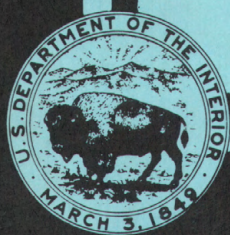
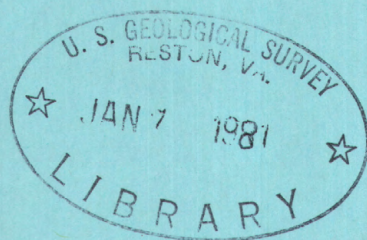


(200)
Ga 3
Texas
1975
pt. 2

Water Resources Data for Texas

Water Year 1975

Volume 2. San Jacinto River Basin,
Brazos River Basin,
San Bernard River Basin and
Intervening Coastal Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-75-1

Prepared in cooperation with the State of Texas
and with other agencies

CALENDAR FOR WATER YEAR 1975

1974

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1975

JANUARY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Water Resources Data for Texas

Water Year 1975

Volume 2. San Jacinto River Basin,
Brazos River Basin,
San Bernard River Basin and
Intervening Coastal Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-75-1

**Prepared in cooperation with the State of Texas
and with other agencies**

BIBLIOGRAPHIC DATA SHEET	1. Report No. USGS/WRD/HD-76/025	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for Texas, 1975 Volumes 1-3		5. Report Date June 1976	
7. Author(s)		6.	
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 300 East 8th Street Austin, Texas 78701		8. Performing Organization Rept. No. USGS-WRD-TX-1	
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 300 East 8th Street Austin, Texas 78701		10. Project/Task/Work Unit No.	
		11. Contract/Grant No.	
		13. Type of Report & Period Covered Oct. 1, 1974 to Sept. 30, 1975	
15. Supplementary Notes Prepared in cooperation with the State of Texas and with other agencies.		14.	
16. Abstracts Surface-water data for the 1975 water year for Texas are presented in three volumes, appropriately identified as to content by river basins. Data in each volume consist of records of stage, discharge, and water quality of streams and canals; and stage, contents, and water quality of lakes and reservoirs. Also included are crest-stage and flood-hydrograph partial-record stations, reconnaissance partial-record stations, and low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. Records for a few pertinent stations in bordering States are also included. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Texas.			
17. Key Words and Document Analysis. 17a. Descriptors *Texas, *Hydrologic data, *Surface water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water analyses.			
17b. Identifiers/Open-Ended Terms			
17c. COSATI Field/Group			
18. Availability Statement No restriction on distribution. This report may be purchased from: National Technical Information Service Springfield, VA 22161		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages
		20. Security Class (This Page) UNCLASSIFIED	22. Price

Preface

This report was prepared by the U.S. Geological Survey in cooperation with the State of Texas and with other agencies by personnel of the Texas district of the Water Resources Division under the supervision of I. D. Yost, District Chief, and Alfred Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Texas are in three volumes as follows:

- Volume 1. Arkansas River basin, Red River basin, Sabine River basin, Neches River basin, Trinity River basin, and intervening Coastal basins
- Volume 2. San Jacinto River basin, Brazos River basin, San Bernardo River basin, and intervening Coastal basins
- Volume 3. Colorado River basin, Lavaca River basin, Guadalupe River basin, Neches River basin, Rio Grande basin, and intervening Coastal basins

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in coo-eration with

Texas Water Development Board
Pecos River Commission
Sabine River Compact Administration
City of Austin
City of Dallas
City of Fort Worth
City of Houston
County of Dallas
Texas Department of Highways and Public Transportation
Corps of Engineers, U.S. Army
U.S. Soil Conservation Service

For additional information write to
District Chief, Water Resources Division
U. S. Geological Survey
300 East 8th Street
Austin, Texas 78701

CONTENTS

	Page
List of gaging stations, in downstream order, for which records are published.....	IV
Introduction.....	1
Cooperation.....	2
Definition of terms.....	3
Special networks and programs.....	12
Downstream order and station numbers.....	13
Explanation of surface-water quantity records.....	14
Collection and computation of data.....	14
Accuracy of data.....	18
Publications.....	19
Other data available.....	19
Explanation of surface-water quality records.....	20
Collection and examination of data.....	20
Solutes.....	20
Temperature.....	21
Sediment.....	22
Publications.....	23
Selected references.....	24
Gaging-station records.....	29
Discharge at partial-record stations and miscellaneous sites.....	428
Low-flow partial-record stations.....	428
Crest-stage and flood-hydrograph partial-record stations.....	430
Discharge measurements at miscellaneous sites.....	432
Index.....	433

TABLES

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre.....	8
2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million.....	8
3.--Degrees Celsius (°C) to degrees Fahrenheit (°F).....	22
4.--Water-supply paper numbers and parts containing water-quality data for Texas, water years 1941-71.....	23
5.--Factors for converting English units to International System (SI) units.....	27

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

WESTERN GULF OF MEXICO BASINSSAN JACINTO RIVER BASIN

West Fork San Jacinto River (head of San Jacinto River):

Lake Conroe near Montgomery.....	29
----------------------------------	----

Lake Conroe near Conroe.....	30
------------------------------	----

Lake Conroe at outflow weir near Conroe.....	32
--	----

West Fork San Jacinto River below Lake Conroe near Conroe.....	33
--	----

Lake Creek near Conroe.....	36
-----------------------------	----

West Fork San Jacinto River near Conroe.....	37
--	----

Spring Creek:

Panther Branch near Conroe.....	46
---------------------------------	----

Lake Harrison at drop inlet at Woodlands.....	51
---	----

Panther Branch near Spring.....	52
---------------------------------	----

Spring Creek near Spring.....	58
-------------------------------	----

Cypress Creek near Cypress.....	60
---------------------------------	----

Cypress Creek near Westfield.....	62
-----------------------------------	----

Cypress Creek near Humble.....	63
--------------------------------	----

West Fork San Jacinto River near Humble.....	65
--	----

East Fork San Jacinto River near Cleveland.....	66
---	----

Caney Creek near Splendora.....	68
---------------------------------	----

Peach Creek at Splendora.....	70
-------------------------------	----

San Jacinto River:

Lake Houston near Sheldon.....	71
--------------------------------	----

Lake Houston Plant Intake at Galena Park.....	73
---	----

San Jacinto River near Sheldon.....	74
-------------------------------------	----

Buffalo Bayou:

Barker Reservoir near Addicks.....	75
------------------------------------	----

South Mayde Creek:

Addicks Reservoir near Addicks.....	76
-------------------------------------	----

Buffalo Bayou near Addicks.....	77
---------------------------------	----

Buffalo Bayou at West Belt Drive, Houston.....	81
--	----

Buffalo Bayou at Piney Point.....	82
-----------------------------------	----

Buffalo Bayou at Houston.....	86
-------------------------------	----

Whiteoak Bayou:

Cole Creek at Deihl Road, Houston.....	90
--	----

Brickhouse Gully at Costa Rica Street, Houston.....	91
---	----

Whiteoak Bayou at Houston.....	95
--------------------------------	----

Little Whiteoak Bayou at Houston.....	99
---------------------------------------	----

Buffalo Bayou at Main Street, Houston.....	102
--	-----

Buffalo Bayou at 69th Street, Houston.....	103
--	-----

Brays Bayou:

Keegans Bayou at Roark Road near Houston.....	104
---	-----

Brays Bayou at Houston.....	108
-----------------------------	-----

Brays Bayou at Scott Street, Houston.....	112
---	-----

Sims Bayou at Hiram Clarke Street, Houston.....	115
---	-----

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

V

Page

WESTERN GULF OF MEXICO BASINS--Continued

SAN JACINTO RIVER BASIN--Continued

San Jacinto River--Continued

Buffalo Bayou--Continued

Sims Bayou at Houston.....	119
Berry Bayou at Forest Oaks Street, Houston.....	123
Vince Bayou at Pasadena.....	126
Hunting Bayou at Falls Street, Houston.....	127
Hunting Bayou at Interstate Highway 610 at Houston.....	130
Greens Bayou at U.S. Highway 75 near Houston.....	134
Greens Bayou near Houston.....	135
Halls Bayou at Houston.....	139
Greens Bayou at Ley Road, Houston.....	143

CLEAR CREEK BASIN

Clear Creek near Pearland.....	147
--------------------------------	-----

COASTAL BASIN

Moses Lake-Galveston Bay near Texas City.....	148
---	-----

HIGHLAND BAYOU BASIN

Highland Bayou at Hitchcock.....	149
----------------------------------	-----

CHOCOLATE BAYOU BASIN

Chocolate Bayou near Alvin.....	150
---------------------------------	-----

OYSTER CREEK BASIN

Oyster Creek near Angleton.....	154
---------------------------------	-----

COASTAL BASIN

East Levee Ditch-Gulf of Mexico near Freeport.....	155
--	-----

South Levee Ditch-Gulf of Mexico near Freeport.....	156
---	-----

BRAZOS RIVER BASIN

Double Mountain Fork Brazos River:

North Fork Double Mountain Fork Brazos River:

Buffalo Springs Lake near Lubbock.....	157
--	-----

Double Mountain Fork Brazos River at Justiceburg.....	158
---	-----

Double Mountain Fork Brazos River near Aspermont.....	159
---	-----

Salt Fork Brazos River:

McDonald Creek near Post.....	162
-------------------------------	-----

Running Water Draw at Plainview.....	165
--------------------------------------	-----

White River Reservoir near Spur.....	166
--------------------------------------	-----

Salt Fork Brazos River at Farm Road 1081 near Clairemont.....	168
---	-----

Salt Fork Brazos River at State Highway 208 near Clairemont.....	169
--	-----

Duck Creek near Girard.....	170
-----------------------------	-----

Salt Fork Brazos River at U.S. Highway 380 near Jayton.....	171
---	-----

Salt Fork Brazos River near Peacock.....	172
--	-----

Croton Creek below Short Croton Creek near Jayton.....	175
--	-----

Croton Creek near Jayton.....	176
-------------------------------	-----

Salt Croton Creek at Weir D near Aspermont.....	179
---	-----

Haystack Creek at Weir E near Aspermont.....	180
--	-----

Salt Croton Creek near Aspermont.....	181
---------------------------------------	-----

WESTERN GULF OF MEXICO BASINS--ContinuedBRAZOS RIVER BASIN--Continued

Double Mountain Fork Brazos River--Continued

Salt Fork Brazos River near Aspermont.....	184
Stinking Creek near Aspermont.....	191
North Croton Creek near Knox City.....	193
Brazos River at Seymour.....	197
Millers Creek near Munday.....	204
Elm Creek near Proffitt.....	205
Brazos River near Graham.....	206
Clear Fork Brazos River near Roby.....	207
Clear Fork Brazos River at Hawley.....	208
Mulberry Creek near Hawley.....	212
Elm Creek near Abilene.....	214
Little Elm Creek near Abilene.....	215
Cat Claw Creek at Abilene.....	216
Cedar Creek at Abilene.....	217
Fort Phantom Hill Reservoir near Nugent.....	218
Clear Fork Brazos River at Nugent.....	220
Deadman Creek near Nugent.....	222
Paint Creek:	
Lake Stamford near Haskell.....	223
California Creek near Stamford.....	225
Clear Fork Brazos River at Fort Griffin.....	228
Hubbard Creek near Sedwick.....	231
Hubbard Creek at U.S. Highway 380 near Moran.....	232
Deep Creek at Moran.....	233
Hubbard Creek near Albany.....	236
Salt Prong Hubbard Creek at U.S. Highway 380 near Albany.....	240
North Fork Hubbard Creek:	
Cook Creek near Albany.....	241
North Fork Hubbard Creek near Albany.....	242
Salt Prong Hubbard Creek near Albany.....	246
Snailum Creek near Albany.....	247
Hubbard Creek below Albany.....	248
Big Sandy Creek near Eolian.....	251
Battle Creek near Moran.....	252
Pecan Creek near Eolian.....	253
Big Sandy Creek near Breckenridge.....	256
Hubbard Creek Reservoir near Breckenridge.....	260
Hubbard Creek near Breckenridge.....	262
Clear Fork Brazos River at Eliasville.....	265
Brazos River near South Bend.....	269
Salt Creek at Olney.....	271
Briar Creek near Graham.....	272
Lake Graham near Graham.....	273

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

VII

Page

WESTERN GULF OF MEXICO BASINS--Continued

BRAZOS RIVER BASIN--Continued

Brazos River at Farm Road 1287 near Graham.....	275
Big Cedar Creek near Ivan.....	276
Possum Kingdom Reservoir near Graford.....	277
Brazos River at Possum Kingdom Dam near Graford.....	279
Brazos River near Palo Pinto.....	282
Palo Pinto Creek:	
Lake Palo Pinto near Santo.....	283
Palo Pinto Creek near Santo.....	285
Brazos River near Dennis.....	286
Lake Granbury near Granbury.....	289
Brazos River near Glen Rose.....	291
Paluxy River at Glen Rose.....	292
Squaw Creek near Glen Rose.....	293
Lake Pat Cleburne near Cleburne.....	294
Nolan River at Blum.....	296
Whitney Lake near Whitney.....	298
Brazos River at Whitney Dam near Whitney.....	300
Brazos River near Aquilla.....	303
Aquilla Creek:	
Cobb Creek near Abbott.....	304
Aquilla Creek near Aquilla.....	305
North Bosque River (head of Bosque River) at Stephenville.....	309
Green Creek:	
Green Creek subwatershed No. 1 near Dublin.....	310
North Bosque River at Hico.....	311
North Bosque River near Clifton.....	312
North Bosque River at Valley Mills.....	313
South Bosque River:	
Middle Bosque River near McGregor.....	314
Hog Creek near Crawford.....	315
Waco Lake near Waco.....	316
Bosque River near Waco.....	318
Brazos River at Waco.....	319
Cow Bayou:	
South Cow Bayou:	
Foster Branch:	
Cow Bayou subwatershed No. 4 near Bruceville.....	321
Cow Bayou at Mooreville.....	322
Brazos River near Highbank.....	323
Pond Creek:	
Little Pond Creek at Burlington.....	330
Leon River (head of Little River):	
Leon Reservoir near Ranger.....	332
Leon River near De Leon.....	334
Sabana River near De Leon.....	335

WESTERN GULF OF MEXICO BASINS--ContinuedBRAZOS RIVER BASIN--ContinuedBrazos River--Continued

Proctor Lake near Proctor.....	336
Leon River near Hasse.....	338
Leon River near Hamilton.....	339
Leon River at Gatesville.....	340
Cowhouse Creek at Pidcoke.....	341
Belton Lake near Belton.....	342
Leon River near Belton.....	344
Nolan Creek at Belton.....	345
Lampasas River near Kempner.....	346
Rocky Creek:	
South Fork Rocky Creek near Briggs.....	347
Lampasas River at Youngsfort.....	350
Stillhouse Hollow Lake near Belton.....	351
Lampasas River near Belton.....	353
Little River near Little River.....	354
San Gabriel River:	
North Fork San Gabriel River near Georgetown.....	356
South Fork San Gabriel River at Georgetown.....	357
San Gabriel River at Georgetown.....	358
Berry Creek near Georgetown.....	360
San Gabriel River near Circleville.....	361
San Gabriel River at Lanepoint.....	362
Brushy Creek near Rockdale.....	365
Little River at Cameron.....	366
Brazos River near Bryan.....	370
Brazos River near College Station.....	371
Middle Yegua Creek (head of Yegua Creek) near Dime Box.....	374
East Yegua Creek near Dime Box.....	375
Somerville Lake near Somerville.....	377
Yegua Creek near Somerville.....	379
Davidson Creek near Lyons.....	381
Brazos River at Washington.....	383
Navasota River:	
Lake Mexia near Mexia.....	384
Navasota River near Groesbeck.....	386
Navasota River near Easterly.....	389
Navasota River near Bryan.....	391
Brazos River near Hempstead.....	397
Mill Creek near Bellville.....	398
Brazos River near Wallis.....	400
Richmond Irrigation Co.'s canal near Richmond.....	401
Brazos River at Richmond.....	402
Big Creek near Needville.....	409
Dry Creek near Rosenberg.....	410

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

IX

Page

WESTERN GULF OF MEXICO BASINS--Continued

BRAZOS RIVER BASIN--Continued

Brazos River near Rosharon..... 411

Brazos River at Harris Reservoir near Angleton..... 419

Brazos River at Brazoria Reservoir near Brazoria..... 421

SAN BERNARD RIVER BASIN

San Bernard River near Boling..... 423

San Bernard River near West Columbia..... 424

BIG BOGGY CREEK BASIN

Big Boggy Creek near Wadsworth..... 425

WATER RESOURCES DATA FOR TEXAS, 1975
VOLUME 2
SAN JACINTO, BRAZOS, SAN BERNARD RIVERS,
AND INTERVENING COASTAL BASINS

INTRODUCTION

Surface-water data for Texas for the 1975 water year are presented in three volumes, appropriately identified by river basins. Data in each volume consist of records of stage, discharge, and water quality of streams and canals; and stage, contents, and water quality of lakes and reservoirs. Records for a few pertinent stations in bordering states are also included. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Texas.

Records of discharge (or stage) of streams and contents (or stage) of lakes and reservoirs were first published in a series of Geological Survey Water-Supply Papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperature, and suspended sediment were published from 1941 to 1971 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States."

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records, beginning with the 1964 water year, have been similarly released in separate reports. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water-year reports will be in a series that will carry an identification number consisting of the two-letter State abbreviation, the last digits of the water year, and the report series number. For example, this report is identified as "U.S. Geological Survey Water-Data Report TX-75-1." These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151. For more information on publications available, see "PUBLICATIONS" on page 19.

COOPERATION

Organizations that assisted in the collection of data in this report through cooperative agreements with the Geological Survey in 1975 are:

City of Austin, Charles B. Graves, Jr., Director, Engineering Department.

City of Dallas, Monroe McCorkle, Director, Public Works Department.

City of Fort Worth, J. M. Graham, Director of Public Works.

City of Houston, E. B. Cape, Director, Department of Public Works.

County of Dallas, Judson Shook, Director of Public Works.

Pecos River Commission, Horace Babcock, Federal Representative and Chairman; R. B. McGowen, Jr., Commissioner for Texas, and Robert E. Pritchett, Commissioner for New Mexico.

Sabine River Compact Administration, William H. Robinson, Federal Representative and Chairman; Raymond J. Palmer and D. V. Cresap for Louisiana; and J. M. Syler and George M. Smith for Texas.

Texas Department of Highways and Public Transportation, B. L. DeBerry, Engineer-Director.

Texas Water Development Board, Harry P. Burleigh, Executive Director; W. E. Tinsley, Chairman; Marvin Shurbet, Vice-Chairman; R. B. Gilmore, John H. McCoy, Milton T. Potts, and Carl Illig, Members.

Assistance in the form of funds or services was given by the following Federal agencies:

Corps of Engineers, U.S. Army.

International Boundary and Water Commission, Department of State.

Soil Conservation Service, Department of Agriculture.

The National Oceanic and Atmospheric Administration, National Weather Service, is acknowledged for assistance in the collection of some of the records published in this report.

Assistance in the form of funds or services was rendered by the following organizations through the Texas Water Development Board:

The cities of Abilene, Alice, Arlington, Austin, Brady, Cleburne, Clyde, Corpus Christi, Dallas, El Paso, Gainesville, Graham, Houston, Lampasas, San Angelo, and Wichita Falls; Athens Municipal Water Authority; Bexar, Medina, and Atascosa Counties Water Control and Improvement District No. 1; Bistone Municipal Water Supply District; Brazos River Authority; Chocolate Bayou Land and Water Company; Colorado River Municipal Water District; Dallas County; Dallas Power and Light Company; Dow Chemical Company; Edwards Underground Water District; Franklin County Water District; GMA Development Corporation; Greenbelt Municipal and Industrial Water Authority; Guadalupe-Blanco River Authority; Harris County Flood Control District; Houston Lighting and Power Company; Lone Star Steel Company; Lower Colorado River Authority; Lower Neches Valley Authority; Palo Pinto County Municipal Water District; Red Bluff Water Power Control District; Reeves County Water Improvement District No. 1; Richmond Rice Association; Sabine River Authority of Texas; San Antonio City Public Service Board; San Antonio City Water Board; San Antonio River Authority; San Jacinto River Authority; Tarrant County Water Control and Improvement District No. 1; Texas Electric Service Company; Texas Utilities Services, Inc.; Tom Green County Water Control and Improvement District No. 1; Trinity River Authority; Upper Guadalupe River Authority; Upper Neches River Municipal Water Authority; West Central Texas Municipal Water District; White River Municipal Water District; Wichita County Water Improvement District No. 2; and Wood County.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. A table for converting English units to the International System of units (SI) is given on page 27.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, about 326,000 gallons, or 1,233 cubic metres.

Algae are mostly aquatic, single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, spiral, or threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-Endo medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 ml (millilitres) of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals and are often used as indicators of the sanitary quality of the water. These bacteria are defined as all the organisms that produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-FC medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found in the intestines of warmblooded animals. The presence of fecal streptococci in water is considered to verify fecal pollution. These bacteria are defined as all the organisms that produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-enterococcus medium (nutrient medium for bacterial growth). Concentrations are expressed as number of colonies per 100 ml of sample.

Bed material is the fragmented alluvial material composing a stream-bed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry-weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash-weight values of zooplankton and phytoplankton are expressed in g/m^3 (grams per cubic metre), and the ash-weight values of periphyton and benthic organisms are expressed in g/m^2 (grams per square metre).

Biomass pigment ratio is the ratio of organic weight in mg/m^2 (milligrams per square metre) to the weight of chlorophyll a, in mg/m^2 .

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total

organic matter, ash, and sediment in the sample. Dry-weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of a living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as for ash and dry weights.

Cubic foot per second-day (Cfs-day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic metres. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimetre from 1 square kilometre.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of water. The number of coliform colonies per 100 ml of sample was determined by the immediate-incubation membrane-filter method.

Contents is the volume of water in a reservoir or lake, and unless otherwise indicated is computed on the basis of a level pool. The computation does not include bank storage.

Control designates a feature downstream from a gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second per square mile (CFSM) is the average flow of water in cubic feet per second from each square mile of drainage area, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S , ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second. This rate is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic metres per second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic average of individual daily mean discharges during a specified period.

Instantaneous discharge is the discharge at a given time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and may therefore include some very small (colloidal) suspended particles.

Dissolved oxygen (DO).--The dissolved-oxygen content of water in equilibrium with air is a function of atmospheric pressure, dissolved-solids content, and temperature of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids content. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen content in water from streams.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane and enclosed by a topographic divide, from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified location. The measurements of drainage area given in this report include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.HT.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a designated site on a stream, canal, lake, or reservoir where systematic observations are made of the physical and (or) chemical and biological character of the water. The scope and frequency of data collected at a gaging station varies. This variation is reflected by the terminology used in further identifying the type of gaging station as follows:

Stream-gaging station is a gaging station at which a continuous record of discharge is generally computed. Water-quality data collected at a stream-gaging station may vary from only a temperature observation with each discharge measurement to continuous monitoring of one or more parameters. However, monthly and annual means and loads for dissolved constituents are not usually computed from less than daily samples.

Partial-record station is a gaging station where limited streamflow and (or) water-quality data are collected systematically over a period of years for use in hydrologic analyses of low-flow, peak-flow, and (or) general-runoff characteristics. Partial-record stations are further categorized as follows:

Crest-stage partial-record station is a gaging station at which only the annual peak stage and (or) discharge is obtained. Water-quality data are not usually collected at this type of gaging station.

Flood-hydrograph partial-record station is a gaging station at which flood hydrographs are sought for a variety of climatic and physiographic settings for purposes of modeling. Water-quality samples are sometimes collected at varying discharges during different seasons of the year.

Low-flow partial-record station is a gaging station at which definition of the quantity and (or) quality of the low flow (principally base flow) is sought. One or more discharge measurements and (or) water-quality samples may be obtained annually.

Reconnaissance partial-record station is a gaging station operated to define variations in water quality with discharge and (or) reservoir contents, and any changes in these variations. A discharge measurement and a water sample may be obtained at about 6-week intervals at some reconnaissance stations, or samples only may be obtained at greater time intervals at other stations.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Herbicides are substances or mixtures of substances intended to control or destroy vegetation.

Insecticides are substances or mixtures of substances intended to control or destroy insects.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic-detergent compounds.

Micrograms per litre (UG/L, $\mu\text{g/l}$) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represent the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one-thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1 on the following page. The concentration of suspended sediment is also expressed in mg/l and is based on the weight

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre

<u>Ion</u>	<u>Multiply by</u>	<u>Ion</u>	<u>Multiply by</u>
Aluminum (Al^{+3})*.....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as N.....	.07139	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})..	.01639	Lithium (Li^{+1})*.....	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).....	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.....	.03640
Carbonate (CO_3^{-2}).....	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate as N.....	.07139
Chromium (Cr^{+6})*.....	.11539	Nitrite as N.....	.07139
Cobalt (Co^{+2})*.....	.03394	Phosphate as P.....	.03228
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1}).....	.02557
Cyanide (CN^{-1})*.....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*.....	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2}).....	.02082
Hydroxide (OH^{-1}).....	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-472	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2 on page 8.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square metres (m^2), acres, or hectares. Numbers of periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organisms count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (l). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

Particle-size classification as used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Do.
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distribution given in this report is not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, the assemblage may include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control or destroy undesirable plants and animals. The major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide, almost 60,000 pesticide formulations have been registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to replace many of the chlorinated hydrocarbon pesticides with more specific, fast acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Phytoplankton is the plant part of the plankton. The plants are usually microscopic and movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because the plants are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. Phytoplankton are primary food producers in the aquatic environment and are commonly known as algae.

Plankton is the community of suspended, floating, or weakly swimming aquatic organisms that consist chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which a dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or by volume, that is discharged in a given time.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams per litre of dry sediment in the water-sediment mixture.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimetre at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per centimetre at 25°C). This relation is not constant from stream to stream, and it may even vary in the same stream with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the volume of water flowing in a channel per unit of time.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per litre by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension.

Weighted average indicates the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the summary REVISIONS paragraph to refer to previously published annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network is an accounting network designed by the Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in stream quality.

Radiochemical program is a network of regularly sampled gaging stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in $\mu\text{g/l}$ (micrograms per litre), radium as radium-226 in PC/L, (pCi/l, picocuries per litre), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre. Gross alpha and beta radioactivity associated with the fine-grained (silt and clay sized) sediments in the samples are also determined.

A picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations in this report, the rank of tributaries is indicated by indention, each indention representing one rank.

Each gaging station has been assigned a station number in downstream order, without regard to the type of station. The numbers are not consecutive because some numbers are reserved for new stations that may be established. The complete number for each station consists of eight digits, such as 08123800. The first two digits, 08 or 07, identify the river basin as previously published in the series of water-supply papers on the

Surface Water Supply of the United States. The digits 07 indicate the Lower Mississippi River basin, and the digits 08 indicate the Western Gulf of Mexico Basins. The remaining six digits of the station number are sequential in downstream order.

All records for a drainage basin that extends across State boundaries can be arranged in downstream order by assembling the pages from the appropriate State reports by station number.

EXPLANATION OF SURFACE-WATER QUANTITY RECORDS

Collection and Computation of Data

The basic data collected at gaging stations consist of (1) records of stage; (2) measurements of discharge of streams and canals; and (3) stage, surface area, and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement basic data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a non-recording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is often determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area measurements, contracted-opening measurements, or computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables; monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors (based on individual discharge measurements and notes by the hydrologists or observers) are used in applying the gage heights to the rating tables.

At some stream-gaging stations, the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations, the stage-discharge relation is affected by changing stage; at these stations, the rate of change in stage is used as a factor in computing discharge.

For a lake or reservoir gaging station, a capacity table giving the contents for any stage is prepared from a stage-area relation curve defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes in contents are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

At some gaging stations, there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report usually comprises a description of the station and tabulations of daily and monthly values. For stream-gaging stations on streams or canals, a table showing the daily, monthly, and yearly discharge is given. For a gaging station on a reservoir, a table showing the daily contents is given. Tables of daily or maximum and minimum daily gage heights are included for some gaging stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations, except those partial-record stations published in tabular form in the back of the report, gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging stations and the drainage areas are obtained from the most

accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies (U.S. Water Resources Council, 1968). Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of gages used previously during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record.

For stations where changes in upstream water-resources development occurred during the period of record, "AVERAGE DISCHARGE" is given for both before and after development. The maximum discharge or contents, maximum gage height or elevation, minimum discharge or contents (if there is little or no regulation), and minimum gage height or elevation (if it is significant) are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low).

Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge or contents correspond to the crest stage obtained by use of a water-stage recorder (graphic or digital), crest-stage gage, or nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records and to conditions that affect the natural flow at the gaging station is given under "REMARKS;" for a reservoir station information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is also given under "REMARKS."

Previously published records for some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description for all stations for which revised records have been published, each followed by the water years for which values are revised in that report. In listing the water years, one number

is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual values of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum discharge was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised value was first published is given.

It should be noted that for all stations for which runoff in cubic feet per second per square mile and in inches are published, a revision of the drainage area necessitates corresponding revision of all measurements based on the drainage area. Revised values of runoff in cubic feet per second per square mile and in inches, resulting from a revision of the drainage area only, are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Measurements in cubic feet per second per square mile and in inches are omitted if there is extensive regulation or diversion, or if the drainage area includes large noncontributing areas.

In the yearly summary below the monthly summary, the values following "MAX" are the maximum daily discharges for the calendar and water years; those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of the lack of a gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual conditions at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For gaging stations on lakes and reservoirs, the data presented comprise a description of the station, a skeleton table of capacity at given stages, a table of daily contents, and a monthly summary of stage, contents, and known diversions.

Streamflow data collected at partial-record stations and miscellaneous sites where water-quality data are not collected are given in three tables at the end of this volume. The first is a table of low-flow discharge at low-flow partial-record stations; the second is a table of annual maximum stage and (or) discharge at crest-stage and (or) flood-hydrograph partial-record stations; and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation, or if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The accuracy of the data are given under the "REMARKS" paragraph of the station description. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Values of daily mean discharge are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s, and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge values listed for partial-record stations and miscellaneous sites.

Discharge at some stations, as indicated by the monthly mean, may not reflect natural runoff because of the effects of diversion, consumption, or regulation by storage. For such stations, computations of cubic feet per second per square mile or computations in inches are not published unless satisfactory adjustments can be made for diversions and for changes in contents of upstream reservoirs.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area.

Four series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950; the second series covers the period of October 1950 to September 1960; the third series covers the period October 1960 to September 1965; and the fourth series covers the period October 1965 to September 1970. The first and second series of reports contain summaries of monthly and annual discharge and contents for all published records, as well as some records not previously published in the annual series of water-supply papers. The third and fourth series of reports contain daily, monthly, and yearly discharge and content data. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Texas are compiled in Water-Supply Papers 1311-12 through September 1950; in WSP 1731-32 for October 1950 to September 1960; in WSP 1920-23 for October 1960 to September 1965; and in WSP 2120-23 for October 1965 to September 1970.

Special reports on major floods or droughts or on other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office, U.S. Geological Survey, WRD, 300 East 8th Street, Austin, Texas 78701.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the Texas District Office in Austin. Most gaging-station records are available in computer-usable form, and many statistical analyses have been made.

The International Boundary and Water Commission, United States and Mexico, operates all streamflow stations on the Rio Grande and near the mouth of its principal tributaries at and below El Paso, Texas. Records collected at these stations are published in annual bulletins by the Commission and may be obtained from the International Boundary and Water Commission, United States Section, P. O. Box 20003, El Paso, Texas 79998.

EXPLANATION OF SURFACE-WATER QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses are usually collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the loads of chemical constituents and sediment.

Water-quality information is presented for chemical, biological, and microbiological quality; water temperature; and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. The biological information includes qualitative analyses of plankton and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water temperature was measured at the time of collection of most samples. At some sites, a continuous temperature recorder (thermograph) furnished information from which daily minimums and maximums were obtained; at other sites, once-daily temperatures were obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre are equivalent. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3, page 22.

In October 1968, the Geological Survey began reporting the concentrations of many of the chemical constituents, including minor elements, in micrograms per litre instead of milligrams per litre. (See "Definition of Terms," p. 7.)

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described in U.S. Geological Survey Techniques of Water Resources Investigations, book 5, chapter A1. Analytical methods for insecticides, herbicides, and organic substances in water are described in the Survey's Techniques of Water Resources

Investigations, book 5, chapter A3 and in Water-Supply Paper 1817. The collection and analysis of aquatic biological and microbiological samples are described in the Survey's Techniques of Water Resources Investigations, book 5, chapter A4.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed determination of for an accurate mean concentration and for use in calculating loads.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is probably the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

At stream-gaging stations where daily samples are obtained, tables are included to show monthly and annual means of specific conductance; concentrations of dissolved solids, chloride, sulfate, hardness; and loads of dissolved solids, chloride, and sulfate. The means have been computed by using the daily records of specific conductance and developing regression relationships between each water-quality parameter and specific conductance.

Temperature

Water temperatures are generally taken with each sample at a gaging station. Water temperatures are also taken at time of discharge measurements at gaging stations. At sites at which daily samples are taken, the water temperature is taken about the same time each day. Large streams have a small diurnal temperature change; but small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records published consist of maximum and minimum temperatures for each day and the monthly averages.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected twice daily or, in some instances, hourly. The published values of sediment discharges for days of rapidly changing flow or concentrations were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days in which the published value of sediment discharge differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed

by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water-sediment discharge relations, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in estimating long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Publications

The annual series of water-supply papers that give information on quality of surface waters in Texas are listed in the following table. Data for the Lower Mississippi River basin are given in Part 7 and for the Western Gulf of Mexico Basin in Part 8.

Table 4.--Water-supply paper numbers and parts containing water-quality data for Texas, water years 1941-71

<u>Year</u>	<u>Parts 1-14</u>	<u>Year</u>	<u>Parts 7-8</u>	<u>Year</u>	<u>Parts 7-8</u>
1941	942	1950	1188	1963	1950
1942	950	1951	1199	1964	1957
1943	970	1952	1252	1965	1964
1944	1022	1953	1292	1966	1994
1945	1030	1954	1352	1967	2014
1946	1050	1955	1402	1968	C2096
1947	1102	1956	1452		D2097
1948	A1133	1957	1522	1969	C2146
1949	A1163	1958	1573		D2147
----	----	1959	1644	1970	C2156
----	----	1960	1744		D2157
----	----	1961	1884	1971	BC2166
----	----	1962	1944		BD2167

A Parts 7-14. B In Press. C Part 7. D Part 8.

SELECTED REFERENCES

- American Public Health Association, and others, 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.
- Barker, F. B., and Johnson, J. O., 1964, Determination of radium in water: U.S. Geol. Survey Water-Supply Paper 1696-B, 29 p.
- Barker, F. B., and others, 1965, Determination of uranium in natural water: U.S. Geol. Survey Water-Supply Paper 1696-C, 25 p.
- Barker, F. B., and Robinson, B. P., 1963, Determination of beta activity in water: U.S. Geol. Survey Water-Supply Paper 1696-A, 32 p.
- Blakey, J. F., Hawkinson, R. O., and Steele, T. D., 1972, An evaluation of water-quality records for Texas streams: U.S. Geol. Survey open-file report, 54 p.
- Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.
- Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. A6, 13 p.
- Colby, B. R., 1963, Fluvial sediments--a summary of sources, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.
- Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.
- Corbett, D. M., and others, 1943, reprinted 1957, Stream-gaging procedures, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Federal Interagency Work Group on Designation of Standards for Water Data Acquisition, 1972, Recommended methods for water-data acquisition: U.S. Dept. of the Interior, Geol. Survey, Office of Water Data Coordination, 6 chap.
- Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A3, 40 p.

- Goerlitz, D. F., and Lamar, W. L., 1967, Determination of phenoxy acid herbicides in water by electron-capture and microcoulometric gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-C, 21 p.
- Guy, H. P., 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 57 p.
- _____, 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.
- Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.
- Hem, J. D., 1971, Study and interpretation of the chemical characteristics of natural water - 2d ed.: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.
- Lamar, W. L., Goerlitz, D. F., and Law, L. M., 1965, Identification and measurement of chlorinated organic pesticides in water by electron-capture gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-B, 12 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.
- Page, C. H., and Vigoureaux, Paul, eds., 1972, The International System of Units (SI): U.S. Natl Bur. Standards Spec. Pub. 330, p. 13, 15.
- Porterfield, George, 1972, Computations of fluvial sediment discharges: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C3, 66 p.
- Ritter, J. R., and Helley, E. J., 1969, Optical methods for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p. (open file).
- Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A4, 165 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

_____ 1941, Methods of analyzing sediment samples: Rept. 4.

_____ 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

_____ 1957, Some fundamentals of particle-size analysis: Rept. 12.

_____ 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

_____ 1961, The single stage sampler for suspended sediment: Rept. 13.

_____ 1963, Determinations of fluvial sediment discharge: Rept. 14.

U.S. Water Resources Council, 1968, River mileage measurements: Washington, D.C., Hydrology Comm. Bull. 14, 17 p.

Table 5.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI units equivalents in the station manuscript description until such time that all data will be published in SI units.

<u>Multiply English units</u>	<u>By</u>	<u>To obtain SI units</u>
Length		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4047	square metres (m ²)
	.4047	hectares (ha)
	.4047	square hectometres (hm ²)
	.004047	square kilometres (km ²)
square miles (mi ²)	2.590	square kilometres (km ²)
Volume		
gallons (gal)	3.785	litres (l)
	3.785x10 ⁻³	cubic metres (m ³)
million gallons (10 ⁶ gal)	3785	cubic metres (m ³)
	3.785x10 ⁻³	cubic hectometres (hm ³)
cubic feet (ft ³)	.02832	cubic metres (m ³)
cubic feet per second-days	2447	cubic metres (m ³)
[(ft ³ /s)·d]	2.447x10 ⁻³	cubic hectometres (hm ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ⁻³	cubic hectometres (hm ³)
	1.233x10 ⁻⁶	cubic kilometres (km ³)
Flow		
cubic feet per second (ft ³ /s)	0.02832	cubic metres per second (m ³ /s)
gallons per minute (gal/min)	.06309	litres per second (l/s)
	6.309x10 ⁻⁵	cubic metres per second (m ³ /s)
million gallons per day	.04381	cubic metres per second (m ³ /s)
(10 ⁶ gal/d)		
Mass		
tons (short)	0.9072	tonnes (t)

08067580 Lake Conroe near Montgomery, Tex.

LOCATION.--Lat 30°26'13", long 95°36'36", Montgomery County, at bridge on Farm Road 1097, 6.4 miles (10.3 km) upstream from dam, 8.1 miles (13.0 km) east of Montgomery, and 8.2 miles (13.2 km) west of Willis.

DRAINAGE AREA.--445 mi² (1,153 km²), see station 08067600.

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum elevation, 201.93 ft (61.548 m) May 13; minimum, 200.00 ft (60.960 m) Oct. 27.

Period of record: Maximum elevation, 202.33 ft (61.670 m) Jan. 27, 28, 1974; minimum since lake reached conservation storage level 199.02 ft (60.661 m) Jan. 14, 1974.

REMARKS.--No large diversions above station.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200.89	200.93	200.71	200.70	200.76	200.80	200.72	201.07	200.98	201.13	200.99	200.91
2	200.84	200.95	200.66	200.73	200.79	200.80	200.70	201.03	200.95	201.10	200.99	200.90
3	200.78	200.88	200.68	200.78	200.98	200.80	200.70	201.06	200.94	201.07	201.00	200.93
4	200.71	200.76	200.64	200.79	201.32	200.83	200.70	201.11	200.99	201.03	201.02	200.92
5	200.66	200.66	200.65	200.80	201.46	200.83	200.68	201.15	200.99	201.02	201.03	200.96
6	200.62	200.59	200.65	200.77	201.40	200.83	200.68	201.13	200.98	201.01	201.03	200.95
7	200.57	200.94	200.64	200.74	201.25	200.84	200.68	201.35	200.98	201.00	201.04	200.94
8	200.52	201.04	200.62	200.72	201.08	200.84	201.28	201.57	200.99	201.01	201.04	200.86
9	200.46	201.05	200.62	200.72	201.00	200.84	201.24	201.79	201.08	201.00	201.03	200.86
10	200.40	201.32	200.67	200.79	200.95	200.84	201.17	201.71	201.34	200.98	201.02	200.86
11	200.37	201.30	200.74	200.79	200.90	200.85	201.08	201.80	201.31	201.04	201.00	200.86
12	200.34	201.20	200.79	200.79	200.86	200.86	200.96	201.91	201.25	201.05	200.98	200.85
13	200.31	201.04	200.83	200.79	200.85	200.84	201.11	201.91	201.18	201.05	200.97	200.85
14	200.34	200.91	200.91	200.76	200.85	200.83	201.37	201.80	201.05	201.15	200.94	200.84
15	200.32	200.79	200.91	200.75	200.86	200.82	201.42	201.62	200.95	201.15	200.93	200.83
16	200.30	200.74	200.91	200.75	200.87	200.83	201.38	201.38	200.95	201.13	200.92	200.84
17	200.29	200.71	200.90	200.73	200.88	200.97	201.24	201.18	200.95	201.10	200.90	200.85
18	200.25	200.68	200.88	201.02	200.87	201.02	201.14	201.08	200.93	201.08	200.88	200.85
19	200.22	200.64	200.87	200.97	200.83	200.98	201.08	201.01	200.92	201.08	200.79	200.85
20	200.18	200.62	200.85	200.92	200.80	200.95	201.04	200.98	200.90	201.07	200.79	200.85
21	200.15	200.60	200.83	200.86	200.80	200.95	201.01	200.95	200.90	201.05	200.78	200.82
22	200.06	200.58	200.80	200.86	200.82	200.95	200.97	200.95	200.89	201.04	200.82	200.81
23	200.04	200.60	200.80	200.84	200.80	200.97	200.96	200.94	200.88	201.03	200.81	200.79
24	200.03	200.96	200.76	200.81	200.77	200.96	200.95	201.10	200.89	201.02	200.92	200.76
25	200.03	201.05	200.72	200.78	200.78	200.96	200.95	201.10	200.95	201.01	200.93	200.71
26	200.02	201.10	200.68	200.76	200.78	201.01	200.95	201.06	200.96	201.00	200.93	200.70
27	200.01	201.08	200.66	200.75	200.79	201.00	200.95	201.02	201.03	200.99	200.99	200.67
28	200.37	200.98	200.66	200.74	200.80	200.95	200.95	201.01	201.03	200.96	200.98	200.65
29	200.56	200.89	200.66	200.73	-----	200.83	201.02	201.00	201.04	200.95	200.95	200.64
30	200.66	200.80	200.67	200.72	-----	200.76	201.07	201.06	201.07	200.94	200.94	200.63
31	200.84	-----	200.67	200.70	-----	200.72	-----	201.03	-----	200.96	200.93	-----
MAX	200.89	201.32	200.91	201.02	201.46	201.02	201.42	201.91	201.34	201.15	201.04	200.96
MIN	200.01	200.58	200.62	200.70	200.76	200.72	200.68	200.94	200.88	200.94	200.78	200.63
CAL YR 1974.....			MAX	202.33			MIN	199.02				
WTR YR 1975.....			MAX	201.91			MIN	200.01				

SAN JACINTO RIVER BASIN

08067600 Lake Conroe near Conroe, Tex.

LOCATION.--Lat 30°21'30", long 95°33'39", Montgomery County, at service outlet tower, 140 ft (43 m) upstream from centerline of dam, and 7.4 miles (11.9 km) west of Conroe.

DRAINAGE AREA.--445 mi² (1,153 km²).

PERIOD OF RECORD.--Contents: January 1973 to current year.

Water quality: Chemical analyses: September 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 451,200 acre-ft (556 hm³) May 13 (elevation, 201.98 ft or 61.564 m); minimum, 410,300 acre-ft (506 hm³) Oct. 27 (elevation, 200.03 ft or 60.969 m).

Period of record: Maximum contents, 460,000 acre-ft (567 hm³) Jan. 28, 1974 (elevation, 202.38 ft or 61.685 m); minimum since operating level was reached, 390,500 acre-ft (481 hm³) Dec. 2, 1973 (elevation, 199.04 ft or 60.667 m).

REMARKS.--The lake is formed by an earthfill dam 11,300 ft (3,440 m) long, including a controlled spillway. The dam was completed Sept. 1, 1972, and deliberate impoundment began Jan. 9, 1973. The spillway is a concrete gravity structure 240 ft (73 m) long with a net opening of 200 ft (61 m). The spillway has five 40- by 30-foot (12- by 9-metre) tainter gates and is located near center of dam. The outlet works for low-flow releases are located in a vertical concrete multi-gated inlet tower. There are three gated openings and one uncontrolled opening in the inlet tower. The capacity table was based on Geological Survey topographic maps dated 1958 and 1959. During the current year, Gulf States Utilities diverted 1,765 acre-ft (2.18 hm³) to Lewis Creek Reservoir. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	212.0	-
Design flood.....	205.5	532,000
Top of tainter gates.....	202.5	462,600
Top of conservation pool (uncontrolled tower outlet).....	200.4	417,900
Crest of spillway (sill of tainter gates).....	173.0	64,960
Lowest gated outlet (invert).....	144.5	300

COOPERATION.--Capacity tables were prepared by Freese, Nichols, and Endress, Consulting Engineers, and furnished by the San Jacinto River Authority.

Capacity table (elevation, in feet, and contents, in acre-feet)

200.0 409,600
202.0 451,600

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428,000	429,600	426,100	424,900	426,300	426,100	424,700	432,400	430,700	433,500	430,300	428,400
2	427,000	430,100	424,900	425,500	427,200	426,100	425,700	431,800	429,800	432,800	430,300	428,400
3	425,500	428,400	423,900	426,500	430,700	426,100	424,500	432,400	429,200	432,000	430,700	428,800
4	424,100	427,200	423,000	426,300	437,700	426,800	423,900	433,900	429,800	431,800	431,500	428,600
5	423,000	424,500	423,000	426,300	442,000	426,300	423,900	434,500	429,800	431,300	431,300	428,600
6	422,400	423,000	423,300	425,700	440,100	426,500	423,700	433,300	429,800	430,900	431,300	428,200
7	421,200	429,800	423,000	425,300	436,500	427,600	423,000	439,000	429,800	430,300	431,500	429,000
8	420,000	432,800	422,800	425,100	433,500	426,800	436,900	443,900	430,100	430,100	431,300	428,600
9	418,900	432,800	421,800	424,900	431,300	426,800	435,400	448,400	432,400	429,400	430,700	428,600
10	417,900	438,400	423,900	426,300	429,400	427,200	434,100	446,700	438,000	429,400	430,500	428,600
11	416,900	438,400	425,100	427,400	428,800	426,500	432,000	449,300	437,100	431,800	429,800	428,600
12	416,200	436,000	425,700	427,200	427,600	429,000	429,200	451,000	435,800	432,000	429,400	428,800
13	415,600	432,800	426,500	426,100	427,000	427,400	433,500	450,100	433,900	431,800	429,000	428,400
14	417,900	429,800	428,200	426,100	427,200	426,800	438,200	448,600	430,700	433,700	428,600	427,800
15	416,200	427,200	428,200	425,900	428,000	426,500	439,200	444,800	429,200	433,300	428,200	427,400
16	415,600	426,100	428,200	425,700	428,200	427,000	437,700	438,800	428,400	432,600	427,800	428,600
17	415,200	425,700	427,400	425,700	428,200	429,600	434,700	435,000	428,400	432,000	427,400	428,400
18	414,800	424,700	427,600	431,300	428,400	430,900	433,000	432,400	428,200	432,000	427,200	428,200
19	414,400	424,300	427,000	430,700	427,200	429,800	432,000	431,100	428,000	431,800	426,500	428,600
20	413,600	423,700	427,000	427,800	426,100	428,800	430,700	429,800	427,800	431,300	425,900	428,200
21	412,300	422,800	426,300	427,200	426,300	428,800	431,300	429,600	427,800	430,900	425,700	428,800
22	411,500	422,200	425,700	428,000	428,200	428,800	430,300	429,600	427,600	430,700	426,500	427,400
23	411,100	421,800	425,500	427,200	426,500	429,800	429,000	429,800	427,600	430,700	426,300	426,800
24	410,900	431,500	426,500	426,300	426,100	429,800	429,600	433,900	428,200	430,100	428,600	426,800
25	411,100	432,600	424,500	426,100	425,500	429,200	429,400	433,300	429,400	429,800	428,800	425,700
26	410,900	433,500	423,700	425,700	425,700	429,200	429,200	432,400	429,800	429,600	428,800	425,300
27	410,500	433,000	423,500	425,500	425,900	429,000	429,600	431,300	431,500	429,400	430,100	424,700
28	417,700	430,900	423,500	425,500	426,100	429,400	429,600	431,300	431,300	428,800	430,500	424,500
29	421,600	432,400	423,500	425,300	-----	427,800	431,100	431,800	431,500	429,000	429,200	424,300
30	423,700	428,200	423,900	424,900	-----	425,300	432,800	433,000	432,800	428,800	428,800	424,100
31	428,000	-----	424,900	425,100	-----	424,900	-----	431,800	-----	429,400	428,600	-----
(†)	200.89	200.90	200.74	200.75	200.80	200.74	201.12	201.07	201.12	200.96	200.92	200.70
(*)	-1,000	+200	-3,300	+200	+1,000	-1,200	+7,900	-1,000	+1,000	-3,400	-800	-4,500
MAX	428,000	438,400	428,200	431,300	442,000	430,900	439,200	451,000	438,000	433,700	431,500	429,000
MIN	410,500	421,800	421,800	424,900	425,500	424,900	423,000	429,600	427,600	428,800	425,700	424,100
CAL YR 1974.....	†	+23,200			MAX	459,300		MIN	390,700			
WTR YR 1975.....	†	-4,900			MAX	451,000		MIN	410,500			

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

SAN JACINTO RIVER BASIN

31

08067600 Lake Conroe near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
FEB. 12...	1130	4.6	27	2.2	8.5	3.1	86	0
MAY 19...	1530	4.0	26	2.3	9.6	3.2	85	0
AUG. 28...	1630	4.6	27	2.3	9.9	3.1	94	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
FEB. 12...	4.8	15	.1	.23	.03	.03	109	76	4
MAY 19...	3.7	17	.1	.01	.00	.01	108	74	5
AUG. 28...	4.5	17	.2	.00	.00	.01	115	77	0

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
FEB. 12...	.4	206	8.0	13.5	7.3	70	20	0
MAY 19...	.5	208	7.6	25.5	4.8	58	20	10
AUG. 28...	.5	210	7.7	29.5	6.2	81	60	40

SAN JACINTO RIVER BASIN

08067610 Lake Conroe at outflow weir near Conroe, Tex.

LOCATION.--Lat 30°21'23", long 95°33'37", Montgomery County, on left side of stilling basin of outflow weir, 620 ft (189 m) downstream from centerline of dam, 770 ft (235 m) downstream from service outlet tower, 3.0 miles (4.8 km) upstream from State Highway 105, and 7.4 miles (11.9 km) west of Conroe.

DRAINAGE AREA.--445 mi² (1,153 km²).

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 138.48 ft (42.209 m) above mean sea level (levels by San Jacinto River Authority).

EXTREMES.--Current year: Maximum daily discharge, 60 ft³/s (1.70 m³/s) June 5; many days with no controlled releases.
Period of record: Maximum daily discharge, 339 ft³/s (9.60 m³/s) Feb. 19-25, 1974; many days with no controlled releases.

REMARKS.--Records fair. Discharge represents controlled outflow from service tower and does not constitute the total outflow from Lake Conroe. Uncontrolled low flows through weir published at West Fork San Jacinto River below Lake Conroe (station 08067650).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

JUNE 4..... 54
5..... 60

08067650 West Fork San Jacinto River below Lake Conroe near Conroe, Tex.

LOCATION.--Lat 30°20'31", long 95°32'34", Montgomery County, on right bank at downstream side of bridge on State Highway 105, 3.0 miles (4.8 km) downstream from Lake Conroe Dam, and 5.9 miles (9.5 km) west of Conroe.

DRAINAGE AREA.--451 mi² (1,168 km²).

PERIOD OF RECORD.--Discharge: August 1972 to current year (discharge for periods of outflow from Lake Conroe only).

Water quality: Chemical, biochemical, and pesticide analyses: October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 116.06 ft (35.375 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,480 ft³/s (70.2 m³/s) May 10 (gage height, 28.74 ft or 8.760 m); maximum gage height, 29.66 ft (9.040 m) May 11 (backwater from local runoff); minimum discharge not determined.

Period of record: Maximum discharge, 2,750 ft³/s (77.9 m³/s) Jan. 28, 1974 (gage height, 29.00 ft or 8.839 m); maximum gage height, 30.87 ft (9.409 m) June 13, 1973 (backwater from local runoff); minimum discharge not determined.

Flood in November 1940 reached a stage of 41.94 ft (12.783 m), from information provided by the Texas Highway Department.

REMARKS.--Discharge records fair. Discharge is determined only during periods of outflow from Lake Conroe. Low-flow discharges are estimated on basis of uncontrolled flow from Lake Conroe. Discharge estimated during periods of backwater from local runoff.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	515	1280	1070	248	250	7.0	13	1070	686	251	8.3	7.7
2	512	1230	779	301	290	7.0	6.0	947	327	461	9.5	7.7
3	512	1550	496	482	517	7.0	5.0	41	15	457	9.5	7.7
4	509	1360	352	464	1510	220	4.0	115	54	248	8.9	7.7
5	508	1080	240	456	1850	29	4.0	1300	103	18	8.9	180
6	505	795	242	457	1860	10	4.0	1920	26	11	8.3	25
7	504	895	246	457	1710	7.0	4.0	1050	10	10	8.3	10
8	500	1470	243	344	1790	7.0	1100	1430	7.7	10	8.3	7.7
9	497	1850	242	241	1380	6.0	1830	2270	8.9	8.9	7.7	7.7
10	496	1850	233	239	718	7.0	1460	2470	1170	7.7	7.7	7.1
11	396	1850	244	239	713	6.0	1450	2450	2350	8.9	7.1	6.5
12	258	1840	248	248	542	7.0	1130	2460	1410	9.5	7.1	6.5
13	255	1850	250	237	236	256	534	2460	1170	10	6.5	6.5
14	255	1660	246	240	24	31	1710	2460	1160	50	5.9	6.5
15	256	1210	253	235	23	10	1570	2460	1140	192	5.9	5.9
16	255	857	251	239	657	7.0	1500	2420	138	352	5.4	7.1
17	254	528	253	239	706	148	1490	2060	18	278	5.4	7.1
18	252	519	250	988	673	700	1480	1530	10	25	4.8	7.1
19	253	515	244	1800	604	681	975	669	7.7	10	4.8	7.1
20	251	522	243	1160	365	508	342	388	7.1	8.3	4.8	6.5
21	248	407	242	732	18	177	88	210	7.1	8.3	4.8	6.5
22	248	286	240	804	13	15	670	27	7.7	7.7	4.8	6.5
23	142	284	264	735	10	10	350	10	7.1	8.3	5.4	5.9
24	12	594	471	489	7.0	9.0	20	12	7.1	7.7	5.9	5.4
25	-	1240	482	372	6.0	8.0	8.0	688	8.3	7.1	7.1	5.4
26	-	1090	478	249	6.0	116	7.1	722	8.9	7.1	7.1	4.8
27	-	1080	351	246	7.0	654	7.1	522	121	6.5	9.6	4.3
28	204	1080	240	246	7.0	697	7.1	354	380	5.9	165	3.8
29	375	1110	237	246	---	718	12	356	362	5.9	349	3.3
30	754	1270	240	246	---	707	526	556	327	6.5	191	3.3
31	1150	---	244	247	---	367	---	723	---	7.1	12	---
TOTAL	-	33152	10114	13926	16492.0	6139.0	18306.3	36150	11054.6	2504.4	904.8	384.3
MEAN	-	1105	326	449	589	198	610	1166	368	80.8	29.2	12.8
MAX	-	1850	1070	1800	1860	718	1830	2470	2350	461	349	180
MIN	-	284	233	235	6.0	6.0	4.0	10	7.1	5.9	4.8	3.3
AC-FT	-	65760	20060	27620	32710	12180	36310	71700	21930	4970	1790	762
CAL YR 1974	TOTAL -	MEAN -	MAX -	MIN -	AC-FT -							
WTR YR 1975	TOTAL -	MEAN -	MAX -	MIN -	AC-FT -							

SAN JACINTO RIVER BASIN

08067650 West Fork San Jacinto River below Lake Conroe near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 07...	1400	470	3.9	31	2.3	9.1	3.2	98	0	3.7	15
DEC. 02...	1420	580	4.8	32	2.6	8.6	2.9	94	0	4.4	17
FEB. 24...	0800	18	6.6	34	2.6	11	2.9	102	0	5.7	19
APR. 07...	1140	3.0	10	45	6.0	15	3.2	142	0	6.3	29
JUNE 09...	1045	57	9.2	39	3.3	13	2.7	126	0	5.2	24
AUG. 26...	1130	11	13	35	2.6	14	2.7	106	0	5.7	28

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)
OCT. 07...	--	.11	.01	.07	.72	.79	.04	117	17	5	87
DEC. 02...	.2	.25	.01	.09	1.5	1.6	.04	119	23	3	91
FEB. 24...	.1	.18	.01	.07	.46	.53	.03	133	22	9	96
APR. 07...	.1	.08	.00	.01	.53	.54	.03	185	25	4	140
JUNE 09...	.1	.07	.01	.04	.75	.79	.09	159	31	14	110
AUG. 26...	.1	.06	.01	.00	.38	.38	.04	154	92	61	98

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 07...	7	.4	231	6.8	24.0	5	8	9.4	111	1.4	9.2
DEC. 02...	14	.4	222	7.2	13.5	10	10	14.3	136	1.3	10
FEB. 24...	12	.5	243	6.7	9.0	30	15	9.8	84	.9	9.4
APR. 07...	21	.6	338	7.2	17.5	30	10	7.3	76	.6	6.4
JUNE 09...	8	.5	304	6.8	26.0	30	15	4.9	60	1.8	8.6
AUG. 26...	11	.6	273	6.8	28.0	40	20	5.6	71	1.3	8.5

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DEC. 02...	1420	70	1	70	1	<10	3	1
APR. 07...	1140	10	2	50	0	0	1	2
JUNE 09...	1045	10	0	50	0	0	1	1
AUG. 26...	1130	10	1	30	0	0	0	2

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 2...	20	6	0	0	<.1	5	110	60
JUNE 09...	20	0	10	40	.0	2	240	20
AUG. 26...	70	2	0	50	.0	0	160	30
	10	1	0	0	.0	0	130	20

08067650 West Fork San Jacinto River below Lake Conroe near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)
DEC. 02...	1420	580	13.5	.00	.00	.00	.00	.00	.00	.00	.00
APR. 07...	1140	3.0	17.5	.00	.00	.00	.00	.00	.00	.00	.00
JUNE 09...	1045	57	26.0	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 26...	1130	11.	28.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL PCB (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
DEC. 02...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
APR. 07...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
JUNE 09...	.00	.0	.0	.00	.00	.00	.00	.52	.00	.00
AUG. 26...	.00	.0	.0	.00	.00	.00	.00	.03	.00	.00

SAN JACINTO RIVER BASIN

08067900 Lake Creek near Conroe, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°15'12", long 95°34'43", Montgomery County, at bridge on county road and 8.3 miles (13.4 km) southwest of Conroe.

DRAINAGE AREA.--291 mi² (754 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 30...	1000	34	17	30	2.7	23	2.2	74	0	6.1
NOV. 14...	1415	404	16	28	2.5	15	3.8	71	0	8.2
DEC. 11...	1055	361	11	22	1.8	17	2.2	50	0	7.7
FEB. 10...	1345	142	14	29	2.8	18	3.1	86	0	6.9
MAR. 07...	1630	57	17	49	4.7	37	2.7	126	0	12
JUNE 06...	--	99	--	--	--	--	--	--	--	--
06...	1100	48	--	33	2.4	20	2.7	92	0	7.0
JULY 10...	1100	41	18	33	3.0	18	3.1	88	0	7.9
AUG. 20...	1730	12	22	31	2.4	25	2.9	84	0	4.1

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 30...	48	--	165	86	25	1.1	311	6.8	23.5
NOV. 14...	33	.1	142	80	22	.7	250	6.9	17.0
DEC. 11...	38	.1	124	62	21	.9	234	6.7	--
FEB. 10...	35	.2	151	84	13	.9	284	6.8	11.5
MAR. 07...	77	.3	262	140	38	1.4	493	6.9	16.5
JUNE 06...	--	--	--	--	--	--	--	--	--
06...	39	--	--	92	17	.9	315	6.7	26.0
JULY 10...	34	.2	161	95	23	.8	282	7.0	28.5
AUG. 20...	51	.1	180	87	18	1.2	332	6.7	29.0

SAN JACINTO RIVER BASIN

37

08068000 West Fork San Jacinto River near Conroe, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 30°14'41", long 95°27'26", Montgomery County, near right bank at downstream side of pier of bridge on Interstate Highway 45 and U.S. Highway 75, 281 ft (86 m) upstream from Missouri Pacific Railroad Co. bridge, 3.5 miles (5.6 km) downstream from Lake Creek, and 4.2 miles (6.8 km) south of Conroe.

DRAINAGE AREA.--809 mi² (2,095 km²).

PERIOD OF RECORD.--Discharge: May 1924 to September 1927, July 1939 to current year.

Water quality: Chemical and biochemical analyses: October 1961 to current year. Water temperatures: October 1961 to current year. Sediment records: October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 95.03 ft (28.965 m) above mean sea level, datum of 1929, adjustment of 1943. May 7, 1924, to Sept. 30, 1927, nonrecording gage at railroad bridge 285 ft (87 m) downstream at datum 30.10 ft (9.174 m) higher. July 13, 1939, to Sept. 30, 1963, water-stage recorder at datum 5.0 ft (1.52 m) higher.

AVERAGE DISCHARGE.--36 years (1924-27, 1939-72) prior to regulation by Lake Conroe, 477 ft³/s (13.51 m³/s), 8.01 in/yr (203 mm/yr), 345,600 acre-ft/yr (426 hm³/yr); 3 years (1972-75) regulated, 697 ft³/s (19.74 m³/s), 505,000 acre-ft/yr (623 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 6,760 ft³/s (191 m³/s) Nov. 11 (gage height, 19.17 ft or 5.843 m); minimum daily, 28 ft³/s (0.79 m³/s) Oct. 27.

Period of record: Maximum discharge, 110,000 ft³/s (3,120 m³/s) Nov. 25, 1940 (gage height, 30.85 ft or 9.403 m, present datum), from rating curve extended above 43,000 ft³/s (1,220 m³/s) on basis of velocity-area studies; no flow June 14, 1956, Sept. 19 to Oct. 1, 1965, result of temporary dams.

Historic: Maximum stage since at least December 1913, that of Nov. 25, 1940. Flood in December 1913 reached a stage of 30.2 ft (9.20 m), present site and datum, from information by Missouri Pacific Railroad Co. (discharge, 101,000 ft³/s or 2,860 m³/s, from rating curve explained above).

Water quality: Current year: Maximum daily specific conductance, 425 micromhos Mar. 10; minimum daily, 133 micromhos Dec. 15. Maximum water temperatures, 32.0°C Sept. 2; minimum, 7.5°C Jan. 14.

Period of record: Maximum daily specific conductance, 763 micromhos Apr. 20, 1971; minimum daily, 52 micromhos May 12, 1972. Maximum water temperatures, 36.0°C Aug. 6, 1964, July 9, 1967; minimum, freezing point Dec. 22, 1963, Jan. 31, 1968.

REMARKS.--Discharge records good. Regulated since Jan. 9, 1973, by Lake Conroe (station 08067600), capacity 532,000 acre-ft (656 hm³), 14.5 miles (23.3 km) upstream. No diversions above station.

REVISIONS (WATER YEARS).--WSP 1058: 1926. WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542	4,370	1,210	455	519	89	158	1,240	1,230	670	158	124
2	528	2,650	1,050	585	560	86	104	1,390	914	1,040	277	93
3	517	2,410	667	869	754	81	102	699	380	951	322	75
4	511	2,270	542	924	2,740	148	81	428	212	871	373	71
5	505	1,550	366	913	3,630	262	68	943	265	609	291	517
6	501	1,160	594	934	5,060	110	64	1,760	149	518	306	826
7	496	1,680	489	816	4,140	104	60	1,390	94	355	437	215
8	490	2,830	389	641	2,650	101	1,370	2,240	77	229	492	130
9	485	2,940	361	408	1,950	95	4,440	3,570	99	130	365	93
10	476	3,850	365	531	1,050	89	4,340	4,480	861	95	169	82
11	441	6,210	1,170	573	922	85	3,550	4,420	2,710	133	105	106
12	255	4,140	920	558	835	83	2,080	4,840	2,320	161	86	82
13	235	2,770	838	573	532	248	1,050	3,710	2,140	123	73	114
14	234	2,100	1,120	477	240	271	3,790	3,190	2,240	134	65	85
15	267	1,540	2,090	400	182	105	4,330	3,050	1,610	412	59	82
16	256	1,170	1,140	373	526	90	3,810	2,800	719	738	55	137
17	245	755	772	360	858	110	3,590	2,290	220	776	51	128
18	240	689	596	652	945	1,310	2,470	1,840	145	383	49	85
19	235	655	471	2,260	1,080	1,340	1,630	1,050	116	200	45	129
20	230	632	411	2,110	905	1,260	743	610	100	126	43	118
21	227	588	380	1,520	277	643	382	502	90	96	40	85
22	225	417	360	1,210	169	242	641	215	82	81	142	84
23	205	388	349	2,060	154	160	744	160	77	114	171	75
24	60	1,390	526	1,250	148	131	218	154	71	225	111	58
25	36	2,700	717	770	117	113	156	828	104	153	173	51
26	31	2,390	609	534	103	101	129	1,210	264	111	195	48
27	28	2,640	557	463	96	606	112	882	343	87	159	44
28	296	2,430	391	418	92	840	101	614	762	75	218	41
29	1,400	1,500	398	393	-----	846	97	682	718	140	460	40
30	734	1,500	469	376	-----	825	448	825	668	120	481	38
31	2,110	-----	478	370	-----	674	-----	1,210	-----	118	200	-----
TOTAL	13,041	62,394	20,795	24,776	31,234	11,248	40,858	53,222	19,780	9,974	6,171	3,856
MEAN	421	2,080	671	799	1,116	363	1,362	1,717	659	322	199	129
MAX	2,110	6,210	2,090	2,260	5,060	1,340	4,440	4,840	2,710	1,040	492	826
MIN	28	368	349	360	92	81	60	154	71	75	40	38
AC-FT	25,870	123,800	41,250	49,140	61,950	22,310	81,040	105,600	39,230	19,780	12,240	7,650
CAL YR 1974	TOTAL	262,754	MEAN	720	MAX	11,700	MIN	13	AC-FT	521,200		
WTR YR 1975	TOTAL	297,349	MEAN	815	MAX	6,210	MIN	28	AC-FT	589,800		

SAN JACINTO RIVER BASIN

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 10...	1230	480	5.5	32	2.2	9.6	3.1	96	0	3.2
NOV. 14...	0815	2200	7.1	28	2.5	9.7	3.1	83	0	5.3
DEC. 05...	1030	410	11	31	3.3	14	2.8	92	0	6.7
JAN. 09...	1330	420	11	29	2.4	14	3.1	97	0	6.7
FEB. 26...	1530	95	17	30	3.2	20	2.6	84	0	7.4
MAR. 19...	1530	1450	7.6	33	3.0	19	2.8	95	0	8.6
APR. 07...	1015	55	17	36	3.6	28	2.9	91	0	8.2
MAY 05...	1015	880	6.3	31	2.1	12	3.3	84	0	5.6
JUNE 09...	0915	135	17	28	2.9	21	2.4	87	0	5.6
JULY 01...	0815	550	9.1	23	1.9	13	2.5	64	0	6.2
AUG. 26...	1030	175	17	19	2.3	15	2.4	53	0	6.8
SEP. 04...	0845	68	19	33	2.9	23	3.0	78	0	6.8

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT. 10...	18	--	.14	.00	.06	.60	.66	.06	140
NOV. 14...	18	--	.17	.00	.06	.71	.77	.06	134
DEC. 05...	32	.1	.19	.00	.04	.30	.34	.09	157
JAN. 09...	30	.0	.17	.01	.06	.76	.82	.08	157
FEB. 26...	42	.1	.21	.00	.04	.62	.66	.11	190
MAR. 19...	38	.3	.11	.00	.03	.58	.61	.08	187
APR. 07...	57	.1	.35	.00	.02	.60	.62	.16	222
MAY 05...	24	.1	.13	.01	.12	1.6	1.7	.08	138
JUNE 09...	35	.1	.18	.01	.04	.75	.79	.18	175
JULY 01...	25	.1	.08	.01	.03	.91	.94	.14	131
AUG. 26...	30	.2	.11	.02	.00	1.1	1.1	.08	126
SEP. 04...	48	.1	.13	.01	.00	.65	.65	.26	183

SAN JACINTO RIVER BASIN

39

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 10...	121	20	9	89	10	.4	235	6.8	24.0
NOV. 14...	115	48	18	80	12	.5	217	6.6	17.5
DEC. 05...	147	33	17	91	16	.6	270	6.9	13.5
JAN. 09...	144	34	4	82	3	.7	257	6.4	14.5
FEB. 26...	164	23	4	88	19	.9	307	6.5	17.0
MAR. 19...	159	91	35	95	17	.9	310	7.5	17.5
APR. 07...	198	24	20	110	30	1.2	366	7.1	18.0
MAY 05...	126	94	2	86	17	.6	238	7.2	22.0
JUNE 09...	155	46	12	82	11	1.0	282	6.8	26.5
JULY 01...	112	125	24	65	13	.7	238	6.5	25.5
AUG. 26...	119	92	11	57	14	.9	210	6.9	26.0
SEP. 04...	174	50	17	94	30	1.0	301	6.6	24.5

DATE	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 10...	10	10	9.0	106	1.4	6700	21	31	9.2
NOV. 14...	30	25	8.3	86	1.8	2200	120	410	12
DEC. 05...	30	15	9.7	92	1.2	580	55	49	9.5
JAN. 09...	50	20	9.8	95	1.4	230	160	64	8.6
FEB. 26...	60	20	9.4	97	.7	980	84	42	9.0
MAR. 19...	50	40	9.5	99	1.5	6600	2200	3900	12
APR. 07...	50	10	8.8	93	.8	3100	130	62	7.1
MAY 05...	30	35	8.2	93	1.2	19000	750	220	13
JUNE 09...	50	25	6.9	84	1.8	10000	520	260	7.2
JULY 01...	100	55	7.2	87	1.2	9700	2300	2800	9.2
AUG. 26...	100	45	7.3	89	1.5	3700	130	380	18
SEP. 04...	30	25	7.1	85	1.3	4300	32	140	12

SAN JACINTO RIVER BASIN

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
DEC. 05...	1030	60	3	1	50	<10	1	<10	<10	<50
APR. 07...	1015	10	1	1	60	10	0	0	0	<50
JUNE 09...	0915	<10	3	2	60	<10	0	0	0	<50
AUG. 26...	1030	40	2	1	10	<10	0	0	0	<50

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
DEC. 05...	3	<10	0	780	50	<100	2	0	110
APR. 07...	0	90	1	1200	60	100	0	10	160
JUNE 09...	1	<10	3	2200	80	200	1	0	--
AUG. 26...	0	10	2	510	80	<100	1	0	20

DATE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DEC. 05...	20	<.1	<.1	3	0	0	120	30	10
APR. 07...	60	.2	.1	1	0	0	210	290	30
JUNE 09...	20	.3	.1	0	0	0	130	10	20
AUG. 26...	0	.1	.0	0	0	0	90	10	20

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
FEB. 26	47	0.2	0.2	0.1	0.1	0.0	Polyethylene strip
MAY 05	28	0.8	0.5	0.1	0.1	3100	
AUG. 26	56	11	7.8	7.9	2.4	450	

OCT. 10, 1974 TIME 1230

PHYTOPLANKTON 36,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	6,300	17
....TETRAEDRON	200	1
....SCENEDESMACEAE		
....ACTINASTRUM	390	1
....CRUCIGENIA	7,800	22
....SCENEDESMUS	980	3
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....MELOSIRA	200	1
..PENNALES		
...FRAGILARIACEAE		
....SYNEDRA	780	2
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM	14,000	39
....ANACYSTIS	1,200	3
...OSCILLATORIALES		
....NOSTOCACEAE		
....ANABAENA	690	2
...OSCILLATORIAEAE		
....LYNGBYA	3,400	9

NOV. 14, 1974 TIME 0815

PHYTOPLANKTON 2,200 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...HYDRODICTYACEAE		
....PEDIASTRUM	150	7
...OCCYSTACEAE		
....ANKISTRODESMUS	38	2
....CERASTERIAS	380	17
....CHLORELLA	19	1
....KIRCHNERIELLA	19	1
....SCENEDESMACEAE		
....SCENEDESMUS	420	19
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	95	4
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	130	6
....MELOSIRA	460	21
..PENNALES		
...FRAGILARIACEAE		
....SYNEDRA	130	6
...NITZSCHIAEAE		
....NITZSCHIA	19	1
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM	76	3
...OSCILLATORIALES		
...OSCILLATORIAEAE		
....LYNGBYA	95	4
...OSCILLATORIA	190	9

SAN JACINTO RIVER BASIN

41

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DEC. 5, 1974 TIME 1030

PHYTOPLANKTON 1,700 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...HYDRODICTYACEAE		
....PEDIASTRUM	110	6
...OCCYSTACEAE		
....ANKISTRODESMUS	87	5
....KIRCHNERIELLA	87	5
....TETRAEDRON	44	3
...SCENEDESMACEAE		
....SCENEDESMUS	350	21
...ZYGNEATALES		
....DESMIDIACEAE		
....COSMARIUM	22	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCACEAE		
....CYCLOTELLA	540	32
....MELOSIRA	200	12
...PENNALES		
...FRAGILARIACEAE		
....SYNEDRA	22	1
...GOMPHONEMACEAE		
....GOMPHONEMA	22	1
...NITZSCHIA		
....NITZSCHIA	150	9
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
....EUGLENAEAE		
....TRACHELOMONAS	22	1
PYRRHOPHYTA		
..DINOPHYCEAE		
...PERIDINIALES		
....PERIDINIACEAE		
....PERIDINIUM	44	3

JAN. 9, 1975 TIME 1330

PHYTOPLANKTON 1,500 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....KIRCHNERIELLA	37	2
...SCENEDESMACEAE		
....SCENEDESMUS	73	5
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCACEAE		
....CYCLOTELLA	92	6
....MELOSIRA	510	35
...PENNALES		
...FRAGILARIACEAE		
....FRAGILARIA	92	6
...NAVICULACEAE		
....NAVICULA	55	4
...NITZSCHIA		
....NITZSCHIA	150	10
CHRYSOPHYCEAE		
...CHRYSONOMADACEAE		
....OCHROMONADACEAE		
....DINOBRYON	18	1
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....AGMENELLUM	150	10
....ANACYSTIS	310	21

FEB. 26, 1975 TIME 1530

PHYTOPLANKTON 1,200 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	63	5
....CHODATELLA	32	3
...SCENEDESMACEAE		
....CRUCIGENIA	250	21
....SCENEDESMUS	130	11
...ZYGNEATALES		
....DESMIDIACEAE		
....STAUSTRUM	32	3
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCACEAE		
....CYCLOTELLA	160	13
....MELOSIRA	130	11
...PENNALES		
...ACHNANTHACEAE		
....COCCONEIS	32	3
...NAVICULACEAE		
....NAVICULA	32	3
...NITZSCHIA		
....NITZSCHIA	290	24
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....ANACYSTIS	63	5

MAR. 19, 1975 TIME 1530

PHYTOPLANKTON 5,500 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	110	2
...SCENEDESMACEAE		
....CRUCIGENIA	110	2
....SCENEDESMUS	110	2
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCINODISCACEAE		
....CYCLOTELLA	210	4
....MELOSIRA	640	12
...PENNALES		
...FRAGILARIACEAE		
....SYNEDRA	190	3
...NAVICULACEAE		
....GYROSIGMA	53	1
....NAVICULA	80	1
...NITZSCHIA		
....NITZSCHIA	690	13
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
....NOSTOCACEAE		
....ANABAENA	500	9
...OSCILLATORIAEAE		
....LYNGBYA	2,800	51

SAN JACINTO RIVER BASIN

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

APR. 7, 1975 TIME 1015

PHYTOPLANKTON 3,800 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...SCENEDESMACEAE		
....SCENEDESMUS	480	13
...VOLVOCEAE		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	48	1
CHRYSOPLANKTON		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTELLA	48	1
....MELOSIRA	380	10
...PENNALES		
...NITZSCHIA		
....NITZSCHIA	330	9
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	430	11
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	2,000	54

MAY 5, 1975 TIME 1015

PHYTOPLANKTON 3,500 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...HYDRODICTYACEAE		
....PEDIASTRUM	270	8
...MICRACINTHACEAE		
....GOLENKINIA	68	2
...OCCYSTACEAE		
....ANKISTRODESMUS	170	5
...SCENEDESMACEAE		
....CRUCIGENIA	540	15
...SCENEDESMUS	410	12
CHRYSOPLANKTON		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTELLA	470	13
....MELOSIRA	270	8
...PENNALES		
...CYMBELLACEAE		
....RHOPALODIA	68	2
...GOMPHONEMACEAE		
....GOMPHONEMA	34	1
...NAVICULACEAE		
....NAVICULA	100	3
...NITZSCHIA		
....NITZSCHIA	470	13
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	270	8
...OSCILLATORIALES		
...OSCILLATORIAEAE		
....LYNGBYA	340	10
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
....TRACHELOMONAS	34	1

JUNE 9, 1975 TIME 0915

PHYTOPLANKTON 1,300 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...CHARACIACEAE		
....SCHROEDERIA	29	2
...OCCYSTACEAE		
....ANKISTRODESMUS	58	5
...SCENEDESMACEAE		
....CRUCIGENIA	350	28
...SCENEDESMUS	580	47
CHRYSOPLANKTON		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....CYCLOTELLA	29	2
....MELOSIRA	29	2
...PENNALES		
...NAVICULACEAE		
....NAVICULA	29	2
...NITZSCHIA		
....NITZSCHIA	120	9
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
....EUGLENA	29	2

AUG. 26, 1975 TIME 1030

PHYTOPLANKTON 1,500 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	27	2
...OCCYSTIS	220	15
...SCENEDESMACEAE		
...SCENEDESMUS	440	30
CHRYSOPLANKTON		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCEAE		
....MELOSIRA		0
...PENNALES		
...CYMBELLACEAE		
....AMPHORA		0
...NAVICULACEAE		
....GYROSIGMA	27	2
...NAVICULA	240	17
...PINNULARIA	82	6
...TROPIDONEIS		0
...NITZSCHIAEAE		
....HANTZSCHIA	54	4
...NITZSCHIA	330	22
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
...EUGLENACEAE		
....EUGLENA	54	4

SAN JACINTO RIVER BASIN

43

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

SEP. 4, 1975 TIME 0845

PHYTOPLANKTON 4,200 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...HYDRODICTYACEAE		
....PEDIASTRUM		0
....OCCYSTACEAE		
....ANKISTRODESMUS	160	4
....DICTYOSPHAERIUM		0
....TETRAEDRON		0
....SCENEDESMACEAE		
....ACTINASTRUM		0
....CRUCIGENIA	640	15
....SCENEDESMUS	920	22
....TETRASTRUM	92	2
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	110	3
....MELOSIRA	270	6
..PENNALES		
...NAVICULACEAE		
....GYROSIGMA		0
....NAVICULA	180	4
....PINNULARIA	23	1
...NITZSCHIA		
....NITZSCHIA	390	9
..XANTHOPHYCEAE		
...HETEROCOCCALES		
...CHLOROTHECIACEAE		
....OPHIOCYTIUM	23	1
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	1,300	30
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	140	3

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SEDIMENT % FINER THAN .062 MM
OCT.						
10...	1230	480	24.0	55	71	41
22...	0940	235	--	15	9.5	82
NOV.						
14...	0815	2200	17.5	29	172	92
DEC.						
05...	1030	410	13.5	23	25	90
06...	1035	616	--	244	406	48
JAN.						
09...	1330	420	14.5	24	27	95
16...	1100	389	--	47	49	52
FEB.						
25...	1605	120	--	18	5.8	82
26...	1530	95	17.0	21	5.4	82
MAR.						
19...	1530	1450	17.5	47	184	100
APR.						
07...	1015	55	18.0	12	1.8	91
24...	1830	189	--	44	22	67
MAY						
05...	1015	880	22.0	101	240	82
JUNE						
09...	0915	135	26.5	29	11	95
JULY						
01...	0815	550	25.5	96	143	93
AUG.						
26...	1030	175	26.0	68	32	88
SEP.						
04...	0845	68	24.5	31	5.7	96

SAN JACINTO RIVER BASIN

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	13041	213	110	3870	21	739	5.3	187	64
NOV. 1974.....	62394	188	100	16800	17	2860	4.8	809	57
DEC. 1974.....	20795	227	120	6740	24	1350	5.5	309	68
JAN. 1975.....	24776	259	140	9370	30	2010	6.2	415	76
FEB. 1975.....	31234	222	120	10100	23	1940	5.4	455	66
MAR. 1975.....	11248	279	150	4560	34	1030	6.6	200	81
APR. 1975.....	40858	188	100	11000	17	1880	4.8	530	57
MAY 1975.....	53222	212	110	15800	21	3020	5.2	747	64
JUNE 1975.....	19780	227	120	6410	24	1280	5.5	294	68
JULY 1975.....	9974	221	120	3230	23	619	5.4	145	66
AUG. 1975.....	6171	260	140	2330	30	500	6.2	103	76
SEPT 1975.....	3856	242	130	1350	27	281	5.8	60	72
TOTAL	297349	**	**	91600	**	17500	**	4250	**
WTD.AVG.	814.65	215	110	**	22	**	5.3	**	64

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	147	216	282	268	338	359	318	237	238	282	275
2	243	167	226	311	244	352	375	310	250	189	286	298
3	241	201	249	297	202	360	367	325	277	195	286	328
4	239	204	260	301	254	356	379	293	260	200	287	301
5	237	210	271	340	206	300	376	222	239	220	286	232
6	236	219	203	307	208	345	375	218	241	235	234	134
7	236	168	223	261	179	360	368	209	270	267	233	272
8	235	180	255	248	192	369	136	187	269	263	232	267
9	235	196	263	260	210	415	156	157	258	270	284	266
10	235	180	290	255	215	425	159	182	197	277	290	270
11	234	155	177	255	223	416	229	203	210	230	257	244
12	244	179	242	301	224	415	233	194	211	233	260	248
13	242	208	266	307	240	316	228	198	190	225	250	250
14	240	219	288	328	287	270	135	208	190	185	260	256
15	233	224	133	297	322	386	154	210	329	183	270	256
16	241	223	190	281	233	392	193	214	225	230	275	349
17	237	227	226	279	246	392	195	217	238	230	283	293
18	239	226	251	270	300	210	204	222	253	230	289	285
19	241	232	245	239	278	293	209	222	267	229	297	282
20	237	233	245	229	247	274	223	233	293	229	289	236
21	235	244	244	261	273	286	240	315	293	229	288	337
22	234	258	251	268	285	322	222	256	285	229	251	283
23	234	267	249	178	287	326	232	268	285	230	252	295
24	266	139	231	190	291	334	262	255	293	230	249	288
25	282	161	230	219	331	343	276	210	396	229	249	284
26	294	198	228	274	317	357	287	200	199	280	248	280
27	296	202	233	280	321	246	301	219	190	201	248	270
28	215	192	257	275	338	249	311	211	190	230	249	278
29	157	202	264	269	---	246	307	220	230	230	249	277
30	204	211	269	268	---	253	214	220	272	230	246	266
31	150	---	271	264	---	246	---	240	---	229	260	---
MONTH	237	202	240	271	258	329	257	231	251	229	265	273

SAN JACINTO RIVER BASIN

45

08068000 West Fork San Jacinto River near Conroe, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.5	21.5	13.0	13.0	18.5	17.0	17.0	22.0	25.0	26.0	26.0	---
2	25.5	22.5	13.0	13.0	16.0	19.0	---	---	---	27.0	---	32.0
3	22.5	23.5	13.0	12.0	15.0	17.0	17.0	24.0	27.0	---	28.0	30.0
4	25.0	23.0	12.0	13.0	13.0	15.0	14.0	21.0	26.0	---	27.0	28.0
5	22.0	20.0	13.0	12.0	13.0	14.0	---	22.0	26.0	---	26.0	26.0
6	26.0	18.0	16.0	11.0	13.0	14.0	20.0	24.0	26.0	---	28.0	28.0
7	25.0	17.0	14.0	---	8.0	16.0	19.0	22.0	28.0	23.0	27.0	28.0
8	25.0	---	16.0	14.0	10.0	22.0	18.0	23.0	28.0	---	26.0	28.0
9	24.5	16.0	12.0	13.0	13.0	15.0	19.0	24.0	26.0	---	27.0	29.0
10	25.0	18.0	12.0	14.0	11.0	16.0	19.0	24.0	26.0	---	---	27.0
11	25.0	17.0	12.0	11.0	13.0	16.0	17.0	23.0	---	---	27.0	29.0
12	23.0	17.0	13.0	11.0	12.0	21.0	17.0	23.0	26.0	---	---	---
13	24.0	17.0	13.0	8.0	11.0	15.0	17.0	23.0	26.0	26.0	---	---
14	25.0	17.0	13.0	7.5	13.0	11.0	17.0	23.0	28.0	26.0	---	28.0
15	22.0	16.5	14.0	8.0	15.0	13.0	18.0	23.0	27.0	27.0	---	27.0
16	22.0	16.0	13.0	11.0	14.0	17.0	19.0	23.0	26.0	26.0	---	28.0
17	24.0	18.0	12.0	11.0	14.0	17.0	19.0	25.0	29.0	28.0	30.0	29.0
18	24.5	17.0	13.0	12.0	13.0	17.0	20.0	25.0	28.0	26.0	27.0	28.0
19	20.0	20.0	13.0	13.0	11.0	18.0	18.0	23.0	29.0	26.0	27.0	29.0
20	21.0	18.0	13.0	12.0	11.0	18.0	20.0	24.0	29.0	26.0	27.0	29.0
21	22.0	17.0	14.0	10.0	13.0	18.0	19.0	24.0	29.0	28.0	27.0	26.0
22	21.0	18.0	15.0	12.0	16.0	21.0	20.0	24.0	30.0	27.0	29.0	25.0
23	24.5	19.0	15.0	---	13.0	21.0	20.0	27.0	31.0	26.0	30.0	24.0
24	24.0	15.0	15.0	11.0	17.0	18.0	24.0	25.0	28.0	25.0	28.0	25.0
25	22.5	14.0	---	11.0	---	22.0	25.0	26.0	26.0	27.0	28.0	25.0
26	18.0	13.0	12.0	15.0	16.0	20.0	26.0	25.0	25.0	28.0	27.0	24.0
27	---	14.0	12.0	13.0	14.0	18.0	26.0	26.0	---	29.0	30.0	24.0
28	21.0	13.0	13.0	16.0	18.0	21.0	24.0	24.0	---	27.0	29.0	25.0
29	22.0	15.0	14.0	16.0	---	15.0	26.0	26.0	28.0	28.0	31.0	25.0
30	23.0	12.0	17.0	16.0	---	16.0	22.0	26.0	28.0	26.0	31.0	25.0
31	---	---	16.0	16.0	---	13.0	---	25.0	---	28.0	---	---
MONTH	23.0	17.5	13.5	12.5	13.5	17.0	20.0	24.0	27.5	---	---	27.0

SAN JACINTO RIVER BASIN

08068400 Panther Branch near Conroe, Tex.

LOCATION.--Lat 30°11'34", long 95°29'09", Montgomery County, on left bank 100 ft (30 m) downstream from pipeline right-of-way, 400 ft (122 m) downstream from mouth of Bear Branch, 5.6 miles (9.0 km) upstream from Panther Branch near Spring (station 08068450), and 8 miles (13 km) southwest of Conroe.

DRAINAGE AREA.--25.9 mi² (67.1 km²).

PERIOD OF RECORD.--Discharge: July 1974 to current year.

Water quality: Chemical and biochemical analyses: March to September 1975 (discontinued). Pesticide analyses: August to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 125.52 ft (38.258 m) above mean sea level.

EXTREMES.--July to September 1974: Maximum discharge during period, 725 ft³/s (20.5 m³/s) Sept. 13 (gage height, 9.40 ft or 2.865 m); no flow for many days.

Water year 1975: Maximum discharge, 1,350 ft³/s (38.2 m³/s) Oct. 31 (gage height, 10.01 ft or 3.051 m); no flow for many days.

REMARKS.--Discharge records good. There is no known diversion or regulation above station. Rain gages are located in or near basin.

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											0	4.3
2											16	1.4
3											6.8	5.0
4											1.9	2.3
5											12	.48
6											8.0	.16
7											25	.09
8											10	.05
9											8.5	.04
10											9.0	.04
11											2.5	.27
12											.50	4.3
13											.10	119
14											.02	199
15											.01	40
16											.01	15
17											0	5.2
18											0	2.6
19											0	1.5
20											0	.72
21											0	.40
22											0	.23
23											0	.13
24											0	.11
25											0	.11
26											0	.11
27											0	.11
28											0	.11
29											0	.09
30											5.0	.05
31											1.8	-----
TOTAL										0	107.14	402.90
MEAN										0	3.46	13.4
MAX										0	25	199
MIN										0	0	.04
CFSM										0	.13	.52
IN.										0	.15	.58
AC-FT										0	213	799
(††)										.68	7.69	5.43

WTR YR 1974 TOTAL - MEAN - MAX - MIN - CFSM - IN - AC-FT - †† -

PEAK DISCHARGE (BASE, 500 FT³/S).--Sept. 13 (2000) 725 ft³/s (9.40 ft).

†† Weighted-mean rainfall, in inches, based on three rain gages.

08068400 Panther Branch near Conroe, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	427	8.6	21	74	.61	1.0	42	17	12	39	.05
2	.04	80	4.9	30	81	.58	.97	9.6	4.7	15	6.0	.03
3	.03	22	3.2	57	88	.52	.68	3.7	1.8	13	1.8	.02
4	.03	9.1	2.4	50	621	1.0	.45	2.1	.81	3.7	1.3	.01
5	.03	4.3	5.8	22	183	2.1	.35	1.2	.46	1.3	1.0	.03
6	.02	2.4	232	14	58	1.7	.32	.84	.40	.54	.59	.31
7	.02	422	163	11	21	1.4	.27	.61	.25	.25	.28	.13
8	.01	277	39	9.4	13	.91	487	13	.17	.12	.14	.05
9	.01	103	16	7.0	9.9	.63	304	52	1.8	.07	.08	.03
10	.01	288	30	28	6.2	.56	158	33	43	.04	.06	.05
11	0	393	352	25	5.7	.62	279	36	90	.22	.05	.04
12	0	87	136	14	5.0	.73	77	38	18	.40	.04	.12
13	0	22	40	11	3.9	33	21	14	6.2	.32	.03	.28
14	0	11	61	9.0	2.9	11	731	10	2.5	.20	.02	.09
15	.27	6.5	458	6.5	2.7	3.0	214	4.5	1.1	.58	.02	.04
16	.11	4.2	123	5.4	2.7	1.9	57	2.2	.55	.23	.01	.04
17	.05	4.7	34	5.0	2.7	41	20	1.1	.29	.12	0	.06
18	.04	5.5	20	21	2.2	235	12	.55	.16	.09	0	.03
19	.03	5.1	14	34	1.6	76	6.1	.31	.09	.08	0	.01
20	.02	4.1	9.5	18	1.2	18	3.1	.21	.05	.04	0	0
21	.01	2.8	6.1	11	1.1	8.6	2.1	.14	.03	.03	0	0
22	.01	1.7	4.6	39	1.1	5.8	3.4	.10	.03	.02	.55	0
23	0	1.3	4.1	81	1.1	4.6	3.3	.08	.03	11	.63	0
24	0	343	9.5	29	.88	3.6	2.1	.08	.07	19	.18	0
25	0	245	34	19	.64	1.9	1.3	8.2	.15	2.0	1.4	0
26	0	61	27	13	.61	1.4	.78	18	45	3.7	.58	.43
27	0	21	20	8.4	.61	6.0	.52	5.0	57	2.9	.19	1.8
28	57	12	18	6.0	.61	7.3	.36	12	14	.63	.68	.42
29	211	7.5	18	4.8	-----	4.0	.47	122	5.8	1.6	.38	.32
30	27	10	23	3.9	-----	2.1	27	150	4.5	3.5	.17	.24
31	264	-----	23	5.0	-----	1.3	-----	76	-----	26	.08	-----
TOTAL	559.78	2,883.2	1,939.7	618.4	1,192.35	476.86	2,414.57	656.52	315.94	118.68	55.26	4.63
MEAN	18.1	96.1	62.6	19.9	42.6	15.4	80.5	21.2	10.5	3.83	1.78	.15
MAX	264	427	458	81	621	235	731	150	90	26	39	1.8
MIN	0	1.3	2.4	3.9	.61	.52	.27	.08	.03	.02	0	0
CFSM	.70	3.71	2.42	.77	1.64	.59	3.11	.82	.41	.15	.07	.006
IN.	.80	4.14	2.79	.89	1.71	.68	3.47	.94	.45	.17	.08	.006
AC-FT	1,110	5,720	3,850	1,230	2,370	946	4,790	1,300	627	235	110	9.2
(††)	7.36	7.36	4.97	1.97	2.27	3.00	7.66	5.62	5.14	4.09	2.25	1.56

CAL YR 1974 TOTAL - MEAN - MAX - MIN - CFSM - IN - AC-FT - †† -
WTR YR 1975 TOTAL 11,235.89 MEAN 30.8 MAX 731 MIN 0 CFSM 1.19 IN 16.14 AC-FT 22,290 †† 53.25

PEAK DISCHARGE (BASE, 500 FT²/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-31	2230	10.01	1,350	12-15	0430	9.42	741
11- 7	1700	9.67	969	2- 4	0830	9.67	969
11-10	2230	9.66	959	4- 8	1930	9.84	1,150
11-24	1800	9.35	689	4-14	1100	9.92	1,240

†† Weighted-mean rainfall, in inches, based on three rain gages.

SAN JACINTO RIVER BASIN

08068400 Panther Branch near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
16...	1200	.09	11	4.2	1.4	14	.7	14	0	3.9
NOV.										
13...	1315	21	4.4	3.1	.8	4.2	1.2	4	0	6.0
DEC.										
18...	1000	18	5.2	4.5	.7	5.1	1.2	6	0	5.0
FEB.										
10...	1100	6.0	7.1	8.2	2.7	13	1.1	11	0	5.3
24...	1200	.80	10	14	4.6	31	1.2	11	0	4.8
MAR.										
04...	1200	.80	--	--	--	--	--	--	--	--
APR.										
21...	1200	2.0	6.8	8.0	2.9	17	1.3	16	0	5.6
MAY										
28...	1300	1.2	6.1	7.9	1.1	16	1.1	15	0	6.3
JUNE										
19...	1115	.09	5.8	6.7	1.2	11	.7	17	0	4.5
JULY										
21...	1100	.03	5.8	8.7	2.9	20	1.1	17	0	4.6
SEP.										
16...	1000	.07	4.0	6.9	2.4	17	2.7	14	0	4.1

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
16...	22	--	.00	.00	.09	.71	.80	.09	64	24
NOV.										
13...	7.5	--	.00	.00	.08	.74	.82	.01	30	22
DEC.										
18...	9.8	.0	.01	.00	.10	.64	.74	.03	35	123
FEB.										
10...	26	.0	.02	.00	.05	.88	.93	.00	70	25
24...	67	.0	.03	.01	.06	.77	.83	.03	139	11
MAR.										
04...	--	--	.07	.00	.08	.76	.84	.05	--	9
APR.										
21...	31	.1	.06	.00	.10	1.0	1.1	.05	81	23
MAY										
28...	26	.1	.12	.01	.10	.65	.75	.11	72	42
JUNE										
19...	19	.1	.07	.01	.05	1.2	1.2	.04	59	19
JULY										
21...	37	.1	.02	.01	.07	.93	1.0	.02	89	19
SEP.										
16...	33	.1	.02	.01	.00	1.1	1.1	.05	79	154

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
16...	4	16	5	1.5	117	5.6	18.0	70	15
NOV.									
13...	12	11	8	.6	43	5.6	16.0	140	15
DEC.									
18...	119	14	9	.6	58	7.0	8.5	140	15
FEB.									
10...	4	32	23	1.0	119	5.7	9.5	120	20
24...	10	54	45	1.8	274	5.8	10.0	120	10
MAR.									
04...	6	--	--	--	276	--	12.5	100	10
APR.									
21...	14	32	19	1.3	156	6.3	17.0	120	10
MAY									
28...	20	24	12	1.4	14.	6.1	25.0	80	25
JUNE									
19...	11	22	8	1.0	111	6.2	27.5	160	10
JULY									
21...	11	34	20	1.5	180	5.7	25.5	60	5
	145	27	16	1.4	164	6.2	23.5	200	85

SAN JACINTO RIVER BASIN

49

08068400 Panther Branch near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 16...	4.7	49	2.6	18000	390	780	14	2	.1
NOV. 13...	9.3	93	2.0	3200	150	170	23	1	.2
DEC. 18...	10.2	86	1.1	5000	110	130	20	31	.1
FEB. 10...	8.4	74	1.1	1700	600	150	20	3	.2
24...	9.6	85	.5	1500	230	47	21	2	.5
MAR. 04...	6.8	64	2.9	2000	270	60	16	7	.2
APR. 21...	8.7	90	1.4	--	--	--	21	12	.2
MAY 28...	5.2	62	2.2	98000	3700	260	22	7	.3
JUNE 19...	3.2	40	.7	2200	230	220	16	8	.0
JULY 21...	2.3	28	2.0	--	--	--	17	6	.1
SEP. 16...	3.2	37	2.2	8700	82	2800	18	6	.2

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 16...	1200	20	1	--	<1	0	0	2
NOV. 13...	1315	240	2	130	2	0	0	0
DEC. 18...	1000	190	0	70	0	0	0	19
FEB. 10...	1100	170	2	100	1	0	1	4
24...	1200	110	1	80	1	0	0	3
MAR. 04...	1200	70	0	440	0	0	0	0
APR. 21...	1200	60	0	80	0	0	1	3
MAY 28...	1300	10	0	40	0	0	0	12
JUNE 19...	1115	80	2	110	0	0	0	2
JULY 21...	1100	20	0	80	0	0	0	2
SEP. 16...	1000	40	0	130	0	0	0	6

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 16...	130	5	0	0	.0	0	0	70
NOV. 13...	370	18	0	20	.1	1	20	180
DEC. 18...	270	13	0	20	.0	7	0	110
FEB. 10...	640	9	0	40	.0	4	60	290
24...	670	7	0	10	.0	1	70	90
MAR. 04...	470	1	0	0	.0	1	50	40
APR. 21...	490	2	10	60	.0	0	40	30
MAY 28...	90	1	0	0	.0	1	40	20
JUNE 19...	800	3	0	350	.0	1	40	60
JULY 21...	370	0	0	10	.0	0	70	20
SEP. 16...	250	1	0	240	.0	1	50	20

SAN JACINTO RIVER BASIN

08068400 Panther Branch near Conroe, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)
OCT.											
16...	1200	.09	18.0	.00	--	.00	--	.00	--	.00	--
NOV.											
13...	1315	21	16.0	.00	--	.00	--	.00	--	.00	--
DEC.											
18...	1000	18	8.5	.00	--	.00	--	.00	--	.00	--
FEB.											
10...	1100	6.0	9.5	.00	--	.00	--	.00	--	.00	--
24...	1200	.80	10.0	.00	--	.00	--	.00	--	.00	--
MAR.											
04...	1200	.80	12.5	.00	--	.00	--	.00	--	.00	--
APR.											
21...	1200	2.0	17.0	.00	.0	.00	.0	.00	.0	.00	.0
JUNE											
19...	1115	.09	27.5	.00	--	.00	--	.00	--	.00	--
JULY											
21...	1100	.03	25.5	.00	--	.00	--	.00	--	.00	--
SEP.											
16...	1000	.07	23.5	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
OCT.											
16...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
NOV.											
13...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
DEC.											
18...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
FEB.											
10...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
24...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
MAR.											
04...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
APR.											
21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JUNE											
19...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
JULY											
21...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
SEP.											
16...	.00	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT.										
16...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
NOV.										
13...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
DEC.										
18...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
FEB.										
10...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
24...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
MAR.										
04...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
APR.										
21...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
JUNE										
19...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
JULY										
21...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
SEP.										
16...	--	.0	--	.00	.00	.00	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

51

08068440 Lake Harrison at drop inlet at Woodlands, Tex.

LOCATION.--Lat 30°08'24", long 95°28'33", Montgomery County, at end of walkway to drop-inlet structure on dam of Lake A at Woodlands.

DRAINAGE AREA.--0.71 mi² (1.84 km²).

PERIOD OF RECORD.--October 1974 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) above mean sea level (sea level datum by Mitchell Development Co. of the Southwest).

EXTREMES.--Current year: Maximum discharge, 114 ft³/s (3.23 m³/s) Apr. 8 (gage height, 23.66 ft or 7.212 m); no flow for many days.

REMARKS.--Records good except those for October and November, which are poor. Sewage effluent is discharged into Lake A from nearby treatment plant. Water from lake is used to irrigate an adjacent golf course. Rice University operates a rain gage in the basin from which rainfall data are available.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	15	.25	1.8	3.5	0	0	2.7	.90	.06		
2	0	4.0	.15	2.2	1.8	0	0	.59	.18	1.4		
3	0	1.0	.10	1.8	11	0	0	.14	.06	.45		
4	0	.20	.07	.84	17	0	0	.08	0	.11		
5	0	.10	1.0	.30	5.2	0	0	.01	0	.06		
6	0	.05	6.0	.20	1.3	.03	0	0	0	.03		
7	0	5.0	7.0	.17	.33	.22	0	0	0	.02		
8	0	12	1.0	.16	.11	.12	37	0	0	0		
9	0	3.0	.30	.13	.07	.05	8.6	.02	0	0		
10	0	3.0	.15	2.0	.05	.04	9.4	.01	.96	0		
11	0	15	6.0	.97	.05	.01	8.0	1.5	.48	0		
12	0	4.0	2.6	1.7	.05	0	1.6	3.0	.15	.02		
13	0	.50	.95	1.2	.04	.99	.31	.75	.07	.02		
14	0	.10	4.9	.35	.03	.27	20	.25	.01	.31		
15	0	.05	6.8	.23	.02	.09	4.9	.11	0	.85		
16	0	.04	2.7	.20	.01	.06	.94	.06	0	.36		
17	0	2.0	.65	.23	0	3.1	.24	.03	0	.02		
18	0	1.2	.26	3.8	0	6.5	.03	0	0	0		
19	0	.72	.23	1.8	0	1.4	0	0	0	0		
20	0	.35	.15	.57	0	.28	0	0	0	0		
21	0	.16	.08	.27	0	.05	.01	0	.06	0		
22	0	.08	.06	.20	0	.04	.09	0	0	0		
23	0	.10	.07	2.0	0	0	.09	.06	0	0		
24	0	13	.86	2.5	0	0	.06	.01	0	0		
25	0	5.5	1.5	1.5	0	0	.01	4.9	0	0		
26	0	1.5	.52	.80	0	0	0	8.2	0	0		
27	0	.30	.49	.45	0	0	0	1.8	0	0		
28	2.0	.19	.75	.25	0	0	0	2.8	0	0		
29	6.0	.14	2.1	.15	-----	0	.05	21	0	0		
30	2.5	.12	2.4	.10	-----	0	4.7	9.7	0	0		
31	1.0	-----	1.5	.06	-----	0	-----	4.7	-----	0		-----
TOTAL	11.5	88.40	51.59	28.93	40.56	13.25	96.03	62.42	2.87	3.71	0	0
MEAN	.37	2.95	1.66	.93	1.45	.43	3.20	2.01	.096	.12	0	0
MAX	6.0	15	7.0	3.8	17	6.5	37	21	.96	1.4	0	0
MIN	0	.04	.06	.06	0	0	0	0	0	0	0	0
AC-FT	23	175	102	57	80	26	190	124	5.7	7.4	0	0
(††)	-	-	-	-	-	3.03	9.09	6.05	2.72	4.03	1.28	2.51

CAL YR 1974 TOTAL - MEAN - MAX - MIN - AC-FT -
WTR YR 1975 TOTAL 399.26 MEAN 1.09 MAX 37 MIN 0 AC-FT 792

†† Rainfall, in inches, at rain gage 0.25 mile northeast of Lake Harrison gage.

SAN JACINTO RIVER BASIN

08068450 Panther Branch near Spring, Tex.

LOCATION.--Lat 30°08'04", long 95°28'38", Montgomery County, on left bank 300 ft (91 m) upstream from Sawdust Road, 3.0 miles (4.8 km) upstream from Spring Creek, and 5.1 miles (8.2 km) northwest of Spring.

DRAINAGE AREA.--34.5 mi² (89.4 km²).

PERIOD OF RECORD.--Discharge: April 1972 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: May 1972 to current year. Sediment records: October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.69 ft (30.081 m) above mean sea level.

EXTREMES.--Discharge: Current year: Maximum discharge, 1,330 ft³/s (37.7 m³/s) Apr. 14 (gage height, 12.53 ft or 3.819 m); no flow for many days.

Period of record: Maximum discharge, 5,550 ft³/s (157 m³/s) June 13, 1973 (gage height, 15.94 ft or 4.859 m); no flow for many days.

Water quality: Current year: Maximum daily sediment concentrations, 448 mg/l Apr. 8; no flow several days. Maximum daily sediment loads, 485 tons Apr. 8; minimum daily, 0 tons on many days.

REMARKS.--Discharge records good. Rain gage located 500 ft (150 m) east of gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	610	12	29	64	1.5	2.0	63	49	13	46	.24
2	.09	171	9.3	41	105	1.9	1.5	27	14	20	17	.15
3	.09	52	6.3	49	141	1.9	1.2	9.5	6.1	18	5.9	.07
4	.09	18	5.1	66	723	2.7	.96	5.6	3.3	10	3.2	.07
5	.07	9.1	18	38	346	2.4	.80	4.9	2.8	4.3	2.3	3.5
6	.07	5.1	248	20	124	3.1	.62	4.0	2.7	2.1	1.7	1.3
7	.07	196	266	14	39	2.9	.69	3.1	3.1	1.6	1.0	.41
8	.07	547	98	12	20	2.0	495	1.6	2.9	1.4	.68	.17
9	.05	175	32	10	15	1.5	672	24	3.6	.39	.45	.12
10	.05	178	28	27	12	1.4	243	49	17	.28	.32	.10
11	.03	634	318	50	9.7	1.2	380	35	70	6.0	.24	.07
12	.03	178	251	38	9.0	1.2	172	81	52	1.1	.12	.12
13	.02	56	85	41	7.7	54	44	29	16	.47	.04	.16
14	.79	23	63	23	6.2	30	801	15	7.1	8.6	.03	.16
15	4.2	13	415	14	4.7	8.3	488	11	3.4	7.8	.03	.16
16	.16	8.2	224	11	4.0	4.2	132	5.5	2.1	2.0	.03	1.0
17	0	24	72	9.4	3.8	19	36	3.3	1.3	.93	.02	.17
18	.17	16	30	26	3.6	258	20	2.2	.86	.52	.01	.05
19	1.3	13	20	63	2.9	187	11	1.5	.59	.64	.01	.06
20	2.3	9.7	14	43	2.6	44	6.8	1.0	.44	.37	.01	.11
21	2.1	6.6	9.8	20	3.3	16	6.3	.77	.44	.24	.01	.13
22	1.3	4.7	7.1	14	2.7	10	6.7	.56	.42	.16	.05	.04
23	.44	3.3	5.8	72	2.0	7.7	5.6	.46	.33	.10	.24	.02
24	.15	290	14	54	2.0	5.7	4.6	.51	.23	15	.07	.01
25	.07	486	39	29	2.6	4.2	3.4	19	.16	9.3	.09	.01
26	.71	136	43	19	1.4	3.3	3.5	72	.98	2.6	.47	0
27	2.2	44	29	13	.99	5.3	1.7	18	54	4.0	.68	0
28	89	21	24	9.8	.99	9.7	1.8	12	34	2.8	.37	0
29	306	13	26	7.7	-----	8.2	4.2	198	12	1.5	.21	0
30	123	10	32	5.4	-----	4.8	21	327	6.4	1.9	.33	0
31	76	-----	33	5.2	-----	3.0	-----	163	-----	6.0	.31	-----
TOTAL	610.71	3,950.7	2,477.4	873.5	1,659.18	706.1	3,567.37	1,187.50	367.25	143.10	81.92	8.40
MEAN	19.7	132	79.9	28.2	59.3	22.8	119	38.3	12.2	4.62	2.64	.28
MAX	306	634	415	72	723	258	801	327	70	20	46	3.5
MIN	0	3.3	5.1	5.2	.99	1.2	.62	.46	.16	.10	.01	0
CFSM	.57	3.83	2.32	.82	1.72	.66	3.45	1.11	.35	.13	.08	.008
IN.	.66	4.26	2.67	.94	1.79	.76	3.85	1.28	.40	.15	.09	.009
AC-FT	1,210	7,840	4,910	1,730	3,290	1,400	7,080	2,360	728	284	162	17
(††)	6.86	7.22	4.86	1.94	2.49	3.06	8.07	5.86	4.61	3.98	2.09	1.50
CAL YR 1974	TOTAL 13,736.85	MEAN 37.6	MAX 662	MIN 0	CFSM 1.09	IN 14.81	AC-FT 27,250	†† 54.44				
WTR YR 1975	TOTAL 15,633.13	MEAN 42.8	MAX 801	MIN 0	CFSM 1.24	IN 16.86	AC-FT 31,010	†† 52.54				

PEAK DISCHARGE (BASE, 800 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 1	0700	11.98	1,050	2- 4	1600	11.91	1,020
11- 8	0100	11.66	913	4- 9	0300	12.15	1,130
11-11	0700	11.73	941	4-14	1800	12.53	1,330

†† Weighted-mean rainfall, in inches, based on four rain gages.

08068450 Panther Branch near Spring, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
29...	1000	390	2.2	3.0	1.4	5.1	1.3	5	0	4.3
NOV.										
13...	0930	49	4.3	3.2	1.2	4.1	1.2	8	0	5.0
DEC.										
18...	0900	30	5.4	4.3	.7	5.6	1.0	6	0	4.8
FEB.										
10...	1330	11	8.8	8.5	2.7	17	1.1	29	0	6.3
24...	1000	2.2	13	14	3.9	29	1.5	22	0	7.2
MAR.										
04...	0945	2.4	--	--	--	--	--	--	--	--
APR.										
21...	1010	3.6	8.4	9.2	2.8	14	1.5	23	0	8.0
MAY										
28...	1000	6.4	6.0	7.6	2.7	15	1.2	18	0	6.6
JUNE										
19...	0830	1.1	10	8.7	2.4	13	.9	21	0	5.2
JULY										
21...	1310	.20	9.5	16	2.8	50	4.2	70	0	23
AUG.										
20...	1130	.01	15	16	.5	150	9.9	0	46	93
SEP.										
16...	1100	2.4	5.7	13	1.4	45	5.5	75	0	19

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA- NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
29...	8.6	--	.03	.00	.08	.75	.83	.09	29	211
NOV.										
13...	9.0	--	.06	.00	.05	.95	1.0	.07	33	55
DEC.										
18...	9.7	.0	.03	.00	.10	.61	.71	.03	35	43
FEB.										
10...	24	.1	.12	.01	.08	1.0	1.1	.04	84	51
24...	57	.1	.25	.01	.15	.78	.93	.04	138	39
MAR.										
04...	--	--	4.8	.01	.09	1.0	1.1	.28	--	101
APR.										
21...	25	.1	.45	.01	.17	1.3	1.5	.22	81	42
MAY										
28...	26	.1	.14	.01	.11	1.3	1.4	.09	74	117
JUNE										
19...	24	.1	.03	.01	.11	1.3	1.4	.03	77	27
JULY										
21...	47	.2	2.4	.03	.07	1.7	1.8	.16	188	41
AUG.										
20...	84	.4	20	1.5	.00	2.9	2.9	.02	432	34
SEP.										
16...	34	.2	2.5	.01	.17	1.6	1.8	.15	162	24

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
29...	43	13	9	.6	56	5.5	25.5	100	80
NOV.									
13...	24	13	6	.5	48	5.4	14.5	160	30
DEC.									
18...	23	14	9	.7	59	6.9	10.5	140	20
FEB.									
10...	12	32	9	1.3	150	6.0	11.5	120	30
24...	13	51	33	1.8	267	5.8	8.5	140	20
MAR.									
04...	29	--	--	--	573	7.9	13.5	80	45
APR.									
21...	15	35	16	1.0	156	5.8	17.0	120	15
MAY									
28...	28	30	15	1.2	141	6.0	24.0	120	60
JUNE									
19...	13	32	14	1.0	142	6.2	28.0	140	15
JULY									
21...	18	52	0	3.0	372	6.8	28.0	80	30
AUG.									
20...	29	42	0	10	862	10.2	28.5	40	8
SEP.									
16...	20	38	0	3.2	308	7.3	25.0	100	7

SAN JACINTO RIVER BASIN

08068450 Panther Branch near Spring, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT. 29...	7.1	86	3.4	100000	6700	11000	20	2	.1
NOV. 13...	8.4	82	2.4	4000	160	240	22	4	.2
DEC. 18...	10.0	89	1.3	1800	210	150	20	12	--
FEB. 10...	10.0	91	1.4	2000	650	180	23	5	.2
24...	7.9	67	.4	750	68	18	19	6	1.3
MAR. 04...	7.2	69	1.0	2300	130	84	11	6	.2
APR. 21...	7.5	77	2.0	--	--	--	24	10	.3
MAY 28...	4.4	52	3.1	320000	9300	2600	16	9	.0
JUNE 19...	4.2	53	2.1	2500	200	160	17	11	.1
JULY 21...	5.9	75	3.4	3500	130	210	18	5	.2
AUG. 20...	2.8	36	.9	54	1	22	7.3	7	.3
SEP. 16...	4.9	58	3.2	11000	250	6300	16	19	.1

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 29...	1000	210	2	60	1	0	1	8
NOV. 13...	0930	220	2	140	0	0	1	20
DEC. 18...	0900	180	0	70	1	0	0	8
FEB. 10...	1330	170	2	100	1	0	1	4
24...	1000	110	0	80	0	0	1	7
MAR. 04...	0945	40	2	130	0	0	1	7
APR. 21...	1010	70	2	80	1	0	1	4
MAY 28...	1000	10	0	30	0	0	1	5
JUNE 19...	0830	60	1	80	0	0	0	1
JULY 21...	1310	30	0	90	0	0	0	3
AUG. 20...	1130	300	3	340	0	0	0	9
SEP. 16...	1100	30	6	90	0	0	0	30

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 29...	90	0	0	0	.0	0	30	20
NOV. 13...	370	10	0	10	.1	9	0	110
DEC. 18...	330	36	0	40	.0	7	20	160
FEB. 10...	660	3	0	30	.0	2	70	260
24...	660	7	0	180	.0	2	70	60
MAR. 04...	90	1	10	90	.1	1	190	30
APR. 21...	500	3	0	10	.0	0	60	240
MAY 28...	80	2	0	0	.2	1	40	0
JUNE 19...	1000	2	0	590	.0	1	60	70
JULY 21...	80	0	0	0	.1	0	130	20
AUG. 20...	10	1	20	0	.1		140	10
SEP. 16...	150	20	0	590	.0		80	20

08068450 Panther Branch near Spring, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 29...	1000	390	25.5	.00	--	.00	--	.00	--	.00	--
NOV. 13...	0930	49	14.5	.00	--	.00	--	.00	--	.00	--
DEC. 18...	0900	30	10.5	.00	--	.00	--	.00	--	.00	--
FEB. 10...	1330	11	11.5	.00	--	.00	--	.00	--	.00	--
24...	1000	2.2	8.5	.00	--	.00	--	.00	--	.00	--
MAR. 04...	0945	2.4	13.5	.00	--	.00	--	.00	--	.00	--
APR. 21...	1010	3.6	17.0	.00	.0	.00	.0	.00	.0	.00	.0
JUNE 19...	0830	1.1	28.0	.00	--	.00	--	.00	--	.00	--
JULY 21...	1310	.20	28.0	.00	--	.00	--	.00	--	.00	--
AUG. 20...	1130	.01	28.5	.00	--	.00	--	.00	--	.00	--

DATE	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)
OCT. 29...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
NOV. 13...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
DEC. 18...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
FEB. 10...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
24...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
MAR. 04...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
APR. 21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JUNE 19...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
JULY 21...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
AUG. 20...	.00	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 29...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
NOV. 13...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
DEC. 18...	--	.0	--	.00	.00	.00	.00	.01	.00	.00
FEB. 10...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
24...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
MAR. 04...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
APR. 21...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
JUNE 19...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
JULY 21...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
AUG. 20...	--	.0	--	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT. 28...	1515	51	1220	168	75	91	98	99	100

SAN JACINTO RIVER BASIN

08068450 Panther Branch near Spring, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.09	15	0	610	183	243	12	30	.97
2	.09	15	0	171	80	37	9.3	30	.75
3	.09	15	0	52	80	11	6.3	30	.51
4	.09	15	0	18	90	4.4	5.1	35	.48
5	.07	15	0	9.1	52	1.3	18	88	15
6	.07	15	0	5.1	55	.76	248	110	74
7	.07	15	0	196	185	93	266	60	43
8	.07	15	0	547	50	74	98	40	11
9	.05	10	0	175	30	14	32	50	4.3
10	.05	10	0	178	87	63	28	68	12
11	.03	10	0	634	147	248	318	105	77
12	.03	10	0	178	100	48	251	30	20
13	.02	10	0	56	90	14	85	32	7.3
14	.79	20	.04	23	83	5.2	63	92	24
15	4.2	37	.42	13	95	3.3	415	123	117
16	.16	30	.01	8.2	73	1.6	224	50	30
17	0	---	---	24	123	8.4	72	40	7.8
18	.17	20	.01	16	78	3.4	30	35	2.8
19	1.3	30	.11	13	62	2.2	20	35	1.9
20	2.3	25	.16	9.7	55	1.4	14	30	1.1
21	2.1	25	.14	6.6	50	.89	9.8	30	.79
22	1.3	20	.07	4.7	45	.57	7.1	25	.48
23	.44	20	.02	3.3	40	.36	5.8	25	.39
24	.15	20	.01	290	296	251	14	66	5.4
25	.07	15	0	486	270	354	39	98	10
26	.71	25	.05	136	245	90	43	40	4.6
27	2.2	30	.18	44	190	23	29	32	2.5
28	89	437	137	21	108	6.1	24	30	1.9
29	306	264	187	13	42	1.5	26	35	2.5
30	123	110	37	10	36	.97	32	35	3.0
31	76	157	45	---	---	---	33	40	3.6
MONTH	610.71	---	407.22	3950.7	---	1605.35	2477.4	---	486.07

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	29	45	3.5	64	91	19	1.5	25	.10
2	41	58	6.4	105	78	22	1.9	25	.13
3	49	45	6.0	141	111	57	1.9	25	.13
4	66	45	8.0	723	169	272	2.7	30	.22
5	38	30	3.1	346	72	67	2.4	30	.19
6	20	30	1.6	124	42	14	3.1	30	.25
7	14	25	.95	39	40	4.2	2.9	30	.23
8	12	25	.81	20	40	2.2	2.0	30	.16
9	10	25	.68	15	40	1.6	1.5	25	.10
10	27	65	4.7	12	40	1.3	1.4	25	.09
11	50	50	6.8	9.7	35	.92	1.2	25	.08
12	38	45	4.6	9.0	35	.85	1.2	25	.08
13	41	40	4.4	7.7	35	.73	54	58	8.5
14	23	35	2.2	6.2	35	.59	30	50	4.1
15	14	30	1.1	4.7	35	.44	8.3	45	1.0
16	11	30	.89	4.0	30	.32	4.2	40	.45
17	9.4	25	.63	3.8	30	.31	19	110	5.6
18	26	50	3.5	3.6	30	.29	258	103	60
19	63	50	8.5	2.9	30	.23	187	45	23
20	43	55	6.4	2.6	30	.21	44	35	4.2
21	20	63	3.4	3.3	30	.27	16	20	.86
22	14	58	2.2	2.7	30	.22	10	15	.41
23	72	110	21	2.0	30	.16	7.7	15	.31
24	54	92	13	2.0	30	.16	5.7	15	.23
25	29	70	5.5	2.6	30	.21	4.2	15	.17
26	19	60	3.1	1.4	25	.09	3.3	15	.13
27	13	55	1.9	.99	25	.07	5.3	25	.36
28	9.8	50	1.3	.99	25	.07	9.7	30	.79
29	7.7	40	.83	---	---	---	8.2	30	.66
30	5.4	35	.51	---	---	---	4.8	25	.32
31	5.2	30	.42	---	---	---	3.0	20	.16
MONTH	873.5	---	127.92	1659.18	---	466.44	706.1	---	113.01

08068450 Panther Branch near Spring, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.0	15	.08	63	87	15	49	35	4.6
2	1.5	20	.08	27	70	5.1	14	25	.95
3	1.2	25	.08	9.5	65	1.7	6.1	20	.33
4	.96	25	.06	5.6	55	.83	3.3	20	.18
5	.80	30	.06	4.9	55	.73	2.8	20	.15
6	.62	35	.06	4.0	55	.59	2.7	15	.11
7	.69	47	.09	3.1	60	.50	3.1	15	.13
8	495	448	485	1.6	50	.22	2.9	15	.12
9	672	90	163	24	40	2.6	3.6	15	.15
10	243	113	76	49	20	2.6	17	45	2.1
11	380	80	82	35	59	8.7	70	85	16
12	172	50	23	81	76	16	52	45	6.3
13	44	33	3.9	29	30	2.3	16	30	1.3
14	801	150	335	15	25	1.0	7.1	25	.48
15	488	95	125	11	30	.89	3.4	25	.23
16	132	80	29	5.5	30	.45	2.1	20	.11
17	36	35	3.4	3.3	30	.27	1.3	20	.07
18	20	42	2.3	2.2	25	.15	.86	20	.05
19	11	42	1.2	1.5	20	.08	.59	15	.02
20	6.8	35	.64	1.0	20	.05	.44	15	.02
21	6.3	15	.26	.77	15	.03	.44	15	.02
22	6.7	55	1.0	.56	15	.02	.42	15	.02
23	5.6	35	.53	.46	15	.02	.33	10	.01
24	4.6	30	.37	.51	10	.01	.23	10	.01
25	3.4	30	.28	19	67	15	.16	10	0
26	3.5	25	.24	72	172	40	.98	10	.03
27	1.7	25	.11	18	20	.97	54	75	11
28	1.8	30	.15	12	25	.81	34	65	6.0
29	4.2	35	.40	198	113	75	12	30	.97
30	21	60	3.4	327	60	53	6.4	30	.52
31	---	---	---	163	35	15	---	---	---
MONTH	3567.37	---	1336.69	1187.50	---	259.62	367.25	---	51.98
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	60	2.1	46	70	8.7	.24	20	.01
2	20	65	3.5	17	35	1.6	.15	20	.01
3	18	35	1.7	5.9	35	.56	.07	15	0
4	10	40	1.1	3.2	30	.26	.07	15	0
5	4.3	30	.35	2.3	30	.19	3.5	40	.38
6	2.1	30	.17	1.7	25	.11	1.3	35	.12
7	1.6	25	.11	1.0	25	.07	.41	30	.03
8	1.4	25	.09	.68	25	.05	.17	20	.01
9	.39	20	.02	.45	20	.02	.12	15	0
10	.28	20	.02	.32	20	.02	.10	10	0
11	6.0	40	.65	.24	20	.01	.07	10	0
12	1.1	40	.12	.12	20	.01	.12	10	0
13	.47	35	.04	.04	10	0	.16	10	0
14	8.6	50	1.2	.03	10	0	.16	10	0
15	7.8	30	.63	.03	10	0	.16	10	0
16	2.0	30	.16	.03	10	0	1.0	30	.08
17	.93	30	.08	.02	10	0	.17	25	.01
18	.52	25	.04	.01	10	0	.05	10	0
19	.64	25	.04	.01	10	0	.06	10	0
20	.37	20	.02	.01	10	0	.11	10	0
21	.24	20	.01	.01	10	0	.13	10	0
22	.16	15	.01	.05	10	0	.04	10	0
23	.10	15	0	.24	20	.01	.02	10	0
24	15	55	5.7	.07	15	0	.01	10	0
25	9.3	18	.45	.09	10	0	.01	10	0
26	2.6	20	.14	.47	20	.03	0	---	---
27	4.0	25	.27	.68	25	.05	0	---	---
28	2.8	25	.19	.37	25	.03	0	---	---
29	1.5	20	.08	.21	20	.01	0	---	---
30	1.9	20	.10	.33	20	.02	0	---	---
31	6.0	50	.81	.31	20	.02	---	---	---
MONTH	143.10	---	19.90	81.92	---	11.77	8.40	---	.65
YEAR	15633.13	---	4886.62	---	---	---	---	---	---

SAN JACINTO RIVER BASIN

08068500 Spring Creek near Spring, Tex.

LOCATION.--Lat 30°06'37", long 95°26'10", Harris-Montgomery County line, near left bank at downstream side of bridge on Interstate Highway 45 and U.S. Highway 75, 4,500 ft (1,372 m) upstream from Missouri Pacific Railroad Co. bridge, 2.4 miles (3.9 km) northwest of Spring, and 4.0 miles (6.4 km) downstream from Willow Creek.

DRAINAGE AREA.--409 mi² (1,059 km²).

PERIOD OF RECORD.--Discharge: April 1939 to current year.

Water quality: Chemical analyses: September 1961 to April 1964. Sediment records: December 1965 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 73.10 ft (22.281 m) above mean sea level. Prior to Jan. 5, 1946, nonrecording gage, and Jan. 6, 1946, to Oct. 1, 1965, water-stage recorder at present site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--36 years, 208 ft³/s (5.891 m³/s), 6.91 in/yr (176 mm/yr), 150,700 acre-ft/yr (186 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,340 ft³/s (208 m³/s) Apr. 16 (gage height, 24.60 ft or 7.498 m); minimum daily, 11 ft³/s (0.31 m³/s) Sept. 27-30.

Period of record: Maximum discharge, 42,700 ft³/s (1,210 m³/s) Nov. 25, 1940 (gage height, 33.60 ft or 10.241 m, present datum, from graph based on gage readings); minimum, 1.1 ft³/s (0.031 m³/s) Oct. 23, 24, 1956.

Maximum stage since at least 1879, 34.3 ft (10.45 m), present datum, May 30, 1929 (discharge, 48,300 ft³/s or 1,370 m³/s), from floodmarks identified by local residents.

REMARKS.--Discharge records good. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	1,200	186	248	158	68	65	486	633	388	240	55
2	40	1,170	184	298	330	68	62	518	497	628	121	53
3	38	602	139	430	1,270	65	60	355	229	674	223	63
4	35	196	115	548	2,840	70	58	161	121	396	369	54
5	35	103	118	540	2,360	76	57	105	89	259	409	63
6	32	79	983	308	2,280	74	56	86	85	220	331	167
7	30	248	1,270	172	1,540	72	56	77	76	110	126	79
8	29	1,500	709	139	562	70	1,130	74	72	81	87	43
9	28	1,700	301	124	237	68	3,500	221	78	70	80	33
10	28	1,650	201	152	172	65	4,390	794	138	63	122	28
11	27	2,370	870	317	140	64	4,440	1,460	474	74	92	27
12	26	2,950	1,350	311	126	64	2,490	1,190	724	72	68	37
13	26	2,410	1,240	265	116	94	1,510	519	900	61	56	43
14	26	1,030	850	187	105	122	1,970	392	323	69	48	41
15	51	328	1,080	136	98	88	4,460	212	126	162	42	28
16	44	188	1,430	114	94	73	6,280	167	95	159	38	28
17	44	172	1,380	105	93	156	2,670	119	82	96	34	31
18	41	150	627	144	95	1,100	891	91	74	76	32	30
19	35	131	254	243	90	1,500	356	76	69	76	31	30
20	33	114	179	428	83	500	224	68	65	75	30	28
21	31	102	140	384	80	300	208	63	62	56	29	21
22	29	92	117	179	78	120	416	59	59	48	29	17
23	27	84	106	249	75	100	298	56	57	44	131	15
24	26	545	106	548	73	90	178	54	55	53	96	13
25	25	1,690	178	776	70	85	130	185	54	86	68	12
26	25	1,690	185	384	70	80	102	513	79	75	62	12
27	26	1,670	156	184	69	100	87	531	143	59	87	12
28	180	776	145	152	68	120	79	363	272	50	101	11
29	669	268	161	125	-----	90	75	632	378	50	121	11
30	424	187	191	110	-----	75	176	1,140	387	100	92	11
31	206	-----	286	103	-----	70	-----	863	-----	249	67	-----
TOTAL	2,359	25,395	15,237	8,403	13,372	5,687	36,474	11,630	6,496	4,679	3,462	1,096
MEAN	76.1	847	492	271	478	183	1,216	375	217	151	112	36.5
MAX	669	2,950	1,430	776	2,840	1,500	6,280	1,460	900	674	409	167
MIN	25	79	106	103	68	64	56	54	44	44	29	11
CFSM	.19	2.07	1.20	.66	1.17	.45	2.97	.92	.53	.37	.27	.09
IN.	.21	2.31	1.39	.76	1.22	.52	3.32	1.06	.59	.43	.31	.10
AC-FT	4,680	50,370	30,220	16,670	26,520	11,280	72,350	23,070	12,880	9,280	6,870	2,170

CAL YR 1974 TOTAL 112,614.4 MEAN 309 MAX 5,690 MIN 5.7 CFSM .76 IN 10.24 AC-FT 223,400
WTR YR 1975 TOTAL 134,290.0 MEAN 368 MAX 6,280 MIN 11 CFSM .90 IN 12.21 AC-FT 266,400

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
11-12	2000	18.63	3,130	4-10	2400	22.50	5,330
	about			4-16	0600	24.60	7,340
2-4	0400	18.30	2,980				

08068500 Spring Creek near Spring, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 24...	1600	25	21.5	16	1.1	--
DEC. 04...	1700	108	9.5	192	56	--
FEB. 03...	1500	600	14.0	395	640	--
25...	1320	66	11.5	13	2.3	26
APR. 24...	1445	212	23.5	86	49	--
AUG. 22...	1600	27	27.0	27	2.0	--

SAN JACINTO RIVER BASIN

08068750 Cypress Creek near Cypress, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 29°57'23", long 95°40'41", Harris County, at bridge on U.S. Highway 290 and 1.5 miles (2.4 km) southeast of Cypress.

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1970 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	
OCT. 21...	1200	7.9	14	17	3.2	43	6.3	80	0	8.8	58	
MAR. 20...	1430	136	4.0	7.6	2.3	9.3	4.0	25	0	12	13	
MAY 23...	1245	--	10	24	4.8	63	3.8	94	0	16	84	
SEP. 24...	1330	6.6	26	27	4.6	66	7.2	140	0	18	78	
DATE		DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)
OCT. 21...	--	.05	.01	.07	1.1	1.2	.18	191	43	15	56	
MAR. 20...	.3	.18	.01	.12	1.8	1.9	.37	65	952	208	29	
MAY 23...	.3	.10	.01	.01	1.4	1.4	.07	252	90	33	80	
SEP. 24...	--	.02	.01	.05	2.1	2.1	.19	296	69	33	87	
DATE		NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 21...	0	2.5	352	6.1	22.0	80	30	11.2	127	1.6	13	
MAR. 20...	8	.8	112	5.9	19.5	240	150	8.7	94	4.5	19	
MAY 23...	3	3.1	490	7.8	29.5	140	75	8.5	110	2.4	9.3	
SEP. 24...	0	3.1	523	8.2	25.0	120	30	11.0	131	1.6	22	

SAN JACINTO RIVER BASIN

08069000 Cypress Creek near Westfield, Tex.

LOCATION.--Lat 30°02'08", long 95°25'44", Harris County, near left bank at downstream side of bridge on U.S. Highway 75, 0.9 mile (1.4 km) upstream from Senger Gully, 1.8 miles (2.9 km) northwest of Westfield, 2.0 miles (3.2 km) upstream from Missouri Pacific Railroad Co. bridge, and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--285 mi² (738 km²).

PERIOD OF RECORD.--July 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 63.89 ft (19.474 m) above mean sea level, datum of 1929, adjustment of 1943; unadjusted for land-surface subsidence. Prior to Mar. 17, 1951, water-stage recorder at upstream side of bridge at datum 12.00 ft (3.658 m) higher.

AVERAGE DISCHARGE.--31 years, 152 ft³/s (4,305 m³/s), 110,100 acre-ft/yr (136 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,560 ft³/s (101 m³/s) Apr. 10 (gage height, 20.42 ft or 6.224 m); minimum daily, 8.2 ft³/s (0.23 m³/s) Mar. 12.

Period of record: Maximum discharge, 22,100 ft³/s (626 m³/s) Oct. 8, 1949 (gage height, 33.44 ft or 10.193 m, present datum), from rating curve extended above 11,000 ft³/s (312 m³/s); no flow at times.

Maximum stage since at least 1875, 34 ft (10.4 m), present datum, in May 1929 (discharge, 26,000 ft³/s or 736 m³/s), from information by local resident. Flood in November 1940 reached a stage of about 32 ft (9.8 m), present datum (discharge, 15,000 ft³/s or 425 m³/s), from information by State Highway Department.

REMARKS.--Records fair. No large diversion above station. Low flow is maintained by sewage effluent. Channel below gage was rectified in 1950-51 and in 1975.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	1,060	142	137	150	8.8	31	622	1,140	143	106	40
2	34	1,190	106	182	300	8.5	26	548	692	342	94	34
3	28	524	75	258	2,000	8.5	20	279	347	259	82	34
4	31	279	57	325	1,800	18	17	141	174	137	237	31
5	31	165	55	319	1,500	20	14	93	89	81	302	33
6	30	112	1,190	198	1,000	12	11	69	62	54	281	58
7	28	326	1,310	122	500	11	10	55	59	41	106	27
8	24	1,000	775	87	350	11	896	48	51	31	68	18
9	21	1,190	405	66	250	10	3,170	120	48	26	66	18
10	21	1,410	342	103	160	9.1	3,460	245	399	22	57	14
11	29	2,120	1,230	121	100	8.5	2,400	412	1,340	51	47	44
12	24	2,010	1,200	149	70	8.2	1,770	277	1,240	72	38	19
13	15	1,470	946	115	50	20	1,240	245	1,030	63	30	15
14	25	1,090	865	91	35	30	1,450	220	714	113	30	11
15	167	626	1,920	64	25	20	2,230	120	321	197	28	14
16	54	330	1,290	55	20	17	2,560	78	155	137	25	46
17	66	238	1,030	50	17	17	1,820	56	96	107	22	37
18	53	173	579	100	15	1,000	1,160	47	65	89	20	27
19	41	142	326	300	13	800	530	39	52	69	18	20
20	33	112	221	320	12	500	278	34	45	67	16	16
21	25	85	149	200	11	200	296	29	39	64	14	14
22	18	63	102	100	10	100	791	26	41	94	17	17
23	13	50	73	150	12	70	380	25	34	88	25	17
24	13	1,080	68	200	14	49	203	27	31	167	23	16
25	13	1,500	71	120	11	38	128	194	29	115	22	19
26	12	1,300	78	90	9.4	31	91	503	117	133	21	21
27	9.0	918	75	70	9.1	29	71	554	141	152	28	18
28	438	488	77	60	8.8	29	60	610	162	84	47	16
29	300	286	64	55	-----	34	70	1,080	208	66	48	13
30	132	196	68	50	-----	34	258	1,850	163	75	46	12
31	481	-----	91	50	-----	35	-----	1,490	-----	118	44	-----
TOTAL	2,252.0	21,533	14,980	4,307	8,452.3	3,186.6	25,441	10,136	9,084	3,257	2,008	719
MEAN	72.6	718	483	139	302	103	848	327	303	105	64.8	24.0
MAX	481	2,120	1,920	325	2,000	1,000	3,460	1,850	1,340	342	302	58
MIN	9.0	50	55	50	8.8	8.2	10	25	29	22	14	11
AC-FT	4,470	42,710	29,710	8,540	16,770	6,320	50,460	20,100	18,020	6,460	3,980	1,430

CAL YR 1974 TOTAL 100,975.48 MEAN 277 MAX 4,710 MIN .27 AC-FT 200,300
WTR YR 1975 TOTAL 105,355.90 MEAN 289 MAX 3,460 MIN 8.2 AC-FT 209,000

PEAK DISCHARGE (BASE, 1,800 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-10	2300	19.27	2,390	4-10	1200	20.42	3,560
11-24	1800	17.24	1,840	4-16	0600	18.30	2,740
12-15	0200	19.65	2,520	5-29	2200	18.01	2,640
2-3	unknown	unknown	about 2,100				

SAN JACINTO RIVER BASIN

63

08069200 Cypress Creek near Humble, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°01'49", long 95°19'47", Harris County, 500 ft (150 m) north of end of dirt extension of Tetlar Road, about 2 miles (3 km) upstream from mouth, and 4.7 miles (7.6 km) northwest of Humble.

DRAINAGE AREA.--319 mi² (826 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1970 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
DATE	TIME											
OCT. 21...	1000	24	16	20	3.0	.48	7.5	92	0	17	50	
MAR. 19...	1305	--	3.1	7.9	1.5	12	3.4	19	0	12	18	
MAY 23...	1030	13	17	31	5.1	63	5.6	130	0	25	68	
SEP. 24...	0930	15	17	32	5.2	87	8.4	180	0	32	86	
		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	
DATE												
OCT. 21...	--	1.7	.12	.21	1.4	1.6	1.7	208	90	23	62	
MAR. 19...	.2	.25	.02	.22	1.9	2.1	.41	68	812	114	26	
MAY 23...	.3	2.7	.21	.08	1.9	2.0	3.0	279	95	6	98	
SEP. 24...	--	1.6	.22	.39	1.7	2.1	3.0	357	84	32	100	
		NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
DATE												
OCT. 21...	0	2.6	385	6.3	20.0	70	55	8.1	88	2.2	16	
MAR. 19...	10	1.0	131	6.0	18.0	240	140	8.5	89	4.3	--	
MAY 23...	0	2.8	523	6.8	26.5	50	50	6.2	76	3.1	7.6	
SEP. 24...	0	3.8	659	7.1	20.0	60	35	6.3	68	2.5	13	

SAN JACINTO RIVER BASIN

08069200 Cypress Creek near Humble, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
OCT. 21...	1000	120	4	170	1	0	1	10			
MAR. 19...	1305	80	2	50	0	0	1	13			
SEP. 24...	0930	10	6	260	0	10	1	5			
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)		
DATE	TIME										
OCT. 21...	100	29	0	20	.0	2	100	790			
MAR. 19...	80	1	0	10	.0	0	50	60			
SEP. 24...	40	0	10	10	.1	0	200	20			
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 21...	1000	24	20.0	.00	.00	.00	.01	.01	.00	.00	.00
MAR. 19...	1305	--	18.0	.00	.00	.00	.00	.01	.00	.00	.00
SEP. 24...	0930	15	20.0	.00	.00	.00	.00	.01	.00	.00	.01
DATE	TOTAL LINDANE (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL PCB (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
OCT. 21...	.01	.0	.0	.02	.00	.00	.00	.00	.00	.00	
MAR. 19...	.00	.0	.0	.01	.00	.00	.00	.00	.00	.01	
SEP. 24...	.04	.0	.0	.36	.02	.00	.00	.00	.00	.00	

SAN JACINTO RIVER BASIN

65

08069500 West Fork San Jacinto River near Humble, Tex.

LOCATION.--Lat 30°01'37", long 95°15'28", Harris County, on right bank at bridge on U.S. Highway 59, 970 ft (296 m) upstream from Texas and New Orleans Railroad Co. bridge, 0.5 mile (0.8 km) downstream from Spring Creek, and 2.5 miles (4.0 km) north of Humble.

DRAINAGE AREA.--1,741 mi² (4,509 km²).

PERIOD OF RECORD.--October 1928 to September 1954, October 1954 to current year (gage heights only). Annual maximum and minimum gage heights only for October 1954 to September 1966 published with station 08072000 Lake Houston near Sheldon. Published as San Jacinto River near Humble prior to 1938.

GAGE.--Water-stage recorder. Datum of gage is 30.53 ft (9.306 m) above mean sea level. Prior to July 17, 1933, nonrecording gage at site 1,800 ft (549 m) downstream at same datum. July 17, 1933, to Mar. 5, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--26 years (1928-54), 1,097 ft³/s (31.1 m³/s), 794,800 acre-ft/yr (980 hm³/yr).

EXTREMES.--Current year: Maximum gage height, 18.85 ft (5.745 m) Apr. 16; minimum, 12.09 ft (3.685 m) Sept. 30.
1928-54: Maximum discharge, 187,000 ft³/s (5,300 m³/s) May 31, 1929, Nov. 25, 26, 1940; maximum gage height, 32.7 ft (9.97 m) May 31, 1929, Nov. 26, 1940, present site and datum, both affected by backwater from East Fork San Jacinto River; minimum discharge, 11 ft³/s (0.31 m³/s) Aug. 31, Sept. 1, 2, 1951.
1954-74: Maximum gage height since first appreciable storage at Lake Houston, 23.09 ft (7.038 m) June 15, 1973; minimum since first appreciable storage at Lake Houston, 5.5 ft (1.68 m) Dec. 12, 1956.
Maximum stage since at least 1865, occurred in September 1900, May 31, 1929, and Nov. 25, 26, 1940, and all reached about the same stage, from information by local resident.

REMARKS.--Station discontinued as a streamflow station Sept. 30, 1954, due to backwater from Lake Houston. No large diversion above station.

REVISIONS.--WSP 1732: Drainage area.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.00	17.65	13.42	13.42	13.36	12.87	12.98	13.66	-	13.27	13.13	12.91
2	12.99	15.62	13.38	13.58	13.44	12.87	12.75	13.68	-	13.65	13.15	12.88
3	12.99	14.78	13.23	13.69	14.04	12.87	12.73	13.34	12.86	13.52	13.12	12.84
4	12.99	14.32	13.17	13.75	16.88	12.84	12.75	13.18	12.68	13.33	13.84	12.84
5	12.98	13.84	13.17	13.66	16.81	12.91	12.77	13.15	13.09	13.18	13.45	12.84
6	12.97	13.54	14.66	13.53	16.83	12.95	12.78	13.46	13.04	13.12	13.34	13.04
7	12.95	14.11	14.32	13.41	15.81	12.86	12.85	13.42	12.98	13.04	13.25	12.97
8	12.96	15.46	13.68	13.28	14.53	12.86	16.17	13.79	12.97	12.98	13.18	12.93
9	12.97	15.53	13.42	13.22	14.00	12.90	18.36	13.39	13.15	12.90	13.08	12.89
10	12.98	16.67	13.50	13.30	13.49	12.87	18.55	15.07	13.73	12.85	13.08	12.90
11	12.98	18.20	14.75	13.32	13.33	12.91	17.97	15.59	14.85	12.93	13.02	12.89
12	12.96	17.16	14.57	13.24	13.28	12.83	15.91	15.67	14.75	13.00	12.94	12.86
13	12.94	15.78	14.25	13.30	13.19	12.90	14.69	14.92	14.60	13.03	12.88	12.81
14	12.95	14.72	14.77	13.25	13.10	13.08	17.59	14.68	14.26	13.03	12.86	12.80
15	12.90	14.00	15.75	13.17	13.06	13.07	18.33	14.51	13.72	13.20	12.82	12.79
16	12.91	13.58	14.92	13.11	13.04	13.00	18.50	14.30	13.31	13.21	12.80	12.73
17	12.94	13.33	14.45	13.11	13.15	13.33	16.54	13.96	13.35	13.19	12.77	12.75
18	12.93	13.25	13.77	13.31	13.12	14.44	14.98	13.72	13.05	13.10	12.72	12.76
19	12.90	13.22	13.46	13.82	13.19	14.39	14.02	13.34	13.00	13.02	12.69	12.71
20	12.90	13.18	13.32	14.07	13.22	14.12	13.42	13.18	12.92	12.96	12.67	12.68
21	12.89	13.18	13.23	13.92	13.12	13.53	13.27	13.11	12.89	12.90	12.64	12.57
22	12.88	13.15	13.20	13.60	12.86	13.23	13.50	13.01	12.85	12.87	12.62	12.40
23	12.87	13.10	13.16	13.91	12.72	13.08	13.44	-	12.88	12.89	12.64	12.35
24	12.85	15.18	13.10	13.67	12.70	12.95	13.21	-	12.83	12.94	12.74	12.30
25	12.81	15.75	13.26	13.53	12.75	12.95	13.12	-	12.85	12.94	12.79	12.27
26	12.78	15.36	13.32	13.28	12.81	13.03	13.07	-	13.04	12.93	12.87	12.24
27	12.78	15.19	13.37	13.18	12.84	13.08	13.05	-	13.20	12.92	12.86	12.20
28	13.18	14.55	13.35	13.14	12.86	13.13	13.47	-	13.25	12.94	12.88	12.18
29	14.20	13.77	13.37	13.10	-----	13.06	13.09	-	13.30	12.90	12.95	12.14
30	13.84	13.56	13.43	13.08	-----	13.07	13.11	-	13.27	12.91	12.97	12.09
31	15.17	-----	13.38	13.06	-----	13.07	-----	-	-----	13.01	12.94	-----
MAX	15.17	18.20	15.75	14.07	16.88	14.44	18.55	-	-	13.65	13.84	13.04
MIN	12.78	13.10	13.10	13.06	12.70	12.83	12.73	-	-	12.85	12.62	12.09

SAN JACINTO RIVER BASIN

08070000 East Fork San Jacinto River near Cleveland, Tex.

LOCATION.--Lat 30°20'11", long 95°06'14", Liberty County, near left bank at downstream side of bridge on State Highway 105, 1,880 ft (570 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) west of Cleveland, and 4.3 miles (6.9 km) downstream from Winter Creek.

DRAINAGE AREA.--325 mi² (842 km²).

PERIOD OF RECORD.--Discharge: April 1939 to current year.

Water quality: Chemical analyses: January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 107.98 ft (32.912 m) above mean sea level, datum of 1929, supplementary adjustment of 1936. Prior to Sept. 13, 1955, at site 1,800 ft (549 m) upstream at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--36 years, 224 ft³/s (6.344 m³/s), 9.36 in/yr (238 mm/yr), 162,300 acre-ft/yr (200 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,360 ft³/s (265 m³/s) Oct. 30 (gage height, 18.62 ft or 5.675 m); minimum, 32 ft³/s (0.91 m³/s) Sept. 29, 30.

Period of record: Maximum discharge, 59,000 ft³/s (1,670 m³/s) Nov. 24, 1940 (gage height, 24.1 ft or 7.35 m, present site and datum), from rating curve extended above 27,000 ft³/s (765 m³/s); minimum daily, 3.0 ft³/s (0.085 m³/s) Aug. 23, 24, Sept. 27, 28, 1956.

Maximum stage since at least 1900, that of Nov. 24, 1940. Flood of May 5, 1935, reached a stage of 23.6 ft (7.19 m), present site and datum (discharge, 53,500 ft³/s or 1,520 m³/s), from information by local residents.

REMARKS.--Discharge records good. No large diversion above station.

REVISIONS (WATER YEARS).--WSP 1512: 1941(M), 1945(M). WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	4,150	422	556	482	120	162	247	773	192	136	66
2	67	4,680	419	514	660	114	142	456	391	395	244	61
3	57	4,310	291	758	859	107	127	637	197	278	153	56
4	50	2,650	216	898	1,590	128	112	315	148	155	227	92
5	47	913	186	891	2,140	178	104	292	154	104	795	97
6	46	348	608	626	3,310	175	100	773	177	108	711	72
7	44	487	641	328	2,470	158	98	2,360	151	87	228	84
8	42	1,290	462	279	870	133	397	2,610	115	79	132	101
9	41	2,720	270	329	337	115	1,380	1,680	129	72	128	74
10	41	3,670	214	473	262	112	3,020	989	625	67	96	78
11	39	3,320	667	679	238	112	2,510	839	1,080	160	80	92
12	38	3,710	1,050	711	223	110	855	1,270	864	448	73	68
13	39	3,270	1,120	600	200	235	268	4,700	848	316	68	113
14	48	1,950	1,020	399	182	267	1,300	3,990	412	241	64	70
15	88	471	1,530	289	173	178	2,160	2,350	175	407	62	57
16	81	259	1,050	238	192	136	2,610	734	132	172	59	48
17	63	240	592	210	194	153	2,000	308	115	107	55	46
18	57	277	320	505	198	722	765	211	104	99	53	46
19	50	373	259	1,840	173	1,170	269	172	94	90	51	42
20	45	274	225	3,260	150	875	210	150	90	83	49	44
21	41	225	198	2,700	141	323	192	136	86	87	47	41
22	39	188	179	1,160	138	200	212	126	83	93	128	40
23	38	157	168	584	138	170	187	116	84	73	104	38
24	37	538	196	516	129	155	185	117	80	95	79	37
25	37	1,360	738	366	120	134	157	287	86	173	84	36
26	36	1,930	1,050	296	116	121	138	447	110	124	76	34
27	37	2,470	707	255	113	245	125	381	164	86	75	34
28	86	1,590	496	225	112	502	115	242	119	77	161	33
29	1,280	410	449	201	-----	485	112	557	115	102	163	32
30	7,660	361	463	189	-----	301	162	632	132	185	94	33
31	4,770	-----	564	181	-----	203	-----	799	-----	130	77	-----
TOTAL	15,122	48,591	16,770	21,056	15,910	8,137	20,174	28,923	7,833	4,885	4,552	1,765
MEAN	488	1,620	541	679	568	262	672	933	261	158	147	58.8
MAX	7,660	4,680	1,530	3,260	3,310	1,170	3,020	4,700	1,080	448	795	113
MIN	36	157	168	181	112	107	98	116	80	67	47	32
CFSM	1.50	4.98	1.66	2.09	1.75	.81	2.07	2.87	.80	.49	.45	.18
IN.	1.73	5.56	1.92	2.41	1.82	.93	2.31	3.31	.90	.56	.52	.20
AC-FT	29,990	96,380	33,260	41,760	31,560	16,140	40,020	57,370	15,540	9,690	9,030	3,500

CAL YR 1974 TOTAL 171,105 MEAN 469 MAX 7,660 MIN 20 CFSM 1.44 IN 19.58 AC-FT 339,400
WTR YR 1975 TOTAL 193,718 MEAN 531 MAX 7,660 MIN 32 CFSM 1.63 IN 22.17 AC-FT 384,200

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	0900	18.62	9,360	4-10	1300	15.11	3,310
11-9	2400	15.66	3,890	4-16	0700	14.48	2,740
11-27	1000	14.22	2,530	5-7	2200	14.80	3,020
1-20	0600	15.20	3,400	5-13	1600	17.30	6,200
2-6	1300	15.29	3,490				

SAN JACINTO RIVER BASIN

67

08070000 East Fork San Jacinto River near Cleveland, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 29...	1345	1260	4.9	6.6	1.0	6.7	1.9	12	0	4.5
DEC. 06...	1550	800	9.0	9.6	1.0	10	1.8	23	0	5.1
JAN. 14...	1430	410	11	19	2.5	14	2.0	51	0	5.8
MAR. 04...	1150	115	13	21	2.9	24	1.7	54	0	6.5
APR. 25...	1230	165	15	21	2.9	22	1.5	55	0	5.3
JULY 07...	1335	82	13	21	2.3	23	1.7	50	0	3.7

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 29...	13	.0	45	21	11	.6	86	5.9	25.0
DEC. 06...	23	.0	71	28	9	.8	133	5.9	9.5
JAN. 14...	31	.0	110	58	16	.8	198	6.6	--
MAR. 04...	49	.1	145	64	20	1.3	277	7.0	10.0
APR. 25...	44	.0	139	64	19	1.2	264	6.8	22.5
JULY 07...	46	.1	135	62	21	1.3	262	7.0	27.0

SAN JACINTO RIVER BASIN

08070500 Caney Creek near Splendora, Tex.

LOCATION.--Lat 30°15'34", long 95°18'08", Montgomery County, on left bank at downstream side of bridge on Farm Road 2090, 4 miles (6 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 8 miles (13 km) west of Splendora.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--Discharge: October 1943 to current year. Monthly discharge only for some periods, published in WSP 1312.

Water quality: Sediment records: December 1965 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 118.44 ft (36.101 m) above mean sea level, datum of 1929, adjustment of 1943. Prior to June 17, 1965, at site 170 ft (52 m) upstream at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--32 years, 72.6 ft³/s (2.056 m³/s), 9.39 in/yr (239 mm/yr), 52,600 acre-ft/yr (64.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,520 ft³/s (128 m³/s) Oct. 29 (gage height, 18.64 ft or 5.681 m); minimum daily, 23 ft³/s (0.65 m³/s) Oct. 22-24.

Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) June 14, 1973 (gage height, 26.30 ft or 8.016 m); minimum, 4.1 ft³/s (0.116 m³/s) Oct. 26, 1956, caused by construction upstream.

Maximum stage since at least 1885, 27.0 ft (8.23 m) in November 1940, present site and datum, from information by local resident.

Flood in May 1935 reached a stage of 24.3 ft (7.41 m), present site and datum, from information by local resident.

REMARKS.--Discharge records good. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	2,280	154	127	110	48	50	139	119	113	50	38
2	31	1,810	103	145	342	48	50	100	79	193	54	34
3	30	277	88	228	275	45	46	64	63	86	43	32
4	29	170	80	297	1,380	48	42	56	55	65	85	51
5	28	134	76	145	1,420	89	41	213	59	56	73	59
6	28	109	158	107	258	66	40	536	63	48	47	371
7	28	313	189	91	148	58	41	112	51	44	38	83
8	27	1,620	109	92	112	53	487	570	46	41	42	48
9	26	2,110	85	88	100	47	2,690	1,260	58	39	80	40
10	26	491	80	126	89	47	854	368	228	37	40	37
11	26	1,940	363	223	85	49	353	139	1,130	57	35	82
12	25	1,110	520	125	84	49	166	725	272	508	33	78
13	24	212	164	124	74	82	114	725	98	165	32	45
14	25	146	167	94	69	94	1,010	152	79	112	31	40
15	35	115	740	79	67	58	1,820	193	68	191	30	36
16	37	99	326	73	72	51	284	104	63	96	29	35
17	30	105	151	71	73	66	153	79	59	62	29	39
18	27	113	111	264	66	466	118	67	55	52	28	38
19	25	99	97	1,730	61	374	97	59	52	80	28	32
20	24	94	89	364	57	109	86	55	50	67	29	30
21	24	80	80	169	56	79	77	52	47	48	28	28
22	23	73	74	160	57	69	82	50	46	43	54	28
23	23	70	74	247	53	64	89	46	45	41	42	27
24	23	337	83	164	47	60	72	42	47	42	43	27
25	24	1,630	199	122	44	52	64	174	51	46	44	26
26	24	592	127	106	45	47	58	201	85	39	40	25
27	24	169	113	95	48	78	55	86	81	37	36	26
28	158	123	114	87	49	110	52	79	66	36	49	26
29	2,400	105	114	82	-----	80	52	344	53	82	44	26
30	2,290	154	161	78	-----	63	83	311	56	95	38	25
31	471	-----	190	77	-----	54	-----	207	-----	57	35	-----
TOTAL	6,047	16,680	5,179	5,980	5,341	2,703	9,226	7,308	3,324	2,678	1,309	1,512
MEAN	195	556	167	193	191	87.2	308	236	111	86.4	42.2	50.4
MAX	2,400	2,280	740	1,730	1,420	466	2,690	1,260	1,130	508	85	371
MIN	23	70	74	71	44	45	40	42	45	36	28	25
CFSM	1.86	5.30	1.59	1.84	1.82	.83	2.93	2.25	1.06	.82	.40	.48
IN.	2.14	5.91	1.83	2.12	1.89	.96	3.27	2.59	1.18	.95	.46	.54
AC-FT	11,990	33,080	10,270	11,860	10,590	5,360	18,300	14,500	6,590	5,310	2,600	3,000

CAL YR 1974 TOTAL 57,427 MEAN 157 MAX 2,400 MIN 14 CFSM 1.50 IN 20.35 AC-FT 113,900
WTR YR 1975 TOTAL 67,287 MEAN 184 MAX 2,690 MIN 23 CFSM 1.75 IN 23.84 AC-FT 133,500

PEAK DISCHARGE (BASE, 1,500 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	2000	18.64	4,520	1-19	1400	13.95	2,130
11- 1	2000	17.65	3,840	2- 5	0200	13.45	1,950
11- 9	0300	16.04	2,990	4- 9	1400	17.63	3,830
11-11	2100	15.66	2,820	4-15	0700	14.49	2,340
11-25	2100	13.92	2,120	5- 9	0700	12.69	1,690

SAN JACINTO RIVER BASIN

69

08070500 Caney Creek near Splendora, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 25...	1430	24	20.5	101	6.5	--
DEC. 17...	1725	172	11.0	37	17	--
JAN. 02...	1305	181	10.0	2170	1060	--
MAR. 07...	1225	60	16.0	12	1.9	84
JULY 09...	1245	42	26.5	21	2.4	--
AUG. 20...	1610	27	27.0	17	1.2	--

SAN JACINTO RIVER BASIN

08071000 Peach Creek at Splendora, Tex.

LOCATION.--Lat 30°13'57", long 95°10'05", Montgomery County, on left bank at downstream side of bridge on Farm Road 2090, about 1,500 ft (457 m) west of depot at Splendora, 2.5 miles (4.0 km) upstream from Texas and New Orleans Railroad Co. bridge, 2.5 miles (4.0 km) upstream from bridge on U.S. Highway 59, and 9.7 miles (15.6 km) upstream from Caney Creek.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 81.61 ft (24.875 m) above mean sea level, datum of 1929, adjustment of 1936. Prior to Oct. 1, 1965, at same site and 5.00 ft (1.524 m) higher datum.

AVERAGE DISCHARGE.--32 years, 73.1 ft³/s (2.070 m³/s), 8.48 in/yr (215 mm/yr), 52,960 acre-ft/yr (65.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,250 ft³/s (63.7 m³/s) Nov. 1 (gage height, 15.11 ft or 4.606 m); minimum, 23 ft³/s (0.65 m³/s) Oct. 23-26.

Period of record: Maximum discharge, 28,500 ft³/s (807 m³/s) Oct. 8, 1949 (gage height, 22.73 ft or 6.928 m); minimum, 1.1 ft³/s (0.031 m³/s) Sept. 28-30, 1956.

Maximum stage since at least 1895, that of Oct. 8, 1949. Flood of June 14, 1973, reached a stage of 22.57 ft or 6.879 m (discharge, 25,800 ft³/s or 731 m³/s). Flood in November 1940 reached a stage of 22.3 ft or 6.80 m (discharge, 24,700 ft³/s or 700 m³/s), from information by local residents.

REMARKS.--Records good. No large diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	1,490	156	248	220	65	79	185	324	157	207	40
2	29	1,550	138	279	333	64	75	151	156	156	83	38
3	28	554	105	452	346	61	71	93	90	117	81	35
4	27	265	94	388	1,050	63	62	78	73	77	122	46
5	26	159	90	258	977	112	57	70	65	62	368	89
6	26	116	371	175	491	114	56	98	70	51	307	70
7	26	169	675	143	242	82	56	111	57	46	107	57
8	25	571	318	133	160	73	244	127	50	42	70	43
9	25	852	162	128	136	65	1,330	293	81	38	256	38
10	24	618	128	183	122	62	868	307	399	36	200	39
11	24	1,120	422	299	113	65	934	191	637	88	79	43
12	24	1,040	529	235	113	65	522	346	356	156	58	39
13	24	398	311	211	104	189	231	378	159	182	51	38
14	29	207	309	163	91	221	719	277	98	96	45	35
15	73	143	1,920	131	88	141	1,640	220	77	316	42	34
16	63	116	896	119	96	89	638	154	66	147	39	32
17	46	111	360	114	101	117	287	103	61	79	37	34
18	31	127	207	299	92	469	182	81	56	68	35	38
19	27	148	169	413	82	492	141	69	50	59	33	32
20	26	159	148	489	75	267	112	63	46	60	32	30
21	25	129	127	272	72	131	106	60	43	52	31	29
22	24	95	112	170	73	104	126	57	41	41	30	28
23	23	83	106	179	76	95	121	54	40	39	61	27
24	23	239	110	180	72	87	107	61	40	43	63	26
25	23	833	318	161	65	78	89	159	50	86	81	25
26	23	666	404	138	63	67	78	266	112	98	68	25
27	24	294	380	120	63	113	70	316	187	50	52	25
28	30	163	352	108	63	200	66	180	142	48	57	25
29	261	129	331	102	-----	180	65	580	109	84	60	25
30	924	122	303	98	-----	125	98	1,020	80	187	48	25
31	447	-----	275	94	-----	93	-----	640	-----	210	41	-----
TOTAL	2,461	12,666	10,326	6,482	5,579	4,149	9,230	6,788	3,815	2,971	2,844	1,110
MEAN	79.4	422	333	209	199	134	308	219	127	95.8	91.7	37.0
MAX	924	1,550	1,920	489	1,050	492	1,640	1,020	637	316	368	89
MIN	23	83	90	94	63	61	56	54	40	36	30	25
CFSM	.68	3.61	2.85	1.79	1.70	1.15	2.63	1.87	1.09	.82	.78	.32
IN.	.78	4.03	3.28	2.06	1.77	1.32	2.93	2.16	1.21	.94	.90	.35
AC-FT	4,880	25,120	20,480	12,860	11,070	8,230	18,310	13,460	7,570	5,890	5,640	2,200

CAL YR 1974 TOTAL 59,603 MEAN 163 MAX 2,560 MIN 13 CFSM 1.39 IN 18.95 AC-FT 118,200
WTR YR 1975 TOTAL 68,421 MEAN 187 MAX 1,920 MIN 23 CFSM 1.60 IN 21.75 AC-FT 135,700

PEAK DISCHARGE (BASE, 1,000 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	0800	13.80	1,230	2- 4	2400	13.92	1,300
11- 1	2000	15.11	2,250	4- 9	1400	14.55	1,750
11-12	0200	14.09	1,410	4-15	0500	14.97	2,120
12-15	0700	15.03	2,180	5-29	2000	13.87	1,270

08072600 Lake Houston near Sheldon, Tex.

LOCATION.--Lat 29°54'58", long 95°08'28", Harris County, at intake structure on San Jacinto River near right bank 100 ft (30 m) upstream from Lake Houston Dam, 4.0 miles (6.4 km) north of Sheldon, 4.6 miles (7.4 km) upstream from bridge on U.S. Highway 90, and 18 miles (29.0 km) northeast of Houston.

DRAINAGE AREA.--2,828 mi² (7,325 km²) at dam.

PERIOD OF RECORD.--Contents: April 1954 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage at dam is 0.70 ft (0.213 m) below mean sea level, adjustment of 1959; unadjusted for land-surface subsidence. Prior to Aug. 3, 1954, nonrecording gage read once daily.

EXTREMES.--Current year: Maximum contents, 174,000 acre-ft (215 hm³) Nov. 2 (gage height, 46.60 ft or 14.204 m); minimum, 141,500 acre-ft (174 hm³) Sept. 30 (gage height, 44.07 ft or 13.432 m).

Period of record: Maximum contents, 210,000 acre-ft (260 hm³) June 15, 1973 (gage height, 49.08 ft or 14.960 m); minimum since first filling of lake in August 1954, 53,380 acre-ft (65.8 hm³) Dec. 1, 1971 (gage height, 34.08 ft or 10.388 m).

REMARKS.--The lake is formed by two earthfill embankment sections and a 3,160-foot-long (963-metre) concrete spillway midway between the embankment sections. The total length of dam, including spillway, is 12,097 ft (3,687 m). The dam was completed and storage began Apr. 9, 1954. The spillway is a slab-and-buttress (Ambursen type) structure and includes two tainter gates, 18.0 by 20.5 ft (5.5 by 6.2 m), that can be used for control of releases below 44.5 ft (13.56 m) gage height and above 28.0 ft (8.53 m) gage height. In addition, there is a 36-inch-diameter (914-millimetre) sluice gate that is used for low-flow releases. The capacity table is based on a 1965 sedimentation study. Water is used for municipal supply by Houston for irrigation and industrial use in the ship-channel area. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	63.0	-
Design flood.....	57.0	-
Spillway crest.....	44.5	146,700
Crest of tainter gates (sill).....	28.0	22,800
Lowest gated outlet (invert).....	22.0	6,180

COOPERATION.--The capacity table furnished by the city of Houston. Records of diversions furnished by the San Jacinto River Authority and the city of Houston.

REVISIONS.--WSP 1732: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

44.0	140,700
45.0	152,900
46.6	174,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151,600	173,200	154,500	155,500	155,500	150,600	152,200	154,400	160,100	154,000	153,300	151,600
2	151,400	171,200	154,400	158,100	157,100	150,500	150,900	155,300	157,900	155,500	154,400	151,100
3	151,200	166,000	154,000	158,100	158,400	150,700	149,600	154,900	155,300	155,800	153,600	151,000
4	151,400	162,800	153,300	158,100	167,200	150,500	149,900	154,000	153,700	154,600	158,900	150,600
5	151,400	159,700	152,700	157,700	168,900	151,100	149,900	152,600	152,500	153,500	157,900	150,600
6	151,400	156,800	157,500	156,600	166,600	151,200	149,900	154,500	152,100	152,800	156,700	152,200
7	151,200	155,400	159,700	155,700	165,900	151,600	149,600	154,500	151,500	152,200	155,100	152,100
8	151,100	160,500	158,000	154,600	162,100	150,700	160,200	157,600	151,400	151,700	154,500	151,700
9	151,100	163,400	155,900	154,200	158,000	150,700	169,700	159,800	152,900	150,900	154,200	151,400
10	151,100	165,600	155,500	154,800	155,800	151,000	170,200	160,300	157,500	150,700	153,600	151,400
11	151,100	169,700	159,000	155,000	154,900	150,700	170,800	162,100	161,100	151,400	152,600	151,000
12	151,100	169,400	160,700	154,900	154,100	151,400	165,900	162,000	161,100	152,300	152,000	151,100
13	150,900	166,300	159,400	154,400	153,600	151,400	161,400	161,600	159,500	152,700	151,400	150,300
14	151,700	162,400	159,500	154,500	153,200	153,200	167,500	162,800	158,500	152,700	150,700	150,000
15	150,900	159,200	166,300	153,700	152,700	152,900	171,500	161,900	156,800	154,500	150,400	149,800
16	150,700	156,400	164,100	153,100	152,000	152,900	170,500	159,700	154,500	154,200	150,000	149,400
17	151,100	154,600	161,700	152,900	152,700	154,200	166,700	157,200	152,800	154,000	149,500	149,000
18	151,200	153,800	159,200	154,400	152,500	160,100	162,500	155,800	152,200	153,500	149,300	149,000
19	151,000	153,600	156,600	156,800	152,600	161,000	157,900	154,500	151,600	152,200	148,900	148,900
20	150,700	153,200	155,300	159,000	153,200	159,800	154,900	153,300	151,100	151,700	148,400	148,500
21	150,500	153,300	154,200	159,800	152,500	157,600	154,100	152,600	150,900	151,200	148,200	148,200
22	150,300	152,900	153,500	158,400	151,700	154,900	154,500	151,700	150,300	151,100	148,000	146,000
23	150,100	152,600	152,900	157,300	148,700	153,600	154,600	151,500	150,300	151,000	148,400	145,000
24	150,000	157,100	153,500	156,600	148,400	152,200	153,700	151,500	150,000	151,200	149,300	144,700
25	149,800	163,000	153,200	155,700	149,000	151,800	152,500	151,600	150,100	151,600	149,900	143,900
26	149,400	163,700	154,900	155,000	149,800	151,500	151,800	155,500	151,700	151,600	151,000	143,500
27	148,900	162,100	155,700	154,100	150,100	152,000	151,700	155,800	153,500	151,400	151,100	142,900
28	151,100	161,100	155,800	153,300	150,400	154,000	151,500	155,100	154,000	151,400	151,100	142,500
29	156,400	158,900	155,900	152,900	-----	152,900	151,500	161,600	154,600	151,000	151,600	142,200
30	159,200	154,600	156,200	152,700	-----	152,500	152,300	165,400	154,000	151,400	152,000	141,700
31	166,600	-----	156,600	152,700	-----	152,900	-----	162,500	-----	151,700	152,000	-----
(†)	46.05	45.13	45.28	44.98	44.79	45.00	44.95	45.74	45.08	44.90	44.92	44.08
(*)	+15,000	-12,000	+2,000	-3,900	-2,300	+2,500	-600	+10,200	-8,500	-2,300	+300	-10,300
(††)	17,450	15,330	15,840	15,460	14,640	16,900	16,220	18,200	17,610	18,770	18,540	18,300
MAX	166,600	173,200	166,300	159,800	168,900	161,000	171,500	165,400	161,100	155,800	158,900	152,200
MIN	148,900	152,600	152,700	148,400	150,500	150,500	149,600	151,500	150,000	150,700	148,000	141,700

CAL YR 1974..... * +3,300

WTR YR 1975..... * -9,900

†† 205,450

†† 203,260

MAX 178,500

MAX 173,200

MIN 123,300

MIN 141,700

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, by San Jacinto River Authority and city of Houston.

SAN JACINTO RIVER BASIN
08072000 Lake Houston near Sheldon, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
APR., 1975										
16...	1210	4.1	9.9	1.3	8.6	2.2	17	0	7.7	21
JULY										
07...	0955	7.5	14	2.0	12	2.1	38	0	7.0	23
AUG.										
18...	1030	8.8	14	2.2	13	2.0	40	0	7.0	22

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
APR., 1975									
16...	.1	63	30	16	.7	110	6.8	19.0	30
JULY									
07...	.1	86	43	12	.8	146	6.8	26.5	--
AUG.									
18...	.1	89	44	11	.9	169	6.7	28.0	40

SAN JACINTO RIVER BASIN

73

08072020 Lake Houston Plant Intake at Galena Park, Tex.

LOCATION.--Lat 29°44'01", long 95°12'58", Harris County, at city of Houston municipal water plant intake from Lake Houston West Canal and 1 mile (2 km) east of Galena Park.

DRAINAGE AREA.--2,828 mi² (7,325 km²).

PERIOD OF RECORD.--Periodic chemical analyses: May 1972 to current year. Pesticide analyses: May 1968 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

			DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	
DATE	TIME									
OCT. 08...	0900		180	2	130	0	<10	1	4	
JAN. 07...	0945		100	0	500	0	0	1	26	
APR. 22...	1215		20	0	30	0	10	2	10	
SEP. 02...	1615		30	0	50	0	0	0	5	
			DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DATE	TIME									
OCT. 08...	220		11	<10	0	1.0	0	60	170	
JAN. 07...	10		5	10	0	.0	4	60	390	
APR. 22...	80		3	0	1	.0	0	60	90	
SEP. 02...	50		0	0	0	.0	0	90	30	
DATE	TIME	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 08...	0900	--	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 07...	0945	14.0	.00	.00	.00	.00	.00	.00	.00	.00
APR. 22...	1215	21.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 02...	1615	30.0	.00	.00	.00	.00	.00	.00	.00	.00
DATE	TOTAL LINDANE (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL PCB (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 08...	.00	.0	.0	.00	.00	.00	.00	.02	.00	.00
JAN. 07...	.00	.0	.0	.00	.00	.00	.00	.01	.00	.00
APR. 22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 02...	.00	.0	.0	.00	.00	.00	.00	.01	.00	.00

SAN JACINTO RIVER BASIN

08072050 San Jacinto River near Sheldon, Tex.

LOCATION.--Lat 29°52'34", long 95°05'37", Harris County, on left bank at U.S. Highway 90 bridge, 0.3 mile (0.5 km) downstream from Southern Pacific Railway Company bridge, 1.5 miles (2.4 km) east of Sheldon, 4.6 miles (7.4 km) downstream from Lake Houston, and 21 miles (34 km) northeast of Houston.

DRAINAGE AREA.--2,879 mi² (7,457 km²).

PERIOD OF RECORD.--February 1970 to current year (elevations only prior to 1973, beginning 1973 gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 0.69 ft (0.210 m) below mean sea level, adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 9.33 ft (2.844 m) Nov. 2; minimum, -1.62 ft (-0.494 m) Dec. 1, Feb. 24.

Period of record: Maximum gage height, 20.12 ft (6.133 m) June 15, 1973; minimum elevation, -2.36 ft (-0.719 m) Feb. 13, 1971.

Maximum elevation since at least 1875, 31.5 ft (9.60 m) Nov. 26, 1940, at site 0.3 mile (0.5 km) upstream at Southern Pacific Railway Co. bridge.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	-	-	8.95	6.04	0.03	-1.62	2.07	0.48	2.73	1.50	2.26	0.51	2.73	1.24	-	-	4.00	2.90	-	-	-	-	2.97	1.50
2	-	-	9.33	8.07	1.08	-.62	2.99	1.67	2.35	1.00	2.72	.36	2.79	.99	-	-	2.88	2.23	-	-	-	-	2.88	1.18
3	-	-	8.07	5.27	1.25	-.23	3.03	1.13	2.47	1.00	-	1.22	.88	-.85	-	-	-	1.72	-	-	-	-	2.89	1.17
4	-	-	5.43	3.15	1.49	.09	2.04	.96	5.15	2.20	-	-	2.70	1.03	-	-	-	1.48	-	-	-	-	3.44	1.29
5	-	-	3.19	1.78	2.20	1.10	2.55	1.43	6.30	5.15	-	-	2.65	1.33	-	-	3.00	1.57	-	-	-	-	3.29	1.79
6	-	-	2.88	1.51	2.75	1.75	2.62	1.21	6.25	4.48	-	-	2.57	1.30	-	-	2.70	1.20	-	-	-	-	3.10	1.64
7	-	-	2.81	1.63	2.42	1.53	2.90	1.69	4.59	4.04	-	.69	2.86	1.65	-	-	.92	-	-	-	-	-	3.01	1.51
8	-	-	2.86	1.78	1.85	.87	2.65	.81	4.62	3.27	2.10	.24	3.60	1.98	4.17	1.77	-	.73	-	-	-	-	3.17	1.78
9	-	-	4.21	2.67	1.92	.36	3.18	.92	3.68	1.32	3.45	1.82	5.85	2.80	4.09	2.38	-	.20	-	-	-	-	3.29	1.63
10	-	-	5.29	4.13	3.77	1.01	3.56	.97	2.92	1.26	3.40	1.38	6.79	5.85	3.45	2.40	-	-	-	-	-	-	3.10	1.66
11	-	-	6.44	5.30	3.31	1.58	2.55	.48	2.88	1.54	2.88	1.21	7.04	6.60	4.10	2.15	-	-	-	-	-	-	3.12	1.56
12	-	-	6.71	6.26	3.17	1.77	2.40	.06	2.57	.65	3.03	2.05	6.95	5.25	3.87	3.01	-	-	-	-	-	-	3.01	1.19
13	-	-	6.29	4.84	3.40	1.93	1.17	-.65	2.36	.98	2.92	-.08	5.25	4.08	3.84	2.77	-	-	-	-	-	-	2.76	1.19
14	-	-	5.22	2.80	3.31	1.96	1.93	.42	2.60	1.44	1.95	-.83	5.13	3.42	3.94	2.45	-	-	-	-	0.64	-	2.99	1.31
15	-	-	3.28	2.08	4.83	3.31	1.96	.46	2.88	1.50	3.00	1.20	7.35	5.13	3.71	2.83	-	-	-	-	2.28	.64	3.02	1.68
16	-	-	3.73	2.04	5.15	3.48	1.82	.68	2.85	1.43	3.00	1.60	7.40	7.08	3.05	1.97	-	-	-	-	2.22	.67	2.83	1.45
17	-	-	3.69	1.12	3.53	2.14	2.40	1.08	2.73	.92	3.13	.58	7.12	5.84	2.72	1.50	-	-	-	-	2.19	.50	2.80	1.62
18	-	-	2.62	1.01	2.85	1.91	2.42	1.55	2.73	1.13	3.15	1.89	5.84	4.30	2.65	1.15	-	-	-	-	2.14	.52	3.24	1.48
19	-	-	2.68	1.34	2.50	1.30	2.42	.70	1.85	-.10	2.81	1.65	4.45	2.25	2.81	1.40	-	-	-	-	2.23	.63	3.06	2.14
20	-	-	2.80	.55	2.22	.75	2.05	.10	2.94	.94	3.00	1.65	-	-	3.23	1.69	-	-	-	-	2.13	.65	2.90	1.59
21	-	-	1.92	1.18	1.83	.95	3.07	1.70	3.20	1.35	2.92	1.65	-	-	3.10	1.86	-	-	-	-	2.65	.60	2.79	1.90
22	-	-	2.44	1.43	2.42	1.20	3.05	1.80	3.65	1.82	2.62	.90	-	-	3.13	1.76	-	-	-	-	2.40	.86	2.75	.79
23	3.05	1.53	2.47	1.52	2.66	1.48	2.85	1.45	2.75	-.35	2.71	1.36	-	-	3.34	1.75	-	-	-	-	2.68	1.11	2.56	1.14
24	3.00	1.94	2.52	1.04	2.44	1.03	2.85	1.20	.40	-1.62	2.54	.56	-	-	3.15	1.17	-	-	-	-	2.88	1.67	2.61	1.08
25	2.87	1.53	3.39	1.09	1.78	-.03	2.70	.68	1.71	-.60	2.58	.85	-	-	3.46	1.13	-	-	-	-	3.00	1.83	2.53	1.30
26	2.80	1.37	4.41	3.39	2.58	1.06	2.42	.75	2.35	.95	4.80	2.02	-	-	3.08	1.13	-	-	-	-	2.76	1.64	2.59	1.36
27	3.10	1.75	4.32	2.84	2.42	.70	2.50	.90	2.10	.66	4.43	3.15	-	-	2.93	1.16	-	-	-	-	2.87	1.67	2.62	1.12
28	3.90	2.68	3.58	2.40	2.45	.74	2.58	1.02	2.20	.60	3.94	2.25	-	-	3.20	1.43	-	-	-	-	2.77	1.62	2.48	1.01
29	3.78	2.13	3.68	2.23	2.45	.92	2.60	1.05	----	----	2.82	1.07	-	-	4.15	1.66	-	-	-	-	2.91	1.51	2.45	.98
30	4.15	2.58	2.23	-.92	2.47	1.03	2.55	1.37	----	----	1.97	-.50	-	-	5.94	4.15	-	-	-	-	2.85	1.51	2.52	.86
31	6.04	4.05	----	----	2.47	1.22	2.60	1.45	----	----	2.50	.55	----	----	5.73	4.00	----	----	-	-	3.01	1.50	----	----

SAN JACINTO RIVER BASIN

75

08072500 Barker Reservoir near Addicks, Tex.

LOCATION.--Lat 29°46'11", long 95°38'49", Harris County, at dam on Buffalo Bayou, 45 ft (14 m) upstream from reservoir outlet works, 1,160 ft (354 m) upstream from Addicks-Howell county road, 1.1 miles (1.8 km) south of Addicks, and 1.2 miles (1.9 km) upstream from South Mayde Creek.

DRAINAGE AREA.--134 mi² (347 km²). During extreme floods when the capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 150 mi² (388 km²).

PERIOD OF RECORD.--August 1945 to current year. On October 1973 the upper gage was converted to a low-flow partial-record station.

GAGE.--Water-stage recorders. Datum of gage is 0.33 ft (0.101 m) below mean sea level; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum contents, 15,190 acre-ft (18.7 hm³) June 14 (gage height, 91.42 ft or 27.856 m); minimum daily, 3.5 acre-ft (0.004 hm³) Mar. 7-10.

Period of record: Maximum contents, 39,200 acre-ft (48.3 hm³) May 15, 1968 (gage height, 94.60 ft or 28.834 m); minimum not determined.

REMARKS.--The reservoir is formed by a rolled earthfill dam 72,900 ft (22,200 m) long. The dam was completed Feb. 3, 1946, but was used as early as the spring of 1945 for flood control. The reservoir is operated for flood protection for the city of Houston. The controlled outlet works consist of five concrete conduits, 9 by 7 ft (2.7 by 2.1 m) wide, each controlled by a vertical slide gate. The capacity between the bottom of conduits (gage height, 75.0 or 22.86 m) and the top of design flood pool (gage height, 101.9 ft or 31.06 m) is 127,900 acre-ft (158 hm³). The capacity curve is based on a survey in 1940. There is no emergency spillway, but runoff in excess of the design flood will be discharged around both ends of the dam.

COOPERATION.--Capacity curve furnished by the Corps of Engineers.

REVISIONS.--WSP 1922: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

75.00	1.7	81.00	79	86.00	1,830
76.00	6.3	82.00	129	87.50	3,850
76.50	9.5	82.60	190	89.00	7,040
77.50	19.0	83.40	344	90.30	10,890
78.50	31.0	84.20	582	91.50	15,540
80.00	55.0	85.00	999		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,240	2,110	925	26	8.0	3.6	3.6	120	9,760	3,680	10	271
2	482	5,020	467	61	5.8	3.6	3.6	125	8,040	3,740	165	145
3	116	6,800	232	68	16	3.6	3.6	41	5,640	4,140	669	60
4	57	7,630	66	51	425	3.7	3.6	5.5	3,110	4,380	1,330	10
5	17	7,630	31	19	1,490	3.7	3.6	4.5	1,210	4,530	2,590	105
6	8.4	6,750	416	8.0	1,670	3.6	3.6	4.1	361	4,600	3,300	269
7	32	6,290	1,810	7.1	1,310	3.5	3.6	4.1	77	4,290	2,830	368
8	6.9	6,240	2,460	6.3	794	3.5	10	5.3	58	3,420	2,390	247
9	4.3	5,930	2,300	5.8	258	3.5	196	149	518	2,380	1,820	73
10	6.1	6,920	2,080	18	44	3.5	482	501	5,770	1,370	1,210	13
11	5.4	10,180	3,910	18	8.0	4.1	579	539	11,590	600	588	8.8
12	5.1	11,250	5,150	8.3	8.8	3.6	510	448	14,400	543	145	10
13	4.7	10,680	5,320	6.9	6.7	5.0	335	320	15,020	822	42	16
14	7.3	9,360	5,700	5.6	5.9	3.7	350	207	15,020	885	9.3	15
15	65	7,800	6,920	5.1	5.3	3.6	559	68	14,610	896	7.7	9.5
16	117	6,190	7,530	5.1	5.4	3.6	331	6.1	13,950	885	6.7	10
17	105	5,020	7,040	4.9	4.9	4.1	15	5.6	13,150	822	5.6	9.4
18	55	3,800	6,220	5.8	4.7	80	7.1	4.8	12,410	748	5.5	8.4
19	22	2,460	5,360	6.9	4.0	114	6.2	4.4	11,700	673	5.3	7.6
20	7.6	1,070	4,220	6.9	3.9	45	6.1	5.0	10,580	567	5.5	7.6
21	6.5	174	2,900	7.3	3.8	5.8	5.1	4.8	9,390	439	5.3	7.4
22	6.4	33	1,600	5.7	3.7	4.8	9.7	4.5	8,720	346	27	7.0
23	5.9	10	641	5.1	3.7	4.3	6.9	5.7	7,580	326	134	7.1
24	5.4	368	238	4.9	3.6	3.9	4.8	64	6,750	405	202	7.9
25	4.5	2,680	74	4.7	3.6	3.7	4.2	567	6,000	419	109	8.9
26	4.1	3,440	22	4.4	3.6	3.7	3.9	1,260	5,410	388	41	8.7
27	3.9	3,270	13	4.2	3.6	3.8	3.8	1,430	5,280	359	16	8.1
28	12	2,700	13	4.0	3.6	3.8	3.8	1,360	4,790	248	71	7.8
29	7.9	2,100	10	3.9	-----	3.7	3.8	2,170	4,350	112	101	9.2
30	6.8	1,530	17	3.7	-----	3.7	17	6,310	3,940	55	117	8.9
31	162	-----	11	3.7	-----	3.6	-----	9,450	-----	19	291	-----
MAX	1,240	11,250	7,530	68	1,670	114	579	9,450	15,020	4,600	3,300	368
MIN	3.9	10	10	3.7	3.6	3.5	3.6	4.1	58	19	5.3	7.0
CAL YR 1974	MAX	18,130	MIN	3.0								
WTR YR 1975	MAX	15,020	MIN	3.5								

SAN JACINTO RIVER BASIN

08073000 Addicks Reservoir near Addicks, Tex.

LOCATION.--Lat 29°47'28", long 95°37'24", Harris County, at dam on South Mayde Creek, 65 ft (20 m) upstream from reservoir outlet works, 2,700 ft (823 m) upstream from U.S. Highway 90, 1.2 miles (1.9 km) east of Addicks, and 1.4 miles (2.3 km) upstream from mouth.

DRAINAGE AREA.--133 mi² (344 km²). During extreme floods when the capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 129 mi² (334 km²).

PERIOD OF RECORD.--June 1948 to current year. In October 1973, the upper gages were converted to low-flow partial-record stations.

GAGE.--Water-stage recorders. Datum of gage is at mean sea level; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum contents, 8,950 acre-ft (11.0 hm³) Nov. 12 (elevation, 94.22 ft or 28.718 m); minimum, reservoir was dry for many days.

Period of record: Maximum contents, 37,460 acre-ft (46.2 hm³) May 15, 1968 (elevation, 100.02 ft or 30.486 m); minimum not determined.

Flood in December 1935 reached a stage of 89.9 ft (27.40 m) at bridge on U.S. Highway 90, 2,700 ft (823 m) downstream from gage, from information by Corps of Engineers.

