Location: U.S. Highway 90A bridge, 8 miles east-northeast of Hallettsville. Flow records are from stream-gaging station at same location.

Records Available: March 1962 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	125,874	113,136	340	74	0.066
MIN	1964	12,524	8,697	26	6	0.051
AVG	3 Years	52,407	48,031	144	32	0.067
WATER YEAR 1964						
OCTOBER		59	0	--	0	0.000
NOVEMBER		255	10	--	0	0.003
DECEMBER		428	21	--	0	0.004
JANUARY		1,090	216	--	0	0.015
FEBRUARY		1,750	334	--	0	0.014
MARCH		4,150	4,491	--	3	0.079
APRIL		1,400	566	--	0	0.030
MAY		600	72	--	0	0.009
JUNE		395	123	--	0	0.023
JULY		19	0	--	0	0.000
AUGUST		28	0	--	0	0.000
SEPTEMBER		2,350	2,864	--	2	0.090
SUMMARY		12,524	8,697	--	6	0.051
WATER YEAR 1965						
OCTOBER		287	36	--	0	0.009
NOVEMBER		304	34	--	0	0.008
DECEMBER		710	65	--	0	0.007
JANUARY		9,810	4,772	--	3	0.036
FEBRUARY		27,430	22,178	--	15	0.059
MARCH		2,050	268	--	0	0.010
APRIL		1,080	113	--	0	0.008
MAY		52,370	53,992	--	35	0.076
JUNE		30,800	31,525	--	21	0.075
JULY		657	101	--	0	0.011
AUGUST		241	48	--	0	0.015
SEPTEMBER		135	4	--	0	0.002
SUMMARY		125,874	113,136	--	74	0.066

GUADALUPE RIVER BASIN

GUADALUPE RIVER NEAR SPRING BRANCH

Net Drainage Area: 1,282 square miles.

Location: Ranch Road 311 bridge, 2.0 miles southeast of Spring Branch. Flow records are from stream-gaging station at same location.

Records Available: January 1942 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	572,200	873,384	681	573	0.302
MIN	1956	9,650	871	1	1	0.007
AVG	23 Years	171,857	186,995	146	123	0.080
WATER YEAR 1964						
OCTOBER		3,370	966	--	1	0.021
NOVEMBER		5,730	1,015	--	1	0.013
DECEMBER		3,960	125	--	0	0.002
JANUARY		3,680	290	--	0	0.006
FEBRUARY		8,550	773	--	1	0.007
MARCH		16,820	26,775	--	18	0.117
APRIL		7,100	768	--	1	0.008
MAY		3,810	288	--	0	0.006
JUNE		3,010	2,081	--	1	0.051
JULY		237	7	--	0	0.002
AUGUST		4,960	1,577	--	1	0.023
SEPTEMBER		41,060	38,895	--	26	0.070
SUMMARY		102,287	73,560	57	48	0.053
WATER YEAR 1965						
OCTOBER		12,160	934	--	1	0.006
NOVEMBER		9,560	687	--	0	0.005
DECEMBER		6,670	177	--	0	0.002
JANUARY		6,080	170	--	0	0.002
FEBRUARY		23,280	15,194	--	10	0.048
MARCH		13,320	480	--	0	0.003
APRIL		21,900	8,851	--	6	0.030
MAY		83,910	97,250	--	64	0.085
JUNE		43,670	29,414	--	19	0.049
JULY		10,210	619	--	0	0.004
AUGUST		4,920	322	--	0	0.005
SEPTEMBER		6,120	5,568	--	4	0.067
SUMMARY		241,800	159,666	125	105	0.049

GUADALUPE RIVER BASIN

GUADALUPE RIVER AT VICTORIA

Net Drainage Area: 5,161 square miles.

Location: U.S. Highway 59 bridge in Victoria. Flow records are from stream-gaging station at same location.

Records Available: September 1945 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	1,429,000	1,499,513	291	984	0.077
MIN	1956	95,500	8,685	2	4	0.007
AVG	20 Years	980,128	497,680	96	326	0.037
WATER YEAR 1964						
OCTOBER		13,120	1,129	--	1	0.006
NOVEMBER		46,140	52,246	--	34	0.083
DECEMBER		29,120	1,478	--	1	0.004
JANUARY		27,690	1,276	--	1	0.003
FEBRUARY		46,450	11,183	--	7	0.018
MARCH		73,670	40,601	--	27	0.040
APRIL		40,350	9,340	--	6	0.017
MAY		27,470	3,070	--	2	0.008
JUNE		33,250	9,794	--	6	0.022
JULY		15,970	1,365	--	1	0.006
AUGUST		16,690	8,294	--	5	0.037
SEPTEMBER		42,630	19,261	--	13	0.033
SUMMARY		412,550	159,037	31	104	0.028
WATER YEAR 1965						
OCTOBER		51,260	17,830	--	12	0.026
NOVEMBER		57,460	21,202	--	14	0.027
DECEMBER		32,350	2,187	--	1	0.005
JANUARY		98,290	129,535	--	85	0.097
FEBRUARY		263,000	306,049	--	201	0.085
MARCH		78,170	11,146	--	7	0.010
APRIL		72,570	18,548	--	12	0.019
MAY		266,000	224,017	--	147	0.062
JUNE		239,100	163,501	--	107	0.050
JULY		68,630	9,641	--	6	0.010
AUGUST		42,950	5,379	--	4	0.009
SEPTEMBER		42,060	5,640	--	4	0.010
SUMMARY		1,311,840	914,675	177	600	0.051

SAN ANTONIO RIVER BASIN

CIBOLO CREEK NEAR FALLS CITY

Net Drainage Area: 827 square miles.