REMARKS.--The reservoir is formed by a rolled earthfill dam 61,166 ft (18,643 m) long. The dam was completed in December 1948. The reservoir is operated for flood protection for the city of Houston. The outlet works consist of five concrete conduits 8 by 6 ft (2.4 by 1.8 m) wide, each controlled by a vertical slide gate. Runoff in excess of maximum design capacity will be discharged around both ends of dam. The capacity curve is based on a survey made in 1940. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	123.5	-
Ground elevation at ends of dam.....	114.0	204,500
Maximum design flood.....	113.0	188,030
Crest of spillway (invert).....	73.0	0

COOPERATION.--Capacity curve furnished by the Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

73.7	0	84.0	135	90.0	2,020
76.0	7	85.0	189	91.5	3,570
78.0	22	86.5	385	93.0	6,000
80.0	46	88.5	1,020	95.0	11,380
82.0	82				

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	1,090	659	9.7	8.4	0	0	88	6,950	833	5.4	92
2	228	3,530	492	23	4.2	0	0	117	5,870	1,010	122	69
3	133	5,190	350	19	12	0	0	82	4,530	1,150	373	38
4	101	5,960	227	6.3	319	.2	0	42	3,070	1,240	1,150	2.8
5	68	6,070	160	1.9	1,480	0	0	1.1	1,790	1,310	3,210	125
6	35	5,360	394	1.5	1,910	0	0	0	815	1,350	3,550	404
7	1.6	4,850	780	1.3	1,620	0	0	0	362	1,370	3,190	524
8	1.5	4,710	828	1.1	1,180	0	23	0	225	1,180	2,730	486
9	1.6	4,440	612	.9	739	0	184	71	187	677	2,230	358
10	1.2	5,340	537	10	360	0	492	91	2,110	322	1,680	194
11	1.1	8,150	1,840	2.8	181	0	582	67	5,510	186	1,140	94
12	1.2	8,920	2,690	1.6	131	0	551	37	7,280	142	659	43
13	.9	8,180	2,750	1.4	90	0	449	1.6	7,800	116	307	35
14	1.5	6,790	2,910	1.1	45	0	564	1.5	7,800	97	166	9.4
15	20	5,290	4,050	.6	1.2	0	721	1.4	7,400	114	115	1.8
16	31	3,890	4,710	0	0	0	551	.8	6,700	125	69	1.8
17	19	2,860	4,420	0	0	0	298	0	5,940	126	21	1.9
18	1.8	2,160	3,680	0	0	95	155	0	5,210	118	.3	1.5
19	1.3	1,630	2,920	.3	0	138	115	0	4,480	111	0	1.3
20	1.3	1,130	2,280	.5	0	122	75	0	3,790	102	0	1.8
21	1.0	666	1,730	.7	0	85	35	0	3,100	80	0	1.4
22	.3	430	1,200	.8	0	43	8.5	0	2,530	68	17	1.4
23	0	290	718	.8	0	.7	3.1	0	1,930	60	67	1.1
24	0	776	432	.8	0	0	1.4	40	1,500	65	74	1.1
25	0	2,210	299	0	0	0	1.1	71	1,230	60	53	1.2
26	0	2,500	204	0	0	0	0	65	1,010	54	25	1.3
27	0	2,140	144	0	0	0	0	57	1,010	44	1.8	1.2
28	10	1,590	110	0	0	0	0	49	895	37	1.6	1.1
29	24	1,090	74	0	-----	0	0	360	900	25	54	.5
30	19	828	42	0	-----	0	12	3,920	815	12	94	.2
31	49	-----	13	0	-----	0	-----	6,680	-----	9.2	104	-----
MAX	500	8,920	4,710	23	1,910	138	721	6,680	7,800	1,370	3,550	524
MIN	0	290	13	0	0	0	0	0	187	9.2	0	.2

CAL YR 1974 MAX 13,980 MIN 0
WTR YR 1975 MAX 8,920 MIN 0

SAN JACINTO RIVER BASIN

77

08073500 Buffalo Bayou near Addicks, Tex.

LOCATION.--Lat 29°45'42", long 95°36'20", Harris County, near right bank at downstream side of bridge on Dairy-Ashford Road over rectified channel, 1.8 miles (2.9 km) downstream from South Mayde Creek, and 2.6 miles (4.2 km) southeast of Addicks.

DRAINAGE AREA.--293 mi² (759 km²). During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridge lines and is 310 mi² (803 km²).

PERIOD OF RECORD.--Discharge: August 1945 to current year.

Water quality: Chemical, biochemical, and pesticides analyses: August 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.40 ft (0.427 m) below mean sea level, adjustment of 1973; records unadjusted to land-surface subsidence. Prior to Feb. 2, 1948, water-stage recorder at bridge on natural channel 1,200 ft (366 m) to right at same datum. Feb. 2 to May 21, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--30 years, 204 ft³/s (5.777 m³/s), 147,800 acre-ft/yr (182 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) June 2 (gage height, 66.68 ft or 20.324 m); minimum daily, 18 ft³/s (0.51 m³/s) Apr. 4, 5.

Period of record: Maximum discharge, 11,200 ft³/s (317 m³/s) Aug. 29, 1945 (gage height, 81.23 ft or 24.759 m, former site); no flow at times.

Maximum stage since at least 1896, 85.6 ft (26.09 m) in December 1935, adjusted to former site from floodmark 0.5 mile (0.8 km) downstream, on basis of slope of flood of Aug. 29, 1945, from information by local resident.

REMARKS.--Discharge records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 3.2 and 3.0 miles (5.1 and 4.8 km) upstream, respectively (total capacity, 315,900 acre-ft or 390 hm³). Extreme low flow is sustained by drainage from irrigated lands.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	557	470	125	88	21	26	196	1,610	549	115	252
2	750	339	409	178	103	20	21	252	2,280	259	175	238
3	568	206	283	201	79	19	21	235	2,420	41	295	213
4	288	118	264	186	393	23	18	158	2,270	49	575	161
5	219	319	231	135	471	29	18	98	2,020	36	216	464
6	158	937	418	86	620	27	20	33	1,310	33	272	213
7	98	1,150	578	64	694	25	20	28	666	142	745	39
8	59	1,150	553	57	667	23	42	28	374	464	725	138
9	49	1,120	611	49	629	21	207	298	426	847	708	275
10	45	1,290	689	120	548	22	278	269	1,320	823	681	339
11	40	702	279	135	330	26	287	260	471	687	653	334
12	37	1,290	652	98	174	22	288	241	520	466	576	272
13	35	1,830	827	69	158	26	284	210	839	326	422	181
14	40	1,950	728	55	136	34	259	209	738	452	304	147
15	169	1,880	171	44	106	23	334	148	725	473	200	96
16	219	1,740	383	40	41	21	502	92	847	332	172	82
17	216	1,410	843	39	36	25	532	38	824	309	134	87
18	171	1,120	1,030	47	33	228	293	33	809	301	78	76
19	113	1,080	1,020	67	30	266	146	29	793	284	41	63
20	74	1,040	1,000	61	27	247	131	27	870	270	38	62
21	48	885	1,010	59	26	186	129	27	977	261	38	66
22	37	405	979	54	25	129	109	28	985	259	74	61
23	31	201	850	44	24	95	104	32	967	250	358	56
24	29	401	496	39	23	31	58	175	984	257	312	54
25	27	396	268	41	22	25	38	302	747	259	234	58
26	23	952	242	38	22	22	29	293	722	265	203	64
27	20	1,040	202	34	22	24	24	279	728	240	141	65
28	137	1,000	198	31	21	25	21	294	751	227	109	62
29	145	888	185	29	-----	24	21	699	721	214	245	59
30	124	581	173	27	-----	23	60	582	536	186	262	60
31	375	-----	164	27	-----	28	-----	591	-----	150	259	-----
TOTAL	5,144	27,977	16,206	2,279	5,548	1,760	4,320	6,184	30,250	9,711	9,360	4,337
MEAN	166	933	523	73.5	198	56.8	144	199	1,008	313	302	145
MAX	800	1,950	1,030	201	694	266	532	699	2,420	847	745	464
MIN	20	118	164	27	21	19	18	27	374	33	38	39
AC-FT	10,200	55,490	32,140	4,520	11,000	3,490	8,570	12,270	60,000	19,260	18,570	8,600
CAL YR 1974	TOTAL	126,903.6	MEAN	348	MAX	1,950	MIN	6.7	AC-FT	251,700		
WTR YR 1975	TOTAL	123,076.0	MEAN	337	MAX	2,420	MIN	18	AC-FT	244,100		

SAN JACINTO RIVER BASIN

08073500 Buffalo Bayou near Addicks, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 07...	1000	110	20	22	3.0	21	4.3	86	0	9.2
NOV. 04...	0930	120	--	--	--	--	--	--	--	--
DEC. 03...	0930	280	7.9	12	2.2	11	4.0	48	0	7.3
JAN. 29...	1000	36	--	--	--	--	--	--	--	--
FEB. 12...	0950	170	--	--	--	--	--	--	--	--
MAR. 10...	1030	20	--	--	--	--	--	--	--	--
APR. 07...	1010	18	11	59	13	77	4.5	232	0	40
MAY 12...	1030	260	--	--	--	--	--	--	--	--
JUNE 02...	0930	1950	--	--	--	--	--	--	--	--
JULY 14...	0900	285	--	--	--	--	--	--	--	--
AUG. 12...	1000	600	8.8	17	3.0	15	4.6	64	0	9.3
SEP. 03...	0930	230	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 07...	26	--	.10	.01	.37	1.2	1.6	.47	149	116
NOV. 04...	--	--	.03	.01	.17	1.5	1.7	.51	--	104
DEC. 03...	17	.2	.12	.01	.12	1.4	1.5	.36	85	103
JAN. 29...	--	--	.50	.12	.56	1.9	2.5	.77	--	211
FEB. 12...	--	--	.25	.04	.22	1.8	2.0	.30	--	135
MAR. 10...	--	--	.63	.19	.77	1.0	1.8	1.2	--	65
APR. 07...	99	1.5	.57	.15	.11	1.7	1.8	.92	420	99
MAY 12...	--	--	.31	.07	.21	1.5	1.7	.35	--	138
JUNE 02...	--	--	.10	.01	.13	2.6	2.7	.18	--	78
JULY 14...	--	--	.21	.05	.13	1.3	1.4	.23	--	236
AUG. 12...	20	.2	.09	.01	.08	.92	1.0	.26	110	57
SEP. 03...	--	--	.15	.04	.00	1.7	1.7	.42	--	179

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 07...	11	67	0	1.1	255	6.6	23.5	100	60
NOV. 04...	26	--	--	--	215	6.6	23.5	100	40
DEC. 03...	30	39	0	.8	169	6.7	9.0	140	65
JAN. 29...	34	--	--	--	605	7.1	21.5	30	100
FEB. 12...	9	--	--	--	237	6.6	13.0	240	100
MAR. 10...	19	--	--	--	956	6.8	18.5	30	30
APR. 07...	23	200	11	2.4	792	7.0	19.0	30	60
MAY 12...	10	--	--	--	213	6.3	23.5	240	95
JUNE 02...	37	--	--	--	127	7.3	16.5	140	50
JULY 14...	42	--	--	--	239	7.2	26.5	80	100
AUG. 12...	4	55	2	.9	204	6.8	27.5	80	40
SEP. 03...	17	--	--	--	290	6.8	27.5	120	85

SAN JACINTO RIVER BASIN

08073500 Buffalo Bayou near Addicks, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 07...	7.9	92	3.5	52000	3600	880	19	5	.1
NOV. 04...	6.9	80	3.5	280000	700	1400	13	--	.1
DEC. 03...	10.6	91	2.3	12000	430	46	14	4	.0
JAN. 29...	6.8	76	5.4	35000	250	72	22	--	.2
FEB. 12...	8.9	84	4.2	34000	1000	200	18	--	.3
MAR. 10...	6.3	67	5.8	7700	240	150	20	--	.2
APR. 07...	7.6	81	5.2	34000	720	160	14	10	.2
MAY 12...	--	--	3.7	58000	1200	380	12	--	.0
JUNE 02...	12.5	128	2.4	79000	41000	230	17	--	.1
JULY 14...	6.8	83	3.1	7000	120	680	9.5	--	.0
AUG. 12...	6.7	84	2.3	11000	170	190	8.6	5	.1
SEP. 03...	6.7	84	3.1	20000	280	430	14	--	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 07...	1000	100	3	90	3	26	2	14
APR. 07...	1010	10	4	120	0	0	0	3
AUG. 12...	1000	--	--	60	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 07...	290	68	0	10	--	1	90	30
APR. 07...	20	2	10	10	.0	1	350	20
AUG. 12...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08073500 Buffalo Bayou near Addicks, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 07...	1000	110	23.5	.00	.0	.00	4.9	.00	2.0	.00	.4
DEC. 03...	0930	280	9.0	.00	.0	.00	1.5	.00	.6	.03	.4
APR. 07...	1010	18	19.0	.00	.0	.00	4.0	.00	.4	.00	.1
AUG. 12...	1000	600	27.5	.00	.0	.00	.1	.00	.2	.00	.3

DATE	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 07...	.01	5.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
DEC. 03...	.00	1.8	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 07...	.01	1.7	.00	.0	.00	.0	.00	.0	.04	.0	.1
AUG. 12...	.00	.4	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 07...	44	.0	8	.00	.00	.00	.00	.09	.00	.00
DEC. 03...	35	.0	2	.01	.00	.00	.00	.02	.00	.00
APR. 07...	26	.0	1	.60	.08	.00	.00	7.8	1.8	.27
AUG. 12...	11	.0	2	.01	.00	.00	.00	.42	.00	.04

LOCATION.--Lat 29°45'43", Long 95°33'27", Harris County, at downstream side of bridge on West Belt Drive in west Houston, 100 ft (30 m) downstream from Rummel Creek, 3.5 miles (5.6 km) downstream from the gage Buffalo Bayou near Addicks, and 3.7 miles (6.0 km) upstream from the gage Buffalo Bayou at Piney Point.

EXTREMES.--Current year: Maximum discharge, 2,430 ft³/s (68.8 m³/s) June 3 (gage height, 55.52 ft or 16.922 m); minimum daily, 35 ft³/s (0.99 m³/s) Apr. 5.
Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Mar. 20, 1972 (gage height, 61.48 ft or 18.739 m); minimum daily, 25 ft³/s (0.71 m³/s) Nov. 21, 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905	1,070	552	201	165	42	42	233	1,410	707	148	294
2	840	485	503	234	146	41	38	294	2,030	347	205	280
3	666	274	351	262	111	41	38	277	2,380	71	357	254
4	299	171	328	239	594	66	36	196	2,250	101	693	203
5	250	292	305	182	533	53	35	125	2,060	69	417	785
6	193	931	508	121	668	49	37	51	1,440	53	268	507
7	141	1,200	645	102	768	46	37	43	780	141	778	77
8	78	1,200	622	87	745	44	86	47	499	477	775	156
9	73	1,170	655	78	713	42	251	484	518	860	760	326
10	70	1,540	791	192	643	43	339	314	1,880	866	730	440
11	65	962	432	183	434	49	340	297	697	761	704	393
12	62	1,200	658	146	227	45	340	280	528	552	644	422
13	60	1,680	870	103	203	73	337	248	885	409	477	259
14	98	1,830	852	85	177	57	539	286	798	554	360	178
15	296	1,790	308	74	142	46	466	187	753	748	240	124
16	282	1,710	378	67	66	44	586	122	882	422	207	110
17	279	1,470	862	68	58	52	620	56	865	359	163	109
18	231	1,200	1,040	86	54	336	364	49	847	346	118	98
19	161	1,150	1,050	102	51	307	173	48	831	325	65	83
20	109	1,120	1,030	94	49	288	156	44	874	309	61	80
21	76	1,020	1,050	88	48	225	206	44	1,000	303	58	84
22	62	540	1,020	83	46	160	144	44	1,030	320	152	78
23	56	268	930	72	45	123	132	47	1,010	302	614	73
24	53	788	605	68	43	49	78	228	1,070	302	483	71
25	52	444	359	69	42	42	57	365	829	337	282	74
26	47	968	361	64	42	42	48	342	767	324	248	81
27	43	1,110	263	63	42	45	43	321	792	282	178	81
28	380	1,080	270	58	41	43	40	367	847	268	142	76
29	208	1,000	244	55	-----	40	56	1,050	860	253	351	75
30	169	705	229	52	-----	39	127	955	601	222	335	75
31	551	-----	214	54	-----	45	-----	568	-----	189	307	-----
TOTAL	6,855	30,368	18,285	3,432	6,896	2,617	5,791	8,012	32,013	11,579	11,320	5,946
MEAN	221	1,012	590	111	246	84.4	193	258	1,067	374	365	198
MAX	905	1,830	1,050	262	768	336	620	1,050	2,380	866	778	785
MIN	43	171	214	52	41	39	35	43	499	53	58	71
AC-FT	13,600	60,230	36,270	6,810	13,680	5,190	11,490	15,890	63,500	22,970	22,450	11,790
WTR YR 1974	TOTAL	146,521	MEAN	401	MAX	1,830	MIN	33	AC-FT	290,600		

LOCATION.--Lat 29°44'48", long 95°31'24", Harris County, on downstream side of bridge on Piney Point Road, village of Piney Point, 3.7 miles (6.0 km) downstream from Rummel Creek, 7.2 miles (11.6 km), downstream from gage Buffalo Bayou near Addicks, and 12.5 miles (20.1 km) upstream from gage Buffalo Bayou at Houston.

PERIOD OF RECORD.--Discharge: October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.35 ft (0.412 m) below mean sea level, adjustment of 1973.

EXTREMES.--Current year: Maximum discharge, 2,380 ft³/s (67.4 m³/s) June 3 (gage height, 47.44 ft or 14.460 m); minimum daily, 39 ft³/s (1.10 m³/s) Apr. 5.

Period of record: Maximum discharge, 4,470 ft³/s (127 m³/s) June 13, 1973 (gage height, 54.98 ft or 16.758 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Dec. 6, 7, 1964.

REMARKS.--Discharge records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 14.0 miles (22.5 km) and 13.8 miles (22.2 km) upstream, respectively. Low flow is partly sustained by sewage effluent from Houston suburbs.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	897	1,280	596	250	230	46	50	241	1,280	863	201	323
2	823	650	556	255	160	46	43	318	1,890	484	232	312
3	710	330	399	296	108	47	42	310	2,340	111	428	287
4	354	215	372	277	636	70	40	237	2,290	133	486	241
5	271	242	343	219	540	60	39	155	2,140	120	668	635
6	207	840	550	152	653	55	40	74	1,570	72	240	768
7	158	1,130	680	148	767	50	41	51	909	143	779	105
8	77	1,140	664	106	755	46	111	52	613	510	799	150
9	81	1,110	677	90	727	45	224	549	592	882	786	392
10	69	1,460	826	213	681	44	353	346	2,040	918	763	497
11	69	1,210	590	208	502	46	358	331	1,040	852	739	474
12	68	1,090	648	174	268	44	356	315	558	634	698	480
13	67	1,610	898	117	235	84	353	286	904	550	534	374
14	123	1,850	904	96	205	61	653	337	857	546	424	223
15	378	1,830	453	79	172	51	462	219	794	909	285	166
16	285	1,760	335	72	130	47	591	159	904	559	243	142
17	284	1,530	870	76	90	52	649	75	904	446	189	136
18	245	1,220	1,040	94	70	379	446	60	888	422	136	123
19	170	1,140	1,060	105	60	338	214	58	877	397	69	105
20	119	1,110	1,040	103	56	319	187	52	888	376	59	98
21	86	1,040	1,060	91	54	263	238	52	1,000	366	58	107
22	69	659	1,040	90	52	185	205	51	1,030	398	120	98
23	62	336	984	75	51	148	159	55	1,040	378	543	94
24	55	915	704	70	50	66	103	219	1,120	364	657	90
25	57	520	392	70	49	48	71	428	930	402	318	91
26	50	913	399	67	48	48	56	385	848	405	276	100
27	45	1,090	305	62	47	59	49	360	872	352	216	100
28	455	1,060	313	58	47	52	46	423	938	329	153	94
29	260	1,010	290	52	-----	46	54	1,050	994	314	339	92
30	183	773	276	52	-----	44	191	1,310	730	284	437	93
31	493	-----	254	51	-----	49	-----	587	-----	248	341	-----
TOTAL	7,270	31,063	19,518	3,868	7,443	2,938	6,424	9,145	33,780	13,767	12,216	6,990
MEAN	235	1,035	630	125	266	94.8	214	295	1,126	444	394	233
MAX	897	1,850	1,060	296	767	379	653	1,310	2,340	918	799	768
MIN	45	215	254	51	47	44	39	51	558	72	58	90
AC-FT	14,420	61,610	38,710	7,670	14,760	5,830	12,740	18,140	67,000	27,310	24,230	13,860
CAL YR 1974	TOTAL	150,895	MEAN	413	MAX	1,850	MIN	27	AC-FT	29		

SAN JACINTO RIVER BASIN

83

08073700 Buffalo Bayou at Piney Point, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 07...	1140	230	21	25	3.6	31	4.8	111	0	8.9
NOV. 04...	1130	280	--	--	--	--	--	--	--	--
DEC. 03...	1100	380	8.1	14	2.4	14	4.2	57	0	8.4
JAN. 29...	1040	50	--	--	--	--	--	--	--	--
FEB. 12...	1050	240	--	--	--	--	--	--	--	--
MAR. 10...	0930	30	--	--	--	--	--	--	--	--
APR. 07...	1135	28	20	52	11	100	7.3	318	0	38
MAY 12...	1145	320	--	--	--	--	--	--	--	--
JUNE 02...	1045	1800	--	--	--	--	--	--	--	--
JULY 14...	1030	410	--	--	--	--	--	--	--	--
AUG. 12...	1130	720	9.0	18	3.0	15	4.6	68	0	9.5
SEP. 03...	1040	300	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 07...	31	--	.14	.16	1.2	.80	2.0	1.3	181	69
NOV. 04...	--	--	.05	.10	.49	2.0	2.5	1.3	--	624
DEC. 03...	19	.2	.10	.03	.39	1.1	1.5	.58	98	105
JAN. 29...	--	--	.56	.74	6.0	1.3	7.3	4.5	--	67
FEB. 12...	--	--	.25	.03	.50	1.6	2.1	.68	--	125
MAR. 10...	--	--	.25	.59	9.9	.00	9.9	7.6	--	21
APR. 07...	90	.7	.23	.75	8.5	2.5	11	7.2	477	29
MAY 12...	--	--	.34	.19	.45	1.6	2.0	.87	--	129
JUNE 02...	--	--	.10	.01	.15	3.1	3.2	.23	--	136
JULY 14...	--	--	.15	.10	.31	1.2	1.5	.48	--	180
AUG. 12...	20	.2	.09	.04	.08	.88	.96	.36	113	83
SEP. 03...	--	--	.12	.09	.03	1.3	1.3	1.1	--	134

SAN JACINTO RIVER BASIN

08073700 Buffalo Bayou at Piney Point, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON-FILT- RAHLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 07...	12	77	0	1.5	327	6.7	24.0	60	45
NOV. 04...	81	--	--	--	282	6.6	23.5	70	200
DEC. 03...	28	45	0	.9	181	6.6	9.5	130	65
JAN. 29...	20	--	--	--	759	6.9	22.0	30	30
FEB. 12...	15	--	--	--	260	6.9	14.5	240	100
MAR. 10...	1	--	--	--	903	6.6	21.0	30	15
APR. 07...	6	180	0	3.3	890	6.8	21.0	40	15
MAY 12...	9	--	--	--	218	6.0	24.5	200	90
JUNE 02...	22	--	--	--	133	7.5	19.0	120	70
JULY 14...	22	--	--	--	255	6.9	27.0	120	95
AUG. 12...	25	57	2	.9	206	6.7	28.0	80	50
SEP. 03...	18	--	--	--	313	6.6	28.0	120	70

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 07...	6.9	81	4.0	2500	140	14	15	5	.1
NOV. 04...	6.1	71	5.0	260000	18000	9500	20	--	.2
DEC. 03...	10.7	94	2.6	5000	50	18	13	2	.1
JAN. 29...	4.0	45	6.8	22000	600	60	17	--	.5
FEB. 12...	8.3	81	4.7	10000	310	45	20	--	.2
MAR. 10...	5.6	62	7.4	2100	28	31	14	--	1.0
APR. 07...	4.8	53	15	6900	650	56	19	22	1.3
MAY 12...	--	--	4.3	22000	1100	190	16	--	.0
JUNE 02...	7.6	81	3.0	9700	3600	460	17	--	.1
JULY 14...	6.0	74	4.2	2600	150	96	10	--	.1
AUG. 12...	6.3	80	3.5	3900	190	48	11	5	.1
SEP. 03...	5.5	70	5.3	18000	330	150	10	--	.1

SAN JACINTO RIVER BASIN

85

08073700 Buffalo Bayou at Piney Point, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	
DATE	TIME								
OCT. 07...									
APR. 07...	1140	50	4	120	2	0	1	9	
AUG. 12...	1135	20	4	360	0	0	1	7	
	1130	--	--	50	--	--	--	--	
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 07...	230	36	0	0	.0	2	130	0	
APR. 07...	40	6	20	170	.0	2	470	30	
AUG. 12...	--	--	--	--	--	--	--	--	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	
OCT. 07...	1140	230	24.0	.00	.0	.00	.9	.00	.7	.00	.8	
DEC. 03...	1100	380	9.5	.00	.0	.00	.0	.00	.1	.00	.1	
APR. 07...	1135	28	21.0	.00	.0	.00	.0	.00	.0	.00	.0	
AUG. 12...	1130	720	28.0	.00	.0	.00	1.3	.00	.8	.00	.0	
DATE	TIME	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
OCT. 07...	.01	1.1	.00	.0	.00	.0	.00	.0	.01	.0	.0	
DEC. 03...	.00	.3	.00	.0	.00	.0	.00	.0	.00	.0	.0	
APR. 07...	.01	.3	.00	.0	.00	.0	.00	.0	.01	.0	.1	
AUG. 12...	.00	1.2	.00	.0	.00	.1	.00	.0	.00	.0	.0	
DATE	TIME	TOTAL PCB (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL OI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
OCT. 07...	12	.0	3	.06	.00	.00	.00	.00	.00	.00	.00	
DEC. 03...	3	.0	1	.01	.00	.00	.00	.00	.01	.00	.00	
APR. 07...	4	.0	0	.03	.01	.00	.00	.00	3.7	.53	.12	
AUG. 12...	22	.0	5	.04	.00	.00	.00	.00	.42	.00	.04	

SAN JACINTO RIVER BASIN

08074000 Buffalo Bayou at Houston, Tex.

LOCATION.--Lat 29°45'36", long 95°24'30", Harris County, at bridge on Shepherd Drive in Houston and 0.8 mile (1.3 km) upstream from Waugh Drive.

DRAINAGE AREA.--358 mi² (927 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Discharge: May 1936 to September 1957, October 1957 to December 1961 (high-water records and discharge measurements), January 1962 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.36 ft (0.414 m) below mean sea level, adjustment of 1973; records unadjusted for land-surface subsidence. Prior to June 19, 1936, nonrecording gage, and June 19, 1936, to Jan. 16, 1962, water-stage recorder at site 0.8 mile (1.3 km) downstream at 4.08 ft (1.244 m) lower datum. Jan. 17, 1962, to Sept. 30, 1973, auxiliary water-stage recorder 0.8 mile (1.3 km) downstream. Water-stage recorder at Main Street (station 08074600) used as auxiliary gage after Sept. 30, 1973.

AVERAGE DISCHARGE.--8 years (1936-44) unregulated, 272 ft³/s (7.703 m³/s), 197,100 acre-ft/yr (243 hm³/yr); 26 years (1944-57, 1962-75) regulated, 274 ft³/s (7.760 m³/s), 198,500 acre-ft/yr (245 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,430 ft³/s (154 m³/s) June 10 (gage height, 18.80 ft or 5.730 m); minimum daily, 44 ft³/s (1.25 m³/s) Apr. 4, 7.

Period of record: Maximum discharge, 10,900 ft³/s (309 m³/s) Aug. 30, 1945 (gage height, 28.82 ft or 8.784 m), at site 0.8 mile (1.3 km) downstream at present datum; minimum daily, 1.3 ft³/s (0.037 m³/s) May 24, 1939, Nov. 5, 1950.

All flood data at site 0.8 mile (1.3 km) downstream at present datum. Maximum gage height since at least 1835, 49.0 ft (14.94 m) Dec. 9, 1935 (discharge, 40,000 ft³/s or 1,130 m³/s; furnished by engineer for Harris County). Flood of May 31, 1929, reached a gage height of 43.5 ft or 13.26 m (discharge, 19,000 ft³/s or 538 m³/s at bridge on Capitol Avenue 2.8 miles or 4.5 km downstream, from rating curve extended above 15,300 ft³/s or 433 m³/s, stage-discharge relation materially affected by bridge; furnished by city of Houston).

REMARKS.--Discharge records fair. Floodflow regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) 26.3 and 26.5 miles (42.3 and 42.6 km) upstream, respectively. Gage height affected by tides and backwater from Whiteoak Bayou and other streams. Low flow is mostly sustained by sewage effluent from Houston suburbs.

REVISIONS.--WSP 1732: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010	2,030	570	357	797	53	59	267	1,110	1,550	450	396
2	864	1,010	529	297	221	53	51	328	1,790	781	300	384
3	808	419	422	317	167	50	45	325	2,330	196	400	312
4	450	344	353	313	850	111	44	275	2,420	132	750	280
5	304	210	351	294	623	94	49	196	2,310	179	450	339
6	247	709	602	218	606	62	47	128	1,940	81	300	1,340
7	202	1,220	614	454	735	57	44	81	1,200	72	653	216
8	125	1,250	641	172	757	53	207	128	740	350	850	144
9	128	1,160	628	132	728	54	181	834	1,030	721	834	421
10	97	1,660	927	277	678	53	333	367	3,510	870	817	436
11	90	2,040	1,030	245	640	59	356	353	2,100	830	817	662
12	77	1,010	533	228	365	65	347	339	611	696	785	833
13	74	1,470	888	166	260	142	333	298	882	632	737	659
14	125	1,800	991	129	223	84	1,000	396	879	413	509	287
15	735	1,860	851	111	207	75	515	270	791	1,060	332	221
16	287	1,850	253	94	140	64	620	216	864	856	293	187
17	279	1,650	742	111	82	56	728	119	917	430	243	183
18	265	1,330	964	140	74	477	569	68	917	407	196	177
19	211	1,170	1,060	127	74	325	280	65	888	390	156	173
20	160	1,110	1,020	140	67	307	210	65	864	361	92	160
21	108	1,050	1,030	125	64	274	265	60	947	370	76	150
22	80	818	1,050	135	60	204	306	59	1,020	401	563	140
23	65	374	1,020	111	57	157	185	57	1,100	1,100	782	130
24	60	1,200	853	104	54	101	150	376	1,510	537	1,210	140
25	60	700	485	97	56	62	97	623	1,240	398	499	140
26	56	808	489	97	54	59	76	424	834	481	404	135
27	54	1,050	333	97	54	59	63	396	924	384	285	126
28	393	1,070	384	90	53	57	49	887	1,010	327	207	120
29	476	1,030	382	82	-----	54	92	1,280	1,450	300	306	117
30	214	850	339	72	-----	53	267	3,290	1,020	280	653	117
31	545	-----	262	67	-----	56	-----	992	-----	400	463	-----
TOTAL	8,649	34,252	20,596	5,399	8,746	3,430	7,568	13,562	39,148	15,985	15,412	9,125
MEAN	279	1,142	664	174	312	111	252	437	1,305	516	497	304
MAX	1,010	2,040	1,060	454	850	477	1,000	3,290	3,510	1,550	1,210	1,340
MIN	54	210	253	67	53	50	44	57	611	72	76	117
AC-FT	17,160	67,940	40,850	10,710	17,350	6,800	15,010	26,900	77,650	31,710	30,570	18,100

CAL YR 1974 TOTAL 181,522 MEAN 497 MAX 2,880 MIN 29 AC-FT 360,000
WTR YR 1975 TOTAL 181,872 MEAN 498 MAX 3,510 MIN 44 AC-FT 360,700

08074000 Buffalo Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
07...	1350	180	21	30	3.8	35	4.9	130	0	9.7
NOV.										
04...	1230	370	--	--	--	--	--	--	--	--
DEC.										
04...	0900	380	9.8	19	3.0	24	4.2	86	0	10
JAN.										
07...	1000	900	--	--	--	--	--	--	--	--
29...	1145	84	--	--	--	--	--	--	--	--
MAR.										
05...	1245	96	--	--	--	--	--	--	--	--
APR.										
16...	0845	420	4.9	17	2.7	15	1.9	59	0	11
MAY										
12...	0905	300	--	--	--	--	--	--	--	--
JUNE										
10...	1100	5700	3.4	15	2.6	12	2.6	51	0	5.6
JULY										
15...	0930	1050	--	--	--	--	--	--	--	--
AUG.										
06...	0930	235	1.3	27	3.3	24	3.5	102	0	12
SEP.										
10...	1230	500	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
07...	34	--	.38	.23	.68	1.1	1.8	.71	203	70
NOV.										
04...	--	--	.33	.22	.58	1.4	2.0	.81	--	82
DEC.										
04...	26	.2	.17	.06	.71	1.3	2.0	.62	139	109
JAN.										
07...	--	--	.46	.06	.56	4.4	5.0	1.3	--	814
29...	--	--	.49	.37	3.2	1.1	4.3	3.0	--	55
MAR.										
05...	--	--	.73	.47	4.8	1.5	6.3	4.4	--	23
APR.										
16...	19	.2	.55	.16	.65	1.9	2.5	.83	101	464
MAY										
12...	--	--	.55	.27	.45	1.7	2.1	.53	--	197
JUNE										
10...	13	.1	.22	.03	.19	2.0	2.2	.42	80	816
JULY										
15...	--	--	.39	.14	.41	1.5	1.9	.71	--	404
AUG.										
06...	30	.4	.40	.15	.14	1.1	1.2	.45	152	128
SEP.										
10...	--	--	.46	.32	.59	2.0	2.6	.67	--	152

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
07...	17	91	0	1.6	366	6.7	25.0	50	35
NOV.									
04...	39	--	--	--	313	6.5	24.0	100	50
DEC.									
04...	25	60	0	1.4	265	7.0	9.5	140	60
JAN.									
07...	125	--	--	--	301	6.5	17.0	100	150
29...	10	--	--	--	724	6.8	21.0	30	5
MAR.									
05...	12	--	--	--	716	6.7	14.0	40	20
APR.									
16...	142	54	5	.9	191	6.5	19.5	400	200
MAY									
12...	22	--	--	--	245	6.3	23.0	200	120
JUNE									
10...	108	48	6	.8	118	6.8	23.5	80	200
JULY									
15...	52	--	--	--	185	7.2	25.0	70	200
AUG.									
06...	26	81	0	1.2	298	7.1	26.0	60	65
SEP.									
10...	32	--	--	--	339	7.4	27.5	70	65

SAN JACINTO RIVER BASIN

08074000 Buffalo Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.									
07...	5.3	63	4.5	74000	2800	440	19	3	.0
NOV.									
04...	5.2	61	6.8	280000	48000	3900	12	--	.3
DEC.									
04...	9.9	87	3.6	77000	2400	250	15	3	.0
JAN.									
07...	8.2	85	15	330000	78000	20000	32	--	.0
29...	2.9	32	9.3	380000	120000	2200	13	--	.5
MAR.									
05...	3.2	31	26	1100000	260000	14000	18	--	1.0
APR.									
16...	7.4	80	6.7	760000	50000	1300	19	5	.0
MAY									
12...	--	--	6.3	360000	50000	720	10	--	.0
JUNE									
10...	6.5	76	5.8	210000	57000	28000	12	--	.0
JULY									
15...	5.1	61	5.9	420000	130000	22000	15	--	.0
AUG.									
06...	4.8	59	5.5	720000	58000	1200	8.9	7	.1
SEP.									
10...	5.7	71	6.4	110000	26000	1400	15	--	.2

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT.								
07...	1350	50	3	120	1	0	1	2
APR.								
16...	0845	10	2	70	0	0	0	7
JUNE								
10...	1100	280	3	50	0	10	2	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
07...	200	29	0	0	.2	1	160	20
APR.								
16...	40	3	10	10	.2	0	90	20
JUNE								
10...	290	19	0	30	.0	0	70	270

SAN JACINTO RIVER BASIN

89

08074000 Buffalo Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 07...	1350	180	25.0	.00	.0	.00	32	.00	5.5	.00	9.0
DEC. 04...	0900	380	9.5	.00	.0	.00	3.4	.00	2.0	.00	6.2
APR. 16...	0845	420	19.5	.00	.0	.00	29	.00	12	.00	57
JUNE 10...	1100	5700	23.5	.01	--	.02	--	.00	--	.10	--
AUG. 06...	0930	235	26.0	.00	.2	.00	1.9	.00	.5	.00	3.6

DATE	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)
OCT. 07...	.01	4.4	.00	.0	.00	.0	.00	.0	.02	.0	.0
DEC. 04...	.00	.7	.00	.0	.00	.0	.00	.1	.00	.0	.0
APR. 16...	.01	18	.00	.0	.00	3.9	.00	.1	.00	1.4	.0
JUNE 10...	.04	--	.00	--	.00	--	.00	--	.07	--	.2
AUG. 06...	.01	.4	.00	.0	.00	.0	.01	.0	.03	.0	.0

DATE	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 07...	40	.0	13	.03	.00	.00	.00	.00	.00	.00
DEC. 04...	9	.0	1	.05	.00	.00	.00	.00	.00	.00
APR. 16...	130	.0	44	.05	.01	.00	.00	.15	.06	.16
JUNE 10...	--	.0	--	.21	.00	.00	.00	.00	.00	.18
AUG. 06...	5	.0	0	.17	.02	.00	.00	.06	.00	.41

SAN JACINTO RIVER BASIN

08074150 Cole Creek at Deihl Road, Houston, Tex.

LOCATION.--Lat 29°51'04", long 95°29'16", Harris County, on downstream side of bridge at Deihl Road in northwest Houston and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--8.05 mi² (20.85 km²). Drainage area changes due to relocations and changes in storm sewers.

PERIOD OF RECORD.--April 1964 to current year. Gage at temporary location 1.0 mile (1.6 km) downstream at Antoine Drive May 18, 1965, to Sept. 1, 1966, due to bridge construction and channel rectification.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--11 years, 7.52 ft³/s (0.213 m³/s), 5,450 acre-ft/yr (6.72 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 29 (elevation, 77.30 ft or 23.561 m); minimum daily, 0.04 ft³/s (0.001 m³/s) Oct. 27.

Period of record: Maximum discharge, 2,020 ft³/s (57.2 m³/s) Mar. 20, 1972 (elevation, 78.60 ft or 23.957 m); no flow at times.

REMARKS.--Records fair. No diversion above station. Low flow is partly sustained by sewage effluent from Houston suburbs. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	195	3.5	12	33	1.7	.98	11	18	12	1.6	1.9
2	.30	86	2.9	12	10	1.9	1.1	3.1	6.0	7.4	19	.95
3	.25	17	2.6	9.1	13	1.9	.92	1.3	2.3	1.4	2.3	.60
4	.20	6.5	2.3	5.9	131	9.7	.98	.81	1.4	1.0	121	.46
5	.17	3.3	5.0	4.2	26	3.6	.98	.68	.98	.83	102	14
6	.14	1.9	38	3.4	9.6	1.7	.92	.51	.74	.69	9.7	18
7	.12	14	17	2.9	5.1	1.4	.92	.51	.61	.64	16	2.7
8	.10	14	8.1	2.6	3.4	1.1	15	1.3	2.0	.56	7.2	1.4
9	.09	7.9	5.3	2.3	2.7	1.1	7.6	40	3.1	.54	.94	.94
10	.08	195	17	16	2.2	1.3	3.5	5.5	261	.64	.43	1.3
11	.07	129	58	7.8	3.7	1.5	2.2	2.0	67	.69	1.3	1.5
12	.06	25	18	5.0	2.8	1.5	1.6	1.1	19	.54	.43	.90
13	.06	9.6	9.2	3.4	1.9	12	1.5	.81	6.7	1.9	.53	.70
14	25	6.3	62	2.4	1.6	2.9	62	5.8	3.3	4.4	.35	.46
15	30	4.0	180	2.0	1.7	1.6	14	1.0	2.0	2.4	.35	.40
16	2.2	2.9	21	1.6	1.4	1.3	4.4	.79	1.6	.63	.18	1.8
17	.38	2.9	9.5	2.3	1.2	11	1.9	.57	1.3	.19	5.9	.99
18	.22	2.6	6.3	11	1.1	77	1.1	.49	1.1	.12	36	1.0
19	.14	2.3	5.2	8.3	1.0	14	.72	.39	.94	.08	20	.41
20	.10	11	4.2	4.4	1.1	5.5	.54	.59	.76	.10	2.5	.24
21	.12	5.5	3.4	2.7	1.2	2.8	4.0	.60	.71	.15	.87	.21
22	.08	4.1	2.8	2.2	1.2	2.0	4.9	.47	1.0	64	1.7	.18
23	.06	2.0	2.5	1.7	1.1	1.6	2.0	.51	1.1	87	4.8	.16
24	.14	167	3.2	1.6	1.1	1.4	.79	19	3.2	31	1.9	.15
25	.12	59	3.6	1.5	1.1	1.0	.67	12	1.1	3.5	3.2	.15
26	.06	18	6.8	1.3	1.3	1.4	.52	2.3	3.0	.91	1.0	.14
27	.04	10	6.5	1.2	1.4	2.5	.53	1.2	1.2	.29	.68	.15
28	54	6.9	9.5	1.1	1.4	1.7	.56	20	3.1	.21	.47	.14
29	8.6	5.5	9.1	1.1	-----	1.3	3.9	351	1.8	.16	3.0	.46
30	2.0	4.5	9.1	1.0	-----	1.1	17	342	1.4	.15	17	.13
31	105	-----	7.0	1.0	-----	.99	-----	80	-----	.16	7.5	-----
TOTAL	230.30	1,018.7	538.6	135.0	263.3	171.49	157.73	907.33	417.44	224.28	389.83	52.52
MEAN	7.43	34.0	17.4	4.35	9.40	5.53	5.26	29.3	13.9	7.23	12.6	1.75
MAX	105	195	180	16	131	77	62	351	261	87	121	18
MIN	.04	1.9	2.3	1.0	1.0	.99	.52	.39	.61	.08	.78	.13
AC-FT	457	2,020	1,070	266	522	340	313	1,800	828	445	773	104
(††)	4.43	6.68	3.78	1.54	2.12	2.70	3.66	8.04	4.58	4.50	4.12	1.86

CAL YR 1974 TOTAL 4,264.98 MEAN 11.7 MAX 245 MIN .01 AC-FT 8,460 †† 49.20
WTR YR 1975 TOTAL 4,506.52 MEAN 12.3 MAX 351 MIN .04 AC-FT 8,940 †† 48.01

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11- 1	0830	73.94	342	6-10	0700	75.73	652
11-10	1600	74.74	454	7-22	1730	74.53	417
11-24	1230	73.60	303	8- 4	2030	74.65	438
5-29	1630	77.30	1,100				

†† Weighted-mean rainfall, in inches, based on four rain gages.

SAN JACINTO RIVER BASIN

91

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.

LOCATION.--Lat 29°49'40", Long 95°28'09", Harris County, at downstream side of bridge at Costa Rica Street in northwest Houston and 1.0 mile (1.6 km) upstream from Whiteoak Bayou.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

PERIOD OF RECORD.--Discharge: August 1964 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--11 years, 13.1 ft³/s (0.371 m³/s), 9,490 acre-ft/yr (11.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,520 ft³/s (99.7 m³/s) May 29 (elevation, 65.75 ft or 20.041 m); minimum daily, 0.51 ft³/s (0.014 m³/s) Sept. 26.

Period of record: Maximum discharge, 5,800 ft³/s (164 m³/s) Mar. 20, 1972 (elevation, 69.20 ft or 21.092 m); no flow at times.

REMARKS.--Discharge records good. Low flow is partially sustained by sewage effluent. No known diversion above station. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	273	5.1	29	92	4.6	3.2	12	17	41	6.6	2.3
2	2.0	44	4.8	13	8.2	3.3	2.3	4.1	9.6	23	38	2.1
3	2.1	17	4.2	8.8	22	3.5	2.4	3.4	5.9	5.6	3.7	2.1
4	1.8	14	3.9	6.0	108	31	2.5	3.0	4.1	3.4	139	2.2
5	1.7	6.0	15	4.8	23	5.8	2.0	3.3	2.6	2.8	46	41
6	1.1	4.7	33	4.3	10	3.7	2.1	3.4	2.2	2.6	11	31
7	1.4	34	7.6	8.7	7.4	3.3	2.0	3.4	2.5	2.1	6.1	10
8	1.6	18	5.2	4.9	5.6	2.7	39	7.4	14	2.2	3.9	5.6
9	1.6	7.6	4.4	4.8	5.2	2.6	7.1	77	21	2.1	5.7	4.3
10	1.6	355	47	30	4.8	3.1	3.5	7.3	480	2.2	3.3	6.4
11	1.7	79	42	7.5	19	4.5	3.2	4.6	52	3.2	3.6	4.2
12	1.6	26	13	9.3	6.3	4.0	2.6	3.6	24	5.5	7.0	34
13	1.6	14	7.8	5.6	4.9	29	2.8	3.5	12	20	2.6	4.1
14	31	9.0	135	4.1	5.3	5.6	160	58	7.2	28	2.5	1.2
15	42	7.1	77	4.2	6.6	4.0	13	5.6	5.2	59	2.1	1.6
16	3.7	6.4	24	4.2	5.6	3.3	5.6	3.4	4.1	12	2.1	5.3
17	2.5	4.9	12	8.0	4.7	9.1	4.3	2.2	4.3	3.7	2.1	1.5
18	2.1	4.1	8.5	15	4.8	69	4.1	2.0	3.8	2.7	42	1.1
19	1.9	4.0	7.6	6.2	5.0	6.3	4.0	1.9	3.3	2.1	22	.92
20	1.8	3.7	6.3	4.7	4.6	2.9	3.4	2.0	3.2	1.9	5.5	.92
21	1.6	3.4	5.2	4.6	4.0	1.8	16	2.1	2.6	1.8	3.7	.76
22	1.9	3.5	4.5	5.1	4.2	1.8	12	2.1	3.0	129	24	.63
23	2.0	3.2	4.5	4.2	3.5	2.1	5.6	2.3	2.8	94	81	.92
24	1.6	219	4.9	3.7	3.7	2.1	4.6	55	18	25	24	.92
25	1.6	36	8.6	3.6	4.1	2.6	4.3	17	5.7	5.3	20	.63
26	1.5	17	16	3.7	3.7	3.4	4.1	3.6	20	8.2	5.2	.51
27	1.6	9.9	6.2	3.7	3.6	7.7	3.4	3.0	6.8	4.1	3.5	.76
28	112	7.4	15	3.8	3.5	3.7	3.4	56	129	3.5	4.1	.76
29	11	6.5	11	4.0	-----	3.2	20	691	25	2.6	4.4	.63
30	3.6	6.2	9.1	4.4	-----	2.6	40	194	48	3.0	3.4	.63
31	236	-----	6.9	5.7	-----	3.2	-----	50	-----	4.6	2.7	-----
TOTAL	480.6	1,243.6	555.3	229.6	383.3	235.5	382.5	1,287.2	938.9	506.2	530.8	168.99
MEAN	15.5	41.5	17.9	7.41	13.7	7.60	12.8	41.5	31.3	16.3	17.1	5.63
MAX	236	355	135	30	108	69	160	691	480	129	139	41
MIN	1.1	3.2	3.9	3.6	3.5	1.8	2.0	1.9	2.2	1.8	2.1	.51
AC-FT	953	2,470	1,100	455	760	467	759	2,550	1,860	1,000	1,050	335
(††)	4.80	6.60	3.92	1.72	2.27	2.70	4.01	8.85	5.79	4.53	5.12	1.45

CAL YR 1974 TOTAL 6,571.39 MEAN 18.0 MAX 464 MIN .59 AC-FT 13,030 †† 50.23
WTR YR 1975 TOTAL 6,942.49 MEAN 19.0 MAX 691 MIN .51 AC-FT 13,770 †† 51.76

PEAK DISCHARGE (BASE, 850 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-31	1715	61.55	1,620	6-28	1900	61.22	1,500
11-10	1500	61.75	1,700	7-22	1730	60.51	1,260
5-29	1515	65.75	3,520	8-4	1700	59.43	938
6-10	0715	64.95	3,100				

†† Weighted-mean rainfall, in inches, based on five rain gages.

SAN JACINTO RIVER BASIN

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	
OCT. 08...	0900	1.9	23	77	16	100	2.0	374	0	25	
NOV. 04...	0900	12	--	--	--	--	--	--	--	--	
DEC. 04...	1130	4.2	20	80	14	80	1.4	392	0	21	
JAN. 07...	1115	14	--	--	--	--	--	--	--	--	
FEB. 03...	1130	5.9	--	--	--	--	--	--	--	--	
MAR. 18...	1130	39	--	--	--	--	--	--	--	--	
APR. 07...	1330	2.4	14	58	16	90	2.4	356	0	22	
MAY 12...	1300	3.0	--	--	--	--	--	--	--	--	
JUNE 02...	1245	9.0	--	--	--	--	--	--	--	--	
JULY 15...	1130	7.6	--	--	--	--	--	--	--	--	
AUG. 06...	1100	12	9.8	29	5.8	22	2.5	131	0	8.7	
SEP. 10...	1000	3.0	--	--	--	--	--	--	--	--	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	98	--	--	.00	.00	.06	.34	.40	.15	526	23
NOV. 04...	--	--	--	.02	.01	.07	.92	.99	.21	--	57
DEC. 04...	71	.4	.14	.01	.43	.67	1.1	.24	481	13	
JAN. 07...	--	--	.37	.06	.05	1.3	1.3	.28	--	167	
FEB. 03...	--	--	.27	.35	.16	1.1	1.3	.25	--	101	
MAR. 18...	--	--	.35	.04	.50	2.9	3.4	.57	--	98	
APR. 07...	80	.4	.05	.00	.02	.43	.45	.13	459	19	
MAY 12...	--	--	.04	.01	.39	3.3	3.7	.43	--	30	
JUNE 02...	--	--	.07	.01	.01	4.8	4.8	.17	--	92	
JULY 15...	--	--	.06	.03	.11	1.4	1.5	.20	--	43	
AUG. 06...	18	.2	.05	.01	.01	.87	.88	.23	161	92	
SEP. 10...	--	--	.01	.01	.00	1.1	1.1	.24	--	48	
DATE		VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	
OCT. 08...	23	260	0	2.7	933	7.7	23.5	5	4		
NOV. 04...	23	--	--	--	357	7.2	24.5	80	25		
DEC. 04...	3	260	0	2.2	841	7.9	13.0	10	7		
JAN. 07...	37	--	--	--	587	7.6	17.5	30	80		
FEB. 03...	17	--	--	--	679	7.7	15.5	50	50		
MAR. 18...	31	--	--	--	295	7.2	18.0	80	35		
APR. 07...	10	210	0	2.7	829	8.0	20.5	30	5		
MAY 12...	1	--	--	--	736	7.6	27.0	40	9		
JUNE 02...	28	--	--	--	317	8.7	23.0	120	50		
JULY 15...	17	--	--	--	608	8.3	27.0	50	25		
AUG. 06...	27	96	0	1.0	287	8.0	28.0	60	50		
SEP. 10...	20	--	--	--	507	8.0	29.0	50	15		

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	9.8	114	1.4	18000	2300	31000	7.2	1	.1
NOV. 04...	8.8	105	2.6	1400000	140000	2600	16	--	.1
DEC. 04...	15.2	143	4.5	520000	34000	2300	6.2	4	.4
JAN. 07...	8.7	91	24	71000	21000	4500	15	--	--
FEB. 03...	8.9	88	4.4	240000	18000	2400	12	--	.1
MAR. 18...	8.8	93	5.3	320000	40000	52000	20	--	.0
APR. 07...	--	--	2.0	700000	58000	4400	5.0	13	.2
MAY 12...	--	--	3.0	740000	20000	700	7.3	--	.4
JUNE 02...	5.2	60	3.5	54000	11000	780	16	--	.1
JULY 15...	11.8	146	3.1	64000	29000	5200	14	--	.1
AUG. 06...	10.2	129	2.4	67000	5700	1200	11	5	.1
SEP. 10...	14.6	187	1.7	17000	3200	550	11	--	.2

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 08...	0900	40	7	340	0	30	0	3
APR. 07...	1330	30	3	250	0	0	1	32
AUG. 06...	1100	--	--	80	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 08...	40	22	30	0	.1	3	460	30
APR. 07...	50	6	20	0	.0	3	390	40
AUG. 06...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08074250 Brickhouse Gully at Costa Rica Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 08...	0900	1.9	23.5	.00	.0	.00	1.4	.00	.3	.00	.2
DEC. 04...	1130	4.2	13.0	.00	.0	.00	53	.00	11	.00	98
APR. 07...	1330	2.4	20.5	.00	.0	.00	32	.00	18	.00	220
AUG. 06...	1100	12	28.0	.00	.0	.00	32	.00	9.1	.00	63

DATE	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)
OCT. 08...	.00	1.9	.00	.0	.00	.0	.00	.0	.04	.0	.0
DEC. 04...	.00	5.2	.00	.0	.00	.0	.00	.3	.05	.0	.0
APR. 07...	.00	11	.00	.0	.00	.0	.00	.0	.07	.0	.0
AUG. 06...	.01	1.0	.00	.0	.00	.0	.01	.1	.02	.0	.0

DATE	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 08...	15	.0	3	.02	.00	.00	.00	.00	.00	.00
DEC. 04...	75	.0	3	.07	.00	.00	.00	.00	.00	.00
APR. 07...	150	.0	33	.03	.00	.00	.00	.13	.00	.03
AUG. 06...	61	.0	30	.06	.00	.00	.00	.00	.00	.20

SAN JACINTO RIVER BASIN

95

08074500 Whiteoak Bayou at Houston, Tex.

LOCATION.--Lat 29°46'30", long 95°23'49", Harris County, at downstream side of downstream bridge on Heights Boulevard in Houston, 560 ft (171 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.4 miles (3.9 km) upstream from Little Whiteoak Bayou, and 4.0 miles (6.4 km) upstream from mouth.

DRAINAGE AREA.--84.7 mi² (219.4 km²); unadjusted for basin boundary changes. During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridges and is 92.0 mi² (238.3 km²).

PERIOD OF RECORD.--Discharge: May 1936 to current year (October 1965 to September 1966, monthly discharge only).

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.35 ft (2.240 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence. Prior to June 17, 1936, nonrecording gage, and June 17, 1936, to Apr. 28, 1965, water-stage recorder at site 480 ft (146 m) upstream at same datum.

AVERAGE DISCHARGE.--39 years, 75.1 ft³/s (2.127 m³/s), 54,410 acre-ft/yr (67.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,180 ft³/s (175 m³/s) May 29 (gage height, 29.47 ft or 8.982 m); minimum daily, 12 ft³/s (0.34 m³/s) Oct. 27.

Period of record: Maximum discharge, 17,300 ft³/s (490 m³/s) Mar. 20, 1972 (gage height, 43.50 ft or 13.259 m); maximum gage height, 43.60 ft (13.289 m) Nov. 13, 1961; no flow for many days during 1965 water year (result of construction dams).

Maximum stage since at least 1919, 51.5 ft (15.70 m) Dec. 9, 1935, prior to channel rectification, present site and datum (discharge, 14,750 ft³/s or 418 m³/s, furnished by engineer for Harris County). Flood of May 31, 1929, reached a stage of 47.0 ± 0.5 ft (14.33 ± 0.15 m), prior to channel rectification, present site and datum (discharge, 9,360 ft³/s or 265 m³/s), computed on basis of current-meter measurement at stage 1.0 ft (0.30 m) below crest, furnished by city of Houston.

REMARKS.--Discharge records fair. Low flow is partly sustained by industrial waste. No diversion above station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	1,560	48	215	629	27	22	148	200	414	38	45
2	13	1,080	41	243	150	26	21	63	100	313	250	31
3	14	413	34	182	117	25	20	31	70	162	65	26
4	14	285	30	129	907	191	19	20	50	108	646	27
5	15	162	55	97	316	66	18	26	42	66	579	105
6	15	101	435	80	180	35	18	28	33	40	140	183
7	14	239	217	166	112	31	17	26	31	30	82	73
8	14	217	133	59	75	28	261	35	100	23	50	40
9	14	159	78	38	64	27	210	390	182	27	65	46
10	14	1,220	294	224	54	27	111	92	1,700	27	54	81
11	13	990	594	121	112	29	55	42	800	29	40	136
12	13	327	238	103	64	31	35	33	335	33	69	465
13	17	195	166	63	46	187	29	29	139	47	44	138
14	100	150	443	51	41	62	746	172	67	187	30	38
15	289	108	670	43	72	36	218	67	42	328	22	29
16	108	83	241	40	49	31	108	50	34	116	18	81
17	45	74	162	80	40	68	56	35	28	50	19	59
18	32	60	122	166	36	611	38	30	22	39	165	40
19	29	54	91	103	35	187	32	25	19	31	122	30
20	27	85	69	60	33	87	25	22	16	25	186	25
21	21	47	55	43	34	52	95	20	15	24	36	22
22	17	39	46	48	32	41	134	19	25	394	157	20
23	17	29	45	37	30	37	63	18	78	1,190	288	19
24	17	1,180	48	37	29	36	35	270	186	556	114	18
25	16	574	84	33	28	32	28	100	49	168	186	18
26	13	230	126	30	28	47	22	37	269	112	97	17
27	12	161	86	29	27	59	22	28	154	59	45	16
28	446	109	159	28	26	35	20	276	545	41	35	17
29	179	79	160	29	-----	27	68	1,710	247	31	47	17
30	70	64	146	27	-----	26	229	2,050	309	23	128	18
31	733	-----	105	28	-----	24	-----	700	-----	39	139	-----
TOTAL	2,354	10,074	5,221	2,632	3,366	2,228	2,775	6,592	5,887	4,732	3,956	1,880
MEAN	75.9	336	168	84.9	120	71.9	92.5	213	196	153	128	62.7
MAX	733	1,560	670	243	907	611	746	2,050	1,700	1,190	646	465
MIN	12	29	36	27	26	24	17	18	15	23	18	16
AC-FT	4,670	19,980	10,360	5,220	6,680	4,420	5,500	13,080	11,680	9,390	7,850	3,730
(††)	4.07	7.39	3.82	1.55	2.31	2.65	3.94	7.77	5.54	5.73	5.31	2.02

CAL YR 1974 TOTAL 51,682.3 MEAN 142 MAX 2,120 MIN 8.7 AC-FT 102,500 †† 54.17
WTR YR 1975 TOTAL 51,697.0 MEAN 142 MAX 2,050 MIN 12 AC-FT 102,500 †† 52.10

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1830	25.44	3,460	6-28	2000	27.43	4,750
11-10	1630	26.72	4,270	7-23	1600	28.74	5,650
2-1	0630	24.70	3,040	8-4	1830	23.99	2,650
5-29	2000	29.47	6,180	9-12	1700	25.20	3,320
6-10	1100	28.0	5,140				

†† Weighted-mean rainfall, in inches, based on six rain gages.

SAN JACINTO RIVER BASIN

08074500 Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	
OCT. 08...	1100	16	23	74	12	170	5.4	350	0	33	
NOV. 05...	0830	165	--	--	--	--	--	--	--	--	
DEC. 04...	1015	27	20	74	14	87	3.5	322	0	28	
JAN. 07...	0920	310	--	--	--	--	--	--	--	--	
FEB. 03...	1030	115	--	--	--	--	--	--	--	--	
MAR. 05...	1115	50	--	--	--	--	--	--	--	--	
12...	1315	22	--	--	--	--	--	--	--	--	
APR. 16...	0950	100	11	43	9.5	60	2.0	198	0	20	
MAY 27...	0915	18	--	--	--	--	--	--	--	--	
JUNE 10...	1015	5300	3.5	15	2.1	11	2.0	54	0	14	
16...	1115	28	--	--	--	--	--	--	--	--	
JULY 15...	1015	165	--	--	--	--	--	--	--	--	
AUG. 11...	1100	34	19	65	13	92	4.4	294	0	27	
SEP. 10...	1330	21	--	--	--	--	--	--	--	--	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	180	--	--	.57	.08	2.7	2.5	5.2	3.7	671	19
NOV. 05...	--	--	--	.41	.07	.59	1.4	2.0	1.1	--	90
DEC. 04...	110	--	--	.46	.06	2.7	1.0	3.7	2.3	496	42
JAN. 07...	--	--	--	.48	.06	.30	2.1	2.4	.77	--	489
FEB. 03...	--	--	--	.48	.27	1.4	1.6	3.0	1.7	--	82
MAR. 05...	--	--	--	1.1	.17	1.8	1.3	3.1	2.1	--	97
12...	--	--	--	.69	.18	2.0	1.4	3.4	1.9	--	23
APR. 16...	69	--	--	.43	.26	1.1	1.5	2.6	1.6	313	146
MAY 27...	--	--	--	.50	.21	2.6	1.9	4.5	3.1	--	45
JUNE 10...	10	--	--	.18	.01	.30	2.1	2.4	.43	85	958
16...	--	--	--	.51	.49	1.8	1.2	3.0	2.2	--	29
JULY 15...	--	--	--	.36	.16	2.1	3.6	5.7	1.9	--	266
AUG. 11...	110	--	--	.69	.91	1.9	1.0	2.9	1.2	476	30
SEP. 10...	--	--	--	.57	.63	.50	1.8	2.3	1.6	--	30

SAN JACINTO RIVER BASIN

08074500 Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CARBONATE HARD-NESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)
OCT. 08...	16	230	0	4.8	1260	7.5	26.0	0	8
NOV. 05...	25	--	--	--	357	6.8	17.0	120	50
DEC. 04...	9	240	0	2.4	893	7.4	11.5	20	20
JAN. 07...	132	--	--	--	355	6.9	17.5	70	200
FEB. 03...	20	--	--	--	753	7.2	15.5	100	45
MAR. 05...	20	--	--	--	721	6.8	12.5	100	55
12...	1	--	--	--	1400	7.2	22.0	30	15
APR. 16...	58	150	0	2.2	588	6.8	20.0	280	65
MAY 27...	20	--	--	--	949	7.0	24.0	30	25
JUNE 10...	132	46	2	.7	151	6.9	23.0	100	300
16...	19	--	--	--	957	8.2	17.5	50	5
JULY 15...	76	--	--	--	471	7.5	25.5	80	120
AUG. 11...	7	220	0	2.7	879	7.5	27.5	30	20
SEP. 10...	19	--	--	--	976	8.4	28.5	30	20
DATE	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT. 08...	14.8	180	4.3	4200	1300	4	24	5	.0
NOV. 05...	8.8	91	9.6	140000	2300	1600	20	--	.2
DEC. 04...	10.3	94	6.9	380000	9700	400	11	2	.4
JAN. 07...	9.6	100	11	180000	39000	14000	31	--	.1
FEB. 03...	7.9	78	1.6	300	46	1	22	--	.3
MAR. 05...	9.0	84	.8	170	34	14	18	--	.4
12...	11.0	125	1.2	1500	31	170	12	--	.6
APR. 16...	10.2	111	1.2	120	1	10	21	18	.2
MAY 27...	11.5	135	2.3	300	34	6	18	--	.9
JUNE 10...	7.4	85	5.1	85000	75000	66000	13	--	.1
16...	9.1	95	2.5	580	4	1	41	--	.5
JULY 15...	6.7	81	22	1300000	260000	2900	17	--	.1
AUG. 11...	8.9	111	5.0	1700	180	110	11	3	.4
SEP. 10...	14.6	187	4.6	9700	1200	110	9.0	--	.4

SAN JACINTO RIVER BASIN

08074500 Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
OCT. 08...	1100	40	24	430	0	0	0	7				
APR. 16...	0950	40	0	160	0	0	0	60				
JUNE 10...	1015	10	4	60	0	10	2	5				
AUG. 11...	1100	--	--	220	--	--	--	--				
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)			
OCT. 08...	40	4	30	10	.0	1	540	50				
APR. 16...	60	7	10	60	.0	3	310	30				
JUNE 10...	30	2	0	0	.0	0	80	10				
AUG. 11...	--	--	--	--	--	--	--	--				
DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	
OCT. 08...	1100	16	26.0	.00	.0	.00	5.4	.00	3.3	.00	.0	
DEC. 04...	1015	27	11.5	.00	.0	.00	3.1	.00	1.8	.00	4.4	
APR. 16...	0950	100	20.0	.00	.0	.00	8.4	.00	2.0	.00	10	
JUNE 10...	1015	5300	23.0	.00	--	.01	--	.00	--	.02	--	
AUG. 11...	1100	34	27.5	.00	.0	.00	3.8	.00	2.1	.00	.3	
DATE	TIME	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 08...	.01	1.2	.00	.0	.00	.0	.00	.0	.03	.0	.0	
DEC. 04...	.00	2.3	.00	.0	.00	.0	.00	.0	.02	.0	.0	
APR. 16...	.00	.9	.00	.0	.00	.4	.00	.0	.00	.0	.0	
JUNE 10...	.02	--	.00	--	.01	--	.17	--	.02	--	.2	
AUG. 11...	.00	3.2	.00	.0	.00	.0	.00	.0	.06	.0	.0	
DATE	TIME	TOTAL CHLORDANE (UG/L)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 08...	27	.0	22	.28	.00	.00	.00	.00	1.0	.00	.59	
DEC. 04...	31	.0	13	.18	.00	.00	.00	.00	.00	.00	.00	
APR. 16...	11	.0	17	.10	.04	.00	.00	.00	.20	.00	.06	
JUNE 10...	--	.0	--	.14	.01	.00	.00	.00	.06	.00	.54	
AUG. 11...	77	.0	32	.38	.00	.00	.00	.00	.05	.00	.15	

SAN JACINTO RIVER BASIN

99

08074550 Little Whiteoak Bayou at Houston, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 29°47'05", long 95°21'56", Harris County, at bridge on North Main Street, 0.8 mile (1.3 km) upstream from mouth, and 1.7 miles (2.7 km) north of Harris County courthouse.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: May 1971 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	
OCT. 09...	0945	2.8	17	60	14	130	4.1	382	0	34	
NOV. 05...	0915	4.5	--	--	--	--	--	--	--	--	
DEC. 09...	0850	3.5	16	61	12	84	3.3	318	0	35	
JAN. 29...	1240	6.6	--	--	--	--	--	--	--	--	
FEB. 03...	0930	110	--	--	--	--	--	--	--	--	
MAR. 12...	1230	8.2	--	--	--	--	--	--	--	--	
APR. 16...	1330	210	13	56	12	67	1.9	276	0	34	
MAY 27...	1030	2.1	--	--	--	--	--	--	--	--	
JUNE 10...	0910	900	2.9	18	3.1	5.3	1.9	58	0	8.5	
16...	1215	2.0	--	--	--	--	--	--	--	--	
JULY 23...	1230	11	--	--	--	--	--	--	--	--	
AUG. 11...	0915	2.0	17	59	13	85	3.1	297	0	38	
SEP. 23...	1200	3.7	--	--	--	--	--	--	--	--	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 09...	110	--	--	.04	.03	.74	.96	1.7	1.3	558	16
NOV. 05...	--	--	--	.22	.06	.53	1.1	1.6	.77	--	49
DEC. 09...	72	.5	.30	.08	1.2	.50	1.7	1.1	441	18	
JAN. 29...	--	--	.00	.22	2.7	1.0	3.7	1.4	--	12	
FEB. 03...	--	--	.33	.05	1.2	1.3	2.5	.90	--	24	
MAR. 12...	--	--	.11	.11	.55	.95	1.5	1.1	--	16	
APR. 16...	61	.4	.38	.11	1.2	.80	2.0	1.2	382	25	
MAY 27...	--	--	.07	.16	.43	2.4	2.8	1.2	--	18	
JUNE 10...	12	.1	.19	.01	.31	1.9	2.2	.48	81	744	
16...	--	--	.19	.07	1.1	.80	1.9	.93	--	10	
JULY 23...	--	--	.03	.04	.22	1.7	1.9	1.1	--	26	
AUG. 11...	78	.5	.08	.03	.41	.69	1.1	.95	440	13	
SEP. 23...	--	--	.08	.12	.36	1.3	1.7	1.5	--	26	

SAN JACINTO RIVER BASIN

08074550 Little Whiteoak Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CARBONATE HARD-NESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
OCT. 09...	5	210	0	3.9	980	7.2	25.0	5	4
NOV. 05...	23	--	--	--	386	6.7	19.5	40	35
DEC. 09...	14	200	0	2.6	800	7.1	12.5	20	3
JAN. 29...	7	--	--	--	1100	7.1	22.0	30	4
FEB. 03...	0	--	--	--	687	6.8	17.5	50	15
MAR. 12...	0	--	--	--	1080	6.8	21.0	30	6
APR. 16...	13	190	0	2.1	692	6.8	22.5	60	15
MAY 27...	17	--	--	--	588	--	25.0	30	4
JUNE 10...	120	58	10	.3	136	7.0	22.5	70	250
16...	9	--	--	--	917	7.6	18.0	30	5
JULY 23...	13	--	--	--	961	7.5	29.0	20	0
AUG. 11...	3	200	0	2.6	776	7.3	27.5	20	3
SEP. 23...	26	--	--	--	919	7.8	22.0	30	4
DATE	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 09...	4.4	52	4.4	260000	58000	3100	11	4	.1
NOV. 05...	4.8	52	4.8	1100000	82000	16000	12	--	.3
DEC. 09...	5.6	52	2.4	74000	2400	150	8.8	6	.2
JAN. 29...	3.8	43	5.8	2200000	190000	1200	13	--	1.0
FEB. 03...	3.9	41	4.9	9900000	1100000	26000	14	--	.7
MAR. 12...	3.6	40	5.2	1400000	160000	880	6.9	--	.5
APR. 16...	6.1	69	4.7	1400000	90000	190	9.5	10	.5
MAY 27...	4.3	51	6.2	9900000	3000000	8900	12	--	.6
JUNE 10...	7.0	80	9.0	1300000	220000	110000	9.6	--	.1
16...	6.5	68	3.4	44000	11000	460	8.5	--	.4
JULY 23...	5.9	76	18	1100000	180000	1600	11	--	.4
AUG. 11...	3.7	46	4.1	21000	5300	20	5.8	4	.2
SEP. 23...	7.1	81	3.6	74000	3100	60	11	--	.4

SAN JACINTO RIVER BASIN

08074600 Buffalo Bayou at Main Street, Houston, Tex.

LOCATION.--Lat 29°45'54", long 95°21'32", Harris County, on left bank at mouth of Whiteoak Bayou at upstream side of Main Street viaduct in Houston and 3.2 miles (5.1 km) downstream from the gage Buffalo Bayou at Houston.

DRAINAGE AREA.--469 mi² (1,215 km²).

PERIOD OF RECORD.--January 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.47 ft (0.448 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers); unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 15.1 ft (4.60 m) June 10; minimum, -1.3 ft (-0.40 m) Feb. 24.

Period of record: Maximum gage height, 23.6 ft (7.19 m) June 13, 1973; minimum, -3.5 ft (-1.07 m) Jan. 13, 1964.

Maximum gage height since at least 1835, 38.5 ft (11.73 m) Dec. 9, 1935, present site and datum, unadjusted for land-surface subsidence.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	3.9	2.6	7.5	5.0	-	-	2.8	1.2	7.2	2.2	2.9	1.3	-	-	4.2	2.4	3.9	2.7	4.8	2.8	2.9	1.4	-	-
2	3.8	2.2	6.1	3.2	1.9	0.1	3.9	2.2	2.8	1.4	3.4	1.1	-	-	4.0	2.6	3.8	2.9	4.3	2.1	4.6	1.7	-	-
3	3.7	2.4	4.5	2.9	2.0	.4	3.5	1.2	2.9	1.2	4.2	2.0	-	-	3.8	2.5	4.1	3.2	2.4	1.9	4.6	2.0	-	-
4	3.8	2.4	4.2	1.7	2.2	.8	2.4	.9	3.8	2.8	4.2	2.1	-	-	3.8	2.0	4.4	3.3	3.4	1.9	7.0	1.8	-	-
5	4.0	2.7	2.7	1.3	3.5	2.0	3.1	1.6	3.5	1.6	3.6	1.6	-	-	4.4	2.5	4.4	3.3	3.1	1.4	6.0	2.2	-	-
6	4.2	2.4	-	-	3.7	2.1	3.1	1.5	2.8	.6	3.3	1.7	-	-	3.8	2.9	3.9	2.5	2.8	1.1	3.1	1.3	-	-
7	3.7	1.7	-	-	2.7	1.2	3.5	2.1	3.1	.9	3.0	1.4	-	-	3.7	2.5	3.6	2.2	2.9	.9	3.4	1.4	-	-
8	3.4	1.6	3.8	2.7	2.0	.7	3.0	1.3	3.3	1.9	3.1	.9	-	-	4.9	2.2	4.2	1.6	2.7	1.2	3.4	1.8	-	-
9	3.2	1.4	3.7	2.5	2.6	.8	4.0	1.4	3.2	1.1	4.2	2.4	-	-	5.6	2.8	7.4	1.7	2.8	.9	3.7	-	-	-
10	-	1.6	8.9	2.9	5.7	1.7	4.2	1.3	3.6	1.7	4.0	2.1	-	-	3.8	2.1	15.1	2.7	3.3	1.2	-	2.1	-	-
11	3.5	1.8	7.3	2.8	5.0	2.0	3.0	1.0	3.6	2.2	3.6	1.8	-	-	4.3	1.6	6.4	2.8	3.0	1.2	3.1	2.1	-	-
12	3.5	2.1	3.1	1.0	3.2	1.4	3.3	.4	3.1	1.2	3.8	2.8	-	-	3.7	2.0	3.5	1.6	3.1	1.2	3.3	-	-	-
13	4.0	2.4	3.8	-	3.6	1.9	1.8	-.2	3.1	1.7	3.4	.5	-	-	3.6	1.7	3.3	1.7	3.1	1.8	3.3	-	-	-
14	4.3	2.6	3.8	-	5.4	2.2	2.6	1.0	3.2	2.1	2.6	-.2	-	-	3.7	1.3	3.4	1.8	3.2	1.8	3.2	1.5	-	-
15	4.1	1.0	4.0	-	4.9	1.8	2.6	1.2	3.5	2.2	3.9	1.9	-	-	3.2	1.2	4.5	2.5	3.6	2.2	3.1	1.5	-	-
16	3.0	1.0	4.7	-	3.0	1.0	2.6	1.4	3.5	2.2	3.7	2.4	-	-	2.7	.9	4.1	2.4	3.4	1.8	-	-	-	-
17	3.1	1.5	-	2.4	2.3	1.3	3.2	1.8	3.5	1.6	3.9	1.3	-	-	3.2	1.3	4.2	3.1	3.3	1.7	-	-	-	-
18	3.2	1.3	3.6	2.0	3.0	2.0	3.2	2.1	3.5	1.7	4.5	2.3	-	-	3.2	1.5	4.7	3.2	3.3	1.8	-	-	-	-
19	2.9	1.1	3.5	-	3.1	2.0	3.1	.7	2.6	.6	2.8	1.0	3.1	1.8	3.5	1.9	4.8	3.1	3.4	1.7	-	-	-	-
20	2.9	1.8	3.5	-	3.0	1.6	2.2	-.2	3.7	1.6	3.2	1.1	4.1	2.1	4.0	2.3	4.1	2.5	3.3	1.6	-	-	-	-
21	3.8	2.4	2.7	2.0	2.8	1.9	3.3	1.3	4.0	2.0	3.2	1.6	4.1	2.9	3.8	2.7	4.0	2.2	3.1	1.4	-	-	-	-
22	3.9	2.5	3.1	2.2	3.4	2.1	3.3	1.7	4.2	2.5	3.3	1.3	3.9	3.2	3.9	2.4	3.8	2.2	4.2	1.3	-	-	-	-
23	4.1	2.3	3.0	2.1	3.5	2.4	3.4	1.6	3.2	.0	3.4	1.9	4.0	2.5	4.1	2.5	4.4	2.1	9.8	1.8	-	-	-	-
24	3.8	2.4	5.8	2.4	3.3	1.9	3.4	1.5	1.0	-.3	3.1	1.8	3.9	2.3	4.1	1.9	5.4	2.5	4.7	2.2	-	-	-	-
25	3.7	2.4	-	1.1	2.7	.7	3.2	1.1	2.5	.2	-	-	3.7	2.0	4.2	2.0	4.1	2.5	3.4	1.7	-	-	-	-
26	3.5	2.2	3.7	1.9	3.3	1.6	3.1	1.3	3.2	1.7	-	-	4.1	1.9	3.8	1.9	4.0	2.1	3.6	2.1	-	-	-	2.2
27	3.9	2.6	-	2.2	3.1	1.1	3.2	1.4	2.8	1.6	-	-	4.4	2.5	3.5	1.6	4.5	2.0	3.1	1.9	-	-	-	3.5
28	5.4	3.4	3.6	1.9	3.0	1.2	3.3	1.6	3.0	1.3	-	-	4.2	2.4	5.4	1.9	8.5	2.0	3.3	1.8	-	-	-	3.4
29	4.8	2.8	3.9	-	3.2	1.5	3.3	1.7	---	---	-	-	4.1	2.0	13.5	2.3	4.7	2.5	3.4	1.8	-	-	-	3.3
30	4.4	2.9	-	-	3.2	1.6	3.2	2.1	---	---	-	-	4.6	2.4	12.5	5.2	5.2	2.1	3.0	1.6	-	-	-	3.4
31	6.8	3.4	---	---	3.1	1.5	3.3	2.1	---	---	-	-	---	---	5.2	3.0	---	---	3.5	1.7	-	-	---	---

08074700 Buffalo Bayou at 69th Street, Houston, Tex.

LOCATION.--Lat 29°45'15", long 95°17'51", Harris County, at downstream side of bridge on 69th Street in Houston, 1.1 miles (1.8 km) upstream from Turning Basin, 2.8 miles (4.5 km) upstream from Brays Bayou, and 4.8 miles (7.7 km) downstream from Whiteoak Bayou.

DRAINAGE AREA.--476 mi² (1,233 km²).

PERIOD OF RECORD.--April 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.73 ft (0.527 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers); unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 6.1 ft (1.86 m) June 9; minimum, -1.0 ft (-0.30 m) Dec. 1.
Period of record: Maximum gage height, 15.1 ft (4.60 m) Sept. 11, 12, 1961, result of Hurricane Carla; minimum, -3.5 ft (-1.07 m) Jan. 13, 1964.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	-	-	-	-	1.0	-1.0	3.1	1.4	-	-	3.3	1.8	4.0	2.4	4.6	2.9	4.0	2.9	3.6	2.6	3.1	2.0	4.2	2.5
2	-	-	-	-	2.2	.2	4.0	2.5	-	-	3.8	1.6	3.5	2.2	4.4	3.0	3.6	2.7	3.9	2.4	4.6	2.1	4.1	2.5
3	-	-	-	-	2.2	.7	3.7	1.5	-	-	4.6	2.5	2.7	.3	4.2	2.9	3.7	2.7	3.8	2.4	4.3	2.0	4.3	2.5
4	-	-	-	-	2.5	1.1	2.7	1.2	-	-	4.6	2.4	3.9	2.3	4.2	2.5	4.1	2.6	3.7	2.0	4.3	2.2	4.5	2.7
5	-	-	-	-	3.4	2.3	3.4	1.9	-	1.7	4.1	2.0	4.0	2.6	4.7	3.0	4.2	2.8	3.5	1.7	3.5	1.7	4.5	3.0
6	-	-	-	-	3.7	2.3	3.4	1.8	2.9	.6	3.7	2.2	3.8	2.6	4.1	3.4	3.8	2.4	3.3	1.6	3.4	1.7	4.2	2.9
7	-	-	-	2.5	2.9	1.3	3.8	2.2	3.3	.9	3.5	1.9	4.2	3.0	4.2	3.2	3.8	2.2	3.3	1.5	3.7	1.8	4.2	2.7
8	-	-	3.8	2.7	2.2	.8	3.3	1.7	3.6	2.1	3.3	1.4	4.9	3.3	5.2	2.8	3.9	2.0	3.1	1.6	3.6	1.9	4.4	3.0
9	-	-	3.8	-	2.9	.9	4.2	1.8	3.5	1.4	4.5	2.9	4.1	3.0	5.6	2.7	6.1	2.1	3.1	1.3	3.8	2.1	4.5	2.8
10	-	-	-	-	4.7	1.9	4.3	1.7	4.0	1.9	4.4	2.6	3.9	2.6	4.1	2.3	5.6	2.7	3.4	1.5	3.7	2.4	4.2	2.9
11	-	-	-	-	4.3	1.8	3.3	1.3	3.9	1.4	4.0	2.4	3.7	2.7	4.5	2.0	4.1	2.4	3.1	1.4	3.5	2.4	4.3	2.8
12	-	-	-	-	3.4	1.5	3.4	.8	3.3	1.6	4.2	3.3	4.2	2.6	4.0	2.4	3.7	1.8	3.5	1.5	3.6	2.4	4.2	2.4
13	-	-	-	-	3.8	2.0	2.1	.2	3.4	2.1	3.8	1.0	5.0	3.0	3.9	2.1	3.5	1.8	3.5	2.1	3.6	2.0	4.1	2.4
14	-	-	-	-	3.7	2.3	2.9	1.3	3.6	2.5	3.0	.3	4.2	3.0	4.0	1.6	3.7	2.0	3.6	2.4	3.5	1.8	4.2	2.6
15	-	-	-	-	3.7	1.8	-	-	3.9	2.6	4.3	2.4	4.0	2.2	3.4	1.6	4.7	2.8	3.9	2.2	3.4	1.9	4.2	2.8
16	-	-	-	-	3.3	1.3	-	-	3.9	2.5	4.0	2.9	4.1	2.4	3.1	1.4	4.4	2.7	3.5	2.2	3.4	1.8	4.1	2.7
17	-	-	-	-	2.6	1.3	-	-	3.9	2.0	4.4	1.8	4.4	2.5	3.6	1.8	4.5	3.4	3.7	2.2	3.3	1.7	4.0	2.8
18	-	-	-	-	3.1	2.0	-	-	3.8	2.2	4.2	2.4	4.7	2.6	4.6	1.9	5.0	3.5	3.7	2.2	3.3	1.7	4.4	2.8
19	-	-	-	-	3.1	2.0	-	-	3.0	1.0	3.2	1.4	3.6	2.1	3.9	2.3	5.1	3.0	3.8	2.1	3.4	1.8	4.2	3.4
20	-	-	-	-	3.1	1.5	-	-	4.0	2.0	3.6	1.5	4.3	2.4	4.3	2.8	4.4	2.7	3.7	2.0	3.2	1.8	3.9	2.8
21	-	-	-	-	3.0	1.9	-	-	4.3	2.4	3.7	2.0	4.3	3.3	4.2	3.1	4.2	2.4	3.5	1.8	3.4	1.8	4.1	3.1
22	-	-	-	-	3.6	2.2	-	-	4.6	2.9	3.7	1.7	4.2	3.1	4.3	2.9	4.1	2.4	3.7	1.8	3.7	2.1	3.8	2.0
23	-	-	-	-	3.7	2.6	-	-	3.6	.4	3.9	2.4	4.2	2.9	4.4	2.9	4.6	2.3	4.0	2.0	3.9	2.4	3.8	2.5
24	-	-	-	-	3.5	2.1	-	-	1.4	-.8	3.5	1.7	4.1	2.7	4.4	2.4	4.8	2.7	3.5	2.1	4.0	2.9	3.8	2.4
25	-	-	-	-	2.9	1.0	-	-	2.9	.6	3.8	2.0	4.1	2.5	4.5	2.3	4.4	2.6	3.6	2.0	4.3	3.2	3.8	2.6
26	-	-	3.9	2.0	3.6	2.0	-	-	3.5	2.1	5.9	3.3	4.4	2.4	4.2	2.3	4.0	2.4	3.6	2.4	4.1	2.9	3.8	2.6
27	-	-	3.5	1.8	3.3	1.5	-	-	3.2	2.0	5.5	4.1	4.7	2.9	4.0	2.1	3.9	2.2	3.4	2.2	4.1	3.0	3.9	2.4
28	-	-	3.8	1.9	3.4	1.5	-	-	3.3	1.8	5.0	3.1	4.5	2.8	4.4	2.3	3.8	2.2	3.6	2.2	4.0	2.9	3.8	2.3
29	-	-	4.1	2.0	3.5	1.8	-	-	---	---	3.4	1.6	4.4	2.4	5.1	2.6	3.5	2.2	3.6	2.6	4.2	2.8	3.6	2.2
30	-	-	2.3	-.6	3.4	1.9	-	-	---	---	3.2	.6	4.6	2.7	6.0	3.0	3.5	2.4	3.5	2.0	4.1	2.8	3.8	2.1
31	-	-	---	---	3.5	1.9	-	-	---	---	3.8	1.8	---	---	4.2	3.3	---	---	2.9	1.7	4.3	2.7	---	---

SAN JACINTO RIVER BASIN

08074800 Keegans Bayou at Roark Road near Houston, Tex.

LOCATION.--Lat 29°39'23", long 95°33'43", Harris County, on left bank at downstream side of bridge on Roark Road and about 2 miles (3 km) southwest of city limits of Houston.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

PERIOD OF RECORD.--Discharge: August 1964 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year. Sediment analyses: October 1970 to September 1971.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--11 years, 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 966 ft³/s (27.4 m³/s) June 9 (elevation, 72.35 ft or 22.052 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Oct. 3, 5.

Period of record: Maximum discharge, 1,570 ft³/s (44.5 m³/s) June 13, 1973 (elevation, 73.37 ft or 22.363 m); no flow for many days.

REMARKS.--Discharge records fair except those below 100 ft³/s (2.83 m³/s), which are poor. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	40	5.5	33	80	4.6	2.5	9.0	30	39	3.4	4.4
2	1.9	15	6.6	16	30	4.5	3.4	4.8	12	18	8.9	3.4
3	1.8	7.0	6.9	11	20	4.6	2.2	3.8	6.2	7.0	3.3	3.5
4	2.0	5.0	5.5	7.6	30	6.8	2.2	13	5.0	7.4	52	3.7
5	1.8	4.0	18	6.2	31	4.8	2.2	7.0	4.4	4.8	22	5.2
6	1.9	4.0	45	6.5	10	3.4	2.3	8.3	5.2	4.3	5.1	5.0
7	2.4	15	14	58	7.2	3.1	2.5	3.6	3.4	4.5	4.9	2.8
8	4.1	20	5.6	23	6.3	3.5	8.9	6.5	28	5.2	4.2	2.9
9	3.8	11	4.0	10	5.6	3.4	3.6	50	224	3.8	3.0	4.0
10	2.6	95	26	22	4.2	3.2	8.2	7.3	403	3.7	2.9	3.9
11	2.2	99	51	12	8.5	2.4	3.0	4.3	226	4.3	2.8	2.9
12	2.2	64	21	10	4.7	2.5	2.3	3.9	99	6.9	2.8	2.6
13	2.1	36	9.8	5.3	4.2	6.2	2.1	5.2	50	5.4	3.7	2.5
14	6.0	14	16	5.4	4.1	2.2	87	4.0	20	4.1	2.7	2.5
15	26	9.6	21	3.8	4.1	2.0	23	8.8	12	7.7	2.5	2.6
16	2.7	8.5	9.6	3.4	4.2	2.0	8.0	5.5	9.5	6.1	2.4	4.0
17	2.0	7.0	6.5	4.3	4.3	2.2	5.0	3.2	8.8	4.0	2.4	2.6
18	2.1	8.1	5.5	3.3	5.4	35	3.3	2.9	6.4	3.5	5.5	2.5
19	2.8	9.5	2.7	3.1	5.1	4.1	3.0	3.4	5.5	2.9	4.6	2.4
20	6.0	5.8	2.1	3.0	4.2	3.1	2.8	5.1	6.2	3.0	2.3	2.4
21	5.0	5.7	2.1	3.3	4.3	2.3	15	3.1	4.8	3.4	2.0	2.4
22	4.0	5.1	1.9	3.0	4.2	2.3	4.5	2.8	4.3	4.5	57	2.5
23	3.0	5.1	3.6	2.8	4.3	2.4	2.9	2.9	20	18	19	3.9
24	2.5	133	4.0	3.0	4.3	2.1	2.6	66	44	5.7	3.7	3.9
25	4.0	69	14	3.5	5.0	3.1	3.4	34	16	3.7	3.2	2.7
26	3.5	30	28	3.0	5.8	3.2	2.3	8.6	20	3.2	20	2.3
27	4.5	14	12	2.8	4.8	4.9	2.1	5.2	9.2	3.1	12	2.3
28	50	9.5	31	3.0	4.5	2.7	2.5	22	6.3	3.3	6.6	2.3
29	10	7.0	20	2.8	-----	2.4	6.5	48	5.5	4.6	15	3.0
30	3.6	5.7	21	2.4	-----	2.3	53	140	18	4.3	13	4.0
31	30	-----	12	2.3	-----	2.4	-----	78	-----	3.2	11	-----
TOTAL	198.4	761.6	431.9	278.8	310.3	133.7	272.3	570.2	1,312.7	202.6	303.9	95.1
MEAN	6.40	25.4	13.9	8.99	11.1	4.31	9.08	18.4	43.8	6.54	9.80	3.17
MAX	50	133	51	58	80	35	87	140	403	39	57	5.2
MIN	1.8	4.0	1.9	2.3	4.1	2.0	2.1	2.8	3.4	2.9	2.0	2.3
AC-FT	394	1,510	857	553	615	265	540	1,130	2,600	402	603	189
(††)	4.44	4.94	2.85	1.27	1.48	1.05	2.87	5.06	6.32	1.64	3.13	.44

CAL YR 1974 TOTAL 5,515.8 MEAN 15.1 MAX 333 MIN 1.3 AC-FT 10,940 †† 40.47

WTR YR 1975 TOTAL 4,871.5 MEAN 13.3 MAX 403 MIN 1.8 AC-FT 9,660 †† 35.49

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	ELEV.	DISCHARGE
11-10	1600	68.62	337
11-24	1230	67.83	269
6- 9	1900	72.35	966

†† Weighted-mean rainfall, in inches, based on three rain gages.

08074800 Keegans Bayou at Roark Road near Houston, Tex.--Continued
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
15...	1315	11	14	28	6.1	38	4.6	120	0	30
NOV.										
06...	1130	16	--	--	--	--	--	--	--	--
DEC.										
03...	1230	5.3	21	76	15	60	5.1	320	0	45
JAN.										
29...	0920	8.2	--	--	--	--	--	--	--	--
FEB.										
12...	1235	4.5	--	--	--	--	--	--	--	--
MAR.										
03...	1230	4.2	--	--	--	--	--	--	--	--
APR.										
28...	0930	2.5	16	61	14	86	9.1	308	0	33
MAY										
19...	1030	.70	--	--	--	--	--	--	--	--
JUNE										
11...	1045	240	--	--	--	--	--	--	--	--
JULY										
14...	1130	4.8	--	--	--	--	--	--	--	--
AUG.										
13...	1215	2.5	24	70	15	70	6.2	314	0	39
SEP.										
03...	1300	1.0	--	--	--	--	--	--	--	--
22...	1100	.88	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
15...	35	--	.83	.15	3.7	.30	4.0	3.0	216	269
NOV.										
06...	--	--	.28	.04	.93	1.7	2.6	1.1	--	75
DEC.										
03...	58	.3	.91	.09	1.6	1.3	2.9	2.5	438	43
JAN.										
29...	--	--	3.1	.39	2.8	1.4	4.2	4.0	--	40
FEB.										
12...	--	--	.61	.29	3.1	2.2	5.3	2.6	--	94
MAR.										
03...	--	--	.22	.26	4.3	1.1	5.4	4.2	--	33
APR.										
28...	79	.1	.01	.04	6.7	3.3	10	8.1	451	16
MAY										
19...	--	--	.02	.01	9.7	.30	10	7.0	--	18
JUNE										
11...	--	--	.07	.01	.11	.99	1.1	.17	--	159
JULY										
14...	--	--	.29	.16	4.1	2.3	6.4	4.0	--	28
AUG.										
13...	69	.3	.99	.21	2.7	1.6	4.3	3.2	449	33
SEP.										
03...	--	--	.80	.19	2.1	5.3	7.4	5.7	--	65
22...	--	--	5.2	.74	1.5	2.1	3.6	8.1	--	31

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
15...	24	95	0	1.7	417	6.5	23.0	30	100
NOV.									
06...	24	--	--	--	351	6.8	18.5	100	35
DEC.									
03...	12	250	0	1.6	770	7.5	15.5	20	20
JAN.									
29...	11	--	--	--	815	7.1	21.5	20	30
FEB.									
12...	17	--	--	--	684	7.2	19.5	30	50
MAR.									
03...	9	--	--	--	899	7.3	18.5	20	20
APR.									
28...	5	210	0	2.6	855	7.0	23.0	30	4
MAY									
19...	1	--	--	--	905	7.0	25.0	50	10
JUNE									
11...	35	--	--	--	105	6.3	25.0	100	75
JULY									
14...	4	--	--	--	755	7.2	27.5	40	20
AUG.									
13...	4	240	0	2.0	786	7.3	30.0	20	20
SEP.									
03...	10	--	--	--	772	7.0	30.5	40	40
22...	20	--	--	--	839	7.3	22.5	30	10

SAN JACINTO RIVER BASIN

08074800 Keegans Bayou at Roark Road near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	4.1	47	14	920000	58000	14000	17	7	.0
NOV. 06...	7.3	78	5.0	15000	1200	950	17	--	.1
DEC. 03...	9.6	95	2.1	1500	420	10	11	4	.3
JAN. 29...	6.0	67	9.9	5000	210	34	16	--	.3
FEB. 12...	6.9	74	7.3	130	34	20	17	--	.3
MAR. 03...	8.5	90	4.8	420	1	6	20	--	.3
APR. 28...	1.6	18	10	560000	74000	8000	11	13	.8
MAY 19...	4.6	55	4.8	240000	60000	8900	21	--	.8
JUNE 11...	--	--	2.6	200000	35000	3700	13	--	.0
JULY 14...	2.2	28	6.0	600000	32000	4900	16	--	.4
AUG. 13...	4.0	53	1.8	5500	4	220	10	5	.3
SEP. 03...	5.8	76	5.5	5500	46	142	16	--	.6
22...	6.8	77	1.8	5300	100	100	14	--	.3

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 15...	1315	80	140	150	<1	0	0	3
APR. 28...	0930	<10	2	360	1	10	0	2
AUG. 13...	1215	--	--	300	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 15...	50	11	0	0	.0	2	220	110
APR. 28...	20	1	10	10	.0	1	560	30
AUG. 13...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

107

08074800 Keegans Bayou at Roark Road near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 15...	1315	11	23.0	.00	.0	.00	.0	.00	1.2	.00	.0
DEC. 03...	1230	5.3	15.5	.00	.0	.00	3.5	.01	15	.00	.7
APR. 28...	0930	2.5	23.0	.00	.0	.00	.9	.00	1.0	.00	1.0
JUNE 11...	1045	240	25.0	.00	--	.00	--	.00	--	.00	--
AUG. 13...	1215	2.5	30.0	.00	.0	.00	.0	.00	1.1	.00	.0

DATE	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 15...	.03	6.3	.00	.0	.00	.0	.00	.0	.05	.0	.2
DEC. 03...	.01	15	.00	.0	.00	.0	.00	.5	.01	.0	.1
APR. 28...	.10	6.8	.00	.0	.00	.0	.00	.3	.04	.1	.0
JUNE 11...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
AUG. 13...	.02	.9	.00	.0	.00	.0	.01	.0	.22	.0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIALAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 15...	120	.0	11	.00	.00	.00	.00	.00	.00	.19
DEC. 03...	190	.0	11	.19	.00	.00	.00	.00	.00	.00
APR. 28...	120	.0	19	1.5	.00	.00	.00	.00	.00	.00
JUNE 11...	--	.0	--	.02	.00	.00	.00	.00	.00	.05
AUG. 13...	15	.0	0	.80	.00	.00	.00	.00	.00	.09

08075000 Brays Bayou at Houston, Tex.

LOCATION.--Lat 29°41'49", long 95°24'43", Harris County, near right bank at downstream side of pile bent of Main Street Bridge in southwest section of Houston, 1.6 miles (2.6 km) upstream from Harris Gully, and 11.6 miles (18.7 km) upstream from Buffalo Bayou.

DRAINAGE AREA.--88.4 mi² (229.0 km²).

PERIOD OF RECORD.--Discharge: May 1936 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.16 ft (2.182 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence. Prior to June 20, 1936, nonrecording gage, and June 20, 1936, to Nov. 25, 1959, water-stage recorder at site 0.8 mile (1.3 km) downstream at same datum.

AVERAGE DISCHARGE.--39 years, 106 ft³/s (3.002 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,000 ft³/s (510 m³/s) June 9 (gage height, 45.34 ft or 13.820 m); minimum daily, 43 ft³/s (1.22 m³/s) Mar. 2.

Period of record: Maximum discharge, 24,800 ft³/s (702 m³/s) June 13, 1973 (gage height, 49.90 ft or 15.210 m); maximum gage height, 51.70 ft (15.758 m) Aug. 28, 1945; minimum daily discharge, 0.1 ft³/s (0.003 m³/s) Oct. 11, 12, 1937, Mar. 14, Apr. 1, 1958. Maximum stage since at least 1911, 56.0 ft (17.07 m) in June 1919 before channel rectification, former site, from information by engineer for Houston; maximum discharge, that of June 13, 1973.

REMARKS.--Discharge records good. No diversion above station. Low flow is mostly sewage effluent from Houston suburbs.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	1,440	64	377	967	45	50	222	250	605	362	103
2	48	607	60	327	159	43	54	95	147	238	360	85
3	46	246	56	199	112	45	48	64	100	190	243	70
4	47	248	55	132	627	125	47	230	91	279	848	72
5	46	140	181	98	329	65	47	154	73	219	544	67
6	44	86	667	82	156	51	48	183	68	180	189	112
7	48	216	208	409	102	50	50	77	65	115	107	76
8	48	228	128	208	89	51	179	70	342	91	84	67
9	49	125	84	124	62	51	81	568	4,750	82	131	86
10	49	1,080	410	311	56	57	137	149	6,790	73	92	218
11	49	922	620	160	177	67	76	84	1,480	83	73	97
12	52	348	255	208	102	55	47	67	576	164	95	503
13	50	211	169	117	63	159	50	59	319	195	80	147
14	125	130	232	89	59	62	1,070	100	194	123	73	65
15	403	93	315	79	76	54	218	68	128	456	66	63
16	61	83	158	70	58	52	106	69	101	184	65	80
17	52	84	110	135	51	61	74	54	108	124	61	60
18	48	114	108	149	52	441	61	52	123	96	63	59
19	49	101	85	98	51	85	52	52	140	69	74	57
20	50	65	66	71	48	58	47	57	171	67	67	56
21	50	57	59	62	47	54	187	57	177	105	74	53
22	53	54	60	72	48	52	122	53	179	114	442	52
23	53	52	62	58	45	52	66	52	140	231	324	52
24	50	1,300	90	70	45	53	58	476	661	192	190	56
25	52	521	187	57	44	50	58	294	299	99	170	56
26	52	241	375	54	45	55	57	145	271	108	157	55
27	50	152	196	60	45	84	52	111	245	76	176	53
28	422	109	336	59	44	70	54	998	192	62	106	55
29	177	128	358	57	-----	51	76	758	187	400	125	56
30	73	88	338	55	-----	48	704	1,470	542	130	298	56
31	907	-----	187	57	-----	48	-----	670	-----	537	220	-----
TOTAL	3,351	9,309	6,279	4,104	3,759	2,294	3,976	7,558	18,909	5,687	5,959	2,687
MEAN	108	310	203	132	134	74.0	133	244	630	183	192	89.6
MAX	907	1,440	667	409	967	441	1,070	1,470	6,790	605	848	503
MIN	44	52	55	54	44	43	47	52	65	62	61	52
AC-FT	6,650	18,460	12,450	8,140	7,460	4,550	7,890	14,990	37,510	11,280	11,820	5,330
(††)	3.75	4.82	3.08	1.39	1.77	1.33	3.31	5.97	8.26	2.47	3.90	.64

CAL YR 1974 TOTAL 71,144 MEAN 195 MAX 3,620 MIN 44 AC-FT 141,100 †† 44.52

WTR YR 1975 TOTAL 73,872 MEAN 202 MAX 6,790 MIN 43 AC-FT 146,500 †† 40.69

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
2- 1	0545	34.32	5,200
5-28	1415	34.35	5,220
6- 9	1930	45.34	18,000

†† Weighted-mean rainfall, in inches, based on six rain gages.

08075000 Brays Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 15...	1030	345	10	26	3.9	33	4.1	105	0	27
NOV. 06...	0910	69	--	--	--	--	--	--	--	--
DEC. 02...	1230	70	24	45	9.4	95	6.0	272	0	33
JAN. 08...	0845	200	--	--	--	--	--	--	--	--
FEB. 05...	0915	350	--	--	--	--	--	--	--	--
26...	0930	45	--	--	--	--	--	--	--	--
MAR. 11...	0855	43	--	--	--	--	--	--	--	--
APR. 01...	1340	66	23	46	12	120	9.1	301	0	40
MAY 13...	1130	74	--	--	--	--	--	--	--	--
JUNE 10...	1400	6000	5.6	14	2.6	7.8	1.8	62	0	6.4
JULY 29...	0900	46	--	--	--	--	--	--	--	--
AUG. 19...	0930	54	23	43	11	100	6.5	258	0	41
SEP. 09...	0900	70	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 15...	27	--	.58	.11	1.4	1.3	2.7	1.8	184	122
NOV. 06...	--	--	1.5	.24	1.2	1.7	2.9	2.8	--	82
DEC. 02...	75	.5	4.2	.22	2.0	1.4	3.4	4.8	422	43
JAN. 08...	--	--	.35	.15	1.4	2.0	3.4	2.3	--	173
FEB. 05...	--	--	.73	.07	.60	1.8	2.4	1.3	--	201
26...	--	--	1.7	.36	4.2	1.8	6.0	6.1	--	12
MAR. 11...	--	--	1.4	.31	3.2	.70	3.9	4.5	--	23
APR. 01...	90	1.0	3.8	.43	3.5	1.4	4.9	5.9	490	25
MAY 13...	--	--	2.8	.60	2.7	2.6	5.3	5.5	--	28
JUNE 10...	7.4	.2	.15	.01	.14	1.9	2.0	.28	77	640
JULY 29...	--	--	.75	.35	1.1	3.0	4.1	5.0	--	21
AUG. 19...	86	.6	1.2	.24	.92	2.9	3.8	6.1	439	24
SEP. 09...	--	--	1.0	.47	1.7	.90	2.6	3.7	--	32

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 15...	8	81	0	1.6	350	6.5	20.0	50	60
NOV. 06...	30	--	--	--	606	7.0	18.5	50	45
DEC. 02...	13	150	0	3.4	782	7.5	19.0	20	20
JAN. 08...	34	--	--	--	474	7.2	18.5	70	85
FEB. 05...	26	--	--	--	379	6.9	16.5	100	95
26...	9	--	--	--	922	7.2	19.0	20	6
MAR. 11...	1	--	--	--	824	7.0	22.5	30	15
APR. 01...	7	160	0	4.1	897	7.0	23.5	30	10
MAY 13...	7	--	--	--	829	6.8	26.0	30	8
JUNE 10...	122	46	0	.5	139	6.8	23.5	80	220
JULY 29...	13	--	--	--	871	7.4	28.0	20	15
AUG. 19...	9	150	0	3.5	820	7.5	28.0	30	25
SEP. 09...	17	--	--	--	655	7.1	27.5	30	15

SAN JACINTO RIVER BASIN

08075000 Brays Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	5.8	63	4.5	3900	420	390	14	5	.2
NOV. 06...	7.6	81	1.0	460	380	.40	11	--	.2
DEC. 02...	--	--	.5	440	1	24	13	3	.5
JAN. 08...	8.6	91	3.2	190	1	52	16	--	.1
FEB. 05...	7.2	73	3.6	800	88	250	19	--	.2
26...	8.2	87	1.9	31	4	26	21	--	.3
MAR. 11...	7.4	84	1.1	220	10	6	13	--	.6
APR. 01...	14.5	169	3.4	32	8	54	9.6	19	.7
MAY 13...	--	--	2.6	69000	4100	290	14	--	1.7
JUNE 10...	5.4	63	3.6	580000	260000	28000	12	--	.0
JULY 29...	6.8	86	--	36	5	1	13	--	.5
AUG. 19...	7.6	96	.8	380	8	2	8.6	7	.3
SEP. 09...	6.5	81	4.2	150	1	6	21	--	.5

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 15...	1030	130	270	120	<1	0	0	5
APR. 01...	1340	50	13	360	0	0	1	8
JUNE 10...	1400	<10	8	50	0	10	2	8
AUG. 19...	0930	--	--	320	--	--	--	--

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 15...	80	16	0	0	.0	2	170	50
APR. 01...	10	2	20	40	.0	0	430	40
JUNE 10...	50	2	0	5	.0	0	70	10
AUG. 19...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

111

08075000 Brays Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 15...	1030	745	20.0	.00	.0	.00	30	.00	19	.00	16
DEC. 02...	1230	70	19.0	.00	.0	.00	83	.00	41	.00	53
APR. 01...	1340	66	23.5	.00	.0	.00	42	.00	46	.00	13
AUG. 19...	0930	54	28.0	.00	.0	.00	25	.00	22	.00	.0

DATE	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)
OCT. 15...	.01	43	.00	.0	.00	.0	.00	.0	.00	.0	.1
DEC. 02...	.01	53	.00	.0	.00	.0	.00	.0	.04	.0	.0
APR. 01...	.04	120	.00	.0	.00	.0	.00	7.1	.00	.0	.1
AUG. 19...	.03	50	.00	.0	.00	.0	.01	8.7	.21	.0	.0

DATE	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 15...	450	.0	61	.49	.02	.00	.00	.00	.00	.47
DEC. 02...	670	.0	55	.22	.02	.00	.00	.00	.00	.00
APR. 01...	1700	.0	160	.45	.02	.00	.00	.02	.00	.00
AUG. 19...	520	.0	110	.71	.00	.00	.00	.00	.00	.18

SAN JACINTO RIVER BASIN

08075100 Brays Bayou at Scott Street, Houston, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 29°42'35", long 95°21'23", Harris County, at bridge on Scott Street in Houston.

DRAINAGE AREA.--106 mi² (275 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: May 1971 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 29...	0820	560	12	29	6.5	42	3.8	116	0	27
NOV. 18...	1015	147	--	--	--	--	--	--	--	--
DEC. 09...	1415	111	23	43	10	110	6.0	282	0	33
JAN. 07...	1230	1150	--	--	--	--	--	--	--	--
FEB. 19...	0945	53	--	--	--	--	--	--	--	--
MAR. 17...	1140	--	--	--	--	--	--	--	--	--
APR. 22...	1315	--	18	46	12	110	5.9	221	0	42
MAY 20...	0920	63	--	--	--	--	--	--	--	--
JUNE 10...	1330	8000	5.7	15	2.8	9.5	2.1	61	0	7.5
JULY 22...	1300	145	--	--	--	--	--	--	--	--
AUG. 05...	0900	680	11	24	6.0	35	4.0	113	0	19
SEP. 23...	0900	70	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)
OCT. 29...	37	--	.54	.15	.94	1.4	2.3	2.0	215	168
NOV. 18...	--	--	.75	.35	1.9	2.1	4.0	3.6	--	54
DEC. 09...	95	.6	1.8	.49	3.3	2.9	6.2	4.4	460	72
JAN. 07...	--	--	.44	.12	.72	2.8	3.5	1.4	--	599
FEB. 19...	--	--	1.2	.58	2.4	.00	1.8	4.0	--	28
MAR. 17...	--	--	1.3	.80	3.2	1.6	4.8	5.7	--	40
APR. 22...	130	.6	2.3	.42	2.7	2.6	5.3	3.9	475	64
MAY 20...	--	--	1.6	.70	4.9	2.2	7.1	5.1	--	46
JUNE 10...	13	.2	.15	.01	.13	1.7	1.8	.41	86	460
JULY 22...	--	--	.54	.43	1.9	5.5	7.4	3.9	--	58
AUG. 05...	32	.3	.70	.07	.45	2.0	2.4	1.2	187	462
SEP. 23...	--	--	1.8	.48	1.2	2.3	3.5	5.6	--	23

SAN JACINTO RIVER BASIN

113

08075100 Brays Bayou at Scott Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 29...	32	99	4	1.8	408	6.8	25.0	40	95
NOV. 18...	29	--	--	--	555	7.1	21.0	20	30
DEC. 09...	21	150	0	3.9	834	7.3	17.0	40	35
JAN. 07...	96	--	--	--	369	6.8	18.5	30	150
FEB. 19...	10	--	--	--	971	7.3	15.5	20	15
MAR. 17...	26	--	--	--	940	7.2	20.0	10	20
APR. 22...	28	170	0	3.7	919	6.9	24.0	30	35
MAY 20...	18	--	--	--	1810	7.4	26.0	50	25
JUNE 10...	76	49	0	.6	149	6.8	23.5	70	200
JULY 22...	27	--	--	--	819	7.7	31.0	30	40
AUG. 05...	88	85	0	1.7	325	7.0	24.5	50	200
SEP. 23...	21	--	--	--	985	7.7	22.5	30	6

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 29...	6.6	79	4.0	200000	8000	820	19	6	.2
NOV. 18...	6.8	76	23	1100000	82000	8800	20	--	.5
DEC. 09...	9.3	96	22	48000	1700	54	25	17	.5
JAN. 07...	7.9	84	6.3	2400000	370000	34000	24	--	.0
FEB. 19...	4.1	41	3.0	5500	18	22	8.9	--	.5
MAR. 17...	7.8	85	21	28000	780	580	20	--	.7
APR. 22...	8.2	96	26	4200000	880000	21000	23	19	1.8
MAY 20...	6.0	73	7.2	3700000	1200000	96000	26	--	1.2
JUNE 10...	5.6	65	4.2	2700000	220000	32000	12	--	.0
JULY 22...	7.3	97	46	9800000	3900000	94000	16	--	.9
AUG. 05...	6.0	71	6.9	690000	130000	6300	12	13	.0
SEP. 23...	7.8	89	5.3	5300	22	2	7.6	--	.5

SAN JACINTO RIVER BASIN

08075100 Brays Bayou at Scott Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
OCT. 29...	0820	70	400	150	<1	0	1	11				
DEC. 09...	1415	--	--	260	--	--	--	--				
APR. 22...	1315	30	14	310	0	0	0	8				
JUNE 10...	1330	200	6	50	0	10	1	2				
AUG. 05...	0900	--	--	90	--	--	--	--				
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)			
DATE	TIME											
OCT. 29...	40	4	0	0	--	2	210	50				
DEC. 09...	--	--	--	--	--	--	--	--				
APR. 22...	20	8	20	50	.0	1	700	90				
JUNE 10...	150	6	0	10	.3	0	90	70				
AUG. 05...	--	--	--	--	--	--	--	--				
DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	
OCT. 29...	0820	560	25.0	.00	.0	.00	150	.00	120	.00	320	
DEC. 09...	1415	111	17.0	.00	.0	.00	24	.00	15	.00	9.0	
APR. 22...	1315	--	24.0	.00	190	.00	96	.00	30	.00	72	
JUNE 10...	1330	8000	23.5	.00	--	.00	--	.00	--	.00	--	
AUG. 05...	0900	680	24.5	.00	.0	.00	30	.00	38	.00	9.4	
DATE	TIME	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 29...	.02	22	.00	.0	.00	.0	.00	.0	.03	.0	.1	
DEC. 09...	.03	83	.00	.0	.00	.0	.00	4.3	.00	.0	.1	
APR. 22...	.01	130	.00	.0	.00	.0	.00	2.4	.01	.0	.0	
JUNE 10...	.01	--	.00	--	.00	--	.02	--	.00	--	.0	
AUG. 05...	.02	48	.00	.0	.01	.0	.02	3.0	.02	.0	.1	
DATE	TIME	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
OCT. 29...	530	.0	350	.17	.00	.00	.00	.00	.00	.00	.33	
DEC. 09...	710	.0	120	.29	.00	.00	.00	.00	.00	.00	.00	
APR. 22...	1500	.0	170	.15	.03	.00	.00	.28	.00	.00	.71	
JUNE 10...	--	.0	--	.16	.00	.00	.00	.00	.00	.00	.35	
AUG. 05...	360	.0	270	.29	.00	.00	.00	.03	.00	.00	.76	

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.

LOCATION.--Lat 29°37'07", long 95°26'45", Harris County, on right bank at downstream side of bridge on Hiram Clarke Street in southwest Houston, 12.7 miles (20.4 km) upstream from gage Sims Bayou at Houston, and 19.7 miles (31.7 km) upstream from mouth.

DRAINAGE AREA.--20.2 mi² (52.3 km²).

PERIOD OF RECORD.--Discharge: August 1964 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1959; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--11 years, 26.9 ft³/s (0.762 m³/s), 19,490 acre-ft/yr (24.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,830 ft³/s (80.1 m³/s) June 10 (elevation, 54.41 ft or 16.584 m); maximum elevation, 55.12 ft (16.801 m) June 9; minimum daily, 4.0 ft³/s (0.11 m³/s) Oct. 25.

Period of record: Maximum discharge, 4,220 ft³/s (120 m³/s) June 13, 1973 (elevation, 55.02 ft or 16.770 m); maximum elevation, 55.12 ft (16.801 m) June 9, 1975; minimum daily discharge, 1.5 ft³/s (0.042 m³/s) July 26, 1965.

REMARKS.--Discharge records fair. No known diversion above station. Low flow is partly sustained by sewage effluent from Houston suburbs. Records furnished by Houston Lighting and Power Co. show that during the current year, 285 acre-ft (0.351 hm³) of ground water was used for cooling purposes and released to bayou about 300 ft (91 m) above gage. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	105	8.1	57	153	7.9	7.9	97	70	35	23	8.0
2	8.1	49	7.4	69	47	7.9	7.5	28	30	45	21	7.5
3	8.1	21	7.1	48	25	7.6	7.2	17	16	13	24	7.0
4	7.0	48	6.3	29	70	14	6.7	198	14	11	27	7.0
5	8.6	29	9.3	19	44	8.5	6.7	64	12	11	32	6.8
6	8.1	15	67	14	24	7.2	6.8	28	12	10	13	6.8
7	7.7	25	32	92	15	7.2	6.7	16	12	11	8.0	6.4
8	7.7	36	16	40	13	7.7	15	13	32	9.6	7.1	6.2
9	8.1	19	11	20	11	7.7	10	80	679	9.1	7.5	7.2
10	6.6	119	35	25	9.8	7.8	42	29	1840	8.9	9.0	17
11	6.6	159	94	18	15	8.3	26	18	439	9.5	7.7	11
12	7.5	45	40	20	16	7.7	10	13	146	10	7.1	44
13	6.6	21	21	16	11	13	8.	24	52	9.0	8.2	18
14	6.8	13	17	14	10	7.5	396	17	22	9.1	9.8	15
15	23	9.1	23	11	10	8.6	119	12	16	17	9.1	14
16	7.1	11	15	11	9.9	8.1	38	10	13	12	8.3	15
17	5.4	13	11	17	9.3	9.0	19	9.6	11	8.9	7.9	13
18	5.7	9.8	9.4	20	8.3	63	14	9.3	11	9.3	7.6	9.7
19	6.4	7.7	8.6	17	7.8	16	11	10	9.5	9.5	7.5	9.0
20	5.4	7.7	8.4	13	7.8	11	10	9.5	9.8	8.1	7.8	9.6
21	4.9	10	8.6	14	7.9	10	28	8.5	12	7.9	7.5	9.5
22	5.4	6.9	9.6	11	8.3	10	18	8.0	11	7.6	60	10
23	5.4	6.8	8.4	9.1	7.5	11	12	8.0	10	8.2	24	9.5
24	4.2	131	12	12	7.7	9.3	11	30	40	15	9.7	9.0
25	4.0	94	28	11	7.5	7.9	9.9	45	15	12	7.4	8.5
26	6.4	38	81	9.6	7.9	8.7	9.7	15	10	9.5	8.2	8.0
27	5.1	20	48	9.3	7.7	10	9.2	8.5	20	8.0	17	8.0
28	26	14	68	8.9	7.7	12	8.8	30	15	7.8	12	7.5
29	15	9.9	78	8.9	---	9.3	9.8	80	12	18	17	7.5
30	7.5	9.0	101	8.2	---	8.2	134	350	15	15	10	7.0
31	55	---	47	9.7	---	8.0	---	400	---	10	8.7	---
TOTAL	298.2	1101.9	936.2	681.7	579.1	340.1	1018.3	1685.4	3606.3	385.0	434.1	322.7
MEAN	9.62	36.7	30.2	22.0	20.7	11.0	33.9	54.4	120	12.4	14.0	10.8
MAX	55	159	101	92	153	63	396	400	1840	45	60	44
MIN	4.0	6.8	6.3	8.2	7.5	7.2	6.7	8.0	9.5	7.6	7.1	6.2
AC-FT	591	2190	1860	1350	1150	675	2020	3340	7150	764	861	640
(††)	3.66	4.39	3.53	2.33	1.92	1.71	4.85	6.64	8.20	2.00	4.12	.85

CAL YR 1974 TOTAL 10278.5 MEAN 28.2 MAX 647 MIN 3.8 AC-FT 20390 †† 45.04
WTR YR 1975 TOTAL 11389.0 MEAN 31.2 MAX 1840 MIN 4.0 AC-FT 22590 †† 44.20

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
4-14	0800	48.01	740	6-10	0900	54.41	2,830
5-13	1900	unknown	about 1,000				

†† Weighted-mean rainfall, in inches, based on three rain gages.

SAN JACINTO RIVER BASIN

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 15...	1200	20	13	37	6.7	96	7.1	152	0	35
NOV. 06...	1000	15	--	--	--	--	--	--	--	--
DEC. 02...	1130	8.2	21	53	12	110	7.2	260	0	44
JAN. 08...	0945	42	--	--	--	--	--	--	--	--
FEB. 05...	0945	50	--	--	--	--	--	--	--	--
26...	1030	7.6	--	--	--	--	--	--	--	--
MAR. 03...	0845	7.5	--	--	--	--	--	--	--	--
APR. 01...	0910	6.5	21	53	13	120	8.6	282	0	49
MAY 19...	0925	14	--	--	--	--	--	--	--	--
JUNE 11...	1235	410	--	--	--	--	--	--	--	--
JULY 29...	0945	6.5	--	--	--	--	--	--	--	--
AUG. 19...	1100	7.0	26	45	9.8	120	6.7	290	0	41
SEP. 09...	0930	8.0	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)
OCT. 15...	110	--	2.8	.15	1.1	.90	2.0	3.2	380	104
NOV. 06...	--	--	3.6	.10	1.7	2.3	4.0	4.0	--	64
DEC. 02...	110	.4	5.5	.06	.44	.96	1.4	6.9	486	28
JAN. 08...	--	--	.70	.06	1.0	2.2	3.2	1.5	--	155
FEB. 05...	--	--	.56	.07	.62	1.6	2.2	1.2	--	221
26...	--	--	4.2	.05	1.0	1.2	2.2	7.7	--	14
MAR. 03...	--	--	2.5	.07	2.9	1.4	4.3	7.7	--	48
APR. 01...	120	1.5	6.4	.12	2.0	1.1	3.1	7.4	526	23
MAY 19...	--	--	.56	.44	4.2	.90	5.1	7.2	--	24
JUNE 11...	--	--	.16	.02	.19	1.0	1.2	.29	--	214
JULY 29...	--	--	2.1	.15	.69	2.6	3.3	6.3	--	36
AUG. 19...	91	.5	4.4	.09	.69	.07	.76	7.6	483	97
SEP. 09...	--	--	3.3	.03	.59	1.6	2.2	6.9	--	36

DATE	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
OCT. 15...	6	120	0	3.8	737	6.8	19.5	20	45
NOV. 06...	25	--	--	--	683	7.1	18.5	70	40
DEC. 02...	3	180	0	3.6	901	7.7	15.5	20	15
JAN. 08...	30	--	--	--	556	6.8	18.0	120	80
FEB. 05...	49	--	--	--	561	7.0	16.5	140	80
26...	12	--	--	--	1050	7.3	18.0	30	15
MAR. 03...	15	--	--	--	1110	7.5	16.0	20	30
APR. 01...	10	190	0	3.8	957	7.3	18.0	20	10
MAY 19...	3	--	--	--	1340	--	23.0	30	15
JUNE 11...	48	--	--	--	281	6.8	24.0	120	100
JULY 29...	11	--	--	--	931	7.5	27.5	20	25
AUG. 19...	81	150	0	4.2	891	7.6	28.5	30	15
SEP. 09...	17	--	--	--	1020	7.3	27.5	20	15

SAN JACINTO RIVER BASIN

117

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	5.9	63	5.8	300000	1400	1600	11	4	1.1
NOV. 06...	7.2	77	12	5500	680	150	19	--	.3
DEC. 02...	9.6	95	.8	2400	140	58	9.9	3	.1
JAN. 08...	7.0	74	7.5	200000	18000	1500	22	--	.1
FEB. 05...	6.5	66	3.3	400000	63000	2500	18	--	.1
26...	8.7	92	.7	2000	100	2	8.4	--	.1
MAR. 03...	7.0	70	1.0	680	1	22	9.6	--	.4
APR. 01...	8.8	93	.4	1500	56	8	9.0	7	.3
MAY 19...	8.5	98	2.1	380	1	20	21	--	.1
JUNE 11...	5.0	59	3.5	220000	46000	2700	13	--	.0
JULY 29...	5.9	74	--	550	150	2	8.5	--	.2
AUG. 19...	5.9	76	.1	1200	500	700	8.3	7	.6
SEP. 09...	6.2	78	.2	580	14	42	8.8	--	.3

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 15...	1200	80	110	190	<1	0	0	4
APR. 01...	0910	60	3	370	2	0	0	5
AUG. 19...	1100	--	--	320	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 15...	20	14	0	0	.0	1	270	30
APR. 01...	10	2	20	60	.0	1	430	40
AUG. 19...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08075400 Sims Bayou at Hiram Clarke Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)
OCT. 15...	1200	20	19.5	.00	.0	.00	.0	.00	.5	.00	.0
DEC. 02...	1130	8.2	15.5	.00	.0	.00	.0	.00	.0	.00	.0
APR. 01...	0910	6.5	18.0	.00	.0	.00	.3	.00	.0	.00	.4
JUNE 11...	1235	410	24.0	.00	--	.00	--	.00	--	.00	--
AUG. 19...	1100	7.0	28.5	.00	.0	.00	.0	.00	5.1	.00	.0

DATE	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
OCT. 15...	.04	2.9	.00	.0	.00	.0	.00	.0	.00	.0	.1
DEC. 02...	.01	7.9	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 01...	.02	4.5	.00	.0	.00	.0	.00	.1	.02	.0	.0
JUNE 11...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
AUG. 19...	.02	27	.00	.0	.00	.0	.01	3.7	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 15...	14	.0	3	.26	.04	.00	.00	.00	.00	.04
DEC. 02...	84	.0	23	.09	.00	.00	.00	.00	.00	.00
APR. 01...	16	.0	1	.32	.00	.00	.00	--	--	--
JUNE 11...	--	.0	--	.02	.00	.00	.00	.00	.00	.10
AUG. 19...	390	.0	76	.84	.00	.00	.00	.14	.01	.01

SAN JACINTO RIVER BASIN

119

08075500 Sims Bayou at Houston, Tex.

LOCATION.--Lat 29°40'27", long 95°17'21", Harris County, on left bank at downstream side of bridge on State Highway 35 in southeast Houston and 7.0 miles (11.3 km) upstream from mouth.

DRAINAGE AREA.--64.0 mi² (165.8 km²).

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.09 ft (0.942 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--23 years, 72.2 ft³/s (2.045 m³/s), 52,310 acre-ft/yr (64.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) June 19 (gage height, 33.17 ft or 10.110 m); minimum daily, 17 ft³/s (0.48 m³/s) Sept. 19.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) June 9, 1975 (gage height, 33.17 ft or 10.110 m); minimum daily, 0.9 ft³/s (0.026 m³/s) Aug. 7, 1955.

REMARKS.--Discharge records fair. Low flow is largely sustained by sewage effluent from Houston suburbs and industrial wastes.

REVISIONS (WATER YEARS).--WSP 1922: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	1090	28	179	350	24	23	245	243	112	90	29
2	25	390	28	412	182	24	23	64	79	160	153	23
3	28	79	31	252	86	22	21	40	45	50	74	24
4	24	137	28	111	252	55	21	215	35	40	435	24
5	25	84	32	67	156	36	23	143	32	35	200	22
6	26	47	128	52	76	26	24	59	31	33	54	21
7	25	85	74	693	48	24	27	40	29	33	31	21
8	24	145	45	272	39	23	45	30	134	32	30	19
9	22	68	34	106	35	24	34	156	2820	31	35	22
10	23	365	173	152	33	27	216	66	7170	30	30	30
11	21	592	445	77	52	28	123	44	1510	30	27	35
12	22	143	138	103	52	28	34	32	357	31	45	90
13	24	68	75	70	36	64	29	71	124	27	49	90
14	28	49	61	53	32	29	1300	266	56	26	27	28
15	70	37	89	42	31	26	462	66	41	61	24	22
16	29	36	59	39	32	25	119	42	35	42	24	20
17	24	43	42	59	30	29	58	29	33	27	25	20
18	23	34	35	256	29	271	41	27	30	29	24	19
19	25	33	34	140	27	55	32	26	28	26	26	17
20	24	28	32	67	27	31	27	25	28	26	24	18
21	22	26	30	48	26	30	96	24	25	23	24	18
22	21	29	30	46	27	28	88	23	24	23	99	18
23	23	24	32	37	26	27	38	23	26	22	134	18
24	20	460	34	38	25	27	30	100	147	41	35	18
25	20	346	70	39	25	25	26	154	38	42	26	21
26	21	109	273	35	25	24	25	39	29	53	61	19
27	23	62	166	35	24	27	23	27	63	30	46	19
28	83	43	283	35	24	27	23	147	63	23	35	20
29	63	36	244	34	---	26	23	267	37	47	33	19
30	25	32	376	32	---	24	122	1060	50	59	36	19
31	446	---	160	34	---	22	---	1330	---	66	28	---
TOTAL	1308	4720	3309	3615	1807	1158	3176	4880	13362	1310	1984	783
MEAN	42.2	157	107	117	64.5	37.4	106	157	445	42.3	64.0	26.1
MAX	446	1090	445	693	350	271	1300	1330	7170	160	435	90
MIN	20	24	28	32	24	22	21	23	24	22	24	17
AC-FT	2590	9360	6560	7170	3580	2300	6300	9680	26500	2600	3940	1550
(††)	4.26	5.01	3.23	2.70	1.62	1.89	4.76	6.78	9.44	2.17	4.62	.76

CAL YR 1974 TOTAL 37225 MEAN 102 MAX 2160 MIN 17 AC-FT 73840 †† 48.82
WTR YR 1975 TOTAL 41412 MEAN 113 MAX 7170 MIN 17 AC-FT 82140 †† 47.24

PEAK DISCHARGE (BASE, 1,600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	1400	18.68	1,810	5-30	2400	20.32	2,370
4-14	1200	19.80	2,180	6-9	2200	33.17	10,600

†† Weighted-mean rainfall, in inches, based on four rain gages.

SAN JACINTO RIVER BASIN

08075500 Sims Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
15...	0900	86	13	41	8.4	99	5.2	158	0	97
NOV.										
11...	1245	470	--	--	--	--	--	--	--	--
DEC.										
10...	0900	26	17	50	13	120	5.6	302	0	44
JAN.										
27...	0930	38	--	--	--	--	--	--	--	--
FEB.										
11...	1310	64	--	--	--	--	--	--	--	--
MAR.										
10...	1315	26	--	--	--	--	--	--	--	--
APR.										
01...	1215	27	19	58	17	160	7.2	346	0	58
14...	1430	1800	5.3	20	4.7	23	1.8	80	0	16
MAY										
20...	1145	23	--	--	--	--	--	--	--	--
JUNE										
11...	1350	1130	--	--	--	--	--	--	--	--
JULY										
22...	1100	35	--	--	--	--	--	--	--	--
AUG.										
18...	0945	35	20	49	13	160	6.1	344	0	49
SEP.										
17...	0930	19	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
15...	72	--	.71	.23	4.0	.70	4.7	4.0	414	82
NOV.										
11...	--	--	.32	.11	.49	--	--	.98	--	316
DEC.										
10...	120	.4	.52	.24	6.1	1.2	7.3	4.1	519	51
JAN.										
27...	--	--	.47	.31	7.1	2.3	9.4	3.8	--	32
FEB.										
11...	--	--	.68	.28	4.5	2.3	6.8	2.3	--	417
MAR.										
10...	--	--	.46	.42	7.2	.30	7.5	5.1	--	86
APR.										
01...	170	.9	1.5	.45	8.0	1.2	9.2	5.6	662	41
14...	33	.2	.36	.03	.36	2.5	2.9	1.4	144	1310
MAY										
20...	--	--	.10	.21	13	1.0	14	4.8	--	23
JUNE										
11...	--	--	.06	.02	.30	1.4	1.7	.35	--	424
JULY										
22...	--	--	.00	.02	3.6	6.4	10	8.1	--	13
AUG.										
18...	140	.5	.06	.07	1.9	22	24	6.1	607	22
SEP.										
17...	--	--	.02	.01	9.9	1.1	11	5.6	--	34

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
15...	5	140	8	3.7	763	6.6	21.0	20	30
NOV.									
11...	40	--	--	--	429	6.8	19.5	80	120
DEC.									
10...	21	180	0	3.9	980	6.9	13.0	30	75
JAN.									
27...	2	--	--	--	2030	7.2	19.0	20	15
FEB.									
11...	91	--	--	--	1020	7.2	18.5	20	150
MAR.									
10...	8	--	--	--	1170	6.3	20.5	30	45
APR.									
01...	12	220	0	4.8	1220	7.0	17.5	40	25
14...	238	70	4	1.2	276	6.7	18.0	140	300
MAY									
20...	5	--	--	--	1310	--	25.5	40	15
JUNE									
11...	90	--	--	--	--	7.5	23.5	120	150
JULY									
22...	13	--	--	--	1090	7.2	28.5	30	5
AUG.									
18...	11	180	0	5.3	1100	7.2	28.0	20	15
SEP.									
17...	23	--	--	--	1050	7.6	26.0	30	5

SAN JACINTO RIVER BASIN

08075500 Sims Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	1.8	20	11	4000000	83000	16000	19	8	.2
NOV. 11...	6.3	68	8.1	4700000	69000	11000	20	--	.2
DEC. 10...	5.8	55	12	380000	26000	190	11	5	.8
JAN. 27...	3.1	33	15	330000	35000	420	20	--	.4
FEB. 11...	5.2	55	17	280000	17000	1400	30	--	.7
MAR. 10...	.4	4	8.4	1600000	300000	17000	21	--	1.7
APR. 01...	5.4	56	21	100000	550	230	17	29	2.2
14...	7.4	78	6.2	2100000	140000	88000	7.1	7	.0
MAY 20...	3.3	40	5.7	870000	60000	1900	16	--	1.4
JUNE 11...	.4	5	4.3	1200000	140000	7000	14	--	--
JULY 22...	.3	4	28	10000000	1100000	16000	25	--	1.7
AUG. 18...	.8	10	11	1700000	28000	1700	16	13	1.7
SEP. 17...	.6	7	14	2800000	26000	750	13	--	1.6

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 15...	0900	10	8	220	0	0	1	2
DEC. 10...	0900	--	--	240	--	--	--	--
APR. 01...	1215	120	30	330	0	0	0	6
14...	1430	30	8	50	0	10	0	2
AUG. 18...	0945	--	--	290	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 15...	50	8	0	0	.0	1	300	50
DEC. 10...	--	--	--	--	--	--	--	--
APR. 01...	40	4	20	160	.0	1	490	40
14...	30	5	10	30	.0	1	170	20
AUG. 18...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08075500 Sims Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 15...	0900	86	21.0	.00	.0	.00	21	.00	13	.00	13
DEC. 10...	0900	26	13.0	--	.0	--	3.0	--	.0	--	.0
APR. 01...	1215	27	17.5	.00	.0	.00	23	.00	.0	.00	.0
14...	1430	1800	18.0	.00	.0	.00	3.0	.00	.8	.00	7.1
JUNE 11...	1350	1130	23.5	.00	--	.00	--	.00	--	.00	--
AUG. 18...	0945	35	28.0	.00	.0	.00	10	.00	.0	.00	.0

DATE	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)
OCT. 15...	.03	44	.00	.0	.00	.0	.00	.0	.00	.0	.1
DEC. 10...	--	18	--	.0	--	.0	--	.9	--	.0	--
APR. 01...	.02	72	.00	.0	.00	.0	.00	.0	.00	.0	.2
14...	.02	4.1	.00	.0	.00	.8	.01	.1	.00	.0	.2
JUNE 11...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
AUG. 18...	.01	27	.00	.0	.00	.0	.00	3.6	.01	.0	.1

DATE	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 15...	330	.0	44	.00	.08	.00	.00	.04	.00	.15
DEC. 10...	130	--	10	--	--	--	--	.00	.00	.00
APR. 01...	450	.0	300	.39	.02	.00	.00	.51	.00	.01
14...	49	.0	13	.19	.01	.00	.00	.00	.00	.00
JUNE 11...	--	.0	--	.03	.00	.00	.00	.00	.00	.12
AUG. 18...	220	.0	150	.40	.00	.00	.00	.33	.00	.04

08075650 Berry Bayou at Forest Oaks Street, Houston, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°40'35", long 95°14'37", Harris County, at gaging station at Forest Oaks Street Bridge in southeast Houston, 0.8 mile (1.3 km) upstream from auxiliary gage at mouth of Berry Creek, and 1.7 miles (2.7 km) upstream from Sims Bayou.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--Discharge (storm hydrographs): October 1967 to current year. April 1964 to September 1966 operated as a daily discharge station.

Water quality (periodic samples or observations): Chemical, biochemical, and pesticide analyses: October 1968 to current year. Water temperatures, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.72 ft (0.829 m) below mean sea level, adjustment of 1973; prior record unadjusted for land-surface subsidence. Auxiliary water-stage recorder 0.8 mile (1.3 km) downstream at same datum. June 25, 1964, to Jan. 11, 1965, auxiliary nonrecording gage 0.8 mile (1.3 km) downstream at same datum.

PEAK DISCHARGE.--Current year: Maximum discharge, 5,080 ft³/s (144 m³/s) June 9; maximum gage height, 21.69 ft (6.6111 m) June 9. Period of record: Maximum discharge, 5,080 ft³/s (144 m³/s) June 9, 1975; maximum gage height, 21.69 ft (6.6111 m) June 9, 1975.

REMARKS.--Additional storm rainfall-runoff data for this site can be obtained from the report "Hydrologic Data for Urban Studies in the Houston, Texas Metropolitan Area, 1975."

SUPPLEMENTAL PEAK DISCHARGE

DATE	TIME	G.HT.	DISCHARGE
11-10	1800	-	531
4-14	1000	-	534

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 23...	1000	5.4	15	37	5.4	140	9.1	248	0	41
NOV. 11...	1130	65	--	--	--	--	--	--	--	--
DEC. 10...	1230	22	14	44	12	140	5.1	286	0	44
JAN. 27...	1030	8.8	--	--	--	--	--	--	--	--
FEB. 11...	1100	6.3	--	--	--	--	--	--	--	--
MAR. 18...	1310	--	--	--	--	--	--	--	--	--
APR. 14...	1200	280	5.0	18	4.3	21	1.9	76	0	18
MAY 21...	1315	--	--	--	--	--	--	--	--	--
JULY 22...	0945	7.6	--	--	--	--	--	--	--	--
AUG. 18...	1115	7.5	15	35	11	140	6.3	257	0	30
SEP. 17...	1030	5.8	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)
OCT. 23...	120	--	.36	.40	5.5	2.6	8.1	5.3	491	40
NOV. 11...	--	--	.49	.05	.51	1.5	2.0	1.0	--	52
DEC. 10...	140	1.0	1.6	.51	2.7	1.5	4.2	4.2	541	28
JAN. 27...	--	--	.08	.23	7.9	1.4	9.3	5.3	--	15
FEB. 11...	--	--	1.1	.54	3.3	1.2	4.5	5.7	--	14
MAR. 18...	--	--	.51	.14	2.0	1.2	3.2	1.4	--	224
APR. 14...	26	.3	.49	.04	.58	1.3	1.9	.70	132	248
MAY 21...	--	--	.23	.24	3.3	6.3	9.6	5.9	--	18
JULY 22...	--	--	.03	.12	1.9	2.9	4.8	5.8	--	21
AUG. 18...	130	1.0	.24	.21	1.8	1.7	3.5	6.3	495	14
SEP. 17...	--	--	.11	.27	3.1	1.1	4.2	6.5	--	23

SAN JACINTO RIVER BASIN

08075650 Berry Bayou at Forest Oaks Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 23...	21	120	0	5.7	908	6.8	24.0	30	25
NOV. 11...	26	--	--	--	707	6.8	20.5	100	25
DEC. 10...	13	160	0	4.8	1030	6.9	15.5	20	15
JAN. 27...	1	--	--	--	1350	6.8	20.0	30	4
FEB. 11...	6	--	--	--	1380	7.2	20.5	20	7
MAR. 18...	32	--	--	--	5210	6.8	19.5	60	250
APR. 14...	74	63	0	1.2	257	6.6	18.5	120	90
MAY 21...	6	--	--	--	--	7.0	27.0	40	5
JULY 22...	19	--	--	--	1120	7.3	27.5	30	5
AUG. 18...	7	130	0	5.3	962	7.3	28.0	30	8
SEP. 17...	22	--	--	--	1170	7.6	26.0	30	4

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 23...	3.1	36	14	21000	680	440	17	3	.6
NOV. 11...	6.1	67	8.7	680000	84000	25000	22	--	.6
DEC. 10...	7.2	71	10	6800	880	210	14	5	.4
JAN. 27...	1.3	14	12	1600000	840000	26000	32	--	1.4
FEB. 11...	7.3	80	4.5	1400	10	1	14	--	.8
MAR. 18...	5.5	59	12	74000	7800	4200	21	--	.4
APR. 14...	6.8	72	7.7	1000000	200000	100000	13	10	.1
MAY 21...	5.1	63	7.7	1300000	200000	7800	14	--	.7
JULY 22...	1.9	24	17	1600000	740000	8100	17	--	.6
AUG. 18...	3.1	39	6.3	240000	10000	980	10	30	.5
SEP. 17...	1.8	22	6.6	200000	7700	500	17	--	.5

SAN JACINTO RIVER BASIN

125

08075650 Berry Bayou at Forest Oaks Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DATE	TIME							
OCT. 23...	1000	30	4	420	12	0	1	12
DEC. 10...	1230	--	--	320	--	--	--	--
APR. 14...	1200	40	4	60	0	10	0	4
AUG. 18...	1115	--	--	340	--	--	--	--

		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
OCT. 23...	50	9	20	40	.1	16	240	100	
DEC. 10...	--	--	--	--	--	--	--	--	--
APR. 14...	40	8	10	40	.0	7	120	30	
AUG. 18...	--	--	--	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 23...	1000	5.4	24.0	.00	.0	.00	5.3	.00	1.9	.00	2.7
DEC. 10...	1230	22	15.5	.00	.0	.00	4.4	.00	.0	.00	.1
APR. 14...	1200	280	18.5	.00	.0	.00	9.4	.00	3.5	.00	42
APR. 16...	0845	--	--	.00	--	.00	--	.00	--	.00	--
AUG. 18...	1115	7.5	28.0	.00	.0	.00	4.5	.09	.0	.00	2.0

DATE	TIME	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 23...	.03	5.6	.00	.0	.00	.0	.00	.0	.00	.0	.0	.1
DEC. 10...	.02	20	.00	.0	.00	.0	.00	.5	.00	.0	.0	.1
APR. 14...	.01	23	.00	.0	.00	2.1	.00	.5	.00	.0	.0	.1
APR. 16...	.01	--	.00	--	.00	--	.00	--	.00	--	.0	.0
AUG. 18...	.00	44	.00	.0	.00	.0	.00	2.3	.01	.0	.0	.0

DATE	TIME	TOTAL CHLORDANE (UG/KG)	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 23...	120	.0	25	.25	.00	.00	.00	.00	.79	.06	.00	.00
DEC. 10...	220	.0	--	.16	.00	.00	.00	.00	.00	.00	.00	.00
APR. 14...	270	.0	380	.14	.05	.00	.00	.00	.01	.00	.18	.18
APR. 16...	--	.0	--	.05	.01	.00	.00	.00	.15	.06	.16	.16
AUG. 18...	160	.5	160	.28	.00	.00	.00	.00	.02	.00	.12	.12

SAN JACINTO RIVER BASIN

08075730 Vince Bayou at Pasadena, Tex.

LOCATION.--Lat 29°41'40", long 95°12'58", Harris County, on right bank of concrete lined channel at end of West Ellaine Avenue in Pasadena and 2.4 miles (3.9 km) upstream from mouth.

DRAINAGE AREA.--8.21 mi² (21.26 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.54 ft (0.774 m) below mean sea level, adjustment of 1973 (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum discharge, 2,490 ft³/s (70.5 m³/s) June 10 (gage height, 14.82 ft or 4.517 m); minimum daily, 1.1 ft³/s (0.031 m³/s) for many days.

Period of record: Maximum discharge, 3,360 ft³/s (95.2 m³/s) June 11, 1973 (gage height, 16.20 ft or 4.938 m); no flow Aug. 5, 6, 18, 1972.

REMARKS.--Records fair. Low flow is sustained by sewage effluent.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	473	2.8	3.0	19	2.6	1.5	6.8	8.5	70	208	1.2
2	1.2	31	4.7	97	5.4	2.4	1.4	5.4	5.9	8.1	19	1.3
3	1.1	8.0	5.0	20	7.6	2.4	1.7	6.0	5.1	4.8	138	6.9
4	3.1	19	4.9	9.7	27	23	3.1	13	4.9	3.6	96	3.7
5	3.9	5.4	9.2	6.8	5.4	5.4	2.6	3.3	2.8	1.9	23	3.4
6	4.2	3.3	36	6.1	3.1	4.8	1.5	3.1	2.3	3.6	5.9	3.5
7	3.6	18	6.3	134	2.3	4.5	1.1	6.0	2.2	4.2	3.1	4.4
8	2.0	13	3.4	12	4.0	4.2	15	8.9	2.4	1.8	11	6.1
9	1.4	5.9	2.7	7.5	5.0	4.5	6.1	29	684	1.2	4.0	4.1
10	3.4	192	118	30	4.0	4.8	36	3.8	659	6.9	5.5	4.4
11	3.9	38	100	8.8	6.8	3.4	5.4	25	49	1.8	5.1	2.9
12	3.6	9.2	15	18	2.9	3.1	2.2	16	11	4.0	2.9	6.0
13	3.6	6.1	6.0	6.1	2.1	7.2	2.6	7.5	5.8	2.7	2.4	2.4
14	5.1	5.1	25	5.7	2.0	2.6	212	8.2	4.6	185	2.2	3.9
15	9.3	3.0	10	5.3	4.5	2.6	6.8	10	3.9	120	4.8	2.0
16	1.8	6.4	6.0	3.9	5.1	2.2	3.9	6.4	3.9	11	9.6	4.1
17	1.7	14	4.5	17	5.4	4.8	2.2	6.8	3.9	5.7	3.3	1.9
18	1.7	4.3	5.0	99	5.1	14	1.7	3.0	4.2	5.4	3.7	2.0
19	3.9	7.6	5.0	16	2.8	3.9	3.6	3.5	3.5	5.4	2.1	3.6
20	5.4	6.2	4.5	6.3	2.5	3.4	3.4	4.7	2.3	3.5	4.0	3.6
21	5.0	4.9	4.0	4.5	2.3	3.1	81	6.8	2.6	3.0	4.4	3.5
22	3.5	4.8	3.5	3.1	4.8	3.1	6.1	7.2	4.7	5.7	100	1.4
23	3.4	4.8	4.0	2.9	5.4	3.1	4.2	5.1	5.4	6.6	5.0	1.4
24	2.9	187	5.0	2.6	5.3	2.9	4.8	21	50	95	2.2	1.5
25	1.1	18	25	5.1	5.4	1.7	5.1	5.0	6.9	7.8	1.8	1.4
26	3.4	7.9	20	5.1	4.4	1.5	3.9	2.7	5.0	6.7	102	3.6
27	1.4	3.7	10	4.9	2.8	1.4	2.6	2.4	130	5.0	12	1.5
28	36	2.9	15	4.2	2.4	2.2	2.6	104	12	8.4	4.6	1.1
29	7.7	4.2	30	2.4	-----	2.9	3.9	239	32	25	3.2	1.1
30	3.4	4.5	10	2.3	-----	2.2	33	273	129	9.9	1.6	1.4
31	71	-----	5.0	3.2	-----	1.7	-----	61	-----	356	1.3	-----
TOTAL	204.7	1,111.2	505.5	552.5	154.8	131.6	461.0	903.6	1,846.8	979.7	791.7	89.3
MEAN	6.60	37.0	16.3	17.8	5.53	4.25	15.4	29.1	61.6	31.6	25.5	2.98
MAX	71	473	118	134	27	23	212	273	684	356	208	6.9
MIN	1.1	2.9	2.7	2.3	2.0	1.4	1.1	2.4	2.2	1.2	1.3	1.1
AC-FT	406	2,200	1,000	1,100	307	261	914	1,790	3,660	1,940	1,570	177
(††)	3.25	5.75	3.76	3.32	1.11	1.78	4.14	7.28	11.12	9.47	5.33	.59

CAL YR 1974 TOTAL 6,825.50 MEAN 18.7 MAX 500 MIN .80 AC-FT 13,540 †† 59.57
WTR YR 1975 TOTAL 7,732.40 MEAN 21.2 MAX 684 MIN 1.1 AC-FT 15,340 †† 56.90

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	1400	12.86	1,370	7-14	1815	12.94	1,410
4-14	0600	13.08	1,480	7-31	2000	14.44	2,260
5-30	1645	12.66	1,280	8-22	1445	12.56	1,230
6-10	0745	14.82	2,490				

†† Weighted-mean rainfall, in inches, based on two rain gages.

SAN JACINTO RIVER BASIN

127

08075760 Hunting Bayou at Falls Street, Houston, Tex.
(Flood-hydrograph partial-record station)

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

DRAINAGE AREA.--3.92 mi² (10.15 km²). Prior to Oct. 1, 1973, 3.50 mi² (9.07 km²). Prior to June 1, 1970, 3.42 mi² (8.86 km²).

PERIOD OF RECORD.--Discharge (storm hydrographs): April 1964 to current year.

Water quality (periodic samples or observations): Chemical, biochemical, and pesticide analyses: October 1970 to current year.
Water temperatures: April 1964 to current year.

GAGE.--Flood-hydrograph and rainfall recorder and crest-stage gage. Datum of gage is at mean sea level, unadjusted for land-surface subsidence.

PEAK DISCHARGE.--Current year: Maximum discharge, 359 ft³/s (10.2 m³/s) Aug. 4 (elevation, 43.64 ft or 13.301 m).

Period of record: Maximum discharge, 778 ft³/s (22.0 m³/s) June 13, 1973 (elevation, 46.70 ft or 14.234 m).

REMARKS.--Additional storm rainfall-runoff data for this site can be obtained from the report "Hydrologic Data for Urban Studies in the Houston, Texas Metropolitan Area, 1975."

SUPPLEMENTAL PEAK DISCHARGE

DATE	TIME	ELEV.	DISCHARGE
4-14	0830	39.2	65

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
09...	1130	1.5	19	45	10	140	3.7	300	0	82
NOV.										
05...	1200	2.5	--	--	--	--	--	--	--	--
25...	1030	6.8	14	61	11	66	4.3	292	0	21
DEC.										
16...	1145	4.0	17	79	14	93	4.1	338	0	50
JAN.										
06...	0900	2.8	--	--	--	--	--	--	--	--
FEB.										
19...	1130	1.8	--	--	--	--	--	--	--	--
MAR.										
05...	0900	--	--	--	--	--	--	--	--	--
APR.										
14...	0915	40	5.0	22	3.3	32	1.9	91	0	23
30...	0940	6.0	--	--	--	--	--	--	--	--
MAY										
20...	1315	.80	--	--	--	--	--	--	--	--
JUNE										
16...	0930	6.0	--	--	--	--	--	--	--	--
JULY										
24...	0920	1.2	--	--	--	--	--	--	--	--
SEP.										
02...	0930	.65	--	49	6.2	66	4.8	176	0	10
10...	0900	.48	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
09...	90	--	.04	.04	18	.00	18	3.6	538	51
NOV.										
05...	--	--	.07	.01	7.0	.70	7.7	1.8	--	68
25...	55	.4	.26	.07	3.4	.00	2.4	1.6	377	64
DEC.										
16...	88	6.0	.10	.03	4.0	.80	4.8	1.2	518	55
JAN.										
06...	--	--	.17	.07	1.5	2.1	3.6	.97	--	11
FEB.										
19...	--	--	.24	.09	2.8	1.2	4.0	2.3	--	40
MAR.										
05...	--	--	.62	.11	6.3	1.5	7.8	3.8	--	70
APR.										
14...	30	.2	.67	.06	1.8	1.8	3.6	1.3	163	290
30...	--	--	.27	.05	1.1	1.3	2.4	.71	--	171
MAY										
20...	--	--	.08	.03	.79	2.3	3.1	1.5	--	23
JUNE										
16...	--	--	.08	.04	2.2	1.3	3.5	2.5	--	40
JULY										
24...	--	--	.08	.11	3.8	5.0	8.8	3.7	--	41
SEP.										
02...	100	--	.03	.01	2.1	6.0	8.1	2.9	--	36
10...	--	--	.00	.06	1.2	.70	1.9	.99	--	41

SAN JACINTO RIVER BASIN

08075760 Hunting Bayou at Falls Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
09...	15	150	0	4.9	951	7.1	25.5	20	30
NOV.									
05...	32	--	--	--	833	6.9	20.5	40	30
25...	9	200	0	2.0	714	6.9	18.0	30	30
DEC.									
16...	26	260	0	2.5	923	7.1	14.0	30	30
JAN.									
06...	0	--	--	--	1190	7.0	13.5	30	9
FEB.									
19...	15	--	--	--	1270	7.4	16.0	20	20
MAR.									
05...	34	--	--	--	797	6.8	12.0	50	40
APR.									
14...	82	69	0	1.7	264	7.0	18.0	100	150
30...	46	--	--	--	493	6.7	22.5	50	50
MAY									
20...	0	--	--	--	995	7.5	28.0	70	25
JUNE									
16...	21	--	--	--	1100	7.8	16.0	30	20
JULY									
24...	18	--	--	--	577	6.8	26.0	30	25
SEP.									
02...	5	150	4	2.4	624	6.9	26.5	50	25
10...	25	--	--	--	645	7.4	25.5	20	15

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.									
09...	5.6	67	8.2	1600000	280000	4600	20	6	.4
NOV.									
05...	2.7	30	6.3	780000	69000	19000	18	--	.9
25...	3.2	34	13	1600000	160000	56000	18	9	.7
DEC.									
16...	6.4	62	4.6	500000	20000	2700	14	5	.1
JAN.									
06...	4.1	39	2.6	120000	12000	290	13	--	.3
FEB.									
19...	7.2	72	12	200000	26000	1500	19	--	1.0
MAR.									
05...	3.5	32	20	4000000	940000	30000	26	--	.5
APR.									
14...	6.5	68	9.3	2000000	310000	110000	15	12	.1
30...	4.4	50	19	9900000	960000	48000	--	--	.5
MAY									
20...	11.0	139	7.4	300000	38000	4900	18	--	.6
JUNE									
16...	4.4	44	5.0	35000	11000	500	11	--	.3
JULY									
24...	1.5	18	20	7900000	1700000	22000	20	--	.7
SEP.									
02...	3.1	38	5.3	51000	2300	3500	16	8	.5
10...	2.7	33	4.0	64000	7000	2400	21	--	.3

SAN JACINTO RIVER BASIN

129

08075760 Hunting Bayou at Falls Street, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
OCT. 09...	1130	20	6	240	0	0	1	1				
NOV. 25...	1030	--	--	130	--	--	--	--				
APR. 14...	0915	30	6	60	0	0	0	10				
SEP. 02...	0930	--	--	80	--	--	--	--				
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
OCT. 09...	50	4	30	50	.0	4	400	120				
NOV. 25...	--	--	--	--	--	--	--	--				
APR. 14...	40	6	10	50	.0	3	130	50				
SEP. 02...	--	--	--	--	--	--	--	--				
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	
OCT. 09...	1130	1.5	25.5	.00	.0	.00	88	.00	17	.00	.0	
NOV. 25...	1030	6.8	18.0	.00	.0	.01	35	.00	8.3	.01	200.	
DEC. 16...	1145	4.0	14.0	.00	.0	.00	40	.00	7.9	.00	9.3	
APR. 14...	0915	40	18.0	.00	.0	.05	38	.02	.0	.08	.0	
SEP. 02...	0930	.65	26.5	.00	.0	.00	65	.00	.0	.00	340	
DATE	TIME	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
OCT. 09...	.00	5.9	.00	.0	.00	.0	.00	.0	.00	.0	.0	.0
NOV. 25...	.01	2.7	.00	.0	.00	.0	.00	.0	.00	.0	.0	.1
DEC. 16...	.00	2.7	.00	.0	.00	5.1	.00	.0	.05	.0	.0	.0
APR. 14...	.02	2.0	.00	.0	.02	.0	.00	.0	.00	.0	.0	.2
SEP. 02...	.00	5.6	.00	.0	.00	.0	.00	.6	.00	.0	.0	.0
DATE	TIME	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
OCT. 09...	68	.0	210	.16	.00	.00	.00	.00	.00	.00	.00	
NOV. 25...	92	.0	160	.09	.00	.00	.00	.00	.30	.00	.02	
DEC. 16...	100	.0	140	.06	.00	.00	.00	.00	.04	.00	.01	
APR. 14...	110	.0	320	.09	.04	.00	.00	.00	.15	.00	.03	
SEP. 02...	140	.0	330	.06	.00	.00	.00	.00	.06	.01	.04	

SAN JACINTO RIVER BASIN

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.

LOCATION.--Lat 29°47'35", long 95°16'04", Harris County, on left bank at downstream side of downstream service road bridge of Interstate Highway 610 in northeast section of Houston and 8.9 miles (14.3 km) upstream from mouth.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

PERIOD OF RECORD.--Discharge: April 1964 to current year. Prior to October 1973, published as "at U.S. Highway 90-A, Houston".
Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, datum of 1929, adjustment of 1959; unadjusted for land-surface subsidence. Prior to Oct. 1, 1972, water-stage recorder, 1,800 ft (549 m) upstream at same datum.

AVERAGE DISCHARGE.--11 years, 20.9 ft³/s (0.592 m³/s), 15,140 acre-ft/yr (18.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 890 ft³/s (25.2 m³/s) Aug. 4 (elevation, 31.35 ft or 9.555 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Oct. 13.
Period of record: Maximum discharge, 3,380 ft³/s (95.7 m³/s) June 13, 1973 (elevation, 38.11 ft or 11.616 m); minimum daily, 0.88 ft³/s (0.02 m³/s) Aug. 24, 1971.

REMARKS.--Discharge records fair. Low flow is largely maintained by sewage and industrial effluent. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	216	9.4	39	101	6.3	5.7	22	29	297	13	3.9
2	2.8	68	8.9	112	26	5.8	6.1	7.8	13	230	42	3.2
3	2.7	20	7.8	62	15	5.7	6.1	6.7	11	49	13	3.2
4	2.5	23	8.3	23	82	28	5.9	5.9	9.5	18	191	2.9
5	2.5	16	11	17	40	13	5.8	11	7.8	34	254	3.2
6	2.5	11	54	15	16	7.5	5.8	25	6.5	8.5	17	3.1
7	2.4	14	18	139	10	7.0	6.3	7.5	5.7	8.0	9.7	2.9
8	2.3	27	11	47	9.4	6.4	41	6.3	19	6.9	7.2	2.3
9	2.3	14	9.9	20	8.3	6.0	14	63	157	6.3	6.3	3.1
10	2.3	88	43	58	7.9	6.5	8.5	9.9	485	6.1	5.6	9.8
11	2.2	122	111	20	34	7.5	8.1	20	100	6.6	5.6	4.9
12	2.0	19	19	28	21	7.2	6.8	21	22	6.0	8.7	83
13	1.9	14	12	15	12	16	6.7	8.3	12	5.2	7.8	53
14	3.9	12	52	13	10	7.6	161	26	8.6	28	5.2	5.7
15	37	10	104	11	9.3	6.3	26	16	6.3	37	4.9	4.4
16	14	11	22	10	9.0	6.0	11	9.0	5.9	11	4.9	4.4
17	6.9	22	13	20	8.4	7.6	8.0	6.1	5.6	7.5	4.9	4.2
18	7.9	19	12	31	8.7	83	7.6	5.1	5.4	6.7	4.9	3.9
19	6.5	15	11	21	8.0	13	6.8	5.2	5.5	5.9	5.2	3.9
20	5.3	13	9.7	13	7.6	8.7	5.8	5.0	4.5	5.0	4.9	3.8
21	4.6	11	8.6	11	7.3	7.6	24	4.7	5.0	5.0	5.2	3.7
22	4.6	10	8.5	11	7.0	6.9	17	4.9	4.8	4.9	9.7	3.6
23	4.0	9.4	8.1	9.7	7.1	6.7	7.5	5.3	4.8	47	6.7	3.5
24	4.0	210	8.7	9.6	7.2	7.8	6.4	27	152	67	5.2	4.0
25	4.3	68	16	9.4	7.1	6.1	6.0	19	41	61	4.9	3.8
26	4.2	21	57	7.8	7.2	6.1	5.3	8.1	9.6	32	7.4	3.7
27	4.0	11	35	9.0	6.9	8.0	5.2	6.0	21	11	4.4	3.6
28	28	8.9	66	7.8	6.8	6.9	5.1	22	50	11	4.2	3.8
29	33	11	82	7.8	-----	6.3	8.1	186	108	5.9	3.9	4.0
30	13	13	96	7.7	-----	6.3	64	529	81	5.6	4.2	3.9
31	181	-----	30	8.0	-----	5.7	-----	239	-----	7.1	4.6	-----
TOTAL	397.4	1,127.3	962.9	812.8	500.2	329.5	501.6	1,337.8	1,396.5	1,040.2	676.2	246.4
MEAN	12.8	37.6	31.1	26.2	17.9	10.6	16.7	43.2	46.6	33.6	21.8	8.21
MAX	181	216	111	139	101	83	161	529	485	297	254	83
MIN	1.9	8.9	7.8	7.7	6.8	5.7	5.1	4.7	4.5	4.9	3.9	2.3
AC-FT	788	2,240	1,910	1,610	992	654	995	2,650	2,770	2,060	1,340	489
(††)	4.47	4.65	4.27	2.74	1.86	1.89	3.85	5.94	8.85	3.48	4.69	1.53

CAL YR 1974 TOTAL 9,230.8 MEAN 25.3 MAX 388 MIN 1.9 AC-FT 18,310 †† 54.73
WTR YR 1975 TOTAL 9,328.8 MEAN 25.6 MAX 529 MIN 1.9 AC-FT 18,500 †† 48.22

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	ELEV.	DISCHARGE
5-30	1900	30.70	840
6-10	1200	30.85	870
8-4	2200	31.35	890

†† Weighted-mean rainfall, in inches, based on three rain gages.

SAN JACINTO RIVER BASIN

131

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 09...	1300	6.4	17	61	13	120	4.8	330	0	48
NOV. 05...	1245	12	--	--	--	--	--	--	--	--
25...	1230	54	13	46	8.4	41	4.8	196	0	39
DEC. 16...	0930	40	10	45	8.3	45	2.6	174	0	41
JAN. 13...	0930	18	--	--	--	--	--	--	--	--
27...	1230	400	--	--	--	--	--	--	--	--
MAR. 05...	0945	12	--	--	--	--	--	--	--	--
APR. 02...	1215	5.0	18	67	18	140	5.4	424	0	64
14...	1010	320	4.9	26	4.7	21	1.8	95	0	27
30...	1300	62	--	--	--	--	--	--	--	--
MAY 19...	1300	5.4	--	--	--	--	--	--	--	--
JULY 16...	1245	12	--	--	--	--	--	--	--	--
AUG. 04...	1020	7.6	6.7	45	9.4	56	3.8	197	0	120
SEP. 08...	1215	2.5	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 09...	94	--	.15	.55	4.7	2.2	6.9	2.4	521	37
NOV. 05...	--	--	.22	.09	2.0	1.0	3.0	1.5	--	54
25...	35	.3	.71	.11	1.0	1.8	2.8	1.1	284	132
DEC. 16...	45	.4	.46	.12	1.1	1.1	2.2	.85	283	187
JAN. 13...	--	--	.28	.00	1.7	.00	.41	1.3	--	30
27...	--	--	.47	.63	3.0	1.9	4.9	3.3	--	69
MAR. 05...	--	--	.83	.27	3.1	1.5	4.6	1.6	--	180
APR. 02...	110	.8	.59	.81	4.8	1.2	6.0	2.8	633	284
14...	24	.3	1.0	.06	1.3	1.7	3.0	1.1	157	392
30...	--	--	.87	.12	1.6	2.4	4.0	1.0	--	634
MAY 19...	--	--	.57	.53	1.6	.40	2.0	2.6	--	21
JULY 16...	--	--	.73	.37	1.4	.80	2.2	1.4	--	27
AUG. 04...	67	.4	.46	.16	15	6.0	21	15	405	175
SEP. 08...	--	--	.08	.25	3.0	1.1	4.1	2.7	--	33

SAN JACINTO RIVER BASIN

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
09...	16	210	0	3.6	951	7.3	27.0	20	15
NOV.									
05...	31	--	--	--	725	6.8	20.0	20	25
25...	28	150	0	1.5	523	6.8	16.5	60	65
DEC.									
16...	40	150	4	1.6	510	6.7	12.5	40	90
JAN.									
13...	4	--	--	--	842	7.1	3.0	30	15
27...	20	--	--	--	1100	7.2	20.5	20	35
MAR.									
05...	39	--	--	--	1060	6.8	12.5	80	65
APR.									
02...	38	240	0	3.9	1110	6.6	21.5	50	85
14...	132	84	7	1.0	302	6.5	18.5	80	120
30...	114	--	--	--	412	7.2	20.5	30	220
MAY									
19...	1	--	--	--	966	--	27.0	40	15
JULY									
16...	17	--	--	--	714	6.9	26.5	50	15
AUG.									
04...	41	150	0	2.0	760	6.9	27.5	50	75
SEP.									
08...	18	--	--	--	812	7.1	28.0	30	10
DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.									
09...	10.4	128	8.4	140000	1000	820	18	2	.2
NOV.									
05...	3.9	45	5.7	31000	1600	1700	15	--	.4
25...	5.9	60	8.4	3400000	580000	9300	19	6	.4
DEC.									
16...	6.6	62	5.5	26000	1400	1500	--	5	.1
JAN.									
13...	7.9	59	5.1	5000	110	56	16	--	.9
27...	5.7	63	8.7	420000	69000	1500	9.6	--	.3
MAR.									
05...	6.1	57	13	9700	380	550	45	--	.8
APR.									
02...	7.2	81	52	20000	950	900	12	13	.6
14...	7.0	74	8.1	1300000	180000	96000	18	14	.0
30...	6.3	69	18	460000	36000	22000	--	--	.0
MAY									
19...	9.9	122	3.5	21000	550	8	9.5	--	.4
JULY									
16...	4.3	52	20	20000	3500	390	11	--	.4
AUG.									
04...	1.7	21	29	19000	1500	950	27	10	.8
SEP.									
08...	6.9	87	7.2	13000	1600	420	19	--	.6

08075770 Hunting Bayou at Interstate Highway 610, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DATE	TIME							
OCT. 09...	1300	20	26	330	0	0	0	5
NOV. 25...	1230	--	--	130	--	--	--	--
DEC. 16...	0930	--	--	100	--	--	--	--
APR. 02...	1215	--	--	350	--	--	--	--
14...	1010	30	8	80	0	0	0	3
AUG. 04...	1020	--	--	150	--	--	--	--

		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
OCT. 09...	20	3	20	0	0	20	420	70	
NOV. 25...	--	--	--	--	--	--	--	--	
DEC. 16...	--	--	--	--	--	--	--	--	
APR. 02...	--	--	--	--	--	--	--	--	
14...	30	2	10	70	.1	2	170	40	
AUG. 04...	--	--	--	--	--	--	--	--	

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 09...	1300	6.4	27.0	.00	.0	.00	49	.00	17	.00	.0
NOV. 25...	1230	54	16.5	.00	.0	.00	170	.00	31	.01	4.3
DEC. 16...	0930	40	12.5	.00	.0	.02	140	.00	20	.06	48
APR. 02...	1215	5.0	21.5	.00	.0	.03	26	.00	.0	.03	8.4
14...	1010	320	18.5	.00	.0	.04	17	.01	1.1	.05	68
AUG. 04...	1020	7.6	27.5	.00	.0	.00	85	.00	7.5	.00	.0

DATE	TIME	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 09...	.00	6.1	.00	.0	.00	.0	.00	.0	.02	.0	.0	.0
NOV. 25...	.00	12	.00	.0	.00	.0	.00	.0	.04	.0	.0	.0
DEC. 16...	.01	13	.00	.0	.00	.0	.00	.4	.00	.0	.0	.0
APR. 02...	.01	2.3	.00	.0	.00	.0	.00	.0	.03	.0	.0	.0
14...	.02	7.8	.00	.0	.00	.0	.00	.1	.00	.0	.0	.1
AUG. 04...	.00	14	.00	.0	.00	.0	.00	.7	.04	.0	.0	.1

DATE	TIME	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIBAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 09...	82	.0	180	.23	.00	.00	.00	.00	.00	.00	.00
NOV. 25...	190	.0	400	.09	.00	.00	.00	.07	.00	.02	
DEC. 16...	190	.0	250	.07	.00	.00	.00	.00	.00	.00	
APR. 02...	39	.0	110	.23	.01	.00	.00	.00	.00	.00	
14...	130	.0	460	.06	.03	.00	.00	.06	.00	.03	
AUG. 04...	300	.0	400	.11	.48	.00	.00	.26	.00	.18	

SAN JACINTO RIVER BASIN

08075900 Greens Bayou at U.S. Highway 75 near Houston, Tex.

LOCATION.--Lat 29°57'24", Long 95°25'04", Harris County, on left bank at downstream side of U.S. Highway 75 bridge, 9.0 miles (14.5 km) upstream from station 08076000, and 21 miles (34 km) upstream from Halls Bayou.

DRAINAGE AREA.--34.8 mi² (90.1 km²).

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, adjustment of 1959; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--10 years, 27.7 ft³/s (0.784 m³/s), 20,070 acre-ft/yr (24.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft³/s (73.1 m³/s) Nov. 1 (elevation, 89.47 ft or 27.270 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Oct. 7, 14.

Period of record: Maximum discharge, 2,940 ft³/s (83.3 m³/s) Mar. 20, 1972 (elevation, 89.75 ft or 27.356 m); maximum elevation, 91.09 ft (27.764 m) Feb. 21, 1969; minimum daily discharge, 0.16 ft³/s (0.004 m³/s) Oct. 21, 22, 1969.

REMARKS.--Records good. Records furnished by Houston Lighting and Power Co. show that 2,250 acre-ft (2.77 hm³) of ground water used for cooling purposes was released to bayou about 8 miles (13 km) upstream from gage during the current year. No known diversion above station. Recording rain gage located at station.

REVISIONS.--WRD Texas 1974: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1,240	13	36	69	9.1	6.4	51	112	28	14	11
2	2.8	981	11	58	54	9.1	8.0	20	41	42	18	9.3
3	2.6	263	8.9	45	45	9.2	7.0	13	20	21	13	8.3
4	2.4	97	8.9	29	383	18	6.8	8.9	14	10	194	12
5	2.2	46	10	19	178	13	7.0	7.9	10	7.5	318	9.0
6	2.1	27	187	14	81	11	7.0	7.2	9.7	8.9	77	11
7	2.0	57	95	12	38	10	7.0	10	6.5	7.9	34	8.8
8	3.0	72	42	11	25	9.7	90	8.4	7.2	8.4	18	7.2
9	3.2	46	22	10	20	8.2	109	30	10	9.1	26	7.0
10	3.5	322	25	34	17	6.3	40	15	189	7.1	14	7.5
11	3.2	454	241	25	16	6.2	24	12	117	8.8	9.1	16
12	2.7	150	107	16	15	8.2	15	14	42	12	18	11
13	2.4	62	50	14	13	37	10	12	22	8.2	18	8.2
14	2.0	33	43	11	11	16	149	21	14	44	12	7.2
15	40	21	178	10	12	10	76	15	10	111	9.4	9.2
16	12	14	81	8.6	12	9.5	30	9.2	8.8	30	7.9	15
17	6.7	14	40	8.8	11	32	17	8.3	7.9	14	9.8	14
18	4.0	13	27	21	10	197	14	6.6	7.9	9.7	15	8.6
19	3.4	13	19	20	11	67	10	6.0	6.9	9.2	15	6.8
20	3.8	12	15	14	11	27	9.5	6.0	7.3	7.3	8.9	7.2
21	3.6	12	12	12	11	16	12	6.7	9.7	6.4	7.7	6.0
22	3.1	9.7	9.5	9.5	11	13	51	7.4	7.3	37	12	6.8
23	3.6	9.4	8.8	8.8	10	10	21	6.8	7.3	51	17	9.7
24	3.2	285	8.4	8.3	10	8.7	13	9.6	7.1	81	10	6.7
25	3.1	262	12	8.1	8.9	7.6	10	31	6.9	43	10	6.8
26	3.8	91	15	7.1	9.8	7.6	8.8	38	22	21	9.5	5.6
27	3.4	42	26	7.1	10	10	7.6	12	24	38	13	2.9
28	90	26	35	7.3	9.5	9.9	7.2	60	15	12	16	2.4
29	69	18	34	8.3	-----	8.9	9.5	488	10	8.2	13	3.0
30	18	17	33	8.7	-----	8.1	51	683	9.2	7.9	33	2.7
31	203	-----	27	8.4	-----	6.8	-----	359	-----	9.7	17	-----
TOTAL	510.7	4,709.1	1,444.5	510.0	1,112.2	620.1	833.8	1,983.0	781.7	719.3	1,007.3	246.9
MEAN	16.5	157	46.6	16.5	39.7	20.0	27.8	64.0	26.1	23.2	32.5	8.23
MAX	203	1,240	241	58	383	197	149	683	189	111	318	16
MIN	2.0	9.4	8.4	7.1	8.9	6.2	6.4	6.0	6.5	6.4	7.7	2.4
AC-FT	1,010	9,340	2,870	1,010	2,210	1,230	1,650	3,930	1,550	1,430	2,000	490
(††)	5.35	7.17	3.62	1.27	2.02	2.72	4.51	6.36	3.20	4.56	4.24	1.11
CAL YR 1974 TOTAL	17,108.3			MEAN 46.9	MAX 1,240	MIN 2.0	AC-FT 33,930	†† 51.98				
WTR YR 1975 TOTAL	14,478.6			MEAN 39.7	MAX 1,240	MIN 2.0	AC-FT 28,720	†† 46.13				

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
11-1	1900	89.47	2,580	5-29	2000	86.01	1,250
11-10	2100	84.98	888	8-4	2230	84.70	743
2-4	0830	83.21	535				

†† Weighted-mean rainfall, in inches, based on four rain gages.

SAN JACINTO RIVER BASIN

135

08076000 Greens Bayou near Houston, Tex.

LOCATION.--Lat 29°55'05", long 95°18'24", Harris County, on left bank at downstream side of bridge on U.S. Highway 59, 10.5 miles (16.9 km) northeast of Houston, 12.0 miles (19.3 km) upstream from Halls Bayou, and 23.4 miles (37.7 km) upstream from mouth.

DRAINAGE AREA.--72.7 mi² (188.3 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft (0.201 m) below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--23 years, 50.7 ft³/s (1.436 m³/s), 36,730 acre-ft/yr (45.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,390 ft³/s (96.0 m³/s) Nov. 2 (gage height, 54.50 ft or 16.612 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Oct. 26, 27.

Period of record: Maximum discharge, 7,000 ft³/s (198 m³/s) July 30, 1954 (gage height, 64.75 ft or 19.736 m); maximum gage height, 65.75 ft (20.041 m) Sept. 12, 1961; no flow at times.

REMARKS.--Discharge records poor. No known diversion above station. Low flow is sustained by Houston Light and Power Co. effluent, which is obtained from ground-water sources. Recording rain gage located at station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	1,680	30	100	370	19	16	221	226	247	55	23
2	20	2,420	20	144	183	19	16	112	75	428	222	16
3	14	828	16	120	183	17	16	71	39	96	52	13
4	13	215	16	85	840	37	13	92	30	28	667	14
5	11	67	20	55	405	38	13	69	24	20	1,120	17
6	8.7	43	276	40	153	27	13	26	22	16	139	27
7	5.4	90	120	34	85	25	12	29	20	20	76	14
8	6.5	90	50	29	60	24	183	25	18	14	38	12
9	8.7	64	30	25	45	22	303	88	28	14	34	11
10	8.7	854	60	96	35	20	126	45	463	14	30	21
11	8.7	1,190	473	85	48	19	65	35	281	14	19	24
12	7.0	405	215	55	40	20	45	45	106	16	17	19
13	5.5	193	100	32	30	74	28	35	39	12	40	14
14	4.7	92	110	27	24	45	734	60	30	39	25	12
15	80	50	290	24	22	28	330	38	22	213	18	11
16	29	38	165	22	21	24	122	27	19	62	16	16
17	16	30	85	22	20	37	66	23	18	31	15	25
18	8.7	27	50	20	20	464	45	19	16	19	17	14
19	7.0	27	38	20	21	173	35	14	15	16	24	11
20	5.5	24	31	39	24	68	29	13	14	15	16	10
21	4.0	22	25	30	24	39	97	13	16	14	13	10
22	3.2	20	20	27	22	30	154	14	20	118	14	9.5
23	5.4	19	16	25	20	26	75	14	17	602	30	11
24	4.1	480	14	23	19	24	45	47	23	242	17	12
25	3.5	652	12	22	18	18	37	60	20	154	30	9.6
26	3.0	251	89	22	16	17	35	110	32	47	48	9.6
27	3.0	116	100	27	18	29	35	35	106	38	17	8.1
28	70	70	110	24	18	33	39	56	68	22	26	6.6
29	130	50	110	22	-----	24	53	926	107	14	14	6.6
30	28	40	101	20	-----	19	248	1,470	85	13	44	6.8
31	142	-----	89	20	-----	17	-----	737	-----	12	38	-----
TOTAL	678.3	10,147	2,881	1,336	2,784	1,476	3,028	4,569	1,999	2,610	2,931	413.8
MEAN	21.9	338	92.9	43.1	99.4	47.6	101	147	66.6	84.2	94.5	13.8
MAX	142	2,420	473	144	840	464	734	1,470	463	602	1,120	27
MIN	3.0	19	12	20	16	17	12	13	14	12	13	6.6
AC-FT	1,350	20,130	5,710	2,650	5,520	2,930	6,010	9,060	3,970	5,180	5,810	821
(††)	4.67	8.25	3.36	1.39	2.05	2.51	4.46	5.87	3.03	5.35	4.39	.81

CAL YR 1974 TOTAL 32,707.2 MEAN 89.6 MAX 2,420 MIN 3.0 AC-FT 64,870 †† 50.78
WTR YR 1975 TOTAL 34,853.1 MEAN 95.5 MAX 2,420 MIN 3.0 AC-FT 69,130 †† 46.14

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	0400	54.50	3,390	5-29	2300	53.91	2,600
11-11	0200	51.00	1,700	7-23	0100	51.39	1,260
4-14	1130	49.99	1,320	8-4	2300	54.55	2,430

†† Weighted-mean rainfall, in inches, based on four rain gages.

SAN JACINTO RIVER BASIN

08076000 Greens Bayou near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	
OCT. 16...	1000	36	13	30	3.6	36	4.8	116	0	23	
NOV. 19...	1200	27	--	--	--	--	--	--	--	--	
DEC. 17...	1130	85	15	31	4.8	27	3.0	127	0	12	
JAN. 06...	1115	40	--	--	--	--	--	--	--	--	
FEB. 04...	0900	980	--	--	--	--	--	--	--	--	
MAR. 11...	1230	20	--	--	--	--	--	--	--	--	
APR. 08...	1230	225	7.0	34	5.5	34	4.3	113	0	25	
MAY 13...	1345	27	--	--	--	--	--	--	--	--	
JUNE 09...	0915	17	--	--	--	--	--	--	--	--	
JULY 23...	0930	600	--	--	--	--	--	--	--	--	
AUG. 04...	1145	110	17	44	7.3	41	3.6	164	0	27	
SEP. 22...	0945	8.0	--	--	--	--	--	--	--	--	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 16...	40	--	--	.70	.11	.44	1.1	1.5	1.5	208	305
NOV. 19...	--	--	--	.75	.22	.50	.50	1.0	1.8	--	78
DEC. 17...	30	.2	.19	.04	.32	.64	.96	.71	186	139	
JAN. 06...	--	--	--	.62	.11	.51	2.3	2.8	1.7	--	78
FEB. 04...	--	--	--	.26	.02	.33	1.8	2.1	.83	--	514
MAR. 11...	--	--	--	1.9	.31	.53	1.3	1.8	2.7	--	62
APR. 08...	41	.2	.84	.10	1.1	4.1	4.1	5.2	1.9	207	544
MAY 13...	--	--	--	1.1	.30	.83	1.8	2.6	1.9	--	152
JUNE 09...	--	--	--	1.1	.65	1.0	1.2	2.2	2.2	--	169
JULY 23...	--	--	--	.23	.04	.08	.88	.96	.39	--	656
AUG. 04...	45	.3	.70	.16	.27	.27	2.4	2.7	1.1	266	185
SEP. 22...	--	--	--	.32	.68	3.5	5.8	9.3	7.5	--	39

SAN JACINTO RIVER BASIN

137

08076000 Greens Bayou near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR 'PLAT- '/NUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 16...	35	90	0	1.7	396	6.8	19.5	60	180
NOV. 19...	24	--	--	--	606	7.2	23.5	50	45
DEC. 17...	40	97	0	1.2	337	6.8	11.5	100	65
JAN. 06...	12	--	--	--	622	6.7	11.5	100	45
FEB. 04...	46	--	--	--	254	7.0	13.5	120	250
MAR. 11...	3	--	--	--	1090	7.2	20.5	30	30
APR. 08...	128	110	15	1.4	389	6.8	19.0	70	180
MAY 13...	16	--	--	--	711	6.7	27.0	50	70
JUNE 09...	32	--	--	--	837	7.9	27.5	10	95
JULY 23...	98	--	--	--	175	7.0	25.0	50	180
AUG. 04...	42	140	5	1.5	473	7.0	28.5	70	80
SEP. 22...	26	--	--	--	962	7.4	22.0	30	15

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 16...	5.9	63	7.6	440000	20000	8100	15	4	.0
NOV. 19...	6.8	79	4.0	91000	4700	15	15	--	.2
DEC. 17...	10.0	91	1.9	5300	420	150	16	8	.0
JAN. 06...	8.3	75	5.6	18000	2700	270	21	--	.2
FEB. 04...	7.9	75	19	360000	42000	36000	22	--	.0
MAR. 11...	7.5	82	4.0	52000	2600	140	7.5	--	.3
APR. 08...	6.0	64	18	1400000	300000	33000	26	12	.0
MAY 13...	--	--	5.0	45000	5300	520	9.4	--	.0
JUNE 09...	5.2	65	6.8	65000	20000	700	12	--	.1
JULY 23...	5.3	63	17	520000	120000	15000	12	--	.0
AUG. 04...	6.3	81	3.1	29000	7700	1000	20	4	.1
SEP. 22...	2.8	32	9.0	1200000	46000	720	15	--	1.4

SAN JACINTO RIVER BASIN

08076000 Greens Bayou near Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	
DATE	TIME								
OCT. 16...	1000	60	5	120	<1	0	0	.6	
DEC. 17...	1130	--	--	70	--	--	--	--	
APR. 08...	1230	30	11	110	0	0	0	4	
AUG. 04...	1145	--	--	120	--	--	--	--	
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
OCT. 16...	30	1	0	0	.0	2	180	50	
DEC. 17...	--	--	--	--	--	--	--	--	
APR. 08...	40	1	10	20	.1	2	210	40	
AUG. 04...	--	--	--	--	--	--	--	--	

		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)
DATE	TIME										
OCT. 16...	1000	36	19.5	.00	.0	.00	.0	.00	.0	.00	.0
DEC. 17...	1130	85	11.5	.00	.0	.00	.0	.00	.0	.00	.0
APR. 08...	1230	225	19.0	.00	1.1	.00	4.3	.00	1.0	.00	.0
AUG. 04...	1145	110	28.5	.00	.0	.00	.1	.00	.4	.00	.0

		DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)
DATE	TIME					
OCT. 16...	.02	.9	.00	.0	.00	.15
DEC. 17...	.00	.2	.00	.0	.00	.01
APR. 08...	.02	18	.00	.0	.00	.0
AUG. 04...	.00	.5	.00	.0	.00	.0

		CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
DATE	TIME									
OCT. 16...	4	.0	3	.00	.00	.00	.00	.00	.00	.12
DEC. 17...	0	.0	0	.04	.00	.00	.00	.00	.00	.05
APR. 08...	93	.0	27	.14	.00	.00	.00	.10	.00	.24
AUG. 04...	5	.0	10	.13	.00	.00	.00	.02	.00	.09

SAN JACINTO RIVER BASIN

139

08076500 Halls Bayou at Houston, Tex.

LOCATION.--Lat 29°51'42", long 95°20'05", Harris County, on right bank at downstream side of bridge on Jensen Drive in northeast section of Houston and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--24.7 mi² (64.0 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft (0.201 m) below mean sea level, datum of 1929, adjustment of 1957; unadjusted for land-surface subsidence.

AVERAGE DISCHARGE.--23 years, 25.0 ft³/s (0.708 m³/s), 18,110 acre-ft/yr (22.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,940 ft³/s (54.9 m³/s) May 29 (gage height, 57.94 ft or 17.660 m); minimum daily, 4.9 ft³/s (0.14 m³/s) Oct. 22, 27.

Period of record: Maximum discharge, 3,780 ft³/s (107 m³/s) Mar. 21, 1972 (gage height, 60.70 ft or 18.501 m); maximum gage height, 60.75 ft (18.517 m) June 13, 1973; no flow at times prior to 1956.

REMARKS.--Discharge records fair. No known diversion above station. Low flow is partly sustained by sewage effluent from Houston suburbs.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	558	13	70	387	9.8	13	50	52	300	125	33
2	6.3	415	12	113	80	9.6	13	18	24	273	251	21
3	6.0	78	11	78	45	9.5	12	13	15	69	39	13
4	6.1	39	10	43	313	63	11	11	11	31	405	12
5	6.0	22	11	30	96	24	12	10	9.7	24	445	14
6	6.1	13	102	24	49	14	12	10	8.6	15	58	26
7	6.1	49	43	25	31	13	13	9.4	7.6	13	28	12
8	5.9	49	25	23	25	11	100	9.1	12	11	18	10
9	5.6	29	18	19	22	10	38	61	32	10	14	9.3
10	5.5	370	46	71	20	12	19	15	439	9.7	12	59
11	5.4	394	235	32	41	11	15	23	104	11	11	18
12	5.1	73	54	28	35	11	11	20	42	13	38	36
13	5.3	36	34	22	21	52	11	11	23	9.9	47	47
14	5.7	23	88	18	18	21	447	14	16	44	28	11
15	36	16	292	16	21	14	98	11	12	51	18	9.2
16	9.3	13	61	15	27	12	42	11	11	19	13	12
17	5.7	14	35	18	18	18	27	8.4	9.8	12	11	11
18	5.4	13	27	73	15	165	22	7.7	9.0	11	20	7.9
19	5.2	12	25	46	13	41	18	7.8	8.4	11	39	7.9
20	5.2	34	20	27	13	23	15	7.6	8.1	9.5	26	7.2
21	5.3	13	17	20	13	18	43	7.2	8.6	9.3	28	6.8
22	4.9	11	16	21	13	16	46	7.1	8.6	25	13	6.5
23	5.3	9.7	15	19	12	15	19	7.3	9.4	196	31	6.2
24	5.1	374	16	18	11	13	14	33	38	216	16	6.4
25	6.3	157	18	18	11	11	12	39	19	84	64	6.8
26	8.0	50	35	16	11	13	11	10	125	40	45	6.8
27	4.9	32	29	15	11	22	9.8	8.7	83	23	23	6.4
28	46	23	48	14	11	21	9.8	44	43	16	24	6.5
29	32	17	57	13	---	16	12	572	59	12	20	6.7
30	6.6	16	68	12	---	13	105	766	56	11	103	6.4
31	122	---	38	12	---	12	---	256	---	10	38	---
TOTAL	394.9	2952.7	1519	969	1383	713.9	1230.6	2078.3	1303.8	1589.4	2051	442.0
MEAN	12.7	98.4	49.0	31.3	49.4	23.0	41.0	67.0	43.5	51.3	66.2	14.7
MAX	122	558	292	113	387	165	447	766	439	300	445	59
MIN	4.9	9.7	10	12	11	9.5	9.8	7.1	7.6	9.3	11	6.2
AC-FT	783	5860	3010	1920	2740	1420	2440	4120	2590	3150	4070	877
(††)	3.92	6.93	3.87	2.16	2.43	2.66	4.34	6.57	5.68	6.00	6.91	1.49
CAL YR 1974 TOTAL	14368.9											
WTR YR 1975 TOTAL	16627.6											
MEAN	39.4											
MAX	892											
MIN	3.8											
AC-FT	28500											
(††)	50.27											
AC-FT	32980											
(††)	52.96											

PEAK DISCHARGE (BASE, 950 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-10	2030	55.51	1,310	5-29	2100	57.94	1,940
2-1	1030	54.61	1,080	6-10	1230	55.20	1,030
4-14	1030	54.47	955	8-4	2130	57.43	1,680

†† Weighted-mean rainfall, in inches, based on four rain gages.

SAN JACINTO RIVER BASIN

08076500 Halls Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 08...	1300	6.0	32	60	8.7	100	10	250	0	40
NOV. 05...	1000	22	--	--	--	--	--	--	--	--
DEC. 09...	1030	20	22	59	10	75	4.6	260	0	29
JAN. 06...	1030	27	--	--	--	--	--	--	--	--
27...	1300	15	--	--	--	--	--	--	--	--
MAR. 11...	1115	10	--	--	--	--	--	--	--	--
APR. 08...	0930	51	13	40	7.4	52	4.3	170	0	28
30...	0845	74	--	--	--	--	--	--	--	--
MAY 13...	1300	12	--	--	--	--	--	--	--	--
JUNE 09...	1100	11	--	--	--	--	--	--	--	--
19...	1245	8.3	--	--	--	--	--	--	--	--
JULY 16...	0920	17	--	--	--	--	--	--	--	--
AUG. 04...	1300	16	19	61	11	60	5.1	268	0	24
SEP. 22...	0900	9.8	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 08...	110	--	.04	.07	11	2.0	13	12	485	17
NOV. 05...	--	--	.41	.13	2.4	1.0	3.4	2.5	--	76
DEC. 09...	83	.3	.90	.40	2.7	1.5	4.2	3.9	411	49
JAN. 06...	--	--	1.2	.27	1.3	3.3	4.6	3.2	--	44
27...	--	--	.78	.32	3.4	1.9	5.3	4.1	--	407
MAR. 11...	--	--	1.3	.55	4.1	1.3	5.4	6.8	--	286
APR. 08...	57	.3	.99	.11	.63	2.6	3.2	1.6	286	878
30...	--	--	.72	.20	1.8	3.5	5.3	1.8	--	413
MAY 13...	--	--	.38	.55	4.5	1.4	5.9	4.5	--	57
JUNE 09...	--	--	.24	.30	2.8	3.4	6.2	3.7	--	38
19...	--	--	.82	.98	2.8	1.1	3.9	4.5	--	30
JULY 16...	--	--	.05	.06	4.7	3.9	8.6	4.0	--	46
AUG. 04...	61	.3	.33	.27	2.8	.50	3.3	2.5	374	57
SEP. 22...	--	--	2.2	.45	.34	1.5	1.8	3.7	--	147

SAN JACINTO RIVER BASIN

141

08076500 Halls Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 08...	0	190	0	3.2	891	6.6	25.5	20	4
NOV. 05...	26	--	--	--	536	6.7	19.0	60	35
DEC. 09...	13	190	0	2.4	762	7.0	11.5	50	25
JAN. 06...	12	--	--	--	833	6.0	15.5	60	20
27...	62	--	--	--	1010	7.1	21.0	30	250
MAR. 11...	19	--	--	--	1020	7.0	20.5	30	80
APR. 08...	202	130	0	2.0	536	6.9	18.5	60	220
30...	60	--	--	--	475	6.5	21.5	50	190
MAY 13...	3	--	--	--	907	6.9	26.5	30	30
JUNE 09...	9	--	--	--	932	7.7	28.0	30	20
19...	14	--	--	--	1100	7.5	31.0	30	20
JULY 16...	18	--	--	--	612	7.1	24.5	60	20
AUG. 04...	13	200	0	1.9	654	6.9	29.0	50	35
SEP. 22...	37	--	--	--	903	7.4	21.0	20	60

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	7.1	86	8.2	31000	1600	420	20	0	.2
NOV. 05...	3.7	39	11	740000	58000	6900	18	--	.7
DEC. 09...	6.3	57	7.4	11000	1700	6800	16	4	.7
JAN. 06...	6.4	63	7.9	160000	16000	310	26	--	.6
27...	5.4	60	6.1	11000	2700	400	12	--	.9
MAR. 11...	4.6	51	13	1600000	170000	2400	10	--	1.0
APR. 08...	7.2	77	6.9	2800000	720000	69000	21	15	.0
30...	4.5	51	21	5100000	250000	72000	22	--	.0
MAY 13...	--	--	6.0	110000	9300	380	8.1	--	.8
JUNE 09...	4.5	57	10	1400000	81000	880	15	--	.5
19...	9.2	123	6.5	4100000	260000	7300	12	--	.7
JULY 16...	1.9	23	15	660000	39000	1800	16	--	.6
AUG. 04...	4.1	53	8.0	31000	2900	1200	17	8	.6
SEP. 22...	5.7	63	4.8	25000	70	1400	5.9	--	.2

SAN JACINTO RIVER BASIN

08076500 Hall's Bayou at Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
OCT. 08...	1300	20	8	400	<1	0	1	4				
DEC. 09...	1030	--	--	170	--	--	--	--				
APR. 08...	0930	20	5	130	0	0	2	7				
AUG. 04...	1300	--	--	160	--	--	--	--				
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
OCT. 08...	60	8	20	10	.0	0	410	30				
DEC. 09...	--	--	--	--	--	--	--	--				
APR. 08...	30	2	10	0	.0	3	250	30				
AUG. 04...	--	--	--	--	--	--	--	--				
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	
OCT. 08...	1300	6.0	25.5	.00	.0	.00	5.6	.00	3.6	.00	.7	
DEC. 09...	1030	20	11.5	.00	.0	.00	3.0	.00	.0	.00	.0	
APR. 08...	0930	51	18.5	.00	.0	.00	.3	.00	.0	.00	1.7	
AUG. 04...	1300	16	29.0	.00	.0	.00	.7	.00	1.6	.00	.0	
DATE	TIME	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
OCT. 08...	.02	8.7	.00	.0	.00	.0	.01	.0	.04	.0	.0	.1
DEC. 09...	.01	16	.00	.0	.00	.0	.00	.5	.01	.0	.0	.0
APR. 08...	.00	.8	.00	.0	.00	.0	.00	.0	.01	.0	.0	.1
AUG. 04...	.01	2.6	.00	.0	.00	.0	.02	.3	.01	.0	.0	.1
DATE	TIME	TOTAL PCB (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 08...	91	.0	15	.27	.01	.00	.00	.00	.00	.00	.00	.00
DEC. 09...	110	.0	6	.17	.00	.00	.00	.00	.00	.00	.00	.00
APR. 08...	6	.0	12	.23	.00	.00	.00	.00	.05	.00	.00	.15
AUG. 04...	41	.0	10	.20	.00	.00	.00	.00	.03	.00	.00	.30

08076700 Greens Bayou at Ley Road, Houston, Tex.

LOCATION.--Lat 29°50'13", long 95°13'59", Harris County, on right bank at downstream side of Ley Road Bridge, 300 ft (91 m) downstream from mouth of Halls Bayou, and in northeast Houston.

DRAINAGE AREA.--182 mi² (471 km²), corrected.

PERIOD OF RECORD.--Discharge: November 1962 to December 1964, May to September 1971 (discharge measurements only), October 1971 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.13 ft (0.649 m) below mean sea level, adjustment of 1973.

EXTREMES.--Current year: Maximum discharge, 5,300 ft³/s (150 m³/s) May 30 (gage height, 21.18 ft or 6.456 m); minimum not determined (affected by tides).

Period of record: Maximum discharge, 16,700 ft³/s (473 m³/s) June 13, 1973 (gage height, 34.27 ft or 10.445 m); minimum not determined (affected by tides).

REMARKS.--Discharge records good except those below 700 ft³/s (19.8 m³/s), which are poor. Discharge is computed for all storms which produce peak discharges over 700 ft³/s (19.8 m³/s). Tidal influences on the stage-discharge relationship affect discharge below about 500 ft³/s (14.2 m³/s). Discharge below 500 ft³/s (14.2 m³/s) is estimated following designated storm periods only.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-	2,400	-	160	1,110	-	-	450	580	1,490	80	
2	-	3,650	-	729	553	-	-	150	150	2,350	1,270	
3	-	1,150	-	651	160	-	-	-	-	1,080	293	
4	-	320	-	180	1,510	-	-	-	-	218	700	
5	-	100	-	60	880	-	-	-	-	70	3,760	
6	-	-	-	-	250	-	-	-	-	-	781	
7	-	-	-	-	150	-	-	-	-	-	185	
8	-	-	-	-	-	-	494	-	-	-	70	
9	-	-	-	-	-	-	500	-	180	-	-	
10	-	578	176	-	-	-	200	-	2,080	-	-	
11	-	2,660	1,290	-	-	-	100	343	1,450	-	-	
12	-	630	474	-	-	-	-	715	358	-	-	
13	-	250	120	-	-	-	-	130	120	-	-	
14	-	100	200	-	-	-	1,990	-	-	264	-	
15	-	-	1,350	-	-	-	1,190	-	-	816	-	
16	-	-	457	-	-	-	285	-	-	225	-	
17	-	-	120	-	-	-	140	-	-	80	-	
18	-	-	-	-	-	816	-	-	-	-	-	
19	-	-	-	-	-	308	-	-	-	-	-	
20	-	-	-	-	-	100	-	-	-	-	-	
21	-	-	-	-	-	-	-	-	-	-	-	
22	-	-	-	-	-	-	-	-	-	31	-	
23	-	-	-	-	-	-	-	-	-	1,340	-	
24	-	1,310	-	-	-	-	-	-	418	1,070	-	
25	-	1,500	-	-	-	-	-	-	161	567	-	
26	-	400	-	-	-	-	-	-	243	216	-	
27	-	100	-	-	-	-	-	-	316	60	-	
28	-	-	200	-	-	-	-	-	100	-	-	
29	-	-	412	-	-----	-	-	1,100	150	-	-	
30	-	-	776	-	-----	-	315	4,700	243	-	-	
31	567	-----	230	-	-----	-	-----	2,800	-----	-	-	-----
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-
MEAN	-	-	-	-	-	-	-	-	-	-	-	-
MAX	-	-	-	-	-	-	-	-	-	-	-	-
MIN	-	-	-	-	-	-	-	-	-	-	-	-
AC-FT	-	-	-	-	-	-	-	-	-	-	-	-
CAL YR 1974	TOTAL -	MEAN -	MAX -	MIN -	AC-FT -							
WTR YR 1975	TOTAL -	MEAN -	MAX -	MIN -	AC-FT -							

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 2	1100	18.94	4,180	5-30	0700	21.18	5,300
11-11	0600	17.28	3,510	6-10	2000	16.87	3,350
11-24	2200	14.80	2,650	7- 2	1800	15.00	2,720
4-14	1800	16.95	3,380	8- 5	0700	20.02	4,700

SAN JACINTO RIVER BASIN

08076700 Greens Bayou at Ley Road, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
22...	0900	18	25	62	10	130	8.4	278	0	49
NOV.										
12...	0900	700	--	--	--	--	--	--	--	--
DEC.										
11...	1100	1500	8.0	28	3.1	24	2.4	91	0	11
JAN.										
28...	1045	58	--	--	--	--	--	--	--	--
FEB.										
04...	1230	1950	--	--	--	--	--	--	--	--
MAR.										
17...	1350	200	--	--	--	--	--	--	--	--
APR.										
22...	0940	400	7.7	36	6.4	47	3.8	124	0	18
30...	1345	430	--	--	--	--	--	--	--	--
MAY										
27...	1350	63	--	--	--	--	--	--	--	--
JULY										
16...	1000	280	--	--	--	--	--	--	--	--
AUG.										
05...	1100	4500	5.5	19	2.3	11	1.9	68	0	9.3
SEP.										
15...	1100	28	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
22...	150	--	.79	.11	6.8	2.1	8.9	7.7	572	35
NOV.										
12...	--	--	.13	.03	.21	1.4	1.6	.59	--	442
DEC.										
11...	35	.2	.23	.03	.26	1.3	1.6	.64	157	451
JAN.										
28...	--	--	1.3	.25	1.8	1.6	3.4	2.5	--	52
FEB.										
04...	--	--	.19	.02	.17	1.8	2.0	.59	--	577
MAR.										
17...	--	--	1.5	.51	1.9	.70	2.6	3.6	--	35
APR.										
22...	67	.2	.56	.12	.37	2.5	2.9	1.4	248	380
30...	--	--	.92	.18	.92	3.1	4.0	1.2	--	449
MAY										
27...	--	--	.64	.46	.58	2.0	2.6	2.0	--	163
JULY										
16...	--	--	.22	.16	.50	1.1	1.6	.88	--	312
AUG.										
05...	15	.2	.11	.01	.04	1.3	1.3	.40	98	388
SEP.										
15...	--	--	1.4	.71	.69	2.7	3.4	3.8	--	51

SAN JACINTO RIVER BASIN

145

08076700 Greens Bayou at Ley Road, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 22...	17	200	0	4.0	1080	7.1	20.0	20	20
NOV. 12...	54	--	--	--	270	6.8	17.5	100	180
DEC. 11...	61	83	8	1.1	299	6.7	12.5	100	180
JAN. 28...	17	--	--	--	1400	7.3	20.5	30	20
FEB. 04...	73	--	--	--	336	6.8	14.5	80	260
MAR. 17...	27	--	--	--	1190	7.2	18.0	20	20
APR. 22...	66	120	15	1.9	486	7.3	24.5	50	190
30...	57	--	--	--	554	--	20.5	40	200
MAY 27...	38	--	--	--	628	--	27.5	30	95
JULY 16...	66	--	--	--	437	7.1	24.5	120	150
AUG. 05...	62	57	1	.6	180	7.0	24.0	120	200
SEP. 15...	24	--	--	--	851	7.6	26.0	30	20

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 22...	4.3	47	8.7	340000	12000	920	16	6	.3
NOV. 12...	7.9	82	4.0	69000	8400	2100	20	--	.1
DEC. 11...	8.6	80	6.3	930000	52000	33000	17	2	.1
JAN. 28...	--	--	7.5	1500000	200000	1700	15	--	.6
FEB. 04...	7.2	70	20	360000	68000	32000	20	--	.0
MAR. 17...	6.2	65	5.7	19000	1700	1	11	--	.4
APR. 22...	7.8	93	12	1300000	160000	24000	18	8	.0
30...	7.0	77	19	4000000	460000	69000	31	--	.0
MAY 27...	6.3	19	7.3	92000	7700	230	11	--	.2
JULY 16...	5.9	70	26	170000	46000	1100	12	--	.0
AUG. 05...	4.8	56	3.2	200000	46000	17000	12	7	.0
SEP. 15...	4.5	56	10	25000	5500	460	8.3	--	.8

SAN JACINTO RIVER BASIN

08076700 Greens Bayou at Ley Road, Houston, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
OCT. 22...	0900	50	31	370	0	0	1	6				
DEC. 11...	1100	--	--	70	--	--	--	--				
APR. 22...	0940	30	3	60	2	10	1	60				
AUG. 05...	1100	--	--	50	--	--	--	--				
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
OCT. 22...	150	10	30	0	.0	1	470	30				
DEC. 11...	--	--	--	--	--	--	--	--				
APR. 22...	40	4	10	3	.0	8	240	70				
AUG. 05...	--	--	--	--	--	--	--	--				
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	
OCT. 22...	0900	18	20.0	.00	.0	.00	2.7	.00	.1	.00	1.1	
DEC. 11...	1100	1500	12.5	.00	--	.00	--	.00	--	.00	--	
APR. 22...	0940	400	24.5	.00	.0	.01	1.9	.00	.0	.15	.4	
AUG. 05...	1100	4500	24.0	.00	--	.00	--	.00	--	.00	--	
DATE	TIME	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (16/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM TERIAL (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
OCT. 22...	.01	2.3	.00	.0	.00	.0	.00	.0	.02	.0	.1	
DEC. 11...	.00	--	.00	--	.00	--	.00	--	.00	--	.0	
APR. 22...	.04	1.6	.00	.0	.00	.0	.02	.0	.00	.0	.2	
AUG. 05...	.00	--	.00	--	.00	--	.01	--	.01	--	.0	
DATE	TIME	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
OCT. 22...	48	.0	8	.22	.01	.00	.00	.11	.00	.00		
DEC. 11...	--	.0	--	.06	.00	.00	.00	.00	.00	.09		
APR. 22...	14	.0	3	.41	.02	.00	.00	.01	.00	.13		
AUG. 05...	--	.0	--	.05	.00	.00	.00	.03	.00	.14		

CLEAR CREEK BASIN

147

08077000 Clear Creek near Pearland, Tex.

LOCATION.--Lat 29°35'50", long 95°17'11", Harris-Brazoria County line, at downstream side of pier of bridge on State Highway 35, 0.7 mile (1.1 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) upstream from Hickory Slough, 2.3 miles (3.7 km) north of Pearland, and about 30 miles (48 km) upstream from head of Clear Lake.

DRAINAGE AREA.--38.8 mi² (100.5 km²).

PERIOD OF RECORD.--July to October 1944, March to October 1946, April 1947 to December 1959, March 1963 to current year. Discharge for some high-water periods in 1944 and 1946 published in WSP 1392.

GAGE.--Water-stage recorder. Datum of gage is 26.58 ft (8.102 m) above mean sea level, adjustment of 1973; prior records unadjusted for land-surface subsidence. Prior to June 9, 1948, nonrecording gage, and June 9, 1948, to Apr. 22, 1952, water-stage recorder at same site and datum 5.80 ft (1.768 m) higher.

AVERAGE DISCHARGE.--24 years (1947-59, 1963-75), 35.6 ft³/s (1.008 m³/s), 25,790 acre-ft/yr (31.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,040 ft³/s (29.5 m³/s) June 10 (gage height, 15.45 ft or 4.709 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Oct. 25-27.

Period of record: Maximum discharge, 2,170 ft³/s (61.5 m³/s) Mar. 18, 1957 (gage height, 16.80 ft or 5.121 m); no flow at times.

Flood of June 26, 1960 (stage and discharge unknown), probably exceeded that of Mar. 18, 1957, from records of rainfall and nearby stations. Because of channel rectification in 1933, 1952, and 1968, there is no relation between historic floods and recent floods.

REMARKS.--Records fair. Large area of riceland above station is irrigated with water from the Brazos River. Low flow from April to October is largely drainage from irrigated lands. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1392: 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	799	16	86	44	2.4	3.5	65	368	162	15	16
2	10	571	10	188	80	1.7	3.6	33	166	170	54	10
3	7.0	254	7.7	206	53	1.3	2.7	14	72	105	135	9.7
4	5.7	204	5.9	104	82	2.3	2.3	204	33	92	176	13
5	5.1	209	5.6	56	97	2.5	2.4	243	19	32	204	13
6	5.5	109	75	38	55	2.5	5.5	131	24	17	83	11
7	5.8	69	70	164	30	3.0	6.6	60	18	12	43	9.6
8	6.9	132	40	269	20	2.5	3.9	33	12	9.2	28	7.7
9	5.1	105	22	140	16	2.5	4.2	68	88	6.4	25	6.0
10	3.8	116	28	119	13	2.6	5.3	75	832	6.0	24	4.6
11	3.1	406	224	77	14	2.5	10	61	785	6.9	27	5.8
12	2.6	229	140	58	25	2.4	4.2	165	378	9.0	37	3.7
13	2.4	115	72	49	19	4.2	3.0	89	186	9.7	38	5.6
14	2.4	63	47	35	15	3.7	211	229	86	10	61	4.0
15	3.9	35	120	27	12	4.6	204	140	42	32	43	2.7
16	5.9	22	94	22	11	3.5	85	63	24	64	26	2.3
17	3.8	28	51	23	9.2	2.3	37	35	19	48	22	2.5
18	2.8	29	30	152	7.7	35	22	20	28	35	24	3.4
19	2.2	25	22	198	6.3	20	15	13	20	37	14	3.5
20	1.9	22	16	89	5.3	10	9.7	12	20	28	9.8	5.9
21	1.6	15	11	50	4.6	6.3	29	27	21	23	7.6	9.0
22	1.4	9.1	7.8	38	5.0	5.3	41	13	29	19	57	4.4
23	1.4	7.2	6.6	32	4.9	4.3	23	9.4	36	17	99	2.3
24	1.2	87	8.6	26	3.2	4.0	16	18	83	40	35	2.8
25	1.1	272	10	26	2.4	3.3	16	65	64	53	19	5.6
26	1.1	146	68	22	2.5	2.2	17	37	45	52	29	3.6
27	1.1	80	100	18	3.0	2.1	12	24	28	41	27	2.2
28	9.9	47	136	16	3.4	2.1	7.4	60	29	28	15	1.6
29	3.3	32	132	14	---	2.0	4.9	112	28	17	12	1.5
30	2.5	24	167	12	---	2.2	14	391	40	15	16	1.3
31	145	---	112	11	---	3.0	---	760	---	13	22	---
TOTAL	268.5	4261.3	1855.2	2365	643.5	148.3	821.2	3269.4	3623	1209.2	1427.4	174.3
MEAN	8.66	142	59.8	76.3	23.0	4.78	27.4	105	121	39.0	46.0	5.81
MAX	145	799	224	269	97	35	211	760	832	170	204	16
MIN	1.1	7.2	5.6	11	2.4	1.3	2.3	9.4	12	6.0	7.6	1.3
AC-FT	533	8450	3680	4690	1280	294	1630	6480	7190	2400	2830	346

CAL YR 1974 TOTAL 23601.08 MEAN 64.7 MAX 824 MIN .81 AC-FT 46810
WTR YR 1975 TOTAL 20066.30 MEAN 55.0 MAX 832 MIN 1.1 AC-FT 39800

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE TIME G.H.T. DISCHARGE

11-1 1700 13.76 885
5-31 0500 13.99 848
6-10 1700 15.45 1,040

COASTAL BASIN

08077650 Moses Lake-Galveston Bay near Texas City, Tex.

LOCATION.--Lat 29°26'50", long 94°55'12", Galveston County, on right side of gate abutment of Texas City Flood Control Dike, one orifice located upstream and one downstream, at mouth of Moses Lake, and 4.5 miles (7.2 km) north of Texas City.

PERIOD OF RECORD.--May 1967 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is 0.49 ft (0.149 m) below mean sea level (levels by Corps of Engineers), adjustment of 1973. Prior records unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height (Moses Lake), 3.5 ft (1.07 m) Nov. 16; minimum, -1.5 ft (-0.46 m) Dec. 1. Maximum gage height (Galveston Bay), 3.3 ft (1.01 m) Oct. 28; minimum, -2.3 ft (-0.70 m) Dec. 1.
Period of record: Maximum gage height (Moses Lake), 3.8 ft (1.16 m) Sept. 9, 1971, and Mar. 23, 1973; minimum, -2.6 ft (-0.79 m) Mar. 12, 13, 1968. Maximum gage height (Galveston Bay), 4.7 ft (1.43 m) Feb. 14, 1969; minimum not recorded but probably occurred Mar. 12 or 13, 1968.

REMARKS.--The purpose of this station is to record gage heights of high tides in Galveston Bay and the corresponding gage heights of the water surface in Moses Lake. Moses Lake is connected to Galveston Bay by gated opening through levee. No gage heights are shown for Moses Lake until gage heights in Galveston Bay exceed 3.0 ft (0.91 m).

MAXIMUM DAILY GAGE HEIGHT, IN FEET, GALVESTON BAY AND MOSES LAKE
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake	Galv. Bay	Moses Lake
1	2.2	-	2.9	-	-0.7	-	1.3	-	1.5	-	1.2	-	2.0	-	2.7	-	1.9	-	1.6	-	-	-	2.4	-
2	2.2	-	2.5	-	.1	-	1.8	-	1.6	-	1.7	-	1.8	-	2.4	-	1.6	-	1.8	-	-	-	2.5	-
3	2.2	-	2.7	-	.4	-	1.8	-	1.5	-	2.7	-	1.0	-	2.1	-	1.7	-	2.0	-	-	-	2.2	-
4	2.3	-	2.6	-	.6	-	1.1	-	1.9	-	2.4	-	1.9	-	2.2	-	1.9	-	1.9	-	-	-	2.5	-
5	2.7	-	1.4	-	1.3	-	1.7	-	1.7	-	1.9	-	1.9	-	2.4	-	2.0	-	1.6	-	-	-	2.5	-
6	2.9	-	1.8	-	1.6	-	1.7	-	1.4	-	1.9	-	1.8	-	2.3	-	1.8	-	1.4	-	1.7	-	2.2	-
7	2.3	-	2.3	-	1.2	-	1.9	-	1.3	-	1.7	-	2.0	-	2.4	-	1.7	-	1.4	-	1.6	-	2.2	-
8	2.1	-	2.1	-	.6	-	1.8	-	1.7	-	1.4	-	2.3	-	2.9	-	1.7	-	1.3	-	1.5	-	2.5	-
9	1.9	-	2.0	-	1.2	-	2.0	-	1.8	-	2.6	-	2.0	-	3.2	2.6	2.5	-	1.3	-	1.7	-	2.7	-
10	1.9	-	2.3	-	2.4	-	2.5	-	1.8	-	2.6	-	1.9	-	2.1	-	2.5	-	1.3	-	-	-	2.6	-
11	2.0	-	1.8	-	2.4	-	1.6	-	2.0	-	1.7	-	1.9	-	2.5	-	2.1	-	-	-	-	-	2.6	-
12	2.0	-	.8	-	1.6	-	2.2	-	1.6	-	2.2	-	2.1	-	2.2	-	1.8	-	1.3	-	-	-	2.4	-
13	2.1	-	1.7	-	1.9	-	.3	-	1.3	-	2.0	-	2.7	-	2.1	-	1.6	-	1.4	-	-	-	2.3	-
14	2.4	-	1.7	-	1.9	-	.8	-	1.4	-	.7	-	2.2	-	2.3	-	1.4	-	-	-	-	-	2.5	-
15	2.4	-	2.0	-	2.0	-	1.1	-	2.0	-	2.2	-	1.9	-	1.6	-	1.9	-	-	-	1.4	-	2.5	-
16	1.4	-	2.6	-	1.5	-	1.2	-	2.0	-	2.1	-	2.1	-	1.4	-	2.0	-	1.5	-	-	-	2.5	-
17	1.8	-	2.8	-	.9	-	1.4	-	2.0	-	2.1	-	2.3	-	1.6	-	2.4	-	1.8	-	1.7	-	2.2	-
18	1.7	-	1.8	-	1.3	-	1.5	-	1.8	-	2.0	-	2.5	-	1.4	-	2.7	-	1.7	-	1.7	-	2.4	-
19	1.5	-	1.8	-	1.4	-	1.5	-	1.4	-	1.1	-	2.1	-	1.6	-	2.9	-	-	-	-	-	2.4	-
20	1.6	-	1.9	-	1.1	-	.6	-	2.2	-	1.5	-	2.5	-	1.8	-	2.6	-	1.7	-	1.5	-	2.1	-
21	2.4	-	1.2	-	1.2	-	1.7	-	2.4	-	1.6	-	2.5	-	2.1	-	2.4	-	1.6	-	1.5	-	2.9	-
22	2.4	-	1.5	-	1.7	-	1.9	-	2.8	-	1.6	-	2.3	-	2.1	-	2.4	-	1.7	-	1.8	-	2.2	-
23	2.5	-	1.4	-	1.8	-	2.0	-	2.6	-	1.9	-	2.1	-	2.4	-	2.5	-	-	-	1.9	-	2.0	-
24	2.4	-	1.5	-	1.7	-	2.0	-	.5	-	1.9	-	2.0	-	2.3	-	2.6	-	1.7	-	2.0	-	2.1	-
25	2.3	-	.9	-	1.4	-	1.8	-	.8	-	1.5	-	2.0	-	2.4	-	2.5	-	1.7	-	2.2	-	2.1	-
26	2.0	-	1.9	-	1.8	-	1.3	-	1.3	-	2.9	-	2.3	-	2.2	-	2.1	-	1.7	-	2.1	-	2.2	-
27	2.3	-	1.9	-	1.8	-	1.4	-	1.1	-	3.2	2.5	2.5	-	2.0	-	1.9	-	-	-	2.3	-	2.2	-
28	3.3	2.7	1.8	-	1.5	-	1.7	-	1.1	-	2.8	-	2.7	-	2.6	-	1.8	-	-	-	2.4	-	2.1	-
29	3.0	2.7	2.0	-	1.5	-	1.7	-	---	---	2.3	-	2.4	-	3.0	2.8	1.5	-	-	-	2.5	-	1.9	-
30	2.6	-	1.1	-	1.6	-	1.4	-	---	---	1.2	-	2.5	-	2.9	-	1.5	-	-	-	2.5	-	1.9	-
31	2.9	-	---	---	1.6	-	1.6	-	---	---	1.9	-	---	---	2.5	-	---	---	-	-	2.6	-	---	---

08077700 Highland Bayou at Hitchcock, Tex.

LOCATION.--Lat 29°21'12", long 95°01'49", Galveston County, at downstream side of bridge on Farm Road 2004, 0.6 mile (1.0 km) west of Hitchcock, and 7 miles (11 km) from mouth and Jones Bay.

DRAINAGE AREA.--15.6 mi² (40.4 km²).

PERIOD OF RECORD.--August 1963 to current year (elevations only prior to 1973, beginning 1973 gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 0.80 ft (0.244 m) below mean sea level, adjustment of 1973; unadjusted for land-surface subsidence.

EXTREMES.--Current year: Maximum gage height, 6.77 ft (2.064 m) May 30; minimum, -1.09 ft (-0.332 m) Feb. 24.

Period of record: Maximum gage height, 10.51 ft (3.203 m) Mar. 23, 1973; minimum unknown.

Maximum elevation since at least 1930, 14.6 ft (4.45 m) July 25, 1959, from information by local residents.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.
1	2.61	1.96	3.23	2.23	0.35	-0.84	2.04	0.66	2.09	1.38	1.74	0.98	2.54	1.12	3.13	2.07	3.88	2.06	2.18	1.65	1.73	0.89	2.80	1.77
2	2.50	1.83	3.05	1.94	.72	-.28	3.10	2.04	1.93	1.02	2.22	.78	2.37	1.38	2.79	2.05	2.15	1.64	2.32	1.50	2.60	.99	2.84	1.77
3	2.52	1.84	3.06	2.06	.96	.03	2.34	1.36	1.85	.92	2.93	1.42	1.41	.11	2.61	2.02	2.17	1.50	2.67	1.58	2.54	1.38	2.60	1.82
4	2.75	1.97	2.90	1.63	1.00	.24	1.66	.95	2.18	1.16	2.93	1.83	2.30	1.20	4.13	2.08	2.43	1.51	2.59	1.41	5.38	1.33	3.06	1.78
5	3.06	2.22	1.93	.97	2.04	1.00	2.10	1.05	2.12	1.04	2.39	1.29	2.43	1.66	2.94	2.27	2.50	1.57	2.58	1.12	3.46	1.38	2.99	2.16
6	3.19	2.07	2.16	1.60	2.12	1.38	2.12	1.14	1.95	.36	2.30	1.40	2.25	1.72	2.78	2.38	2.30	1.35	1.92	1.00	2.16	1.07	4.72	2.18
7	2.75	1.60	2.57	2.00	1.75	.50	3.22	1.52	1.82	.40	2.24	1.13	2.43	1.87	2.80	2.10	2.22	1.24	1.97	.76	2.16	1.13	3.30	2.09
8	2.46	1.45	2.55	1.87	1.06	.13	2.75	1.42	2.08	1.16	1.83	.57	2.91	2.19	3.35	2.07	2.26	1.05	1.84	.80	2.13	1.20	3.12	2.42
9	2.25	1.29	2.42	1.85	1.62	.30	2.62	1.11	2.18	.70	2.92	1.83	2.50	1.75	3.43	2.21	2.67	1.16	1.87	.63	2.20	1.27	3.20	2.18
10	2.16	1.49	2.79	2.17	2.97	1.03	2.87	1.67	2.25	1.22	2.90	1.82	2.33	1.49	2.64	1.75	3.39	1.48	1.91	.76	2.15	1.58	3.05	2.12
11	2.45	1.61	2.36	1.02	3.15	1.93	1.91	.73	2.45	1.70	2.32	1.67	2.26	1.63	3.38	1.45	2.89	1.91	1.65	.81	1.93	1.40	3.00	1.96
12	2.50	1.77	1.30	-.07	2.24	.91	2.25	.82	1.80	.87	2.60	2.15	2.65	1.58	3.40	2.05	2.39	1.52	1.83	.82	2.22	1.42	2.84	2.17
13	2.59	1.95	2.01	.85	2.35	1.23	.85	-.08	1.79	1.16	2.37	.61	3.19	2.02	2.56	1.52	2.12	1.23	1.86	1.17	2.24	1.25	2.83	1.88
14	2.78	2.15	2.05	.48	2.43	1.48	1.28	.90	1.86	1.50	1.24	.04	2.74	1.93	2.72	1.41	2.00	1.18	1.90	1.42	2.17	1.09	3.03	2.13
15	2.65	1.16	2.35	1.12	2.37	1.25	1.53	.80	2.42	1.62	2.76	1.07	2.42	1.28	1.86	1.17	2.37	1.61	2.15	1.30	2.08	1.09	2.93	1.95
16	1.93	.85	3.65	2.35	1.90	.73	1.70	1.03	2.24	1.72	2.55	1.87	2.53	1.51	1.89	.85	2.44	1.78	2.26	1.33	2.21	1.10	2.84	1.83
17	2.15	1.25	3.77	2.08	1.47	.41	1.96	1.17	2.47	1.25	2.64	1.19	2.74	1.60	2.02	1.03	2.87	2.12	2.37	1.33	2.12	1.00	2.65	2.07
18	2.58	1.00	2.37	1.45	1.74	1.05	1.96	1.60	2.26	1.63	2.52	1.47	2.85	1.79	1.90	1.13	3.27	2.15	2.25	1.35	2.08	1.02	2.90	1.91
19	1.88	.81	2.33	1.44	1.66	.94	1.94	.45	1.93	.72	1.55	.53	2.53	1.44	2.15	1.38	3.29	2.20	2.40	1.24	2.03	1.10	2.79	2.30
20	1.99	1.37	2.21	.98	1.42	.53	1.19	-.10	2.52	1.10	2.00	.62	2.83	1.57	2.39	1.86	2.95	1.85	2.27	1.22	2.03	1.09	2.77	2.07
21	2.84	1.90	1.64	1.01	1.66	.93	2.17	.73	2.84	1.65	2.08	1.10	3.03	2.47	2.62	1.76	2.83	1.72	2.15	1.08	2.07	1.13	2.85	2.29
22	2.74	2.13	1.85	1.18	2.16	1.18	2.47	1.38	3.01	2.13	2.00	.92	2.94	2.32	2.68	1.73	2.77	1.72	2.17	1.12	2.37	1.32	3.00	2.04
23	2.90	2.05	1.85	1.50	2.25	1.54	2.47	1.46	2.82	.15	2.32	1.49	2.68	2.05	2.85	1.85	2.93	1.62	2.26	1.19	2.32	1.55	2.73	1.88
24	2.82	2.15	2.84	1.66	1.98	1.28	2.37	1.28	.16	-1.09	2.36	1.15	2.54	1.85	2.78	1.75	3.36	1.95	2.12	1.35	2.33	1.87	2.57	1.76
25	2.68	1.90	2.39	1.10	2.23	.81	2.27	.76	1.10	-.54	1.94	1.15	2.53	1.75	2.91	1.67	3.23	1.95	2.20	1.22	2.60	2.00	2.39	1.67
26	2.54	1.90	2.23	1.22	3.94	1.90	1.85	.85	1.74	1.10	3.43	1.85	2.87	1.60	2.63	1.66	2.54	1.89	2.12	1.52	2.45	1.95	2.62	1.65
27	2.75	2.02	2.32	1.19	2.88	1.75	1.99	.99	1.60	1.08	3.76	3.12	3.01	2.01	2.50	1.41	2.34	1.54	1.98	1.48	2.65	2.05	2.55	1.79
28	3.53	2.64	2.16	1.01	2.15	1.27	2.17	1.32	1.62	1.02	3.37	2.62	3.01	2.04	2.88	1.51	2.25	1.37	1.90	1.39	2.82	1.98	2.40	1.44
29	3.30	2.34	2.49	1.65	2.10	1.13	2.15	1.23	-----	-----	2.85	1.82	2.84	1.83	2.98	1.92	2.00	1.37	2.23	1.61	2.82	1.87	2.25	1.42
30	3.05	2.26	1.75	-.38	2.13	1.15	2.01	1.43	-----	-----	1.88	.83	2.71	2.00	6.77	2.52	1.95	1.49	2.06	1.13	2.80	1.91	2.33	1.35
31	3.36	2.57	-----	-----	2.12	1.16	2.18	1.64	-----	-----	2.42	1.04	-----	-----	5.88	3.88	-----	-----	1.40	.82	3.05	1.80	-----	-----

CHOCOLATE BAYOU BASIN

08078000 Chocolate Bayou near Alvin, Tex.

LOCATION.--Lat 29°22'09", long 95°19'14", Brazoria County, on right bank 800 ft (240 m) downstream from bridge on Farm Road 1462, 5.9 miles (9.5 km) southwest of Alvin, and 6.9 miles (11.1 km) upstream from State Highway 35.

DRAINAGE AREA.--87.7 mi² (227.1 km²).

PERIOD OF RECORD.--Discharge: August to October 1944 and March to December 1946 (low-water records during irrigation season), January 1947 to February 1958, March 1958 to February 1959 (discharge measurements only), March 1959 to current year.
Water quality: Chemical, biochemical, and pesticide analyses: May 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.31 ft (3.142 m) above mean sea level. Prior to May 3, 1959, nonrecording gage or water-stage recorders located at various sites from 900 to 1,400 ft (270 to 427 m) upstream and at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--26 years (1947-57, 1959-75), 106 ft³/s (3.002 m³/s), 76,800 acre-ft/yr (94.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,210 ft³/s (90.9 m³/s) June 1 (gage height, 19.66 ft or 5.992 m); minimum daily, 3.7 ft³/s (0.10 m³/s) Oct. 28.

Period of record: Maximum discharge, 7,400 ft³/s (210 m³/s) Oct. 8, 1949 (gage height, 21.80 ft or 6.645 m, present datum, from floodmark before channel rectification), from rating curve extended above 3,800 ft³/s (108 m³/s); no flow at times.

Maximum stage in recent years, 22.9 ft (6.98 m) July 14, 1939, former site and present datum (adjusted from floodmark 1,700 ft or 518 m to right and 550 ft or 168 m upstream from present gage, on basis of slope of flood of Oct. 8, 1949), from information by local residents.

REMARKS.--Discharge records fair except those for period of no gage-height record, which are poor. Large area of riceland above station is irrigated with water from Brazos River. Low flow from April to October is largely drainage from irrigated lands. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	1850	43	200	18	6.2	26	188	2990	210	72	50
2	50	2480	30	350	75	6.0	33	115	1940	244	82	37
3	45	1740	24	500	250	6.0	18	53	600	222	114	30
4	40	595	19	400	150	7.0	11	187	189	170	145	26
5	35	332	18	300	80	15	17	158	112	146	151	22
6	30	185	29	200	50	10	19	72	88	131	142	19
7	27	117	40	170	35	7.0	22	48	75	116	113	16
8	25	115	33	150	30	6.0	20	33	73	102	87	18
9	22	101	24	100	25	5.8	44	47	86	96	84	13
10	20	119	42	125	20	5.8	49	60	204	95	94	13
11	18	643	650	104	25	6.0	62	66	605	87	115	25
12	16	391	378	69	60	6.3	53	117	595	103	82	23
13	15	171	200	58	40	6.7	49	78	345	109	91	20
14	20	96	100	41	25	7.7	133	62	218	89	88	18
15	30	59	300	30	20	11	168	62	144	108	80	17
16	25	48	200	25	17	16	63	69	123	164	65	18
17	15	193	130	28	14	26	36	75	99	153	55	17
18	11	197	80	175	12	35	22	62	79	136	45	14
19	9.0	131	60	251	10	40	19	50	68	133	50	11
20	8.0	112	50	121	9.0	21	16	49	76	114	45	9.7
21	7.0	66	40	62	8.5	15	18	57	74	90	40	12
22	6.0	44	30	44	8.0	15	20	58	83	84	100	11
23	5.0	32	25	36	7.5	15	27	60	91	95	150	8.6
24	4.8	297	30	29	7.2	16	20	85	94	101	120	8.3
25	5.0	622	40	26	7.0	14	25	168	178	101	100	8.8
26	5.0	277	100	22	6.8	18	52	161	190	106	120	8.9
27	4.4	133	150	19	6.6	17	62	120	245	102	150	11
28	3.7	79	200	17	6.4	28	48	107	452	89	200	10
29	4.8	56	200	15	---	27	44	131	310	83	142	7.1
30	5.7	52	300	14	---	34	99	1290	215	73	125	6.2
31	29	---	250	13	---	30	---	2600	---	70	78	---
TOTAL	596.4	11333	3815	3694	1023.0	479.5	1295	6488	10641	3722	3125	508.6
MEAN	19.2	378	123	119	36.5	15.5	43.2	209	355	120	101	17.0
MAX	55	2480	650	500	250	40	168	2600	2990	244	200	50
MIN	3.7	32	18	13	6.4	5.8	11	33	68	70	40	6.2
AC-FT	1180	22480	7570	7330	2030	951	2570	12870	21110	7380	6200	1010

CAL YR 1974 TOTAL 56565.6 MEAN 155 MAX 2510 MIN 3.7 AC-FT 112200
WTR YR 1975 TOTAL 46720.5 MEAN 128 MAX 2990 MIN 3.7 AC-FT 92670

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Nov. 2 (1230) 2,550 ft³/s (18.75 ft); June 1 (0200) 3,210 ft³/s (19.66 ft).

NOTE.--No gage-height record Feb. 2 to Mar. 13.

CHOCOLATE BAYOU BASIN

151

08078000 Chocolate Bayou near Alvin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
29...	1245	6.9	18	68	19	180	3.2	281	0	150
NOV.										
19...	0945	127	--	--	--	--	--	--	--	--
DEC.										
02...	0930	32	15	50	13	72	2.6	178	0	53
JAN.										
08...	1130	200	--	--	--	--	--	--	--	--
FEB.										
05...	1145	70	--	--	--	--	--	--	--	--
MAR.										
03...	1100	6.5	--	--	--	--	--	--	--	--
APR.										
28...	1230	32	8.0	70	20	100	4.8	146	0	110
MAY										
21...	1040	92	--	--	--	--	--	--	--	--
JULY										
24...	1100	98	--	--	--	--	--	--	--	--
AUG.										
13...	1030	86	13	39	13	49	4.4	180	0	20
SEP.										
09...	1100	15	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT.										
29...	170	--	.01	.00	.02	.61	.63	.28	748	64
NOV.										
19...	--	--	.02	.01	.03	.64	.67	.16	--	125
DEC.										
02...	97	.4	.02	.00	.03	.51	.54	.17	391	76
JAN.										
08...	--	--	.06	.01	.10	1.4	1.5	.19	--	261
FEB.										
05...	--	--	.12	.02	.13	1.4	1.5	.14	--	305
MAR.										
03...	--	--	.04	.00	.13	.76	.89	.11	--	78
APR.										
28...	160	.1	2.2	.05	.10	1.6	1.7	.15	546	104
MAY										
21...	--	--	.71	.59	.71	3.3	4.0	.11	--	159
JULY										
24...	--	--	.01	.01	.04	.82	.86	.12	--	74
AUG.										
13...	72	.4	.03	.00	.00	.67	.67	.06	300	45
SEP.										
09...	--	--	.02	.01	.03	1.6	1.6	.11	--	137

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.									
29...	26	250	18	5.0	1280	7.4	25.5	10	35
NOV.									
19...	41	--	--	--	467	7.1	22.5	60	65
DEC.									
02...	22	180	32	2.3	725	7.6	8.5	30	45
JAN.									
08...	58	--	--	--	459	6.7	18.5	100	130
FEB.									
05...	42	--	--	--	650	7.3	17.5	60	150
MAR.									
03...	18	--	--	--	1500	7.7	19.0	20	35
APR.									
28...	5	260	140	2.7	1050	6.7	25.0	40	50
MAY									
21...	22	--	--	--	--	7.0	25.5	50	75
JULY									
24...	23	--	--	--	638	7.7	28.5	20	40
AUG.									
13...	12	150	3	1.7	552	7.3	27.0	40	25
SEP.									
09...	29	--	--	--	920	7.3	27.0	30	65

CHOCOLATE BAYOU BASIN

08078000 Chocolate Bayou near Alvin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 29...	5.9	71	1.5	29000	120	230	7.1	2	.0
NOV. 19...	8.2	93	2.4	39000	1200	1200	15	--	.0
DEC. 02...	11.2	95	2.9	8000	330	150	17	1	.4
JAN. 08...	8.6	91	2.9	28000	3200	2500	--	--	.0
FEB. 05...	8.1	84	5.0	72000	3900	7300	13	--	.2
MAR. 03...	6.6	70	1.7	2400	180	74	5.2	--	.0
APR. 28...	9.0	10	4.1	26000	850	390	12	4	.1
MAY 21...	6.0	72	4.8	49000	3100	5200	12	--	.2
JULY 24...	7.3	94	2.3	4400	170	420	9.0	--	.1
AUG. 13...	6.5	80	1.1	11000	120	330	12	2	.1
SEP. 09...	5.8	72	1.8	11000	110	230	14	--	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 29...	1245	40	6	300	<1	0	1	6
APR. 28...	1230	<10	2	120	0	0	0	3
AUG. 13...	1030	--	--	90	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 29...	10	10	30	0	.0	1	490	50
APR. 28...	40	1	0	5	.1	2	640	20
AUG. 13...	--	--	--	--	--	--	--	--

CHOCOLATE BAYOU BASIN

153

08078000 Chocolate Bayou near Alvin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
OCT. 29...	1245	6.9	25.5	.00	.2	.00	.6	.00	1.5	.00	1.5
DEC. 02...	0930	32	8.5	.00	.0	.00	.0	.00	.0	.00	.0
APR. 28...	1230	32	25.0	.00	--	.00	--	.00	--	.00	--
AUG. 13...	1030	86	27.0	.00	.6	.00	.0	.00	.6	.00	.0

DATE	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
OCT. 29...	.01	.5	.00	.0	.00	.0	.00	.0	.00	.0	.0
DEC. 02...	.00	1.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 28...	.02	--	.00	--	.00	--	.00	--	.00	--	.0
AUG. 13...	.01	3.4	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
OCT. 29...	0	.0	0	.00	.00	.00	.00	.02	.00	.00
DEC. 02...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 28...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
AUG. 13...	1	.0	2	.00	.00	.00	.00	.00	.00	.00

OYSTER CREEK BASIN

08079000 Oyster Creek near Angleton, Tex.

LOCATION.--Lat 29°09'30", long 95°28'32", Brazoria County, near center of low-water channel at downstream side of bridge on State Highway 35, 2.7 miles (4.3 km) west of Angleton, 4.1 miles (6.6 km) upstream from Missouri Pacific Railroad Co. bridge, 4.5 miles (7.2 km) downstream from Styles Bayou, and about 45 miles (72 km) upstream from Gulf of Mexico.

DRAINAGE AREA.--171 mi² (443 km²).

PERIOD OF RECORD.--October 1944 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 1.31 ft (0.399 m) below mean sea level. Prior to Apr. 30, 1958, at site 500 ft (150 m) downstream at same datum.

AVERAGE DISCHARGE.--31 years, 182 ft³/s (5.154 m³/s), 131,900 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.6 m³/s) June 1 (gage height, 20.52 ft or 6.254 m); minimum daily, 76 ft³/s (2.15 m³/s) Sept. 16.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) May 10, 1957 (gage height, 31.45 ft or 9.586 m, present site, overflow from Brazos River); minimum daily, 0.3 ft³/s (0.008 m³/s) at times in 1955-56.

Maximum stage since about 1900, 32.2 ft (9.81 m) in December 1913; flood of Dec. 5, 1940, reached a stage of 30.9 ft (9.42 m), from information by State Highway Department. At extreme high stages the Brazos River overflows into Oyster Creek above this station.

REMARKS.--Records good. Diversions above station for irrigation. A large part of flow is water released from Harris Reservoir (capacity, 12,000 acre-ft or 14.8 hm³) for industrial use below station. Harris Reservoir is supplied with water diverted from Brazos River during periods of floodflow.

COOPERATION.--Records of water released from Harris Reservoir into Oyster Creek above station furnished by Dow Chemical Co.

REVISIONS (WATER YEARS).--WSP 1392: 1947.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	331	120	240	163	123	124	120	1,190	87	98	107
2	113	779	108	276	168	123	132	119	1,170	86	159	105
3	112	672	110	314	169	124	133	117	972	85	214	98
4	112	483	161	298	174	124	133	127	704	97	129	96
5	111	320	167	269	179	123	132	117	435	95	104	96
6	110	227	174	250	153	123	132	123	262	97	92	237
7	110	184	183	265	141	122	131	116	195	93	90	261
8	109	166	175	382	134	121	132	114	161	90	95	148
9	108	155	166	343	118	120	138	122	137	94	98	103
10	124	153	164	297	115	120	140	122	135	95	98	106
11	128	201	378	279	115	121	136	121	159	94	98	122
12	145	213	456	262	122	120	141	123	212	96	91	107
13	148	196	350	251	125	120	147	121	184	95	90	151
14	146	177	277	235	121	120	149	119	145	94	89	120
15	131	155	244	223	118	119	156	118	124	106	90	93
16	131	116	223	215	119	119	140	114	114	109	95	76
17	140	405	206	208	134	120	124	117	107	107	94	80
18	148	290	195	213	134	122	122	115	102	102	93	86
19	152	171	192	259	131	121	124	114	96	94	89	88
20	153	144	189	258	129	121	128	116	107	92	88	89
21	150	122	185	231	128	120	130	123	113	91	89	93
22	145	117	183	210	127	120	137	125	111	103	113	91
23	143	110	180	198	126	122	128	123	108	111	176	90
24	142	183	178	188	125	121	117	123	105	105	149	89
25	141	358	181	181	124	119	115	126	115	110	130	88
26	141	290	198	175	123	119	132	128	93	107	98	91
27	141	210	201	170	123	118	131	121	85	98	87	91
28	143	143	228	167	123	121	127	100	114	95	85	90
29	143	128	269	164	-----	124	116	97	104	93	93	90
30	143	138	273	162	-----	123	114	304	94	93	102	87
31	143	-----	252	160	-----	122	-----	934	-----	98	104	-----
TOTAL	4,120	7,337	6,566	7,343	3,761	3,755	3,941	9	7,753	3,012	3,320	3,269
MEAN	133	245	212	237	134	121	131	1	258	97.2	107	109
MAX	153	779	456	382	179	124	156		1,190	111	214	261
MIN	108	110	108	160	115	118	114		85	85	85	76
AC-FT	8,170	14,550	13,020	14,560	7,460	7,450	7,820	9	15,380	5,970	6,590	6,480
(†)	7,630	4,150	7,680	8,580	5,720	6,460	6,640	5	1,580	4,450	4,840	4,360

CAL YR 1974 TOTAL 73,134 MEAN 200 MAX 1,280 MIN 64 AC-FT 145,10†
WTR YR 1975 TOTAL 58,856 MEAN 161 MAX 1,190 MIN 76 AC-FT 116,70†

PEAK DISCHARGE (BASE, 800 FT³/S).--Nov. 2 (1300) 802 ft³/s (17.32 ft); June 1 (2100) J ft³/s (20.52 ft).

† Disch: in acre-feet, released from Harris Reservoir into Oyster Creek above (included in total flow past gage).

08079100 East Levee Ditch-Gulf of Mexico near Freeport, Tex.

LOCATION.--Lat 28°57'38", long 95°18'34", Brazoria County, on County Road 690, in room at left end of East Union Bayou drainage structure of East Levee, one orifice located upstream and one downstream from levee, 0.9 mile (1.4 km) above Intracoastal Waterway, and 2.4 miles (3.9 km) east of Freeport.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation (East Levee Ditch), 2.4 ft (0.73 m) May 30; minimum, -1.4 ft (-0.43 m) Dec. 1.

Maximum elevation (Gulf of Mexico), 3.4 ft (1.04 m) Mar. 27; minimum, -1.7 ft (-0.52 m) Dec. 1.

Period of record: Maximum elevation (East Levee Ditch), 4.4 ft (1.34 m) Oct. 13, 14, 1973; minimum not determined. Maximum elevation (Gulf of Mexico), 5.5 ft (1.68 m) Sept. 10, 1971; minimum, -2.2 ft (-0.67 m) Feb. 3, 1970.

REMARKS.--The purpose of this station is to record elevations of high tides in the Gulf of Mexico and the corresponding elevations of the water surface behind the levee. No elevations are shown for East Levee Ditch until elevations in the Gulf of Mexico exceed 3.0 ft (0.91 m). The levee is an earthen structure about 43 miles (69 km) long with a maximum height of 22 ft (6.7 m) above mean sea level. Gravity drainage structures with flapper gates and pumps to remove floodwaters from behind levee are located at various points along the levee.

MAXIMUM DAILY ELEVATION, IN FEET, GULF OF MEXICO AND EAST LEEVE DITCH
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP			
	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch	Gulf of Mex.	East Levee Ditch		
1	-	-	-	-	0.8	-	1.9	-	1.9	-	1.7	-	2.4	-	3.2	1.4	-	2.2	2.0	-	1.5	-	2.8	-		
2	-	-	-	-	1.2	-	2.2	-	1.7	-	2.0	-	2.3	-	2.6	-	-	1.9	2.0	-	1.9	-	2.8	-		
3	-	-	-	-	1.3	-	1.7	-	1.8	-	2.5	-	1.4	-	2.4	-	-	2.1	-	-	2.2	-	2.6	-		
4	-	-	-	-	1.4	-	1.6	-	2.3	-	2.2	-	2.3	-	2.5	-	-	2.3	-	-	2.1	-	2.8	-		
5	-	-	-	-	-	-	1.9	-	1.9	-	2.3	-	2.2	-	2.6	-	2.2	-	2.2	-	2.0	-	2.8	-		
6	-	-	-	-	1.7	-	1.8	-	1.6	-	2.1	-	2.0	-	2.5	-	2.1	-	2.0	-	2.1	-	2.7	-		
7	-	-	-	-	1.2	-	2.3	-	1.9	-	1.7	-	2.2	-	2.6	-	2.1	-	1.8	-	2.1	-	2.8	-		
8	-	-	-	-	1.1	-	1.9	-	2.1	-	2.0	-	2.4	-	2.9	-	2.3	-	1.7	-	2.0	-	3.0	1.6		
9	-	-	-	-	1.5	-	2.5	-	1.8	-	2.9	-	2.4	-	-	-	2.4	-	1.7	-	2.1	-	2.9	-		
10	-	-	-	-	3.0	-	2.4	-	2.2	-	2.4	-	2.1	-	-	-	2.8	-	1.8	-	2.0	-	2.8	-		
11	-	-	-	-	2.0	-	2.6	-	2.1	-	2.0	-	2.4	-	-	-	2.6	-	1.8	-	1.8	-	2.8	-		
12	-	-	-	-	2.4	-	2.6	-	1.5	-	2.4	-	2.4	-	-	-	2.5	-	2.0	-	2.0	-	2.7	-		
13	-	-	-	-	2.0	-	1.1	-	1.8	-	2.3	-	2.9	-	-	-	2.1	-	1.9	-	2.0	-	2.7	-		
14	-	-	-	-	2.3	-	1.4	-	1.7	-	1.2	-	2.6	-	-	-	1.9	-	2.1	-	2.0	-	3.1	1.5		
15	-	-	-	-	2.0	-	1.4	-	2.3	-	2.3	-	2.3	-	-	-	2.0	-	2.1	-	2.0	-	2.9	-		
16	-	-	-	-	1.6	-	1.5	-	2.0	-	2.3	-	2.4	-	-	-	2.3	-	2.0	-	2.0	-	2.7	-		
17	-	-	-	-	1.3	-	1.7	-	2.3	-	2.3	-	2.4	-	-	-	2.5	-	2.2	-	2.0	-	2.6	-		
18	-	-	-	-	1.6	-	1.8	-	2.0	-	2.2	-	2.5	-	-	-	2.8	-	2.2	-	2.0	-	2.5	-		
19	-	-	-	-	1.5	-	1.4	-	1.8	-	1.6	-	2.3	-	-	-	2.9	-	2.4	-	1.9	-	2.5	-		
20	-	-	-	-	1.3	-	1.1	-	2.4	-	1.8	-	2.9	-	-	-	2.8	-	2.2	-	1.8	-	2.5	-		
21	-	-	-	-	1.5	-	1.9	-	2.7	-	1.8	-	2.9	-	-	-	2.9	-	2.1	-	1.8	-	3.2	1.6		
22	-	-	-	-	1.8	-	2.4	-	2.9	-	1.8	-	2.7	-	-	-	2.8	-	2.1	-	2.0	-	3.0	1.6		
23	-	-	-	-	1.9	-	2.6	-	1.8	-	2.0	-	2.4	-	-	-	2.8	-	2.1	-	2.1	-	2.8	-		
24	-	-	-	-	1.7	-	2.4	-	1.4	-	2.0	-	2.5	-	-	-	3.0	1.4	2.0	-	2.0	-	2.4	-		
25	-	-	1.5	-	2.0	-	1.8	-	1.3	-	1.8	-	2.5	-	-	-	2.7	-	1.8	-	2.4	-	2.4	-		
26	-	-	2.2	-	2.5	-	1.9	-	1.6	-	2.9	-	2.8	-	-	-	2.4	-	2.0	-	2.2	-	2.5	-		
27	-	-	1.8	-	2.3	-	2.0	-	1.6	-	3.4	0.4	2.9	-	-	-	2.2	-	1.8	-	2.4	-	2.5	-		
28	-	-	2.2	-	2.2	-	1.8	-	1.7	-	3.1	1.4	3.0	1.2	-	-	2.2	-	1.8	-	2.5	-	2.4	-		
29	-	-	2.5	-	2.2	-	1.8	-	---	---	2.6	-	2.9	-	-	-	1.9	-	2.0	-	2.6	-	2.3	-		
30	-	-	1.1	-	2.2	-	1.8	-	---	---	1.9	-	2.8	-	-	-	2.4	1.8	-	1.8	-	2.6	-	2.3	-	
31	-	-	---	---	2.1	-	2.0	-	---	---	2.3	-	---	---	-	-	2.4	---	---	---	1.4	-	2.8	-	---	---

COASTAL BASIN

08079150 South Levee Ditch-Gulf of Mexico near Freeport, Tex.

LOCATION.--Lat 28°55'28", long 95°21'23", Brazoria County, on southern arm of levee, in room at right end of South Levee drainage structure, one orifice located upstream and one downstream from levee, 0.6 mile (1.0 km) upstream from Intracoastal Waterway, 0.7 mile (1.1 km) west of State Highway 1495, and 1.7 miles (2.7 km) southwest of Freeport.

PERIOD OF RECORD.--May 1970 to current year.

GAGE.--Duplex water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation (South Levee Ditch), 3.3 ft (1.01 m) Nov. 2 minimum, 0.1 ft (0.03 m) Sept. 30. Maximum elevation (Gulf of Mexico), 3.4 ft (1.04 m) Mar. 27; minimum, 0.1 ft (0.03 m) Feb. 24.

Period of record: Maximum elevation (South Levee Ditch), 3.3 ft (1.01 m) Oct. 13, 1973, Nov. 2, 1974; minimum not determined. Maximum elevation (Gulf of Mexico), 5.8 ft (1.77 m) Sept. 10, 1971; minimum, -0.4 ft (-0.12 m) July 21, 22, 24, 30, 1971.

REMARKS.--The purpose of this station is to record elevations of high tides in the Gulf of Mexico and the corresponding elevation of the water surface behind the levee. No elevations are shown for South Levee Ditch until those in the Gulf of Mexico exceed 3.0 ft (0.91 m). The levee is an earthen structure with a maximum elevation of 22 ft (6.7 m) above mean sea level. Gravity drainage structures with flapper gates and pumps to remove floodwaters from behind levee are located along the levee.

MAXIMUM DAILY ELEVATION, IN FEET, GULF OF MEXICO AND SOUTH LEEVE DITCH
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch	Gulf of Mex.	South Levee Ditch
1	-	-	2.9	-	1.0	-	1.8	-	2.0	-	1.8	-	2.3	-	3.1	0.4	-	-	2.0	-	1.5	-	2.8	-
2	-	-	2.9	-	1.3	-	2.1	-	1.8	-	2.0	-	2.2	-	2.6	-	-	-	2.1	-	1.8	-	2.8	-
3	-	-	2.8	-	1.3	-	1.9	-	1.8	-	2.5	-	1.4	-	2.4	-	-	-	2.1	-	-	-	2.6	-
4	-	-	2.7	-	1.4	-	1.6	-	2.2	-	2.2	-	2.2	-	2.3	-	-	-	2.3	-	-	-	2.9	-
5	-	-	2.3	-	1.9	-	1.8	-	2.0	-	2.3	-	2.2	-	2.4	-	2.2	-	2.3	-	-	-	2.8	-
6	-	-	2.5	-	1.9	-	1.7	-	1.6	-	2.2	-	2.0	-	2.4	-	2.1	-	2.1	-	-	-	2.6	-
7	-	-	2.6	-	1.5	-	2.1	-	2.0	-	1.8	-	2.1	-	2.6	-	2.0	-	2.0	-	1.9	-	2.8	-
8	-	-	2.7	-	1.2	-	1.9	-	2.1	-	2.0	-	2.3	-	2.7	-	2.3	-	1.8	-	2.0	-	3.1	0.4
9	-	-	2.5	-	1.5	-	2.4	-	1.9	-	2.7	-	2.2	-	-	-	2.3	-	1.9	-	2.0	-	2.9	-
10	-	-	2.6	-	2.8	-	2.4	-	2.2	-	2.4	-	2.1	-	-	-	2.7	-	1.9	-	2.0	-	2.8	-
11	2.4	-	2.1	-	2.3	-	2.3	-	2.1	-	2.0	-	2.2	-	-	-	2.4	-	1.9	-	1.9	-	2.8	-
12	2.3	-	1.7	-	2.2	-	2.4	-	1.7	-	2.3	-	2.3	-	-	-	2.3	-	2.0	-	2.0	-	2.7	-
13	2.4	-	2.1	-	2.1	-	1.2	-	1.8	-	2.2	-	2.8	-	-	-	2.0	-	2.0	-	2.0	-	2.6	-
14	2.7	-	1.8	-	2.3	-	1.4	-	1.8	-	1.2	-	2.5	-	-	-	1.9	-	2.0	-	2.0	-	3.0	.4
15	2.3	-	2.6	-	2.2	-	1.5	-	2.2	-	2.2	-	2.2	-	-	-	1.9	-	2.0	-	2.0	-	2.9	-
16	2.3	-	2.7	-	1.8	-	1.5	-	2.1	-	2.2	-	2.3	-	-	-	2.1	-	2.0	-	2.0	-	2.6	-
17	2.2	-	2.7	-	1.5	-	1.8	-	2.2	-	2.2	-	2.4	-	-	-	2.1	-	2.2	-	2.0	-	2.6	-
18	2.1	-	2.2	-	1.7	-	1.9	-	2.0	-	2.2	-	2.5	-	-	-	2.6	-	2.2	-	1.9	-	2.5	-
19	2.0	-	2.2	-	1.5	-	1.6	-	1.9	-	1.6	-	2.1	-	-	-	2.9	-	2.4	-	1.9	-	2.5	-
20	2.3	-	2.1	-	1.3	-	1.1	-	2.4	-	1.9	-	2.7	-	-	-	2.7	-	2.3	-	1.6	-	2.4	-
21	2.6	-	1.8	-	1.3	-	1.9	-	2.6	-	2.0	-	2.8	-	-	-	2.8	-	2.1	-	1.6	-	3.1	.3
22	2.7	-	1.8	-	1.7	-	2.3	-	3.0	-	2.0	-	2.6	-	-	-	2.8	-	2.1	-	1.7	-	3.0	-
23	2.6	-	1.7	-	1.9	-	2.6	-	2.5	-	2.2	-	2.4	-	-	-	2.8	-	2.1	-	1.9	-	2.7	-
24	2.6	-	1.6	-	1.7	-	2.4	-	.6	-	2.0	-	2.3	-	-	-	3.0	.7	2.0	-	1.8	-	2.5	-
25	2.6	-	1.5	-	1.9	-	2.0	-	1.4	-	1.9	-	2.4	-	-	-	2.7	-	1.9	-	2.1	-	2.5	-
26	2.3	-	2.2	-	2.3	-	2.0	-	1.7	-	2.8	-	2.7	-	-	-	2.4	-	2.0	-	2.1	-	2.6	-
27	2.6	-	2.0	-	2.1	-	2.0	-	1.6	-	3.4	.6	2.7	-	-	-	2.2	-	1.8	-	2.1	-	2.7	-
28	3.1	1.3	2.2	-	2.0	-	2.0	-	1.7	-	3.0	.6	2.9	-	-	-	2.2	-	1.8	-	2.2	-	2.5	-
29	2.9	-	2.3	-	2.0	-	1.9	-	---	---	2.3	-	2.7	-	-	-	2.0	-	2.0	-	2.4	-	2.3	-
30	2.8	-	1.6	-	2.0	-	1.9	-	---	---	1.8	-	2.7	-	-	-	2.0	-	1.8	-	2.4	-	2.5	-
31	3.1	1.8	---	---	1.9	-	1.9	-	---	---	2.2	-	---	---	-	-	---	---	1.4	-	2.7	-	---	---

BRAZOS RIVER BASIN

157

08079550 Buffalo Springs Lake near Lubbock, Tex.

LOCATION.--Lat 33°32'02", long 101°41'41", Lubbock County, on left bank of spillway channel of dam on North Fork Double Mountain Fork Brazos River, 175 ft (53 m) upstream from spillway crest, 9 miles (14 km) southeast of Lubbock, and at mile 74.1 (119.2 km).

DRAINAGE AREA.--286 mi² (741 km²).

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 5,500 acre-ft (6.78 hm³) Oct. 13, 14; maximum elevation, 3,015.59 ft (919.152 m) Oct. 14; minimum contents, 5,340 acre-ft (6.58 hm³) Mar. 24 (elevation, 3,014.93 ft or 918.951 m).
Period of record: Maximum contents, 6,120 acre-ft (7.55 hm³) June 2, 1967 (elevation, 3,018.05 ft or 919.902 m); minimum, 5,310 acre-ft (6.55 hm³) Apr. 3, 1974 (elevation, 3,014.78 ft or 918.905 m).

REMARKS.--The lake is formed by a rolled earthfill dam 1,600 ft (488 m) long. The dam was completed and storage began Sept. 15, 1959. The lake first filled to spillway elevation on July 6, 1960. The dam and lake are the property of the Lubbock County Water Improvement District No. 1. The lake is used for recreational purposes, but water may be sold to the cities of Lubbock and Slaton for their municipal use. The uncontrolled service spillway is a concrete chute, 138 ft (42 m) wide at crest, and is designed to discharge 26,200 ft³/s (742 m³/s) at an elevation of 3,028.7 ft (923.15 m). The capacity table is based on topographic surveys made in 1954. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	3,032.0	-
Crest of spillway.....	3,015.0	5,360
Lowest gated outlet (invert).....	2,980.0	510

COOPERATION.--Capacity table furnished by Lubbock County Water Improvement District No. 1.

Capacity table (elevation, in feet, and contents, in acre-feet)

3,014.0 5,140
3,016.0 5,600

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,390	5,380	5,380	5,380	5,380	5,380	5,370	5,370	5,380	5,380	5,380	5,370
2	5,390	5,380	5,380	5,380	5,390	5,380	5,370	5,370	5,380	5,380	5,430	5,370
3	5,390	5,380	5,380	5,380	5,400	5,380	5,380	5,370	5,380	5,390	5,400	5,370
4	5,390	5,380	5,380	5,380	5,400	5,380	5,380	5,370	5,380	5,390	5,380	5,370
5	5,390	5,380	5,380	5,380	5,390	5,380	5,380	5,370	5,380	5,390	5,380	5,370
6	5,380	5,390	5,370	5,380	5,390	5,380	5,380	5,370	5,380	5,390	5,380	5,370
7	5,380	5,390	5,370	5,380	5,380	5,380	5,370	5,370	5,380	5,390	5,380	5,370
8	5,380	5,390	5,380	5,380	5,380	5,380	5,370	5,370	5,380	5,380	5,380	5,370
9	5,380	5,390	5,380	5,380	5,380	5,370	5,380	5,380	5,380	5,380	5,390	5,370
10	5,380	5,390	5,380	5,360	5,380	5,370	5,380	5,380	5,380	5,380	5,390	5,380
11	5,380	5,390	5,380	5,370	5,370	5,380	5,390	5,380	5,380	5,380	5,390	5,390
12	5,390	5,390	5,380	5,370	5,380	5,390	5,390	5,380	5,380	5,380	5,390	5,410
13	5,500	5,390	5,380	5,380	5,380	5,390	5,390	5,380	5,380	5,380	5,390	5,420
14	5,460	5,390	5,370	5,380	5,380	5,390	5,380	5,380	5,380	5,370	5,390	5,410
15	5,430	5,390	5,370	5,380	5,380	5,380	5,390	5,380	5,380	5,370	5,390	5,400
16	5,410	5,390	5,380	5,380	5,380	5,380	5,390	5,380	5,380	5,370	5,390	5,390
17	5,400	5,390	5,380	5,380	5,380	5,370	5,390	5,380	5,380	5,370	5,390	5,380
18	5,390	5,380	5,370	5,380	5,390	5,370	5,360	5,380	5,380	5,370	5,390	5,380
19	5,390	5,380	5,370	5,370	5,390	5,380	5,370	5,380	5,380	5,480	5,390	5,380
20	5,380	5,380	5,380	5,370	5,380	5,380	5,380	5,370	5,380	5,430	5,380	5,380
21	5,380	5,380	5,380	5,370	5,380	5,370	5,380	5,370	5,380	5,410	5,380	5,430
22	5,390	5,380	5,380	5,380	5,380	5,380	5,380	5,370	5,380	5,400	5,380	5,410
23	5,410	5,370	5,380	5,380	5,370	5,350	5,380	5,370	5,400	5,390	5,380	5,400
24	5,440	5,370	5,380	5,380	5,380	5,350	5,380	5,380	5,420	5,380	5,380	5,390
25	5,410	5,380	5,380	5,360	5,380	5,360	5,380	5,380	5,410	5,380	5,370	5,390
26	5,400	5,380	5,380	5,370	5,380	5,370	5,380	5,380	5,400	5,390	5,380	5,380
27	5,390	5,380	5,380	5,380	5,380	5,360	5,380	5,380	5,390	5,380	5,380	5,380
28	5,390	5,380	5,380	5,380	5,380	5,360	5,380	5,380	5,390	5,370	5,380	5,390
29	5,380	5,370	5,380	5,380	-----	5,370	5,380	5,380	5,380	5,370	5,380	5,390
30	5,380	5,380	5,380	5,380	-----	5,380	5,370	5,380	5,380	5,370	5,380	5,380
31	5,380	-----	5,380	5,380	-----	5,370	-----	5,380	-----	5,370	5,370	-----
(†)	3,015.10	3,015.08	3,015.10	3,015.09	3,015.10	3,015.06	3,015.04	3,015.09	3,015.08	3,015.03	3,015.06	3,015.10
(*)	-10	0	0	0	0	-10	0	+10	0	-10	0	+10
MAX	5,500	5,390	5,380	5,380	5,400	5,390	5,390	5,380	5,420	5,480	5,430	5,430
MIN	5,380	5,370	5,370	5,360	5,370	5,350	5,360	5,370	5,380	5,370	5,370	5,370
CAL YR 1974.....	* +10			MAX 5,680			MIN 5,320					
WTR YR 1975.....	* -10			MAX 5,500			MIN 5,350					

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

BRAZOS RIVER BASIN

08079600 Double Mountain Fork Brazos River at Justiceburg, Tex.

LOCATION.--Lat 33°02'18", long 101°11'50", Garza County, on right bank at downstream side of bridge on U.S. Highway 84 at Justiceburg, 250 ft (76 m) downstream from Panhandle and Santa Fe Railroad, and at mile 143.4 (230.7 km), measured from confluence with Salt Fork Brazos River at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA.--1,272 mi² (3,294 km²), of which 1,003 mi² (2,598 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1961 to current year. Prior to October 1963, published as Sand Creek or South Fork Double Mountain Fork Brazos River at Justiceburg.

GAGE.--Water-stage recorder. Datum of gage is 2,222.47 ft (677.409 m) above mean sea level.

AVERAGE DISCHARGE.--13 years (1962-75), 29.9 ft³/s (0.847 m³/s), 21,660 acre-ft/yr (26.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,880 ft³/s (167 m³/s) Sept. 12 (gage height, 9.65 ft or 2.941 m); no flow at times.

Period of record: Maximum discharge, 49,600 ft³/s (1,400 m³/s) May 6, 1969 (gage height, 19.8 ft or 6.04 m, from floodmarks); no flow at times most years.

Maximum stages since at least 1895, 25.8 ft (7.86 m) in 1914 and 22.2 ft (6.77 m) in September 1955, from information by local resident. Flood of July 1961 reached a stage of 18.2 ft (5.55 m), from floodmark.

REMARKS.--Records poor. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	5.9	.18	.18	.18	.02	0	0	0	0	2.4	1.8
2	.74	5.2	.18	.10	3.2	.02	0	0	0	0	2.2	.99
3	.86	3.5	.14	.18	2.9	.02	0	0	0	378	2.2	.53
4	.74	2.7	.14	.14	1.3	.02	0	0	0	86	1.3	.24
5	.63	2.0	.14	.14	.37	.02	0	0	0	.29	.37	.14
6	.63	1.6	.14	.10	.18	.02	0	0	0	0	.30	.07
7	.86	2.2	.14	.14	.05	.02	5.2	0	19	0	.07	.03
8	.86	1.8	.14	.10	.03	.01	5.3	0	201	0	.02	.02
9	.86	1.6	.14	.10	.03	.01	.02	0	.24	0	.02	.01
10	.74	6.8	.14	.10	.03	.01	.01	0	.03	0	.02	.01
11	.74	3.7	.18	.10	.02	.01	.01	0	8.8	0	.02	13
12	.74	2.0	.14	.05	.02	.01	.01	0	.93	0	.02	1,200
13	6.4	.86	.14	.14	.02	.01	.01	0	.01	0	.02	1,030
14	297	.53	.18	.10	.02	.01	.01	0	0	0	.02	159
15	25	.44	.14	.07	.03	.01	.01	0	0	0	238	15
16	9.4	.37	.14	.07	.05	0	.01	0	0	0	60	6.4
17	5.2	.44	.14	.07	.05	0	0	0	0	0	20	2.9
18	3.5	.53	.14	.07	.03	0	0	0	0	0	5.4	2.0
19	2.2	.53	.14	.07	.02	0	0	9.4	0	0	.86	1.8
20	1.8	.44	.14	.05	.02	0	0	3.6	0	.275	.30	1.6
21	1.8	.44	.14	.05	.02	0	0	.07	0	144	.18	74
22	1.8	.30	.14	.05	.45	0	0	67	0	27	.10	21
23	91	.18	.14	.03	.10	0	0	17	0	.27	.05	4.4
24	337	.18	.14	.03	1.3	0	0	16	377	.02	.01	2.2
25	18	.14	.14	.03	.53	0	0	.03	2.2	14	.01	2.0
26	4.4	.14	.14	.03	.05	0	0	.01	.03	705	.01	1.6
27	1.1	.14	.14	.03	.03	0	0	.01	.02	218	968	1.3
28	28	.14	.14	.07	.03	0	0	.01	.01	27	336	.99
29	5.5	.14	.14	.07	-----	0	0	.01	.01	5.9	38	.99
30	2.5	.14	.10	.07	-----	0	0	0	.01	4.4	6.4	.74
31	4.5	-----	.10	.03	-----	0	-----	0	-----	2.7	2.9	-----
TOTAL	855.03	45.08	4.42	2.56	11.06	.22	10.59	113.14	609.29	1,887.58	1,685.20	2,544.76
MEAN	27.6	1.50	.14	.083	.40	.007	.35	3.65	20.3	60.9	54.4	84.8
MAX	337	6.8	.18	.18	3.2	.02	5.3	67	377	705	968	1,200
MIN	.53	.14	.10	.03	.02	0	0	0	0	0	.01	.01
AC-FT	1,700	89	8.8	5.1	22	.4	21	224	1,210	3,740	3,340	5,050
CAL YR 1974	TOTAL	3,006.23	MEAN	8.24	MAX	438	MIN	0	AC-FT	5,960		
WTR YR 1975	TOTAL	7,768.93	MEAN	21.3	MAX	1,200	MIN	0	AC-FT	15,410		

PEAK DISCHARGE (BASE, 2,100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-24	0600	7.93	2,100	9-12	0200	9.65	5,880
7- 3	1900	8.45	3,000		about		
7-26	1200	8.73	3,580	9-13	1300	a9.20	4,680
8-27	1900	9.19	4,660				

a From floodmark.

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.

LOCATION.--Lat 33°00'29", long 100°10'49", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 83, 0.3 mile (0.5 km) downstream from Hitson Creek, 10 miles (16 km) south of Aspermont, and at mile 34.5 (55.5 km) measured from confluence with Salt Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA.--7,980 mi² (20,670 km²), approximately, of which 6,470 mi² (16,760 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: December 1923 to September 1934, June 1939 to current year.

Water quality: Chemical analyses: October 1948 to November 1951, October 1956 to current year. Water temperatures: November 1949 to November 1951, October 1956 to current year. Sediment records: November 1949 to September 1951.

GAGE.--Water-stage recorder. Datum of gage is 1,624.79 ft (495.236 m) above mean sea level. Dec. 3, 1923, to Sept. 30, 1934, nonrecording gage at site 90 ft (27 m) downstream at datum 2.0 ft (0.61 m) higher, and June 8, 1939, to Aug. 12, 1972, recording gage at present site and at datum 2.0 ft (0.61 m) higher.

AVERAGE DISCHARGE.--46 years (1924-34, 1939-75), 171 ft³/s (4.843 m³/s), 123,900 acre-ft/yr (153 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 12,000 ft³/s (340 m³/s) July 27 (gage height, about 12.19 ft or 3.716 m); minimum, 0.11 ft³/s (0.003 m³/s) May 21.

Period of record: Maximum discharge, 91,400 ft³/s (2,590 m³/s) Sept. 26, 1955 (gage height, 29.5 ft or 8.99 m, present datum); no flow at times most years.

Historic: Maximum stage since at least 1899, that of Sept. 26, 1955.

Water quality: Current year: Maximum daily specific conductance, 11,900 micromhos May 21; minimum daily, 1,000 micromhos Aug. 30. Maximum water temperatures, 28.0°C Aug. 2.

Period of record: Maximum daily specific conductance, 12,800 micromhos May 30, 1973; minimum daily, 735 micromhos Oct. 24, 1957.

Maximum water temperatures (1949-51, 1956-67, 1969-75), 38.0°C July 18, 1966; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. Small diversions above station for oilfield operations.

REVISIONS (WATER YEARS).--WSP 733: 1927(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	314	20	13	10	23	2.4	.64	27	6.6	73	102
2	116	272	19	15	15	21	1.8	.56	21	3.8	62	60
3	92	385	18	13	21	19	1.7	.56	16	14	48	40
4	72	184	18	12	30	17	1.4	.44	13	13	43	30
5	57	140	18	12	29	15	1.5	.38	9.9	4.7	30	28
6	47	153	19	11	37	14	1.4	.38	7.9	74	25	22
7	39	176	17	11	37	12	7.5	.38	6.4	43	17	16
8	35	81	16	12	36	11	54	.38	19	27	13	13
9	32	71	15	11	34	10	23	.38	22	21	11	12
10	28	70	17	9.7	32	10	15	.38	97	12	8.5	11
11	23	66	16	8.5	27	10	14	.38	80	13	6.5	10
12	20	65	14	6.0	24	9.6	20	.28	44	8.5	4.8	30
13	19	57	14	6.0	22	8.8	18	.28	36	4.4	4.3	205
14	155	58	14	11	20	8.4	14	.33	37	2.8	15	1,820
15	94	53	13	11	19	8.0	10	.38	74	1.8	11	1,100
16	332	48	12	9.0	17	7.3	7.7	.28	50	1.5	454	657
17	306	43	12	7.3	16	6.2	5.9	.28	26	1.4	1,280	427
18	236	41	12	7.6	15	5.9	4.1	.24	16	3.3	443	276
19	182	38	11	7.3	15	5.3	2.5	.24	9.6	7.1	190	179
20	135	35	11	6.2	14	4.4	1.7	.17	8.0	872	98	118
21	106	33	10	5.0	14	3.5	1.4	.14	5.9	4,370	60	116
22	89	31	10	5.6	17	3.5	1.4	13	4.1	1,840	39	104
23	78	30	9.6	5.6	19	3.0	1.3	841	2.8	670	27	96
24	663	27	9.2	5.6	19	2.4	1.2	843	1.8	289	19	135
25	2,110	25	8.4	5.3	20	2.0	1.1	283	1.2	628	13	132
26	899	26	8.4	4.7	17	2.2	1.1	139	23	1,570	162	79
27	420	26	10	5.0	17	2.4	1.1	128	42	5,980	83	66
28	366	26	11	4.7	22	2.6	.99	98	29	1,440	1,280	59
29	411	22	11	4.6	-----	2.2	.90	54	15	562	1,250	54
30	621	20	11	5.2	-----	2.2	.80	37	11	233	472	46
31	397	-----	15	6.7	-----	2.2	-----	29	-----	118	217	-----
TOTAL	8,344	2,616	419.6	257.6	615	254.1	218.89	2,472.48	755.6	18,834.9	6,459.1	6,043
MEAN	269	87.2	13.5	8.31	22.0	8.20	7.30	79.8	25.2	608	208	201
MAX	2,110	385	20	15	37	23	54	843	97	5,980	1,280	1,820
MIN	19	20	8.4	4.6	10	2.0	.80	.14	1.2	1.4	4.3	10
AC-FT	16,550	5,190	832	511	1,220	504	434	4,900	1,500	37,360	12,810	11,990

CAL YR 1974 TOTAL 30,129.03 MEAN 82.5 MAX 2,730 MIN 0 AC-FT 59,760

WTR YR 1975 TOTAL 47,290.27 MEAN 130 MAX 5,980 MIN .14 AC-FT 93,800

PEAK DISCHARGE (BASE, 8,800 FT³/S).--July 21 (0400) 8,900 ft³/s (10.61 ft); July 27 (0330) 12,000 ft³/s (12.19 ft).

BRAZOS RIVER BASIN

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT. 31...	0825	300	9.7	120	24	200	6.8	144	0	330
NOV. 21...	1430	31	12	380	77	960	11	138	0	1200
DEC. 31...	0940	9.2	9.3	560	130	1400	11	150	0	1500
JAN. 09...	1510	10	8.7	450	110	1100	11	148	0	1400
FEB. 26...	1445	17	5.3	420	130	1100	12	153	0	1400
MAR. 31...	0940	1.8	6.7	740	160	1400	15	145	0	2000
APR. 15...	0745	11	3.9	380	73	960	12	124	0	1200
MAY 24...	1245	701	14	240	35	250	8.8	171	0	660
JUNE 30...	0810	12	13	200	40	510	9.8	170	0	590
JULY 24...	0855	304	13	110	22	180	5.6	168	0	320
AUG. 18...	1400	380	12	95	16	170	5.4	142	0	270
SEP. 29...	1330	54	12	240	57	540	8.4	130	0	800

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 31...	290	.8	1050	400	280	4.4	1810	7.7	15.5
NOV. 21...	1400	.9	4110	1300	1200	12	6180	7.9	19.0
DEC. 31...	2300	.4	5980	1900	1800	14	8890	7.7	--
JAN. 09...	1700	1.0	4850	1600	1500	12	7170	7.7	6.0
FEB. 26...	1800	1.2	4940	1600	1500	12	7420	7.8	15.0
MAR. 31...	2400	.6	6790	2500	2400	12	9530	7.9	7.0
APR. 15...	1400	1.1	4090	1300	1100	12	6680	7.4	18.0
MAY 24...	310	.6	1600	740	600	4.0	2370	7.5	21.0
JUNE 30...	720	1.3	2170	660	530	8.6	3460	7.9	23.0
JULY 24...	180	1.0	914	370	230	4.1	1500	7.5	26.0
AUG. 18...	180	--	818	300	190	4.3	1390	7.0	29.0
SEP. 29...	770	.8	2490	830	730	8.1	3740	7.8	25.5

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	8344	2260	1400	31500	370	8340	460	10400	510
NOV. 1974.....	2616	3220	2100	14800	640	4520	640	4520	720
DEC. 1974.....	419.6	8740	5900	6680	2200	2490	1700	1930	1900
JAN. 1975.....	257.6	8290	5600	3890	2000	1390	1600	1110	1800
FEB. 1975.....	615	6180	4100	6810	1400	2320	1200	1990	1400
MAR. 1975.....	254.1	7700	5200	3570	1900	1300	1500	1030	1700
APR. 1975.....	218.89	6860	4600	2720	1600	946	1300	768	1500
MAY 1975.....	2472.48	2430	1600	10700	420	2800	490	3270	540
JUNE 1975.....	755.59	5490	3700	7550	1300	2650	1100	2240	1200
JULY 1975.....	18834.89	1310	800	40700	110	5590	270	13700	300
AUG. 1975.....	6459.09	2080	1300	22700	320	5580	420	7320	470
SEPT 1975.....	6043	1690	1100	17900	210	3430	340	5550	380
TOTAL	47290.25	**	**	170000	**	41400	**	53800	**
W.U.AVG.	129.56	2090	1300	**	320	**	420	**	470

08080500 Double Mountain Fork Brazos River near Aspermont, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	1870	7980	9070	8070	5690	10000	10900	5490	4350	2150	1250
2	2800	2090	8080	8730	8210	5360	10400	10900	6480	5590	2560	1590
3	3170	1820	8170	8410	7950	5780	10300	10700	6780	6260	2770	2070
4	3530	1700	8330	8510	6760	6180	10200	10900	6780	2810	3400	2580
5	3930	1920	8470	7860	6070	6730	10100	10800	7050	4370	3400	3140
6	4250	2400	8470	7630	5110	7160	10100	10900	7570	3370	3820	3680
7	4610	3000	8610	7460	4150	7600	9710	11400	8110	2590	3840	4130
8	4950	3660	8790	7370	3960	7960	3900	11300	6000	2510	4190	4570
9	5390	3990	9090	7260	4500	8290	6920	11400	5890	2530	4670	5210
10	5730	4220	8700	6890	4500	8600	8080	10700	11400	3450	4950	5360
11	6090	4430	8400	7080	4930	8710	7770	10900	3550	4230	4830	5170
12	6410	4840	8310	7300	5580	8720	8490	11300	3740	5230	5430	5370
13	6690	4190	8870	7500	6130	8870	5820	11400	3690	6040	5860	3800
14	5020	4710	9140	7700	6480	9230	5940	11300	3910	7080	5200	1180
15	4260	4300	9220	7390	6750	9530	6690	11100	3180	8230	5860	1120
16	5940	4550	8980	8090	6990	9580	7480	11600	3520	9360	4600	1180
17	2200	4930	8760	8450	7290	9530	8350	11600	3970	10300	1850	1320
18	1900	5580	8690	8660	7470	9510	9100	11700	4790	10200	1360	1480
19	1880	5670	8650	9240	7600	9490	9710	11400	5450	3910	1400	1820
20	2460	5950	8860	9670	7740	9620	9950	11600	6240	1120	1650	2150
21	2860	6170	8860	9120	7950	9760	10000	11900	6820	1190	1800	2450
22	3220	6200	9020	9280	7540	9710	10000	11400	7410	1470	2200	2690
23	3700	6320	9090	9320	6850	9670	9900	2390	7920	1350	3100	3030
24	3450	6600	9170	9070	6670	9950	9710	2510	8370	1470	3700	3240
25	1570	6750	9170	9000	6810	9860	9950	1850	8730	1560	4200	2990
26	1160	6840	8750	9070	7380	9760	10200	1840	4630	1500	3200	2940
27	1180	6940	9010	9280	7360	9030	10100	1980	7860	1250	2770	2920
28	1450	7150	9210	9580	7200	8720	10200	2240	2740	1040	2630	3360
29	1700	7520	9550	9540	---	9530	10500	2680	2760	1080	1170	3660
30	1790	7740	9860	9630	---	9490	11300	3520	3460	1270	1000	4040
31	1810	---	8890	9240	---	9530	---	4330	---	1650	1080	---
MONTH	3470	4800	8810	8460	6570	8620	9030	8720	5810	3820	3250	2980

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	14.0	0.0	8.0	6.0	10.0	9.0	24.0	18.0	23.0	26.0	25.0
2	---	18.5	1.5	8.0	7.0	10.0	5.0	19.0	21.0	23.0	28.0	24.0
3	17.0	---	2.0	6.0	7.0	6.0	5.0	26.0	19.0	24.0	25.0	25.0
4	15.0	---	3.5	6.0	8.0	6.0	7.0	25.0	19.0	22.0	25.0	24.0
5	20.0	---	11.0	8.0	6.0	10.0	11.0	16.0	22.0	22.0	24.0	23.0
6	19.0	---	7.0	6.0	2.0	13.0	15.0	16.0	23.0	24.0	24.0	22.0
7	15.5	---	5.5	14.0	2.0	9.0	15.0	14.0	24.0	24.0	24.0	23.0
8	16.5	13.0	4.5	14.0	6.0	7.0	12.0	15.0	---	25.0	24.0	21.0
9	19.0	12.0	0.5	16.0	1.0	9.0	11.0	15.0	22.0	24.0	23.0	23.0
10	18.5	13.5	---	4.0	3.0	6.0	12.0	18.0	21.0	24.0	23.0	24.0
11	19.0	10.5	5.0	1.0	8.0	7.0	10.0	19.0	19.0	22.0	23.0	23.0
12	20.5	10.0	4.5	---	6.0	8.0	11.0	19.0	19.0	22.0	24.0	18.0
13	17.0	10.0	3.5	---	8.0	4.0	11.0	20.0	22.0	21.0	25.0	---
14	16.0	8.0	5.0	1.0	9.0	5.0	15.0	16.0	21.0	21.0	25.0	15.0
15	11.0	7.0	---	3.0	8.0	8.0	16.0	18.0	22.0	22.0	25.0	17.0
16	12.0	10.0	---	4.0	11.0	8.0	15.0	15.0	25.0	21.0	24.0	20.0
17	15.0	10.0	---	5.0	4.0	10.0	21.0	17.0	23.0	23.0	26.0	21.0
18	15.5	9.5	---	2.0	5.0	---	16.0	19.0	23.0	23.0	26.0	22.0
19	16.0	11.5	---	5.0	4.0	12.0	9.0	20.0	22.0	24.0	---	22.0
20	14.5	9.0	---	2.0	7.0	12.0	14.0	20.0	23.0	23.0	---	18.0
21	15.0	9.5	---	4.0	8.0	12.0	13.0	23.0	22.0	22.0	---	16.0
22	16.5	9.5	---	2.0	5.0	11.0	18.0	22.0	21.0	24.0	---	14.0
23	16.5	15.5	---	6.0	---	13.0	---	18.0	22.0	25.0	---	15.0
24	19.0	8.5	---	6.0	4.0	7.0	19.0	19.0	22.0	25.0	---	15.0
25	16.5	5.0	---	5.0	5.0	8.0	16.0	21.0	26.0	24.0	24.0	14.0
26	16.5	7.0	---	6.0	7.0	12.0	20.0	22.0	22.0	23.0	25.0	15.0
27	16.0	5.5	---	7.0	5.0	13.0	20.0	23.0	24.0	24.0	22.0	16.0
28	16.0	6.5	---	7.0	9.0	7.0	11.0	21.0	23.0	26.0	24.0	17.0
29	15.5	3.5	---	9.0	---	4.0	16.0	20.0	23.0	27.0	24.0	18.0
30	19.0	0.0	---	8.0	---	2.0	13.0	18.0	23.0	27.0	25.0	18.0
31	15.5	---	---	7.0	---	7.0	---	17.0	---	27.0	25.0	---
MONTH	16.5	9.5	---	6.0	6.0	8.5	13.5	19.0	22.0	23.5	24.5	19.5

BRAZOS RIVER BASIN

08080540 McDonald Creek near Post, Tex.

LOCATION.--Lat 33°21'03", long 101°13'36", Garza County, on right bank at downstream side of bridge on Farm Road 651, 2.6 miles (4.2 km) downstream from Lake Creek, 4.1 miles (6.6 km) upstream from mouth, and 14.4 miles (23.2 km) northeast of Post.

DRAINAGE AREA.--112 mi² (290 km²), of which 39.9 mi² (103.3 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: 1959-61, occasional low-flow measurements at road crossing 4 miles (6 km) downstream, September 1965 to current year.

Water quality: Chemical analyses: October 1965 to current year. Water temperatures: October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,301.6 ft (701.53 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--10 years, 1.81 ft³/s (0.0513 m³/s), 1,310 acre-ft/yr (1.62 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 1,020 ft³/s (28.9 m³/s) Oct. 23 (gage height, 6.74 ft or 2.054 m); no flow for many days.

Period of record: Maximum discharge, 15,300 ft³/s (433 m³/s) June 9, 1968 (gage height, 14.98 ft or 4.566 m), from rating curve extended above 740 ft³/s (21.0 m³/s) on basis of slope-area measurements of 3,020 and 15,300 ft³/s (85.5 and 433 m³/s); no flow for many days.

Water quality: Current year: Maximum daily specific conductance, 76,400 micromhos Dec. 9; minimum daily, 1,700 micromhos July 21.

Period of record: Maximum daily specific conductance (1965-66, 1973-75), 76,400 micromhos Dec. 9, 1974; minimum daily, 975 micromhos Aug. 29, 1966. Maximum water temperatures (1965-66), 29.0°C Sept. 1, 1966; minimum, 10.0°C Apr. 30, 1966.

REMARKS.--Discharge records poor. No diversions above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.79	.14	.12	.68	.16	0	0	0	0	.37	0
2	.55	.66	.13	.20	1.9	.16	0	0	0	0	1.1	0
3	.46	1.4	.13	.10	2.4	.16	0	0	0	0	.01	0
4	.32	.72	.14	.10	1.1	.16	0	0	0	0	0	0
5	.26	.66	.12	.10	.50	.14	0	0	0	0	0	0
6	.23	.60	.11	.10	.42	.14	.04	0	0	0	0	0
7	.18	.72	.10	.10	.35	.13	1.9	0	1.6	0	0	0
8	.16	.66	.09	.10	.32	.13	.14	0	.69	0	0	0
9	.14	.87	.09	.09	.23	.12	.01	0	.01	0	0	0
10	.12	1.6	.09	.08	.18	.12	.01	0	.04	.01	0	0
11	.12	.66	.10	.08	.16	.14	.01	0	.17	0	0	23
12	.11	.50	.09	.08	.16	.18	0	0	.04	0	0	24
13	4.8	.46	.09	.10	.16	.13	0	0	.03	0	0	7.2
14	11	.42	.08	.12	.16	.13	0	0	.07	0	.46	1.2
15	2.4	.38	.09	.12	.16	.12	0	0	.01	0	4.6	.12
16	.60	.32	.08	.11	.67	.12	0	0	0	0	.06	.01
17	.46	.29	.06	.11	.16	.12	0	0	0	0	0	0
18	.42	.29	.06	.12	.16	.12	0	0	0	0	0	0
19	.42	.29	.05	.12	.16	.11	0	1.5	0	7.1	0	0
20	.38	.26	.05	.12	.16	.10	0	.22	0	70	0	0
21	.35	.23	.06	.11	.16	.08	0	.01	0	91	0	4.1
22	19	.23	.08	.12	1.4	.06	0	.03	0	1.4	0	.04
23	115	.18	.08	.12	.10	.05	0	.04	0	.02	0	0
24	27	.18	.08	.12	.16	.04	0	.05	1.6	0	0	0
25	2.8	.16	.08	.12	.18	.04	0	.01	.01	.69	0	0
26	1.1	.14	.09	.13	.18	.03	0	0	0	7.9	2.2	0
27	.79	.14	.10	.14	.18	.03	0	0	0	.07	5.2	0
28	1.0	.14	.08	.14	.16	.02	0	0	0	.11	.09	0
29	.60	.13	.09	.14	-----	.02	0	0	0	0	0	0
30	.55	.13	.11	.86	-----	.01	0	0	0	0	0	0
31	28	-----	.27	.26	-----	.01	-----	0	-----	0	0	-----
TOTAL	219.92	14.21	3.01	4.43	12.71	3.08	2.11	1.86	4.27	178.30	14.09	59.67
MEAN	7.09	.47	.097	.14	.45	.099	.070	.060	.14	5.75	.45	1.99
MAX	115	1.6	.27	.86	2.4	.18	1.9	1.5	1.6	91	5.2	24
MIN	.11	.13	.05	.08	.10	.01	0	0	0	0	0	0
AC-FT	436	28	6.0	8.8	25	6.1	4.2	3.7	8.5	354	28	118

CAL YR 1974 TOTAL 623.20 MEAN 1.71 MAX 134 MIN 0 AC-FT 1,240

WTR YR 1975 TOTAL 517.66 MEAN 1.42 MAX 115 MIN 0 AC-FT 1,030

PEAK DISCHARGE (BASE, 500 FT³/S).--Oct. 23 (2100) 1,020 ft³/s (6.74 ft).

BRAZOS RIVER BASIN

163

08080540 McDonald Creek near Post, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
10...	0815	.12	3.6	600	280	13000	20	201	0	1900
NOV.										
12...	1100	.49	9.1	360	170	8700	16	293	0	1500
DEC.										
18...	1145	.06	10	450	240	12000	18	289	0	2000
JAN.										
11...	1535	.04	6.1	440	250	12000	23	262	0	1900
FEB.										
03...	1800	3.5	6.7	190	84	3800	13	246	0	770
MAR.										
12...	1245	.18	4.0	390	230	9600	23	302	0	1700
JUNE										
11...	0930	.2	3.9	380	170	8900	22	118	0	1200
AUG.										
02...	1000	.10	3.7	200	110	5100	14	100	0	1100
SEP.										
13...	0900	7.0	4.2	120	58	3100	12	104	0	460

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
10...	19000	--	34900	2700	2500	110	55700	7.7	15.5
NOV.									
12...	14000	1.4	24900	1600	1400	95	38200	7.9	14.0
DEC.									
18...	18000	1.0	33000	2100	1870	114	49800	7.6	8.0
JAN.									
11...	18000	1.3	32800	2100	1900	113	50500	7.8	8.0
FEB.									
03...	5600	1.6	10600	820	620	58	17400	7.9	7.0
MAR.									
12...	15000	1.3	27100	1900	1700	95	43900	7.7	7.0
JUNE									
11...	14000	.5	24700	1600	1600	95	39000	7.3	17.0
AUG.									
02...	7500	--	14100	950	870	72	22600	7.5	--
SEP.									
13...	4900	.5	8710	540	450	58	14700	7.9	12.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	219.92	10100	5800	3440	3000	1780	420	249	****
NOV. 1974.....	14.21	35200	22000	844	11000	422	1500	58	****
DEC. 1974.....	3	57800	38000	309	19000	154	2400	20	****
JAN. 1975.....	4.43	48500	32000	383	16000	191	2000	24	****
FEB. 1975.....	12.71	31400	20000	686	9700	333	1300	45	****
MAR. 1975.....	3.08	50700	33000	274	16000	133	2100	18	****
APR. 1975.....	2.11	26400	16000	91	8000	46	1100	6.3	****
MAY 1975.....	1.86	35400	22000	110	11000	55	1500	7.5	****
JUNE 1975.....	4.27	15500	9000	104	4200	48	640	7.4	****
JULY 1975.....	178.3	4250	2400	1160	1200	578	180	87	210
AUG. 1975.....	14.09	26500	16000	609	8000	304	1100	42	****
SEPT 1975.....	59.67	8640	5000	806	2600	419	360	58	420
TOTAL	517.66	**	**	8820	**	4460	**	620	**
WTD.AVG.	1.42	10600	6300	**	3200	**	440	**	*****

08080540 McDonald Creek near Post, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7000	18000	51100	38000	46000	46300	---	---	---	---	33000	---
2	16000	20000	59100	49000	31500	46000	---	---	---	---	22600	---
3	23000	19000	53500	48600	17400	46500	---	---	---	---	28000	---
4	32000	21000	51700	47000	19000	46700	---	---	---	---	---	---
5	46000	28000	57800	48200	22000	46900	---	---	---	---	---	---
6	53800	33000	67500	48000	28000	50400	51900	---	---	---	---	---
7	52000	40000	55600	48300	35300	51200	26400	---	12000	---	---	---
8	51500	47000	65200	48600	42300	51600	16300	---	9240	---	---	---
9	49000	53000	76400	49200	40800	52000	38000	---	26000	---	---	---
10	52000	18000	65500	49700	41900	52200	42000	---	30600	20000	---	---
11	53000	26700	65000	49900	45700	50400	49100	---	39000	---	---	6500
12	52000	33000	58900	49300	46000	49300	---	---	43900	---	---	4900
13	12200	42000	55100	48400	45600	48300	---	---	30000	---	---	14700
14	7110	46000	55400	46700	47000	49200	---	---	49500	---	32000	19000
15	5000	51200	50000	50100	46600	50000	---	---	50000	---	27000	23000
16	11000	45700	53800	52100	36000	51300	---	---	---	---	36000	29000
17	16000	48200	55400	55700	38200	53000	---	---	---	---	---	---
18	22000	53200	53000	51600	40000	54200	---	---	---	---	---	---
19	25000	54000	49700	51800	41200	54000	---	34800	---	13300	---	---
20	30000	54000	50100	51700	43600	54600	---	31700	---	4610	---	---
21	32000	54200	48200	51600	45700	55000	---	38000	---	1700	---	28200
22	11000	54200	50700	51400	31500	54800	---	44700	---	6420	---	31400
23	9140	54500	49100	51000	39000	55000	---	50200	---	12000	---	---
24	3100	54500	49800	51200	41000	55000	---	47400	16100	---	---	---
25	4200	54700	52300	51000	42500	58000	---	49600	27500	23700	---	---
26	19100	54000	60000	49000	42000	57600	---	---	---	19700	23400	---
27	25100	54000	68300	48600	44000	59000	---	---	---	21000	27100	---
28	29200	53100	59700	47800	46700	59500	---	---	---	22800	34000	---
29	32000	62700	60900	47000	---	60000	---	---	---	---	---	---
30	36000	62000	61700	46000	---	60000	---	---	---	---	---	---
31	15800	---	61100	46000	---	60500	---	---	---	---	---	---
MONTH	26850	43630	57150	49110	38800	52850	---	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

[illegible]

08080700 Running Water Draw at Plainview, Tex.

LOCATION.--Lat 34°10'44", long 101°42'08", Hale County, on downstream side of bridge on Broadway Street in Plainview, 0.5 mile (0.8 km) upstream from Atchison, Topeka, and Santa Fe Railway Co. bridge, and at mile 28.1 (45.2 km).

DRAINAGE AREA.--470 mi² (1,220 km²), approximately (contributing area).

PERIOD OF RECORD.--June 1939 to September 1949, October 1949 to September 1953, and October 1956 to April 1960 (monthly figures only), February 1961 to current year. Prior to October 1963, published as White River at Plainview.

GAGE.--Water-stage recorder. Datum of gage is 3,341.11 ft (1,018.370 m) above mean sea level.

AVERAGE DISCHARGE.--31 years (1939-53, 1956-59, 1961-75), 3.30 ft³/s (0.0935 m³/s), 2,390 acre-ft/yr (2.95 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 76 ft³/s (2.15 m³/s) Aug. 14 (gage height, 2.45 ft or 0.747 m); no flow most of year.

Period of record: Maximum discharge, 12,000 ft³/s (340 m³/s) June 6, 1941 (gage height, 8.75 ft or 2.667 m), from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of slope-area measurement of 12,000 ft³/s (340 m³/s); no flow most of time.

Maximum discharge since at least 1880, that of June 6, 1941; maximum stage, 9.38 ft (2.859 m) July 8, 1960 (discharge, 9,130 ft³/s or 259 m³/s, by contracted-opening measurement). A flood in 1890, stage not determined, was probably the second highest, from information by local residents.

REMARKS.--Records fair. No diversion above station. At end of year, flow from 29.2 mi² (75.6 km²) above this station was partly controlled by one floodwater-retarding structure with a capacity of 4,150 acre-ft (5.12 hm³) below the flood-spillway crest, of which 593 acre-ft (0.731 hm³) is sediment-pool capacity. The capacity in this pool allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.43	0	.02	.94		0	0	0	0	0	0
2	0	.03	0	.88	2.6		0	0	0	0	1.1	0
3	0	0	0	.21	1.5		0	0	0	0	0	0
4	0	0	0	0	1.7		0	0	0	3.1	0	0
5	0	0	0	0	.70		0	0	0	4.9	0	0
6	0	.07	0	0	0		0	0	0	.07	0	0
7	0	1.5	0	0	0		0	0	0	0	0	0
8	0	.32	0	0	0		.01	0	0	0	0	0
9	0	.54	0	0	0		0	0	1.5	0	0	0
10	0	.09	0	0	0		.98	0	.67	11	0	0
11	0	0	0	0	0		1.4	0	1.3	.95	0	1.8
12	.43	0	0	0	0		.01	0	0	0	0	.50
13	12	0	0	0	0		.57	0	0	0	0	1.5
14	3.7	0	0	0	0		.04	0	0	0	7.0	.33
15	1.1	0	0	0	0		0	0	0	0	15	0
16	.03	0	0	0	.64		0	0	0	0	.36	0
17	0	0	0	0	.01		0	0	0	0	0	0
18	0	0	0	0	0		0	2.2	0	0	0	0
19	0	0	0	0	0		0	2.3	0	5.4	0	0
20	0	0	0	0	0		0	0	0	3.2	0	0
21	.20	0	0	0	0		0	0	0	4.3	0	9.1
22	8.7	0	0	0	.31		0	1.9	17	.40	0	.81
23	12	0	0	0	.45		0	.02	8.9	1.7	0	.01
24	7.8	0	0	0	.04		0	0	7.8	.72	0	0
25	1.8	0	0	0	0		0	0	.49	.02	0	0
26	.38	0	.48	0	0		0	0	0	.08	0	0
27	1.4	0	0	0	0		0	0	0	0	.52	0
28	1.1	0	0	0	0		0	0	0	0	.01	0
29	.18	0	0	0	---		0	.01	0	0	0	0
30	2.1	0	1.4	.55	---		0	0	0	0	0	0
31	2.3	---	.75	0	---		---	0	---	0	0	---
TOTAL	55.22	2.98	2.63	1.66	8.89	0	3.01	6.43	37.66	35.84	23.99	14.05
MEAN	1.78	.099	.085	.054	.32	0	.10	.21	1.26	1.16	.77	.47
MAX	12	1.5	1.4	.88	2.6	0	1.4	2.3	17	11	15	9.1
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	110	5.9	5.2	3.3	18	0	6.0	13	75	71	48	28
CAL YR 1974	TOTAL	2096.73	MEAN 5.74	MAX 1300	MIN 0	AC-FT 4160						
WTR YR 1975	TOTAL	192.36	MEAN .53	MAX 17	MIN 0	AC-FT 382						

PEAK DISCHARGE (BASE, 100 FT³/S).--No peak above base.

BRAZOS RIVER BASIN

Q080910 White River Reservoir near Spur, Tex.

LOCATION.--Lat 33°27'28", long 101°05'22", Crosby County, on right bank at intake structure at White River Dam on White River, 0.5 mile (0.8 km) downstream from Sand Creek, 1.7 miles (2.7 km) upstream from Home Creek, 13 miles (21 km) west of Spur, and 22.8 miles (36.7 km) upstream from Salt Fork Brazos River.

DRAINAGE AREA.--775 mi² (2,007 km²), of which 603 mi² (1,562 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: April 1964 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 45,580 acre-ft (56.2 hm³) Oct. 25 (elevation, 2,372.84 ft or 723.242 m); minimum, 41,920 acre-ft (51.7 hm³) May 19 (elevation 2,370.98 ft or 722.675 m).

Period of record: Maximum contents, 45,580 acre-ft (56.2 hm³) Oct. 25, 1974 (elevation, 2,372.84 ft or 723.242 m); minimum since reaching normal operating level in June 1969, 25,990 acre-ft (32.0 hm³) June 1, 1974 (elevation, 2,361.39 ft or 719.752 m).

REMARKS.--The reservoir is formed by a rolled earthfill dam 3,300 ft (1,010 m) long. The dam was completed and storage began in October 1963. The emergency spillway is an open cut channel through rock, 1,100 ft (335 m) wide, located at the right end of dam. The spillway is designed to discharge 69,000 ft³/s (1,950 m³/s) with a 7.5-foot (2.29-metre) head. The uncontrolled service spillway is a 5-foot (2-metre) square drop-inlet structure that discharges through a 5-foot (2-metre) square concrete conduit. The service outlet is a controlled 18-inch-diameter (457-millimetre) concrete pipe that is connected to the 5-foot (2-metre) conduit. There is a pump station about 1,400 ft (427 m) upstream from the dam on the right bank. The pump station is connected to the lake by a 58-inch-diameter (1,473-millimetre) concrete pipe. The water in the reservoir is used for municipal and industrial supplies for the cities of Crosbyton, Post, Ralls, and Spur. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station No. 08080700. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	2,395.0	-
Crest of spillway.....	2,384.0	71,590
Crest of spillway (top of conservation pool).....	2,372.5	44,900
Lowest gated outlet (invert).....	2,331.2	2,270

COOPERATION.--Records of diversion and capacity table (dated July 1960) furnished by the White River Municipal Water District.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,370.0	40,070
2,373.0	45,900

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43710	45480	44760	44360	44080	44200	43280	42540	43730	43820	44300	43300
2	43690	45460	44740	44380	44240	44200	43220	42540	43670	43740	44280	43240
3	43650	45440	44720	44360	44360	44160	43180	42500	43610	43880	44240	43220
4	43630	45380	44700	44340	44400	44140	43160	42500	43550	43860	44200	43160
5	43590	45340	44700	44340	44400	44140	43140	42480	43510	43880	44140	43120
6	43570	45320	44680	44320	44340	44120	43140	42410	43450	43840	44080	43030
7	43530	45320	44660	44360	44340	44100	43260	42350	43590	43800	44000	42970
8	43530	45300	44620	44340	44340	44060	43240	42310	43550	43800	43940	42910
9	43510	45380	44600	44340	44300	44060	43220	42290	43530	43780	43880	42870
10	43470	45400	44600	44300	44280	44020	43220	42250	43510	43740	43820	42810
11	43450	45380	44600	44300	44280	44000	43200	42250	43510	43710	43740	42990
12	43430	45320	44580	44220	44240	43920	43180	42210	43490	43650	43710	43050
13	43610	45300	44580	44200	44240	43900	43180	42190	43530	43570	43650	43140
14	43820	45240	44540	44200	44220	43880	43160	42130	43510	43490	43670	43120
15	43800	45220	44520	44200	44220	43860	43120	42100	43430	43420	43860	43120
16	43800	45200	44480	44180	44300	43840	43120	42040	43360	43320	43880	43100
17	43800	45200	44460	44180	44300	43800	43120	41980	43280	43280	43860	43050
18	43780	45180	44440	44180	44280	43780	43010	41940	43220	43340	43800	43030
19	43760	45160	44420	44140	44260	43760	42970	42230	43160	43630	43760	42970
20	43740	45140	44400	44100	44260	43740	42930	42370	43100	44060	43710	42910
21	43730	45100	44380	44100	44280	43710	42910	43200	43050	44120	43670	42970
22	44040	45080	44380	44060	44300	43690	42910	44040	43050	44080	43630	42910
23	45020	45060	44380	44040	44280	43630	42890	44100	42990	44100	43570	42850
24	45540	45000	44320	44040	44280	43570	42850	44120	43530	44100	43510	42790
25	45580	44940	44320	44020	44260	43550	42830	44080	43880	44100	43450	42740
26	45560	44940	44340	44020	44240	43490	42790	44040	44000	44440	43400	42720
27	45540	44900	44340	44000	44220	43470	42740	44000	44000	44480	43510	42700
28	45540	44880	44340	44000	44220	43420	42720	43960	43940	44460	43470	42660
29	45500	44820	44320	43980	---	43360	42660	43940	43900	44440	43430	42640
30	45500	44780	44360	44000	---	43320	42580	43820	43880	44400	43400	42600
31	45520	---	44360	44000	---	43300	---	43760	---	44340	43360	---
(†)	2372.81	2372.44	2372.23	2372.05	2372.16	2371.69	2371.32	2371.93	2371.99	2372.22	2371.72	2371.33
(*)	+1810	-740	-420	-360	+220	+80	+280	+1180	+120	+460	-980	-760
(††)	179	190	198	197	157	195	230	253	278	266	269	223
MAX	45580	45480	44760	44380	44400	44200	43280	44120	44000	44480	44300	43300
MIN	43430	44780	44320	43980	44080	43300	42580	41940	42990	43280	43360	42600

CAL YR 1974..... * +14570

WTR YR 1975..... * -1110

†† 2940

†† 2640

MAX 45580

MAX 45580

MIN 26020

MIN 41940

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal and industrial use.

BRAZOS RIVER BASIN

167

08080910 White River Reservoir near Spur, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-
		SOLVED SILICA (SiO2) (MG/L)	SOLVED CAL- CIUM (CA) (MG/L)	SOLVED MAG- NE- SIUM (MG) (MG/L)		SOLVED SODIUM (NA) (MG/L)			SOLVED PO- TAS- SIUM (K) (MG/L)
APR., 1975									
15...	1415	.5	31	13	110	5.9	242	8	37
JULY									
08...	1210	1.6	30	13	110	6.9	252	0	38
DATE	DIS-	DIS-	DIS-	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
DATE	SOLVED CHLO- RIDE (CL) (MG/L)	SOLVED FLUO- RIDE (F) (MG/L)	SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)						
APR., 1975									
15...	82	1.9	409	130	0	4.2	753	8.5	14.0
JULY									
08...	89	1.9	415	130	0	4.2	757	8.3	27.0

BRAZOS RIVER BASIN

08080916 Salt Fork Brazos River at Farm Road 1081 near Clairemont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°14'33", Long 100°55'40", Kent County, at bridge on Farm Road 1081 and 11.7 miles (18.8 km) northwest of Clairemont.

PERIOD OF RECORD.--Periodic discharge measurements: April 1965, March 1967 to current year. Periodic water-quality data: December 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT. 10...	1035	.12	170	59	630	1000	670	4490	22.0
NOV. 21...	1130	2.9	230	79	770	2500	900	8930	12.0
JAN. 08...	1120	.61	320	110	980	3600	1300	11600	10.0
FEB. 26...	0835	1.1	350	100	930	4300	1300	13700	4.0
APR. 15...	1330	.27	280	97	1000	1800	1100	7340	24.0
JULY 08...	--	.00	--	--	--	--	--	--	--
AUG. 19...	1700	.12	230	63	670	1000	830	5000	31.0

BRAZOS RIVER BASIN

169

08080940 Salt Fork Brazos River at State Highway 208 near Clairemont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°12'22", long 100°44'50", Kent County, at bridge on State Highway 208 and 2.8 miles (4.5 km) north of Clairemont.

PERIOD OF RECORD.--Periodic discharge measurements: March to August 1964, October 1966 to current year. Periodic water-quality data: December 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT. 10...	1115	.37	630	170	1600	6200	2300	19100	23.0
NOV. 21...	1230	2.0	400	150	1400	5200	1400	16100	13.0
JAN. 18...	1245	.77	620	190	1800	5900	2300	19400	10.0
FEB. 26...	0930	1.7	470	160	1500	5000	1800	15800	4.5
APR. 15...	1220	.47	750	230	2100	6900	2800	22000	23.0
JULY 08...	--	.00	--	--	--	--	--	--	--
AUG. 19...	1530	2.6	450	100	1200	4200	1500	13400	30.0
SEP. 30...	1440	.71	540	210	1700	6300	2200	21600	28.0

Brazos River Basin

08080950 Duck Creek near Girard, Tex.

LOCATION.--Lat 33°21'22", long 100°42'17", Kent County, near right bank on downstream side of bridge on Farm Road 643, 2.5 miles (4.0 km) west of Girard, and 10.0 miles (16.1 km) upstream from Salt Fork Brazos River.

DRAINAGE AREA.--294 mi² (761 km²), of which 17.3 mi² (44.8 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,006.08 ft (611.453 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 5.79 ft³/s (0.164 m³/s), 4,190 acre-ft/yr (5.17 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,560 ft³/s (44.2 m³/s) May 23 (gage height, 13.44 ft or 4.097 m); minimum, 0.63 ft³/s (0.018 m³/s) Sept. 5.

Period of record: Maximum discharge, 5,000 ft³/s (142 m³/s) June 4, 1974 (gage height, 15.22 ft or 4.639 m); no flow July 19 to Aug. 6, Aug. 18-21, 1966, Aug. 19, 1969, July 20, 1971, and Aug. 17-22, 1974.

Maximum stage since at least 1902 occurred in March or April 1918 (stage and discharge unknown); the second highest stage, 19.8 ft (6.04 m) September 1955, from information by local residents.

REMARKS.--Records good. Several small diversions upstream from gage. At end of year, flow from 108 mi² (280 km²) above this station was partly controlled by 12 floodwater-retarding structures with a combined capacity of 28,800 acre-ft (35.5 hm³) below the flood-spillway crests, of which 4,090 acre-ft (5.04 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WRD Texas 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	8.2	1.7	2.5	3.5	1.8	2.7	3.0	2.8	1.4	1.8	1.2
2	2.2	3.1	1.8	2.7	3.5	1.6	2.6	3.2	2.8	1.3	2.0	1.1
3	2.1	2.3	1.8	2.6	4.1	1.6	2.6	3.0	2.5	4.0	1.9	.98
4	2.0	1.9	1.9	2.6	4.0	1.4	2.7	3.3	2.3	6.1	1.8	.87
5	1.8	1.7	2.0	2.5	3.2	1.4	2.8	3.6	2.2	1.8	1.8	.80
6	1.6	1.6	1.9	2.5	2.8	1.4	2.7	3.1	2.1	1.4	1.6	.87
7	1.5	1.8	1.9	2.6	2.8	1.3	3.5	3.0	2.0	1.3	1.5	1.0
8	1.4	1.8	1.9	2.7	2.9	1.2	3.7	2.9	4.6	1.2	1.5	1.1
9	1.3	1.9	1.9	2.9	2.6	1.4	2.4	3.0	2.7	1.2	1.4	1.0
10	1.3	2.2	2.2	2.9	2.8	1.4	2.2	3.0	2.9	1.3	1.5	1.0
11	1.3	1.8	2.3	2.8	2.9	1.5	2.3	3.1	2.6	1.3	1.5	1.1
12	1.4	1.6	2.1	2.2	2.7	1.6	2.1	3.0	3.3	1.2	1.4	38
13	1.7	1.7	2.0	2.3	2.7	1.5	2.3	3.0	13	1.0	1.5	17
14	2.5	1.6	2.1	2.5	2.8	1.5	2.1	2.9	26	.90	27	11
15	2.4	1.6	2.1	2.6	2.8	1.5	2.1	3.0	3.1	.81	7.5	4.7
16	1.7	1.7	2.1	2.5	3.2	1.5	2.3	2.7	2.3	.75	120	3.1
17	1.6	1.7	2.2	2.4	3.4	1.7	2.4	2.4	2.0	.82	11	2.7
18	1.5	1.8	2.1	2.6	3.0	1.9	2.4	2.2	1.7	.85	3.2	2.4
19	1.5	1.8	2.1	2.5	2.9	2.0	2.3	2.1	1.6	1.0	1.9	2.3
20	1.5	1.8	2.1	2.5	3.0	2.2	2.5	2.7	1.5	2.1	1.5	2.3
21	1.4	1.8	2.3	2.6	3.0	2.2	2.5	58	1.5	2.1	1.3	3.4
22	1.6	1.8	2.4	2.4	3.1	2.4	2.6	455	1.5	1.7	1.2	3.2
23	2.1	1.8	2.4	2.6	2.9	2.2	2.9	349	2.2	1.4	1.2	2.6
24	81	1.6	2.1	2.7	2.8	2.2	2.8	17	4.1	26	1.1	2.4
25	17	1.6	2.2	2.7	2.6	2.4	2.9	6.9	8.9	3.6	.97	2.3
26	4.3	1.7	2.6	2.6	2.4	2.6	3.1	4.7	2.7	64	1.1	2.3
27	2.5	1.8	2.5	2.5	2.3	3.3	3.2	3.8	1.7	14	1.6	2.3
28	2.7	1.9	2.5	2.3	1.9	2.7	3.0	4.0	1.5	2.9	1.9	2.3
29	2.2	1.8	2.5	2.5	-----	2.3	3.0	3.4	1.5	2.1	1.6	2.3
30	2.4	1.6	2.4	2.7	-----	2.6	2.9	3.2	1.5	1.8	1.4	2.6
31	40	-----	2.8	3.6	-----	2.7	-----	2.9	-----	1.8	1.2	-----
TOTAL	191.9	61.0	66.9	80.6	82.6	59.0	79.6	966.1	111.1	153.13	207.87	120.22
MEAN	6.19	2.03	2.16	2.60	2.95	1.90	2.65	31.2	3.70	4.94	6.71	4.01
MAX	81	8.2	2.8	3.6	4.1	3.3	3.7	455	26	64	120	38
MIN	1.3	1.6	1.7	2.2	1.9	1.2	2.1	2.1	1.5	.75	.97	.80
AC-FT	381	121	133	160	164	117	158	1920	220	304	412	238
CAL YR 1974	TOTAL	4,880.13	MEAN	13.4	MAX	2,440	MIN	0	AC-FT	9,680		
YR 1975	TOTAL	2,180.02	MEAN	5.97	MAX	455	MIN	.75	AC-FT	4,320		

08080959 Salt Fork Brazos River at U.S. Highway 380 near Jayton, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°10'06", long 100°37'50", Kent County, at bridge on U.S. Highway 380 and 6.5 miles (10.5 km) southwest of Jayton.

PERIOD OF RECORD.--Periodic discharge measurements: February 1965 to current year. Periodic water-quality data: October 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS)	TEMPER- ATURE (DEG C)
OCT. 10...	1300	2.9	530	140	1500	4000	1900	13800	25.0
NOV. 21...	1320	4.5	530	180	1600	5100	2100	16200	13.0
JAN. 08...	1335	2.0	550	170	1700	4100	2100	14500	12.0
FEB. 26...	1030	5.1	580	180	1800	4600	2200	15500	7.0
APR. 15...	1300	2.2	730	250	1900	12000	2900	37200	21.0
JULY 08...	1015	1.5	540	170	1800	5000	2000	17100	28.0
AUG. 19...	1600	3.0	330	95	900	2100	1200	8240	30.0
SEP. 30...	1440	5.6	510	170	1700	4300	2000	14600	28.0

BRAZOS RIVER BASIN

08081000 Salt Fork Brazos River near Peacock, Tex.

LOCATION.--Lat 33°12'43", long 100°25'53", Stonewall County, on right bank at downstream side of bridge on U.S. Highway 380, 2.9 miles (4.7 km) northwest of Peacock, 6.2 miles (10.0 km) upstream from Croton Creek, 13.0 miles (20.9 km) northwest of Aspermont and at mile 54.3 (87.4 km) measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA.--4,275 mi² (11,072 km²), of which 2,770 mi² (7,170 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: December 1949 to September 1951, September 1964 to current year.

Water quality: Chemical analyses: December 1949 to September 1951, October 1964 to current year. Water temperatures: December 1949 to September 1951, October 1964 to current year.

GAGE.--Water-stage and specific-conductance recorders. Datum of gage is 1,724.32 ft (525.573 m) above mean sea level. Prior to Sept. 19, 1964, nonrecording gage at site 2.9 miles (4.7 km) upstream at datum 19.39 ft (5.910 m) higher.

AVERAGE DISCHARGE.--12 years (1950-51, 1964-75), 42.4 ft³/s (1.201 m³/s), 30,720 acre-ft/yr (37.9 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 3,020 ft³/s (85.5 m³/s) May 23 (gage height, 7.67 ft or 2.338 m); no flow July 12-19.

Period of record: Maximum discharge, 19,000 ft³/s (538 m³/s) Aug. 13, 1972 (gage height, 13.75 ft or 4.191 m); no flow at times most years.

Historic: Maximum stage since at least 1939, that of Aug. 13, 1972.

Water quality: Current year: Maximum daily specific conductance, 42,600 micromhos May 15; minimum daily, 2,000 micromhos July 28. Maximum water temperatures, 37.0°C Aug. 23; minimum, freezing point on several days during winter months.

Period of record: Maximum daily specific conductance, 61,100 micromhos July 31, 1966; minimum daily, 900 micromhos Aug. 31, 1966. Maximum water temperatures (1949-50, 1964-69, 1971-75), 39.0°C June 25, 1968; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. Some regulation by White River Reservoir (station 08080910). Several small diversions above station. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Specific conductance is recorded continuously at this station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	128	13	15	20	9.6	6.2	2.1	10	.12	4.3	10
2	45	71	13	24	22	9.2	5.2	2.1	7.8	.25	6.5	4.3
3	37	48	12	18	32	8.2	4.3	2.1	6.6	.76	2.5	3.7
4	30	42	12	14	30	7.8	4.3	2.1	5.5	8.1	1.5	3.2
5	24	37	16	12	32	7.4	4.3	2.1	4.9	1.1	1.2	2.7
6	22	36	12	10	33	7.4	4.0	1.9	4.0	.23	1.0	2.5
7	19	33	11	10	36	7.0	13	1.9	4.6	.09	.80	1.9
8	19	31	11	9.6	39	7.0	13	1.9	7.4	.04	.70	1.6
9	17	31	11	9.2	38	6.6	8.7	1.8	5.9	.02	.60	1.2
10	14	37	16	9.2	33	6.6	31	1.6	4.3	.02	.50	24
11	11	33	11	7.8	22	6.6	21	2.3	5.4	.01	.45	7.9
12	9.8	34	11	7.8	15	8.7	16	1.9	4.9	0	.40	261
13	9.8	36	11	7.4	12	7.8	13	1.9	5.3	0	.35	352
14	57	32	10	7.4	12	7.4	12	1.6	5.2	0	.30	261
15	48	29	9.2	7.0	11	7.0	11	1.5	24	0	12	172
16	146	25	8.2	6.6	11	7.0	11	1.3	14	0	19	108
17	92	23	7.8	6.6	11	7.0	9.6	1.3	3.7	0	70	69
18	47	22	7.8	7.4	10	6.2	8.7	1.2	1.5	0	29	42
19	43	21	7.8	7.8	11	5.2	7.8	1.1	.80	0	15	32
20	33	19	7.8	7.8	11	4.6	6.6	2.3	.57	5.4	9.6	25
21	24	18	7.4	7.4	10	4.0	5.9	1.9	.50	283	6.6	31
22	19	18	7.0	6.6	10	4.0	5.5	151	.35	505	4.9	26
23	39	18	7.0	6.6	12	4.3	5.2	1700	.23	130	3.7	24
24	576	15	6.6	5.9	15	4.3	4.3	215	.12	59	2.5	21
25	601	15	6.6	5.9	14	3.7	3.0	93	.12	94	1.8	18
26	264	14	7.0	6.2	12	3.2	2.7	48	1.3	192	11	17
27	169	15	11	6.2	11	6.1	9.0	30	2.5	474	35	15
28	143	15	11	6.2	10	11	3.5	21	1.2	389	268	13
29	75	15	9.6	7.4	---	8.2	2.5	18	.44	118	100	12
30	144	14	11	18	---	7.4	2.1	12	.20	32	42	12
31	121	---	19	23	---	7.0	---	11	---	11	26	---
TOTAL	2957.6	925	321.8	304.0	535	207.5	254.4	2336.9	133.33	2303.14	677.20	1574.0
MEAN	95.4	30.8	10.4	9.81	19.1	6.69	8.48	75.4	4.44	74.3	21.8	52.5
MAX	601	128	19	24	39	11	31	1700	24	505	268	352
MIN	9.8	14	6.6	5.9	10	3.2	2.1	1.1	.12	0	.30	1.2
AC-FT	5870	1830	638	603	1060	412	505	4640	264	4570	1340	3120

CAL YR 1974 TOTAL 18218.37 MEAN 49.9 MAX 4010 MIN 0 AC-FT 36140
WTR YR 1975 TOTAL 12529.87 MEAN 34.3 MAX 1700 MIN 0 AC-FT 24850

PEAK DISCHARGE (BASE, 5,000 FT³/S).--No peak above base.

08081000 Salt Fork Brazos River near Peacock, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 31...	1625	5.4	13	240	72	2200	8.1	164	0	610
NOV. 19...	1615	22	14	590	180	6500	18	181	0	1800
DEC. 10...	1350	13	9.3	640	230	7000	20	169	0	2200
JAN. 07...	1510	9.9	8.7	690	220	6800	25	158	0	2200
FEB. 19...	1430	11	9.6	690	240	7000	25	189	0	2200
APR. 23...	1410	5.4	8.3	790	260	7800	24	171	0	2500
MAY 22...	1440	150	27	780	180	5800	25	258	0	2300
JUNE 18...	0945	1.9	10	680	120	5500	20	157	0	1900
JULY 23...	1430	110	12	85	15	440	4.3	158	0	240
AUG. 20...	0905	3.6	9.7	330	98	2400	13	130	0	970
SEP. 10...	0850	30	8.6	450	44	810	9.0	83	0	1100

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	3400	--	6620	900	760	32	11500	7.9	19.5
NOV. 19...	10000	.6	19200	2200	2100	60	28900	7.8	19.5
DEC. 10...	11000	.2	21200	2500	2400	60	33500	7.7	7.0
JAN. 07...	11000	1.1	21000	2600	2500	58	29400	7.6	13.0
FEB. 19...	11000	1.0	21300	2700	2600	59	33400	7.8	14.0
APR. 23...	12000	.7	23500	3000	2900	62	36300	7.5	24.0
MAY 22...	8800	.7	18000	2700	2500	49	27800	7.0	22.0
JUNE 18...	8800	.6	17100	2200	2100	51	26800	7.9	23.0
JULY 23...	610	--	1480	270	140	12	2650	7.8	28.0
AUG. 20...	3900	--	7780	1200	1100	30	12600	7.8	23.0
SEP. 10...	1300	.5	3760	1300	1200	9.8	5890	7.4	22.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	2957.6	10900	6700	53500	3200	25600	920	7350	****
NOV. 1974.....	925	20400	13000	32500	6600	16500	1400	3500	****
DEC. 1974.....	321.8	34600	22000	19100	11000	9560	2500	2170	****
JAN. 1975.....	304	32900	21000	17200	11000	9030	1900	1560	****
FEB. 1975.....	535	26400	17000	24600	8700	12600	1800	2600	****
MAR. 1975.....	207.5	35000	23000	12900	12000	6720	2100	1180	****
APR. 1975.....	254.4	28700	19000	13100	9800	6730	1900	1310	****
MAY 1975.....	2336.9	5170	3000	18900	1200	7570	610	3850	680
JUNE 1975.....	133.33	23500	15000	5400	7600	2740	1600	576	****
JULY 1975.....	2303.14	4390	2400	14900	910	5660	470	2920	620
AUG. 1975.....	677.2	5190	3000	5490	1200	2190	610	1120	680
SEPT 1975.....	1574	11600	7200	30600	3500	14900	930	3950	****
TOTAL	12529.84	**	**	248000	**	120000	**	32100	**
WTD.AVG.	34.33	11800	7300	**	3500	**	950	**	*****

BRAZOS RIVER BASIN

08081000 Salt Fork Brazos River near Peacock, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20200	10300	35500	33700	27000	29500	35200	39600	23500	33000	9710	7910
2	22200	10400	33600	34200	27200	32800	36300	39600	25500	32500	9620	12500
3	24900	15700	37400	33000	23600	32900	36200	39600	27800	32400	17700	15300
4	27100	15800	35300	32900	26200	33800	36100	39500	29100	20000	18000	18400
5	28800	14100	36600	33400	26600	32500	36300	39900	26400	21400	18800	21000
6	25700	20800	34100	33500	21100	34400	35700	39500	31700	33800	20600	23100
7	34500	19200	38100	32300	18500	35900	31500	40600	33200	33800	22800	15600
8	35500	16100	36600	35800	19400	36000	27800	38200	28600	32700	24700	18400
9	36500	24100	35600	32700	23600	35700	27600	38600	28400	32800	25800	27000
10	37900	24100	33300	34200	23600	35700	23600	38300	31600	32200	28000	5940
11	38000	21400	33900	39300	26100	36400	12800	40200	32200	31700	27700	13700
12	32000	21300	34100	30500	26000	33000	17300	40000	31500	---	21700	9500
13	39400	20900	34000	33400	28600	34000	21200	39600	30900	---	19600	8930
14	32100	19600	32600	37700	28500	34600	24200	40400	26900	---	29300	6930
15	32100	22000	34900	32700	33800	34100	27900	42600	10600	---	20000	7250
16	8970	25700	34900	30900	33200	34600	31500	42400	13600	---	7800	9670
17	10500	27700	34900	30400	33200	36000	35200	41100	19300	---	3320	13000
18	11400	24700	35000	32700	33600	35300	35500	41800	26400	---	3370	17300
19	16100	28300	34700	34400	33300	36000	37500	41700	31800	---	9280	20800
20	21000	29000	34800	34200	33700	36200	38600	39600	33800	15700	12800	24200
21	23500	25400	35000	34600	33800	34600	38000	41700	34000	8540	17700	25300
22	26000	29800	35300	35200	32200	37000	37500	11300	33500	4300	21500	28700
23	28800	33400	34900	34000	32600	37600	36500	3500	33300	2740	24400	24900
24	9630	33700	34900	31000	32700	39000	36500	2130	33500	3050	25500	27700
25	3440	33800	34700	33500	33200	35900	36800	6890	33100	5280	27600	18100
26	3360	33500	33900	34200	33200	38500	37200	6900	30500	4750	17500	29100
27	2800	35100	33300	34000	27000	36200	32200	10800	27300	4250	4030	19600
28	6280	27200	34200	34100	29400	37900	35700	16500	25200	2000	3500	14400
29	9540	36400	33000	33900	---	36500	38600	17800	31500	2260	2480	34900
30	11200	25900	33500	30000	---	36000	39000	19300	31500	3770	3010	36400
31	11300	---	31400	26700	---	35500	---	23300	---	7100	5500	---
MONTH	21640	24180	34650	33330	28600	35290	32530	31060	28540	---	16240	18520

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	19.0	3.0	3.0	7.0	8.0	21.0	18.0	26.0	22.0	25.0	22.0
2	18.0	18.0	5.0	11.0	7.0	8.0	3.0	18.0	17.0	23.0	23.0	22.0
3	16.0	12.0	3.0	5.0	7.0	5.0	5.0	17.0	27.0	23.0	23.0	22.0
4	16.0	10.0	13.0	10.0	10.0	20.0	6.0	16.0	17.0	23.0	23.0	21.0
5	17.0	6.0	9.0	1.0	7.0	22.0	9.0	16.0	17.0	26.0	20.0	21.0
6	16.0	8.0	7.0	2.0	7.0	10.0	17.0	16.0	22.0	23.0	20.0	20.0
7	14.0	13.0	11.0	6.0	---	7.0	14.0	27.0	21.0	23.0	21.0	20.0
8	15.0	10.0	6.0	5.0	---	5.0	10.0	12.0	21.0	31.0	24.0	20.0
9	17.0	11.0	10.0	7.0	---	5.0	10.0	15.0	21.0	23.0	23.0	20.0
10	20.0	12.0	7.0	10.0	---	3.0	11.0	27.0	---	23.0	22.0	20.0
11	18.0	13.0	8.0	0.0	---	8.0	9.0	21.0	27.0	21.0	22.0	20.0
12	17.0	15.0	4.0	0.0	---	6.0	9.0	18.0	19.0	---	22.0	---
13	19.0	9.0	3.0	0.0	---	2.0	21.0	14.0	20.0	---	25.0	13.0
14	14.0	5.0	10.0	10.0	10.0	3.0	12.0	14.0	20.0	---	23.0	17.0
15	16.0	7.0	8.0	2.0	6.0	16.0	12.0	14.0	20.0	---	23.0	17.0
16	21.0	9.0	7.0	3.0	3.0	6.0	13.0	31.0	25.0	---	25.0	20.0
17	22.0	9.0	6.0	3.0	3.0	19.0	13.0	14.0	20.0	---	24.0	20.0
18	14.0	9.0	4.0	2.0	12.0	7.0	14.0	18.0	23.0	---	24.0	19.0
19	14.0	10.0	3.0	10.0	0.0	8.0	26.0	18.0	22.0	---	33.0	19.0
20	14.0	8.0	3.0	0.0	15.0	10.0	25.0	17.0	23.0	28.0	24.0	16.0
21	14.0	8.0	7.0	6.0	6.0	11.0	11.0	17.0	22.0	28.0	24.0	16.0
22	14.0	15.0	5.0	5.0	3.0	8.0	17.0	22.0	22.0	23.0	24.0	12.0
23	21.0	14.0	5.0	5.0	7.0	7.0	18.0	18.0	21.0	23.0	37.0	23.0
24	22.0	7.0	2.0	4.0	15.0	5.0	16.0	18.0	21.0	24.0	24.0	22.0
25	20.0	5.0	0.0	6.0	15.0	5.0	15.0	21.0	27.0	23.0	23.0	22.0
26	16.0	6.0	0.0	13.0	4.0	10.0	19.0	21.0	21.0	23.0	23.0	15.0
27	14.0	14.0	4.0	15.0	4.0	12.0	25.0	21.0	23.0	28.0	20.0	25.0
28	14.0	14.0	4.0	5.0	6.0	6.0	10.0	20.0	21.0	31.0	22.0	25.0
29	13.0	1.0	5.0	---	---	0.0	10.0	18.0	21.0	25.0	22.0	17.0
30	18.0	0.0	6.0	7.0	---	8.0	10.0	16.0	21.0	24.0	23.0	18.0
31	19.0	---	9.0	7.0	---	20.0	---	26.0	---	33.0	26.0	---
MONTH	17.0	10.0	5.5	5.5	---	8.5	13.5	18.5	21.5	---	24.0	19.5

08081100 Croton Creek below Short Croton Creek near Jayton, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°18'23", long 100°31'55", Kent County, at county road crossing and 4.7 miles (7.6 km) northeast of Jayton.

PERIOD OF RECORD.--Periodic discharge measurements: August 1959 to current year. Periodic water-quality data: October 1960 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA+MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT. 10...	1550	.81	1100	220	2800	9000	3700	27000	28.0
NOV. 20...	1545	2.5	1000	270	3000	9900	3600	28700	13.0
JAN. 08...	1610	1.7	1100	270	3700	13000	3900	39100	14.0
FEB. 26...	1200	2.3	1100	310	3400	12000	4000	35200	7.0
APR. 01...	1110	.49	1300	370	3700	17000	4800	48700	14.0
23...	0900	.14	1200	340	4100	13000	4400	39600	18.5
MAY 07...	0805	.05	1000	240	3100	8400	3500	27700	13.0
JUNE 18...	1445	.80	1100	250	3200	7900	3800	25400	30.5
AUG. 01...	1240	.06	1200	170	3300	7500	3700	24800	37.0
20...	1035	.03	910	120	2500	3900	2800	14600	28.0

BRAZOS RIVER BASIN

08081200 Croton Creek near Jayton, Tex.

LOCATION.--Lat 33°17'21", long 100°26'00", Stonewall County, on left bank 460 ft (140 m) upstream from county road, 1.1 miles (1.8 km) upstream from mouth, and 8.6 miles (13.8 km) northeast of Jayton.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--Discharge: August 1959 to current year.

Water quality: Chemical analyses: May 1959 to current year. Water temperatures: October 1961 to September 1973.

GAGE.--Water-stage and specific-conductance recorders. Datum of gage is 1,694.45 ft (516.468 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 15.2 ft³/s (0.430 m³/s), 11,010 acre-ft/yr (13.6 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 5,130 ft³/s (145 m³/s) May 22 (gage height, 10.48 ft or 3.194 m, from floodmark); no flow for many days.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) Oct. 18, 1960 (gage height, 12.40 ft or 3.780 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s); no flow for many days.

Historic: Maximum stage since at least 1935, 13.5 ft (4.11 m) in 1941 or 1942, present datum, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 49,500 micromhos Feb. 4; minimum daily, 2,180 micromhos May 23.

Period of record: Maximum daily specific conductance (1961-64, 1972-75), 50,900 micromhos Apr. 18, 1964; minimum daily, 2,150 micromhos Sept. 25, 1974.

REMARKS.--Discharge records fair. No diversion above station. Specific conductance is recorded continuously at this station.

REVISIONS.--WSP 2122: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	14	1.6	4.2	6.5	1.7	.38	.05	8.0	.04	.05	.08
2	5.0	9.8	1.5	4.3	8.6	1.6	.27	.05	4.0	.02	.05	.02
3	4.2	7.4	1.4	4.1	11	1.2	.22	1.1	2.5	.39	.03	0
4	3.3	5.8	1.4	3.4	11	1.2	.18	.50	1.5	15	0	0
5	2.5	4.9	1.9	2.8	11	1.2	.16	.40	.90	3.0	0	0
6	2.0	4.4	2.1	2.2	7.0	1.1	.14	.30	.60	1.0	0	0
7	1.7	4.9	1.8	1.9	4.7	.90	.80	.42	.35	.30	0	0
8	1.4	5.0	1.7	1.7	4.2	.81	5.3	.23	14	.06	0	0
9	1.2	5.4	1.7	1.6	3.7	.90	2.9	.18	2.7	.02	0	0
10	1.0	6.0	2.0	1.5	3.2	.81	1.7	.14	21	0	0	0
11	.80	5.3	2.3	1.5	2.8	.90	1.1	.12	24	0	0	.72
12	.70	4.7	2.2	1.4	2.4	1.2	.63	.10	7.2	0	0	32
13	1.0	4.3	1.9	1.4	2.1	1.2	.50	.09	3.0	0	0	45
14	3.2	4.0	1.7	1.3	1.9	1.1	.30	.08	17	0	0	23
15	5.5	3.8	1.6	1.3	1.9	1.0	.20	.07	9.0	0	1.1	10
16	5.1	3.6	1.5	1.2	2.5	.90	.16	.07	5.0	0	20	5.0
17	4.2	3.4	1.5	1.2	3.5	.81	.14	.06	2.5	0	8.8	2.7
18	3.2	3.2	1.4	1.1	3.2	.64	.12	.06	1.3	0	3.3	1.4
19	2.5	3.6	1.4	1.1	2.9	.49	.10	.10	.60	5.9	.54	.70
20	2.2	3.3	1.3	1.0	2.7	.42	.09	.08	.30	1.0	.08	.40
21	1.9	3.0	1.3	1.0	2.5	.36	.08	1.0	.15	.30	.02	2.0
22	1.9	2.8	1.2	1.0	2.4	.31	.07	996	.09	.06	0	1.0
23	2.8	2.6	1.2	1.0	2.3	.27	.07	898	.05	.02	0	.50
24	251	2.4	1.1	1.0	2.2	.23	.06	48	.02	0	0	.30
25	176	2.2	1.1	.90	2.1	.25	.06	24	20	29	0	.15
26	35	2.1	2.0	.90	2.0	.27	.06	16	11	25	3.2	.08
27	14	2.0	2.5	.90	1.9	.40	.05	12	2.5	9.5	12	.04
28	39	1.9	2.2	.90	1.8	.76	.05	140	.80	4.0	17	.02
29	71	1.8	2.0	.90	---	.45	.05	35	.20	.92	5.2	0
30	31	1.7	2.1	3.4	---	.60	.05	15	.08	.18	1.0	0
31	31	---	4.5	5.0	---	.51	---	11	---	.07	.30	---
TOTAL	711.30	129.3	55.1	57.10	114.0	24.49	15.99	2200.20	160.34	95.78	72.67	125.11
MEAN	22.9	4.31	1.78	1.84	4.07	.79	.53	71.0	5.34	3.09	2.34	4.17
MAX	251	14	4.5	5.0	11	1.7	5.3	996	24	29	20	45
MIN	.70	1.7	1.1	.90	1.8	.23	.05	.05	.02	0	0	0
AC-FT	1410	256	109	113	226	49	32	4360	318	190	144	248

CAL YR 1974 TOTAL 4432.41 MEAN 12.1 MAX 1240 MIN 0 AC-FT 8790
WTR YR 1975 TOTAL 3761.38 MEAN 10.3 MAX 996 MIN 0 AC-FT 7460

PEAK DISCHARGE (BASE, 1,600 FT³/S).--May 22 (about 0700) 5,130 ft³/s (10.48 ft, from floodmark); May 23 (0300) 5,080 ft³/s (10.46 ft).

08081200 Croton Creek near Jayton, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 31...	1210	40	7.9	730	81	2000	8.1	84	0	1600
NOV. 19...	1100	3.6	7.4	1100	210	6000	15	160	0	2900
DEC. 10...	1000	1.9	7.5	1100	270	6700	18	163	0	2900
JAN. 29...	1350	.89	3.6	1200	320	8300	27	157	0	3300
FEB. 28...	0905	1.9	2.0	1100	300	7700	25	141	0	3300
MAR. 14...	1000	.56	3.7	1200	360	8500	26	144	0	3800
APR. 01...	1310	.44	2.4	1300	380	10000	31	185	0	4300
MAY 24...	1000	45	8.2	610	39	730	7.2	72	0	1600
JUNE 18...	1250	1.3	6.6	1100	130	4500	17	274	0	2800
JULY 09...	1425	.02	8.5	1300	210	5000	19	130	0	3400
AUG. 20...	1155	.10	5.4	1100	180	4300	21	90	0	2700
SEP. 12...	1030	30	6.0	870	120	3800	18	94	0	2000

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	3400	--	7870	2200	2100	19	12000	7.5	15.0
NOV. 19...	9500	.2	19800	3600	3500	43	30900	8.0	13.5
DEC. 10...	11000	.1	22100	3900	3700	47	33800	7.8	6.0
JAN. 29...	13000	.5	26200	4300	4200	55	40200	7.7	10.0
FEB. 28...	12000	.6	24500	4000	3900	53	37200	7.7	6.0
MAR. 14...	13000	.2	27000	4500	4400	55	40800	7.8	--
APR. 01...	16000	.2	32100	4800	4700	63	47200	7.6	20.0
MAY 24...	1100	.2	4130	1700	1600	7.7	6000	7.4	15.5
JUNE 18...	7200	.2	15900	3300	3100	34	23800	7.8	31.0
JULY 09...	8400	.6	18400	4100	4000	34	27100	7.4	32.0
AUG. 20...	7000	1.0	15400	3500	3400	32	22900	7.6	32.0
SEP. 12...	6200	.5	13100	2700	2600	32	20200	7.2	24.0

BRAZOS RIVER BASIN

08081200 Croton Creek near Jayton, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1974.....	711.3	12600	8300	15900	3300	6340	2000	3840	****
NOV. 1974.....	129.3	24100	16000	5590	7500	2620	2600	908	****
DEC. 1974.....	55.1	36900	24000	3570	12000	1790	3100	461	****
JAN. 1975.....	57.1	38400	25000	3850	13000	2000	2800	432	****
FEB. 1975.....	114	37200	24000	7390	12000	3690	3100	954	****
MAR. 1975.....	24.49	41100	27000	1790	14000	926	3000	198	****
APR. 1975.....	15.99	37400	25000	1080	13000	561	2800	121	****
MAY 1975.....	2200.2	3940	2600	15400	120	713	1600	9500	1300
JUNE 1975.....	160.34	15900	11000	4760	4800	2080	2200	952	****
JULY 1975.....	95.78	19600	13000	3360	5900	1530	2400	621	****
AUG. 1975.....	72.67	12400	8200	1610	3200	628	2000	392	****
SEPT 1975.....	125.11	17300	11000	3720	4800	1620	2200	743	****
TOTAL	3761.38	**	**	68000	**	24500	**	19100	**
WTD.AVG.	10.31	10200	6700	**	2400	**	1900	**	*****

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17000	14900	35000	39000	48900	39000	47300	35000	14600	26000	30000	17700
2	18300	13100	34900	43000	48700	38900	48400	34700	18500	26900	31300	20100
3	19200	16400	34900	42900	49000	39000	46500	25500	22000	24600	32100	----
4	20000	19600	34900	45400	49500	39000	46300	26700	24600	16500	----	----
5	20900	19600	34700	42200	24200	39200	46400	27000	26300	16700	----	----
6	22300	20500	32500	38200	20600	39600	46300	27200	27800	19000	----	----
7	23600	21600	34500	37700	23200	40100	42500	36200	29500	21400	----	----
8	24500	22800	37200	38200	23900	40400	37000	41500	23500	24300	----	----
9	25700	24400	35500	38200	28800	40700	40000	40800	26800	26600	----	----
10	26200	28500	33800	38900	28800	41200	24700	39700	13300	----	----	----
11	27400	34800	33000	39500	29600	41000	32200	40200	10000	----	----	22300
12	28000	25800	37500	38000	33400	40200	34700	40700	10700	----	----	20200
13	27500	26000	39800	36600	34900	41400	35900	40900	19900	----	----	13700
14	26600	26900	37700	37500	35500	41400	37100	41300	14600	----	----	15000
15	26600	27500	37000	38800	36100	42000	38800	42000	17000	----	20600	17900
16	29500	27400	36500	38700	37300	41900	41600	41800	19500	----	12500	20200
17	26300	27600	36500	39400	38700	42100	43700	42400	20500	----	15000	25800
18	27300	27800	36600	38300	39800	42600	45500	42600	23000	----	18700	26300
19	28900	28200	36600	38900	36700	42500	45100	41700	25900	15500	21600	27100
20	31100	29300	36800	39400	35400	43300	45200	42300	27800	20700	23700	28000
21	33300	29300	37000	39800	36300	43700	45100	40500	27700	22000	24300	30000
22	31500	29600	37100	40000	40600	43200	45000	4730	29400	32300	----	32000
23	32700	29700	37200	40000	40200	44800	44100	2180	30800	33700	----	32000
24	13400	32200	37700	40000	40600	45200	43000	6000	32100	----	----	32500
25	12500	34200	37500	40000	40500	44700	41800	7700	15200	17500	----	32700
26	11600	34300	35300	39900	39600	44300	40700	9300	16000	20000	20200	32200
27	13000	34500	35300	39800	38300	41100	39600	10000	17100	27500	10700	32900
28	7500	34700	46200	39800	37200	41600	38400	4490	18200	28700	9300	33600
29	4180	35000	43500	40000	----	44800	37300	5780	20800	28900	9750	----
30	6820	35000	40100	29000	----	46000	36100	8500	23700	29100	12800	----
31	14800	----	37500	27200	----	47100	----	11200	----	29400	15400	----
MONTH	21880	27040	36780	38850	36300	42000	41210	27760	21560	----	----	----

08081400 Salt Croton Creek at Weir D near Aspermont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°24'00", long 100°24'39", King County, 500 ft (150 m) upstream from Haystack Creek, 1,000 ft (305 m) upstream from streamflow station Salt Croton Creek near Aspermont, and 20 miles (32 km) northwest of Aspermont.

PERIOD OF RECORD.--Periodic measurements of discharge and water-quality data: October 1956 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA+MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT. 09...	1140	.57	2200	1100	3900	170000	10000	242000	28.0
NOV. 05...	1115	.95	1900	770	3700	120000	7900	210000	14.5
20...	1450	.79	2100	1100	3800	140000	9400	223000	14.5
JAN. 08...	1410	.69	2100	1100	4100	140000	9400	230000	18.0
FEB. 20...	1150	1.0	2100	1200	4000	140000	10000	227000	15.0
APR. 11...	1230	.75	2000	1100	3900	140000	9500	232000	16.0
MAY 07...	0935	.59	2000	1400	3500	170000	11000	243000	17.0
JUNE 19...	--	.60	--	--	--	--	--	--	--
JULY 09...	0900	.34	2300	1100	4300	130000	10000	215000	33.0
31...	1015	.51	2500	940	4100	110000	10000	191000	31.5
AUG. 21...	1110	.44	2800	1400	4900	170000	13000	232000	34.0

BRAZOS RIVER BASIN

08081450 Haystack Creek at Weir E near Aspermont, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 33°24'04", long 100°24'41", King County, about 400 ft (120 m) upstream from Salt Croton Creek and 20 miles (32 km) north-west of Aspermont.

PERIOD OF RECORD.--Periodic measurements of discharge and water-quality data: October 1956 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA+MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT. 09...	1020	.17	1700	420	4200	60000	6000	136000	25.5
NOV. 06...	1050	.39	1400	360	3500	33000	5000	87600	13.5
20...	1045	.26	1600	440	3800	43000	5000	100000	12.0
JAN. 08...	1350	.22	1700	500	4100	60000	6300	127000	16.0
FEB. 28...	1140	.17	1500	470	4300	45000	5700	103000	7.5
APR. 11...	1220	.19	1600	340	4000	46000	5400	113000	15.5
MAY 08...	0915	.11	1800	560	4600	64000	6800	143000	17.0
23...	1710	4.9	830	95	2100	4000	2500	14900	28.0
JUNE 19...	--	.00	--	--	--	--	--	--	--
JULY 09...	0900	.06	2000	570	5300	80000	7300	161000	33.0
31...	--	.00	--	--	--	--	--	--	--
AUG. 21...	1030	.09	1700	660	5000	68000	7000	141000	30.5
SEP. 16...	1020	.46	1500	430	4000	34000	5500	83600	22.0

08081500 Salt Croton Creek near Aspermont, Tex.

LOCATION.--Lat 33°24'03", long 100°24'29", King County, on left bank 0.1 mile (0.2 km) downstream from Haystack Creek, 2.4 miles (3.9 km) downstream from Salt Flat Creek, 9.0 miles (14.5 km) upstream from Salt Fork Brazos River, and 21 miles (34 km) northwest of Aspermont.

DRAINAGE AREA.--64.3 mi² (166.5 km²).

PERIOD OF RECORD.--Discharge: October 1956 to current year. Prior to October 1958, published as Dove Creek near Aspermont.
Water quality: Chemical analyses: October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,670 ft (509 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 5.92 ft³/s (0.168 m³/s), 4,290 acre-ft/yr (5.29 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 18,500 ft³/s (524 m³/s) May 21 (gage height, 7.21 ft or 2.198 m), from rating curve extended as explained below; minimum daily, 0.29 ft³/s (0.008 m³/s) July 2.

Period of record: Maximum discharge, 29,900 ft³/s (847 m³/s) Aug. 30, 1966 (gage height, 8.75 ft or 2.667 m), from rating curve extended above 240 ft³/s (6.80 m³/s) on basis of slope-area measurements of 6,910, 11,400, and 29,500 ft³/s (196, 323, and 835 m³/s); minimum daily, 0.01 ft³/s (0.0003 m³/s) July 22, 1974.

Historic: Flood in 1941 reached a stage of about 9 ft (2.7 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 241,000 micromhos Mar. 24; minimum daily, 3,450 micromhos May 23.

Period of record: Maximum daily specific conductance (1972-75), 248,000 micromhos June 26, 27, 1974; minimum daily, 3,450 micromhos May 23, 1975. Maximum water temperatures (1972-73), 39.0°C Sept. 4, 1973; minimum, freezing point on several days during winter months.

REMARKS.--Discharge records poor. Stage-discharge relation frequently affected by winds. Base flow is maintained by springs. No diversion upstream from station. Recording rain gage located at station. Specific conductance is recorded continuously at this station.

REVISIONS.--WSP 1732: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.6	.90	.85	2.6	.90	1.0	.99	1.3	.36	.40	.66
2	.90	2.4	.97	1.6	5.8	.90	1.0	.93	1.1	.29	3.1	.66
3	.90	1.5	1.1	.86	5.7	.90	1.0	.73	1.0	6.9	.59	.66
4	.90	1.3	1.1	.89	2.5	1.0	1.0	1.9	1.0	2.1	.40	.66
5	.90	1.2	1.0	.80	1.4	1.1	1.1	1.0	.92	1.2	.45	.66
6	.80	1.4	1.0	.78	.82	1.1	1.1	.80	1.0	.92	.58	.66
7	.80	1.8	.90	.80	.80	.90	6.3	.71	53	.78	.71	.66
8	.80	1.7	.90	.80	.78	1.0	1.9	.87	32	.66	.70	.78
9	.80	1.9	.91	.86	.80	1.0	1.0	3.2	6.8	.45	.67	.92
10	.80	2.5	1.5	.80	.86	1.1	.90	1.5	4.0	.45	.68	.92
11	.80	1.4	1.2	.77	.80	1.2	.90	.79	3.0	.45	.88	1.7
12	.80	1.2	.99	.80	.74	1.1	.85	.90	1.8	.45	1.2	10
13	.80	1.1	.90	.82	.71	1.1	1.0	.90	1.3	.45	1.5	11
14	4.9	1.0	.91	.88	.73	1.1	.90	.90	.78	.45	2.2	4.2
15	1.5	1.1	.78	.85	.71	1.1	.90	.90	.78	.45	15	2.4
16	1.2	1.1	.80	.80	1.5	1.2	1.0	.90	.78	.45	2.1	1.6
17	1.0	1.2	.80	.81	.87	1.1	1.0	1.0	.66	.45	.80	1.6
18	.80	1.2	.77	.90	.72	1.0	1.0	.95	.66	7.0	.58	.99
19	.80	1.1	.77	.80	.81	1.2	1.0	1.1	.58	11	.63	.96
20	.80	1.1	.84	.80	.91	1.2	1.0	6.0	.54	6.9	.68	1.3
21	.80	1.1	.86	.71	.63	1.1	1.0	1,900	.55	3.3	.72	5.2
22	.80	1.3	.86	.63	.81	1.2	1.0	485	.45	1.2	.78	1.4
23	54	.99	.84	.71	.90	1.0	1.0	497	.45	.66	.88	.84
24	103	.72	.80	.75	.71	1.0	1.0	17	.45	3.0	1.0	.78
25	6.2	1.0	.77	.67	.80	1.1	1.0	6.3	.45	40	.97	.78
26	1.7	.93	1.6	.73	.75	1.1	1.0	2.8	.45	7.5	.78	.78
27	1.4	1.1	1.0	.68	.92	2.6	4.6	2.1	.45	3.1	3.8	.78
28	4.6	.90	.99	.75	1.0	1.0	1.0	41	.45	.76	1.1	.66
29	2.1	.90	.92	.70	-----	1.0	1.0	5.6	.45	.51	.92	.66
30	25	.90	.95	2.7	-----	1.0	1.0	1.7	.45	.33	.78	.66
31	13	-----	1.5	4.4	-----	1.0	-----	1.5	-----	.35	.78	-----
TOTAL	234.60	39.64	30.13	30.70	37.08	34.30	39.45	2,986.97	117.60	102.87	46.36	55.65
MEAN	7.57	1.32	.97	.99	1.32	1.11	1.32	96.4	3.92	3.32	1.50	1.86
MAX	103	2.6	1.6	4.4	5.8	2.6	6.3	1,900	53	40	15	11
MIN	.80	.72	.77	.63	.63	.90	.85	.71	.45	.29	.40	.66
AC-FT	465	79	60	61	74	68	78	5,920	233	204	92	110

CAL YR 1974 TOTAL 1,110.32 MEAN 3.04 MAX 143 MIN .01 AC-FT 2,200
WTR YR 1975 TOTAL 3,755.35 MEAN 10.3 MAX 1,900 MIN .29 AC-FT 7,450

PEAK DISCHARGE (BASE, 1,000 FT³/S).--May 21 (2000) 18,500 ft³/s (7.21 ft); May 23 (0015) 7,530 ft³/s (5.44 ft).

BRAZOS RIVER BASIN

08081500 Salt Croton Creek near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
NOV. 20...	1305	1.0	4.1	3200	760	68000	180	58	0	3900
DEC. 11...	1050	1.0	3.7	1600	640	54000	72	68	0	3600
JAN. 26...	1015	1.5	3.3	2000	1000	83000	260	46	0	3800
FEB. 20...	1040	1.0	2.6	1900	920	78000	220	54	0	4000
APR. 02...	1250	.40	4.1	2100	1000	100000	270	45	0	4100
MAY 30...	1015	1.9	4.1	1300	310	19000	69	86	0	2500
JUNE 19...	1345	.28	5.2	2600	1300	90000	260	58	0	4800
JULY 09...	0900	.49	--	2500	1000	--	--	--	--	4600
AUG. 21...	1300	.81	4.8	2800	1200	80000	240	54	0	5100
SEP. 16...	1015	1.7	4.9	1600	560	36000	160	62	0	3700

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV. 20...	110000	1.4	186000	11000	11000	281	203000	7.4	17.5
DEC. 11...	86000	.0	146000	6600	6600	289	175000	7.2	9.0
JAN. 26...	130000	.6	220000	9100	9100	378	221000	6.9	8.5
FEB. 20...	120000	.8	205000	8500	8500	368	206000	7.2	9.5
APR. 02...	160000	.0	268000	9400	9300	450	239000	6.9	18.5
MAY 30...	30000	.2	53200	4500	4500	123	77400	7.7	19.0
JUNE 19...	150000	--	249000	12000	12000	360	228000	7.1	34.0
JULY 09...	130000	--	--	10000	--	--	203000	--	33.0
AUG. 21...	130000	--	219000	12000	12000	319	212000	7.3	35.0
SEP. 16...	58000	1.0	100000	6300	6300	197	131000	7.0	21.5

BRAZOS RIVER BASIN

183

08081500 Salt Croton Creek near Aspermont, Tex.

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	234.60	51000	32000	20300	18000	11400	2100	1330	--
NOV. 1974.....	39.64	173000	145000	15500	86000	9200	3700	396	--
DEC. 1974.....	30.13	200000	183000	14900	109000	8870	3900	317	--
JAN. 1975.....	30.70	187000	163000	13500	97000	8040	3800	315	--
FEB. 1975.....	37.08	154000	120000	12000	71000	7110	3600	360	--
MAR. 1975.....	34.30	207000	195000	18100	116000	10700	4000	370	--
APR. 1975.....	39.45	189000	166000	17700	99000	10500	3800	405	--
MAY 1975.....	2986.97	8900	5940	47900	2180	17600	1500	12100	--
JUNE 1975.....	117.60	64000	44000	14000	25000	7940	2300	730	--
JULY 1975.....	102.87	90200	65000	18100	38000	10600	2700	750	--
AUG. 1975.....	46.36	159000	127000	15900	75000	9390	3600	451	--
SEP. 1975.....	55.65	160000	128000	19200	76000	11400	3600	541	--
TOTAL.....	3755.35	--	--	227000	--	123000	--	18100	--
WTD.AVG.	10.3	29000	22000	--	12000	--	1800	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207000	93700	221000	180000	127000	186000	230000	200000	115000	237000	186000	230000
2	224000	129000	220000	150000	123000	166000	220000	202000	127000	236000	134000	235000
3	229000	150000	209000	163000	111000	180000	209000	220000	130000	150000	183000	237000
4	215000	172000	199000	162000	120000	215000	200000	170000	130000	75000	190000	238000
5	210000	182000	200000	180000	130000	210000	196000	180000	150000	99500	201000	237000
6	232000	184000	205000	188000	162000	200000	200000	200000	169000	125000	221000	235000
7	234000	150000	199000	195000	167000	190000	150000	210000	30000	147000	223000	233000
8	221000	121000	200000	201000	172000	175000	104000	221000	20000	175000	225000	233000
9	226000	110000	203000	205000	210000	200000	140000	110000	50000	203000	230000	233000
10	228000	100000	200000	208000	188000	204000	200000	150000	75000	215000	235000	233000
11	189000	148000	205000	210000	209000	200000	206000	160000	120000	224000	180000	190000
12	200000	162000	200000	210000	200000	205000	200000	179000	156000	225000	150000	120000
13	210000	182000	200000	210000	200000	218000	200000	196000	160000	227000	145000	100000
14	146000	190000	204000	210000	200000	210000	200000	229000	164000	229000	130000	110000
15	120000	194000	206000	210000	170000	210000	200000	233000	164000	230000	75000	120000
16	156000	194000	210000	203000	150000	210000	200000	230000	164000	230000	100000	130000
17	200000	195000	210000	201000	200000	220000	225000	220000	178000	230000	150000	139000
18	217000	199000	214000	200000	200000	220000	238000	225000	190000	150000	175000	150000
19	226000	201000	202000	195000	157000	230000	220000	233000	211000	50000	200000	194000
20	228000	202000	208000	195000	198000	231000	220000	90000	223000	75000	220000	198000
21	226000	202000	207000	215000	200000	234000	212000	6690	226000	133000	220000	150000
22	210000	202000	207000	210000	200000	198000	205000	3860	230000	159000	225000	160000
23	12900	206000	215000	200000	200000	200000	210000	3450	230000	161000	230000	162000
24	13700	206000	215000	205000	200000	241000	219000	25000	229000	150000	230000	180000
25	62000	203000	220000	210000	200000	210000	220000	32000	231000	35000	230000	187000
26	99100	210000	182000	215000	176000	200000	221000	40000	233000	100000	228000	200000
27	125000	215000	170000	218000	180000	150000	160000	50000	235000	95000	170000	212000
28	75000	218000	167000	213000	196000	218000	150000	30000	236000	120000	150000	212000
29	100000	221000	180000	212000	---	220000	151000	50000	238000	130000	200000	220000
30	37200	220000	194000	211000	---	221000	180000	78000	240000	149000	230000	225000
31	40000	---	180000	120000	---	225000	---	100000	---	150000	230000	---
MONTH	165130	178720	201680	196940	176640	206350	196200	137970	168470	158530	190190	190100

BRAZOS RIVER BASIN

08082000 Salt Fork Brazos River near Aspermont, Tex.
(National stream-quality accounting network)

LOCATION (revised).--Lat 33°20'02", long 100°14'16", Stonewall County, on left bank at downstream side of bridge on U.S. Highway 83, 5.5 miles (8.8 km) downstream from Salt Croton Creek, 13.2 miles (21.2 km) north of Aspermont, and at mile 27.3 (43.9 km) measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 (1,485.4 km) on the Brazos River.

DRAINAGE AREA.--4,830 mi² (12,510 km²), approximately, of which 2,770 mi² (7,170 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: December 1923 to August 1925, June 1939 to current year.

Water quality: Chemical analyses: October 1948 to September 1951, October 1956 to current year. Water temperatures: October 1948 to September 1951, October 1956 to current year.

GAGE (revised).--Water-stage and specific-conductance recorders. Datum of gage is 1,588.70 ft (484.236 m) above mean sea level. Dec. 5, 1923, to Aug. 29, 1925, nonrecording gage at site 6.7 miles (10.8 km) downstream at different datum. June 15, 1939, to July 13, 1972, water-stage recorder at present site. July 14, 1972, to July 14, 1975, at site 0.1 mile (0.2 km) upstream at same datum.

AVERAGE DISCHARGE.--36 years (1939-75), 121 ft³/s (3.427 m³/s), 87,660 acre-ft/yr (108 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 13,000 ft³/s (368 m³/s) May 21 (gage height, 10.29 ft or 3.136 m); minimum, 0.25 ft³/s (0.007 m³/s) Aug. 12, 13.

Period of record: Maximum discharge, 52,200 ft³/s (1,480 m³/s) Sept. 25, 1955 (gage height, 14.92 ft or 4.548 m), from rating curve extended above 29,000 ft³/s (821 m³/s); no flow at times most years.

Historic: Maximum stage since at least 1900, that of Sept. 25, 1955. Flood in December 1913 reached a stage of 14.4 ft (4.39 m), and flood in November 1934 reached a stage of 13.7 ft (4.18 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 94,400 micromhos May 11; minimum daily, 3,860 micromhos July 29. Maximum water temperatures, 32.0°C May 11, Aug. 25; minimum, freezing point Jan. 12, Feb. 5, 7.

Period of record: Maximum daily specific conductance, 173,000 micromhos Apr. 12, 1974; minimum daily, 1,690 micromhos July 8, 1960. Maximum water temperatures, 38.0°C Aug. 2, 1973; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. No large diversion above station. Some regulation by White River Reservoir (station 08080910). For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Specific conductance is recorded continuously at this station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	130	16	33	36	16	6.7	2.8	27	1.3	27	38
2	78	140	17	37	42	16	3.9	2.2	21	.96	19	22
3	66	96	18	37	83	14	3.5	2.2	20	79	16	14
4	58	87	16	29	86	12	3.2	2.0	12	75	13	10
5	48	69	19	24	82	12	3.5	1.7	9.6	27	6.0	7.1
6	40	59	23	20	52	12	4.9	5.3	8.8	12	3.8	3.6
7	36	61	21	19	50	10	6.7	3.5	16	7.3	2.4	2.9
8	35	62	15	18	45	9.6	31	2.0	249	3.5	1.6	2.0
9	30	62	13	18	34	10	22	1.3	28	1.7	.94	2.0
10	25	67	19	16	30	12	16	2.8	41	1.3	.76	1.4
11	21	61	24	14	25	12	27	2.9	51	1.1	.65	160
12	18	50	22	12	21	14	27	2.2	31	1.7	.41	451
13	17	50	18	12	18	14	22	1.1	20	1.7	2.0	463
14	47	47	15	15	15	12	18	.70	18	.70	13	555
15	52	41	14	14	16	12	15	.60	24	.56	29	302
16	41	40	14	14	22	10	12	.43	19	.41	20	209
17	85	37	14	15	29	9.6	10	.43	18	.35	68	149
18	56	37	12	14	27	8.8	9.6	.36	12	.48	55	110
19	41	33	12	12	24	8.0	8.0	.36	6.1	.92	40	83
20	32	31	12	12	20	7.3	6.7	.96	5.5	46	20	67
21	25	31	12	9.6	16	6.7	5.5	1,020	4.4	13	11	92
22	22	31	10	9.6	24	6.7	6.1	2,610	3.9	445	6.8	93
23	79	26	12	8.8	29	6.1	7.3	2,960	2.8	191	4.2	69
24	628	23	12	9.6	27	4.4	6.7	480	2.2	101	2.3	55
25	918	22	14	10	25	3.5	5.5	239	2.0	492	1.5	44
26	343	22	26	9.6	18	3.2	4.9	147	9.2	229	35	38
27	195	22	24	8.8	16	5.5	4.9	89	13	219	12	32
28	208	20	21	9.6	14	14	9.7	328	6.7	280	160	27
29	205	17	18	10	-----	10	7.3	205	3.2	204	256	24
30	134	16	19	12	-----	8.8	3.5	70	2.2	94	130	22
31	266	-----	27	35	-----	7.3	-----	41	-----	47	73	-----
TOTAL	3,949	1,490	529	517.6	926	307.5	318.1	8,224.84	686.6	2,577.98	1,030.36	3,148.0
MEAN	127	49.7	17.1	16.7	33.1	9.92	10.6	265	22.9	83.2	33.2	105
MAX	918	140	27	37	86	16	31	2,960	249	492	256	555
MIN	17	16	10	8.8	14	3.2	3.2	.36	2.0	.35	.41	1.4
AC-FT	7,830	2,960	1,050	1,030	1,840	610	631	16,310	1,360	5,110	2,040	6,240

CAL YR 1974 TOTAL 24,701.89 MEAN 67.7 MAX 2,260 MIN .01 AC-FT 49,000

WTR YR 1975 TOTAL 23,704.98 MEAN 64.9 MAX 2,960 MIN .35 AC-FT 47,020

PEAK DISCHARGE (BASE, 12,000 FT³/S).--May 21 (2400) 13,000 ft³/s (10.29 ft).

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 25...	1430	646	7.1	280	100	980	7.9	90	0	770	1600	--
NOV. 21...	1730	33	11	800	160	8100	28	184	0	2100	13000	--
DEC. 19...	1430	12	11	920	280	11000	31	198	0	2400	18000	.4
JAN. 16...	1500	15	9.3	920	260	11000	27	193	0	2400	17000	.4
FEB. 21...	0800	18	7.0	880	280	8900	28	191	0	2400	15000	.4
MAR. 13...	1430	14	7.3	950	170	14000	50	175	0	2700	21000	.5
APR. 17...	0845	10	2.0	910	280	9800	38	143	0	2200	16000	.4
MAY 13...	1030	1.1	3.9	1200	310	17000	62	134	0	3000	28000	.3
30...	1240	76	8.7	660	84	2500	15	89	0	1800	4000	.3
JUNE 12...	1030	37	7.6	770	120	3100	17	94	0	2100	4900	.3
JULY 11...	1700	1.5	3.3	1100	300	11000	42	106	0	2900	17000	.3
AUG. 07...	1500	2.5	8.0	660	170	4700	22	105	0	1800	7500	.5
SEP. 18...	1400	112	8.5	380	95	3000	16	156	0	1100	4900	.6

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 25...	.25	.02	.19	6.1	6.3	1.7	3920	3790	1100	1000	13
NOV. 21...	.31	.01	.11	.47	.58	.04	24200	24300	2700	2500	68
DEC. 19...	.53	.03	.16	.06	.22	.02	32800	32700	3500	3300	82
JAN. 16...	.40	.03	.16	--	.00	.07	31600	31700	3400	3200	83
FEB. 21...	.47	.01	.04	.02	.06	.08	28100	27600	3400	3200	67
MAR. 13...	.41	.01	.20	--	.10	.05	39300	39000	3100	2900	110
APR. 17...	.04	.00	.12	.01	.13	.04	29700	29300	3400	3300	73
MAY 13...	--	--	--	--	--	--	50900	49600	4300	4200	113
30...	--	--	--	--	--	--	--	9110	2000	1900	24
JUNE 12...	.11	.01	.04	1.1	1.1	.08	11700	11100	2400	2400	27
JULY 11...	.54	.03	.03	.18	.21	.02	34200	32400	4000	3900	76
AUG. 07...	.13	.01	.00	.32	.32	.01	15500	14900	2400	2300	42
SEP. 18...	.26	.04	.00	.48	.48	.37	9770	9580	1300	1200	36

BRAZOS RIVER BASIN

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 25...	6220	7.8	19.0	5500	8.7	94	6.8	46000	24000	26000	--
NOV. 21...	37400	8.0	17.5	4	10.3	108	.5	9	7	9	--
DEC. 19...	49800	7.9	11.5	2	10.1	111	.4	3	1	6	--
JAN. 16...	47900	8.0	8.0	2	11.6	108	.6	2	2	23	--
FEB. 21...	42100	8.0	8.0	1	9.9	99	.2	11	5	15	2.7
MAR. 13...	58000	8.0	15.5	1	10.3	129	.1	1	0	4	--
APR. 17...	45500	7.8	19.0	2	8.9	113	.9	64	31	56	--
MAY 13...	72000	7.8	27.5	3	7.8	134	.4	3	3	18	--
30...	14200	7.4	21.0	--	--	--	--	--	--	--	--
JUNE 12...	17200	7.8	25.0	100	8.5	108	1.6	1500	1000	1300	6.1
JULY 11...	48600	8.0	30.5	2	6.4	103	.7	6	4	33	--
AUG. 07...	23400	8.2	34.0	20	8.1	125	1.3	110	11	140	2.8
SEP. 18...	15600	8.1	29.0	400	7.8	105	1.2	650	400	550	--

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 25...	1430	660	180	4	360	20	0	120	0	<50
FEB. 21...	0800	10	1	0	1400	50	0	50	20	150
JUNE 12...	1030	10	6	3	860	10	0	40	20	<50
AUG. 07...	1500	10	2	2	1300	30	0	50	30	450

DATE	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
OCT. 25...	0	180	2	78000	300	200	3	90	6100
FEB. 21...	1	40	1	350	20	200	1	180	110
JUNE 12...	2	30	3	4700	30	<100	1	70	--
AUG. 07...	0	20	0	340	10	100	0	100	100

DATE	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 25...	10	.1	.0	1	2	0	3300	710	50
FEB. 21...	110	.0	.0	3	7	7	14000	50	20
JUNE 12...	40	.0	.0	0	3	2	8800	50	0
AUG. 07...	60	.1	.1	0	7	6	10000	30	10

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
DEC. 19	28	1.5	0.8	0.3	0.3	2300	Polyethylene strip
FEB. 21	36	2.8	2.5	.1	.0	3000	
APR. 17	35	200	190	23	1.1	550	
AUG. 07	27	36	12	27	3.4	870	
OCT. 25, 1974 TIME 1430				JAN. 16, 1975 TIME 1500			
PHYTOPLANKTON 5,000 CELLS/ML				PHYTOPLANKTON 460 CELLS/ML			
_ORGANISM_NAME_____		CELLS/ML	PER_CENT	_ORGANISM_NAME_____		CELLS/ML	PER_CENT
CHRYSOPHYTA				CHLOROPHYTA			
.BACILLARIOPHYCEAE				.CHLOROPHYCEAE			
..PENNALES				..CHLOROCOCCALES			
...NAVICULACEAE				...SCENEDESMACEAE			
....NAVICULA		1,400	29	....ACTINASTRUM		75	16
...NITZSCHIA				...VOLVOCALES			
....NITZSCHIA		3,600	71	...CHLAMYDOMONADACEAE			
				....CHLAMYDOMONAS		64	14
NOV. 21, 1974 TIME 1730				CHRYSOPHYTA			
PHYTOPLANKTON 3,200 CELLS/ML				.BACILLARIOPHYCEAE			
_ORGANISM_NAME_____		CELLS/ML	PER_CENT	..PENNALES			
CHRYSOPHYTA				...CYMBELLACEAE		210	47
.BACILLARIOPHYCEAE				....AMPHORA			
..PENNALES				...NAVICULACEAE		21	5
...ACHNANTHACEAE				....AMPHIPRORA		54	12
....ACHNANTHES		2,800	86	...NAVICULA			
...GOMPHONEMACEAE				...NITZSCHIA		32	7
....GOMPHONEMA		29	1				
...NAVICULACEAE				FEB. 21, 1975 TIME 0800			
....AMPHIPRORA		200	6	PHYTOPLANKTON 300 CELLS/ML			
...NAVICULA		200	6	_ORGANISM_NAME_____		CELLS/ML	PER_CENT
DEC. 19, 1974 TIME 1430				CHRYSOPHYTA			
PHYTOPLANKTON 790 CELLS/ML				.BACILLARIOPHYCEAE			
_ORGANISM_NAME_____		CELLS/ML	PER_CENT	..PENNALES			
CHLOROPHYTA				...CYMBELLACEAE		66	22
.CHLOROPHYCEAE				....CYMBELLA			
..CHLOROCOCCALES				...NAVICULACEAE		230	78
...SCENEDESMACEAE				....NAVICULA			
....ACTINASTRUM		390	50	MAR. 13, 1975 TIME 1430			
...VOLVOCALES				PHYTOPLANKTON 680 CELLS/ML			
...CHLAMYDOMONADACEAE				_ORGANISM_NAME_____		CELLS/ML	PER_CENT
....CHLAMYDOMONAS		110	14	CHLOROPHYTA			
CHRYSOPHYTA				.CHLOROPHYCEAE			
.BACILLARIOPHYCEAE				..CHLOROCOCCALES			
..CENTRALES				...OCCYSTACEAE			
...COSCIDINACEAE				....ANKISTRODESMUS		45	7
....CYCLOTILLA		22	3	...SCENEDESMACEAE			
..PENNALES				....ACTINASTRUM		410	60
...CYMBELLACEAE				CHRYSOPHYTA			
....CYMBELLA		66	8	.BACILLARIOPHYCEAE			
...FRAGILARIACEAE				..CENTRALES			
....SYNEDRA		66	8	...COSCIDINACEAE			
...NAVICULACEAE				....CYCLOTILLA		23	3
....AMPHIPRORA		66	8	..PENNALES			
...NAVICULA		22	3	...FRAGILARIACEAE			
...NITZSCHIA				....SYNEDRA		68	10
....NITZSCHIA		44	6	...NITZSCHIA			
				....NITZSCHIA		140	20

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

APR. 17, 1975 TIME 0845

PHYTOPLANKTON 660 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...SCENEDESMACEAE		
....CRUCIGENIA	77	12
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
....CHLAMYDOMONAS	39	6
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCAEAE		
....CYCLOTELLA	120	18
...PENNALES		
...EUNOTIACEAE		
....EUNOTIA	19	3
...FRAGILARIACEAE		
....SYNEDRA	39	6
...NAVICULACEAE		
....NAVICULA	120	18
...NITZSCHIAEAE		
....NITZSCHIA	170	26
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	77	12

MAY 13, 1975 TIME 1030

PHYTOPLANKTON 570 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...PENNALES		
...CYMBELLACEAE		
....CYMBELLA	23	4
...FRAGILARIACEAE		
....LICHOPHORA	23	4
....SYNEDRA	69	12
...NAVICULACEAE		
....AMPHIPRORA	23	4
....GYROSIGMA	23	4
...NAVICULA	320	56
...NITZSCHIAEAE		
....NITZSCHIA	92	16

JUNE 12, 1975 TIME 1030

PHYTOPLANKTON 4,900 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...COSCINODISCAEAE		
....CYCLOTELLA	1,300	27
...PENNALES		
...CYMBELLACEAE		
....CYMBELLA	220	5
...NAVICULACEAE		
....NAVICULA	2,400	50
...NITZSCHIAEAE		
....NITZSCHIA	890	18

JULY 11, 1975 TIME 1700

PHYTOPLANKTON 410 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
...CHAETOCERACEAE		
....CHAETOCEROS	78	19
...COSCINODISCAEAE		
....CYCLOTELLA	120	29
...PENNALES		
...CYMBELLACEAE		
....AMPHORA	20	5
...NAVICULACEAE		
....NAVICULA	39	10
...NITZSCHIAEAE		
....NITZSCHIA	160	38

AUG. 7, 1975 TIME 1500

PHYTOPLANKTON 150,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS		0
...SCENEDESMACEAE		
....SCENEDESMUS		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...PENNALES		
...GOMPHONEMATACEAE		
....GOMPHONEMA		0
...NAVICULACEAE		
....NAVICULA		0
...NITZSCHIAEAE		
....NITZSCHIA		0
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS		0
...OSCILLATORIALES		
...OSCILLATORIAEAE		
....LYNGBYA	150,000	100

SEP. 18, 1975 TIME 1400

PHYTOPLANKTON 1,300 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
...PENNALES		
...NITZSCHIAEAE		
....HANTZSCHIA	430	33
....NITZSCHIA	860	67

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 25...	1430	646	19.0	3310	5770	91
NOV. 21...	1730	33	17.5	22	2.0	69
DEC. 19...	1430	12	11.5	46	1.5	71
JAN. 16...	1500	15	8.0	26	1.1	88
FEB. 21...	0800	18	8.0	11	.53	63
MAR. 13...	1430	14	15.5	17	.64	15
APR. 17...	0900	10	--	8	.22	25
MAY 13...	1030	1.1	27.5	5	.01	70
JUNE 12...	1030	37	25.0	217	22	99
JULY 11...	1700	1.5	30.5	19	.08	52
AUG. 07...	1500	2.5	34.0	35	.24	96
SEP. 18...	1430	112	--	636	192	96

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT. 1974.....	3949	14700	9100	97000	4400	46900	1300	13900	****
NOV. 1974.....	1490	26300	17000	68400	8900	35800	1700	6840	****
DEC. 1974.....	529	49400	33000	47100	18000	25700	2600	3710	****
JAN. 1975.....	517.59	50000	33000	46100	18000	25200	2600	3630	****
FEB. 1975.....	926	40100	26000	65000	14000	35000	2200	5500	****
MAR. 1975.....	307.5	52100	35000	29100	19000	15800	2800	2320	****
APR. 1975.....	318.1	46200	30000	25800	16000	13700	2700	2320	****
MAY 1975.....	8224.84	12200	7400	164000	3500	77700	1100	24400	****
JUNE 1975.....	686.59	25900	17000	31500	8900	16500	1700	3150	****
JULY 1975.....	2577.98	16800	11000	76600	5500	38300	1400	9740	****
AUG. 1975.....	1030.36	16900	11000	30600	5500	15300	1400	3890	****
SEPT 1975.....	3148	15100	9400	79900	4600	39100	1300	11000	****
TOTAL	23704.96	**	**	761000	**	385000	**	90400	**
WTD.AVG.	64.95	18700	12000	**	6000	**	1400	**	*****

BRAZOS RIVER BASIN

08082000 Salt Fork Brazos River near Aspermont, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15800	12600	43900	61100	42700	43400	60500	56100	21400	40400	9230	6750
2	18500	15300	43700	44500	41900	43800	60700	57400	23700	44300	11300	9670
3	21200	14100	44600	57800	54300	44700	58600	53900	26100	28700	14500	14000
4	21100	16600	45400	47300	38400	42900	52900	54000	27900	23400	17100	15600
5	25200	19200	46100	45600	26500	45000	52500	60300	30600	39300	19200	17200
6	27000	22000	48400	45600	35900	47400	54300	77400	31300	36200	21600	24300
7	28700	24200	54100	43100	34400	48100	59800	69200	33000	40800	23600	26500
8	29900	26500	46700	42800	27800	48100	75000	62300	29500	43800	25900	32400
9	34100	27800	46300	43900	27800	45800	47900	64300	23900	46600	31100	32700
10	36900	33300	42200	44700	26900	52700	38300	59100	19500	48300	32600	38700
11	37600	36300	49800	46600	29700	52000	34200	94400	15000	48800	30200	17500
12	38300	35100	54100	43800	36700	51100	25100	73700	17600	44800	32100	10200
13	39500	27500	48000	48700	36200	57800	26300	72100	21600	39500	30500	14000
14	45000	27800	46900	50200	38200	54000	34600	70600	25500	47800	24200	11300
15	76800	26000	46700	49100	39600	48700	40000	66700	22500	55500	53400	10900
16	41200	26500	44900	48300	41300	51900	42600	66900	24000	60700	80600	11200
17	19300	33800	46100	50500	59900	53900	44500	70600	27200	64900	23700	12700
18	14000	35600	45900	47900	50200	53200	48800	70900	33100	63500	16300	15200
19	16300	36500	48000	49400	47600	54300	54300	69300	34400	62000	9450	17700
20	20000	39100	47100	53300	42900	53200	49300	67700	35900	55000	11900	20100
21	23500	37300	47700	47600	42100	54800	47900	43900	38100	75600	16900	20500
22	26100	38200	48400	45700	37100	54000	46700	9230	40200	39100	22200	33100
23	33400	38900	48400	48800	53400	56400	48800	4570	41100	5260	23700	31900
24	11800	40200	49600	48400	50600	58600	65200	4530	42800	4410	31400	30600
25	8300	40200	49800	52000	47300	52300	66200	6540	44500	14900	33400	27200
26	5160	39400	57500	52500	45400	50700	62700	9950	31800	7800	11200	27100
27	6460	40400	70300	52500	49000	47900	56700	12800	15100	9040	19100	27800
28	12000	41800	55800	52300	41700	70900	14000	16300	25900	6130	31700	28400
29	12400	43900	50200	52500	---	73700	80200	10700	33000	3860	9010	28900
30	11400	43800	49800	53100	---	63500	63700	13800	36700	4710	4090	30000
31	15200	---	45900	60900	---	57500	---	18000	---	7500	5400	---
MONTH	24910	31330	48780	49370	40910	52650	50410	47970	29100	35890	23440	21470

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	12.0	---	4.0	9.0	17.0	12.0	21.0	19.0	25.0	28.0	24.0
2	15.0	18.0	2.0	6.0	8.0	13.0	6.0	24.0	22.0	24.0	28.0	28.0
3	15.0	16.0	2.0	6.0	7.0	6.0	6.0	22.0	24.0	20.0	21.0	31.0
4	20.0	11.0	4.0	5.0	7.0	5.0	11.0	23.0	25.0	23.0	22.0	25.0
5	17.0	9.0	9.0	4.0	0.0	7.0	14.0	17.0	28.0	30.0	24.0	28.0
6	20.0	8.0	12.0	7.0	2.0	10.0	15.0	20.0	30.0	23.0	28.0	27.0
7	15.0	13.0	9.0	5.0	0.0	14.0	17.0	23.0	31.0	26.0	28.0	18.0
8	18.0	13.0	7.0	9.0	9.0	7.0	10.0	16.0	25.0	25.0	28.0	30.0
9	20.0	12.0	3.0	12.0	5.0	10.0	15.0	28.0	22.0	25.0	27.0	23.0
10	25.0	15.0	7.0	6.0	4.0	11.0	12.0	23.0	21.0	26.0	26.0	31.0
11	---	11.0	4.0	2.0	7.0	6.0	7.0	32.0	19.0	25.0	25.0	26.0
12	18.0	9.0	4.0	0.0	9.0	7.0	11.0	26.0	22.0	26.0	25.0	15.0
13	---	10.0	10.0	1.0	14.0	6.0	11.0	23.0	30.0	23.0	29.0	14.0
14	16.0	10.0	7.0	2.0	8.0	6.0	14.0	20.0	26.0	28.0	30.0	16.0
15	10.0	11.0	9.0	7.0	6.0	11.0	16.0	20.0	25.0	22.0	27.0	18.0
16	12.0	9.0	4.0	9.0	6.0	11.0	15.0	21.0	26.0	22.0	29.0	20.0
17	23.0	14.0	2.0	5.0	9.0	12.0	17.0	24.0	25.0	21.0	27.0	20.0
18	15.0	15.0	4.0	6.0	8.0	9.0	15.0	20.0	26.0	23.0	26.0	24.0
19	15.0	11.0	4.0	7.0	5.0	11.0	15.0	26.0	24.0	---	27.0	19.0
20	14.0	9.0	7.0	5.0	9.0	11.0	12.0	25.0	29.0	---	22.0	19.0
21	16.0	13.0	6.0	7.0	9.0	12.0	13.0	27.0	28.0	26.0	28.0	17.0
22	16.0	14.0	10.0	3.0	5.0	15.0	16.0	18.0	27.0	25.0	29.0	15.0
23	17.0	15.0	7.0	7.0	3.0	14.0	19.0	17.0	28.0	25.0	29.0	15.0
24	18.0	11.0	7.0	9.0	6.0	11.0	18.0	17.0	27.0	25.0	31.0	13.0
25	18.0	7.0	---	9.0	7.0	8.0	28.0	21.0	28.0	21.0	32.0	15.0
26	17.0	6.0	4.0	10.0	8.0	11.0	22.0	22.0	27.0	25.0	27.0	16.0
27	17.0	6.0	9.0	14.0	8.0	13.0	20.0	21.0	27.0	25.0	28.0	20.0
28	16.0	5.0	7.0	8.0	9.0	7.0	15.0	20.0	29.0	26.0	25.0	17.0
29	17.0	7.0	9.0	8.0	---	4.0	21.0	21.0	27.0	28.0	25.0	17.0
30	20.0	---	7.0	7.0	---	---	18.0	17.0	31.0	29.0	24.0	17.0
31	16.0	---	6.0	8.0	---	12.0	---	21.0	---	---	---	---
MONTH	17.0	11.0	6.5	6.5	6.5	10.0	14.5	22.0	26.0	24.5	27.0	21.0

08082100 Stinking Creek near Aspermont, Tex.

LOCATION.--Lat 33°14'00", long 100°12'47", Stonewall County, at downstream side of bridge on Farm Road 1263, 4.9 miles (7.9 km) upstream from Salt Fork Brazos River, and 6.8 miles (10.9 km) north of Aspermont.