Location: State Highway 123 bridge, 5.5 miles northeast of Falls City. Flow records from stream-gaging station at same location.

Records Available: June 1963 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1965	106,481	129,066	156	85	0.089
MIN	1964	35,782	8,830	11	6	0.018
AVG	2 Years	71,132	68,948	84	45	0.071
WATER YEAR 1964						
	OCTOBER	833	144	--	0	0.013
	NOVEMBER	7,480	2,554	--	2	0.025
	DECEMBER	909	30	--	0	0.002
	JANUARY	3,080	722	--	0	0.017
	FEBRUARY	5,650	899	--	1	0.012
	MARCH	5,670	1,366	--	1	0.018
	APRIL	980	69	--	0	0.005
	MAY	607	42	--	0	0.005
	JUNE	3,400	649	--	0	0.014
	JULY	349	19	--	0	0.004
	AUGUST	824	76	--	0	0.007
	SEPTEMBER	6,000	2,260	--	1	0.028
	SUMMARY	35,782	8,830	11	6	0.018
WATER YEAR 1965						
	OCTOBER	2,330	290	--	0	0.009
	NOVEMBER	7,330	1,113	--	1	0.011
	DECEMBER	978	69	--	0	0.005
	JANUARY	1,750	312	--	0	0.013
	FEBRUARY	21,690	27,733	--	18	0.094
	MARCH	2,040	421	--	0	0.015
	APRIL	4,900	1,884	--	1	0.028
	MAY	52,810	91,106	--	60	0.127
	JUNE	9,750	5,922	--	4	0.045
	JULY	1,270	95	--	0	0.005
	AUGUST	1,010	77	--	0	0.006
	SEPTEMBER	623	44	--	0	0.005
	SUMMARY	106,481	129,066	156	85	0.089

SAN ANTONIO RIVER BASIN

SAN ANTONIO RIVER AT GOLIAD

Net Drainage Area: 3,921 square miles

Location: U.S. Highway 183 bridge in Goliad. Flow records are from stream-gaging station at same location.

Records Available: January 1942 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	705,400	1,725,533	440	1,132	0.180
MIN	1954	103,800	76,530	20	50	0.054
AVG	23 Years	370,337	512,612	131	336	0.102
WATER YEAR 1964						
	OCTOBER	18,110	40,391	--	26	0.164
	NOVEMBER	20,480	47,712	--	31	0.171
	DECEMBER	15,080	4,776	--	3	0.023
	JANUARY	13,140	1,177	--	1	0.007
	FEBRUARY	30,880	82,847	--	54	0.197
	MARCH	27,430	59,952	--	39	0.161
	APRIL	11,500	1,271	--	1	0.008
	MAY	9,370	2,428	--	2	0.019
	JUNE	17,230	17,750	--	12	0.076
	JULY	5,460	320	--	0	0.004
	AUGUST	29,020	48,593	--	32	0.123
	SEPTEMBER	12,310	11,206	--	7	0.067
	SUMMARY	210,010	318,423	81	209	0.111
WATER YEAR 1965						
	OCTOBER	19,430	39,656	--	26	0.150
	NOVEMBER	35,640	60,619	--	40	0.125
	DECEMBER	14,070	1,340	--	1	0.007
	JANUARY	34,910	81,029	--	53	0.171
	FEBRUARY	98,770	220,652	--	145	0.164
	MARCH	19,900	2,470	--	2	0.009
	APRIL	27,490	21,735	--	14	0.058
	MAY	160,200	209,462	--	137	0.096
	JUNE	43,570	44,359	--	29	0.075
	JULY	14,180	1,209	--	1	0.006
	AUGUST	10,640	662	--	0	0.005
	SEPTEMBER	10,520	3,710	--	2	0.026
	SUMMARY	489,320	686,813	175	450	0.103

NUECES RIVER BASIN

NUECES RIVER AT COTULLA

Net Drainage Area: 5,260 square miles.

Location: U.S. Highway 81 bridge at Cotulla. Flow records are from stream-gaging station at same location.