DRAINAGE AREA.--92.4 mi² (239.3 km²).

PERIOD OF RECORD.--Discharge: September 1965 to current year.

Water quality: Chemical analyses: October 1965 to current year. Water temperatures: October 1965 to September 1969.

GAGE.--Water-stage recorder. Datum of gage is 1,601.5 ft (488.14 m) above mean sea level (State Highway Department bridge plans).

AVERAGE DISCHARGE.--10 years, 3.82 ft³/s (0.108 m³/s), 2,770 acre-ft/yr (3.42 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 455 ft³/s (12.9 m³/s) May 23 (gage height, 6.65 ft or 2.027 m, from floodmark); minimum, 0.03 ft³/s (0.001 m³/s) Sept. 11.

Period of record: Maximum discharge, 1,620 ft³/s (45.9 m³/s) Aug. 13, 1972 (gage height, 9.85 ft or 3.002 m); no flow for many days most years.

Maximum stage since at least 1925, 31 ft (9.4 m) in September 1955, from information by local resident.

REMARKS.--Discharge records good. No known diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.9	1.2	1.6	2.2	1.4	.96	.47	.42	.12	1.0	.08
2	1.2	2.2	1.2	1.8	3.2	1.3	.96	.47	.42	.08	8.3	.06
3	1.0	2.1	1.2	1.9	4.6	1.3	.96	.50	.38	.11	17	.05
4	.90	2.1	1.2	1.7	5.0	1.2	.96	.57	.33	.68	2.3	.05
5	.90	2.0	1.2	1.6	3.6	1.2	.96	.58	.38	.78	.62	.05
6	.73	1.6	1.4	1.5	2.5	1.2	.96	.64	.42	.29	.49	.04
7	.52	1.7	1.4	1.4	2.0	1.2	2.2	.62	.38	.18	.38	.04
8	.38	1.7	1.3	1.3	1.9	1.2	3.2	.57	.47	.12	.38	.04
9	.96	1.8	1.2	1.2	1.7	1.2	1.9	.57	.42	.15	.29	.04
10	.84	2.0	1.2	1.2	1.6	1.2	1.2	.57	.42	.15	.25	.04
11	.73	1.8	1.4	1.2	1.6	1.2	1.2	.57	.52	.25	.25	.72
12	.73	1.8	1.5	1.2	1.5	1.2	1.3	.57	.42	.34	.21	33
13	.73	1.6	1.4	1.2	1.4	1.2	1.2	.57	.38	.34	.48	34
14	5.4	1.5	1.3	1.2	1.4	1.2	1.1	.62	.42	.23	.33	47
15	4.6	1.4	1.3	1.2	1.4	1.2	1.0	.62	.38	.11	1.8	14
16	2.2	1.4	1.2	1.2	1.4	1.1	1.2	.62	.38	.10	.52	5.4
17	1.6	1.4	1.2	1.2	1.4	1.1	.96	.57	.29	.10	.38	3.0
18	1.2	1.5	1.2	1.2	1.4	1.1	.84	.52	.25	.16	.29	1.9
19	1.1	1.5	1.2	1.2	1.3	1.1	.78	.52	.25	.63	.15	1.4
20	1.0	1.3	1.1	1.2	1.3	.96	.67	.67	.25	7.8	.08	.93
21	.90	1.2	1.1	1.1	1.3	.96	.62	.62	.25	6.9	.08	1.5
22	.90	1.2	1.1	1.0	8.0	.96	.57	17	.29	2.1	.08	4.5
23	7.1	1.2	1.1	1.0	4.7	.90	.62	98	.29	1.1	.08	1.7
24	70	1.2	1.1	1.0	3.3	.78	.62	9.6	.19	.70	.12	.96
25	32	1.1	1.0	1.1	2.2	.78	.62	4.8	.26	.90	.07	.82
26	8.1	1.1	1.0	1.1	1.7	.78	.58	2.1	.54	2.8	.38	.78
27	4.3	1.1	1.1	1.1	1.5	.96	.57	1.2	.21	3.7	6.2	.73
28	28	1.1	1.2	1.1	1.4	1.1	.53	.90	.18	2.4	1.8	.63
29	9.7	1.1	1.2	1.1	-----	1.0	.52	.67	.18	1.2	.42	.47
30	4.2	1.2	1.2	1.1	-----	1.0	.48	.62	.12	.78	.17	.46
31	3.3	-----	1.6	1.4	-----	1.0	-----	.52	-----	.83	.09	-----
TOTAL	196.72	46.8	38.0	39.3	66.5	33.98	30.24	147.44	10.09	36.13	44.99	154.39
MEAN	6.35	1.56	1.23	1.27	2.38	1.10	1.01	4.76	.34	1.17	1.45	5.15
MAX	70	2.9	1.6	1.9	8.0	1.4	3.2	98	.54	7.8	17	47
MIN	.38	1.1	1.0	1.0	1.3	.78	.48	.47	.12	.08	.07	.04
AC-FT	390	93	75	78	132	67	60	292	20	72	89	306

CAL YR 1974 TOTAL 1,112.86 MEAN 3.05 MAX 289 MIN 0 AC-FT 2,210

WTR YR 1975 TOTAL 844.58 MEAN 2.31 MAX 98 MIN .04 AC-FT 1,680

PEAK DISCHARGE (BASE, 300 FT³/S).--May 23 (about 0100) 455 ft³/s (6.65 ft, from floodmark).

BRAZOS RIVER BASIN

08082100 Stinking Creek near Aspermont, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 11...	1000	.65	1.3	550	290	1100	15	161	0	2000
NOV. 20...	1210	1.3	1.2	730	340	1500	14	222	0	2300
JAN. 09...	1120	1.2	1.3	710	340	1500	15	230	0	2300
FEB. 27...	1400	1.3	2.4	560	250	1100	13	205	0	1700
APR. 14...	1630	1.0	.1	670	350	1300	17	120	0	2300
MAY 23...	1120	78	6.8	190	32	120	11	102	0	490
JUNE 01...	1530	.12	.1	740	360	1200	17	44	0	2700
AUG. 19...	1105	.12	.4	480	190	590	13	86	0	1600
SEP. 29...	1600	.47	2.4	460	200	790	12	120	0	1500

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 11...	2000	--	6040	2600	2400	9.4	8710	7.4	20.0
NOV. 20...	2800	.3	7800	3200	3000	12	10700	7.8	16.0
JAN. 09...	2700	.6	7680	3200	3000	12	10700	7.7	8.0
FEB. 27...	2000	.4	5730	2400	2300	9.7	8280	8.0	9.0
APR. 14...	2300	.4	7000	3100	3000	10	10300	8.1	22.0
MAY 23...	210	.2	1110	610	520	2.1	1700	7.2	20.0
JUNE 01...	2200	.3	7240	3300	3300	9.1	10800	7.9	27.0
AUG. 19...	1100	.5	4020	2000	1900	5.8	5810	8.0	27.0
SEP. 29...	1400	.4	4420	2000	1900	7.7	6530	8.1	26.0

08082180 North Croton Creek near Knox City, Tex.

LOCATION.--Lat 33°22'59", long 100°04'51", Stonewall County, on left bank 600 ft (180 m) downstream from Wedington Creek, 9.5 miles (15.3 km) upstream from Brazos River, and 15 miles (24 km) southwest of Knox City.

DRAINAGE AREA.--251 mi² (650 km²).

PERIOD OF RECORD.--Discharge: September 1965 to current year.

Water quality: Chemical analyses: October 1965 to current year. Water temperatures: October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,462.44 ft (445.752 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 18.3 ft³/s (0.518 m³/s), 13,260 acre-ft/yr (16.3 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) May 23 (gage height, 19.75 ft or 6.020 m, from flood-mark), from rating curve extended as explained below; minimum, 0.20 ft³/s (0.006 m³/s) May 21, 22.
Period of record: Maximum discharge, 32,100 ft³/s (909 m³/s) Aug. 30, 1966 (gage height, 32.36 ft or 9.863 m), from rating curve extended above 240 ft³/s (6.80 m³/s) on basis of step-backwater analysis and slope-area measurements of 2,660 ft³/s (75.3 m³/s), 6,530 ft³/s (185 m³/s), and peak flow; no flow at times.

Historic: Maximum stage since at least 1921, that of Aug. 30, 1966. Flood in 1932 reached a stage of about 32 ft (9.8 m), from information by local residents.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in WSP 2122 and WRD Texas for the water years indicated.

Water year	Date	Discharge (cfs)	Gage height (feet)
1966	Aug. 30, 1966	32,100	32.36
1967	July 5, 1967	1,200	14.25
1969	May 4, 1969	788	11.92
1970	Oct. 27, 1969	534	10.15
1971	Aug. 24, 1971	2,680	19.80
1972	Aug. 13, 1972	4,620	23.77
1973	Mar. 10, 1973	654	11.02
1974	June 3, 1974	1,410	15.33

Water quality: Current year: Maximum daily specific conductance, 36,400 micromhos July 22; minimum daily, 1,300 micromhos May 23. Maximum water temperatures, 33.0°C June 5, July 6, Aug. 10; minimum, freezing point Jan. 12, 13.

Period of record: Maximum daily specific conductance, 47,400 micromhos Oct. 23, 1969; minimum daily, 1,060 micromhos Aug. 30, 1966. Maximum water temperatures, 35.0°C June 14, 1972; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. No diversion or regulation above station. Recording rain gage located at station.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for high-water periods in water years 1966-67, 1969-74, superseding figures published in WSP 2122 and WRD Texas, 1971-74 are given below:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1965		1966-Con.		1967-Con.		1972	
Oct. 17	53	Sept. 1	1,280	July 6	33	Oct. 16	144
18	2,140	2	1,290			17	282
19	130	3	541	1969		July 1	545
20	47	4	73	May 4	100	Aug. 13	1,720
		5	53	5	50	14	1,770
1966		8	97	6	171	26	164
Mar. 27	140	9	165	7	182	27	687
28	194	10	68	8	40		
Apr. 23	71	15	387			1973	
25	554	16	328	1970		Oct. 31	280
26	79	17	70	Oct. 27	277	Mar. 10	227
Aug. 11	127	18	58	28	87		
12	56					1974	
22	29	1967		1971		June 3	392
23	112	Apr. 12	362	Aug. 14	170	4	401
24	464	13	96	15	71	Sept. 19	363
25	403	May 30	14	16	400	24	206
29	1,260	31	191	24	1,150	25	624
30	16,300	July 4	483	25	438		
31	6,710	5	699	28	585		

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1965.....	2,466.11	2,140	.36	79.6	4,890
March.....	404.34	194	.49	13.0	802
April.....	793.64	554	.26	26.5	1,570
August.....	25,583.45	16,300	.06	825	50,740
September.....	4,981	1,290	14	166	9,880
WTR YR 1966.....	34,650.16	16,300	.03	94.9	68,730
CAL YR 1966.....	32,520.37	16,300	.03	89.1	64,500
April 1967.....	544.17	362	.65	18.1	1,080
May.....	222.02	191	.23	7.16	440
July.....	1,346.76	699	.74	43.4	2,670
WTR YR 1967.....	2,890.50	699	.21	7.92	5,730
CAL YR 1967.....	2,501.91	699	.13	6.85	4,960
May 1969.....	938.08	182	.11	30.3	1,860
WTR YR 1969.....	1,350.79	182	0	3.70	2,680
October 1969.....	402.72	227	.16	13.0	799
CAL YR 1969.....	1,759.84	227	0	4.82	3,490
WTR YR 1970.....	1,000.15	227	0	2.74	1,980

BRAZOS RIVER BASIN

08082180 North Croton Creek near Knox City, Tex.--Continued

Month	Cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
August 1971.....	3,160.93	1,150	0	102	6,270
WTR YR 1971.....	3,682.63	1,150	0	10.1	7,300
October 1971.....	1,169.5	282	1.5	37.7	2,320
CAL YR 1971.....	5,064.70	1,150	0	13.9	10,050
July 1972.....	578.84	545	.02	18.7	1,150
August.....	4,726.48	1,770	.01	152	9,370
WTR YR 1972.....	8,017.59	1,770	.01	21.9	15,900
October 1972.....	521.5	280	1.1	16.8	1,030
CAL YR 1972.....	7,659.89	1,770	.01	20.9	15,190
March 1973.....	851.2	227	6.9	27.5	1,690
WTR YR 1973.....	3,598.74	280	.09	9.86	7,140
CAL YR 1973.....	2,640.10	227	.09	7.23	5,240
June 1974.....	847.76	392	.03	28.3	1,680
September.....	1,417.88	624	0	47.3	2,810
WTR YR 1974.....	2,640.35	624	0	7.23	5,240

REVISED PEAK DISCHARGE.--1966: Oct. 18 (about 0600) 6,530 ft³/s (26.20 ft); Mar. 27 (about 2400) 2,260 ft³/s (18.50 ft); Apr. 25 (1930) 1,820 ft³/s (17.00 ft); Aug. 24 (about 2100) 1,550 ft³/s (16.00 ft); Aug. 30 (about 1400) 32,100 ft³/s (32.36 ft); Sept. 2 (time unknown) 5,140 ft³/s (24.50 ft); Sept. 15 (2300) 1,050 ft³/s (13.45 ft).
 1967: July 5 (1100) 1,200 ft³/s (14.25 ft).
 1969: May 4 (1900) 788 ft³/s (11.92 ft).
 1971: Aug. 16 (0700) 951 ft³/s (12.90 ft); Aug. 24 (1830) 2,680 ft³/s (19.80 ft); Aug. 28 (0330) 1,590 ft³/s (16.16 ft).
 1972: Oct. 16 (2300) 1,400 ft³/s (15.30 ft); July 1 (0730) 1,850 ft³/s (17.13 ft); Aug. 13 (2230) 4,620 ft³/s (23.77 ft); Aug. 27 (0115) 1,030 ft³/s (13.33 ft).
 1974: June 3 (2100) 1,410 ft³/s (15.33 ft); Sept. 19 (0730) 1,060 ft³/s (13.49 ft); Sept. 25 (0630) 1,100 ft³/s (13.76 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	30	3.4	3.7	9.2	3.7	1.7	1.2	14	1.2	8.4	2.3
2	2.5	22	3.4	5.4	9.1	2.9	1.6	.97	12	1.1	8.6	2.0
3	1.8	19	3.6	5.2	14	2.7	1.4	.76	9.9	1.2	11	1.9
4	1.6	17	3.7	4.2	26	2.7	1.4	.66	8.8	2.0	8.4	1.7
5	1.6	15	4.0	3.6	21	2.6	1.4	.66	8.2	1.5	6.9	1.7
6	1.6	14	5.1	3.4	13	2.6	1.4	.60	6.9	1.1	5.4	1.5
7	1.4	14	4.1	3.3	8.2	2.4	2.1	.45	8.3	.98	4.7	1.5
8	1.4	15	3.1	3.0	2.7	2.1	4.9	.42	258	.85	3.8	1.5
9	1.4	15	3.0	2.7	2.0	2.3	4.8	.44	35	.76	3.3	1.4
10	1.2	18	4.2	2.4	3.9	2.5	4.8	6.1	144	.78	3.1	1.4
11	1.1	15	5.9	1.9	12	2.1	4.2	21	40	.94	2.6	1.9
12	1.2	13	4.5	1.7	4.5	3.2	3.2	6.8	19	.97	2.2	201
13	1.0	12	3.6	2.3	4.2	2.9	2.6	2.8	14	.78	4.3	237
14	8.2	9.9	3.4	2.0	4.2	2.6	2.3	1.5	12	.66	17	91
15	26	9.5	3.4	1.9	4.2	2.3	1.9	1.0	9.1	.54	6.4	38
16	13	9.4	2.9	1.8	4.2	2.3	1.6	.75	7.4	.48	8.7	26
17	6.8	9.0	2.9	1.8	4.9	2.3	1.5	.52	5.5	.47	16	21
18	4.7	8.6	2.9	1.8	4.2	2.9	1.3	.33	4.3	.48	9.5	16
19	3.9	8.5	2.7	1.7	3.9	2.8	1.1	.26	3.4	.98	5.2	12
20	3.3	6.7	2.6	1.5	3.9	2.4	1.0	.24	3.1	2.3	3.6	10
21	3.0	6.3	2.5	1.4	3.4	2.0	.96	.20	3.2	3.8	3.0	24
22	3.1	6.5	2.5	1.1	9.1	1.9	.95	536	3.3	1.8	2.5	21
23	23	6.1	2.4	1.1	11	1.8	1.1	1,880	2.7	1.1	2.2	16
24	176	4.6	2.2	1.4	7.4	1.6	1.2	366	2.7	2.6	2.1	12
25	136	4.2	2.0	1.5	5.9	1.4	.98	45	2.7	348	1.8	10
26	30	4.6	2.6	1.2	4.9	1.4	.93	26	2.6	848	28	12
27	23	4.5	3.1	1.2	4.2	1.8	1.1	39	2.1	43	15	7.7
28	33	4.5	2.9	1.1	3.9	2.2	1.4	35	2.0	24	5.1	7.3
29	25	4.0	2.9	1.1	-----	2.2	1.0	80	1.6	16	3.8	6.9
30	22	3.4	2.6	1.3	-----	2.1	1.2	32	1.3	12	3.0	6.1
31	31	-----	4.2	3.3	-----	2.0	-----	19	-----	9.9	2.5	-----
TOTAL	591.7	329.3	102.3	71.0	209.1	72.7	57.02	3,105.66	647.1	1,330.27	208.1	810.9
MEAN	19.1	11.0	3.30	2.29	7.47	2.35	1.90	100	21.6	42.9	6.71	27.0
MAX	176	30	5.9	5.4	26	3.7	4.9	1,880	258	848	28	237
MIN	1.0	3.4	2.0	1.1	2.0	1.4	.93	.20	1.3	.47	1.8	1.4
AC-FT	1,170	653	203	141	415	144	113	6,160	1,280	2,640	413	1,610
CAL YR 1974 TOTAL	3,564.69											
WTR YR 1975 TOTAL	7,535.15											
MEAN	9.77											
MAX	624											
MIN	0											
AC-FT	7,070											
WTR YR 1975	14,950											

PEAK DISCHARGE (BASE, 500 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
	about						
5-23	1300	19.75	2,660	7-26	0130	17.24	1,880
6-8	1330	10.76	617	9-13	1830	10.31	556

a From floodmark.

08082180 North Croton Creek near Knox City, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 31...	1100	35	7.4	560	120	490	12	150	0	1500
NOV. 20...	0930	6.5	4.7	760	240	1600	20	175	0	2000
DEC. 31...	1700	3.3	3.4	700	260	2400	24	152	0	2200
JAN. 09...	0830	2.8	3.2	740	250	2400	25	181	0	2200
FEB. 28...	1030	2.5	1.8	700	250	2100	25	178	0	2100
MAR. 31...	1115	1.4	2.6	790	300	3100	28	161	0	2500
APR. 14...	1415	2.6	1.3	740	260	2300	23	170	0	2300
MAY 28...	1030	28	8.3	610	87	860	14	135	0	1700
JUNE 30...	1705	1.4	4.0	860	270	3000	24	162	0	2400
JULY 31...	1830	9.8	6.9	700	180	1700	18	144	0	2000
AUG. 19...	0815	6.1	6.3	650	170	1400	19	130	0	1900
SEP. 30...	0800	6.5	4.5	710	190	1600	23	148	0	2000

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	850	--	3610	1900	1800	4.9	5090	8.1	15.0
NOV. 20...	2800	.5	7510	2900	2700	13	10500	7.7	10.0
DEC. 31...	4000	.4	9660	2800	2700	20	14200	8.1	8.0
JAN. 09...	4100	.7	9810	2900	2700	19	14200	7.7	7.0
FEB. 28...	3500	.8	8770	2800	2600	17	12700	8.1	8.0
MAR. 31...	5200	.4	12000	3200	3100	24	17500	7.9	9.0
APR. 14...	4000	.5	9710	2900	2800	19	14600	7.2	22.0
MAY 28...	1400	.4	4750	1900	1800	8.6	7070	7.6	23.0
JUNE 30...	5000	.4	11600	3300	3100	23	17500	7.6	34.5
JULY 31...	2800	.3	7480	2500	2400	15	11000	7.9	31.0
AUG. 19...	2100	.6	6310	2300	2200	13	9540	7.6	26.0
SEP. 30...	2800	.7	7400	2600	2400	14	10900	8.0	19.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	591.7	6950	4600	7350	1300	2080	1700	2720	2100
NOV. 1974.....	329.29	8860	5900	5250	1900	1690	1800	1600	2300
DEC. 1974.....	102.3	14700	9800	2710	4100	1130	2300	635	****
JAN. 1975.....	71	14400	9600	1840	3900	748	2300	441	****
FEB. 1975.....	209.1	11400	7600	4290	2800	1580	2000	1130	****
MAR. 1975.....	72.7	14600	9800	1920	4000	785	2300	451	****
APR. 1975.....	57.02	17900	12000	1850	5300	816	2500	385	****
MAY 1975.....	3105.66	2030	1300	10900	300	2520	920	7710	1000
JUNE 1975.....	647.09	5440	3600	6290	880	1540	1500	2620	1900
JULY 1975.....	1330.27	3350	2200	7900	500	1800	1200	4310	1400
AUG. 1975.....	208.1	11600	7700	4330	2900	1630	2000	1120	****
SEPT 1975.....	810.9	4870	3200	7010	730	1600	1500	3280	1700
TOTAL	7535.14	**	**	61600	**	17900	**	26400	**
WTD.AVG.	20.64	4600	3000	**	880	**	1300	**	1700

BRAZOS RIVER BASIN

08082180 North Croton Creek near Knox City, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10800	8100	14100	15500	17900	12700	18500	26400	8800	18400	11400	17500
2	12000	6240	14100	12900	18000	12900	20100	29000	9620	20000	12000	17200
3	13000	6500	14000	14600	11000	12900	20100	30000	10600	19400	13400	17200
4	13900	7210	14000	15700	9280	13300	19900	29200	11000	20000	14400	17500
5	15000	8030	13600	15800	9370	13300	19000	27600	12000	19400	12200	18700
6	16300	8060	13600	15800	9950	13500	18500	25100	12400	18400	13400	18700
7	17200	7910	14300	14100	7370	14100	18300	23900	12900	19100	13400	19400
8	17300	8060	14400	14200	7260	14100	10600	22800	3970	20400	14900	20600
9	17300	8030	15300	14100	7260	13900	18000	22000	4630	21000	15600	20600
10	18100	8650	14100	14500	8730	14600	22500	13200	3300	20700	17300	20600
11	18900	8690	14000	14900	7500	14300	25300	4460	4000	19400	17300	9000
12	19400	10000	13800	16300	12700	13500	16900	8910	5560	19400	18100	3000
13	19400	9100	13900	16100	12700	13800	14900	10400	7340	21500	18400	2990
14	14300	8410	14300	15000	13100	14400	14600	13200	7560	21400	9630	4070
15	35000	9260	15000	14800	13100	14600	15500	14600	8400	21600	9200	4690
16	9120	9260	14700	15600	12500	14800	16000	15800	10100	21500	13400	5800
17	9200	9460	14500	15400	12800	15000	16000	16000	9950	21000	12000	6190
18	9760	9910	14500	15400	13600	14800	16900	16700	11100	17900	8810	6870
19	9900	10100	14900	16100	15100	14900	17200	16400	12100	17600	9810	8170
20	10200	10600	15400	16100	15100	15000	17800	16000	12200	19100	12600	8510
21	10200	10700	15000	15000	14600	14900	17800	16000	12700	31100	12600	6440
22	10000	11500	15400	14000	12400	15100	17400	2000	12800	36400	13900	7980
23	8000	11500	15400	14000	10600	16700	16900	1300	12500	31100	15100	8050
24	5230	12500	16400	13100	10500	16700	17500	1800	13700	23600	16800	8050
25	2730	12500	16400	12700	13100	16600	18300	6880	14300	4040	17300	8510
26	4070	12600	16100	12800	12800	16500	18100	6970	14300	1810	4000	9120
27	5480	12600	15700	12800	13000	15800	18300	4000	14300	6730	9810	9450
28	5050	13500	16200	13000	12700	16500	17800	9110	14900	6690	16200	9900
29	8960	12900	15900	12800	---	16500	17700	4250	14900	9110	17600	10500
30	6170	13500	16300	10300	---	16900	19300	5720	16900	11000	19400	10900
31	5060	---	14200	10300	---	17500	---	6960	---	11000	18100	---
MONTH	12160	9850	14820	14310	11930	14840	17860	14420	10630	18380	13810	11210

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	16.0	3.0	5.0	6.0	11.0	13.0	24.0	26.0	26.0	31.0	25.0
2	23.0	18.0	2.0	6.0	6.0	10.0	14.0	28.0	23.0	30.0	29.0	26.0
3	23.0	16.0	1.0	7.0	7.0	6.0	16.0	29.0	29.0	26.0	25.0	24.0
4	19.0	15.0	7.0	6.0	9.0	16.0	14.0	25.0	24.0	29.0	26.0	25.0
5	20.0	11.0	8.0	5.0	5.0	7.0	22.0	19.0	33.0	25.0	32.0	25.0
6	24.0	10.0	9.0	4.0	5.0	12.0	19.0	22.0	25.0	33.0	25.0	28.0
7	19.0	12.0	7.0	10.0	6.0	10.0	15.0	27.0	31.0	27.0	25.0	22.0
8	19.0	13.0	5.0	10.0	8.0	9.0	12.0	26.0	24.0	28.0	32.0	23.0
9	19.0	12.0	3.0	8.0	6.0	15.0	12.0	28.0	23.0	32.0	25.0	24.0
10	19.0	10.0	8.0	7.0	11.0	7.0	14.0	25.0	22.0	26.0	33.0	25.0
11	23.0	11.0	9.0	1.0	13.0	9.0	15.0	21.0	20.0	31.0	25.0	25.0
12	24.0	10.0	9.0	0.0	6.0	8.0	11.0	27.0	20.0	28.0	27.0	---
13	19.0	15.0	8.0	0.0	14.0	13.0	18.0	22.0	30.0	28.0	27.0	14.0
14	16.0	12.0	6.0	7.0	13.0	14.0	23.0	18.0	24.0	25.0	26.0	16.0
15	12.0	10.0	3.0	8.0	7.0	12.0	26.0	18.0	23.0	24.0	25.0	25.0
16	16.0	9.0	3.0	6.0	10.0	14.0	26.0	18.0	27.0	25.0	24.0	23.0
17	22.0	11.0	4.0	5.0	7.0	19.0	30.0	29.0	27.0	26.0	27.0	28.0
18	22.0	11.0	7.0	8.0	10.0	14.0	22.0	22.0	30.0	25.0	27.0	23.0
19	16.0	16.0	4.0	5.0	11.0	20.0	14.0	25.0	30.0	29.0	28.0	23.0
20	15.0	10.0	5.0	5.0	7.0	22.0	18.0	25.0	25.0	29.0	28.0	19.0
21	15.0	9.0	6.0	6.0	11.0	16.0	25.0	21.0	23.0	31.0	26.0	18.0
22	16.0	11.0	5.0	5.0	4.0	15.0	21.0	23.0	29.0	25.0	28.0	18.0
23	19.0	13.0	5.0	6.0	2.0	16.0	27.0	18.0	25.0	27.0	24.0	16.0
24	17.0	10.0	4.0	9.0	4.0	18.0	30.0	18.0	25.0	27.0	27.0	17.0
25	17.0	7.0	3.0	11.0	13.0	20.0	27.0	20.0	25.0	23.0	26.0	21.0
26	17.0	10.0	4.0	10.0	9.0	21.0	21.0	25.0	28.0	23.0	25.0	22.0
27	18.0	10.0	7.0	10.0	15.0	20.0	22.0	23.0	31.0	25.0	27.0	17.0
28	17.0	8.0	10.0	10.0	8.0	9.0	18.0	27.0	25.0	27.0	29.0	19.0
29	21.0	6.0	11.0	7.0	---	5.0	17.0	22.0	25.0	31.0	31.0	19.0
30	18.0	2.0	6.0	6.0	---	15.0	16.0	22.0	25.0	30.0	31.0	26.0
31	15.0	---	8.0	7.0	---	9.0	---	22.0	---	31.0	28.0	---
MONTH	19.0	11.0	6.0	6.5	8.5	13.5	19.5	23.0	26.0	27.5	27.5	22.0

08082500 Brazos River at Seymour, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 33°34'51", long 99°16'02", Baylor County, on left bank at upstream side of bridge on U.S. Highways 277 and 283, 0.8 mile (1.3 km) upstream from Wichita Valley Railway bridge, 1.0 mile (1.6 km) southwest of courthouse in Seymour, and at mile 833.2 (1,340.6 km).

DRAINAGE AREA.--14,490 mi² (37,530 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: November 1923 to current year.

Water quality: Chemical analyses: August 1959 to current year. Water temperatures: August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,238.97 ft (377.638 m) above mean sea level. Prior to Apr. 6, 1972, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--51 years (1924-75), 397 ft³/s (11.24 m³/s), 287,600 acre-ft/yr (355 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 9,030 ft³/s (256 m³/s) July 28 (gage height, 7.90 ft or 2.408 m); minimum, 10 ft³/s (0.28 m³/s) May 21, 22.

Period of record: Maximum discharge, 95,400 ft³/s (2,700 m³/s) Oct. 16, 1926 (gage height, 17.16 ft or 5.230 m, from floodmarks, present datum), from rating curve extended above 48,000 ft³/s (1,360 m³/s) on basis of slope-area measurement of 95,400 ft³/s (2,700 m³/s); maximum gage height, 23.00 ft (7.010 m), present datum, Sept. 28, 1955 (discharge, 71,200 ft³/s or 2,020 m³/s); no flow at times.

Historic: Since 1906 the maximum stage was that of Sept. 28, 1955, and maximum discharge was that of Oct. 16, 1926. A flood in 1906 reached about the same stage as flood in 1955.

Water quality: Current year: Maximum daily specific conductance, 26,500 micromhos Apr. 15; minimum daily, 1,180 micromhos Aug. 27. Maximum water temperatures, 36.0°C July 8; minimum, 3.0°C Feb. 6.

Period of record: Maximum daily specific conductance, 80,400 micromhos May 24, 1971; minimum daily, 776 micromhos July 20, 1967. Maximum water temperatures; 37.0°C Aug. 6, 1959, Sept. 3, 1963; minimum, freezing point on many days during winter months.

REMARKS.--Discharge records fair. Small diversions above station for irrigation and oilfield operation. Flow is slightly regulated by two major upstream reservoirs which have a capacity of 43,960 acre-ft (54.2 hm³). For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950).

REVISIONS (WATER YEARS).--WSP 808: 1924-29. WSP 1312: 1933.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	606	897	68	66	59	74	29	19	510	51	1,160	626
2	442	740	64	92	67	70	25	18	337	52	625	362
3	324	516	66	102	86	63	26	19	267	59	617	240
4	255	391	67	91	130	61	25	19	220	63	397	183
5	200	370	68	92	191	63	23	19	186	55	332	151
6	166	326	66	84	179	63	22	18	164	64	303	136
7	134	262	64	79	187	57	28	16	133	93	240	119
8	122	227	61	77	164	52	181	15	308	77	184	92
9	107	211	60	75	142	50	156	15	267	60	151	83
10	93	211	76	68	137	47	95	14	337	71	126	74
11	80	187	91	65	133	47	67	14	489	71	103	64
12	72	186	80	59	129	59	70	14	295	99	88	188
13	65	177	78	57	124	55	63	17	193	69	78	1,310
14	178	168	75	58	110	46	56	27	168	47	75	3,330
15	301	161	68	63	99	45	52	22	158	37	134	2,710
16	206	153	67	57	96	47	49	17	143	31	116	1,540
17	203	141	63	59	92	47	46	15	114	27	77	1,070
18	170	145	59	61	88	43	39	13	101	25	132	765
19	206	135	57	56	85	41	31	13	104	127	738	550
20	258	134	54	58	84	39	30	15	89	613	518	414
21	208	129	54	54	75	38	28	12	79	276	333	357
22	172	118	55	51	84	35	28	445	122	2,660	213	376
23	144	112	54	50	85	32	28	4,820	87	1,860	156	296
24	927	103	48	53	81	30	28	5,110	131	1,930	136	234
25	939	97	48	51	87	28	28	2,390	230	898	90	207
26	2,740	91	51	50	88	27	28	1,490	116	902	125	184
27	1,830	86	53	48	89	30	28	854	80	2,590	244	163
28	1,320	82	57	47	81	32	27	858	79	5,950	437	173
29	829	73	59	46	-----	40	23	1,480	84	2,180	283	150
30	709	71	58	47	-----	33	19	2,000	61	1,570	1,010	135
31	964	-----	68	51	-----	31	-----	992	-----	1,090	1,080	-----
TOTAL	14,970	6,700	1,957	1,967	3,052	1,425	1,378	20,790	5,652	23,697	10,301	16,282
MEAN	483	223	63.1	63.5	109	46.0	45.9	671	188	764	332	543
MAX	2,740	897	91	102	191	74	181	5,110	510	5,950	1,160	3,330
MIN	65	71	48	46	59	27	19	12	61	25	75	64
AC-FT	29,690	13,290	3,880	3,900	6,050	2,830	2,730	41,240	11,210	47,000	20,430	32,300

CAL YR 1974 TOTAL 62,175.05 MEAN 170 MAX 3,670 MIN 0 AC-FT 123,300
WTR YR 1975 TOTAL 108,171.00 MEAN 296 MAX 5,950 MIN 12 AC-FT 214,600

PEAK DISCHARGE (BASE, 11,000 FT³/S).--No peak above base.

BRAZOS RIVER BASIN

08082500 Brazos River at Seymour, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
26...	1030	2910	8.1	310	45	1100	11	98	0	860	1700	--
NOV.												
22...	1100	131	9.7	490	140	2700	15	156	0	1300	4200	--
DEC.												
20...	0845	54	9.9	650	180	4000	16	204	0	1800	6700	.5
JAN.												
17...	0830	45	7.0	640	170	3600	14	207	0	1800	5900	.5
FEB.												
21...	1130	80	4.9	620	190	3500	18	194	0	1700	5500	.6
MAR.												
14...	0900	45	5.3	560	180	3300	19	208	0	1850	5200	.7
APR.												
17...	1130	58	2.3	730	180	4700	26	158	0	2000	7400	.5
MAY												
12...	1630	13	1.1	730	240	4800	26	146	0	1900	7600	.6
JUNE												
12...	1430	275	7.4	280	48	910	10	82	0	640	1500	.3
JULY												
12...	0630	64	5.3	620	120	3700	22	122	0	1600	6000	.5
AUG.												
08...	0815	200	11	250	21	710	11	128	0	750	950	.7
SEP.												
19...	0815	577	6.9	190	35	720	7.0	112	0	540	1100	.5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.											
26...	.19	.02	.14	7.4	7.5	1.6	4390	4090	970	880	15
NOV.											
22...	.08	.01	.07	.71	.78	.12	--	8930	1800	1700	28
DEC.											
20...	.54	.02	.06	.84	.90	.00	13700	13500	2400	2200	36
JAN.											
17...	.37	.01	.08	.61	.69	.05	12600	12200	2300	2100	33
FEB.											
21...	.41	.01	.03	.45	.48	.02	12400	11600	2300	2200	32
MAR.											
14...	.49	.01	.06	.37	.43	.11	11500	11200	2100	2000	31
APR.											
17...	.02	.00	.07	.18	.25	.05	15700	15100	2600	2400	40
MAY											
12...	.00	.00	.02	.45	.47	.02	16300	15400	2800	2700	39
JUNE											
12...	.31	.01	.08	1.8	1.9	.26	3650	3440	900	830	13
JULY											
12...	.03	.01	.00	.65	.65	.07	12400	12100	2000	1900	36
AUG.											
08...	.00	.01	.00	.86	.86	.18	3010	2770	720	610	12
SEP.											
19...	.21	.03	.00	1.2	1.2	1.0	2710	2650	620	530	13

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
26...	6820	7.6	18.0	5800	7.8	84	6.2	33000	17000	13000	59
NOV.											
22...	13900	8.0	14.5	80	11.8	119	1.6	190	47	260	--
DEC.											
20...	20000	7.9	3.5	25	12.2	98	.8	70	64	15	--
JAN.											
17...	18500	8.0	2.5	4	12.6	98	.4	62	1	11	--
FEB.											
21...	18300	8.0	11.5	3	12.0	115	.2	3	1	13	6.3
MAR.											
14...	17000	7.6	2.5	130	11.6	91	.8	75	60	280	--
APR.											
17...	22800	8.0	22.5	10	10.2	124	.9	11	2	24	--
MAY											
12...	24600	8.0	31.5	2	8.5	125	.7	12	5	20	--
JUNE											
12...	6030	7.6	27.5	550	8.1	104	2.8	3200	1400	5400	13
JULY											
12...	19600	7.9	23.0	25	7.1	87	1.5	2000	780	680	--
AUG.											
08...	4750	7.9	24.0	250	8.1	96	2.3	240	64	170	4.2
SEP.											
19...	4370	7.8	22.0	1700	8.5	97	1.8	5500	1200	2200	--

08082500 Brazos River at Seymour, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 26...	1030	40	200	4	550	10	0	110	0	<50
FEB. 21...	1130	30	0	2	1400	20	0	30	10	50
JUNE 12...	1430	40	26	1	480	<10	0	60	10	<50
AUG. 08...	0815	0	12	6	540	<10	0	20	10	<50

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
OCT. 26...	0	160	2	74000	110	200	4	90	5600
FEB. 21...	0	20	3	120	10	100	2	170	50
JUNE 12...	1	60	4	29000	30	<100	4	20	--
AUG. 08...	0	20	2	9800	50	<100	0	60	200

DATE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 26...	0	.3	.0	0	1	1	4900	680	30
FEB. 21...	30	.0	.0	2	4	4	11000	30	30
JUNE 12...	0	.0	.0	0	1	1	3400	140	0
AUG. 08...	10	.1	.1	0	1	1	4400	100	20

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
DEC. 20	28	4.6	3.1	0.2	0.2	7500	Polyethylene strip
FEB. 21	35	2.3	2.0	.0	.0	.0	
APR. 17	34	96	87	12	.9	760	
AUG. 08	28	.6	.1	.0	.0	.0	

OCT. 26, 1974 TIME 1030

NOV. 22, 1974 TIME 1100

PHYTOPLANKTON 93,000 CELLS/ML

PHYTOPLANKTON 44,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT	ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSTOPHYTA			CHLOROPHYTA		
..BACILLARIOPHYCEAE			..CHLOROPHYCEAE		
..PENNALES			..CHLOROCOCCALES		
....CYMBELLACEAE	5+200	6	....OCCYSTACEAE		
....CYMBELLA			....ANKISTRODESMUS	740	2
....NAVICULACEAE	26+000	28	....SCENEDESMACEAE		
....NAVICULA			....SCENEDESMUS	3,000	7
CYANOPHYTA			CHRYSTOPHYTA		
..MYXOPHYCEAE			..BACILLARIOPHYCEAE		
..OSCILLATORIALES			..CENTRALES		
....NOSTOCACEAE	62+000	67	....COSCINODISCACEAE		
....ANABAENA			....CYCLOTELLA	11,000	24
			..PENNALES		
			....ACHNANTHACEAE		
			....COCCONEIS	370	1
			....NITZSCHACEAE		
			....NITZSCHIA	10,000	24
			CYANOPHYTA		
			..MYXOPHYCEAE		
			..CHROOCOCCALES		
			....CHROOCOCCACEAE		
			....ANACYSTIS	5,900	13
			..OSCILLATORIALES		
			....OSCILLATORIAEAE		
			....LYNGBYA	9,300	21
			....OSCILLATORIA	3,700	8

08082500 Brazos River at Seymour, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DEC. 20, 1974 TIME 0845

PHYTOPLANKTON 220 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
....SCENEDESMACEAE		
....SCENEDESMUS	32	15
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNIALES		
....FRAGILARIACEAE		
....SYNEDRA	49	22
....NAVICULACEAE		
....NAVICULA	73	33
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....ANACYSTIS	65	30

JAN. 17, 1975 TIME 0830

PHYTOPLANKTON 490 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
....OCCYSTACEAE		
....ANKISTRODESMUS	42	9
....SCENEDESMACEAE		
....ACTINASTRUM	210	43
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCONODISCACEAE		
....CYCLOTELLA	42	9
...PENNIALES		
....FRAGILARIACEAE		
....SYNEDRA	42	9
....NAVICULACEAE		
....AMPHIPRORA	130	26
....NAVICULA	21	4
....SURIPELLACEAE		
....CYMATOPLEURA	10	2

FEB. 21, 1975 TIME 1130

PHYTOPLANKTON 410 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
....OCCYSTACEAE		
....ANKISTRODESMUS	39	10
....SCENEDESMACEAE		
....SCENEDESMUS	99	24
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCONODISCACEAE		
....CYCLOTELLA	30	7
....MELOSIRA	20	5
...PENNIALES		
....FRAGILARIACEAE		
....FRAGILARIA	99	24
....NAVICULACEAE		
....NAVICULA	49	12
....NITZSCHACEAE		
....MANTZSCHIA	10	2
....NITZSCHIA	69	17

MAR. 14, 1975 TIME 0900

PHYTOPLANKTON 860 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
....OCCYSTACEAE		
....ANKISTRODESMUS	72	8
....SCENEDESMACEAE		
....SCENEDESMUS	290	33
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCONODISCACEAE		
....CYCLOTELLA	72	8
...PENNIALES		
....NAVICULACEAE		
....NAVICULA	290	33
....NITZSCHACEAE		
....NITZSCHIA	140	17

APR. 17, 1975 TIME 1130

PHYTOPLANKTON 860 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCONODISCACEAE		
....CYCLOTELLA	660	76
...PENNIALES		
....FRAGILARIACEAE		
....SYNEDRA	51	6
....NAVICULACEAE		
....NAVICULA	100	12
....NITZSCHACEAE		
....NITZSCHIA	51	6

MAY 12, 1975 TIME 1630

PHYTOPLANKTON 1,400 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...CENTRALES		
....COSCONODISCACEAE		
....CYCLOTELLA	110	8
...PENNIALES		
....CYMBELLACEAE		
....AMPHORA	18	1
....DIATOMACEAE		
....DIATOMA	18	1
....NAVICULACEAE		
....AMPHIPRORA	89	6
....NAVICULA	120	9
....NITZSCHACEAE		
....NITZSCHIA	410	29
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....ANACYSTIS	500	36
PYRRHOPHYTA		
..DINOPHYCEAE		
...PERIDINIALES		
....GLENODINIACEAE		
....GLENODINIUM	120	9

08082500 Brazos River at Seymour, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

JUNE 12, 1975 TIME 1430

PHYTOPLANKTON 2,300 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	1,100	50
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..PENNALES		
...NAVICULACEAE		
....NAVICULA	570	25
....NITZSCHIAEAE		
....NITZSCHIA	570	25

JULY 12, 1975 TIME 0630

PHYTOPLANKTON 82,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS		0
....OCCYSTIS	6,200	8
...SCENEDESMACEAE		
....SCENEDESMUS		0
....TETRASTRUM	470	1
..TETRASPORALES		
...PALMELLACEAE		
....GLOEOCYSTIS		0
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...CHAETOCERACEAE		
....CHAETOCEROS	4,600	6
...COSCINODISCEAE		
....CYCLOTELLA		0
..PENNALES		
...FRAGILARIACEAE		
....SYNEDRA		0
...NAVICULACEAE		
....NAVICULA	590	1
....NITZSCHIAEAE		
....NITZSCHIA	830	1
CYANOPHYTA		
.MYXOPHYCEAE		
..CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM	29,000	36
....ANACYSTIS	21,000	26
....GOMPHOSPHERIA	6,600	8
..OSCILLATORIALES		
...OSCILLATORIAEAE		
....LYNGBYA	11,000	13
....SPIRULINA		0
PYRRHOPHYTA		
.DINOPHYCEAE		
..GYMNODINIALES		
...GYMNODINIACEAE		
....GYMNODINIUM		0

AUG. 8, 1975 TIME 0815

PHYTOPLANKTON 37,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
.CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	220	1
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEAE		
....CYCLOTELLA	220	1
..PENNALES		
...CYMBELLACEAE		
....CYMBELLA		0
....NITZSCHIAEAE		
....NITZSCHIA	890	2
CYANOPHYTA		
.MYXOPHYCEAE		
..CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM		0
....ANACYSTIS	4,000	11
....GOMPHOSPHERIA	2,700	7
..OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA		0
....APHANIZOMENON	7,800	21
...OSCILLATORIAEAE		
....LYNGBYA	2,700	7
....OSCILLATORIA	19,000	51

SEP. 19, 1975 TIME 0815

PHYTOPLANKTON 180 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHRYSOPHYTA		
.BACILLARIOPHYCEAE		
..PENNALES		
...NAVICULACEAE		
....NAVICULA	180	100

BRAZOS RIVER BASIN

08082500 Brazos River at Seymour, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 26...	1030	2910	18.0	6780	53300	94
NOV. 22...	1100	131	14.5	167	59	98
DEC. 20...	0845	54	3.5	87	13	95
JAN. 17...	0830	45	2.5	41	5.0	95
FEB. 21...	1130	80	11.5	6	1.3	90
MAR. 14...	0900	45	2.5	78	9.5	99
MAY 12...	1630	13	31.5	28	.98	47
JUNE 12...	1430	275	27.5	1490	1110	100
JULY 12...	0630	64	23.0	47	8.1	97
AUG. 08...	0815	200	24.0	354	191	99
SEP. 19...	0815	577	22.0	3230	5030	98

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	14970	5340	3400	137000	1300	52500	720	29100	800
NOV. 1974.....	6700	9500	6000	109000	2500	45200	1100	19900	1200
DEC. 1974.....	1957	18500	12000	63400	5800	30600	1300	6870	****
JAN. 1975.....	1967	19300	12000	63700	6100	32400	1300	6900	****
FEB. 1975.....	3052	17900	11000	90600	5600	46100	1800	14800	****
MAR. 1975.....	1425	19600	12000	46200	6200	23900	1300	5000	****
APR. 1975.....	1378	15900	10000	37200	4800	17900	1600	5950	****
MAY 1975.....	20790	3990	2500	140000	910	51100	600	33700	660
JUNE 1975.....	5652	7690	4900	74800	1900	29000	920	14000	1000
JULY 1975.....	23697	3440	2100	134000	760	48600	550	35200	610
AUG. 1975.....	10301	3730	2300	64000	840	23400	580	16100	640
SEPT 1975.....	16282	4000	2500	110000	910	40000	600	26400	670
TOTAL	108171	**	**	1070000	**	441000	**	214000	**
WTD.AVG.	296.36	5860	3700	**	1500	**	730	**	850

BRAZOS RIVER BASIN

203

08082500 Brazos River at Seymour, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3650	4780	17000	19500	18200	18500	21600	22600	5600	13500	2520	3550
2	4360	3870	17000	16900	16700	20500	22300	22600	6720	11800	2050	2700
3	5430	10200	17000	16700	15800	20700	23000	20800	6380	14600	2300	2470
4	6530	6060	17400	18600	13900	20300	22900	21700	7390	11300	2810	2610
5	7630	7650	17400	18600	15100	20300	23200	21800	8500	12900	3480	3030
6	8460	6460	17400	18500	20700	20200	22500	23100	9580	12800	3520	3520
7	9460	7290	17700	20400	18600	19100	23500	24200	10700	11900	3760	3660
8	10100	8380	17900	20800	21600	19100	25600	24700	3060	12300	4300	4450
9	10900	9080	18200	20000	18000	18900	8040	24300	8500	19800	5600	4880
10	11500	9730	16700	22000	19400	18900	11300	24400	6340	18900	6270	4910
11	12100	10800	16700	21000	17400	19000	8030	24600	7230	18700	6900	6120
12	12700	11800	17600	20500	18000	16600	13200	24000	7400	8100	6910	3920
13	12900	12600	18500	19800	17000	12700	13800	23900	10900	8100	6860	2600
14	10000	13400	19800	18900	15700	18400	19400	23900	11500	10100	7430	3240
15	8140	14400	18400	18500	16200	19400	26500	25400	14100	12000	3700	3660
16	8470	15300	18000	18500	15800	19300	22900	26300	11200	11300	3740	3280
17	10400	14700	18400	18700	16300	20000	24100	24100	12800	12100	6210	3200
18	12900	14000	19800	20600	17200	19800	22800	20900	11900	12900	8320	3980
19	14100	13300	21200	18500	17800	20000	20800	19000	11900	8290	4900	4510
20	11400	13700	19600	18300	18000	21000	20000	18700	12100	8400	5910	4790
21	12900	13700	19600	18900	18200	22300	20400	18700	13000	1700	4150	4990
22	8170	14100	19400	19800	17000	22300	20900	9200	3770	2850	4700	4930
23	7530	15200	19200	19600	19300	22300	21100	5100	7760	2590	4490	5670
24	1710	15700	19100	19900	21600	22200	21100	3180	6890	6030	4510	6580
25	3770	16300	19400	20300	19900	22200	21100	3340	2980	3620	4540	8300
26	6020	16600	19600	20100	19700	22800	22000	3680	1500	2140	4560	9810
27	3750	16400	19500	19900	20300	21100	14000	3650	3840	3500	1180	11700
28	2830	16600	19400	20200	16500	19800	20500	1880	8260	2010	3210	11500
29	2760	17000	19600	20200	---	18200	21100	1880	10900	2210	3780	9540
30	3040	17000	19500	19600	---	18200	21400	1980	12200	2210	3340	9670
31	4180	---	19600	18500	---	19300	---	5160	---	2470	3480	---
MONTH	7990	12200	18570	19430	17850	19790	19300	16730	8500	9070	4500	5260

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	19.0	7.0	---	9.0	16.0	---	27.0	---	32.0	26.0	30.0
2	23.0	---	9.0	10.0	7.0	9.0	14.0	27.0	29.0	31.0	30.0	31.0
3	23.0	20.0	11.0	---	7.0	6.0	---	29.0	29.0	25.0	30.0	32.0
4	22.0	14.0	10.0	10.0	10.0	17.0	19.0	29.0	30.0	28.0	31.0	30.0
5	23.0	15.0	12.0	---	5.0	18.0	20.0	29.0	31.0	34.0	31.0	31.0
6	---	15.0	13.0	11.0	3.0	22.0	---	30.0	34.0	31.0	---	30.0
7	---	16.0	12.0	13.0	5.0	14.0	17.0	31.0	34.0	33.0	26.0	28.0
8	24.0	16.0	---	14.0	9.0	10.0	15.0	31.0	28.0	36.0	---	30.0
9	26.0	---	11.0	16.0	9.0	15.0	---	---	28.0	35.0	---	34.0
10	25.0	15.0	9.0	10.0	13.0	14.0	15.0	31.0	25.0	28.0	34.0	31.0
11	24.0	---	10.0	---	16.0	9.0	17.0	32.0	25.0	---	35.0	30.0
12	25.0	15.0	12.0	18.0	16.0	8.0	16.0	---	28.0	31.0	29.0	16.0
13	22.0	---	12.0	17.0	16.0	11.0	14.0	25.0	32.0	35.0	26.0	16.0
14	16.0	14.0	10.0	9.0	15.0	19.0	---	21.0	32.0	30.0	34.0	17.0
15	20.0	13.0	8.0	10.0	7.0	10.0	---	29.0	29.0	---	34.0	21.0
16	20.0	12.0	11.0	11.0	9.0	9.0	24.0	29.0	33.0	---	25.0	20.0
17	23.0	13.0	11.0	8.0	12.0	19.0	30.0	33.0	34.0	---	29.0	25.0
18	---	15.0	10.0	16.0	10.0	20.0	21.0	22.0	34.0	31.0	33.0	26.0
19	---	17.0	11.0	---	11.0	23.0	25.0	30.0	23.0	26.0	29.0	23.0
20	24.0	16.0	11.0	---	16.0	23.0	---	26.0	25.0	28.0	30.0	21.0
21	20.0	17.0	10.0	---	14.0	20.0	24.0	33.0	---	32.0	31.0	19.0
22	22.0	18.0	15.0	---	5.0	17.0	21.0	---	28.0	27.0	35.0	21.0
23	21.0	16.0	14.0	8.0	8.0	24.0	25.0	18.0	31.0	30.0	29.0	22.0
24	17.0	12.0	---	14.0	12.0	19.0	31.0	20.0	29.0	29.0	---	21.0
25	20.0	11.0	---	18.0	14.0	19.0	---	26.0	30.0	25.0	30.0	---
26	20.0	14.0	---	17.0	12.0	10.0	25.0	27.0	32.0	28.0	22.0	23.0
27	20.0	15.0	---	17.0	15.0	19.0	21.0	25.0	34.0	29.0	27.0	24.0
28	20.0	13.0	---	10.0	18.0	13.0	27.0	25.0	33.0	30.0	28.0	26.0
29	20.0	7.0	---	13.0	---	13.0	29.0	24.0	31.0	31.0	29.0	26.0
30	19.0	6.0	7.0	8.0	---	---	26.0	20.0	32.0	27.0	31.0	28.0
31	18.0	---	---	7.0	---	---	---	25.0	---	34.0	33.0	---
MONTH	21.0	14.5	---	---	11.0	15.0	---	27.0	30.0	30.0	30.0	25.0

08082700 Millers Creek near Munday, Tex.

LOCATION.--Lat 33°19'45", long 99°27'53", Throckmorton County, near right bank on downstream side of bridge on Farm Road 1720, 12.7 miles (20.4 km) southeast of Munday, and 25 miles (40 km) upstream from Brazos River.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,350 ft (411 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 4.76 ft³/s (0.135 m³/s), 3,450 acre-ft/yr (4.25 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 179 ft³/s (5.07 m³/s) July 31 (gage height, 5.63 ft or 1.716 m); no flow for many days.

Period of record: Maximum discharge, 1,040 ft³/s (29.5 m³/s) Aug. 26, 1971 (gage height, 14.75 ft or 4.496 m); no flow most of time.

Maximum stage since at least 1883 occurred June 13, 1930, and exceeded 18.0 ft (5.49 m); maximum stage since 1930, 18.0 ft (5.49 m) in October 1962, from information by local resident.

REMARKS.--Records fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.32		0	0			0	7.3	0	1.4	0
2	0	0		.99	.32			0	2.5	0	2.1	0
3	0	0		1.1	.85			0	1.2	0	.95	0
4	0	0		.30	2.6			0	.44	0	.12	0
5	0	0		.10	1.8			0	.43	0	.01	0
6	0	0		0	.55			0	.40	0	0	0
7	0	0		0	0			0	.44	0	0	0
8	0	0		0	0			0	.59	0	0	0
9	0	0		0	0			0	.49	0	0	0
10	0	0		0	0			0	.35	0	0	0
11	0	0		0	0			0	.14	0	0	0
12	0	0		0	0			0	.04	0	0	1.4
13	0	0		0	0			0	.01	0	0	2.5
14	.52	0		0	0			0	.01	0	0	3.3
15	.40	0		0	0			0	0	0	0	2.9
16	.20	0		0	0			0	0	0	0	2.3
17	0	0		0	0			0	0	0	0	1.3
18	0	0		0	0			0	0	0	0	.46
19	0	0		0	0			0	0	0	0	.10
20	0	0		0	0			0	0	0	0	.06
21	0	0		0	0			0	0	0	0	.04
22	0	0		0	0			0	0	0	0	.02
23	0	0		0	0			1.9	0	0	0	.01
24	0	0		0	0			15	0	0	0	.01
25	0	0		0	0			11	0	.01	0	.01
26	0	0		0	0			5.4	0	.32	.34	0
27	0	0		0	0			1.9	0	.04	.13	0
28	0	0		0	0			.93	0	0	.07	0
29	0	0		0	-----			31	0	0	.34	0
30	.32	0		0	-----			136	0	0	.20	0
31	1.1	-----		0	-----		-----	42	-----	22	.06	-----
TOTAL	2.54	.32	0	2.49	6.12	0	0	245.13	14.34	22.37	5.72	14.41
MEAN	.082	.011	0	.080	.22	0	0	7.91	.48	.72	.18	.48
MAX	1.1	.32	0	1.1	2.6	0	0	136	7.3	22	2.1	3.3
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	5.0	.6	0	4.9	12	0	0	486	28	44	11	29

CAL YR 1974 TOTAL 23.81 MEAN .065 MAX 5.5 MIN 0 AC-FT 47

WTR YR 1975 TOTAL 313.44 MEAN .86 MAX 136 MIN 0 AC-FT 622

PEAK DISCHARGE (BASE, 200 FT³/S).--No peak above base.

LOCATION.--Lat 33°10'58", long 98°53'40", Young County, at bridge on U.S. Highway 380 in Proffitt community, 1,000 ft (305 m) west of Farm Road 578 south, and about 9 miles (14 km) west of Newcastle.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible]

BRAZOS RIVER BASIN

08083000 Brazos River near Graham, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 33°04'55", long 98°43'36", Young County, at bridge on Farm Road 209 and about 8 miles (13 km) southwest of Graham.

DRAINAGE AREA.--15,730 mi² (40,740 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1968 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)
OCT. 16...	1815	558	11	160	40	790	8.3	110	0	380
NOV. 19...	0915	206	10	400	100	2200	14	142	0	1100
DEC. 20...	0735	86	6.3	490	140	2800	15	178	0	670
JAN. 28...	1235	60	2.0	510	150	2900	14	172	0	1400
MAR. 11...	1340	74	2.0	550	170	3200	19	172	0	1600
APR. 22...	1230	51	3.2	580	170	3700	21	164	0	1700
JUNE 03...	1255	574	10	240	42	690	11	114	0	530
JULY 15...	0955	95	7.8	460	110	1800	11	146	0	1300
AUG. 25...	1220	108	11	210	34	700	8.9	118	0	560

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 16...	1200	--	2640	560	470	14	4570	7.8	19.0
NOV. 19...	3600	.6	7490	1400	1300	26	11800	7.6	12.5
DEC. 20...	4800	.7	9010	1800	1700	29	15500	8.1	5.0
JAN. 28...	4700	.7	9760	1900	1800	29	15600	8.0	10.0
MAR. 11...	5000	.6	10600	2100	1900	31	16400	7.9	9.0
APR. 22...	5600	.5	11900	2100	2000	35	19600	7.4	20.0
JUNE 03...	1200	.3	2780	770	680	11	4690	7.4	25.0
JULY 15...	3000	.6	6760	1600	1500	20	10700	7.8	24.0
AUG. 25...	1070	--	2650	660	570	12	4260	7.7	29.0

08083100 Clear Fork Brazos River near Roby, Tex.

LOCATION.--Lat 32°47'15", long 100°23'18", Fisher County, on right bank at downstream side of pile bent of bridge on State Highway 70, 3.0 miles (4.8 km) north of Roby, 3.2 miles (5.1 km) upstream from Cottonwood Creek, and at mile 255.7 (411.4 km).

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,885.09 ft (574.575 m) above mean sea level.

AVERAGE DISCHARGE.--13 years (1962-75), 9.58 ft³/s (0.271 m³/s), 6,940 acre-ft/yr (8.56 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,650 ft³/s (75.0 m³/s) July 20 (gage height, 16.95 ft or 5.166 m); minimum, 1.2 ft³/s (0.034 m³/s) July 13-19.

Period of record: Maximum discharge, 7,050 ft³/s (200 m³/s) Oct. 18, 1965 (gage height, 21.48 ft or 6.547 m); maximum gage height, 21.52 ft (6.559 m) Sept. 19, 1969; no flow at times in 1963-67.

Maximum stage since the 1890's, about 22 ft (6.7 m) in May and June 1935, from information by local residents.

REMARKS.--Records good. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.3	2.7	4.4	3.8	3.0	3.6	3.8	1.6	1.3	5.1	2.8
2	1.6	1.9	2.8	4.6	3.8	3.0	3.6	3.8	1.6	1.3	5.4	2.8
3	1.6	1.9	2.8	4.4	3.7	3.0	3.7	3.8	1.6	1.4	6.3	2.8
4	1.5	1.8	2.9	4.5	3.8	3.0	3.7	3.6	1.5	4.1	4.9	2.7
5	1.5	1.8	3.0	4.5	3.6	3.1	3.8	3.5	1.5	2.4	4.6	2.7
6	1.5	1.8	3.1	4.5	3.5	3.2	3.8	3.3	1.5	1.6	4.5	2.6
7	1.4	1.8	3.0	4.7	3.3	3.1	4.0	3.1	1.4	1.5	4.5	2.6
8	1.5	1.9	3.0	4.7	3.3	3.1	4.1	3.0	1.5	1.4	4.3	2.5
9	1.5	1.9	3.0	4.9	3.2	3.3	3.8	3.0	1.5	1.4	4.1	2.5
10	1.4	2.9	3.2	4.7	3.3	3.1	3.9	3.1	1.5	1.3	4.0	2.6
11	1.4	2.5	3.3	4.5	3.3	3.1	3.9	3.0	1.5	1.3	3.9	2.5
12	1.5	2.2	3.4	4.6	3.3	3.3	3.8	2.8	1.5	1.3	3.9	3.8
13	1.5	2.1	3.4	4.5	3.3	3.3	3.9	2.5	1.6	1.3	3.9	2.0
14	1.7	2.0	3.4	4.7	3.2	3.3	3.9	2.4	1.9	1.3	2.0	1.3
15	3.9	2.0	3.4	4.8	3.2	3.4	4.0	2.4	1.5	1.3	1.3	4.6
16	3.3	2.1	3.4	4.8	3.1	3.4	4.1	2.3	1.5	1.3	5.6	3.4
17	2.1	2.1	3.5	4.6	3.2	3.5	4.2	2.2	1.4	1.3	4.5	3.0
18	1.8	2.2	3.6	4.6	3.1	3.4	4.2	2.1	1.4	1.3	4.0	2.8
19	1.7	2.2	3.7	4.6	3.1	3.6	4.0	2.0	1.4	1.3	3.5	2.7
20	1.7	2.2	3.7	4.5	3.1	3.6	4.1	2.0	1.4	4.37	3.4	2.6
21	1.6	2.3	3.7	4.5	3.1	3.6	4.1	1.9	1.4	1.120	3.3	2.9
22	1.7	2.3	3.8	4.4	3.3	3.6	4.2	1.9	1.4	1.08	3.2	2.8
23	1.7	2.4	3.9	4.2	3.3	3.6	4.3	2.6	1.4	1.9	3.1	2.8
24	3.1	2.4	3.9	4.4	3.3	3.5	4.3	6.4	1.4	1.1	3.1	2.7
25	4.1	2.4	3.9	4.5	3.2	3.6	4.3	2.6	1.4	9.2	3.0	2.6
26	4.7	2.4	4.1	4.5	3.0	3.6	4.2	2.0	1.4	7.7	3.0	2.6
27	2.4	2.4	4.2	4.3	3.0	3.7	4.1	1.8	1.4	3.0	1.7	2.6
28	7.2	2.6	4.3	4.1	2.9	3.6	3.9	1.7	1.3	1.8	1.0	2.6
29	2.1	2.7	4.3	3.9	-----	3.6	3.9	1.8	1.3	8.2	3.9	2.6
30	4.1	2.7	4.3	3.8	-----	3.7	3.8	1.7	1.3	6.3	3.2	2.5
31	5.5	-----	4.6	3.7	-----	3.7	-----	1.7	-----	5.4	3.0	-----
TOTAL	181.0	66.2	109.3	138.4	92.3	104.6	119.2	83.8	44.0	1,878.5	169.2	111.7
MEAN	5.84	2.21	3.53	4.46	3.30	3.37	3.97	2.70	1.47	60.6	5.46	3.72
MAX	4.1	2.9	4.6	4.9	3.8	3.7	4.3	6.4	1.9	1,120	2.0	2.0
MIN	1.4	1.8	2.7	3.7	2.9	3.0	3.6	1.7	1.3	1.3	3.0	2.5
AC-FT	359	131	217	275	183	207	236	166	87	3,730	336	222

CAL YR 1974 TOTAL 1,222.76 MEAN 3.35 MAX 1.78 MIN .45 AC-FT 2,430

WTR YR 1975 TOTAL 3,098.20 MEAN 8.49 MAX 1,120 MIN 1.3 AC-FT 6,150

PEAK DISCHARGE (BASE, 300 FT³/S).--July 20 (2400) 2,650 ft³/s (16.95 ft).

BRAZOS RIVER BASIN

08083240 Clear Fork Brazos River at Hawley, Tex.

LOCATION.--Lat 32°35'53", long 99°48'53", Jones County, on right bank 90 ft (27 m) upstream from upstream bridge on U.S. Highways 83 and 277, 0.8 mile (1.3 km) south of Hawley, 7.4 miles (11.9 km) upstream from Mulberry Creek, and at mile 188.6 (303.5 km).

DRAINAGE AREA.--1,390 mi² (3,600 km²).

PERIOD OF RECORD.--Discharge: October 1967 to current year.

Water quality: Chemical analyses: October 1967 to current year. Water temperatures: October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,613.25 ft (491.719 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 54.5 ft³/s (1.543 m³/s), 39,490 acre-ft/yr (48.7 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 1,410 ft³/s (39.9 m³/s) Oct. 15 (gage height, 12.75 ft or 3.886 m); minimum, 13 ft³/s (0.37 m³/s) Sept. 7-11, 29, 30.

Period of record: Maximum discharge, 6,170 ft³/s (175 m³/s) Sept. 11, 1969 (gage height, 18.51 ft or 5.642 m); minimum, 0.44 ft³/s (0.012 m³/s) May 27, 1971.

Historic: Maximum stage since at least 1915 occurred in 1932; second highest stage, 24.2 ft (7.38 m) in 1957, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 6,100 micromhos Apr. 14; minimum daily, 393 micromhos July 26. Maximum water temperatures, 29.0°C on several days during June, July, and August; minimum, 1.0°C Jan. 12, Feb. 6.

Period of record: Maximum daily specific conductance (1967-70, 1972-75), 11,500 micromhos Oct. 5, 1969; minimum daily, 163 micromhos Sept. 11, 1969. Maximum water temperatures (1967-69, 1972-75), 30.0°C June 14, 1968, June 22, 1969; minimum, freezing point Dec. 16, 1967, Jan. 3, 4, 1974.

REMARKS.--Discharge records fair. Lake Sweetwater (capacity, 11,900 acre-ft or 14.7 hm³) is located on a tributary upstream from gage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	983	38	65	49	37	25	17	25	15	25	17
2	36	335	38	68	85	35	24	17	23	15	39	15
3	34	162	39	65	104	34	24	16	22	17	124	14
4	32	163	39	59	117	33	24	17	20	104	78	15
5	31	135	41	57	126	32	24	17	20	104	29	15
6	30	101	43	49	109	31	24	17	20	57	24	14
7	30	88	42	47	87	31	24	16	20	24	24	13
8	30	82	40	46	74	29	52	16	19	20	23	13
9	30	80	38	43	61	29	46	16	19	17	23	13
10	29	82	42	40	57	28	41	277	23	16	22	13
11	29	84	51	36	56	27	38	216	214	16	21	13
12	29	89	50	37	51	29	34	108	73	15	20	19
13	32	81	50	39	49	29	26	76	33	15	20	37
14	546	68	46	39	48	29	25	36	25	15	20	77
15	1,250	62	44	39	43	28	24	24	22	15	21	56
16	392	58	43	39	41	27	24	24	18	15	217	56
17	134	54	41	39	41	28	24	22	17	15	159	25
18	43	53	40	39	40	28	24	20	17	15	47	22
19	25	51	39	38	39	26	24	20	15	15	24	20
20	24	50	38	35	38	26	24	19	16	499	22	17
21	24	48	38	35	38	26	24	18	16	935	20	20
22	23	46	38	32	37	25	23	18	16	372	18	22
23	23	45	38	32	40	25	23	22	16	625	17	24
24	85	45	37	33	42	24	23	155	16	287	16	22
25	170	42	36	34	41	24	23	209	17	160	15	18
26	117	41	40	33	42	24	22	145	28	993	18	16
27	85	42	42	33	40	24	22	75	22	330	23	14
28	422	43	42	32	39	24	21	55	15	335	24	14
29	686	40	42	31	-----	24	20	120	15	140	19	13
30	500	38	39	30	-----	24	19	75	15	64	22	13
31	1,110	-----	49	30	-----	25	-----	50	-----	30	21	-----
TOTAL	6,072	3,291	1,283	1,274	1,634	865	795	1,933	837	5,295	1,195	660
MEAN	196	110	41.4	41.1	58.4	27.9	26.5	62.4	27.9	171	38.5	22.0
MAX	1,250	983	51	68	126	37	52	277	214	993	217	77
MIN	23	38	36	30	37	24	19	16	15	15	15	13
AC-FT	12,040	6,530	2,540	2,530	3,240	1,720	1,580	3,830	1,660	10,500	2,370	1,310

CAL YR 1974 TOTAL 24,667.15 MEAN 67.6 MAX 1,710 MIN .75 AC-FT 48,930
WTR YR 1975 TOTAL 25,134.00 MEAN 68.9 MAX 1,250 MIN 13 AC-FT 49,850

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-15	0800	12.75	1,410	7-21	0800	12.62	1,350
10-29	1400	11.02	772	7-24	0030	10.91	740
10-31	2400	12.57	1,330	7-26	1400	12.00	1,100
5-10	1930	10.46	619				

08083240 Clear Fork Brazos River at Hawley, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 31...	1202	1020	8.7	58	16	43	7.4	104	0	120
NOV. 19...	1045	52	13	380	150	540	8.8	366	0	1400
DEC. 31...	0835	50	8.9	410	190	620	7.4	324	0	1600
JAN. 07...	1015	47	7.8	440	180	640	8.4	328	0	1700
FEB. 25...	1030	40	6.3	440	200	680	6.9	318	0	1800
MAR. 31...	1220	25	7.3	420	190	640	7.3	296	0	1800
APR. 30...	1230	20	14	460	180	670	8.4	304	0	1900
MAY 08...	1240	17	15	450	210	610	8.2	263	0	1800
JUNE 12...	1345	52	11	160	63	260	9.7	146	0	610
JULY 21...	1710	711	10	52	15	37	8.0	114	0	110
AUG. 31...	1030	22	13	380	150	480	7.5	248	0	1400
SEP. 30...	1530	16	16	380	120	390	8.5	294	0	1100

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	72	--	376	210	130	1.3	666	7.9	18.0
NOV. 19...	770	.5	3440	1600	1300	5.9	4880	7.8	14.0
DEC. 31...	860	.5	3860	1800	1500	6.4	5220	8.1	8.0
JAN. 07...	900	.8	4040	1800	1600	6.5	5520	7.8	7.5
FEB. 25...	930	.6	4220	1900	1700	6.8	5730	7.7	8.0
MAR. 31...	880	.6	4090	1800	1600	6.5	5740	7.7	10.0
APR. 30...	850	.6	4230	1900	1600	6.7	5750	8.0	19.5
MAY 08...	840	.6	4060	2000	1800	6.0	5640	7.5	20.0
JUNE 12...	370	.3	1560	660	540	4.4	2380	7.6	24.0
JULY 21...	58	.2	346	190	98	1.2	587	7.0	27.0
AUG. 31...	630	--	3180	1600	1400	5.3	4440	7.9	26.0
SEP. 30...	550	.8	2710	1400	1200	4.5	3750	7.8	18.5

BRAZOS RIVER BASIN

08083240 Clear Fork Brazos River at Hawley, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
JULY 28...	1445	375	27.0	1440	1460	99	100	56	76	85	95	98

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	6072	1510	940	15400	200	3280	360	5900	500
NOV. 1974.....	3291	2640	1800	16000	420	3730	710	6310	890
DEC. 1974.....	1283	5490	4000	13900	880	3050	1700	5890	1900
JAN. 1975.....	1274	5340	3800	13100	850	2920	1600	5500	1800
FEB. 1975.....	1634	5050	3600	15900	810	3570	1500	6620	1700
MAR. 1975.....	865	5800	4200	9810	930	2170	1800	4200	2000
APR. 1975.....	795	5500	4000	8590	880	1890	1700	3650	1900
MAY 1975.....	1933	3050	2100	11000	490	2560	850	4440	1000
JUNE 1975.....	837	3150	2200	4970	500	1130	880	1990	1100
JULY 1975.....	5295	1080	660	9440	130	1860	230	3290	350
AUG. 1975.....	1195	2720	1900	6130	440	1420	730	2360	920
SEPT 1975.....	660	4250	3000	5350	680	1210	1300	2320	1400
TOTAL	25134	**	**	130000	**	28800	**	52500	**
WTD.AVG.	68.86	2770	1900	**	420	**	770	**	930

08083240 Clear Fork Brazos River at Hawley, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2950	693	5370	5300	4910	6020	5800	5800	3460	2640	2120	4730
2	3150	1380	5370	5240	4740	6010	5800	5760	3810	2580	2110	4790
3	3400	1790	5440	4550	4070	5920	5800	5700	3770	2580	2010	4890
4	3530	2060	5370	4870	3930	5450	5920	5700	4170	1170	1770	5000
5	3920	2750	5450	5370	4580	5850	5800	5620	4230	1210	2610	4170
6	3800	2720	5450	5100	4770	5740	5830	5620	4220	2990	2360	4460
7	4010	3130	5450	5410	4850	5390	5730	5690	4330	3790	3040	4960
8	4070	3300	5580	5500	5400	5920	5410	5690	4300	5100	3430	4790
9	4220	3640	5590	5500	5350	5850	5520	5690	4230	5460	3800	5220
10	4320	3700	5440	5560	5400	5770	3700	3000	4230	5460	3810	5370
11	4420	3830	5310	3730	5320	5710	4130	1450	2050	3930	3940	5390
12	4450	4020	5370	5540	5320	5850	4680	2070	2350	3930	4040	5420
13	3290	4210	5460	5520	5460	5850	5970	2780	1850	4530	4290	4130
14	1420	4370	5540	5450	5400	5860	6100	4610	1820	5290	4600	3740
15	642	4660	5480	5330	5320	5790	5930	5670	2490	5290	4370	2970
16	1330	4710	5480	5420	5270	5890	5810	5400	2920	5450	983	4640
17	3900	4690	5580	5450	5230	5650	5900	5440	3260	5230	1750	4460
18	3450	4710	5610	5450	5370	5810	5670	5470	3450	5020	3560	5000
19	2730	4690	5650	5520	5460	5860	5640	5370	3620	4750	3670	5000
20	2870	5170	5570	5450	5430	5920	5670	5220	3730	599	4070	4170
21	3250	5100	5580	5450	5430	5860	5730	5010	4070	502	4340	4170
22	3340	5210	5600	5520	5600	5860	5760	5130	3890	2200	4510	4410
23	3510	5190	5600	5520	5600	5770	5670	1840	3890	507	5310	4500
24	2620	5330	5640	5590	5560	5890	5620	1930	3830	1180	5360	3620
25	3240	5280	5640	5610	5560	5820	5540	2730	3790	1180	5270	3590
26	2330	5310	5530	5610	5600	5890	5620	2700	3810	393	4750	3620
27	3150	5370	5470	5570	5600	5590	5620	2800	4400	818	4940	3550
28	1080	5370	5470	5670	5560	5620	5710	4040	5270	2040	5530	3550
29	1360	5160	5540	5640	---	5660	5760	3000	5270	1720	4250	3730
30	2010	5400	5540	5570	---	5800	5750	2010	3390	1560	3360	3750
31	673	---	5220	5600	---	5800	---	3450	---	1990	4500	---
MONTH	2980	4100	5500	5370	5220	5800	5590	4270	3660	2940	3690	4390

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	18.0	6.0	8.0	5.0	11.5	17.0	19.0	27.0	25.5	29.0	26.0
2	18.0	19.0	11.5	6.5	5.0	8.0	12.0	20.5	25.0	25.0	29.0	24.5
3	20.0	18.0	12.0	7.0	4.0	8.0	14.5	20.5	23.0	23.0	29.0	24.0
4	19.0	17.0	8.0	6.0	6.0	8.0	14.0	23.0	27.0	26.5	29.0	24.0
5	21.5	16.5	10.0	6.5	4.0	6.5	15.5	22.0	24.0	26.0	28.0	25.5
6	21.0	14.5	11.0	6.0	1.0	11.0	16.5	20.5	26.0	28.0	28.0	24.0
7	19.5	14.0	10.0	8.0	2.0	11.0	18.0	23.0	29.0	28.0	27.0	23.5
8	20.0	14.0	9.0	8.0	4.5	9.0	18.0	23.0	26.0	26.5	26.5	23.5
9	22.0	14.5	8.0	8.0	1.5	8.5	16.0	23.0	24.0	26.0	25.5	23.5
10	22.0	15.0	8.0	8.0	4.5	10.0	15.0	21.0	24.5	26.0	24.5	26.0
11	21.0	14.5	8.5	6.0	5.0	9.0	16.5	21.5	23.0	27.0	24.5	24.5
12	22.0	14.5	8.0	1.0	4.0	8.0	14.5	23.5	21.0	28.0	24.0	20.5
13	20.5	13.5	9.0	2.0	8.0	5.0	14.0	22.0	25.0	25.5	26.0	18.0
14	18.0	11.5	8.5	2.0	8.0	5.0	15.0	21.0	24.5	25.0	25.5	17.0
15	16.0	10.5	8.5	3.5	7.0	9.0	16.0	22.0	26.0	25.0	25.5	18.0
16	15.5	12.0	8.0	4.0	4.5	8.0	18.5	19.5	25.0	24.5	23.0	22.0
17	16.5	14.0	6.0	4.5	8.0	9.0	18.5	20.5	25.0	24.0	25.5	23.0
18	18.0	13.0	8.0	5.0	6.0	9.5	19.5	21.5	26.0	25.0	28.0	24.0
19	19.0	14.0	8.0	5.5	6.5	10.5	18.0	23.5	26.0	25.0	26.0	22.0
20	18.0	13.5	8.5	5.5	6.5	13.0	19.0	25.5	26.5	24.0	28.0	22.0
21	18.0	13.0	10.0	6.0	7.0	14.5	19.5	24.5	25.0	24.0	24.5	18.5
22	18.0	16.0	10.0	4.5	2.0	13.0	19.0	24.0	24.5	25.5	25.5	18.0
23	20.0	18.0	10.0	6.5	2.0	13.0	21.0	21.5	28.0	27.0	28.0	18.0
24	18.0	11.0	9.5	6.5	3.5	11.0	19.0	20.5	28.0	26.0	28.0	18.0
25	20.0	10.5	10.0	10.0	8.0	11.5	20.5	22.0	26.0	26.0	25.5	18.0
26	19.0	12.0	6.0	12.0	8.0	14.0	23.5	24.0	26.5	24.5	25.0	18.0
27	20.0	13.0	6.0	9.5	7.0	14.0	24.5	23.0	26.0	26.0	24.5	18.5
28	17.0	12.0	8.0	8.0	10.0	8.0	20.0	23.0	25.0	26.0	24.5	18.0
29	18.0	9.0	10.0	8.0	---	4.0	20.5	23.0	25.5	28.0	24.0	18.5
30	20.0	6.0	10.0	7.0	---	3.0	19.5	20.5	27.0	29.0	26.0	18.5
31	18.0	---	8.0	6.0	---	10.5	---	19.5	---	28.0	26.0	---
MONTH	19.0	13.5	9.0	6.5	5.5	9.5	18.0	22.0	25.5	26.0	26.0	21.5

BRAZOS RIVER BASIN

08083245 Mulberry Creek near Hawley, Tex.

LOCATION.--Lat 32°34'04", long 99°47'32", Jones County, on right bank at downstream side of downstream bridge on U.S. Highways 83 and 277, 3.3 miles (5.3 km) south of Hawley, and 7.0 miles (11.3 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--Discharge: December 1967 to current year.

Water quality: Chemical analyses: December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,615.98 ft (492.551 m) above mean sea level.

AVERAGE DISCHARGE.--7 years (1968-75), 11.0 ft³/s (0.312 m³/s), 7,970 acre-ft/yr (9.83 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,500 ft³/s (70.8 m³/s) July 21 (gage height, 15.53 ft or 4.734 m); minimum, 0.01 ft³/s (0.0003 m³/s) July 17-19.

Period of record: Maximum discharge, 2,500 ft³/s (70.8 m³/s), July 21, 1975 (gage height, 15.53 ft or 4.734 m); no flow at times most years.

Maximum stage since at least 1932, about 16.0 ft (4.88 m) in 1957, from floodmarks on right bank.

REMARKS.--Discharge records good. No known diversion above station.

REVISIONS.--WRD Texas 1974: 1972(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	223	7.5	21	17	7.6	5.9	2.8	3.6	.13	3.5	.58
2	3.3	253	8.0	16	41	7.2	5.1	2.7	3.0	.07	5.1	.56
3	2.8	78	8.2	19	47	7.1	4.5	2.6	2.5	30	7.6	.52
4	2.3	42	8.2	13	49	6.9	4.7	2.6	2.2	158	7.2	1.1
5	2.0	31	8.4	11	64	7.1	4.8	2.7	2.0	9.2	4.5	1.0
6	1.7	24	8.1	11	28	7.1	5.7	2.6	1.8	3.2	3.4	.63
7	1.5	25	8.1	9.3	15	7.0	5.2	2.5	1.6	1.5	2.9	.56
8	1.4	28	7.7	9.3	14	6.9	5.1	2.4	1.5	.89	2.7	.55
9	1.3	25	7.3	8.8	13	6.7	5.0	2.1	8.6	.60	2.5	.52
10	1.3	27	8.0	8.4	11	6.5	5.1	2.2	41	.40	2.3	.52
11	1.3	29	11	8.0	16	7.4	5.0	2.9	8.4	.33	2.2	.52
12	1.1	23	11	7.8	18	7.6	5.1	6.5	4.9	.21	2.1	4.4
13	7.3	18	9.1	10	12	7.9	4.8	4.8	3.1	.15	2.0	5.7
14	453	16	8.6	9.8	10	8.0	4.9	2.8	2.5	.08	1.9	4.6
15	631	13	8.3	11	10	7.3	5.2	2.3	2.1	.04	4.9	2.5
16	89	12	8.0	11	10	7.3	4.6	2.5	1.8	.02	11	2.6
17	38	12	7.8	9.8	11	7.1	4.6	2.3	1.5	.01	7.2	1.2
18	22	12	7.7	9.5	9.9	6.5	5.0	2.0	1.2	.01	4.2	.58
19	15	12	7.8	9.1	9.4	6.4	4.3	2.4	.92	.01	3.2	.42
20	11	11	7.5	8.5	8.5	5.5	3.9	2.2	.69	1,050	2.2	.33
21	9.2	9.5	7.3	8.1	9.1	5.2	3.6	1.9	.55	1,630	1.9	2.2
22	8.3	9.3	7.3	7.8	9.1	5.3	4.0	1.8	.42	85	1.6	1.4
23	7.7	9.3	7.3	7.6	9.1	5.5	4.3	54	.36	17	1.5	.77
24	11	8.4	7.3	7.9	9.3	5.6	4.1	102	.29	5.9	1.5	.87
25	33	8.0	7.0	7.8	9.0	5.2	4.2	28	.23	264	1.4	.49
26	27	8.0	8.5	7.5	8.1	4.8	4.0	11	.18	705	23	.37
27	18	8.0	11	7.2	7.4	4.7	3.8	7.4	.12	63	16	.29
28	435	8.4	10	6.9	7.4	12	3.3	7.6	.08	15	2.4	.22
29	408	8.2	9.5	7.3	-----	18	3.4	12	.08	7.1	1.1	.21
30	162	8.0	9.6	7.0	-----	11	3.2	13	.21	4.9	.82	.21
31	638	-----	17	7.0	-----	6.8	-----	5.7	-----	3.9	.67	-----
TOTAL	3,047.5	999.1	268.1	303.4	482.3	225.2	136.4	300.3	97.43	4,055.65	134.49	36.42
MEAN	98.3	33.3	8.65	9.79	17.2	7.26	4.55	9.69	3.25	131	4.34	1.21
MAX	638	253	17	21	64	18	5.9	102	41	1,630	23	5.7
MIN	1.1	8.0	7.0	6.9	7.4	4.7	3.2	1.8	.08	.01	.67	.21
AC-FT	6,040	1,980	532	602	957	447	271	596	193	8,040	267	72

CAL YR 1974 TOTAL 8,598.80 MEAN 23.6 MAX 1,090 MIN 0 AC-FT 17,060
WTR YR 1975 TOTAL 10,086.29 MEAN 27.6 MAX 1,630 MIN .01 AC-FT 20,010

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-15	1000	11.84	993	7-4	0830	6.08	303
10-29	0400	11.18	815	7-21	0030	15.53	2,500
10-31	0430	10.57	711	7-26	0230	13.98	1,770
11-2	1000	8.20	467				

BRAZOS RIVER BASIN

213

08083245 Mulberry Creek near Hawley, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 09...	0820	1.3	7.8	210	150	400	9.2	280	0	720
NOV. 19...	0930	13	11	180	190	410	5.8	366	0	810
JAN. 07...	0815	10	6.1	210	190	420	5.4	337	0	870
FEB. 25...	0815	8.9	5.6	220	240	470	5.6	358	0	1100
MAR. 31...	1025	7.5	1.4	180	200	430	5.9	299	0	850
MAY 08...	1230	2.4	2.3	210	250	510	7.0	278	0	1400
24...	0905	81	9.8	72	41	90	6.3	142	0	200
JUNE 16...	1444	1.7	6.3	130	92	200	8.0	158	0	450
JULY 22...	1245	72	14	45	12	26	8.1	136	0	46
SEP. 08...	1245	.50	4.3	300	320	700	7.5	350	0	1900

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 09...	720	--	2360	1100	910	5.2	3690	7.8	20.0
NOV. 19...	690	.6	2480	1200	930	5.1	3820	7.9	13.0
JAN. 07...	770	.8	2640	1300	1000	5.1	4050	8.0	7.0
FEB. 25...	750	.7	2970	1500	1200	5.2	4290	8.0	6.5
MAR. 31...	680	.7	2500	1300	1000	5.2	3760	8.1	7.5
MAY 08...	760	.7	3280	1600	1300	5.6	4730	8.0	20.0
24...	150	.4	640	350	230	2.1	1110	8.0	19.0
JUNE 16...	380	.3	1340	700	570	3.3	2250	7.7	31.0
JULY 22...	42	.3	260	160	50	.9	453	7.6	28.0
SEP. 08...	910	1.0	4320	2100	1800	6.7	6370	8.2	27.0

08083300 Elm Creek near Abilene, Tex.

LOCATION.--Lat 32°21'08", long 99°48'27", Taylor County, on right bank at upstream side of bridge on Farm Road 707, 2.8 miles (4.5 km) southeast of Caps, and 7.5 miles (12.1 km) southwest of Abilene.

DRAINAGE AREA.--139 mi² (360 km²).

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,804.15 ft (549.90 m) above mean sea level (Texas Highway Department bridge plans).

AVERAGE DISCHARGE.--12 years, 11.4 ft³/s (0.323 m³/s), 8,260 acre-ft/yr (10.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 972 ft³/s (27.5 m³/s) May 11 (gage height, 9.31 ft or 2.838 m); minimum, 0.49 ft³/s (0.014 m³/s) Sept. 12.

Period of record: Maximum discharge, 4,570 ft³/s (129 m³/s) Sept. 18, 1974 (gage height, 18.68 ft or 5.694 m); no flow at times most years.

REMARKS.--Records good. Since 1921 flow largely regulated by Lake Abilene (capacity, 7,900 acre-ft or 9.74 hm³, corrected) 12 miles (19 km) upstream. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	130	32	22	67	23	17	15	18	5.1	5.1	.77
2	75	100	31	26	53	22	15	54	17	3.5	3.4	3.6
3	60	130	30	25	55	22	14	16	17	20	2.0	2.1
4	44	100	29	24	71	22	12	13	17	16	1.9	.62
5	40	90	27	24	62	21	12	12	16	4.2	1.6	.62
6	34	90	28	22	55	20	12	10	16	3.3	1.5	.62
7	35	100	28	22	53	20	14	10	16	2.6	1.5	.62
8	47	90	26	21	51	19	27	13	35	2.4	1.5	.70
9	43	85	25	21	46	19	19	13	27	3.1	1.4	.77
10	36	120	25	20	43	19	17	18	105	3.4	1.3	4.8
11	33	100	26	17	41	17	16	381	19	3.4	1.2	2.3
12	32	90	26	18	40	18	14	29	17	3.6	1.3	.84
13	34	85	26	18	43	17	13	26	17	3.4	5.0	14
14	344	80	24	20	41	16	13	31	17	3.4	4.0	5.0
15	282	75	23	21	36	15	13	19	17	3.1	52	1.5
16	227	75	23	21	35	15	13	18	17	3.1	69	1.3
17	166	70	23	20	38	16	13	17	16	2.9	5.8	1.2
18	147	68	23	20	36	16	13	18	17	2.2	1.0	1.2
19	119	65	21	22	31	13	13	18	16	1.9	.94	1.0
20	91	59	19	20	29	13	12	20	16	14	.85	.94
21	84	56	19	18	27	13	12	18	17	2.2	.70	2.0
22	74	52	19	17	27	13	12	18	17	1.9	.70	1.4
23	67	50	18	16	26	13	12	113	18	1.8	.70	1.2
24	159	46	18	16	24	12	12	24	16	1.9	.56	1.0
25	108	42	19	17	25	11	14	19	16	2.0	.56	.94
26	94	40	20	17	25	10	13	17	16	4.4	71	.94
27	86	37	20	17	24	10	12	63	17	1.9	66	.94
28	284	36	20	17	24	20	12	22	16	2.5	1.6	.94
29	152	34	20	17	---	19	13	55	17	3.0	4.2	.94
30	132	32	21	17	---	18	14	21	16	1.9	2.1	.94
31	200	---	24	16	---	17	---	19	---	1.5	.85	---
TOTAL	3416	2227	733	609	1128	519	418	1140	619	129.6	311.26	55.74
MEAN	110	74.2	23.6	19.6	40.3	16.7	13.9	36.8	20.6	4.18	10.0	1.86
MAX	344	130	32	26	71	23	17	381	105	20	71	14
MIN	32	32	18	16	24	10	12	10	16	1.5	.56	.62
AC-FT	6780	4420	1450	1210	2240	1030	829	2260	1230	257	617	111
CAL YR 1974 TOTAL	13589.76			MEAN 37.2	MAX 1630	MIN 0	AC-FT 26960					
WTR YR 1975 TOTAL	11305.60			MEAN 31.0	MAX 381	MIN .56	AC-FT 22420					

BRAZOS RIVER BASIN

215

08083400 Little Elm Creek near Abilene, Tex.

LOCATION.--Lat 32°23'29", long 99°51'08", Taylor County, on right bank at downstream side of bridge on Farm Road 707, 1.2 miles (1.9 km) north of Caps, and 4.6 miles (7.4 km) southwest of intersection of U.S. Highways 277 and 83 in Abilene.

DRAINAGE AREA.--39.1 mi² (101.3 km²).

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,786.12 ft (544.409 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 2.35 ft³/s (0.0666 m³/s), 1,700 acre-ft/yr (2.10 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 510 ft³/s (14.4 m³/s) Oct. 14 (gage height, 5.87 ft or 1.789 m); no flow for many days.
Period of record: Maximum discharge, 2,180 ft³/s (61.7 m³/s) Sept. 18, 1974 (gage height, 11.52 ft or 3.511 m); no flow for many days each year.
Maximum stage since 1903, about 15 ft (4.6 m) in 1913, from information by local residents.

REMARKS.--Records good. No known diversion above station. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	16	2.3	3.5	2.9	1.3	1.2	.22	.02	0	0	
2	3.6	33	2.3	3.2	5.6	1.3	.99	.22	.01	0	0	
3	3.2	14	2.3	2.9	10	1.4	.73	.22	0	0	0	
4	2.9	14	2.3	2.6	9.0	1.4	.56	.14	0	0	0	
5	2.8	9.3	2.3	2.0	15	1.4	.59	.14	0	0	0	
6	2.7	6.1	2.2	1.7	5.1	1.4	.68	.14	0	0	0	
7	2.3	12	2.0	1.8	4.2	1.4	.80	.14	0	0	0	
8	2.2	11	2.0	1.7	3.3	1.3	.87	.08	0	0	0	
9	2.0	7.6	1.7	1.6	2.9	1.3	.86	.07	.02	0	0	
10	1.5	27	1.7	1.5	2.8	1.3	.63	.06	13	0	0	
11	1.4	15	2.3	1.5	2.7	1.4	.62	.46	4.3	0	0	
12	1.2	8.0	2.2	2.0	2.3	2.7	.68	.17	.25	0	0	
13	1.5	6.1	2.3	2.0	2.3	2.4	.81	.05	.04	0	0	
14	200	4.6	2.9	2.1	2.1	1.8	1.4	.02	.01	0	0	
15	31	4.0	2.9	2.7	2.1	1.6	1.1	.01	.01	0	0	
16	8.9	3.7	2.0	2.9	2.1	1.6	.93	.01	0	0	0	
17	5.9	3.5	1.8	2.6	2.0	1.7	.93	0	0	0	0	
18	4.2	3.4	1.9	2.1	1.8	1.7	1.1	0	0	0	0	
19	3.5	3.4	1.7	1.7	1.8	2.1	.79	0	0	0	0	
20	3.3	2.9	1.6	1.4	1.8	1.8	.64	.01	0	115	0	
21	2.9	2.8	1.6	1.2	1.8	1.8	.55	0	0	19	0	
22	2.8	2.8	1.7	1.1	1.8	1.7	.51	0	0	.66	0	
23	2.6	2.8	1.7	1.1	1.8	1.9	.51	4.1	0	.01	0	
24	13	2.6	1.8	1.4	1.7	1.9	.47	2.3	0	0	0	
25	13	2.4	1.8	1.4	1.6	2.4	.44	.21	0	.02	0	
26	5.9	2.4	2.3	1.3	1.6	2.2	.37	.04	0	3.5	.17	
27	4.1	2.4	2.2	1.1	1.4	2.2	.31	.05	0	1.3	.04	
28	74	2.4	2.0	1.1	1.4	35	.26	.01	0	.03	0	
29	19	2.3	1.8	1.1	---	5.7	.26	.06	0	0	0	
30	10	2.3	1.9	1.1	---	2.1	.26	.08	0	0	0	
31	64	---	3.2	1.1	---	1.4	---	.12	---	0	0	---
TOTAL	499.3	229.8	64.7	56.5	94.9	90.6	20.85	9.13	17.66	139.52	.21	0
MEAN	16.1	7.66	2.09	1.82	3.39	2.92	.70	.29	.59	4.50	.007	0
MAX	200	33	3.2	3.5	15	35	1.4	4.1	13	115	.17	0
MIN	1.2	2.3	1.6	1.1	1.4	1.3	.26	0	0	0	0	0
AC-FT	990	456	128	112	188	180	41	18	35	277	.4	0

CAL YR 1974 TOTAL 2853.85 MEAN 7.82 MAX 849 MIN 0 AC-FT 5660
WTR YR 1975 TOTAL 1223.17 MEAN 3.35 MAX 200 MIN 0 AC-FT 2430

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-14	1400	5.87	510	7-20	about		
10-28	1130	3.87	188	1500	a4.65		302
3-28	1200	3.25	120				

a From floodmark.

BRAZOS RIVER BASIN

08083420 Cat Claw Creek at Abilene, Tex.

LOCATION.--Lat 32°28'31", Long 99°44'56", Taylor County, in Sears Park 320 ft (98 m) downstream from bridge on Ambler Street in Abilene and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--13.0 mi² (33.7 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,682.32 ft (512.77 m), Corps of Engineers bench mark.

AVERAGE DISCHARGE.--5 years, 2.80 ft³/s (0.0793 m³/s), 2,030 acre-ft/yr (2.50 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 596 ft³/s (16.9 m³/s) July 3 (gage height, 5.11 ft or 1.558 m); no flow for many days.
Period of record: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Sept. 18, 1974 (gage height, 6.41 ft or 1.954 m); no flow for many days each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.9	0	.54	24	0	.10	0	0	0	0	0
2	0	1.7	0	7.4	13	0	0	0	0	8.4	5.4	0
3	0	1.1	0	.63	3.8	0	0	0	0	82	.29	0
4	0	9.6	0	.29	11	0	0	0	0	6.9	0	1.0
5	0	5.2	0	.18	.69	0	0	0	0	.16	0	.30
6	0	3.9	0	.03	.14	0	0	0	0	0	0	0
7	0	4.6	0	0	.12	0	.51	0	0	0	0	0
8	0	3.4	0	0	.11	0	.62	0	0	0	0	0
9	0	2.7	0	0	.06	0	.07	5.7	8.6	0	0	0
10	0	30	9.5	0	.11	0	.46	7.2	17	0	0	0
11	0	6.5	.72	0	.11	0	4.2	1.8	3.1	0	0	0
12	0	2.0	.16	.95	.05	12	.87	.05	.06	0	0	7.2
13	6.5	.79	.02	6.5	.05	.50	2.1	0	0	0	0	31
14	72	.29	0	1.4	.06	.27	1.6	0	0	0	0	2.0
15	3.2	.10	0	.73	.09	.17	.06	0	0	0	2.2	.44
16	2.3	.05	0	.28	.14	.05	0	0	0	0	37	.01
17	.76	.04	0	.13	.09	.14	0	0	0	0	6.0	0
18	.16	.04	0	.14	.03	.58	0	0	0	0	.07	0
19	0	.03	0	.04	0	.10	0	0	0	0	0	0
20	0	0	0	0	.01	0	0	1.9	0	50	0	0
21	0	0	0	0	.03	0	0	.29	0	.40	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	.62	0	0	0	.38	0	0	54	0	0	0	0
24	21	0	0	.41	.11	0	0	15	0	0	0	0
25	.70	0	2.5	.09	.03	0	0	.52	4.8	6.3	0	0
26	.02	0	6.2	.01	.01	0	0	.30	.30	28	78	0
27	0	0	.64	0	0	.92	0	3.4	0	.27	5.1	0
28	55	0	.43	0	0	36	0	.27	0	0	.04	0
29	10	0	.30	0	---	.58	0	16	0	0	0	0
30	15	0	2.1	0	---	.22	0	.34	0	0	0	0
31	14	---	10	0	---	.16	---	.01	---	0	0	---
TOTAL	201.26	76.94	32.57	19.75	54.22	51.69	10.59	106.78	33.86	182.43	134.10	41.95
MEAN	6.49	2.56	1.05	.64	1.94	1.67	.35	3.44	1.13	5.88	4.33	1.40
MAX	72	30	10	7.4	24	36	4.2	54	17	82	78	31
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	399	153	65	39	108	103	21	212	67	362	266	83

CAL YR 1974 TOTAL 1620.93 MEAN 4.44 MAX 480 MIN 0 AC-FT 3220
WTR YR 1975 TOTAL 946.14 MEAN 2.59 MAX 82 MIN 0 AC-FT 1880

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-28	0345	4.31	308	7-20	0245	4.17	303
3-28	0515	4.19	308	8-16	2000	4.20	310
7-3	1845	5.11	596	8-26	1800	4.80	486

08083470 Cedar Creek at Abilene, Tex.

LOCATION.--Lat 32°26'56", long 99°43'13", Taylor County, on right bank at upstream side of North Second Street Bridge and State Highway 355 at Abilene, 0.2 mile (0.3 km) downstream from Lytle Creek, 4.1 miles (6.6 km) downstream from Buttonwillow Creek, 5.9 miles (9.5 km) upstream from Rainy Creek, 7.2 miles (11.6 km) downstream from Kirby Lake, and 8.1 miles (13.0 km) upstream from mouth.

DRAINAGE AREA.--120 mi² (311 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,677.67 ft (511.354 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 8.06 ft³/s (0.228 m³/s), 5,840 acre-ft/yr (7.20 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,500 ft³/s (70.8 m³/s) Oct. 30 (gage height, 10.63 ft or 3.240 m); no flow at times.
Period of record: Maximum discharge, 4,670 ft³/s (132 m³/s) Sept. 18, 1974 (gage height, 12.54 ft or 3.822 m); no flow at times each year.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow is partly regulated by Lytle Lake (capacity, 1,200 acre-ft or 1.48 hm³) and Lake Kirby (capacity, 7,620 acre-ft or 9.40 hm³). The city of Abilene pumped 5.2 acre-ft (6,410 m³), corrected, during the 1974 water year, and 3.6 acre-ft (4,440 m³) during the 1975 water year from Lake Kirby.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	155	11	12	69	8.0	22	6.9	3.2	.10	1.7	0
2	11	85	12	17	71	14	22	7.1	1.5	.10	2.1	0
3	12	52	13	13	68	11	16	7.1	1.5	27	.24	0
4	16	150	14	12	72	7.3	8.0	7.5	1.4	6.3	.11	0
5	12	110	13	11	74	15	8.0	7.2	.76	.06	.18	0
6	9.6	70	11	11	45	24	8.7	7.3	.50	.04	.19	0
7	11	87	10	12	35	8.5	12	7.1	.43	.04	0	0
8	11	86	10	8.6	27	7.6	8.3	6.9	.31	.01	0	0
9	9.7	69	10	15	23	16	7.1	12	3.4	0	0	0
10	9.5	121	17	7.2	26	8.1	7.1	13	13	0	0	0
11	9.5	88	13	7.1	22	7.6	6.9	7.6	.26	0	0	0
12	9.5	57	13	8.9	22	24	6.9	6.6	.17	0	0	8.3
13	13	45	12	16	25	7.6	9.6	4.6	.17	0	0	31
14	677	24	11	20	20	7.3	7.3	.55	.17	0	0	2.6
15	122	24	10	21	8.2	17	7.3	.37	.17	0	4.6	.35
16	37	18	9.9	21	12	8.5	8.9	.28	.17	0	14	.04
17	20	18	11	21	26	14	7.7	.23	.14	0	1.4	.01
18	16	19	11	21	10	10	7.1	.23	.14	0	.05	0
19	14	19	10	13	7.8	7.8	6.6	.33	.14	0	.01	0
20	14	17	8.6	17	21	8.0	6.8	4.4	.14	14	0	0
21	14	17	8.9	18	15	11	6.5	1.2	.14	.07	0	13
22	13	19	11	7.7	7.5	20	6.5	4.1	.12	0	0	.33
23	13	14	10	7.7	7.9	20	6.6	27	.12	0	0	.03
24	109	12	8.3	12	7.4	21	6.6	11	.12	0	0	4.3
25	92	14	10	8.3	7.4	21	6.6	.44	.12	.52	0	1.4
26	35	15	14	9.1	7.9	27	6.6	.41	.12	10	31	.10
27	22	12	11	9.9	11	23	7.0	4.9	.10	.09	2.7	1.8
28	591	16	11	8.8	12	69	6.9	13	.10	.02	.03	.24
29	102	11	11	9.4	---	24	6.9	25	.10	.68	0	.01
30	362	11	12	8.9	---	22	6.8	3.4	.10	2.0	0	0
31	792	---	18	8.8	---	21	---	1.5	---	.61	0	---
TOTAL	3190.8	1455	355.7	393.4	760.1	510.3	261.3	199.24	28.81	61.64	58.31	63.51
MEAN	103	48.5	11.5	12.7	27.1	16.5	8.71	6.43	.96	1.99	1.88	2.12
MAX	792	155	18	21	74	69	22	27	13	27	31	31
MIN	9.5	11	8.3	7.1	7.4	7.3	6.5	.23	.10	0	0	0
AC-FT	6330	2890	706	780	1510	1010	518	395	57	122	116	126

CAL YR 1974 TOTAL 9802.38 MEAN 26.9 MAX 1710 MIN 0 AC-FT 19440
WTR YR 1975 TOTAL 7338.11 MEAN 20.1 MAX 792 MIN 0 AC-FT 14560

NOTE.--No gage-height record June 6 to July 6.

BRAZOS RIVER BASIN

08083500 Fort Phantom Hill Reservoir near Nugent, Tex.

LOCATION.--Lat 32°36'58", long 99°40'05", Jones County, at outlet gate tower near right bank, 120 ft (37 m) upstream from dam on Elm Creek 4.3 miles (6.9 km) upstream from Clear Fork Brazos River, and 5.4 miles (8.7 km) south of Nugent.

DRAINAGE AREA.--478 mi² (1,238 km²).

PERIOD OF RECORD.--Contents: July 1940 to current year. Prior to October 1965 (revised), monthend contents only.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Nonrecording gage. Datum of gage is 1,580.78 ft (481.822 m) above mean sea level.

EXTREMES (at 0800).--Current year: Maximum contents observed, 83,620 acre-ft (103 hm³) Oct. 31 (gage height, 57.3 ft or 17.47 m); minimum, 71,520 acre-ft (88.2 hm³) Sept. 28-30 (gage height, 54.4 ft or 16.58 m).
 Period of record: Maximum contents observed, 89,910 acre-ft (111 hm³) May 25, 1957 (gage height, 58.7 ft or 17.89 m); minimum observed, 19,040 acre-ft (23.5 hm³) Apr. 23-25, 1953 (gage height, 34.5 ft or 10.52 m).

REMARKS.--The reservoir is formed by a rock-faced earthfill dam 3,740 ft (1,140 m) long. The dam was completed and storage began in October 1938. The uncontrolled service spillway is a cut channel through natural ground with a concrete ogee weir located 0.7 mile (1.1 km) from right end of dam. The service outlet works consist of a concrete tower with a 4.0- by 7.0-foot (1.2- by 2.1-metre) conduit. The service tower contains five gated openings at various elevations. The dam and lake are owned by the city of Abilene and were built to impound water for municipal use. During the year, the city of Abilene made no diversions from Clear Fork Brazos River into Fort Phantom Hill Reservoir, but 17,000 acre-ft (21.0 hm³) was pumped from the reservoir for municipal use. In addition, an undetermined amount of floodflow was diverted by gravity ditch from Deadman Creek into the reservoir. The capacity table was based on a survey of Oct. 2, 1953. Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	69.2	-
Crest of spillway.....	55.1	74,310
Highest gated outlet (invert).....	28.0	10,330
Lowest gated outlet (invert).....	1.6	-

COOPERATION.--Records of pumpage, gage heights, and diversions furnished by the city of Abilene. Capacity table furnished by Soil Conservation Service.

REVISIONS (WATER YEARS).--WSP 1562: 1953-57 (figures of monthend contents).

Capacity table (gage height, in feet, and contents, in acre-feet)

54.0	69,930
56.0	78,020
58.0	86,710

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78,450	81,860	76,370	76,370	75,960	75,960	75,960	74,720	75,960	74,720	76,780	73,900
2	78,020	80,580	76,370	76,780	76,780	75,960	75,960	74,720	75,960	74,310	76,780	73,500
3	78,020	80,160	76,370	76,780	77,200	75,960	75,960	74,720	75,960	74,310	76,780	73,500
4	77,610	79,730	76,370	76,780	77,610	75,960	75,550	74,310	75,960	75,140	76,780	73,500
5	77,610	79,730	76,370	76,780	77,610	75,960	75,550	74,310	75,960	75,140	76,780	73,100
6	77,200	79,300	76,370	76,780	77,610	75,960	75,550	74,310	75,960	75,140	76,780	73,100
7	77,200	79,300	76,370	76,780	77,610	75,960	75,550	74,310	75,550	74,720	76,370	73,100
8	77,200	78,880	76,370	76,780	77,610	75,960	75,550	74,310	75,550	74,720	76,370	72,710
9	77,200	78,880	76,370	76,780	77,610	75,960	75,550	74,310	75,550	74,310	75,960	72,710
10	77,200	79,300	76,370	76,370	77,200	75,960	75,550	74,310	76,370	74,310	75,960	72,310
11	77,200	79,730	76,370	76,370	76,780	75,960	75,550	74,310	76,370	74,310	75,550	72,310
12	76,780	79,300	76,370	76,370	76,780	75,960	75,550	74,720	76,780	74,310	75,550	72,310
13	76,780	78,880	76,370	76,370	76,780	75,960	75,550	74,720	76,780	73,900	75,140	72,310
14	78,020	78,450	76,370	76,370	76,780	75,960	75,550	74,720	76,780	73,900	75,140	73,100
15	81,010	78,450	76,370	76,370	76,780	75,960	75,550	74,720	76,370	73,900	74,720	73,100
16	80,580	78,020	76,370	75,960	76,780	75,960	75,550	74,720	76,370	73,900	74,310	72,710
17	80,160	78,020	76,370	75,960	76,370	75,960	75,550	74,720	76,370	73,500	74,720	72,710
18	79,300	77,610	76,370	75,960	76,370	75,960	75,550	74,720	75,960	73,500	74,720	72,310
19	79,300	77,610	76,370	75,960	76,370	75,960	75,550	74,720	75,960	73,500	74,720	72,310
20	78,880	77,610	75,960	75,960	76,370	75,960	75,140	74,310	75,550	73,900	74,720	72,310
21	78,450	77,610	75,960	75,960	76,370	75,550	75,140	74,310	75,550	74,720	74,720	72,310
22	78,450	77,200	75,960	75,960	76,370	75,550	75,140	74,310	75,550	75,140	74,310	72,310
23	78,020	77,200	75,960	75,960	76,370	75,550	75,140	74,720	75,140	75,140	74,310	72,310
24	78,020	77,200	75,960	75,960	76,370	75,550	75,140	75,550	75,140	75,140	73,900	72,310
25	78,450	76,780	75,960	75,960	76,370	75,550	75,140	75,550	74,720	75,140	73,900	71,910
26	78,450	76,780	75,960	75,960	75,960	75,140	75,140	75,550	75,550	76,780	73,500	71,910
27	78,450	76,780	75,960	75,960	75,960	75,140	75,140	76,370	75,140	78,020	73,900	71,910
28	79,300	76,780	75,960	75,960	75,960	75,140	74,720	76,370	75,140	77,610	74,310	71,520
29	81,860	76,780	75,960	75,960	-----	75,960	74,720	76,370	74,720	77,610	74,310	71,520
30	80,580	76,780	75,960	75,960	-----	75,960	74,720	76,370	74,720	77,200	74,310	71,520
31	83,620	-----	76,370	75,960	-----	75,960	-----	76,370	-----	77,200	73,900	-----
(+)	57.3	55.7	55.6	55.5	55.5	55.5	55.2	55.6	55.2	55.8	55.0	54.4
(*)	+4,740	-6,840	-410	-410	0	0	-1,240	+1,650	-1,650	+2,480	-3,300	-2,380
(++)	1,150	990	1,000	1,080	958	1,170	1,410	1,610	2,070	1,920	2,090	1,550
MAX	83,620	81,860	76,370	76,780	77,610	75,960	75,960	76,370	76,780	78,020	76,780	73,900
MIN	76,780	76,780	75,960	75,960	75,960	75,140	74,720	74,310	74,720	73,500	73,500	71,520

CAL YR 1974..... * +31,060 †† 18,160 MAX 83,620 MIN 26,590

WTR YR 1975..... * -7,360 †† 17,000 MAX 83,620 MIN 71,520

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use.

BRAZOS RIVER BASIN

219

08083500 Fort Phantom Hill Reservoir near Nugent, Tex.--Continued

WATER QUALITY DATA

		DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	
DATE	TIME									
OCT., 1974										
09...	1145	5.4	37	12	34	6.2	122	0	43	
JULY, 1975										
28...	1845	4.2	47	24	58	7.0	168	0	68	
		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT., 1974										
09...	56	--	254	140	42	1.2	475	7.9	23.0	
JULY, 1975										
28...	99	.2	390	220	78	1.7	725	7.8	32.5	

BRAZOS RIVER BASIN

08084000 Clear Fork Brazos River at Nugent, Tex.

LOCATION.--Lat 32°41'24", long 99°40'09", Jones County, on right bank 33 ft (10 m) downstream from bridge on Farm Road 600 at Nugent, 2 miles (3 km) downstream from Elm Creek, 4 miles (6 km) upstream from Deadman Creek, and at mile 167.8 (270.0 km).

DRAINAGE AREA.--2,220 mi² (5,750 km²).

PERIOD OF RECORD.--Discharge: February 1924 to current year.

Water quality: Chemical analyses: August 1948 to September 1953. Chemical and biochemical analyses: February 1968 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 1,531.91 ft (466.926 m) above mean sea level (levels by Brazos River Authority). Prior to Dec. 12, 1933, nonrecording gage at site 575 ft (175 m) downstream at same datum.

AVERAGE DISCHARGE.--14 years (1924-38) prior to completion of Fort Phantom Hill Reservoir, 186 ft³/s (5.268 m³/s), 134,800 acre-ft/yr (166 hm³/yr); 37 years (1938-75) regulated, 86.8 ft³/s (2.458 m³/s), 62,890 acre-ft/yr (77.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,880 ft³/s (110 m³/s) Oct. 31 (gage height, 12.11 ft or 3.691 m); minimum, 11 ft³/s (0.31 m³/s) June 25, July 15-17, 19.

Period of record: Maximum discharge observed, 47,000 ft³/s (1,330 m³/s) Sept. 8, 1932 (gage height, 27.05 ft or 8.245 m, site then in use), from rating curve extended above 25,000 ft³/s (708 m³/s); no flow at times.

Maximum stage, 30 ft (9.1 m) in 1876; floods in 1900 and May 1923 reached stages of 24 and 24.5 ft (7.3 and 7.47 m), respectively, from information by local residents.

REMARKS.--Discharge records good. Flow regulated by four major reservoirs with a capacity of 103,600 acre-ft (128 hm³). Numerous diversions above station for municipal supply and oilfield operation will materially affect low flow. No water was diverted from the river into Fort Phantom Hill Reservoir by the city of Abilene during the current year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	3450	100	138	93	83	65	18	52	12	58	23
2	202	1880	98	155	189	83	53	17	40	12	52	20
3	170	1080	96	159	300	83	40	17	34	20	124	18
4	155	759	98	155	352	85	37	17	31	60	117	17
5	118	782	103	150	458	88	34	17	28	177	63	33
6	92	611	97	137	381	99	33	16	26	83	46	23
7	75	518	93	128	327	92	38	15	25	43	39	17
8	72	512	85	118	263	85	35	14	24	30	35	16
9	68	478	87	119	194	92	93	14	24	22	32	15
10	66	508	94	107	202	97	64	58	62	18	30	15
11	65	622	107	94	180	84	62	356	166	16	29	15
12	61	555	109	80	157	86	58	85	132	14	28	18
13	70	462	104	94	153	82	56	79	53	13	27	57
14	826	358	103	98	142	86	52	56	39	13	26	92
15	2740	319	97	97	122	89	50	38	31	11	26	78
16	2160	272	92	93	116	85	49	31	27	11	158	73
17	943	246	94	95	117	81	47	28	24	11	225	50
18	577	235	92	93	108	84	43	26	21	12	76	32
19	408	220	90	81	104	73	38	27	19	14	43	27
20	320	198	85	90	107	75	34	26	16	644	32	23
21	262	187	85	92	101	73	32	24	15	2250	26	27
22	225	183	87	72	83	69	32	24	14	1550	24	32
23	198	168	82	76	85	66	30	36	14	545	23	29
24	235	135	76	82	91	63	29	210	13	558	22	34
25	454	144	75	78	89	56	28	206	11	204	20	26
26	468	142	91	77	84	52	26	149	18	2390	27	23
27	370	124	100	77	83	54	24	156	35	1180	60	21
28	1350	128	102	73	85	57	22	66	21	455	45	21
29	2670	98	104	74	---	63	21	84	13	265	29	20
30	1750	103	100	73	---	70	19	119	12	133	23	19
31	3070	---	120	74	---	70	---	61	---	75	28	---
TOTAL	20499	15477	2946	3129	4766	2405	1244	2090	1040	10841	1593	914
MEAN	661	516	95.0	101	170	77.6	41.5	67.4	34.7	350	51.4	30.5
MAX	3070	3450	120	159	458	99	93	356	166	2390	225	92
MIN	61	98	75	72	83	52	19	14	11	11	20	15
AC-FT	40660	30700	5840	6210	9450	4770	2470	4150	2060	21500	3160	1810

CAL YR 1974 TOTAL 59642.79 MEAN 163 MAX 3450 MIN 0 AC-FT 118300
WTR YR 1975 TOTAL 66944.00 MEAN 183 MAX 3450 MIN 11 AC-FT 132800

BRAZOS RIVER BASIN

221

08084000 Clear Fork Brazos River at Nugent, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 26...	1400	460	7.3	120	49	140	7.8	158	0	310
DEC. 20...	1230	75	8.5	280	130	440	6.1	288	0	1000
FEB. 22...	0900	90	5.2	270	140	450	6.7	286	0	1040
APR. 18...	0945	28	5.2	340	150	470	6.8	266	0	1200
JUNE 13...	1230	50	9.2	140	58	190	4.4	155	0	440
AUG. 08...	1300	35	11	210	82	220	8.6	236	0	640

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT. 26...	240	--	.82	.01	.12	.88	1.0	.25	952
DEC. 20...	590	.5	3.3	.03	.03	.58	.61	.05	2600
FEB. 22...	600	.4	2.7	.01	.13	1.2	1.3	.03	2650
APR. 18...	730	.5	1.9	.01	.01	.70	.71	.09	3030
JUNE 13...	290	.3	.72	.03	.13	1.3	1.4	.18	1210
AUG. 08...	320	.4	1.1	.01	.01	.81	.82	.12	1610

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 26...	500	370	2.7	1590	7.9	20.0	8.6	93	2.0
DEC. 20...	1200	1000	5.5	3680	8.1	6.5	12.1	98	--
FEB. 22...	1300	1000	5.5	3760	8.0	9.0	10.9	95	4.0
APR. 18...	1500	1200	5.3	4600	7.8	20.0	6.9	76	2.4
JUNE 13...	590	460	3.4	2010	7.8	24.0	6.6	76	2.6
AUG. 08...	860	670	3.3	2410	7.6	27.0	7.6	94	1.6

BRAZOS RIVER BASIN

08084100 Deadman Creek near Nugent, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 32°40'36", long 99°37'00", Jones County, at low-water crossing on county road, 3.2 miles (5.1 km) east of Nugent, and 4.4 miles (7.1 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: October 1967 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 26...	1430	--	13	100	29	150	7.3	247	0	110
NOV. 19...	--	89	--	--	--	--	--	--	--	--
DEC. 20...	1315	40	9.6	120	45	220	7.4	272	0	190
FEB. 22...	1000	57	9.0	100	44	220	7.3	271	0	180
FEB. 25...	--	58	--	--	--	--	--	--	--	--
APR. 03...	--	20	--	--	--	--	--	--	--	--
APR. 18...	1045	25	11	89	47	270	12	265	0	230
MAY 12...	--	6.4	--	--	--	--	--	--	--	--
JUNE 13...	1335	20	14	110	58	300	12	261	0	260
JUNE 16...	--	14	--	--	--	--	--	--	--	--
AUG. 08...	1345	17	9.7	48	31	200	15	206	0	170

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 26...	260	--	1.5	.30	.39	1.5	1.9	1.7	791
NOV. 19...	--	--	--	--	--	--	--	--	--
DEC. 20...	390	.5	3.1	.18	1.3	1.3	2.6	4.1	1120
FEB. 22...	340	.6	1.7	.11	3.4	2.1	5.5	.14	1030
FEB. 25...	--	--	--	--	--	--	--	--	--
APR. 03...	--	--	--	--	--	--	--	--	--
APR. 18...	370	.7	.73	.37	4.0	2.6	6.6	7.8	1160
MAY 12...	--	--	--	--	--	--	--	--	--
JUNE 13...	470	.7	2.3	1.2	3.3	2.6	5.9	5.8	1350
JUNE 16...	--	--	--	--	--	--	--	--	--
AUG. 08...	240	.7	2.7	2.3	5.5	2.6	8.1	4.7	816

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 26...	370	170	3.4	1460	7.8	20.0	8.2	89	5.3
NOV. 19...	--	--	--	--	--	--	--	--	--
DEC. 20...	490	260	4.3	1970	8.0	9.0	13.7	118	9.0
FEB. 22...	430	210	4.6	1820	8.0	9.5	9.8	86	7.4
FEB. 25...	--	--	--	--	--	--	--	--	--
APR. 03...	--	--	--	--	--	--	--	--	--
APR. 18...	420	200	5.8	2240	8.0	21.0	8.8	98	8.1
MAY 12...	--	--	--	--	--	--	--	--	--
JUNE 13...	510	300	5.8	2430	8.0	28.0	9.6	122	26
JUNE 16...	--	--	--	--	--	--	--	--	--
AUG. 08...	250	79	5.5	1480	7.8	31.0	11.0	147	20

08084500 Lake Stamford near Haskell, Tex.

LOCATION.--Lat 33°04'44", long 99°34'52", Haskell County, on left bank at intake structure of West Texas Utilities Co. steam powerplant at Lake Stamford on Paint Creek, 1.0 mile (1.6 km) upstream from dam, 1.7 miles (2.7 km) upstream from California Creek, and 10 miles (16 km) southeast of Haskell.

DRAINAGE AREA.--360 mi² (932 km²).

PERIOD OF RECORD.--Contents: July 1953 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 2.77 ft (0.84 m) above mean sea level (levels by Freese, Nichols, and Endress, Consulting Engineers).

EXTREMES (at 0800).--Current year: Maximum contents, 45,950 acre-ft (56.7 hm³) June 1, 2 (gage height, 1,412.4 ft or 430.50 m); minimum, 30,100 acre-ft (37.1 hm³) May 21, 22 (gage height, 1,408.0 ft or 429.16 m).
Period of record: Maximum contents, 74,100 acre-ft (91.4 hm³) Sept. 9, 10, 1962 (gage height, 1,416.6 ft or 431.78 m); minimum since first appreciable storage in June 1954, 14,060 acre-ft (17.3 hm³) Jan. 29-31, 1957 (gage height, 1,400.2 ft or 426.78 m).

REMARKS.--The lake is formed by a rock-faced earthfill dam 3,600 ft (1,097 m) long. The dam was completed in March 1953, and deliberate impoundment began in June 1953. The emergency spillway is an uncontrolled natural channel located near right end of dam. The service spillway is an uncontrolled channel excavated through natural ground, 169 ft (52 m) wide, and located 900 ft (270 m) to left of left end of dam. The service outlet is a controlled 24-inch-diameter (610-millimetre) concrete pipe that is used for low-flow releases. During the current year, the cities of Stamford and Hamlin diverted 1,610 acre-ft (1.99 hm³) for municipal use. The capacity table is based on sedimentation survey of 1966. Gage-height record was furnished by West Texas Utilities Co. from their powerplant 1.0 mile (1.6 km) upstream from dam. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	1,434.0	-
Crest of spillway.....	1,425.8	-
Crest of spillway.....	1,414.0	53,070
Lowest gated outlet (invert).....	1,380.0	358

COOPERATION.--The capacity table furnished by the Soil Conservation Service. The diversions furnished by city of Stamford.

Capacity table (gage height, in feet, and contents, in acre-feet)

1,408.0	30,100	1,411.0	40,330
1,409.0	33,250	1,412.0	44,280
1,410.0	36,660	1,413.0	48,530

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,580	33,580	33,250	33,250	33,250	33,250	31,960	31,330	45,950	43,070	45,530	44,280
2	33,250	33,910	33,250	33,250	33,250	33,250	31,960	31,330	45,950	43,070	45,530	44,280
3	33,250	33,910	33,250	33,250	33,250	33,250	31,960	31,330	45,530	42,670	45,530	44,280
4	33,250	33,910	33,250	33,250	33,580	33,250	31,960	31,330	45,530	43,070	45,530	44,280
5	33,250	33,910	33,250	33,250	33,580	33,250	31,650	31,330	45,530	43,070	45,110	43,880
6	33,250	33,910	33,250	33,250	33,580	33,250	31,650	31,330	45,530	43,070	45,110	43,880
7	33,250	33,910	33,250	33,250	33,580	32,920	31,650	31,330	45,530	42,670	45,110	43,880
8	33,250	33,910	33,250	33,250	33,580	32,920	31,960	31,020	45,110	42,670	45,110	43,880
9	33,250	33,910	33,250	33,250	33,580	32,920	31,960	31,020	45,110	42,270	45,110	43,880
10	32,920	33,910	33,250	33,250	33,580	32,920	31,960	31,020	45,110	42,270	45,110	43,880
11	32,920	33,910	33,250	33,250	33,580	32,920	31,960	30,710	44,700	42,270	45,110	43,880
12	32,920	33,910	33,250	33,250	33,580	32,920	31,960	30,710	44,700	42,270	45,110	43,880
13	32,920	33,910	33,250	33,250	33,580	32,920	31,960	30,710	44,700	42,270	45,700	43,880
14	33,250	33,910	33,250	33,250	33,580	32,600	31,960	30,710	44,700	42,270	44,700	44,280
15	33,250	33,910	33,250	33,250	33,580	32,600	31,960	30,710	44,700	41,880	44,700	44,700
16	33,250	33,580	33,250	33,250	33,580	32,600	31,960	30,410	44,700	41,880	44,700	44,700
17	33,250	33,580	33,250	33,250	33,580	32,600	31,960	30,410	44,700	41,880	44,700	44,280
18	33,250	33,580	33,250	32,920	33,580	32,600	31,960	30,410	44,700	41,880	44,700	44,700
19	33,250	33,580	33,250	32,920	33,250	32,600	31,650	30,410	44,700	41,880	44,700	44,280
20	33,250	33,580	32,920	32,920	33,250	32,600	31,650	30,410	44,280	42,670	44,280	44,280
21	33,250	33,580	32,920	32,920	33,250	32,600	31,650	30,100	43,880	42,670	44,280	44,280
22	33,250	33,580	32,920	32,920	33,250	32,600	31,650	30,100	43,880	43,470	44,280	44,280
23	33,250	33,580	32,920	32,920	33,250	32,600	31,650	31,960	43,470	43,470	43,880	44,280
24	33,250	33,580	32,920	32,920	33,250	32,280	31,650	36,300	43,470	43,470	43,880	44,280
25	33,250	33,580	32,920	32,920	33,250	32,280	31,650	41,100	43,470	43,470	43,880	44,280
26	33,250	33,580	32,920	32,920	33,250	32,280	31,650	41,880	43,470	43,880	43,470	43,880
27	33,250	33,250	32,600	32,920	33,250	32,280	31,650	42,670	43,470	44,280	44,700	43,880
28	33,250	33,250	32,920	32,920	33,250	32,280	31,650	42,670	43,470	45,110	44,700	43,880
29	33,250	33,250	32,920	32,600	-----	32,280	31,650	43,470	43,070	45,530	44,700	43,880
30	33,250	33,250	32,920	32,600	-----	31,960	31,330	45,110	43,070	45,110	44,700	43,880
31	33,580	-----	32,920	32,920	-----	31,960	-----	45,530	-----	45,110	44,700	-----
(†)	1,409.1	1,409.0	1,408.9	1,408.9	1,409.0	1,408.6	1,408.4	1,412.3	1,411.7	1,412.2	1,412.1	1,411.9
(*)	0	-330	-330	0	+330	-1,290	-630	+14,200	-2,460	+2,040	-410	-820
(††)	101	90.0	88.9	95.3	85.6	108	114	157	208	215	195	151
MAX	33,580	33,910	33,250	33,250	33,580	33,250	31,960	45,530	45,950	45,530	45,530	44,700
MIN	32,920	33,250	32,600	32,600	33,250	31,960	31,330	30,100	43,070	41,880	43,470	43,470

CAL YR 1974..... * -9,750 †† 1,708 MAX 42,670 MIN 28,620
WTR YR 1975..... * +10,300 †† 1,610 MAX 45,950 MIN 30,100

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use.

BRAZOS RIVER BASIN

08084500 Lake Stamford near Haskell, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)
OCT., 1974 21...	1400	3.6	55	44	130	16	176	0	200

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT., 1974 21...	180	715	320	170	3.2	1260	8.2	19.0

08084800 California Creek near Stamford, Tex.

LOCATION.--Lat 32°55'51", long 99°38'32", Jones County, near right bank at downstream side of bridge on Farm Road 142, 9 miles (14 km) east of Stamford, and 17 miles (27 km) upstream from Paint Creek.

DRAINAGE AREA.--465 mi² (1,204 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year.

Water quality: Chemical analyses: October 1962 to current year. Water temperatures: October 1962 to current year. Sediment records: October 1974 to September 1975.

GAGE.--Water-stage recorder. Altitude of gage is 1,470 ft (448 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 28.1 ft³/s (0.796 m³/s), 20,360 acre-ft/yr (25.1 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 977 ft³/s (27.7 m³/s) July 26 (gage height, 15.37 ft or 4.685 m); minimum, 0.32 ft³/s (0.009 m³/s) Sept. 8, 9.

Period of record: Maximum discharge, 7,420 ft³/s (210 m³/s) May 6, 1969 (gage height, 27.12 ft or 8.266 m); no flow at times.

Historic: Maximum stage since at least 1897, 29.6 ft (9.02 m) June 10, 1962 (from floodmark); flood of July 1961 (stage unknown) was second highest. Other large floods are reported to have occurred in June 1909, June 24, 1915, and May 1957; flood of September 1962 reached a stage of 28.1 ft (8.56 m); from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 9,720 micromhos Feb. 21; minimum daily, 310 micromhos July 26. Maximum water temperatures, 32.0°C June 16, 17, Aug. 21; minimum, 1.0°C Feb. 19, Mar. 13.

Period of record: Maximum daily specific conductance, 46,400 micromhos Sept. 16, 1970; minimum daily, 218 micromhos Sept. 20, 1974. Maximum water temperatures, 37.0°C July 4, 6, 16, 1965, July 5, 1968; minimum, freezing point on several days during winter months.

REMARKS.--Discharge records good. Three small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	376	5.2	13	17	5.5	3.1	2.5	16	.84	12	1.6
2	10	387	4.9	20	26	5.2	2.9	2.1	7.9	.84	16	1.1
3	8.8	107	4.9	20	48	4.4	3.0	1.9	6.1	1.3	352	.80
4	10	56	4.9	21	55	4.4	3.0	1.9	4.3	7.7	193	.63
5	9.6	38	4.9	16	49	4.9	2.6	1.7	3.3	9.4	36	.50
6	13	25	5.7	16	41	4.4	2.6	1.4	2.7	6.0	16	.41
7	9.6	19	6.6	13	32	6.9	3.8	1.3	2.4	2.7	6.4	.41
8	6.9	16	5.2	12	25	6.3	16	1.5	2.2	1.8	5.7	.33
9	5.5	16	4.7	9.9	20	4.7	14	.88	1.7	1.6	5.2	.33
10	4.7	18	5.5	11	13	3.5	14	1.9	9.8	1.3	4.7	.39
11	4.2	19	5.7	9.9	13	6.6	8.7	1.6	2.2	1.2	4.2	.40
12	4.2	18	6.9	7.5	14	4.9	6.3	.88	1.8	1.2	3.7	1.6
13	115	16	7.5	6.0	9.6	4.2	5.8	138	1.7	1.2	3.3	8.0
14	834	15	6.6	9.2	9.2	4.2	5.5	18	2.1	1.1	2.9	7.8
15	684	14	6.0	10	11	4.9	5.2	8.0	1.7	1.1	2.9	14
16	100	12	6.0	11	8.2	5.2	4.7	6.3	1.6	1.1	2.9	14
17	43	11	5.5	10	6.6	5.7	4.4	4.6	1.5	1.1	2.9	7.5
18	25	11	4.9	8.5	6.6	4.9	4.2	3.5	1.5	1.1	14	4.9
19	17	9.9	5.2	7.8	8.2	5.2	3.6	2.9	1.3	3.0	9.6	2.9
20	12	11	5.5	7.2	6.0	4.7	3.1	2.6	1.3	320	6.0	2.0
21	9.2	9.2	5.2	6.0	6.6	3.7	3.0	2.2	1.3	192	4.0	1.9
22	6.9	8.2	4.7	9.2	9.9	3.5	2.7	2.0	1.2	46	2.5	1.7
23	6.6	8.2	4.4	5.5	5.7	3.5	2.7	28	1.2	22	2.5	1.4
24	6.6	7.8	5.5	4.2	5.5	3.5	2.5	86	1.1	16	2.2	1.3
25	5.7	6.6	4.9	4.2	5.5	4.0	2.5	317	1.1	57	2.0	1.3
26	8.2	5.7	4.9	6.3	5.7	3.7	2.5	103	.94	766	11	1.2
27	8.5	6.0	4.7	5.2	5.7	2.9	2.4	44	.94	239	8.7	1.0
28	190	7.5	5.5	4.7	5.5	3.5	2.5	112	.84	50	9.1	.94
29	149	6.0	6.6	4.4	-----	5.4	2.0	33	.90	27	8.6	.94
30	104	5.7	6.6	3.7	-----	3.7	2.0	30	.91	21	4.2	.94
31	542	-----	8.8	3.7	-----	3.1	-----	28	-----	17	2.5	-----
TOTAL	2,970.2	1,265.8	174.1	296.1	468.5	141.2	141.3	1,075.78	83.53	1,818.58	756.7	82.22
MEAN	95.8	42.2	5.62	9.55	16.7	4.55	4.71	34.7	2.78	58.7	24.4	2.74
MAX	834	387	8.8	21	55	6.9	16	317	16	766	352	14
MIN	4.2	5.7	4.4	3.7	5.5	2.9	2.0	.88	.84	.84	2.0	.33
AC-FT	5,890	2,510	345	587	929	280	280	2,130	166	3,610	1,500	163
CAL YR 1974	TOTAL 9,952.59	MEAN 27.3	MAX 1,330	MIN .01	AC-FT 19,740							
WTR YR 1975	TOTAL 9,274.01	MEAN 25.4	MAX 834	MIN .33	AC-FT 18,390							

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	0600	15.00	900	5-25	0945	11.23	364
10-28	0700	10.65	301	5-28	0945	11.67	415
10-31	1300	12.96	575	7-20	0845	12.14	471
11- 2	0800	13.64	676	7-26	1400	15.37	977
5-13	0115	10.47	283	8- 3	1630	12.39	502

BRAZOS RIVER BASIN

08084800 California Creek near Stamford, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 31...	0815	562	8.6	48	15	42	4.7	116	0	83
NOV. 25...	1505	6.6	17	410	350	780	11	236	0	2000
DEC. 31...	1400	10	2.3	380	310	880	9.9	268	0	2000
JAN. 31...	0830	7.6	.5	420	330	880	9.6	210	0	2100
FEB. 28...	1515	7.6	1.6	470	370	1000	13	218	0	2200
MAR. 31...	1800	6.6	4.6	470	360	990	12	254	0	2300
APR. 30...	0835	3.8	6.9	450	460	1100	11	324	0	2800
MAY 31...	0920	34	13	140	84	220	10	172	0	570
JUNE 10...	1355	4.6	7.2	49	25	120	5.1	94	0	140
JULY 23...	1615	22	9.6	130	98	200	9.7	127	0	570
AUG. 26...	1455	1.8	3.2	170	140	390	9.8	140	0	780
SEP. 30...	1630	.94	.6	330	320	790	15	134	0	1800

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	70	.2	329	180	86	1.4	585	8.0	16.0
NOV. 25...	1400	.6	5090	2500	2300	6.8	6900	7.8	11.5
DEC. 31...	1300	.4	5010	2200	2000	8.1	7030	8.2	8.0
JAN. 31...	1500	.3	5340	2400	2200	7.8	7390	7.7	9.0
FEB. 28...	1800	.0	5960	2700	2500	8.4	8320	7.7	17.0
MAR. 31...	1600	.5	5860	2700	2400	8.4	8240	7.5	16.0
APR. 30...	1500	.5	6490	3000	2800	8.7	8780	7.9	18.0
MAY 31...	330	.4	1450	700	550	3.6	2280	7.8	21.0
JUNE 10...	180	.5	573	230	150	3.5	1030	7.6	23.5
JULY 23...	340	.4	1420	730	620	3.2	2230	7.3	30.0
AUG. 26...	650	.6	2210	1000	890	5.4	3420	7.9	25.0
SEP. 30...	1100	.6	4420	2100	2000	7.4	6660	7.6	26.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1974.....	2970.19	1030	610	4890	160	1280	150	1200	310
NOV. 1974.....	1265.79	1940	1200	4100	310	1060	420	1440	620
DEC. 1974.....	174.1	7930	5800	2730	2000	940	2200	1030	2700
JAN. 1975.....	296.1	6780	4900	3920	1700	1360	1900	1520	2300
FEB. 1975.....	468.5	5450	3800	4810	1300	1640	1500	1900	1800
MAR. 1975.....	141.2	8220	6100	2330	2000	762	2300	877	2800
APR. 1975.....	141.3	7520	5500	2100	1800	687	2100	801	2500
MAY 1975.....	1075.77	1520	930	2700	240	697	290	842	470
JUNE 1975.....	83.53	4350	3000	677	1100	248	1100	248	1400
JULY 1975.....	1818.58	684	380	1870	110	540	100	491	190
AUG. 1975.....	756.69	1230	740	1510	200	409	210	429	380
SEPT 1975.....	82.22	4250	2900	644	1000	222	1100	244	1400
TOTAL	9273.98	**	**	32300	**	9840	**	11000	**
WTD.AVG.	25.41	1960	1300	**	390	**	440	**	630

BRAZOS RIVER BASIN

227

08084800 California Creek near Stamford, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) • WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2770	1100	9280	7110	4850	8470	9020	8760	3510	8440	2280	8120
2	3100	732	8150	6640	4580	8540	9480	8640	3610	8440	1950	7140
3	3340	1380	7450	5720	4350	8650	8500	8610	3860	8440	800	6590
4	3540	1700	8480	5800	3860	8840	8630	8610	4070	8100	700	6760
5	3730	2160	8590	5820	3960	8840	7480	8720	4080	7270	900	7190
6	4010	2660	7670	5560	4090	8540	7620	8870	4080	2700	1270	7610
7	4170	3100	8520	5980	4490	8330	8420	8950	4270	4760	1700	7780
8	4610	3430	8740	6120	4830	8470	5910	9110	4570	4590	2050	7840
9	4430	3720	8930	6050	5810	7950	7370	9110	4850	4960	2370	7780
10	4400	4030	9000	6920	5780	8610	6800	9190	1000	5440	2550	7610
11	4430	3890	8890	6450	5750	8400	8020	9400	1660	5770	2840	7530
12	4410	4280	7380	7300	6620	7050	6450	2120	4830	5990	3130	7300
13	2000	4340	7620	7200	7400	6910	7210	1040	5520	6210	3390	3990
14	860	4610	8010	6340	7850	7180	6730	1660	5950	6550	3600	3410
15	530	4770	7660	7000	7980	8660	6120	2450	5880	6830	3900	3570
16	900	5140	7830	8490	9130	7920	7110	3170	6380	6970	4070	3200
17	1570	4840	7680	7450	8640	7150	7770	4080	6670	7070	4300	2680
18	2560	5320	7680	7530	7060	8110	8150	4530	6890	7220	3240	3200
19	3220	5930	8100	7560	7480	8480	8200	5000	7030	7320	3220	3660
20	3910	5270	8060	7930	8930	8690	8280	5650	7230	370	2670	4260
21	4220	5680	8000	8020	9720	8840	8280	5950	7390	621	2680	4810
22	4400	5920	7700	8600	8970	8660	8280	5950	7500	1150	2740	5670
23	4680	6340	8000	7750	8220	8210	8420	4400	7610	2710	2920	6060
24	4800	5950	8060	8060	9670	8080	8520	3000	7730	1340	3150	6650
25	5100	6960	7160	8600	8490	8550	8630	598	7790	2500	3340	6730
26	5180	7950	7360	6230	6450	7440	8780	929	7970	310	1500	6650
27	1160	7450	7110	6520	6890	8020	8780	1280	8100	325	915	6650
28	880	6400	7850	7920	8320	8580	8900	650	8100	562	3340	6690
29	1280	6850	7480	8050	---	8170	8710	1600	8330	983	3510	6690
30	1530	8190	7120	6970	---	8110	8780	2380	8430	1740	8370	6660
31	585	---	7230	7310	---	8240	---	2280	---	1980	8730	---
MONTH	3110	4670	7960	7060	6790	8220	7980	5050	5830	4440	2970	6020

TEMPERATURE (DEG. C) OF WATER • WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	20.0	4.0	6.0	7.0	16.0	20.0	25.0	21.0	30.0	29.0	31.0
2	20.0	20.0	7.0	7.0	7.0	11.0	12.0	23.0	27.0	27.0	27.0	30.0
3	22.0	22.0	8.0	6.0	8.0	10.0	---	25.0	28.0	25.0	23.0	31.0
4	19.0	16.0	9.0	---	10.0	9.0	11.0	20.0	25.0	26.0	---	30.0
5	21.0	12.0	12.0	5.0	7.0	15.0	19.0	26.0	---	30.0	31.0	29.0
6	19.0	13.0	10.0	9.0	5.0	13.0	16.0	27.0	26.0	27.0	24.0	27.0
7	16.0	13.0	13.0	11.0	7.0	15.0	18.0	27.0	28.0	22.0	23.0	23.0
8	23.0	14.0	8.0	9.0	6.0	10.0	15.0	24.0	29.0	31.0	27.0	22.0
9	21.0	13.0	8.0	10.0	7.0	11.0	13.0	22.0	29.0	31.0	31.0	25.0
10	25.0	14.0	7.0	8.0	5.0	10.0	16.0	26.0	25.0	26.0	26.0	24.0
11	21.0	12.0	9.0	5.0	10.0	10.0	13.0	22.0	21.0	28.0	25.0	29.0
12	24.0	10.0	6.0	4.0	9.0	8.0	14.0	25.0	28.0	25.0	27.0	20.0
13	21.0	12.0	10.0	3.0	---	1.0	13.0	25.0	30.0	23.0	27.0	16.0
14	17.0	10.0	10.0	5.0	11.0	9.0	15.0	24.0	30.0	26.0	26.0	18.0
15	15.0	9.0	8.0	---	9.0	12.0	20.0	26.0	24.0	29.0	27.0	17.0
16	19.0	11.0	7.0	5.0	8.0	9.0	21.0	19.0	32.0	27.0	24.0	21.0
17	15.0	13.0	9.0	6.0	5.0	16.0	26.0	21.0	32.0	26.0	26.0	22.0
18	17.0	11.0	7.0	7.0	2.0	12.0	23.0	23.0	30.0	28.0	31.0	28.0
19	18.0	15.0	8.0	8.0	1.0	14.0	---	25.0	28.0	28.0	31.0	25.0
20	18.0	14.0	9.0	7.0	3.0	15.0	23.0	26.0	28.0	25.0	31.0	19.0
21	18.0	14.0	7.0	9.0	6.0	18.0	24.0	29.0	29.0	30.0	32.0	18.0
22	15.0	17.0	8.0	4.0	3.0	15.0	18.0	---	27.0	27.0	27.0	22.0
23	20.0	18.0	10.0	6.0	4.0	15.0	23.0	25.0	30.0	28.0	29.0	14.0
24	18.0	13.0	8.0	9.0	9.0	14.0	22.0	24.0	29.0	26.0	31.0	21.0
25	17.0	13.0	6.0	9.0	4.0	13.0	28.0	21.0	27.0	22.0	31.0	14.0
26	17.0	12.0	5.0	8.0	8.0	15.0	26.0	23.0	31.0	28.0	26.0	22.0
27	19.0	12.0	6.0	13.0	8.0	17.0	22.0	24.0	30.0	27.0	20.0	24.0
28	16.0	10.0	8.0	9.0	17.0	11.0	26.0	26.0	27.0	30.0	28.0	24.0
29	19.0	7.0	10.0	10.0	---	7.0	27.0	27.0	28.0	31.0	29.0	26.0
30	23.0	5.0	8.0	8.0	---	2.0	18.0	19.0	29.0	29.0	27.0	26.0
31	16.0	---	9.0	9.0	---	16.0	---	21.0	---	31.0	27.0	---
MONTH	19.0	13.0	8.0	7.5	7.0	12.0	19.5	24.0	28.0	27.5	27.5	23.5

BRAZOS RIVER BASIN

08085500 Clear Fork Brazos River at Fort Griffin, Tex.

LOCATION.--Lat 32°56'04", Long 99°13'27", Shackelford County, on right bank just downstream from pier of bridge on old Fort Griffin-Throckmorton road, 0.4 mile (0.6 km) northeast of Fort Griffin, 5,100 ft (1,550 m) upstream from bridge on U.S. Highway 283, and 1.7 miles (2.7 km) upstream from Mill Creek.

DRAINAGE AREA.--3,974 mi² (10,293 km²).

PERIOD OF RECORD.--Discharge: December 1923 to current year.

Water quality: Chemical analyses: November 1949 to September 1951, November 1967 to current year. Water temperatures: November 1949 to September 1951, November 1967 to current year. Sediment records: November 1949 to September 1951.

GAGE.--Water-stage recorder. Datum of gage is 1,174.09 ft (357.863 m) above mean sea level. Prior to June 23, 1932, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--51 years (1924-75), 226 ft³/s (6.400 m³/s), 163,700 acre-ft/yr (202 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 7,410 ft³/s (210 m³/s) May 28 (gage height, 23.21 ft or 7.074 m); minimum, 9.5 ft³/s (0.27 m³/s) July 18, 19.

Period of record: Maximum discharge, 33,600 ft³/s (952 m³/s) Sept. 10, 1932 (gage height, 35.09 ft or 10.695 m); no flow at times. Historic: Maximum stage since 1876, 38.0 ft (11.58 m) in September 1900; flood in July 1876 was probably higher; from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 6,580 micromhos May 17; minimum daily, 395 micromhos July 29. Maximum water temperatures, 30.0°C June 30, Aug. 24; minimum, freezing point Jan. 13.

Period of record: Maximum daily specific conductance, 6,680 micromhos May 11, 1972; minimum daily, 204 micromhos July 27, 1950. Maximum water temperatures, 34.0°C June 14, 1969, June 28, 1972; minimum, freezing point on several days during January 1969 and in 1974-75.

REMARKS.--Discharge records good. Some regulation by five major reservoirs (total capacity, 156,700 acre-ft or 193 hm³). Diversions above station for irrigation, municipal supply, and oilfield operations materially affect low flow.

REVISIONS (WATER YEARS).--WSP 1392: 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496	6,000	169	188	137	144	114	41	243	23	167	50
2	384	4,580	169	249	167	137	115	56	153	26	240	39
3	301	2,990	167	282	427	128	104	40	115	32	146	33
4	246	1,960	165	314	735	123	88	35	93	41	319	31
5	210	1,440	164	286	874	119	75	36	80	30	364	28
6	182	1,200	165	265	968	118	74	32	65	17	203	32
7	146	926	166	238	785	116	88	30	56	94	125	27
8	123	837	157	220	660	122	177	30	64	96	88	27
9	110	821	146	204	572	110	102	28	68	72	65	35
10	109	780	147	185	456	101	111	25	47	48	52	25
11	106	877	164	179	430	102	110	25	51	35	42	20
12	100	950	205	167	395	108	105	64	110	32	37	27
13	112	812	227	153	337	96	92	217	167	27	33	36
14	794	701	212	147	313	91	88	192	168	23	29	42
15	1,990	572	187	158	294	96	86	139	108	17	29	46
16	3,150	525	171	167	261	104	93	100	76	13	57	100
17	2,540	475	160	173	237	104	90	73	59	11	34	111
18	1,140	422	153	170	241	101	85	54	47	10	101	91
19	779	402	150	167	224	94	76	46	43	11	214	86
20	618	385	145	158	201	95	71	39	35	16	107	61
21	526	348	138	147	192	95	66	38	32	1,230	72	49
22	463	328	136	142	192	101	61	38	29	1,920	58	42
23	380	312	133	142	180	94	56	78	25	1,870	47	37
24	329	299	132	130	158	81	64	221	29	589	41	36
25	314	261	129	130	166	78	64	121	27	627	36	37
26	532	239	129	137	167	76	66	459	21	355	36	33
27	594	240	128	132	160	79	56	367	22	2,510	44	31
28	947	228	152	127	147	88	52	4,030	46	1,990	136	31
29	2,770	207	167	127	-----	77	43	1,520	35	588	137	29
30	3,260	195	171	125	-----	90	42	585	26	465	90	28
31	4,310	-----	176	122	-----	126	-----	419	-----	253	67	-----
TOTAL	28,061	30,312	4,980	5,531	10,076	3,194	2,514	9,178	2,140	13,071	3,216	1,300
MEAN	905	1,010	161	178	360	103	83.8	296	71.3	422	104	43.3
MAX	4,310	6,000	227	314	968	144	177	4,030	243	2,510	364	111
MIN	100	195	128	122	137	76	42	25	21	10	29	20
AC-FT	55,660	60,120	9,880	10,970	19,990	6,340	4,990	18,200	4,240	25,930	6,380	2,580

CAL YR 1974 TOTAL 99,308.25 MEAN 272 MAX 6,000 MIN 0 AC-FT 197,000
WTR YR 1975 TOTAL 113,573.00 MEAN 311 MAX 6,000 MIN 10 AC-FT 225,300

PEAK DISCHARGE (BASE, 3,900 FT³/S).--Nov. 1 (1200) 6,310 ft³/s (21.13 ft); May 28 (1230) 7,410 ft³/s (23.21 ft).

08085500 Clear Fork Brazos River at Fort Griffin, Tex.--Continued
 WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 31...	0805	3850	8.8	56	22	61	5.3	126	0	100
NOV. 26...	0935	239	9.0	130	50	190	6.6	242	0	350
DEC. 31...	0905	180	2.2	190	92	320	6.3	273	0	650
JAN. 31...	0825	140	.7	220	110	340	5.7	275	0	700
FEB. 04...	0930	740	2.5	240	120	380	5.8	274	0	760
MAR. 18...	0915	105	5.3	220	100	380	7.3	277	0	710
APR. 28...	0850	46	7.9	240	130	460	7.7	199	0	930
MAY 31...	0840	430	10	110	50	170	8.9	162	0	320
JUNE 10...	1620	46	7.3	94	40	130	7.1	135	0	220
JULY 24...	0935	555	11	47	12	30	7.4	118	0	72
AUG. 27...	0940	31	11	150	59	220	12	236	5	440
SEP. 30...	0905	28	9.1	190	85	330	12	228	0	670

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	100	--	415	230	130	1.7	763	8.0	17.0
NOV. 26...	280	.3	1140	530	330	3.6	1850	8.2	10.0
DEC. 31...	500	.4	1900	850	630	4.8	2970	8.2	8.5
JAN. 31...	590	.7	2100	1000	780	4.7	3260	8.1	8.5
FEB. 04...	610	.5	2250	1100	870	5.0	3340	8.0	8.5
MAR. 18...	570	.5	2130	960	730	5.3	3416	8.3	13.0
APR. 28...	710	.5	2580	1100	970	5.9	3930	8.2	24.0
MAY 31...	280	.3	1030	480	350	3.4	1760	7.7	20.5
JUNE 10...	250	.3	815	400	290	2.8	1420	7.7	27.0
JULY 24...	47	.3	285	170	70	1.0	493	8.0	27.0
AUG. 27...	310	--	1320	620	420	3.9	2050	8.4	27.0
SEP. 30...	430	.9	1840	820	640	5.0	2900	7.5	23.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	28061	863	500	37900	130	9850	130	9850	270
NOV. 1974.....	30312	882	510	41700	130	10600	130	10600	280
DEC. 1974.....	4980	2710	1600	21500	470	6320	500	6720	750
JAN. 1975.....	5531	3050	1800	26900	540	8060	610	9110	830
FEB. 1975.....	10076	2470	1500	40800	420	11400	420	11400	690
MAR. 1975.....	3194	3220	1900	16400	570	4920	670	5780	910
APR. 1975.....	2514	3790	2300	15600	680	4620	850	5770	1100
MAY 1975.....	9178	1840	1100	27300	300	7430	310	7680	520
JUNE 1975.....	2140	1910	1100	6360	310	1790	320	1850	540
JULY 1975.....	13071	812	470	16600	120	4230	120	4230	260
AUG. 1975.....	3216	1090	640	5560	180	1560	170	1480	330
SEPT 1975.....	1300	2450	1500	5260	420	1470	420	1470	680
TOTAL	113573	**	**	262000	**	72200	**	75900	**
WTD.AVG.	311.16	1450	850	**	240	**	250	**	430

BRAZOS RIVER BASIN

08085500 Clear Fork Brazos River at Fort Griffin, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	560	2040	3000	3110	2640	3700	4000	1160	2530	550	1770
2	810	566	2180	3040	3060	2740	3810	4200	1420	2650	510	1940
3	870	627	2170	2950	2950	2730	3710	4270	1700	2670	540	2160
4	935	700	2390	3220	3000	2740	3630	4270	2220	2770	470	2420
5	997	750	2320	2920	3110	2710	3630	4290	2390	2520	450	2560
6	1060	800	2320	2990	2850	2770	3780	4260	2310	2350	560	2690
7	1120	849	2320	3020	2530	2960	3750	4230	2120	2250	620	2850
8	1110	949	2400	3110	2210	3130	3130	4230	2010	2200	740	3020
9	1140	962	2510	2990	2210	3060	3200	4200	1740	2600	870	3170
10	1180	1010	2570	3080	2120	3020	3350	4070	1470	2820	990	3380
11	1190	1090	2740	2860	2030	3070	3580	3860	1700	3070	1090	3390
12	1200	1160	2640	2950	2060	3180	3670	3750	1740	3170	1210	3360
13	1100	1230	2680	3000	1960	3220	4360	3960	1840	3200	1360	3210
14	800	1140	2720	2950	1900	3280	4430	4030	1950	3270	1480	2990
15	900	1180	2810	2860	1950	3370	4150	4120	1760	3330	1570	2690
16	825	1210	2760	2840	2180	3460	4100	5260	1790	3390	1620	2530
17	675	1290	2840	2870	2130	3440	4160	6580	1950	3440	1630	2050
18	619	1340	2890	2840	2110	3410	4250	6220	2090	3470	1670	1700
19	724	1470	2880	2970	2180	3480	4100	5950	2340	3490	1660	1880
20	837	1550	3000	3090	2330	3550	3930	5670	2520	3300	1700	2220
21	1210	1550	2930	3010	2290	3540	3840	5440	2700	2200	1830	2280
22	1200	1690	2910	3080	2300	3530	3720	5410	2760	750	1860	2310
23	1280	1740	2710	3210	2300	3390	3690	4350	2800	535	1880	2330
24	1280	1790	3190	3270	2430	3540	3750	4480	2760	509	1880	2480
25	1310	1840	3190	3360	2470	3540	3830	4570	2700	470	1890	2470
26	1210	1850	3300	3210	2580	3710	3900	3200	2670	496	2010	2590
27	1180	1920	2920	3220	2560	3700	3950	2800	2600	600	2050	2750
28	800	1920	3030	3300	2580	3480	3930	650	2550	415	1950	2890
29	1000	2010	3030	3270	---	3460	3950	1220	2510	395	1940	2890
30	756	2000	3080	3300	---	3620	3960	1720	2520	420	2120	2920
31	774	---	2970	3260	---	3630	---	1760	---	470	1630	---
MONTH	995	1290	2720	3070	2410	3260	3830	4100	2160	2120	1370	2600

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	18.5	6.0	6.5	8.0	14.0	15.0	21.0	21.0	28.5	---	---
2	---	18.5	10.0	7.0	9.0	13.0	13.0	24.0	24.5	29.0	---	28.5
3	---	18.5	6.0	6.0	8.0	10.5	13.0	23.0	24.0	28.0	---	29.0
4	---	---	7.0	6.0	---	12.0	14.5	23.5	26.0	26.5	---	29.0
5	---	---	7.0	7.0	6.5	11.5	14.0	24.0	26.5	28.0	---	25.5
6	---	---	7.0	7.0	4.5	15.0	15.5	22.0	26.5	25.5	---	25.0
7	18.5	14.0	7.0	9.0	3.5	11.5	15.5	23.0	28.5	28.0	---	26.0
8	20.0	14.0	7.0	7.0	5.5	13.0	14.5	25.5	28.0	29.5	---	25.0
9	20.5	14.0	5.5	8.5	4.5	12.0	17.0	22.0	25.5	28.0	---	25.0
10	21.5	14.5	7.0	8.5	7.0	11.5	15.5	23.0	25.0	28.5	---	26.5
11	21.5	14.0	7.0	5.5	8.5	11.0	15.5	26.0	24.0	28.5	---	26.5
12	22.0	14.0	8.5	3.5	9.5	---	14.0	24.0	24.0	26.0	---	22.0
13	21.0	12.0	6.0	0.0	10.0	10.0	14.5	25.5	25.0	26.5	---	20.0
14	16.5	11.0	6.5	4.5	10.0	10.0	14.0	21.5	25.0	26.5	29.5	15.5
15	17.0	11.5	7.0	6.0	9.0	---	15.0	25.5	28.5	25.5	29.5	20.5
16	16.0	11.0	6.0	4.5	9.0	13.0	18.5	23.5	28.5	28.5	26.5	23.0
17	16.5	11.5	5.5	5.5	9.5	---	21.0	21.5	29.5	26.5	26.5	21.5
18	16.5	11.5	7.0	5.5	9.0	---	20.5	26.0	28.0	27.0	26.5	25.0
19	16.5	13.5	6.0	5.5	7.0	15.0	21.0	24.0	28.0	26.0	26.5	23.0
20	18.5	14.5	6.0	6.5	9.5	18.0	19.0	23.5	26.0	26.5	28.5	23.0
21	16.5	10.5	5.5	5.5	10.5	16.5	20.5	26.0	26.5	28.0	29.0	20.0
22	16.5	14.5	6.5	4.5	4.5	16.5	19.5	25.0	25.5	26.5	28.5	19.0
23	18.5	15.0	9.0	5.5	6.5	18.5	21.0	24.0	26.0	27.0	29.5	18.5
24	17.0	13.0	7.0	9.0	9.0	17.0	21.5	23.0	28.0	26.5	30.0	19.5
25	17.0	11.5	7.0	9.0	10.5	18.0	24.5	23.0	29.0	25.5	27.0	17.0
26	17.0	10.0	4.5	10.0	10.0	14.5	23.0	24.0	26.5	26.0	28.5	17.0
27	18.5	11.0	6.0	10.5	11.0	15.5	24.5	24.0	26.5	28.0	26.0	17.0
28	15.5	10.0	7.0	9.0	9.5	13.0	21.5	18.5	26.5	25.5	25.5	21.5
29	18.5	7.0	8.5	9.5	---	10.0	24.5	23.5	28.5	27.0	25.5	19.5
30	19.5	7.0	7.0	9.5	---	13.0	25.5	21.0	30.0	---	26.5	23.0
31	17.0	---	4.5	8.5	---	13.0	---	20.5	---	---	28.5	---
MONTH	18.0	13.0	6.5	7.0	8.0	13.5	18.0	23.5	26.5	27.0	---	22.5

BRAZOS RIVER BASIN

231

08086015 Hubbard Creek near Sedwick, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°36'06", long 99°14'20", Shackelford County, at bridge on county road, 1.6 mile (2.6 km), revised, upstream from Reynolds Creek, 2.2 miles (3.5 km) west of Sedwick, and at mile 51.6 (83.0 km).

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--Periodic discharge measurements: October 1966 to July 1975 (discontinued). Operated as a daily discharge station October 1963 to September 1966. Periodic chemical analyses: October 1963 to September 1965, April 1967 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
01...	1635	15	170	966	19.5
18...	1410	51	140	878	17.5
NOV.					
20...	1450	32	240	1260	15.0
JAN.					
10...	1200	12	380	1780	9.5
FEB.					
19...	1305	22	290	1490	11.5
MAY					
13...	1615	2.0	480	2230	26.0
JULY					
29...	1800	1.5	240	1340	32.0

BRAZOS RIVER BASIN

08086020 Hubbard Creek at U.S. Highway 380 near Moran, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°37'24", Long 99°13'12", Shackelford County, at bridge on U.S. Highway 380 and 6.1 miles (9.8 km) northwest of Moran.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--Periodic discharge measurements: October 1962 to July 1975 (discontinued). Periodic chemical analyses: January 1963 to September 1975 (discontinued). Sediment records: September 1962 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
01...	1530	19	200	1090	21.0
18...	1325	56	160	949	19.0
NOV.					
20...	1535	36	270	1400	15.0
JAN.					
10...	1235	12	460	1960	9.5
FEB.					
19...	1345	24	330	1650	11.5
MAY					
13...	1545	2.7	580	2510	28.5
JULY					
29...	1725	2.1	450	2100	34.5

08086050 Deep Creek at Moran, Tex.

LOCATION.--Lat 32°33'33", long 99°10'11", Shackelford County, at downstream side of bridge on U.S. Highway 380, 0.8 mile (1.3 km) north of Moran, 2.3 miles (3.7 km) upstream from Post Oak Creek, and 10.8 miles (17.4 km) upstream from Hubbard Creek.

DRAINAGE AREA.--235 mi² (609 km²).

PERIOD OF RECORD.--Discharge: October 1962 to September 1975 (discontinued).

Water quality: Chemical analyses: October 1962 to current year. Water temperatures: October 1962 to current year.

GAGE.--Water-stage and specific-conductance recorders. Datum of gage is 1,296.21 ft (395.085 m) above mean sea level.

AVERAGE DISCHARGE.--12 years (1963-75), 20.8 ft³/s (0.589 m³/s), 15,070 acre-ft/yr (18.6 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 6,770 ft³/s (192 m³/s) Oct. 14 (gage height, 15.66 ft or 4.773 m); no flow Aug. 13-15, Aug. 31 to Sept. 1.

Period of record: Maximum discharge, 9,800 ft³/s (278 m³/s) Jan. 21, 1968 (gage height, 18.86 ft or 5.749 m); no flow at times.

Historic: Maximum stage since 1888, 25.6 ft (7.80 m) June 6, 1961, from floodmark. Flood in 1888 reached about the same stage.

Water quality: Current year: Maximum daily specific conductance, 4,340 micromhos Mar. 26; minimum daily, 290 micromhos Oct. 14.

Maximum water temperatures, 33.0°C July 28, 29; minimum, 3.0°C Jan. 12.

Period of record: Maximum daily specific conductance, 12,900 micromhos Apr. 15, 1971; minimum daily, 215 micromhos Oct. 13, 1973.

Maximum water temperatures (1964-75), 37.0°C June 20, 1972; minimum, freezing point Dec. 26, 1966.

REMARKS.--Discharge records good. Recording rain gage located at station. Specific conductance is recorded continuously at this station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	195	5.6	7.7	1020	6.6	3.3	.57	6.0	.28	1.1	0
2	5.6	95	5.2	8.8	439	6.1	3.0	.79	3.5	.30	1.8	.01
3	4.2	66	5.1	11	467	5.6	2.6	17	2.1	17	.49	.01
4	3.3	214	5.1	12	357	5.1	2.2	8.5	1.3	50	.31	.01
5	2.0	123	5.4	10	413	5.1	2.2	4.1	.80	8.0	.19	.02
6	1.4	70	4.2	8.8	165	5.1	2.2	2.6	.52	5.7	.15	.02
7	.94	74	3.7	7.7	85	5.1	3.3	1.8	.32	3.5	.10	.02
8	1.7	88	3.7	6.6	64	4.6	253	1.3	.27	2.1	.09	.02
9	2.0	66	3.7	6.2	48	4.6	52	1.0	.31	1.2	.03	.02
10	1.7	164	4.6	5.2	38	4.1	21	15	140	.82	.02	.01
11	1.7	159	6.6	4.2	36	4.1	11	20	58	.62	.02	.03
12	1.4	80	8.2	4.6	30	6.1	8.3	11	24	.50	.02	.03
13	2.0	54	8.2	4.6	26	6.1	6.4	4.9	13	.34	0	.16
14	3210	40	7.2	5.6	22	5.6	6.3	3.0	7.2	.26	0	.15
15	473	30	6.2	6.2	20	4.6	7.1	1.9	4.8	.19	0	.11
16	110	25	5.6	8.2	18	4.1	6.4	1.3	3.4	.16	.10	.07
17	63	22	4.6	8.8	18	3.7	5.1	1.1	2.2	.13	.27	.05
18	38	20	4.2	8.2	16	3.3	4.3	.84	1.5	.18	2.0	.04
19	25	19	4.2	7.2	15	3.0	3.4	.61	1.0	.16	2.2	.07
20	17	16	3.7	6.6	13	3.0	3.2	1.0	.93	.13	.73	.06
21	14	15	3.3	5.6	12	3.0	2.5	1.6	.77	.15	.27	.12
22	12	13	3.3	5.2	10	3.0	1.7	1.5	.72	.10	.10	.12
23	12	12	3.3	4.6	9.7	3.0	1.4	7.9	.57	.12	7.4	.07
24	13	11	3.0	4.6	9.0	2.6	1.4	5.6	.46	.08	7.7	.05
25	113	9.6	3.0	4.2	9.0	2.6	1.2	3.9	.55	.13	.36	.06
26	49	8.6	4.2	4.2	8.4	2.2	.96	2.4	.97	26	.19	.06
27	91	8.2	5.2	4.2	7.8	1.9	.92	290	.80	6.6	.17	.07
28	764	7.9	6.6	3.7	7.2	19	.77	97	.70	2.0	.10	.07
29	235	6.3	7.7	3.7	---	17	.72	53	.44	.83	.04	.08
30	297	5.6	7.2	3.7	---	6.6	.60	25	.35	.40	.01	.10
31	1300	---	7.7	78	---	4.6	---	12	---	.24	0	---
TOTAL	6871.64	1717.2	159.5	269.9	3383.1	161.1	418.47	598.21	277.48	128.22	25.96	1.71
MEAN	222	57.2	5.15	8.71	121	5.20	13.9	19.3	9.25	4.14	.84	.057
MAX	3210	214	8.2	78	1020	19	253	290	140	50	7.7	.16
MIN	.94	5.6	3.0	3.7	7.2	1.9	.60	.57	.27	.08	0	0
AC-FT	13630	3410	316	535	6710	320	830	1190	550	254	51	3.4

CAL YR 1974 TOTAL 17560.46 MEAN 48.1 MAX 3320 MIN 0 AC-FT 34830
WTR YR 1975 TOTAL 14012.49 MEAN 38.4 MAX 3210 MIN 0 AC-FT 27790

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	1900	15.66	6,770	10-31	0300	11.12	3,510
10-28	1400	7.85	1,720	2- 1	1600	10.23	2,996

BRAZOS RIVER BASIN

08086050 Deep Creek at Moran, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
18...	1145	38	11	55	12	49	5.0	142	0	40
NOV.										
20...	1350	16	10	120	32	170	5.3	228	0	120
DEC.										
31...	1600	8.2	3.1	190	66	340	5.6	242	0	270
JAN.										
10...	1020	5.1	2.2	180	73	340	4.5	244	0	260
FEB.										
04...	1420	285	9.9	61	15	51	5.3	158	0	46
MAR.										
31...	1930	5.1	2.9	200	100	410	6.0	185	0	350
APR.										
30...	2030	.88	3.7	190	81	370	5.4	214	0	350
MAY										
13...	1720	4.1	3.3	130	54	210	6.1	208	0	190
JUNE										
17...	1540	2.4	5.2	76	27	120	6.4	162	0	110
JULY										
31...	2030	.49	5.3	120	43	210	6.0	166	0	190
AUG.										
31...	1945	.07	5.5	120	57	290	5.8	102	0	280

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
18...	110	.2	352	190	70	1.6	653	7.7	17.5
NOV.									
20...	370	.2	940	430	240	3.6	1680	7.8	14.0
DEC.									
31...	730	.3	1720	750	550	5.4	3020	8.0	9.0
JAN.									
10...	710	.6	1690	750	550	5.4	3000	7.9	9.0
FEB.									
04...	100	.4	367	210	85	1.5	674	8.1	9.0
MAR.									
31...	880	.3	2040	910	760	5.9	3620	7.9	14.0
APR.									
30...	740	.3	1850	810	630	5.7	3240	8.2	23.0
MAY									
13...	450	.4	1150	550	380	3.9	2110	7.8	27.0
JUNE									
17...	220	.3	645	300	170	3.0	1190	7.4	31.0
JULY									
31...	430	.3	1090	480	340	4.2	1960	7.9	29.0
AUG.									
31...	570	--	1380	530	450	5.5	2430	7.2	30.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	6871.64	377	200	3690	47	875	34	632	80
NOV. 1974.....	1717.2	993	550	2550	190	895	81	375	220
DEC. 1974.....	159.5	3030	1720	739	740	317	230	100	710
JAN. 1975.....	269.9	2680	1510	1100	640	463	210	151	620
FEB. 1975.....	3383.1	682	370	3380	110	1046	53	484	150
MAR. 1975.....	161.1	3440	1950	847	830	362	310	137	810
APR. 1975.....	418.47	1270	700	796	260	293	100	116	290
MAY 1975.....	598.21	1040	570	927	200	320	90	145	240
JUNE 1975.....	277.48	822	450	340	140	108	78	58	180
JULY 1975.....	128.22	1210	670	233	250	87	94	33	280
AUG. 1975.....	25.96	2400	1350	95	550	39	220	15	560
SEP. 1975.....	1.71	2560	1450	6.9	600	2.7	220	1.0	600
TOTAL.....	14012.49	--	--	14700	--	4800	--	2250	--
WTD.AVG.	38.4	711	390	--	130	--	59	--	160

BRAZOS RIVER BASIN

235

08086050 Deep Creek at Moran, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C): WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	511	2530	1710	401	2800	3620	3520	978	2490	1870	---
2	1130	689	2630	2480	542	2970	3680	3500	1100	2510	1970	2410
3	1210	801	2690	1940	562	3050	3770	2630	1190	635	1930	2410
4	1290	652	2710	2160	674	2980	3900	2740	1300	1310	1940	2420
5	1380	718	2710	2350	564	2920	3920	2980	1420	1690	1950	2430
6	1500	825	2850	2100	686	3080	4000	3160	1480	1320	1980	2420
7	1530	904	2800	1930	867	3120	4070	3230	1530	946	2000	2430
8	1730	983	2880	2080	1000	3200	631	3280	1580	987	2020	2450
9	1870	1200	2900	1850	1110	3200	2080	3390	1620	1040	2040	2450
10	2140	1360	2880	3000	1330	3230	1960	3030	466	1100	2040	2460
11	2230	1010	2910	2060	1470	3420	1790	2800	1000	1170	2050	2460
12	2430	1090	3390	1640	1510	3180	1710	2180	1580	1190	2080	2420
13	2530	1160	2990	3020	1650	3670	1750	2110	1060	1240	---	2350
14	290	1170	2870	2960	1770	3410	1780	2260	987	1280	---	2360
15	345	1250	2850	3240	1910	3360	1830	2330	1030	1310	---	2390
16	475	1340	2890	3320	1860	3460	1920	2520	1120	1330	2080	2420
17	589	1430	2930	2920	2070	3520	1970	2610	1190	1350	2160	2460
18	653	1530	3000	3000	2150	3530	2120	2680	1310	1440	2920	2490
19	832	1630	3110	3080	2170	3810	2210	2730	1420	1420	3480	2480
20	982	1680	3100	3230	2280	3780	2340	2840	1520	1440	3700	2510
21	1100	1740	3260	3110	2360	3920	2440	3010	1620	1470	3770	2530
22	1220	1810	3250	3240	2460	4080	2500	3250	1710	1510	3750	2590
23	1330	1880	3250	3190	2420	4120	2650	3180	1800	1550	2020	2620
24	1410	2050	3370	3190	2480	4150	2760	3210	1860	1590	2400	2680
25	1270	1970	3450	3330	2590	4300	2910	2680	1920	1570	2460	2750
26	1040	2100	3150	3360	2670	4340	2950	2760	2060	935	2430	2800
27	949	2250	3390	3410	2670	4310	3010	532	2120	1990	2420	2830
28	320	2320	3660	3460	2800	3400	3120	665	2230	2030	2400	2860
29	418	2460	3320	3480	---	3680	3260	665	2350	1980	2430	2910
30	594	2440	3140	3350	---	3630	3240	706	2440	1970	2450	2940
31	330	---	3020	2710	---	3620	---	946	---	1960	---	---
MONTH	1170	1430	3030	2770	1680	3520	2660	2520	1500	1480	2400	2540

TEMPERATURE (DEG. C) OF WATER: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	19.0	6.0	7.0	8.0	15.0	17.0	25.0	26.0	31.0	29.0	---
2	21.0	20.0	6.0	7.0	8.0	15.0	15.0	---	26.0	27.0	28.0	29.0
3	22.0	21.0	7.0	7.0	7.0	11.0	15.0	23.0	27.0	27.0	29.0	30.0
4	22.0	16.0	9.0	---	10.0	12.0	16.0	23.0	28.0	29.0	---	28.0
5	24.0	15.0	10.0	8.0	8.0	14.0	17.0	24.0	29.0	30.0	29.0	---
6	25.0	15.0	10.0	8.0	5.0	17.0	17.0	25.0	30.0	---	30.0	26.0
7	20.0	13.0	10.0	10.0	7.0	---	17.0	---	31.0	31.0	29.0	27.0
8	23.0	14.0	8.0	11.0	8.0	15.0	17.0	26.0	28.0	32.0	29.0	28.0
9	23.0	14.0	8.0	12.0	6.0	14.0	18.0	26.0	28.0	31.0	29.0	28.0
10	23.0	14.0	7.0	10.0	10.0	13.0	16.0	26.0	23.0	---	30.0	28.0
11	23.0	14.0	8.0	7.0	11.0	13.0	17.0	26.0	---	29.0	29.0	28.0
12	23.0	---	9.0	3.0	11.0	10.0	15.0	26.0	27.0	30.0	29.0	21.0
13	23.0	14.0	9.0	4.0	---	9.0	16.0	25.0	28.0	30.0	---	18.0
14	18.0	12.0	11.0	6.0	13.0	10.0	16.0	22.0	28.0	30.0	---	19.0
15	17.0	11.0	9.0	7.0	9.0	12.0	19.0	23.0	28.0	28.0	---	24.0
16	19.0	11.0	---	7.0	10.0	15.0	19.0	25.0	29.0	28.0	27.0	---
17	19.0	12.0	8.0	7.0	12.0	15.0	19.0	26.0	---	28.0	27.0	26.0
18	20.0	12.0	8.0	8.0	9.0	16.0	21.0	27.0	---	28.0	30.0	26.0
19	19.0	15.0	10.0	9.0	9.0	18.0	23.0	26.0	---	29.0	29.0	23.0
20	19.0	14.0	10.0	9.0	12.0	19.0	22.0	25.0	---	28.0	31.0	22.0
21	---	13.0	11.0	9.0	13.0	19.0	22.0	27.0	---	30.0	31.0	19.0
22	19.0	15.0	11.0	6.0	8.0	20.0	22.0	---	---	31.0	---	21.0
23	19.0	16.0	11.0	7.0	6.0	19.0	---	24.0	---	31.0	29.0	19.0
24	18.0	13.0	9.0	10.0	7.0	18.0	24.0	24.0	---	30.0	31.0	19.0
25	19.0	11.0	7.0	12.0	11.0	21.0	26.0	26.0	28.0	27.0	30.0	20.0
26	20.0	12.0	6.0	13.0	10.0	19.0	26.0	27.0	32.0	28.0	26.0	21.0
27	19.0	10.0	7.0	14.0	12.0	20.0	25.0	21.0	27.0	31.0	27.0	---
28	18.0	---	8.0	---	13.0	---	24.0	24.0	29.0	33.0	28.0	24.0
29	19.0	9.0	10.0	11.0	---	9.0	25.0	25.0	31.0	33.0	28.0	21.0
30	18.0	9.0	8.0	11.0	---	13.0	23.0	23.0	30.0	---	30.0	23.0
31	19.0	---	9.0	10.0	---	14.0	---	25.0	---	29.0	---	---
MONTH	20.5	13.5	8.5	8.5	9.5	15.0	19.5	25.0	---	29.5	29.0	24.0

BRAZOS RIVER BASIN

08086100 Hubbard Creek near Albany, Tex.

LOCATION.--Lat 32°41'21", long 99°09'52", Shackelford County, on right bank 348 ft (106 m) upstream from bridge on Farm Road 601, 1.8 miles (2.9 km) downstream from Deep Creek, 5.1 miles (8.2 km) upstream from Salt Prong Hubbard Creek, 8.1 miles (13.0 km) southeast of Albany, 28.1 miles (45.2 km) upstream from Hubbard Creek Dam, and at mile 40.7 (65.5 km).

DRAINAGE AREA.--461 mi² (1,194 km²).

PERIOD OF RECORD.--Discharge: February 1962 to September 1975 (discontinued).

Water quality: Chemical analyses: February 1962 to current year. Water temperatures: February 1962 to current year. Sediment records: January 1966 to September 1972.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,224.1 ft (373.11 m) above mean sea level (Texas Highway Department survey). Prior to Mar. 20, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 45.6 ft³/s (1.291 m³/s), 33,040 acre-ft/yr (40.7 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 11,800 ft³/s (334 m³/s) Oct. 14 (gage height, 13.18 ft or 4.017 m); no flow Aug. 13-15, Sept. 2-30.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) May 13, 1965 (gage height, 16.17 ft or 4.929 m); no flow at times.

Historic: Maximum stages since 1897, about 26 ft (7.9 m) in 1899 and 20.3 ft (6.19 m) in June 1961.

Water quality: Current year: Maximum daily specific conductance, 3,520 micromhos May 16; minimum daily, 333 micromhos Oct. 31.

Maximum water temperatures, 31.0°C June 7, July 21, 22, Aug. 21; minimum, 5.5°C Jan. 13, 14, 16.

Period of record: Maximum daily specific conductance, 4,410 micromhos Apr. 6, 1962; minimum daily, 204 micromhos Sept. 8, 9, 1967.

REMARKS.--Discharge records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	497	25	25	1,460	27	18	6.4	25	.81	.98	.01
2	28	241	25	28	861	26	14	5.1	22	.46	10	0
3	20	205	25	33	979	24	13	7.9	11	.49	16	0
4	14	1,150	22	35	603	22	12	22	8.6	34	6.0	0
5	10	368	19	30	797	22	11	15	7.0	17	2.2	0
6	8.3	201	19	27	310	21	11	11	5.6	16	.95	0
7	5.6	217	19	23	196	20	11	8.3	4.7	7.7	.49	0
8	4.4	237	17	22	152	20	308	5.4	6.2	5.0	.28	0
9	3.6	173	16	19	117	16	97	5.1	5.5	3.0	.21	0
10	3.4	611	17	20	96	15	36	5.4	100	2.0	.14	0
11	3.8	439	32	20	88	15	24	20	106	1.3	.08	0
12	4.0	218	34	18	74	21	16	26	41	.73	.02	0
13	4.3	152	32	17	64	21	12	12	27	.73	0	0
14	5,920	115	25	18	59	20	12	8.3	17	.47	0	0
15	2,120	93	22	24	53	18	11	6.8	11	.33	0	0
16	297	83	21	27	53	17	13	5.1	8.9	.19	.20	0
17	154	77	17	27	50	16	11	4.4	8.1	.13	2.4	0
18	108	65	16	27	49	15	9.6	3.8	5.5	.13	7.5	0
19	76	59	16	26	44	14	7.9	3.5	3.7	.10	.95	0
20	56	55	15	23	43	13	7.9	5.4	3.0	.20	2.3	0
21	43	58	13	19	43	12	7.2	6.8	2.6	.19	2.3	0
22	38	50	13	17	38	12	6.8	7.5	3.1	.16	1.0	0
23	31	47	13	16	38	12	6.1	7.9	2.7	.11	.53	0
24	45	41	13	16	36	11	4.8	38	2.4	.08	7.5	0
25	232	37	12	16	36	11	4.1	21	3.7	.09	7.7	0
26	120	33	16	16	34	10	3.2	9.6	1.8	22	2.0	0
27	140	33	23	15	32	11	3.8	2,370	1.2	23	1.1	0
28	2,110	31	22	13	29	71	3.8	318	1.1	10	.58	0
29	616	29	22	12	-----	41	3.5	261	2.4	5.1	.30	0
30	715	26	22	12	-----	27	3.2	86	1.6	2.7	.16	0
31	2,930	-----	24	48	-----	22	-----	36	-----	1.3	.06	-----
TOTAL	15,894.4	5,641	627	689	6,434	623	701.9	3,419.8	449.4	155.50	73.93	.01
MEAN	513	188	20.2	22.2	230	20.1	23.4	110	15.0	5.02	2.38	.0003
MAX	5,920	1,150	34	48	1,460	71	308	2,370	106	34	16	.01
MIN	3.4	26	12	12	29	10	3.2	3.5	1.1	.08	0	0
AC-FT	31,530	11,190	1,240	1,370	12,760	1,240	1,390	6,780	891	308	147	.02

CAL YR 1974 TOTAL 48,010.24 MEAN 132 MAX 5,920 MIN 0 AC-FT 95,230
WTR YR 1975 TOTAL 34,708.94 MEAN 95.1 MAX 5,920 MIN 0 AC-FT 68,850

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	1700	13.18	11,800	2- 1	1930	4.88	3,520
10-28	1200	5.67	4,160	5-27	1300	8.95	7,250
10-31	0200	6.93	5,140				

08086100 Hubbard Creek near Albany, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 01...	1850	31	14	85	16	64	4.6	190	0	42
NOV. 21...	1100	51	10	120	30	150	4.1	236	0	95
DEC. 01...	1740	23	10	150	42	200	4.7	248	0	140
JAN. 09...	1500	22	6.3	180	63	280	3.4	241	0	190
FEB. 04...	1205	683	10	66	16	58	4.8	158	0	46
MAR. 01...	1845	31	6.8	150	49	230	4.2	222	0	170
APR. 07...	1450	15	2.3	200	67	390	5.0	182	0	310
MAY 28...	1235	245	7.3	52	12	44	5.6	130	0	37
JUNE 17...	1140	8.5	8.2	87	29	110	5.9	159	0	99
JULY 01...	2120	3.5	12	120	38	170	5.8	187	0	140
AUG. 01...	1850	1.1	8.5	150	59	280	5.8	154	0	230

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 01...	160	--	479	280	120	1.7	909	8.2	21.0
NOV. 21...	330	.2	856	420	230	3.2	1600	8.1	14.0
DEC. 01...	450	.3	1120	550	340	3.7	2040	8.1	6.5
JAN. 09...	660	.6	1500	710	510	4.6	2750	7.8	10.0
FEB. 04...	130	.5	409	230	100	1.7	762	7.9	8.5
MAR. 01...	510	.3	1230	580	390	4.2	2300	8.0	14.0
APR. 07...	830	.3	1890	780	630	6.1	3350	7.9	17.0
MAY 28...	87	.2	309	180	73	1.4	590	7.6	21.5
JUNE 17...	250	.3	668	340	210	2.6	1260	7.5	29.5
JULY 01...	380	.3	958	460	300	3.5	1740	8.0	28.0
AUG. 01...	610	--	1420	620	490	4.9	2490	7.3	28.5

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDIMENT DIS- CHARGE (T/DAY)
FEB. 04...	1200	683	8.5	105	194
MAY 27...	1820	1990	21.5	3650	19600

08086100 Hubbard Creek near Albany, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT. 1974.....	15894.4	490	260	11300	71	3060	37	1580	160
NOV. 1974.....	5641	922	490	7480	170	2530	55	830	260
DEC. 1974.....	627	2450	1350	2280	560	945	170	287	610
JAN. 1975.....	689	2740	1500	2790	630	1180	190	363	680
FEB. 1975.....	6434	1010	540	9350	190	3220	58	1010	280
MAR. 1975.....	623	2580	1400	2360	600	1010	180	303	640
APR. 1975.....	701.9	2270	1220	2310	510	969	140	272	570
MAY 1975.....	3419.8	744	400	3650	130	1200	56	519	220
JUNE 1975.....	449.4	1130	600	724	220	266	86	105	310
JULY 1975.....	155.50	2230	1260	530	530	223	210	87	560
AUG. 1975.....	73.93	2340	1330	266	560	113	220	44	590
SEP. 1975.....	.01	2600	1490	.04	640	.02	240	.01	650
TOTAL.....	34708.94	--	--	43000	--	14700	--	5400	--
WTD.AVG.	95.1	855	460	--	160	--	58	--	240

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	909	532	2040	2740	1270	2300	2870	2600	950	1740	2490	2600
2	970	673	2050	2780	667	2220	2950	2600	1010	1730	2150	---
3	1030	822	2070	3070	655	2300	2890	2600	1060	1730	2310	---
4	1050	565	2170	2700	762	2330	3120	2590	1110	1550	2400	---
5	1090	700	2070	2970	748	2350	3260	2720	1160	2270	2360	---
6	1110	787	2130	2790	783	2380	3330	2720	1190	2740	2410	---
7	1120	1010	2240	2690	880	2450	3350	2720	1290	2850	2490	---
8	1180	1160	2280	2590	995	2520	2350	2760	1290	2810	2450	---
9	1200	1080	2300	2750	1130	2480	1680	2760	1260	2740	2480	---
10	1260	1060	2350	2790	1210	2550	1510	2770	932	2680	2500	---
11	1270	991	2320	2730	1300	2540	1590	2640	1260	2650	2490	---
12	1310	991	2340	2790	1410	2630	1780	3000	1000	2670	2520	---
13	1310	1010	2430	2700	1570	2640	2030	3420	1150	2680	---	---
14	504	1120	2770	2700	1580	2550	2140	3450	1150	2680	---	---
15	364	1240	2450	2620	1630	2650	2240	3510	1150	2670	---	---
16	516	1360	2520	2580	1670	2630	2290	3520	1260	2680	2550	---
17	668	1320	2550	2670	1750	2920	2350	3510	1260	2680	2400	---
18	793	1420	2490	2640	1990	2970	2320	3490	1290	2670	2360	---
19	876	1480	2530	2670	1940	2880	2390	3450	1300	2660	2370	---
20	970	1530	2720	2680	1840	2770	2410	3420	1420	2640	2380	---
21	1050	1600	2720	2670	1880	2780	2410	3410	1350	2630	2390	---
22	1110	1680	2720	2640	2000	2860	2470	3400	1440	2650	2380	---
23	1180	1730	2630	2690	2040	2880	2510	1960	1420	2660	2390	---
24	1240	1770	2670	2820	2100	3020	2540	1920	1440	2640	2380	---
25	1600	1800	2660	2740	2100	3020	2610	2090	1510	2620	2390	---
26	1240	1850	2740	2720	2180	3070	2600	2070	1620	2250	2400	---
27	1030	1840	2720	2730	2200	3120	2580	482	1620	2180	2370	---
28	442	1920	2590	2680	2220	2070	2580	590	1580	2350	2480	---
29	445	1920	2650	2710	---	2720	2590	860	1680	2420	2500	---
30	551	1950	2880	2770	---	3150	2560	844	1680	2490	2520	---
31	333	---	2790	2780	---	3090	---	835	---	2480	2510	---
MONTH	959	1300	2470	2730	1520	2670	2480	2540	1290	2480	2420	---

08086100 Hubbard Creek near Albany, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	19.0	6.5	8.0	7.0	14.0	15.0	24.0	25.5	28.0	28.5	
2	20.5	20.0	7.0	8.0	8.0	14.5	14.0	24.0	26.5	27.0	28.0	
3	20.5	20.0	6.0	8.0	8.0	12.0	14.0	23.0	26.5	26.5	28.5	
4	20.5	15.5	8.5	7.0	9.5	13.5	14.5	22.0	27.0	26.0	27.0	
5	21.5	15.0	8.0	7.0	8.5	14.0	15.0	21.5	29.0	29.5	28.5	
6	20.5	14.0	8.5	8.0	6.0	15.5	16.0	23.5	30.5	29.5	30.0	
7	20.0	14.0	11.0	8.0	6.0	14.5	16.0	23.5	31.0	30.5	29.5	
8	23.5	14.0	8.5	8.5	6.5	14.5	16.5	25.0	28.0	30.5	30.5	
9	23.0	14.0	8.5	9.0	6.0	14.5	16.0	25.5	28.0	29.5	---	
10	23.5	13.0	8.0	8.5	6.5	13.0	16.0	26.0	25.5	27.0	---	
11	22.0	14.0	8.0	9.0	9.0	13.0	15.5	24.5	23.5	28.5	---	
12	23.0	13.5	9.0	6.5	9.5	11.5	15.0	25.0	24.0	28.5	---	
13	21.0	13.5	9.0	5.5	10.5	11.0	15.5	23.5	23.5	28.5	---	
14	18.0	12.0	8.5	5.5	12.0	11.0	15.5	22.0	29.0	29.5	---	
15	16.5	11.0	8.5	6.0	10.5	11.5	18.5	22.0	26.5	29.0	---	
16	18.0	11.0	8.0	5.5	9.5	12.0	18.5	23.5	29.0	28.0	---	
17	17.0	11.5	8.0	6.5	9.5	14.0	22.0	21.0	28.5	28.0	28.5	
18	18.5	14.0	8.0	7.0	9.5	14.5	18.5	26.5	28.5	28.5	30.0	
19	18.5	14.0	8.5	6.5	9.5	16.5	21.0	25.5	28.5	30.5	30.0	
20	18.5	14.0	8.5	8.0	11.5	18.5	20.5	25.5	28.0	29.0	29.5	
21	18.5	14.5	8.5	7.0	12.0	18.5	20.5	26.5	25.5	31.0	31.0	
22	18.5	15.0	9.0	6.5	9.5	18.5	21.0	26.0	24.5	31.0	30.0	
23	19.5	16.0	10.0	7.0	9.0	17.0	20.5	23.5	29.5	30.5	30.5	
24	18.5	14.0	8.0	8.0	10.0	17.0	24.0	23.0	29.0	28.0	29.0	
25	19.0	13.0	7.0	9.5	9.5	18.5	26.0	26.0	29.0	27.0	29.5	
26	19.0	13.0	8.0	11.0	9.5	18.0	24.5	26.5	28.5	27.0	29.0	
27	19.5	12.0	8.0	11.5	9.0	18.0	24.5	24.0	28.5	30.0	29.5	
28	17.0	13.0	8.0	10.5	13.0	11.0	24.5	23.0	28.5	30.0	28.5	
29	19.5	9.0	8.0	10.5	---	9.5	25.0	24.0	30.5	---	---	
30	20.0	8.5	8.0	10.5	---	9.5	23.0	22.0	29.0	30.0	---	
31	18.5	---	9.5	10.0	---	12.0	---	23.0	---	29.5	---	
MONTH	20.0	14.0	8.5	8.0	9.0	14.0	19.0	24.0	27.5	29.0	---	

BRAZOS RIVER BASIN

08086120 Salt Prong Hubbard Creek at U.S. Highway 380 near Albany, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°41'01", long 99°16'05", Shackelford County, at dam downstream from U.S. Highway 380, 2.0 miles (3.2 km) upstream from North Fork Hubbard Creek, and 3.2 miles (5.1 km) southeast of Albany.

DRAINAGE AREA.--65.2 mi² (168.9 km²).

PERIOD OF RECORD.--Periodic discharge measurements: October 1962 to September 1963, May 1969 to July 1975 (discontinued). Operated as a daily discharge station October 1963 to September 1968. Periodic chemical analyses: October 1962 to September 1968, October 1969 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
01...	1455	9.0	99	702	20.5
18...	1410	26	74	596	21.5
NOV.					
20...	1630	19	130	888	17.0
JAN.					
10...	1310	8.9	190	1160	9.5
FEB.					
19...	1420	10	190	1110	11.5
MAY					
13...	1510	.87	470	2040	29.5
JULY					
29...	1640	.08	520	2160	35.0

08086130 Cook Creek near Albany, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°44'53", long 99°20'06", Shackelford County, at first crossing of Farm Road 1084 and 2.7 miles (4.3 km) northwest of Albany.

DRAINAGE AREA.--10.7 mi² (27.7 km²).

PERIOD OF RECORD.--Periodic discharge measurements: October 1962 to July 1975 (discontinued). Periodic chemical analyses: December 1961 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
01...	1230	1.3	1500	4770	19.5
17...	0915	1.7	1300	4240	15.0
NOV.					
20...	1715	2.4	1500	4820	17.0
JAN.					
09...	1140	.95	2100	6690	10.0
FEB.					
19...	1730	1.5	1700	5540	13.5
MAY					
13...	0950	.05	2600	8060	23.0
JULY					
29...	--	.00	--	--	--

BRAZOS RIVER BASIN

08086150 North Fork Hubbard Creek near Albany, Tex.

LOCATION.--Lat 32°42'27", long 99°16'29", Shackelford County, on downstream side of bridge on U.S. Highway 380, 1.7 miles (2.7 km) south-east of Albany, and 2.0 miles (3.2 km) upstream from Salt Prong Hubbard Creek.

DRAINAGE AREA.--38.4 mi² (99.5 km²).

PERIOD OF RECORD.--Discharge: November 1962 to current year.

Water quality: Chemical analyses: November 1962 to current year. Water temperatures: November 1962 to current year. Sediment records: October 1967 to September 1969.

GAGE.--Water-stage recorder. Datum of gage is 1,340.54 ft (408.597 m) above mean sea level.

AVERAGE DISCHARGE.--12 years (1963-75), 4.84 ft³/s (0.137 m³/s), 3,510 acre-ft/yr (4.33 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 4,310 ft³/s (122 m³/s) Oct. 30 (gage height, 11.30 ft or 3.444 m); minimum, 0.03 ft³/s (0.001 m³/s) Sept. 12.

Period of record: Maximum discharge, 9,520 ft³/s (270 m³/s) May 5, 1969 (gage height, 19.22 ft or 5.858 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of 4,570 ft³/s (129 m³/s) and contracted-opening measurement of 9,520 ft³/s (270 m³/s); no flow at times.

Historic: Flood information begins in 1940. Floods of June 10, 1940, and July 18, 1953, reached stages of about 21 ft (6.4 m), from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 7,630 micromhos Sept. 13; minimum daily, 662 micromhos Oct. 30. Maximum water temperatures, 32.0°C Aug. 23; minimum, 4.0°C Jan. 12.

Period of record: Maximum daily specific conductance, 9,750 micromhos Sept. 28-30, 1968; minimum daily, 408 micromhos Sept. 16, 1974. Maximum water temperatures (1962-69, 1974-75), 33.0°C July 11, 1964; minimum, freezing point Jan. 12, 1963, Jan. 29, 1966.

REMARKS.--Discharge records good. No diversion above station. Rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	63	5.6	9.8	22	5.0	1.9	.75	1.2	.33	.19	.09
2	17	43	5.7	16	25	4.9	1.3	.76	1.1	.34	.24	.07
3	15	35	5.6	16	33	4.5	1.3	.75	.89	.60	.34	.06
4	12	75	5.6	9.9	51	4.3	1.4	.79	.89	2.2	.17	.06
5	10	32	5.6	7.7	53	4.4	1.4	.86	.81	.68	.13	.04
6	8.7	26	5.3	7.3	22	4.3	1.4	.77	.81	.40	.13	.04
7	7.4	35	5.2	6.6	19	4.0	1.5	.75	.74	.34	.13	.05
8	7.3	26	4.9	6.1	17	3.9	2.1	.74	1.5	.42	.12	.05
9	6.8	25	4.7	6.0	12	3.6	2.3	.71	.97	.47	.12	.04
10	6.0	68	11	5.1	13	3.2	1.8	.79	2.0	.49	.10	.05
11	5.4	32	18	5.1	13	3.3	1.5	.95	.89	.41	.10	.05
12	5.1	24	9.9	4.8	10	3.6	1.3	.92	.67	.33	.10	.05
13	8.7	22	7.1	5.3	9.5	3.3	1.3	.65	.67	.28	.10	.16
14	134	17	5.8	7.5	9.2	3.4	1.5	.64	.61	.25	.10	.83
15	31	16	5.5	7.4	8.3	3.3	1.3	.64	.56	.17	1.2	.42
16	16	17	5.0	5.8	9.9	3.0	1.3	.58	.56	.15	2.4	.27
17	12	16	5.0	4.9	10	2.9	1.2	.59	.51	.18	.54	.21
18	9.6	15	4.8	4.8	8.3	2.6	.93	.59	.51	.23	.33	.20
19	7.9	14	4.7	4.3	7.6	2.6	.91	.94	.45	.23	.25	.22
20	6.4	12	4.6	4.0	7.6	2.5	.95	.72	.45	1.5	.20	.19
21	5.7	11	4.3	3.7	7.7	2.2	.92	.66	.55	.68	.15	.31
22	5.3	11	4.3	3.4	6.9	2.1	.92	.58	.66	.27	.11	.35
23	5.1	10	4.4	3.2	7.2	1.8	.91	31	.54	.20	.09	.28
24	15	8.7	4.0	3.5	7.9	1.7	.89	4.0	.45	.15	.07	.21
25	20	8.2	4.0	3.6	6.8	1.9	.85	2.3	.41	.28	.06	.19
26	12	8.1	7.6	3.4	5.6	2.1	.84	1.4	.38	1.0	.08	.20
27	13	8.2	8.1	3.1	5.3	1.9	.83	17	.34	.65	.18	.18
28	211	8.1	6.8	2.7	5.2	2.7	.86	5.0	.33	.44	.13	.18
29	44	6.8	6.0	2.6	-----	2.8	.80	8.2	.30	.28	.11	.17
30	620	6.0	5.6	2.6	-----	2.2	.71	2.1	.31	.23	.11	.18
31	237	-----	12	2.4	-----	2.0	-----	1.3	-----	.20	.10	-----
TOTAL	1,534.4	699.1	196.7	178.6	413.0	96.0	37.12	88.43	21.06	14.38	8.18	5.40
MEAN	49.5	23.3	6.35	5.76	14.8	3.10	1.24	2.85	.70	.46	.26	.18
MAX	620	75	18	16	53	5.0	2.3	31	2.0	2.2	2.4	.83
MIN	5.1	6.0	4.0	2.4	5.2	1.7	.71	.58	.30	.15	.06	.04
AC-FT	3,040	1,390	390	354	819	190	74	175	42	29	16	11

CAL YR 1974 TOTAL 5,316.02 MEAN 14.6 MAX 1,090 MIN 0 AC-FT 10,540
WTR YR 1975 TOTAL 3,292.37 MEAN 9.02 MAX 620 MIN .04 AC-FT 6,530

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	1130	4.29	387	11-10	0830	3.31	119
10-28	0630	5.23	719	2-4	2130	3.35	128
10-30	1930	11.30	4,310	5-23	0600	3.37	106
11-4	0430	3.58	184				

BRAZOS RIVER BASIN

243

08086150 North Fork Hubbard Creek near Albany, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
17...	1430	11	11	170	37	310	4.2	199	0	48
NOV.										
30...	1520	6.0	9.3	290	77	570	4.3	205	0	110
DEC.										
31...	1230	8.3	8.9	330	84	660	3.8	191	0	130
JAN.										
10...	1455	4.9	7.2	300	83	570	2.8	201	0	120
FEB.										
04...	0945	34	9.2	190	46	340	3.9	202	0	75
MAR.										
31...	1830	1.6	5.4	330	99	640	3.8	168	0	150
APR.										
07...	1605	1.8	5.1	340	100	680	4.6	145	0	170
MAY										
13...	1430	.67	6.2	400	140	710	4.5	189	0	190
JUNE										
17...	1410	.52	8.3	270	99	470	4.8	180	0	140
JULY										
31...	1900	.37	14	330	120	660	4.8	148	0	170
AUG.										
31...	2000	.14	14	360	130	680	4.8	167	0	180
SEP.										
09...	1210	.05	15	310	130	650	4.7	169	0	180

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
17...	770	.3	1450	580	410	5.6	2740	7.9	12.5
NOV.									
30...	1400	.3	2560	1000	870	7.7	4730	7.8	8.0
DEC.									
31...	1700	.3	3010	1200	1000	8.4	5530	7.7	10.0
JAN.									
10...	1400	.2	2580	1100	930	7.5	4870	7.6	9.0
FEB.									
04...	820	.5	1580	660	500	5.7	2960	7.4	8.5
MAR.									
31...	1700	.3	3010	1200	1100	7.9	5710	7.8	14.0
APR.									
07...	1700	.3	3070	1300	1100	8.3	5880	7.7	16.5
MAY									
13...	1900	.3	3440	1600	1400	7.8	6460	7.7	27.0
JUNE									
17...	1300	.3	2380	1100	930	6.2	4490	7.3	30.5
JULY									
31...	1800	.3	3170	1300	1200	7.9	5820	8.0	30.0
AUG.									
31...	1800	--	3250	1400	1300	7.8	5910	7.8	28.0
SEP.									
09...	1600	.5	2970	1300	1200	7.8	5820	7.7	27.0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
FEB.					
04...	0945	34	8.5	27	2.5

BRAZOS RIVER BASIN

08086150 North Fork Hubbard Creek near Albany, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG)
OCT. 1974.....	1534.4	1420	740	3080	380	1550	34	139	320
NOV. 1974.....	699.1	2760	1470	2770	790	1490	52	98	600
DEC. 1974.....	196.7	5170	2800	1490	1560	831	130	71	1130
JAN. 1975.....	178.6	5090	2750	1330	1530	740	120	60	1110
FEB. 1975.....	413.0	3530	1890	2110	1030	1150	77	86	770
MAR. 1975.....	96.0	5430	2870	744	1600	415	140	37	1200
APR. 1975.....	37.12	6060	3170	318	1780	178	160	16	1370
MAY 1975.....	88.43	4130	2200	525	1210	289	100	25	890
JUNE 1975.....	21.06	4610	2470	141	1370	78	120	6.9	1000
JULY 1975.....	14.38	5830	3090	120	1730	67	160	6.4	1310
AUG. 1975.....	8.18	5960	3150	69	1770	39	170	3.8	1350
SEP. 1975.....	5.40	6030	3190	46	1790	26	170	2.5	1370
TOTAL.....	3292.37	--	--	12700	--	6850	--	552	--
WTD. AVG.	9.02	2690	1430	--	770	--	62	--	590

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3220	1810	4750	5230	5560	4870	6020	6180	2890	6030	5750	5850
2	3220	2560	4830	5280	4400	4870	5980	6280	3420	6150	5630	5940
3	3480	2750	4890	4760	3290	4920	6170	6270	3880	6260	5560	6010
4	3840	1610	6400	4620	2960	4920	6170	6270	3860	6100	5660	5960
5	3810	2160	5060	4620	2090	5180	5910	6310	3820	6220	5690	5930
6	4000	2750	5090	4650	2360	5180	5890	6300	3990	6280	5730	5910
7	4290	2740	5120	4680	2720	5260	5880	6290	4230	6300	5750	5890
8	4270	2710	5180	4700	3400	5260	5960	6270	4410	6200	5690	5910
9	4360	2890	5220	4870	3380	5250	6020	6300	4650	6150	5720	5940
10	4450	2190	5220	4870	3530	5260	5980	6400	5480	6140	5800	5930
11	4530	2310	5060	4960	3620	5430	5980	6350	5420	6100	5890	5970
12	4230	2620	5140	4950	3640	5620	6120	6370	5260	6080	5800	6120
13	4290	2960	5120	5170	3780	5620	6120	6290	4610	6000	5890	7630
14	1420	4700	5120	5170	3900	5570	6100	6370	4790	5940	5910	6450
15	1910	2870	5120	5230	4030	5540	6080	6410	4660	5830	5690	5950
16	2450	3440	5060	5260	3970	5660	6050	6370	4520	5740	6060	5670
17	2740	3520	4890	5260	4070	5660	5980	6410	4490	5690	6240	5700
18	3030	3600	5040	5210	4150	5790	6010	6410	4570	5650	6220	5720
19	3450	3710	5080	5370	4230	5790	5980	6330	4720	5790	6210	5700
20	3860	3780	5100	5330	4340	5680	6080	6200	4850	5710	6200	5730
21	3840	3880	5150	5330	4400	5670	6120	6240	4870	5730	6220	5750
22	3930	3880	5360	5370	4450	5860	6120	6270	5150	5800	6240	5920
23	4000	4020	5340	5570	4400	5910	6080	4290	5260	5860	6300	5970
24	4030	4150	5270	5510	4550	5890	6200	4000	5360	5890	6320	6010
25	4020	4220	5280	5460	4630	5860	6160	3990	5450	6120	6270	5990
26	3650	4310	4880	5430	4630	5830	6200	4960	5580	4460	6190	5950
27	3720	4420	4790	5540	4720	5880	6200	3520	5670	4950	6130	5960
28	1050	4450	5340	5570	4850	5910	6270	3030	5510	5430	6060	5970
29	1960	4640	5370	5590	---	5750	6270	1950	5420	5940	6030	5970
30	662	4730	5450	5600	---	5620	6310	2070	6200	5770	6010	6240
31	1110	---	5530	5620	---	5710	---	2260	---	5820	5940	---
MONTH	3320	3350	5170	5190	3930	5520	6080	5450	4770	5880	5960	5990

08086150 North Fork Hubbard Creek near Albany, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	18.0	8.0	10.0	11.0	17.0	17.0	24.0	---	30.0	---	27.0
2	---	21.0	---	9.0	9.0	16.0	15.0	26.0	---	---	30.0	29.0
3	---	---	10.0	9.0	9.0	12.0	15.0	25.0	26.0	29.0	31.0	30.0
4	---	16.0	13.0	10.0	10.0	14.0	14.0	26.0	26.0	25.0	31.0	---
5	---	15.0	12.0	8.0	8.0	17.0	15.0	25.0	25.0	27.0	29.0	27.0
6	---	15.0	13.0	10.0	7.0	19.0	---	---	28.0	29.0	29.0	24.0
7	---	14.0	12.0	---	7.0	15.0	---	---	27.0	31.0	30.0	27.0
8	---	14.0	---	12.0	11.0	17.0	17.0	24.0	27.0	---	29.0	---
9	---	14.0	9.0	13.0	10.0	---	16.0	---	26.0	29.0	30.0	---
10	---	15.0	9.0	10.0	---	14.0	16.0	26.0	27.0	28.0	30.0	---
11	---	15.0	10.0	9.0	12.0	---	17.0	---	26.0	28.0	29.0	---
12	---	14.0	11.0	4.0	13.0	14.0	13.0	25.0	28.0	30.0	29.0	---
13	23.0	15.0	12.0	5.0	15.0	13.0	14.0	24.0	28.0	---	29.0	18.0
14	17.0	14.0	9.0	8.0	14.0	12.0	---	---	27.0	28.0	---	18.0
15	17.0	12.0	10.0	---	12.0	13.0	19.0	24.0	---	29.0	27.0	---
16	18.0	12.0	---	9.0	11.0	15.0	18.0	25.0	29.0	---	27.0	27.0
17	---	13.0	9.0	10.0	12.0	17.0	22.0	26.0	27.0	29.0	26.0	25.0
18	21.0	---	10.0	11.0	11.0	16.0	20.0	26.0	28.0	28.0	30.0	26.0
19	---	17.0	---	9.0	---	17.0	24.0	26.0	---	---	30.0	23.0
20	18.0	16.0	10.0	9.0	13.0	18.0	24.0	27.0	27.0	28.0	29.0	---
21	20.0	15.0	10.0	9.0	---	17.0	23.0	26.0	26.0	30.0	30.0	21.0
22	19.0	16.0	14.0	7.0	9.0	17.0	24.0	25.0	---	30.0	30.0	24.0
23	19.0	---	15.0	11.0	7.0	18.0	23.0	24.0	29.0	31.0	32.0	---
24	18.0	13.0	10.0	---	12.0	---	25.0	25.0	30.0	29.0	---	20.0
25	19.0	13.0	8.0	12.0	15.0	18.0	24.0	26.0	---	28.0	---	---
26	20.0	---	---	13.0	13.0	19.0	24.0	25.0	29.0	29.0	27.0	21.0
27	19.0	12.0	9.0	16.0	14.0	---	22.0	23.0	28.0	---	24.0	20.0
28	18.0	13.0	10.0	---	15.0	13.0	25.0	25.0	30.0	30.0	27.0	---
29	21.0	---	12.0	10.0	---	---	26.0	25.0	30.0	31.0	---	24.0
30	22.0	8.0	---	---	---	12.0	23.0	24.0	29.0	31.0	26.0	24.0
31	19.0	---	10.0	10.0	---	14.0	---	25.0	---	30.0	28.0	---
MONTH	---	14.5	10.5	9.5	11.0	15.5	20.0	25.0	27.5	29.0	29.0	---

BRAZOS RIVER BASIN

08086200 Salt Prong Hubbard Creek near Albany, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°42'02", long 99°12'42", Shackelford County, at bridge on Farm Road 601, 3.4 miles (5.5 km), revised, downstream from North Prong Hubbard Creek, 4.9 miles (7.9 km) upstream from Hubbard Creek, and 5.2 miles (8.4 km) southeast of Albany.

DRAINAGE AREA.--116 mi² (300 km²).

PERIOD OF RECORD.--Periodic discharge measurements: December 1963 to July 1975 (discontinued). Operated as a daily discharge station February 1962 to September 1963. Periodic water-quality data: October 1964 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
01...	1310	19	--	1850	20.5
17...	1040	45	220	1080	17.0
NOV.					
21...	0930	28	530	2140	13.5
JAN.					
09...	1250	12	680	2690	12.0
FEB.					
19...	1655	16	640	2590	11.5
MAY					
13...	1055	2.1	980	3660	24.5
JULY					
29...	1445	.58	920	3500	34.0

BRAZOS RIVER BASIN

247

08086210 Snailum Creek near Albany, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°43'27", long 99°10'55", Shackelford County, at low-water crossing on county road, 0.6 mile (1.0 km) upstream from Salt Prong Hubbard Creek, and 6.6 miles (10.6 km) east of Albany.

DRAINAGE AREA.--25.5 mi² (66.0 km²).

PERIOD OF RECORD.--Periodic discharge measurements: October 1962 to September 1963, January 1968 to July 1975 (discontinued). Operated as a daily discharge station October 1963 to September 1966. Periodic chemical analyses: October 1962 to September 1975 (discontinued). Sediment records: October 1967 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
01...	1400	1.1	860	2950	22.5
17...	1005	3.2	280	1220	15.5
NOV.					
21...	0855	1.3	1100	3660	12.5
JAN.					
09...	1215	.75	1200	4130	11.0
FEB.					
19...	1630	.96	1100	3930	11.5
MAY					
13...	--	.00	--	--	--
JULY					
29...	--	.00	--	--	--

BRAZOS RIVER BASIN

08086212 Hubbard Creek below Albany, Tex.

LOCATION.--Lat 32°43'58", long 99°08'25", Shackelford County, on left bank 0.5 mile (0.8 km) downstream from Salt Prong Hubbard Creek, 2.8 miles (4.5 km) upstream from Newcomb Creek, 4.5 miles (7.2 km) upstream from U.S. Highway 180, 9.1 miles (14.6 km) east of Albany, and at mile 35.1 (56.5 km).

DRAINAGE AREA.--621 mi² (1,608 km²).

PERIOD OF RECORD.--Discharge: October 1966 to current year.

Water quality: Chemical analyses: October 1966 to current year. Water temperatures: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,184.99 ft (361.185 m) above mean sea level. Prior to June 12, 1968, water-stage recorder at site 2.1 miles (3.4 km) downstream at datum 7.63 ft (2.326 m) lower.

AVERAGE DISCHARGE.--9 years, 67.3 ft³/s (1.906 m³/s), 48,760 acre-ft/yr (60.1 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 13,200 ft³/s (374 m³/s) Oct. 14 (gage height, 22.48 ft or 6.852 m), from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of step-backwater method; no flow Sept. 12, 17.

Period of record: Maximum discharge, 27,200 ft³/s (770 m³/s) Jan. 21, 1968 (gage height, 25.10 ft or 7.650 m, at former site and datum), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurement of peak flow; no flow for many days.

Water quality: Current year: Maximum daily specific conductance, 6,340 micromhos Sept. 30; minimum daily, 366 micromhos Oct. 15. Maximum water temperatures, 34.0°C Aug. 22; minimum, 3.0°C Jan. 13.

Period of record: Maximum daily specific conductance (1966-70, 1972-75), 11,800 micromhos Nov. 27, 1968; minimum daily, 253 micromhos Sept. 8, 1967. Maximum water temperatures, 37.0°C July 11, 1969; minimum, freezing point Dec. 11, 1972, Jan. 8, 10, 1973.

REMARKS.--Discharge records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	678	37	42	1,060	36	22	7.3	68	1.8	3.4	.82
2	46	337	36	49	879	33	19	7.4	36	2.0	3.2	.55
3	33	276	36	64	828	31	17	7.1	24	2.6	9.8	.32
4	26	1,110	35	64	529	29	15	14	18	42	8.6	.23
5	21	424	35	52	700	28	14	14	14	49	5.7	.16
6	18	253	35	47	304	27	14	12	13	19	3.7	.11
7	15	251	34	42	203	26	15	9.1	12	13	2.8	.07
8	13	283	31	38	169	24	197	8.0	12	7.8	2.0	.07
9	12	226	29	34	140	22	119	7.4	12	4.2	1.3	.04
10	11	579	31	31	119	22	54	6.9	101	3.2	.97	.02
11	9.9	496	52	29	115	22	32	17	239	3.0	.82	.01
12	9.6	269	62	26	101	27	24	23	82	2.8	.43	.01
13	8.9	198	51	26	88	29	20	14	39	2.8	.16	.02
14	6,200	166	41	27	82	28	19	9.9	24	2.8	.04	.04
15	3,130	141	38	33	75	27	18	7.9	19	2.8	.16	.02
16	333	130	34	37	70	24	17	6.8	12	2.8	.16	.01
17	202	123	32	37	71	23	17	5.9	9.4	2.8	.23	.01
18	147	112	30	37	69	23	16	4.9	7.4	2.6	2.0	0
19	113	104	28	34	61	21	13	4.5	4.8	2.4	3.4	.02
20	93	94	26	32	55	19	12	4.5	3.2	2.2	2.0	.04
21	76	83	25	29	53	18	11	4.8	1.8	2.0	1.6	.06
22	62	78	24	27	49	17	11	4.8	.82	1.8	1.6	.07
23	51	72	23	25	47	16	11	126	.68	1.3	1.3	.04
24	52	64	23	24	47	15	11	57	.68	1.3	.82	.04
25	234	55	21	24	46	14	11	29	.82	1.1	2.2	.02
26	171	52	25	24	45	14	9.7	14	.97	23	3.0	.03
27	190	49	32	23	40	14	9.4	2,030	.97	24	2.8	.04
28	2,940	46	36	21	38	89	8.7	647	.97	14	2.4	.02
29	840	44	36	20	-----	71	8.5	471	.97	9.0	1.6	.02
30	1,390	40	36	19	-----	43	8.0	312	1.3	6.0	1.4	.02
31	5,020	-----	38	19	-----	27	-----	125	-----	4.5	1.1	-----
TOTAL	21,527.4	6,833	1,052	1,036	6,083	859	773.3	4,012.2	759.78	259.6	70.69	2.93
MEAN	694	228	33.9	33.4	217	27.7	25.8	129	25.3	8.37	2.28	.098
MAX	6,200	1,110	62	64	1,060	89	197	2,030	239	49	9.8	.82
MIN	8.9	40	21	19	38	14	8.0	4.5	.68	1.1	.04	0
AC-FT	42,700	13,550	2,090	2,050	12,070	1,700	1,530	7,960	1,510	515	140	5.8
CAL YR 1974	TOTAL 69,532.13	MEAN 190	MAX 8,750	MIN 0	AC-FT 137,900							
WTR YR 1975	TOTAL 43,268.90	MEAN 119	MAX 6,200	MIN 0	AC-FT 85,820							

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	1830	22.49	13,200	2-1	2200	11.83	3,220
10-28	1400	15.22	5,490	5-27	1500	16.03	6,120
10-31	0030	19.46	9,400				

08086212 Hubbard Creek below Albany, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 30...	1120	600	13	59	11	47	4.6	158	0	25
NOV. 25...	1520	53	10	160	38	210	4.6	246	0	55
DEC. 09...	1520	28	10	170	52	290	4.2	230	0	75
JAN. 27...	1210	22	6.5	210	66	360	4.7	218	0	190
FEB. 04...	0850	800	10	77	19	83	4.4	164	0	45
MAR. 10...	1430	22	5.4	180	64	340	4.4	186	0	190
APR. 21...	1710	11	2.3	210	72	380	5.1	196	0	210
MAY 27...	1415	5620	8.1	44	4.6	19	4.5	122	0	14
JUNE 03...	0835	12	8.8	92	25	140	5.9	156	0	71
JULY 08...	1155	6.7	7.0	140	47	260	6.0	172	0	170
AUG. 19...	0915	3.4	9.3	220	75	550	6.5	138	0	240
SEP. 30...	1105	.03	6.4	290	110	880	7.5	114	0	240

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 30...	100	--	338	190	63	1.5	641	7.7	23.5
NOV. 25...	530	.3	1130	560	350	3.9	2140	7.9	14.0
DEC. 09...	700	.3	1420	640	450	5.0	2730	7.7	8.0
JAN. 27...	810	.3	1760	800	620	5.6	3200	7.6	11.0
FEB. 04...	190	.2	509	270	140	2.2	944	7.8	7.0
MAR. 10...	760	.3	1640	710	560	5.5	3040	7.7	13.0
APR. 21...	890	.4	1870	820	660	5.8	3380	7.7	22.0
MAY 27...	40	.2	195	130	29	.7	362	8.2	19.5
JUNE 03...	320	.3	740	330	200	3.3	1400	7.6	24.0
JULY 08...	570	--	1280	540	400	4.9	2340	7.7	31.0
AUG. 19...	1200	--	2370	860	750	8.2	4150	7.4	27.0
SEP. 30...	1900	.8	3490	1200	1100	11	6340	7.7	22.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	21527.4	523	270	15800	75	4340	33	1930	140
NOV. 1974.....	6833	1160	600	11100	250	4620	48	891	270
DEC. 1974.....	1052	2920	1530	4340	760	2170	81	231	620
JAN. 1975.....	1036	3080	1650	4620	810	2280	110	313	650
FEB. 1975.....	6083	1470	780	12900	340	5650	60	982	330
MAR. 1975.....	859	3070	1610	3730	810	1880	89	207	650
APR. 1975.....	773.3	2310	1210	2520	580	1210	79	164	500
MAY 1975.....	4012.2	943	510	5540	210	2240	49	534	220
JUNE 1975.....	759.78	1450	760	1570	330	679	75	153	330
JULY 1975.....	259.6	2630	1440	1010	660	462	170	120	560
AUG. 1975.....	70.69	3350	1840	351	880	167	190	36	710
SEP. 1975.....	2.93	4100	2250	18	1110	8.8	200	1.6	860
TOTAL.....	43268.90	--	--	63500	--	25700	--	5560	--
WTD.AVG.....	119	1030	540	--	220	--	47	--	240

BRAZOS RIVER BASIN

08086212 Hubbard Creek below Albany, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.) WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	562	2480	3150	3010	2560	3460	3830	1160	2820	3120	3900
2	1320	789	2430	3130	772	2820	3470	3730	1320	2870	3130	3900
3	1550	1030	2640	3070	793	2850	3480	3690	1400	2860	2950	3920
4	1760	932	2650	3120	944	2700	3420	3450	1700	2550	2920	3900
5	1800	814	2600	3140	921	2720	3420	3430	1740	2050	3060	3990
6	2330	921	2650	3170	907	2680	3510	3320	1850	2250	3100	3960
7	2260	1120	2680	3150	975	2810	3460	3310	1880	2210	3150	4110
8	2240	1310	2750	3130	1110	2770	1140	3240	1940	2340	3200	4070
9	2240	1320	2730	2940	1110	3080	2030	3190	2110	2460	3270	4010
10	2400	1150	2990	2930	1420	3040	1910	3220	1750	2620	3360	3970
11	2440	1120	2970	3030	1540	2930	2100	3260	1210	2800	3330	3900
12	2440	1110	2860	3030	1540	2920	2100	3240	1460	2980	3410	3870
13	2400	1220	2940	3050	1700	3190	2620	3180	1420	3000	3440	3820
14	520	1310	2940	2970	1900	2950	2660	3420	1490	3070	3490	3950
15	366	1410	3050	2970	1850	2960	2420	3570	1470	3100	3460	4020
16	559	1610	3110	2920	1870	2960	2400	3480	1480	3210	3390	4050
17	716	1750	2950	2920	1870	2950	2840	3560	1630	3300	3360	4090
18	913	1750	2930	2940	2100	3100	2880	3920	1780	3370	4040	---
19	910	1870	3000	3080	2140	3190	2850	3960	1940	3420	4150	4240
20	1270	1870	2980	3090	2200	3300	3110	4010	2090	3650	3780	4150
21	1280	1930	3160	3100	2280	3390	3110	3960	2110	3750	3760	4390
22	1390	2070	3160	3250	2270	3380	3130	4150	2260	3960	3780	4950
23	1510	2070	2880	3030	2420	3460	3110	2310	2270	4040	3760	5310
24	1590	2190	3390	3010	2390	3480	3400	2730	2290	4090	3810	5570
25	1490	2140	3390	3010	2360	3450	3510	2480	2280	4220	3800	5850
26	1940	2230	3200	3010	2420	3420	3420	2640	2410	3030	3700	5000
27	1310	2250	3200	3200	2460	3750	3420	595	2490	2760	3700	5890
28	487	2450	3110	3240	2540	3430	3830	785	2640	2800	3690	5000
29	469	2450	3140	3240	---	3140	3840	850	2790	2970	3710	6240
30	500	2440	3070	3240	---	2980	3940	907	2800	3000	3770	6340
31	383	---	3070	3340	---	3300	---	1080	---	3090	3850	---
MONTH	1420	1570	2940	3080	1780	3090	3000	2980	1910	3050	3500	4500

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	19.0	8.0	9.0	8.0	9.0	13.0	22.0	22.0	29.5	30.0	28.0
2	21.0	20.0	6.0	8.0	8.0	12.0	12.0	23.0	23.5	28.0	29.0	28.0
3	19.0	21.0	5.0	8.0	8.0	11.0	11.0	22.0	24.0	26.5	28.0	31.0
4	20.0	15.0	6.0	8.0	9.0	10.0	13.0	24.0	28.0	25.5	29.0	28.0
5	20.0	15.0	7.0	9.0	8.0	14.0	12.0	22.0	25.0	27.0	30.0	26.0
6	21.0	15.0	10.0	9.0	8.0	12.0	17.0	23.0	28.0	27.0	26.0	25.0
7	20.0	14.0	9.0	11.0	4.0	15.0	16.0	25.0	27.0	27.0	28.0	26.0
8	19.0	15.0	7.0	9.0	7.0	10.0	15.0	24.0	27.0	29.0	28.0	29.0
9	22.0	15.0	6.0	9.0	8.0	14.0	17.0	23.0	26.0	28.5	28.0	---
10	22.0	15.0	7.0	8.0	6.0	11.0	16.0	23.0	25.0	28.0	28.0	---
11	22.0	14.0	8.0	9.0	10.0	12.0	15.0	24.0	24.0	25.5	29.0	---
12	21.0	15.0	8.0	6.0	10.0	11.0	13.0	25.0	26.0	26.5	28.0	---
13	19.0	15.0	10.0	3.0	11.0	9.0	14.0	25.0	27.0	26.5	30.0	19.0
14	18.0	13.0	10.0	5.0	11.0	9.0	14.0	23.0	26.0	26.5	30.0	22.0
15	16.0	10.0	9.0	7.0	11.0	11.0	20.0	23.0	26.0	28.5	29.0	20.0
16	16.0	11.0	7.0	6.0	8.0	14.0	16.0	24.0	29.0	26.0	28.5	22.0
17	16.0	13.0	7.0	6.0	11.0	13.0	19.0	24.0	28.0	27.0	28.0	20.0
18	19.0	12.0	8.0	5.0	10.0	13.0	21.0	28.0	28.0	27.0	28.0	---
19	17.0	13.0	8.0	8.0	8.0	14.0	18.0	28.0	27.0	27.0	30.0	23.0
20	20.0	14.0	9.0	6.0	10.0	15.0	20.0	27.0	28.0	27.0	28.0	21.0
21	19.0	14.0	10.0	8.0	11.0	17.0	18.0	26.0	27.0	28.0	28.0	22.0
22	19.0	15.0	11.0	6.0	9.0	16.0	21.0	25.0	28.0	32.0	34.0	21.0
23	18.0	16.0	11.0	7.0	8.0	19.0	20.0	23.0	28.0	30.0	28.0	17.0
24	18.0	13.0	9.0	9.0	7.0	18.0	21.0	23.0	31.0	---	28.0	20.0
25	18.0	12.0	7.0	9.0	11.0	18.0	20.0	22.0	28.0	29.0	30.0	23.0
26	19.0	11.0	6.0	7.0	9.0	10.0	23.0	25.5	28.0	28.0	28.0	19.0
27	20.0	10.0	5.0	11.0	9.0	20.0	26.0	21.0	31.0	30.0	28.0	18.0
28	20.0	15.0	9.0	11.0	11.0	15.0	25.0	22.0	28.0	28.0	26.0	24.0
29	18.0	9.0	8.0	11.0	---	11.0	23.0	21.5	28.0	32.0	29.0	25.0
30	20.0	7.0	9.0	11.0	---	10.0	24.0	22.0	28.0	33.0	28.0	24.0
31	18.0	---	8.0	10.0	---	10.0	---	22.0	---	33.0	29.0	---
MONTH	19.0	14.0	8.0	8.0	9.0	13.0	18.0	23.5	27.0	28.0	28.5	23.0

251

PERIOD OF RECORD.--Periodic discharge measurements: October 1962 to July 1975 (discontinued). Periodic water-quality data: October 1962 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible][illegible]

BRAZOS RIVER BASIN

08086235 Battle Creek near Moran, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 32°33'10", long 99°06'32", Shackelford County, at Farm Road 2408 and 3.4 miles (5.5 km) east of Moran.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--Periodic discharge measurements: October 1968 to July 1975 (discontinued). Operated as a daily discharge station October 1966 to September 1968. Periodic water-quality data: October 1966 to September 1975 (discontinued).

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CHLORIDE (CL) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)
OCT.					
01...	--	.00	--	--	--
18...	1020	3.1	22	279	16.5
NOV.					
20...	1210	1.8	78	760	12.0
JAN.					
08...	1310	.98	100	914	8.5
FEB.					
20...	1545	2.6	84	737	11.0
MAY					
18...	--	.00	--	--	--
JULY					
29...	--	.00	--	--	--

BRAZOS RIVER BASIN

253

08086260 Pecan Creek near Eolian, Tex.

LOCATION.--Lat 32°35'01", long 99°01'57", Stephens County, at county road crossing 1.4 miles (2.3 km) east of Farm Road 1853, 3.3 miles (5.3 km) upstream from Battle Creek, and 5.8 miles (9.3 km) south of Eolian.

DRAINAGE AREA.--25.4 mi² (65.8 km²).

PERIOD OF RECORD.--Discharge: October 1962 to September 1966 (low-flow partial-record only), October 1966 to September 1975 (discontinued).

Water quality: Chemical analyses: October 1966 to current year. Water temperatures: October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,270 ft (387 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 2.59 ft³/s (0.0733 m³/s), 1,880 acre-ft/yr (2.32 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 326 ft³/s (9.23 m³/s) Oct. 14 (gage height, 5.62 ft or 1.713 m); no flow at times.

Period of record: Maximum discharge, 648 ft³/s (18.4 m³/s) May 6, 1969 (gage height, 12.78 ft or 3.895 m); no flow at times.

Water quality: Current year: Maximum daily specific conductance, 32,100 micromhos Mar. 23, 25; minimum daily, 323 micromhos Oct. 14.

Period of record: Maximum daily specific conductance, 34,000 micromhos July 4, 1968; minimum daily, 220 micromhos Oct. 22, 1972.

REMARKS.--Discharge records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.1	.05	.13	121	.31	.52	.06	.07	.01	0	
2	0	3.2	.05	.15	58	.27	.15	.05	.01	0	.03	
3	0	.76	.05	.28	52	.25	.07	.06	0	0	0	
4	0	.09	.05	.16	38	.23	.07	.09	0	0	0	
5	0	.19	.05	.09	25	.23	.09	.12	0	0	0	
6	0	.07	.08	.06	5.8	.23	.15	.10	0	0	0	
7	0	.04	.09	.05	2.5	.23	6.2	.06	0	0	0	
8	0	.02	.09	.04	2.2	.16	50	.04	0	0	0	
9	0	0	.08	.02	1.7	.15	3.4	.03	0	0	0	
10	0	9.9	.12	.02	1.4	.15	1.6	.01	0	0	0	
11	0	1.1	.34	.02	1.1	.15	1.2	0	0	0	0	
12	0	.37	.28	.02	.85	.42	.81	.13	0	0	0	
13	0	.27	.19	.04	.71	.49	.66	.25	0	0	0	
14	160	.19	.13	.04	.71	.32	.65	.09	0	0	0	
15	20	.09	.06	.04	.71	.32	.62	.03	0	0	0	
16	2.4	.05	.05	.04	.65	.25	.52	.01	0	0	0	
17	.77	.04	.05	.04	.61	.18	.52	0	0	0	0	
18	.15	.04	.04	.04	.58	.15	.48	0	0	0	0	
19	.19	.07	.03	.04	.43	.18	.39	0	0	0	0	
20	.23	.06	.03	.03	.37	.17	.34	0	0	0	0	
21	.09	.05	.03	.02	.34	.12	.32	.83	0	0	0	
22	.05	.05	.01	.01	.27	.12	.32	.79	0	0	0	
23	.04	.06	0	.01	.30	.12	.35	1.5	0	0	1.1	
24	.34	.08	0	.01	.32	.15	.37	1.4	0	0	.69	
25	.63	.07	.01	.01	.32	.15	.35	.71	0	0	0	
26	.15	.07	.17	.01	.32	.21	.28	.27	6.9	8.4	0	
27	.12	.07	.26	.01	.32	.40	.21	.15	1.8	.90	0	
28	63	.05	.16	.01	.32	35	.18	.10	2.8	.10	0	
29	16	.05	.15	.01	-----	7.9	.15	.14	.61	.01	0	
30	26	.05	.15	.01	-----	1.4	.10	.11	.09	0	0	
31	127	-----	.12	53	-----	1.2	-----	.10	-----	0	0	-----
TOTAL	417.16	21.25	2.97	54.46	316.83	51.61	71.07	7.23	12.28	9.42	1.82	0
MEAN	13.5	.71	.096	1.76	11.3	1.66	2.37	.23	.41	.30	.059	0
MAX	160	9.9	.34	53	121	35	50	1.5	6.9	8.4	1.1	0
MIN	0	0	0	.01	.27	.12	.07	0	0	0	0	0
AC-FT	827	42	5.9	108	628	102	141	14	24	19	3.6	0

CAL YR 1974 TOTAL 899.16 MEAN 2.46 MAX 160 MIN 0 AC-FT 1,780
WTR YR 1975 TOTAL 966.10 MEAN 2.65 MAX 160 MIN 0 AC-FT 1,920

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
10-14	1300	5.62	326
10-31	0900	3.90	231
2-1	1015	5.07	298

BRAZOS RIVER BASIN

08086260 Pecan Creek near Eolian, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 14...	1800	102	7.1	34	2.7	17	2.7	100	0	14
NOV. 01...	1700	3.5	9.4	70	13	120	4.8	96	0	27
DEC. 13...	1700	.69	4.7	1100	290	2900	11	92	0	180
JAN. 08...	1600	.05	5.4	1700	490	4000	10	91	0	270
FEB. 20...	1505	.32	3.5	710	190	1800	9.6	107	0	150
MAR. 01...	1700	.27	2.6	1100	320	2900	9.9	78	0	210
APR. 07...	1320	.36	.6	390	93	860	6.3	80	0	96
MAY 13...	1835	.12	1.4	1200	320	2800	11	71	0	230

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 14...	29	--	156	96	14	.8	291	7.9	14.0
NOV. 01...	280	.2	572	230	150	3.5	1120	7.8	20.0
DEC. 13...	7200	.1	11700	3900	3900	20	19300	7.5	10.0
JAN. 08...	10000	.3	16500	6300	6200	22	27500	7.4	13.5
FEB. 20...	4500	.4	7420	2600	2500	16	12600	7.8	14.5
MAR. 01...	7100	.2	11700	4100	4000	20	20300	7.7	17.0
APR. 07...	2200	.2	3690	1400	1300	10	7170	7.5	18.5
MAY 13...	7100	.2	11700	4300	4300	19	20400	7.1	29.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	417.16	412	220	247	68	76	18	20	40
NOV. 1974.....	21.25	2700	1420	81	810	46	35	2.0	500
DEC. 1974.....	2.97	18800	11200	90	6870	55	200	1.6	--
JAN. 1975.....	54.46	1690	920	135	500	74	30	4.4	300
FEB. 1975.....	316.83	1470	780	669	420	358	33	28	250
MAR. 1975.....	51.61	7260	3890	543	2310	322	120	16	1420
APR. 1975.....	71.07	2490	1330	255	750	144	41	7.9	460
MAY 1975.....	7.23	27300	15700	307	9460	185	390	7.7	--
JUNE 1975.....	12.28	9700	5200	172	3130	104	120	3.9	1910
JULY 1975.....	9.42	1540	780	20	430	11	31	.8	270
AUG. 1975.....	1.82	386	160	.8	61	.3	21	.1	40
SEP. 1975.....	0	--	--	0	--	0	--	0	--
TOTAL.....	966.10	--	--	2520	--	1380	--	92	--
WTD.AVG.....	2.65	1790	970	--	530	--	36	--	320

BRAZOS RIVER BASIN

255

08086260 Pecan Creek near Eolian, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1120	8870	25100	801	20300	6100	17000	25400	11300	---	---
2	---	2020	9240	26100	1090	20200	6050	17200	26800	---	890	---
3	---	2040	9800	26900	1070	21300	6310	17500	---	---	---	---
4	---	2260	10300	27400	1420	21300	6600	17100	---	---	---	---
5	---	1200	10700	27300	1610	22100	6860	16900	---	---	---	---
6	---	1930	11400	27300	2420	23100	7170	17500	---	---	---	---
7	---	2300	12000	23300	4170	23100	6500	18100	---	---	---	---
8	---	4860	12700	27400	4200	24100	954	18800	---	---	---	---
9	---	---	13100	27400	5670	24100	2750	19200	---	---	---	---
10	---	3280	13600	26800	6330	24100	2750	19600	---	---	---	---
11	---	3450	15500	26300	7070	24800	4070	---	---	---	---	---
12	---	2560	18400	26000	7880	23200	4100	20200	---	---	---	---
13	---	3010	19300	25500	8460	27000	4740	20400	---	---	---	---
14	323	2140	20000	26700	9490	28200	6420	21700	---	---	---	---
15	607	4050	19900	26700	9490	28200	6420	22300	---	---	---	---
16	944	4090	21400	26600	10100	28900	7530	24000	---	---	---	---
17	1180	4420	21500	26400	10700	28900	7560	---	---	---	---	---
18	1300	4830	21800	26400	12000	21100	8660	---	---	---	---	---
19	1270	4910	21900	26700	12000	21100	8710	---	---	---	---	---
20	1200	5680	22300	26500	12600	21100	9220	---	---	---	---	---
21	1360	5770	22400	26300	13400	24700	9470	29600	---	---	---	---
22	1510	5910	22600	26400	14200	31600	9630	29800	---	---	---	---
23	1650	6020	---	26500	14400	32100	10300	28700	---	---	405	---
24	9900	6090	---	20800	16600	31700	10500	28300	---	---	333	---
25	1460	6230	23100	26100	16600	32100	11100	29900	---	---	---	---
26	1480	6400	23200	26000	16700	31600	12300	29700	10200	1570	---	---
27	1530	7080	23400	26100	17700	28500	13700	28900	9500	1050	---	---
28	427	7460	23500	26300	17700	5230	15000	27100	8330	2550	---	---
29	783	7950	24000	26200	---	2980	15900	22800	8750	1220	---	---
30	407	8310	24200	26000	---	5210	16700	26300	10000	---	---	---
31	386	---	25600	1010	---	5220	---	27000	---	---	---	---
MONTH	---	4390	18130	25370	9140	22810	8140	22900	---	---	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.0	---	8.0	9.0	17.0	19.0	---	---	---	---	---
2	---	21.0	---	9.0	7.0	16.0	17.0	---	---	---	25.0	---
3	---	23.0	---	8.0	10.0	14.0	---	---	---	---	---	---
4	---	14.0	---	10.0	12.0	16.0	---	---	---	---	---	---
5	---	17.0	---	9.0	7.0	19.0	---	---	---	---	---	---
6	---	15.0	---	10.0	7.0	20.0	---	---	---	---	---	---
7	---	14.0	---	13.0	9.0	17.0	---	---	---	---	---	---
8	---	14.0	---	12.0	12.0	14.0	18.0	---	---	---	---	---
9	---	---	---	15.0	7.0	15.0	17.0	---	---	---	---	---
10	---	15.0	---	---	13.0	16.0	15.0	---	---	---	---	---
11	---	17.0	---	---	15.0	---	14.0	---	---	---	---	---
12	---	14.0	---	---	15.0	12.0	15.0	---	---	---	---	---
13	---	17.0	10.0	4.0	16.0	14.0	15.0	---	---	---	---	---
14	14.0	13.0	8.0	5.0	14.0	15.0	17.0	---	---	---	---	---
15	16.0	14.0	8.0	10.0	10.0	16.0	17.0	---	---	---	---	---
16	19.0	15.0	9.0	8.0	11.0	15.0	20.0	---	---	---	---	---
17	21.0	15.0	8.0	9.0	15.0	16.0	26.0	---	---	---	---	---
18	---	14.0	---	10.0	14.0	17.0	25.0	---	---	---	---	---
19	---	13.0	---	8.0	13.0	18.0	24.0	---	---	---	---	---
20	---	15.0	---	9.0	16.0	18.0	---	---	---	---	---	---
21	---	16.0	---	---	18.0	---	---	---	---	---	---	---
22	---	---	---	10.0	10.0	17.0	---	---	---	---	---	---
23	---	---	---	9.0	7.0	18.0	---	22.0	---	---	33.0	---
24	18.0	---	---	11.0	10.0	19.0	---	25.0	---	---	32.0	---
25	22.0	---	---	10.0	13.0	18.0	---	27.0	---	---	---	---
26	21.0	---	---	---	15.0	---	---	32.0	---	---	---	---
27	---	---	---	15.0	17.0	---	---	33.0	---	30.0	---	---
28	20.0	---	11.0	---	20.0	11.0	---	25.0	---	32.0	---	---
29	23.0	---	13.0	---	---	7.0	---	30.0	---	35.0	---	---
30	21.0	---	10.0	---	---	---	---	29.0	---	---	---	---
31	20.0	---	9.0	13.0	---	16.0	---	31.0	---	---	---	---
MONTH	---	---	---	---	12.0	16.0	---	---	---	---	---	---

08086300 Big Sandy Creek near Breckenridge, Tex.

LOCATION.--Lat 32°39'52", long 99°00'01", Stephens County, on left bank at upstream side of bridge on Farm Road 576, 1.5 miles (2.4 km) downstream from Battle Creek, 8.2 miles (13.2 km) southwest of Breckenridge, and about 13 miles (21 km) upstream from Hubbard Creek Dam.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--Discharge: February 1962 to current year.

Water quality: Chemical analyses: February 1962 to current year. Water temperatures: February 1962 to current year. Sediment records: October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,178.42 ft (359.182 m) above mean sea level. Prior to Mar. 19, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 31.2 ft³/s (0.884 m³/s), 22,600 acre-ft/yr (27.9 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 3,970 ft³/s (112 m³/s) Oct. 14 (gage height, 16.68 ft or 5.084 m); no flow for many days.

Period of record: Maximum discharge, 8,170 ft³/s (231 m³/s) May 13, 1965 (gage height, 23.30 ft or 7.102 m); no flow at times each year.

Historic: According to information from State Highway Department, the floods of May 16, 1949, July 20, 1953, and Apr. 29, 1957, each reached a stage of 24.6 ft (7.50 m).

Water quality: Current year: Maximum daily specific conductance, 7,720 micromhos May 10; minimum daily, 304 micromhos Oct. 15.

Period of record: Maximum daily specific conductance, 17,200 micromhos Mar. 27, 1964; minimum daily, 59 micromhos Nov. 21, 1963.

REMARKS.--Discharge records good prior to Nov. 1 and poor thereafter, due to backwater from Hubbard Creek Reservoir. Some regulation by Lake Cisco (capacity, 25,600 acre-ft or 31.6 hm³).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	352	1.1	1.3	1490	4.0	2.9	.50	.25	.74	.09	
2	.56	84	1.1	1.4	717	3.7	2.4	.44	.22	.54	.07	
3	.39	51	1.1	3.0	623	3.4	2.0	.43	.19	.44	.05	
4	.21	153	1.0	2.5	270	3.2	1.7	.39	.17	.35	.04	
5	.21	30	1.0	2.0	207	3.0	1.5	.36	.15	.32	.03	
6	.21	17	.98	1.6	87	2.7	1.4	.34	.14	.29	.03	
7	.21	14	.97	1.5	60	2.5	1.3	.32	.12	.27	.02	
8	.17	13	.95	1.3	40	2.3	.45	.30	.11	.25	.02	
9	.17	12	.94	1.2	27	2.0	18	.29	.10	.23	.01	
10	.17	24	.92	1.0	19	1.8	10	.27	1.5	.22	.01	
11	.17	19	.91	.95	13	1.7	5.0	.69	.40	.21	0	
12	.17	16	.89	.87	10	1.6	3.2	.56	.13	.20	0	
13	1.7	13	.88	.80	9.1	1.6	2.6	.48	.05	.19	0	
14	2120	11	.87	.74	8.1	1.5	2.2	.42	.04	.18	0	
15	502	9.0	.86	.70	7.4	1.5	1.9	.37	.03	.17	0	
16	61	7.4	.85	.66	6.8	1.4	1.8	.34	.02	.16	0	
17	22	6.2	.84	.63	6.3	1.4	1.6	.31	.02	.15	0	
18	9.4	5.1	.84	.59	5.9	1.4	1.5	.28	.01	.15	0	
19	5.8	4.1	.83	.56	5.7	1.3	1.4	.26	.01	.14	0	
20	4.0	3.3	.82	.54	5.5	1.3	1.3	.25	.01	.14	0	
21	2.5	2.7	.82	.52	5.3	1.3	1.2	.23	0	.13	0	
22	2.2	2.3	.81	.50	5.2	1.3	1.1	.22	0	.13	0	
23	2.2	2.0	.81	.48	5.1	1.2	.97	4.2	0	.13	0	
24	16	1.8	.81	.47	5.0	1.2	.89	2.5	0	.12	0	
25	44	1.6	.80	.47	4.9	1.2	.83	1.5	0	154	0	
26	33	1.4	.80	.46	4.7	1.2	.76	.98	31	50	0	
27	19	1.4	1.7	.46	4.5	11	.69	.70	11	10	0	
28	799	1.3	1.3	.45	4.3	39	.64	.53	4.5	1.8	0	
29	152	1.2	1.1	.44	---	15	.58	.44	2.0	.38	0	
30	219	1.2	1.1	.44	---	7.0	.54	.35	1.2	.22	0	
31	2320	---	1.1	40	---	4.4	---	.30	---	.14	0	---
TOTAL	6338.54	861.0	29.80	68.53	3656.8	127.1	116.90	19.55	53.37	222.39	.37	0
MEAN	204	28.7	.96	2.21	131	4.10	3.90	.63	1.78	7.17	.012	0
MAX	2320	352	1.7	40	1490	39	45	4.2	31	154	.09	0
MIN	.17	1.2	.80	.44	4.3	1.2	.54	.22	0	.12	0	0
AC-FT	12570	1710	59	136	7250	252	232	39	106	441	.7	0
CAL YR 1974	TOTAL	13356.20	MEAN	36.6	MAX	2320	MIN	0	AC-FT	26490		
WTR YR 1975	TOTAL	11494.35	MEAN	31.5	MAX	2320	MIN	0	AC-FT	22800		

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
10-14	1500	16.68	3,970
10-31	1000	16.20	3,780
2-1	1500	14.76	3,050

NOTE.--Gage in backwater starting Nov. 1 at 0500 hours.

BRAZOS RIVER BASIN

257

08086300 Big Sandy Creek near Breckenridge, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 30...	1645	2.0	9.7	42	5.9	32	4.5	110	0	21
DEC. 09...	1225	.94	8.2	330	61	790	6.9	238	0	260
JAN. 06...	1230	1.6	4.4	270	56	630	6.1	214	0	210
FEB. 03...	1800	594	8.9	46	6.0	32	4.8	114	0	26
MAR. 10...	1140	1.8	6.1	200	40	400	6.6	199	0	150
31...	1530	4.4	4.9	340	73	750	8.3	166	0	150
APR. 21...	1520	1.2	4.5	220	42	440	7.1	195	0	190
MAY 08...	1750	.30	6.0	380	79	1000	8.7	213	0	340
JUNE 17...	0945	.02	5.3	94	20	210	7.1	118	0	95
JULY 29...	1400	.38	6.4	40	4.8	39	5.4	95	0	25

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 30...	65	--	234	130	39	1.2	444	7.5	20.0
DEC. 09...	1600	.2	3170	1100	880	10	5750	7.8	7.0
JAN. 06...	1400	.7	2680	900	730	9.1	4570	7.8	8.0
FEB. 03...	66	.2	246	140	46	1.2	457	7.8	8.0
MAR. 10...	850	.2	1750	660	500	6.8	3240	7.6	12.0
31...	1800	.2	3210	1200	1000	9.6	5980	7.5	14.0
APR. 21...	960	.3	1960	720	560	7.1	3620	7.6	22.0
MAY 08...	2000	.2	3920	1300	1100	12	7160	7.5	22.5
JUNE 17...	420	.3	910	320	220	5.1	1700	8.0	27.0
JULY 29...	77	--	244	120	42	1.6	472	7.3	29.0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB. 04...	1630	298	11.0	186	150

BRAZOS RIVER BASIN

08086300 Big Sandy Creek near Breckenridge, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARONNESS (CA+MG) (MG/L)
OCT. 1974.....	6338.54	396	210	3610	56	955	27	460	130
NOV. 1974.....	861.0	788	420	987	170	391	45	105	200
DEC. 1974.....	29.80	5750	3170	255	1600	129	260	21	1150
JAN. 1975.....	68.53	4510	2550	471	1270	235	220	41	910
FEB. 1975.....	3656.8	583	310	3070	100	1020	45	441	160
MAR. 1975.....	127.1	3780	2110	723	1090	373	180	62	770
APR. 1975.....	116.90	2510	1370	433	680	215	120	38	530
MAY 1975.....	19.55	4390	2430	128	1210	64	240	13	890
JUNE 1975.....	53.37	906	480	69	190	27	54	7.8	220
JULY 1975.....	222.39	457	240	143	74	44	32	19	140
AUG. 1975.....	.37	2050	1110	1.1	520	.5	120	.1	440
SEP. 1975.....	0	--	--	0	--	0	--	0	--
TOTAL.....	11494.35	--	--	9890	--	3450	--	1210	--
WTD.AVG.	31.5	593	320	--	110	--	39	--	170

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	598	385	5480	5290	531	2850	5950	3720	3060	1980	1120	
2	654	520	5520	5270	410	2890	5910	4210	2870	2020	1500	
3	684	650	5610	4910	457	2900	5980	4720	2740	2090	1840	
4	901	410	5590	4770	608	2960	5970	5200	2720	2150	2310	
5	905	500	5640	4610	650	3000	5950	5680	2690	2240	2750	
6	1000	720	5710	4570	738	3030	5980	6170	2650	2340	2940	
7	1000	860	5800	4460	867	3050	5990	6680	2620	2410	3120	
8	1210	1000	5720	4360	1020	3110	2610	7160	2580	2480	3300	
9	1230	1130	5750	4500	1020	3170	1040	7650	2540	2530	3440	
10	1400	1020	5770	4610	1250	3240	996	7720	1500	2600	3560	
11	1400	1460	5730	4820	1460	3350	1050	6530	1390	2690	---	
12	1410	1740	5820	4860	1570	3450	1260	6410	1410	2760	---	
13	1150	1990	5860	5010	1710	3570	1800	6470	1440	2770	---	
14	374	2470	5940	5140	1800	3680	1800	6510	1460	2800	---	
15	304	2850	6000	5350	1960	3750	1960	6490	1490	2820	---	
16	384	3270	5970	5460	2080	3900	2190	6530	1520	2870	---	
17	487	3480	5980	5490	2210	4000	2320	6550	1540	2860	---	
18	633	3820	6000	5610	2330	4120	2560	6540	1570	2900	---	
19	750	4000	6030	5750	2400	4230	2850	6520	1610	2970	---	
20	870	4230	5990	5870	2500	4340	3070	6550	1660	2960	---	
21	1040	4460	6000	6000	2540	4450	3120	6580	---	2970	---	
22	1140	4610	6050	6110	2630	4560	3170	6600	---	3010	---	
23	1210	4790	6020	6270	2680	4670	3200	3530	---	3080	---	
24	890	4870	5910	6440	2750	4790	3260	3320	---	3130	---	
25	391	5060	5890	6530	2780	4900	3300	3160	---	404	---	
26	560	5100	5900	6690	2770	5000	3370	2540	669	387	---	
27	974	5130	5560	6800	2800	3750	3410	2160	750	430	---	
28	584	5180	5510	6890	2820	3100	3490	2760	1410	475	---	
29	393	5290	5530	7010	---	4970	3560	2900	1730	620	---	
30	375	5370	5550	7240	---	5930	3640	3010	1910	890	---	
31	356	---	5370	4040	---	5980	---	3130	---	1000	---	
MONTH	815	2880	5780	5510	1760	3890	3360	5280	1900	2180	---	

08086300 Big Sandy Creek near Breckenridge, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

[illegible]

BRAZOS RIVER BASIN

08086400 Hubbard Creek Reservoir near Breckenridge, Tex.

LOCATION.--Lat 32°49'53", long 98°58'03", Stephens County, on left bank just upstream from dam on Hubbard Creek, 1.0 mile (1.6 km) upstream from U.S. Highway 183, 6.5 miles (10.5 km) northwest of Breckenridge, and at mile 12.6 (20.3 km).

DRAINAGE AREA.--1,107 mi² (2,867 km²).

PERIOD OF RECORD.--Contents: October 1962 to current year.

Water quality: Chemical analyses: September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 327,200 acre-ft (403 hm³) Feb. 3 (elevation, 1,183.61 ft or 360.764 m); minimum, 228,600 acre-ft (282 hm³) Oct. 12 (elevation, 1,176.48 ft or 358.591 m).

Period of record: Maximum contents, 327,200 acre-ft (403 hm³) Feb. 3, 1975 (elevation, 1,183.61 ft or 360.764 m); minimum since normal operating level was reached in May 1969, 171,200 acre-ft (211 hm³) Oct. 18-20, 1972 (elevation, 1,171.3 ft or 357.01 m).

REMARKS.--The reservoir is formed by a rolled earthfill dam 5,630 ft (1,720 m) long. There are two additional levees, the north and south, making an overall length of 3.5 miles (5.6 km). Storage began September 1962 and the dam was completed in December 1962. The emergency spillway is a 2,000-foot-wide (610-metre) cut through natural ground near the left end of dam. The service spillway is a partially controlled morning-glory type with 12 lift gates designed to discharge 30,000 ft³/s (850 m³/s) with a 17.5-foot (5.3-metre) head through a 22-foot-diameter (7-metre) concrete conduit. The dam is the property of the West Central Texas Municipal Water District. The District has a permit to divert 56,000 acre-ft (69.0 hm³) annually for municipal, mining, and industrial uses. Diversions during the 1975 water year are as follows: 558 acre-ft (0.688 hm³) for municipal use, 3,860 acre-ft (4.76 hm³) for oilfield operation, and 1,560 acre-ft (1.92 hm³) for irrigation and domestic uses. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	1,208.0	-
Crest of spillway.....	1,194.0	515,800
Top of gates.....	1,185.1	350,900
Top of conservation pool.....	1,183.0	317,800
Crest of spillway.....	1,176.6	230,100
Sill of gate.....	1,138.0	5,580
Lowest gated outlet (invert).....	1,136.0	3,470

COOPERATION.--Diversions and capacity table furnished by West Central Texas Municipal Water District.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,176.0	222,800
1,180.0	274,200
1,184.0	333,200

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230100	297000	310200	310200	319300	307200	307200	307200	304200	301300	295500	286800
2	230100	298400	310200	310200	324000	307200	307200	307200	304200	301300	295500	286800
3	230100	298400	310200	311800	327000	307200	307200	307200	304200	301300	295500	286800
4	230100	302800	310200	311800	324000	307200	307200	307200	304200	299800	294000	285400
5	230100	304200	310200	311800	322400	307200	307200	307200	304200	299800	294000	285400
6	228900	304200	310200	311800	322400	307200	307200	307200	304200	299800	294000	285400
7	228900	304200	310200	311800	322400	307200	308800	307200	304200	299800	294000	285400
8	228900	305800	310200	311800	320800	307200	308800	307200	304200	299800	294000	285400
9	228900	305800	310200	311800	322400	307200	308800	307200	304200	299800	292600	285400
10	228900	308800	310200	310200	322400	307200	308800	305800	304200	299800	292600	285400
11	228900	310200	311800	310200	322400	307200	308800	305800	304200	299800	292600	284000
12	228900	310200	311800	310200	322400	307200	308800	305800	304200	298400	292600	284000
13	228900	310200	311800	310200	322400	307200	308800	304200	304200	298400	291200	284000
14	246500	310200	310200	310200	319300	307200	308800	304200	304200	298400	291200	284000
15	255600	311800	310200	310200	316200	305800	308800	304200	304200	298400	291200	284000
16	255600	311800	310200	310200	314800	305800	308800	304200	304200	298400	291200	284000
17	256800	311800	310200	311800	313200	307200	308800	304200	304200	297000	291200	284000
18	256800	311800	310200	311800	311800	307200	308800	304200	302800	297000	291200	284000
19	256800	311800	310200	310200	310200	307200	308800	304200	302800	297000	289700	284000
20	256800	311800	310200	311800	310200	307200	308800	304200	302800	297000	289700	284000
21	256800	311800	310200	310200	308800	307200	308800	304200	302800	297000	289700	282600
22	256800	311800	310200	310200	307200	307200	308800	304200	302800	297000	289700	282600
23	256800	311800	310200	310200	307200	305800	308800	305800	302800	297000	289700	282600
24	256800	311800	310200	310200	307200	305800	308800	305800	301300	297000	289700	281200
25	256800	311800	310200	311800	307200	305800	308800	305800	301300	297000	288200	281200
26	258100	311800	310200	311800	307200	305800	308800	305800	301300	297000	288200	281200
27	258100	311800	310200	311800	307200	305800	308800	305800	301300	297000	288200	281200
28	268800	311800	310200	311800	307200	307200	308800	307200	301300	297000	288200	281200
29	271500	311800	310200	310200	---	307200	307200	305800	301300	297000	288200	281200
30	275600	311800	310200	311800	---	307200	307200	305800	301300	295500	286800	281200
31	291200	---	310200	311800	---	307200	---	305800	---	295500	286800	---
(†)	1181.2	1182.6	1182.5	1182.6	1182.3	1182.3	1182.3	1182.2	1181.9	1181.5	1180.9	1180.5
(*)	+61100	+20600	-1600	+1600	-4600	0	0	-1400	-4500	-5800	-8700	-5600
MAX	291200	311800	311800	311800	327000	307200	308800	308800	304200	301300	295500	286800
MIN	228900	297000	310200	310200	307200	305800	307200	304200	301300	295500	286800	281200

CAL YR 1974..... * +142000
WTR YR 1975..... * +51100

MAX 311800
MAX 327000

MIN 147300
MIN 228900

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.

08086400 Hubbard Creek Reservoir near Brickenridge, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
JAN. 25...	1315	6.3	68	17	91	7.8	123	0
MAY 30...	1545	5.0	74	18	100	7.5	134	0
SEP. 10...	0940	6.3	76	19	110	8.8	134	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
JAN. 25...	42	220	.3	.26	.04	.00	513	240	140
MAY 30...	45	230	.3	.16	.00	.02	546	260	150
SEP. 10...	47	250	.3	.02	.00	.02	584	270	160

DATE	SODIUM AD- SORP- TION RATIO	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JAN. 25...	2.6	979	8.3	8.0	8.2	69	20	0
MAY 30...	2.7	1060	7.9	23.0	7.5	86	60	20
SEP. 10...	2.9	1110	8.0	26.5	6.2	76	50	90

BRAZOS RIVER BASIN

08086500 Hubbard Creek near Breckenridge, Tex.

LOCATION.--Lat 32°50'13", long 98°56'52", Stephens County, on downstream side of pier of bridge on U.S. Highway 183, 1.4 miles (2.3 km) downstream from Hubbard Creek Reservoir, 6.8 miles (10.9 km) northwest of Breckenridge, 8.2 miles (13.2 km) upstream from Gonzales Creek, and 11.2 miles (18.0 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--1,111 mi² (2,877 km²), of which 1,107 mi² (2,867 km²) is above Hubbard Creek Dam.

PERIOD OF RECORD.--Discharge: April 1955 to current year.

Water quality: Chemical analyses: April 1955 to current year. Water temperatures: April 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,092.10 ft (332.872 m) above mean sea level. Prior to July 16, 1959, at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--7 years (1955-62) prior to completion of Hubbard Creek Dam, 170 ft³/s (4.814 m³/s), 123,200 acre-ft/yr (152 hm³/yr); 13 years (1962-75) regulated, 27.9 ft³/s (0.790 m³/s), 20,210 acre-ft/yr (24.9 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 3,700 ft³/s (105 m³/s) Feb. 4 (gage height, 20.84 ft or 6.352 m); no flow for many days.

Period of record: Maximum discharge, 34,500 ft³/s (977 m³/s) May 26, 1957 (gage height, 34.00 ft or 10.363 m); no flow at times.

Historic: Maximum stage since at least 1925, 34.2 ft (10.42 m) July 20, 1953, from information by local resident and State Highway Department.

Water quality: Current year: Maximum daily specific conductance, 2,440 micromhos May 19; minimum daily, 283 micromhos Oct. 16.

Period of record: Maximum daily specific conductance, 9,270 micromhos July 4, 1960; minimum daily, 121 micromhos Apr. 27, 1957.

Maximum water temperatures (1955-74), 33.0°C July 15, 1965; minimum, freezing point Jan. 12, 16, 20, 1963.

REMARKS.--Discharge records good. Flow is regulated by Hubbard Creek Reservoir (station 08086400).

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.0	.04	.07	21	.25	.18	.01	233	.04		
2	0	1.3	.04	.12	16	.23	.11	.01	148	.03		
3	0	.59	.03	.09	802	.24	.06	.01	2.0	.04		
4	0	13	.04	.07	3,110	.26	.04	.01	.79	.05		
5	.03	4.8	.06	.08	1,880	.20	.05	.02	.71	.06		
6	.03	1.7	.08	.10	325	.23	.05	.02	.58	.07		
7	.01	.74	.08	.07	514	.16	1.1	.01	.46	.06		
8	0	.39	.06	.05	254	.10	4.1	.01	1.0	.05		
9	0	.37	.06	1.0	251	.10	1.4	.01	.75	.03		
10	0	14	.23	3.7	250	.14	.56	.01	.55	.04		
11	0	6.5	.23	2.0	249	.11	.27	.01	.39	.05		
12	0	2.0	.17	1.8	250	.25	.13	.02	.25	.04		
13	.01	.92	.13	1.6	491	.12	.11	.01	.20	.02		
14	23	.59	.10	1.6	1,000	.09	.11	.04	.19	.01		
15	8.7	.10	.09	1.4	976	.07	.06	.03	.16	.01		
16	3.0	.08	.06	1.4	954	.06	.04	.02	.12	0		
17	1.2	.04	.06	1.4	933	2.3	.05	.01	.13	0		
18	.58	.05	.06	1.5	911	2.4	.06	.01	.18	0		
19	.38	.08	.07	1.4	893	.91	.09	.01	.46	0		
20	.19	.07	.09	1.4	875	.48	.04	.02	.26	0		
21	.05	.06	.09	1.4	500	.32	.02	.07	.14	0		
22	.03	.07	.08	1.4	238	.18	.02	.06	.11	0		
23	.01	.13	.08	1.5	238	.14	.03	103	.10	0		
24	.01	.14	.06	1.5	157	.14	.03	277	.10	0		
25	.02	.07	.04	1.4	1.4	.09	.03	273	.18	0		
26	.02	.04	.13	1.4	.4	.09	.02	271	.17	0		
27	.04	.12	.15	1.3	.4	.32	.01	464	.11	0		
28	7.9	.15	.09	1.5	.4	3.2	.05	890	.08	0		
29	3.6	.11	.07	1.5	-----	1.3	.03	883	.06	0		
30	2.7	.06	.05	1.3	-----	.54	.01	600	.04	0		
31	13	-----	.09	1.6	-----	.27	-----	245	-----	0		-----
TOTAL	64.51	52.27	2.71	36.65	16,090.6	15.29	8.86	4,006.43	391.27	.60	0	0
MEAN	2.08	1.74	.087	1.18	575	.49	.30	129	13.0	.019	0	0
MAX	23	14	.23	3.7	3,110	3.2	4.1	890	233	.07	0	0
MIN	0	.04	.03	.05	.40	.06	.01	.01	.04	0	0	0
AC-FT	128	104	5.4	73	31,920	30	18	7,950	776	1.2	0	0
CAL YR 1974 TOTAL	419.54			MEAN 1.15	MAX 28	MIN 0	AC-FT 832					
WTR YR 1975 TOTAL	20,669.19			MEAN 56.6	MAX 3,110	MIN 0	AC-FT 41,000					

BRAZOS RIVER BASIN

263

08086500 Hubbard Creek near Breckenridge, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HC03) (MG/L)	CAR-BONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)
OCT. 19...	1045	1.3	9.2	55	11	54	6.6	110	0	41
FEB. 20...	1300	827	5.8	69	17	96	7.1	129	0	41
MAR. 09...	1430	.31	2.6	150	32	170	7.6	148	0	270
APR. 08...	0925	4.6	6.2	110	26	61	5.9	90	0	280
MAY 14...	1000	.04	3.9	220	51	200	7.9	223	0	440
JUNE 18...	1025	.17	6.4	130	30	150	8.3	220	0	160

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT. 19...	120	--	351	180	92	1.7	681	7.9	18.0
FEB. 20...	210	.2	510	240	140	2.7	996	7.9	9.0
MAR. 09...	360	.3	1070	510	390	3.3	1920	8.0	14.0
APR. 08...	110	.3	644	380	310	1.4	1060	7.6	15.0
MAY 14...	400	.3	1430	760	580	3.2	2290	8.0	23.5
JUNE 18...	310	.3	903	450	270	3.1	1610	7.8	29.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	64.51	505	280	48	88	15	37	6.4	160
NOV. 1974.....	52.27	403	240	33	72	10	34	4.8	140
DEC. 1974.....	2.71	1040	600	4.4	220	1.6	83	.6	310
JAN. 1975.....	36.65	944	550	55	200	20	71	7.0	280
FEB. 1975.....	16090.6	969	550	23700	200	8810	66	2890	290
MAR. 1975.....	15.29	1450	870	36	300	12	190	7.8	420
APR. 1975.....	8.86	1220	730	17	250	6.0	140	3.3	360
MAY 1975.....	4006.43	1070	650	7010	230	2510	100	1110	320
JUNE 1975.....	391.27	1070	640	681	230	244	100	107	320
JULY 1975.....	.60	1640	920	1.5	310	.5	180	.3	470
AUG. 1975.....	0	--	--	0	--	0	--	0	--
SEP. 1975.....	0	--	--	0	--	0	--	0	--
TOTAL.....	20669.19	--	--	31600	--	11600	--	4140	--
WTD. AVG.	56.6	988	570	--	210	--	73	--	300

BRAZOS RIVER BASIN

08086500 Hubbard Creek near Breckenridge, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	409	950	1230	713	1610	1620	2110	1060	1660		
2	---	433	970	1120	523	1610	1720	2140	1060	1680		
3	---	470	990	1200	523	1600	1860	2170	1130	1650		
4	---	400	1000	1250	992	1620	1870	2180	1260	1620		
5	900	337	980	1190	983	1700	1910	2120	1300	1610		
6	1000	352	960	1110	1010	1710	2030	2110	1380	1600		
7	1100	326	950	1170	987	1780	1960	2150	1340	1620		
8	---	377	990	1210	992	1970	1060	2180	1420	1630		
9	---	403	1000	850	992	1940	718	2200	1470	1660		
10	---	376	875	720	992	1930	862	2230	1490	1650		
11	---	375	850	910	1000	2010	1390	2260	1570	1620		
12	---	514	980	950	992	1980	1450	2240	1600	1660		
13	1300	520	995	980	992	2060	1530	2300	1660	1700		
14	555	617	1060	970	992	2140	1490	2290	1710	1690		
15	357	631	1090	1030	996	2170	1560	2280	1650	1720		
16	283	610	1140	1010	992	2230	1660	2330	1580	---		
17	285	650	1130	1000	996	1250	1710	2170	1600	---		
18	678	710	1140	970	996	1130	1730	2400	1610	---		
19	672	770	1120	1000	996	1410	1720	2440	1500	---		
20	682	800	1100	980	1000	1490	1830	2420	1520	---		
21	751	830	1080	1000	996	1570	1880	2370	1550	---		
22	858	850	1110	990	1000	1960	1940	2180	1540	---		
23	892	775	1160	950	1000	1960	1920	1680	1570	---		
24	933	760	1210	930	1000	1960	1900	1050	1600	---		
25	1000	810	1230	960	1130	2090	1910	1050	1550	---		
26	875	820	1050	970	1220	2090	1970	1050	1580	---		
27	900	760	1000	975	1330	2160	2040	1050	1610	---		
28	620	750	1180	940	1350	1410	1990	1060	1630	---		
29	660	830	1220	950	---	1230	2080	1060	1640	---		
30	627	920	1270	965	---	1560	2170	1060	1670	---		
31	424	---	1210	950	---	1570	---	1060	---	---		
MONTH	---	606	1060	1010	989	1770	1720	1930	1500	---		

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.0			8.0	10.0	15.0	---	20.0			
2	---	20.0			9.0	10.0	12.0	---	21.0			
3	---	21.0			9.0	10.0	9.0	---	22.0			
4	---	16.0			8.0	8.0	11.0	---	30.0			
5	---	15.0			8.0	12.0	12.0	---	30.0			
6	---	17.0			8.0	14.0	18.0	---	30.0			
7	---	15.0			7.0	13.0	17.0	---	31.0			
8	---	15.0			9.0	12.0	14.0	---	27.0			
9	---	15.0			8.0	14.0	14.0	---	29.0			
10	---	15.0			8.0	12.0	13.0	---	28.0			
11	---	12.0			9.0	10.0	13.0	---	27.0			
12	---	15.0			11.0	10.0	13.0	---	28.0			
13	---	15.0			12.0	7.0	14.0	---	30.0			
14	18.0	12.0			8.0	7.0	13.0	21.0	28.0			
15	19.0	12.0			12.0	11.0	15.0	---	29.0			
16	21.0	12.0			9.0	14.0	17.0	---	27.0			
17	19.0	---			10.0	12.0	---	---	---			
18	20.0	---			9.0	12.0	---	---	---			
19	18.0	---			7.0	12.0	---	---	---			
20	20.0	---			10.0	15.0	---	---	---			
21	20.0	---			9.0	17.0	---	---	---			
22	19.0	---			9.0	18.0	---	---	---			
23	18.0	---			8.0	19.0	---	23.0	---			
24	18.0	---			7.0	17.0	---	22.0	---			
25	19.0	---			6.0	17.0	---	22.0	---			
26	19.0	---			8.0	15.0	---	21.0	---			
27	---	---			7.0	22.0	---	---	---			
28	20.0	---			12.0	10.0	---	21.0	---			
29	20.0	---			---	8.0	---	21.0	---			
30	20.0	---			---	10.0	---	22.0	---			
31	20.0	---			---	11.0	---	20.0	---			
MONTH	---	---			9.0	12.5	---	---	---			

08087300 Clear Fork Brazos River at Eliasville, Tex.

LOCATION.--Lat 32°57'36", long 98°45'59", Young County, on right bank 30 ft (9 m) upstream from old mill dam, 180 ft (55 m) upstream from bridge on Farm Road 1974, 400 ft (122 m) northwest of Eliasville, and at mile 12.4 (20.0 km).

DRAINAGE AREA.--5,721 mi² (14,817 km²).

PERIOD OF RECORD.--Discharge: November 1915 to April 1920, December 1923 to August 1925, July 1928 to September 1951, October 1961 to current year. Monthly discharge only for some periods published in WSP 1312 as "near Crystal Falls".

Water quality: Chemical analyses: October 1961 to current year. Pesticide analyses: January 1968 to current year. Water temperatures: October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,027.77 ft (313.264 m) above mean sea level. See WSP 1922 for history of changes prior to Dec. 18, 1961.

AVERAGE DISCHARGE.--40 years (1916-19, 1928-51, 1961-75), 370 ft³/s (10.48 m³/s), 268,100 acre-ft/yr (331 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 8,850 ft³/s (251 m³/s) Oct. 31 (gage height, 18.64 ft or 5.681 m); minimum, 8.4 ft³/s (0.24 m³/s) July 21.

Period of record: Maximum discharge, 35,800 ft³/s (1,010 m³/s) June 11, 1941 (gage height, 33.45 ft or 10.196 m, site and datum then in use), from rating curve extended above 23,000 ft³/s (651 m³/s); no flow at times.

Historic: Maximum stage since 1877, 35 ft (11 m) May 1, 1957, present site and datum; flood in September 1900 reached about same stage, from information by Texas Highway Department and local residents. Other floods are reported to have occurred in 1876, Apr. 27, 1890, 1932, 1941, and 1955.

Water quality: Current year: Maximum daily specific conductance, 4,250 micromhos Apr. 29, 30; minimum daily, 413 micromhos Aug. 1. Maximum water temperatures, 29.5°C July 8, 9; minimum, 4.5°C Jan. 13.

Period of record: Maximum daily specific conductance, 7,400 micromhos Jan. 9, 1971; minimum daily, 300 micromhos Sept. 10, 1962. Maximum water temperatures, 38.0°C Aug. 6, 1964; minimum, freezing point on several days during January 1963, January 1964, December 1972, and January 1973.

REMARKS.--Discharge records good. Regulation by eight major upstream reservoirs with a capacity of 510,100 acre-ft (629 hm³). Many small diversions above station for municipal supply and oilfield operations.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651	6,910	228	199	1,240	178	122	55	648	37	258	73
2	490	5,890	202	224	853	170	117	68	464	28	194	57
3	385	5,850	199	252	713	162	114	58	220	25	324	44
4	309	4,470	198	289	4,220	155	107	66	139	42	170	35
5	259	3,050	196	322	5,310	149	97	56	115	40	292	32
6	230	2,140	195	289	2,810	147	88	55	97	54	343	28
7	206	1,600	191	267	1,690	143	108	52	83	35	211	25
8	174	1,250	190	245	856	138	546	45	840	26	142	28
9	150	1,060	180	221	720	143	259	42	659	98	103	26
10	130	1,340	175	206	618	137	147	43	224	81	80	25
11	123	1,240	185	191	527	128	135	46	117	65	65	32
12	123	1,270	194	184	524	138	127	40	76	47	57	22
13	121	1,230	224	174	508	144	131	37	93	36	48	25
14	2,320	966	245	161	1,400	127	118	251	160	31	42	35
15	2,920	794	227	153	1,460	122	107	212	173	24	36	47
16	3,390	630	203	160	1,420	125	97	170	117	20	36	46
17	4,270	584	186	170	1,360	216	97	117	85	16	47	69
18	3,440	527	173	174	1,320	323	98	91	65	13	62	113
19	1,430	497	166	171	1,300	146	89	79	51	12	49	99
20	834	479	165	168	1,270	126	84	68	45	11	200	93
21	601	451	161	162	1,090	119	81	60	41	11	121	82
22	474	396	158	150	413	108	82	52	38	1,610	82	67
23	396	375	155	141	416	107	78	298	33	2,630	65	54
24	394	353	146	149	404	97	77	1,020	30	2,270	53	44
25	362	335	141	136	233	90	77	548	30	918	41	39
26	348	294	141	132	197	83	93	384	33	723	38	39
27	583	269	141	138	194	87	72	758	33	470	46	39
28	2,190	267	151	138	187	140	77	1,500	48	3,140	42	36
29	2,970	253	161	132	-----	113	67	5,460	39	2,290	85	36
30	4,160	239	176	129	-----	98	61	4,290	47	575	136	35
31	7,400	-----	187	248	-----	91	-----	1,020	-----	430	99	-----
TOTAL	41,833	45,009	5,640	5,875	33,253	4,250	3,553	17,041	4,843	15,808	3,567	1,425
MEAN	1,349	1,500	182	190	1,188	137	118	550	161	510	115	47.5
MAX	7,400	6,910	245	322	5,310	323	546	5,460	840	3,140	343	113
MIN	121	239	141	129	187	83	61	37	30	11	36	22
AC-FT	82,980	89,280	11,190	11,650	65,960	8,430	7,050	33,800	9,610	31,360	7,080	2,830

CAL YR 1974 TOTAL 147,474.06 MEAN 404 MAX 7,400 MIN 0 AC-FT 292,500
WTR YR 1975 TOTAL 182,097.00 MEAN 499 MAX 7,400 MIN 11 AC-FT 361,200

PEAK DISCHARGE (BASE, 6,000 FT³/S).--Oct. 31 (2100) 8,850 ft³/s (18.64 ft); May 29 (2130) 6,780 ft³/s (15.68 ft).

BRAZOS RIVER BASIN

08087300 Clear Fork Brazos River at Eliasville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 16...	1355	7.8	7.7	57	16.	51	5.3	134	0	86
NOV. 19...	1235	496	9.9	100	31	120	6.0	208	0	160
DEC. 19...	1605	163	6.8	180	82	300	6.7	270	0	530
JAN. 17...	1400	171	2.3	210	99	340	7.0	255	0	620
FEB. 05...	1110	5950	6.4	93	31	130	6.8	139	0	130
MAR. 11...	1035	127	4.9	180	77	310	7.2	256	0	500
APR. 22...	0925	82	.9	210	100	380	7.2	232	0	620
MAY 12...	1300	42	5.2	240	130	420	7.4	258	0	730
JUNE 03...	1000	209	8.7	97	41	140	7.8	150	0	230
JULY 12...	1100	45	12	150	55	240	8.5	236	0	290
AUG. 25...	1420	41	6.2	88	33	130	12	158	0	170
SEP. 19...	1245	101	9.9	140	60	230	10	238	0	410

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 16...	88	--	377	210	98	1.5	681	7.6	16.5
NOV. 19...	210	.3	740	380	210	2.7	1290	8.1	12.5
DEC. 19...	500	.4	1740	790	570	4.7	2770	8.0	8.0
JAN. 17...	590	.7	1990	930	720	4.8	3130	8.0	5.0
FEB. 05...	280	.3	746	360	250	3.0	1360	7.6	7.0
MAR. 11...	530	.4	1740	770	560	4.9	2860	8.3	12.0
APR. 22...	670	.4	2100	940	750	5.4	3390	7.9	20.0
MAY 12...	750	.5	2410	1100	920	5.4	3830	8.0	26.0
JUNE 03...	250	.3	849	410	290	3.0	1450	8.0	23.5
JULY 12...	430	.4	1300	600	410	4.3	2220	7.9	29.0
AUG. 25...	230	--	747	360	230	3.0	1340	7.6	30.0
SEP. 19...	340	.4	1320	600	400	4.1	2170	8.1	25.0

BRAZOS RIVER BASIN

267

08087300 Clear Fork Brazos River at Eliasville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
JAN. 17...	1400	171	5.0	.00	.0	.00	.0	.00	.2	.00	.0
MAY 12...	1300	42	26.0	.00	.0	.00	.0	.00	.0	.00	.0
JULY 12...	1045	45	--	.00	.0	.00	.1	.00	.2	.00	.0
SEP. 19...	1245	101	25.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)
JAN. 17...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 12...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JULY 12...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 19...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DI-AZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
JAN. 17...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 12...	0	.0	0	.00	.00	.00	.00	.01	.00	.00
JULY 12...	0	.0	0	.00	.00	.00	.00	.00	.00	.05
SEP. 19...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA, MG)
OCT. 1974.....	41833	840	490	55300	110	12400	100	11300	230
NOV. 1974.....	45009	832	480	58300	110	13400	100	12200	220
DEC. 1974.....	5640	2550	1500	22800	480	7310	480	7310	700
JAN. 1975.....	5875	3130	1900	30100	600	9520	590	9360	860
FEB. 1975.....	33253	1620	970	87100	280	25100	210	18900	440
MAR. 1975.....	4250	2990	1800	20700	570	6540	570	6540	820
APR. 1975.....	3553	3330	2000	19200	640	6140	630	6040	910
MAY 1975.....	17041	1900	1100	50600	340	15600	350	16100	520
JUNE 1975.....	4843	1450	860	11200	240	3140	190	2480	390
JULY 1975.....	15808	1230	730	31200	200	8540	160	6830	330
AUG. 1975.....	3567	745	430	4140	93	896	92	886	200
SEPT 1975.....	1425	2010	1200	4620	360	1390	380	1460	550
TOTAL	182097	**	**	395000	**	110000	**	99400	**
WTD.AVG.	498.9	1360	800	**	220	**	200	**	370

BRAZOS RIVER BASIN

08087300 Clear Fork Brazos River at Eliasville, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	678	561	2000	2990	2600	2420	3510	4230	1210	1940	413	1590
2	709	568	2010	3030	1260	2510	3820	4130	1330	1940	416	1770
3	769	587	2020	3090	1750	2500	3690	4130	1450	1970	432	1860
4	828	637	2050	3230	1300	2620	3640	4130	1470	1970	449	1910
5	863	753	2110	3260	1280	2700	3550	4130	1520	2010	614	1910
6	912	738	2110	3120	2010	2760	3540	4170	1600	2160	599	1860
7	934	756	2170	3200	2490	2860	3380	4170	1840	2210	599	1860
8	983	796	2190	3240	2610	2820	2770	4110	1910	2280	567	1830
9	1000	892	2190	3180	2350	2860	3110	4040	1150	2330	458	1800
10	1030	982	2250	3360	2140	2840	3360	3970	1000	2390	512	1770
11	1040	1350	2340	3180	1960	2850	2930	3920	1260	2270	694	1770
12	1050	1190	2460	3130	1820	2940	2590	3830	1400	2210	758	1820
13	1050	1130	2560	3120	1850	2920	2690	3760	1450	2210	774	1820
14	900	1220	2490	3170	1660	3010	3270	3760	1210	2210	812	1870
15	950	1240	2550	3220	1330	3250	3280	3660	1100	2210	848	1990
16	690	1260	2600	3190	1310	3120	3470	4000	1250	2210	874	2010
17	1070	1200	2660	3110	1300	3150	3630	4110	1480	2210	874	1990
18	653	1230	2860	3150	1280	3150	3600	4050	1590	2250	874	2030
19	663	1270	2770	3120	1310	3000	3420	3080	1710	2250	920	2160
20	620	1330	2790	3030	1320	2720	3350	3310	1930	2250	885	2160
21	714	1440	2780	3070	1340	3460	3330	3560	2010	2270	909	2200
22	777	1520	2850	3050	1350	3180	3370	3930	1920	2400	1270	2240
23	745	1640	2910	2990	1770	3190	3480	3830	1850	2270	1530	2200
24	814	1640	2910	2970	1740	3190	3600	3600	1780	1250	1430	2040
25	983	1680	2940	2990	1780	3240	3630	1520	1780	708	1340	1970
26	1310	1720	3030	2990	1810	3310	3700	2230	1790	703	1320	1970
27	1380	1790	3060	2920	1910	3320	3900	2430	1850	523	1320	2050
28	1050	1870	3100	2990	2300	3340	4110	3000	1850	487	1290	2160
29	1020	1950	3280	3130	---	3360	4250	1500	1850	726	1270	2330
30	1010	1940	3140	3150	---	3450	4250	792	1880	474	1290	2540
31	582	---	2980	3110	---	3670	---	1080	---	422	1430	---
MONTH	696	1230	2590	3110	1750	3020	3470	3420	1580	1800	896	1980

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	17.0	5.5	7.0	9.0	10.0	13.0	21.5	21.5	28.5	28.5	28.0
2	18.0	18.5	7.0	7.0	7.0	11.0	13.5	23.5	23.0	28.5	29.0	27.0
3	18.5	19.0	6.5	7.0	8.0	11.0	13.5	23.5	23.5	28.5	28.0	27.0
4	19.5	18.0	6.5	6.5	8.5	10.0	13.5	23.0	24.0	28.0	28.0	28.0
5	19.5	19.0	8.0	6.5	8.0	10.5	14.5	22.0	25.0	28.0	27.0	28.0
6	20.5	15.5	8.5	6.5	6.5	12.0	15.5	23.0	26.0	28.5	27.0	27.0
7	20.0	15.5	8.5	7.0	6.0	13.5	15.5	22.0	27.0	28.5	28.0	26.5
8	19.0	14.5	8.5	8.0	6.5	10.0	14.5	23.0	28.0	29.5	27.0	25.5
9	20.0	14.0	6.5	8.5	6.0	12.0	15.5	24.0	22.0	29.5	26.5	26.5
10	20.0	14.5	7.0	8.5	6.0	12.0	16.0	25.0	24.5	28.5	27.0	26.5
11	20.5	14.0	7.0	7.0	7.0	11.5	15.0	25.0	25.0	28.0	27.0	26.5
12	20.5	13.5	7.0	6.0	7.0	12.0	14.5	24.0	24.5	28.0	28.0	25.5
13	21.0	13.5	7.0	4.5	8.5	10.5	15.0	24.5	25.5	27.0	28.0	23.5
14	21.0	12.0	8.0	5.0	9.5	9.5	14.5	23.5	25.5	28.0	28.5	21.5
15	18.0	12.0	7.0	5.0	8.5	10.5	15.0	23.0	26.0	28.0	28.5	22.0
16	16.5	12.0	6.5	5.5	7.0	10.5	16.5	22.0	27.0	28.0	28.5	22.0
17	16.5	11.5	6.5	6.0	7.0	11.0	18.5	22.0	26.5	28.0	28.0	22.0
18	16.0	11.5	8.5	5.5	8.0	12.0	20.0	23.5	28.0	28.0	28.0	20.5
19	16.5	12.0	6.5	6.0	7.0	13.0	18.5	24.0	27.0	28.0	28.5	24.0
20	16.0	12.0	6.5	5.0	8.0	14.0	18.0	24.0	28.0	28.0	28.0	23.5
21	16.5	11.5	6.5	6.0	8.5	15.5	18.5	24.0	28.0	28.5	28.5	22.0
22	17.0	13.0	7.0	6.0	8.5	15.0	20.0	25.0	27.0	28.0	28.5	20.5
23	17.0	14.5	8.5	6.0	7.0	16.5	20.0	24.5	28.5	28.0	28.0	20.0
24	18.0	13.0	8.5	7.0	7.0	15.5	20.5	24.0	28.5	26.5	28.5	20.0
25	18.0	11.5	7.0	7.0	8.0	15.5	21.0	21.0	28.0	26.5	29.0	19.5
26	18.0	12.0	6.5	8.0	8.5	15.5	23.0	22.0	28.0	26.0	28.5	18.5
27	18.0	11.5	6.5	8.5	8.5	16.0	24.0	23.5	29.0	26.5	27.0	19.0
28	18.0	11.5	7.0	8.5	9.5	15.5	21.0	23.5	28.0	26.5	28.5	20.0
29	17.0	11.0	8.5	9.0	---	13.0	23.0	23.5	28.0	26.5	27.0	20.0
30	18.5	9.0	8.5	9.0	---	11.5	23.0	22.0	28.0	27.0	27.0	20.5
31	18.0	---	8.0	9.5	---	11.5	---	21.5	---	28.5	28.0	---
MONTH	18.5	13.5	7.5	7.0	7.5	12.5	17.5	23.0	26.5	28.0	28.0	23.5

BRAZOS RIVER BASIN

269

08088000 Brazos River near South Bend, Tex.

LOCATION.--Lat 33°01'27", long 98°38'37", Young County, on left bank 265 ft (81 m) downstream from bridge on State Highway 67, 1.8 miles (2.9 km) downstream from Clear Fork Brazos River, 2.0 miles (3.2 km) northeast of South Bend, and at mile 758.3 (1,220.1 km).

DRAINAGE AREA.--21,600 mi² (55,940 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: September 1938 to current year.

Water quality: Chemical analyses: January 1942 to March 1948, October 1968 to September 1969. Pesticide analyses: March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,002.98 ft (305.708 m) above mean sea level. Prior to Feb. 23, 1939, nonrecording gage at site 265 ft (81 m) upstream. Feb. 23, 1939, to Mar. 9, 1961, water-stage recorder at site 265 ft (81 m) upstream.

AVERAGE DISCHARGE.--37 years, 868 ft³/s (24.58 m³/s), 628,900 acre-ft/yr (775 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,400 ft³/s (436 m³/s) Nov. 1 (gage height, 17.20 ft or 5.243 m); minimum, 75 ft³/s (2.12 m³/s) July 21.

Period of record: Maximum discharge, 87,400 ft³/s (2,480 m³/s) May 4, 1941 (gage height, 27.35 ft or 8.336 m); maximum gage height, 32.70 ft (9.967 m) Aug. 29, 1957; no flow at times.

Maximum stage, 36.2 ft (11.03 m) in 1876, from information by State Highway Department and Corps of Engineers. Flood of Sept. 24, 1900, reached a stage of 29.5 ft (8.99 m), and flood of June 16, 1930, reached a stage of 35.5 ft (10.82 m), from information by local residents.

REMARKS.--Discharge records good. Flow partly regulated by 10 major upstream reservoirs (total capacity, 554,000 acre-ft or 683 hm³).

Many small diversions above station for municipal supply and oilfield operations. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950).

REVISIONS (WATER YEARS).--WRD Texas 1974: 1973(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,750	12,700	399	262	653	264	147	114	2,500	139	1,160	686
2	1,380	9,420	371	293	910	258	153	403	1,590	133	1,020	782
3	1,120	7,750	357	333	663	248	147	223	1,030	123	1,350	562
4	924	5,560	348	363	2,140	241	144	160	747	118	829	410
5	782	3,830	341	405	4,750	234	137	131	597	125	691	318
6	683	2,530	331	385	2,450	227	130	113	482	127	667	258
7	614	1,980	323	364	1,560	217	141	101	395	109	516	223
8	550	1,620	317	346	1,090	212	588	93	1,520	102	429	201
9	495	1,420	310	322	890	216	330	86	4,620	113	360	183
10	448	1,540	302	304	792	209	253	84	2,010	139	299	169
11	414	1,480	308	282	680	202	278	149	577	133	261	151
12	392	1,380	310	268	636	195	247	116	462	122	231	142
13	380	1,400	322	256	615	199	220	81	520	109	208	160
14	1,840	1,200	339	248	933	196	200	591	454	107	190	429
15	3,550	1,070	321	241	1,110	191	190	603	397	106	180	2,840
16	2,980	924	301	241	1,090	195	175	328	321	104	180	2,230
17	4,300	858	282	251	1,050	205	163	208	283	93	180	1,500
18	3,700	795	263	257	998	395	153	154	250	86	268	1,130
19	1,550	753	250	247	998	221	146	129	218	82	214	913
20	1,030	730	243	249	975	213	141	114	197	80	239	733
21	808	700	237	244	931	182	133	106	179	86	572	608
22	754	654	236	236	516	175	132	93	167	851	559	508
23	661	610	231	227	441	164	130	759	163	2,910	409	434
24	652	570	222	234	428	157	126	6,780	160	3,260	310	423
25	610	544	216	226	359	150	121	4,620	184	2,020	250	362
26	1,040	507	231	218	280	146	130	1,850	156	1,620	213	310
27	2,920	466	230	212	276	143	122	1,540	210	1,120	210	287
28	3,840	453	224	204	270	158	120	1,900	236	4,090	212	260
29	5,480	436	234	194	-----	178	118	7,820	184	7,070	274	236
30	5,450	414	251	188	-----	153	126	11,100	149	2,420	387	231
31	13,000	-----	262	194	-----	142	-----	6,200	-----	1,570	392	-----
TOTAL	64,097	64,294	8,912	8,294	28,484	6,286	5,341	46,749	20,958	29,267	13,260	17,679
MEAN	2,068	2,143	287	268	1,017	203	178	1,508	699	944	428	589
MAX	13,000	12,700	399	405	4,750	395	588	11,100	4,620	7,070	1,350	2,840
MIN	380	414	216	188	270	142	118	81	149	80	180	142
AC-FT	127,100	127,500	17,680	16,450	56,500	12,470	10,590	92,730	41,570	58,050	26,300	35,070
CAL YR 1974	TOTAL 237,688.2	MEAN 651	MAX 13,000	MIN 5.6	AC-FT 471,500							
WTR YR 1975	TOTAL 313,621.0	MEAN 859	MAX 13,000	MIN 80	AC-FT 622,100							

PEAK DISCHARGE (BASE, 11,000 FT³/S).--Nov. 1 (0100) 15,400 ft³/s (17.20 ft); May 30 (0800) 11,800 ft³/s (16.18 ft).

BRAZOS RIVER BASIN

08088000 Brazos River near South Bend, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)
JAN. 17...	1300	.00	.0	.00	.0	.00	.0	.00	.0	.00
MAY 12...	1400	.00	.0	.00	.0	.00	.0	.00	.0	.00
JULY 12...	1000	.00	.0	.00	.0	.00	.0	.00	.0	.00
SEP. 19...	1145	.00	.0	.00	.0	.00	.0	.00	.0	.00
DATE	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)
JAN. 17...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 12...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JULY 12...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.1
SEP. 19...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
DATE	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
JAN. 17...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 12...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
JULY 12...	0	.1	0	.00	.00	.00	.00	.00	.00	.05
SEP. 19...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

08088100 Salt Creek at Olney, Tex.

LOCATION.--Lat 33°22'13", long 98°44'40", Young County, on right bank 21 ft (6 m) downstream from bridge on State Highway 199 and 0.5 mile (0.8 km) east of Olney.

DRAINAGE AREA.--9.6 mi² (24.9 km²).

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,164.03 ft (354.796 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 3.07 ft³/s (0.0869 m³/s), 2,220 acre-ft/yr (2.74 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 730 ft³/s (20.7 m³/s) May 28 (gage height, 9.94 ft or 3.030 m); no flow for many days.

Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) May 12, 1972 (gage height, 12.25 ft or 3.734 m), from rating curve extended above 1,020 ft³/s (28.9 m³/s) on basis of indirect measurement of 11,500 ft³/s (326 m³/s); no flow at times each year.

Maximum stage since at least 1908, 16.7 ft (5.09 m) in June 1915; flood in May or June 1941 reached a stage of 16 ft (4.9 m), from information by local residents.

REMARKS.--Records good. No diversion above station. Records furnished by the city of Olney show that during the year 1,094 acre-ft (1.35 hm³) was diverted from reservoirs in the Red River basin for municipal and industrial uses of which 396 acre-ft (0.488 hm³) was returned as sewage effluent to Salt Creek downstream from station. Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 1922: 1958-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	8.3	.05	.06	2.6	.09	.12	.01	2.3	.11	0	0
2	0	1.9	.05	3.7	1.8	.08	.12	1.9	1.1	.09	4.0	0
3	0	2.9	.05	.32	2.4	.10	.12	3.5	.75	.07	.62	0
4	0	6.3	.05	.07	15	.09	.12	.09	.56	3.3	.03	0
5	0	1.3	.04	.05	25	.09	.12	.03	.47	6.6	.01	0
6	0	.53	.04	.04	1.6	.09	.12	.02	.37	.20	0	0
7	0	.36	.04	.03	.53	.08	.13	.01	2.2	.07	0	0
8	0	.29	.04	.03	.34	.07	.43	0	179	.04	0	0
9	0	.25	.04	.03	.20	.08	.53	0	154	.02	0	0
10	0	.53	.87	.02	.17	.10	.55	0	70	.34	0	0
11	0	.30	.23	.02	.15	.09	.59	.13	5.0	.18	0	0
12	0	.22	.17	.01	.11	.11	.59	.01	2.0	.13	0	.79
13	1.2	.19	.17	.01	.10	.11	.59	1.2	1.1	.03	0	1.5
14	24	.14	.17	.02	.08	.10	.59	1.8	.82	.01	0	2.4
15	2.8	.12	.17	.03	.07	.10	.65	.06	.61	0	0	1.1
16	.50	.14	.17	.02	.09	.10	.59	.01	.52	0	0	.02
17	.11	.14	.17	.02	.07	1.2	.48	0	.45	0	0	0
18	.03	.14	.17	.02	.06	.37	.43	0	.36	0	0	0
19	.01	.14	.17	.02	.05	.08	.34	.01	.29	0	0	0
20	0	.13	.17	.01	.07	.06	.30	0	.26	0	0	0
21	0	.12	.17	.02	.07	.05	.23	0	.26	0	0	.41
22	0	.12	.12	.01	.20	.05	.20	.13	3.1	0	0	.04
23	0	.12	.10	.01	.30	.05	.14	241	.43	0	0	0
24	.34	.10	.10	.02	.11	.05	.13	69	.23	.06	0	0
25	.04	.10	.10	.01	.11	.05	.10	16	.21	.65	0	0
26	.01	.08	.55	.01	.10	.05	.08	2.2	.20	2.7	0	0
27	0	.05	.48	.01	.08	.05	.05	.79	.17	.49	.02	0
28	10	.05	.48	0	.09	.11	.03	277	.16	.05	0	0
29	.98	.05	.48	0	-----	.12	.01	269	.14	.01	0	0
30	64	.05	.48	0	-----	.12	.02	113	.14	0	0	0
31	167	-----	1.6	0	-----	.12	-----	7.9	-----	0	0	-----
TOTAL	271.02	25.16	7.69	4.62	51.55	4.01	8.50	1,004.80	427.20	15.15	4.68	6.26
MEAN	8.74	.84	.25	.15	1.84	.13	.28	32.4	14.2	.49	.15	.21
MAX	167	8.3	1.6	3.7	25	1.2	.65	277	179	6.6	4.0	2.4
MIN	0	.05	.04	0	.05	.05	.01	0	.14	0	0	0
AC-FT	538	50	15	9.2	102	8.0	17	1,990	847	30	9.3	12

CAL YR 1974 TOTAL 747.63 MEAN 2.05 MAX 167 MIN 0 AC-FT 1,480
WTR YR 1975 TOTAL 1,830.64 MEAN 5.02 MAX 277 MIN 0 AC-FT 3,630

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	2400	9.17	408	5-28	1330	9.94	730
5-23	0730	9.46	503	6- 8	2200	9.77	636

BRAZOS RIVER BASIN

08088300 Briar Creek near Graham, Tex.

LOCATION.--Lat 33°12'43", long 98°37'06", Young County, near right bank on downstream side of bridge on Farm Road 1769, 2.5 miles (4.0 km) upstream from mouth, and 7.0 miles (11.3 km) northwest of Graham.

DRAINAGE AREA.--19.7 mi² (51.0 km²).

PERIOD OF RECORD.--April 1958 to current year. Prior to October 1965, published as Oak Creek near Graham.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (332 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 3.84 ft³/s (0.109 m³/s), 2,780 acre-ft/yr (3.43 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 483 ft³/s (13.7 m³/s) May 29 (gage height, 7.58 ft or 2.310 m); no flow for many days.

Period of record: Maximum discharge, 2,720 ft³/s (77.0 m³/s) Apr. 30, 1970 (gage height, 12.30 ft or 3.749 m); no flow most of time.

Maximum stage since at least 1900, 15.2 ft (4.63 m) in September 1955. Flood in May 1957 reached a stage of 15.0 ft (4.57 m), from information by local resident.

REMARKS.--Records good. No diversion above station.

REVISIONS (WATER YEARS).--WSP 2122: 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	22	0	0	7.4	0	.07	.02	2.8	0	0	
2	0	3.1	0	.15	19	.01	.04	77	1.4	0	0	
3	0	1.2	0	.04	40	.01	.04	23	1.2	0	0	
4	0	6.4	0	.04	45	.01	.03	3.9	.56	0	.10	
5	0	3.7	0	.04	83	.01	.02	1.5	.26	0	.10	
6	0	1.2	0	.01	12	.01	.02	.71	.15	0	.01	
7	0	.42	0	.01	3.1	.01	1.6	.29	.12	0	0	
8	0	.18	0	0	1.4	.01	20	.13	61	0	0	
9	0	.11	0	0	.58	.01	5.0	.05	97	0	0	
10	0	2.7	0	0	.29	.01	2.0	.03	38	0	0	
11	0	2.3	0	0	.18	.01	.65	64	16	0	0	
12	0	1.2	0	0	.09	.02	.25	25	3.2	0	0	
13	.23	.47	0	0	.04	.02	.18	57	1.3	0	0	
14	45	.13	0	0	.02	.02	.15	141	.59	0	0	
15	11	.05	0	0	.01	.02	.11	16	.28	0	0	
16	2.2	.03	0	0	0	.03	.07	3.7	.16	0	0	
17	.53	.01	0	0	0	.03	.04	1.6	.09	0	0	
18	.13	0	0	0	0	.04	.04	.78	.06	0	0	
19	.02	0	0	0	0	.04	.03	.37	.03	0	0	
20	0	0	0	0	0	.04	.03	.25	.01	.80	0	
21	0	0	0	0	0	.04	.01	.21	0	.08	0	
22	0	0	0	0	0	.04	.01	.11	.01	.01	0	
23	0	0	0	0	.01	.04	.01	115	.12	0	0	
24	0	0	0	0	.01	.04	.03	63	.19	.33	0	
25	0	0	0	0	0	.03	.01	26	.04	44	0	
26	0	0	0	0	0	.02	.01	2.0	.01	43	0	
27	0	0	0	0	0	.02	.03	.25	.01	6.8	.03	
28	88	0	.07	0	0	.77	.51	.02	0	.78	.42	
29	18	0	0	0	-----	.47	.11	216	0	.10	.10	
30	31	0	0	0	-----	.21	.04	245	0	.02	.01	
31	124	-----	0	0	-----	.09	-----	17	-----	0	-----	
TOTAL	320.12	45.20	.07	.29	212.13	2.13	31.14	1,100.92	224.59	95.92	.77	0
MEAN	10.3	1.51	.002	.009	7.58	.069	1.04	35.5	7.49	3.09	.025	0
MAX	124	22	.07	.15	83	.77	20	245	97	44	.42	0
MIN	0	0	0	0	0	0	.01	.02	0	0	0	0
AC-FT	635	90	.1	.6	421	4.2	62	2,180	445	190	1.5	0

CAL YR 1974 TOTAL 599.92 MEAN 1.64 MAX 124 MIN 0 AC-FT 1,190

WTR YR 1975 TOTAL 2,033.28 MEAN 5.57 MAX 245 M7N 0 AC-FT 4,030

PEAK DISCHARGE (BASE, 200 FT³/S).--May 13 (2300) 364 ft³/s (6.23 ft); May 29 (2100) 483 ft³/s (7.58 ft).

BRAZOS RIVER BASIN

273

08088400 Lake Graham near Graham, Tex.

LOCATION.--Lat 33°08'04", long 98°36'48", Young County, near left end of earthen dam on Salt Creek, 2.2 miles (3.5 km) northwest of Graham, and 5 miles (8 km) downstream from Briar Creek.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--Contents: March 1958 to September 1963 (unpublished record), October 1963 to current year. Prior to October 1965, monthend contents only.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage (Salt Creek datum) is 1.30 ft (0.396 m) above mean sea level. Prior to October 1963, non-recording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 57,060 acre-ft (70.4 hm³) May 30 (gage height, 1,076.29 ft or 328.053 m); minimum, 40,150 acre-ft (49.5 hm³) Oct. 13 (gage height, 1,069.43 ft or 325.962 m).
Period of record: Maximum contents, 61,120 acre-ft (75.4 hm³) Apr. 30, 1970 (gage height, 1,077.77 ft or 328.504 m); minimum, 30,780 acre-ft (38.0 hm³) Aug. 12, 1971 (gage height, 1,065.10 ft or 324.642 m).

REMARKS.--The lake is formed by a rolled earthfill dam 5,000 ft (1,500 m) long. Lake Graham was connected with Lake Eddleman in 1959 by a cut channel at a 1,050.0 ft (320.04 m) gage height. Deliberate impoundment began Apr. 28, 1958, and the dam was completed in July 1958. The uncontrolled emergency spillway is a 1,050-foot-wide (320-metre) cut at the right end of dam. The spillway is designed to discharge 136,500 ft³/s (3,870 m³/s) at a gage height of 1,087.5 ft (331.47 m). The dam is the property of the city of Graham and was built to impound water for municipal and industrial uses. In addition, water is used by Texas Electric Service Co. for operation of their steam generating powerplant. The capacity table is based on an original survey of Lake Eddleman in 1928 and a Salt Creek survey of 1953. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	1,092.0	-
Crest of spillway.....	1,075.0	53,680
Bottom of interconnecting channel.....	1,050.0	8,670
Lowest gated outlet (invert).....	1,050.0	8,670

COOPERATION.--Capacity table was furnished by Freese, Nichols, and Endress, Consulting Engineers. Record of diversions furnished by the city of Graham and Texas Electric Service Co.

Capacity table (gage height, in feet, and contents, in acre-feet)

1,069.0	39,180	1,075.0	53,680
1,071.0	43,820	1,077.0	58,990
1,073.0	48,660		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40680	45370	44730	44250	44180	46240	45620	45420	55150	52340	51440	49910
2	40630	45400	44700	44370	44490	46220	45520	47800	54730	52260	51710	49810
3	40540	45450	44650	44350	44800	46170	45520	47900	54470	52290	51810	49760
4	40490	45620	44650	44350	45320	46150	45470	47900	54270	52260	51740	49680
5	40450	45640	44650	44320	46220	46150	45450	47900	54060	52260	51690	49610
6	40380	45660	44630	44320	46370	46170	45450	47870	53910	52210	51610	49460
7	40360	45640	44610	44300	46410	46100	45780	47850	53750	52160	51510	49460
8	40330	45620	44560	44300	46410	46070	45910	47820	53360	52110	51440	49390
9	40310	45590	44510	44280	46390	46070	45930	47720	53030	52110	51360	49320
10	40240	45710	44560	44250	46410	46030	45950	47700	56050	52090	51260	49270
11	40200	45710	44580	44200	46440	46030	45930	48240	55230	52010	51110	49100
12	40200	45660	44580	44160	46440	45950	45910	48360	54780	52010	51030	49070
13	40310	45590	44560	44130	46410	45930	45930	49440	54450	51960	50930	49100
14	41200	45540	44560	44110	46390	45880	45930	50660	54320	51740	50860	49140
15	41330	45490	44490	44130	46370	45910	45930	50780	54090	51710	50810	49140
16	41330	45470	44460	44110	46370	45930	45880	50760	53910	51610	50780	49120
17	41310	45450	44440	44090	46370	45930	45880	50710	53680	51540	50760	49100
18	41290	45400	44420	44060	46320	45910	45810	50660	53440	51490	50760	49020
19	41260	45420	44390	43990	46290	45910	45780	50630	53320	51560	50680	49000
20	41240	45370	44350	43970	46290	45880	45710	50660	53140	51540	50580	48920
21	41150	45320	44350	43940	46290	45880	45660	50630	52930	51490	50510	48900
22	41130	45300	44300	43920	46320	45830	45660	50580	52880	51410	50430	48880
23	41080	45250	44300	43920	46290	45810	45640	51760	52700	51360	50380	48800
24	41170	45230	44230	43940	46270	45740	45640	52670	52670	51390	50230	48750
25	41200	45160	44200	43940	46290	45660	45620	52900	52620	51540	50080	48680
26	41200	45060	44230	43900	46240	45660	45590	52830	52540	51660	50080	48580
27	41150	44920	44230	43870	46240	45710	45640	52650	52490	51740	50160	48560
28	41960	44840	44230	43850	46270	45710	45590	53290	52390	51710	50160	48510
29	42080	44770	44230	43850	---	45660	45540	55620	52390	51610	50130	48510
30	42950	44750	44230	43820	---	45660	45490	57060	52360	51590	50060	48460
31	44840	---	44250	43870	---	45640	---	55860	---	51510	49980	---
(†)	1071.43	1071.39	1071.18	1071.02	1072.02	1071.76	1071.70	1075.84	1074.49	1074.15	1073.54	1072.92
(*)	+4090	-90	-500	-380	+2400	-630	-150	+10370	-3500	-850	-1530	-1520
(††)	436	438	426	249	189	297	321	350	367	462	579	430
MAX	44840	45710	44730	44370	46440	46240	45950	57060	57030	52340	51810	49910
MIN	40200	44750	44200	43820	44180	45640	45450	45420	52360	51360	49980	48460
CAL YR 1974.....	* -1440			†† 5052			MAX 45710	MIN 38070				
WTR YR 1975.....	* +7710			†† 4544			MAX 57060	MIN 40200				

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by the city of Graham and Texas Electric Service Co.

BRAZOS RIVER BASIN

08088400 Lake Graham near Graham, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
JUNE, 1975 03...	1450	6.3	46	8.3	52	8.3	116	0	18

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JUNE, 1975 03...	110	.3	306	150	54	1.9	604	7.8	25.0

BRAZOS RIVER BASIN

275

08088420 Brazos River at Farm Road 1287 near Graham, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 33°03'20", long 98°34'54", Young County, at Gooseneck Bridge on Farm Road 1287 and about 3.5 miles (5.6 km) south of Graham.

DRAINAGE AREA.--21,955 mi² (56,863 km²), of which 9,240 mi² (23,930 km²) is noncontributing.

PERIOD OF RECORD.--Occasional discharge measurements: December 1969 to September 1972, May 1974 to current year. Occasional water-quality data: October 1969 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 17...	0740	3870	8.7	80	23	150	6.5	136	0	150
NOV. 19...	0715	742	11	180	50	680	8.4	190	0	420
DEC. 20...	0850	263	5.2	280	92	1100	9.7	232	0	590
JAN. 27...	1755	189	.4	310	110	1200	9.9	212	0	870
MAR. 10...	1835	214	2.3	340	110	1400	14	181	0	850
APR. 21...	1855	146	1.4	360	120	1300	13	180	0	1000
JUNE 02...	1845	1640	9.3	110	22	190	8.3	123	0	210
JULY 15...	1545	108	7.9	330	84	1200	14	160	0	850
AUG. 20...	0855	316	10	200	38	660	8.5	120	0	500

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 17...	250	--	735	290	180	3.8	1330	7.8	16.0
NOV. 19...	1100	.4	2540	660	500	12	4330	8.2	12.0
DEC. 20...	1800	.5	3990	1100	890	15	6960	8.1	7.0
JAN. 27...	1900	.2	4510	1200	1100	15	7440	8.1	13.0
MAR. 10...	2300	.5	5110	1300	1200	17	8700	7.5	12.0
APR. 21...	2100	.4	4980	1400	1200	15	8570	7.6	21.5
JUNE 02...	330	.2	940	370	260	4.3	1650	7.6	24.5
JULY 15...	2000	.5	4570	1200	1000	15	7710	7.5	30.0
AUG. 20...	1050	.8	2530	660	560	11	4150	7.8	26.0

08088450 Big Cedar Creek near Ivan, Tex.

LOCATION.--Lat 32°49'39", long 98°43'25", Stephens County, on left bank at downstream side of bridge on Farm Road 717, 3.2 miles (5.1 km) south of Ivan, 8.2 miles (13.2 km) northwest of Caddo, and 11.6 miles (18.7 km) northeast of Breckenridge.

DRAINAGE AREA.--95.8 mi² (248.1 km²).

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,090 ft (332 m), from topographic map.

AVERAGE DISCHARGE.--10 years (1965-75), 13.9 ft³/s (0.394 m³/s), 10,070 acre-ft/yr (12.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,370 ft³/s (209 m³/s) Oct. 30 (gage height, 20.13 ft or 6.136 m); no flow for many days.
Period of record: Maximum discharge, 9,590 ft³/s (272 m³/s) July 8, 1968 (gage height, 22.39 ft or 6.824 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of 7,980 ft³/s (226 m³/s); no flow at times each year.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	74	1.1	2.2	1,620	2.7	1.5	.16	.41	0	0	
2	.01	30	.86	4.4	250	2.5	1.2	.12	.21	0	0	
3	0	16	.86	9.5	208	2.2	.85	.10	.11	25	26	
4	0	173	.86	7.0	151	2.3	.61	.11	.03	7.3	3.4	
5	0	38	.91	4.2	137	2.2	.49	.14	.01	1.7	.54	
6	0	17	.96	2.4	33	2.2	.47	.16	0	.56	.08	
7	0	13	.96	2.4	19	2.1	.84	.15	0	.05	.01	
8	0	11	.96	1.9	16	1.8	115	.09	0	0	0	
9	0	9.3	.88	1.6	11	1.7	21	.05	0	0	0	
10	0	74	.88	1.6	9.0	1.6	8.3	.04	0	0	0	
11	0	42	1.9	1.4	8.3	1.5	5.1	.07	0	0	0	
12	0	17	3.6	1.1	7.1	2.4	3.5	.07	0	0	0	
13	0	11	3.2	.77	7.0	3.6	2.9	.04	0	0	0	
14	2,190	7.7	2.3	.77	6.1	3.9	2.6	.03	0	0	0	
15	92	5.6	1.7	.77	5.6	2.8	2.0	.02	0	0	0	
16	19	4.7	1.3	.77	5.4	2.3	1.7	.01	0	0	0	
17	9.2	3.7	1.1	.77	5.1	2.1	1.5	.01	0	0	0	
18	4.9	3.7	.87	.77	4.9	3.4	1.4	0	0	0	1.3	
19	2.8	3.4	.78	.77	3.9	2.1	.96	0	0	0	.24	
20	1.4	3.2	.77	.63	3.8	1.6	.77	0	0	0	.02	
21	.76	2.8	.69	.61	3.5	1.4	.61	.01	0	0	0	
22	.42	2.5	.69	.55	3.5	1.3	.52	.01	0	0	0	
23	.20	2.3	.72	.49	3.9	1.1	.54	.47	0	0	0	
24	62	2.1	.77	.47	3.7	.86	.54	1.6	0	0	0	
25	46	2.6	.70	.47	3.7	.52	1.4	.89	0	93	0	
26	10	2.0	1.1	.47	3.4	.59	1.0	.32	0	6.9	31	
27	4.5	1.7	1.8	.47	3.0	.61	.46	.13	0	1.5	31	
28	545	1.4	2.5	.53	2.8	1.7	.35	.06	0	.24	3.6	
29	53	1.3	2.8	.61	-----	4.0	.26	.08	0	.03	.53	
30	1,030	1.2	2.6	.61	-----	3.9	.19	.09	0	0	.06	
31	2,250	-----	2.6	627	-----	2.5	-----	.05	-----	0	.01	-----
TOTAL	6,321.24	577.2	43.72	678.00	2,538.7	65.48	178.56	5.08	.77	136.28	97.79	0
MEAN	204	19.2	1.41	21.9	90.7	2.11	5.95	.16	.026	4.40	3.15	0
MAX	2,250	173	3.6	627	1,620	4.0	115	1.6	.41	93	31	0
MIN	0	1.2	.69	.47	2.8	.52	.19	0	0	0	0	0
AC-FT	12,540	1,140	87	1,340	5,040	130	354	10	1.5	270	194	0
CAL YR 1974	TOTAL	9,557.07	MEAN	26.2	MAX	2,250	MIN	0	AC-FT	18,960		
WTR YR 1975	TOTAL	10,642.82	MEAN	29.2	MAX	2,250	MIN	0	AC-FT	21,110		

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-14	1400	19.23	6,550	10-30	2400	20.13	7,370
10-28	1100	11.03	1,540	2-1	1145	17.51	5,110

08088500 Possum Kingdom Reservoir near Graford, Tex.

LOCATION.--Lat 32°52'20", long 98°25'32", Palo Pinto County, at dam on Brazos River, 2.6 miles (4.2 km) upstream from Loving Creek, 11.3 miles (18.2 km) southwest of Graford, and at mile 687.5 (1,106.2 km).

DRAINAGE AREA.--22,550 mi² (58,400 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: March 1941 to current year.

Water quality: Chemical analyses: March 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.10 ft (0.030 m) above mean sea level (levels by Brazos River Authority). Prior to Mar. 19, 1968, mercury U-tube in powerhouse at present site and datum.

EXTREMES.--Current year: Maximum contents, 567,200 acre-ft (699 hm³) Oct. 28 (gage height, 999.83 ft or 304.748 m); minimum, 499,400 acre-ft (616 hm³) Apr. 3 (gage height, 995.70 ft or 303.489 m).

Period of record: Maximum contents observed, 743,700 acre-ft (917 hm³) Oct. 5, 1941 (gage height, 1,001.0 ft or 305.10 m); minimum observed, 273,300 acre-ft (337 hm³) Feb. 19 to Mar. 17, 1953 (gage height, 967.0 ft or 294.74 m).

REMARKS.--The reservoir is formed by reinforced concrete dam, Ambursen-type, massive buttress with flat-slab deck, a controlled spillway, two bulkhead sections, and an earthen-dike section. Total length of dam is 2,740 ft (835 m) long. The dam was completed and storage began Mar. 21, 1941. The spillway has nine roof-weir gates (modified bear-trap type) that are 73.66- by 13-foot (22.45- by 4-metre) each and are designed to discharge about 100,000 ft³/s (2,830 m³/s) at a gage height of 1,000.0 ft (304.80 m). The outlet works consist of one controlled 54-inch-diameter (1,372-millimetre) conduit. Water is used for power development, municipal, industrial, irrigation, and recreational purposes. Two generators located in the powerhouse at dam can produce 22,500 kilowatts at a 1,000 ft (305 m) gage height. Eleven major reservoirs, with a combined capacity of 607,800 acre-ft (749 hm³), largely regulate the inflow. The capacity curve is based on recomputation of survey made in 1974. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Duck Creek near Girard (station 08080950). Data regarding the dam and reservoir are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	1,024.0	-
Design flood (top of gates).....	1,000.0	570,200
Crest of spillway.....	987.0	383,300
Invert of penstock.....	911.5	4,560
Lowest gated outlet (invert of 54-inch conduit).....	874.8	0

COOPERATION.--Capacity table 3-C furnished by Brazos River Authority.

Capacity table (gage height, in feet, and contents, in acre-feet)

994.0	474,100	998.0	536,000
996.0	504,000	1,000.0	570,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	553,700	561,100	540,700	543,600	543,900	533,600	500,900	512,800	560,100	541,200	552,300	540,500
2	553,500	559,500	540,800	544,200	540,300	530,400	500,300	515,300	560,200	540,500	551,100	540,700
3	552,800	554,600	541,700	542,900	548,400	528,600	500,300	518,200	559,400	541,200	551,100	539,600
4	551,800	552,000	540,300	542,200	549,700	526,500	500,300	519,300	557,700	541,200	550,400	539,000
5	550,200	559,500	540,000	543,000	553,700	524,800	500,800	518,000	554,600	541,800	548,700	538,700
6	548,600	561,300	540,300	542,200	555,100	523,600	501,200	516,900	550,800	541,800	548,000	537,700
7	546,700	563,200	540,300	541,000	554,600	522,000	502,800	516,900	548,200	541,700	546,300	537,900
8	545,500	563,600	540,000	539,800	553,500	519,800	505,800	516,800	556,500	540,800	544,700	538,000
9	546,200	564,300	538,500	538,700	549,400	518,700	507,400	516,800	563,600	540,700	542,400	537,500
10	546,700	560,600	538,500	536,700	548,200	516,300	508,500	516,800	554,900	540,200	540,300	537,000
11	546,800	561,700	537,700	534,400	546,200	514,800	508,500	517,100	555,400	540,700	538,700	537,200
12	547,400	562,400	538,300	530,200	545,200	513,700	508,700	517,200	556,100	540,500	536,300	534,900
13	547,700	564,500	538,800	526,800	544,700	511,000	509,300	517,200	555,400	540,200	536,300	535,200
14	558,200	563,000	539,500	525,700	543,200	508,700	510,400	517,600	553,500	539,800	536,500	535,800
15	561,800	561,100	540,000	525,600	541,500	506,800	511,400	519,600	551,800	539,000	535,400	538,300
16	562,700	558,000	540,200	525,200	540,300	505,300	511,200	520,400	548,700	538,800	535,200	540,800
17	563,900	553,900	541,000	525,700	541,200	505,100	511,800	521,100	546,500	538,700	537,500	539,100
18	565,800	551,100	540,800	526,700	539,300	505,100	512,000	520,300	544,100	538,500	538,200	537,000
19	564,300	550,100	541,700	526,200	538,200	506,000	512,000	519,500	543,000	538,300	538,500	533,400
20	560,400	548,600	541,500	526,500	538,300	506,600	512,100	520,100	541,700	538,200	538,300	529,900
21	557,700	547,400	542,200	527,500	539,500	507,300	512,400	520,600	541,200	538,200	538,800	529,100
22	556,600	547,400	543,400	527,200	538,000	507,600	512,900	520,300	542,400	538,200	539,100	530,400
23	555,400	547,500	543,700	527,800	535,000	507,600	512,900	521,100	541,200	541,300	539,800	531,300
24	556,300	546,000	542,900	528,400	532,900	507,400	513,600	527,500	540,500	548,400	540,200	531,400
25	556,600	545,200	543,000	528,900	533,400	507,400	513,700	538,700	540,300	551,300	539,500	532,100
26	556,600	544,900	543,900	529,200	533,000	505,900	513,600	544,900	540,000	552,000	542,700	532,500
27	559,400	544,900	544,700	530,200	533,200	506,000	513,900	547,200	540,200	549,400	543,000	532,900
28	562,700	546,200	545,200	530,400	533,600	505,600	514,200	548,700	540,500	548,000	543,600	533,600
29	553,500	542,200	545,400	530,400	-----	501,900	513,900	554,400	540,700	554,100	543,000	533,900
30	558,200	541,800	545,000	530,800	-----	499,800	513,400	558,300	541,200	556,500	542,400	534,100
31	558,800	-----	544,600	535,500	-----	500,800	-----	555,100	-----	554,800	541,500	-----
(†)	999.35	998.35	998.51	997.97	997.85	995.79	996.60	999.13	998.31	999.11	998.33	997.88
(*)	+5,100	-17,000	+2,800	-9,100	-1,900	-32,800	+12,600	+41,700	-13,900	+13,600	-13,300	-7,400
MAX	565,800	564,500	545,400	544,200	555,100	533,600	514,200	558,300	563,600	556,500	552,300	540,800
MIN	545,500	541,800	537,700	525,200	532,900	499,800	500,300	512,800	540,000	538,200	535,200	529,100
CAL YR 1974.....	* +84,100				MAX	565,800	MIN	423,000				
WTR YR 1975.....	* -19,600				MAX	565,800	MIN	499,800				

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

BRAZOS RIVER BASIN

08088500 Possum Kingdom Reservoir near Graford, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JAN. 26...	1130	5.2	140	37	420	7.5	118	0
MAY 31...	1235	4.0	130	34	390	7.3	126	0
SEP. 16...	1025	3.9	130	38	410	7.6	122	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
JAN. 26...	390	670	.3	.06	.02	.01	1730	500	410
MAY 31...	320	620	.3	.00	.00	.00	1570	470	360
SEP. 16...	340	620	.3	.15	.00	.01	1610	480	380

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JAN. 26...	8.2	2970	8.3	10.5	8.4	76	10	0
MAY 31...	7.9	2740	8.3	23.5	8.2	95	100	10
SEP. 16...	8.1	2870	7.9	26.0	5.1	63	30	10

BRAZOS RIVER BASIN

279

08088600 Brazos River at Possum Kingdom Dam near Graford, Tex.

LOCATION.--Lat 32°52'00", long 98°26'00", Palo Pinto County, immediately below Possum Kingdom Dam, 2.6 miles (4.2 km) upstream from Loving Creek, 11.3 miles (18.2 km) southwest of Graford, and 20 miles (32 km) upstream from gaging station near Palo Pinto.

DRAINAGE AREA.--22,550 mi² (58,400 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1942 to current year. Water temperatures: October 1949 to September 1955, October 1965 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 4,050 micromhos on several days during October; minimum daily, 2,580 micromhos Apr. 1.

Period of record: Maximum daily specific conductance, 6,110 micromhos Feb. 20, 1961; minimum daily, 494 micromhos May 4, 1957. Maximum water temperatures, 26.5°C on several days during September 1971; minimum, 7.0°C on several days in February 1951.

REMARKS.--Discharges are computed on the basis of records for the gaging station near Palo Pinto and releases from Possum Kingdom Reservoir.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
28...	1130	900	5.9	170	46	580	7.8	112	0	430
NOV.										
26...	1255	450	5.9	150	36	460	8.3	108	0	380
DEC.										
04...	1545	820	6.0	140	40	470	8.4	110	0	380
JAN.										
22...	1515	20	5.2	140	38	450	7.2	122	0	360
FEB.										
18...	0940	1800	4.7	130	40	430	9.5	132	0	360
MAR.										
17...	1550	440	4.8	140	35	400	6.6	139	0	360
APR.										
08...	1600	20	4.7	140	41	440	7.2	135	0	350
MAY										
28...	1400	1400	5.1	140	35	420	8.0	136	0	330
JUNE										
03...	0910	1600	5.1	130	39	400	7.7	142	0	330
JULY										
16...	1520	20	4.7	140	40	430	7.3	144	0	290
AUG.										
07...	1355	1560	5.0	140	41	460	7.0	140	0	320
SEP.										
19...	0940	1940	5.5	150	42	440	9.0	140	0	340

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT.									
28...	920	--	2220	610	520	10	3720	7.8	21.0
NOV.									
26...	730	.3	1820	520	430	8.8	3150	7.9	20.0
DEC.									
04...	740	.3	1840	510	420	9.0	3110	8.0	16.0
JAN.									
22...	730	.4	1790	510	410	8.7	3080	7.8	15.5
FEB.									
18...	690	.5	1730	490	380	8.5	2970	8.0	14.0
MAR.									
17...	620	.3	1640	490	380	7.8	2840	8.0	14.0
APR.									
08...	700	.3	1750	520	410	8.4	3040	8.0	15.0
MAY									
28...	660	.3	1670	490	380	8.2	2910	8.0	16.0
JUNE									
03...	670	.4	1650	490	370	7.9	2930	8.0	16.0
JULY									
16...	730	.3	1710	510	400	8.3	3050	7.8	21.0
AUG.									
07...	710	--	1750	520	400	8.8	3150	7.7	23.0
SEP.									
19...	710	1.0	1770	550	430	8.2	3110	7.9	23.5

08088600 Brazos River at Possum Kingdom Dam near Graford, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	81900	3800	2270	502000	940	208000	440	97300	620
NOV. 1974.....	87200	3450	1990	469000	800	188000	420	98900	560
DEC. 1974.....	7330	3100	1840	36400	740	14600	360	7120	510
JAN. 1975.....	16270	3050	1770	77800	720	31600	360	15800	510
FEB. 1975.....	45600	3000	1750	215000	700	86200	360	44300	500
MAR. 1975.....	27280	2900	1670	123000	630	46400	350	25800	490
APR. 1975.....	3000	2980	1720	13900	650	5260	340	2750	500
MAY 1975.....	30340	2910	1670	137000	660	54100	330	27000	490
JUNE 1975.....	52000	2950	1660	233000	670	94100	330	46300	490
JULY 1975.....	19030	3050	1710	87900	730	37500	290	14900	510
AUG. 1975.....	23700	3130	1760	113000	720	46100	320	20500	520
SEP. 1975.....	18830	3140	1770	90000	710	36100	340	17300	550
TOTAL	412480	--	--	2100000	--	848000	--	418000	--
WTD.AVG.	1130	3250	1880	--	760	--	380	--	540

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

[illegible]

281

08088600 Brazos River at Possum Kingdom Dam near Graford, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

[illegible]

LOCATION.--Lat 32°51'45", long 98°18'08", Palo Pinto County, on right bank 100 ft (30 m) upstream from bridge on Farm Road 4, 300 ft (91 m) downstream from Dark Valley Creek, 6.5 miles (10.5 km) north of Palo Pinto, and at mile 667.3 (1,073.7 km).

PERIOD OF RECORD.--January 1924 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "near Mineral Wells" 1924-33.

AVERAGE DISCHARGE.--16 years (1924-40) prior to completion of Possum Kingdom Reservoir, 1,262 ft³/s (35.74 m³/s), 914,300 acre-ft/yr (1,130 hm³/yr); 35 years (1940-75) regulated, 971 ft³/s (27.50 m³/s), 703,500 acre-ft/yr (867 hm³/yr).

Period of record: Maximum discharge, 95,600 ft³/s (2,710 m³/s) June 16, 1930, at site 19 miles (31 km) downstream near Mineral Wells (gage height, 30 ft or 9.1 m, present site and datum); no flow at times.

Maximum stage occurred in 1876, from data by Corps of Engineers, and was several feet higher than flood of June 16, 1930, (about 30 ft or 9.1 m), which was the highest since at least 1876.

REVISIONS (WATER YEARS).--WSP 1512: 1924-25, 1929, 1932-34. WSP 1712: 1935-36, 1937-38(M), 1939, 1940(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,810	14,200	283	711	660	316	92	231	4,430	24	2,850	929
2	1,750	11,200	994	596	1,680	904	64	540	2,700	24	2,870	791
3	1,470	11,100	243	721	1,650	1,310	77	95	1,790	30	1,490	847
4	1,460	10,700	159	1,350	2,230	1,400	144	49	1,800	30	1,580	948
5	1,460	2,150	1,410	371	2,930	1,400	122	36	2,340	36	1,580	663
6	1,450	2,890	195	617	3,070	1,390	70	607	2,420	30	1,160	356
7	1,440	1,210	85	1,090	3,020	677	63	642	2,110	23	1,230	374
8	1,440	2,050	67	920	3,000	1,120	487	207	1,950	21	1,400	90
9	682	1,550	433	1,270	2,970	1,200	228	74	3,430	221	1,430	48
10	116	4,050	842	937	2,890	1,130	123	40	15,400	72	1,250	258
11	65	3,810	1,150	1,070	1,860	1,360	174	31	5,200	36	1,030	287
12	50	1,320	310	1,790	1,730	1,000	269	27	1,240	28	1,000	215
13	43	1,130	95	2,540	1,600	1,350	261	54	1,370	24	957	145
14	2,690	878	71	1,790	1,450	1,370	106	61	1,610	22	100	64
15	1,990	2,350	62	646	1,840	1,380	82	40	1,670	20	48	39
16	2,800	2,920	58	366	1,870	1,210	72	27	1,820	19	511	868
17	2,950	2,940	55	217	1,820	990	69	22	1,570	19	91	2,760
18	2,960	2,490	52	83	1,570	474	97	20	1,420	19	70	2,810
19	2,940	2,100	51	66	1,930	852	105	382	1,130	22	79	2,820
20	3,400	1,030	50	61	1,780	277	61	286	983	23	58	2,560
21	2,840	1,810	50	53	1,160	81	49	83	744	21	32	1,370
22	1,460	888	50	52	1,120	60	47	37	634	19	25	594
23	1,420	506	49	51	1,940	55	49	31	209	18	22	106
24	1,560	908	49	49	2,060	46	68	85	775	263	104	58
25	1,280	744	49	48	1,280	63	50	68	535	331	79	42
26	947	728	59	47	378	323	42	659	82	2,080	162	34
27	970	512	67	46	528	659	38	1,330	44	2,810	537	29
28	2,920	521	63	45	252	532	41	1,470	33	2,830	207	27
29	13,800	810	59	45	-----	1,410	39	3,250	28	2,830	66	25
30	3,880	1,120	197	45	-----	2,480	32	5,070	27	2,820	325	25
31	18,700	-----	563	57	-----	323	-----	14,300	-----	2,820	797	-----
TOTAL	82,743	90,615	7,920	17,750	50,268	27,142	3,221	29,854	59,494	17,585	23,140	20,162
MEAN	2,669	3,021	255	573	1,795	876	107	963	1,983	567	746	672
MAX	18,700	14,200	1,410	2,540	3,070	2,480	487	14,300	15,400	2,830	2,870	2,820
MIN	43	506	49	45	252	46	32	20	27	18	22	25
AC-FT	164,100	179,700	15,710	35,210	99,710	53,						

CAL YR 1974	TOTAL 233,346.7	MEAN 639	MAX 18,700	MIN 6.7	AC-FT 462,800
WTR YR 1975	TOTAL 429,894.0	MEAN 1,178	MAX 18,700	MIN 18	AC-FT 852,700

08090300 Lake Palo Pinto near Santo, Tex.

LOCATION.--Lat 32°38'53", long 98°15'56", Palo Pinto County, near left end of dam on Palo Pinto Creek, 4.0 miles (6.4 km) upstream from bridge on Farm Road 4, 4.4 miles (7.1 km) northwest of Santo, and 7.5 miles (12.1 km) upstream from Big Sunday Creek.

DRAINAGE AREA.--471 mi² (1,220 km²).

PERIOD OF RECORD.--Contents: April 1964 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Freese, Nichols, and Endress, Consulting Engineers, bench mark).

EXTREMES.--Current year: Maximum contents, 56,060 acre-ft (69.1 hm³) Oct. 31 (elevation, 871.15 ft or 265.527 m); minimum, 37,230 acre-ft (45.9 hm³) Sept. 30 (elevation, 864.28 ft or 263.433 m).

Period of record: Maximum contents, 56,060 acre-ft (69.1 hm³) Oct. 31, 1974 (elevation, 871.15 ft or 265.527 m); minimum since first initial filling to present spillway elevation, 22,150 acre-ft (27.3 hm³) May 27, 1971 (elevation, 857.00 ft or 261.214 m).

REMARKS.--The lake is formed by a rock-faced earthfill dam 1,300 ft (396 m) long with a 550-foot (168-metre) uncontrolled ogee-crested emergency spillway at right end of dam. The dam was completed and storage began in April 1964. During the summer of 1965, the dam was raised 2 ft (0.6 m) and the spillway crest was raised 4 ft (1.2 m) and lengthened from 500 to 550 ft (150 to 168 m). The lake is the property of Palo Pinto County Municipal Water District No. 1 and was built to impound water for municipal use, principally for the city of Mineral Wells. Water is released to the downstream channel through a 30-inch (762-millimetre) gated concrete pipe. It then flows 15 miles (24 km) downstream to a diversion lake where it is then pumped to the city of Mineral Wells. In addition, water is circulated through a steam generating powerplant owned by the Brazos Electric Power Co-Operative, Inc. The capacity table is based on a survey completed in 1959. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	898.0	-
Design flood.....	893.0	163,200
Crest of spillway.....	867.0	44,090
Lowest gated outlet (invert).....	835.0	1,900

COOPERATION.--Capacity table furnished by Freese, Nichols, and Endress, Consulting Engineers, for Palo Pinto Municipal Water District No. 1. Records of diversions furnished by city of Mineral Wells.

Capacity table (elevation, in feet, and contents, in acre-feet)

864.0	36,570	870.0	52,550
866.0	41,480	871.5	57,160
868.0	46,810		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37,900	52,550	44,230	43,960	46,970	44,230	43,800	43,560	45,060	43,670	42,000	38,960
2	37,830	50,490	44,230	44,150	47,370	44,150	43,620	43,560	44,880	43,560	42,080	38,880
3	37,810	48,990	44,150	44,230	47,590	44,040	43,510	43,540	44,660	43,590	42,060	38,810
4	37,760	48,070	44,090	44,260	47,450	44,070	43,460	43,490	44,470	43,510	41,980	38,710
5	37,710	47,370	44,090	44,260	47,060	44,070	43,410	43,430	44,390	43,430	41,900	38,640
6	37,690	46,920	44,070	44,260	46,670	44,090	43,380	43,360	44,230	43,380	41,740	38,560
7	37,660	46,500	43,990	44,260	46,310	43,990	43,930	43,300	44,150	43,230	41,590	38,490
8	37,620	46,170	43,880	44,260	46,010	43,960	48,260	43,200	44,120	43,150	41,430	38,420
9	37,540	46,040	43,850	44,120	45,740	43,930	47,620	43,150	44,550	43,070	41,280	38,390
10	37,470	46,230	43,910	44,120	45,630	43,800	46,950	43,070	49,390	42,970	41,150	38,290
11	37,400	46,170	43,930	44,010	45,420	43,800	46,390	42,970	48,290	42,890	41,020	38,200
12	37,350	45,980	43,880	43,910	45,250	43,830	45,930	42,910	47,310	42,840	40,850	38,070
13	37,540	45,820	43,850	43,880	45,170	43,750	45,630	42,780	46,610	42,760	40,700	38,000
14	38,930	45,600	43,830	43,880	45,060	43,700	45,390	42,780	46,040	42,600	40,570	37,950
15	39,250	45,440	43,780	43,850	45,010	43,640	45,170	42,680	45,600	42,580	40,420	38,050
16	39,320	45,340	43,780	43,830	44,960	43,620	44,980	42,600	45,310	42,390	40,370	38,050
17	39,370	45,230	43,800	43,780	44,820	43,670	44,820	42,520	44,930	42,340	40,340	37,980
18	39,350	45,170	43,640	43,800	44,630	44,850	44,550	42,450	44,660	42,240	40,170	37,950
19	39,300	45,090	43,640	43,750	44,550	44,820	44,420	42,370	44,440	42,160	40,070	37,880
20	39,270	45,010	43,620	43,750	44,550	44,740	44,280	42,450	44,340	42,110	40,000	37,780
21	39,220	44,930	43,620	43,700	44,500	44,660	44,150	42,420	44,150	42,080	39,870	37,780
22	39,200	44,930	43,720	43,720	44,420	44,580	44,120	42,370	44,710	42,000	39,800	37,710
23	39,200	44,880	43,670	43,700	44,360	44,420	44,070	42,370	44,500	41,930	39,720	37,660
24	39,500	44,710	43,540	43,670	44,340	44,280	44,090	42,370	44,420	41,850	39,600	37,570
25	39,840	44,660	43,590	43,590	44,310	44,200	44,010	42,340	44,260	42,210	39,500	37,500
26	40,120	44,610	43,720	43,560	44,310	44,150	43,930	42,320	44,170	42,420	39,470	37,420
27	40,270	44,550	43,800	43,540	44,260	44,150	43,880	44,150	44,010	42,390	39,420	37,400
28	41,690	44,470	43,830	43,510	44,260	43,990	43,780	44,930	44,930	42,320	39,320	37,350
29	42,080	44,360	43,830	43,490	-----	43,910	43,700	45,790	43,830	42,240	39,220	37,300
30	43,250	44,280	43,930	43,360	-----	43,850	43,620	45,660	43,750	42,160	39,180	37,230
31	55,840	-----	43,990	43,720	-----	43,830	-----	45,340	-----	42,080	39,080	-----
(†)	871.08	867.07	866.96	866.86	867.06	866.90	866.82	867.46	866.87	866.23	865.04	864.28
(*)	+17,910	-11,560	-290	-270	+540	-430	-210	+1,720	-1,590	-1,670	-3,000	-1,850
(††)	173	216	219	222	183	172	191	230	281	305	285	244
MAX	55,840	52,550	44,230	44,260	47,590	44,850	48,260	45,790	49,390	43,670	42,080	38,960
MIN	37,350	44,280	43,540	43,360	44,260	43,620	43,380	42,320	43,750	41,850	39,080	37,230
CAL YR 1974.....	* +1,730				†† 3,246	MAX 55,840			MIN 33,710			
WTR YR 1975.....	* -700				†† 2,721	MAX 55,840			MIN 37,230			

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Mineral Wells.

BRAZOS RIVER BASIN

08090300 Lake Palo Pinto near Santo, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
DEC., 1974 18...	0950	7.0	41	6.9	18	4.3	142	0	24

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
DEC., 1974 18...	28	.4	200	130	14	.7	352	8.1	10.0

08090500 Palo Pinto Creek near Santo, Tex.

LOCATION.--Lat 32°37'51", long 98°10'50", Palo Pinto County, on left bank 0.5 mile (0.8 km) upstream from the Texas and Pacific Railway Co. bridge, 2.4 miles (3.9 km) downstream from Big Sunday Creek, 2.6 miles (4.2 km) northeast of Santo, 2.8 miles (4.5 km) upstream from Wusser Creek, and 7.9 miles (12.7 km) upstream from mouth.

DRAINAGE AREA.--567 mi² (1,469 km²).

PERIOD OF RECORD.--October 1924 to September 1925, April 1951 to current year. Monthly discharge only for October 1924 to September 1925, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 762.63 ft (232.450 m) above mean sea level. Nov. 20, 1924, to Sept. 30, 1925, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years (1924-25, 1951-63) prior to regulation by Lake Palo Pinto, 90.3 ft³/s (2.557 m³/s), 65,420 acre-ft/yr (80.7 hm³/yr); 12 years (1963-75) regulated, 65.8 ft³/s (1.863 m³/s), 47,670 acre-ft/yr (58.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,230 ft³/s (233 m³/s) Oct. 31 (gage height, 17.25 ft or 5.258 m); no flow at times.

Period of record: Maximum discharge, 45,100 ft³/s (1,280 m³/s) May 26, 1957 (gage height, 31.05 ft or 9.464 m, from floodmark), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-area measurement of peak flow; no flow at times.

Maximum stages since at least 1880 occurred May 8, 1922, and May 26, 1957. Flood of May 8, 1922, reached about the same stage as in 1957, from information by the Texas and Pacific Railway Co., but probably was slightly lower, from information by local residents.

REMARKS.--Records good. Flow largely regulated since April 1964 by Lake Palo Pinto (station 08090300) located about 10 miles (16 km) upstream. At times, water is released from Lake Palo Pinto and flows past station to a channel dam where it is pumped to treatment plant of city of Mineral Wells.

REVISIONS.--WSP 1312: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	2,360	14	4.2	1,090	20	22	21	144	23	.06	15
2	0	1,340	14	8.3	524	20	23	23	113	23	.65	14
3	0	857	14	26	528	19	24	21	88	23	3.3	4.5
4	0	600	14	25	496	19	25	21	69	26	1.1	4.4
5	0	431	14	23	430	19	26	21	54	29	.58	4.4
6	0	316	14	21	344	14	27	21	44	23	45	4.5
7	0	247	14	20	274	1.6	79	21	36	22	58	4.6
8	0	199	14	19	227	1.2	1,530	21	43	22	35	4.5
9	5.4	165	14	19	183	18	621	20	34	22	35	4.7
10	9.9	199	16	22	157	20	461	22	1,370	22	35	4.7
11	11	210	17	19	137	20	353	20	804	22	35	4.7
12	11	173	16	19	115	19	274	19	555	22	35	5.3
13	9.6	149	16	19	100	19	221	20	403	22	35	5.8
14	30	118	16	19	86	18	185	20	202	22	35	5.8
15	9.6	97	12	19	73	18	154	19	234	22	36	5.6
16	3.0	81	3.5	19	65	18	128	19	187	21	57	7.0
17	.87	69	1.7	19	56	21	106	19	153	3.0	46	5.7
18	.28	59	1.5	2.4	50	162	93	18	119	.51	34	5.7
19	.13	53	1.4	.23	42	94	70	18	90	18	18	6.1
20	.08	43	1.4	.34	39	74	54	21	70	17	17	5.9
21	.02	37	1.4	.24	34	62	46	20	55	1.5	17	6.2
22	0	32	1.4	.13	33	52	41	18	66	.30	17	5.9
23	0	30	1.4	16	35	46	37	19	93	.06	16	6.2
24	1.4	25	1.4	19	30	36	35	21	77	.01	17	6.0
25	7.4	20	1.3	19	25	28	31	21	64	46	17	6.3
26	4.3	18	8.0	19	23	24	27	16	52	80	18	6.4
27	4.7	16	5.2	19	22	26	25	708	41	8.7	17	6.2
28	60	15	5.2	19	21	27	23	84	35	2.6	15	6.2
29	41	16	4.6	19	-----	25	22	228	29	1.1	15	6.3
30	349	14	3.8	19	-----	23	21	253	25	.52	15	6.4
31	4,510	-----	3.8	43	-----	22	-----	185	-----	.17	15	-----
TOTAL	5,068.70	8,029	266.0	515.84	5,239	985.8	4,784	1,978	5,349	545.47	740.69	185.0
MEAN	164	268	8.58	16.6	187	31.8	159	63.8	178	17.6	23.9	6.17
MAX	4,510	2,360	17	43	1,090	162	1,530	708	1,370	80	58	15
MIN	0	14	1.3	.13	21	1.2	21	16	25	.01	.06	4.4
AC-FT	10,050	15,930	528	1,020	10,390	1,960	9,490	3,920	10,610	1,080	1,470	367
CAL YR 1974	TOTAL 15,607.45		MEAN 42.8		MAX 4,510		MIN 0	AC-FT 30,960				
WTR YR 1975	TOTAL 33,686.50		MEAN 92.3		MAX 4,510		MIN 0	AC-FT 66,820				

BRAZOS RIVER BASIN

08090800 Brazos River near Dennis, Tex.

LOCATION.--Lat 32°36'56", long 97°55'32", Parker County, at downstream side of bridge on Farm Road 1543, 0.2 mile (0.3 km) south of Dennis, 1.0 mile (1.6 km) upstream from Patrick Creek, and at mile 589.8 (949.0 km).

DRAINAGE AREA.--24,160 mi² (62,570 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: May 1968 to current year.

Water quality: Chemical analyses: October 1970 to current year. Water temperatures: October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 697.67 ft (212.650 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--7 years, 938 ft³/s (26.56 m³/s), 679,600 acre-ft/yr (838 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 57,100 ft³/s (1,620 m³/s) Oct. 31 (gage height, 24.0 ft or 7.32 m, from floodmark); minimum, 42 ft³/s (1.19 m³/s) July 24.

Period of record: Maximum discharge, 57,100 ft³/s (1,620 m³/s) Oct. 31, 1974 (gage height, 24.0 ft or 7.32 m, from floodmarks); minimum, 3.1 ft³/s (0.088 m³/s) July 19, 20, 1971.

Historic: Maximum stage since at least 1930, 31.8 ft (9.69 m) in May 1957, from floodmark, from information by State Highway Department.

Water quality: Current year: Maximum daily specific conductance, 4,040 micromhos Oct. 10; minimum daily, 481 micromhos Apr. 8.

Maximum water temperatures, 34.5°C July 21, 22; minimum, 5.0°C Jan. 12.

Period of record: Maximum daily specific conductance, 4,720 micromhos Mar. 16, 1973; minimum daily, 400 micromhos Dec. 12, 1973.

Maximum water temperatures, 35.5°C Aug. 23, 1971, July 25, 1973; minimum, 0.5°C Jan. 3, 1974.

REMARKS.--Discharge records good. Flow is largely regulated by 14 major upstream reservoirs that have a combined capacity of 1,229,000 acre-ft (1.52 km³). At end of year, flow from 46.5 mi² (120.4 km²) above this station and below Possum Kingdom Reservoir was partly controlled by 10 floodwater-retarding structures with a combined capacity of 13,510 acre-ft (16.7 hm³) below the floodspillway crests, of which 1,620 acre-ft (2.00 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Many diversions above station for irrigation, municipal supply, and oil-field operations.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	28000	1540	132	2510	600	1370	140	11800	158	2470	287
2	1480	17300	1120	824	3400	416	424	137	5390	128	2490	628
3	1500	14700	858	933	3730	367	223	221	2720	126	2530	719
4	1280	13700	1110	871	3130	1370	152	780	2240	180	1980	620
5	1210	12600	625	1240	3510	1220	117	414	1790	368	1390	824
6	1200	4710	801	1340	4010	1490	104	279	1880	208	1400	606
7	1200	3970	1260	637	3520	1510	254	221	2190	247	1360	487
8	1200	2530	551	969	3250	1350	4350	502	2770	170	884	361
9	1200	2710	355	1350	3120	703	3040	513	2400	128	1310	338
10	1100	2900	282	1190	3040	1370	1610	296	9770	107	1310	221
11	446	5010	824	1540	2990	1270	980	243	17200	97	1230	150
12	171	5780	961	1200	2380	1300	712	182	6750	152	1040	121
13	83	2800	1300	1660	2100	1330	611	152	3080	127	865	231
14	686	2370	614	2300	1870	1400	631	178	1870	99	856	235
15	2250	1870	357	2360	1660	1430	580	214	2110	85	540	231
16	2730	2420	262	1460	1900	1440	446	474	1970	76	293	251
17	2200	3270	209	798	2000	1410	369	279	1810	70	233	174
18	2570	3330	168	592	2010	1410	323	203	1920	65	427	1220
19	2660	3020	157	452	1710	1280	279	146	1540	57	268	2330
20	2600	2930	135	284	2000	1190	247	120	1360	51	186	2380
21	2590	2020	125	221	2050	871	232	224	986	49	165	2260
22	2640	2090	119	178	1720	409	236	300	846	48	152	1920
23	1910	2020	118	158	1080	228	217	232	977	45	147	835
24	1350	1420	115	149	1850	171	203	175	726	42	131	492
25	1400	1090	110	149	2030	132	188	149	578	89	117	274
26	1460	1330	126	149	1990	110	171	123	596	321	111	191
27	1210	1350	152	137	884	100	162	618	488	1300	107	148
28	1250	1000	140	129	559	335	168	1920	290	2190	278	123
29	2670	910	132	118	---	575	158	2540	221	2480	463	106
30	11400	844	129	112	---	858	146	3050	174	2490	299	94
31	45300	---	132	175	---	2100	---	4520	---	2490	218	---
TOTAL	102296	149994	14887	23807	66003	29745	18703	19545	88442	14243	25250	18857
MEAN	3300	5000	480	768	2357	960	623	630	2948	459	815	629
MAX	45300	28000	1540	2360	4010	2100	4350	4520	17200	2490	2530	2380
MIN	83	844	110	112	559	100	104	120	174	42	107	94
AC-FT	202900	297500	29530	47220	130900	59000	37100	38770	175400	28250	50080	37400
CAL YR 1974	TOTAL	327934.7	MEAN	898	MAX	45300	MIN	9.7	AC-FT	650500		
WTR YR 1975	TOTAL	571772.0	MEAN	1566	MAX	45300	MIN	42	AC-FT	1134000		

08090800 Brazos River near Dennis, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 31...	0820	64000	4.6	34	4.4	36	3.1	86	0	34
NOV. 01...	1317	26700	8.1	84	18	230	6.1	120	0	180
DEC. 31...	1740	123	3.4	130	33	340	6.0	180	0	310
JAN. 31...	1505	267	4.3	120	30	290	5.4	170	0	250
FEB. 28...	1310	479	4.7	130	33	360	7.7	151	0	330
MAR. 12...	1520	1460	3.6	130	35	400	6.8	146	0	330
APR. 24...	1705	192	5.2	89	19	130	4.9	200	0	140
MAY 31...	1900	4480	6.7	92	24	270	6.3	122	0	210
JUNE 11...	1310	18000	6.1	78	18	200	5.8	116	0	160
JULY 17...	1500	71	3.3	97	26	220	5.6	172	0	180
AUG. 31...	1730	209	6.7	85	27	260	6.6	136	0	190
SEP. 30...	1645	91	3.9	140	40	400	9.0	154	0	330

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 31...	56	--	215	100	32	1.5	414	7.9	18.0
NOV. 01...	370	.2	956	280	190	5.9	1700	7.4	19.0
DEC. 31...	540	.4	1450	460	310	6.9	2500	8.1	10.0
JAN. 31...	450	.3	1230	420	280	6.1	2170	7.7	12.0
FEB. 28...	580	.5	1520	460	340	7.3	2590	8.1	14.0
MAR. 12...	620	.4	1600	470	350	8.0	2790	7.5	10.0
APR. 24...	210	.3	697	300	140	3.3	1230	7.7	25.0
MAY 31...	440	.3	1110	330	230	6.5	2040	8.0	22.0
JUNE 11...	330	.2	855	270	170	5.3	1560	7.6	24.0
JULY 17...	340	--	957	350	210	5.1	1740	7.8	29.0
AUG. 31...	390	--	1030	320	210	6.3	1900	7.9	33.0
SEP. 30...	670	.5	1670	510	390	7.7	2860	8.1	28.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	102296	2250	1300	359000	500	138000	280	77300	410
NOV. 1974.....	149994	2710	1600	648000	620	251000	340	138000	480
DEC. 1974.....	14887	2790	1600	64300	640	25700	350	14100	500
JAN. 1975.....	23807	2750	1600	103000	630	40500	350	22500	490
FEB. 1975.....	66003	2200	1300	232000	490	87300	280	49900	410
MAR. 1975.....	29745	2660	1600	128000	610	49000	340	27300	480
APR. 1975.....	18703	1040	580	29300	190	9590	120	6060	230
MAY 1975.....	19545	1740	960	50700	370	19500	210	11100	330
JUNE 1975.....	88442	2180	1300	310000	480	115000	270	64500	400
JULY 1975.....	14243	2570	1500	57700	580	22300	320	12300	460
AUG. 1975.....	25250	3000	1800	123000	690	47000	380	25900	530
SEPT 1975.....	18857	3060	1800	91600	710	36100	390	19900	540
TOTAL	571772	**	**	2200000	**	841000	**	469000	**
WTD.AVG.	1566.5	2420	1400	**	540	**	300	**	440

BRAZOS RIVER BASIN

08090800 Brazos River near Dennis, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	1710	3010	2480	662	2580	2780	1440	2700	2100	3040	2090
2	3750	2870	2860	2460	1060	2520	2710	1450	2670	2180	3010	2970
3	3900	3120	2840	2150	560	2440	2680	1430	2650	2190	3060	3000
4	3940	3190	2970	2270	1340	2590	2600	1970	2730	1720	3060	3030
5	3970	3170	2840	2400	1560	2710	2560	1770	2690	723	3050	3120
6	3980	2880	2730	2580	1900	2880	2540	1280	2740	1070	3100	3040
7	4000	2730	2900	2580	2260	2850	2170	1190	2810	2050	3110	3050
8	3980	2830	2790	2580	2470	2860	481	1300	1960	2250	3100	2970
9	4000	2710	2690	2740	2570	2820	601	1890	2380	2250	3120	3120
10	4040	2470	2630	2740	2660	2850	790	2280	1400	2260	3120	3140
11	3960	2620	2460	2900	2690	2770	859	2370	1520	2300	3150	3110
12	3900	2780	2760	2900	2610	2760	816	2370	2240	2180	3140	3140
13	3820	2560	2820	2950	2600	2760	869	2320	2050	1880	3160	2780
14	991	2460	2810	2970	2610	2760	1050	2290	2110	1690	3120	2970
15	2010	2480	2710	2970	2550	2820	957	2300	2090	1730	3080	2580
16	682	2700	2600	2960	2640	2760	930	2390	2350	1730	2980	2580
17	1710	3050	2560	2900	2710	2750	987	1690	2550	1740	2880	2580
18	2770	3100	2500	2850	2790	2620	983	1300	2570	1740	2760	3190
19	3810	3080	2490	2850	2760	2460	1000	1150	2700	1790	2820	3140
20	3970	3050	2540	2820	2780	2510	1030	1120	2820	1850	2650	3140
21	3930	3010	2590	2840	2830	1940	1110	1130	2610	1880	2650	3120
22	3930	3030	2730	2840	2780	2350	1180	1110	2670	1920	2390	3110
23	3920	2950	2790	2810	2620	2320	1250	1190	2660	1980	2340	3140
24	3850	2900	2790	2800	2730	2240	1240	1300	2130	2050	2370	3120
25	3740	2880	2790	2800	2780	2210	1260	1600	2130	2090	2300	3080
26	3780	2920	2700	2780	2720	2190	1280	1910	2450	1130	2310	3030
27	3660	2860	2610	2780	2630	2210	1280	2020	2270	1880	2100	3000
28	3060	2860	2590	2700	2590	2270	1310	1580	2040	2800	2010	2960
29	2330	2850	2470	2590	---	2290	1390	1560	1960	2960	2880	2950
30	3510	2890	2440	2590	---	2440	1400	1510	1960	3000	1880	2900
31	952	---	2500	2170	---	2650	---	2040	---	3050	1900	---
MONTH	3280	2820	2690	2700	2340	2550	1400	1690	2350	2010	2760	2970

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	19.5	7.0	8.5	9.0	16.0	18.0	26.5	22.0	30.0	28.0	31.0
2	21.5	21.0	8.0	8.5	9.0	17.0	16.0	24.0	21.0	31.0	26.5	27.0
3	23.0	21.0	8.5	8.5	9.0	11.0	15.0	26.0	25.0	---	28.0	---
4	21.5	19.0	10.0	8.0	10.0	13.0	15.0	24.0	26.5	28.0	28.0	30.5
5	23.0	18.0	10.0	---	8.5	14.0	16.0	25.0	28.0	30.0	29.0	30.0
6	23.0	18.0	12.0	10.0	7.0	17.0	16.0	27.0	28.5	33.0	29.0	30.0
7	23.0	16.0	12.0	11.5	7.0	17.0	15.5	27.0	28.0	34.0	30.0	28.0
8	23.0	16.0	7.0	9.0	9.0	14.0	17.0	28.0	26.0	34.0	31.0	28.0
9	24.5	15.0	8.0	13.0	8.0	14.0	17.0	28.0	26.5	33.0	30.0	29.0
10	23.0	17.0	8.0	11.0	10.0	13.0	16.0	26.5	24.0	29.5	30.0	30.0
11	24.5	16.5	9.0	8.0	11.5	11.5	16.5	25.0	21.5	33.0	30.5	29.0
12	24.0	16.5	9.5	5.0	13.0	---	17.0	27.0	25.0	32.0	30.5	24.0
13	24.0	16.0	10.0	6.0	13.5	10.5	15.0	28.0	28.0	32.0	30.0	20.0
14	18.5	14.0	11.5	7.0	14.0	12.0	18.0	25.0	28.0	31.5	30.0	23.5
15	17.0	13.0	10.0	9.5	11.0	10.0	21.5	26.5	28.0	32.0	30.5	24.0
16	19.5	12.0	9.0	9.5	11.0	13.0	16.5	27.0	29.0	31.0	---	28.0
17	20.0	14.0	10.0	8.5	11.0	13.5	24.5	28.0	29.0	30.5	29.0	28.0
18	21.5	14.0	11.0	11.0	9.5	16.5	23.0	28.0	28.0	31.0	33.0	27.0
19	20.5	16.5	11.0	10.0	9.0	18.0	21.0	28.0	28.0	30.5	32.0	25.5
20	21.0	---	9.5	10.0	13.0	18.5	18.0	25.0	28.0	30.0	33.0	24.0
21	19.5	16.5	10.5	9.5	14.0	20.0	23.0	28.0	29.0	34.5	33.5	21.0
22	20.0	16.0	7.0	8.5	10.5	19.0	21.5	29.0	30.0	34.5	31.0	20.5
23	19.5	18.0	17.0	9.5	7.0	21.0	23.0	24.5	31.0	32.0	33.0	22.0
24	18.5	15.0	11.0	14.0	8.5	19.5	20.5	23.0	31.0	30.5	30.0	23.0
25	19.0	14.5	8.0	13.0	12.0	20.0	---	---	30.0	28.0	30.5	21.5
26	21.0	13.0	---	15.0	12.0	17.0	26.5	30.0	31.5	30.5	26.5	23.0
27	21.0	13.0	8.0	15.0	13.5	23.0	23.0	28.0	30.5	28.0	29.0	24.0
28	20.5	---	9.0	14.5	14.0	14.5	26.5	24.5	30.0	30.0	30.0	25.0
29	21.0	9.0	11.0	13.5	---	9.0	25.0	25.0	31.0	29.0	30.0	27.0
30	21.5	7.0	10.5	14.5	---	12.0	25.5	23.0	30.0	29.0	33.0	28.0
31	18.0	---	10.0	12.0	---	14.0	---	22.0	---	29.0	33.0	---
MONTH	21.0	15.5	10.0	10.5	10.5	15.5	19.5	26.0	27.5	31.0	30.5	26.0

08090900 Lake Granbury near Granbury, Tex.

LOCATION.--Lat 32°22'27", long 97°41'20", Hood County, at right end of spillway of DeCordova Bend Dam on Brazos River, 2.6 miles (4.2 km) upstream from Fall Creek, 7.5 miles (12.1 km) southeast of Granbury, and at mile 542.5 (872.9 km).

DRAINAGE AREA.--24,690 mi² (63,950 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: October 1968 to current year.

Water quality: Chemical analyses: September 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 153,300 acre-ft (189 hm³) Apr. 7 (elevation, 692.98 ft or 211.220 m); minimum, 136,400 acre-ft (168 hm³) Nov. 1 (elevation, 690.93 ft or 210.595 m).

Period of record: Maximum contents, 153,500 acre-ft (189 hm³) Dec. 30, 1969, June 18, Oct. 8, 1970 (elevation, 693.00 ft or 211.226 m); minimum since first filling in October 1969, 99,150 acre-ft (122 hm³) July 22, 23, 1971 (elevation, 685.53 ft or 208.950 m).

REMARKS.--The lake is formed by an Ambursen-type concrete and earthfill dam 2,256 ft (688 m) long, including a 932-foot (284-metre) concrete spillway. The dam was completed on Aug. 30, 1969, and deliberate impoundment began Sept. 15, 1969. The spillway consists of 16 36- by 35-foot (11.0- by 10.7-metre) tainter gates and two 7- by 8-foot (2.1- by 2.4-metre) sluice gates. The outflow from the sluice gates discharges into a bay where it is then controlled by two 4- by 4.5-foot (1.2- by 1.4-metre) sluice gates with invert at 625.8 ft (190.74 m). The lake was built by the Brazos River Authority for the conservation of water for municipal, industrial, and irrigation uses. At end of year, flow from 52.7 mi² (136 km²) above this station was partly controlled by 11 floodwater-retarding structures with a combined capacity of 15,110 acre-ft (18.6 hm³) below the flood-spillway crests, of which 1,760 acre-ft (2.17 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Records furnished by the Brazos River Authority show that 3,191 acre-ft (3.93 hm³) was diverted during the current year from the lake. Records furnished by the city of Granbury show that 249 acre-ft (7,020 m³) of sewage effluent was returned during the current year above station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	706.5	-
Top of tainter gates (design flood).....	693.0	153,500
Crest of spillway.....	658.0	15,440
Lowest gated outlet (invert).....	640.0	2,200

COOPERATION.--Capacity curve was based on data prepared by the Ambursen Engineering Corporation and furnished by the Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

690.0	129,200	692.0	145,000
691.0	136,900	693.0	153,500

CONTENTS, IN ACRE-FEET, AT 2400+ WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150,100	142,000	144,700	148,900	145,900	149,800	147,800	148,700	142,400	146,000	148,300	148,800
2	150,600	144,600	145,300	149,900	140,200	148,800	148,700	148,700	146,200	146,200	148,100	149,000
3	150,900	145,600	145,900	150,300	139,100	149,400	148,800	148,700	145,500	146,700	148,300	148,600
4	151,100	144,300	147,700	150,100	139,100	149,000	148,800	149,200	145,600	147,200	149,000	148,400
5	151,400	144,900	148,600	149,700	140,200	148,300	148,700	148,800	145,300	148,100	149,100	148,700
6	151,200	143,200	148,800	150,500	141,700	149,800	148,600	149,400	145,800	148,600	148,100	148,200
7	150,500	146,500	148,400	151,000	142,600	148,300	150,800	149,600	145,100	149,100	147,100	147,800
8	149,800	147,800	147,700	150,700	144,300	146,200	151,200	148,800	148,400	149,700	146,900	147,800
9	149,200	147,500	147,500	150,600	146,000	145,700	148,000	148,800	143,100	149,800	148,800	147,700
10	149,900	147,200	148,200	148,800	149,800	146,500	148,800	148,800	141,400	149,800	150,600	147,800
11	149,500	146,100	149,200	150,000	148,300	147,300	149,200	148,400	146,000	149,800	150,900	148,000
12	149,400	148,200	149,400	149,000	147,800	148,700	149,700	148,300	147,500	149,900	149,000	147,700
13	149,900	147,400	149,900	148,300	148,900	147,200	149,100	149,100	146,400	150,000	148,100	147,500
14	151,000	147,000	150,600	148,200	149,800	145,700	149,200	148,400	145,300	149,900	148,200	147,600
15	148,400	146,600	151,000	148,800	149,900	146,200	149,800	148,000	146,900	150,000	148,400	148,900
16	149,000	146,700	150,000	147,400	148,800	147,200	150,200	149,000	146,800	149,900	148,400	148,300
17	148,700	147,500	149,600	146,900	149,300	148,300	148,900	149,000	146,800	149,800	148,000	147,500
18	149,100	148,200	149,700	146,900	149,400	148,400	149,500	148,800	147,400	149,600	148,000	147,400
19	149,200	148,500	150,000	147,500	148,700	148,200	149,500	148,300	148,200	149,500	148,100	148,600
20	149,000	148,100	149,400	147,800	148,800	148,000	149,500	147,900	148,800	149,400	148,100	149,600
21	148,600	146,800	149,100	148,000	149,500	149,100	149,300	148,000	148,600	149,300	148,100	150,000
22	149,400	147,800	148,800	147,900	148,900	149,200	149,300	147,900	148,600	149,000	148,000	148,900
23	147,900	148,400	149,100	147,900	146,000	149,700	149,700	147,800	149,800	148,800	147,900	148,900
24	147,900	146,800	149,200	148,100	147,700	148,400	150,000	147,300	149,000	149,400	147,800	148,800
25	148,500	147,100	149,100	148,600	149,600	148,000	149,700	147,200	147,000	149,700	147,200	148,200
26	149,400	148,800	149,000	148,800	149,100	147,900	149,100	147,400	146,700	148,600	147,000	148,000
27	149,300	148,200	149,000	149,200	148,500	148,300	148,800	147,700	146,700	148,700	146,800	147,600
28	148,100	147,100	149,100	149,100	149,500	148,000	148,600	148,800	146,400	149,000	147,200	147,500
29	141,600	145,400	149,200	149,500	-----	147,500	148,500	146,100	146,200	147,400	147,900	147,300
30	142,000	144,100	149,300	150,000	-----	147,000	148,800	142,000	145,800	146,700	148,300	147,300
31	145,600	-----	149,400	150,600	-----	146,900	-----	138,200	-----	147,700	148,500	-----
(†)	692.07	691.89	692.53	692.66	692.54	692.23	692.46	691.16	692.10	692.32	692.42	692.28
(*)	-3,500	-1,500	+5,300	+1,200	-1,100	-2,600	+1,900	-10,600	+7,600	+1,900	+800	-1,200
MAX	151,400	148,800	151,000	151,000	149,900	149,800	151,200	149,600	149,800	150,000	150,900	150,000
MIN	141,600	142,000	144,700	146,900	139,100	145,700	147,800	138,200	141,400	146,000	146,800	147,300
CAL YR 1974.....	* +8,900				MAX	151,400	MIN 110,400					
WTR YR 1975.....	* -1,800				MAX	151,400	MIN 138,200					

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

BRAZOS RIVER BASIN

08090900 Lake Granbury near Granbury, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
FEB. 04...	1215	4.8	140	32	360	6.5	152	0	340	580	.3
JUNE 01...	1530	3.2	99	27	260	6.1	154	0	220	390	.3
SEP. 07...	1200	4.9	100	32	350	5.5	130	0	260	560	.3

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)
FEB. 04...	1.4	.04	--	--	.03	.03	--	--	.02	1540	7
JUNE 01...	--	--	--	--	.01	.00	--	--	.01	1080	--
SEP. 07...	1.7	.03	.00	.00	.00	.00	.67	.67	.02	1380	3

DATE	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	TRANSPARENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)
FEB. 04...	1	480	360	7.1	2610	7.8	10.0	5	7	1.10	9.8
JUNE 01...	--	360	230	6.0	1920	7.7	25.5	--	--	1.40	8.2
SEP. 07...	3	380	280	7.8	2440	8.3	29.5	5	1	1.65	7.8

DATE	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)	CHLOROPHYLL C (UG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)
FEB. 04...	88	.7	4.30	6.00	15.0	30	11	25	--	4
JUNE 01...	99	--	--	--	--	--	--	--	--	--
SEP. 07...	101	1.1	4.30	6.00	15.0	15	0	1	5.9	1

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
FEB. 04...	1215	40	0	260	0	0	2	1
JUNE 01...	1530	--	--	--	--	--	--	--
SEP. 07...	1200	0	1	240	0	10	0	1

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
FEB. 04...	10	1	30	0	.0	3	2100	30
JUNE 01...	10	--	--	10	--	--	--	--
SEP. 07...	0	0	10	10	.0	0	1800	10

LOCATION.--Lat 32°16'18", long 97°39'48", Somervell County, at downstream side of bridge on U.S. Highway 67, 600 ft (180 m) downstream from Georges Creek, 4.1 miles (6.6 km) upstream from Paluxy River, 6 miles (10 km) northeast of Glen Rose, and at mile 511.2 (822.5 km).

PERIOD OF RECORD.--October 1923 to current year.

AVERAGE DISCHARGE.--52 years, 1,493 ft³/s (42.28 m³/s), 1,082,000 acre-ft/yr (1.33 km³/yr).

Period of record: Maximum discharge, 97,600 ft³/s (2,760 m³/s) May 18, 1935 (gage height, 23.68 ft or 7.218 m, site then in use, from floodmarks); maximum gage height, 33.89 ft (10.330 m), present site, May 27, 1957; no flow at times prior to construction of Possum Kingdom Reservoir dam (1941).

Maximum stage since at least 1876, that of May 27, 1957. Flood in May 1908 reached a stage of 27 ft (8.2 m), and flood in May 1922 reached a stage of 29.5 ft (8.99 m), which could have equaled or exceeded flood in 1957 at present site, each at site 2.4 miles (3.9 km) downstream, from information by local residents.

REMARKS.--Records good. Flow is largely regulated by 15 major reservoirs with a combined capacity of 1,383,000 acre-ft (1.71 km³). Many diversions above station for irrigation, municipal supply, and oilfield operation.

REVISIONS (WATER YEARS).--WSP 1058: 1932. WSP 1512: 1946-47, 1949. WSP 1712: 1928(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861	45,400	1,170	190	3,360	236	2,360	167	8,720	580	2,230	167
2	1,350	21,100	820	258	12,500	661	793	167	8,440	322	3,000	161
3	1,420	14,000	806	340	6,570	806	216	358	3,590	156	3,320	594
4	1,420	14,200	305	594	5,790	281	266	243	3,020	92	2,350	1,370
5	1,440	13,600	121	889	4,380	1,900	273	1,170	2,320	70	2,000	620
6	1,480	10,500	229	1,510	4,300	1,590	281	349	2,000	73	1,790	904
7	1,810	4,120	634	918	4,240	1,120	472	130	1,720	76	2,060	1,160
8	1,810	2,480	1,470	594	4,200	2,860	6,290	150	3,290	67	2,070	555
9	1,820	2,420	861	933	3,260	2,210	8,960	1,100	4,940	64	1,210	543
10	1,770	4,960	305	1,530	2,360	963	2,970	450	14,200	52	580	407
11	948	6,260	100	1,600	3,120	918	2,070	368	17,700	40	495	121
12	740	6,650	251	1,570	3,990	933	875	702	12,600	43	1,680	126
13	418	4,800	918	1,570	3,000	1,570	793	203	7,380	52	2,060	135
14	1,240	2,560	978	1,990	1,510	2,130	1,640	172	3,890	62	1,070	140
15	2,580	2,320	397	2,300	1,720	1,810	620	580	2,030	62	918	266
16	3,610	1,710	166	2,340	2,340	1,440	428	305	2,070	52	634	1,860
17	2,830	2,640	779	2,300	2,540	1,120	568	96	2,200	38	555	1,270
18	2,640	3,220	378	861	2,270	1,400	1,200	236	2,120	30	555	506
19	2,790	3,320	190	607	2,270	1,670	461	289	2,360	29	387	1,740
20	3,040	3,300	209	340	2,260	1,480	281	273	1,600	37	203	2,040
21	3,040	3,190	266	92	1,820	978	358	1,070	1,480	52	190	2,160
22	3,040	2,240	266	178	2,390	580	297	216	1,570	85	172	2,880
23	3,060	1,210	196	203	2,920	568	216	209	1,280	73	156	2,660
24	2,810	2,320	184	203	2,260	450	216	1,590	779	43	156	397
25	1,510	1,640	178	130	568	963	273	472	1,450	100	156	702
26	1,470	495	184	70	1,990	273	368	184	1,800	178	178	568
27	1,470	483	184	76	2,560	439	407	273	1,210	676	178	251
28	1,700	1,600	184	89	861	483	472	702	779	1,270	178	243
29	3,520	1,770	184	70	-----	806	450	2,550	676	2,590	172	209
30	8,770	1,770	184	104	-----	978	229	5,580	620	3,570	167	151
31	35,000	-----	184	100	-----	1,650	-----	6,670	-----	2,760	172	-----
TOTAL	101,317	186,278	13,281	24,549	91,349	35,266	35,103	27,024	117,834	13,394	31,042	24,906
MEAN	3,268	6,209	428	792	3,262	1,138	1,170	872	3,928	432	1,001	830
MAX	35,000	45,400	1,470	2,340	12,500	2,860	8,					

BRAZOS RIVER BASIN

08091500 Paluxy River at Glen Rose, Tex.

LOCATION.--Lat 32°13'53", long 97°46'37", Somervell County, on left bank at downstream side of remaining pier of dismantled highway bridge, 500 ft (152 m) upstream from bridge on U.S. Highway 67, 1.0 mile (1.6 km) upstream from Cross Branch, 1.2 miles (1.9 km) southwest of Glen Rose, and 5.1 miles (8.2 km) upstream from mouth.