Records Available: January 1942 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1958	359,400	474,297	90	311	0.097
MIN	1951	31,050	10,010	2	7	0.024
AVG	23 Years	170,148	87,088	17	57	0.038
WATER YEAR 1964						
	OCTOBER	1,960	601	--	0	0.023
	NOVEMBER	147	8	--	0	0.004
	DECEMBER	0	0	--	0	0.000
	JANUARY	0	0	--	0	0.000
	FEBRUARY	0	0	--	0	0.000
	MARCH	0	0	--	0	0.000
	APRIL	0	0	--	0	0.000
	MAY	1,720	499	--	0	0.021
	JUNE	189	38	--	0	0.015
	JULY	0	0	--	0	0.000
	AUGUST	35,240	4,777	--	3	0.010
	SEPTEMBER	322,300	32,671	--	21	0.007
	SUMMARY	361,556	38,594	7	25	0.008
WATER YEAR 1965						
	OCTOBER	120,800	7,367	--	5	0.004
	NOVEMBER	1,360	50	--	0	0.003
	DECEMBER	27	0	--	0	0.000
	JANUARY	0	0	--	0	0.000
	FEBRUARY	20	0	--	0	0.000
	MARCH	0	0	--	0	0.000
	APRIL	0	0	--	0	0.000
	MAY	79,110	10,024	--	7	0.009
	JUNE	18,130	2,773	--	2	0.011
	JULY	5,130	235	--	0	0.003
	AUGUST	0	0	--	0	0.000
	SEPTEMBER	0	0	--	0	0.000
	SUMMARY	224,577	20,449	4	13	0.007

NUECES RIVER BASIN

FRIO RIVER AT CALLIHAM

Net Drainage Area: 5,491 square miles.

Location: Farm Road 99 bridge, 1 mile north of Calliham. Flow records are from stream-gaging station Frio River at Calliham, about 2,500 feet upstream from sampling point.

Records Available: January 1953 to date.

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	TONS PER SQ MI	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1957	374,300	485,754	88	319	0.095
MIN	1962	14,278	17,726	3	12	0.091
AVG	12 Years	131,691	150,993	27	99	0.084
WATER YEAR 1964						
OCTOBER		728	701	--	0	0.071
NOVEMBER		2,600	6,245	--	4	0.176
DECEMBER		2,180	3,001	--	2	0.101
JANUARY		43	1	--	0	0.002
FEBRUARY		22	0	--	0	0.000
MARCH		1,290	1,376	--	1	0.078
APRIL		66	4	--	0	0.004
MAY		510	121	--	0	0.017
JUNE		3,330	2,648	--	2	0.058
JULY		375	695	--	0	0.136
AUGUST		3,540	6,076	--	4	0.126
SEPTEMBER		1,210	2,813	--	2	0.171
SUMMARY		15,894	23,681	4	16	0.109
WATER YEAR 1965						
OCTOBER		7,960	4,079	--	3	0.038
NOVEMBER		9,010	4,042	--	3	0.033
DECEMBER		129	0	--	0	0.000
JANUARY		651	43	--	0	0.005
FEBRUARY		4,760	4,458	--	3	0.069
MARCH		103	3	--	0	0.002
APRIL		7,040	4,296	--	3	0.045
MAY		68,730	82,004	--	54	0.088
JUNE		2,360	424	--	0	0.013
JULY		12	0	--	0	0.000
AUGUST		0	0	--	0	0.000
SEPTEMBER		8	0	--	0	0.000
SUMMARY		100,763	99,349	18	65	0.072

NUECES RIVER BASIN

LAKE CORPUS CHRISTI NEAR MATHIS

Net Drainage Area: 16,660 square miles.

Location: State Highway 359 bridge about 0.6 mile downstream from Wesley E. Seale Dam. Flow records are from stream-gaging station Nueces River near Mathis, at the same location.

Records Available: February 2,1942 through May 1958, and July 1961 to date.

RATIOS OF RESERVOIR CAPACITY TO INFLOW

	RECORD PERIOD	RESERVOIR CAPACITY[a/] ACRE-FEET	RESERVOIR INFLOW ACRE-FEET	RATIO C/I
MAX	1962	298,367	76,167	3.92
MIN	1959	301,443	673,452	0.45
AVG	1959-65	299,047	444,783	1.21[b/]
	1964	297,922	327,834	0.91
	1965	297,433	634,608	0.47

SEDIMENT OUTFLOW FROM RESERVOIR

	RECORD PERIOD	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
MAX	1961	613,000	39,908[c/]	26	0.005
MIN	1963	79,240	2,769	2	0.003
AVG	1959-65	350,677	20,666[c/]	14	0.004
	1964	75,370	3,445	2	0.003
	1965	569,830	33,642	22	0.004
SEDIMENT DISCHARGED WITH FLOOD RELEASES IN 1964-65					
Oct	5-15, 1965	161,990	7,506	5	0.003
Feb	24-Mar 11, 1965	86,540	3,939	3	0.003
May	20-Jun 11, 1965	203,684	15,541	10	0.006

a/ Estimates of reservoir capacity were determined using sediment inflow values taken from an adjusted sediment production curve for stream-gaging station Nueces River at Three Rivers, less measured sediment outflow. For period of no measurement of sediment outflows, estimated values were obtained from a sediment production curve for stream-gaging station Nueces River near Mathis.

b/ Average for the period 1959-65.

c/ Estimated from sediment production curve for stream-gaging station Nueces River near Mathis during period of missing record.

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM SAMPLING STATIONS OPERATED BY INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM

SAMPLING STATIONS OPERATED BY

INTERNATIONAL BOUNDARY AND WATER COMMISSION,

UNITED STATES AND MEXICO

RIO GRANDE AT EL PASO

Net Drainage Area: 29,267 square miles (all in U.S.).