DRAINAGE AREA.--410 mi² (1,062 km²).

PERIOD OF RECORD.--October 1923 to September 1925, May 1947 to current year. Prior to October 1965, published as Paluxy Creek at Glen Rose.

GAGE.--Water-stage recorder. Datum of gage is 609.66 ft (185.824 m) above mean sea level. Oct. 27, 1923, to Sept. 30, 1925, nonrecording gage at bridge 1.8 miles (2.9 km) downstream at datum 13.62 ft (4.151 m) lower.

AVERAGE DISCHARGE.--29 years (1924-25, 1947-75), 69.4 ft³/s (1.965 m³/s), 50,280 acre-ft/yr (62.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,450 ft³/s (183 m³/s) Oct. 31 (gage height, 10.75 ft or 3.277 m); minimum, 0.44 ft³/s (0.012 m³/s) Sept. 11-13.

Period of record: Maximum discharge, 50,000 ft³/s (1,420 m³/s) Oct. 4, 1959 (gage height, 25.4 ft or 7.74 m), from rating curve extended above 32,000 ft³/s (906 m³/s); no flow at times.

Maximum stage since at least 1877, 27.2 ft (8.29 m) Apr. 17, 1908, present site and datum (discharge, 59,000 ft³/s or 1,670 m³/s, from rating curve extended as explained above). Flood of May 21, 1922, reached a stage of 26.0 ft (7.92 m), present site and datum (discharge, 53,000 ft³/s or 1,500 m³/s, from rating curve extended as explained above). Flood in November 1918 reached about same stage as that of May 21, 1922, from information by local residents.

REMARKS.--Records good. Occasional small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1392: 1949, 1952. WSP 2122: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	388	40	33	1,050	65	47	56	49	15	6.2	2.2
2	4.4	184	40	36	742	62	46	54	42	14	5.4	1.8
3	4.1	132	40	37	454	60	44	56	38	14	6.0	1.3
4	3.7	121	38	35	415	59	43	56	35	15	5.8	1.0
5	3.2	115	38	35	298	61	43	55	32	18	4.6	.85
6	3.0	105	38	33	219	61	44	53	31	21	4.0	.78
7	2.9	88	37	34	178	59	236	50	29	15	3.6	.70
8	2.8	88	35	33	161	56	2,490	48	29	12	3.4	.67
9	2.8	85	35	33	140	55	437	46	29	11	2.9	.70
10	2.8	214	37	32	126	57	296	44	144	11	2.7	.67
11	2.7	239	48	31	121	57	191	44	116	10	2.5	.59
12	2.6	144	48	30	112	58	146	43	55	11	2.2	.48
13	6.4	121	45	30	103	79	126	41	40	9.4	1.9	.48
14	357	102	41	30	99	73	122	44	33	8.3	1.7	.53
15	197	85	35	30	94	68	115	43	29	7.9	1.5	1.1
16	53	78	35	30	89	80	105	40	26	7.5	1.5	271
17	28	76	33	30	86	75	97	38	23	7.1	2.0	.48
18	19	74	32	30	83	69	92	35	21	7.1	1.7	18
19	14	69	31	30	79	63	86	34	19	7.3	1.6	9.9
20	12	67	31	29	76	59	81	59	18	6.6	2.1	7.4
21	11	65	30	28	75	57	76	84	19	6.1	1.8	7.0
22	9.2	57	30	28	73	55	73	73	20	5.6	1.5	7.4
23	8.9	57	30	27	76	55	71	53	18	5.0	1.3	6.2
24	12	53	29	28	76	52	71	48	17	7.8	1.1	5.8
25	13	57	28	27	75	49	67	48	21	9.6	1.5	5.1
26	13	51	31	28	71	49	62	45	26	7.5	1.2	4.7
27	106	46	33	28	68	55	59	89	34	7.9	2.2	4.1
28	230	45	35	27	66	53	77	148	20	6.8	4.2	4.0
29	158	45	34	26	-----	50	64	96	16	5.9	2.7	3.8
30	63	43	33	26	-----	49	67	89	16	5.6	3.6	3.5
31	2,360	-----	34	34	-----	48	-----	65	-----	4.6	3.3	-----
TOTAL	3,710.4	3,094	1,104	948	5,305	1,848	5,574	1,777	1,045	300.6	87.7	419.75
MEAN	120	103	35.6	30.6	189	59.6	186	57.3	34.8	9.70	2.83	14.0
MAX	2,360	388	48	37	1,050	80	2,490	148	144	21	6.2	271
MIN	2.6	43	28	26	66	48	43	34	16	4.6	1.1	.48
AC-FT	7,360	6,140	2,190	1,880	10,520	3,670	11,060	3,520	2,070	596	174	833

CAL. YR 1974 TOTAL 10,903.31 MEAN 29.9 MAX 2,360 MIN 0 AC-FT 21,630
WTR YR 1975 TOTAL 25,213.45 MEAN 69.1 MAX 2,490 MIN .48 AC-FT 50,010

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Oct. 31 (1200) 6,450 ft³/s (10.75 ft); Apr. 8 (0600) 4,540 ft³/s (8.97 ft).

08091750 Squaw Creek near Glen Rose, Tex.

LOCATION.--Lat 32°16'12", long 97°43'56", Somervell County, on left bank at downstream side of bridge on State Highway 144, 2.1 miles (3.4 km) upstream from mouth, and 2.8 miles (4.5 km) northeast of Glen Rose.

DRAINAGE AREA.--62.5 mi² (161.9 km²).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 569.02 ft (173.437 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 9,030 ft³/s (256 m³/s) Apr. 8 (gage height, 11.90 ft or 3.627 m), from rating curve extended as explained below; minimum, 0.31 ft³/s (0.009 m³/s) Oct. 7-12.

Period of record: Maximum discharge, 9,030 ft³/s (256 m³/s) Apr. 8, 1975 (gage height, 11.90 ft or 3.627 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of velocity-area study; minimum, 0.02 ft³/s (0.001 m³/s) Aug. 28, 29, 1974.

Maximum stage since 1934, about 20.5 ft (6.25 m) in May 1957, from information by Texas Highway Department (discharge not determined).

REMARKS.--Record, good. No known diversions. At present time there is no regulation of streamflow, but a reservoir for impoundment and storage of cooling water for a proposed generating plant is now under construction about 2.5 miles (4.0 km) upstream from gage and will materially affect flows when the dam is completed. Deliberate impoundment is expected to begin about Oct. 1, 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	46	6.5	6.1	819	8.4	6.5	7.2	7.0	2.8	.70	.70
2	.41	19	6.5	6.1	126	7.9	6.1	7.0	6.1	2.5	.75	.67
3	.41	11	6.5	7.0	117	7.4	5.7	7.0	5.3	5.0	.79	.60
4	.36	18	6.5	7.0	101	7.0	5.7	7.0	4.6	3.8	.85	.54
5	.36	16	6.5	7.0	46	7.0	5.7	7.0	4.3	2.8	.94	.54
6	.36	9.5	6.5	6.5	30	7.0	5.7	6.8	4.0	2.2	1.1	.54
7	.31	8.7	6.5	6.5	25	10	251	5.7	3.4	2.0	1.1	.54
8	.31	9.8	6.4	6.1	26	8.4	1510	5.3	3.4	1.8	1.5	.54
9	.31	8.7	6.1	6.5	21	7.9	51	5.3	4.0	1.7	1.6	.54
10	.31	205	7.2	6.1	18	7.9	28	5.0	107	1.7	1.6	.52
11	.31	51	9.3	5.3	16	7.9	24	5.0	21	1.7	1.5	.47
12	.31	25	9.0	5.3	13	7.9	21	4.7	9.1	1.7	1.4	.47
13	.41	19	8.5	4.6	13	11	19	4.2	6.8	1.7	1.4	.47
14	262	14	8.4	4.6	12	8.9	19	5.0	5.1	1.5	1.3	.47
15	47	12	8.0	4.6	11	8.5	17	4.5	4.3	1.3	1.3	1.9
16	9.1	12	6.5	4.6	10	9.5	16	4.0	4.2	1.1	1.3	99
17	3.6	11	6.5	4.6	11	8.4	15	3.7	3.6	1.1	1.3	22
18	1.8	11	6.5	4.7	10	8.4	13	3.6	3.1	1.1	1.2	2.0
19	1.4	11	6.5	5.3	9.0	8.4	12	3.4	2.7	.95	1.1	1.0
20	1.2	8.4	6.5	4.7	9.0	8.4	11	9.6	2.4	.79	.96	1.3
21	1.1	7.9	6.1	4.3	9.0	8.4	10	5.7	2.5	.76	.89	1.5
22	1.1	7.9	6.1	4.3	9.0	8.0	9.5	6.4	2.6	.70	.80	1.4
23	1.1	7.9	6.1	4.2	8.4	7.9	9.5	7.6	2.4	.68	.79	1.3
24	1.2	7.6	6.1	4.8	8.4	7.1	9.4	6.6	2.3	18	.79	1.3
25	1.3	7.4	6.1	4.5	9.0	6.7	8.8	5.5	4.7	19	.84	1.3
26	1.4	7.4	6.1	4.8	9.0	6.8	7.9	4.6	2.6	1.9	.86	2.1
27	1.4	7.3	6.1	4.6	8.4	8.5	7.9	3.8	2.1	1.4	.79	2.5
28	64	6.5	6.1	4.0	8.4	7.0	7.9	7.6	2.2	.86	.79	3.0
29	19	6.5	6.1	3.7	---	6.5	7.9	53	2.8	.76	.79	4.2
30	4.1	6.5	6.1	3.7	---	6.5	7.8	32	2.5	.70	.79	3.5
31	676	---	6.1	12	---	6.5	---	11	---	.70	.76	---
TOTAL	1102.38	599.0	208.0	168.1	1512.6	246.1	2129.0	254.8	238.1	84.70	32.58	156.91
MEAN	35.6	20.0	6.71	5.42	54.0	7.94	71.0	8.22	7.94	2.73	1.05	5.23
MAX	676	205	9.3	12	819	11	1510	53	107	19	1.6	99
MIN	.31	6.5	6.1	3.7	8.4	6.5	5.7	3.4	2.1	.68	.70	.47
AC-FT	7190	1190	413	333	3000	488	4220	505	472	168	65	311
CAL YR 1974	TOTAL	2142.98	MEAN	5.87	MAX	676	MIN	0	AC-FT	4250		
WTR YR 1975	TOTAL	6732.27	MEAN	18.4	MAX	1510	MIN	.31	AC-FT	13350		

BRAZOS RIVER BASIN

08091900 Lake Pat Cleburne near Cleburne, Tex.

LOCATION.--Lat 32°17'20", long 97°24'54", Johnson County, at side of walkway from dam to outlet structure, near left end of Cleburne Dam on Nolan River, 2.2 miles (3.5 km) upstream from Buffalo Creek, and 4.3 miles (6.9 km) south of Cleburne.

DRAINAGE AREA.--100 mi² (259 km²).

PERIOD OF RECORD.--Contents: April 1965 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Homer Hunter Associates, Consulting Engineers bench mark).

EXTREMES.--Current year: Maximum contents, 30,600 acre-ft (37.7 hm³) Feb. 1 (elevation, 736.56 ft or 224.503 m); minimum, 23,510 acre-ft (29.0 hm³) Sept. 30 (elevation, 732.13 ft or 223.153 m).

Period of record: Maximum contents, 37,200 acre-ft (45.9 hm³) May 13, 1968 (elevation, 740.10 ft or 225.582 m); minimum, 18,890 acre-ft (23.3 hm³) Dec. 11-14, 1967 (elevation, 728.70 ft or 222.108 m).

REMARKS.--The lake is formed by a rock-faced earthfill dam 5,050 ft (1,540 m) long, including a 150-foot-wide (46-metre) uncontrolled concrete service spillway at left end of dam. An emergency spillway, 500 ft (150 m) wide, is cut in natural ground on the right bank about 400 ft (120 m) from right end of dam. Storage began Aug. 4, 1964. Lake is the property of city of Cleburne and was built to impound water for municipal use. Capacity table based on survey of 1958 from Geological Survey topographic maps. Records furnished by city of Cleburne indicate that 3,150 acre-ft (3.88 hm³) of sewage effluent was returned to a tributary of Nolan River which enters below this station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	753.0	-
Top of design flood pool.....	752.3	66,700
Crest of spillway.....	744.0	45,430
Crest of spillway (top of conservation pool).....	733.5	25,560
Lowest gated outlet (invert).....	690.0	115

COOPERATION.--Records of diversions furnished by city of Cleburne. Capacity table furnished by Homer Hunter Associates, Consulting Engineers for the city of Cleburne.

Capacity table (elevation, in feet, and contents, in acre-feet)

732.0	23,320	735.0	27,950
733.0	24,790	736.0	29,630
734.0	26,340	737.0	31,370

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26,090	27,400	26,040	26,150	29,770	26,100	26,000	26,040	26,400	25,760	25,480	24,320
2	26,060	26,920	26,060	26,250	29,270	26,100	25,950	26,100	26,260	25,740	25,470	24,240
3	26,010	26,680	26,060	26,260	28,070	26,090	25,920	26,100	26,180	25,780	25,440	24,200
4	25,980	26,530	26,060	26,230	27,630	26,070	25,890	26,040	26,140	26,900	25,390	24,150
5	25,960	26,600	26,090	26,200	27,240	26,070	25,890	26,040	26,100	26,600	25,340	24,090
6	25,960	26,360	26,120	26,170	26,870	26,090	25,920	26,030	26,060	26,390	25,300	24,060
7	25,950	26,360	26,090	26,170	26,660	26,070	25,920	26,010	26,030	26,250	25,250	24,010
8	25,930	27,870	26,040	26,150	26,600	26,040	29,100	25,980	26,070	26,170	25,200	23,960
9	25,960	27,370	26,030	26,200	26,420	26,090	28,120	25,950	26,480	26,100	25,160	23,930
10	25,950	27,060	26,150	26,140	26,390	26,040	27,400	25,930	26,920	26,060	25,110	23,890
11	25,930	26,880	26,260	26,120	26,330	26,030	26,960	26,000	27,610	26,000	25,070	23,840
12	25,930	26,740	26,250	26,070	26,300	26,070	26,680	26,010	27,000	25,950	25,020	23,780
13	25,980	26,660	26,220	26,060	26,250	26,060	26,470	26,030	26,630	25,900	24,980	23,710
14	27,550	26,580	26,220	26,040	26,220	26,040	26,330	26,030	26,440	25,890	24,930	23,670
15	27,030	26,340	26,180	26,060	26,230	26,040	26,250	25,960	26,310	25,840	24,880	23,900
16	26,710	26,300	26,140	26,060	26,180	26,060	26,170	25,930	26,180	25,790	24,840	23,930
17	26,500	26,250	26,100	26,070	26,170	26,100	26,120	25,900	26,100	25,740	24,790	23,900
18	26,370	26,230	26,100	26,070	26,150	26,100	26,100	25,890	26,040	25,710	24,780	23,870
19	26,260	26,230	26,100	26,040	26,120	26,070	26,070	25,850	26,030	25,680	24,720	23,870
20	26,180	26,200	26,120	26,010	26,100	26,040	26,060	26,000	25,980	25,650	24,670	23,810
21	26,100	26,180	26,100	26,030	26,140	26,030	26,040	26,030	25,950	25,620	24,630	23,830
22	26,070	26,170	26,100	26,000	26,150	26,030	26,030	26,000	25,930	25,590	24,720	23,780
23	26,040	26,260	26,120	26,000	26,100	26,010	26,030	26,480	25,900	25,560	24,660	23,730
24	26,070	26,250	26,140	26,030	26,100	25,960	26,040	26,480	25,870	25,590	24,600	23,680
25	26,090	26,200	26,100	26,010	26,120	25,920	26,030	26,400	25,850	25,640	24,550	23,640
26	26,090	26,180	26,120	26,030	26,120	25,980	26,010	26,300	25,840	25,620	24,490	23,610
27	26,070	26,150	26,120	26,030	26,100	26,150	26,010	26,260	25,810	25,590	24,450	23,570
28	26,790	26,150	26,140	26,060	26,100	26,150	26,090	27,290	25,840	25,570	24,420	23,550
29	26,660	26,120	26,150	26,060	-----	26,090	26,140	27,270	25,810	25,560	24,380	23,520
30	26,550	26,070	26,180	26,090	-----	26,060	26,090	26,850	25,790	25,530	24,350	23,510
31	28,220	-----	26,180	26,880	-----	26,030	-----	26,560	-----	25,500	24,350	-----
(†)	735.16	733.83	733.90	734.34	733.85	733.80	733.84	734.14	733.65	733.46	732.70	732.13
(*)	+2,080	-2,150	+110	+700	-780	-70	+60	+470	-770	-1,150	-840	-840
(††)	198	187	186	179	158	166	165	181	186	232	294	270
MAX	28,220	27,870	26,260	26,880	29,770	26,150	29,100	27,290	28,920	26,900	25,480	24,320
MIN	25,930	26,070	26,030	26,000	26,100	25,920	25,890	25,850	25,790	25,500	24,350	23,510

CAL YR 1974..... † +440 †† 2,378 MAX 28,220 MIN 22,650
WTR YR 1975..... * -2,630 †† 2,401 MAX 29,770 MIN 23,510

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Cleburne.

BRAZOS RIVER BASIN

295

08091900 Lake Pat Cleburne near Cleburne, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
JULY, 1975									
14...	1050	8.4	43	4.3	11	3.4	144	0	15

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
JULY, 1975									
14...	12	.3	168	130	7	.4	300	7.8	28.0

BRAZOS RIVER BASIN

08092000 Nolan River at Blum, Tex.

LOCATION.--Lat 32°09'02", long 97°24'10", Hill County, on right bank 60 ft (18 m) upstream from bridge on Farm Road 933, 0.6 mile (1.0 km) northwest of Blum, 2.8 miles (4.5 km) downstream from Mustang Creek, 3.0 miles (4.8 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 3.2 miles (5.1 km) upstream from Rock Creek.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--Discharge: July 1924 to September 1925, November 1947 to current year.

Water quality: Chemical and biochemical analyses: January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.48 ft (168.091 m) above mean sea level. July 29, 1924, to Sept. 30, 1925, and Nov. 14, 1947, to May 28, 1949, nonrecording gage at railway bridge (now abandoned) 0.5 mile (0.8 km) upstream at datum 5.00 ft (1.524 m) higher. May 29 to July 7, 1949, nonrecording gage at present site and datum then in use, 5.00 ft (1.524 m) higher than present datum.

AVERAGE DISCHARGE.--28 years (1924-25, 1948-75), 80.9 ft³/s (2.291 m³/s), 58,610 acre-ft/yr (72.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,890 ft³/s (280 m³/s) Feb. 1 (gage height, 13.91 ft or 4.240 m); minimum, 1.4 ft³/s (0.040 m³/s) Sept. 26.

Period of record: Maximum discharge, 62,200 ft³/s (1,760 m³/s) May 7, 1969 (gage height, 31.23 ft or 9.519 m), from rating curve extended above 22,200 ft³/s (629 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times.

Maximum stage since at least 1887, 35.0 ft (10.67 m) May 8, 1922, present site and datum, from information by local resident.

REMARKS.--Discharge records good. Flow is partly regulated since August 1964 by Lake Pat Cleburne (station 08091900) located 13 miles (21 km) upstream.

REVISIONS (WATER YEARS).--WSP 1312: 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	1,100	69	72	6,720	55	44	73	125	17	4.7	2.3
2	60	535	64	76	2,870	51	46	75	86	16	4.1	2.6
3	54	335	61	102	1,600	46	36	81	66	22	6.4	2.4
4	48	286	59	82	1,200	46	27	65	51	33	7.3	2.4
5	42	203	60	74	827	44	25	59	42	228	5.6	2.3
6	38	153	74	71	545	46	25	56	36	96	4.3	2.8
7	36	148	72	69	340	53	1,200	53	32	66	3.9	2.5
8	35	142	67	68	266	51	5,000	46	31	49	3.6	2.8
9	33	128	57	64	217	44	1,010	42	201	44	3.6	2.9
10	31	1,180	58	68	172	51	534	37	3,450	33	3.5	2.7
11	28	781	117	63	157	46	316	49	1,040	28	3.2	2.6
12	26	375	88	65	135	51	210	163	392	21	2.8	2.5
13	25	247	78	53	120	117	170	60	202	16	2.8	2.2
14	320	180	74	49	110	85	199	58	125	12	3.1	2.5
15	675	129	72	49	101	67	152	53	88	10	2.9	3.5
16	257	108	70	48	99	394	122	42	72	17	2.9	29
17	155	98	67	47	86	71	106	34	56	12	2.9	10
18	111	90	64	48	84	136	102	31	46	9.6	2.9	4.8
19	87	88	61	56	75	76	89	28	38	9.7	2.6	3.4
20	69	81	57	50	69	58	74	29	32	7.4	2.4	3.4
21	55	77	54	42	67	51	67	62	30	6.7	2.3	2.9
22	46	75	51	41	73	48	64	46	27	6.1	2.3	5.1
23	41	76	50	39	89	45	64	110	24	5.9	3.1	5.2
24	42	114	55	38	84	42	64	231	22	5.5	3.5	3.1
25	49	86	57	40	70	34	61	190	20	7.3	3.0	2.5
26	47	78	53	38	65	32	57	102	20	13	2.7	2.1
27	43	75	58	37	62	55	52	78	19	12	2.7	2.5
28	213	73	56	37	57	80	73	1,350	18	7.0	2.8	2.9
29	268	74	61	37	-----	83	86	711	21	5.3	2.2	2.8
30	158	72	62	38	-----	73	214	472	18	4.8	2.5	2.4
31	4,170	-----	72	158	-----	52	-----	207	-----	4.0	2.4	-----
TOTAL	7,330	7,187	2,018	1,819	16,360	2,183	10,289	4,693	6,430	824.3	105.0	121.1
MEAN	236	240	65.1	58.7	584	70.4	343	151	214	26.6	3.39	4.04
MAX	4,170	1,180	117	158	6,720	394	5,000	1,350	3,450	228	7.3	29
MIN	25	72	50	37	57	32	25	28	18	4.0	2.2	2.1
AC-FT	14,540	14,260	4,000	3,610	32,450	4,330	20,410	9,310	12,750	1,630	208	240

CAL YR 1974 TOTAL 35,753.10 MEAN 98.0 MAX 4,170 MIN .42 AC-FT 70,920

WTR YR 1975 TOTAL 59,359.40 MEAN 163 MAX 6,720 MIN 2.1 AC-FT 117,700

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1100	12.11	7,730	4-8	0430	13.19	9,000
2-1	1800	13.91	9,890	6-10	1730	10.79	6,170

BRAZOS RIVER BASIN

297

08092000 Nolan River at Blum, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 12...	1425	300	9.5	57	4.5	15	3.6	186	0	18
JAN. 21...	1500	38	3.0	75	7.3	28	2.5	220	16	41
MAR. 04...	1230	45	3.9	80	8.1	40	2.7	247	10	57
MAY 07...	1135	56	7.6	78	7.4	30	3.7	250	0	44
JULY 16...	1030	.21	9.0	64	6.0	25	3.4	220	6	28
SEP. 24...	1225	.03	8.9	50	4.8	41	6.0	179	10	39

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 12...	13	--	.78	.00	.03	.84	.87	.14	212
JAN. 21...	30	.3	.77	.02	.03	.62	.65	.32	312
MAR. 04...	35	.3	1.3	.05	.03	.38	.41	.38	359
MAY 07...	32	.4	1.1	.01	.03	.55	.58	.39	326
JULY 16...	21	.5	.46	.03	.07	1.1	1.2	.43	271
SEP. 24...	27	.6	.02	.01	.03	1.5	1.5	3.6	276

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV. 12...	160	8	.5	378	7.8	16.5	8.8	90	1.0
JAN. 21...	220	10	.8	544	8.4	12.0	16.6	154	.9
MAR. 04...	230	14	1.1	595	8.2	11.0	15.4	139	1.6
MAY 07...	230	20	.9	554	8.0	25.0	10.5	125	1.0
JULY 16...	180	0	.8	483	8.5	26.0	10.1	123	2.8
SEP. 24...	140	0	1.5	477	8.4	22.5	15.2	173	2.3

BRAZOS RIVER BASIN

08092500 Whitney Lake near Whitney, Tex.

LOCATION.--Lat 31°51'55", long 97°22'18", Bosque County, on State Highway 22, in intake structure of Whitney Dam on Brazos River, 2.4 miles (3.9 km) upstream from Coon Creek, 3.5 miles (5.6 km) upstream from Iron Creek, 7.4 miles (11.9 km) southwest of Whitney, and at mile 442.3 (711.7 km).

DRAINAGE AREA.--26,170 mi² (67,780 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Contents: December 1951 to current year. Prior to October 1970, published as Whitney Reservoir.
Water quality: Chemical analyses: November 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 789,100 acre-ft (973 hm³) Nov. 6 (elevation, 539.34 ft or 164.391 m); minimum, 466,300 acre-ft (575 hm³) Oct. 1 (elevation, 525.30 ft or 160.111 m).
Period of record: Maximum contents, 1,980,000 acre-ft (2.44 km³) May 29, 1957 (elevation, 570.25 ft or 173.812 m); minimum daily since power pool elevation first reached in April 1954, 250,200 acre-ft (308 hm³) Nov. 1, 1956 (elevation, 509.52 ft or 155.302 m).

REMARKS.--The lake is formed by a concrete-gravity and rolled earthfill dam 17,695 ft (5,393 m) long, including spillway. The dam was completed in April 1951 and deliberate impoundment began Dec. 10, 1951. The concrete spillway is 680 ft (210 m) long and includes 17 tainter gates 38.0 by 40.0 ft (11.6 by 12.2 m) each. The outlet works are comprised of 16 gate-operated conduits that are 5.0 by 9.0 ft (1.5 by 2.7 m) each. The space between elevations 522.0 and 571.0 ft (159.11 and 174.04 m) is reserved for flood-control storage. At a maximum design elevation of 573.0 ft (174.65 m), the spillway is designed to discharge 684,000 ft³/s (19,400 m³/s). The capacity table is based on a survey made in April and May 1959. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	584.0	
Design flood.....	573.0	2,100,000
Top of gates.....	571.0	1,999,500
Crest of spillway (sill of gates).....	533.0	627,100
Top of conservation pool (top of designated power storage).....	522.0	411,100
Lowest controlled outlets (invert).....	448.83	4,270

COOPERATION.--Records furnished by the Corps of Engineers and reviewed by the Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

525.0	461,000	535.0	675,500
530.0	559,200	540.0	807,300

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467,700	717,100	628,500	605,700	632,300	623,800	625,400	626,600	661,200	616,300	597,300	580,400
2	469,500	761,600	628,800	605,700	665,900	621,200	626,200	627,300	664,200	616,800	601,800	578,600
3	471,500	776,400	629,700	605,700	680,500	619,800	623,800	627,800	654,100	619,800	605,200	576,400
4	473,800	782,200	627,800	605,000	689,800	616,600	621,500	628,500	647,800	620,500	608,200	576,100
5	476,400	788,000	628,500	607,100	692,600	615,200	621,500	628,700	644,000	620,500	611,200	577,900
6	478,900	777,000	629,000	609,900	691,600	614,500	621,900	631,300	640,900	619,600	611,700	578,400
7	482,100	745,100	628,300	612,700	688,800	614,200	636,300	632,100	636,300	618,700	612,600	579,200
8	484,900	709,400	630,400	613,600	688,800	614,700	668,600	631,300	633,700	617,000	614,500	579,900
9	487,200	690,100	630,000	616,900	684,000	615,600	681,000	632,800	634,400	617,000	614,500	579,900
10	488,800	694,400	630,700	615,300	678,500	616,100	678,800	633,700	659,000	617,000	612,600	578,600
11	489,800	689,100	630,200	616,600	674,500	614,500	662,900	634,200	675,800	615,900	611,900	577,700
12	490,200	672,300	629,700	615,500	672,300	615,600	650,000	634,200	677,500	619,400	611,700	577,900
13	490,500	657,100	631,400	612,200	671,600	613,100	644,700	633,000	666,900	614,200	614,000	576,800
14	492,400	640,200	633,800	612,700	675,300	613,800	639,400	632,800	648,600	613,800	613,800	575,700
15	496,100	635,200	635,000	615,700	681,300	614,500	633,000	630,900	637,500	613,800	613,100	575,200
16	501,000	635,500	634,000	616,200	684,500	617,000	625,900	630,400	632,100	613,600	613,100	581,500
17	506,100	635,900	630,700	618,700	684,500	617,000	618,200	628,700	628,300	613,300	612,400	584,600
18	511,200	638,100	628,800	619,700	679,800	621,500	616,100	627,300	625,200	612,600	610,800	584,200
19	515,700	641,700	625,700	619,700	672,000	625,200	617,000	627,300	623,100	610,500	609,200	586,900
20	520,600	643,100	622,000	617,800	664,600	627,800	617,700	629,700	619,600	608,700	606,200	589,100
21	524,600	643,600	621,500	616,400	658,300	631,300	619,100	630,400	616,100	605,500	603,600	592,900
22	529,300	640,200	620,600	615,000	653,400	632,800	619,600	630,400	614,700	602,300	603,600	596,800
23	533,600	638,100	620,600	614,100	648,300	634,700	621,000	632,300	613,100	599,100	601,400	600,900
24	538,200	636,700	620,600	613,600	644,000	633,000	621,500	641,800	611,900	597,700	598,400	602,000
25	540,800	631,400	617,600	612,200	637,800	630,900	622,200	644,000	614,700	595,900	596,300	600,900
26	542,500	628,000	615,300	611,100	632,300	630,200	621,500	645,000	616,800	592,000	594,500	600,900
27	544,600	622,700	611,800	609,200	628,500	628,700	622,400	645,400	617,700	590,000	594,500	600,000
28	548,100	622,400	609,700	608,100	625,900	629,000	623,600	649,300	617,700	588,700	592,000	598,800
29	552,800	625,900	608,500	605,700	-----	626,600	624,500	650,500	617,300	589,300	589,300	598,400
30	565,200	627,800	607,800	602,300	-----	625,400	626,900	654,100	615,900	592,300	586,200	597,500
31	636,200	-----	607,800	603,400	-----	624,300	-----	657,600	-----	595,000	582,800	-----
(+)	533.38	533.03	532.17	531.98	532.95	532.88	532.99	534.27	532.52	531.61	531.07	531.72
(*)	+170,300	-8,400	-20,000	-4,400	+22,500	-1,600	+2,600	+30,700	-41,700	-20,900	-12,200	+14,700
MAX	636,200	788,000	635,000	619,700	692,600	634,700	681,000	657,600	677,500	620,500	614,500	602,000
MIN	467,700	622,400	607,800	602,300	625,900	613,100	616,100	626,600	611,900	588,700	582,800	575,200
CAL YR 1974.....	* +3,500			MAX 788,000			MIN 415,600					
WTR YR 1975.....	* +131,600			MAX 788,000			MIN 467,700					

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

BRAZOS RIVER BASIN

299

08092500 Whitney Lake near Whitney, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JAN. 27...	1130	4.7	98	24	260	6.2	135	0
JUNE 02...	1100	4.2	95	20	210	5.1	160	0
SEP. 06...	1030	5.3	86	23	220	5.4	142	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
JAN. 27...	220	420	.3	.08	.06	.02	1100	340	230
JUNE 02...	190	330	.3	.01	.00	.01	933	320	190
SEP. 06...	190	350	.3	.01	.00	.02	950	310	190

DATE	SODIUM AD- SORP- TION RATIO	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JAN. 27...	6.1	1970	8.1	10.5	8.6	77	0	0
JUNE 02...	5.1	1670	8.0	25.0	8.2	98	20	10
SEP. 06...	5.4	1670	8.3	28.5	8.0	103	30	10

08092600 Brazos River at Whitney Dam near Whitney, Tex.

LOCATION.--Lat 31°52'00", long 97°22'00", Hill County, immediately below Whitney Dam, 3.4 miles (5.5 km) upstream from gaging station near Whitney, 4.0 miles (6.4 km) upstream from Iron Creek, and 7.4 miles (11.9 km) southwest of Whitney.

DRAINAGE AREA.--26,190 mi² (67,830 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1947 to May 1948, October 1948 to current year. Water temperatures: October 1947 to May 1948, October 1948 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 2,240 micromhos Oct. 28; minimum daily, 1,640 micromhos Aug. 2. Maximum water temperatures, 28.0°C Sept. 4; minimum, 8.5°C Feb. 26, Mar. 4.

Period of record: Maximum daily specific conductance, 2,660 micromhos Oct. 1, 1948; minimum daily, 203 micromhos May 23, 1952. Maximum water temperatures, 33.5°C July 3, 1973; minimum, freezing point Jan. 28, 29, 1948.

REMARKS.--Records of discharge are given for gaging station 08093100. No appreciable inflow between dam and gaging station except during periods of heavy local rains.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 24...	0815	1040	4.8	94	23	260	5.7	132	0	200
NOV. 14...	0800	12100	5.2	100	25	280	6.8	130	0	230
DEC. 30...	0800	1300	5.6	97	26	280	6.5	132	0	230
JAN. 31...	0800	2400	4.7	99	24	260	5.1	135	0	220
FEB. 21...	0800	6080	4.7	100	24	270	7.9	144	0	210
MAR. 15...	0800	1960	4.4	100	22	230	5.3	148	0	200
APR. 16...	0800	4450	4.5	99	21	240	5.4	153	0	200
MAY 08...	0800	283	4.5	100	21	230	5.9	162	0	200
JUNE 30...	0800	956	5.3	92	20	210	5.5	164	0	180
JULY 16...	0800	33	5.6	94	21	210	4.8	168	0	170
AUG. 31...	0800	1460	6.3	80	22	210	5.0	160	0	170
SEP. 30...	0800	536	5.9	91	23	220	7.5	146	0	180

08092600 Brazos River at Whitney Dam near Whitney, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 24...	420	--	1070	330	220	6.2	1970	8.0	21.0
NOV. 14...	470	.3	1180	350	250	6.5	2070	8.1	19.5
DEC. 30...	430	.3	1140	350	240	6.5	2010	7.9	11.0
JAN. 31...	430	.6	1110	350	240	6.1	1970	7.9	9.5
FEB. 21...	410	.3	1100	350	230	6.3	1890	7.9	9.0
MAR. 15...	370	.2	1000	340	220	5.4	1850	8.1	10.0
APR. 16...	370	.3	1020	330	210	5.7	1810	8.2	12.0
MAY 08...	360	.3	1000	340	200	5.5	1790	8.3	15.5
JUNE 30...	330	.3	924	310	180	5.2	1660	7.9	25.5
JULY 16...	340	.3	929	320	180	5.1	1650	8.3	--
AUG. 31...	320	--	892	290	160	5.4	1650	7.9	26.0
SEP. 30...	350	.5	950	320	200	5.3	1700	8.0	24.5

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	17193	2020	1100	51100	440	20400	220	10200	350
NOV. 1974.....	216033	2050	1200	700000	450	262000	220	128000	360
DEC. 1974.....	33804	2020	1100	100000	440	40200	220	20100	350
JAN. 1975.....	39952	1870	1100	119000	400	43100	200	21600	340
FEB. 1975.....	126467	1910	1100	376000	410	140000	210	71700	340
MAR. 1975.....	43267	1860	1000	117000	400	46700	200	23400	330
APR. 1975.....	76252	1810	1000	206000	380	78200	200	41200	330
MAY 1975.....	33604	1740	980	88900	370	33600	190	17200	320
JUNE 1975.....	140528	1690	950	360000	350	133000	180	68300	320
JULY 1975.....	22522	1650	930	56600	340	20700	180	10900	310
AUG. 1975.....	29621	1650	930	74400	340	27200	180	14400	310
SEPT 1975.....	11809	1680	950	30300	350	11200	180	5740	310
TOTAL	791052	**	**	2280000	**	856000	**	433000	**
MTD.AVG.	2167.27	1870	1100	**	400	**	200	**	340

BRAZOS RIVER BASIN

08092600 Brazos River at Whitney Dam near Whitney, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2000	2210	2050	2000	1940	1880	1850	1780	1700	1660	1660	1660
2	2000	1980	2050	2000	1950	1890	1850	1780	1730	1660	1640	1660
3	2020	1980	2030	1990	1950	1880	1850	1780	1730	1660	1660	1690
4	2000	2020	2030	1990	1950	1860	1850	1750	1730	1660	1660	1660
5	2000	2020	2030	1990	1950	1880	1850	1780	1730	1660	1660	1660
6	2000	2040	2030	1990	1910	1880	1850	1790	1730	1650	1670	1660
7	2000	2030	2030	1990	1930	1880	1830	1780	1730	1650	1650	1660
8	2000	2020	2040	1990	1930	1880	1820	1790	1690	1660	1650	1660
9	2010	2040	2040	1990	1930	1880	1830	1790	1690	1660	1650	1660
10	2010	2040	2040	2000	1920	1880	1820	1740	1690	1660	1650	1660
11	2000	2050	2040	2000	1910	1860	1800	1730	1690	1660	1650	1660
12	2000	2060	2020	1990	1910	1870	1810	1790	1690	1650	1650	1660
13	2000	2070	2020	2000	1910	1850	1770	1780	1690	1660	1650	1660
14	2000	2070	2020	1990	1900	1850	1800	1750	1670	1660	1650	1680
15	2000	2070	2030	1990	1910	1850	1810	1750	1670	1650	1650	1690
16	1980	2080	2020	1990	1910	1850	1810	1760	1680	1650	1650	1670
17	1980	2080	2020	1990	1910	1850	1810	1730	1690	1650	1650	1690
18	1980	2080	2020	1990	1910	1850	1810	1730	1690	1670	1650	1690
19	1970	2080	2020	1990	1910	1850	1810	1780	1680	1650	1650	1690
20	1970	2090	2010	1970	1910	1850	1830	1720	1680	1650	1650	1690
21	1970	2090	2010	1980	1910	1850	1810	1780	1680	1650	1650	1690
22	1970	2080	2010	1970	1900	1850	1810	1790	1680	1650	1650	1690
23	1970	2080	2010	1970	1880	1850	1810	1720	1670	1660	1650	1690
24	1980	2080	2010	1970	1890	1850	1810	1710	1670	1650	1650	1690
25	1980	2080	2010	1970	1890	1850	1810	1690	1670	1650	1650	1690
26	2020	2060	2010	1970	1870	1850	1810	1720	1670	1650	1650	1690
27	2150	2050	2010	1970	1870	1850	1830	1730	1670	1650	1660	1690
28	2240	2050	2010	1970	1880	1850	1820	1720	1670	1650	1650	1690
29	2030	2050	2010	1970	---	1840	1810	1750	1670	1650	1650	1690
30	2220	2050	2010	1970	---	1840	1810	1720	1670	1650	1650	1690
31	1990	---	2000	---	---	1850	---	1680	---	1650	1650	---
MONTH	2010	2060	2020	1980	1910	1860	1820	1750	1690	1650	1650	1680

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	21.0	15.5	11.0	9.0	9.0	12.0	14.0	15.5	25.5	26.5	26.0
2	22.0	21.0	15.5	11.0	9.0	9.0	12.0	14.5	20.0	25.5	26.5	26.0
3	22.0	21.0	15.5	10.5	9.5	9.5	12.0	14.5	21.0	25.5	26.5	26.5
4	22.0	21.0	15.5	11.0	9.5	8.5	12.0	14.5	21.0	---	26.5	28.0
5	22.0	21.0	15.5	11.0	9.0	---	12.0	14.5	21.0	---	26.5	26.0
6	22.0	21.0	15.5	11.0	9.0	10.0	12.0	14.5	21.0	---	26.5	26.0
7	22.0	21.0	15.5	11.0	9.0	10.0	13.0	15.5	22.0	---	26.5	26.0
8	22.0	20.0	15.5	11.0	9.0	10.0	13.0	15.5	22.0	25.5	26.5	26.0
9	22.0	20.0	15.5	11.0	9.0	10.0	13.0	15.5	22.0	25.5	26.5	25.5
10	22.0	20.0	15.5	11.0	9.0	10.0	13.5	15.5	22.0	25.5	26.5	25.5
11	22.0	20.0	15.5	11.0	9.0	---	12.0	15.5	22.0	25.5	26.0	26.0
12	22.0	20.0	15.5	11.0	9.0	10.0	12.0	15.0	22.0	---	26.0	25.5
13	22.0	19.5	15.5	10.5	9.0	---	12.0	15.5	22.0	---	26.0	25.5
14	22.0	19.5	15.5	9.5	9.0	---	12.0	15.5	22.0	25.5	26.0	25.5
15	22.0	18.0	15.5	9.5	9.0	10.0	12.0	15.5	22.0	---	26.0	25.5
16	22.0	20.0	15.5	9.5	9.0	10.0	12.0	15.5	25.0	---	26.0	24.5
17	21.0	20.0	11.5	9.5	9.0	---	14.0	15.5	25.5	---	26.0	24.5
18	21.0	20.0	11.5	9.5	9.0	---	12.0	15.5	25.5	25.5	26.5	24.5
19	22.0	20.0	11.5	9.5	9.0	10.0	12.0	15.5	25.0	---	20.5	24.5
20	21.0	20.0	11.5	10.0	9.0	10.0	14.0	15.5	25.0	---	26.0	24.5
21	21.0	20.0	15.5	10.0	9.0	10.0	14.0	15.5	25.0	---	26.0	24.5
22	21.0	19.5	15.5	10.0	9.0	10.0	14.0	15.5	26.0	26.5	25.5	24.5
23	21.0	25.5	11.5	10.0	9.0	10.0	14.0	15.5	26.0	26.5	25.5	23.5
24	21.0	25.5	12.0	9.0	9.0	10.5	14.0	15.5	26.0	26.5	25.5	20.5
25	21.0	19.0	12.0	9.0	9.0	12.0	14.0	15.5	25.5	---	25.5	20.5
26	21.0	16.5	11.5	9.0	8.5	12.0	14.0	15.5	25.5	26.5	25.5	20.0
27	21.0	16.5	11.0	10.0	---	12.0	14.0	15.5	25.5	---	26.0	20.0
28	21.0	16.5	11.0	9.5	9.0	12.0	14.0	15.5	25.5	25.5	26.0	20.0
29	21.0	16.5	11.0	9.0	---	12.0	14.0	15.5	25.5	25.5	26.0	24.5
30	21.0	16.0	11.0	9.5	---	12.0	14.0	16.5	25.5	26.5	26.0	24.5
31	21.0	---	10.5	9.5	---	12.0	---	15.5	---	26.5	26.0	---
MONTH	21.5	20.0	14.0	10.0	9.0	10.0	13.0	15.5	23.5	---	25.5	24.5

08093100 Brazos River near Aquilla, Tex.
(Formerly published as 08093000 Brazos River near Whitney)

LOCATION (revised).--Lat 31°48'44", long 97°17'51", Bosque County, on right bank at downstream side of bridge on Farm Road 2114, 2.0 miles (3.2 km) downstream from Tener Creek, 4.9 miles (7.9 km) downstream from Iron Creek, 5.4 miles (8.7 km) southwest of Aquilla, 9.0 miles (14.5 km) downstream from Whitney Dam, and at mile 434.0 (698.3 km).

DRAINAGE AREA (revised).--26,220 mi² (67,910 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1974, published as Brazos River near Whitney.

GAGE (revised).--Water-stage recorder. Datum of gage is 407.29 ft (124.142 m) above mean sea level. Prior to Oct. 1, 1948, nonrecording gage at site 13.9 miles (22.4 km) upstream at datum 27.77 ft (8.464 m) higher. Oct. 1, 1948, to Feb. 12, 1975, at site 5.6 miles (9.0 km) upstream at datum 13.10 ft (3.993 m) higher.

AVERAGE DISCHARGE.--37 years, 1,610 ft³/s (45.60 m³/s), 1,166,000 acre-ft/yr (1.44 km³/yr).

EXTREMES.--Current year: Maximum discharge, 23,000 ft³/s (651 m³/s) Nov. 6 (gage height, 17.77 ft or 5.416 m); minimum, 28 ft³/s (0.79 m³/s) Oct. 20.

Period of record: Maximum discharge, 71,800 ft³/s (2,030 m³/s) May 18, 1949 (gage height, 31.03 ft or 9.458 m); minimum daily, 0.4 ft³/s (0.011 m³/s) May 9, 1953. Maximum discharge since construction of Whitney Dam in 1951, 58,200 ft³/s (1,650 m³/s) May 28, 1957 (gage height, 27.34 ft or 8.333 m), site and datum then in use.

Maximum stage since at least 1853, 45 ft (13.7 m) May 9, 1922, at site and datum in use prior to Feb. 12, 1975, from information by local residents.

REMARKS.--Records good. Flow is regulated by 18 major upstream reservoirs whose combined capacity is 3,413,000 acre-ft (4.21 km³), 1,372,000 acre-ft (1.69 km³) is flood control. Brazos River at Whitney Dam (station 08092600) uses the discharge record at this station for publication of water-quality records.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	315	710	1140	1920	2210	1610	483	5370	452	866	1190
2	37	2690	560	1080	3590	2200	1650	116	6870	88	513	867
3	35	8540	330	1030	3880	2280	1490	411	9500	38	731	900
4	34	12000	961	1030	4840	1670	1610	319	6900	41	958	391
5	33	11800	675	70	5700	1310	481	644	3990	333	407	174
6	33	16700	269	67	6250	1980	326	1110	4060	402	606	221
7	33	22600	793	76	6200	2530	1390	359	3940	567	1140	167
8	88	22400	225	85	6220	2140	2250	283	3940	872	1100	224
9	388	13600	754	90	6190	2270	4000	350	3960	431	1060	463
10	837	5210	450	2480	6190	1550	6720	350	3330	40	1220	439
11	944	9390	999	904	6170	2220	11400	251	7120	141	811	654
12	909	15100	550	3140	5450	2000	9510	572	13600	295	806	165
13	704	14900	153	3360	2950	480	4900	1160	13300	219	611	185
14	994	12100	118	2090	214	1480	4930	1030	13100	200	1300	196
15	1090	6470	304	979	205	1960	4890	1110	8930	39	1180	234
16	898	2160	710	2560	208	2110	4450	1000	4420	33	960	178
17	803	2150	2440	1100	2580	1610	4430	1050	4410	32	697	212
18	95	2160	2520	836	5220	163	4410	1080	3870	32	919	476
19	30	2010	2460	1090	6150	90	962	390	3090	557	1160	144
20	84	1960	2510	1330	6150	74	136	340	3310	1060	1530	147
21	691	3290	701	1460	6080	92	169	715	3300	1360	1090	146
22	498	4930	684	1330	6000	153	192	620	2490	1460	659	143
23	1090	4930	888	717	4950	161	151	1310	2230	1400	763	146
24	1040	4960	1460	1070	4940	1020	216	1990	917	1360	1290	553
25	652	4110	1570	953	5010	1870	424	491	386	1560	941	531
26	586	3160	1860	985	5040	1600	655	249	375	1610	1210	512
27	276	3750	2240	1050	4630	1660	627	361	702	1740	953	509
28	962	1440	2050	1170	3540	1350	443	1200	782	1720	160	513
29	727	754	1340	1790	---	497	1200	5190	1380	1520	1080	593
30	640	454	1300	2490	---	977	630	4540	956	1550	1440	536
31	1870	---	1220	2400	---	1560	---	4530	---	1370	1460	---
TOTAL	17193	216033	33804	39952	126467	43267	76252	33604	140528	22522	29621	11809
MEAN	555	7201	1090	1289	4517	1396	2542	1084	4684	727	956	394
MAX	1870	22600	2520	3360	6250	2530	11400	5190	13600	1740	1530	1190
MIN	30	315	118	67	205	74	136	116	375	32	160	143
AC-FT	34100	428500	67050	79240	250800	85820	151200	66650	278700	44670	58750	23420
CAL YR 1974	TOTAL	441737	MEAN	1210	MAX	22600	MIN	25	AC-FT	876200		
WTR YR 1975	TOTAL	791052	MEAN	2167	MAX	22600	MIN	30	AC-FT	1569000		

BRAZOS RIVER BASIN

08093400 Cobb Creek near Abbott, Tex.

LOCATION.--Lat 31°55'11", long 97°05'57", Hill County, at downstream side of bridge on service road on downstream side of Interstate Highway 35, 1.5 miles (2.4 km) downstream from Missouri, Kansas, and Texas Railroad Co. bridge, 2.8 miles (4.5 km) northwest of Abbott, and 9 miles (14 km) upstream from mouth.

DRAINAGE AREA.--11.7 mi² (30.3 km²).

PERIOD OF RECORD.--December 1966 to current year.

GAGE.--Water-stage recorder with low-water concrete control since Aug. 1, 1975. Datum of gage is 575.00 ft (175.260 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 8.32 ft³/s (0.236 m³/s), 9.66 in/yr (245 mm/yr), 6,030 acre-ft/yr (7.43 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,990 ft³/s (56.4 m³/s) Oct. 31 (gage height, 9.28 ft or 2.829 m); no flow at times.

Period of record: Maximum discharge, 2,720 ft³/s (77.0 m³/s) May 9, 1968 (gage height, 10.50 ft or 3.200 m); no flow at times each year.

Maximum stage since at least 1932, 11.1 ft (3.38 m), date unknown, from information by State Highway Department.

REMARKS.--Records good except those below 5 ft³/s (0.14 m³/s), which are fair. No known diversion or regulation above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	43	6.0	7.6	37	.01	1.8	7.4	16	2.6		0
2	2.1	28	5.6	15	136	.01	1.5	6.0	13	2.1		0
3	1.9	28	5.2	13	73	.01	1.1	5.6	9.3	1.9		0
4	2.0	106	4.9	9.5	45	.01	1.3	4.6	6.5	1.5		0
5	1.9	28	9.5	8.7	13	.01	1.3	4.7	5.6	1.3		0
6	1.7	20	15	7.6	6.1	0	1.5	6.6	5.1	1.1		0
7	1.6	44	6.2	7.5	3.2	0	162	23	4.6	.80		0
8	1.4	27	4.9	6.8	3.1	0	227	4.4	8.2	.65		0
9	1.2	22	4.4	6.9	1.4	0	15	3.8	5.9	.44		0
10	1.1	108	15	13	1.4	0	10	3.7	5.4	.33		0
11	1.1	27	16	11	1.3	0	11	91	5.1	.18		0
12	.97	18	8.6	30	.66	0	6.1	12	4.6	.10		0
13	.88	15	7.3	9.9	.49	8.1	8.6	8.9	4.4	.04		0
14	3.2	11	6.9	9.0	.40	1.2	7.9	8.7	4.0	.01		0
15	.72	9.6	6.0	7.7	.23	1.2	5.8	9.8	3.8	0		0
16	.65	8.7	5.1	6.6	.21	7.3	4.8	8.7	3.6	0		9.0
17	.58	7.8	4.7	6.7	.11	2.6	4.4	8.5	3.3	0		4.7
18	.45	7.5	4.4	6.7	.09	2.4	4.2	8.4	3.3	0		2.0
19	.39	7.3	4.1	6.4	.07	2.3	2.9	8.6	2.9	0		.37
20	.33	7.0	3.8	5.2	.07	2.2	2.4	135	2.8	0		.01
21	.28	6.7	3.5	5.1	.07	2.0	2.2	28	2.4	0		0
22	.28	6.7	3.7	4.4	.07	1.8	2.3	18	2.3	0		0
23	.23	8.7	3.9	4.1	.06	1.7	2.3	278	2.0	0		0
24	.19	14	4.8	5.4	.05	1.6	2.0	481	1.8	0		0
25	.15	7.2	4.7	4.6	.05	1.5	1.5	86	1.7	0		0
26	.12	6.7	5.3	3.9	.04	1.5	1.3	30	1.4	0		0
27	.09	5.8	4.6	3.8	.02	1.7	1.2	23	10	0		0
28	.97	5.5	4.5	3.7	.01	2.1	2.9	168	5.3	0		0
29	.80	12	4.9	3.6	---	2.0	136	135	0	0		0
30	2.7	7.6	5.6	3.5	---	1.9	48	27	2.9	0		0
31	904	---	13	6.5	---	1.9	---	19	---	0		---
TOTAL	936.28	653.8	202.1	243.4	323.20	47.05	680.3	1662.4	150.7	13.05	0	16.08
MEAN	30.2	21.8	6.52	7.85	11.5	1.52	22.7	53.6	5.02	.42	0	.54
MAX	904	108	16	30	136	8.1	227	481	16	2.6	0	9.0
MIN	.09	5.5	3.5	3.5	.01	0	1.1	3.7	1.4	0	0	0
CFSM	2.58	1.86	.56	.67	.98	.13	1.94	4.58	.43	.04	0	.05
IN.	2.98	2.08	.64	.77	1.03	.15	2.16	5.29	.48	.04	0	.05
AC-FT	1860	1300	401	483	641	93	1350	3300	299	26	0	32

CAL YR 1974	TOTAL	2573.69	MEAN	7.05	MAX	904	MIN	0	CFSM	.60	IN	8.18	AC-FT	5100
WTR YR 1975	TOTAL	4928.36	MEAN	13.5	MAX	904	MIN	0	CFSM	1.15	IN	15.67	AC-FT	9780

PEAK DISCHARGE (BASE, 600 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0300	9.28	1,990	5-24	0030	7.00	904
4-7	1645	6.81	821	5-24	1830	6.43	764
4-8	0245	6.97	867	5-28	0615	6.32	740
4-29	2045	7.59	1,090				

BRAZOS RIVER BASIN

305

08093500 Aquilla Creek near Aquilla, Tex.

LOCATION.--Lat 31°50'40", long 97°12'06", Hill County, on right bank 50 ft (15 m) upstream from bridge on Farm Road 1304, 1.0 mile (1.6 km) southeast of Aquilla, 1.2 miles (1.9 km) downstream from Cobb Creek, and at mile 18.2 (29.3 km).

DRAINAGE AREA.--306 mi² (793 km²).

PERIOD OF RECORD.--Discharge: December 1938 to current year. Records of daily discharge for December 1924 to August 1925, published in WSP 608, are unreliable.

Water quality: Chemical analyses: May 1965 to June 1966, October 1967 to current year. Chemical and biochemical analyses: January 1968 to current year. Water temperatures: May 1965 to June 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 451.48 ft (137.611 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--36 years (1939-75), 122 ft³/s (3.455 m³/s), 88,390 acre-ft/yr (109 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 16,700 ft³/s (473 m³/s) Oct. 31 (gage height, 28.46 ft or 8.675 m); minimum daily, 0.85 ft³/s (0.024 m³/s) Aug. 21.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) May 10, 1968 (gage height, 30.32 ft or 9.242 m), from rating curve extended above 25,900 ft³/s (733 m³/s) on basis of slope-area measurement of 74,200 ft³/s (2,100 m³/s), adjusted to gage site; no flow at times.

Historic: Flood of Aug. 31, 1887, reached a stage of 34 ft (10.4 m), from information by local resident. Flood of Sept. 27, 1936, was the highest since 1887 and reached a stage of 33 ft (10.1 m), from floodmark; discharge 84,500 ft³/s (2,390 m³/s) by slope-area measurement at site 9 miles (14 km) downstream and 74,200 ft³/s (2,100 m³/s) adjusted to gage site.

Water quality: Current year: Maximum daily specific conductance, 1,890 micromhos Sept. 18; minimum daily, 182 micromhos Oct. 31.

Period of record: Maximum daily specific conductance, 1,990 micromhos Aug. 30, 1968; minimum daily, 182 micromhos Oct. 31, 1974. Maximum water temperatures, 30.0°C on several days during summer months; minimum, 1.0°C Jan. 30, 1966, Jan. 8, 1968, Jan. 9, 1970.

REMARKS.--Discharge records fair. Records furnished by the city of Hillsboro show that 856 acre-ft (1.05 hm³) of sewage effluent was discharged into a tributary above gage during year.

REVISIONS (WATER YEARS).--WSP 1712: 1944(M), 1957-58. WSP 1922: Drainage area. See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	5080	64	160	1180	29	25	87	285	9.2	2.7	1.3
2	11	392	48	193	4470	29	22	44	167	9.0	2.5	1.3
3	11	167	42	633	4450	27	18	33	107	8.7	2.6	1.2
4	10	427	40	145	1920	26	18	29	70	8.7	2.7	1.2
5	9.0	203	38	78	567	28	18	27	50	8.5	2.6	1.2
6	8.6	113	95	68	276	30	18	152	41	8.5	2.2	1.2
7	8.5	147	93	62	135	30	2230	669	34	6.8	2.0	1.1
8	8.3	226	48	58	109	26	9770	77	63	6.2	2.0	1.1
9	8.3	124	39	54	88	26	2620	44	48	5.3	1.9	1.1
10	7.8	854	57	49	72	27	325	28	131	5.3	1.7	1.1
11	6.4	694	605	72	71	30	232	508	284	5.0	1.8	1.1
12	6.1	159	159	399	61	30	118	357	44	4.8	1.8	1.0
13	5.8	100	85	101	53	774	98	40	29	4.6	1.8	1.0
14	26	75	64	72	50	301	160	30	25	4.2	1.7	1.0
15	20	62	65	64	47	70	95	28	21	3.7	1.6	1.0
16	9.3	57	54	59	45	1110	72	30	18	3.2	1.1	3.2
17	7.1	54	53	56	43	498	59	23	17	3.3	1.2	6.6
18	6.8	52	53	56	40	124	56	21	14	3.2	1.1	3.5
19	6.4	52	49	51	36	105	50	16	12	3.2	1.1	3.0
20	6.2	45	46	47	33	56	42	482	12	3.2	1.0	2.4
21	5.9	36	46	43	31	43	33	593	11	3.0	.85	2.3
22	5.8	37	45	40	31	40	30	59	10	2.9	1.2	2.2
23	6.0	37	44	38	38	36	32	2780	9.8	2.6	1.5	2.1
24	5.9	333	46	39	57	32	32	8540	9.5	2.5	1.2	2.0
25	8.3	123	46	40	49	26	31	4730	9.5	7.2	1.2	2.0
26	9.3	54	45	40	38	23	28	2030	28	16	1.5	2.0
27	8.4	45	50	40	33	36	25	210	23	6.4	1.5	1.9
28	8.7	41	51	39	29	38	26	689	23	4.6	1.4	1.9
29	14	40	51	39	---	42	292	2920	13	3.6	1.4	1.9
30	10	137	54	38	---	35	1450	3600	10	3.0	1.3	1.9
31	11800	---	143	98	---	28	---	466	---	3.0	1.3	---
TOTAL	12076.9	9966	2418	2971	14052	3755	18025	29342	1618.8	169.4	51.45	55.8
MEAN	390	332	78.0	95.8	502	121	601	947	54.0	5.46	1.66	1.86
MAX	11800	5080	605	633	4470	1110	9770	8540	285	16	2.7	6.6
MIN	5.8	36	38	38	29	23	18	16	9.5	2.5	.85	1.0
AC-FT	23950	19770	4800	5890	27870	7450	35750	58200	3210	336	102	111

CAL YR 1974 TOTAL 41786.02 MEAN 114 MAX 11800 MIN .72 AC-FT 82880
WTR YR 1975 TOTAL 94501.35 MEAN 259 MAX 11800 MIN .85 AC-FT 187400

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1300	28.46	16,700	5-24	0400	27.27	11,600
2-2	1930	25.88	7,110	5-30	0700	25.20	6,230
4-8	0930	27.17	11,000				

NOTE.--Low-flow sewage effluent resulted in in/yr calculation being discontinued.

BRAZOS RIVER BASIN

08093500 Aquilla Creek near Aquilla, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 04...	1545	11	7.5	89	4.3	54	4.3	235	0	110
NOV. 12...	1310	145	12	97	3.7	35	4.0	228	0	92
DEC. 21...	0930	34	4.9	130	8.2	74	3.4	293	0	210
JAN. 21...	1400	37	6.0	140	8.1	71	2.7	300	0	220
FEB. 28...	1100	36	6.8	130	11	86	2.8	301	0	240
MAR. 04...	1400	59	5.8	150	12	91	3.3	332	0	250
APR. 24...	1207	32	11	160	12	86	2.6	352	0	240
MAY 07...	1240	560	8.1	53	3.5	19	4.7	128	0	61
JULY 16...	1200	3.4	10	140	15	120	4.4	391	0	240
AUG. 27...	1317	1.4	10	120	11	260	4.5	564	0	320
SEP. 24...	1335	2.5	14	64	7.0	200	8.0	384	0	220

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT. 04...	26	--	--	--	--	--	--	--	411
NOV. 12...	23	--	.34	.02	.06	.83	.89	.31	379
DEC. 21...	47	.6	--	--	--	--	--	--	623
JAN. 21...	52	.5	2.1	.06	.14	.52	.66	.17	648
FEB. 28...	61	.8	--	--	--	--	--	--	687
MAR. 04...	61	.5	2.1	.08	.07	.39	.46	.31	737
APR. 24...	62	.6	--	--	--	--	--	--	748
MAY 07...	19	.4	1.2	.03	.11	2.7	2.8	.26	232
JULY 16...	66	.8	1.3	.02	.00	.47	.47	.32	789
AUG. 27...	79	--	--	--	--	--	--	--	1080
SEP. 24...	54	1.1	.32	.21	.16	3.1	3.3	4.0	757

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 04...	240	47	1.5	694	7.9	22.0	--	--	--
NOV. 12...	260	70	1.0	630	7.6	14.0	8.7	84	1.5
DEC. 21...	360	120	1.7	964	8.2	10.0	--	--	--
JAN. 21...	380	140	1.6	1030	7.6	9.5	10.6	93	.3
FEB. 28...	370	120	1.9	1110	8.0	13.0	--	--	--
MAR. 04...	420	150	1.9	1140	7.8	11.0	10.7	96	1.4
APR. 24...	450	160	1.8	1170	8.0	21.0	--	--	--
MAY 07...	150	42	.7	387	7.5	23.0	6.7	77	5.2
JULY 16...	410	91	2.6	1240	7.6	25.0	8.9	106	1.6
AUG. 27...	350	0	6.1	1610	8.2	31.0	--	--	--
SEP. 24...	190	0	6.3	1230	7.6	19.0	6.1	65	14

08093500 Aquilla Creek near Aquilla, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	12076.89	195	100	3260	4.5	147	16	522	70
NOV. 1974.....	9966	463	280	7530	14	377	79	2130	170
DEC. 1974.....	2418	806	500	3260	36	235	160	1040	290
JAN. 1975.....	2971	846	530	4250	39	313	170	1360	300
FEB. 1975.....	14052	488	300	11400	16	607	85	3220	180
MAR. 1975.....	3755	675	420	4260	28	244	130	1320	240
APR. 1975.....	18025	452	270	13100	14	681	76	3700	160
MAY 1975.....	29342	381	230	18200	9.2	729	60	4750	140
JUNE 1975.....	1618.8	759	470	2050	33	144	150	656	270
JULY 1975.....	169.4	1070	680	311	53	24	220	101	390
AUG. 1975.....	51.45	1260	800	111	65	9.0	260	36	450
SEPT 1975.....	55.8	1540	990	149	83	12	330	50	550
TOTAL	94501.18	**	**	67900	**	3560	**	18900	**
WTD.AVG.	258.91	441	270	**	14	**	74	**	160

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	311	840	940	691	1090	1090	718	749	853	1010	1740
2	663	420	825	917	404	1100	1030	737	811	983	1030	1710
3	671	460	850	709	378	1100	1060	961	890	911	1090	1770
4	675	505	879	740	445	1070	1060	884	966	1010	966	1730
5	716	605	885	800	573	1060	1090	921	832	1000	1010	1790
6	730	700	737	874	696	1060	1100	700	934	819	970	1770
7	740	707	836	945	794	1170	500	488	841	831	983	1740
8	738	679	841	945	840	1170	357	644	800	890	1200	1770
9	719	660	841	991	880	1170	354	737	908	991	983	1740
10	731	620	859	1000	930	1170	700	801	962	1060	1170	1770
11	738	651	619	960	991	1140	755	500	469	1150	1180	1770
12	753	613	520	650	991	1140	800	532	688	1150	1190	1730
13	760	682	749	757	1010	511	880	716	710	1160	1220	1770
14	660	703	790	803	1020	703	965	801	725	1160	1230	1830
15	729	729	840	907	1050	734	829	847	730	1100	1300	1800
16	793	750	894	892	1070	500	1050	828	738	1200	1300	1700
17	802	770	908	941	1090	673	1070	880	751	1230	1280	1710
18	802	793	925	961	1050	668	929	930	760	1180	1400	1890
19	769	815	944	980	1080	795	980	969	768	1330	1400	1800
20	775	830	991	1020	1110	850	1020	622	790	1390	1520	1800
21	784	848	996	1020	1090	928	1090	505	795	1390	1530	1670
22	793	879	995	1010	1100	960	1060	774	820	1390	1520	1440
23	804	885	991	1000	1100	1020	1060	317	830	1260	1570	1340
24	810	500	1010	1040	1110	1080	1070	324	840	1310	1540	1250
25	758	563	996	1060	1120	1120	1090	339	860	1350	1610	962
26	740	679	983	1050	1120	1100	1120	563	720	1070	1600	962
27	800	750	992	1060	1110	1110	1140	600	740	1070	1610	962
28	892	809	1010	1060	1110	1100	1170	625	780	1080	1640	930
29	867	820	1000	1060	---	1000	1100	331	810	1080	1640	930
30	925	845	1010	1060	---	1020	555	286	850	1150	1720	930
31	182	---	991	1050	---	1040	---	607	---	1070	1730	---
MONTH	742	686	889	942	927	979	936	661	796	1120	1330	1560

BRAZOS RIVER BASIN

08093500 Aquilla Creek near Aquilla, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	20.0	---	---	12.0	13.0	16.0	20.0	22.0	26.0	28.0	28.0
2	19.0	---	7.0	9.0	10.0	---	15.0	21.0	23.0	26.0	28.0	27.0
3	18.0	---	7.0	8.0	9.0	12.0	11.0	22.0	---	26.0	28.0	27.0
4	19.0	17.0	8.0	8.0	10.0	10.0	12.0	23.0	24.0	27.0	28.0	27.0
5	20.0	16.0	8.0	---	10.0	9.0	14.0	21.0	24.0	---	28.0	27.0
6	---	16.0	12.0	8.0	7.0	11.0	---	23.0	25.0	27.0	29.0	27.0
7	20.0	14.0	11.0	12.0	5.0	13.0	15.0	24.0	25.0	25.0	29.0	27.0
8	20.0	14.0	8.0	11.0	---	12.0	14.0	23.0	---	27.0	29.0	26.0
9	20.0	---	7.0	12.0	---	---	14.0	23.0	26.0	27.0	30.0	26.0
10	20.0	---	8.0	---	6.0	11.0	18.0	23.0	25.0	27.0	27.0	26.0
11	20.0	16.0	9.0	---	10.0	11.0	16.0	---	23.0	26.0	27.0	26.0
12	20.0	15.0	---	5.0	11.0	---	---	22.0	23.0	26.0	27.0	25.0
13	---	14.0	10.0	4.0	11.0	7.0	---	22.0	---	---	28.0	23.0
14	---	13.0	---	4.0	12.0	7.0	14.0	21.0	25.0	26.0	27.0	22.0
15	18.0	11.0	---	6.0	---	9.0	15.0	20.0	---	26.0	27.0	---
16	16.0	---	10.0	7.0	---	---	17.0	20.0	---	25.0	27.0	---
17	16.0	---	8.0	8.0	10.0	10.0	18.0	---	---	26.0	28.0	---
18	16.0	12.0	8.0	10.0	10.0	11.0	18.0	---	---	27.0	27.0	23.0
19	17.0	15.0	8.0	---	10.0	13.0	---	22.0	---	27.0	28.0	23.0
20	---	15.0	9.0	9.0	11.0	13.0	---	21.0	---	27.0	28.0	22.0
21	17.0	13.0	10.0	9.0	13.0	15.0	18.0	24.0	---	27.0	28.0	22.0
22	17.0	15.0	---	8.0	---	---	18.0	23.0	---	26.0	28.0	20.0
23	18.0	17.0	12.0	8.0	---	---	18.0	21.0	---	27.0	27.0	20.0
24	20.0	---	14.0	10.0	7.0	16.0	20.0	20.0	---	27.0	27.0	21.0
25	19.0	14.0	8.0	10.0	10.0	16.0	---	21.0	---	25.0	27.0	21.0
26	---	11.0	8.0	---	---	14.0	---	24.0	---	27.0	27.0	21.0
27	---	12.0	8.0	12.0	10.0	17.0	---	---	---	27.0	26.0	22.0
28	18.0	12.0	10.0	14.0	13.0	16.0	22.0	24.0	---	27.0	26.0	20.0
29	19.0	---	---	16.0	---	---	23.0	22.0	---	28.0	27.0	22.0
30	19.0	8.0	12.0	16.0	---	---	20.0	22.0	---	28.0	27.0	21.0
31	20.0	---	11.0	14.0	---	11.0	---	21.0	---	28.0	28.0	---
40NTH	18.5	---	9.0	9.5	---	---	---	22.0	---	26.5	27.5	24.0

08093700 North Bosque River at Stephenville, Tex.

LOCATION.--Lat 32°12'56", long 98°11'55", Erath County, in center of stream at downstream side of bridge on U.S. Highway 67 at Stephenville, 0.5 mile (0.8 km) southeast of Erath County Courthouse, 1.5 miles (2.4 km) downstream from Gulf, Colorado, and Santa Fe Railway bridge, and at mile 120.3 (193.6 km).

DRAINAGE AREA.--93.2 mi² (241.4 km²).

PERIOD OF RECORD.--March 1958 to current year.

GAGE.--Water-stage recorder with rock and concrete control. Datum of gage is 1,223.60 ft (372.953 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 14.7 ft³/s (0.416 m³/s), 10,650 acre-ft/yr (13.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,060 ft³/s (30.0 m³/s) Oct. 31 (gage height, 11.28 ft or 3.438 m); no flow at times.

Period of record: Maximum discharge, 12,100 ft³/s (343 m³/s) Oct. 4, 1959 (gage height, 19.90 ft or 6.066 m, from floodmark), from rating curve extended above 4,250 ft³/s (120 m³/s) on basis of contracted-opening measurements of 40,000 and 49,000 ft³/s (1,130 and 1,390 m³/s); no flow at times each year.

Maximum stage since at least 1854, 23.5 ft (7.16 m) May 19, 1955, from floodmarks, discharge, 49,000 ft³/s (1,390 m³/s), by contracted-opening measurement of peak flow. The flood of May 23, 1952, reached a stage of 22.2 ft (6.77 m), from floodmarks, discharge 40,000 ft³/s (1,130 m³/s), by contracted-opening measurement of peak flow.

REMARKS.--Records good. At end of year, flow from 59.8 mi² (154.9 km²) above this station was partly controlled by 14 floodwater-retarding structures with a combined capacity of 27,230 acre-ft (33.6 hm³) below the flood-spillway crests, of which 1,980 acre-ft (2.44 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. No diversion above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	375	.43	.62	235	1.5	1.1	.64	.26	0	.08	0
2	0	249	.38	1.2	155	1.3	.98	.69	.14	0	1.4	0
3	0	203	.36	1.2	77	1.3	.94	.74	.07	.01	.83	0
4	0	190	.38	.77	50	1.2	.92	.85	.07	.23	.28	0
5	0	183	.44	.60	28	1.6	.89	.74	.05	.09	.16	0
6	0	177	.45	.51	16	1.3	.92	1.2	.05	.02	.07	0
7	0	173	.47	.49	10	1.2	1.08	1.3	.03	.01	.01	0
8	0	151	.46	.54	7.4	1.1	4.38	1.3	.03	0	0	0
9	0	48	.40	.51	6.1	1.3	1.36	1.3	.02	0	0	0
10	0	203	1.8	.48	4.8	1.2	41	1.3	21	0	0	0
11	0	193	1.9	.43	3.9	1.2	23	1.2	26	0	0	0
12	0	101	.97	.60	3.2	1.6	15	1.2	11	0	0	0
13	2.4	26	.65	.56	2.9	3.8	11	1.3	5.6	0	0	0
14	165	23	.53	.60	2.7	2.1	8.5	2.4	2.5	0	0	0
15	16	16	.32	.51	2.5	1.9	5.9	1.0	1.1	0	0	0
16	1.9	2.8	.28	.47	2.3	2.3	4.5	.90	.65	0	.21	0
17	.51	3.4	.28	.43	2.3	1.4	3.8	.69	.46	0	.79	0
18	.21	1.7	.31	.47	2.0	1.4	3.2	.47	.23	0	.23	0
19	.10	.63	.29	.39	2.0	1.2	2.8	.26	.14	0	.15	0
20	.05	.50	.29	.39	2.0	2.0	2.3	9.1	.08	0	.04	0
21	.04	.47	.28	.43	1.8	1.6	2.0	13	.05	0	0	.18
22	.03	.48	.27	.43	1.9	1.2	1.8	1.5	.03	0	0	.01
23	.03	3.3	.29	.51	2.3	1.2	1.8	.96	.02	0	0	0
24	3.9	3.4	.29	.43	2.5	1.2	1.9	1.0	0	0	0	0
25	3.9	1.2	.33	.39	2.2	1.0	1.6	.96	0	1.6	0	0
26	6.8	.79	1.3	.51	2.0	1.1	1.3	.32	0	.56	0	0
27	15	.62	.81	.51	1.6	1.2	1.2	4.6	.01	.27	0	0
28	142	.62	.69	.51	1.4	1.1	1.0	1.8	.06	.17	0	0
29	13	.52	.60	.51	-----	1.0	.80	5.3	.02	.06	0	0
30	2.4	.47	.52	.55	-----	.91	.80	1.7	0	.01	0	0
31	581	-----	.85	2.7	-----	1.0	-----	.64	-----	0	0	-----
TOTAL	954.27	2,331.90	17.62	19.25	630.8	44.41	822.95	60.36	69.67	3.03	4.25	.19
MEAN	30.8	77.7	.57	.62	22.5	1.43	27.4	1.95	2.32	.098	.14	.006
MAX	581	375	1.9	2.7	235	3.8	438	13	26	1.6	1.4	.18
MIN	0	.47	.27	.39	1.4	.91	.80	.26	0	0	0	0
AC-FT	1,890	4,630	35	38	1,250	88	1,630	120	138	6.0	8.4	.4
CAL YR 1974	TOTAL 3,529.04	MEAN 9.67	MAX 581	MIN 0	AC-FT 7,000							
WTR YR 1975	TOTAL 4,958.70	MEAN 13.6	MAX 581	MIN 0	AC-FT 9,840							

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Oct. 31 (0700) 1,060 ft³/s (11.28 ft).

BRAZOS RIVER BASIN

08094000 Green Creek subwatershed No. 1 near Dublin, Tex.

LOCATION.--Lat 32°09'57", long 98°20'28", Erath County, near center of dam on main headwater channel of Green Creek, 0.9 mile (1.4 km) downstream from county road, 1.3 miles (2.1 km) east of Farm Road 219, and 5.5 miles (8.8 km) north of Dublin.

DRAINAGE AREA.--3.34 mi² (8.65 km²).

PERIOD OF RECORD.--May 1955 to current year.

GAGE.--Water-stage recorder and concrete drop inlet. Datum of gage is 1,408.00 ft (429.158 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--20 years, 546 acre-ft/yr (673,000 m³/yr).

AVERAGE OUTFLOW.--20 years, 385 acre-ft/yr (475,000 m³/yr).

EXTREMES.--Current year: Maximum outflow, 13.6 ft³/s (0.39 m³/s) Oct. 31 (gage height, 11.96 ft or 3.645 m); no outflow most of time. Maximum inflow, 243 ft³/s (6.88 m³/s), average for 5-minute interval, Oct. 31, computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 709 ft³/s (20.1 m³/s) May 1, 1956 (gage height, 23.21 ft or 7.074 m); no outflow most of time each year. Maximum inflow, 11,500 ft³/s (326 m³/s), average for 5-minute interval, Apr. 30, 1956, computed from outflow and change in pool contents and adjusted for rainfall on pool surface during time of peak inflow; no inflow for many days each year.

REMARKS.--Records fair. The pool is formed by a rolled earthfill dam 3,000 ft (914 m) long. The dam was completed Apr. 25, 1955, and storage began shortly thereafter. The outlet structure consists of a 30-inch (762-millimetre) square concrete drop inlet that is connected to a 14-inch (356-millimetre) concrete outlet pipe. The gage height at top of the drop inlet is 11.0 ft (3.35 m). The spillway is a 250-foot-wide (76-metre) cut in natural ground at the right end of dam. The gage height at crest of spillway is 21.8 ft (6.64 m). There is a cleanout gate valve at the end of an 8-inch (203-millimetre) pipe which connects to the lower end of the drop-inlet box at a gage height of 3.76 ft (1.146 m). The pool capacity at the crest of spillway is 1,097 acre-ft (1.35 hm³); at top of drop inlet, 223 acre-ft (275,000 m³); and at controlled outlet pipe, 48.0 acre-ft (59,200 m³). The dam was built by the Soil Conservation Service for flood control. A permit issued by the Texas Water Rights Commission grants 181 acre-ft (223,000 m³) per year for irrigation. A total of 30.5 acre-ft (37,600 m³) was diverted from the pool for irrigation during the water year. A recording rain gage is located at station. The surface area and capacity tables are based on a Soil Conservation Service sedimentation survey of June 1967.

REVISIONS (WATER YEARS).--WSP 1922: 1955-60(M). WRD Texas 1971: 1955-63.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	124	29.7	4.0	4.5	44.9	2.7	90.9	11.6	8.8	5.2	1.9	1.8
Outflow	23.0	50.3	0	0	36.6	0	74.9	10.2	5.1	5.1	0	0
(+)	+102	-31.3	-3.1	-4.3	+5.4	-8.8	+5.0	-10.3	-22.1	-25.0	-22.7	-15.4
(++)	6.70	1.50	1.38	.50	2.10	1.20	3.10	3.95	1.04	1.39	1.0	1.30
CAL YR 1974: Inflow	258					† +20.8		†† 22.85				
WTR YR 1975: Inflow	330					† -30.6		†† 25.66				
				Outflow	87.2							
				Outflow	205							

PEAK INFLOW (BASE, 100 FT³/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
10-14	1050	*186	10-31	0345	*243
10-28	0900	*110	4- 7	2350	*235

1/ Inflow adjusted for rainfall on pool and pool losses.
 † Change in contents, in acre-feet.
 †† Rainfall, in inches.
 * Average for 5-minute interval.

BRAZOS RIVER BASIN

311

08094800 North Bosque River at Hico, Tex.

LOCATION.--Lat 31°58'39", long 98°02'05", Hamilton County, on left bank at downstream side of bridge on U.S. Highway 281 near south boundary of Hico, 2.5 miles (4.0 km) downstream from Gilmore Creek, 5.0 miles (8.0 km) upstream from Honey Creek, and at mile 92.4 (148.7 km).

DRAINAGE AREA.--357 mi² (925 km²).

PERIOD OF RECORD.--January 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 982.46 ft (299.454 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 47.1 ft³/s (1.334 m³/s), 34,120 acre-ft/yr (42.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,310 ft³/s (65.4 m³/s) Apr. 8 (gage height, 8.51 ft or 2.594 m); minimum, 0.09 ft³/s (0.003 m³/s) Oct. 13.

Period of record: Maximum discharge, 16,800 ft³/s (476 m³/s) May 16, 1965 (gage height, 21.83 ft or 6.654 m), from rating curve extended above 9,000 ft³/s (255 m³/s); no flow at times in 1962-65, 1967-68, 1971, 1974.

Maximum stage since at least 1880, 27.6 ft (8.41 m) May 23, 1952, from floodmarks, discharge, 87,800 ft³/s (2,490 m³/s), by contracted-opening measurement.

REMARKS.--Records good. At end of year, flow from 202 mi² (523 km²) above this station was partly controlled by 40 floodwater-retarding structures with a combined capacity of 71,460 acre-ft (88.1 hm³) below the flood-spillway crests, of which 5,730 acre-ft (7.07 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	483	15	17	592	26	21	25	26	4.0	1.8	1.4
2	1.6	241	15	18	567	25	21	23	21	3.7	2.4	1.3
3	1.1	123	14	20	370	25	21	23	18	8.1	2.2	1.3
4	.81	92	14	20	271	24	21	23	17	5.7	2.2	1.4
5	.62	66	14	20	188	25	22	23	15	5.3	2.9	1.4
6	.45	47	15	18	140	25	21	23	14	5.3	2.5	1.4
7	.42	59	14	18	110	24	337	21	14	5.2	2.2	1.4
8	.32	53	13	17	96	23	1,620	21	13	5.0	2.0	1.4
9	.21	44	12	17	76	22	579	20	12	4.4	2.0	1.4
10	.18	102	14	17	70	22	304	20	45	4.0	2.1	1.3
11	.15	103	28	16	63	23	199	19	57	3.9	2.2	1.3
12	.12	66	28	15	52	23	146	19	43	3.9	2.3	1.3
13	.16	53	22	15	48	38	118	19	29	3.7	2.4	1.4
14	187	38	19	15	44	40	104	23	22	3.4	2.3	1.1
15	184	32	18	15	41	33	90	25	19	3.1	2.1	.83
16	27	31	17	15	40	45	76	20	16	3.5	1.7	1.3
17	8.7	30	15	15	38	47	68	19	13	3.1	1.8	1.6
18	4.0	29	15	14	34	39	59	18	11	3.0	1.6	2.7
19	2.7	28	15	14	33	33	48	18	8.4	3.2	1.3	2.7
20	2.0	24	15	14	32	29	42	26	6.8	3.1	1.3	2.1
21	1.7	21	15	14	31	29	39	96	6.3	3.1	1.4	1.9
22	1.4	22	15	14	31	28	37	42	5.8	2.8	1.8	1.8
23	1.4	21	15	14	31	28	36	30	5.1	2.6	1.5	2.0
24	7.0	34	15	13	32	25	36	30	4.9	2.6	1.1	2.7
25	22	34	14	13	31	23	34	31	4.8	23	1.3	2.0
26	.11	23	14	13	29	23	33	28	4.8	21	1.6	1.8
27	7.8	19	16	13	28	24	30	38	4.7	5.6	2.0	1.6
28	448	18	18	13	27	24	29	40	4.4	3.0	2.0	1.4
29	193	16	18	13	-----	24	29	72	4.2	2.2	1.9	1.4
30	59	15	17	13	-----	23	29	47	4.3	1.9	1.7	1.4
31	991	-----	17	17	-----	22	-----	33	-----	1.6	1.5	-----
TOTAL	2,167.24	1,967	506	480	3,145	864	4,249	915	469.5	154.0	59.1	48.03
MEAN	69.9	65.6	16.3	15.5	112	27.9	142	29.5	15.7	4.97	1.91	1.60
MAX	991	483	28	20	592	47	1,620	96	57	23	2.9	2.7
MIN	.12	15	12	13	27	22	21	18	4.2	1.6	1.1	.83
AC-FT	4,300	3,900	1,000	952	6,240	1,710	8,430	1,810	931	305	117	95

CAL YR 1974 TOTAL 6,548.30 MEAN 17.9 MAX 991 MIN 0 AC-FT 12,990
WTR YR 1975 TOTAL 15,023.87 MEAN 41.2 MAX 1,620 MIN .12 AC-FT 29,800

PEAK DISCHARGE (BASE, 2,500 FT³/S).--No peak above base.

08095000 North Bosque River near Clifton, Tex.

LOCATION.--Lat 31°47'09", long 97°34'04", Bosque County, near left bank on downstream side of bridge on Farm Road 219, 0.5 mile (0.8 km) northeast of Clifton, 2.5 miles (4.0 km) downstream from Meridian Creek, and at mile 42.0 (67.6 km).

DRAINAGE AREA.--972 mi² (2,517 km²).

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is 605.43 ft (184.535 m) above mean sea level. Prior to Oct. 1, 1955, and from Apr. 23, 1957, to Mar. 26, 1958, nonrecording gage at site 1.1 miles (1.8 km) upstream at datum 17.02 ft (5.188 m) higher; Oct. 1, 1955, to Apr. 22, 1957, and Mar. 27, 1958, to Sept. 30, 1959, water-stage recorder (destroyed by floods of Apr. 27, 1957, and Oct. 4, 1959); and Oct. 1, 1959, to Jan. 1, 1961, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years (1923-67) unregulated, 195 ft³/s (5.522 m³/s), 141,300 acre-ft/yr (174 hm³/yr); 8 years (1967-75) regulated, 221 ft³/s (6.259 m³/s), 160,100 acre-ft/yr (197 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft³/s (402 m³/s) Apr. 8 (gage height, 17.49 ft or 5.331 m); minimum daily, 8.6 ft³/s (0.24 m³/s) Sept. 11.

Period of record: Maximum discharge, 92,800 ft³/s (2,630 m³/s) Oct. 4, 1959 (gage height, 34.88 ft or 10.631 m), from rating curve extended above 34,000 ft³/s (963 m³/s) on basis of contracted-opening measurement of 92,800 ft³/s (2,630 m³/s); no flow at times.

Maximum stage since at least 1854, that of Oct. 4, 1959. Flood of May 9, 1922, reached a stage of about 32 ft (9.8 m), from information by local residents.

REMARKS.--Records good. The city of Clifton diverted 2.5 acre-ft (0.003 hm³) of water from the river above the station for municipal use and returned 325 acre-ft (0.401 hm³) of sewage effluent below station. The city of Meridian discharged 59.4 acre-ft (0.073 hm³) of sewage effluent into the river at about mile 56 (90 km). Since 1968, at least 10 percent of drainage area is regulated by reservoirs. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see North Bosque River near Hico (station 08094800). Recording rain gage located at station.

REVISIONS (WATER YEARS).--WSP 788: 1924-26, 1928, 1930. WSP 1058: 1945(M). WSP 1512: 1924(M), 1927, 1928(M), 1929, 1930(M), 1931-33, 1934(M), 1935-37, 1939. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	1,580	96	110	3,630	185	124	204	188	67	26	9.0
2	30	621	92	118	4,870	178	115	163	148	40	364	9.0
3	25	386	90	136	1,820	170	106	155	122	316	338	8.9
4	22	285	88	133	1,500	166	100	147	107	204	59	9.0
5	19	246	88	119	1,040	166	99	140	95	71	38	9.2
6	17	204	92	113	743	165	100	139	86	57	33	9.6
7	16	214	92	114	586	163	1,250	133	79	46	26	9.4
8	14	268	88	105	524	153	8,990	119	75	45	22	9.1
9	13	249	84	101	461	150	1,720	111	70	41	20	9.2
10	13	291	88	100	411	154	904	104	72	37	20	8.8
11	12	497	162	93	390	153	660	99	81	36	19	8.6
12	12	356	204	101	350	156	505	94	124	34	17	8.7
13	12	258	163	95	320	275	439	89	106	33	16	8.9
14	176	213	134	93	302	262	432	96	87	31	15	9.1
15	445	180	118	91	293	198	390	103	73	108	14	12
16	226	159	106	86	282	282	337	98	61	352	13	640
17	93	153	98	87	267	301	308	89	55	60	13	78
18	56	150	92	88	254	283	291	77	49	41	13	29
19	40	148	88	88	239	238	258	72	44	34	12	20
20	31	143	84	83	231	196	230	84	41	31	11	16
21	25	132	81	82	224	179	215	274	38	30	11	15
22	21	123	79	79	223	164	209	217	37	28	11	14
23	19	121	78	76	224	151	213	152	36	26	13	13
24	18	148	76	80	223	141	209	346	35	61	12	12
25	19	126	75	81	219	133	197	391	47	236	12	12
26	21	132	85	80	207	125	182	226	44	82	11	12
27	44	114	93	80	197	128	169	153	96	38	11	12
28	648	104	96	78	190	129	171	234	45	47	10	13
29	821	104	100	78	-----	123	167	698	42	40	9.7	13
30	264	101	101	77	-----	140	520	581	37	34	9.4	13
31	2,460	-----	106	153	-----	134	-----	268	-----	29	9.0	-----
TOTAL	5,668	7,806	3,117	2,998	20,220	5,541	19,610	5,856	2,220	2,335	1,208.1	1,050.5
MEAN	183	260	101	96.7	722	179	654	189	74.0	75.3	39.0	35.0
MAX	2,460	1,580	204	153	4,870	301	8,990	698	188	352	364	640
MIN	12	101	75	76	190	123	99	72	35	26	9.0	8.6
AC-FT	11,240	15,480	6,180	5,950	40,110	10,990	38,900	11,620	4,400	4,630	2,400	2,080

CAL YR 1974 TOTAL 27,052.17 MEAN 74.1 MAX 2,560 MIN .27 AC-FT 53,660
WTR YR 1975 TOTAL 77,629.60 MEAN 213 MAX 8,990 MIN 8.6 AC-FT 154,000

PEAK DISCHARGE (BASE, 8,300 ft³/s).--Feb. 2 (0415) 9,680 ft³/s (14.08 ft); Apr. 8 (0745) 14,200 ft³/s (17.49 ft).

08095200 North Bosque River at Valley Mills, Tex.

LOCATION.--Lat 31°40'10", long 97°28'09", Bosque County, on right bank at downstream side of bridge on Farm Road 56, about 0.8 mile (1.3 km) downstream from Thompson Hollow, 0.8 mile (1.3 km) north of intersection of State Highway 6 and Farm Road 56 in Valley Mills, and at mile 28.0 (45.1 km).

DRAINAGE AREA.--1,150 mi² (2,978 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 524.55 ft (159.883 m) above mean sea level. Prior to Dec. 29, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years (1959-67) unregulated, 263 ft³/s (7.448 m³/s), 190,500 acre-ft/yr (235 hm³/yr); 8 years (1967-75) regulated, 262 ft³/s (7.420 m³/s), 189,800 acre-ft/yr (234 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,100 ft³/s (456 m³/s) Apr. 8 (gage height, 26.69 ft or 8.135 m); minimum, 20 ft³/s (0.57 m³/s) Sept. 11-13

Period of record: Maximum discharge, 107,000 ft³/s (3,030 m³/s) Oct. 4, 1959 (gage height, 40.22 ft or 12.259 m, from floodmark), from rating curve extended above 28,200 ft³/s (799 m³/s) on basis of slope-area measurement of 107,000 ft³/s (3,030 m³/s); no flow Oct. 5-12, 1965.

Maximum stage since at least 1868, 43 ft (13.1 m) in May 1908. Floods in September 1936 and April 1945 reached a stage of about 38 ft (11.6 m), from information by local residents.

REMARKS.--Records good. Since 1968, at least 10 percent of drainage area is regulated by reservoirs. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see North Bosque River at Hico (station 08094800). Small diversions above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	2,290	130	143	3,010	225	163	275	293	104	53	24
2	51	794	125	153	6,360	216	154	215	242	100	400	23
3	45	494	122	176	2,680	204	143	218	206	133	347	23
4	41	364	120	167	2,110	201	137	222	186	453	119	23
5	38	314	119	155	1,430	200	136	197	172	130	74	22
6	35	256	128	145	1,050	201	137	235	163	102	62	24
7	32	276	124	148	826	194	1,350	213	150	88	53	23
8	31	344	118	142	729	181	10,500	178	144	79	47	22
9	29	325	113	134	626	176	2,420	167	138	85	44	22
10	29	348	118	136	556	180	1,190	162	136	72	46	22
11	28	568	213	127	526	178	878	152	138	67	42	21
12	28	452	239	147	471	179	653	147	160	65	39	20
13	27	330	199	138	425	318	564	140	162	64	36	20
14	28	265	170	133	402	330	547	150	143	59	35	21
15	457	225	153	131	380	259	494	152	129	57	34	21
16	278	202	141	124	362	339	428	146	119	438	32	651
17	122	193	132	122	338	361	387	140	110	107	32	134
18	79	188	127	125	320	338	366	127	104	79	32	59
19	60	188	122	125	298	302	322	123	98	67	30	40
20	49	179	117	120	286	249	285	269	94	60	29	32
21	43	168	114	118	283	222	264	274	91	56	27	30
22	37	160	112	114	276	207	257	253	89	52	26	29
23	35	156	112	112	275	191	258	198	87	49	30	27
24	33	196	111	116	273	178	252	1,070	83	48	32	25
25	35	171	106	120	266	170	239	741	84	177	29	25
26	34	163	116	116	251	163	222	375	99	174	27	25
27	44	154	128	114	238	167	208	261	145	80	27	24
28	152	140	130	114	230	169	213	308	107	75	26	24
29	1,240	140	133	112	-----	161	230	1,230	96	74	26	25
30	319	143	135	110	-----	169	580	845	85	64	25	24
31	3,230	-----	142	334	-----	172	-----	405	-----	58	25	-----
TOTAL	6,748	10,186	4,169	4,271	25,277	6,800	23,977	9,588	4,053	3,316	1,886	1,505
MEAN	218	340	134	138	903	219	799	309	135	107	60.8	50.2
MAX	3,230	2,290	239	334	6,360	361	10,500	1,230	293	453	400	651
MIN	27	140	106	110	230	161	136	123	83	48	25	20
AC-FT	13,380	20,200	8,270	8,470	50,140	13,490	47,560	19,020	8,040	6,580	3,740	2,990

CAL YR 1974 TOTAL 37,176.9 MEAN 102 MAX 4,880 MIN 2.3 AC-FT 73,740
WTR YR 1975 TOTAL 101,776.0 MEAN 279 MAX 10,500 MIN 20 AC-FT 201,900

PEAK DISCHARGE (BASE, 8,500 FT³/S).--Feb. 2 (0700) 9,190 ft³/s (19.40 ft); Apr. 8 (0830) 16,100 ft³/s (26.69 ft).

BRAZOS RIVER BASIN

08095300 Middle Bosque River near McGregor, Tex.

LOCATION.--Lat 31°30'33", long 97°21'56", McLennan County, on downstream side of bridge on county road, 1,100 ft (335 m) downstream from Pecan Creek, 5.2 miles (8.4 km) northeast of McGregor, and 8.2 miles (13.2 km) upstream from South Bosque River.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 530.51 ft (161.699 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 90.1 ft³/s (2.552 m³/s), 65,280 acre-ft/yr (80.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,300 ft³/s (943 m³/s) Oct. 31 (gage height, 24.62 ft or 7.504 m); minimum, 0.05 ft³/s (0.001 m³/s) Sept. 4, 11.

Period of record: Maximum discharge, 33,300 ft³/s (943 m³/s) Oct. 31, 1974 (gage height, 24.62 ft or 7.504 m); no flow at times in 1960-64, 1967, 1971.

Historical flood information begins with flood in 1889 which reached a stage of 28.5 ft (8.69 m); flood in 1957 reached a stage of 28.2 ft (8.60 m); and floods in 1913 and 1942 or 1943 reached a stage of about 28 ft (8.53 m), from information by local residents.

REMARKS.--Records good. No diversion above station. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	588	91	90	155	90	34	67	221	36	5.6	.60
2	88	412	87	103	2,090	83	32	52	190	35	5.7	.45
3	81	312	84	126	985	80	29	52	168	142	7.8	.64
4	77	390	81	104	843	81	28	77	148	65	7.9	.77
5	72	274	80	103	418	79	28	56	134	52	10	2.5
6	68	231	90	97	321	78	29	54	122	35	7.5	2.6
7	65	428	78	98	273	74	621	118	113	29	5.1	1.6
8	64	365	69	93	266	66	1,820	61	104	25	4.4	1.2
9	61	282	64	92	225	66	195	51	96	38	4.0	1.0
10	57	457	132	97	216	71	166	45	126	28	3.6	1.0
11	54	298	244	85	207	67	150	42	91	23	3.1	.82
12	51	231	122	162	179	66	117	40	80	23	2.9	.82
13	49	214	107	118	170	89	117	37	72	33	2.8	1.2
14	51	181	100	122	164	76	118	41	66	22	2.5	1.3
15	58	169	97	116	155	65	105	38	60	19	2.0	1.7
16	50	165	90	108	151	68	95	33	56	35	1.7	.87
17	45	159	85	103	139	65	94	30	50	21	1.5	1.6
18	43	150	84	105	127	66	91	27	43	18	1.2	5.2
19	40	149	79	101	118	59	76	27	39	16	.98	8.6
20	38	128	77	91	116	55	69	122	36	14	.94	45
21	37	119	72	91	113	53	67	85	34	12	.79	8.7
22	35	117	72	84	114	51	67	46	35	11	.78	5.3
23	34	122	72	81	114	48	66	394	32	10	.77	4.3
24	36	121	70	87	115	43	62	1,880	28	9.2	.66	3.4
25	46	103	65	89	104	40	56	586	63	13	.57	3.0
26	41	102	73	82	97	40	51	259	48	11	.50	2.8
27	36	97	76	78	93	43	50	206	33	9.0	1.1	2.7
28	36	94	71	76	91	44	54	230	38	7.6	1.1	2.6
29	40	98	74	75	-----	37	58	1,530	35	6.8	.86	2.3
30	158	107	73	74	-----	36	166	407	29	6.7	.74	2.1
31	15,600	-----	101	79	-----	35	-----	279	-----	5.6	.64	-----
TOTAL	17,305	6,663	2,760	3,010	8,159	1,914	4,711	6,972	2,390	810.9	89.73	217.20
MEAN	558	222	89.0	97.1	291	61.7	157	225	79.7	26.2	2.89	7.24
MAX	15,600	588	244	162	2,090	90	1,820	1,880	221	142	10	.87
MIN	34	94	64	74	91	35	28	27	28	5.6	.50	.45
AC-FT	34,320	13,220	5,470	5,970	16,180	3,800	9,340	13,830	4,740	1,610	178	431

CAL YR 1974 TOTAL 41,033.69 MEAN 112 MAX 15,600 MIN .02 AC-FT 81,390

WTR YR 1975 TOTAL 55,001.83 MEAN 151 MAX 15,600 MIN .45 AC-FT 109,100

PEAK DISCHARGE (BASE, 8,000 FT³/S).--Oct. 31 (0245) 33,300 ft³/s (24.62 ft).

08095400 Hog Creek near Crawford, Tex.

LOCATION.--Lat 31°33'20", long 97°21'22", McLennan County, on downstream side of bridge on Farm Road 185, 5.6 miles (9.0 km) east of Crawford, and 9.8 miles (15.8 km) upstream from South Bosque River.

DRAINAGE AREA.--78.2 mi² (203 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 560.54 ft (170.853 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 38.4 ft³/s (1.087 m³/s), 27,820 acre-ft/yr (34.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,800 ft³/s (362 m³/s) Oct. 31 (gage height, 12.86 ft or 3.920 m); minimum, 0.33 ft³/s (0.009 m³/s) Sept. 11-16.

Period of record: Maximum discharge, 15,400 ft³/s (436 m³/s) Oct. 4, 1959 (gage height, 14.31 ft or 4.362 m); no flow at times in 1959, 1963-64, and 1971.

Maximum stage since 1900, 17.5 ft (5.33 m) Sept. 26, 1936. Flood in April or May 1957 reached a stage of 15.7 ft (4.79 m), from information by local residents.

REMARKS.--Records good. No known diversions above station. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	267	40	38	249	37	15	39	87	28	2.0	.50
2	28	161	37	43	972	35	15	28	72	21	2.4	.49
3	27	122	36	53	460	34	15	27	62	15	3.1	.48
4	25	135	34	47	417	34	15	26	55	14	2.1	.45
5	24	115	34	44	197	34	15	25	50	15	2.0	.48
6	23	90	36	43	144	34	15	37	45	13	1.8	.48
7	22	134	34	43	116	33	434	112	42	10	1.7	.41
8	22	162	31	42	108	30	1,310	36	39	9.1	1.5	.40
9	21	111	29	39	92	30	129	28	36	9.9	1.6	.40
10	20	176	47	40	85	31	80	25	57	11	1.6	.40
11	19	159	91	37	80	30	68	23	34	7.7	1.3	.38
12	18	100	57	66	70	30	57	22	31	6.9	1.2	.36
13	18	87	46	52	65	37	54	21	29	7.0	1.1	.33
14	18	74	43	49	62	36	56	23	26	6.1	1.0	.33
15	19	67	42	48	59	31	50	22	24	5.7	.82	.33
16	18	65	40	46	57	31	44	19	23	19	.81	.40
17	17	62	39	43	54	33	42	17	21	11	.76	2.4
18	16	59	38	43	51	31	40	16	19	6.9	.72	1.0
19	15	58	35	42	48	29	35	17	17	5.7	.59	15
20	14	52	33	38	47	26	32	240	16	4.8	.54	15
21	14	48	31	37	46	24	30	64	16	4.4	.49	2.0
22	13	46	30	36	45	23	30	35	15	3.9	.54	1.3
23	14	47	30	35	46	22	30	103	14	3.4	.58	1.0
24	14	47	30	36	46	21	29	1,050	13	3.3	.56	.82
25	17	44	29	37	43	18	27	341	15	4.0	.90	.78
26	16	41	31	35	40	18	25	109	14	4.4	.78	.78
27	14	39	34	34	38	20	23	80	14	3.2	.70	.71
28	14	38	32	33	38	19	24	85	16	2.7	.70	.68
29	16	39	32	33	-----	17	27	882	17	2.4	.61	.52
30	88	42	34	32	-----	17	119	222	13	2.2	.58	.49
31	5,890	-----	40	34	-----	16	-----	117	-----	2.0	.52	-----
TOTAL	6,524	2,687	1,175	1,278	3,775	861	2,885	3,891	932	262.7	35.60	88.70
MEAN	210	89.6	37.9	41.2	135	27.8	96.2	126	31.1	8.47	1.15	2.96
MAX	5,890	267	91	66	972	37	1,310	1,050	87	28	3.1	.40
MIN	13	38	29	32	38	16	15	16	13	2.0	.49	.33
AC-FT	12,940	5,330	2,330	2,530	7,490	1,710	5,720	7,720	1,850	521	71	176

CAL YR 1974 TOTAL 15,496.68 MEAN 42.5 MAX 5,890 MIN .05 AC-FT 30,740
WTR YR 1975 TOTAL 24,395.00 MEAN 66.8 MAX 5,890 MIN .33 AC-FT 48,390

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0215	12.86	12,800	5-24	1845	7.57	4,240
4- 8	0715	7.67	4,390	5-29	1530	6.91	3,340

08095550 Waco Lake near Waco, Tex.

LOCATION.--Lat 31°34'46", long 97°11'51", McLennan County, in intake structure at Waco Dam on Bosque River, at northwest edge of city limits of Waco, and 4.6 miles (7.4 km) upstream from Brazos River.

DRAINAGE AREA.--1,652 mi² (4,279 km²).

PERIOD OF RECORD.--Contents: February 1965 to current year. Prior to October 1970, published as Waco Reservoir.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 257,800 acre-ft (318 hm³) Nov. 2 (elevation, 467.52 ft or 142.500 m); minimum, 144,300 acre-ft (178 hm³) Oct. 15 (elevation, 453.86 ft or 138.337 m).
Period of record: Maximum contents, 292,100 acre-ft (360 hm³) May 15, 1968 (elevation, 470.86 ft or 143.518 m); minimum since initial filling, 126,700 acre-ft (156 hm³) Aug. 25, 1974 (elevation, 451.31 ft or 137.559 m).

REMARKS.--The lake is formed by a rolled earthfill dam 24,618 ft (7,504 m) long, including spillway. The lake was built for flood control and water conservation. From Oct. 1, 1964, to Feb. 26, 1965, the lake was operated as a detention basin only. On Feb. 26, 1965, old Lake Waco was breached and deliberate impoundment began. The emergency spillway is controlled by fourteen 40.0- by 35.0-foot (12.2- by 10.7-metre) tainter gates. The outlet works consist of three gate-controlled outlets, 6.7- by 20.0-foot (2.0- by 6.1-metre), opening into a 20.0-foot-diameter (6.1-metre) concrete conduit and two 54-inch (1,370-millimetre) concrete pipes. Low-flow releases are made through two 54-inch (1,370-millimetre) butterfly valves. Flow into two wet wells is controlled by four 5.0- by 6.0-foot (1.5- by 1.8-metre) slide gates that are used to release water downstream for the city of Waco municipal water supply. The capacity table is based on maps prepared in 1956, and the reservoir of old Lake Waco in 1964. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see North Bosque River near Hico (station 08094800). Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	510.0	
Design flood.....	505.0	828,300
Top of gates.....	500.0	726,400
Crest of spillway.....	465.0	233,500
Top of conservation pool.....	455.0	152,500
Lowest gated outlet (invert).....	400.0	580

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

452.0	131,400	458.0	174,800	464.0	224,500
454.0	145,300	460.0	190,600	466.0	242,900
456.0	159,800	462.0	207,100	468.0	262,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153,400	255,400	152,800	153,200	158,000	153,100	153,400	155,600	166,900	153,400	151,300	146,900
2	152,800	256,600	152,300	152,900	183,400	153,200	153,100	155,600	160,900	152,700	152,100	146,800
3	152,500	250,400	152,400	152,500	197,900	152,900	152,100	155,900	156,600	153,000	152,800	146,700
4	152,600	239,200	152,500	152,400	205,800	152,500	151,800	156,000	153,000	154,200	152,900	146,400
5	152,700	225,000	152,700	152,400	204,200	152,100	152,100	155,200	152,400	154,500	152,700	146,200
6	152,800	211,000	152,900	152,400	195,300	151,800	152,400	153,700	153,200	154,700	152,600	146,100
7	152,900	198,700	153,000	152,400	187,300	152,100	156,000	153,100	153,800	154,000	152,400	145,900
8	152,900	185,000	152,900	152,400	182,800	152,700	185,800	152,600	154,400	152,800	152,100	145,700
9	153,000	172,900	152,900	152,500	178,200	153,300	192,400	152,600	154,300	152,200	151,900	145,600
10	153,000	162,800	154,000	152,400	172,600	153,400	192,000	152,600	154,000	152,100	151,600	145,400
11	153,000	157,800	155,300	152,800	168,300	153,200	185,900	154,300	152,900	152,100	151,400	145,200
12	153,000	156,200	155,600	153,400	166,200	153,200	179,200	153,800	152,100	152,100	151,000	144,900
13	152,900	154,200	154,800	153,400	167,900	153,400	172,700	152,900	152,100	152,000	150,700	144,700
14	153,100	153,200	153,200	152,900	169,900	153,400	167,100	152,600	152,000	151,800	150,500	144,500
15	153,600	153,000	152,200	152,500	171,800	152,900	163,200	152,500	152,000	151,800	150,100	144,400
16	154,200	152,900	152,400	152,600	172,200	152,700	159,000	152,500	152,100	152,500	149,900	146,500
17	153,700	152,800	152,800	153,000	172,100	152,500	154,800	152,300	152,100	152,600	149,500	146,900
18	152,600	152,500	153,300	153,500	168,400	152,200	152,600	152,300	152,200	152,200	149,200	146,900
19	152,300	153,100	153,400	154,000	164,000	152,100	152,200	154,000	152,300	152,500	149,000	146,900
20	152,300	153,900	153,200	153,800	157,600	152,000	152,200	156,400	152,300	152,400	148,700	147,200
21	152,300	153,800	152,700	153,400	154,500	152,400	152,200	155,600	152,400	152,100	148,400	147,200
22	152,400	153,400	152,700	152,900	153,200	152,900	152,100	153,400	152,400	152,000	148,300	147,000
23	152,400	153,600	152,900	152,900	152,800	153,600	152,100	168,800	152,400	151,800	148,200	146,900
24	152,700	154,000	153,400	153,500	153,000	153,200	152,100	181,800	152,500	151,700	147,900	146,700
25	152,900	154,700	153,700	154,000	153,400	152,300	152,100	187,900	154,000	152,100	147,700	146,600
26	153,000	155,200	154,200	154,100	153,300	152,200	151,900	190,300	154,300	152,300	147,500	146,400
27	153,200	155,400	154,300	153,500	153,000	152,700	152,100	189,500	155,000	152,100	147,600	146,200
28	153,600	154,800	154,100	152,600	152,900	153,100	153,100	184,600	155,200	152,000	147,500	146,100
29	155,300	154,300	153,900	152,200	-----	153,300	154,200	185,400	155,500	151,800	147,400	146,000
30	158,100	153,600	154,000	152,200	-----	153,600	155,300	180,900	154,800	151,600	147,300	145,900
31	247,100	-----	153,700	153,100	-----	153,200	-----	174,300	-----	151,400	147,200	-----
(†)	466.43	455.15	455.17	455.08	455.06	455.10	455.39	457.93	455.32	454.85	454.26	454.09
(*)	+93,300	-93,500	+100	-600	-200	+300	+2,100	+19,000	-19,500	-3,400	-4,200	-1,300
(††)	2,050	1,750	1,720	1,760	1,630	1,700	1,800	1,820	2,270	2,560	2,860	2,270
MAX	247,100	256,600	155,600	154,100	205,800	153,600	192,400	190,300	166,900	154,700	152,900	147,200
MIN	152,300	152,500	152,200	152,200	152,800	151,800	151,800	152,300	152,000	151,400	147,200	144,400
CAL YR 1974.....	*	+3,800			††	26,780		MAX	256,600		MIN	126,900
WTR YR 1975.....	*	-7,900			††	24,190		MAX	256,600		MIN	144,400

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by city of Waco.

BRAZOS RIVER BASIN

317

08095550 Waco Lake near Waco, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
JAN.. 1975 07...	1415	6.0	56	3.4	11	2.6	170	0	23.

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JAN.. 1975 07...	12	.3	198	150	14	.4	350	8.1	11.5

BRAZOS RIVER BASIN

08095600 Bosque River near Waco, Tex.

LOCATION.--Lat 31°36'04", long 97°11'36", McLennan County, on downstream side of bridge on Farm Road 1637, 1.8 miles (2.9 km) downstream from Waco Lake Dam, 2.8 miles (4.5 km) upstream from mouth, and 4.7 miles (7.6 km) northwest of courthouse in Waco.

DRAINAGE AREA.--1,655 mi² (4,286 km²).

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 365.44 ft (111.386 m) above mean sea level. Prior to Jan. 21, 1960, nonrecording gage, and from Jan. 21 to Aug. 20, 1960, nonrecording gage below 11.38 ft (3.469 m) and water-stage recorder above. All gages at same site and datum. Dec. 30, 1959, to Aug. 29, 1967, auxiliary water-stage recorder 2.7 miles (4.3 km) downstream at datum 4.66 ft (1.420 m) lower. Since Aug. 30, 1967, auxiliary water-stage recorder 0.7 mile (1.1 km) downstream at datum 4.66 ft (1.420 m) lower.

AVERAGE DISCHARGE.--16 years, 461 ft³/s (13.06 m³/s), 334,000 acre-ft/yr (412 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 8,400 ft³/s (238 m³/s) Nov. 5; maximum gage height, 17.15 ft (5.227 m) Nov. 8 (backwater from Brazos Lake); no flow at times.

Period of record: Maximum discharge, 69,000 ft³/s (1,950 m³/s) Oct. 4, 1959 (gage height, 39.8 ft or 12.13 m, from floodmark), from rating curve extended above 51,000 ft³/s (1,440 m³/s) on basis of computation of peak flow through gates at old Lake Waco; no flow at times in 1963-64, 1966-67, 1970, and 1972-74.

Maximum stage since at least 1880, 44.5 ft (13.56 m) Sept. 27, 1936 (discharge, 96,000 ft³/s or 2,720 m³/s), from information by local resident. Maximum stage may be the result of backwater from Brazos River because the discharges on Apr. 22, 1945 (140,000 ft³/s or 3,960 m³/s), and Apr. 20, 1957 (103,000 ft³/s or 2,920 m³/s), exceeded the discharge corresponding to the maximum stage. The discharges for the 1936, 1945, and 1957 floods were obtained from rating curve for tainter gates at old Lake Waco.

REMARKS.--Records poor. Backwater from the Brazos River. Discharge for the entire year is record of releases furnished by Corps of Engineers from Waco Lake. Flow is regulated by Waco Lake (see preceding page). Records furnished by the city of Waco show that 24,180 acre-ft (29.8 hm³) was diverted for municipal use above station. Recording rain gage located at station.

COOPERATION.--Records of releases furnished by Corps of Engineers and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	0	550	550	0	300	0	300	4,820	860		
2	300	1,190	420	550	0	300	281	300	4,060	528		
3	106	4,510	150	550	0	451	550	300	2,820	200		
4	0	7,390	150	389	1,150	550	212	300	2,160	0		
5	0	8,400	150	300	3,810	469	0	706	670	0		
6	0	8,280	150	300	7,140	347	0	1,080	0	0		
7	0	8,180	150	300	6,070	119	0	796	0	315		
8	0	8,040	150	300	3,320	0	0	456	0	550		
9	0	7,930	150	300	3,320	0	0	209	331	295		
10	0	7,030	150	300	3,310	125	2,380	150	600	59		
11	0	3,970	150	300	3,290	300	4,940	150	775	0		
12	0	1,650	321	300	1,740	300	4,910	396	519	0		
13	0	1,650	806	435	0	300	4,860	700	219	0		
14	0	1,020	1,150	550	0	383	3,980	362	150	0		
15	0	550	784	550	0	550	3,060	150	150	0		
16	0	550	201	303	0	550	3,040	150	62	0		
17	338	550	0	150	702	550	3,020	150	0	0		
18	550	550	0	150	2,350	550	1,930	53	0	0		
19	178	212	149	150	3,300	389	591	0	0	0		
20	0	0	275	305	3,270	300	300	0	0	0		
21	0	315	275	425	2,090	0	300	793	0	0		
22	0	550	202	425	1,150	0	300	1,410	0	0		
23	0	550	150	244	619	0	300	558	0	0		
24	0	223	56	120	300	339	300	0	0	0		
25	0	0	0	120	300	550	300	0	0	0		
26	0	0	0	236	435	269	300	0	0	0		
27	0	178	163	481	550	0	106	1,190	0	0		
28	0	550	300	600	404	0	0	3,900	0	0		
29	246	550	300	412	-----	0	131	4,880	0	0		
30	550	550	300	131	-----	0	300	4,890	448	0		
31	189	-----	383	0	-----	419	-----	4,860	-----	0		-----
TOTAL	2,757	75,118	8,135	10,226	48,627	8,410	36,391	29,189	17,784	2,807	0	0
MEAN	88.9	2,504	262	330	1,736	271	1,213	942	593	90.5	0	0
MAX	550	8,400	1,150	600	7,140	550	4,940	4,890	4,820	860	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	5,470	149,000	16,140	20,280	96,440	16,680	72,180	57,900	35,270	5,570	0	0
CAL YR 1974	TOTAL	114,464.00	MEAN	314	MAX	8,400	MIN	0	AC-FT	227,000		
WTR YR 1975	TOTAL	239,437.00	MEAN	656	MAX	8,400	MIN	0	AC-FT	474,900		

BRAZOS RIVER BASIN

319

08096500 Brazos River at Waco, Tex.

LOCATION.--Lat 31°32'06", long 97°04'22", McLennan County, on left bank 2.2 miles (3.5 km) downstream from bridge on La Salle Avenue in Waco and at mile 400.7 (644.7 km).

DRAINAGE AREA.--28,530 mi² (73,890 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: September 1898 to current year (January 1912 to September 1914 monthly records only, published in WSP 1312).

Water quality: Chemical, biochemical, and pesticide analyses: March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 349.34 ft (106.479 m) above mean sea level. Sept. 14, 1898, to Mar. 28, 1918, May 6, 1922, to Feb. 12, 1925, nonrecording gage, and May 28, 1918, to May 5, 1922, Feb. 13, 1925, to Aug. 14, 1969, water-stage recorder. Prior to Aug. 14, 1969, at site 3.9 miles (6.3 km) upstream at datum 7.46 ft (2.274 m) higher.

AVERAGE DISCHARGE.--42 years (1898-1940) unregulated, 2,560 ft³/s (72.50 m³/s), 1,855,000 acre-ft/yr (2.29 km³/yr); 35 years (1940-75) regulated, 2,349 ft³/s (66.52 m³/s), 1,702,000 acre-ft/yr (2.10 km³/yr).

EXTREMES.--Current year: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Oct. 31 (gage height, 25.32 ft or 7.718 m); minimum daily, 106 ft³/s (3.00 m³/s) Oct. 21.

Period of record: Maximum discharge, 246,000 ft³/s (6,970 m³/s) Sept. 27, 1936 (gage height, 40.90 ft or 12.466 m, at former site and datum), levee on left bank was overtopped and broken by flood; minimum for periods of daily record 1898-1911, 1914-69, no flow Aug. 20, 21, 1918, and probably for several days in August 1923.

Maximum stage since at least 1847, that of Sept. 27, 1936; maximum stage 1847-98, 34.63 ft (10.555 m) May 28, 1885, from floodmark at site 3.9 miles (6.3 km) upstream.

REMARKS.--Discharge records good. Flow is largely regulated by Whitney Lake (station 08092500) and Waco Lake (station 08095550). Combined capacity of 18 major reservoirs above station, 4,135,000 acre-ft (5.10 km³), of which 2,194,000 acre-ft (2.71 km³) is flood-control storage in Whitney and Waco Lakes. Records furnished by city of Waco show that during year they diverted 24,180 acre-ft (29.8 hm³) for municipal use above station; records furnished by the Brazos River Authority show that during year they returned 21,580 acre-ft (26.6 hm³) of treated sewage effluent above station. Many other small diversions above station for municipal supply, irrigation, and oilfield operation will not appreciably affect flow. Since 1941, at least 10 percent of drainage area is regulated by reservoirs.

REVISIONS (WATER YEARS).--WSP 568: Drainage area. WSP 850 and 878: 1899-1900, 1907-9 (monthly and yearly summaries only). WSP 1512: 1901-5, 1910, 1915, 1925-26(M), 1927-29. WSP 1922: 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,240	22,900	1,660	2,150	2,450	2,640	1,500	1,540	10,100	1,880	1,300	1,440
2	647	5,560	2,230	2,070	7,880	2,640	1,780	1,160	10,400	841	715	1,100
3	437	9,970	1,160	2,480	13,700	2,650	2,110	771	12,400	620	512	823
4	272	19,300	1,060	2,090	10,700	2,790	1,830	1,210	11,600	329	700	962
5	252	21,200	2,420	1,410	10,700	2,610	1,430	1,120	5,550	291	896	520
6	226	21,300	1,020	776	13,400	2,420	586	2,070	4,460	502	325	304
7	194	30,000	1,160	735	13,100	2,550	1,150	4,420	624	856	280	280
8	172	29,800	1,610	704	10,400	2,240	13,600	1,090	4,290	1,130	1,100	272
9	167	28,100	936	699	10,300	2,230	11,800	855	4,500	1,140	802	321
10	441	14,800	1,550	836	10,300	2,180	7,790	684	4,000	317	942	468
11	667	12,100	2,620	2,650	10,100	2,270	15,400	1,470	6,060	202	1,100	484
12	742	16,100	2,020	2,820	9,760	2,430	15,500	1,540	13,200	261	598	636
13	715	17,100	1,980	4,040	5,430	3,210	10,200	1,850	13,700	312	772	346
14	669	16,000	1,770	3,550	2,470	3,200	9,030	1,760	13,300	322	530	240
15	841	10,100	1,350	2,220	299	2,760	7,940	1,380	12,000	307	1,180	310
16	862	4,170	1,140	1,820	288	2,900	7,420	1,300	4,570	187	829	1,120
17	997	3,920	1,340	2,240	1,700	3,630	7,190	1,260	4,310	145	723	444
18	1,110	3,880	2,410	1,350	6,890	1,880	6,570	1,160	4,160	124	588	375
19	439	3,320	2,570	1,130	9,300	988	3,730	1,090	2,530	113	973	535
20	129	2,930	2,780	1,600	9,480	797	1,020	1,300	3,060	701	980	444
21	106	3,320	2,590	1,950	8,440	590	898	2,930	3,000	826	1,380	285
22	409	5,310	1,210	1,760	7,800	491	898	2,590	2,610	1,290	882	281
23	312	5,600	1,020	1,570	6,960	440	876	5,870	2,060	1,460	503	264
24	898	6,260	1,190	926	4,800	735	823	21,200	2,330	1,530	870	260
25	634	5,410	1,520	1,120	5,110	3,130	1,050	14,100	1,040	1,080	954	495
26	493	3,120	1,610	1,260	5,250	2,790	1,010	3,680	360	1,690	802	595
27	295	4,070	2,040	1,640	5,170	1,730	953	2,240	1,140	1,550	925	552
28	347	4,370	2,620	1,780	4,580	1,680	1,050	4,580	601	1,580	340	544
29	1,020	2,010	2,220	1,760	-----	1,700	1,120	12,000	1,180	1,560	895	552
30	994	2,490	1,890	2,190	-----	1,330	4,240	15,600	1,520	1,310	1,270	586
31	29,100	-----	1,920	2,250	-----	232	-----	11,300	-----	1,570	1,300	-----
TOTAL	46,827	334,510	54,616	55,576	206,757	63,863	140,494	123,250	164,451	25,794	26,542	15,838
MEAN	1,511	11,150	1,762	1,793	7,384	2,060	4,683	3,976	5,482	832	856	528
MAX	29,100	30,000	2,780	4,040	13,700	3,630	15,500	21,200	13,700	1,880	1,380	1,440
MIN	106	2,010	936	699	288	232	586	684	360	113	325	240
AC-FT	92,880	663,500	108,300	110,200	410,100	126,700	278,700	244,500	326,200	51,160	52,650	31,410
CAL YR 1974	TOTAL	675,102	MEAN	1,850	MAX	30,000	MIN	61	AC-FT	1,339,000		
WTR YR 1975	TOTAL	1,258,518	MEAN	3,448	MAX	30,000	MIN	106	AC-FT	2,496,000		

BRAZOS RIVER BASIN

08096500 Brazos River at Waco, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
NOV. 11...	1515	12700	7.5	80	15	160	5.0	144	0	130
JAN. 22...	1000	1760	5.3	89	15	170	4.7	167	0	150
MAR. 04...	1530	2790	4.7	96	20	190	5.3	168	0	170
MAY 07...	1415	2550	5.3	87	14	120	4.5	188	0	120
JULY 16...	1400	187	7.8	82	17	140	4.7	176	0	130
SEP. 24...	1450	260	6.6	63	12	110	3.9	140	0	93

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 11...	250	--	.50	.01	.04	.96	1.0	.35	719
JAN. 22...	280	.3	.37	.01	.03	.25	.28	.07	797
MAR. 04...	300	.2	.27	.01	.03	.39	.42	.03	869
MAY 07...	190	.3	.39	.02	.02	.79	.81	.02	634
JULY 16...	220	.3	.06	.01	.00	1.0	1.0	.02	689
SEP. 24...	170	.3	.04	.01	.03	.97	1.0	.12	528

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
NOV. 11...	260	140	4.3	1280	7.7	18.0	7.9	83	1.0
JAN. 22...	280	150	4.4	1390	7.5	9.5	10.7	94	1.0
MAR. 04...	320	180	4.6	1530	8.0	11.0	11.0	99	1.5
MAY 07...	280	120	3.2	1140	7.9	23.0	8.2	94	1.0
JULY 16...	270	130	3.7	1270	7.6	29.0	8.2	105	1.4
SEP. 24...	210	92	3.3	995	8.2	24.0	9.4	111	1.9

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
JAN. 22...	1000	1760	9.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY 07...	1415	2550	23.0	.00	.00	.00	.00	.00	.00	.00	.00
JULY 16...	1400	187	29.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 24...	1450	260	24.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL PCB (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
JAN. 22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 07...	.00	.0	.0	.00	.00	.00	.00	.02	.00	.00
JULY 16...	.00	.0	.0	.00	.00	.00	.00	.01	.00	.00
SEP. 24...	.00	.0	.0	.01	.00	.00	.00	.07	.02	.00

08096800 Cow Bayou subwatershed No. 4 near Bruceville, Tex.

LOCATION.--Lat 31°19'59", long 97°16'02", McLennan County, near center of dam on Foster Branch, 1.0 mile (1.6 km) upstream from South Fork Cow Bayou, and 2.1 miles (3.4 km) west of Bruceville.

DRAINAGE AREA.--5.25 mi² (13.60 km²).

PERIOD OF RECORD.--September 1956 to September 1975 (discontinued).

GAGE.--Water-stage recorder with drop-inlet structure as control. Datum of gage is 574.46 ft (175.10 m) above mean sea level (levels by Soil Conservation Service).

AVERAGE INFLOW.--19 years, 1,490 acre-ft/yr (1.84 hm³/yr), adjusted for rainfall on pool and pool losses.

AVERAGE OUTFLOW.--19 years, 1,380 acre-ft/yr (1.70 hm³/yr).

EXTREMES.--Current year: Maximum outflow, 29.4 ft³/s (0.83 m³/s) Feb. 4 (gage height, 22.25 ft or 6.782 m); no outflow for many days. Maximum inflow, 1,070 ft³/s (30.3 m³/s), average for 5-minute interval, Oct. 31, computed and adjusted as explained below; no inflow for many days.

Period of record: Maximum outflow, 2,290 ft³/s (64.9 m³/s) May 11, 1957 (gage height, 40.16 ft or 12.241 m), from rating curve extended above 35 ft³/s (0.99 m³/s) on basis of slope-area measurement of peak outflow measured below dam during time when emergency spillway was partially washed out; no outflow for many days each year. Maximum inflow, 6,900 ft³/s (195 m³/s), average for 15-minute interval, May 11, 1957, computed from change in pool contents and adjusted for outflow and rainfall on pool surface during time of peak inflow; no inflow at times.

REMARKS.--Records good. The pool is formed by a rolled earthfill dam, 1,285 ft (392 m) long. A grass sodded emergency spillway section 400 ft (120 m) wide is located at left end of dam. The gage height at crest of emergency spillway is 38.1 ft (11.61 m); prior to May 11, 1957, gage height was 37.7 ft (11.49 m) after spillway was repaired. The dam was completed in August 1956, but no appreciable storage began before Mar. 20, 1957. The outlet structure consists of a 2.5-foot (0.8-metre) square uncontrolled drop-inlet structure covered with an anti-vortex baffle and two 8-inch (203-millimetre) square uncontrolled portholes on the downstream face. The gage height at crest of the drop inlet is 18.0 ft (5.49 m) and at the bottom of the portholes, 14.76 ft (4.499 m). The drop-inlet structure is connected to a 17-inch-diameter (432-millimetre) outlet pipe at the base of dam. There is also an 8-inch (203-millimetre) controlled water-supply outlet at a gage height of 6.07 ft (1.850 m). The pool capacity is 1,740 acre-ft (2.15 hm³) at the spillway crest, 241 acre-ft (0.297 hm³) at the crest of the drop inlet, 145 acre-ft (0.179 hm³) at the bottom of 8-inch (203-millimetre) portholes, and 13 acre-ft (16,030 m³) at the controlled outlet pipe. The area and capacity tables are based on a sediment survey made Sept. 24, 1969. The dam was built by the Soil Conservation Service for flood control and conservation. Three rain gages (two recording and one nonrecording) are located in the watershed, one at station and two in the watershed above station to compute the weighted-mean rainfall for hydrologic studies.

REVISIONS (WATER YEARS).--WSP 1922: 1957-60. WRD Texas 1973: 1972.

POOL WATER BUDGET, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
Inflow 1/	264	254	197	236	652	102	39.5	161	24.5	21.0	2.2	2.0
Outflow	39.7	403	217	237	646	102	32.1	97.3	60.4	19.3	0	0
(+)	+220	-154	-26.0	-8.7	+1.7	-11.2	-4.8	+56.2	-53.5	-14.1	-15.5	-9.6
(++)	6.04	3.67	2.21	1.53	3.53	1.58	1.44	6.80	3.24	2.74	2.43	2.58
CAL YR 1974: Inflow	904			753		+25.2		++ 32.73				
WTR YR 1975: Inflow	1,960			1,850		-19.5		++ 37.79				

PEAK INFLOW (BASE, 200 FT³/S)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
10-31	0555	*1,070	5-24	1500	*278
11-23	2215	*261	5-29	0955	*322
2-2	1310	*458			

1/ Inflow adjusted for rainfall on pool and pool losses.
 + Change in contents, in acre-feet.
 ++ Weighted-mean rainfall, in inches.
 * Average for 5-minute interval.

BRAZOS RIVER BASIN

08097000 Cow Bayou at Mooreville, Tex.

LOCATION.--Lat 31°18'45", long 97°08'16", Falls County, on right bank at downstream side of county bridge, 500 ft (150 m) downstream from confluence of North Cow Bayou and South Cow Bayou, 0.8 mile (1.3 km) north of Mooreville, and 5.0 miles (8.0 km) northwest of Chilton.

DRAINAGE AREA.--85.0 mi² (220.2 km²).

PERIOD OF RECORD.--September 1954 to May 1958 (annual maximum only), and June 1958 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 399.58 ft (121.792 m) above mean sea level (levels by Soil Conservation Service). Prior to June 10, 1958, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--17 years (1958-75), 36.5 ft³/s (1.034 m³/s), 26,400 acre-ft/yr (32.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,800 ft³/s (164 m³/s) Oct. 31 (gage height, 22.23 ft or 6.776 m); minimum daily, 0.34 ft³/s (0.010 m³/s) Sept. 12.

Period of record: Maximum discharge, 7,960 ft³/s (225 m³/s) May 11, 1957 (gage height, 23.88 ft or 7.279 m), and Oct. 4, 1959 (gage height, 23.86 ft or 7.273 m), from rating curve extended above 4,500 ft³/s (127 m³/s); no flow at times.

Maximum stage since at least 1900, 31 ft (9.4 m) about May 1, 1944, from information by local resident.

REMARKS.--Records good. At end of year, flow from 42.7 mi² (110.6 km²) above this station was partly controlled by 26 floodwater-retarding structures with a combined capacity of 15,510 acre-ft (19.1 hm³) below the flood-spillway crests, of which 2,760 acre-ft (3.40 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Ten rain gages (seven standard and three recording) were operating in the basin above this station. Small diversion for irrigation above station.

REVISIONS.--WSP 2122: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	427	91	64	56	53	18	9.7	75	23	4.5	.66
2	8.7	233	87	71	1490	52	17	7.7	66	72	5.2	.65
3	7.7	162	83	76	620	50	15	7.2	56	118	9.6	.60
4	7.8	147	81	67	528	51	15	6.5	47	49	5.1	.38
5	7.2	125	78	63	246	50	14	7.1	41	34	3.7	.57
6	6.6	108	84	59	182	50	14	6.8	37	22	3.0	.74
7	5.8	192	76	58	150	49	16	6.2	34	18	2.2	.59
8	5.0	151	72	55	131	46	27	6.5	32	14	1.8	.52
9	4.3	116	69	53	115	40	23	5.5	30	15	5.2	.82
10	3.7	154	104	61	106	39	19	4.4	29	15	7.7	.66
11	3.3	119	135	53	95	37	16	160	29	9.8	5.8	.44
12	2.8	94	89	148	87	36	14	50	27	7.5	4.9	.34
13	2.6	85	78	87	83	72	16	38	27	6.7	5.7	.56
14	4.2	74	71	78	80	55	17	35	25	6.1	3.6	1.1
15	6.7	68	65	72	77	48	15	32	23	8.4	3.2	.86
16	4.7	62	61	66	76	63	13	28	21	7.0	2.8	15
17	3.8	58	57	64	72	40	13	25	18	4.5	3.0	5.1
18	4.0	54	55	62	68	43	8.0	20	16	3.8	2.5	2.6
19	3.0	52	52	60	64	34	6.2	18	14	3.4	3.2	2.0
20	2.5	48	51	55	63	31	5.8	25	12	3.2	3.5	8.3
21	2.5	44	49	54	63	30	6.6	24	11	3.1	1.9	4.3
22	2.3	42	48	52	62	29	8.2	20	10	2.5	1.8	3.7
23	2.7	407	49	50	62	28	6.9	281	9.3	2.5	3.0	2.7
24	3.8	468	50	51	59	25	5.1	1480	7.4	2.8	2.7	2.2
25	5.6	163	50	50	57	20	4.1	315	62	3.9	3.2	2.2
26	4.4	119	50	48	56	20	3.6	145	60	4.2	2.9	2.4
27	3.8	105	52	47	54	22	3.4	107	44	4.5	5.3	2.1
28	5.3	98	51	46	54	23	13	94	33	3.6	6.5	1.8
29	5.0	103	53	46	---	21	7.8	224	27	3.3	5.3	1.7
30	4.0	101	53	45	---	19	12	125	24	4.2	2.2	1.4
31	2470	---	70	47	---	18	---	92	---	3.5	1.2	---
TOTAL	2613.5	4179	2114	1908	4856	1194	372.7	3405.6	946.7	478.5	122.2	66.99
MEAN	84.3	139	68.2	61.5	173	38.5	12.4	110	31.6	15.4	3.94	2.23
MAX	2470	468	135	148	1490	72	27	1480	75	118	9.6	15
MIN	2.3	42	48	45	54	18	3.4	4.4	7.4	2.5	1.2	.34
CFSM	.99	1.64	.80	.72	2.04	.45	.15	1.29	.37	.18	.05	.03
IN.	1.14	1.83	.93	.84	2.13	.52	.16	1.49	.41	.21	.05	.03
AC-FT	5180	8290	4190	3780	9630	2370	739	6760	1880	949	242	133
(††)	6.10	4.33	2.38	1.52	3.69	1.54	2.01	7.99	2.63	2.92	3.31	3.23

CAL YR 1974 TOTAL 11762.02 MEAN 32.2 MAX 2470 MIN 0 CFSM .38 IN 5.15 AC-FT 23330 †† 34.80
WTR YR 1975 TOTAL 22257.19 MEAN 61.0 MAX 2470 MIN .34 CFSM .72 IN 9.74 AC-FT 44150 †† 41.65

BRAZOS RIVER BASIN

-323

08098290 Brazos River near Highbank, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 31°08'02", long 96°49'29", Falls County, near right bank 45 ft (14 m) downstream from bridge on Farm Road 413, 1.4 miles (2.3 km) downstream from Highbank Slough and Spring Branch, 2.6 miles (4.2 km) south of Highbank, and at mile 346.6 (557.7 km).

DRAINAGE AREA.--29,421 mi² (76,200 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: October 1965 to current year.

Water quality: Chemical and biochemical analyses: November 1967 to current year. Water temperatures: November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 279.29 ft (85.128 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 2,810 ft³/s (79.58 m³/s), 2,036,000 acre-ft/yr (2.51 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 56,600 ft³/s (1,600 m³/s) Nov. 1 (gage height, 21.64 ft or 6.596 m); minimum daily, 331 ft³/s (9.37 m³/s) Sept. 25.

Period of record: Maximum discharge, 57,900 ft³/s (1,640 m³/s) May 11, 1968 (gage height, 21.88 ft or 6.669 m); minimum daily, 71 ft³/s (2.01 m³/s) Mar. 10, 19, 20, 26, 27, 30, 1971.

Historic: Maximum stages since at least 1909, 42 ft (12.8 m) in December 1913 and 40 ft (12.2 m) in September 1936, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 1,810 micromhos Nov. 23; minimum daily, 298 micromhos May 25.

Maximum water temperatures, 33.0°C on several days during July and August; minimum, 7.0°C Jan. 13, 14.

Period of record: Maximum daily specific conductance, 2,170 micromhos Dec. 8, 1972; minimum daily, 298 micromhos May 11, 1968, July 31, 1971, and May 25, 1975. Maximum water temperatures, 33.0°C on several days during July and August 1975; minimum, 1.0°C Jan. 9, 1968.

REMARKS.--Discharge records good. Many diversions for municipal supply, irrigation, and industrial uses above gage (amount unknown). Flow affected by 20 major reservoirs with a combined capacity of 4,181,000 acre-ft (5.16 km³), of which 2,194,000 acre-ft (2.70 km³) is for flood control. During the year, Texas Power and Light Co. diverted 156 acre-ft (0.192 km³) to Tradinghouse Reservoir above this station. At end of year, flow from 210 mi² (544 km²) above this station was partly controlled by 59 floodwater-retarding structures with a combined capacity of 84,180 acre-ft (104 km³) below the flood-spillway crests, of which 8,420 acre-ft (10.4 km³) is sediment-pool capacity. Three structures were built during the current year and have a combined capacity below flood-spillway crests of 5,980 acre-ft (7.37 km³), of which 337 acre-ft (0.416 km³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,510	52,700	4,160	2,860	3,060	4,550	644	7,130	14,100	2,320	2,210	1,790
2	2,590	34,700	3,180	2,970	8,970	3,020	1,540	3,720	12,800	2,750	2,150	1,940
3	1,200	12,900	3,270	3,370	26,200	2,930	2,110	2,490	12,600	2,200	1,330	1,570
4	880	18,300	2,290	3,570	25,600	3,010	2,360	1,780	14,500	1,430	884	1,180
5	600	27,000	2,040	3,160	17,100	3,110	2,060	2,300	11,800	1,300	1,030	1,320
6	537	27,000	3,050	2,320	15,300	2,900	1,680	2,140	6,580	796	1,360	796
7	498	30,900	1,940	1,690	15,900	2,650	855	2,860	5,730	796	747	500
8	462	39,800	1,820	1,560	12,700	2,730	4,190	3,070	5,560	1,140	1,080	358
9	430	41,200	2,230	1,470	11,200	2,430	15,800	1,620	5,350	1,760	1,610	366
10	395	34,900	1,720	1,480	11,100	2,470	10,900	1,190	5,660	1,930	1,230	358
11	451	18,200	3,830	1,940	10,900	2,330	11,300	2,400	5,060	1,140	1,390	459
12	846	16,800	5,160	3,900	10,700	2,470	16,300	3,350	8,690	610	1,600	563
13	952	21,500	3,900	5,260	9,340	2,800	14,400	2,630	14,800	563	951	747
14	958	19,800	3,100	5,450	5,780	3,730	10,200	2,470	14,700	670	1,110	582
15	900	15,000	2,650	4,310	2,840	3,490	9,250	2,250	14,200	630	808	373
16	1,110	9,010	2,200	2,980	934	3,220	8,690	1,750	10,600	759	1,600	450
17	1,130	4,440	1,880	2,880	749	3,340	8,280	1,640	5,540	610	1,280	1,250
18	1,240	4,070	2,050	2,880	2,660	3,760	8,110	1,580	5,270	483	1,120	911
19	1,440	3,940	3,000	2,130	7,810	2,250	6,960	1,460	4,950	434	871	518
20	981	3,340	3,170	1,870	9,850	1,380	3,490	1,420	3,610	403	1,330	509
21	493	3,110	3,320	2,240	9,950	1,060	1,560	2,330	3,920	820	1,450	680
22	375	3,570	2,910	2,610	8,610	954	1,260	4,220	3,870	1,390	1,930	500
23	486	5,990	1,900	2,390	7,920	811	1,180	3,570	3,390	1,820	1,320	373
24	547	35,800	1,710	2,210	6,680	716	1,120	25,200	2,850	1,940	871	338
25	955	19,000	1,880	1,640	5,250	749	1,050	39,600	2,720	2,090	1,150	331
26	905	12,400	2,260	1,720	5,390	3,150	1,200	19,800	2,620	1,650	1,390	388
27	805	7,730	2,340	1,870	5,560	2,900	1,230	9,570	1,460	2,280	1,200	747
28	727	6,810	2,720	2,280	5,380	2,090	1,420	7,770	2,390	2,180	1,380	680
29	659	5,730	3,170	2,460	-----	1,990	1,650	10,300	1,740	2,230	690	690
30	1,080	5,740	2,840	2,440	-----	1,990	3,370	21,000	2,040	2,210	1,050	700
31	13,500	-----	2,680	2,900	-----	1,710	-----	20,900	-----	1,980	1,700	-----
TOTAL	40,642	541,380	84,370	82,810	263,433	76,690	154,159	213,510	209,100	43,314	39,822	21,967
MEAN	1,311	18,050	2,722	2,671	9,408	2,474	5,139	6,887	6,970	1,397	1,285	732
MAX	13,500	52,700	5,160	5,450	26,200	4,550	16,300	39,600	14,800	2,750	2,210	1,940
MIN	375	3,110	1,710	1,470	749	716	644	1,190	1,460	403	690	331
AC-FT	80,610	1,074M	167,300	164,300	522,500	152,100	305,800	423,500	414,700	85,910	78,990	43,570

CAL YR 1974 TOTAL 1,021,314 MEAN 2,798 MAX 52,700 MIN 160 AC-FT 2,026,000
WTR YR 1975 TOTAL 1,771,197 MEAN 4,853 MAX 52,700 MIN 331 AC-FT 3,513,000

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
09...	1335	382	6.2	66	15	150	5.2	123	13	130	210	--
NOV.												
12...	1915	16400	7.5	79	13	160	4.9	144	0	120	250	--
DEC.												
11...	1115	4190	10	78	11	92	4.6	189	0	100	130	.3
JAN.												
22...	1150	1160	5.8	98	17	180	4.6	190	0	160	280	.3
FEB.												
05...	1235	16900	7.6	59	6.2	65	3.3	134	0	72	96	.2
MAR.												
04...	1815	3800	5.2	100	20	200	5.2	182	0	170	310	.4
APR.												
01...	1645	445	5.6	110	22	190	2.4	222	0	160	290	.3
MAY												
07...	1530	2750	3.1	73	10	81	4.4	190	0	89	110	.3
JUNE												
03...	1615	12900	6.3	76	12	110	4.0	170	0	100	170	.3
JULY												
17...	1350	358	7.3	73	16	100	4.9	220	0	95	140	.4
AUG.												
28...	0930	1500	5.9	83	21	190	5.4	172	0	160	290	.3
SEP.												
25...	1230	325	6.1	83	20	150	4.2	221	0	120	210	.3

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.												
09...	.00	.00	.04	1.1	1.1	.21	675	656	230	100	4.3	1180
NOV.												
12...	.38	.02	.09	.71	.80	.83	744	706	250	130	4.4	1260
DEC.												
11...	.78	.02	.15	.69	.84	.22	546	519	240	85	2.6	924
JAN.												
22...	.60	.02	.11	.47	.58	.13	860	839	310	160	4.4	1450
FEB.												
05...	2.0	.06	.07	1.0	1.1	.20	391	376	170	64	2.2	683
MAR.												
04...	.38	.01	.04	.31	.35	.11	923	901	330	180	4.8	1530
APR.												
01...	.53	.02	.09	.83	.92	.21	927	890	370	180	4.3	1580
MAY												
07...	.76	.04	.06	.68	.74	.16	480	464	220	68	2.4	849
JUNE												
03...	.34	.00	.00	3.1	3.1	.08	575	563	240	100	3.1	1020
JULY												
17...	.00	.01	.03	.83	.86	.11	552	545	250	68	2.8	982
AUG.												
28...	.00	.00	.01	.91	.92	.15	886	842	300	150	4.8	1470
SEP.												
25...	.01	.00	.03	.94	.97	.20	736	703	290	110	3.8	1290

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.											
09...	8.5	27.0	10	12.2	151	6.4	80	12	9	12	.0
NOV.											
12...	7.8	17.0	150	8.0	82	.3	14000	980	1200	--	--
DEC.											
11...	7.6	10.0	280	10.8	96	1.3	16000	5400	2300	14	.1
JAN.											
22...	7.5	10.5	10	9.7	87	1.0	8800	290	45	--	.1
FEB.											
05...	6.8	11.0	250	--	--	1.5	18000	5800	6900	13	--
MAR.											
04...	7.8	11.5	15	10.6	96	1.1	100	64	320	--	--
APR.											
01...	7.8	19.5	15	10.1	109	.4	80	17	19	--	--
MAY											
07...	7.8	27.0	80	7.8	96	1.9	72000	1800	490	7.0	--
JUNE											
03...	7.6	25.0	55	8.2	98	.8	1400	520	110	5.5	--
JULY											
17...	8.0	30.5	20	11.2	147	1.8	1600	84	190	--	--
AUG.											
28...	8.0	27.5	40	10.2	128	4.6	420	280	200	12	--
SEP.											
25...	8.2	21.5	20	12.0	135	5.2	700	16	300	6.1	.7

08098290 Brazos River near Highbank, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV. 12...	1915	40	24	4	140	<10	0	10	0	100
FEB. 05...	1235	70	11	4	70	--	1	--	20	--
JUNE 03...	1615	20	6	2	110	<10	0	10	0	<50
AUG. 28...	0930	0	4	3	170	<10	0	10	0	100

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
NOV. 12...	1	<10	4	13000	10	<100	0	0	500
FEB. 05...	2	--	6	--	50	--	1	10	--
JUNE 03...	1	10	1	7200	30	<100	1	10	--
AUG. 28...	0	10	1	1100	60	<100	1	10	100

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 12...	0	<.1	<.1	3	0	0	880	40	10
FEB. 05...	0	--	.0	2	0	0	590	--	10
JUNE 03...	0	.1	.1	0	0	0	840	20	0
AUG. 28...	0	.0	.0	2	0	0	1100	20	10

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
APR. 01	28	Dry weight	Ash weight				
SEP. 25	28	80	68	44	3.0	270	Polyethylene strip
		160	140	67	.0	210	

NOV. 12, 1974 TIME 1915

DEC. 11, 1974 TIME 1115

PHYTOPLANKTON 1,300 CELLS/ML

PHYTOPLANKTON 900 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT	ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA			CHLOROPHYTA		
..CHLOROPHYCEAE			..CHLOROPHYCEAE		
..CHLOROCOCCALES			..CHLOROCOCCALES		
...COELASTRACEAE			...MICRACTINIAEAE		
...COELASTRUM	530	42	...GOLENKINIA	47	5
...OCCYSTACEAE			...OCCYSTACEAE		
...ANKISTRODESMUS	130	11	...ANKISTRODESMUS	47	5
...OCCYSTIS	33	3	...SCENEDESMACEAE		
...VOLVOCALES			...SCENEDESMUS	190	21
...CHLAMYDOMONADACEAE			CHRYSOPHYTA		
...CHLAMYDOMONAS	270	21	..BACILLARIOPHYCEAE		
CHRYSOPHYTA			..CENTRALES		
..BACILLARIOPHYCEAE			...COSCINODISCACEAE		
..CENTRALES			...CYCLOTETRA	95	11
...COSCINODISCACEAE			..PENNALES		
...CYCLOTETRA	230	18	...CYMBELLACEAE		
..PENNALES			...CYMBELLA	47	5
...ACHNANTHACEAE			...NAVICULACEAE		
...COCONEIS	33	3	...NAVICULA	240	26
...FRAGILARIACEAE			...NITZSCHIAEAE		
...SYNEDRA	33	3	...NITZSCHIA	240	26

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

JAN. 22, 1975 TIME 1150

PHYTOPLANKTON 2,600 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	92	4
....CHLORELLA	120	4
....KIRCHNERIELLA	23	1
....OOCYSTIS	140	5
....TETRAEDRON	46	2
...SCENEDESMACEAE		
...SCENEDESMUS	690	26
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS	370	14
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...COSCINODISCUS	46	2
...CYCLOTELLA	250	10
..PENNALES		
...CYMBELLACEAE		
...CYMBELLA	23	1
...FRAGILARIACEAE		
...SYNEDRA	280	11
...NAVICULACEAE		
...STAURONEIS	23	1
...NITZSCHACEAE		
...HANTZSCHIA	23	1
...NITZSCHIA	120	4
...SURIPELLACEAE		
...SURIPELLA	23	1
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....AGMENELLUM	370	14

FEB. 5, 1975 TIME 1235

PHYTOPLANKTON 570 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...SCENEDESMACEAE		
...SCENEDESMUS	340	60
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...FRAGILARIACEAE		
...SYNEDRA	110	20
...GOMPHONEMATACEAE		
...GOMPHONEMA	57	10
...NAVICULACEAE		
...GYROSIGMA	57	10

MAR. 4, 1975 TIME 1815

PHYTOPLANKTON 2,400 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	220	9
....OOCYSTIS	340	14
...SCENEDESMACEAE		
...SCENEDESMUS	1,700	70
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..PENNALES		
...ACHNANTHACEAE		
...ACHNANTHES	56	2
...NITZSCHACEAE		
...NITZSCHIA	110	5

APR. 1, 1975 TIME 1645

PHYTOPLANKTON 2,400 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...CHARACIACEAE		
...SCHROEDERIA	33	1
...OCCYSTACEAE		
....ANKISTRODESMUS	200	8
....OOCYSTIS	130	5
...SELENASTRUM	33	1
....TETRAEDRON	33	1
...SCENEDESMACEAE		
...ACTINASTRUM	260	11
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	230	10
..PENNALES		
...ACHNANTHACEAE		
...COCCONEIS	33	1
...CYMBELLACEAE		
...CYMBELLA	33	1
...GOMPHONEMATACEAE		
...GOMPHONEMA	65	3
...NAVICULACEAE		
...NAVICULA	330	14
...NITZSCHACEAE		
...NITZSCHIA	98	4
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	390	16
UNKNOWN	520	22

MAY 7, 1975 TIME 1530

PHYTOPLANKTON 2,600 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...HYDRODICTYACEAE		
...PEDIASTRUM	92	4
...OCCYSTACEAE		
....ANKISTRODESMUS	46	2
...SCENEDESMACEAE		
...SCENEDESMUS	1,200	46
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	140	5
..PENNALES		
...ACHNANTHACEAE		
...COCCONEIS	46	2
...NAVICULACEAE		
...NAVICULA	180	7
...NITZSCHACEAE		
...NITZSCHIA	46	2
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
....ANACYSTIS	500	19
...OSCILLATORIALES		
...NOSTOCACEAE		
....ANABAENA	370	14

08098290 Brazos River near Highbank, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

JUNE 3, 1975 TIME 1615

PHYTOPLANKTON 1,300 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...CHARACIACEAE		
...SCHROEDERIA	20	2
...HYDRODICTYACEAE		
...PEDIASTRUM	99	8
...OCCYSTACEAE		
...ANKISTRODESMUS	20	2
...TETRAEDRON	40	3
...SCENEDESMACEAE		
...SCENEDESMUS	800	62
..VOLVOCALES		
..CHLAMYDOMONADACEAE		
..CHLAMYDOMONAS	60	5
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	20	2
...MELOSIRA	40	3
..PENNALES		
...FRAGILARIACEAE		
...SYNEDRA	99	8
...NAVICULACEAE		
...NAVICULA	40	3
..CHRYSTOPHYCEAE		
..CHRYDOMONADALES		
..OCHROMONADACEAE		
...DINOBRYON	20	2
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
..EUGLENACEAE		
....PHACUS	20	2

AUG. 28, 1975 TIME 0930

PHYTOPLANKTON 47,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESMUS	460	1
...DICTYOSPHAERIUM	610	1
...OOCYSTIS	610	1
...SELENASTRUM		0
...TETRAEDRON	910	2
...SCENEDESMACEAE		
...CRUCIGENIA	1,200	3
...SCENEDESMUS	3,000	7
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA	8,200	18
..PENNALES		
...ACHNANTHACEAE		
...COCCONEIS		0
...NAVICULACEAE		0
...GYROSIGMA		0
...NAVICULA		0
...NITZSCHIA		
...NITZSCHIA	5,300	11
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
..CHROOCOCCACEAE		
...AGMENELLUM	1,200	3
...ANACYSTIS	3,400	7
..OSCILLATORIALES		
..OSCILLATORIALES		
....LYNGBYA	21,000	46

JULY 17, 1975 TIME 1350

PHYTOPLANKTON 110,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...HYDRODICTYACEAE		
...PEDIASTRUM		0
...OCCYSTACEAE		
...ANKISTRODESMUS	1,900	2
...DICTYOSPHAERIUM	4,800	4
...KIRCHNERIELLA	850	1
...OOCYSTIS	1,400	1
...PLANKTOSPHAERIA		0
...TREUBARIA		0
...SCENEDESMACEAE		
...ACTINASTRUM		0
...CRUCIGENIA		0
...SCENEDESMUS	3,800	3
...TETRASPORALES		
...PALMELLACEAE		
...SPHAEROCYSTIS	1,400	1
..VOLVOCALES		
..CHLAMYDOMONADACEAE		
..CHLAMYDOMONAS		0
..VOLVOCAEAE		0
..PANDORINA		0
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA		0
..PENNALES		
...NITZSCHIA		
...NITZSCHIA		0
...NITZSCHIA	680	1
..XANTHOPHYCEAE		
..HETEROCOCCALES		
..CHLOROTHECIACEAE		
..OPHIOTIUM		0
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
..CHROOCOCCACEAE		
...AGMENELLUM	90,000	84
...ANACYSTIS	1,400	1
..OSCILLATORIALES		
..NOSTOCACEAE		0
...ANABAENA		
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
..EUGLENACEAE		
....PHACUS		0
....TRACHELOMONAS		0

SEP. 25, 1975 TIME 1230

PHYTOPLANKTON 140,000 CELLS/ML

ORGANISM_NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESMUS	8,300	6
...DICTYOSPHAERIUM	14,000	10
...KIRCHNERIELLA	2,100	1
...OOCYSTIS	8,300	6
...TETRAEDRON	2,100	1
...SCENEDESMACEAE		
...CRUCIGENIA	2,800	2
...SCENEDESMUS	15,000	11
..VOLVOCALES		
..CHLAMYDOMONADACEAE		
..CHLAMYDOMONAS	3,400	2
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
...CYCLOTELLA		0
..PENNALES		
...NITZSCHIA		
...NITZSCHIA		
...NITZSCHIA	2,100	1
..CHRYSTOPHYCEAE		
..CHRYDOMONADALES		
..OCHROMONADACEAE		
...OCHROMONAS		0
CYANOPHYTA		
..MYXOPHYCEAE		
..CHROOCOCCALES		
..CHROOCOCCACEAE		
...AGMENELLUM	66,000	48
...ANACYSTIS	12,000	8

BRAZOS RIVER BASIN

08098290 Brazos River near Highbank, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 09...	1335	382	27.1	12	12	83
NOV. 12...	1915	16400	17.0	1070	47400	67
DEC. 11...	1115	4190	10.0	1050	11900	85
JAN. 22...	1150	1160	10.5	32	100	86
FEB. 05...	1235	16900	11.0	1210	55200	47
MAR. 04...	1815	3800	11.5	381	3910	19
APR. 01...	1645	445	19.5	15	18	97
MAY 07...	1530	2750	27.0	205	1520	77
JUNE 03...	1615	12900	25.0	239	8320	83
JULY 17...	1350	358	30.5	35	34	99
AUG. 28...	0930	1500	27.5	51	207	97
SEP. 25...	1230	325	21.5	14	12	98

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1974.....	40642	1110	620	68000	200	21900	120	13200	260
NOV. 1974.....	541380	1080	600	877000	190	278000	110	161000	260
DEC. 1974.....	84370	1260	710	162000	240	54700	130	29600	290
JAN. 1975.....	82810	1230	690	154000	230	51400	130	29100	280
FEB. 1975.....	263433	1090	610	434000	200	142000	110	78200	260
MAR. 1975.....	76690	1460	820	170000	290	60000	150	31100	320
APR. 1975.....	154159	1180	660	275000	220	91600	120	49900	270
MAY 1975.....	213510	556	300	173000	62	35700	59	34000	170
JUNE 1975.....	209100	1390	780	440000	270	152000	140	79000	310
JULY 1975.....	43314	1220	680	79500	230	26900	130	15200	280
AUG. 1975.....	39822	1500	850	91400	300	32300	160	17200	330
SEPT 1975.....	21967	1460	820	48600	290	17200	150	8900	320
TOTAL	1771197	**	**	2970000	**	964000	**	546000	**
WTD.AVG.	4852.59	1110	620	**	200	**	110	**	260

BRAZOS RIVER BASIN

329

08098290 Brazos River near Highbank, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	316	1210	1360	1390	1640	1590	871	730	1240	1530	1590
2	923	301	946	1300	1200	1630	1570	608	898	1320	1510	1620
3	1180	352	1110	1220	598	1600	1690	629	1030	883	1510	1660
4	1400	427	1030	1090	593	1560	634	673	1330	970	1420	1640
5	1390	1320	1070	1210	598	1560	1680	646	1400	1010	1420	1510
6	1350	1130	1010	1120	907	1490	1320	666	1240	825	1420	1600
7	1230	1170	1340	1000	1060	1490	1420	870	1480	743	1440	1620
8	1160	1430	1340	1090	991	1490	1500	909	1550	748	1410	1550
9	1210	1470	1380	1130	1230	1520	470	1120	1550	869	1490	1510
10	1210	1500	1370	1120	808	1650	1420	1130	1580	970	1410	1500
11	1170	937	1100	941	1290	1680	1100	1060	1460	922	1430	1460
12	1050	903	991	875	1290	1680	1340	685	1480	904	1540	1480
13	1010	1710	1180	811	1290	1570	1370	747	1640	922	1490	1580
14	1090	1760	1120	1060	1580	1490	1120	782	1640	942	1510	1580
15	1060	1800	1170	1370	1690	1500	1240	624	1630	1010	1470	1580
16	1100	1790	954	1480	1560	1340	1120	774	1630	1090	1510	1370
17	1390	1680	776	1370	1420	1360	1240	1070	1580	962	1570	1390
18	1530	1610	761	1150	1280	1370	1230	1330	1610	1110	1470	1420
19	1610	1530	801	1370	1100	1200	1250	1350	1610	1110	1530	1270
20	1570	1560	1530	1510	1300	1130	1450	1360	1600	1070	1490	1280
21	1510	1490	1720	1440	1350	1090	1400	1380	1600	1120	1510	1380
22	1320	1600	1650	1430	1350	1450	1370	1140	1580	1150	1550	1420
23	1260	1810	1550	1360	1530	1070	1350	531	1580	1200	1570	1390
24	1220	493	1550	1330	1570	1100	1240	400	1590	1390	1470	1340
25	1170	780	1440	1360	1660	1090	1120	298	1590	1510	1530	1240
26	1250	1080	1380	1340	1720	946	1010	325	1040	1580	1530	1160
27	1320	1200	1400	1390	1700	1130	929	337	1230	1580	1490	1070
28	1370	1470	1580	1510	1670	1370	808	364	966	1490	1510	1030
29	1480	1580	1660	1530	---	1590	842	427	1130	1510	1510	1160
30	1550	1390	1630	1270	---	1640	881	740	1220	1530	1550	1370
31	800	---	1500	1190	---	1640	---	603	---	1530	1520	---
MONTH	1260	1250	1270	1250	1280	1420	1220	789	1410	1140	1490	1430

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	20.0	9.0	11.0	15.0	13.0	19.5	23.0	23.0	29.5	31.5	30.0
2	22.0	21.0	9.0	12.0	13.0	14.0	15.5	24.0	24.5	29.5	31.5	32.0
3	22.0	22.0	9.0	10.0	11.0	14.0	14.0	23.5	25.5	29.0	32.0	32.0
4	21.0	21.0	9.0	9.0	11.0	12.0	14.5	23.5	24.0	28.0	33.0	29.0
5	21.0	19.0	12.0	9.0	11.0	11.0	14.5	24.5	25.0	28.0	31.5	28.0
6	22.0	19.0	13.0	9.0	10.0	11.0	16.0	26.0	28.0	33.0	32.0	27.0
7	23.0	19.0	13.0	12.0	9.0	14.0	18.0	27.0	25.5	32.0	32.0	30.0
8	22.0	18.0	12.0	13.0	9.0	14.0	19.0	26.5	27.0	32.0	33.0	29.5
9	23.0	18.0	10.0	13.0	9.0	14.0	19.0	28.0	27.0	32.0	31.5	30.5
10	23.0	19.0	10.0	14.0	9.0	14.0	18.0	27.0	26.5	31.5	32.0	28.0
11	24.0	18.0	10.0	12.0	11.0	14.0	17.0	25.5	26.0	33.0	32.0	29.5
12	23.0	17.0	10.0	10.0	11.0	15.0	16.5	25.5	26.5	29.0	31.0	29.0
13	23.0	18.0	11.0	7.0	11.0	11.0	14.5	27.0	25.5	32.0	31.0	25.0
14	23.0	17.0	12.0	7.0	12.0	11.0	16.5	25.5	24.5	30.0	33.0	27.0
15	18.0	11.0	11.0	8.0	13.0	11.0	18.0	24.0	26.0	29.0	31.5	28.0
16	17.0	11.0	10.0	9.0	11.0	12.0	18.5	26.0	26.5	29.5	31.0	27.0
17	18.0	15.0	9.0	10.0	12.0	12.0	18.5	25.5	28.0	29.0	32.0	28.0
18	19.0	16.0	10.0	12.0	12.0	12.0	20.0	28.0	28.5	30.0	33.0	30.0
19	21.0	17.0	10.0	14.0	12.0	13.0	17.0	28.0	28.0	28.0	33.0	31.0
20	20.0	17.0	10.0	10.0	11.0	15.0	18.5	27.0	27.0	31.0	32.0	26.0
21	19.0	16.0	10.0	9.0	12.0	17.0	18.0	28.0	27.0	32.0	33.0	22.0
22	19.0	16.0	11.0	11.0	14.0	19.0	21.0	26.0	30.0	33.0	32.0	22.0
23	20.0	18.0	14.0	11.0	10.0	21.0	23.0	23.5	30.5	33.0	31.0	23.0
24	20.0	18.0	17.0	11.0	9.0	18.0	25.5	23.0	30.5	31.5	28.0	23.5
25	21.0	15.0	11.0	11.0	10.0	17.0	26.0	23.0	28.0	31.0	30.0	24.0
26	20.0	14.0	10.0	12.0	11.0	18.0	23.5	20.5	28.0	28.0	29.0	24.0
27	20.0	13.0	10.0	13.0	13.0	19.0	24.0	27.0	26.0	31.0	28.0	22.0
28	21.0	14.0	11.0	15.0	12.0	21.0	22.0	20.5	24.5	32.0	29.5	28.5
29	21.0	14.0	11.0	18.0	---	13.0	24.5	24.0	25.5	33.0	31.0	27.0
30	23.0	11.0	13.0	17.0	---	10.0	23.5	23.0	30.0	33.0	29.0	28.0
31	23.0	---	13.0	18.0	---	12.0	---	21.5	---	31.5	30.5	---
MONTH	21.0	16.5	11.0	11.5	11.0	14.5	19.0	25.0	27.0	31.0	31.5	27.5

08098300 Little Pond Creek at Burlington, Tex.

LOCATION.--Lat 31°01'35", long 96°59'17", Milam County, on left bank downstream from bridge on U.S. Highway 77, 1.0 mile (1.6 km) north of Burlington, and 2.5 miles (4.0 km) downstream from Keys Creek.

DRAINAGE AREA.--22.2 mi² (57.5 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year.

Water quality: Sediment records: January 1966 to September 1975 (discontinued).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 388.51 ft (118.418 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 12.9 ft³/s (0.365 m³/s), 7.90 in/yr (201 mm/yr), 9,350 acre-ft/yr (11.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,570 ft³/s (243 m³/s) May 24 (gage height, 16.90 ft or 5.151 m); no flow for many days.

Period of record: Maximum discharge, 8,570 ft³/s (243 m³/s) May 24, 1975 (gage height, 16.90 ft or 5.151 m); no flow for many days each year.

Maximum stage since at least 1938, 17.5 ft (5.33 m) in 1950, from information by local residents.

REMARKS.--Discharge records good. No diversions above station. A recording rain gage is located at the station. Two other recording rain gages located in the watershed were discontinued on Oct. 9, 1974.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	99	2.8	4.8	.50	.16	0	1.7	.28	.22	0	
2	0	5.7	1.1	14	943	.13	0	.29	.06	.86	0	
3	0	1.7	.66	23	266	.11	0	.10	.01	1.9	3.1	
4	0	.84	.45	4.4	231	.13	0	260	0	.12	.10	
5	0	.74	.38	2.0	24	.17	0	1,020	0	.31	23	
6	0	.32	.71	1.2	8.3	.16	0	3.4	0	.01	.43	
7	0	212	1.1	.98	2.9	.13	0	14	0	0	.01	
8	0	153	.53	.88	1.7	.13	0	311	0	0	0	
9	0	13	.26	.72	1.3	.18	0	2.4	3.6	0	0	
10	0	130	39	1.4	.89	.17	0	.42	17	.01	0	
11	0	43	136	2.1	.66	.16	0	139	.36	0	0	
12	0	4.3	8.4	30	.56	.14	0	106	.01	0	0	
13	0	1.2	3.1	6.0	.45	.14	0	1.0	0	3.8	0	
14	0	.45	1.6	2.2	.32	.15	0	31	0	.48	0	
15	0	.20	1.3	1.5	.24	.21	0	1.2	0	1.1	0	
16	0	.10	.89	1.1	.36	.27	0	.21	0	5.4	0	
17	0	.07	.52	.89	.38	.45	0	.03	0	.71	0	
18	0	.06	.31	.81	.35	.60	0	0	0	.09	0	
19	0	.06	.23	.96	.26	.70	0	0	0	0	0	
20	0	.06	.23	.95	.19	.44	0	.10	0	0	0	
21	0	.06	.19	.60	.14	.31	0	.74	0	0	0	
22	0	.07	.16	.43	.14	.23	0	.06	0	0	0	
23	0	4.6	.14	.36	.21	.16	0	.88	0	0	0	
24	0	1,980	.19	.33	.32	0	0	2,690	0	0	0	
25	0	13	.74	.38	.33	0	0	305	0	0	0	
26	0	2.7	1.2	.38	.30	0	0	4.1	0	0	0	
27	0	1.2	2.3	.38	.24	0	0	.79	22	0	0	
28	0	.66	1.6	.38	.21	0	209	54	118	0	0	
29	5.5	15	1.5	.38	-----	0	152	291	89	0	0	
30	.48	38	1.9	.38	-----	0	89	107	1.2	0	0	
31	511	-----	6.0	.47	-----	0	-----	1.5	-----	0	0	-----
TOTAL	516.98	2,721.09	215.49	104.36	1,485.25	5.43	450	5,434.04	251.52	15.01	26.64	0
MEAN	16.7	90.7	6.95	3.37	53.0	.18	15.0	175	8.38	.48	.86	0
MAX	511	1,980	136	30	943	.70	209	2,690	118	5.4	23	0
MIN	0	.06	.14	.33	.14	0	0	0	0	0	0	0
AC-FT	1,030	5,400	427	207	2,950	11	893	10,780	499	30	53	0
CAL YR 1974	TOTAL	6,663.89	MEAN	18.3	MAX	1,980	MIN	0	AC-FT	13,220		
WTR YR 1975	TOTAL	11,225.81	MEAN	30.8	MAX	2,690	MIN	0	AC-FT	22,270		

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-31	1530	12.17	1,870	5- 8	0630	10.25	851
11-24	0230	16.70	8,120	5-24	0100	16.90	8,570
2- 2	1700	13.89	3,480	5-29	2000	10.52	956
5- 4	2400	15.60	5,950				

08098300 Little Pond Creek at Burlington, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
NOV. 12...	1355	1.2	15.5	108	.35	--	--	--
FEB. 03...	0940	92	9.5	1070	266	86	88	89
MAY 05...	1210	378	--	1580	1610	--	--	--

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
NOV. 12...	--	--	--	--	--	--	--
FEB. 03...	90	100	63	70	74	81	83
MAY 05...	--	--	--	--	--	--	--

BRAZOS RIVER BASIN

08099000 Leon Reservoir near Ranger, Tex.

LOCATION.--Lat 32°21'46", long 98°40'32", Eastland County, at outlet works near center of dam on Leon River, 7.4 miles (11.9 km) south of Ranger, and 8.7 miles (14.0 km) southeast of Eastland.

DRAINAGE AREA.--252 mi² (653 km²).

PERIOD OF RECORD.--Contents: January 1955 to current year. Prior to October 1969, monthend contents only.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level.

EXTREMES (at 1000).--Current year: Maximum contents observed, 30,280 acre-ft (37.3 hm³) Nov. 1 (elevation, 1,376.8 ft or 419.65 m); minimum, 22,720 acre-ft (28.0 hm³) Oct. 12-14 (elevation, 1,371.9 ft or 418.16 m).
Period of record: Maximum contents observed, 40,640 acre-ft (50.1 hm³) June 13, 1967 (elevation, 1,382.2 ft or 421.29 m); minimum observed since first appreciable storage, 15,880 acre-ft (19.6 hm³) Jan. 11-21, Feb. 5-7, Apr. 29, 30, 1956 (elevation, 1,366.2 ft or 416.42 m).

REMARKS.--The reservoir is formed by a rolled earthfill dam 3,700 ft (1,130 m) long. Storage began in April 1954 and dam was completed in June 1954. The emergency spillway is a 1,200-foot-wide (366-metre) cut through natural ground near the left end of dam. The service spillway is an uncontrolled circular concrete drop inlet designed for a maximum discharge of 5,000 ft³/s (142 m³/s) through an 11-foot-diameter (3-metre) concrete conduit. The dam is the property of Eastland County Water Supply District and was built to impound water for municipal use by the cities of Ranger, Olden, and Eastland. The capacity table is based on a survey made in 1952. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	1,398.0	-
Crest of spillway.....	1,382.0	40,210
Crest of spillway (top of conservation pool).....	1,375.0	27,290
Lowest gated outlet (invert for water supply).....	1,335.0	869

COOPERATION.--Elevation and diversion records furnished by Eastland County Water Supply District.

REVISIONS.--WSP 1922: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,371.0 21,510
1,377.0 30,620

CONTENTS, IN ACRE-FEET, AT 1000, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,130	30,110	27,290	27,290	28,100	27,290	27,290	27,290	28,100	27,290	26,670	25,740
2	23,130	29,600	27,290	27,290	29,430	27,290	27,290	27,290	27,940	27,290	26,670	25,590
3	22,990	28,920	27,290	27,290	29,430	27,290	27,290	27,290	27,620	27,290	26,820	25,590
4	22,990	28,430	27,140	27,290	29,260	27,290	27,140	27,290	27,620	27,290	27,290	25,590
5	22,990	28,100	27,140	27,290	28,920	27,290	27,140	27,290	27,620	27,290	27,290	25,590
6	22,850	27,940	27,140	27,290	28,590	27,290	27,140	27,290	27,620	27,290	27,290	25,440
7	22,850	27,780	27,140	27,290	28,270	27,290	27,140	27,290	27,620	27,290	27,290	25,440
8	22,850	27,620	26,980	27,290	28,100	27,290	28,590	27,290	27,450	27,290	26,980	25,440
9	22,850	27,620	26,980	27,290	27,940	27,290	28,920	27,290	27,290	27,290	26,980	25,300
10	22,850	27,620	26,980	27,290	27,780	27,290	28,920	27,290	27,290	27,290	26,980	25,300
11	22,850	27,780	26,980	27,290	27,780	27,290	28,270	27,290	27,290	27,290	26,820	25,300
12	22,720	27,780	26,980	27,290	27,620	27,290	27,940	27,290	27,290	27,290	26,820	25,300
13	22,720	27,620	26,980	27,290	27,620	27,290	27,780	27,290	27,290	27,140	26,820	25,150
14	22,720	27,620	26,820	27,290	27,620	27,290	27,780	27,290	27,290	27,140	26,670	25,150
15	22,990	27,620	26,820	27,290	27,620	27,290	27,620	27,290	27,140	27,140	26,670	25,000
16	22,990	27,450	26,820	27,290	27,620	27,290	27,620	27,290	27,140	26,980	26,520	25,000
17	23,270	27,450	26,820	27,290	27,450	27,290	27,450	27,290	27,140	26,980	26,520	25,000
18	23,270	27,450	26,820	27,290	27,450	27,290	27,450	27,290	27,140	26,820	26,520	25,000
19	23,270	27,450	26,820	27,290	27,450	27,290	27,450	27,290	27,140	26,820	26,360	25,000
20	23,130	27,290	26,820	27,290	27,450	27,450	27,450	27,290	26,980	26,820	26,360	25,000
21	23,130	27,290	26,820	27,290	27,450	27,450	27,450	27,290	26,980	26,820	26,360	25,000
22	22,990	27,290	26,820	27,290	27,450	27,450	27,450	27,290	26,980	26,670	26,200	25,150
23	22,990	27,290	26,820	27,290	27,450	27,450	27,450	27,290	26,980	26,670	26,200	25,300
24	22,850	27,290	26,820	27,290	27,450	27,450	27,450	27,290	26,820	26,670	26,050	25,300
25	22,850	27,290	26,820	27,290	27,450	27,450	27,290	27,290	26,670	26,670	26,050	25,300
26	22,850	27,290	26,980	27,290	27,450	27,290	27,290	27,290	26,670	26,820	26,050	25,300
27	22,850	27,290	27,140	27,290	27,450	27,290	27,290	27,290	26,670	26,820	25,900	25,300
28	24,260	27,290	27,140	27,290	27,450	27,290	27,290	27,290	26,670	26,820	25,900	25,300
29	25,000	27,290	27,140	27,290	-----	27,290	27,290	28,100	26,980	26,670	25,740	25,300
30	25,590	27,290	27,140	27,290	-----	27,290	27,290	28,430	26,980	26,670	25,740	25,300
31	27,450	-----	27,140	27,290	-----	27,290	-----	28,430	-----	26,670	25,740	-----
(†)	1,375.1	1,375.0	1,374.9	1,375.0	1,375.1	1,375.0	1,375.0	1,375.7	1,374.8	1,374.6	1,374.0	1,373.7
(*)	+4,320	-160	-150	+150	+160	-160	0	+1,140	-1,450	-310	-930	-440
(††)	147	134	136	133	120	133	131	150	184	219	267	211
MAX	27,450	30,110	27,290	27,290	29,430	27,450	28,920	28,430	28,100	27,290	27,290	25,740
MIN	22,720	27,290	26,820	27,290	27,450	27,290	27,140	27,290	26,670	26,670	25,740	25,000

CAL YR 1974..... * +1,090

WTR YR 1975..... * +2,170

†† 1,990

†† 1,960

MAX 30,110

MAX 30,110

MIN 21,380

MIN 22,720

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use.

BRAZOS RIVER BASIN

333

06099000 Leon Reservoir near Ranger, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	
JAN., 1975										
23...	1105	3.3	48	9.1	43	6.2	126	0	44	
JULY										
30...	1045	2.7	58	12	54	6.0	144	0	52	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JAN., 1975										
23...	84	.5	300	160	54	1.5	563	8.3	9.5	
JULY										
30...	110	--	366	190	76	1.7	670	8.1	29.0	

BRAZOS RIVER BASIN

08099100 Leon River near De Leon, Tex.

LOCATION.--Lat 32°10'25", long 98°31'58", Comanche County, on left bank at downstream end of bridge on State Highway 16, 1.5 miles (2.4 km) upstream from Flat Creek, 4.4 miles (7.1 km) northeast of De Leon, and 6 miles (10 km) downstream from Hog Creek.

DRAINAGE AREA.--463 mi² (1,199 km²).

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,209.93 ft (368.787 m) above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 53.7 ft³/s (1.521 m³/s), 38,910 acre-ft/yr (48.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,520 ft³/s (43.0 m³/s) Nov. 1 (gage height, 11.04 ft or 3.365 m); no flow at times. Period of record: Maximum discharge, 7,540 ft³/s (214 m³/s) Jan. 21, 1968 (gage height, 15.50 ft or 4.724 m); no flow for many days.

A stage of 19.3 ft (5.88 m) occurred in May 1908 at a point 2,000 ft (610 m) downstream from gage site and is the highest since that time, from information by local resident.

REMARKS.--Records good. Flow partly regulated by Leon Reservoir (station 08099000). Numerous diversions above station for municipal, steam powerplant operation, and other uses. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	1,140	11	17	346	21	8.2	13	136	1.7	.42	
2	16	986	10	24	704	20	6.8	13	95	.95	1.6	
3	15	537	8.9	36	871	19	7.2	19	69	22	1.3	
4	15	325	7.6	28	786	16	6.6	21	50	19	3.6	
5	14	211	7.6	22	592	16	5.3	24	37	13	.94	
6	14	141	7.6	21	428	16	6.0	24	28	15	.30	
7	13	110	7.5	18	293	16	22	17	22	9.3	.06	
8	12	91	8.3	17	214	14	1,060	12	18	5.0	0	
9	11	74	7.4	18	161	11	625	8.8	13	3.2	0	
10	10	97	7.6	17	123	11	365	38	77	2.9	0	
11	9.4	123	12	20	104	10	261	55	59	2.5	0	
12	8.5	108	14	13	87	9.2	178	15	27	1.6	0	
13	9.5	88	13	12	74	11	129	10	17	.95	0	
14	9.9	73	10	14	67	12	102	13	12	.54	0	
15	110	58	8.6	11	58	10	83	15	8.5	.29	0	
16	19	48	7.9	11	54	7.3	68	9.7	6.4	.18	0	
17	6.9	41	7.1	10	49	7.6	57	5.9	4.1	.10	0	
18	3.3	38	6.6	10	44	144	49	5.3	1.7	.08	0	
19	2.0	35	6.3	9.4	39	52	42	4.4	.93	.16	0	
20	1.3	32	6.9	10	35	39	31	32	.52	.11	0	
21	.87	27	6.6	9.2	33	33	26	33	.30	.07	0	
22	.81	24	6.2	8.0	30	28	25	9.9	.21	.02	0	
23	.80	23	5.5	7.4	34	24	23	6.8	.20	0	0	
24	2.1	21	5.5	7.7	36	21	22	19	.16	0	0	
25	21	20	5.5	8.0	30	15	21	57	.57	10	0	
26	15	17	14	8.1	25	12	20	19	.59	88	0	
27	6.6	13	20	8.0	23	12	18	314	.54	12	0	
28	55	13	17	7.5	21	13	17	100	.54	3.5	0	
29	106	11	15	7.1	-----	11	16	431	.82	1.9	0	
30	57	11	13	7.1	-----	11	15	352	3.3	1.1	0	
31	1,190	-----	15	7.4	-----	9.8	-----	222	-----	.53	0	-----
TOTAL	1,861.08	4,536	299.2	423.9	5,361	651.9	3,315.1	1,918.8	689.38	215.68	8.22	0
MEAN	60.0	151	9.65	13.7	191	21.0	111	61.9	23.0	6.96	.27	0
MAX	1,190	1,140	20	36	871	144	1,060	431	136	88	3.6	0
MIN	.80	11	5.5	7.1	21	7.3	5.3	4.4	.16	0	0	0
AC-FT	3,690	9,000	593	841	10,630	1,290	6,580	3,810	1,370	428	16	0
CAL YR 1974	TOTAL	8,091.50	MEAN	22.2	MAX	1,190	MIN	0	AC-FT	16,050		
WTR YR 1975	TOTAL	19,280.26	MEAN	52.8	MAX	1,190	MIN	0	AC-FT	38,240		

08099300 Sabana River near De Leon, Tex.

LOCATION.--Lat 32°06'50", long 98°36'19", Comanche County, on left bank at downstream end of bridge on Farm Road 587, 0.6 mile (1.0 km) downstream from Spring Branch, 4.0 miles (6.4 km) west of De Leon, and 4.2 miles (6.8 km) upstream from Turkey Creek.

DRAINAGE AREA.--263 mi² (681 km²).

PERIOD OF RECORD.--September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,209.59 ft (368.683 m) above mean sea level. Prior to Nov. 22, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--15 years, 36.8 ft³/s (1.042 m³/s), 26,600 acre-ft/yr (32.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,820 ft³/s (79.9 m³/s) Oct. 31 (gage height, 19.28 ft or 5.877 m); no flow Aug. 12-28; Sept 1-22.

Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) June 12, 1967 (gage height, 22.05 ft or 6.721 m); no flow at times. Maximum stage since at least 1890, 24 ft (7.3 m) in May 1908, from information by local resident.

REMARKS.--Records fair. Flow slightly regulated by Nabors Lake (capacity unknown) on Spring Branch. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	500	4.9	22	258	11	1.5	33	30	5.0	1.9	0
2	1.7	83	4.6	25	454	10	2.1	15	18	5.3	187	0
3	1.2	69	4.3	28	294	9.3	2.4	9.0	13	27	106	0
4	.81	51	4.3	25	213	8.1	1.9	5.1	9.2	61	24	0
5	.51	42	4.3	19	114	8.1	1.1	4.6	6.8	30	9.3	0
6	.37	32	4.4	14	67	8.1	.98	4.4	5.2	12	3.7	0
7	.33	28	3.8	12	48	8.1	7.0	6.0	4.4	4.1	1.6	0
8	.33	34	3.8	9.9	40	7.5	566	4.2	3.7	.50	.44	0
9	.30	34	3.8	9.5	35	7.0	171	2.8	3.1	.14	.20	0
10	.24	41	4.7	9.0	29	6.1	55	7.0	34	.11	.12	0
11	.24	87	5.8	8.1	28	5.3	60	42	29	.11	.05	0
12	.24	52	10	8.1	26	6.1	41	13	12	2.9	0	0
13	.43	31	10	7.3	22	8.1	30	6.6	5.6	4.1	0	0
14	62	24	8.2	7.3	21	8.1	24	6.1	3.3	.66	0	0
15	100	19	6.2	8.1	19	7.0	22	4.4	2.5	.14	0	0
16	59	17	5.5	9.5	19	6.5	19	7.0	2.1	.07	0	0
17	22	15	5.2	9.9	18	6.1	17	4.3	1.4	.06	0	0
18	9.5	14	4.9	9.5	17	6.1	15	2.9	1.2	.03	0	0
19	1.1	13	4.3	9.0	16	5.3	14	2.2	.80	.03	0	0
20	.80	12	4.3	8.6	14	4.9	11	5.0	.46	.03	0	0
21	.89	11	4.1	8.6	13	4.0	9.8	6.1	.40	.03	0	0
22	.80	9.9	3.5	7.3	13	3.4	9.2	3.3	.40	.02	0	0
23	.63	9.0	3.5	6.6	12	2.9	8.9	3.8	.38	.01	0	.11
24	8.9	8.1	4.1	6.6	13	2.1	8.8	3.0	.31	.01	0	.06
25	147	7.3	3.5	6.6	14	1.7	6.2	11	.26	6.4	0	.06
26	77	6.9	7.3	6.2	14	1.5	4.7	21	18	218	0	.06
27	27	5.9	19	6.2	13	1.3	4.5	191	16	50	0	.06
28	46	5.5	20	6.2	13	1.3	5.3	66	34	18	0	.06
29	163	5.5	15	6.2	-----	1.1	4.8	224	11	7.5	.01	.06
30	69	5.5	14	5.9	-----	1.5	33	365	2.9	3.5	.02	.06
31	1,570	-----	16	5.5	-----	1.5	-----	60	-----	1.6	.01	-----
TOTAL	2,373.82	1,272.6	217.3	330.7	1,857	169.1	1,157.18	1,138.8	269.41	458.35	334.35	.53
MEAN	76.6	42.4	7.01	10.7	66.3	5.45	38.6	36.7	8.98	14.8	10.8	.018
MAX	1,570	500	20	28	454	11	566	365	34	218	187	.11
MIN	.24	5.5	3.5	5.5	12	1.1	.98	2.2	.26	.01	0	0
AC-FT	4,710	2,520	431	656	3,680	335	2,300	2,260	534	909	663	1.1

CAL YR 1974 TOTAL 5,710.06 MEAN 15.6 MAX 1,570 MIN 0 AC-FT 11,330
WTR YR 1975 TOTAL 9,579.14 MEAN 26.2 MAX 1,570 MIN 0 AC-FT 19,000

PEAK DISCHARGE (BASE, 1,500 FT³/S).--Oct. 31 (1700) 2,820 ft³/s (19.28 ft).

08099400 Proctor Lake near Proctor, Tex.

LOCATION.--Lat 31°58'07", long 98°29'09", Comanche County, in intake structure at Proctor Lake on Leon River, 2.0 miles (3.2 km) upstream from U.S. Highways 67 and 377, and 3.5 miles (5.6 km) west of Proctor.

DRAINAGE AREA.--1,265 mi² (3,276 km²).

PERIOD OF RECORD.--Contents: January 1963 to current year. Prior to October 1970, published as Proctor Reservoir.
Water quality: Chemical analyses: January 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to May 28, 1963, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 74,570 acre-ft (91.9 hm³) Nov. 14 (elevation, 1,165.06 ft or 355.110 m); minimum, 51,330 acre-ft (63.3 hm³) Sept. 29, 30 (elevation, 1,160.17 ft or 353.620 m).
Period of record: Maximum contents, 137,500 acre-ft (170 hm³) Jan. 26, 1968 (elevation, 1,174.84 ft or 358.091 m); minimum since first filling of lake, 26,620 acre-ft (32.8 hm³) Sept. 14, 1967 (elevation, 1,152.82 ft or 351.380 m).