Location: Courchesne bridge between El Paso, Texas and Cd. Juarez, Chihuahua. Flow records are from the stream-gaging station at same location.

Records Available: September 1947 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	6,089	328	0	0.004
NOVEMBER	4,563	125	0	0.002
DECEMBER	4,186	109	0	0.002
JANUARY	3,513	60	0	0.001
FEBRUARY	2,324	61	0	0.002
MARCH	7,877	5,270	4	0.049
APRIL	12,050	4,290	3	0.026
MAY	1,205	49	0	0.003
JUNE	6,316	3,490	2	0.041
JULY	9,652	6,730	5	0.051
AUGUST	10,421	16,200	11	0.115
SEPTEMBER	9,431	13,600	9	0.106
SUMMARY	77,627	50,312	34	0.048

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	534	23	0	0.003
NOVEMBER	483	21	0	0.003
DECEMBER	501	40	0	0.006
JANUARY	495	52	0	0.008
FEBRUARY	451	9	0	0.001
MARCH	3,601	2,040	1	0.042
APRIL	15,245	5,110	4	0.025
MAY	522	37	0	0.005
JUNE	39,547	38,400	26	0.071
JULY	57,109	30,700	21	0.040
AUGUST	51,234	27,900	19	0.040
SEPTEMBER	29,827	74,200	51	0.183
SUMMARY	199,549	178,532	122	0.066

RIO GRANDE BELOW RIO CONCHOS NEAR PRESIDIO

Net Drainage Area: 66,203 square miles (34,098 square miles in U.S. and 32,105 square miles in Mexico).

Location: Cable car 10.1 miles downstream from the International Highway bridge between Presidio, Texas and Ojinaga, Chihuahua, Mexico. Flow records are from stream-gaging station at same location.

Records Available: October 1949 to date (Prior to January 1955, samples were taken 11.8 miles upstream from present sampling site).

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	36,032	61,200	42	0.125
NOVEMBER	32,819	25,100	17	0.056
DECEMBER	28,219	6,450	4	0.017
JANUARY	23,467	1,220	1	0.004
FEBRUARY	25,962	2,170	2	0.006
MARCH	26,206	7,970	6	0.022
APRIL	11,921	587	0	0.004
MAY	23,068	93,400	64	0.298
JUNE	68,907	618,000	426	0.660
JULY	26,702	46,500	32	0.128
AUGUST	37,252	283,000	195	0.559
SEPTEMBER	51,702	471,000	324	0.671
SUMMARY	392,257	1,616,597	1,113	0.303

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	36,796	36,000	25	0.072
NOVEMBER	30,371	5,040	4	0.012
DECEMBER	30,459	3,610	3	0.009
JANUARY	32,506	3,550	2	0.008
FEBRUARY	32,267	4,540	3	0.010
MARCH	26,269	2,430	2	0.007
APRIL	11,713	713	0	0.004
MAY	13,410	2,970	2	0.016
JUNE	22,955	27,000	19	0.087
JULY	12,650	5,080	4	0.030
AUGUST	52,880	919,000	633	1.279
SEPTEMBER	70,232	498,000	343	0.521
SUMMARY	372,508	1,507,933	1,040	0.298

RIO GRANDE BASIN

RIO GRANDE AT JOHNSON RANCH NEAR CASTOLON

Net Drainage Area: 70,715 square miles (36,261 square miles in U.S. and 34,454 square miles in Mexico).

Location: Cable car 2 miles upstream from Johnson Ranch and 14 miles downstream from Castolon, Texas. Flow records are from stream-gaging station at same location.

Records Available: October 1949 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	52,134	133,000	92	0.188
NOVEMBER	30,754	7,490	5	0.018
DECEMBER	28,886	8,750	6	0.022
JANUARY	24,300	1,730	1	0.005
FEBRUARY	23,461	719	1	0.002
MARCH	27,071	13,700	9	0.037
APRIL	10,382	457	0	0.003
MAY	27,191	618,000	426	1.672
JUNE	76,980	1,155,000	795	1.104
JULY	28,554	200,000	138	0.515
AUGUST	38,127	231,000	159	0.445
SEPTEMBER	73,320	929,000	640	0.933
SUMMARY	441,160	3,298,846	2,272	0.550

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	35,818	38,300	26	0.079
NOVEMBER	28,735	5,050	4	0.013
DECEMBER	28,979	5,420	4	0.014
JANUARY	31,195	7,600	5	0.018
FEBRUARY	32,127	5,440	4	0.012
MARCH	26,141	2,060	1	0.006
APRIL	9,436	124	0	0.001
MAY	23,637	55,500	38	0.173
JUNE	27,382	158,000	109	0.424
JULY	9,028	74,900	52	0.610
AUGUST	52,563	1,107,000	762	1.550
SEPTEMBER	76,097	787,000	542	0.761
SUMMARY	381,138	2,246,394	1,547	0.434

RIO GRANDE BASIN

RIO GRANDE AT LANGTRY

Net Drainage Area: 84,795 square miles (42,855 square miles in U.S. and 41,940 square miles in Mexico).

Location: Cable car at Langtry, Texas. Flow records are from the stream-gaging station at same location.