REMARKS.--The lake is formed by a reinforced concrete gated structure and rolled earthfill section, total length 13,460 ft (4,103 m). The lake was operated as a detention basin from Jan. 30 to July 5, 1963. The gates were closed July 6, 1963, but lake was operated to elevation 1,156.0 ft (352.35 m) until construction was completed. Deliberate impoundment began Sept. 30, 1963. The spillway is a gated concrete gravity structure located on the left bank, with an ogee weir section and stilling basin. The spillway is controlled by eleven 40.0- by 35.0-foot (12.2- by 10.7-metre) tainter gates. The spillway was designed to discharge 431,800 ft³/s (12,200 m³/s) at an elevation of 1,201.0 ft (366.06 m). The lake is operated for flood control and water conservation. One major reservoir partly regulates the inflow (see station 08099000). At end of year, flow from 131 mi² (339 km²) above this station was partly controlled by 21 floodwater-retarding structures with a combined capacity of 36,640 acre-ft (45.2 hm³) below the flood-spillway crests, of which 3,690 acre-ft (4.55 hm³) is sediment-pool capacity. One structure was built during the current year and has a capacity below flood-spillway crest of 1,420 acre-ft (1.75 hm³) of which 205 acre-ft (0.253 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. The capacity table was based on a survey made in 1946. Borrow is not included in capacity totals. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	1,206.0	-
Design flood.....	1,201.0	427,500
Top of gates.....	1,197.0	374,200
Crest of spillway (top of conservation pool).....	1,162.0	59,400
Lowest gated outlet (invert).....	1,128.0	68

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,160.0	50,620	1,164.0	69,060
1,162.0	59,390	1,166.0	79,660

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52,160	68,320	71,810	68,220	60,600	54,760	56,130	59,440	65,820	59,390	58,340	54,370
2	52,120	70,770	71,600	68,020	63,390	54,720	56,130	59,440	66,070	59,300	58,470	54,190
3	51,990	72,740	71,450	67,680	65,570	54,800	56,080	59,530	66,120	59,390	58,700	54,020
4	51,900	73,470	71,290	67,280	67,750	54,800	56,000	59,440	66,120	59,480	58,700	53,850
5	51,860	73,730	71,140	66,930	69,520	54,800	56,040	59,440	66,120	59,720	58,610	53,800
6	51,900	73,890	71,140	66,490	70,240	54,850	56,080	59,440	66,210	59,810	58,520	53,670
7	51,860	73,990	70,880	65,990	69,720	54,980	57,430	59,480	66,210	59,760	58,380	53,460
8	51,780	73,990	70,720	65,300	69,320	54,940	60,370	59,580	66,160	59,720	58,200	53,290
9	51,730	74,040	70,460	64,660	68,310	54,980	63,340	59,580	66,160	59,620	58,020	53,160
10	51,690	74,200	70,620	63,830	67,400	55,020	64,650	59,850	66,910	59,480	57,930	53,030
11	51,650	74,410	70,570	62,980	66,560	55,070	65,040	60,130	67,160	59,300	57,700	52,940
12	51,610	74,460	70,460	62,320	65,570	55,420	65,230	60,270	67,160	59,440	57,520	52,810
13	52,030	74,520	70,360	61,470	64,650	55,330	65,280	60,370	67,160	59,440	57,290	52,520
14	53,360	74,360	70,260	60,710	63,780	55,330	65,090	60,510	67,060	59,350	57,110	52,390
15	54,720	74,140	70,100	59,960	63,010	55,550	64,500	60,410	66,960	59,160	56,980	52,300
16	55,030	74,090	70,000	59,350	62,100	55,510	63,920	60,320	66,860	58,980	56,980	52,350
17	55,120	73,990	69,790	59,170	61,350	55,600	63,340	60,270	66,710	58,890	56,890	52,260
18	55,250	73,890	69,690	59,170	60,650	55,770	62,860	60,230	66,360	58,750	56,660	52,090
19	55,250	73,730	69,580	59,170	59,900	55,910	62,060	60,180	66,360	58,660	56,490	52,180
20	55,210	73,630	69,370	59,170	59,160	56,040	61,300	60,880	66,260	58,520	56,350	52,130
21	55,120	73,470	69,270	59,210	58,610	56,130	60,550	60,970	66,160	58,430	56,130	52,390
22	55,120	73,320	69,120	59,210	58,250	56,130	59,850	61,020	65,770	58,200	55,950	52,180
23	55,120	73,470	69,060	59,260	57,430	56,310	59,440	61,070	64,890	58,060	55,770	52,010
24	55,430	73,210	68,960	59,300	56,580	56,260	59,350	61,160	64,110	57,930	55,640	51,880
25	55,610	72,950	68,820	59,300	55,950	56,170	59,390	61,210	63,300	58,340	55,380	51,750
26	55,840	72,740	68,870	59,300	55,380	56,040	59,300	61,350	62,480	58,430	55,290	51,630
27	55,930	72,590	68,820	59,350	54,800	56,350	59,390	61,960	61,770	58,750	55,070	51,460
28	56,960	72,430	68,820	59,390	54,800	56,530	59,480	62,580	61,110	58,700	54,940	51,420
29	57,590	72,280	68,820	59,440	-----	56,400	59,480	63,200	60,370	58,610	54,800	51,330
30	58,000	72,020	68,820	59,530	-----	56,170	59,480	64,740	59,720	58,470	54,530	51,330
31	62,510	-----	68,670	59,680	-----	56,130	-----	65,530	-----	58,340	54,500	-----
(†)	1,162.66	1,164.57	1,163.93	1,162.06	1,160.98	1,161.28	1,162.02	1,163.29	1,162.07	1,161.77	1,160.91	1,160.17
(*)	+10,310	+9,510	-3,350	-8,990	-4,880	+1,330	+3,350	+6,050	-5,810	-1,380	-3,840	-3,170
MAX	62,510	74,520	71,810	68,220	70,240	56,530	65,280	65,530	67,160	59,810	58,700	54,370
MIN	51,610	68,320	68,670	59,170	54,800	54,720	56,000	59,440	59,720	57,930	54,500	51,330
CAL YR 1974.....	* +10,760			MAX 74,520			MIN 38,600					
WTR YR 1975.....	* -870			MAX 74,520			MIN 51,330					

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

BRAZOS RIVER BASIN

337

08099400 Proctor Lake near Proctor, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
JAN., 1975									
23...	1320	4.6	50	16	63	6.2	144	0	46
JULY									
30...	1500	4.5	50	21	100	7.3	132	0	62

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHUS)	PH (UNITS)	TEMPERATURE (DEG C)
JAN., 1975									
23...	120	.5	377	190	73	2.0	713	7.9	10.5
JULY									
30...	190	--	500	210	100	3.0	913	7.5	34.0

BRAZOS RIVER BASIN

08099500 Leon River near Hasse, Tex.

LOCATION.--Lat 31°57'28", long 98°27'32", Comanche County, on left bank at downstream side of bridge on U.S. Highways 67 and 377, 500 ft (150 m) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 0.3 mile (0.5 km) upstream from Walnut Creek, 2.0 miles (3.2 km) downstream from Proctor Lake, 2.1 miles (3.4 km) northeast of Hasse, and at mile 236.0 (379.7 km).

DRAINAGE AREA.--1,268 mi² (3,284 km²).

PERIOD OF RECORD.--January 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,115.01 ft (339.855 m) above mean sea level.

AVERAGE DISCHARGE.--24 years (1939-63) prior to completion of Proctor Lake, 151 ft³/s (4.276 m³/s), 109,400 acre-ft/yr (135 hm³/yr); 12 years (1963-75) regulated, 120 ft³/s (3.398 m³/s), 86,940 acre-ft/yr (107 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 690 ft³/s (19.5 m³/s) Feb. 7 (gage height, 6.93 ft or 2.112 m); minimum, 0.03 ft³/s (0.001 m³/s) Sept. 30.

Period of record: Maximum discharge, 38,500 ft³/s (1,090 m³/s) May 24, 1952 (gage height, 21.49 ft or 6.550 m); maximum gage height, 21.72 ft (6.620 m) Oct. 4, 1959; no flow at times.

Maximum stage since at least 1858, occurred in May 1908, from information by local resident. At location about 2.5 miles (4.0 km) upstream, flood of May 1908 was 9.1 ft (2.77 m) higher than that of May 24, 1952, from information by local resident.

REMARKS.--Records good. Flow regulated by Proctor Lake (station 08099400) since October 1963. Numerous diversions above station for municipal, steam powerplant operation, and other uses.

REVISIONS (WATER YEARS).--WSP 1342: 1952. WSP 1392: 1952. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	56	92	258	36	50	3.0	7.0	6.4	118	12	29
2	4.7	82	90	274	41	39	9.4	7.5	6.8	3.5	15	28
3	4.3	96	90	272	51	19	4.6	7.5	6.8	2.9	14	30
4	4.2	109	90	268	64	8.4	2.7	6.6	6.3	3.5	12	30
5	4.3	112	88	263	73	7.7	2.8	7.5	5.9	3.3	10	30
6	4.1	113	91	274	246	7.7	2.9	9.9	5.9	2.8	10	30
7	4.3	116	91	305	682	6.5	17	6.6	5.9	2.4	9.9	30
8	4.5	116	89	362	685	4.8	27	6.3	5.8	9.3	9.9	30
9	4.4	113	86	411	681	5.0	5.6	6.3	6.3	24	9.6	23
10	4.5	117	88	435	663	5.4	61	7.5	9.9	24	9.6	7.3
11	4.5	115	88	427	650	5.1	182	13	7.1	22	9.3	4.7
12	4.4	116	86	420	633	5.3	185	7.0	6.8	15	17	42
13	4.4	116	86	414	627	7.5	185	6.6	6.6	15	37	63
14	17	116	85	408	605	4.9	232	7.8	6.4	15	28	11
15	5.4	112	84	406	557	4.7	379	7.0	5.8	14	28	9.7
16	4.6	111	83	362	508	5.3	382	6.6	5.8	14	28	9.9
17	4.3	111	83	117	460	5.0	382	6.3	5.6	14	28	9.5
18	4.2	110	82	7.9	435	7.0	382	5.9	5.3	14	29	9.3
19	4.0	109	81	18	410	4.7	379	5.8	5.0	15	27	13
20	2.6	109	80	8.4	382	4.5	382	12	5.3	15	28	17
21	2.5	108	79	6.6	370	4.4	379	8.0	5.4	19	29	20
22	2.4	107	79	13	379	4.0	377	6.0	160	23	33	18
23	2.9	107	78	7.5	384	4.7	281	6.5	385	23	41	18
24	3.2	106	80	10	374	4.9	78	7.6	391	24	41	18
25	3.8	102	79	11	367	3.8	3.1	7.7	389	25	34	18
26	3.0	101	79	7.9	365	3.7	2.3	6.8	390	15	29	18
27	3.0	99	77	8.4	285	4.8	2.3	7.0	387	20	29	14
28	12	99	77	11	51	5.6	3.7	6.8	386	19	29	2.7
29	4.1	100	77	10	-----	6.2	6.6	8.3	384	18	28	2.0
30	2.7	93	107	12	-----	4.5	7.0	7.3	325	18	29	.49
31	30	-----	216	21	-----	3.3	-----	6.8	-----	16	28	-----
TOTAL	168.8	3,177	2,761	5,828.7	11,064	257.4	4,346.0	229.5	3,328.1	566.7	721.3	585.59
MEAN	5.45	106	89.1	188	395	8.30	145	7.40	111	18.3	23.3	19.5
MAX	30	117	216	435	685	50	382	13	391	118	41	63
MIN	2.4	56	77	6.6	36	3.3	2.3	5.8	5.0	2.4	9.3	.49
AC-FT	335	6,300	5,480	11,560	21,950	511	8,620	455	6,600	1,120	1,430	1,160
CAL YR 1974	TOTAL 10,526.53			MEAN 28.8	MAX 216	MIN .04	AC-FT 20,880					
WTR YR 1975	TOTAL 33,034.09			MEAN 90.5	MAX 685	MIN .49	AC-FT 65,520					

08100000 Leon River near Hamilton, Tex.

LOCATION.--Lat 31°47'19", long 98°07'16", Hamilton County, on downstream side of bridge on U.S. Highway 281, 2.2 miles (3.5 km) upstream from Mesquite Creek, 3.6 miles (5.8 km) downstream from Bear Creek, 5.9 miles (9.5 km) north of Hamilton, and at mile 181.8 (292.5 km).

DRAINAGE AREA.--1,914 mi² (4,957 km²).

PERIOD OF RECORD.--January 1925 to September 1931, September 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 955.38 ft (291.200 m) above mean sea level. Jan. 7, 1925, to Sept. 30, 1931, nonrecording gage 1.4 miles (2.3 km) downstream at datum 1.87 ft (0.570 m) higher. Sept. 1 to Nov. 22, 1960, nonrecording gage at same site and 5.00 ft (1.524 m) higher datum. Nov. 22, 1960, to Sept. 30, 1972, recording gage at same site and 5.00 ft (1.524 m) higher datum.

AVERAGE DISCHARGE.--6 years (1925-31) unregulated, 130 ft³/s (3.682 m³/s), 94,180 acre-ft/yr (116 hm³/yr); 15 years (1960-75) regulated, 176 ft³/s (4.984 m³/s), 127,500 acre-ft/yr (157 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,470 ft³/s (127 m³/s) Apr. 8 (gage height, 23.85 ft or 7.269 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 22, 23.

Period of record: Maximum discharge, 18,600 ft³/s (527 m³/s) Sept. 9, 1962 (gage height, 31.93 ft or 9.732 m); no flow at times. Maximum stage since at least 1858, 38.4 ft (11.70 m) in May 1908 and December 1913; flood in September 1911 reached a stage of 37.0 ft (11.28 m), all at present site and datum, from information by local residents. The flood in October 1959 reached a stage of 34.1 ft (10.39 m), present datum.

REMARKS.--Records good. Since 1960, at least 10 percent of drainage area is regulated by reservoirs, Leon Reservoir (station 08099000) and Proctor Lake (station 08099400). Numerous diversions above station for irrigation, municipal supply, and industrial uses. At end of year, flow from 44.6 mi² (116 km²) above this station was partly controlled by 16 floodwater-retarding structures with a combined capacity of 13,050 acre-ft (16.1 hm³) below the flood-spillway crests, of which 1,230 acre-ft (1.52 hm³) is sediment-pool capacity. Two structures were built during the current year and have a combined capacity below flood-spillway crests of 242 acre-ft (0.298 hm³), of which 25 acre-ft (0.031 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Recording rain gage located at station.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	543	115	181	309	197	51	90	94	279	18	3.7
2	16	113	112	227	430	129	48	87	78	180	37	4.7
3	15	74	107	251	383	119	44	86	68	103	47	5.3
4	14	88	104	248	322	103	43	83	61	111	26	4.5
5	13	99	104	243	275	92	48	82	56	134	21	4.4
6	12	90	106	239	244	84	45	81	53	71	15	3.9
7	13	147	104	240	241	79	485	79	50	43	12	6.0
8	13	174	98	255	492	71	3,570	77	47	26	8.8	7.0
9	12	140	92	279	551	68	1,220	73	46	21	6.7	6.3
10	12	216	99	302	565	68	341	69	44	17	5.3	7.1
11	12	214	161	330	565	66	261	81	45	18	4.0	6.4
12	12	161	131	335	560	66	338	155	50	22	3.4	5.5
13	12	150	107	328	553	101	322	85	47	29	2.6	4.2
14	279	137	95	328	553	112	364	86	41	20	2.0	2.8
15	646	128	88	319	541	97	361	91	36	15	1.6	39
16	161	137	80	322	520	79	471	80	33	17	1.4	11
17	84	136	75	307	493	75	484	67	30	11	2.4	5.7
18	53	136	73	197	468	152	439	60	28	10	3.0	3.6
19	40	142	71	82	450	147	432	56	25	9.3	3.3	2.2
20	32	126	69	52	430	86	430	64	24	7.6	5.3	1.4
21	28	117	68	45	418	73	428	199	22	6.8	4.3	1.4
22	26	124	73	44	410	66	424	165	24	5.9	3.5	1.3
23	24	132	69	41	421	62	427	96	22	5.2	3.6	1.3
24	24	134	67	41	436	57	400	160	252	6.7	2.5	8.7
25	44	126	64	42	425	53	214	194	334	199	4.3	8.2
26	47	126	77	39	418	52	129	110	350	85	12	8.0
27	34	119	89	41	412	53	104	157	398	38	8.7	8.0
28	241	117	87	39	401	50	98	86	301	21	5.9	8.3
29	678	120	87	36	-----	51	92	128	304	15	2.5	8.3
30	181	114	89	37	-----	53	92	138	288	13	2.8	7.4
31	944	-----	90	40	-----	53	-----	132	-----	11	3.1	-----
TOTAL	3,739	4,380	2,851	5,510	12,286	2,614	12,205	3,197	3,251	1,550.5	279.0	195.6
MEAN	121	146	92.0	178	439	84.3	407	103	108	50.0	9.00	6.52
MAX	944	543	161	335	565	197	3,570	199	398	279	47	39
MIN	12	74	64	36	241	50	43	56	22	5.2	1.4	1.3
AC-FT	7,420	8,690	5,650	10,930	24,370	5,180	24,210	6,340	6,450	3,080	553	388
CAL YR 1974	TOTAL	19,020.48	MEAN	52.1	MAX	1,890	MIN	0	AC-FT	37,730		
WTR YR 1975	TOTAL	52,058.10	MEAN	143	MAX	3,570	MIN	1.3	AC-FT	103,300		

08100500 Leon River at Gatesville, Tex.

LOCATION.--Lat 31°25'58", long 97°45'42", Coryell County, on right bank at upstream side of county road bridge, 800 ft (240 m) downstream from U.S. Highway 84 bridge in Gatesville, 0.3 mile (0.5 km) downstream from Dodds Creek, 5.2 miles (8.4 km) upstream from Cottonwood Creek, and at mile 104.8 (168.6 km).

DRAINAGE AREA.--2,365 mi² (6,125 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 723.85 ft (220.629 m) above mean sea level. Oct. 1, 1950, to Feb. 8, 1951, nonrecording gage; Feb. 9, 1951, to Jan 21, 1969, water-stage recorder; all at site 800 ft (240 m) upstream at same datum.

AVERAGE DISCHARGE.--25 years, 273 ft³/s (7.731 m³/s), 197,800 acre-ft/yr (244 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,200 ft³/s (346 m³/s) Oct. 31 (gage height, 28.42 ft or 8.662 m); minimum daily, 8.2 ft³/s (0.23 m³/s) Sept. 28, 29.

Period of record: Maximum discharge, 51,200 ft³/s (1,450 m³/s) Oct. 4, 1959 (gage height, 34.14 ft or 10.406 m), from rating curve extended above 41,000 ft³/s (1,160 m³/s); no flow at times in 1951-52, 1954-55, and 1971.

Maximum stage since at least 1854, 35 ft (10.7 m) in May 1908, from information by local residents.

REMARKS.--Records good. Some upstream regulation by two major reservoirs. For statement regarding upstream reservoirs and regulation by Soil Conservation Service floodwater-retarding structures, see Leon River near Hamilton (station 08100000). Numerous diversions above station for irrigation, municipal supply, and oilfield operation. The city of Hamilton reported that 442 acre-ft (545,000 m³) was diverted above station during the water year for municipal use and 444 acre-ft (547,000 m³) was returned to the Leon River as sewage effluent. The city of Gatesville reported that 448 acre-ft (552,000 m³) of sewage effluent was discharged into the Leon River below station during the water year.

REVISIONS.--WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	1,200	195	189	1,560	488	119	322	327	418	23	19
2	38	1,320	190	203	3,860	404	112	251	279	384	403	16
3	32	446	190	299	3,660	258	106	251	234	362	229	14
4	26	352	185	349	2,210	227	102	299	202	544	106	11
5	22	289	183	353	1,250	215	99	232	179	313	74	10
6	20	282	188	340	836	200	99	271	163	175	56	11
7	19	418	182	333	638	186	855	308	150	188	48	11
8	17	405	178	329	554	170	5,040	221	140	114	43	12
9	16	419	171	333	710	162	4,630	205	131	80	37	13
10	15	428	206	358	958	160	4,790	194	125	62	33	13
11	14	389	300	396	964	157	1,410	190	116	51	28	12
12	13	410	300	474	926	157	556	187	110	44	25	11
13	12	348	261	487	873	161	485	214	107	38	22	14
14	12	308	223	488	838	214	527	402	103	35	18	15
15	15	289	203	475	811	224	521	285	99	39	17	14
16	336	272	189	463	789	216	493	239	92	48	15	17
17	261	269	179	455	755	208	525	223	83	40	14	16
18	126	264	173	453	693	207	596	197	74	37	14	36
19	81	261	168	409	636	226	582	169	67	33	13	29
20	57	253	163	257	596	254	551	262	60	25	13	50
21	45	244	160	141	572	203	528	293	57	21	12	30
22	37	232	157	126	550	163	519	314	77	18	11	15
23	31	226	157	113	529	149	517	462	57	15	10	11
24	30	277	157	116	518	137	515	1,990	48	13	9.5	9.7
25	39	252	150	112	529	126	508	1,840	46	12	11	8.6
26	36	222	161	106	523	120	408	578	287	11	11	8.6
27	38	211	169	105	505	118	283	399	348	113	10	8.5
28	52	208	182	99	493	118	227	440	424	93	11	8.2
29	489	208	186	98	-----	117	264	1,010	406	57	11	8.2
30	405	210	185	97	-----	113	1,240	1,080	381	41	13	12
31	7,050	-----	198	103	-----	118	-----	436	-----	27	17	-----
TOTAL	9,431	10,912	5,889	8,659	28,336	5,976	27,207	13,764	4,972	3,451	1,357.5	463.8
MEAN	304	364	190	279	1,012	193	907	444	166	111	43.8	15.5
MAX	7,050	1,320	300	488	3,860	488	5,040	1,990	424	544	403	50
MIN	12	208	150	97	493	113	99	169	46	11	9.5	8.2
AC-FT	18,710	21,640	11,680	17,180	56,200	11,850	53,970	27,300	9,860	6,850	2,690	920
CAL YR 1974	TOTAL	43,264.89	MEAN	119	MAX	7,050	MIN	.14	AC-FT	85,820		
WTR YR 1975	TOTAL	120,418.30	MEAN	330	MAX	7,050	MIN	8.2	AC-FT	238,800		

08101000 Cowhouse Creek at Pidcoke, Tex.

LOCATION.--Lat 31°17'05", long 97°53'05", Coryell County, on left bank 125 ft (38 m) downstream from bridge on Farm Road 116, 0.1 mile (0.2 km) downstream from Beehouse Creek, 0.6 mile (1.0 km) northeast of Pidcoke, and 4.9 miles (7.9 km) upstream from Table Rock Creek.

DRAINAGE AREA.--455 mi² (1,178 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.71 ft (224.549 m) above mean sea level.

AVERAGE DISCHARGE.--25 years, 94.7 ft³/s (2.682 m³/s), 68,610 acre-ft/yr (84.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,800 ft³/s (674 m³/s) Oct. 31 (gage height, 30.10 ft or 9.174 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Sept. 30.

Period of record: Maximum discharge, 66,200 ft³/s (1,870 m³/s) Oct. 4, 1959 (gage height, 40.1 ft or 12.22 m, from floodmark), from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement of 55,800 ft³/s (1,580 m³/s); no flow at times.

Maximum stage since at least 1882, that of Oct. 4, 1959, from information by local resident.

REMARKS.--Records good. No known diversion above station.

REVISIONS (WATER YEARS).--WSP 1712: 1955. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	674	65	90	1,680	124	67	146	261	46	17	5.7
2	18	260	61	91	3,410	114	62	92	216	91	28	5.3
3	16	182	58	117	1,630	105	57	92	189	74	106	5.1
4	15	187	57	113	1,350	103	55	92	164	123	52	5.1
5	14	157	59	92	707	103	55	87	154	113	39	5.4
6	13	138	61	83	536	103	57	277	143	92	21	5.1
7	13	338	57	78	442	100	1,710	118	133	55	17	4.6
8	12	441	56	76	397	93	5,380	87	130	42	15	4.5
9	12	272	52	72	346	88	697	81	136	71	13	4.6
10	11	266	73	70	316	90	407	74	160	70	13	4.5
11	11	255	230	71	305	88	313	211	118	34	12	4.1
12	10	183	160	95	277	88	241	138	107	28	12	3.9
13	9.9	144	108	96	256	95	207	89	99	26	11	3.9
14	9.9	124	90	102	246	136	199	710	92	26	10	3.9
15	14	110	81	98	235	106	187	182	85	25	9.6	3.9
16	14	102	75	88	229	111	162	114	80	25	9.2	4.6
17	26	99	68	82	220	108	148	84	74	29	8.7	4.2
18	21	96	64	81	211	124	140	81	67	41	8.5	4.0
19	16	96	61	79	200	106	121	72	60	30	8.2	3.6
20	14	91	58	72	194	88	107	114	55	24	7.9	4.2
21	12	83	55	66	190	82	100	192	67	21	7.4	3.9
22	11	76	54	65	188	80	100	102	83	19	7.2	4.1
23	12	90	54	62	184	78	103	92	58	18	7.2	3.6
24	15	110	53	67	180	74	100	2,590	51	17	6.8	3.3
25	21	81	52	74	180	69	92	1,150	49	78	6.7	3.1
26	18	72	68	68	171	68	86	386	51	69	6.5	2.8
27	16	66	87	63	162	73	81	525	66	30	6.6	2.7
28	46	65	85	60	137	83	92	439	69	20	7.9	2.7
29	81	79	81	60	-----	70	604	1,080	57	17	7.5	2.5
30	43	75	86	61	-----	72	754	534	51	15	6.4	2.4
31	6,730	-----	91	67	-----	71	-----	334	-----	14	6.1	-----
TOTAL	7,294.8	5,012	2,360	2,459	14,579	2,893	12,484	10,365	3,129	1,383	494.4	121.3
MEAN	235	167	76.1	79.3	521	93.3	416	334	104	44.6	15.9	4.04
MAX	6,730	674	230	117	3,410	136	5,380	2,590	261	123	106	5.7
MIN	9.9	65	52	60	137	68	55	72	49	14	6.1	2.4
AC-FT	14,470	9,940	4,680	4,880	28,920	5,740	24,760	20,560	6,210	2,740	981	241
CAL YR 1974	TOTAL	23,990.39	MEAN	65.7	MAX	6,730	MIN	0	AC-FT	47,580		
WTR YR 1975	TOTAL	62,574.50	MEAN	171	MAX	6,730	MIN	2.4	AC-FT	124,100		

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0515	30.10	23,800	4-29	2300	12.83	4,900
2- 2	0145	14.72	6,370	5-24	1715	19.28	10,500
4- 8	0400	26.42	11,600				

08102000 Belton Lake near Belton, Tex.

LOCATION.--Lat 31°06'22", long 97°28'28", Bell County, in intake structure at Belton Dam on Leon River, 1.6 miles (2.6 km) upstream from bridge on State Highway 317, 3.5 miles (5.6 km) north of Belton, 8.9 miles (14.3 km) upstream from Nolan Creek, and at mile 16.8 (27.0 km).

DRAINAGE AREA.--3,560 mi² (9,220 km²).

PERIOD OF RECORD.--Contents: March 1954 to current year. Prior to October 1970, published as Belton Reservoir.
Water quality: Chemical analyses: October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels of Corps of Engineers). Prior to Feb. 20, 1955, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 622,300 acre-ft (767 hm³) Nov. 14 (elevation, 606.73 ft or 184.931 m); minimum, 438,300 acre-ft (540 hm³) Oct. 30 (elevation, 593.25 ft or 180.823 m).
Period of record: Maximum contents, 870,300 acre-ft (1,070 hm³) June 6, 1957 (elevation, 620.45 ft or 189.113 m); minimum since initial filling, 113,400 acre-ft (140 hm³) Dec. 16, 1956 (elevation, 553.06 ft or 168.573 m).

REMARKS.--The lake is formed by a rolled earthfill dam 5,524 ft (1,684 m) long, including a 1,300-foot (396-metre) uncontrolled broad-crested spillway in a saddle near left end of dam and a 418-foot-long (127-metre) dike. Deliberate impoundment began Mar. 8, 1954, and dam was completed in December 1954. The lake was built for flood control and conservation storage. The controlled outlet works consist of a 22.0-foot-diameter (6.7-metre) conduit that is controlled by three 7.0- by 22.0-foot (2.1- by 6.7-metre) broome-type gates. The service outlet consists of one 36- by 36-inch (914- by 914-millimetre) gated outlet that discharges into the flood-control conduit. The capacity table prior to June 1973 was based on surveys dated 1936, 1937, and 1948. Subsequent to June 1973, the table is based on a survey made in 1961. During year, the city of Temple diverted 6,560 acre-ft (8.09 hm³) from river channel downstream for municipal use. There are many small diversions upstream for irrigation, municipal supply, and oilfield operations. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Leon River near Hamilton (station 08100000). Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	662.0	-
Design flood.....	656.9	1,876,700
Crest of spillway.....	631.0	1,091,300
Top of conservation pool.....	594.0	447,500
Service outlet (invert).....	540.0	53,370
Lowest gated outlet (invert).....	483.0	11

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

REVISIONS.--WSP 1922: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

592.0	423,200	603.0	567,400
595.0	460,000	606.0	611,100
597.0	485,800	609.0	658,000
600.0	485,800		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499,900	586,800	608,700	552,400	451,800	487,200	448,000	452,000	515,100	458,000	445,600	442,900
2	497,000	594,300	606,600	549,100	478,500	484,200	448,000	451,200	514,200	459,300	446,400	442,500
3	493,800	598,400	604,700	544,900	498,800	480,800	447,600	450,500	511,000	460,000	448,900	442,300
4	490,900	599,500	602,900	539,800	513,600	475,500	447,500	450,300	507,100	460,800	450,600	442,100
5	488,000	599,500	601,700	536,000	522,400	470,300	447,600	450,700	503,100	461,500	451,000	442,100
6	485,100	600,400	600,200	530,600	526,500	465,400	447,700	452,500	499,400	461,700	451,000	441,700
7	482,300	605,700	598,000	524,500	525,300	461,300	449,400	453,600	495,200	461,000	449,200	441,300
8	479,300	609,000	595,800	518,800	525,000	455,700	465,600	451,800	491,300	459,800	447,400	441,100
9	476,600	612,400	593,500	510,200	521,600	451,000	473,900	449,700	490,600	456,600	447,200	440,900
10	473,700	617,200	593,000	500,400	519,700	448,100	483,200	450,500	491,700	455,000	447,100	440,800
11	470,600	620,400	592,700	491,800	520,400	446,900	489,200	452,100	492,500	452,200	446,900	440,200
12	467,300	621,200	591,400	483,800	520,100	447,700	491,400	453,000	493,000	450,800	446,700	440,100
13	464,500	622,300	590,400	476,300	519,600	447,900	491,000	454,000	491,000	449,200	446,600	439,700
14	462,800	620,600	588,800	471,400	518,800	448,000	488,800	457,700	485,800	447,500	446,200	439,500
15	459,400	619,200	587,400	467,000	518,600	448,000	483,300	458,600	481,200	446,700	446,100	439,100
16	456,300	618,400	585,300	462,400	517,500	449,000	477,600	459,100	476,700	446,000	446,000	441,200
17	453,800	617,100	583,300	458,800	516,500	448,600	472,800	459,800	473,700	445,900	445,600	441,100
18	451,600	616,100	581,700	455,500	515,000	448,400	470,200	460,300	470,300	446,000	445,500	440,600
19	449,900	615,500	580,000	451,200	512,700	448,100	467,000	460,100	467,100	445,800	445,000	440,600
20	448,700	613,700	578,000	449,500	510,100	447,900	463,600	458,800	464,100	445,600	444,900	440,900
21	448,000	612,000	575,800	449,500	508,300	447,600	460,500	457,500	461,400	445,600	444,600	440,800
22	447,900	610,500	573,700	449,600	506,300	447,200	457,100	455,600	458,100	445,400	444,600	440,500
23	448,100	612,100	572,700	449,200	503,300	447,500	454,200	460,800	455,000	444,100	444,400	440,100
24	448,500	612,800	571,100	449,100	500,400	447,500	450,600	475,100	451,800	445,000	444,100	439,800
25	448,600	613,100	568,600	449,100	498,300	447,200	448,400	484,500	450,300	445,000	443,800	439,500
26	448,900	614,100	566,700	448,700	495,600	447,900	447,500	490,000	450,000	444,900	443,900	439,200
27	448,900	614,100	565,000	448,400	492,600	448,100	446,700	493,400	453,600	444,800	443,900	438,900
28	449,000	612,900	563,400	448,500	490,000	448,700	446,200	495,800	455,000	444,800	443,800	438,500
29	449,200	612,600	561,900	448,500	-----	448,600	446,900	503,900	456,100	444,800	443,400	438,400
30	461,300	610,500	559,800	448,200	-----	448,100	450,100	509,900	457,100	444,600	443,300	438,400
31	563,200	-----	557,600	448,500	-----	448,100	-----	513,400	-----	444,500	443,000	-----
(+)	602.70	605.96	602.30	594.08	597.32	594.05	594.21	599.08	594.77	593.76	593.64	593.26
(*)	+60,900	+47,300	-52,900	-109,100	+41,500	-41,900	+2,000	+63,300	-56,300	-12,600	-1,500	-4,600
(††)	1,370	1,240	1,200	1,270	1,150	1,330	1,430	1,480	1,660	1,790	1,900	1,670
MAX	563,200	622,300	608,700	552,400	526,500	487,200	491,400	513,400	515,100	461,700	451,000	442,900
MIN	447,900	586,800	557,600	448,200	451,800	446,900	446,200	449,700	450,000	444,500	443,000	438,400
CAL YR 1974.....	* +110,500				†† 18,430	MAX 622,300				MIN 404,300		
WTR YR 1975.....	* -63,900				†† 17,490	MAX 622,300				MIN 438,400		

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, for municipal use by Bell County Water Control and Improvement District.

BRAZOS RIVER BASIN

343

08102000 Belton Lake near Belton, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)
FEB. 19...	1255	6.3	49	7.2	17	3.2	166	0
JUNE 06...	0900	6.6	52	9.5	18	3.0	181	0
SEP. 17...	1030	6.2	46	10	20	3.2	165	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
FEB. 19...	25	27	.3	.23	.18	.02	217	150	16
JUNE 06...	23	26	.3	.14	.00	.01	228	170	21
SEP. 17...	23	30	.2	.00	.00	.01	220	160	21

DATE	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
FEB. 19...	.6	374	8.0	13.0	10.6	100	10	0
JUNE 06...	.6	418	7.9	24.5	7.4	88	30	20
SEP. 17...	.7	406	8.2	27.0	5.9	73	70	10

BRAZOS RIVER BASIN

08102500 Leon River near Belton, Tex.

LOCATION.--Lat 31°04'12", long 97°26'28", Bell County, on left bank 1,400 ft (427 m) upstream from bridge on Farm Road 817, 2,000 ft (610 m) upstream from concrete dam, 1.0 mile (1.6 km) upstream from bridge on U.S. Highway 81, 2.0 miles (3.2 km) northeast of Belton, 3.2 miles (5.1 km) downstream from Belton Dam, 5.0 miles (8.0 km) upstream from Nolan Creek, and at mile 13.0 (20.9 km).

DRAINAGE AREA.--3,572 mi² (9,251 km²).

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 476.68 ft (145.292 m) above mean sea level. Prior to May 21, 1931, non-recording gage.

AVERAGE DISCHARGE.--30 years (1923-53) unregulated, 659 ft³/s (18.66 m³/s), 477,400 acre-ft/yr (589 hm³/yr); 22 years (1953-75) regulated, 579 ft³/s (16.40 m³/s), 419,500 acre-ft/yr (517 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,700 ft³/s (161 m³/s) Jan. 9 (gage height, 8.02 ft or 2.444 m); minimum daily, 8.4 ft³/s (0.24 m³/s) Sept. 29.

Period of record: Maximum discharge, 56,500 ft³/s (1,600 m³/s) Apr. 22, 1945 (gage height, 24.41 ft or 7.440 m); no flow at times.

Flood in December 1913 reached a stage of 25 ft (7.6 m), and flood in September 1921 reached a stage of 21 ft (6.4 m), from information by local residents.

REMARKS.--Records good. The city of Temple reported that during the year 6,560 acre-ft (8.09 hm³) was diverted from gage pool for municipal use, 2,770 acre-ft (3.42 hm³) of treated sewage effluent was returned to Little Elm Creek, and 3,320 acre-ft (4.09 hm³) of treated sewage effluent was returned to the Leon River below station. Flow regulated by Belton Lake (station 08102000) since Mar. 8, 1954.

REVISIONS (WATER YEARS).--WSP 1442: 1925(M), 1935(M), 1936, 1938(M), 1941-42(M), 1944-45(M). WSP 1712: 1937(M). WSP 1922: Drainage area, 1938.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,570	52	1,520	2,980	520	2,820	326	338	69	72	25	32
2	1,750	47	1,520	3,080	241	2,820	324	987	1,520	76	29	27
3	1,750	472	1,520	3,020	71	3,150	318	983	2,620	196	36	13
4	1,750	1,060	1,520	3,010	74	3,690	246	990	2,810	365	65	14
5	1,750	1,050	1,520	2,990	64	3,670	198	495	2,810	357	41	13
6	1,740	1,050	1,520	3,420	621	3,670	196	76	2,810	357	25	12
7	1,740	1,060	1,520	4,030	2,530	3,660	201	915	2,820	493	641	15
8	1,740	536	1,520	4,600	3,570	3,650	200	1,930	2,820	1,150	933	11
9	1,740	58	1,520	5,230	3,560	3,650	203	1,230	1,380	1,800	26	15
10	1,730	61	1,530	5,690	3,060	2,510	805	57	68	1,810	21	20
11	1,730	78	1,520	5,670	2,250	990	1,540	61	70	1,470	21	17
12	1,730	534	1,510	5,670	2,260	741	1,550	63	62	1,080	21	16
13	1,740	1,100	1,510	4,730	2,260	492	1,550	65	1,370	1,080	22	18
14	1,740	1,290	1,510	3,500	2,260	498	2,420	68	3,070	912	19	19
15	1,730	1,490	1,510	3,500	2,270	714	3,890	59	3,070	475	14	13
16	1,730	1,500	1,510	3,500	2,260	714	3,930	60	2,620	179	13	23
17	1,730	1,490	1,510	3,130	2,260	716	3,540	60	1,920	131	14	17
18	1,730	1,500	1,510	2,810	2,550	713	2,750	59	1,920	64	12	17
19	1,090	1,490	1,510	2,810	2,820	714	2,750	752	1,910	31	11	16
20	633	1,490	1,510	1,620	2,820	714	2,750	1,380	1,910	30	10	20
21	476	1,490	1,510	509	2,820	714	2,750	1,380	1,920	29	11	23
22	52	1,490	1,520	509	2,820	718	2,750	1,370	1,920	27	13	26
23	49	1,500	1,520	509	2,820	487	2,750	856	1,920	25	22	29
24	50	671	1,530	509	2,820	331	2,740	130	1,920	26	19	28
25	52	56	1,530	509	2,810	328	1,940	73	1,420	24	16	27
26	51	55	1,520	509	2,820	329	1,280	60	428	25	14	29
27	48	544	1,520	509	2,820	328	1,100	62	216	28	16	22
28	47	1,080	1,520	509	2,820	331	991	62	73	23	23	10
29	47	1,080	1,510	509	-----	329	485	72	75	20	30	8.4
30	179	1,340	1,750	520	-----	327	70	69	76	23	30	9.0
31	700	-----	2,400	520	-----	326	-----	69	-----	23	32	-----
TOTAL	34,594	26,714	48,150	80,611	60,871	44,844	46,543	14,831	47,617	12,401	2,225	559.4
MEAN	1,116	890	1,553	2,600	2,174	1,447	1,551	478	1,587	400	71.8	18.6
MAX	1,750	1,500	2,400	5,690	3,570	3,690	3,930	1,930	3,070	1,810	933	32
MIN	47	47	1,510	509	64	326	70	57	62	20	10	8.4
AC-FT	68,620	52,990	95,510	159,900	120,700	88,950	92,320	29,420	94,450	24,600	4,410	1,110
CAL YR 1974	TOTAL 136,399.9		MEAN 374		MAX 2,400		MIN 4.0		AC-FT 270,500			
WTR YR 1975	TOTAL 419,960.4		MEAN 1,151		MAX 5,690		MIN 8.4		AC-FT 833,000			

08102600 Nolan Creek at Belton, Tex.

LOCATION.--Lat 31°03'06", long 97°27'25", Bell County, on left bank 43 ft (13 m) downstream from northbound service road of Interstate Highway 35, 0.5 mile (0.8 km) southeast of the courthouse at Belton, and 3.1 miles (5.0 km) upstream from mouth.

DRAINAGE AREA.--112 mi² (290 km²).

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Water-stage recorder. Datum at gage is 480.84 ft (146.560 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 36,100 ft³/s (1,020 m³/s) Oct. 31 (gage height, 26.90 ft or 8.199 m); minimum, 16 ft³/s (0.45 m³/s) Sept. 29.

Period of record: Maximum discharge, 36,100 ft³/s (1,020 m³/s) Oct. 31, 1974 (gage height, 26.90 ft or 8.199 m); minimum, 6.8 ft³/s (0.19 m³/s) July 22, 1974.

Maximum stages since at least 1900, 26.90 ft (8.199 m) Oct. 31, 1974. Floods in December 1913, September 1921, May 1957, and May 1965 reached a stage of 24.5 ft (7.47 m), from information by local residents.

REMARKS.--Records good. Low flow is sustained by sewage effluent from Fort Hood Military installation and by the cities of Killeen, Nolanville, and Harker Heights. Records indicate that 13,120 acre-ft (16.2 hm³) of treated sewage effluent was returned to the stream above station during the current year. At end of year, flow from 47.4 mi² (123 km²) above this station was partly controlled by 13 floodwater-retarding structures with a combined capacity of 16,850 acre-ft (20.8 hm³) below the flood-spillway crests, of which 1,420 acre-ft (1.75 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	747	85	98	189	79	51	38	161	79	42	23
2	48	644	82	111	1990	76	48	36	147	72	76	22
3	45	574	80	136	771	74	46	37	139	87	114	22
4	44	596	78	92	715	79	47	53	131	131	53	23
5	43	507	79	86	367	77	47	254	126	73	54	24
6	41	440	93	81	274	76	49	56	122	64	40	23
7	41	959	79	79	228	72	61	102	115	58	37	23
8	40	559	71	78	202	66	113	702	112	56	34	22
9	40	439	68	76	163	64	67	118	220	53	32	22
10	38	489	140	84	150	69	53	85	113	59	34	24
11	38	399	254	77	144	67	51	276	113	189	32	24
12	36	356	119	257	128	68	47	156	104	71	30	23
13	36	316	97	130	120	200	48	85	103	91	29	22
14	51	277	88	126	115	96	54	425	96	49	29	21
15	96	248	84	107	109	72	49	112	90	49	28	22
16	44	200	80	98	108	139	47	80	88	49	28	49
17	38	133	74	94	103	87	47	65	85	46	27	44
18	39	121	73	94	102	87	47	58	81	67	27	27
19	37	116	71	92	95	68	44	56	78	46	28	23
20	35	105	69	84	94	62	41	101	78	42	26	57
21	35	97	67	83	91	60	40	73	76	40	26	43
22	37	95	66	80	94	59	42	56	76	41	33	28
23	36	143	70	78	99	59	41	981	71	39	44	24
24	39	159	70	84	90	54	41	2290	70	39	41	22
25	64	100	69	82	84	52	41	521	96	38	33	22
26	43	93	83	79	81	54	38	371	76	37	29	21
27	39	89	84	79	80	69	37	251	1190	35	35	21
28	38	86	76	78	81	59	58	174	229	35	55	20
29	43	96	82	78	---	56	53	432	165	36	33	20
30	72	105	82	80	---	50	39	241	97	38	27	21
31	8370	---	142	104	---	49	---	186	---	37	24	---
TOTAL	9696	9288	2755	2985	6867	2299	1487	8471	4448	1846	1180	782
MEAN	313	310	88.9	96.3	245	74.2	49.6	273	148	59.5	38.1	26.1
MAX	8370	959	254	257	1990	200	113	2290	1190	189	114	57
MIN	35	86	66	76	80	49	37	36	70	35	24	20
AC-FT	19230	18420	5460	5920	13620	4560	2950	16800	8820	3660	2340	1550
CAL YR 1974	TOTAL	37666	MEAN 103	MAX 8370	MIN 13	AC-FT 74710						
WTR YR 1975	TOTAL	52104	MEAN 143	MAX 8370	MIN 20	AC-FT 103300						

BRAZOS RIVER BASIN

08103800 Lampasas River near Kempner, Tex.

LOCATION.--Lat 32°04'54", long 98°00'59", Lampasas County, on left bank 800 ft (240 m) upstream from centerline of U.S. Highway 190, 0.6 mile (1.0 km) upstream from Mesquite Creek, 0.8 mile (1.3 km) west of Kempner, 0.9 mile (1.4 km) downstream from Sulphur Creek, and at mile 76.7 (123.4 km).

DRAINAGE AREA.--817 mi² (2,116 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.38 ft (252.490 m) above mean sea level. Prior to Aug. 4, 1967, at site 800 ft (240 m) downstream.

AVERAGE DISCHARGE.--13 years, 153 ft³/s (4.333 m³/s), 110,800 acre-ft/yr (137 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,750 ft³/s (248 m³/s) May 24 (gage height, 11.60 ft or 3.536 m); minimum daily, 29 ft³/s (0.82 m³/s) Sept. 19.

Period of record: Maximum discharge, 71,000 ft³/s (2,010 m³/s) May 16, 1965 (gage height, 32.98 ft or 10.052 m); minimum daily, 1.4 ft³/s (0.040 m³/s) July 17, 1971.

Maximum stage since at least 1871 occurred in September 1873 (stage unknown). Flood of May 13, 1957, reached a stage of 37 ft (11.3 m), and flood of Oct. 4, 1959, reached a stage of 34 ft (10.4 m), from information by local residents.

REMARKS.--Records good. Records furnished by the city of Lampasas show that 1,707 acre-ft (2.10 hm³) of water was diverted from Sulphur Creek and 719 acre-ft (0.887 hm³) of sewage effluent was returned to the creek above station. At end of year, flow from 114 mi² (295 km²) above this station was partly controlled by 12 floodwater-retarding structures with a combined capacity of 36,550 acre-ft (45.1 hm³) below the flood-spillway crests, of which 1,990 acre-ft (2.45 hm³) is sediment-pool capacity. One structure was built during the current year and has a combined capacity below flood-spillway crests of 2,790 acre-ft (3.44 hm³) of which 200 acre-ft (0.247 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. There are many small diversions above station for irrigation and municipal supply, amount unknown. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	407	130	162	1,710	276	124	288	526	133	62	34
2	39	224	124	164	3,350	259	114	193	453	123	677	34
3	37	163	123	203	2,030	248	105	174	403	141	923	34
4	35	154	123	188	1,950	250	99	183	365	171	125	32
5	35	160	123	172	1,260	249	99	944	335	550	89	31
6	34	139	127	163	1,030	249	101	854	314	227	76	32
7	34	551	122	159	890	239	1,040	544	293	154	69	32
8	34	507	111	159	849	214	3,990	328	283	124	63	32
9	34	346	108	153	735	206	857	271	363	110	59	32
10	33	361	124	155	676	221	501	222	286	150	55	32
11	32	306	348	141	648	216	404	410	266	137	53	31
12	31	243	204	180	555	217	343	454	249	101	51	31
13	31	226	163	188	511	234	326	280	238	305	49	31
14	32	199	147	184	492	240	325	781	214	154	48	30
15	56	178	142	184	468	212	299	284	193	119	47	30
16	63	177	131	176	456	218	263	219	179	185	46	35
17	47	177	126	167	420	226	245	189	169	131	44	33
18	41	173	120	166	397	317	241	175	153	12	44	30
19	38	173	119	166	365	279	209	161	140	101	42	29
20	37	157	117	156	353	210	187	246	129	93	41	39
21	35	146	115	153	350	189	180	389	137	86	40	35
22	35	146	109	155	347	174	185	262	148	81	39	35
23	35	151	110	153	329	162	188	284	133	75	39	34
24	37	238	110	167	314	146	180	2,640	120	71	41	32
25	49	160	111	189	302	133	164	1,710	106	124	38	31
26	57	146	143	170	289	125	144	756	110	132	35	31
27	46	140	177	158	280	144	143	662	574	87	46	31
28	42	135	152	156	276	284	157	725	191	72	69	31
29	41	143	149	156	-----	143	183	971	175	67	43	31
30	47	146	149	156	-----	140	1,130	923	152	69	37	31
31	3,070	-----	159	179	-----	135	-----	648	-----	64	36	-----
TOTAL	4,257	6,572	4,316	5,178	21,632	6,555	12,526	17,170	7,397	4,249	3,126	965
MEAN	137	219	139	167	773	211	418	554	247	137	101	32.2
MAX	3,070	551	348	203	3,350	317	3,990	2,640	574	550	923	39
MIN	31	135	108	141	276	125	99	161	106	64	35	29
AC-FT	8,440	13,040	8,560	10,270	42,910	13,000	24,850	34,060	14,670	8,430	6,200	1,910

CAL YR 1974 TOTAL 30,593.8 MEAN 83.8 MAX 3,200 MIN 4.8 AC-FT 60,680
WTR YR 1975 TOTAL 93,943.0 MEAN 257 MAX 3,990 MIN 29 AC-FT 186,300

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1430	10.96	7,620	5-6	2030	9.07	4,710
2-2	1745	9.60	5,460	5-24	2030	11.60	8,750
4-8	0800	10.31	6,550	8-2	2130	9.33	5,070

08103900 South Fork Rocky Creek near Briggs, Tex.
(Hydrologic bench-mark station)

LOCATION.--Lat 30°54'41", long 98°02'12", Burnet County, on upstream side of bridge on Ranch Road 963, 6 miles (10 km) above confluence with North Fork Rocky Creek, and 7 miles (11 km) west of Briggs.

DRAINAGE AREA.--34.2 mi² (88.6 km²).

PERIOD OF RECORD.--Discharge: April 1963 to current year.

Water quality: Chemical analyses: October 1961 to January 1964. Chemical, biochemical, and pesticide analyses: January 1968 to current year. Sediment records: February 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 955.8 ft (291.33 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 11.9 ft³/s (0.337 m³/s), 4.73 in/yr (120 mm/yr), 8,620 acre-ft/yr (10.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,540 ft³/s (129 m³/s) Oct. 31 (gage height, 10.63 ft or 3.240 m); minimum, 0.22 ft³/s (0.006 m³/s) Sept. 29, 30.

Period of record: Maximum discharge, 11,900 ft³/s (337 m³/s) May 16, 1965 (gage height, 13.82 ft or 4.212 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of 3,580 ft³/s (101 m³/s) and area-velocity study; no flow for many days each year from 1963-74.

Maximum stage since at least 1904, 18 ft (5.5 m) in September 1921, from information by local residents.

REMARKS.--Discharge records good. Three recording rain gages located in watershed, one at station and two above station.

REVISIONS (WATER YEARS).--WRD Texas: 1974: 1972-73 (P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	65	26	17	36	25	7.4	3.1	54	13	1.5	.53
2	28	55	26	19	242	23	6.8	2.9	48	15	24	.46
3	26	49	24	18	176	22	6.3	2.8	44	14	11	.36
4	25	47	23	17	138	23	6.3	65	40	11	3.9	.31
5	23	43	23	17	99	22	6.3	42	37	9.0	2.9	.39
6	22	43	23	16	84	21	6.4	9.7	35	7.9	2.4	1.1
7	21	160	20	16	78	19	8.3	162	32	6.9	2.1	.96
8	20	107	19	16	74	17	11	47	31	6.2	1.9	.58
9	19	89	18	16	65	18	7.5	24	49	5.5	1.8	.48
10	17	97	29	15	63	18	6.4	20	77	6.0	1.7	.42
11	16	76	33	16	59	17	6.2	22	39	25	1.6	.35
12	15	68	22	23	53	17	5.7	22	33	8.6	1.4	.29
13	16	65	20	18	51	22	5.6	18	28	7.4	1.3	.27
14	19	57	19	20	49	17	5.7	24	25	6.0	1.2	.30
15	33	56	19	19	47	16	5.6	17	22	5.5	1.1	.31
16	18	55	18	18	46	16	5.3	16	21	5.4	1.0	.48
17	15	52	17	17	43	15	4.9	14	19	5.3	.85	1.3
18	14	50	17	17	40	15	4.7	13	17	4.9	.77	.92
19	13	48	16	17	37	13	4.2	13	15	4.3	.72	.52
20	12	42	15	16	37	12	3.9	46	14	3.7	.63	.67
21	12	41	15	16	35	11	3.8	23	16	3.5	.59	2.2
22	11	39	14	15	35	11	3.8	18	18	3.1	.48	1.1
23	11	38	14	15	33	11	3.8	157	13	2.7	.47	.71
24	13	35	13	16	31	9.7	3.7	326	12	2.3	.47	.54
25	16	32	13	16	29	8.8	3.4	107	23	2.2	.41	.47
26	12	32	19	15	27	9.0	3.1	77	15	2.1	.36	.37
27	11	30	16	15	26	9.8	2.8	65	37	1.9	7.6	.35
28	11	29	14	14	26	8.7	6.0	60	17	1.8	5.0	.31
29	10	29	15	14	-----	8.2	5.3	162	14	1.6	1.5	.28
30	12	29	15	14	-----	8.1	3.6	73	12	2.0	.92	.26
31	533	-----	17	15	-----	8.0	-----	62	-----	1.6	.65	-----
TOTAL	1,054	1,658	592	513	1,759	471.3	163.8	1,713.5	857	195.4	82.22	17.59
MEAN	34.0	55.3	19.1	16.5	62.8	15.2	5.46	55.3	28.6	6.30	2.65	.59
MAX	533	160	33	23	242	25	11	326	77	25	24	2.2
MIN	10	29	13	14	26	8.0	2.8	2.8	12	1.6	.36	.26
CFSM	.99	1.62	.56	.48	1.84	.44	.16	1.62	.84	.18	.08	.02
IN.	1.15	1.80	.64	.56	1.91	.51	.18	1.86	.93	.21	.09	.02
AC-FT	2,090	3,290	1,170	1,020	3,490	935	325	3,400	1,700	388	163	35

CAL YR 1974 TOTAL 8,159.86 MEAN 22.4 MAX 762 MIN 0 CFSM .66 IN 8.88 AC-FT 16,190
WTR YR 1975 TOTAL 9,076.81 MEAN 24.9 MAX 533 MIN .26 CFSM .73 IN 9.87 AC-FT 18,000

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE
10-31	0330	10.63	4,540
5-7	1845	5.80	1,280
5-24	1500	7.26	2,010

BRAZOS RIVER BASIN

08103900 South Fork Rocky Creek near Briggs, Tex.--Continued
(Hydrologic Bench-Mark Station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
NOV. 11...	1210	72	10	71	24	7.5	4.1	338	0
JAN. 23...	1715	15	7.6	63	27	8.2	.6	324	0
MAR. 06...	1745	21	7.0	60	28	7.9	1.7	316	0
MAY 05...	1445	19	7.6	40	17	6.2	2.5	194	0
JUNE 02...	1730	47	8.3	66	27	8.3	1.3	314	0
AUG. 26...	1545	.3	11	50	27	9.3	1.7	282	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
NOV. 11...	14	9.5	--	.01	304	307	--	280	0
JAN. 23...	19	10	.4	.16	241	296	--	270	3
MAR. 06...	21	15	.5	.01	288	297	--	270	11
MAY 05...	15	11	.4	.01	211	195	--	170	11
JUNE 02...	15	10	.4	.00	290	291	1	280	18
AUG. 26...	15	15	.4	.11	256	268	--	240	5

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 11...	.2	550	7.9	17.5	8.8	92	88	26	73
JAN. 23...	.2	536	7.9	13.0	10.0	94	4	2	33
MAR. 06...	.2	530	7.0	20.5	9.1	100	6	0	13
MAY 05...	.2	346	7.5	23.0	7.8	90	39000	3800	10000
JUNE 02...	.2	513	8.1	26.5	8.0	98	1000	36	10
AUG. 26...	.3	476	7.5	29.5	9.3	121	260	55	580

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	CYANIDE (CN) (MG/L)
NOV. 11...	1210	--	--	--	--	--	.01
JUNE 02...	1730	0	0	<10	10	10	.02

DATE	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 11...	--	--	--	--	--	--
JUNE 02...	20	<100	.0	0	<10	10

BRAZOS RIVER BASIN

349

08103900 South Fork Rocky Creek near Briggs, Tex.--Continued
(Hydrologic Bench-Mark Station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)
JUNE 02...	1730	47	26.5	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL PCB (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
JUNE 02...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE D GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDE D GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE D GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	DIS- SOLVED NATURAL URANIUM (U) (UG/L)
JUNE 02...	1730	47	26.5	<2.2	<.4	3.1	<.4	2.5	<.4	.04	.7

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE D SEDI- MENT (MG/L)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY)	SUS- SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 31...	1700	226	19.5	80	49	--
NOV. 11...	1210	73	17.5	8	1.6	--
DEC. 11...	1700	27	11.0	2	.15	--
JAN. 22...	1700	16	10.0	13	.56	--
23...	1715	15	13.0	4	.16	41
MAR. 04...	1600	25	13.5	0	.00	--
06...	1745	21	20.5	12	.68	--
APR. 15...	1730	5.5	22.0	1	.01	--
MAY 05...	1445	19	23.0	20	1.0	90
27...	1030	67	23.0	47	8.5	--
JUNE 02...	1730	47	26.5	7	.89	--
JULY 07...	1100	7.2	27.0	3	.06	--
AUG. 18...	1000	.72	25.5	4	.01	--
26...	1545	.36	29.5	0	.00	--

BRAZOS RIVER BASIN

08104000 Lampasas River at Youngsfort, Tex.

LOCATION.--Lat 30°57'26", long 97°42'30", Bell County, on left bank 600 ft (180 m) downstream from county road low-water crossing, 2,000 ft (610 m) downstream from bridge on county road, 0.7 mile (1.1 km) east of Youngsfort, 4.5 miles (7.2 km) downstream from Rocky Creek, and at mile 40.8 (65.6 km).

DRAINAGE AREA.--1,244 mi² (3,222 km²).

PERIOD OF RECORD.--February 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 630.88 ft (192.29 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 14, 1931, nonrecording gage, and Mar. 14, 1931, to Mar. 11, 1965, water-stage recorder at site 1,000 ft (305 m) upstream at datum 2.58 ft (0.786 m) higher.

AVERAGE DISCHARGE.--51 years, 282 ft³/s (7.986 m³/s), 204,300 acre-ft/yr (252 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 36,400 ft³/s (1,030 m³/s) Oct. 31 (gage height, 30.13 ft or 9.184 m); minimum, 44 ft³/s (1.25 m³/s) Sept. 30.

Period of record: Maximum discharge, 87,900 ft³/s (2,490 m³/s) May 17, 1965 (gage height, 37.7 ft or 11.49 m, from floodmarks), from rating curve extended above 40,000 ft³/s (1,130 m³/s) on basis of maximum discharge of May 13, 1957, measured at highway bridge 22 miles (35 km) downstream; no flow at times in 1925, 1934, 1950-52, 1954, 1956, 1963-67, 1971.

Maximum stage since at least 1873, 45.2 ft (13.78 m) Sept. 8, 1873, from information by local residents at time the former gage was established 1,000 ft (305 m) upstream, adjusted to present site and datum.

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Lampasas River near Kempner (station 08103800).

REVISIONS (WATER YEARS).--WSP 788: 1926, 1928, 1931. WSP 1632: 1957. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	1,880	777	409	592	639	361	575	1,080	374	123	64
2	274	1,250	726	400	5,630	621	339	382	948	374	274	61
3	251	1,020	676	445	4,080	598	312	330	884	400	1,930	57
4	236	1,000	633	445	3,670	598	308	409	823	370	409	55
5	222	857	598	418	2,330	603	299	1,590	770	525	232	54
6	211	777	569	409	1,920	586	299	701	726	569	173	57
7	204	1,680	525	400	1,650	575	312	1,970	694	374	148	57
8	198	2,060	484	400	1,550	541	3,560	2,450	657	303	130	54
9	188	1,460	436	387	1,400	520	1,340	663	790	258	119	54
10	176	1,510	464	387	1,300	536	720	575	1,010	270	110	54
11	164	1,350	694	374	1,260	541	586	688	682	633	104	53
12	154	1,210	615	469	1,160	531	520	923	633	334	98	50
13	146	1,190	504	489	1,070	633	484	645	592	344	92	48
14	146	1,150	455	479	1,020	580	479	1,150	547	413	39	48
15	185	1,090	432	474	985	536	464	694	515	270	83	49
16	225	1,080	404	464	963	563	441	558	489	266	78	57
17	188	1,050	382	450	920	536	413	509	464	312	75	102
18	156	1,020	374	436	870	552	409	464	431	247	70	65
19	143	1,000	357	441	830	633	387	441	395	215	67	53
20	130	956	345	422	796	536	357	536	365	192	65	64
21	123	905	339	409	783	499	339	726	357	173	62	92
22	119	864	325	404	770	489	339	592	404	159	61	71
23	117	843	316	395	751	469	348	1,180	357	148	62	61
24	121	870	312	395	732	450	339	3,090	330	138	64	57
25	138	905	299	413	707	427	321	4,180	445	128	62	51
26	146	927	334	418	676	413	299	1,540	357	188	59	50
27	146	963	404	387	657	422	278	1,230	1,080	176	62	48
28	130	934	391	382	651	474	291	1,250	615	135	85	48
29	123	891	374	378	-----	436	308	1,800	445	114	110	46
30	293	850	361	387	-----	374	898	1,770	395	123	80	44
31	22,800	-----	400	400	-----	378	-----	1,250	-----	123	70	-----
TOTAL	28,144	33,542	14,305	12,966	39,723	16,289	16,150	34,761	18,280	8,648	5,246	1,724
MEAN	908	1,118	461	418	1,419	525	538	1,121	609	279	169	57.5
MAX	22,800	2,060	777	489	5,630	639	3,560	4,180	1,080	633	1,930	102
MIN	117	777	299	374	592	374	278	330	330	114	59	44
AC-FT	55,820	66,530	28,370	25,720	78,790	32,310	32,030	68,950	36,260	17,150	10,410	3,420
CAL YR 1974	TOTAL 132,160.5 MEAN 362 MAX 22,800 MIN 2.8 AC-FT 262,100											
WTR YR 1975	TOTAL 229,778.0 MEAN 630 MAX 22,800 MIN 44 AC-FT 455,800											

PEAK DISCHARGE (BASE, 5,800 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1000	30.13	36,400	5-8	0030	12.46	9,850
2-2	1645	12.06	9,360	5-25	0330	11.41	8,530

08104050 Stillhouse Hollow Lake near Belton, Tex.

LOCATION.--Lat 31°01'20", long 97°31'57", Bell County, in intake structure at Stillhouse Hollow Dam on Lampasas River, 5 miles (8 km) southwest of Belton, and at mile 16 (26 km).

DRAINAGE AREA.--1,318 mi² (3,414 km²).

PERIOD OF RECORD.--Contents: September 1966 to current year. Prior to October 1970, published as Stillhouse Hollow Reservoir.
Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 334,600 acre-ft (413 hm³) Nov. 27 (elevation, 635.70 ft or 193.761 m); minimum, 233,900 acre-ft (288 hm³) May 3 (elevation, 621.72 ft or 189.500 m).

Period of record: Maximum contents, 334,600 acre-ft (413 hm³) Nov. 27, 1974 (elevation, 635.70 ft or 193.761 m); minimum since conservation storage was reached in Apr. 12, 1969, 196,600 acre-ft (242 hm³) July 23, 1971 (elevation, 615.55 ft or 187.620 m).

REMARKS.--The lake is formed by a rolled earthfill dam 15,624 ft (4,762 m) long, including a 1,650-foot (503-metre) spillway and a 5,894-foot (1,796-metre) dike. The lake was operated as a temporary detention basin from Sept. 2, 1966, to Feb. 19, 1968. Deliberate impoundment began Feb. 19, 1968. The lake was built for flood control and water conservation. The emergency spillway is an uncontrolled broad-crested weir 1,650 ft (503 m) long located near right end of dam. A 12.0-foot-diameter (3.7-metre) conduit is controlled by two 5.67-foot by 12.0-foot (1.73- by 3.7-metre) slide gates at an invert elevation of 515.0 ft (156.97 m). The capacity curve is based on maps prepared by Brazos River Authority in 1927 and supplemented by contour maps prepared by the Corps of Engineers in 1958. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 08103800. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	698.0	-
Design flood.....	693.2	1,013,300
Crest of spillway.....	666.0	630,400
Top of conservation pool.....	622.0	235,700
Lowest gated outlet (invert).....	515.0	775

COOPERATION.--Records furnished by Corps of Engineers and reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)

620.0	223,100	630.0	290,800
622.0	235,700	632.0	305,800
624.0	248,800	634.0	321,100
626.0	262,300	636.0	336,900
628.0	276,400		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267,900	300,600	331,800	305,700	236,400	247,700	236,300	235,900	280,300	252,700	236,500	236,900
2	266,700	303,300	331,000	303,100	251,100	244,700	236,100	234,100	280,200	250,200	237,200	236,900
3	265,500	305,300	330,200	300,400	261,500	242,500	236,000	234,000	277,800	247,700	241,200	236,900
4	264,000	307,500	329,400	297,700	269,600	241,300	235,900	235,800	275,400	245,000	241,400	236,900
5	262,600	309,200	329,000	295,000	275,300	239,900	235,900	239,300	273,000	242,600	239,700	236,900
6	261,400	310,700	328,300	291,800	278,700	239,100	236,000	240,600	270,100	240,400	237,900	236,900
7	259,800	315,700	327,300	288,100	280,200	236,300	236,300	244,000	267,400	238,200	236,000	236,900
8	258,600	320,200	326,200	283,400	281,000	237,400	243,300	247,700	264,800	237,000	235,300	236,900
9	257,300	323,400	325,300	278,300	281,200	236,500	245,900	248,100	264,100	236,300	235,400	236,900
10	255,400	327,000	325,300	272,000	281,200	236,000	246,500	249,100	266,300	236,500	235,600	236,900
11	254,400	329,500	325,100	266,200	280,700	235,800	246,600	250,600	267,400	237,300	235,700	236,800
12	253,000	331,200	324,700	260,500	279,700	235,400	246,600	252,000	268,600	237,600	235,700	236,700
13	251,500	332,200	324,000	256,000	278,700	236,000	246,700	252,400	267,900	237,700	235,700	236,500
14	250,100	332,600	323,500	252,800	277,600	235,900	247,100	251,600	265,600	237,600	235,800	236,500
15	248,800	332,600	322,700	249,800	276,500	235,900	247,900	249,600	263,000	236,800	235,900	236,500
16	247,700	332,800	321,900	246,700	275,000	235,800	248,800	246,800	259,700	235,900	236,000	237,300
17	246,900	332,800	320,900	243,800	273,700	236,000	249,600	243,600	255,000	235,400	236,000	236,900
18	245,900	333,000	320,100	240,700	272,000	236,200	250,300	240,600	252,400	235,300	236,000	235,300
19	244,900	332,900	319,300	237,600	270,500	236,500	250,800	238,600	251,300	235,200	236,000	234,900
20	243,800	332,700	318,300	235,800	268,700	236,700	251,300	238,400	249,700	235,300	236,000	235,000
21	242,800	332,200	317,400	235,800	267,100	236,700	251,900	238,400	248,300	235,600	236,000	235,100
22	241,800	331,900	316,600	236,000	265,500	236,500	252,500	238,000	247,200	235,800	236,400	234,900
23	240,800	331,900	315,900	236,200	263,700	236,200	253,000	244,800	245,900	236,000	236,500	234,800
24	239,900	332,300	314,900	236,400	261,300	235,700	253,600	254,800	244,600	236,000	236,300	234,700
25	238,900	333,200	313,900	236,500	258,600	235,500	252,700	263,000	244,300	235,900	236,300	234,600
26	238,000	334,200	313,000	236,700	256,000	235,800	250,900	267,300	243,200	235,900	236,300	234,500
27	237,100	334,300	312,400	236,500	253,100	236,000	248,900	270,000	252,700	235,800	236,600	234,500
28	236,200	333,800	311,700	236,200	250,500	236,200	247,000	271,500	254,700	235,800	236,600	234,500
29	236,000	333,000	311,100	235,600	-----	236,100	243,400	273,400	255,800	235,600	236,700	234,500
30	241,200	332,200	310,000	235,500	-----	236,100	239,600	275,700	255,200	235,600	236,900	234,500
31	296,400	-----	308,300	235,500	-----	236,200	-----	278,200	-----	235,500	236,900	-----
(†)	630.75	635.41	632.34	621.97	624.25	622.07	622.60	628.25	624.95	621.97	622.18	621.81
(*)	+27,300	+35,800	-23,900	-72,800	+15,000	-14,300	+3,400	+38,600	-23,000	-19,700	+1,400	-2,400
MAX	296,400	334,300	331,800	305,700	281,200	247,700	253,600	278,200	280,300	252,700	241,400	237,300
MIN	236,000	300,600	308,300	235,500	236,400	235,400	235,900	234,000	243,200	235,200	235,300	234,500
CAL YR 1974.....	* +72,300				MAX	334,300	MIN	217,600				
WTR YR 1975.....	* -34,600				MAX	334,300	MIN	234,000				

† Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

BRAZOS RIVER BASIN

08104050 Stillhouse Hollow Lake near Belton, Tex.--Continued

WATER QUALITY DATA

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT., 1974									
08...	1450	6.3	37	16	30	3.2	157	0	18
JULY, 1975									
11...	1300	7.3	35	18	23	3.9	173	0	20

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT., 1974									
08...	55	--	243	160	30	1.0	465	8.1	--
JULY, 1975									
11...	33	.3	226	160	20	.8	411	8.2	31.0

LOCATION.--Lat 31°00'06", long 97°29'32", Bell County, on left bank 22 ft (7 m) upstream from upstream bridge of three bridges on Interstate Highway 35 and U.S. Highway 81, 3.5 miles (5.6 km) downstream from Stillhouse Hollow Dam, 4.1 miles (6.6 km) southwest of Belton, and at mile 12.7 (20.4 km).

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 476.58 ft (145.262 m) above mean sea level, adjustment unknown (Texas Highway Department bench mark).

AVERAGE DISCHARGE.--12 years, 282 ft³/s (7.986 m³/s), 204,300 acre-ft/yr (252 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,990 ft³/s (141 m³/s) Oct. 31 (gage height, 16.36 ft or 4.987 m); minimum daily, 4.5 ft³/s (0.13 m³/s) May 6.

Period of record: Maximum discharge, 77,900 ft³/s (2,210 m³/s) May 17, 1965 (gage height, 43.58 ft or 13.283 m); no flow Aug. 9, 10, 12-15, Sept. 5, 6, 1967.

Maximum stage since at least 1877, 45 ft (13.7 m) September 1921, from information by local residents. Flood of May 1957 reached a stage of 44.4 ft or 13.53 m (discharge, 83,500 ft³/s or 2,360 m³/s).

REMARKS.--Records good. Many small diversions above station for irrigation and municipal supply. Since Sept. 2, 1966, flow regulated by Stillhouse Hollow Lake (see preceding page).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	982	22	816	1,590	413	1,880	284	2,380	19	1,620	73	11
2	982	21	816	1,710	272	1,870	284	1,260	961	1,620	8.6	11
3	979	22	816	1,710	27	1,610	284	361	1,980	1,620	7.7	11
4	974	26	816	1,700	27	1,100	284	99	1,980	1,630	340	11
5	974	26	816	1,700	23	1,100	284	7.4	1,970	1,620	1,080	12
6	974	27	813	1,920	334	1,010	284	4.5	1,970	1,620	1,070	12
7	974	36	812	2,230	985	884	284	374	1,970	1,410	1,070	11
8	969	33	812	2,610	1,270	882	284	835	1,970	885	537	11
9	966	33	812	3,150	1,260	882	287	546	1,120	613	15	11
10	966	36	814	3,450	1,400	722	357	6.4	21	454	14	11
11	966	35	810	3,410	1,550	565	449	5.2	18	239	13	11
12	965	230	810	3,380	1,550	565	449	5.0	17	236	13	11
13	964	497	811	2,920	1,550	568	452	615	690	236	13	11
14	968	658	808	1,870	1,550	568	260	1,600	1,640	364	12	11
15	963	833	805	1,860	1,540	568	7.0	1,590	1,640	656	12	12
16	828	834	799	1,860	1,540	568	6.1	1,680	1,890	737	12	16
17	692	830	809	1,860	1,540	489	5.4	1,900	2,290	565	12	286
18	692	830	801	1,860	1,540	381	5.4	1,890	1,880	334	11	787
19	692	830	800	1,850	1,540	381	5.4	1,350	1,070	230	11	368
20	692	826	801	1,320	1,530	382	5.4	711	1,070	109	11	13
21	694	828	798	422	1,530	446	5.4	710	988	12	11	11
22	696	871	801	271	1,530	526	5.4	710	916	11	11	11
23	697	959	807	297	1,520	531	5.4	667	916	9.5	11	11
24	699	477	808	330	1,670	533	5.4	121	916	44	11	11
25	701	52	803	330	1,890	401	570	21	933	134	11	11
26	703	50	801	330	1,890	286	1,180	17	919	134	11	11
27	706	324	801	451	1,880	286	1,180	16	519	134	12	11
28	709	814	801	597	1,880	285	1,260	447	22	134	12	11
29	378	818	801	597	-----	284	1,950	1,420	17	121	11	11
30	19	816	966	561	-----	284	2,590	991	560	92	11	11
31	553	-----	1,270	383	-----	284	-----	21	-----	91	11	-----
TOTAL	24,717	12,694	25,654	48,529	35,231	21,121	13,312.3	22,360.5	32,872	17,714.5	4,458.3	1,748
MEAN	797	423	828	1,565	1,258	681	444	721	1,096	571	144	58.3
MAX	982	959	1,270	3,450	1,890	1,880	2,590	2,380	2,290	1,630	1,080	787
MIN	19	21	798	271	23	284	5.4	4.5	17	9.5	7.7	11
AC-FT	49,030	25,180	50,880	96,260	69,880	41,890	26,400	44,350	65,200	35,140	8,840	3,470

08104500 Little River near Little River, Tex.

LOCATION.--Lat 30°57'59", long 97°20'45", Bell County, on right bank 25 ft (8 m) downstream from State Highway 95, 2.4 miles (3.9 km) southeast of Little River, 5 miles (8 km) downstream from confluence of Leon and Lampasas Rivers, and at mile 95.8 (154.1 km).

DRAINAGE AREA.--5,274 mi² (13,660 km²).

PERIOD OF RECORD.--Discharge: October 1923 to May 1929, August 1962 to current year.

Water quality: Chemical analyses: October 1964 to current year. Water temperatures: October 1964 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 400.11 ft (121.954 m) above mean sea level. Oct. 5, 1923, to May 27, 1929, nonrecording gage on railroad bridge 0.5 mile (0.8 km) upstream at same datum.

AVERAGE DISCHARGE.--5 years (1923-28) unregulated, 709 ft³/s (20.08 m³/s), 513,700 acre-ft/yr (633 hm³/yr); 13 years (1962-75) regulated, 966 ft³/s (27.36 m³/s), 699,900 acre-ft/yr (863 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 36,500 ft³/s (1,030 m³/s) Oct. 31 (gage height, 39.94 ft or 12.174 m); minimum daily, 108 ft³/s (3.06 m³/s) Sept. 30.

Period of record: Maximum discharge, 79,600 ft³/s (2,250 m³/s) May 17, 1965 (gage height, 42.85 ft or 13.061 m); minimum daily, 8.2 ft³/s (0.23 m³/s) Aug. 6, 19, 1963.

Historic: Maximum stage since at least 1900, 46.8 ft (14.26 m) in September 1921, from information by local residents.

Water quality: Period of record: Maximum daily specific conductance (1964-73), 1,140 micromhos Oct. 28, 1964; minimum daily, 245 micromhos May 16, 1965. Maximum water temperatures, 38.0°C July 7, 1969, Sept. 15, 1972; minimum, 3.0°C Jan. 10, 1973.

REMARKS.--Discharge records good. Many small diversions for irrigation and municipal supply affect very low flows. Flow regulated by Belton Lake (station 08102000) on Leon River beginning Mar. 8, 1954, and by Stillhouse Hollow Lake (station 08104050) on the Lampasas River beginning Sept. 2, 1966. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Nolan Creek at Belton (station 08102600). Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2800	4510	2720	4700	1230	4890	751	3040	601	2430	390	144
2	3000	1450	2700	5110	5060	4870	747	2910	1640	2570	384	142
3	2990	1360	2680	5160	3450	4860	735	1630	5310	2570	466	144
4	2980	2220	2670	5080	3070	4760	707	1310	5080	2890	302	139
5	2970	2120	2670	5050	1250	4730	616	3050	5300	2970	1370	136
6	2960	1940	2690	5270	1210	4680	616	463	5270	2770	1430	143
7	2950	2570	2650	6250	3520	4470	629	980	5250	2720	1640	139
8	2950	2650	2620	7060	5170	4430	668	4430	5220	2430	2400	137
9	2940	1080	2620	8110	5140	4420	683	2960	4410	2890	351	153
10	2930	1190	2660	9370	5050	3820	833	497	657	2880	219	143
11	2920	1060	3120	9370	4360	1960	1990	321	467	3290	203	140
12	2910	997	2760	9550	4270	1560	1990	681	421	1830	186	138
13	2910	2180	2690	9170	4250	1530	2000	468	1050	1840	179	133
14	2930	2260	2660	6210	4260	1390	2260	2680	4950	1690	176	136
15	2970	2810	2640	5720	4240	1510	3910	2210	5080	1690	173	139
16	2860	2770	2620	5670	4220	1590	3950	2110	5030	1340	167	438
17	2630	2660	2620	5520	4200	1530	3880	2400	4740	1210	163	293
18	2630	2630	2610	5000	4260	1360	2880	2400	4630	811	161	831
19	2300	2630	2600	4960	4610	1310	2810	2400	3530	582	156	742
20	1600	2610	2590	4280	4600	1290	2800	2460	3430	525	154	187
21	1570	2570	2590	1440	4600	1300	2790	2430	3390	347	152	199
22	1010	2570	2590	1140	4590	1440	2800	2350	3270	324	149	146
23	944	2950	2600	1110	4570	1340	2800	5540	3260	315	229	127
24	954	3570	2590	1110	4600	1070	2790	11700	3240	306	186	119
25	990	593	2590	1110	4920	990	2630	3890	3570	392	168	116
26	979	491	2590	1090	4920	784	2670	1370	2410	415	158	113
27	965	677	2600	1160	4910	802	2580	948	6690	409	167	113
28	976	2240	2590	1390	4910	786	2530	728	1990	407	201	115
29	888	2290	2590	1390	---	768	2700	3100	1490	402	169	113
30	252	2440	2760	1380	---	758	3050	2940	793	364	155	108
31	19900	---	3640	1180	---	755	---	884	---	356	149	---
TOTAL	85558	64088	83320	140110	115440	71753	62795	75280	102169	45965	12553	5866
MEAN	2760	2136	2688	4520	4123	2315	2093	2428	3406	1483	405	196
MAX	19900	4510	3640	9550	5170	4890	3950	11700	6690	3290	2400	831
MIN	252	491	2590	1090	1210	755	616	321	421	306	149	108
AC-FT	169700	127100	165300	277900	229000	142300	124600	149300	202700	91170	24900	11640
CAL YR 1974	TOTAL	345303	MEAN	946	MAX	19900	MIN	37	AC-FT	684900		
WTR YR 1975	TOTAL	864897	MEAN	2370	MAX	19900	MIN	108	AC-FT	1716000		

08104500 Little River near Little River, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 09...	1045	2690	7.7	48	13	25	3.2	184	0	20
NOV. 01...	1045	3680	10	47	4.3	7.4	3.2	154	0	15
DEC. 19...	1530	2640	6.7	47	11	20	3.2	182	0	21
JAN. 13...	1445	9430	6.5	46	12	18	3.2	172	0	20
FEB. 05...	1415	1140	10	79	9.1	15	2.8	266	0	27
APR. 01...	1330	741	6.9	64	13	21	3.0	227	0	23
MAY 08...	1045	4550	7.4	49	7.8	15	3.4	172	0	21
JUNE 25...	1515	3400	8.3	59	13	20	2.8	214	0	24
AUG. 07...	1040	1440	9.7	57	16	17	2.2	228	0	18
SEP. 17...	0925	242	9.7	54	6.1	12	3.2	170	0	19

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 09...	40	--	248	170	22	.8	464	7.9	19.0
NOV. 01...	9.7	--	173	140	9	.3	311	7.7	20.0
DEC. 19...	32	.4	231	160	13	.7	423	8.3	13.0
JAN. 13...	31	.4	222	160	23	.6	405	8.2	10.5
FEB. 05...	19	.3	293	230	17	.4	506	8.0	12.0
APR. 01...	31	.3	274	210	27	.6	509	8.0	15.0
MAY 08...	22	.2	211	150	13	.5	391	7.6	17.5
JUNE 25...	33	.3	266	200	25	.6	480	8.0	20.5
AUG. 07...	28	--	260	210	21	.5	470	7.8	23.0
SEP. 17...	13	.9	202	160	21	.4	361	7.7	22.5

BRAZOS RIVER BASIN

08104700 North Fork San Gabriel River near Georgetown, Tex.

LOCATION.--Lat 30°39'42", long 97°42'40", Williamson County, on left bank 1.5 miles (2.4 km) upstream from Middle Fork San Gabriel River, 2.7 miles (4.3 km) upstream from Interstate Highway 35, 2.7 miles (4.3 km) northwest of Georgetown, and at mile 3.3 (5.3 km).

DRAINAGE AREA.--249 mi² (645 km²).

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 689.06 ft (210.025 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 95.5 ft³/s (2.705 m³/s), 69,190 acre-ft/yr (85.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30,100 ft³/s (852 m³/s) Oct. 31 (gage height, 24.10 ft or 7.346 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 29, 30.

Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) Sept. 17, 1974 (gage height, 26.20 ft or 7.986 m); no flow July 23-25, 1971.

Maximum stage since at least 1875, 39.5 ft (12.04 m) in September 1921. Flood in April 1957 reached a stage of 34.5 ft (10.52 m), from information by local residents.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	817	154	108	100	144	69	36	257	223	47	25
2	103	458	144	97	3,190	141	63	32	307	289	744	23
3	98	344	141	122	1,670	134	59	32	167	244	458	22
4	95	368	137	105	2,380	137	59	33	248	227	403	21
5	91	316	134	95	883	144	59	620	223	196	211	19
6	87	261	137	92	647	141	59	105	207	178	100	18
7	83	1,010	128	90	539	131	63	90	189	164	80	19
8	79	1,080	116	90	509	119	74	861	178	150	74	17
9	76	594	111	83	441	114	65	122	344	141	67	17
10	74	758	125	90	398	114	57	83	2,490	131	61	17
11	78	551	248	83	358	116	54	1,260	344	215	59	17
12	76	414	157	167	320	116	50	284	307	150	56	16
13	73	383	131	141	298	200	50	147	253	131	54	15
14	80	334	122	134	284	157	50	325	236	119	50	13
15	89	302	119	125	270	125	50	178	200	111	49	13
16	76	293	114	119	223	134	49	154	181	116	45	18
17	57	289	105	111	240	122	47	150	174	111	42	16
18	54	270	103	111	227	116	45	144	167	105	41	32
19	47	266	100	111	211	111	42	137	164	95	39	20
20	45	240	95	100	211	103	41	344	141	90	36	17
21	44	211	90	97	200	103	39	339	128	83	33	20
22	42	211	88	95	196	100	39	215	181	78	32	18
23	39	204	88	90	192	92	39	937	122	74	30	16
24	44	204	85	90	181	85	36	4,120	103	67	28	14
25	49	174	83	92	174	80	33	1,930	329	65	27	13
26	49	178	97	88	164	74	32	744	486	59	32	13
27	42	174	114	85	157	78	31	373	861	56	33	13
28	41	161	97	83	154	80	49	368	302	47	125	11
29	39	161	92	78	-----	74	78	1,300	244	54	49	11
30	52	164	92	80	-----	72	47	627	219	65	35	10
31	12,100	-----	100	85	-----	72	-----	393	-----	52	28	-----
TOTAL	14,110	11,190	3,647	3,137	14,817	3,529	1,528	16,483	9,752	3,886	3,168	514
MEAN	455	373	118	101	529	114	50.9	532	325	125	102	17.1
MAX	12,100	1,080	248	167	3,190	200	78	4,120	2,490	289	744	32
MIN	39	161	83	78	100	72	31	32	103	47	27	10
AC-FT	27,990	22,200	7,230	6,220	29,390	7,000	3,030	32,690	19,340	7,710	6,280	1,020

CAL YR 1974 TOTAL 68,500.5 MEAN 188 MAX 12,100 MIN 1.3 AC-FT 135,900
WTR YR 1975 TOTAL 85,761.0 MEAN 235 MAX 12,100 MIN 10 AC-FT 170,100

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1130	24.10	30,100	5-24	2030	11.54	6,900
2-2	1615	13.58	9,840	5-29	1730	9.07	3,870
2-4	0115	10.17	5,160	6-10	0415	10.96	6,130
5-8	0415	9.26	4,090	6-26	2400	10.31	5,330
5-11	1615	12.26	7,910	8-2	2045	10.19	5,180

08104900 South Fork San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°37'32", long 97°41'27", Williamson County, on right bank at downstream side of downstream bridge of two bridges on Interstate Highway 35, 1.1 miles (1.8 km) southwest of the courthouse at Georgetown, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--127 mi² (329 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1948, 1962-67, December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 687.72 ft (209.617 m) above mean sea level.

AVERAGE DISCHARGE.--7 years (1968-75), 49.7 ft³/s (1.408 m³/s), 36,000 acre-ft/yr (44.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,200 ft³/s (572 m³/s) Oct. 31 (gage height, 16.61 ft or 5.063 m); minimum, 3.1 ft³/s (0.088 m³/s) Sept. 29.

Period of record: Maximum discharge, 20,200 ft³/s (572 m³/s) Oct. 31, 1974 (gage height, 16.61 ft or 5.063 m); no flow July 3-25, 1971.

Maximum stage since at least 1887, about 41 ft (12.5 m) on Apr. 24, 1957, from information by local residents.

REMARKS.--Records good. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	278	69	58	59	87	42	24	154	76	60	12
2	23	166	66	54	1640	84	41	26	142	110	110	12
3	21	127	66	61	588	78	38	25	135	118	220	12
4	20	120	63	56	858	79	38	24	128	82	55	10
5	20	115	64	55	313	80	38	28	121	72	38	10
6	20	95	63	52	252	78	40	36	116	66	32	8.6
7	18	265	61	53	220	78	45	33	112	60	28	12
8	18	265	57	52	211	73	50	263	108	58	25	13
9	17	164	54	52	193	70	43	49	153	53	23	9.4
10	16	196	59	52	181	70	41	39	286	52	21	8.6
11	17	166	94	51	177	68	38	1350	142	64	20	9.0
12	16	130	68	83	160	67	36	230	116	52	18	11
13	17	122	59	77	155	95	37	91	105	51	17	12
14	19	114	57	68	148	80	36	129	98	47	16	11
15	18	106	55	64	144	67	35	82	92	44	15	9.4
16	21	108	51	61	142	66	33	69	87	46	14	16
17	17	107	50	62	131	63	33	63	83	46	12	12
18	16	101	49	63	126	59	32	62	78	45	12	12
19	15	100	48	63	119	56	30	64	72	46	11	13
20	16	93	47	57	115	53	29	193	70	43	10	14
21	14	85	47	58	113	53	27	108	68	44	7.9	23
22	14	84	49	58	110	53	28	75	72	45	7.5	15
23	14	89	49	57	107	53	28	434	78	40	8.4	12
24	17	90	49	57	102	48	26	2210	58	35	18	12
25	19	78	48	58	96	47	25	562	113	31	22	11
26	20	76	53	57	94	46	27	238	91	27	12	10
27	18	75	58	54	91	48	25	188	260	24	29	6.9
28	16	75	52	55	88	47	39	170	95	22	78	7.5
29	17	72	51	55	---	46	38	371	95	23	24	5.5
30	29	72	51	56	---	44	31	248	72	24	16	5.8
31	5610	---	56	57	---	43	---	178	---	26	13	---
TOTAL	6156	3734	1763	1816	6733	1979	1049	7662	3400	1572	992.8	335.7
MEAN	199	124	56.9	58.6	240	63.8	35.0	247	113	50.7	32.0	11.2
MAX	5610	278	94	83	1640	95	50	2210	286	118	220	23
MIN	14	72	47	51	59	43	25	24	58	22	7.5	5.5
AC-FT	12210	7410	3500	3600	13350	3930	2080	15200	6740	3120	1970	666

CAL YR 1974	TOTAL	28298.50	MEAN	77.5	MAX	5610	MIN	.72	AC-FT	56130
WTR YR 1975	TOTAL	37192.50	MEAN	102	MAX	5610	MIN	5.5	AC-FT	73770

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1230	16.61	20,200	5-11	1915	11.65	8,360
2-2	1645	10.50	6,440	5-24	2015	10.19	5,960
2-4	0030	7.34	2,490				

BRAZOS RIVER BASIN

08105000 San Gabriel River at Georgetown, Tex.

LOCATION.--Lat 30°39'13", long 97°39'19", Williamson County, at former gaging station site 100 ft (30 m) downstream from Missouri-Kansas-Texas Railroad Co. bridge, 1.2 miles (1.9 km) downstream from confluence of North and South Forks, and 1.8 miles (2.9 km) northeast of Georgetown.

DRAINAGE AREA.--399 mi² (1,033 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT. 09...	1930	11	60	16	12	1.5	246	0	22	15	--	.78
NOV. 14...	1400	11	80	15	11	1.1	306	0	20	15	--	.94
DEC. 11...	1630	11	73	18	12	1.1	288	0	23	17	.3	1.1
JAN. 23...	1600	9.0	75	17	11	.8	290	0	25	18	.2	1.2
FEB. 05...	1600	10	75	13	7.7	1.4	284	0	17	11	.2	.85
MAR. 05...	2250	7.8	76	19	11	1.1	290	0	24	17	.4	1.5
31...	1500	8.5	71	19	12	1.1	282	0	24	19	.3	1.5
MAY 06...	0830	8.1	52	11	8.7	2.3	190	0	20	13	.3	.72
JUNE 04...	1230	9.8	69	15	10	1.1	280	0	18	14	.2	.77
JULY 17...	1715	11	63	19	11	1.1	260	0	18	16	.3	.85
AUG. 27...	0845	11	65	17	14	1.3	252	0	17	21	.2	1.3
SEP. 22...	1530	11	64	17	13	1.2	258	0	17	19	--	.12

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO
OCT. 09...	.00	.05	.71	.76	.04	259	0	0	220	14	.4
NOV. 14...	.00	.04	.36	.40	.03	304	1	0	260	11	.3
DEC. 11...	.00	.04	.27	.31	.05	299	1	0	260	22	.3
JAN. 23...	.01	.01	.25	.26	.36	299	1	1	260	19	.3
FEB. 05...	.00	.01	.36	.37	.04	276	34	4	240	9	.2
MAR. 05...	.00	.01	.19	.20	.02	299	1	0	270	30	.3
31...	.01	.04	1.1	1.1	.02	294	14	3	260	24	.3
MAY 06...	.01	.08	1.3	1.4	.04	209	96	14	180	19	.3
JUNE 04...	.00	.00	1.1	1.1	.01	276	8	1	240	6	.3
JULY 17...	.01	.03	.31	.34	.00	268	4	0	240	22	.3
AUG. 27...	.01	.01	.22	.23	.03	272	4	4	230	26	.4
SEP. 22...	.01	.01	.30	.31	.01	269	6	2	230	18	.4

08105000 San Gabriel River at Georgetown, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT. 09...	474	7.8	24.5	5	1	8.3	99	.3	4.8	0	.0
NOV. 14...	538	7.6	15.0	0	1	9.4	92	.0	2.6	1	.0
DEC. 11...	523	7.8	11.0	0	1	10.9	98	.2	--	1	.1
JAN. 23...	531	7.7	13.5	0	1	10.0	95	.2	1.4	8	.1
FEB. 05...	478	8.2	12.0	0	20	--	--	.6	4.8	1	.1
MAR. 05...	528	7.5	13.5	5	1	9.8	93	.4	2.7	3	.1
31...	526	7.7	17.0	1	0	9.8	101	.0	1.7	8	.1
MAY 06...	369	7.4	23.0	10	50	7.9	91	1.6	4.5	4	.0
JUNE 04...	500	7.8	25.0	0	7	8.5	101	.0	8.9	2	.0
JULY 17...	488	7.4	26.5	0	1	8.6	105	.5	2.3	4	.0
AUG. 27...	480	7.1	25.5	0	1	7.7	93	.8	4.2	0	.0
SEP. 22...	497	7.7	20.5	0	2	9.5	104	.4	1.3	2	.4

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
DEC. 11...	1630	40	0	70	0	<10	0	3
FEB. 05...	1600	40	1	40	1	0	0	2
JUNE 04...	1230	20	1	70	0	0	0	2
AUG. 27...	0845	0	1	70	1	0	0	1

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (MG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
DEC. 11...	10	0	10	0	<.1	9	1300	0
FEB. 05...	10	3	10	0	.4	1	900	10
JUNE 04...	10	0	0	0	.0	1	1100	0
AUG. 27...	20	2	10	0	.0	1	690	10

BRAZOS RIVER BASIN

08105100 Berry Creek near Georgetown, Tex.

LOCATION.--Lat 30°41'28", long 97°39'21", Williamson County, on right bank at upstream side of upstream service road on Interstate Highway 35 and 2.9 miles (4.7 km) north of the county courthouse at Georgetown.

DRAINAGE AREA.--81.8 mi² (211.9 km²).

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 659.97 ft (201.159 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 30.7 ft³/s (0.869 m³/s), 22,240 acre-ft/yr (27.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,500 ft³/s (439 m³/s) Oct. 31 (gage height, 19.33 ft or 5.892 m); minimum, 6.6 ft³/s (0.19 m³/s) Oct. 12-14.

Period of record: Maximum discharge, 15,500 ft³/s (439 m³/s) Oct. 31, 1974 (gage height, 19.33 ft or 5.892 m); no flow at times in 1967, 1971-72.

Maximum stage since at least 1921 occurred September 1921, 25 ft (7.6 m), from information by Texas Highway Department and local residents. Discharge not determined.

REMARKS.--Records good. No regulation or diversion. Recording rain gage at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	136	36	43	34	44	27	16	68	44	23	9.6
2	7.5	73	34	38	1500	42	26	15	60	61	37	9.2
3	7.2	57	33	50	422	39	24	15	56	50	89	8.5
4	7.2	60	33	42	491	38	23	16	52	49	32	8.5
5	7.2	62	32	38	153	41	23	359	49	49	24	8.2
6	7.2	48	32	38	116	41	36	43	47	41	22	8.2
7	7.2	293	32	37	97	40	26	29	46	38	18	7.8
8	7.2	221	30	36	94	37	26	96	43	35	18	7.8
9	7.2	102	28	36	85	37	26	38	48	34	17	7.8
10	6.8	180	29	36	79	37	24	31	130	32	16	7.8
11	6.8	116	83	36	77	37	23	35	63	32	16	7.8
12	6.8	74	45	64	71	36	22	92	49	31	15	7.8
13	6.6	66	37	55	66	52	21	38	44	30	15	7.8
14	7.3	58	34	50	65	50	21	151	41	29	15	7.8
15	7.6	51	33	47	63	37	21	51	39	28	15	7.5
16	7.5	51	32	39	62	37	19	37	38	27	14	7.5
17	7.5	51	30	39	60	39	23	32	36	27	14	7.5
18	7.4	50	28	39	58	35	21	28	35	27	13	7.5
19	7.2	49	30	39	55	33	20	27	32	26	13	7.5
20	7.2	44	29	36	53	32	17	33	32	25	13	7.5
21	7.2	40	28	35	53	32	17	41	32	24	12	7.2
22	7.5	39	29	34	52	32	16	29	31	23	12	6.9
23	7.5	43	29	33	51	31	16	345	31	22	12	6.9
24	7.5	45	29	33	50	30	16	1210	31	22	12	6.9
25	7.5	39	31	33	48	29	14	271	69	21	12	6.9
26	7.5	37	34	33	46	28	14	102	141	20	11	6.9
27	7.5	36	37	32	45	28	14	78	452	20	18	6.9
28	7.5	35	36	32	44	28	17	70	60	20	11	6.9
29	7.8	35	35	31	---	28	21	281	66	20	10	6.9
30	14	36	35	30	---	27	18	137	46	20	9.9	6.9
31	4670	---	42	32	---	27	---	83	---	20	9.9	---
TOTAL	4895.6	2227	1065	1196	4090	1104	632	3829	1967	947	568.8	228.9
MEAN	158	74.2	34.4	38.6	146	35.6	21.1	124	65.6	30.5	18.3	7.63
MAX	4670	293	83	64	1500	52	36	1210	452	61	89	9.6
MIN	6.6	35	28	30	34	27	14	15	31	20	9.9	6.9
AC-FT	9710	4420	2110	2370	8110	2190	1250	7590	3900	1880	1130	454

CAL YR 1974 TOTAL 16751.29 MEAN 45.9 MAX 4670 MIN .88 AC-FT 33230
WTR YR 1975 TOTAL 22750.30 MEAN 62.3 MAX 4670 MIN 6.6 AC-FT 45130

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1115	14.33	15,500	5-23	2400	11.87	4,120
2- 2	1530	12.45	4,750	5-24	1915	9.60	2,180
2- 3	2345	9.16	1,910	5-29	1530	7.71	1,120
5- 5	0230	8.92	1,770	6-26	2400	10.90	3,200

BRAZOS RIVER BASIN

361

08105400 San Gabriel River near Circleville, Tex.

LOCATION.--Lat 30°37'43", long 97°28'23", Williamson County, on right bank at upstream side of county bridge, 2.3 miles (3.7 km) west of Circleville, 3.1 miles (5.0 km) upstream from bridge on State Highway 95, and at mile 47.4 (76.3 km).

DRAINAGE AREA.--591 mi² (1,531 km²). Area at site used prior to July 13, 1967, 602 mi² (1,559 km²).

PERIOD OF RECORD.--February 1924 to September 1934 (published as "at Circleville"), July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.62 ft (158.685 m) above mean sea level. Feb. 1, 1924, to Sept. 30, 1934, water-stage recorder at site 3.1 miles (5.0 km) downstream and at 15.35 ft (4.679 m) lower datum.

AVERAGE DISCHARGE.--18 years (1924-34, 1967-75), 196 ft³/s (5.551 m³/s), 142,000 acre-ft/yr (175 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 43,600 ft³/s (1,230 m³/s) Oct. 31 (gage height, 35.70 ft or 10.881 m); minimum daily, 56 ft³/s (1.59 m³/s) Sept. 30.

Period of record: Maximum discharge, 53,400 ft³/s (1,510 m³/s) May 29, 1929 (gage height, 34.20 ft or 10.424 m, from floodmark, former site and datum); no flow Sept. 5, 6, 8, 11, 1924, and Aug. 10-16, 1967.

Maximum stage since at least 1852, about 46 ft (14.0 m) present site and datum, Sept. 10, 1921 (discharge not determined). Flood of Apr. 24, 1957 (second highest since 1852), reached a stage of about 41 ft (12.5 m), from information by local residents.

REMARKS.--Records good. Recording rain gage located at station. Low flow is partly sustained by sewage effluent from city of Georgetown, which released 724 acre-ft (893,000 m³) of treated sewage effluent into the river 13.9 miles (22.4 km) above gage during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	2,150	352	316	270	379	201	161	835	377	150	85
2	216	1,020	338	308	7,070	364	194	154	734	581	405	82
3	201	767	327	335	3,990	350	185	152	674	504	1,430	80
4	194	681	316	315	4,680	348	180	151	628	444	434	77
5	186	739	313	290	1,720	359	180	1,320	587	376	411	75
6	177	571	318	280	1,300	349	193	371	552	335	195	77
7	174	1,480	301	274	1,080	340	199	319	523	308	162	74
8	165	2,060	278	270	1,000	319	210	1,340	499	287	147	77
9	160	1,100	261	261	913	308	202	392	590	272	137	80
10	153	1,290	348	266	831	314	188	272	3,100	258	130	74
11	147	1,160	579	254	813	307	183	1,770	953	423	125	71
12	140	807	416	384	737	303	168	1,620	667	300	120	74
13	138	717	345	421	685	347	169	448	570	260	116	74
14	153	649	321	345	659	431	172	819	511	240	113	72
15	152	578	310	343	632	315	167	467	481	220	108	70
16	179	568	294	317	619	311	159	354	463	230	105	93
17	141	558	278	306	585	311	159	318	435	225	102	83
18	118	527	270	304	556	291	157	295	403	210	98	77
19	115	511	266	303	522	275	151	278	376	200	95	78
20	110	482	258	281	503	261	145	536	346	188	92	77
21	107	426	252	271	490	253	145	619	325	180	88	77
22	103	413	248	269	484	249	145	355	365	170	83	78
23	103	950	249	263	467	245	148	1,260	340	160	81	72
24	111	2,070	250	263	446	232	150	9,100	310	155	82	68
25	116	489	256	265	425	220	144	4,760	295	150	94	64
26	119	428	271	258	410	219	129	1,400	700	142	90	60
27	110	409	296	249	396	225	145	1,060	1,300	138	328	60
28	106	385	284	242	388	224	288	945	592	130	267	60
29	104	376	270	241	-----	215	247	2,210	490	128	138	59
30	104	370	279	243	-----	208	194	1,680	401	132	102	56
31	18,600	-----	313	253	-----	204	-----	986	-----	136	91	-----
TOTAL	22,929	24,731	9,457	8,990	32,671	9,076	5,297	35,912	19,045	7,859	6,119	2,204
MEAN	740	824	305	290	1,167	293	177	1,158	635	254	197	73.5
MAX	18,600	2,150	579	421	7,070	431	288	9,100	3,100	581	1,430	93
MIN	103	370	248	241	270	204	129	151	295	128	81	56
AC-FT	45,480	49,050	18,760	17,830	64,800	18,000	10,510	71,230	37,780	15,590	12,140	4,370
CAL YR 1974	TOTAL 141,699	MEAN 388	MAX 18,600	MIN 19	AC-FT 281,100							
WTR YR 1975	TOTAL 184,290	MEAN 505	MAX 18,600	MIN 56	AC-FT 365,500							

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1645	35.70	43,600	5-24	0445	26.90	14,400
11-24	0030	20.37	8,560	5-25	0030	26.15	13,300
2-2	2100	30.03	22,200	5-29	2115	14.64	5,110
2-4	0445	20.91	8,890	6-10	0815	15.80	5,800
5-11	2315	22.05	9,610	8-3	0115	14.71	5,150

BRAZOS RIVER BASIN

08105700 San Gabriel River at Laneport, Tex.

LOCATION.--Lat 30°41'40", long 97°16'43", Williamson County, on right bank 22 ft (7 m) downstream from county bridge, 0.2 mile (0.3 km) north of Laneport, 3.4 miles (5.5 km) downstream from Willis Creek, 7.5 miles (12.1 km) northwest of Thrall, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--729 mi² (1,888 km²).

PERIOD OF RECORD.--Discharge: July 1965 to current year.

Water quality: Chemical and biochemical analyses: July 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 412.60 ft (125.760 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 307 ft³/s (8.694 m³/s), 222,400 acre-ft/yr (274 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,200 ft³/s (884 m³/s) Oct. 31 (gage height, 30.80 ft or 9.388 m); minimum daily, 67 ft³/s (1.90 m³/s) Sept. 30.

Period of record: Maximum discharge, 31,200 ft³/s (884 m³/s), Oct. 31, 1974 (gage height, 30.80 ft or 9.388 m); minimum daily, 0.35 ft³/s (0.010 m³/s) July 19-26, 1971.

Maximum stages since 1910 occurred September 1921 (39.6 ft or 12.07 m), April 1957 (34.6 ft or 10.55 m), and October 1959 (33.8 ft or 10.30 m), from floodmarks at present site and datum. Discharge not determined.

REMARKS.--Discharge records good. For statement regarding regulation and diversions, see San Gabriel River near Circleville (station 08105400).

REVISIONS (WATER YEARS).--WRD Texas 1974: 1965(M), 1966(P), 1967(M), 1968, 1969(P), 1973(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	9,140	470	379	281	455	232	175	958	438	177	101
2	239	1,260	442	359	1,600	432	228	148	829	578	481	97
3	230	861	423	401	9,560	414	212	145	754	603	1,470	93
4	217	718	408	386	5,810	406	205	146	703	516	524	91
5	211	767	396	341	2,300	419	205	2,220	658	456	581	88
6	204	627	407	326	1,590	419	212	697	623	394	258	116
7	201	727	391	314	1,280	406	222	275	591	352	203	107
8	186	2,350	357	310	1,150	380	246	1,410	565	324	181	92
9	192	1,370	334	298	1,050	369	247	673	593	305	167	98
10	178	1,110	352	300	935	367	221	329	3,310	291	157	93
11	171	1,470	660	287	907	364	275	276	1,190	474	147	87
12	165	910	568	377	839	359	201	2,670	740	351	139	82
13	162	770	430	507	769	354	192	553	641	302	134	92
14	162	713	385	403	741	513	202	829	582	281	127	86
15	191	637	367	395	712	393	194	625	539	263	123	81
16	204	616	348	362	690	362	185	386	516	254	120	102
17	185	609	326	342	666	372	177	326	475	261	117	143
18	165	589	315	337	635	349	177	289	443	250	114	92
19	158	567	306	337	601	328	166	261	413	236	110	95
20	149	548	296	316	580	309	156	404	390	222	108	129
21	145	492	287	297	569	300	151	731	377	212	104	127
22	139	468	280	295	560	295	150	393	419	200	101	97
23	137	460	282	288	542	291	151	369	400	189	98	86
24	141	4,540	281	285	525	280	149	9,130	349	181	98	79
25	152	870	283	288	503	258	143	9,240	335	175	102	74
26	157	606	304	283	484	250	126	1,850	1,020	166	104	71
27	154	558	325	275	470	262	134	1,250	2,220	162	164	70
28	145	519	331	265	466	267	271	1,080	888	156	446	70
29	142	501	312	262	-----	250	431	1,970	616	147	207	69
30	139	488	311	261	-----	242	228	2,880	543	152	126	67
31	7,350	-----	351	270	-----	238	-----	1,230	-----	158	109	-----
TOTAL	12,623	35,861	11,328	10,146	36,815	10,703	6,089	42,960	22,680	9,049	7,097	2,775
MEAN	407	1,195	365	327	1,315	345	203	1,386	756	292	229	92.5
MAX	7,350	9,140	660	507	9,560	513	431	9,240	3,310	603	1,470	143
MIN	137	460	280	261	281	238	126	145	335	147	98	67
AC-FT	25,040	71,130	22,470	20,120	73,020	21,230	12,080	85,210	44,990	17,950	14,080	5,500

CAL YR 1974 TOTAL 149,745 MEAN 410 MAX 10,200 MIN 27 AC-FT 297,000
 WTR YR 1975 TOTAL 208,126 MEAN 570 MAX 9,560 MIN 67 AC-FT 412,800

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	2200	30.80	31,200	5-24	1300	26.90	14,100
11-24	1000	25.13	10,500	5-30	0430	16.83	4,420
2- 3	0400	28.46	19,000	6-10	1700	18.93	5,610
2- 4	1330	22.53	7,820	6-27	1400	16.77	4,390
5-12	0800	18.84	5,560				

BRAZOS RIVER BASIN

363

08105700 San Gabriel River at Laneport, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
09...	1750	200	10	71	14	15	1.5	268	0	28	20	--
NOV.												
14...	1130	840	12	87	13	13	1.9	304	0	24	17	--
DEC.												
11...	1420	760	10	81	12	19	1.7	262	0	34	26	.3
JAN.												
23...	1445	345	8.5	80	13	15	.9	288	0	31	22	.3
FEB.												
05...	1445	2130	10	70	6.9	8.4	2.2	226	0	19	13	.2
MAR.												
05...	1945	490	7.5	80	16	15	1.3	282	0	31	21	.4
31...	1600	241	9.2	84	16	16	1.1	288	0	32	24	.3
MAY												
06...	0925	680	8.8	50	8.0	10	2.8	172	0	24	13	.3
JUNE												
04...	1100	752	10	75	12	13	1.4	270	0	23	16	.3
JULY												
17...	1615	267	9.6	63	15	15	1.5	250	0	26	21	.3
AUG.												
27...	0930	103	7.1	67	15	18	1.6	232	0	27	25	.3
SEP.												
22...	1635	94	6.3	64	14	19	1.9	226	0	27	28	--

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.												
09...	1.6	.01	.01	.30	.31	.01	292	18	15	240	15	.4
NOV.												
14...	.00	.00	.03	.48	.51	.17	318	214	20	270	21	.3
DEC.												
11...	2.3	.01	.04	.57	.61	.12	314	169	0	250	38	.5
JAN.												
23...	2.2	.01	.02	.35	.37	.06	313	12	2	250	17	.4
FEB.												
05...	--	--	--	--	--	--	242	366	45	200	18	.3
MAR.												
05...	2.5	.01	.02	.25	.27	.04	311	19	2	270	34	.4
31...	2.8	.01	.01	.41	.42	.03	325	28	2	280	39	.4
MAY												
06...	.86	.03	.15	2.3	2.4	.10	202	678	82	160	17	.3
JUNE												
04...	1.3	.00	.00	2.4	2.4	.07	285	87	9	240	16	.4
JULY												
17...	1.5	.01	.03	.31	.34	.02	275	22	3	220	14	.4
AUG.												
27...	1.9	.01	.01	.40	.41	.04	276	14	3	230	40	.5
SEP.												
22...	.40	.01	.04	.35	.39	.06	272	66	62	220	32	.6

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.											
09...	548	7.8	24.0	0	8	8.0	94	1.0	3.5	0	.0
NOV.											
14...	556	7.6	15.5	0	80	9.6	95	.2	4.8	0	.0
DEC.											
11...	557	7.6	10.5	5	70	10.6	95	.9	5.2	3	.0
JAN.											
23...	560	7.9	13.0	5	5	11.3	107	.3	2.2	8	.0
FEB.											
05...	412	7.4	12.5	0	140	--	--	1.0	--	--	--
MAR.											
05...	543	7.7	13.0	0	4	10.9	103	4.0	2.4	3	.1
31...	575	8.0	15.0	0	5	10.0	98	.0	3.5	8	.1
MAY											
06...	355	7.5	22.5	10	350	7.9	90	2.4	13	4	.0
JUNE											
04...	507	7.9	26.0	0	40	8.0	98	.2	9.3	3	.0
JULY											
17...	504	7.5	27.5	5	8	8.3	104	1.0	2.8	3	.0
AUG.											
27...	506	7.4	26.5	0	6	7.2	88	.8	5.8	0	.0
SEP.											
22...	502	7.8	22.5	5	40	9.4	107	1.0	3.0	1	.5

BRAZOS RIVER BASIN

08105700 San Gabriel River at Laneport, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DEC. 11...	1420	0	3	80	0	<10	0	2
FEB. 05...	1445	30	2	50	1	0	2	5
JUNE 04...	1100	30	2	90	0	0	0	0
AUG. 27...	0930	0	3	80	0	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 11...	80	3	10	0	<.1	12	840	0
FEB. 05...	20	1	0	10	.0	2	530	10
JUNE 04...	60	0	0	10	.3	1	920	0
AUG. 27...	0	2	0	10	.0	3	650	10

BRAZOS RIVER BASIN

365

08106300 Brushy Creek near Rockdale, Tex.

LOCATION.--Lat 30°41'38", long 97°04'42", Milam County, on left bank 36 ft (11 m) upstream from bridge on Farm Road 908, 2.8 miles (4.5 km) upstream from mouth, and 5.3 miles (8.5 km) northwest of Rockdale.

DRAINAGE AREA.--504 mi² (1,305 km²).

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 325.56 ft (99.231 m) above mean sea level. Prior to Feb. 4, 1970, water-stage recorder at site 150 ft (46 m) downstream at datum 5.00 ft (1.524 m) higher. Feb. 5 to Sept. 3, 1970, nonrecording gage at site 150 ft (46 m) downstream at present datum.

AVERAGE DISCHARGE.--8 years, 209 ft³/s (5.919 m³/s), 151,400 acre-ft/yr (187 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,300 ft³/s (348 m³/s) May 24 (gage height, 28.43 ft or 8.665 m); minimum, 12 ft³/s (0.34 m³/s) Oct. 22-26.

Period of record: Maximum discharge, 12,300 ft³/s (348 m³/s), May 24, 1975 (gage height, 28.43 ft or 8.665 m); maximum gage height, 31.09 ft (9.476 m) Jan. 20, 1968, prior to channel rectification, present datum, from floodmark; minimum discharge, 0.04 ft³/s (0.001 m³/s) Sept. 4, 1967.

Maximum stage since at least 1903, 54.5 ft (16.61 m), present datum, in September 1921, from information by local residents.

REMARKS.--Records fair. At end of year, flow from 138 mi² (357 km²) above this station was partly controlled by 45 floodwater-retarding structures with a combined capacity of 50,290 acre-ft (62.0 hm³) below the flood-spillway crests, of which 6,540 acre-ft (8.06 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. In 1970, the channel was rectified in the vicinity of the gage. Backwater at times from San Gabriel River.

REVISIONS (WATER YEARS).--WRD Texas 1973: 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	489	183	242	76	84	48	266	452	1000	45	29
2	34	314	150	199	253	85	46	110	280	600	53	26
3	30	143	132	369	3020	86	44	76	200	300	103	25
4	27	139	119	265	4220	86	42	327	152	150	256	23
5	26	204	110	175	2960	87	40	476	126	100	829	22
6	26	99	112	155	1220	88	39	155	106	60	467	22
7	25	125	117	136	555	88	40	152	90	55	151	27
8	23	1340	104	126	390	88	44	1690	77	50	94	30
9	23	1110	90	121	326	83	53	1840	125	47	72	26
10	23	419	151	115	261	77	54	214	2410	45	59	28
11	19	1050	1160	112	223	79	49	193	6930	932	52	46
12	15	353	513	138	203	81	45	407	1870	4010	48	40
13	13	181	234	256	175	81	42	311	551	1140	42	32
14	13	132	170	162	158	82	40	580	383	252	39	58
15	13	101	148	133	149	83	40	1060	271	302	36	58
16	13	83	129	119	145	79	42	162	212	191	32	84
17	14	76	113	116	144	77	44	83	185	114	30	81
18	16	73	99	110	133	75	40	55	157	88	30	64
19	14	69	92	114	125	73	38	42	127	75	29	42
20	13	66	87	109	114	72	38	45	104	66	28	168
21	13	64	82	98	110	71	37	269	88	60	26	396
22	12	58	77	92	108	71	38	67	81	56	25	100
23	12	55	76	89	110	71	34	211	77	51	24	56
24	12	761	76	84	108	70	34	7710	67	49	23	40
25	12	3960	78	84	100	67	34	7540	66	46	23	31
26	12	1790	85	85	97	61	33	4100	1500	44	22	26
27	16	380	106	85	92	56	32	1650	2000	42	23	23
28	15	282	115	79	87	57	30	613	5000	41	37	20
29	15	262	106	71	---	56	1260	1110	2100	40	104	18
30	17	258	105	65	---	55	441	2900	1500	38	45	17
31	47	---	198	65	---	52	---	1760	---	38	33	---
TOTAL	601	14436	5117	4169	15662	2321	2841	36174	27287	10082	2880	1658
MEAN	19.4	481	165	134	559	74.9	94.7	1167	910	325	92.9	55.3
MAX	47	3960	1160	369	4220	88	1260	7710	6930	4010	829	396
MIN	12	55	76	65	76	52	30	42	66	38	22	17
AC-FT	1190	28630	10150	8270	31070	4600	5640	71750	54120	20000	5710	3290
CAL YR 1974	TOTAL	70584.7	MEAN 193	MAX 8350	MIN	3.9	AC-FT 140000					
WTR YR 1975	TOTAL	123228.0	MEAN 338	MAX 7710	MIN	12	AC-FT 244400					

08106500 Little River at Cameron, Tex.

LOCATION.--Lat 30°49'53", long 96°57'01", Milam County, on right bank at site of old McCowan Bridge, 2,020 ft (616 m) upstream from bridge on U.S. Highway 77, 1.1 miles (1.8 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2 miles (3 km) southeast of Cameron, and at mile 33.6 (54.1 km).

DRAINAGE AREA.--7,088 mi² (18,358 km²).

PERIOD OF RECORD.--Discharge: November 1916 to current year.

Water quality: Chemical analyses: October 1959 to September 1974. Chemical and biochemical analyses: January 1968 to current year. Water temperatures: October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 281.89 ft (85.920 m) above mean sea level (levels by Corps of Engineers). Nov. 2, 1916, to Sept. 30, 1922, nonrecording gage at site 1.8 miles (2.9 km) upstream at different datum. Oct. 1, 1922, to Apr. 8, 1926, nonrecording gage at McCowan Bridge 30 ft (9 m) downstream at same datum. Apr. 9, 1926, to Oct. 9, 1933, nonrecording gage at bridge on U.S. Highway 77, 2,020 ft (616 m) downstream at datum 1.58 ft (0.482 m) lower.

AVERAGE DISCHARGE.--36 years (1917-53) unregulated, 1,807 ft³/s (51.17 m³/s), 1,309,000 acre-ft/yr (1.61 km³/yr); 22 years (1953-75) regulated, 1,710 ft³/s (48.43 m³/s), 1,239,000 acre-ft/yr (1.53 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 63,800 ft³/s (1,810 m³/s) May 25 (gage height, 36.58 ft or 11.150 m); minimum daily, 271 ft³/s (7.67 m³/s) Sept. 28.

Period of record: Maximum discharge, 647,000 ft³/s (18,300 m³/s) Sept. 10, 1921 (gage height, 53.2 ft or 16.22 m, present datum, from floodmark), from rating curve extended above 110,000 ft³/s (3,120 m³/s) on basis of slope-area measurement of 647,000 ft³/s (18,300 m³/s); no flow July 12-27, 1956.

Historic: Maximum stage since 1852, that of Sept. 10, 1921; flood in 1852 reached about the same stage. Flood in December 1913 reached a stage of 49.0 ft (14.94 m). Stages based on information by local resident.

Water quality: Current year: Maximum daily specific conductance, 691 micromhos Sept. 15; minimum daily, 220 micromhos Nov. 2. Maximum water temperatures, 28.0°C on several days during July and August; minimum, 10.0°C on several days during January, February, and March.

Period of record: Maximum daily specific conductance, 1,280 micromhos Sept. 25, 26, 1963; minimum daily, 154 micromhos Sept. 13, 1974. Maximum water temperatures, 33.0°C Aug. 6, 1964, Aug. 1, 1969; minimum, 4.0°C Jan. 11, 1968, Jan. 12-14, 1973.

REMARKS.--Discharge records fair. Many small diversions for irrigation and municipal supply affect very low flows. Since 1954, at least 10 percent of the drainage area is regulated by reservoirs. Some regulation by Belton Lake (station 08102000) on Leon River beginning Mar. 8, 1954, and by Stillhouse Hollow Lake (station 08104050) on Lampasas River beginning Sept. 2, 1966. Records of the Aluminum Co. of America indicate that they diverted 5,160 acre-ft (6.36 hm³) from river above gage during the current year for use at their Rockdale plant. At end of year, flow from 191 mi² (495 km²) above this station was partly controlled by 61 floodwater-retarding structures with a combined capacity of 69,770 acre-ft (86.0 hm³) below the flood-spillway crests, of which 8,340 acre-ft (10.3 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation.

REVISIONS (WATER YEARS).--WSP 718: 1918-20, 1922. WSP 1512: 1918-20(M), 1921, 1922(M), 1924(M), 1926, 1929-30, 1934, 1935(M), 1936, 1940(M), 1941, 1944-45(M). WSP 1922: 1954, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2740	12400	3340	3930	1880	5240	1030	3460	4180	2880	607	361
2	2780	21800	3360	4780	2380	5210	1000	3250	2540	3910	720	334
3	2910	4780	3340	5400	13300	5170	957	3050	2490	4030	1640	323
4	2930	2540	3200	5570	24100	5140	936	2050	5340	3650	2490	320
5	2920	3140	3170	5290	16600	5090	917	5300	5860	3570	2100	309
6	2920	3010	3160	5160	7250	5120	823	9990	5990	3600	2430	300
7	2890	2920	3180	5270	3730	5080	813	2910	5970	3200	1840	343
8	2900	4950	3160	6130	4770	4850	849	3360	5830	3040	1780	333
9	2880	5960	3080	6990	6320	4780	888	9010	5790	2780	2530	304
10	2870	3240	3050	7970	6390	4760	914	5100	6370	2950	1400	345
11	2850	3810	4120	8970	6120	4450	952	1950	11300	3530	687	368
12	2820	3250	5160	9630	5450	2880	1880	2140	8360	6200	605	329
13	2800	2350	3930	10200	5110	2160	2030	3680	2420	6810	567	304
14	2800	3020	3390	10200	5010	2150	2050	1840	2000	3580	540	323
15	2820	3060	3240	7940	4980	2140	2190	4360	4670	2420	451	348
16	2840	3390	3160	6430	4940	1970	3460	3340	5480	2460	432	454
17	2800	3420	3100	6200	4880	2120	3840	2680	5380	1940	408	900
18	2580	3340	3050	6000	4850	2070	3780	2710	5080	1720	397	1080
19	2520	3280	3020	5500	4850	1890	3070	2720	4890	1250	384	910
20	2250	3280	3000	5330	4070	1770	2790	2730	4050	973	366	1180
21	1590	3240	2970	4820	5100	1730	2780	3420	3700	939	360	1580
22	1530	3150	2950	2590	5090	1720	2810	3270	3640	837	344	805
23	1140	3130	2950	1880	5070	1710	2920	2860	3570	712	336	468
24	1040	9590	2950	1820	5020	1700	2990	22500	3480	667	470	380
25	1040	17700	2960	1840	5030	1440	2960	57900	3400	631	393	332
26	1070	7790	2980	1840	5230	1330	2760	36100	3740	641	363	301
27	1070	2370	3020	1830	5280	1160	2660	11900	5510	696	346	280
28	1050	1860	3060	1800	5260	1140	2700	3870	14500	669	474	271
29	1060	2870	3030	1990	---	1120	3850	3800	15000	656	787	286
30	1010	3240	3020	2010	---	1080	4240	9300	6650	642	643	301
31	804	---	3170	2010	---	1060	---	9960	---	624	417	---
TOTAL	68224	151880	100270	157320	179060	89230	65839	240510	167180	72207	27307	14472
MEAN	2201	5063	3235	5075	6395	2878	2195	7758	5573	2329	881	482
MAX	2930	21800	5160	10200	24100	5240	4240	57900	15000	6810	2530	1580
MIN	804	1860	2950	1800	1880	1060	813	1840	2000	624	336	271
AC-FT	135300	301300	198900	312000	355200	177000	130600	477100	331600	143200	54160	28710
CAL YR 1974 TOTAL	598956	MEAN	1641	MAX	21800	MIN	53	AC-FT	1188000			
WTR YR 1975 TOTAL	1333499	MEAN	3653	MAX	57900	MIN	271	AC-FT	2645000			

08106500 Little River at Cameron, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
01...	1320	2770	8.1	55	13	27	3.4	200	0	23
NOV.										
14...	1025	2400	11	77	8.9	19	3.0	254	0	28
DEC.										
17...	1150	3080	7.2	59	12	22	3.1	207	0	27
JAN.										
23...	1330	1300	8.2	68	13	25	2.5	250	0	33
FEB.										
11...	1150	6170	7.8	60	10	19	2.5	211	0	27
MAR.										
04...	2000	4700	6.7	55	13	20	3.4	208	0	24
APR.										
22...	1145	2750	7.2	59	8.9	20	3.0	201	0	28
MAY										
06...	1100	11100	9.1	40	3.3	10	3.9	111	0	18
JUNE										
16...	1130	5460	8.4	58	13	21	2.5	222	0	27
JULY										
17...	1515	1720	10	71	14	24	3.0	246	0	32
AUG.										
18...	0800	544	12	88	18	33	2.3	308	0	44
SEP.										
22...	1820	657	11	55	11	24	3.0	202	0	31

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.									
01...	41	--	--	--	--	--	--	--	269
NOV.									
14...	23	--	1.5	.02	.08	.83	.91	.62	295
DEC.									
17...	35	.3	--	--	--	--	--	--	268
JAN.									
23...	37	.3	.99	.01	.04	.71	.75	.19	310
FEB.									
11...	29	.3	--	--	--	--	--	--	260
MAR.									
04...	31	.2	.59	.01	.03	.35	.38	.18	256
APR.									
22...	28	.3	--	--	--	--	--	--	254
MAY									
06...	16	.3	1.3	.04	.09	3.1	3.2	.31	155
JUNE									
16...	31	.3	--	--	--	--	--	--	271
JULY									
17...	33	.4	.74	.02	.00	.47	.47	.13	309
AUG.									
18...	39	--	--	--	--	--	--	--	388
SEP.									
22...	29	.4	.47	.02	.13	1.2	1.3	.28	264

BRAZOS RIVER BASIN

08106500 Little River at Cameron, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 01...	190	27	.9	499	8.0	19.0	--	--	--
NOV. 14...	230	21	.5	524	7.2	15.0	9.0	88	1.2
DEC. 17...	200	27	.7	484	8.0	12.0	--	--	--
JAN. 23...	220	18	.7	550	7.5	12.0	9.8	91	.5
FEB. 11...	190	18	.6	476	7.9	10.5	--	--	--
MAR. 04...	190	20	.6	470	7.6	11.0	9.8	88	.7
APR. 22...	180	19	.6	462	8.3	22.0	--	--	--
MAY 06...	110	22	.4	262	7.1	19.5	6.6	71	2.4
JUNE 16...	200	16	.6	493	7.9	22.0	--	--	--
JULY 17...	240	33	.7	551	7.4	25.0	7.6	90	.8
AUG. 18...	290	41	.8	678	8.0	28.0	--	--	--
SEP. 22...	180	17	.8	466	7.6	22.0	8.2	93	1.8

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	68224	479	260	47900	32	5890	27	4970	190
NOV. 1974.....	151880	390	220	90200	26	10700	22	9020	160
DEC. 1974.....	100270	473	260	70400	32	8660	27	7310	190
JAN. 1975.....	157320	450	250	106000	30	12700	26	11000	180
FEB. 1975.....	179060	435	240	116000	29	14000	25	12100	170
MAR. 1975.....	89230	492	270	65000	33	7950	28	6750	190
APR. 1975.....	65839	485	270	48000	32	5690	27	4800	190
MAY 1975.....	240510	366	210	136000	24	15600	21	13600	150
JUNE 1975.....	167180	430	240	108000	29	13100	24	10800	170
JULY 1975.....	72207	496	270	52600	33	6430	28	5460	200
AUG. 1975.....	27307	551	310	22900	37	2730	31	2290	220
SEPT 1975.....	14472	592	330	12900	39	1520	34	1330	230
TOTAL	1333499	**	**	876000	**	105000	**	89400	**
WTD.AVG.	3653.42	437	240	**	29	**	25	**	170

08106500 Little River at Cameron, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	497	278	498	478	527	467	559	485	457	422	633	564
2	485	220	475	453	545	466	551	490	502	456	636	637
3	495	360	471	457	395	466	526	530	589	507	636	610
4	492	445	474	472	297	465	521	519	500	489	479	665
5	491	447	474	455	367	458	551	413	473	489	485	671
6	482	437	474	446	426	458	577	303	498	493	446	648
7	480	435	472	438	515	458	551	385	500	511	467	588
8	478	460	476	425	494	454	590	444	496	509	479	644
9	471	425	470	423	470	453	579	368	496	511	486	675
10	474	448	466	420	471	451	570	400	497	509	498	658
11	471	488	472	419	473	452	595	470	262	457	557	659
12	467	516	460	427	489	510	507	515	391	342	592	679
13	465	512	458	435	485	541	498	363	538	439	636	665
14	460	537	472	430	484	538	481	483	571	509	658	679
15	460	483	480	444	482	545	485	463	493	521	676	691
16	456	465	480	437	483	540	443	455	493	521	682	644
17	458	465	482	437	481	530	443	500	481	536	687	633
18	447	465	475	433	479	538	447	515	496	551	687	570
19	445	469	475	445	478	534	465	523	496	575	685	540
20	449	469	473	440	470	544	460	528	504	604	679	498
21	480	466	476	444	470	536	460	543	493	598	665	553
22	480	465	469	512	469	540	462	487	504	637	665	432
23	490	468	471	549	466	528	462	496	504	655	673	509
24	511	450	469	556	466	528	469	249	504	665	679	559
25	516	291	470	553	466	544	477	270	499	673	679	600
26	519	346	471	545	464	563	469	354	502	677	673	633
27	523	521	476	545	466	575	510	378	448	673	665	648
28	528	582	479	541	466	586	480	495	284	659	685	679
29	527	582	478	526	---	583	524	541	272	638	566	651
30	529	502	473	524	---	585	460	467	325	631	540	654
31	539	---	476	525	---	585	---	371	---	628	568	---
MONTH	486	450	474	472	466	517	506	445	469	551	608	618

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	20.0	11.0	12.0	14.0	13.0	14.0	17.0	21.0	25.0	28.0	26.0
2	19.0	20.0	11.0	12.0	12.0	12.0	16.0	17.0	21.0	25.0	28.0	27.0
3	19.0	20.0	12.0	11.0	11.0	12.0	15.0	19.0	23.0	24.0	27.0	27.0
4	20.0	19.0	12.0	11.0	12.0	11.0	15.0	18.0	22.0	24.0	26.0	27.0
5	20.0	19.0	12.0	10.0	11.0	10.0	16.0	18.0	21.0	25.0	26.0	26.0
6	20.0	18.0	14.0	11.0	10.0	11.0	15.0	19.0	21.0	25.0	26.0	26.0
7	20.0	18.0	14.0	12.0	10.0	13.0	16.0	20.0	21.0	25.0	25.0	26.0
8	20.0	16.0	14.0	12.0	10.0	13.0	16.0	20.0	21.0	25.0	25.0	25.0
9	21.0	15.0	12.0	12.0	12.0	12.0	18.0	20.0	21.0	25.0	25.0	25.0
10	21.0	15.0	12.0	13.0	11.0	12.0	18.0	20.0	21.0	25.0	25.0	25.0
11	21.0	16.0	11.0	12.0	12.0	12.0	18.0	20.0	23.0	23.0	25.0	26.0
12	21.0	16.0	12.0	10.0	12.0	14.0	15.0	21.0	24.0	24.0	26.0	26.0
13	20.0	15.0	12.0	10.0	12.0	12.0	15.0	22.0	25.0	25.0	27.0	25.0
14	21.0	15.0	13.0	10.0	13.0	12.0	14.0	22.0	25.0	24.0	27.0	23.0
15	20.0	15.0	12.0	10.0	13.0	12.0	15.0	21.0	23.0	24.0	27.0	23.0
16	19.0	15.0	12.0	10.0	12.0	11.0	16.0	20.0	23.0	24.0	28.0	24.0
17	19.0	16.0	12.0	11.0	12.0	14.0	16.0	20.0	22.0	24.0	28.0	24.0
18	20.0	16.0	12.0	12.0	12.0	14.0	16.0	20.0	23.0	24.0	28.0	25.0
19	20.0	18.0	13.0	12.0	11.0	15.0	17.0	21.0	23.0	25.0	28.0	25.0
20	20.0	18.0	12.0	12.0	11.0	15.0	16.0	21.0	23.0	26.0	28.0	25.0
21	20.0	17.0	12.0	11.0	12.0	17.0	16.0	22.0	23.0	26.0	28.0	22.0
22	20.0	17.0	13.0	10.0	13.0	18.0	17.0	22.0	22.0	26.0	28.0	20.0
23	20.0	18.0	15.0	11.0	10.0	18.0	17.0	21.0	23.0	27.0	28.0	20.0
24	20.0	16.0	15.0	12.0	10.0	16.0	18.0	22.0	23.0	27.0	27.0	19.0
25	20.0	14.0	12.0	13.0	11.0	16.0	18.0	20.0	23.0	28.0	27.0	19.0
26	20.0	14.0	11.0	12.0	12.0	16.0	19.0	23.0	22.0	28.0	28.0	19.0
27	19.0	13.0	11.0	14.0	12.0	18.0	21.0	24.0	22.0	28.0	27.0	19.0
28	20.0	13.0	11.0	15.0	13.0	18.0	21.0	24.0	23.0	28.0	27.0	20.0
29	21.0	13.0	12.0	15.0	---	15.0	19.0	24.0	24.0	28.0	26.0	22.0
30	22.0	12.0	13.0	16.0	---	12.0	18.0	23.0	25.0	28.0	26.0	20.0
31	22.0	---	13.0	16.0	---	13.0	---	22.0	---	28.0	26.0	---
MONTH	20.0	16.0	12.5	12.0	11.5	14.0	16.5	20.5	22.5	25.5	27.0	23.5

LOCATION.--Lat 30°36'52", long 96°29'20", Brazos-Burleson County line, on left bank 2.4 miles (3.9 km) downstream from Little Brazos River, 5 miles (8 km) downstream from Texas and New Orleans Railroad Co. bridge, 9 miles (14 km) southwest of Bryan, and at mile 281.1 (452.3 km).

PERIOD OF RECORD.--August 1899 to December 1902, February 1918 to January 1926, June 1926 to current year. Monthly figures only for some periods, published in WSP 1312. Prior to September 1925, published as "near College Station".

AVERAGE DISCHARGE.--24 years (1899-1902, 1918-25, 1926-40) unregulated, 5,652 ft³/s (160.1 m³/s), 4,095,000 acre-ft/yr (5.05 km³/yr); 35 years (1940-75) regulated, 5,097 ft³/s (144.3 m³/s), 3,693,000 acre-ft/yr (4.55 km³/yr).

Period of record: Maximum gage height, 54 ft (16.5 m) Sept. 12, 1921, present site and datum (discharge not determined); minimum daily discharge, 89 ft³/s (2.52 m³/s) Aug. 24, 1934.

Maximum stage since at least 1854, that of Sept. 12, 1921. Flood of Dec. 5, 1913, reached a stage of 51 ft (15.5 m), present site and datum, from information by Texas and New Orleans Railroad Co. at their bridge 5 miles (8 km) upstream and from comparison of maximum stages reached by floods in 1913 and 1921 at gage near College Station. Flood in 1854 reached about the same stage as flood of Dec. 5, 1913.

REMARKS.--Records fair. Flow regulated by 24 major reservoirs with a combined capacity of 6,311,000 acre-ft (7.78 km³), of which 3,791,000 acre-ft (4.67 km³) is for flood control. Many small diversions above station for irrigation, municipal and industrial uses, and oilfield operation. At end of year, flow from 400 mi² (1,036 km²) above this station was partly controlled by 120 (revised) floodwater-retarding structures with a combined capacity of 53,550 acre-ft (190 km³) below the flood-spillway crests, of which 16,770 acre-ft (20.9 km³) is sediment-pool capacity. Three structures were built during the current year and have a combined capacity below flood-spillway crests of 5,980 acre-ft (7.37 km³) of which 337 acre-ft (0.416 km³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Since 1941, at least 10 percent of drainage area is regulated by reservoirs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6100	27100	8280	6200	4680	11000	2400	9600	25700	9060	3500	1930
2	5180	51100	7960	7330	5380	10100	1900	8600	17100	6270	3720	2090
3	5130	43400	6940	8490	26500	8750	1600	7000	14700	7540	3780	2180
4	4220	23500	6770	9650	46300	8540	2000	6000	15200	6980	3890	1960
5	3850	25000	5810	9620	48700	8580	2300	9740	19200	5690	4350	1670
6	3530	28200	5490	8790	37900	8600	2600	16800	16400	5520	4080	1600
7	3390	28000	6150	7970	26600	8370	2300	13300	13100	5130	4820	1520
8	3320	33900	5360	7670	22000	8050	1900	11600	13100	4610	3470	1210
9	3260	40400	4940	8270	19100	7860	1700	16200	12700	4620	3770	1030
10	3200	40200	5320	8840	18900	7520	12000	15200	13500	4760	5220	939
11	3140	32700	8260	9540	18500	7570	11000	10000	14300	5550	3520	886
12	3090	25200	12700	11100	17900	7050	12000	12000	17200	6250	2920	881
13	3340	22900	11800	14100	16900	5620	15000	8000	17200	6120	3060	970
14	3560	23800	8680	16300	14600	5460	12000	5000	17100	8180	1800	1010
15	3580	23000	6950	15700	11700	6400	11000	5400	17100	3600	1560	1130
16	3540	18600	6090	12300	9200	6130	10500	5200	19300	3650	1550	1520
17	3730	13600	5530	9800	6970	5680	10800	4500	15400	3650	1630	1810
18	3710	9880	5120	9430	6370	6100	11000	4200	11100	3430	1780	2030
19	3540	9330	5170	9170	8220	6340	9000	3800	10500	3060	1600	2320
20	3700	9010	5880	8040	13600	4500	7000	3600	9810	2440	1450	1680
21	3200	8290	6100	7660	15300	3000	5000	3800	7820	2060	1470	1810
22	2090	7890	6180	7060	15300	2500	4700	6060	7740	2640	1690	2200
23	1820	8320	5860	5180	13800	2200	4500	7930	7520	3080	2040	1620
24	1460	21800	4940	4370	13200	2000	4200	16500	6960	3420	1730	1130
25	1460	51300	4750	4030	11600	1900	4000	54500	6360	3500	1650	934
26	1590	43200	4860	3500	10600	1800	3800	72500	6250	3600	1470	838
27	1820	24300	5280	3460	11000	2300	3800	61000	6760	3160	1730	781
28	1740	13900	5450	3420	11200	4400	4500	28000	9740	3890	1890	909
29	1630	10900	5800	3800	---	3500	6000	15300	20500	3750	1890	1010
30	1550	9920	6340	4220	---	2900	8000	21800	17800	3790	1910	991
31	2270	---	6130	4280	---	2700	---	30100	---	3750	1480	---
TOTAL	96740	728640	200890	249290	482020	177420	188500	493230	407160	142650	80420	42589
MEAN	3121	24290	6480	8042	17220	5723	6283	15910	13570	4602	2594	1420
MAX	6100	51300	12700	16300	48700	11000	15000	72500	25700	9060	5220	2320
MIN	1460	7890	4750	3420	4680	1800	1600	3600	6250	2060	1450	781
AC-FT	191900	1445000	398500	494500	956100	351900	373900	978300	807600	282900	159500	84480
CAL YR 1974	TOTAL	1831807	MEAN	5019	MAX	51300	MIN	466	AC-FT	3633000		
WTR YR 1975	TOTAL	3289549	MEAN	9012	MAX	72500	MIN	781	AC-FT	6525000		

BRAZOS RIVER BASIN

371

08109500 Brazos River near College Station, Tex.

LOCATION.--Lat 30°33'32", long 96°25'23", Brazos County, at bridge on Farm Road 60, 6.5 miles (10.5 km) south of College Station, and 9 miles (14 km) downstream from gaging station near Bryan.

DRAINAGE AREA.--38,400 mi² (99,460 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1961 to current year. Water temperatures: August 1961 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 1,550 micromhos Nov. 15; minimum daily, 260 micromhos Nov. 3. Maximum water temperatures, 33.0°C July 29, 30; minimum, 9.0°C Feb. 6.

Period of record: Maximum daily specific conductance (1961-71, 1972-75), 2,030 micromhos Oct. 1, 1963; minimum daily, 245 micromhos Sept. 14, 1974. Maximum water temperatures, 34.5°C June 16, 1971; minimum, 2.0°C on several days during winter months.

REMARKS.--Sampling at this site began in September 1966. From August 1961 to September 1965, samples were collected at State Highway 21 near Bryan 17 miles (27 km) upstream and, from October 1965 to September 1966, at the gaging station near Bryan 9 miles (14 km) upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 31...	2330	2270	8.0	56	13	67	4.1	172	0	56
NOV. 30...	2345	9920	8.8	79	14	110	4.8	190	0	100
DEC. 16...	1600	6090	8.6	66	11	65	3.9	190	0	68
JAN. 27...	1500	3460	7.2	86	15	89	4.4	230	0	95
FEB. 28...	1330	11200	6.0	77	16	120	4.6	188	0	110
MAR. 10...	1600	7520	6.3	72	14	78	1.9	208	0	72
APR. 21...	1415	5000	6.7	84	12	95	4.0	189	0	94
MAY 25...	2020	54500	9.7	42	3.4	10	3.8	133	0	20
JUNE 30...	2245	17800	11	44	5.5	24	3.6	132	0	33
JULY 05...	1800	5690	11	67	11	38	3.5	214	0	54
AUG. 27...	--	1730	7.7	73	19	140	4.0	180	0	120
SEP. 30...	1725	991	8.1	69	18	100	4.0	196	0	96

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 31...	99	--	388	190	52	2.1	724	8.0	21.0
NOV. 30...	170	.3	581	260	99	3.0	1060	8.0	10.0
DEC. 16...	93	.3	409	210	54	2.0	730	7.8	9.5
JAN. 27...	130	.3	540	280	88	2.3	929	8.1	10.5
FEB. 28...	190	.5	617	260	100	3.3	1120	8.0	14.5
MAR. 10...	120	.3	467	240	67	2.2	850	7.9	13.5
APR. 21...	150	.3	539	260	100	2.6	987	7.9	20.0
MAY 25...	11	.3	166	120	10	.4	283	8.1	24.0
JUNE 30...	32	.3	218	130	24	.9	383	7.9	26.0
JULY 05...	48	.4	338	210	37	1.1	593	7.7	28.0
AUG. 27...	200	--	652	260	110	3.8	1180	7.5	29.0
SEP. 30...	140	.5	532	250	86	2.8	953	8.2	26.5

BRAZOS RIVER BASIN

08109500 Brazos River near College Station, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	96740	719	400	104000	96	25100	70	18300	220
NOV. 1974.....	728640	885	490	964000	130	256000	86	169000	250
DEC. 1974.....	200890	796	440	239000	110	59700	78	42300	230
JAN. 1975.....	249290	730	410	276000	98	66000	71	47800	220
FEB. 1975.....	482020	794	440	573000	110	143000	77	100000	230
MAR. 1975.....	177420	962	530	254000	150	71900	94	45000	270
APR. 1975.....	188500	926	510	260000	140	71300	91	46300	260
MAY 1975.....	493230	392	230	306000	31	41300	37	49300	140
JUNE 1975.....	407160	910	500	550000	140	154000	89	97800	260
JULY 1975.....	142650	702	390	150000	92	35400	68	26200	210
AUG. 1975.....	80420	1030	570	124000	160	34700	100	21700	2600
SEPT 1975.....	42589	1050	580	66700	170	19500	100	11500	2600
TOTAL	3289549	**	**	3870000	**	978000	**	675000	**
WTD.AVG.	9012.46	783	440	**	110	**	76	**	230

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905	707	900	969	925	1100	1230	507	541	468	1200	1130
2	763	289	814	940	900	1060	1120	703	668	500	1190	1260
3	857	260	689	880	608	912	1010	543	827	712	1180	1320
4	708	337	806	800	415	916	1200	447	940	762	1160	1360
5	679	776	712	712	415	891	1300	439	1060	633	724	1380
6	673	1110	688	669	527	905	1310	413	1010	620	801	1360
7	648	1020	720	669	703	851	1120	366	920	602	729	1340
8	628	1220	788	608	841	842	1010	400	843	589	843	1280
9	616	1220	764	558	870	838	974	431	962	605	764	1190
10	594	1270	801	556	900	832	493	409	907	605	843	1080
11	585	1230	695	525	969	874	449	437	945	595	649	1060
12	600	800	570	525	978	912	1230	425	628	583	1060	1050
13	632	772	595	588	1010	1080	1240	339	934	437	1100	1040
14	648	1530	605	642	965	1180	1240	399	1450	433	1210	1120
15	608	1550	650	629	1050	1170	1100	511	1470	564	1110	1120
16	639	1520	712	755	949	1090	996	536	1330	617	1130	1020
17	628	1380	726	723	740	1130	1000	560	1190	574	1080	662
18	639	1140	659	703	676	950	980	587	1040	659	1270	805
19	762	1060	613	750	881	1100	961	686	1030	693	1220	987
20	858	1030	615	699	937	1030	970	712	1010	698	1240	853
21	858	966	1000	725	1020	891	991	760	983	709	1170	800
22	818	962	1090	767	1040	848	875	804	1060	742	1270	730
23	760	1070	1090	917	1010	804	791	804	1010	780	1270	757
24	723	1160	1080	1040	1140	779	780	400	1040	922	1330	841
25	772	600	1070	1010	1130	756	760	283	974	996	1310	890
26	769	414	1070	961	1110	739	731	280	900	1060	1190	938
27	780	620	960	937	1100	836	666	294	869	1190	1200	954
28	790	678	841	906	1120	880	560	331	463	1190	1210	1000
29	839	906	927	996	---	920	502	372	366	1190	1180	1050
30	858	1060	1070	1070	---	1080	559	416	383	1160	1130	962
31	724	---	1000	1040	---	1240	---	460	---	1190	987	---
MONTH	721	955	817	783	890	950	938	486	926	744	1090	1040

08109500 Brazos River near College Station, Tex.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	23.0	---	13.5	16.0	16.0	15.0	23.0	24.5	27.0	32.0	31.5
2	23.5	21.0	10.0	---	---	15.0	---	23.0	25.0	---	29.0	31.5
3	23.5	21.5	10.5	---	12.0	15.0	16.0	23.0	25.0	28.5	29.5	32.0
4	23.5	20.0	11.5	---	13.0	13.5	---	21.5	---	28.0	---	29.5
5	23.0	19.5	13.0	11.0	13.0	13.0	16.5	23.0	25.0	29.5	29.5	31.0
6	23.5	19.0	14.0	11.5	9.0	14.0	18.0	23.0	25.0	---	30.5	29.0
7	24.0	17.0	---	13.5	10.0	15.0	18.5	23.0	---	29.5	30.0	29.0
8	23.5	18.0	14.0	14.0	13.0	---	19.0	---	26.0	29.0	30.5	29.5
9	24.0	18.0	13.0	15.0	---	---	19.5	25.0	27.0	30.0	29.5	29.0
10	24.0	18.0	11.0	14.0	---	15.0	18.5	23.5	25.0	28.0	30.0	28.0
11	24.5	18.0	10.5	12.0	13.0	14.5	18.0	23.0	25.0	---	30.5	---
12	---	---	11.0	10.5	13.5	14.5	18.5	23.0	26.0	27.0	30.5	28.5
13	24.0	17.0	11.5	10.0	13.0	11.0	17.0	24.5	27.0	27.0	---	28.0
14	24.0	17.0	13.0	9.5	14.0	14.5	16.0	25.0	27.0	28.0	30.0	26.5
15	20.5	16.0	13.0	10.5	15.0	12.0	16.0	24.0	26.5	28.0	30.0	28.0
16	23.0	16.5	11.5	11.0	13.5	15.0	19.0	23.0	27.0	28.0	32.0	26.5
17	22.0	16.5	12.0	12.0	14.5	15.0	19.0	---	27.0	28.0	31.0	25.5
18	22.0	17.0	13.0	12.5	13.5	18.5	---	25.0	27.0	28.5	32.0	28.0
19	21.0	18.0	13.0	13.0	13.0	18.0	19.0	25.0	28.0	28.0	30.0	28.0
20	21.5	18.0	13.0	13.0	14.0	19.0	19.5	25.5	---	30.0	31.5	26.0
21	20.0	17.0	---	---	15.0	19.5	19.5	26.0	27.0	31.5	32.0	---
22	21.0	18.0	13.5	12.0	13.0	21.0	21.0	26.0	28.0	32.0	30.5	28.0
23	---	19.0	16.0	13.0	11.5	22.0	21.5	26.0	28.0	---	31.5	23.0
24	21.0	17.0	---	13.0	11.0	20.0	---	---	28.5	31.0	29.0	22.0
25	21.5	---	---	14.5	13.0	19.0	---	24.0	26.0	31.0	29.5	23.5
26	20.5	14.5	---	14.5	14.5	18.0	18.5	24.0	---	30.5	30.0	23.0
27	---	13.5	---	18.0	14.0	22.0	24.5	25.5	25.0	31.0	---	25.0
28	21.0	13.0	12.0	18.0	14.5	---	---	25.5	25.0	32.0	29.5	23.0
29	22.0	12.0	13.0	19.5	---	---	22.0	25.5	26.0	33.0	---	26.5
30	23.5	10.0	15.0	19.0	---	13.0	21.5	24.5	26.0	33.0	29.0	26.5
31	21.0	---	---	16.0	---	13.5	---	---	---	31.5	29.5	---
MONTH	22.5	17.5	---	13.5	13.0	16.0	19.0	24.0	26.5	29.5	30.5	27.5

BRAZOS RIVER BASIN

08109700 Middle Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°20'21", long 96°54'16", Lee County, on right bank 25 ft (8 m) upstream from centerline of State Highway 21, 4.5 miles (7.2 km) upstream from West Yegua Creek, 5.0 miles (8.0 km) southwest of Dime Box, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--236 mi² (611 km²).

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 295.4 ft (90.04 m) above mean sea level (from Texas Highway Department bridge plans). June 30 to July 21, 1970, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 55.0 ft³/s (1.558 m³/s), 39,850 acre-ft/yr (49.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) May 24 (gage height, 15.16 ft or 4.621 m); minimum, 0.66 ft³/s (0.019 m³/s) Sept. 14.

Period of record: Maximum discharge, 11,400 ft³/s (323 m³/s) May 24, 1975 (gage height, 15.16 ft or 4.621 m); no flow at times most years.

Maximum stage since at least 1851, 16 ft (4.9 m) in December 1913, from information by local residents.

REMARKS.--Records fair. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	251	151	92	633	19	11	117	258	242	6.9	5.4
2	9.0	276	100	97	389	19	11	200	308	284	6.6	3.8
3	9.0	274	71	109	506	18	10	336	264	263	7.0	2.9
4	8.9	421	51	109	1,550	19	9.3	336	120	215	18	2.0
5	8.7	346	42	107	2,100	20	9.2	151	50	135	44	1.4
6	8.0	156	42	86	1,470	20	9.1	70	32	57	30	1.2
7	7.4	183	42	58	858	20	9.4	54	26	44	16	1.1
8	7.3	352	39	45	639	19	15	80	21	18	10	.95
9	7.3	327	34	39	266	18	19	520	19	13	7.8	.92
10	7.1	317	60	38	108	18	17	247	42	9.6	6.1	1.8
11	6.7	495	256	34	63	17	14	141	135	19	5.1	2.9
12	6.2	476	268	58	47	17	12	178	161	21	3.9	1.4
13	5.9	314	225	90	40	17	11	191	327	50	2.6	.94
14	5.9	255	338	102	35	17	10	182	508	80	2.5	.77
15	5.4	191	396	105	33	17	10	206	284	106	2.2	1.0
16	5.0	81	254	73	32	16	9.3	228	88	88	2.0	11
17	5.0	46	151	47	32	16	8.9	200	35	98	1.7	20
18	5.0	35	93	39	30	16	8.9	164	23	104	1.5	17
19	5.0	30	59	35	27	15	8.1	79	17	68	1.4	11
20	5.0	28	45	32	25	15	7.3	37	14	38	1.4	6.8
21	4.5	25	38	29	24	14	6.9	44	13	25	1.1	4.9
22	4.2	23	34	27	24	14	6.6	53	13	19	1.0	17
23	3.7	21	33	25	23	14	6.3	85	13	15	1.1	21
24	3.6	1,160	32	24	22	14	6.4	4,700	13	16	1.1	11
25	3.5	1,740	31	24	21	13	6.3	5,600	13	14	1.1	6.6
26	3.5	1,920	31	23	20	12	5.8	2,200	24	12	1.7	4.3
27	3.5	1,230	31	23	19	13	5.1	1,470	283	9.8	7.1	2.9
28	4.5	754	33	23	19	14	11	912	724	8.6	24	2.2
29	9.1	452	35	22	-----	12	31	673	573	8.6	15	1.7
30	8.4	270	45	22	-----	12	73	684	263	10	11	1.3
31	123	-----	69	129	-----	12	-----	377	-----	8.4	7.9	-----
TOTAL	309.3	12,449	3,129	1,766	9,055	497	377.9	20,515	4,664	2,099.0	248.8	167.18
MEAN	9.98	415	101	57.0	323	16.0	12.6	662	155	67.7	8.03	5.57
MAX	123	1,920	396	129	2,100	20	73	5,600	724	284	44	21
MIN	3.5	21	31	22	19	12	5.1	37	13	8.4	1.0	.77
AC-FT	613	24,690	6,210	3,500	17,960	986	750	40,690	9,250	4,160	493	332

CAL YR 1974 TOTAL 39,065.39 MEAN 107 MAX 4,010 MIN 0 AC-FT 77,490
WTR YR 1975 TOTAL 55,277.18 MEAN 151 MAX 5,600 MIN .77 AC-FT 109,600

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-11	2030	9.24	558	5- 9	1600	9.33	584
11-25	2200	11.57	2,330	5-24	2200	15.16	11,400
2- 1	1300	9.62	675	6-14	0900	9.26	564
2- 4	1900	11.65	2,430	6-28	0430	9.85	754

08109800 East Yegua Creek near Dime Box, Tex.

LOCATION.--Lat 30°24'26", long 96°49'02", Burleson County, on left bank 49 ft (15 m) upstream from centerline of State Highway 21, 0.8 mile (1.3 km) downstream from Buffalo Creek, 3.5 miles (5.6 km) north of Dime Box, and at mile 12.2 (19.6 km).

DRAINAGE AREA.--243 mi² (629 km²).

PERIOD OF RECORD.--Discharge: August 1962 to current year.

Water quality: Sediment records: June 1966 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 284.00 ft (86.56 m) above mean sea level (State Highway Department bench mark). Nov. 6 to Dec. 10, 1970, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years, 59.0 ft³/s (1.671 m³/s), 42,750 acre-ft/yr (52.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,000 ft³/s (396 m³/s) May 24 (gage height, 13.91 ft or 4.240 m); minimum daily, 0.85 ft³/s (0.024 m³/s) Aug. 24, Sept. 8.

Period of record: Maximum discharge, 14,000 ft³/s (396 m³/s) May 24, 1975 (gage height, 13.91 ft or 4.240 m); no flow at times most years.

Maximum stage since at least 1886, 17 ft (5.2 m) in 1899 and 1957, from information by local residents.

REMARKS.--Discharge records good. Diversions above station for irrigation. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	299	94	131	365	21	11	255	701	425	8.6	3.7
2	10	973	68	126	890	22	11	222	305	350	21	2.3
3	8.6	766	48	159	1,240	20	9.5	67	120	255	29	1.6
4	8.3	260	38	177	2,290	21	9.2	34	62	231	78	1.4
5	8.3	85	33	128	1,760	22	8.8	34	50	87	201	1.3
6	8.1	81	40	73	1,080	25	9.1	81	41	42	74	.99
7	7.9	225	41	53	399	27	9.5	87	33	28	26	.87
8	7.7	566	37	45	145	24	23	86	26	17	14	.85
9	7.6	812	30	41	75	22	33	396	20	12	9.6	.89
10	7.6	775	65	41	58	19	27	349	58	26	6.2	1.3
11	7.5	350	314	39	50	19	19	263	179	50	4.6	1.6
12	7.3	275	679	81	45	19	14	192	198	26	3.6	1.6
13	7.3	278	910	130	40	20	11	163	62	19	2.9	1.7
14	7.6	139	352	112	35	20	11	89	28	15	2.4	1.6
15	8.3	51	160	65	36	19	11	72	20	12	2.1	1.3
16	8.2	35	112	47	41	19	10	66	17	17	1.9	1.6
17	7.7	30	76	39	40	18	9.5	42	15	41	1.7	1.7
18	7.5	27	53	36	37	19	10	25	13	24	1.5	2.7
19	7.4	24	43	36	32	18	9.0	16	11	15	1.3	1.1
20	7.3	23	37	34	28	16	7.8	14	9.6	11	1.2	5.8
21	7.0	22	32	30	26	15	6.6	17	8.9	8.4	1.1	4.3
22	6.8	20	29	30	26	15	6.8	31	8.5	6.9	.97	2.7
23	6.7	21	29	30	26	15	7.4	32	7.9	5.7	.95	1.7
24	6.7	1,510	30	27	25	15	7.3	9,490	7.4	5.2	.85	7.5
25	6.9	1,360	31	27	23	13	6.8	3,450	8.9	4.6	.92	4.4
26	7.0	812	30	26	22	11	6.5	1,620	75	4.2	.97	3.1
27	7.1	292	31	25	22	13	6.3	1,080	223	3.8	2.6	2.3
28	8.3	105	35	24	21	14	18	435	305	3.6	8.7	1.8
29	16	78	39	24	-----	13	109	281	866	3.4	4.2	1.6
30	15	105	58	24	-----	13	209	403	453	3.1	6.4	1.3
31	134	-----	90	48	-----	12	-----	955	-----	6.1	5.7	-----
TOTAL	385.7	10,399	3,664	1,908	8,877	559	647.1	20,347	3,932.2	1,758.0	523.96	170.10
MEAN	12.4	347	118	61.5	317	18.0	21.6	656	131	56.7	16.9	5.67
MAX	134	1,510	910	177	2,290	27	209	9,490	866	425	201	2.7
MIN	6.7	20	29	24	21	11	6.3	14	7.4	3.1	.85	.85
AC-FT	765	20,630	7,270	3,780	17,610	1,110	1,280	40,360	7,800	3,490	1,040	337

CAL YR 1974 TOTAL 44,984.04 MEAN 123 MAX 5,820 MIN 0 AC-FT 89,230
WTR YR 1975 TOTAL 53,171.06 MEAN 146 MAX 9,490 MIN .85 AC-FT 105,500

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	1500	9.46	1,150	5-24	1500	13.91	14,000
11-24	1100	10.57	2,410	5-31	1100	9.27	1,000
2-4	0400	10.68	2,580	6-29	1100	9.35	1,060

BRAZOS RIVER BASIN

08109800 East Yegua Creek near Dime Box, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
NOV.					
04...	1300	258	19.5	40	28
JAN.					
22...	1140	25	15.0	22	1.5
MAR.					
10...	1250	21	16.0	38	2.2
MAY					
24...	1800	14000	21.5	149	5630
JUNE					
03...	1430	99	27.5	89	24
JULY					
14...	1350	15	26.0	44	1.8
AUG.					
25...	1545	.90	26.0	12	.03

LOCATION.--Lat 30°19'06", long 96°31'24", Burleson County, in intake structure of Somerville Dam on Yegua Creek, at the southwest edge of the city limits of Somerville, and at mile 20.0 (32.2 km).

PERIOD OF RECORD.--Contents: February 1966 to current year. Prior to October 1970, published as Somerville Reservoir.
Water quality: Chemical analyses: October 1969 to current year.

EXTREMES.--Current year: Maximum contents, 286,200 acre-ft (353 hm³) June 1 (elevation, 247.08 ft or 75.310 m); minimum, 156,100 acre-ft (192 hm³) Dec. 23 (elevation, 237.64 ft or 72.433 m).

Period of record: Maximum contents, 294,200 acre-ft (363 hm³) June 28, 1968 (elevation, 247.56 ft or 75.456 m); minimum, 117,000 acre-ft (144 hm³) Nov. 16, 1971 (elevation, 233.88 ft or 71.287 m).

REMARKS.--The lake is formed by a rolled earthfill dam 20,210 ft (6,160 m) long, with a 4,715-foot-long (1,437-metre) dike and a 1,250-foot-long (381-metre) uncontrolled spillway. Deliberate impoundment began Jan. 3, 1967, and the dam was completed Oct. 27, 1967. The emergency spillway is an uncontrolled ogee weir 1,250-foot (381-metre) wide located near right end of dam. The low-flow outlet consists of one 10.0-foot-diameter (3.0-metre) conduit that is controlled by two 5.0- by 10.0-foot (1.5- by 3.0-metre) tractor-type gates. Capacity table is based on Geological Survey topographic maps dated 1959. The lake was designed for flood control and water conservation. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	280.0	
Design flood.....	274.5	1,028,800
Spillway crest.....	258.0	507,500
Top of conservation pool.....	238.0	160,100
Lowest gated outlet (invert of 10-foot conduit).....	206.0	200

Capacity table (elevation, in feet, and contents, in acre-feet)

237.0	148,900	242.0	210,000
238.0	160,100	244.0	238,300
239.0	171,800	246.0	268,800
240.0	184,000	248.0	301,600

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223,000	174,000	208,000	161,000	161,300	187,600	160,100	162,600	286,200	237,700	179,700	160,100
2	218,100	177,900	203,700	163,400	164,700	185,800	160,100	163,500	283,100	240,200	178,600	160,000
3	213,400	182,400	199,300	165,400	173,900	184,000	159,900	164,300	278,900	241,700	177,200	159,700
4	208,400	185,400	195,200	167,000	189,600	182,400	159,700	165,000	274,400	240,400	176,600	159,800
5	203,700	187,200	190,900	167,900	203,400	188,900	159,700	165,000	269,400	237,200	175,400	159,500
6	199,200	187,600	187,500	167,700	211,700	179,100	159,700	164,100	265,200	232,500	174,000	159,300
7	194,800	193,900	183,100	166,200	214,500	177,500	159,900	165,200	260,400	228,300	172,300	159,100
8	190,000	201,500	178,800	163,900	215,600	175,800	160,700	168,100	256,000	223,500	170,100	159,100
9	185,400	207,000	174,500	162,300	214,900	174,500	161,000	172,400	251,800	219,700	168,500	159,100
10	181,200	210,700	173,000	161,000	213,800	172,400	160,900	176,000	251,000	217,900	166,600	159,000
11	178,900	212,900	173,200	160,100	214,300	170,900	160,900	180,300	247,800	216,400	165,300	159,100
12	176,900	211,500	173,500	160,300	214,500	169,400	160,600	182,500	245,700	214,300	164,300	160,000
13	175,000	208,800	173,000	160,200	214,500	167,700	162,200	182,400	244,200	212,300	163,200	159,500
14	173,900	205,300	172,400	160,200	212,400	165,700	163,100	182,000	242,500	210,800	162,100	159,400
15	172,800	201,600	171,000	160,100	211,600	164,000	163,000	180,800	241,100	209,600	161,300	159,200
16	170,300	198,100	169,000	160,100	209,800	162,400	162,200	179,700	239,800	208,100	160,700	161,600
17	168,900	193,900	165,600	159,900	208,300	160,700	161,300	178,600	237,400	206,500	160,500	161,600
18	167,600	189,500	161,700	159,500	206,700	159,800	160,800	177,200	235,400	205,100	160,100	160,800
19	166,000	184,700	158,500	159,200	205,100	159,900	160,300	175,400	233,200	203,400	160,000	160,300
20	164,700	181,000	156,700	159,100	203,400	159,900	159,700	173,700	231,300	201,500	159,800	160,100
21	163,300	176,600	156,400	159,100	201,700	160,100	159,500	172,400	229,500	199,600	159,400	159,800
22	162,000	172,200	156,200	159,700	200,500	160,100	159,500	170,600	227,800	197,200	159,400	159,300
23	160,900	168,300	156,100	159,700	198,400	160,500	159,500	170,400	225,300	196,200	159,300	159,000
24	160,000	178,500	156,300	160,100	196,200	160,200	159,800	195,300	223,900	194,200	159,200	158,600
25	160,100	192,700	156,200	160,200	194,700	160,000	159,700	231,800	222,500	191,900	159,000	158,600
26	160,100	203,500	156,500	160,300	192,900	160,300	159,700	251,800</				

† Elevation, in feet, at end of month.
* Change in contents, in acre-feet.
†† Diversions, in acre-feet, for municipal use by city of Brenham.

BRAZOS RIVER BASIN

08109900 Somerville Lake near Somerville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
NOV. 05...	1700	9.6	24	5.0	18	5.5	54	0	39
JAN. 28...	1535	5.5	27	6.9	21	5.9	48	0	61
APR. 22...	1415	3.9	32	7.9	25	6.2	54	0	66
AUG. 29...	1120	9.0	26	6.8	22	5.3	58	0	46

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO
NOV. 05...	28	--	--	--	--	156	81	36	.9
JAN. 28...	33	.3	--	--	--	184	96	56	.9
APR. 22...	44	.2	--	--	--	212	110	68	1.0
AUG. 29...	35	.2	.01	.00	.01	179	93	45	1.0

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
NOV. 05...	281	7.2	16.5	--	--	--	--	--
JAN. 28...	324	7.4	16.5	--	--	--	--	--
APR. 22...	391	7.3	24.0	--	--	--	--	--
AUG. 29...	321	7.5	30.0	1.10	5.8	76	10	10

LOCATION.--Lat 30°19'18", long 96°30'26", Burleson County, on left bank 40 ft (12 m) downstream from centerline of bridge on State Highway 36, 860 ft (262 m) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.0 mile (1.6 km) downstream from Somerville Lake, 2.0 miles (3.2 km) south of Somerville, 5.0 miles (8.0 km) upstream from Davidson Creek, and at mile 18.4 (29.6 km).

Water quality: Chemical analyses: September 1961 to September 1967, October 1968 to current year. Water temperatures: September 1961 to September 1967.

AVERAGE DISCHARGE.--41 years (1924-65) unregulated, 290 ft³/s (8.213 m³/s), 210,100 acre-ft/yr (259 hm³/yr); 10 years (1965-75) regulated, 315 ft³/s (8.921 m³/s), 228,200 acre-ft/yr (281 hm³/yr).

Period of record: Maximum discharge, 56,800 ft³/s (1,610 m³/s) July 1, 1940 (gage height, 19.27 ft or 5.873 m); no flow at times. Maximum stage since at least 1875, 22 ft (6.7 m) Dec. 5, 1913, present site and datum, from information by Gulf, Colorado, and Santa Fe Railway Co.

REVISIONS (WATER YEARS).--WSP 1512: 1926(M), 1929, 1935. WSP 1922: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,470	103	2,310	12	149	1,000	1.7	7.1	440	785	934	.74
2	2,470	10	2,320	12	11	1,000	1.8	3.6	1,720	739	954	.83
3	2,470	4.1	2,310	13	25	1,000	1.7	2.8	2,640	435	758	.84
4	2,460	3.2	2,290	5.9	73	989	1.8	2.5	2,690	1,560	365	.89
5	2,460	3.2	2,280	3.3	17	979	2.0	340	2,720	2,530	870	1.0
6	2,460	231	2,280	355	357	980	2.2	920	2,630	2,550	882	1.1
7	2,450	685	2,270	1,160	1,130	980	2.4	954	2,620	2,550	882	1.1
8	2,430	127	2,270	1,230	1,280	968	4.3	743	2,600	2,540	882	1.1
9	2,420	14	2,260	1,240	1,290	963	5.6	141	2,600	2,140	883	1.1
10	2,290	6.4	2,290	1,080	1,110	950	5.2	14	2,350	1,090	881	1.1
11	1,740	192	2,200	625	355	945	4.8	7.4	2,000	977	749	1.1
12	1,280	1,140	1,860	610	18	940	4.2	191	2,570	954	535	.96
13	1,190	2,300	1,860	558	172	924	4.7	794	2,580	954	531	.96
14	1,170	2,310	1,880	486	772	917	8.6	966	2,060	952	525	.89
15	1,190	2,300	1,890	492	908	917	202	974	1,120	953	525	.81
16	1,140	2,300	2,020	495	915	915	571	978	1,010	952	327	1.2
17	1,040	2,290	2,310	495	919	908	581	980	994	950	15	112
18	741	2,310	2,340	498	921	744	486	980	993	956	2.5	571
19	681	2,360	2,250	498	922	63	299	981	991	956	1.2	516
20	677	2,350	1,600	334	929	5.6	282	985	988	950	.8	42
21	673	2,340	629	20	937	2.1	165	989	987	942	.7	3.0
22	673	2,350	436	5.4	941	1.4	11	990	983	936	.5	1.0
23	673	2,340	305	4.1	937	1.2	4.4	996	976	941	.5	.83
24	471	2,050	175	3.6	947	1.1	3.6	794	978	941	.6	.85
25	32	358	13	3.4	964	1.0	4.0	113	977	932	.7	.94
26	2.9	31	5.1	3.6	978	1.1	4.7	10	1,000	930	.7	1.2
27	.8	264	4.4	3.3	985	1.4	5.4	3.3	1,020	933	.8	1.3
28	58	939	3.3	59	995	1.6	7.0	4.8	750	931	.9	1.4
29	183	1,020	2.8	237	-----	1.6	15	18	78	929	.9	1.4
30	569	1,400	3.6	250	-----	1.7	21	17	217	942	.9	1.2
31	514	-----	6.4	254	-----	1.7	-----	14	-----	935	.7	-----
TOTAL	39,078.7	34,130.9	44,673.6	11,045.6	19,957	17,103.5	2,713.1	14,913.5	46,282	36,765	11,510.4	1,269.84
MEAN	1,261	1,138	1,441	356	713	552	90.4	481	1,543	1,186	371	42.3
MAX	2,470	2,360	2,340	1,240	1,290	1,000	581	996	2,720	2,550	954	571
MIN	.80	3.2	2.8	3.3	11	1.0	1.7	2.5	78	435	.50	.74
AC-FT	77,510	67,700	88,610	21,910								

BRAZOS RIVER BASIN

08110000 Yegua Creek near Somerville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 05...	1455	3.2	15	35	6.4	29	5.8	56	0	57
DEC. 17...	1500	2330	9.3	21	5.9	15	5.5	48	0	40
JAN. 28...	1415	3.4	12	66	13	62	5.8	50	0	130
MAR. 11...	1530	971	9.0	29	7.7	24	5.6	48	0	63
APR. 22...	1230	9.6	6.0	43	10	40	7.3	53	0	93
JUNE 05...	1000	2780	2.7	28	7.6	24	5.2	48	0	58
JULY 16...	1455	958	7.0	30	5.9	20	5.0	54	0	46
AUG. 26...	1530	.81	13	53	11	40	6.5	65	0	78

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV. 05...	52	--	228	110	68	1.2	415	6.8	19.0
DEC. 17...	27	.3	148	77	37	.7	259	7.5	11.5
JAN. 28...	130	.1	444	220	180	1.8	805	7.1	19.5
MAR. 11...	40	.3	202	100	65	1.0	356	7.1	13.5
APR. 22...	72	.1	298	150	110	1.4	547	7.0	19.5
JUNE 05...	41	.2	190	100	62	1.0	351	7.0	26.0
JULY 16...	34	.2	175	99	55	.9	309	7.9	28.0
AUG. 26...	91	.2	325	180	120	1.3	596	7.0	29.0

08110100 Davidson Creek near Lyons, Tex.

LOCATION.--Lat 30°25'10", long 96°32'24", Burleson County, on left bank 83 ft (25 m) downstream from Farm Road 60, 1.2 miles (1.9 km) downstream from Berry Creek, 2.8 miles (4.5 km) northeast of Lyons, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--Discharge: October 1962 to current year.

Water quality: Sediment records: June 1966 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 220.26 ft (67.135 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 64.2 ft³/s (1.818 m³/s), 46,510 acre-ft/yr (57.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,710 ft³/s (105 m³/s) Nov. 25 (gage height, 15.65 ft or 4.770 m); minimum, 0.12 ft³/s (0.003 m³/s) Sept. 6, 7.

Period of record: Maximum discharge, 23,200 ft³/s (657 m³/s) June 24, 1968 (gage height, 18.67 ft or 5.691 m); no flow at times each year.

Maximum stage since at least 1902, that of June 24, 1968. Flood in 1947 reached a stage of 17 ft (5.2 m), from information by local resident.

REMARKS.--Discharge records good. During year, the city of Caldwell discharged 264 acre-ft (0.326 hm³) of sewage effluent into creek above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	1,010	78	234	61	14	6.9	87	193	315	4.4	1.2
2	6.9	204	45	198	82	14	6.4	40	89	775	6.8	.84
3	5.8	183	31	332	728	13	5.4	24	35	212	444	.89
4	5.3	134	24	221	1,850	12	4.8	18	26	66	209	.60
5	4.4	58	20	98	1,620	13	4.9	29	21	39	138	.28
6	3.8	29	34	57	883	19	5.0	79	16	26	63	.25
7	3.4	598	46	41	207	19	4.8	58	14	17	23	.20
8	3.6	1,380	26	34	81	16	18	169	12	12	13	.32
9	3.2	991	18	31	60	14	57	1,850	12	9.5	7.7	.22
10	3.0	275	74	29	48	13	20	1,950	266	9.0	5.5	.27
11	2.5	164	841	30	41	13	12	604	193	27	4.4	.27
12	2.1	134	825	146	37	12	8.9	216	51	17	3.6	1.1
13	2.4	70	307	202	32	12	10	91	24	9.5	2.9	.59
14	5.6	35	101	75	28	12	16	93	16	16	2.6	.57
15	13	24	178	46	28	12	9.4	97	12	19	2.3	.50
16	4.3	21	89	33	365	12	7.6	64	9.5	9.8	1.7	128
17	2.8	18	52	28	141	12	6.6	35	7.8	14	1.7	198
18	3.4	16	36	26	52	11	6.1	24	6.7	12	1.5	78
19	3.0	14	28	25	34	11	5.4	19	5.8	15	1.3	21
20	2.6	13	24	24	26	11	4.8	15	4.8	8.1	1.1	9.1
21	2.7	12	21	21	22	11	4.2	13	4.2	5.1	.90	5.6
22	2.0	10	18	19	20	10	4.0	11	3.6	4.2	.80	51
23	1.7	8.6	17	19	19	9.2	3.6	11	3.6	2.7	.71	30
24	1.6	1,470	16	19	17	8.7	3.7	316	3.3	2.3	.90	11
25	1.6	2,330	15	19	16	8.2	4.1	1,180	3.6	2.0	.80	6.2
26	1.9	810	15	19	15	7.5	3.9	1,330	84	1.7	.70	4.0
27	1.8	142	15	18	14	7.2	3.8	795	507	1.7	.71	2.9
28	92	64	16	17	14	7.6	4.3	124	825	1.9	.98	1.7
29	111	76	18	16	-----	7.6	256	159	202	1.1	1.5	1.0
30	15	192	105	16	-----	7.2	162	571	145	1.7	2.5	.32
31	582	-----	262	16	-----	6.7	-----	314	-----	6.0	1.7	-----
TOTAL	902.6	10,485.6	3,395	2,109	6,541	355.9	669.6	10,386	2,795.9	1,658.3	949.70	555.92
MEAN	29.1	350	110	68.0	234	11.5	22.3	335	93.2	53.5	30.6	18.5
MAX	582	2,330	841	332	1,850	19	256	1,950	825	775	444	198
MIN	1.6	8.6	15	16	14	6.7	3.6	11	3.3	1.1	.70	.20
AC-FT	1,790	20,800	6,730	4,180	12,970	706	1,330	20,600	5,550	3,290	1,880	1,100
CAL YR 1974	TOTAL	38,664.14	MEAN	106	MAX	4,610	MIN	0	AC-FT	76,690		
WTR YR 1975	TOTAL	40,804.52	MEAN	112	MAX	2,330	MIN	.20	AC-FT	80,940		

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	0100	15.65	3,710	5-9	2300	15.44	3,120
2-4	2300	15.07	2,290	5-26	1330	14.54	1,510

BRAZOS RIVER BASIN

08110100 Davidson Creek near Lyons, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 04...	1515	86	19.5	154	36
DEC. 16...	1530	82	11.0	62	14
MAR. 10...	1520	13	17.0	180	6.3
JUNE 02...	1600	50	22.5	81	11
JULY 16...	1200	9.5	24.0	36	.92
AUG. 26...	1400	1.3	27.0	12	.04

BRAZOS RIVER BASIN

383

08110200 Brazos River at Washington, Tex.

LOCATION.--Lat 30°21'40", long 96°09'18", Washington County, near right bank beneath floor of bridge on State Highway 105 (corrected), 2.4 miles (3.9 km) upstream from Navasota River, 2.5 miles (4.0 km) north of Washington, and at mile 228.8 (368.1 km).

DRAINAGE AREA.--39,740 mi² (102,930 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1965 to current year. Gage heights collected in this vicinity since 1915 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 140.13 ft (42.712 m) above mean sea level. Auxiliary water-stage recorder 1.8 miles (2.9 km) downstream at same datum.

AVERAGE DISCHARGE.--9 years, 5,422 ft³/s (153.6 m³/s), 3,928,000 acre-ft/yr (4.84 km³/yr).

EXTREMES.--Current year: Maximum discharge, 75,700 ft³/s (2,140 m³/s) May 26 (gage height, 34.15 ft or 10.409 m); maximum gage height, 34.95 ft (10.653 m) May 27 (backwater from Navasota River); minimum daily discharge, 864 ft³/s (24.5 m³/s) Sept. 28.
Period of record: Maximum discharge, 82,500 ft³/s (2,340 m³/s) Jan. 24, 1968 (gage height, 33.60 ft or 10.241 m); maximum gage height, 36.74 ft (11.198 m) Apr. 28, 1966 (backwater from Navasota River); minimum daily discharge, 276 ft³/s (7.82 m³/s) Feb. 17, 19, 1971.

Maximum stage since at least 1856, 62.0 ft (18.90 m) Dec. 6, 1913, from information by local residents.

REMARKS.--Records good. Backwater at times from Navasota River. Many diversions above station for irrigation, municipal, industrial and oilfield operations. Flow is regulated by 26 major reservoirs with a combined capacity of 6,829,000 acre-ft (8.42 km³), of which 4,138,000 acre-ft (5.10 km³) is for flood control. At end of year, flow from 401 mi² (1,039 km²) above this station was partly controlled by 122 floodwater-retarding structures with a combined capacity of 154,440 acre-ft (190 hm³) below the flood-spillway crests, of which 16,810 acre-ft (20.7 hm³) is sediment-pool capacity. Three structures were built during the current year and have a combined capacity below flood-spillway crests of 5,980 acre-ft (7.37 hm³) of which 337 acre-ft (0.416 hm³) is sediment-pool capacity. The capacity in these pools allocated to sediment storage will be used for conservation storage until eliminated by sedimentation. Recording rain gage located at auxiliary gage 1.8 miles (2.9 km) downstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10500	10100	9870	9370	5070	12300	2790	9490	28900	15700	4180	1620
2	9820	35600	9280	10400	5300	11600	2520	10800	18700	10600	4480	2210
3	9050	50300	8870	11600	15700	10300	1770	9000	14200	9080	5340	2440
4	8860	36300	8710	11800	45400	9720	2050	6420	14700	9080	5420	2570
5	7520	23300	8430	12000	54300	9520	2660	8900	18500	8540	6250	2350
6	6800	26800	7920	10900	47700	9650	2890	14700	20700	8000	5400	1900
7	6240	30000	8210	10900	32800	9410	2640	14500	15800	8200	4680	1840
8	6100	34900	8900	10800	24600	9140	2510	11800	14000	7530	5140	1670
9	5870	39500	8430	11600	20300	8870	1780	19600	14500	7060	4300	1420
10	5730	43300	9860	12600	19200	8600	10100	17200	15000	7060	4470	1230
11	5000	34400	13100	12800	18800	8370	12800	10800	17000	6800	5670	1080
12	5000	26800	17200	13600	17400	8400	10100	13700	18500	7270	4010	981
13	4340	22100	17000	15500	16800	7190	15200	12800	21600	8330	2930	1030
14	4470	23700	13600	17200	15900	6330	15800	8590	21500	9540	2890	1080
15	4810	24000	10900	17100	13500	6550	12100	5310	21500	7030	2510	1120
16	4490	20900	9630	14900	12200	7470	11000	6500	22700	5200	2270	1430
17	4380	15500	9050	12200	9990	6620	11400	5510	21900	5490	1920	2080
18	4430	11500	8830	11000	9450	6510	12100	4430	16200	5210	1880	2570
19	4000	10200	8890	11500	9280	6710	11500	4270	14300	4470	1900	3250
20	3900	9680	9360	10200	13500	5400	10500	3520	13600	4010	1690	3240
21	4030	9290	8900	9460	16600	3920	8610	3730	11900	3590	1490	2040
22	3200	8620	7510	9180	16500	3020	6330	4750	10400	3260	1550	2110
23	2270	8580	7620	7840	15400	2420	5050	6700	10400	3240	1780	2510
24	1960	16800	6800	6340	14500	2500	4660	9700	10100	3710	2190	1850
25	1470	49200	6750	5680	13700	2390	4470	42700	9280	3930	1810	1300
26	1140	53300	6950	5100	12100	2200	4330	65300	8720	4030	1650	1070
27	1250	36700	7370	4320	12100	2250	4200	68600	8810	4140	1500	956
28	2070	17000	7820	3990	12400	4570	4220	45900	11100	3820	1770	864
29	5540	13100	7990	4220	---	3960	6810	17600	18200	4410	1890	984
30	2550	11400	8660	4980	---	3030	9990	19300	22700	5030	2020	1110
31	2270	---	9360	5240	---	2860	---	30500	---	4420	1930	---
TOTAL	149060	752870	291770	314320	520490	201780	212880	512620	485410	197780	96910	51905
MEAN	4808	25100	9412	10140	18590	6509	7096	16540	16180	6380	3126	1730
MAX	10500	53300	17200	17200	54300	12300	15800	68600	28900	15700	6250	3250
MIN	1140	8580	6750	3990	5070	2200	1770	3520	8720	3240	1490	864
AC-FT	295700	1493000	578700	623500	1032000	400200	422200	1017000	962800	392300	192200	103000

CAL YR 1974 TOTAL 2169627 MEAN 5944 MAX 53300 MIN 649 AC-FT 4303000
WTR YR 1975 TOTAL 3787795 MEAN 10380 MAX 68600 MIN 864 AC-FT 7513000

BRAZOS RIVER BASIN

08110300 Lake Mexia near Mexia, Tex.

LOCATION.--Lat 31°38'45", long 96°34'39". Limestone County, 550 ft (168 m) downstream from Cedar Creek, 610 ft (186 m) upstream from spillway of dam on Navasota River, 1.0 mile (1.6 km) upstream from Echo Dam, 1.6 miles (2.6 km) upstream from Jacks Creek, and 6 miles (10 km) southwest of Mexia.

DRAINAGE AREA.--198 mi² (513 km²).

PERIOD OF RECORD.--Contents: July 1961 to current year.

Water quality: Chemical analyses: October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 420.0 ft (128.02 m) above mean sea level.

EXTREMES.--Current year: Maximum contents, 20,320 acre-ft (25.1 hm³) Oct. 31 (gage height, 34.40 ft or 10.485 m); minimum, 7,820 acre-ft (9.64 hm³) Sept. 15 (gage height, 27.08 ft or 8.254 m).

Period of record: Maximum contents, 20,320 acre-ft (25.1 hm³) Oct. 31, 1974 (gage height, 34.40 ft or 10.485 m); minimum, 3,730 acre-ft (4.60 hm³) Jan. 15, 1964 (gage height, 21.40 ft or 6.523 m).

REMARKS.--The lake is formed by a 1,645-foot (501-metre) earthfill dam, including a 520-foot (158-metre) uncontrolled concrete ogee type spillway near the center of dam. The dam was completed and deliberate impoundment of water began June 5, 1961. The Bistone Municipal Water Supply District reported a diversion of 1,620 acre-ft (2.00 hm³) for municipal use during the current year. Data regarding the dam is given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	42.3	-
Crest of spillway.....	28.3	9,400
Lowest gated outlet (invert).....	2.1	531

COOPERATION.--Capacity table computed from data furnished by Fowler and Grafe, Inc., Consulting Engineers, Dallas. Data based on pre-construction survey in 1958 and was not adjusted for borrow in the lake area. Diversions from lake for municipal use furnished by the Bistone Municipal Water Supply District.

Capacity table (gage height, in feet, and contents, in acre-feet)

27.0	7,720	31.0	13,620
28.0	8,970	32.0	15,410
29.0	10,400	34.0	19,430
30.0	12,010	35.0	21,660

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9380	12200	9690	9700	9540	9460	9470	10030	9690	9460	9080	8230
2	9370	10090	9610	9800	13820	9440	9430	9690	9600	9470	9070	8200
3	9330	9710	9640	9910	12440	9460	9400	9670	9540	9470	9040	8170
4	9280	9760	9560	9740	11010	9460	9370	10090	9510	9570	9010	8130
5	9270	9700	9610	9660	10010	9460	9370	9760	9500	9540	9000	8120
6	9270	9610	9670	9600	9730	9470	9360	9630	9480	9500	8950	8080
7	9260	9660	9580	9570	9640	9470	9400	9600	9470	9460	8930	8060
8	9230	9710	9540	9540	9660	9460	11010	9560	9440	9430	8880	8020
9	9230	9660	9530	9610	9560	9470	10510	9530	9430	9400	8870	8010
10	9200	11330	10430	9800	9560	9460	9860	9500	10230	9370	8830	7970
11	9170	10190	9000	9790	9540	9470	9800	9800	9760	9360	8810	7930
12	9160	9770	9870	10770	9540	9480	9640	10110	9600	9790	8760	7910
13	9140	9640	9690	9940	9540	10110	9790	9710	9530	9580	8720	7870
14	9260	9570	9640	9730	9540	9840	10140	9710	9480	9510	8700	7830
15	9260	9540	9580	9640	9560	9700	9770	9930	9460	9470	8660	8100
16	9240	9530	9560	9580	9570	9790	9630	9790	9430	9440	8630	8500
17	9160	9510	9540	9570	9570	9740	9560	9640	9370	9410	8580	8500
18	9130	9510	9540	9560	9510	9670	9560	9540	9340	9370	8560	8480
19	9100	9510	9540	9480	9500	9630	9500	9500	9300	9340	8520	8470
20	9080	9500	9510	9480	9500	9580	9480	10920	9270	9300	8500	8450
21	9040	9480	9500	9500	9500	9570	9470	10110	9240	9280	8450	8430
22	9030	9470	9510	9480	9510	9560	9470	9710	9230	9230	8430	8400
23	9010	9860	9530	9480	9440	9540	9460	12250	9180	9200	8380	8360
24	9010	12910	9570	9500	9410	9470	9460	13310	9160	9160	8380	8320
25	9010	10640	9740	9500	9410	9430	9440	11660	9990	9140	8360	8300
26	9000	9840	9690	9500	9430	9400	9480	10010	9940	9100	8360	8270
27	8960	9800	9630	9500	9430	9430	9410	9710	9740	9070	8370	8250
28	9110	9610	9600	9500	9440	9630	9480	9630	9600	9080	8350	8220
29	9200	9690	9600	9510	---	9540	9690	11080	9530	9170	8320	8200
30	9270	9830	9610	9500	---	9500	10950	11010	9500	9140	8300	8180
31	19370	---	9640	9510	---	9470	---	9910	---	9100	8260	---
(†)	33.97	28.60	28.47	28.38	28.33	28.35	29.34	28.66	28.37	28.09	27.43	27.37
(*)	+9960	-9540	-190	-130	-70	+30	+1480	-1040	-410	-400	-840	-80
(††)	129	135	135	135	114	125	111	122	134	161	171	148
MAX	19370	12910	10430	10770	13820	10110	11010	13310	10230	9790	9080	8500
MIN	8960	9470	9000	9480	9410	9400	9360	9500	9160	9070	8260	7830

CAL YR 1974..... * +180

WTR YR 1975..... * -1230

†† 1555

†† 1620

MAX 19370

MAX 19370

MIN 6610

MIN 7830

† Gage height, in feet, at end of month.

* Change in contents, in acre-feet.

†† Diversions, in acre-feet, by Bistone Municipal Water Supply District.

08110300 Lake Mexia near Mexia, Tex.--Continued

WATER QUALITY DATA

		DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)			
DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)		
NOV., 1974										
08...	0900	8.0	17	1.4	3.4	3.1	62	0	4.8	
AUG., 1975										
05...	0945	2.8	37	3.0	13	4.2	118	0	15	
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
NOV., 1974										
08...	3.5	--	72	48	0	.2	125	7.7	15.5	
AUG., 1975										
05...	16	.2	149	100	8	.6	278	8.2	29.5	

08110400 Navasota River near Groesbeck, Tex.

LOCATION.--Lat 31°30'45", long 96°27'03", Limestone County, on left bank 43 ft (13 m) downstream from State Highway 164, 0.4 mile (0.6 km) downstream from Pin Oak Creek, 5 miles (8 km) east of Groesbeck, and at mile 154.6 (248.8 km).

DRAINAGE AREA.--313 mi² (811 km²).