Records Available: April 1944 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	70,256	510,000	351	0.534
NOVEMBER	45,773	5,070	4	0.008
DECEMBER	49,847	38,100	26	0.056
JANUARY	46,906	25,900	18	0.041
FEBRUARY	37,651	1,080	1	0.002
MARCH	47,023	15,600	11	0.024
APRIL	58,960	25,200	17	0.031
MAY	50,181	176,000	121	0.259
JUNE	110,314	1,547,000	1,070	1.032
JULY	56,748	131,000	90	0.170
AUGUST	66,898	459,000	316	0.504
SEPTEMBER	277,740	2,889,000	1,990	0.765
SUMMARY	918,297	5,822,950	4,015	0.467

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	64,325	168,000	116	0.192
NOVEMBER	47,941	4,370	3	0.007
DECEMBER	48,439	13,800	10	0.021
JANUARY	50,885	3,220	2	0.005
FEBRUARY	50,399	5,230	4	0.008
MARCH	44,978	1,690	1	0.003
APRIL	26,627	1,190	1	0.003
MAY	92,540	543,000	374	0.432
JUNE	174,842	1,822,000	1,250	0.767
JULY	35,634	106,000	73	0.219
AUGUST	73,552	1,418,000	977	1.419
SEPTEMBER	104,959	1,323,000	911	0.928
SUMMARY	815,121	5,409,500	3,722	0.488

PECOS RIVER NEAR SHUMLA

Net Drainage Area: 35,162 square miles (all in U.S.)

Location: Rock ledge and light cableway 4.5 miles north of Shumla and 13 miles upstream from Pecos High Bridge. Flow records are from the stream-gaging station at same location.

Records Available: November 1954 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	5,607	96	0	0.001
NOVEMBER	6,222	77	0	0.001
DECEMBER	7,418	69	0	0.001
JANUARY	8,341	79	0	0.001
FEBRUARY	7,202	158	0	0.002
MARCH	7,430	83	0	0.001
APRIL	21,971	1,040	1	0.003
MAY	5,346	98	0	0.001
JUNE	19,714	429	0	0.002
JULY	5,309	78	0	0.001
AUGUST	5,043	106	0	0.002
SEPTEMBER	178,156	521,000	359	0.215
SUMMARY	277,759	523,313	360	0.139

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	30,649	364	0	0.001
NOVEMBER	15,444	148	0	0.001
DECEMBER	13,960	106	0	0.001
JANUARY	12,097	111	0	0.001
FEBRUARY	10,368	67	0	0.000
MARCH	10,235	82	0	0.001
APRIL	11,060	498	0	0.003
MAY	23,427	2,670	2	0.008
JUNE	39,755	4,680	3	0.009
JULY	10,304	257	0	0.002
AUGUST	10,078	255	0	0.002
SEPTEMBER	9,844	179	0	0.001
SUMMARY	197,221	9,417	5	0.004

RIO GRANDE NEAR DEL RIO

Net Drainage Area: 126,940 square miles (82,750 square miles in U.S. and 44,190 square miles in Mexico).

Location: International bridge between Del Rio, Texas and Cd. Acuna, Coahuila, Mexico. Flow records were obtained from the stream-gaging station Rio Grande below Amistad Dam Site, located 10.5 miles upstream from the sampling point.

Records Available: August 1955 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	SUSPENDED SEDIMENT LOAD OF STREAM ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	103,023	406,000	280	0.290
NOVEMBER	76,087	26,500	18	0.026
DECEMBER	83,347	52,600	36	0.046
JANUARY	90,626	64,100	44	0.052
FEBRUARY	74,282	3,660	3	0.004
MARCH	82,375	12,500	9	0.011
APRIL	122,628	164,000	113	0.098
MAY	92,274	24,800	17	0.020
JUNE	155,546	1,437,000	990	0.680
JULY	84,055	202,000	139	0.177
AUGUST	126,022	964,000	664	0.563
SEPTEMBER	1,187,164	5,892,000	4,060	0.365
SUMMARY	2,277,429	9,249,160	6,373	0.299

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	SUSPENDED SEDIMENT LOAD OF STREAM ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	189,365	207,000	143	0.080
NOVEMBER	126,587	5,370	4	0.003
DECEMBER	118,891	5,040	4	0.003
JANUARY	114,428	1,920	1	0.001
FEBRUARY	107,030	6,430	4	0.004
MARCH	102,825	2,690	2	0.002
APRIL	86,600	3,780	3	0.003
MAY	147,711	337,000	232	0.168
JUNE	351,694	1,769,000	1,220	0.370
JULY	88,147	13,600	9	0.011
AUGUST	120,617	884,000	609	0.539
SEPTEMBER	147,810	911,000	627	0.454
SUMMARY	1,701,705	4,146,830	2,858	0.179

RIO GRANDE BASIN

RIO GRANDE AT LAREDO

Net Drainage Area: 135,976 square miles (85,718 square miles in U.S. and 50,258 square miles in Mexico).

Location: Water Treatment Plant in the northwest part of Laredo, Texas. Flow records were obtained from the stream-gaging station Rio Grande at Laredo, located approximately 2 miles downstream.

Records Available: January 1953 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	138,543	446,000	307	0.237
NOVEMBER	76,315	132,000	91	0.128
DECEMBER	88,453	34,300	24	0.029
JANUARY	74,395	5,770	4	0.006
FEBRUARY	84,979	139,000	96	0.120
MARCH	77,393	27,100	19	0.026
APRIL	101,881	421,000	290	0.304
MAY	93,545	152,000	105	0.119
JUNE	130,411	820,000	565	0.463
JULY	50,408	84,300	58	0.123
AUGUST	159,927	804,000	554	0.370
SEPTEMBER	1,674,055	7,271,000	5,010	0.320
SUMMARY	2,750,305	10,336,470	7,123	0.277

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	365,917	457,000	315	0.092
NOVEMBER	177,943	22,700	16	0.009
DECEMBER	141,072	9,540	7	0.005
JANUARY	134,508	11,600	8	0.006
FEBRUARY	116,612	9,100	6	0.006
MARCH	103,079	6,460	4	0.005
APRIL	87,767	11,900	8	0.010
MAY	294,323	547,000	377	0.137
JUNE	365,258	949,000	654	0.191
JULY	73,120	12,700	9	0.013
AUGUST	102,308	26,200	18	0.019
SEPTEMBER	140,931	551,000	379	0.288
SUMMARY	2,102,838	2,614,200	1,801	0.091

RIO GRANDE BASIN

RIO GRANDE AT FALCON DAM

Net Drainage Area: 164,482 square miles (87,760 square miles in U.S. and 76,722 square miles in Mexico).

Location: United States Tailrace of Falcon Dam. Flow records were obtained from total releases as determined by International Boundary and Water Commission.

Records Available: July 1955 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	61,584	317	0	0.000
NOVEMBER	28,632	268	0	0.001
DECEMBER	45,468	450	0	0.001
JANUARY	59,081	744	1	0.001
FEBRUARY	42,508	579	0	0.001
MARCH	95,353	517	0	0.000
APRIL	284,406	1,060	1	0.000
MAY	284,001	1,620	1	0.000
JUNE	119,917	962	1	0.001
JULY	91,239	613	0	0.000
AUGUST	79,120	543	0	0.001
SEPTEMBER	48,578	375	0	0.001
SUMMARY	1,239,887	8,048	4	0.000

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	136,683	2,360	2	0.001
NOVEMBER	102,325	773	1	0.001
DECEMBER	112,171	433	0	0.000
JANUARY	412,727	1,650	1	0.000
FEBRUARY	140,587	685	0	0.000
MARCH	116,193	416	0	0.000
APRIL	404,416	1,740	1	0.000
MAY	359,912	927	1	0.000
JUNE	290,305	1,620	1	0.000
JULY	229,828	1,350	1	0.000
AUGUST	83,579	574	0	0.001
SEPTEMBER	142,310	996	1	0.001
SUMMARY	2,531,036	13,524	9	0.000

RIO GRANDE BASIN

RIO GRANDE AT FORT RINGGOLD, RIO GRANDE CITY

Net Drainage Area: 180,396 square miles (87,982 square miles in U.S. and 92,414 square miles in Mexico).

Location: Cable car 1 mile downstream from Fort Ringgold in Rio Grande City, Texas. Flow records are from stream-gaging station at same location.

Records Available: May 1959 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	114,089	115,000	79	0.074
NOVEMBER	29,274	2,040	1	0.005
DECEMBER	43,082	2,620	2	0.004
JANUARY	60,941	749	1	0.001
FEBRUARY	44,240	840	1	0.001
MARCH	92,134	2,730	2	0.002
APRIL	285,009	48,500	33	0.013
MAY	380,108	376,000	259	0.073
JUNE	120,468	31,000	21	0.019
JULY	96,412	9,020	6	0.007
AUGUST	77,555	1,780	1	0.002
SEPTEMBER	113,633	370,000	255	0.240
SUMMARY	1,456,945	960,279	661	0.048

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	154,201	79,400	55	0.038
NOVEMBER	104,154	5,500	4	0.004
DECEMBER	111,189	3,360	2	0.002
JANUARY	397,255	45,200	31	0.008
FEBRUARY	158,146	14,100	10	0.007
MARCH	118,395	21,100	15	0.013
APRIL	401,084	26,700	18	0.005
MAY	358,954	28,900	20	0.006
JUNE	294,808	25,600	18	0.006
JULY	238,536	6,800	5	0.002
AUGUST	91,892	16,700	12	0.013
SEPTEMBER	160,535	76,900	53	0.035
SUMMARY	2,589,149	350,260	243	0.010

RIO GRANDE BASIN

RIO GRANDE NEAR LOS EBANOS

Net Drainage Area: Not available.

Location: Ferry at Los Ebanos. Flow records were obtained from the stream-gaging station station Rio Grande at Fort Ringgold, Rio Grande City, Texas, approximately 24 miles upstream and estimated storm runoff between gaging station and sampling station as determined by International Boundary and Water Commission.

Records Available: May 1956 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	114,089	103,000	71	0.066
NOVEMBER	29,274	905	1	0.002
DECEMBER	43,082	3,110	2	0.005
JANUARY	60,941	1,110	1	0.001
FEBRUARY	44,240	2,090	1	0.003
MARCH	92,134	3,440	2	0.003
APRIL	285,009	40,000	28	0.010
MAY	380,108	290,000	200	0.056
JUNE	120,468	34,600	24	0.021
JULY	96,412	5,080	4	0.004
AUGUST	77,555	4,380	3	0.004
SEPTEMBER	113,633	236,000	163	0.153
SUMMARY	1,456,945	723,715	500	0.037

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	154,201	60,200	42	0.029
NOVEMBER	104,154	6,370	4	0.005
DECEMBER	111,189	5,160	4	0.003
JANUARY	397,255	66,500	46	0.012
FEBRUARY	158,146	23,200	16	0.011
MARCH	118,395	5,900	4	0.004
APRIL	401,084	53,400	37	0.010
MAY	358,954	73,700	51	0.015
JUNE	294,808	21,700	15	0.005
JULY	238,536	10,700	7	0.003
AUGUST	91,892	5,550	4	0.004
SEPTEMBER	160,535	83,500	58	0.038
SUMMARY	2,589,149	415,880	288	0.012

RIO GRANDE BELOW ANZALDUAS DAM

Net Drainage Area: 182,138 square miles (88,934 square miles in U.S. and 93,204 square miles in Mexico).

Location: International Highway Bridge between Hidalgo, Texas and Reynosa, Tamaulipas. Flow records are from the stream-gaging stations Rio Grande below Anzalduas Dam, Texas, located 12.2 miles upstream, plus Return Flow to the Rio Grande at Poniente Drain, 0.7 mile upstream.

Records Available: May 1956 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	70,246	176,000	121	0.184
NOVEMBER	19,445	1,310	1	0.005
DECEMBER	16,365	730	1	0.003
JANUARY	34,892	1,150	1	0.002
FEBRUARY	28,469	878	1	0.002
MARCH	58,686	2,640	2	0.003
APRIL	71,930	32,200	22	0.033
MAY	100,124	106,000	73	0.078
JUNE	90,254	6,470	5	0.005
JULY	71,852	2,070	1	0.002
AUGUST	41,258	1,570	1	0.003
SEPTEMBER	48,772	109,000	75	0.164
SUMMARY	652,293	440,018	304	0.050

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	101,958	22,300	15	0.016
NOVEMBER	81,764	4,220	3	0.004
DECEMBER	61,605	2,890	2	0.003
JANUARY	148,356	38,600	27	0.019
FEBRUARY	37,490	6,120	4	0.012
MARCH	67,818	2,250	2	0.002
APRIL	111,218	405,000	279	0.268
MAY	160,590	49,300	34	0.023
JUNE	209,212	29,800	21	0.010
JULY	142,542	5,730	4	0.003
AUGUST	34,125	1,120	1	0.002
SEPTEMBER	81,077	12,200	8	0.011
SUMMARY	1,237,755	579,530	400	0.034

RIO GRANDE BASIN

RIO GRANDE NEAR SAN BENITO

Net Drainage Area: 182,187 square miles (88,954 square miles in U.S. and 93,233 square miles in Mexico).

Location: 5.6 miles below San Benito pumping plant. Flow records are from stream-gaging station at same location.

Records Available: April 1955 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	23,878	76,500	53	0.236
NOVEMBER	10,272	792	1	0.006
DECEMBER	11,551	494	0	0.003
JANUARY	8,352	193	0	0.002
FEBRUARY	10,257	295	0	0.002
MARCH	15,294	1,060	1	0.005
APRIL	16,261	1,060	1	0.005
MAY	40,149	20,700	14	0.038
JUNE	22,166	4,570	3	0.015
JULY	19,597	1,230	1	0.005
AUGUST	13,067	852	1	0.005
SEPTEMBER	15,669	18,000	12	0.084
SUMMARY	206,513	125,746	87	0.045

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	15,913	3,800	3	0.018
NOVEMBER	15,991	1,500	1	0.007
DECEMBER	19,274	1,480	1	0.006
JANUARY	25,829	6,390	4	0.018
FEBRUARY	17,340	5,420	4	0.023
MARCH	13,250	490	0	0.003
APRIL	25,440	7,850	5	0.023
MAY	70,168	49,900	34	0.052
JUNE	45,577	8,810	6	0.014
JULY	33,033	1,670	1	0.004
AUGUST	12,121	512	0	0.003
SEPTEMBER	17,771	1,730	1	0.007
SUMMARY	311,707	89,552	60	0.021

RIO GRANDE NEAR BROWNSVILLE

Net Drainage Area: 182,215 square miles (88,968 square miles in U.S. and 93,247 square miles in Mexico).

Location: Cable car located 1,000 feet downstream from the El Jardin pumping plant and 6.8 river miles downstream from Brownsville. Flow records are from the stream-gaging station Rio Grande near Brownsville, Texas, at the same location.

Records Available: April 1955 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	12,929	25,900	18	0.147
NOVEMBER	8,162	428	0	0.004
DECEMBER	8,271	558	0	0.005
JANUARY	3,175	82	0	0.002
FEBRUARY	6,023	138	0	0.002
MARCH	7,200	199	0	0.002
APRIL	6,587	243	0	0.003
MAY	19,185	5,700	4	0.022
JUNE	10,082	1,010	1	0.007
JULY	5,234	191	0	0.003
AUGUST	4,244	124	0	0.002
SEPTEMBER	4,290	199	0	0.003
SUMMARY	95,382	34,772	23	0.027

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	6,615	1,140	1	0.013
NOVEMBER	5,493	660	0	0.009
DECEMBER	11,160	1,070	1	0.007
JANUARY	4,213	364	0	0.006
FEBRUARY	11,952	981	1	0.006
MARCH	4,544	179	0	0.003
APRIL	3,904	238	0	0.004
MAY	33,347	27,300	19	0.060
JUNE	10,313	1,130	1	0.008
JULY	8,984	557	0	0.005
AUGUST	8,264	626	0	0.006
SEPTEMBER	7,186	848	1	0.009
SUMMARY	115,975	35,093	24	0.022

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM SAMPLING STATIONS OPERATED BY U.S. GEOLOGICAL SURVEY, QUALITY OF WATER BRANCH

RECORDS OF SUSPENDED-SEDIMENT LOADS FROM

SAMPLING STATIONS OPERATED BY

U.S. GEOLOGICAL SURVEY,

QUALITY OF WATER BRANCH

TRINITY RIVER BASIN

ELM FORK TRINITY RIVER NEAR MUENSTER

Net Drainage Area: 46.0 square miles.

Location: State Farm Road 373 bridge, 2.5 miles south of Muenster. Flow records are from stream-gaging station at same location.

Records Available: October 1956 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	0	0		
NOVEMBER	5	0		
DECEMBER	7	0		
JANUARY	5	0		
FEBRUARY	10	1		
MARCH	64	8		
APRIL	115	35		
MAY	146	242		
JUNE	8	2		
JULY	0	0		
AUGUST	2	0		
SEPTEMBER	3,240	5,209		
SUMMARY	3,690	5,498		

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	726	37		
NOVEMBER	10,300	17,159		
DECEMBER	3,000	157		
JANUARY	1,300	899		
FEBRUARY	1,770	481		
MARCH	619	68		
APRIL	411	53		
MAY	3,660	3,103		
JUNE	1,080	494		
JULY	170	14		
AUGUST	161	304		
SEPTEMBER	1,200	1,305		
SUMMARY	24,397	24,073		

TRINITY RIVER BASIN

PIN OAK CREEK NEAR HUBBARD

Net Drainage Area: 17.6 square miles.

Location: State Highway 17 bridge, 5.8 miles southeast of Hubbard. Flow records are from stream-gaging station at same location.

Records Available: October 1956 to September 1960 and September 1962 to date.

WATER YEAR 1964

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	SUSPENDED SEDIMENT LOAD OF STREAM ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	0	0		
NOVEMBER	0	0		
DECEMBER	0	0		
JANUARY	0	0		
FEBRUARY	0	0		
MARCH	10	7		
APRIL	0	0		
MAY	0	0		
JUNE	0	0		
JULY	0	0		
AUGUST	0	0		
SEPTEMBER	77	117		
SUMMARY	87	124		

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	SUSPENDED SEDIMENT LOAD OF STREAM ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	0	0		
NOVEMBER	0	0		
DECEMBER	0	0		
JANUARY	113	179		
FEBRUARY	341	505		
MARCH	755	1,695		
APRIL	482	1,297		
MAY	6,110	11,111		
JUNE	249	35		
JULY	0	0		
AUGUST	0	0		
SEPTEMBER	18	30		
SUMMARY	8,070	14,850		

COLORADO RIVER BASIN

COLORADO RIVER AT COLUMBUS

Net Drainage Area: 29,170 square miles.

Location: U.S. Highway 90 at eastern edge of Columbus. Flow records are from stream-gaging station at same location.

Records Available: March 1957 to date.

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	26,860	1,165		
NOVEMBER	12,120	513		
DECEMBER	9,980	306		
JANUARY	11,190	382		
FEBRUARY	16,260	1,185		
MARCH	40,690	39,946		
APRIL	47,790	7,140		
MAY	92,310	15,630		
JUNE	125,800	79,260		
JULY	98,560	9,832		
AUGUST	67,240	4,434		
SEPTEMBER	115,300	92,270		
SUMMARY	664,100	252,063		

WATER YEAR 1965

MONTH	STREAMFLOW ACRE-FEET	SUSPENDED SEDIMENT LOAD OF STREAM TONS	ACRE-FEET	DRY SEDIMENT PCT BY WEIGHT
OCTOBER	31,710	13,555		
NOVEMBER	25,990	15,294		
DECEMBER	19,110	3,465		
JANUARY	121,500	420,337		
FEBRUARY	261,500	483,226		
MARCH	39,810	1,360		
APRIL	68,900	16,899		
MAY	526,800	754,690		
JUNE	455,200	165,900		
JULY	149,000	13,708		
AUGUST	86,840	4,996		
SEPTEMBER	88,740	10,840		
SUMMARY	1,875,000	1,904,270		