PERIOD OF RECORD.--Discharge: March 1965 to current year.

Water quality: Chemical analyses: November 1967 to current year. Water temperatures: November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 353.84 ft (107.85 m) above mean sea level. Prior to Oct. 1, 1972, at 5.0 ft (1.52 m) higher datum.

AVERAGE DISCHARGE.--10 years, 198 ft³/s (5.607 m³/s), 143,500 acre-ft/yr (177 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 27,000 ft³/s (765 m³/s) Nov. 1 (gage height, 25.55 ft or 7.788 m); minimum daily, 3.5 ft³/s (0.099 m³/s) July 28, 29.

Period of record: Maximum discharge, 27,000 ft³/s (765 m³/s) Nov. 1, 1974 (gage height, 25.55 ft or 7.788 m); no flow at times in 1967, 1969, 1971-72.

Historic: Maximum stage since at least 1902 occurred in 1944 (stage unknown) from information by local residents. Maximum stage occurred in 1932 and reached a stage of 28.7 ft (8.75 m), from information by Texas Highway Department.

Water quality: Current year: Maximum daily specific conductance, 1,970 micromhos Aug. 29; minimum daily, 104 micromhos Oct. 31. Maximum water temperatures, 35.0°C Sept. 3, 4; minimum, 4.5°C Feb. 9.

Period of record: Maximum daily specific conductance, 6,590 micromhos Oct. 8, 9, 1969; minimum daily, 71 micromhos June 4, 1973. Maximum water temperatures, 38.0°C on several days during July 1974; minimum, 1.5°C Jan. 10, 1973.

REMARKS.--Discharge records fair. Flow partly regulated by Lake Mexia (station 08110300) 14.4 miles (23.2 km) upstream (capacity, 9,400 acre-ft or 11.6 hm³) and Springfield Lake 8.0 miles (12.9 km) upstream (approximate capacity, 3,100 acre-ft or 3.82 hm³). Several diversions above station for irrigation, municipal supply, and oilfield operation (total amount unknown). The city of Mexia discharged 623 acre-ft (768,000 m³) of sewage effluent during year into river above station. The city of Groesbeck diverted 387 acre-ft (477,000 m³) for municipal use and returned 10 acre-ft (12,300 m³) of washwater and 224 acre-ft (276,000 m³) of sewage effluent above station during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20,900	319	92	26	23	26	1,030	688	55	4.9	4.7
2	13	6,040	212	97	1,730	20	23	780	194	35	7.3	4.6
3	10	1,420	136	235	8,840	14	28	257	107	31	8.4	4.5
4	9.0	336	99	323	5,510	13	17	346	70	68	7.1	4.3
5	7.9	227	76	232	2,740	14	14	418	48	39	5.8	4.2
6	7.4	177	187	145	859	14	12	300	35	29	4.7	4.1
7	6.8	184	202	97	279	15	12	155	27	23	4.3	4.1
8	6.7	260	126	80	189	15	110	87	21	17	4.2	5.2
9	6.4	198	83	63	146	10	1,120	54	17	14	4.1	4.9
10	6.3	712	163	63	118	12	1,500	36	17	11	4.0	4.5
11	6.2	1,300	1,940	110	80	13	499	901	279	9.4	4.9	4.3
12	6.3	888	1,490	588	66	13	248	3,380	232	21	4.7	4.3
13	6.1	313	518	1,240	51	21	174	1,340	105	332	4.2	4.2
14	6.1	167	237	588	38	329	355	318	60	150	4.0	4.1
15	6.2	97	164	249	39	274	513	248	36	70	3.7	4.0
16	11	65	114	148	46	201	295	304	24	41	3.7	17
17	8.9	50	85	103	80	212	161	251	16	22	3.8	21
18	7.5	41	61	82	56	196	98	135	11	15	3.8	9.2
19	7.0	34	50	75	46	133	78	79	9.2	10	3.8	5.9
20	7.1	31	40	67	36	106	50	129	7.4	7.4	3.8	5.0
21	6.2	27	33	40	32	142	34	1,420	6.6	6.3	3.7	4.7
22	6.2	22	28	31	43	107	26	990	6.1	5.6	3.7	4.6
23	6.3	33	25	28	44	47	20	959	6.9	4.5	3.6	4.5
24	6.8	6,690	26	24	38	38	18	6,500	5.3	3.8	3.6	4.5
25	6.9	4,610	40	24	32	30	16	8,690	581	4.1	4.1	4.3
26	7.7	2,710	52	24	24	22	14	3,950	1,170	3.6	5.9	4.2
27	8.3	606	84	22	25	18	12	1,210	1,820	3.6	5.9	4.2
28	9.1	213	90	20	36	20	15	264	554	3.5	9.4	4.2
29	9.2	218	83	20	-----	33	201	309	158	3.5	13	4.2
30	9.3	663	77	21	-----	42	127	1,620	82	4.0	6.6	4.2
31	3,760	-----	86	21	-----	34	-----	2,020	-----	4.5	5.2	-----
TOTAL	4,000.9	49,232	6,926	4,952	21,249	2,181	5,816	38,480	6,393.5	1,046.8	159.9	167.7
MEAN	129	1,641	223	160	759	70.4	194	1,241	213	33.8	5.16	5.59
MAX	3,760	20,900	1,940	1,240	8,840	329	1,500	8,690	1,820	332	13	21
MIN	6.1	22	25	20	24	10	12	36	5.3	3.5	3.6	4.0
AC-FT	7,940	97,650	13,740	9,820	42,150	4,330	11,540	76,330	12,680	2,080	317	333
CAL YR 1974 TOTAL	99,961.32			MEAN 274	MAX 20,900	MIN .12	AC-FT 198,300					
WTR YR 1975 TOTAL	140,604.80			MEAN 385	MAX 20,900	MIN 3.5	AC-FT 278,900					

08110400 Navasota River near Groesbeck, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 02...	1040	12	13	49	6.0	47	4.3	143	0	33
NOV. 30...	1300	740	8.6	24	3.0	16	4.0	76	0	14
DEC. 18...	1005	60	10	52	6.7	40	4.3	146	0	44
JAN. 31...	1300	21	7.4	93	14	100	3.7	244	0	86
FEB. 04...	1000	5350	7.0	21	1.7	8.9	2.8	70	0	14
MAR. 25...	1205	32	6.2	63	9.0	65	1.9	188	0	43
APR. 30...	1230	65	7.5	45	6.7	42	4.4	128	0	37
MAY 31...	1200	2450	11	27	2.2	8.8	4.1	86	0	10
JUNE 30...	1400	33	8.9	37	3.4	29	4.4	115	0	19
JULY 31...	1330	9.4	12	110	17	140	4.7	244	0	120
AUG. 05...	1234	6.0	12	110	18	170	5.0	240	0	110
SEP. 16...	1415	16	12	110	18	120	4.0	271	0	89

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 02...	69	--	292	150	30	1.7	542	7.7	19.0
NOV. 30...	26	.1	133	72	10	.8	237	7.5	8.0
DEC. 18...	67	.2	296	160	38	1.4	528	7.8	8.5
JAN. 31...	160	.3	585	290	90	2.6	1060	7.7	16.5
FEB. 04...	11	.2	101	59	2	.5	177	7.2	10.0
MAR. 25...	100	.2	381	190	40	2.0	718	7.5	17.0
APR. 30...	65	.2	271	140	35	1.5	502	7.2	20.5
MAY 31...	11	.2	117	76	6	.4	206	7.4	21.0
JUNE 30...	46	.2	205	110	12	1.2	393	7.4	29.0
JULY 31...	250	.3	774	340	140	3.3	1410	8.2	30.0
AUG. 05...	280	--	823	350	150	4.0	1510	7.6	29.0
SEP. 16...	200	.5	687	350	130	2.8	1250	7.9	25.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	4000.9	175	93	1000	5.5	59	9.3	100	60
NOV. 1974.....	49232	160	84	11200	2.3	306	8.5	1130	57
DEC. 1974.....	6926	335	180	3370	39	729	18	337	93
JAN. 1975.....	4952	502	280	3740	74	989	27	361	130
FEB. 1975.....	21249	218	120	6880	14	803	12	688	69
MAR. 1975.....	2181	596	330	1940	93	548	32	188	150
APR. 1975.....	5816	473	260	4080	68	1070	25	393	120
MAY 1975.....	38480	231	120	12500	17	1770	12	1250	72
JUNE 1975.....	6393.49	362	200	3450	44	760	19	328	98
JULY 1975.....	1046.79	432	240	678	59	167	23	65	110
AUG. 1975.....	159.9	1520	850	367	320	138	81	35	320
SEPT 1975.....	167.7	1320	740	335	240	109	70	32	290
TOTAL	140604.62	**	**	49500	**	7450	**	4910	**
WTD.AVG.	385.22	243	130	**	20	**	13	**	74

BRAZOS RIVER BASIN

08110400 Navasota River near Groesbeck, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	578	124	271	700	1040	1140	805	367	241	386	1490	1180
2	569	134	302	634	169	1120	875	388	311	448	1540	1260
3	709	134	402	771	200	1090	719	398	375	528	780	1320
4	887	217	463	457	176	1210	885	348	457	409	1260	1320
5	890	342	507	528	176	1240	1030	363	545	552	1500	1320
6	1220	260	623	595	213	1300	1140	405	634	498	1360	1300
7	1230	353	375	611	272	1350	1230	426	710	528	1380	1300
8	1320	312	404	617	365	1300	1300	453	804	585	1410	1250
9	1420	306	422	622	399	1180	468	498	966	651	1370	1210
10	1460	227	488	690	483	1290	422	549	996	723	1380	1180
11	1460	225	227	620	595	1320	403	152	795	786	1410	1190
12	1440	215	232	406	595	1310	421	240	312	889	1410	1230
13	1450	262	266	384	683	1310	437	267	350	309	1560	1230
14	1470	288	323	394	778	449	435	337	388	310	1680	1250
15	1470	343	449	424	842	474	419	411	487	339	1690	1250
16	1540	432	440	459	812	483	402	349	581	383	1640	1210
17	1370	485	463	508	1170	480	431	344	700	441	1610	1940
18	1450	616	530	574	996	484	472	415	869	504	1610	1120
19	1450	619	603	625	614	503	483	443	1000	568	1610	1030
20	1490	663	684	627	661	515	555	511	1140	699	1610	1090
21	1490	696	739	713	747	553	614	345	1230	738	1670	1160
22	1510	769	832	792	784	649	684	273	1380	812	1690	1250
23	1570	864	880	837	708	646	743	378	1420	907	1730	1280
24	1680	142	927	926	643	681	845	193	1420	1030	1730	1280
25	1640	207	788	957	757	715	941	167	746	1090	1760	1280
26	1600	188	860	991	899	890	970	167	313	1240	1790	1280
27	1600	254	572	1010	941	813	1060	205	230	1390	1630	1280
28	1590	297	544	1030	1130	1040	1130	284	262	1460	1760	1320
29	1590	406	576	1080	---	825	451	360	301	1440	1970	1350
30	1510	237	604	1070	---	701	502	232	393	1460	1060	1390
31	104	---	703	1070	---	752	---	206	---	1410	1030	---
MONTH	1310	354	532	701	637	897	709	338	679	758	1520	1270

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	21.0	10.0	11.0	14.5	11.0	15.5	22.0	23.5	29.0	30.0	32.0
2	21.0	21.0	14.5	11.0	9.0	15.0	15.5	22.0	25.0	29.0	29.0	33.0
3	21.0	21.0	11.0	10.0	11.0	11.0	15.5	23.5	26.0	28.0	29.0	35.0
4	21.0	18.5	9.0	10.0	12.0	9.0	15.0	21.0	24.5	30.5	30.0	35.0
5	21.0	18.5	12.0	10.0	10.0	6.5	14.5	22.0	25.5	29.0	29.0	32.0
6	21.0	17.0	13.5	9.0	8.0	10.0	15.5	23.5	25.5	30.0	33.0	32.0
7	21.0	15.5	13.5	13.5	5.5	15.0	15.0	24.5	26.5	29.0	31.0	30.0
8	21.0	15.5	9.0	13.5	6.5	13.5	15.5	22.0	27.0	30.0	33.0	30.0
9	21.0	19.0	9.0	14.5	4.5	10.0	16.5	25.5	25.5	30.0	32.0	29.0
10	21.0	16.5	9.5	12.0	5.5	10.0	16.5	23.5	25.5	30.0	33.0	29.0
11	21.0	15.5	8.0	13.5	11.0	13.5	15.5	16.5	26.5	30.5	32.0	29.0
12	21.0	16.0	10.5	8.0	11.0	13.5	16.5	21.5	26.0	26.5	33.0	29.0
13	21.0	15.5	12.0	6.5	11.0	8.0	14.5	23.0	---	30.0	33.0	26.0
14	21.0	13.5	11.0	11.0	13.5	9.0	15.5	23.0	26.5	29.5	34.0	27.0
15	21.0	14.5	12.0	8.0	12.0	7.0	16.5	23.5	26.5	29.0	33.0	28.0
16	21.0	15.5	13.5	8.0	11.0	7.0	16.5	24.5	24.5	30.0	33.0	30.0
17	21.0	15.0	13.0	9.0	9.0	6.5	18.0	23.5	26.5	29.5	33.0	28.0
18	21.0	15.5	15.5	16.5	9.5	11.5	18.0	25.5	27.0	29.0	34.0	29.0
19	21.0	19.0	13.5	10.0	10.0	10.5	20.0	23.5	28.0	29.0	33.0	31.0
20	21.0	15.5	11.0	9.5	9.0	14.5	19.0	24.5	28.0	26.5	34.0	26.0
21	21.0	15.5	11.0	10.0	11.0	15.5	18.0	23.5	26.5	29.0	33.0	24.0
22	21.0	15.5	13.5	13.5	9.0	16.5	18.0	23.5	30.0	31.0	32.0	23.0
23	21.0	19.0	15.5	9.0	6.5	18.0	18.0	21.0	30.0	30.5	32.0	25.0
24	21.0	15.0	16.5	14.5	8.0	15.5	23.5	22.0	30.0	30.0	31.0	23.0
25	21.0	14.5	9.0	13.5	7.0	16.0	21.0	23.0	24.5	29.0	30.0	21.0
26	21.0	15.5	9.0	12.0	11.0	18.0	24.5	23.5	24.5	30.0	29.0	26.0
27	21.0	13.5	10.0	14.5	12.0	15.5	22.0	24.5	26.5	30.0	30.0	23.0
28	21.0	14.5	10.0	14.5	13.5	15.0	21.0	25.5	19.0	30.0	31.0	26.0
29	21.0	13.5	12.0	21.0	---	10.0	22.0	23.0	10.0	30.0	32.0	24.0
30	21.0	8.0	12.0	19.0	---	11.0	20.5	23.5	29.0	29.0	30.0	26.0
31	21.0	---	12.0	16.5	---	13.5	---	21.0	---	30.0	31.0	---
MONTH	21.0	16.0	11.5	12.0	9.5	12.0	18.0	23.0	26.5	29.5	31.5	28.0

08110500 Navasota River near Easterly, Tex.

LOCATION.--Lat 31°10'10", long 96°17'54", Leon-Robertson County line, near center of span at downstream side of bridge on U.S. Highway 79, 1.0 mile (1.6 km) upstream from Missouri Pacific Railroad Co. bridge, 7 miles (11 km) northeast of Easterly, and at mile 105.7 (170.1 km).

DRAINAGE AREA.--940 mi² (2,430 km²).

PERIOD OF RECORD.--Discharge: March 1924 to current year.

Water quality: Chemical analyses: October 1968 to current year. Sediment records: October 1968 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 276.46 ft (84.265 m) above mean sea level. Prior to June 11, 1932, nonrecording gage at railroad bridge 1.0 mile (1.6 km) downstream at datum 24.86 ft (7.577 m) higher.

AVERAGE DISCHARGE.--36 years (1924-60) unregulated, 406 ft³/s (11.50 m³/s), 294,100 acre-ft/yr (363 hm³/yr); 15 years (1960-75) regulated, 479 ft³/s (13.57 m³/s), 347,000 acre-ft/yr (428 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,900 ft³/s (705 m³/s) Nov. 2 (gage height, 18.67 ft or 5.691 m); minimum daily, 5.7 ft³/s (0.16 m³/s) Sept. 15.

Period of record: Maximum discharge, 60,300 ft³/s (1,710 m³/s) May 2, 1944 (gage height, 22.13 ft or 6.745 m); no flow at times.

Maximum stage since about 1845, 24 ft (7.3 m) in June 1899, from information by local residents (discharge, 90,000 ft³/s or 2,550 m³/s, from rating curve extended above 60,000 ft³/s or 1,700 m³/s).

REMARKS.--Discharge records good. Since 1961, at least 10 percent of drainage area is regulated by reservoirs. Numerous diversions above station for irrigation, municipal supply, and oilfield operation.

REVISIONS (WATER YEARS).--WSP 898: 1924, 1926-27, 1928(M), 1929-30, 1931(M). WSP 1512: 1932(M), 1936. WSP 1922: 1956, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	5,620	956	561	265	104	92	2,530	1,450	1,910	22	23
2	52	21,900	1,300	460	626	112	84	2,190	1,770	864	30	15
3	47	14,900	1,110	642	2,680	100	74	1,460	2,090	627	47	11
4	40	7,290	429	874	14,700	96	68	1,090	702	304	104	9.1
5	33	4,220	265	802	11,800	115	66	1,000	189	450	68	8.0
6	30	2,610	367	548	7,590	109	56	1,010	146	399	47	7.3
7	27	665	479	308	4,610	102	53	768	120	150	35	6.9
8	24	620	502	230	3,080	95	63	759	101	96	24	6.3
9	22	1,150	354	202	1,250	88	280	264	90	74	17	6.2
10	19	1,430	252	193	340	85	996	166	95	63	14	6.0
11	18	1,700	1,100	187	262	81	1,630	169	84	56	12	5.9
12	17	2,300	2,010	257	216	81	1,790	921	159	64	41	5.8
13	17	2,820	2,750	608	188	89	1,460	1,960	279	259	32	6.0
14	17	2,750	3,520	1,090	165	115	415	4,540	167	254	18	6.1
15	19	1,600	2,780	1,420	156	388	531	4,870	112	228	14	5.7
16	18	295	938	1,280	168	485	736	3,250	89	128	12	15
17	17	191	313	355	161	342	634	1,520	72	89	10	35
18	16	158	241	229	174	429	266	517	58	69	9.0	49
19	17	140	202	202	177	647	175	270	47	55	8.1	37
20	19	125	176	181	153	414	136	188	39	45	7.6	28
21	17	111	157	170	129	228	107	354	34	37	7.3	21
22	15	101	144	145	118	171	87	810	35	30	7.0	16
23	14	92	135	126	114	144	80	1,230	30	26	6.7	13
24	15	1,720	131	117	124	132	70	2,260	25	23	7.5	10
25	14	15,700	131	115	147	117	64	5,760	76	20	10	8.5
26	13	14,200	144	116	135	99	58	17,200	268	22	9.9	7.9
27	13	7,770	166	115	113	88	52	12,000	798	19	9.6	7.1
28	14	4,900	184	111	101	84	242	7,520	1,110	17	10	6.8
29	18	3,220	199	107	-----	83	1,150	4,550	1,350	15	11	6.5
30	27	1,470	227	103	-----	83	2,000	3,060	1,940	15	14	6.0
31	939	-----	374	110	-----	90	-----	1,630	-----	19	29	-----
TOTAL	1,639	121,768	22,036	11,964	49,742	5,396	13,515	85,816	13,525	6,427	693.7	395.1
MEAN	52.9	4,059	711	386	1,777	174	451	2,768	451	207	22.4	13.2
MAX	939	21,900	3,520	1,420	14,700	647	2,000	17,200	2,090	1,910	104	49
MIN	13	92	131	103	101	81	52	166	25	15	6.7	5.7
AC-FT	3,250	241,500	43,710	23,730	98,660	10,700	26,810	170,200	26,830	12,750	1,380	784

CAL YR 1974 TOTAL 281,450.7 MEAN 771 MAX 21,900 MIN 1.9 AC-FT 558,300
WTR YR 1975 TOTAL 332,916.8 MEAN 912 MAX 21,900 MIN 5.7 AC-FT 660,300

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11- 2	1400	18.67	24,900	2- 4	1300	17.76	17,400
11-13	2100	14.04	2,980	5- 1	1500	13.50	2,600
11-25	1800	18.30	21,800	5-14	2000	15.89	5,980
12-14	1100	14.86	3,620	5-26	0600	17.91	18,600

BRAZOS RIVER BASIN

08110500 Navasota River near Easterly, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 03...	1120	45	16	38	8.0	44	4.0	101	0	46
NOV. 08...	1230	6.6	13	26	6.0	25	3.9	66	0	37
DEC. 19...	1115	202	13	38	9.6	41	4.0	87	0	61
FEB. 04...	1540	17100	4.9	12	2.2	11	3.5	36	0	12
MAR. 26...	1810	95	10	47	13	63	3.7	111	0	63
MAY 06...	1745	969	7.8	30	6.1	29	4.6	84	0	33
JUNE 04...	1600	336	14	32	6.2	23	4.2	96	0	27
JULY 17...	1615	81	11	40	6.0	30	4.0	104	0	28
AUG. 27...	1530	9.6	15	57	15	83	4.2	102	0	77

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 03...	65	--	271	130	45	1.7	492	7.4	20.5
NOV. 08...	41	--	184	90	36	1.2	327	7.3	14.0
DEC. 19...	68	.2	278	130	63	1.5	498	7.7	9.0
FEB. 04...	17	.2	81	39	10	.8	141	6.9	11.5
MAR. 26...	120	.2	375	170	80	2.1	663	7.4	17.5
MAY 06...	40	.2	192	100	31	1.3	353	7.2	24.0
JUNE 04...	36	.2	190	110	27	1.0	336	7.4	27.0
JULY 17...	47	.3	218	120	39	1.2	391	7.6	28.0
AUG. 27...	150	.2	452	200	120	2.5	850	7.7	27.0

08111000 Navasota River near Bryan, Tex.

LOCATION.--Lat 30°52'10", long 96°11'32", Brazos-Madison County line, on right bank at upstream side of bridge on U.S. Highway 190, 2.5 miles (4.0 km) upstream from Shepherd Creek, 17 miles (27 km) northeast of Bryan, and at mile 68.4 (110.1 km).

DRAINAGE AREA.--1,429 mi² (3,701 km²).

PERIOD OF RECORD.--Discharge: January 1951 to current year.

Water quality: Chemical and biochemical analyses: October 1958 to current year. Water temperatures: October 1958 to current year. Sediment records: October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.64 ft (68.470 m) above mean sea level.

AVERAGE DISCHARGE.--9 years (1951-60) unregulated, 437 ft³/s (12.38 m³/s), 316,600 acre-ft/yr (390 hm³/yr); 15 years (1960-75) regulated, 624 ft³/s (17.67 m³/s), 452,100 acre-ft/yr (557 hm³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 19,300 ft³/s (547 m³/s) Nov. 4 (gage height, 15.03 ft or 4.581 m); minimum daily, 16 ft³/s (0.45 m³/s) Sept. 30.

Period of record: Maximum discharge, 38,200 ft³/s (1,080 m³/s) Apr. 29, 1966 (gage height, 16.57 ft or 5.051 m); no flow at times. Historic: Maximum stage since about 1840, 19.5 ft (5.94 m) in June 1899, from information by local residents.

Water quality: Current year: Maximum daily specific conductance, 789 micromhos Mar. 17; minimum daily, 103 micromhos Nov. 28.

Maximum water temperatures, 31.0°C July 28, 30, Aug. 15, 19; minimum, 7.0°C Dec. 1, Jan. 14.

Period of record: Maximum daily specific conductance, 4,190 micromhos Feb. 8, 1964; minimum daily, 55 micromhos Sept. 17, 1964.

Maximum water temperatures, 32.0°C Aug. 4, 1959, July 5, 1974; minimum, 1.0°C Jan. 13, 1962.

REMARKS.--Discharge records good. Since 1961, at least 10 percent of drainage area regulated by reservoirs. Numerous diversions above station for irrigation, municipal, and oilfield operation.

REVISIONS --WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	1,230	4,840	657	982	207	160	1,160	4,730	1,170	47	27
2	147	1,310	3,500	853	1,250	200	164	1,500	3,370	1,350	98	31
3	121	8,250	2,140	1,160	2,620	203	161	2,060	2,240	1,550	152	35
4	95	17,200	1,540	1,070	3,490	203	149	2,610	1,700	1,480	194	32
5	79	11,100	1,280	993	8,500	200	135	2,980	1,620	1,070	290	28
6	71	6,970	931	1,020	15,000	207	129	2,570	1,160	735	202	25
7	62	5,590	665	922	11,400	219	125	1,630	506	624	140	22
8	56	4,780	613	692	7,700	212	123	2,150	258	464	89	21
9	51	3,170	628	477	5,690	202	124	2,570	191	267	66	19
10	47	1,960	601	372	4,360	191	157	1,890	260	195	50	20
11	44	1,830	847	342	2,690	183	411	1,530	224	182	45	20
12	41	1,770	931	375	1,240	182	749	2,040	200	179	49	21
13	39	1,810	1,170	416	650	185	1,040	1,450	169	276	39	20
14	44	2,110	1,680	476	421	213	1,250	1,470	243	360	42	19
15	235	2,520	2,430	680	356	229	1,200	1,790	259	400	50	17
16	125	2,810	3,230	886	1,190	279	780	2,530	194	409	39	28
17	81	2,510	3,550	1,080	986	446	597	4,460	153	346	34	41
18	65	1,400	2,450	1,090	664	530	630	4,660	125	249	30	85
19	53	628	1,160	660	453	435	547	3,370	101	186	28	136
20	45	337	592	380	353	518	323	1,700	81	148	26	197
21	41	248	368	299	305	574	227	780	70	122	24	169
22	40	212	286	267	271	446	197	430	64	103	23	96
23	38	190	253	254	249	305	175	521	62	94	21	55
24	36	667	236	234	237	250	157	760	64	83	20	36
25	34	1,240	227	215	227	225	146	1,440	65	72	39	29
26	34	2,120	225	207	231	209	132	1,890	172	64	30	25
27	35	14,700	228	203	236	193	119	6,700	466	57	33	21
28	36	11,200	242	201	223	180	207	13,100	715	54	33	19
29	40	7,500	261	198	-----	172	1,020	9,910	925	53	29	18
30	50	5,870	314	194	-----	167	992	7,260	1,070	68	27	16
31	263	-----	525	205	-----	162	-----	5,700	-----	52	27	-----
TOTAL	2,333	123,232	37,943	17,078	71,974	8,167	12,326	94,611	21,457	12,462	2,016	1,328
MEAN	75.3	4,108	1,224	551	2,571	263	411	3,052	715	402	65.0	44.3
MAX	263	17,200	4,840	1,160	15,000	574	1,250	13,100	4,730	1,550	290	197
MIN	34	190	225	194	223	162	119	430	62	52	20	16
AC-FT	4,630	244,400	75,260	33,870	142,800	16,200	24,450	187,700	42,560	24,720	4,000	2,630

CAL YR 1974 TOTAL 388,254.0 MEAN 1,064 MAX 17,200 MIN 2.8 AC-FT 770,100

WTR YR 1975 TOTAL 404,927.0 MEAN 1,109 MAX 17,200 MIN 16 AC-FT 803,200

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
11- 4	0100	15.03	19,300	5- 5	2100	12.84	3,400
11-27	1100	14.74	16,200	5-17	2400	13.28	4,860
12-17	0700	12.93	3,680	5-27	2400	14.53	14,300
2- 6	0100	14.53	16,100				

BRAZOS RIVER BASIN

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 08...	1415	54	18	33	7.5	36	4.6	82	0	49	57	--
NOV. 06...	1630	6950	9.2	12	2.5	6.6	4.4	48	0	9.6	8.4	.1
DEC. 10...	0900	560	17	34	9.9	40	4.0	66	0	59	69	.1
JAN. 11...	1000	360	12	39	11	49	2.3	76	0	75	74	.4
FEB. 04...	1215	3400	8.0	15	4.0	18	3.5	38	0	30	28	.1
MAR. 26...	1205	206	11	39	12	50	2.1	90	0	63	81	.2
APR. 01...	1015	147	13	43	14	59	2.0	95	0	74	95	.2
MAY 28...	1700	13400	8.3	13	2.1	10	4.1	46	0	11	13	.1
JUNE 03...	1400	2180	11	23	5.5	18	3.9	78	0	21	27	.1
AUG. 28...	1300	33	13	41	10	57	4.3	89	0	61	96	.2
SEP. 29...	1730	17	13	24	6.2	28	4.5	60	0	35	46	.4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 08...	.08	.00	.07	1.0	1.1	.12	246	70	6	110	46	1.5
NOV. 06...	--	--	--	--	--	--	76	--	--	40	1	.5
DEC. 10...	.05	.01	.06	.56	.62	.12	266	383	31	130	72	1.6
JAN. 11...	--	--	--	--	--	--	300	--	--	140	80	1.8
FEB. 04...	.06	.00	.03	.95	.98	.10	125	126	19	54	23	1.1
MAR. 26...	--	--	--	--	--	--	303	--	--	150	73	1.8
APR. 01...	.09	.00	.04	1.1	1.1	.11	347	59	6	170	87	2.0
MAY 28...	--	--	--	--	--	--	84	--	--	41	3	.7
JUNE 03...	.10	.01	.09	2.2	2.3	.17	149	307	38	80	16	.9
AUG. 28...	.05	.01	.00	.81	.81	.08	327	94	12	140	71	2.1
SEP. 29...	--	--	--	--	--	--	187	--	--	85	36	1.3

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	447	7.2	24.0	35	35	6.9	81	3.0	14	1	.0
NOV. 06...	126	7.2	18.5	--	--	--	--	--	--	--	--
DEC. 10...	474	7.0	10.0	80	50	9.4	83	1.5	12	2	.0
JAN. 11...	531	7.6	11.0	--	--	--	--	--	--	--	--
FEB. 04...	222	7.0	13.0	100	75	8.4	79	1.4	15	3	.0
MAR. 26...	562	7.2	18.0	--	--	--	--	--	--	--	--
APR. 01...	637	7.0	13.0	30	30	8.8	83	1.2	8.4	7	.1
MAY 28...	149	6.9	25.0	--	--	--	--	--	--	--	--
JUNE 03...	266	6.5	26.0	60	60	7.5	91	1.8	13	3	.0
AUG. 28...	591	6.8	27.5	10	45	6.6	82	2.0	8.8	2	.0
SEP. 29...	332	7.3	22.0	--	--	--	--	--	--	--	--

BRAZOS RIVER BASIN

393

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DEC. 10...	0900	0	1	70	2	<10	0	3
FEB. 04...	1215	--	1	40	--	--	--	--
JUNE 03...	1400	30	1	60	0	10	0	3
AUG. 28...	1300	20	1	80	0	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 10...	70	7	20	10	<.1	11	350	10
FEB. 04...	0	--	--	--	--	--	--	--
JUNE 03...	170	1	10	0	.0	3	260	0
AUG. 28...	20	2	10	120	.0	5	470	0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 06...	1630	6950	18.5	33	619
DEC. 18...	1215	2450	10.0	32	212
19...	1630	1020	10.0	78	215
JAN. 04...	1100	1070	9.0	43	124
05...	1330	992	10.0	43	115
06...	1100	1020	9.0	40	110
07...	1220	920	11.0	68	169
09...	0930	490	11.0	40	53
17...	1115	1090	9.0	57	168
18...	1245	1100	10.0	58	172
27...	1040	204	13.0	57	31
FEB. 01...	1240	1160	15.0	316	990
04...	1300	3620	13.0	69	674
05...	1700	11800	12.0	117	3730
06...	1000	15500	10.0	62	2600
07...	1040	11800	8.0	30	956
07...	1345	11500	9.0	57	1770
08...	0945	7590	9.0	35	717
09...	1130	5700	9.0	35	539
10...	1300	4390	9.0	37	439
11...	0930	2880	10.0	48	373
12...	1205	1200	10.0	65	211
13...	1700	597	13.0	57	92
17...	1010	1000	12.0	129	348
18...	1030	668	13.0	101	182
19...	1645	412	13.0	61	68
25...	1015	228	10.0	48	30
MAR. 05...	1700	200	13.0	46	25
12...	1645	181	--	50	24
18...	0915	542	13.0	89	130
26...	1205	206	18.0	71	39
APR. 04...	1100	150	14.0	58	23
10...	1100	139	19.0	30	11
12...	1015	733	18.0	110	218
14...	0935	1170	16.0	53	167

BRAZOS RIVER BASIN

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
APR.					
15...	1700	1150	18.0	48	149
18...	0930	640	20.0	68	118
19...	1030	569	20.0	81	124
30...	1400	981	21.0	115	305
MAY					
01...	0945	1140	21.0	113	348
02...	0945	1480	23.0	79	316
03...	1000	1900	23.0	77	395
04...	1600	2680	24.0	47	340
05...	1000	2840	22.0	62	475
06...	1030	2640	23.0	48	342
06...	1300	2610	24.0	54	381
07...	1715	1510	25.0	79	322
08...	1030	1950	22.0	144	758
09...	1015	2640	23.0	82	584
10...	1000	1910	23.0	73	376
12...	0945	3140	22.0	95	805
13...	1000	1440	22.0	89	346
15...	1000	1750	22.0	87	411
16...	1000	2320	22.0	71	445
17...	1015	4460	23.0	46	554
18...	1630	4560	25.0	33	406
19...	1015	3590	24.0	35	339
20...	0915	1850	24.0	52	260
22...	0915	419	26.0	101	114
27...	1015	5860	25.0	108	1710
28...	0845	13800	24.0	67	2500
28...	1500	12700	25.0	41	1410
30...	0930	7520	24.0	58	1180
31...	1015	5750	23.0	37	574
JUNE					
02...	0930	3520	23.0	43	409
03...	1000	2240	24.0	61	369
04...	1210	1700	26.5	79	363
04...	1530	1660	25.0	78	350
05...	1000	1640	26.0	69	306
13...	0930	176	27.0	133	63
20...	0915	87	28.0	152	36
26...	0945	135	--	148	54
29...	1430	955	28.0	140	361
30...	1045	1070	26.0	126	364
JULY					
01...	1245	1180	27.0	104	331
02...	0830	1180	27.0	93	296
03...	1015	1560	26.0	890	3750
04...	0930	1500	27.0	81	328
05...	1030	1080	27.0	93	271
07...	0845	654	27.0	118	208
16...	1500	414	27.0	120	134
17...	1305	343	29.0	146	135
AUG.					
03...	1500	130	29.0	150	53
10...	1430	48	--	108	14
19...	1715	27	--	77	5.6
27...	1140	330	27.0	88	78
SEP.					
04...	1000	32	--	80	6.9
10...	1115	21	--	81	4.6
22...	1100	94	--	100	25

08111000 Navasota River near Bryan, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
NOV. 06...	1630	6950	100	--	--	--	--	--	--	--	--	--
DEC. 19...	1630	1020	88	89	92	98	100	82	85	86	87	88
FEB. 01...	1240	1160	98	99	100	--	--	77	85	89	96	97
07...	1345	11500	92	93	95	98	100	80	81	86	90	91
MAY 28...	1500	12700	97	98	99	99	100	87	95	95	96	96

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA, MG)
OCT. 1974.....	2333	384	220	1390	53	334	46	290	98
NOV. 1974.....	123232	146	85	28300	12	3990	15	4990	35
DEC. 1974.....	37943	274	160	16400	34	3480	32	3280	69
JAN. 1975.....	17078	492	280	12900	71	3270	59	2720	130
FEB. 1975.....	71974	211	120	23300	23	4470	24	4660	52
MAR. 1975.....	8167	639	360	7940	97	2140	78	1720	170
APR. 1975.....	12326	497	280	9320	72	2400	60	2000	130
MAY 1975.....	94611	213	120	30700	24	6130	24	6130	52
JUNE 1975.....	21457	284	160	9270	36	2090	33	1910	71
JULY 1975.....	12462	296	170	5720	38	1280	34	1140	74
AUG. 1975.....	2016	498	280	1520	73	397	60	327	130
SEPT 1975.....	1328	552	310	1110	82	294	67	240	140
TOTAL	404927	**	**	148000	**	30300	**	29400	**
WTD.AVG.	1109.39	237	140	**	28	**	27	**	59

BRAZOS RIVER BASIN

08111000 Navasota River near Bryan, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	314	121	158	509	209	675	641	381	190	275	513	424
2	339	223	190	481	383	652	656	350	228	246	521	417
3	360	128	282	424	219	625	676	291	269	225	410	430
4	375	112	282	448	221	652	693	281	253	236	399	445
5	395	120	273	481	210	705	719	272	252	256	344	490
6	413	125	286	467	164	688	761	280	271	290	393	514
7	424	129	323	482	164	654	712	314	310	326	511	573
8	437	149	389	474	176	690	705	275	381	293	605	609
9	449	176	437	467	177	682	693	244	425	289	644	662
10	380	260	485	489	188	685	688	257	463	305	644	692
11	467	277	321	526	210	703	675	253	421	327	612	714
12	465	278	340	536	275	694	614	184	500	347	585	721
13	469	266	321	509	365	702	498	242	452	290	577	703
14	473	231	273	548	407	717	470	249	516	395	560	732
15	304	209	237	575	461	648	462	234	764	354	540	749
16	315	202	214	514	182	653	472	209	536	357	489	698
17	351	209	212	443	293	789	496	196	430	419	523	670
18	354	234	238	413	361	626	485	214	450	404	577	631
19	399	278	295	443	472	588	437	236	471	406	662	554
20	387	334	352	485	521	585	455	242	481	406	678	523
21	416	370	404	496	468	631	465	317	503	405	685	777
22	446	414	449	528	625	601	483	338	533	411	689	523
23	450	452	483	551	648	575	502	411	546	414	695	328
24	452	365	525	573	666	559	526	360	559	422	700	311
25	485	226	569	585	661	556	537	275	566	438	674	304
26	498	220	595	601	619	560	555	258	546	461	703	311
27	509	117	594	601	637	576	572	206	327	468	650	317
28	516	103	592	628	660	597	500	150	328	483	598	323
29	528	106	625	662	---	609	277	148	339	491	543	333
30	496	132	642	675	---	616	417	150	314	496	496	341
31	350	---	538	620	---	623	---	161	---	471	465	---
MONTH	420	219	385	524	380	642	561	257	421	368	570	527

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.0	7.0	12.0	15.0	14.0	13.0	21.0	24.0	27.0	30.0	29.0
2	---	21.0	8.0	12.0	15.0	14.0	14.0	23.0	23.0	26.0	29.0	28.0
3	---	22.0	9.0	9.0	12.0	15.0	16.0	23.0	24.0	26.0	29.0	28.0
4	20.0	21.0	9.0	9.0	13.0	14.0	14.0	24.0	23.0	27.0	28.0	27.0
5	20.0	18.0	9.0	10.0	12.0	13.0	15.0	22.0	26.0	27.0	27.0	29.0
6	---	17.0	10.0	9.0	10.0	13.0	17.0	23.0	27.0	---	28.0	27.0
7	21.0	16.0	10.0	11.0	8.0	14.0	17.0	25.0	27.0	27.0	29.0	28.0
8	22.0	15.0	11.0	---	9.0	14.0	---	22.0	28.0	29.0	29.0	27.0
9	22.0	16.0	10.0	11.0	9.0	14.0	19.0	23.0	28.0	29.0	27.0	27.0
10	22.0	16.0	10.0	12.0	9.0	14.0	18.0	23.0	27.0	29.0	29.0	27.0
11	24.0	15.0	10.0	11.0	10.0	15.0	19.0	23.0	26.0	29.0	28.0	27.0
12	22.0	14.0	9.0	10.0	10.0	18.0	18.0	22.0	26.0	29.0	30.0	26.0
13	24.0	14.0	10.0	8.0	10.0	14.0	17.0	22.0	27.0	27.0	30.0	26.0
14	23.0	14.0	11.0	7.0	12.0	12.0	16.0	24.0	27.0	27.0	29.0	26.0
15	20.0	12.0	11.0	9.0	14.0	12.0	18.0	22.0	28.0	27.0	31.0	25.0
16	18.0	12.0	11.0	9.0	11.0	13.0	19.0	22.0	28.0	27.0	30.0	24.0
17	17.0	14.0	10.0	9.0	12.0	14.0	19.0	23.0	27.0	27.0	30.0	24.0
18	17.0	14.0	10.0	11.0	13.0	13.0	20.0	25.0	29.0	27.0	29.0	25.0
19	18.0	15.0	---	12.0	13.0	14.0	20.0	24.0	29.0	28.0	31.0	25.0
20	20.0	16.0	11.0	---	12.0	15.0	21.0	24.0	28.0	---	30.0	24.0
21	18.0	14.0	9.0	11.0	13.0	17.0	20.0	27.0	28.0	30.0	---	24.0
22	18.0	15.0	11.0	11.0	15.0	18.0	20.0	26.0	29.0	30.0	---	22.0
23	---	17.0	12.0	11.0	12.0	20.0	22.0	26.0	28.0	28.0	---	20.0
24	19.0	15.0	---	11.0	11.0	19.0	23.0	---	29.0	28.0	---	20.0
25	20.0	13.0	---	11.0	10.0	17.0	22.0	---	28.0	28.0	29.0	21.0
26	19.0	13.0	---	13.0	13.0	17.0	23.0	24.0	27.0	29.0	28.0	20.0
27	20.0	14.0	---	13.0	13.0	19.0	25.0	25.0	26.0	30.0	27.0	21.0
28	20.0	13.0	11.0	15.0	14.0	20.0	---	24.0	27.0	31.0	27.0	21.0
29	21.0	13.0	11.0	17.0	---	16.0	20.0	24.0	28.0	31.0	29.0	22.0
30	23.0	10.0	12.0	---	---	---	21.0	24.0	26.0	31.0	28.0	22.0
31	22.0	---	14.0	19.0	---	14.0	---	23.0	---	29.0	29.0	---
MONTH	20.5	15.5	10.0	11.0	12.0	15.0	19.0	23.5	27.0	28.5	29.0	24.5

BRAZOS RIVER BASIN

397

0811500 Brazos River near Hempstead, Tex.

LOCATION.--Lat 30°07'44", long 96°11'15", Washington-Waller County line, at downstream side of bridge on relocated U.S. Highway 290, 6,000 ft (1,830 m) upstream from Texas and New Orleans Railroad Co. bridge, 6.5 miles (10.5 km) northwest of Hempstead, 10.5 miles (16.9 km) upstream from Caney Creek, and at mile 194.1 (312.3 km).

DRAINAGE AREA.--42,640 mi² (110,400 km²), approximately, of which 9,240 mi² (23,900 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1938 to current year. Gage-height records collected in this vicinity at intermittent periods since 1903 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 117.90 ft (35.936 m) above mean sea level. Prior to Nov. 1, 1940, nonrecording gage at railroad bridge 6,000 ft (1,830 m) downstream at datum 5.80 ft (1.768 m) lower. Nov. 1, 1940, to Sept. 30, 1963, nonrecording gage at site 1,500 ft (457 m) downstream at present datum. Oct. 1, 1964, to July 31, 1974, water-stage recorder 1,500 ft (457 m) downstream at present datum.

AVERAGE DISCHARGE.--37 years, 6,738 ft³/s (190.8 m³/s), 4,882,000 acre-ft/yr (6.02 km³/yr).

EXTREMES.--Current year: Maximum discharge, 66,600 ft³/s (1,890 m³/s) May 27, 28 (gage height, 31.66 ft or 9.650 m); minimum daily, 944 ft³/s (26.7 m³/s) Sept. 29.

Period of record: Maximum discharge, 143,000 ft³/s (4,050 m³/s) May 2, 1957 (gage height, 44.21 ft or 13.475 m, at site 1,500 ft or 457 m downstream); minimum daily, 137 ft³/s (3.88 m³/s) Nov. 6, 1952.

Maximum stage since at least 1899, 56.1 ft (17.10 m) Dec. 8, 1913, at site 1,500 ft (457 m) downstream at present datum, from information by Texas and New Orleans Railroad Co., obtained at bridge 6,000 ft (1,830 m) downstream. Flood of July 4, 1899, reached a stage of 53.6 ft (16.34 m), at site 1,500 ft (457 m) downstream at present datum, from information by Texas and New Orleans Railroad Co.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Many small diversions above station for irrigation, municipal and industrial uses, and oilfield operations. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Brazos River at Washington (station 08110200). Flow regulated by 28 major upstream reservoirs having a combined capacity of 6,847,000 acre-ft (8.44 km³), 4,138,000 acre-ft (5.10 km³) for flood control.

REVISIONS (WATER YEARS).--WSP 1442: Drainage area. WSP 1512: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13100	14700	19000	8000	5500	13500	3900	10800	40300	19700	4410	1940
2	12200	30100	19000	9000	7000	13000	3780	11100	37300	14200	4760	1770
3	10600	44500	18000	10000	10000	12000	3360	12800	30100	11200	5570	2060
4	9340	42400	16500	13000	35000	11500	2810	11400	27000	11100	5690	2180
5	8300	28700	15000	14000	48000	11000	3170	9700	26900	10800	5890	2210
6	7200	26200	14000	13500	55000	10500	3650	13200	28600	10000	6500	2000
7	6830	32600	13000	13000	48000	10500	3790	19300	25500	9840	5840	1760
8	6580	40600	12000	12500	35000	10500	4830	19300	21400	9930	5890	1740
9	6420	45200	12000	12000	28000	10500	5920	22700	19600	9250	5480	1610
10	6360	48400	12000	11500	26000	10000	5290	27300	19900	8830	4450	1430
11	6270	48300	15000	11500	25000	10000	13600	25800	19500	8240	4410	1290
12	5990	41800	18000	11500	24000	9500	12600	24900	18700	7780	4580	1190
13	5410	33600	18000	12500	22000	9000	14200	25200	20200	7800	3240	1490
14	5110	29900	17000	15000	20000	8500	27400	22900	20800	9020	2690	1290
15	5390	29200	15000	17000	18000	7920	21100	19800	20300	9380	2600	1200
16	5520	27500	13500	16000	16000	7650	15000	16800	19900	6860	2290	1320
17	5390	22800	12000	14500	14000	8010	13900	15800	20700	5860	2170	1810
18	5420	17800	11000	13000	12000	7810	14200	13400	17700	5890	1850	2070
19	5390	14600	10000	12000	11000	7720	14300	11000	14100	5490	1930	2340
20	4980	13200	10000	11000	11000	7460	13700	9630	13000	4810	1860	2750
21	4840	12800	11000	10500	14000	6350	12000	8820	12200	4280	1710	2450
22	4680	12200	11000	10000	17500	5220	9340	8810	10400	3760	1630	1950
23	3820	13000	10000	9000	17500	4650	6900	10100	9710	3380	1710	2070
24	3150	17000	9000	7500	16000	4320	5830	12600	9490	3380	2120	2260
25	2790	34000	8000	6500	15000	4070	5310	27000	9240	3550	2960	1790
26	2200	50000	7500	5500	14000	3840	5000	50300	8920	3680	2260	1380
27	1970	47000	7000	5000	13500	3560	4790	63500	9830	3740	2190	1150
28	2900	30000	7000	4500	13500	3930	4600	62900	12600	3740	1900	1030
29	12600	19500	7000	4500	---	5310	4790	41500	14500	3630	2090	944
30	10300	17000	7000	4500	---	4590	7820	26000	21500	4190	2080	1020
31	9280	---	7500	4500	---	4040	---	32600	---	4340	2130	---
TOTAL	200330	884600	382000	322500	591500	246450	266880	686960	579890	227650	104880	51494
MEAN	6462	29490	12320	10400	21130	7950	8896	22160	19330	7344	3383	1716
MAX	13100	50000	19000	17000	55000	13500	27400	63500	40300	19700	6500	2750
MIN	1970	12200	7000	4500	5500	3560	2810	8810	8920	3380	1630	944
AC-FT	397400	1755000	757700	639700	1173000	488800	529400	1363000	1150000	451500	208000	102100

CAL YR 1974 TOTAL 2910048 MEAN 7973 MAX 50000 MIN 865 AC-FT 5772000
WTR YR 1975 TOTAL 4545134 MEAN 12450 MAX 63500 MIN 944 AC-FT 9015000

NOTE.--No gage-height record Nov. 26 to Jan. 9 and Jan. 27 to Mar. 15.

BRAZOS RIVER BASIN

08111700 Mill Creek near Bellville, Tex.

LOCATION.--Lat 29°52'51", long 96°12'18", Austin County, on left bank at upstream side of abandoned bridge pier about 5 ft (2 m) downstream from State Highway 36, 5.0 miles (8.0 km) southeast of Bellville, and 6.0 miles (9.7 km) upstream from Brazos River.

DRAINAGE AREA.--377 mi² (976 km²).

PERIOD OF RECORD.--Discharge: July 1963 to current year.

Water quality: Chemical analyses: October 1968 to current year. Sediment records: October 1966 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 122.82 ft (37.436 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 229 ft³/s (6.485 m³/s), 8.25 in/yr (210 mm/yr) 165,900 acre-ft/yr (205 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,400 ft³/s (379 m³/s) May 25 (gage height, 14.75 ft or 4.496 m); minimum daily, 24 ft³/s (0.68 m³/s) Sept. 30.

Period of record: Maximum discharge, 44,400 ft³/s (1,260 m³/s) June 13, 1973 (gage height, 17.95 ft or 5.471 m); minimum daily, 0.08 ft³/s (0.002 m³/s) July 22, 23, 1971.

Maximum stage since 1899, 22.8 ft (6.95 m) in 1940, from information by local residents and the Texas Highway Department.

REMARKS.--Discharge records fair. During the year, the city of Bellville discharged about 306 acre-ft (377,000 m³) of sewage effluent into a tributary of Mill Creek above gage.

REVISIONS (WATER YEARS).--WSP 2122: 1965(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	1,740	199	518	874	100	92	1,090	1,050	342	69	40
2	46	1,530	170	1,060	429	95	94	797	325	508	153	35
3	43	437	159	1,620	403	86	85	205	178	386	650	32
4	40	224	155	1,230	2,610	199	80	140	138	225	1,250	29
5	38	163	154	434	3,770	366	78	115	113	274	1,230	37
6	36	136	377	235	1,240	268	79	107	95	113	343	34
7	34	1,310	394	202	344	211	83	243	82	83	116	30
8	32	1,600	241	197	217	171	1,210	843	76	70	75	28
9	32	1,670	169	181	188	140	2,410	3,090	461	60	62	36
10	31	1,260	198	201	160	151	1,660	3,780	5,000	53	52	325
11	30	630	2,080	193	154	162	864	1,670	5,620	56	47	469
12	28	346	2,440	165	155	172	262	386	1,700	62	43	189
13	27	227	1,030	155	132	189	164	247	321	57	40	69
14	51	179	454	166	122	164	3,860	189	188	55	37	113
15	228	150	1,970	144	166	153	4,550	173	146	104	35	72
16	189	139	619	136	285	167	1,660	163	125	75	32	171
17	89	141	289	134	172	420	435	123	105	71	37	491
18	58	140	231	283	153	922	288	99	86	121	37	235
19	48	138	209	273	126	270	228	85	73	75	30	85
20	43	127	194	213	110	162	211	79	63	60	27	58
21	39	113	180	158	106	130	199	71	59	65	26	47
22	38	107	176	148	120	126	229	63	57	49	26	39
23	38	121	193	180	116	125	234	55	53	62	28	34
24	38	4,640	221	163	95	119	214	3,610	52	94	71	30
25	46	7,000	224	168	82	102	194	10,900	68	54	197	28
26	46	1,790	210	155	84	94	172	3,720	120	57	87	26
27	46	454	280	140	88	107	161	1,190	632	123	62	26
28	124	273	275	129	96	116	147	357	2,280	55	120	25
29	487	234	242	127	-----	108	175	557	1,840	43	119	25
30	702	253	248	126	-----	100	896	972	461	185	57	24
31	829	-----	252	128	-----	93	-----	1,740	-----	136	43	-----
TOTAL	3,606	27,272	14,233	9,362	12,597	5,788	21,014	36,859	21,567	3,773	5,201	2,882
MEAN	116	909	459	302	450	187	700	1,189	719	122	168	96.1
MAX	829	7,000	2,440	1,620	3,770	922	4,550	10,900	5,620	508	1,250	491
MIN	27	107	154	126	82	86	78	55	52	43	26	24
CFSM	.31	2.41	1.22	.80	1.19	.50	1.86	3.15	1.91	.32	.45	.25
IN.	.36	2.69	1.40	.92	1.24	.57	2.07	3.64	2.13	.37	.51	.28
AC-FT	7,150	54,090	28,230	18,570	24,990	11,480	41,680	73,110	42,780	7,480	10,320	5,720

CAL YR 1974 TOTAL 147,983.6 MEAN 405 MAX 20,600 MIN 3.6 CFSM 1.07 IN 14.60 AC-FT 293,500
WTR YR 1975 TOTAL 164,154.0 MEAN 450 MAX 10,900 MIN 24 CFSM 1.19 IN 16.20 AC-FT 325,600

PEAK DISCHARGE (BASE, 2,700 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	0400	13.99	9,590	5-10	1400	13.17	3,980
2-5	0400	13.32	4,620	5-25	0600	14.75	13,400
4-8	2000	12.79	3,310	6-11	0100	13.91	7,870
4-15	0300	13.49	5,430				

BRAZOS RIVER BASIN

399

08111700 Mill Creek near Bellville, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
DEC. 04...	1240	128	20	100	4.7	34	2.6	327	0	14
JAN. 16...	1200	135	16	100	5.1	35	3.4	314	0	15
FEB. 28...	0930	103	15	86	4.6	37	2.1	277	0	15
APR. 14...	2100	5760	8.4	34	1.4	8.9	3.5	105	0	7.2
MAY 19...	1820	78	21	95	4.7	33	2.8	305	0	12
JULY 09...	1640	60	22	87	4.5	35	3.1	268	0	8.1
AUG. 14...	1340	36	23	86	4.7	29	3.5	268	0	8.3
SEP. 24...	1115	31	23	86	4.8	29	3.5	270	0	8.8

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
DEC. 04...	53	.3	390	270	1	.9	699	7.6	9.0
JAN. 16...	59	.3	389	270	13	.9	673	7.4	10.0
FEB. 28...	56	.4	353	230	7	1.1	644	7.3	15.5
APR. 14...	16	.1	131	91	5	.4	250	7.0	17.0
MAY 19...	48	.3	367	260	6	.9	655	7.5	25.5
JULY 09...	56	.3	348	240	16	1.0	641	7.5	31.5
AUG. 14...	49	.3	336	230	14	.8	612	7.5	29.0
SEP. 24...	48	.5	337	230	13	.8	624	7.6	20.0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
DEC. 20...	1600	194	13.5	38	20
JAN. 16...	1200	135	10.0	634	231
FEB. 28...	0950	103	15.5	93	26
APR. 14...	2100	5760	17.0	460	7150
MAY 24...	1820	78	25.5	73	15
JULY 27...	1200	1300	27.0	110	386
AUG. 09...	1640	60	31.5	167	27
SEP. 14...	1340	36	29.0	20	1.9
SEP. 24...	1115	31	20.0	109	9.1

BRAZOS RIVER BASIN

08112200 Brazos River near Wallis, Tex.

LOCATION.--Lat 29°40'37", long 96°03'33", Austin County, on right bank near Farm Road 1458, 1.1 miles (1.8 km) upstream from Allens Creek, 3.0 miles (4.8 km) upstream from bridge on Farm Road 1093, 3.1 miles (5.0 km) north of Wallis, and at mile 131.0 (210.8 km).

DRAINAGE AREA.--43,220 mi² (111,940 km²), of which 9,240 mi² (23,930 km²) is noncontributing.

PERIOD OF RECORD.--May 1973 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 60.00 ft (18.288 m) above mean sea level (levels by Houston Lighting and Power Co.).

EXTREMES.--Current year: Maximum gage height, 38.50 ft (11.735 m) May 28; minimum not determined.

Period of record: Maximum gage height, 43.34 ft (13.210 m) June 13 or 14, 1973; minimum, about 11.2 ft (3.41 m) Sept. 23, 24, 1973.

Maximum stage since 1852, 59.80 ft (18.227 m) Dec. 10, 1913, at bridge 3.0 miles (4.8 km) downstream, from information by Texas Highway Department.

REMARKS.--Midnight gage heights published only. Data was to be used in conjunction with a ground-water investigation. This investigation was discontinued.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.29	21.80	---	---	16.00	20.67	15.04	19.92	32.41	24.35	15.29	13.27
2	20.75	27.40	---	---	17.80	20.62	15.03	20.37	31.57	22.11	15.68	12.95
3	20.10	32.00	23.65	20.45	17.80	20.35	15.22	20.39	28.95	20.60	16.50	12.93
4	19.23	32.40	---	21.40	29.75	19.77	15.67	20.32	27.47	19.95	17.43	13.14
5	18.65	28.10	---	21.95	34.46	19.41	15.95	19.26	27.16	19.93	17.35	13.25
6	17.93	26.30	---	21.50	35.35	19.30	15.50	19.69	27.97	19.38	17.05	13.24
7	17.45	29.25	---	21.00	34.37	19.35	15.15	23.40	27.03	19.01	17.02	13.00
8	17.15	31.95	---	20.50	31.34	19.25	17.30	24.23	25.35	19.03	16.54	---
9	16.95	33.35	---	20.05	29.21	19.10	19.73	26.95	24.53	18.77	16.66	---
10	16.87	35.25	---	19.92	28.11	18.94	18.11	28.19	25.71	18.50	16.08	---
11	16.77	35.40	22.35	20.15	27.69	18.84	20.82	27.28	26.52	18.28	15.40	---
12	16.67	33.52	23.30	20.15	27.12	18.70	21.28	26.65	26.43	17.88	15.73	---
13	16.42	30.30	23.83	20.45	26.37	18.60	20.30	26.56	25.92	17.75	15.40	---
14	16.27	28.95	24.06	21.80	25.64	18.05	28.80	25.76	25.76	18.11	14.27	---
15	16.12	---	24.16	22.90	24.80	17.48	26.82	24.54	25.60	18.95	13.97	---
16	16.25	---	21.85	22.67	23.62	17.40	22.77	23.15	25.42	18.00	13.85	---
17	16.17	---	20.68	21.42	22.35	18.00	21.32	22.55	25.28	16.79	13.58	---
18	16.07	---	20.00	20.40	20.77	19.15	21.28	21.66	25.17	16.69	13.42	---
19	16.12	---	---	19.95	19.45	18.03	21.41	20.45	24.91	16.50	13.04	13.25
20	15.95	---	19.63	19.69	19.05	17.70	21.07	19.58	24.44	16.08	13.18	13.47
21	15.68	---	19.90	19.15	21.47	17.30	20.47	19.01	---	15.59	---	13.80
22	15.66	---	20.24	18.70	23.05	16.46	19.43	18.69	---	15.18	---	13.26
23	15.40	---	---	18.70	23.01	15.84	18.05	18.98	---	14.75	---	12.72
24	14.67	---	---	17.45	22.30	15.48	17.09	20.88	---	14.53	---	13.08
25	14.25	32.85	---	16.13	21.83	15.24	16.61	29.05	---	14.63	13.85	13.18
26	13.87	35.60	---	15.50	21.25	15.08	16.30	34.85	18.69	14.67	13.99	---
27	13.35	35.17	---	15.36	20.58	14.87	16.08	37.58	19.54	14.83	13.56	---
28	13.20	30.90	---	15.10	20.52	14.66	15.93	38.43	22.02	14.82	13.28	---
29	17.00	25.76	---	14.95	-----	15.55	15.91	35.30	21.84	14.68	13.16	---
30	20.45	23.81	---	14.90	-----	15.92	17.45	28.75	24.45	14.98	13.23	---
31	18.90	-----	---	15.20	-----	15.30	-----	29.93	-----	15.42	13.18	-----
MAX	21.29	---	---	---	35.35	20.67	28.80	38.43	---	24.35	---	---
MIN	13.20	---	---	---	16.00	14.66	15.03	18.69	---	14.53	---	---

08113500 Richmond Irrigation Co.'s canal near Richmond, Tex.

LOCATION.--Lat 29°34'00", long 95°47'00", Fort Bend County, on right downstream wingwall of first bridge downstream from pump plant, about 0.5 mile (0.8 km) upstream from previous gage, 1.2 miles (1.9 km) downstream from pump plant, and 1.7 miles (2.7 km) southwest of Richmond.

PERIOD OF RECORD.--October 1927 to September 1954, March 1956 to current year. Records for water years 1928-31, 1955-56 incomplete yearly estimates only published in WSP 1312 and 1732.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27 m), from topographic map.

AVERAGE DISCHARGE.--48 years, 43.6 ft³/s (1.235 m³/s), 31,590 acre-ft/yr (39.0 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 267 ft³/s (7.56 m³/s) Nov. 15, 28, 1957; no flow for several months each year.

REMARKS.--Records fair. Water for irrigation is diverted by pumping from right bank of Brazos River 6 miles (10 km) upstream from Richmond. Figures of discharge represent water pumped from river.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	0	0	5.0	165	57	0	218	0	0
2	0		0	0	0	0	212	117	0	202	0	0
3	0		1.0	6.0	0	0	212	118	77	222	0	0
4	0		0	0	0	0	219	116	181	220	35	0
5	0		0	0	0	7.0	186	117	194	217	101	0
6	0		0	0	0	0	101	165	199	215	85	0
7	0		0	0	0	3.0	98	204	188	213	0	0
8	1.0		0	0	0	1.0	97	198	139	213	0	0
9	0		0	0	0	0	101	136	96	213	0	0
10	0		1.0	0	0	9.0	108	113	43	211	0	0
11	0		0	0	0	0	106	113	13	212	0	0
12	0		0	0	0	0	111	113	54	211	0	0
13	0		0	0	0	0	111	169	187	200	0	0
14	0		0	0	0	0	57	179	190	202	0	0
15	0		0	0	0	0	82	182	183	206	4.0	33
16	0		0	0	0	0	0	177	183	214	31	98
17	0		0	0	0	0	0	181	231	154	100	98
18	0		2.0	0	0	0	0	182	231	98	101	100
19	0		4.0	0	4.0	10	0	171	226	97	102	102
20	0		4.0	6.0	1.0	1.0	0	195	219	97	101	106
21	0		1.0	1.0	0	0	0	197	185	99	103	104
22	0		0	2.0	0	0	0	202	209	98	103	46
23	0		0	0	0	0	0	187	211	98	104	0
24	0		1.0	0	0	0	46	186	207	98	103	0
25	0		0	0	0	0	104	190	208	97	103	0
26	0		0	0	0	0	104	152	211	98	108	0
27	0		0	0	3.0	0	108	144	211	98	42	0
28	0		0	0	4.0	0	107	133	218	101	0	0
29	0		0	0	-----	0	107	127	224	97	0	98
30	0		0	0	-----	33	58	84	224	59	0	45
31	0	-----	0	0	-----	161	-----	0	-----	0	0	-----
TOTAL	1.0	0	14.0	15.0	12.0	230.0	2,600	4,605	4,942	4,778	1,326.0	830
MEAN	.032	0	.45	.48	.43	7.42	86.7	149	165	154	42.8	27.7
MAX	1.0	0	4.0	6.0	4.0	161	219	204	231	222	108	106
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	2.0	0	28	30	24	456	5,160	9,130	9,800	9,480	2,630	1,650
CAL YR 1974	TOTAL 19,080.40		MEAN 52.3	MAX 219	MIN 0	AC-FT 37,850						
WTR YR 1975	TOTAL 19,353.00		MEAN 53.0	MAX 231	MIN 0	AC-FT 38,390						

08114000 Brazos River at Richmond, Tex.

LOCATION.--Lat 29°34'56", long 95°45'27", Fort Bend County, on right bank at downstream side of downstream bridge on U.S. Highway 59 in Richmond, 925 ft (282 m) downstream from Texas and New Orleans Railroad Co. bridge, and at mile 92.0 (148.0 km).

DRAINAGE AREA.--44,020 mi² (114,000 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: January 1903 to June 1906 and October 1922 to current year. Published as "at Rosenberg" October 1922 to September 1931 and equivalent except for diversion by Richmond Irrigation Co.'s canal. June to November 1901 and June to September 1902 in U.S. Department of Agriculture, Office of Experiment Stations, Bulletin Nos. 119 and 133. Gage-height records collected in this vicinity since 1914 are contained in reports of the National Weather Service.

Water quality: Chemical analyses: October 1945 to current year. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: February 1968 to current year. Water temperatures: November 1950 to current year. Sediment records: January 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 40.94 ft (12.479 m) above mean sea level. Prior to Oct. 1, 1922, various types of non-recording gages at railroad bridge 925 ft (282 m) upstream at different datums. Oct. 1, 1922, to Sept. 30, 1931, nonrecording chain gage at Rosenberg 7.6 miles (12.2 km) upstream at datum about 4 ft (1.2 m) higher.

AVERAGE DISCHARGE.--20 years (1903-5, 1922-40) unregulated, 7,209 ft³/s (204.2 m³/s), 5,223,000 acre-ft/yr (6.44 km³/yr); 35 years (1940-75) regulated, 7,448 ft³/s (210.9 m³/s), 5,396,000 acre-ft/yr (6.65 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 64,000 ft³/s (1,810 m³/s) May 29 (gage height, 26.51 ft or 8.080 m); minimum daily, 1,360 ft³/s (38.5 m³/s) Sept. 30.

Period of record: Maximum discharge, 123,000 ft³/s (3,480 m³/s) June 6, 1929 (gage height, 40.6 ft or 12.37 m, from floodmarks), present site and datum; minimum daily, 35 ft³/s (0.99 m³/s) Aug. 23, 1934.

Historic: Maximum stage since at least 1852, 48.2 ft (14.69 m) Dec. 10, 1913, present datum, from floodmarks on right bank 1,000 ft (305 m) upstream from gage. From information by Texas and New Orleans Railroad Co., stages of other floods at railroad bridge, present datum, are as follows: May 1884, 43.7 ft (13.32 m); June 13, 1885, 44.7 ft (13.62 m); July 1899, 45.6 ft (13.90 m); May 2, 1915, 43.3 ft (13.20 m); May 9, 1922, 40.9 ft (12.47 m).

Water quality: Current year: Maximum daily specific conductance, 1,310 micromhos June 19; minimum daily, 287 micromhos May 29. Maximum water temperature, 29.0°C Aug. 17, 22; minimum, 8.0°C Dec. 2, 3. Maximum daily sediment concentrations, 6,550 mg/l Feb. 5; minimum daily, 70 mg/l Sept. 10. Maximum daily sediment loads, 880,000 tons May 28; minimum daily, 367 tons Sept. 30.

Period of record: Maximum daily specific conductance, 2,540 micromhos Sept. 4, 1951; minimum daily, 187 micromhos Apr. 31, 1947. Maximum water temperatures, 33.0°C Aug. 5, 1951; minimum 1.0°C Jan. 8, 1970. Maximum daily sediment concentrations, 8,300 mg/l Apr. 27, 1966; minimum daily, 8 mg/l Nov. 29, 1967. Maximum daily sediment loads, 1,190,000 tons Apr. 28, 1966; minimum daily, 15 tons Apr. 8-10, 1967.

REMARKS.--Discharge records good. Considerable water diverted above station for irrigation and municipal supply (see stations 08112500 and 08113500). For statement regarding regulation by reservoirs and by Soil Conservation Service floodwater-retarding structures see Brazos River at Washington (station 08110200) and Brazos River near Hempstead (station 08111500).

REVISIONS (WATER YEARS).--WSP 1392: 1933. WSP 1442: Drainage area. WSP 1632: 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,400	14,000	19,600	8,200	5,420	13,900	5,180	8,000	36,800	20,400	5,040	2,540
2	15,700	18,600	20,000	8,950	6,650	14,000	4,700	11,800	42,000	19,700	5,140	2,550
3	14,900	31,300	20,100	10,200	8,740	14,000	4,530	12,500	38,000	15,800	5,420	2,350
4	13,700	42,200	19,700	13,200	14,100	13,400	4,340	12,900	30,700	13,300	6,270	2,140
5	12,300	41,600	18,800	14,700	38,500	12,400	3,850	12,700	27,100	12,200	7,380	2,380
6	11,200	30,500	18,500	14,800	50,700	11,700	3,560	10,800	26,600	11,900	7,470	2,520
7	10,000	27,900	17,300	14,700	54,400	11,500	3,840	12,100	27,600	11,000	7,260	2,530
8	9,080	35,400	16,100	13,800	50,200	11,400	4,420	18,200	25,000	10,500	7,090	2,400
9	8,670	42,600	15,100	13,000	40,600	11,200	7,720	20,800	21,800	10,300	6,540	2,170
10	8,380	48,000	14,300	12,500	34,400	10,900	11,400	26,600	23,700	9,880	6,550	2,060
11	8,190	55,400	14,800	12,300	31,200	10,600	9,840	28,800	30,800	9,480	5,940	2,060
12	8,020	55,200	17,700	12,500	29,600	10,500	13,600	26,500	28,000	9,170	5,170	2,060
13	7,870	47,800	19,200	12,600	28,000	10,400	14,100	25,200	22,500	8,580	5,300	2,000
14	7,560	38,000	20,100	13,300	26,000	10,100	16,200	24,800	21,200	8,340	5,090	1,770
15	7,950	32,500	21,000	15,500	24,200	9,370	30,300	22,600	21,100	8,790	3,890	1,680
16	7,190	30,900	19,800	17,100	22,100	8,600	24,800	19,800	20,300	9,740	3,300	1,680
17	7,140	28,900	16,000	16,400	19,700	8,420	17,400	17,500	19,600	8,660	3,070	1,550
18	7,100	24,700	13,900	14,300	17,200	9,430	14,900	16,300	19,800	7,110	2,770	1,770
19	6,830	20,200	12,800	12,800	14,600	10,500	14,600	14,700	17,600	6,780	2,580	2,210
20	6,540	16,900	12,200	12,300	12,700	9,160	14,600	12,700	14,600	6,580	2,270	2,350
21	6,130	15,400	11,800	11,900	12,400	8,750	14,100	11,200	13,400	6,040	2,270	2,580
22	5,610	14,800	12,000	11,100	15,800	8,220	12,900	10,100	12,700	5,390	2,160	2,890
23	5,530	14,300	12,100	10,500	18,200	7,200	11,200	9,610	11,500	4,850	2,110	2,800
24	5,220	15,100	11,600	10,400	18,200	6,260	9,100	10,800	10,500	4,380	2,050	2,350
25	4,440	24,800	11,000	9,130	17,100	5,670	7,510	15,900	10,400	4,070	2,090	2,350
26	3,720	42,300	9,770	7,530	16,200	5,340	6,680	35,800	10,200	4,090	2,710	2,490
27	3,290	51,200	8,440	6,590	15,200	5,100	6,130	50,200	10,100	4,180	3,290	2,190
28	2,870	50,000	7,780	6,040	14,100	4,850	5,800	59,800	11,800	4,380	2,940	1,810
29	2,580	36,800	7,600	5,550	-----	4,570	5,570	62,800	15,500	4,360	2,750	1,490
30	7,160	23,500	7,670	5,260	-----	5,320	5,540	51,200	16,300	4,310	2,500	1,360
31	12,900	-----	7,740	5,160	-----	5,810	-----	34,700	-----	4,500	2,550	-----
TOTAL	254,170	970,800	454,500	352,310	656,210	288,570	308,410	707,410	637,200	268,760	130,960	65,080
MEAN	8,199	32,360	14,660	11,360	23,440	9,309	10,280	22,820	23,240	8,670	4,225	2,169
MAX	16,400	55,400	21,000	17,100	54,400	14,000	30,300	62,800	42,000	20,400	7,470	2,890
MIN	2,580	14,000	7,600	5,160	5,420	4,570	3,560	8,000	10,100	4,070	2,050	1,360
AC-FT	504,100	1,926M	901,500	698,800	1,302M	572,400	611,700	1,403M	1,264M	533,100	259,800	129,100
CAL YR 1974	TOTAL	3,328,092	MEAN	9,118	MAX	55,400	MIN	586	AC-FT	6,601,000		
WTR YR 1975	TOTAL	5,094,380	MEAN	13,960	MAX	62,800	MIN	1,360	AC-FT	10,100,000		

08114000 Brazos River at Richmond, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.											
22...	1400	5590	8.6	49	10	44	4.5	157	0	42	63
NOV.											
21...	1030	23500	8.7	70	15	140	5.0	124	0	120	220
DEC.											
09...	1515	13700	10	43	6.4	33	5.1	128	0	41	53
JAN.											
21...	1430	12000	9.0	60	14	58	3.8	171	0	60	88
FEB.											
07...	0610	56000	8.1	43	6.4	25	1.8	121	0	37	36
MAR.											
11...	1600	11500	8.3	66	14	72	4.4	176	0	81	110
APR.											
21...	0600	17500	7.0	69	12	91	4.1	165	0	87	130
MAY											
07...	1230	12000	11	51	7.9	45	4.6	142	0	51	62
JUNE											
20...	0600	16000	7.0	78	16	140	4.9	166	0	120	210
JULY											
22...	0930	5400	11	61	11	36	3.9	188	0	54	51
AUG.											
27...	0600	3300	11	71	16	100	4.1	208	0	92	150
SEP.											
16...	1000	8200	9.4	80	18	120	4.7	230	0	97	180

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.											
22...	.2	--	--	--	--	--	--	299	--	--	160
NOV.											
21...	--	.24	.02	.08	.78	.86	.70	641	2260	2220	240
DEC.											
09...	.2	--	--	--	--	--	--	255	--	--	130
JAN.											
21...	.2	.43	.01	.04	.83	.87	.26	377	610	103	210
FEB.											
07...	.3	--	--	--	--	--	--	217	--	--	130
MAR.											
11...	.2	.55	.00	.03	.47	.50	.33	444	523	60	220
APR.											
21...	.3	--	--	--	--	--	--	482	--	--	220
MAY											
07...	.5	.81	.01	.10	.76	.86	.36	304	820	140	160
JUNE											
20...	.3	--	--	--	--	--	--	658	--	--	260
JULY											
22...	.3	.45	.01	.08	1.1	1.2	.27	321	372	86	200
AUG.											
27...	--	--	--	--	--	--	--	547	--	--	240
SEP.											
16...	.3	.02	.01	.00	.96	.96	.11	624	65	29	280

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
22...	35	1.5	561	7.6	--	--	--	--	--	--	--
NOV.											
21...	140	4.0	1110	7.6	18.0	10	300	10.3	108	.9	10
DEC.											
09...	29	1.2	471	7.5	11.5	--	--	--	--	--	--
JAN.											
21...	67	1.8	684	6.5	14.0	40	200	11.0	106	1.0	4.6
FEB.											
07...	34	.9	400	7.5	9.0	--	--	--	--	--	--
MAR.											
11...	79	2.1	817	8.1	18.0	10	150	9.2	97	1.9	6.0
APR.											
21...	86	2.7	928	7.9	16.0	--	--	--	--	--	--
MAY											
07...	44	1.5	553	7.2	26.0	30	280	6.9	84	1.9	13
JUNE											
20...	120	3.8	1210	8.2	27.0	--	--	--	--	--	--
JULY											
22...	43	1.1	564	7.5	29.5	10	160	7.0	91	1.6	15
AUG.											
27...	73	2.8	1030	8.1	28.0	--	--	--	--	--	--
SEP.											
16...	86	3.2	1140	7.5	26.0	20	25	7.2	88	1.8	6.4

BRAZOS RIVER BASIN

08114000 Brazos River at Richmond, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
NOV. 21...	1030	100	2	130	0	<10	2	3			
MAR. 11...	1600	20	3	100	0	0	1	2			
MAY 07...	1230	390	2	60	0	0	0	3			
SEP. 16...	1000	0	3	170	0	0	0	8			
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)		
NOV. 21...	40	2	<10	0	<.1	0	800	50			
MAR. 11...	20	2	10	0	.1	0	720	10			
MAY 07...	380	1	0	20	.0	1	570	20			
SEP. 16...	20	0	20	0	.0	1	950	40			
DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)
NOV. 21...	1030	23500	18.0	.00	.0	.00	.0	.01	1.3	.00	.6
MAR. 11...	1600	11500	18.0	.00	.0	.00	.0	.00	.0	.00	.0
MAY 07...	1230	12000	26.0	.00	.0	.00	.0	.01	.20	.00	.0
SEP. 16...	1000	8200	26.0	.00	.0	.00	.9	.00	4.6	.00	.0
DATE	TOTAL DIELDRIN (UG/L)	DIELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
NOV. 21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAR. 11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 07...	.00	.0	.00	.0	.00	.3	.00	.0	.00	.0	.0
SEP. 16...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
DATE	CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
NOV. 21...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	
MAR. 11...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	
MAY 07...	13	.0	0	.00	.00	.00	.00	.03	.00	.01	
SEP. 16...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	

BRAZOS RIVER BASIN

405

08114000 Brazos River at Richmond, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) * WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	419	319	559	819	894	1040	751	---	340	639	803	1090
2	375	348	590	809	898	1030	854	632	360	411	842	1120
3	383	413	625	882	815	1050	823	518	483	373	937	1050
4	559	400	651	902	812	1050	928	543	433	385	904	1100
5	656	390	575	850	686	1040	1020	575	452	393	815	1120
6	636	380	514	705	416	990	1060	601	526	449	688	1100
7	625	372	478	659	400	902	1110	606	621	578	737	1070
8	652	687	478	651	401	871	1120	508	785	619	748	954
9	579	842	477	634	438	842	1030	432	801	613	832	1130
10	554	788	479	602	546	857	741	359	709	522	586	932
11	557	953	508	606	638	846	606	353	545	522	550	1200
12	539	953	504	561	615	821	617	369	477	491	578	1250
13	528	1020	498	536	670	818	1130	350	614	491	578	1170
14	515	483	510	526	700	815	514	316	700	508	651	1010
15	482	918	508	537	738	794	717	351	798	540	663	1130
16	469	671	462	553	772	824	688	339	616	582	729	1130
17	495	652	474	565	778	852	854	311	981	541	739	1130
18	516	1230	486	560	733	940	1020	338	1270	423	778	941
19	553	1230	533	615	802	906	962	394	1310	420	838	954
20	511	1170	580	698	775	868	915	418	1200	500	929	910
21	469	1070	588	700	695	953	928	401	1110	543	954	877
22	556	931	520	688	640	981	915	411	962	558	977	1000
23	583	900	481	715	778	902	903	470	928	549	967	1010
24	610	870	499	636	958	1000	907	490	936	572	1010	732
25	680	686	537	634	965	1010	900	514	915	602	1060	639
26	750	578	710	661	981	958	899	451	879	615	1040	813
27	758	514	857	695	980	863	910	365	911	621	1030	891
28	700	428	902	787	971	928	923	295	876	628	1020	830
29	689	424	829	902	---	799	785	287	724	644	796	762
30	658	476	796	940	---	797	771	293	560	722	1020	714
31	400	---	796	935	---	782	---	300	---	534	---	---
MONTH	563	703	581	696	732	907	877	420	761	535	827	992

TEMPERATURE (DEG. C) OF WATER * WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	22.0	10.0	14.0	20.0	15.0	15.0	---	24.0	26.0	28.0	28.0
2	21.0	22.0	8.0	14.0	19.0	15.0	---	23.0	24.0	---	28.0	28.0
3	22.0	23.0	8.0	12.0	16.0	15.0	14.0	24.0	24.0	26.0	---	28.0
4	22.0	---	9.0	11.0	16.0	13.0	15.0	25.0	24.0	26.0	28.0	28.0
5	22.0	19.0	10.0	---	14.0	13.0	16.0	---	25.0	26.0	26.0	28.0
6	23.0	---	11.0	11.0	11.0	14.0	17.0	25.0	26.0	27.0	27.0	27.0
7	21.0	19.0	11.0	13.0	9.0	15.0	17.0	24.0	26.0	28.0	27.0	27.0
8	23.0	17.0	11.0	14.0	9.0	14.0	19.0	25.0	26.0	28.0	28.0	27.0
9	---	17.0	10.0	14.0	9.0	14.0	19.0	23.0	26.0	28.0	27.0	27.0
10	23.0	---	11.0	14.0	9.0	16.0	20.0	23.0	25.0	28.0	27.0	27.0
11	23.0	---	11.0	13.0	9.0	16.0	18.0	---	25.0	28.0	27.0	28.0
12	23.0	---	---	10.0	10.0	18.0	18.0	24.0	25.0	28.0	27.0	27.0
13	23.0	---	11.0	10.0	10.0	---	18.0	---	26.0	---	28.0	27.0
14	22.0	---	12.0	9.0	10.0	13.0	18.0	23.0	26.0	---	28.0	25.0
15	22.0	---	12.0	9.0	13.0	14.0	16.0	22.0	26.0	---	28.0	25.0
16	20.0	---	12.0	10.0	14.0	17.0	17.0	---	27.0	27.0	28.0	24.0
17	16.0	16.0	11.0	10.0	13.0	17.0	18.0	---	27.0	27.0	29.0	25.0
18	19.0	15.0	11.0	---	14.0	14.0	20.0	---	27.0	28.0	28.0	26.0
19	19.0	17.0	11.0	13.0	17.0	14.0	20.0	24.0	27.0	---	28.0	27.0
20	---	17.0	12.0	11.0	12.0	15.0	18.0	25.0	27.0	---	28.0	---
21	23.0	17.0	11.0	11.0	13.0	17.0	16.0	25.0	27.0	28.0	28.0	24.0
22	20.0	16.0	---	12.0	15.0	18.0	20.0	25.0	27.0	28.0	29.0	22.0
23	21.0	---	13.0	11.0	12.0	20.0	20.0	25.0	27.0	28.0	28.0	21.0
24	21.0	---	14.0	12.0	10.0	19.5	21.0	---	28.0	28.0	28.0	20.0
25	21.0	14.0	14.0	12.0	---	17.0	---	---	---	27.0	28.0	19.0
26	20.0	14.0	13.0	13.0	12.0	18.0	23.0	---	27.0	28.0	28.0	20.0
27	20.0	14.0	13.0	14.0	---	20.0	---	24.0	27.0	28.0	28.0	20.0
28	22.0	---	13.0	17.0	10.0	21.0	23.0	23.0	27.0	28.0	27.0	22.0
29	22.0	14.0	14.0	18.0	---	17.0	24.0	23.0	27.0	28.0	27.0	21.0
30	24.0	10.0	14.0	18.0	---	12.0	24.0	24.0	27.0	28.0	27.0	20.0
31	20.0	---	14.0	20.0	---	13.0	---	23.0	---	28.0	---	---
MONTH	21.5	---	11.5	13.0	12.5	16.0	18.5	---	26.0	27.5	27.5	25.0

BRAZOS RIVER BASIN

08114000 Brazos River at Richmond, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
JAN. 08...	0600	14060	14.0	869	33000	69	93
APR. 15...	0750	30890	17.0	3920	327000	70	95
MAY 28...	2100	63030	25.0	4700	800000	83	95
JULY 06...	0900	12070	27.0	1350	44000	91	98
14...	1130	1740	29.5	713	3350	59	84
AUG. 06...	0725	7470	28.0	979	19700	92	97
		SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
JAN. 08...	100	--	36	46	48	56	62
APR. 15...	99	100	33	38	45	52	59
MAY 28...	99	100	42	51	54	66	73
JULY 06...	99	100	67	75	77	84	87
14...	97	100	35	43	46	53	57
AUG. 06...	98	100	72	79	81	86	88

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	254170	535	290	199000	62	42500	46	31600	160
NOV. 1974.....	970800	686	380	996000	92	241000	62	163000	210
DEC. 1974.....	454500	557	310	380000	67	82200	49	60100	170
JAN. 1975.....	352310	672	370	352000	89	84700	60	57100	200
FEB. 1975.....	656210	649	360	638000	85	151000	58	103000	200
MAR. 1975.....	288570	918	500	390000	130	101000	85	66200	240
APR. 1975.....	308410	841	460	383000	110	91600	77	64100	230
MAY 1975.....	707410	375	200	382000	31	59200	30	57300	110
JUNE 1975.....	637200	684	380	654000	91	157000	61	105000	210
JULY 1975.....	268760	517	280	203000	59	42800	45	32700	160
AUG. 1975.....	130960	772	420	149000	110	38900	70	24800	220
SEPT 1975.....	65080	994	550	96600	160	28100	92	16200	250
TOTAL	5094380	**	**	4820000	**	1120000	**	781000	**
WTD.AVG.	13957.2	638	350	**	81	**	57	**	190

08114000 Brazos River at Richmond, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	16400	700	31000	14000	1750	66100	19600	1800	95300
2	15700	600	25400	18600	1880	93500	20000	1520	82100
3	14900	520	20900	31300	4230	372000	20100	1200	65100
4	13700	500	18500	42200	5810	668000	19700	1050	55800
5	12300	400	13300	41600	4200	472000	18800	1120	56900
6	11200	375	11300	30500	3050	251000	18500	1520	75900
7	10000	375	10100	27900	2600	196000	17300	800	37400
8	9080	375	9190	35400	2750	263000	16100	600	26100
9	8670	400	9360	42600	3100	357000	15100	600	24500
10	8380	270	6110	48000	3150	408000	14300	800	30900
11	8190	270	5970	55400	3100	464000	14800	1270	50700
12	8020	250	5410	55200	2800	417000	17700	1120	53500
13	7870	350	7440	47800	2200	284000	19200	1300	67400
14	7560	800	16300	38000	1900	195000	20100	1450	78700
15	7950	850	18200	32500	1950	171000	21000	1800	102000
16	7190	420	8150	30900	1950	163000	19800	1420	75900
17	7140	300	5780	28900	1900	148000	16000	900	38900
18	7100	320	6130	24700	1700	113000	13900	620	23300
19	6830	320	5900	20200	1400	76400	12800	550	19000
20	6540	250	4410	16900	1100	50200	12200	500	16500
21	6130	250	4140	15400	950	39500	11800	450	14300
22	5610	250	3790	14800	900	36000	12000	450	14600
23	5530	320	4780	14300	850	32800	12100	450	14700
24	5220	570	8030	15100	1100	44800	11600	420	13200
25	4440	220	2640	24800	2500	167000	11000	420	12500
26	3720	150	1510	42300	4730	550000	9770	420	11100
27	3290	170	1510	51200	6170	851000	8440	420	9570
28	2870	270	2090	50000	3900	527000	7780	370	7770
29	2580	120	836	36800	2600	258000	7600	370	7590
30	7160	1400	37600	23500	2180	138000	7670	350	7250
31	12900	2320	80800	---	---	---	7740	350	7310
MONTH	254170	---	386576	970800	---	7872300	454500	---	1195790
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8200	370	8190	5420	570	8340	13900	600	22500
2	8950	370	8940	6650	420	7540	14000	620	23400
3	10200	550	15100	8740	620	14600	14000	620	23400
4	13200	1020	36400	14100	1990	108000	13400	650	23500
5	14700	900	35700	38500	6550	671000	12400	570	19100
6	14800	920	36800	50700	5350	732000	11700	500	15800
7	14700	1200	47600	54400	4750	698000	11500	470	14600
8	13800	850	31700	50200	3350	454000	11400	470	14500
9	13000	770	27000	40600	2450	269000	11200	450	13600
10	12500	700	23600	34400	2400	223000	10900	450	13200
11	12300	670	22300	31200	2050	173000	10600	450	12900
12	12500	720	24300	29600	1850	148000	10500	450	12800
13	12600	870	29600	28000	1700	129000	10400	450	12600
14	13300	1050	37700	26000	1500	105000	10100	450	12300
15	15500	1420	59400	24200	1550	101000	9370	400	10100
16	17100	1670	77100	22100	1370	81700	8600	350	8130
17	16400	1420	62900	19700	1150	61200	8420	370	8410
18	14300	1120	43200	17200	950	44100	9430	720	18300
19	12800	950	32800	14600	800	31500	10500	800	22700
20	12300	770	25600	12700	670	23000	9160	550	13600
21	11900	750	24100	12400	650	21800	8750	450	10600
22	11100	720	21600	15800	870	37100	8220	400	8880
23	10500	570	16200	18200	1320	64900	7200	420	8160
24	10400	520	14600	18200	1200	59000	6260	350	5920
25	9130	450	11100	17100	1100	50800	5670	300	4590
26	7530	400	8130	16200	1100	48100	5340	320	4610
27	6590	350	6230	15200	920	37800	5100	500	6880
28	6040	350	5710	14100	750	28600	4850	350	4580
29	5550	370	5540	---	---	---	4570	220	2710
30	5260	350	4970	---	---	---	5320	220	3160
31	5160	550	7660	---	---	---	5810	250	3920
MONTH	352310	---	811770	656210	---	4431080	288570	---	379450

BRAZOS RIVER BASIN

08114000 Brazos River at Richmond, Tex.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5180	270	3780	8000	600	13000	36800	2800	278000
2	4700	450	5710	11800	950	30300	42000	3200	363000
3	4530	370	4530	12500	1270	42900	38000	2700	277000
4	4340	200	2340	12900	1520	52900	30700	2000	166000
5	3850	300	3120	12700	1550	53100	27100	1550	113000
6	3560	200	1920	10800	1150	33500	26600	1400	101000
7	3840	200	2070	12100	1070	35000	27600	1500	112000
8	4420	320	3820	18200	2000	98300	25000	1400	94500
9	7720	1140	27500	20800	2970	167000	21800	1250	73600
10	11400	1350	41600	26600	3370	242000	23700	2910	188000
11	9840	1320	35100	28800	3000	233000	30800	1920	160000
12	13600	1470	55000	26500	2250	161000	28000	1320	99800
13	14100	1600	61600	25200	2050	139000	22500	1050	63800
14	16200	2990	143000	24800	1850	124000	21200	1220	69800
15	30300	3550	290000	22600	1750	107000	21100	1370	78000
16	24800	1800	121000	19800	1500	80200	20300	1670	91500
17	17400	1170	55000	17500	1270	60000	19600	1170	61900
18	14900	1050	42200	16300	970	42700	19800	1170	62500
19	14600	1000	39400	14700	820	32500	17600	1170	55600
20	14600	1000	39400	12700	850	29100	14600	1020	40200
21	14100	900	34300	11200	750	22700	13400	850	30800
22	12900	750	26100	10100	550	15000	12700	800	27400
23	11200	600	18100	9610	450	11700	11500	700	21700
24	9100	520	12800	10800	570	16600	10500	600	17000
25	7510	500	10100	15900	800	34300	10400	600	16800
26	6680	400	7210	35800	3860	385000	10200	570	15700
27	6130	370	6120	50200	6240	849000	10100	600	16400
28	5800	350	5480	59800	5450	880000	11800	950	30300
29	5570	350	5260	62800	3650	619000	15500	1170	49000
30	5540	320	4790	51200	2300	318000	16300	1100	48400
31	---	---	---	34700	2600	244000	---	---	---
MONTH	308410	---	1108350	707410	---	5171800	637200	---	2822700
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	20400	2000	111000	5040	400	5440	2540	300	2060
2	19700	3110	166000	5140	400	5550	2550	200	1380
3	15800	2050	87500	5420	550	8050	2350	150	952
4	13300	1450	52100	6270	450	7620	2140	120	693
5	12200	1200	39500	7380	670	13400	2380	100	643
6	11900	1270	40800	7470	850	17100	2520	200	1360
7	11000	920	27300	7260	500	9800	2530	350	2390
8	10500	670	19000	7090	650	12400	2400	270	1750
9	10300	620	17200	6540	520	9180	2170	100	586
10	9880	620	16500	6550	550	9730	2060	70	389
11	9480	550	14100	5940	470	7540	2060	100	556
12	9170	550	13600	5170	500	6980	2060	250	1390
13	8580	520	12000	5300	570	8160	2000	350	1890
14	8340	600	13500	5090	450	6180	1770	200	956
15	8790	470	11200	3890	400	4200	1680	150	680
16	9740	570	15000	3300	400	3560	1680	170	771
17	8660	850	19900	3070	400	3320	1550	100	418
18	7110	900	17300	2770	420	3140	1770	170	812
19	6780	650	11900	2580	300	2090	2210	250	1490
20	6580	500	8880	2270	120	735	2350	250	1590
21	6040	400	6520	2270	100	613	2580	200	1390
22	5390	470	6840	2160	100	583	2890	150	1170
23	4850	570	7460	2110	100	570	2800	100	756
24	4380	550	6500	2050	150	830	2350	100	634
25	4070	570	6260	2090	250	1410	2350	150	952
26	4090	500	5520	2710	470	3440	2490	150	1010
27	4180	370	4180	3290	500	4440	2190	120	710
28	4380	300	3550	2940	320	2540	1810	100	489
29	4360	300	3530	2750	250	1860	1490	100	402
30	4310	270	3140	2500	320	2160	1360	100	367
31	4500	320	3890	2550	250	1720	---	---	---
MONTH	268760	---	771670	130960	---	164341	65080	---	30636
YEAR	5094380		25146463						

08115000 Big Creek near Needville, Tex.

LOCATION.--Lat 29°28'35", long 95°48'45", Fort Bend County, near center of stream at downstream side of bridge on State Highway 36, 1.5 miles (2.4 km) downstream from Coon Creek, 5.5 miles (8.8 km) north of Needville, and 10.5 miles (16.9 km) upstream from Fairchild Creek.

DRAINAGE AREA.--42.3 mi² (109.6 km²).

PERIOD OF RECORD.--May 1947 to June 1950, March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 59.39 ft (18.102 m) above mean sea level, adjustment of 1943. Prior to June 30, 1950, and May 29, 1959, to Mar. 29, 1960, nonrecording gage at 10.00 ft (3.048 m) higher datum. March 1952 to May 28, 1959, and Mar. 30, 1960, to Sept. 30, 1967, water-stage recorder at 10.00 ft (3.048 m) higher datum.

AVERAGE DISCHARGE.--25 years (1947-49, 1952-75), 34.2 ft³/s (0.969 m³/s), 24,780 acre-ft/yr (30.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,000 ft³/s (113 m³/s) May 30 (gage height, 22.00 ft or 6.706 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Sept. 22, 23.

Period of record: Maximum discharge, 10,400 ft³/s (295 m³/s) June 26, 1960 (gage height, 23.81 ft or 7.257 m); maximum gage height, 24.03 ft (7.324 m) Oct. 31, 1959; no flow at times.

Maximum stage since 1913, 24.4 ft (7.44 m) in August 1945 before channel rectification, from information by local resident.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Channel rectification was completed in April 1955. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1148: 1947. WSP 1712: 1957-58, 1959(M). WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1200	3.0	46	1.4	.55	.76	1.2	251	5.5	4.5	1.6
2	.86	700	2.5	88	1.6	.49	.80	.92	111	5.5	3.6	1.8
3	.64	300	2.0	51	1.3	.49	.75	.91	55	4.5	16	1.7
4	.54	120	5.0	22	.86	.55	1.4	8.8	25	4.3	21	12
5	.77	50	30	10	90	.57	1.7	6.0	13	4.5	12	5.3
6	.60	20	300	6.0	35	.56	1.8	2.9	7.3	4.6	20	40
7	.79	30	123	24	9.9	.52	1.5	1.7	4.8	4.6	96	6.4
8	.69	50	53	41	4.6	.48	5.1	1.2	4.1	4.7	11	2.7
9	.62	30	20	13	2.6	.49	9.6	27	43	4.7	8.8	6.0
10	.63	700	54	26	1.7	.53	16	31	896	4.7	4.1	14
11	.79	600	238	23	1.6	.54	62	8.7	361	4.3	4.6	3.4
12	.69	300	142	13	1.8	.52	12	3.9	150	4.0	4.2	1.4
13	.67	100	70	8.6	1.3	.59	5.1	2.2	70	4.7	3.7	1.1
14	.69	40	40	5.3	1.0	.56	302	1.6	30	3.9	2.7	.78
15	189	20	50	3.4	.80	.53	132	1.5	15	3.6	3.1	.53
16	159	12	29	2.5	.82	.54	40	1.5	10	4.0	2.3	.50
17	62	8.0	14	2.0	.74	.51	12	.96	8.0	3.8	3.0	.48
18	18	5.5	7.5	2.0	.70	1.8	5.2	.87	5.5	3.3	8.8	.44
19	9.1	4.0	4.9	1.9	.66	1.3	2.9	.88	5.0	3.0	9.7	.41
20	3.6	3.5	3.3	1.7	.65	1.0	2.0	.91	4.5	2.8	31	.38
21	2.2	3.0	2.7	1.6	.64	.89	1.6	.88	4.0	2.7	60	.33
22	1.6	2.5	2.2	1.5	.61	.89	1.6	.95	3.5	2.7	8.0	.30
23	1.3	2.2	1.9	1.5	.61	.83	1.3	.99	3.2	3.1	11	.30
24	1.0	600	1.8	1.4	.54	.73	1.0	104	2.9	5.5	4.3	.55
25	.90	300	1.8	1.3	.56	.70	.94	351	2.7	11	3.2	.58
26	.85	120	9.3	1.2	.54	.70	.87	120	2.5	9.6	2.0	.55
27	.80	50	10	1.2	.52	.77	.88	50	3.5	6.9	2.2	.32
28	70	20	17	1.2	.57	.80	.82	20	4.5	7.0	2.2	.32
29	80	10	9.7	1.3	---	.73	.77	40	4.5	4.8	2.6	.32
30	30	5.0	34	1.2	---	.75	.95	1500	4.5	5.2	2.5	.32
31	400	---	9.8	1.2	---	.74	---	1900	---	5.0	1.7	---
TOTAL	1039.43	5405.7	1291.4	405.0	248.76	21.65	625.34	4192.47	2105.0	148.5	369.8	104.81
MEAN	33.5	180	41.7	13.1	8.88	.70	20.8	135	70.2	4.79	11.9	3.49
MAX	400	1200	300	88	90	1.8	302	1900	896	11	96	40
MIN	.54	2.2	1.8	1.2	.52	.48	.75	.87	2.5	2.7	1.7	.30
AC-FT	2060	10720	2560	803	493	43	1240	8320	4180	295	733	208

CAL YR 1974 TOTAL 20789.36 MEAN 57.0 MAX 1500 MIN .54 AC-FT 41240
WTR YR 1975 TOTAL 15957.86 MEAN 43.7 MAX 1900 MIN .30 AC-FT 31650

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	unknown	unknown	about 1,500	5-30	2400	22.00	4,000
11-10	unknown	unknown	about 1,000	6-10	1130	18.27	1,560

NOTE.--No gage-height record Oct. 24 to Nov. 6.

BRAZOS RIVER BASIN

08116400 Dry Creek near Rosenberg, Tex.

LOCATION.--Lat 29°30'42", long 95°44'45", Fort Bend County, on right bank 38 ft (12 m) downstream from county road bridge, 5.0 miles (8.0 km) southeast of Rosenberg, and 8.2 miles (13.2 km) upstream from Smither's Lake (Lake George) spillway.

DRAINAGE AREA.--8.53 mi² (22.09 km²). See REMARKS.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 71.90 ft (21.915 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 11.4 ft³/s (0.323 m³/s), 8,260 acre-ft/yr (10.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 700 ft³/s (19.8 m³/s) Oct. 31 (gage height, 10.86 ft or 3.310 m); no flow for many days.
Period of record: Maximum discharge, 2,410 ft³/s (68.3 m³/s) Oct. 31, 1959 (gage height, 12.66 ft or 3.859 m); no flow for many days each year.
Highest flood since at least 1932, that of Oct. 31, 1959, from information by local residents.

REMARKS.--Records fair. Runoff given herein includes an unknown amount of irrigation return flow originally diverted from the Brazos River through the Richmond Irrigation Co.'s canal (see station 08113500). Recording rain gage located in basin from January 1969 to September 1974.

REVISIONS (WATER YEARS).--WSP 1732: Drainage area. WSP 1922: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	417	.36	9.0	0	2.5	22	10	21	.23	.31	.93
2	0	.82	.21	11	0	.75	22	21	9.0	.08	.01	.44
3	0	19	.10	5.8	0	.03	26	11	6.4	.16	1.0	.30
4	0	12	.21	4.1	46	.06	31	37	6.7	.10	.63	.84
5	0	11	14	1.1	18	2.6	35	11	2.5	.14	.74	22
6	0	4.6	95	.45	5.2	1.2	6.4	9.0	2.1	.22	.52	103
7	0	6.2	16	1.8	1.6	1.4	3.2	40	1.8	.41	.49	10
8	0	15	6.8	3.8	.65	.93	2.5	33	1.4	.72	.71	2.8
9	0	7.2	2.7	1.4	.29	.59	1.3	14	15	.73	3.6	.97
10	0	226	29	6.6	.16	.19	9.4	5.1	237	.66	1.4	2.7
11	0	180	86	3.5	.14	.35	14	2.7	46	.66	.34	2.6
12	0	25	16	3.0	.26	.16	21	1.5	13	.57	.15	.94
13	0	11	7.4	2.5	.21	.07	30	8.2	5.1	.31	.06	.23
14	.38	4.9	4.3	1.1	.17	.05	138	16	1.9	.31	1.1	.11
15	91	2.1	8.0	.49	.09	.03	59	17	.95	.33	.54	.10
16	13	.96	4.2	.24	.05	.02	3.5	13	.42	1.6	.35	.56
17	5.2	.58	1.6	.14	.02	0	1.1	16	.44	1.2	.79	1.2
18	1.8	.36	1.3	.09	0	.02	.39	18	.32	.09	.96	1.2
19	.50	.25	2.6	.06	.41	.08	.15	10	.65	.08	3.1	1.2
20	.17	.17	4.0	.39	3.8	.36	.06	7.3	.12	.07	2.6	1.3
21	.06	.10	3.8	3.2	.88	.22	.03	7.6	0	.19	1.5	1.2
22	.01	.06	.71	1.8	.07	.11	.01	6.8	.01	.36	1.9	.92
23	0	.04	.08	1.7	.01	.07	0	1.8	.01	.37	1.6	.16
24	0	199	.49	.12	0	.04	1.3	11	0	.41	.88	.08
25	.04	58	.98	.02	0	.02	18	31	0	.43	.75	.08
26	.02	15	4.7	0	0	0	26	7.1	0	.42	55	.06
27	0	6.6	4.6	0	0	.01	27	2.1	.12	.42	46	.06
28	25	3.1	11	0	1.1	.01	28	6.1	.07	.42	23	.06
29	26	1.5	9.4	0	-----	0	22	16	.08	.42	27	.51
30	8.4	.66	12	0	-----	0	14	250	.20	.45	4.7	1.1
31	142	-----	5.8	0	-----	25	-----	155	-----	.54	1.9	-----
TOTAL	313.69	1,309.38	353.34	63.40	79.11	36.87	562.34	795.3	372.29	13.10	183.63	157.65
MEAN	10.1	43.6	11.4	2.05	2.83	1.19	18.7	25.7	12.4	.42	5.92	5.26
MAX	142	417	95	11	46	25	138	250	237	1.6	55	103
MIN	0	.04	.08	0	0	0	0	1.5	0	.07	.01	.06
AC-FT	622	2,600	701	126	157	73	1,120	1,580	738	26	364	313

CAL YR 1974 TOTAL 6,108.61 MEAN 16.7 MAX 417 MIN 0 AC-FT 12,120
WTR YR 1975 TOTAL 4,240.10 MEAN 11.6 MAX 417 MIN 0 AC-FT 8,410

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	2400	10.86	700	5-30	1900	9.97	576
11-10	2000	10.25	614	6-10	1000	8.86	445
11-24	1400	9.24	489				

REMARKS.--Discharge records good. Water diverted above station for irrigation, industrial, and municipal supply materially affects low flow. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see Brazos River at Washington (station 0810200). Flow is partly regulated by 29 major upstream reservoirs having a combined capacity of 6,892,000 acre-ft (8.50 km³), 3,643,000 acre-ft (4.49 km³) for flood control.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,700	15,600	21,500	7,580	5,030	13,400	5,160	6,020	44,100	18,400	4,590	2,910
2	14,000	20,100	20,000	8,270	5,360	13,400	4,550	9,060	44,700	21,000	5,020	2,790
3	13,200	30,000	20,500	9,120	7,210	13,400	4,150	10,800	42,400	17,900	5,080	2,770
4	12,200	41,900	20,300	10,900	8,650	13,200	3,910	11,800	35,100	14,300	5,490	2,510
5	11,000	46,000	19,500	13,600	28,800	12,400	3,550	12,100	29,200	12,100	6,550	2,440
6	9,900	38,000	19,800	14,500	46,500	11,600	3,110	11,000	27,000	11,400	7,270	2,660
7	8,910	30,100	19,500	14,800	52,700	11,200	3,020	9,980	27,700	10,900	7,240	2,780
8	7,990	33,100	17,100	14,500	52,300	11,100	3,440	14,200	26,800	10,000	7,220	2,690
9	7,420	40,700	15,500	13,500	45,500	11,300	4,440	20,600	23,400	9,590	6,810	2,560
10	6,960	46,400	14,400	12,600	37,800	11,200	8,920	27,600	23,800	9,330	6,480	2,420
11	6,560	54,000	14,700	12,000	33,400	10,700	9,740	29,500	32,700	9,010	6,310	2,300
12	6,340	56,800	16,900	12,100	30,900	10,500	10,400	28,600	33,400	8,610	5,600	2,290
13	6,210	52,200	19,400	12,300	29,500	10,200	14,000	26,300	26,300	8,210	5,130	2,280
14	5,990	43,200	20,600	12,600	27,600	9,980	14,000	25,700	22,200	7,790	5,330	2,110
15	6,130	35,600	21,600	14,300	25,800	9,610	27,500	24,300	21,900	7,820	4,720	1,890
16	6,060	32,700	22,100	16,900	23,900	8,720	30,000	21,700	21,300	8,690	3,830	1,900
17	5,760	31,000	18,400	17,800	21,400	8,070	21,600	18,700	20,300	8,980	3,430	1,870
18	5,690	27,600	14,900	16,300	18,600	8,400	16,400	15,900	20,100	7,580	3,220	1,810
19	5,800	22,900	13,100	13,900	15,600	9,840	14,600	14,200	19,200	6,670	3,000	1,980
20	5,710	18,500	12,100	12,500	12,900	9,450	14,400	12,000	15,800	6,470	2,790	2,320
21	5,660	15,800	11,500	11,900	11,500	8,500	14,100	10,100	13,500	6,120	2,520	2,410
22	5,360	14,600	11,400	11,200	12,900	8,110	13,300	8,950	12,500	5,530	2,530	2,620
23	5,150	14,000	11,600	10,400	16,900	7,320	11,600	8,170	11,500	5,010	2,460	2,920
24	5,040	14,300	11,400	10,100	18,300	6,360	9,560	8,230	10,300	4,670	2,410	2,670
25	4,630	21,200	10,700	9,670	17,800	5,600	7,700	11,100	9,780	4,280	2,310	2,370
26	3,940	37,500	10,100	8,200	16,700	5,120	6,490	26,300	9,700	4,130	2,410	2,480
27	3,630	48,900	8,790	7,030	15,600	4,770	5,750	44,500	9,680	4,110	3,320	2,640
28	3,340	51,500	7,840	6,310	14,100	4,500	5,380	54,200	10,200	4,180	3,620	2,310
29	3,030	43,600	7,520	5,750	-----	4,250	5,160	59,600	15,000	4,240	3,470	1,990
30	3,270	29,600	7,500									

BRAZOS RIVER BASIN

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
16...	1530	6000	9.2	44	8.4	35	4.3	136	0	41
NOV.										
15...	1015	37000	9.2	48	8.7	79	4.4	116	0	68
DEC.										
17...	0930	19000	9.4	41	5.6	30	4.3	112	0	39
JAN.										
14...	1030	13200	9.1	51	9.2	33	3.7	168	0	43
FEB.										
18...	1000	18500	6.9	59	9.5	71	3.8	144	0	65
MAR.										
10...	1045	11300	8.2	67	14	84	4.4	190	0	79
APR.										
02...	0900	4800	7.2	76	14	56	3.6	244	0	66
MAY										
19...	1250	13800	8.2	38	6.0	22	4.4	121	0	32
JUNE										
23...	0945	12000	7.7	71	15	92	4.2	180	0	87
JULY										
02...	1515	20000	8.6	43	8.1	32	2.9	141	0	34
AUG.										
27...	0945	3300	14	71	17	98	3.9	223	0	88
SEP.										
03...	0930	2700	11	76	18	120	5.0	224	0	99

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.									
16...	51	--	.24	.00	.04	.62	.66	.15	275
NOV.									
15...	120	--	.43	.01	.05	1.0	1.1	.86	404
DEC.									
17...	41	.2	.37	.01	.11	.99	1.1	.39	245
JAN.									
14...	53	.2	.05	.01	.04	.35	.39	.35	301
FEB.									
18...	110	.2	.47	.02	.07	.93	1.0	.26	412
MAR.									
10...	120	.3	.51	.01	.04	.48	.52	.51	474
APR.									
02...	78	.3	.67	.01	.07	.67	.74	.18	440
MAY									
19...	30	.2	.49	.02	.04	.96	1.0	.34	205
JUNE									
23...	140	.3	.40	.01	.01	.84	.85	.25	520
JULY									
02...	40	.2	.67	.01	.04	2.5	2.5	.79	240
AUG.									
27...	140	.3	.01	.00	.00	.57	.57	.24	553
SEP.									
03...	170	.3	.01	.00	.00	.62	.62	.18	621

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 16...	260	747	93	140	33	1.3	490	6.7	22.0
NOV. 15...	395	--	--	160	61	2.8	708	6.7	15.5
DEC. 17...	226	--	--	130	34	1.2	417	6.3	11.5
JAN. 14...	285	669	619	170	27	1.1	521	6.5	10.0
FEB. 18...	396	846	115	190	68	2.3	729	6.4	14.5
MAR. 10...	472	--	--	230	70	2.4	841	7.5	19.5
APR. 02...	421	--	--	250	47	1.6	769	7.9	18.5
MAY 19...	201	--	--	120	21	.9	355	7.2	25.5
JUNE 23...	506	--	--	240	91	2.6	953	7.5	28.5
JULY 02...	239	--	--	140	26	1.2	445	6.8	27.5
AUG. 27...	542	--	--	250	64	2.7	981	7.4	27.0
SEP. 03...	611	--	--	270	81	3.2	1150	7.2	29.0

DATE	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 16...	20	250	9.5	108	2.2	110000	23	1400	--
NOV. 15...	--	250	9.8	97	1.8	12000	820	1000	32
DEC. 17...	--	280	10.6	96	1.4	11000	3300	1700	--
JAN. 14...	20	200	11.4	101	1.0	7000	720	300	--
FEB. 18...	20	250	9.3	90	.6	5300	1200	600	--
MAR. 10...	10	160	9.4	101	1.1	2000	100	83	6.5
APR. 02...	50	80	11.8	126	1.4	1600	47	15	5.3
MAY 19...	--	280	6.9	83	1.9	24000	520	140	10
JUNE 23...	--	220	7.8	100	.1	7000	220	180	--
JULY 02...	--	350	6.1	76	.6	17000	1400	400	14
AUG. 27...	--	80	7.2	89	2.1	7700	160	330	--
SEP. 03...	--	45	7.1	91	2.3	2700	160	26	7.4

BRAZOS RIVER BASIN

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV. 15...	1015	100	34	5	96	<10	0	30	0	50
MAR. 10...	1045	50	6	2	100	<10	0	10	0	<50
MAY 19...	1250	30	14	3	30	<10	0	20	0	<50
JULY 02...	1515	0	22	3	50	<10	0	60	0	<50
SEP. 03...	0930	0	4	3	160	<10	0	10	0	50

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
NOV. 15...	0	10	5	23000	40	<100	0	0	700
MAR. 10...	0	10	3	8100	30	<100	5	20	200
MAY 19...	0	20	3	17000	70	<100	2	10	460
JULY 02...	0	60	6	43000	46	<100	2	0	1300
SEP. 03...	0	10	1	2000	30	<100	3	20	180

DATE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 15...	0	.1	<.1	7	0	0	490	100	40
MAR. 10...	0	.3	.3	1	1	0	770	50	70
MAY 19...	10	.6	.3	2	0	0	320	70	20
JULY 02...	0	.1	.0	2	0	0	500	210	20
SEP. 03...	0	.0	.0	2	0	0	900	40	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI-ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
NOV. 15...	1015	37000	15.5	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 10...	1045	11300	19.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY 19...	1250	13800	25.5	.00	.00	.02	.00	.00	.00	.00	.00
SEP. 03...	0930	2700	29.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL PCB (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)
NOV. 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAR. 10...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 19...	.00	.0	.0	.00	.00	.00	.00	.11	.00	.02
SEP. 03...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

08116650 Brazos River near Rosharon, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m²)		Chlorophyll	Chlorophyll	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight	a (mg/m²)	b (mg/m²)		
NOV. 15	30	40	31	0.2	0.3	46000	Polyethylene strip
APR. 02	23	.5	--	.1	.0	--	
OCT. 16, 1974 TIME 1530				FEB. 18, 1975 TIME 1000			
PHYTOPLANKTON 6,200 CELLS/ML				PHYTOPLANKTON 1,300 CELLS/ML			
_ORGANISM_NAME_____		CELLS/ML	PER_CENT	_ORGANISM_NAME_____		CELLS/ML	PER_CENT
CHLOROPHYTA				CHLOROPHYTA			
.CHLOROPHYCEAE				.CHLOROPHYCEAE			
..CHLOROCOCCALES				..CHLOROCOCCALES			
...COELASTRACEAE				...OCCYSTACEAE			
....COELASTRUM		1,600	26	....ANKISTRODESMUS		50	4
...OCCYSTACEAE				...SCENEDESMACEAE			
....OCCYSTIS		99	2	....CRUCIGENIA		790	59
...SCENEDESMACEAE				CHRYSOPHYTA			
...SCENEDESMUS		99	2	.BACILLARIOPHYCEAE			
..VOLVOCALES				..CENTRALES			
...CHLAMYDOMONADACEAE				...COSCINODISCACEAE			
....CHLAMYDOMONAS		150	2	...CYCLOTELLA		250	19
..ZYGNEATALES				..PENNALES			
...DESMIDIACEAE				...FRAGILARIACEAE			
...STAUSTRUM		50	1	...SYNEDRA		99	7
CHRYSOPHYTA				...NAVICULACEAE			
.BACILLARIOPHYCEAE				...NAVICULA		99	7
.CENTRALES				...NITZSCHIA			
...COSCINODISCACEAE				...NITZSCHIA		50	4
...CYCLOTELLA		350	6				
...MELOSIRA		200	3				
..PENNALES				MAR. 10, 1975 TIME 1045			
...FRAGILARIACEAE				PHYTOPLANKTON 1,200 CELLS/ML			
...SYNEDRA		600	10				
...NAVICULACEAE							
...GYROSIGMA		50	1				
CYANOPHYTA				_ORGANISM_NAME_____		CELLS/ML	PER_CENT
.MYXOPHYCEAE				CHLOROPHYTA			
..OSCILLATORIALES				.CHLOROPHYCEAE			
...OSCILLATORIAEAE				..CHLOROCOCCALES			
....LYNGBYA		3,000	48	...COELASTRACEAE			
				....COELASTRUM		640	55
				...OCCYSTACEAE			
				....ANKISTRODESMUS		60	5
				....OCCYSTIS		80	7
				...VOLVOCALES			
				...CHLAMYDOMONADACEAE			
				....CHLAMYDOMONAS		40	3
				CHRYSOPHYTA			
				.BACILLARIOPHYCEAE			
				.CENTRALES			
				...COSCINODISCACEAE			
				...CYCLOTELLA		120	10
				...MELOSIRA		160	14
				..PENNALES			
				...ACHNANTHACEAE			
				...ACHNANTHES		20	2
				...NITZSCHIAEAE			
				...NITZSCHIA		40	3

08116650 Brazos River near Rosharon, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

APR. 2, 1975 TIME 0900

PHYTOPLANKTON 14,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS	190	1
....OCCYSTIS	780	5
...SCENEDESMACEAE		
....ACTINASTRUM	780	5
....SCENEDESMUS	4,100	29
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	4,700	33
....MELOSIRA	1,200	8
..PENNALES		
...FRAGILARIACEAE		
....SYNEDRA	390	3
...NAVICULACEAE		
....NAVICULA	190	1
...NITZSCHACEAE		
....NITZSCHIA	780	5
...SURIPELLACEAE		
....SURIPELLA	190	1
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....AGMENELLUM		
...OSCILLATORIALES		
....NOSTOCACEAE		
....ANABAENA	970	7
....ANABAENOPSIS		
....CYLINDROSPERMUM		
...OSCILLATORIA		
....OSCILLATORIA		
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
....EUGLENACEAE		
....EUGLENA		

MAY 19, 1975 TIME 1250

PHYTOPLANKTON 10,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...COELASTRACEAE		
....COELASTRUM	6,900	67
...SCENEDESMACEAE		
....SCENEDESMUS	1,700	17
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	430	4
....MELOSIRA	860	8
..PENNALES		
...CYMBELLACEAE		
....AMPHORA	430	4

JUNE 23, 1975 TIME 0945

PHYTOPLANKTON 4,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...SCENEDESMACEAE		
....SCENEDESMUS	1,000	26
...TETRASPORALES		
...PALMELLACEAE		
....SPHAEROCYSTIS	340	9
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	130	3
....MELOSIRA	170	4
..PENNALES		
...ACHNANTHACEAE		
....COCCONEIS	43	1
...NAVICULACEAE		
....NAVICULA	43	1
...NITZSCHACEAE		
....NITZSCHIA	86	2
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....ANACYSTIS	170	4
...OSCILLATORIALES		
....OSCILLATORIA	1,900	49

AUG. 27, 1975 TIME 0945

PHYTOPLANKTON 100,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...HYDRODICTYACEAE		
....PEDIASTRUM		0
...OCCYSTACEAE		
....OCCYSTIS	3,700	4
....TETRAEDRON		0
...SCENEDESMACEAE		
....SCENEDESMUS	3,700	4
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA	1,400	1
....MELOSIRA		0
..PENNALES		
...NITZSCHACEAE		
....NITZSCHIA	4,700	4
...SURIPELLACEAE		
....SURIPELLA		0
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....AGMENELLUM	7,400	7
...OSCILLATORIALES		
....NOSTOCACEAE		
....ANABAENA	7,000	7
....ANABAENOPSIS	2,300	2
....CYLINDROSPERMUM	14,000	14
...OSCILLATORIA		
....OSCILLATORIA	60,000	57
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
...EUGLENALES		
....EUGLENACEAE		
....EUGLENA		0

SEP. 3, 1975 TIME 0930

PHYTOPLANKTON 110,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
....ANKISTRODESMUS		0
....DICTYOSPHAERIUM	2,000	2
....KIRCHNERIELLA		0
....OCCYSTIS	2,500	2
...SCENEDESMACEAE		
....ACTINASTRUM		0
....SCENEDESMUS	1,500	1
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCACEAE		
....CYCLOTELLA		0
..PENNALES		
...NITZSCHACEAE		
....NITZSCHIA	5,300	5
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
....CHROOCOCCACEAE		
....AGMENELLUM	8,100	8
....ANACYSTIS	3,000	3
...OSCILLATORIALES		
....NOSTOCACEAE		
....ANABAENA	1,500	1
....ANABAENOPSIS	6,800	6
....CYLINDROSPERMUM	37,000	35
...OSCILLATORIA		
....OSCILLATORIA	38,000	36

08116650 Brazos River near Rosharon, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE D SEDI- MENT (MG/L)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 16...	1530	6000	22.0	710	11500	--
NOV. 15...	1015	37000	15.5	1800	180000	84
JAN. 14...	1030	13200	10.0	577	20600	92
FEB. 18...	1000	18500	14.5	722	36100	95
MAR. 10...	1045	11300	19.5	585	17800	71
APR. 02...	0900	4800	18.5	191	2480	94
MAY 19...	1250	13800	25.5	634	23600	95
JUNE 23...	0945	12000	28.5	660	21400	87
JULY 02...	1515	20000	27.5	2300	124000	93
AUG. 27...	0945	3300	27.0	172	1530	94
SEP. 03...	0930	2700	29.0	157	1150	97

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1974.....	219220	533	290	172000	57	33700	46	27200	170
NOV. 1974.....	1007400	760	420	1140000	110	299000	68	185000	210
DEC. 1974.....	467790	525	290	366000	56	70700	45	56800	170
JAN. 1975.....	350820	659	360	341000	79	74800	58	54900	200
FEB. 1975.....	653250	644	350	617000	76	134000	57	101000	200
MAR. 1975.....	281660	925	510	388000	140	106000	85	64600	240
APR. 1975.....	300710	800	440	357000	120	97400	72	58500	220
MAY 1975.....	694910	387	210	394000	33	61900	31	58200	130
JUNE 1975.....	673060	742	410	745000	110	200000	67	122000	210
JULY 1975.....	265500	520	280	201000	55	39400	45	32300	170
AUG. 1975.....	136230	801	440	162000	120	44100	73	26900	220
SEPT 1975.....	71350	1020	560	108000	150	28900	94	18100	250
TOTAL	5121900	**	**	4990000	**	1190000	**	805000	**
WTD.AVG.	14032.6	658	360	**	86	**	58	**	190

BRAZOS RIVER BASIN

08116650 Brazos River near Rosharon, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) * WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	437	457	781	923	1050	774	764	1220	606	798	958
2	359	3000	534	793	894	1000	768	699	796	501	833	1090
3	364	1050	588	772	890	1040	865	619	426	424	891	1110
4	402	691	611	879	835	1060	840	522	446	362	932	1090
5	594	355	572	842	732	1060	932	540	431	386	899	1070
6	634	318	519	738	575	1030	1020	558	461	408	799	1140
7	647	299	458	674	415	971	1050	583	564	467	704	1040
8	623	343	424	619	390	883	1100	546	691	586	759	1100
9	635	836	478	632	398	871	1100	424	795	626	777	995
10	569	698	456	610	463	846	958	382	763	595	830	1100
11	549	765	467	597	580	860	670	332	719	519	606	1240
12	553	858	467	588	611	832	571	330	442	520	568	1220
13	536	971	482	556	627	819	745	351	492	499	593	1220
14	521	1020	457	533	680	815	868	320	650	504	586	1140
15	508	796	518	537	716	824	486	324	697	518	659	1100
16	483	636	487	533	748	818	560	378	641	544	674	1090
17	466	835	439	569	783	842	721	333	672	604	741	1140
18	494	1190	462	555	762	849	915	331	1120	537	744	1140
19	515	1220	483	621	748	962	1030	352	1290	443	791	976
20	564	1180	513	617	802	860	932	400	1260	440	833	967
21	558	1120	556	698	746	902	915	413	1160	502	932	945
22	567	1010	552	688	679	967	911	396	1050	559	953	920
23	564	880	508	679	623	949	915	419	936	580	949	986
24	587	822	478	715	914	923	911	479	915	571	986	1010
25	621	655	486	642	922	1010	895	543	915	593	986	805
26	677	569	549	636	976	1010	919	519	891	618	1050	656
27	752	780	741	668	976	962	903	553	891	632	1000	824
28	736	407	832	707	1020	875	872	312	903	634	1040	904
29	702	403	853	809	---	842	817	285	854	638	990	877
30	661	415	790	898	---	819	788	287	633	650	788	841
31	640	---	763	935	---	802	---	281	---	724	986	---
MONTH	562	819	548	681	730	915	858	438	791	542	828	1020

TEMPERATURE (DEG. C) OF WATER * WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	23.0	11.0	15.0	21.0	15.0	15.0	24.0	24.0	27.0	31.0	29.0
2	22.0	23.0	10.0	15.0	20.0	15.0	18.0	24.0	24.0	27.0	30.0	29.0
3	22.0	23.0	10.0	13.0	18.0	16.0	16.0	25.0	24.0	27.0	30.0	30.0
4	22.0	23.0	10.0	12.0	17.0	15.0	17.0	25.0	25.0	27.0	30.0	29.0
5	22.0	20.0	11.0	12.0	16.0	14.0	17.0	25.0	26.0	28.0	29.0	28.0
6	23.0	20.0	12.0	12.0	12.0	15.0	18.0	25.0	27.0	29.0	29.0	28.0
7	23.0	19.0	12.0	13.0	9.0	16.0	18.0	25.0	27.0	29.0	29.0	28.0
8	23.0	18.0	12.0	14.0	10.0	16.0	19.0	25.0	28.0	29.0	30.0	28.0
9	23.0	17.0	11.0	14.0	10.0	16.0	20.0	24.0	27.0	30.0	28.0	28.0
10	24.0	23.0	12.0	14.0	10.0	16.0	20.0	24.0	27.0	30.0	29.0	28.0
11	24.0	17.0	12.0	13.0	11.0	17.0	20.0	24.0	25.0	30.0	29.0	28.0
12	24.0	16.0	12.0	13.0	10.0	18.0	19.0	24.0	25.0	29.0	30.0	28.0
13	24.0	16.0	12.0	10.0	11.0	17.0	19.0	25.0	27.0	29.0	30.0	27.0
14	25.0	16.0	13.0	10.0	11.0	15.0	19.0	25.0	27.0	29.0	30.0	25.0
15	23.0	15.0	12.0	10.0	13.0	15.0	18.0	24.0	27.0	29.0	30.0	25.0
16	21.0	16.0	12.0	11.0	14.0	16.0	18.0	24.0	27.0	28.0	30.0	26.0
17	20.0	17.0	12.0	11.0	13.0	16.0	19.0	24.0	28.0	28.0	30.0	27.0
18	20.0	17.0	12.0	11.0	14.0	16.0	20.0	25.0	28.0	28.0	30.0	27.0
19	21.0	18.0	12.0	12.0	13.0	16.0	20.0	25.0	28.0	28.0	30.0	28.0
20	21.0	17.0	12.0	10.0	13.0	17.0	20.0	26.0	28.0	28.0	30.0	28.0
21	21.0	16.0	12.0	11.0	14.0	18.0	20.0	26.0	28.0	29.0	30.0	27.0
22	21.0	17.0	12.0	12.0	14.0	19.0	20.0	26.0	29.0	30.0	30.0	25.0
23	22.0	18.0	14.0	12.0	13.0	20.0	21.0	26.0	29.0	29.0	29.0	23.0
24	22.0	18.0	15.0	13.0	12.0	19.0	22.0	26.0	29.0	29.0	29.0	22.0
25	22.0	15.0	14.0	12.0	12.0	19.0	23.0	25.0	28.0	29.0	29.0	22.0
26	21.0	14.0	13.0	13.0	13.0	19.0	25.0	26.0	28.0	29.0	29.0	22.0
27	21.0	15.0	13.0	15.0	13.0	20.0	25.0	26.0	28.0	29.0	28.0	22.0
28	22.0	15.0	13.0	17.0	14.0	22.0	25.0	24.0	27.0	30.0	28.0	23.0
29	23.0	15.0	14.0	17.0	---	20.0	25.0	24.0	27.0	30.0	28.0	23.0
30	24.0	12.0	15.0	19.0	---	15.0	25.0	24.0	27.0	30.0	28.0	23.0
31	24.0	---	16.0	19.0	---	15.0	---	24.0	---	31.0	29.0	---
MONTH	22.5	17.5	12.5	13.0	13.5	17.0	20.0	25.0	27.0	29.0	29.5	26.0

BRAZOS RIVER BASIN

419

08116700 Brazos River at Harris Reservoir near Angleton, Tex.

LOCATION.--Lat 29°14'35", long 95°33'41", Brazoria County, at Harris Pumping Plant of Dow Chemical Co. and 10 miles (16 km) northwest of Angleton.

DRAINAGE AREA.--44,000 mi² (114,000 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1962 to current year. Water temperatures: October 1966 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 2,860 micromhos Nov. 2; minimum daily, 279 micromhos Nov. 7, May 30. Minimum water temperatures, 10.0°C on several days during winter months.

Period of record: Maximum daily specific conductance, 7,190 micromhos Mar. 3, 1964; minimum daily, 217 micromhos Oct. 26, 1970. Maximum water temperatures, 31.0°C on many days during summer months; minimum, 2.0°C Jan. 8, 9, 1970.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.									
31...	1000	9.5	56	11	54	4.0	177	0	50
NOV.									
30...	1000	9.5	40	5.1	29	3.8	117	0	32
DEC.									
31...	1000	10	61	11	68	4.0	184	0	64
JAN.									
31...	1000	8.9	80	14	82	3.6	220	0	82
FEB.									
28...	1000	6.8	70	14	99	2.1	170	0	88
MAR.									
31...	1000	.0	77	15	63	3.6	242	0	72
APR.									
30...	1000	8.1	70	12	67	4.0	202	0	68
MAY									
30...	1000	9.4	34	4.2	13	3.5	108	0	22
JUNE									
30...	1000	8.1	54	11	62	3.8	152	0	55
JULY									
31...	1000	11	58	14	57	4.2	182	0	60
AUG.									
29...	1000	11	66	16	100	4.3	200	0	91
SEP.									
30...	1000	8.4	60	16	86	4.0	199	0	76

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
31...	81	.3	353	190	40	1.7	652	8.1	25.0
NOV.									
30...	44	.3	221	120	25	1.1	406	7.1	12.0
DEC.									
31...	100	.2	409	200	47	2.1	757	7.7	15.5
JAN.									
31...	120	.2	499	260	77	2.2	931	7.7	19.5
FEB.									
28...	150	.3	514	230	93	2.8	981	7.8	14.0
MAR.									
31...	84	.0	434	250	56	1.7	806	7.8	14.5
APR.									
30...	97	.3	426	220	59	1.9	786	8.1	25.0
MAY									
30...	14	.3	154	100	14	.6	279	7.5	24.0
JUNE									
30...	89	.2	358	180	55	2.0	660	7.7	27.5
JULY									
31...	77	.3	371	200	53	1.7	701	7.8	31.0
AUG.									
29...	150	--	537	230	67	2.9	972	8.1	28.0
SEP.									
30...	110	--	459	220	52	2.5	869	7.5	23.0

08116700 Brazos River at Harris Reservoir near Angleton, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	427	468	764	910	1040	771	756	---	586	771	---
2	357	2860	526	782	883	1020	763	739	727	668	---	972
3	343	1250	628	761	886	1030	861	---	413	413	---	1010
4	367	702	606	852	809	1050	866	---	443	---	928	1110
5	550	341	582	852	728	1050	899	534	425	---	907	1040
6	620	302	508	740	543	1030	976	532	436	---	826	---
7	621	279	467	679	400	981	1050	581	---	454	687	---
8	605	314	432	622	383	894	1110	566	---	580	732	1070
9	640	764	470	630	390	871	1100	420	788	619	---	1020
10	571	688	456	605	450	839	1020	---	756	605	---	920
11	553	744	461	596	569	853	689	---	761	521	---	972
12	543	843	451	596	611	849	---	304	515	---	545	1170
13	536	947	472	556	621	819	---	328	478	---	616	---
14	514	995	446	526	677	809	1060	319	---	500	577	---
15	529	794	518	526	720	815	493	295	---	510	652	1200
16	461	663	495	528	744	799	552	383	667	530	---	1040
17	450	711	448	555	781	832	705	---	650	582	---	1130
18	486	1170	453	545	769	849	904	---	1270	549	737	1140
19	507	1200	478	604	736	944	---	---	1070	---	762	1130
20	576	1170	510	607	799	879	---	394	1250	---	808	---
21	556	1130	549	694	763	871	---	412	---	493	915	---
22	550	1020	570	688	684	949	900	395	---	556	967	972
23	571	900	513	679	627	976	912	412	940	580	---	924
24	550	831	478	713	825	906	900	---	911	567	---	1050
25	594	650	480	636	914	1000	896	---	907	582	958	916
26	689	586	511	638	971	1030	---	---	907	---	1020	701
27	738	686	698	663	971	990	---	566	907	---	967	---
28	717	402	832	691	981	886	885	---	---	634	1080	---
29	717	386	853	773	---	853	825	282	---	634	972	907
30	685	406	787	878	---	825	786	279	660	653	---	869
31	652	---	757	931	---	806	---	---	---	701	---	---
MONTH	554	805	545	675	719	914	---	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	23.5	11.5	15.0	20.0	14.0	15.0	24.0	---	27.0	31.0	---
2	25.0	23.5	10.0	14.5	20.0	15.0	17.0	24.0	25.0	27.0	---	29.0
3	22.0	24.0	10.5	13.0	18.0	16.0	14.0	---	25.0	27.0	---	29.0
4	22.5	23.0	10.0	12.0	17.0	14.0	16.0	---	25.5	---	29.5	29.0
5	23.0	20.0	10.0	11.5	15.5	14.5	17.0	24.5	26.0	---	29.0	29.0
6	23.0	19.0	11.5	11.5	12.0	14.5	17.0	25.0	26.0	---	29.0	---
7	23.0	19.0	11.5	12.5	10.0	16.0	17.5	25.0	---	29.5	29.0	---
8	23.0	18.0	11.5	13.0	10.5	15.5	18.5	25.0	---	29.5	29.0	28.0
9	24.0	22.0	11.0	14.0	10.0	15.0	19.0	24.0	27.0	30.0	---	28.0
10	24.0	22.5	11.5	14.0	10.0	16.0	20.0	---	26.0	30.0	---	28.0
11	24.0	18.0	12.0	13.0	11.0	16.5	19.0	---	25.0	30.0	29.0	28.0
12	24.0	17.0	12.0	13.0	10.0	17.0	---	24.0	25.0	---	30.0	28.0
13	24.0	17.0	12.0	10.0	11.0	16.0	---	25.0	26.0	---	30.0	---
14	24.5	16.0	12.0	10.0	12.0	14.5	19.0	25.0	---	30.0	30.0	---
15	23.0	16.0	12.0	10.0	13.0	15.0	19.0	14.0	---	29.0	30.0	28.0
16	21.0	16.0	12.0	10.5	13.0	15.0	18.0	24.0	27.5	28.0	---	27.0
17	20.0	16.0	11.5	11.0	13.0	16.0	19.0	---	27.5	28.0	---	27.0
18	20.0	16.0	12.0	11.0	13.5	16.0	19.5	---	28.0	28.0	30.0	28.0
19	21.0	17.0	12.0	11.5	13.0	16.0	---	---	28.0	---	29.5	28.5
20	21.0	17.0	12.0	12.0	13.0	16.5	---	26.0	28.0	---	30.0	---
21	21.5	16.0	12.0	11.0	13.5	17.5	---	26.0	---	28.0	30.0	---
22	21.0	17.0	12.5	12.0	15.0	18.0	20.0	26.0	---	30.0	30.0	25.0
23	22.0	17.0	13.5	12.0	13.5	19.5	21.0	26.5	28.0	30.0	---	22.5
24	21.0	22.5	15.0	12.0	12.0	19.5	22.0	---	28.5	30.0	---	22.5
25	21.5	15.0	14.0	12.0	12.0	16.0	23.0	---	28.0	29.0	29.0	22.5
26	21.0	15.0	13.0	12.0	13.0	19.0	---	---	28.0	---	29.0	23.0
27	20.5	14.0	12.0	14.5	13.5	20.0	---	25.0	28.0	---	28.0	---
28	22.0	15.0	12.0	16.0	14.0	21.0	25.0	---	---	30.0	28.0	---
29	23.0	14.5	13.5	18.0	---	19.0	27.0	24.0	---	30.5	28.0	23.5
30	23.5	12.0	14.5	19.0	---	15.0	25.0	24.0	27.5	30.5	---	23.0
31	25.0	---	15.5	19.5	---	14.5	---	---	---	31.0	---	---
MONTH	22.5	18.0	12.0	13.0	13.5	16.5	---	---	---	---	---	---

08117200 Brazos River at Brazoria Reservoir near Brazoria, Tex.

LOCATION.--Lat 29°30'09", long 95°33'00", Brazoria County, at Brazoria Pumping Plant of Dow Chemical Co. and 1.5 miles (2.4 km) east of Brazoria.

DRAINAGE AREA.--44,000 mi² (114,000 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1962 to current year. Water temperatures: October 1966 to current year.

EXTREMES.--Current year: Maximum daily specific conductance, 2,530 micromhos Nov. 3; minimum daily, 282 micromhos May 30. Maximum water temperatures, 31.0°C July 31; minimum, 10.0°C on several days during winter months.

Period of record: Maximum daily specific conductance, 37,000 micromhos Aug. 28, 1963; minimum daily, 221 micromhos Oct. 27, 1970. Maximum water temperatures, 32.0°C July 28, 1973; minimum, 2.0°C Jan. 14, 15, 1968.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.									
31...	0700	8.3	56	11	63	4.1	172	0	52
NOV.									
30...	0700	9.6	46	5.1	29	3.7	125	0	32
DEC.									
31...	0700	10	64	11	71	4.2	178	0	68
JAN.									
31...	0700	8.9	76	13	79	3.6	212	0	75
FEB.									
28...	0700	6.8	70	14	98	2.0	168	0	85
MAR.									
31...	0700	9.3	77	15	68	3.9	238	0	76
APR.									
30...	0700	7.8	69	12	78	4.0	196	0	72
MAY									
30...	0700	8.7	34	4.9	13	3.4	114	0	20
JUNE									
30...	0700	8.3	61	13	77	4.0	176	0	65
JULY									
31...	0700	--	67	14	43	4.0	223	0	51
AUG.									
29...	0700	11	71	17	95	4.0	214	0	91
SEP.									
30...	0700	8.8	65	16	86	4.2	206	0	79

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
31...	92	.3	372	190	44	2.0	694	8.0	--
NOV.									
30...	42	.3	229	140	33	1.1	384	8.1	12.5
DEC.									
31...	110	.2	426	210	59	2.2	774	8.1	15.0
JAN.									
31...	110	.2	470	240	69	2.2	877	8.2	19.0
FEB.									
28...	150	.3	509	230	95	2.8	962	7.8	13.0
MAR.									
31...	93	.3	460	250	59	1.9	835	8.0	16.0
APR.									
30...	110	.3	450	220	61	2.3	827	7.7	25.0
MAY									
30...	13	.3	154	110	12	.6	282	7.8	25.0
JUNE									
30...	110	.3	425	210	62	2.3	778	7.6	27.0
JULY									
31...	62	--	--	230	42	1.2	639	7.8	31.0
AUG.									
29...	140	--	535	250	72	2.6	986	8.2	28.0
SEP.									
30...	110	--	471	230	59	2.5	873	8.1	23.5

BRAZOS RIVER BASIN

08117200 Brazos River at Brazoria Reservoir near Brazoria, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	351	638	421	746	923	1020	802	787	---	550	683	---
2	333	311	472	770	923	1050	783	---	1110	605	---	920
3	345	2530	543	778	891	1000	837	---	477	462	---	958
4	351	535	598	772	872	1040	780	---	495	---	833	932
5	440	388	620	885	806	1050	858	570	434	---	914	963
6	608	339	536	816	692	1050	848	542	438	---	902	---
7	610	305	483	694	407	1010	928	590	---	421	802	---
8	613	307	447	637	396	953	990	612	---	481	701	1030
9	620	581	422	629	397	860	1040	518	736	591	---	837
10	649	742	472	639	434	864	1090	---	787	626	---	976
11	565	685	455	617	533	839	967	---	644	595	813	945
12	541	811	470	599	634	849	---	375	521	---	627	888
13	546	947	488	583	600	822	---	379	449	---	547	---
14	528	1000	487	549	661	815	869	317	---	501	643	---
15	514	925	467	526	690	819	595	321	---	511	582	1160
16	510	647	519	541	729	822	725	337	750	522	---	1210
17	461	613	457	532	758	815	650	---	578	540	---	1160
18	461	1090	433	573	782	829	774	---	809	602	690	1180
19	500	1190	473	585	750	842	---	319	1200	---	756	1040
20	513	1200	495	627	779	981	---	365	1310	---	748	---
21	551	1170	514	637	797	853	---	402	---	443	782	---
22	559	1110	561	694	731	898	912	414	---	492	812	963
23	560	985	550	688	661	962	892	400	1040	558	---	932
24	565	860	502	680	616	958	904	---	935	575	---	963
25	581	761	486	683	868	906	907	---	898	580	935	958
26	601	659	493	649	940	1000	---	---	886	---	967	1050
27	678	484	558	635	967	1020	---	490	883	---	953	---
28	709	451	739	667	962	1010	896	379	---	634	1030	---
29	730	404	817	694	---	914	888	297	---	639	986	781
30	733	384	838	769	---	864	827	282	778	638	---	873
31	694	---	774	877	---	835	---	---	---	639	---	---
MONTH	549	768	535	670	721	921	---	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.5	22.0	11.5	15.5	20.0	14.0	15.5	24.5	---	27.0	30.5	---
2	21.5	22.0	10.0	15.0	20.0	14.5	16.5	---	24.0	27.0	---	28.0
3	22.0	23.0	10.5	14.0	20.0	15.0	17.0	---	24.0	26.5	---	28.5
4	22.0	23.0	10.5	12.5	18.0	15.0	15.0	---	25.0	---	29.0	29.0
5	22.5	21.0	10.0	15.0	17.0	14.0	17.0	19.5	26.0	---	29.0	29.0
6	23.0	21.0	11.0	11.5	12.5	14.5	17.5	25.0	26.0	---	29.0	---
7	22.5	19.0	11.5	12.0	10.5	15.0	17.5	25.0	---	28.0	28.0	---
8	22.5	18.5	11.5	---	10.5	15.5	19.0	25.5	---	28.0	28.0	28.0
9	23.0	18.0	11.5	13.0	10.5	16.0	19.5	24.5	27.0	29.5	---	28.0
10	23.0	22.5	11.5	14.0	10.5	15.5	20.0	---	26.5	30.0	---	28.0
11	23.5	22.0	11.5	13.5	11.5	16.0	19.5	---	25.0	30.0	28.0	28.0
12	24.5	17.0	11.5	13.0	10.0	16.0	---	24.0	25.0	---	29.0	28.0
13	25.5	17.0	12.0	10.5	10.0	17.0	---	24.0	26.0	---	30.0	---
14	24.5	17.0	12.0	10.0	10.5	16.0	19.0	24.5	---	30.0	30.0	---
15	24.0	16.0	12.0	10.0	12.0	15.5	19.0	24.0	---	29.0	30.0	27.0
16	22.0	16.0	12.0	10.0	13.0	15.5	18.0	14.0	27.5	28.0	---	27.0
17	21.0	16.0	11.5	10.0	13.0	16.0	18.5	---	27.5	28.0	---	26.5
18	20.0	16.5	12.0	11.0	13.5	16.0	19.0	---	28.0	28.0	29.0	27.0
19	21.0	16.5	12.0	11.0	13.0	16.0	---	25.0	28.0	---	30.0	28.0
20	21.0	22.0	12.0	12.0	13.0	16.0	---	25.5	28.0	---	30.0	---
21	22.0	16.0	12.0	10.5	13.0	17.0	---	26.0	---	28.0	30.0	---
22	21.0	16.5	12.0	12.0	14.5	18.0	20.0	26.0	---	29.0	30.0	27.0
23	21.5	22.0	13.0	12.0	14.5	19.0	20.5	26.5	28.0	30.0	---	25.0
24	22.0	23.0	14.0	12.0	18.0	19.5	21.5	---	29.5	29.5	---	23.5
25	22.0	16.0	14.0	12.0	12.0	19.0	22.5	---	28.0	29.0	29.0	23.0
26	21.0	15.0	14.0	13.0	12.0	19.5	---	---	28.0	---	29.0	23.0
27	21.5	14.0	13.0	14.0	13.0	19.5	---	26.0	28.0	---	29.0	---
28	22.0	15.0	12.5	16.0	13.0	20.0	24.5	24.0	---	30.0	29.0	---
29	22.0	15.0	13.0	17.0	---	20.0	25.0	13.5	---	30.0	28.0	23.0
30	23.0	12.5	14.0	18.0	---	23.0	25.0	25.0	27.0	30.5	---	23.5
31	24.0	---	15.0	19.0	---	16.0	---	---	---	31.0	---	---
MONTH	22.5	18.5	12.0	13.0	13.5	17.0	---	---	---	---	---	---

SAN BERNARD RIVER BASIN

423

08117500 San Bernard River near Boling, Tex.

LOCATION.--Lat 29°18'47", long 95°53'36", Wharton-Fort Bend County line, near left bank at downstream side of pile bent of bridge on Farm Road 442, 2.5 miles (4.0 km) downstream from Snake Creek, and 4.5 miles (7.2 km) northeast of Boling.

DRAINAGE AREA.--727 mi² (1,883 km²).

PERIOD OF RECORD.--May 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 30.81 ft (9.391 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 508 ft³/s (14.39 m³/s), 368,000 acre-ft/yr (454 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,000 ft³/s (425 m³/s) May 31 (gage height, 37.70 ft or 11.491 m); minimum daily, 33 ft³/s (0.93 m³/s) Mar. 15, 16.
Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) June 28, 1960 (gage height, 42.41 ft or 12.927 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Nov. 27-30, 1956.
Maximum stage since at least 1900, 43.5 ft (13.26 m) in 1913 (probably December). Flood in September 1938 reached a stage of 43.3 ft (13.20 m), from information by local resident.

REMARKS.--Records good. Part of low flow is drainage from areas irrigated with diversions from Colorado River. Diversions above station for irrigation and other uses.

REVISIONS (WATER YEARS).--WSP 1712: 1958. WSP 1922: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	3400	1090	278	97	44	42	55	14600	735	243	306
2	232	3850	749	512	91	44	41	60	12100	737	220	284
3	235	3110	518	466	84	43	37	172	8810	703	293	317
4	246	2720	365	418	204	43	34	255	6140	628	358	424
5	246	2300	317	400	662	42	34	337	4490	570	317	393
6	250	1520	1360	406	872	42	38	340	3130	506	304	376
7	230	1010	1190	475	999	41	36	273	1470	449	317	356
8	209	902	1010	529	1310	41	36	198	656	402	284	330
9	204	919	747	437	1080	40	67	160	446	366	261	292
10	208	1180	650	338	714	39	110	199	1090	331	212	269
11	213	3420	1690	336	465	38	296	280	1960	281	163	254
12	205	3280	2160	286	366	36	1020	347	2870	278	124	244
13	186	3110	1790	244	251	36	1370	471	3920	310	97	267
14	164	3340	1360	202	180	34	1440	571	3930	345	86	280
15	696	2950	1560	167	137	33	1840	564	3420	352	83	263
16	1880	1990	1570	142	119	33	1580	468	2430	394	76	280
17	1870	1240	1400	125	108	34	1500	356	1310	466	74	301
18	1720	1000	1420	107	99	37	1720	264	813	482	74	315
19	1490	845	1370	112	94	39	1210	198	565	459	81	337
20	1020	591	988	102	93	71	753	161	415	446	112	316
21	650	403	672	132	88	183	496	133	321	455	125	302
22	431	289	459	175	81	323	337	110	265	396	123	286
23	299	219	321	193	71	380	234	96	234	353	203	254
24	204	1000	243	183	63	302	166	202	222	349	251	232
25	139	3130	195	152	53	201	121	1590	256	389	243	241
26	96	2840	192	130	48	133	88	2430	303	388	242	244
27	69	2970	198	120	46	89	69	3280	495	365	242	244
28	68	3340	201	112	45	66	57	4290	837	350	276	235
29	115	2950	195	115	---	53	50	5280	833	314	355	214
30	78	1910	209	112	---	44	47	10400	705	308	356	209
31	221	---	209	107	---	43	---	14500	---	288	338	---
TOTAL	14128	61728	26398	7613	8520	2627	14869	48040	79036	13195	6533	8665
MEAN	456	2058	852	246	304	84.7	496	1550	2635	426	211	289
MAX	1880	3850	2160	529	1310	380	1840	14500	14600	737	358	424
MIN	68	219	192	102	45	33	34	55	222	278	74	209
AC-FT	28020	122400	52360	15100	16900	5210	29490	95290	156800	26170	12960	17190

CAL YR 1974 TOTAL 254743 MEAN 698 MAX 4370 MIN 38 AC-FT 505300
WTR YR 1975 TOTAL 291352 MEAN 798 MAX 14600 MIN 33 AC-FT 577900

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	0200	21.48	4,040	5-31	2400	37.70	15,000
11-11	1800	20.52	3,690	6-13	2200	21.56	4,070
11-28	1000	19.57	3,380				

SAN BERNARD RIVER BASIN

08117700 San Bernard River near West Columbia, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 29°09'37", long 95°45'56", Brazoria County, at bridge on Farm Road 1301, 7.6 miles (12.2 km) west of West Columbia.

PERIOD OF RECORD.--Occasional discharge measurements: January 1949, April 1970 to September 1971, January 1973 to current year. Occasional water-quality data: October 1969 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 22...	1330	460	13	20	4.6	14	4.7	70	0	10
DEC. 06...	0925	1070	9.6	35	4.8	40	3.8	78	0	41
JAN. 14...	1430	207	12	38	8.5	38	3.8	136	0	16
FEB. 26...	1625	56	13	65	14	71	4.2	230	0	26
APR. 11...	1535	131	14	67	16	77	3.9	244	0	30
MAY 22...	1630	97	12	42	8.7	44	3.7	149	0	19
JULY 08...	1530	388	15	40	9.9	34	2.8	143	0	15
AUG. 13...	1425	146	17	46	12	36	5.4	177	0	14
SEP. 23...	1520	252	31	46	14	38	4.3	183	0	14

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 22...	24	--	125	69	11	.7	224	6.9	21.0
DEC. 06...	66	.1	239	110	43	1.7	453	7.0	13.5
JAN. 14...	57	.1	240	130	18	1.5	430	7.1	8.0
FEB. 26...	110	.2	417	220	31	2.1	776	7.1	15.5
APR. 11...	130	.2	458	230	33	2.2	861	7.4	17.0
MAY 22...	66	.3	269	140	18	1.6	510	7.2	25.0
JULY 08...	60	.3	247	140	23	1.2	459	7.0	27.0
AUG. 13...	60	.3	278	160	19	1.2	540	7.0	26.5
SEP. 23...	62	.4	300	170	22	1.3	553	7.5	20.0

08117900 Big Bogy Creek near Wadsworth, Tex.

LOCATION.--Lat 28°48'46", long 95°57'02", Matagorda County, on right bank at downstream end of bridge on Farm Road 521, 1.3 miles (2.1 km) upstream from State Highway 60, 2.0 miles (3.2 km) southwest of Wadsworth, and 13.1 miles (21.1 km) upstream from mouth (Big Bogy Cut).

DRAINAGE AREA.--10.3 mi² (26.7 km²).

PERIOD OF RECORD.--Discharge: June 1970 to current year.

Water quality: Chemical, biochemical, and pesticide analyses: October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 13.36 ft (4.072 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 13.0 ft³/s (0.368 m³/s) 9,420 acre-ft/yr (11.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 90 ft³/s (2.55 m³/s) Nov. 4 (gage height, 7.43 ft or 2.265 m); no flow at times.

Period of record: Maximum discharge, 436 ft³/s (12.3 m³/s) Oct. 11, 1970 (gage height, 10.18 ft or 3.103 m); maximum gage height, 11.90 ft (3.627 m) Sept. 6, 1973; no flow at times.

Maximum stages since 1901, 11.4 ft (3.47 m) May 31, 1970, and 10.9 ft (3.32 m) in September 1961, from information by local residents.

REMARKS.--Discharge records fair. No known diversions above station. An undetermined amount of water from irrigated ricefields enters stream upstream at various points. Recording rain gage located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	3.1	1.7	3.0	.71	.08	8.6	6.9	65	36	1.7	24
2	2.8	13	1.3	3.6	.68	.08	7.4	4.8	49	31	2.8	21
3	2.7	11	1.1	3.8	.58	.07	4.4	3.8	39	36	3.3	17
4	2.2	35	.90	3.2	.69	.07	8.0	2.8	32	41	11	9.4
5	1.3	54	5.1	2.6	.80	.22	11	2.7	26	39	33	14
6	.61	27	37	2.1	.68	.20	4.5	2.6	21	32	32	28
7	.29	16	22	2.4	.50	.18	5.9	3.4	16	26	33	27
8	.08	12	10	2.7	.46	.17	3.0	3.4	13	22	23	19
9	.04	5.6	6.3	2.3	.46	.16	3.1	4.6	13	23	11	19
10	.04	4.0	8.8	2.1	.36	.15	2.1	2.9	43	18	6.2	25
11	.03	7.6	54	1.9	.42	.14	1.7	23	70	21	4.0	25
12	.01	5.9	31	1.7	.46	.13	1.4	15	70	24	1.1	18
13	.01	3.0	22	1.4	.36	.19	1.3	8.3	50	16	.44	14
14	.01	1.9	17	1.1	.17	.18	1.4	4.2	39	13	.24	11
15	.01	1.1	11	.94	.16	.10	2.0	2.1	33	14	.13	11
16	.01	.62	6.9	.83	.15	.10	.94	1.5	27	10	.42	8.4
17	.01	.58	4.5	.76	.77	.14	2.3	2.7	18	8.0	1.1	7.4
18	.01	.39	3.3	.76	.24	4.9	2.1	3.1	12	7.4	2.4	6.5
19	0	.44	2.5	.76	.22	15	2.2	1.8	11	5.1	4.2	12
20	0	.39	2.0	.70	.22	3.1	2.3	.95	9.4	4.5	5.5	21
21	.01	.10	1.7	.51	.15	3.6	3.0	2.0	8.5	3.8	7.2	11
22	.01	.02	1.5	.81	.11	4.4	5.8	2.7	7.1	2.9	20	9.3
23	0	0	1.3	1.5	.10	2.3	4.0	2.4	8.5	2.5	17	15
24	0	17	1.2	1.2	.10	1.4	2.6	4.9	9.9	2.9	23	6.5
25	.03	29	1.2	1.2	.09	1.5	2.4	9.7	60	2.5	31	4.9
26	.01	14	1.6	1.1	.09	2.1	2.0	8.9	76	1.6	17	5.0
27	.01	8.1	1.8	.94	.08	2.1	1.8	5.3	58	1.3	13	5.6
28	.03	5.1	2.5	.82	.08	1.8	2.5	4.2	50	1.9	10	6.2
29	1.8	3.4	2.8	.71	---	2.6	1.9	8.6	42	2.3	7.8	7.0
30	2.8	2.4	2.8	.68	---	1.9	1.3	3.8	37	3.9	8.2	7.4
31	2.3	---	2.5	.74	---	2.9	---	83	---	4.6	19	---
TOTAL	22.46	281.74	269.30	48.86	9.89	51.96	102.94	337.75	1013.4	458.2	349.73	415.6
MEAN	.72	9.39	8.69	1.58	.35	1.68	3.43	10.9	33.8	14.8	11.3	13.9
MAX	5.3	54	54	3.8	.80	15	11	83	76	41	33	28
MIN	0	0	.90	.51	.08	.07	.94	.95	7.1	1.3	.13	4.9
CFSM	.07	.91	.84	.15	.03	.16	.33	1.06	3.28	1.44	1.10	1.35
IN.	.08	1.02	.97	.18	.04	.19	.37	1.22	3.66	1.65	1.26	1.50
AC-FT	45	559	534	97	20	103	204	670	2010	909	694	824

CAL YR 1974 TOTAL 4276.40 MEAN 11.7 MAX 326 MIN 0 CFSM 1.14 IN 15.44 AC-FT 8480
WTR YR 1975 TOTAL 3361.83 MEAN 9.21 MAX 83 MIN 0 CFSM .89 IN 12.14 AC-FT 6670

PEAK DISCHARGE (BASE, 200 FT³/S).--No peak above base.

BIG BOGGY CREEK BASIN

08117900 Big Boggy Creek near Wadsworth, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 10...	0945	.06	9.1	51	18	41	4.5	202	0	25	74
NOV. 14...	0950	2.0	16	19	5.1	17	3.9	63	0	19	29
DEC. 13...	1055	28	9.8	10	2.9	13	3.6	33	0	12	22
JAN. 30...	1000	.69	9.4	62	16	66	4.9	182	0	26	130
MAR. 13...	1100	.05	3.1	64	24	110	5.8	195	0	26	220
APR. 23...	1010	4.3	9.4	74	21	56	6.8	185	0	110	88
JUNE 08...	0935	12	21	49	13	35	3.3	187	0	20	51
JULY 20...	1025	4.8	17	63	18	53	2.8	254	0	18	80
AUG. 28...	1015	10	32	42	14	34	8.9	169	0	17	59

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 10...	--	--	--	.01	.00	.16	1.1	1.3	.11	322	49
NOV. 14...	--	--	--	.05	.01	.06	.78	.84	.14	140	212
DEC. 13...	.1	.0	.00	.07	.00	.11	.99	1.1	.24	90	128
JAN. 30...	.2	--	--	.01	.00	.03	.94	.97	.09	404	90
MAR. 13...	.5	--	--	.00	.02	.05	.77	.82	.05	550	152
APR. 23...	.4	.4	.04	1.1	.24	2.1	4.9	7.0	.16	458	54
JUNE 08...	.3	--	--	.02	.04	.11	1.3	1.4	.07	285	31
JULY 20...	.5	--	--	.00	.00	.03	.78	.81	.06	378	168
AUG. 28...	.3	.4	.02	.00	.01	.00	1.1	1.1	.07	292	144

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 10...	200	36	1.3	571	7.6	23.0	25	7.0	80	4.0	8.1
NOV. 14...	68	17	.9	221	7.1	15.0	80	7.7	75	1.8	19
DEC. 13...	37	10	.9	141	6.5	14.0	65	7.6	73	2.8	18
JAN. 30...	220	71	1.9	764	7.7	21.0	35	8.6	96	2.2	15
MAR. 13...	260	99	3.0	1050	8.2	10.5	60	11.1	99	4.4	9.5
APR. 23...	270	120	1.5	803	8.2	24.0	20	13.7	161	9.3	16
JUNE 08...	180	23	1.1	488	7.4	27.5	15	7.0	88	2.5	.0
JULY 20...	230	23	1.5	650	7.7	29.0	65	7.0	90	2.6	6.8
AUG. 28...	160	24	1.2	480	7.3	28.0	65	5.8	73	2.0	15

BIG BOGGY CREEK BASIN

427

08117900 Big Boggy Creek near Wadsworth, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
DEC. 13...	1055	110	1	90	2	0	0	7				
APR. 23...	1010	90	1	120	0	0	0	3				
AUG. 28...	1015	20	2	70	0	0	0	2				
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)			
DATE	TIME											
DEC. 13...	280	1	9	20	.3	12	60	10				
APR. 23...	40	0	20	0	.0	0	460	0				
AUG. 28...	120	1	10	80	.0	0	320	10				
		INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MATERIAL (UG/KG)	
DEC. 13...	1055	28	14.0	.00	.0	.00	.8	.00	.6	.00	.0	
APR. 23...	1010	4.3	24.0	.00	.0	.00	.0	.00	.0	.00	.0	
AUG. 28...	1015	10	28.0	.00	.0	.00	.0	.00	.0	.00	.0	
		TOTAL DIELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLORDANE (UG/L)
DEC. 13...	.00	.1	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 23...	.01	.1	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0
AUG. 28...	.00	1.3	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0
		CHLORDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL DIAZINON (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL SILVEX (UG/L)	TOTAL 2,4,5-T (UG/L)	
DEC. 13...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 23...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 28...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	.00	.00

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Because the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than continuous stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage of those events. The data collected for special reasons are called measurements at miscellaneous sites.

Streamflow data collected at partial-record stations where water-quality data other than observations of water temperature are not obtained are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and (or) discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low and high flows are given in a third table. Discharge measurements and water-quality data collected at partial-record stations are presented in downstream order in the section of this report entitled "Gaging-station records."

Low-flow partial-record stations

Measurements of streamflow at low-flow partial-record stations that are not published in the gaging-station section are given in the following table. Most of the measurements of low flow were made during periods when streamflow was sustained primarily by ground-water discharge. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will indicate the low-flow potential of the stream. The years listed in the column headed "Period of record" identifies the water years in which measurements were made at the same or at practically the same site.

Discharge measurements made at low-flow partial-record stations during water year 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
San Jacinto River basin						
08068100	West Fork San Jacinto River near Porter, Tex.	Lat 30°03'36", long 95°16'28", Montgomery County, 100 ft west of River Club Estates Park (formerly River Ridge) and 4.0 miles southwest of Porter.	-	1968-72, 1974-75	10- 9-74 9- 9-75	479 159
08068600	Spring Creek near Humble, Tex.	Lat 30°02'04", long 95°18'43", Montgomery-Harris County line, 600 ft upstream from confluence with Cypress Creek and about 4 miles northwest of Humble.	435	1937, 1962, 1970-75	10- 8-74 9-26-75	40 24
08070200	East Fork San Jacinto River near New Caney, Tex.	Lat 30°08'43", long 95°07'27", Montgomery County, at bridge on Farm Road 1485 and 5.5 miles east of New Caney.	388	1952-54, 1956-57, 1969-75	10- 7-74 9- 4-75	63 59
08070600	Caney Creek near New Caney, Tex.	Lat 30°08'55", long 95°11'31", Montgomery County, at bridge on Farm Road 1485 and 1.3 miles east of New Caney.	178	1970-75	10- 7-74 5- 8-75 9- 4-75	31 154 39
08071100	Peach Creek near New Caney, Tex.	Lat 30°08'48", long 95°10'16", Montgomery County, at bridge on Farm Road 1485 and 2.5 miles east of New Caney.	155	1970-75	10-17-74 5- 8-75 9- 4-75	30 137 38
08071200	Tarkington Bayou near Dayton, Tex.	Lat 30°11'23", long 95°00'05", Liberty County, about 1.5 miles upstream from mouth on county road and about 12 miles northwest of Dayton.	142	1964-71, 1974-75	10- 8-74 8-22-75	.20 4.0
08071300	Luce Bayou near Huffman, Tex.	Lat 30°05'31", long 95°05'03", Harris County, near end of Inland Road, 0.8 mile above mouth of John Young Gully, and 4.8 miles north of Huffman.	226	1970, 1972, 1975	10- 8-74 9- 8-75	a4.5 a20
Brazos River basin						
08079530	North Fork Double Mountain Fork Brazos River above Buffalo Springs Lake near Lubbock, Tex.	Lat 33°31'33", long 101°43'38", Lubbock County, at Farm Road 835, upstream from Buffalo Springs Lake, and 7.8 miles southeast of Lubbock.	-	1952-54, 1957, 1962, 1967-75	10- 1-74 11-12-74 12-18-74 1-28-75 3-12-75 4-15-75 7- 8-75 8-20-75	23 6.1 8.5 11 7.7 8.4 7.9 7.2
08079551	North Fork Double Mountain Fork Brazos River below Buffalo Springs Lake near Lubbock, Tex.	Lat 33°31'58", long 101°41'34", Lubbock County, at downstream end of Buffalo Springs Lake spillway and about 9 miles southeast of Lubbock.	-	1952-54, 1962-63, 1969-75	10- 1-74 11-12-74 12-18-74 1-28-75 3-12-75 4-15-75 7- 8-75 8-20-75	13 9.7 10 7.5 19 5.5 6.4 7.8
08080900	White River below falls near Crosbyton, Tex.	Lat 33°39'57", long 101°09'35", Crosby County, at bridge on U.S. Highway 82 and 4.5 miles east of Crosbyton.	(c)	1951-75	10-10-74 1- 8-75 4-15-75 7- 8-75	.27 .76 .25 .87

c Not applicable

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued

Discharge measurements made at low-flow partial-record stations during water year 1975--Continued						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Brazos River basin--Continued						
08081050	Short Croton Creek at mouth near Jayton, Tex.	Lat 33°18'27", long 100°31'57", Kent County, at mouth, 0.2 mile upstream from county road crossing on Croton Creek, and 4.7 miles north-east of Jayton.	-	1959-75	10-10-74 11-20-74 1- 8-75 2-26-75 4- 1-75 4-23-75 5- 7-75 6-18-75 8- 1-75 8-20-75	0 0 0 0 0 0 0 0 0 0
08110325	Navasota River above Groesbeck, Tex.	Lat 31°34'27", long 96°31'14", Limestone County, at city of Groesbeck filtration plant, 1.2 miles downstream from Springfield Lake, and 3.7 miles north of Groesbeck.	239	1975	7-24-75 8- 5-75 9-16-75 9-23-75	3.2 2.6 3.8 1.4
08110430	Big Creek near Freestone, Tex.	Lat 31°30'25", long 96°19'31", Limestone County, at downstream side of bridge on State Highway 164, 5.1 miles southwest of Freestone, and 8.2 miles upstream from Navasota River.	57.1	1975	7-24-75 8- 5-75 9-16-75 9-23-75	5.1 4.6 .19 .16
08110460	Navasota River near Marquez, Tex.	Lat 31°21'01", long 96°19'11", Robertson County, at old Jewitt McKenzie Road crossing, 0.4 mile upstream from Mine Creek, and 8.5 miles north-west of Marquez.	611	1975	7-24-75 8- 5-75 9-23-75	18 26 3.2
08111600	Piney Creek near Bellville, Tex.	Lat 29°57'06", long 96°10'20", Austin County, at bridge on county road and about 5.1 miles east of Bellville.	30.7	1948, 1955, 1958, 1964-75	1-16-75 7-10-75 8-14-75	13 8.2 4.6
08111650	West Fork Mill Creek near Industry, Tex.	Lat 29°58'55", long 96°30'00", Austin County, at bridge on Farm Road 109 and 0.6 mile north of Industry.	75.3	1964-75	1-16-75 7-10-75 8-14-75	17 4.0 2.2

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage and flood-hydrograph partial-record stations

The following table contains annual maximum stage and (or) discharge at partial-record stations operated primarily for the purpose of defining the flooding characteristics of the streams. At stations where discharge is given, or is footnoted "to be determined", a stage-discharge relation has been, or will be, defined by discharge measurements obtained by current meter or by indirect procedures. Water-stage recorders are located at these flood-hydrograph stations to facilitate complete hydrograph definition. At stations where only the maximum stage is given (discharge column is dashed), data are generally collected for use in stage-frequency studies or flood-profile definition. Gages at these stations usually consist of a device that will register the peak stage occurring between inspections of the gage. The years used in the column "Period of record" identify the years in which the annual maximum has been determined.

Annual maximum stage and (or) discharge during water year 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
San Jacinto River basin							
08068438	Swale No. 8 at Woodlands, Tex.	Lat 30°08'38", long 95°28'09", Montgomery County, on upstream side of upstream bridge on Grogan's Mill Road at Woodlands.	0.55	1975	4- 8-75	32.36	122
08072400	Buffalo Bayou near Clodine, Tex.	Lat 29°43'06"(revised), long 95°43'53", Fort Bend County, on private road to Cinco Ranch, 2.8 miles west of Clodine, and 9.0 miles upstream from Barker Reservoir discharge structure.	89.2	1974-75	9-13-74 6-10-75	97.94 97.26	c2,630 2,090
08072700	South Mayde Creek near Addicks, Tex.	Lat 29°48'03", long 95°41'33"(revised), Harris County, at bridge on Groeschke Road, 3.2 miles west of Addicks, and 4.6 miles upstream from Langham Creek.	34.9	1974-75	5-30-75	106.44	754
08072800	Langham Creek near Addicks, Tex.	Lat 29°50'08", long 95°37'32"(revised), Harris County, at bridge on Clay Road, 3.6 miles north of Addicks, and 4.4 miles upstream from mouth.	45.1	1974-75	5-30-75	100.75	810
08074200	Brickhouse Gully at Clarblak Street, Houston, Tex.	Lat 29°49'53", long 95°31'42", Harris County, at bridge on Clarblak Street in northwest Houston.	2.16	1965-75	6-10-75	92.81	230
08074750	Brays Bayou at Addicks-Clodine Road near Houston, Tex.	Lat 29°43'11", long 95°39'37", Harris County, at culvert on Addicks-Clodine Road, about 1 mile west of State Highway 6, and about 19 miles west of downtown Houston.	.87	1975	10-31-74	3.43	g25
08074780	Keegans Bayou at Keegan Road near Houston, Tex.	Lat 29°39'55", long 95°35'42", Harris County, at bridge on Keegan Road and about 16 miles southwest of Houston.	e6.93	1965-71, 1975	6- 9-75	79.45	622
08074850	Bintliff Ditch at Bissonnet Street, Houston, Tex.	Lat 29°41'16", long 95°30'20", Harris County, at bridge on Bissonnet Street in southwest Houston.	4.38	1968-75	6-10-75	62.38	1,050
08075550	Berry Bayou at Gilpin Street, Houston, Tex.	Lat 29°38'32", long 95°13'22", Harris County, at bridge on Gilpin Street in southeast Houston.	3.28	1965-75	1-19-74 6- 9-75	p35.45 35.20	e472 454
08075780	Greens Bayou at Cutten Road near Houston, Tex.	Lat 29°56'56", long 95°31'10", Harris County, at bridge on Cutten Road and about 16.5 miles northwest of Houston.	8.06	1965-75	5-29-75	p117.60	301
08076200	Halls Bayou at Deertrail Street near Houston, Tex.	Lat 29°54'07", long 95°25'21", Harris County, at bridge on Deertrail Street, 0.6 mile west of U.S. Highway 75, and about 11 miles northwest of Houston.	6.54	1965-75	5-29-75	84.48	856
Clear Creek basin							
08077100	Clear Creek tributary at Hall Road, Houston, Tex.	Lat 29°36'09", long 95°16'41", Harris County, at bridge on Hall Road in south Houston.	1.31	1965-75	7-24-75	p43.44	203
08077600	Clear Creek near Friendswood, Tex.	Lat 29°31'02", long 95°10'42", Galveston County, at bridge on Farm Road 528 and 1.5 miles southeast of Friendswood.		1966-75	6-10-75	10.89	

c Not previously published.

e Revised.

g Maximum for period Oct. 1, 1974, to May 20, 1975; probably exceeded May 21 or June 10 in new channel 920 ft south of gage.

p Occurred at different time than peak discharge.

Annual maximum stage and (or) discharge during water year 1975--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Highland Bayou basin							
08077780	Highland Bayou near Texas City, Tex.	Lat 29°19'54", long 94°56'42", Galveston County, at bridge on State Highway 6, 0.4 mile south-west of U.S. Highway 75, 1.5 miles from mouth, and about 3 miles southwest of Texas City.	--	1974-75	3-27-75	4.27	-
Brazos River basin							
08079300	Blackwater Draw tributary near Floyd, N. Mex.	Lat 34°13'13", long 103°45'05", Roosevelt County, 0.5 mile below section road and about 10 miles west of Floyd.	b10	1963-75	10-23-74	.57	-
08080600	Running Water Draw near Clovis, N. Mex.	Lat 34°31'56", long 103°12'05", Curry County, 0.25 mile upstream from State Highway 18 and about 8 miles north of Clovis.	109	1953-56, 1957-64*, 1964-75	1975	(h)	<100

* Operated as a continuous-record station.

< Less than.

b Estimated.

h Peak did not reach base of gage.

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table:

Discharge measurements made at miscellaneous sites during water year 1975						
Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
San Jacinto River basin						
Greens Bayou	Buffalo Bayou	Lat 29°53'30", long 95°14'17", Harris County, at bridge on Lake Houston Parkway and about 11 miles northeast of Houston, Tex.	-	1963, 1971-74	10-22-74 1-28-75 9-15-75	7.8 33 12
Halls Bayou	Greens Bayou	Lat 29°50'52", long 95°15'42", Harris County, at bridge on East Houston Road at Houston, Tex.	-	1963, 1971-74	10-22-74 1-28-75 9-15-75	10 25 15
Chocolate Bayou basin						
Chocolate Bayou Company's Canal	Chocolate Bayou (Diversion)	Lat 29°19'08", long 95°16'11", Brazoria County, 300 ft below pumps, 3,400 ft southeast of crossing with Farm Road 2917, and 8.0 miles south of Alvin, Tex.	-	-	4-15-75 4-15-75	114 58
Do.....	Brazos River (Diversion)	Lat 29°27'07", long 95°29'30", Fort Bend County, at concrete flume over Oyster Creek, 1 mile west of Juliff, Tex., and 2.5 miles below pumps.	-	1939, 1948-49, 1951-52, 1956, 1958, 1963-74	10- 2-74 3-25-75 4-16-75 4-23-75 5- 8-75 5-20-75 6- 2-75 6-16-75 7- 1-75 7-16-75 8- 7-75 9- 5-75 9-19-75	177 244 94 244 494 578 134 423 431 466 111 159 86
Oyster Creek basin						
Brazos River Authority's Canal A	Oyster Creek (diversion from Brazos River and from Oyster Creek)	Lat 29°36'20", long 95°34'55", Fort Bend County, at bridge on Dulles Blvd., 0.1 mile below second lift pump plant, and 1.5 miles south-west of Stafford, Tex.	-	1947-48, 1969	3-19-75 4- 2-75 4- 4-75 5- 7-75 5-15-75 6-17-75	66 72 131 102 167 273
Brazos River basin						
Pete Creek	White River	Lat 32°32'28", long 101°03'16", Crosby County, 3.9 miles upstream from mouth and 15 miles west of Spur, Tex.	-	-	11-21-74	0
White River	Salt Fork Brazos River	Lat 33°30'22", long 101°04'26", Crosby County, 0.4 mile downstream from Pete Creek and 15 miles west of Spur, Tex.	-	-	11-21-74 8-20-75	2.9 a.51
Sand Creek	White River	Lat 33°31'23", long 101°06'51", Crosby County, 6.1 miles upstream from mouth and 17 miles west of Spur, Tex.	-	-	10-15-74	.05
White River	Salt Fork Brazos River	Lat 33°27'26", long 101°04'57", Crosby County, 100 ft downstream from White River dam and 15 miles west of Spur, Tex.	-	-	10-15-74 8-20-75	0 a.03
Elm Creek	Clear Fork Brazos River	Lat 32°30'28", long 99°44'22", Taylor County, 200 ft downstream from bridge on Pine Street in Abilene, Tex.	-	-	5- 8-75	10
Walnut Creek	Leon River	Lat 31°57'18", long 98°27'24", Comanche County, 60 ft upstream from mouth and 2.2 miles northeast of Hasse, Tex.	-	1968-74	1-23-75	.48

a Estimated

	Page		Page
Accuracy of data.....	18	Clear Fork Brazos River, at Eliasville.....	265-268
Acre-foot, definition of.....	3	at Fort Griffin.....	228-230
Addicks Reservoir near Addicks.....	76	at Hawley.....	208-211
Agencies other than Geological Survey, records		at Nugent.....	220-221
collected by.....	19	near Roby.....	207
Algae, definition of.....	3	Coastal Basin, gaging-station records in.....	148,
Aquilla Creek near Aquilla.....	305-308		155-156
Ash weight, definition of.....	4	Cobb Creek near Abbott.....	304
Bacteria, definition of.....	3	Cole Creek at Deihl Road, Houston.....	90
Barker Reservoir near Addicks.....	75	Coliform organisms, definition of.....	5
Battle Creek near Moran.....	252	Collection, and computation of data.....	14
Bed material, definition of.....	4	and examination of data.....	20
Belton Lake near Belton.....	342-343	Contents, definition of.....	5
Berry Bayou, at Forest Oaks Street, Houston.....	123-125	Control, definition of.....	5
at Gilpin Street, Houston.....	430	Conversion factors, English units to metric units.....	27
Berry Creek near Georgetown.....	360	Cook Creek near Albany.....	241
Big Boggy Creek near Wadsworth.....	425-427	Cooperation.....	2
Big Cedar Creek near Ivan.....	276	Cow Bayou at Mooreville.....	322
Big Creek, near Freestone.....	429	Cow Bayou subwatershed No. 4 near Bruceville.....	321
near Needville.....	409	Cowhouse Creek at Pidcock.....	341
Big Sandy Creek, near Breckenridge.....	256-259	Crest-stage partial-record station,	
near Eolian.....	251	definition of.....	6
Bitliff Ditch at Bissonnet Street, Houston.....	430	Croton Creek, below Short Croton Creek near Jayton.....	175
Biochemical oxygen demand (BOD), definition of.....	4	near Jayton.....	176-178
Biomass, definition of.....	4	Cubic foot per second, definition of.....	5
Biomass pigment ratio, definition of.....	4	Cubic foot per second per square mile, definition of.....	5
Blackwater Draw tributary near Floyd, N. Mex.....	431	Cypress Creek, near Cypress.....	60-61
Boque River near Waco.....	318	near Humble.....	63-64
Brays Bayou, at Addicks-Clodine Road near Houston.....	430	near Westfield.....	62
at Houston.....	108-111	Data, accuracy of.....	18
at Scott Street at Houston.....	112-114	explanation of surface water.....	14
Brazos River, at Brazoria Reservoir near Brazoria.....	421-422	other available.....	19
at Farm Road 1287 near Graham.....	275	Davidson Creek near Lyons.....	381-382
at Harris Reservoir near Angleton.....	419-420	Deadman Creek near Nugent.....	222
at Possum Kingdom Dam near Graford.....	279-281	Deep Creek near Moran.....	233-235
at Richmond.....	402-408	Definition of terms.....	3
at Seymour.....	197-203	Discharge, definition of.....	5
at Waco.....	319-320	Discharge at partial-record stations and	
at Washington.....	383	miscellaneous sites.....	428
at Whitney Dam near Whitney.....	300-302	Dissolved, definition of.....	6
near Aquilla.....	303	Dissolved oxygen, definition of.....	6
near Bryan.....	370	Double Mountain Fork Brazos River, at Justiceburg.....	158
near College Station.....	371-373	near Aspermont.....	159-161
near Dennis.....	286-288	Downstream order and station numbers.....	13
near Glen Rose.....	291	Drainage area, definition of.....	6
near Graham.....	206	Dry Creek near Rosenberg.....	410
near Hempstead.....	397	Dry weight, definition of.....	4
near Highbank.....	323-329	Duck Creek near Girard.....	170
near Palo Pinto.....	282	East Fork San Jacinto River, near Cleveland.....	66-67
near Rosharon.....	410-418	near New Caney.....	428
near South Bend.....	269-270	East Levee Ditch-Gulf of Mexico near Freeport.....	155
near Wallis.....	400	East Yegua Creek near Dime Box.....	375-376
Brazos River basin, crest-stage and flood-hydrograph		Elm Creek, near Abilene.....	214
partial-record stations in.....	431	near Proffitt.....	205
discharge measurements at miscellaneous sites in.....	432	Explanation, of surface-water quality records.....	20
gaging-station records in.....	157-422	of surface-water quantity records.....	14
low-flow partial-record stations in.....	428-429	Fecal coliform bacteria, definition of.....	4
Briar Creek near Graham.....	272	Fecal streptococcal bacteria, definition of.....	4
Brickhouse Gully, at Clarlak Street, Houston.....	430	Flood-hydrograph partial-record station,	
at Costa Rica Street, Houston.....	91-94	definition of.....	7
Brushy Creek near Rockdale.....	365	Fort Phantom Hill Reservoir near Nugent.....	218-219
Buffalo Bayou, at Houston.....	86-89	Gage height, definition of.....	6
at Main Street, Houston.....	102	Gaging station, definition of.....	6
at Piney Point.....	82-85	Gaging-station records.....	29
at West Belt Drive, Houston.....	81	Green Creek subwatershed No. 1 near Dublin.....	310
at 69th Street, Houston.....	103	Greens Bayou, at Cutten Road near Houston.....	430
near Addicks.....	77-80	at Ley Road at Houston.....	143-146
near Clodine.....	430	at U.S. Highway 75 near Houston.....	134
Buffalo Springs Lake near Lubbock.....	157	near Houston.....	135-138
California Creek near Stamford.....	225-227	Halls Bayou, at Deertrail Street near Houston.....	430
Caney Creek, near New Caney.....	428	at Houston.....	139-142
near Splendor.....	68-69	Hardness, definition of.....	7
Cat Claw Creek at Abilene.....	216	Haystack Creek at weir E near Aspermont.....	180
Cedar Creek at Abilene.....	217	Herbicides, definition of.....	7
Cells/volume, definition of.....	9	Highland Bayou at Hitchcock.....	149
Cfs-days, definition of.....	5	Highland Bayou basin, crest-stage and flood-hydrograph	
Chlorophyll, definition of.....	5	partial-record station in.....	431
Chocolate Bayou basin, gaging-station record in.....	150-153	gaging-station record in.....	149
Chocolate Bayou near Alvin.....	150-153	Highland Bayou near Texas City.....	431
Clear Creek basin, crest-stage and flood-hydrograph		Hog Creek near Crawford.....	315
partial-record stations in.....	430	Hubbard Creek, at U.S. Highway 380 near Moran.....	232
gaging-station record in.....	147	below Albany.....	248-250
Clear Creek, near Friendswood.....	430		
near Pearland.....	147		
Clear Creek tributary at Hall Road, Houston.....	430		

	Page		Page
Hubbard Creek, near Albany.....	236-237	Nolan River at Blum.....	296-297
near Breckenridge.....	262-264	North Bosque River, at Hico.....	311
near Sedwick.....	231	at Stephenville.....	309
Hubbard Creek Reservoir near Breckenridge.....	260-261	at Valley Mills.....	313
Hunting Bayou, at Falls Street, Houston.....	127-129	near Clifton.....	312
at Interstate Highway 610 at Houston.....	130-133	North Croton Creek near Knox City.....	193-196
Hydrologic bench-mark station.....	5	North Fork Double Mountain Fork Brazos River, above Buffalo Springs Lake near Lubbock.....	428
Insecticides, definition of.....	7	below Buffalo Springs Lake near Lubbock.....	428
Instantaneous discharge, definition of.....	5	North Fork Hubbard Creek near Albany.....	242-245
Introduction.....	1	North Fork San Gabriel River near Georgetown.....	356
Keegans Bayou, at Keegan Road near Houston.....	430	Organism count/area, definition of.....	9
at Roark Road near Houston.....	104-107	Organism, definition of.....	9
Lake Conroe, at outflow weir near Conroe.....	32	Organisms count/volume, definition of.....	9
near Conroe.....	30-31	Organic weight, definition of.....	5
near Montgomery.....	29	Other data available.....	19
Lake Creek near Conroe.....	36	Oyster Creek near Angleton.....	154
Lake Graham near Graham.....	273-274	Palo Pinto Creek near Santo.....	285
Lake Granbury near Granbury.....	289-290	Paluxy River at Glen Rose.....	292
Lake Houston near Sheldon.....	71-72	Panther Branch, near Conroe.....	46-50
Lake Houston Plant Intake at Galena Park.....	73	near Spring.....	52-57
Lake Mexia near Mexia.....	384-385	Partial-record station, definition of.....	6
Lake Palo Pinto near Santo.....	283-284	Partial-record stations, crest-stage and flood- hydrograph.....	430-431
Lake Pat Cleburne near Cleburne.....	294-295	low-flow.....	428-429
Lake Stamford near Haskell.....	223-224	Particle size, definition of.....	9
Lakes and reservoirs:		Particle-size classification, definition of.....	9
Addicks Reservoir near Addicks.....	76	Peach Creek, at Splendora.....	70
Barker Reservoir near Addicks.....	75	near New Caney.....	428
Belton Lake near Belton.....	342-343	Pecan Creek near Eolian.....	253-255
Buffalo Springs Lake near Lubbock.....	157	Percent composition, definition of.....	10
Conroe, Lake, near Conroe.....	30-31	Periphyton, definition of.....	10
Conroe, Lake, near Montgomery.....	29	Pesticides, definition of.....	10
Fort Phantom Hill Reservoir near Nugent.....	218-219	Phytoplankton, definition of.....	10
Graham, Lake, near Graham.....	273-274	Piney Creek near Bellville.....	429
Granbury, Lake, near Granbury.....	289-290	Plankton, definition of.....	10
Houston, Lake, near Sheldon.....	71-72	Polychlorinated biphenyls, definition of.....	10
Hubbard Creek Reservoir near Breckenridge.....	260-261	Possum Kingdom Reservoir near Graford.....	277-278
Leon Reservoir near Ranger.....	332-333	Proctor Lake near Proctor.....	336-337
Mexia, Lake, near Mexia.....	384-385	Publications.....	19,23
Palo Pinto, Lake, near Santo.....	283-284	Radiochemical program.....	13
Pat Cleburne, Lake, near Cleburne.....	294-295	Reconnaissance partial-record station, definition of.....	7
Possum Kingdom Reservoir near Graford.....	277-278	Records, other agencies.....	19
Proctor Lake near Proctor.....	336-337	Reservoirs. See Lakes and reservoirs.	
Somerville Lake near Somerville.....	377-378	Richmond Irrigation Co.'s canal near Richmond.....	401
Stamford, Lake, near Haskell.....	223-224	Running Water Draw, at Plainview.....	165
Stillhouse Hollow Lake near Belton.....	351-352	near Clovis, N. Mex.....	431
Waco Lake near Waco.....	316-317	Runoff in inches, definition of.....	10
White River Reservoir near Spur.....	166-167	Sabana River near De Leon.....	335
Whitney Lake near Whitney.....	298-299	Salt Creek at Olney.....	271
Lampasas River, at Youngsport.....	350	Salt Croton Creek, near Aspermont.....	181-183
near Belton.....	353	at Weir D near Aspermont.....	179
near Kempner.....	346	Salt Fork Brazos River, at Farm Road 1081 near Clairemont.....	168
Langham Creek near Addicks.....	430	at State Highway 208 near Clairemont.....	169
Leon Reservoir near Ranger.....	332-333	at U.S. Highway 380 near Jayton.....	171
Leon River, at Gatesville.....	340	near Aspermont.....	184-190
near Belton.....	344	near Peacock.....	172-174
near De Leon.....	334	Salt Prong Hubbard Creek, at U.S. Highway 380 near Albany.....	240
near Hamilton.....	339	near Albany.....	246
near Hasse.....	338	San Bernard River, near Boling.....	423
Little Elm Creek near Abilene.....	215	near West Columbia.....	424
Little Pond Creek at Burlington.....	330-331	San Bernard River basin, gaging-station records in.....	423-424
Little River, at Cameron.....	366-369	San Gabriel River, at Georgetown.....	358-359
near Little River.....	354-355	at Laneport.....	362-364
Little Whiteoak Bayou at Houston.....	99-101	near Circleville.....	361
Low-flow partial-record station, definition of.....	7	San Jacinto River near Sheldon.....	74
Luce Bayou near Huffman.....	428	San Jacinto River basin, crest-stage and flood- hydrograph partial-record stations in.....	430
McDonald Creek near Post.....	162-164	discharge measurements at miscellaneous sites in.....	432
Mean concentration, definition of.....	11	gaging-station records in.....	29-146
Mean discharge, definition of.....	5	low-flow partial-record stations in.....	428
Methylene blue active substance, definition of.....	7	Sediment, definition of.....	10
Metric units, conversion to.....	27	collection and examination.....	22
Micrograms per litre, definition of.....	7	Selected references.....	24
Middle Bosque River near McGregor.....	314	Short Croton Creek at mouth near Jayton.....	429
Middle Yegua Creek near Dime Box.....	374	Sims Bayou, at Hiram Clarke Street, Houston.....	115-118
Mill Creek near Bellville.....	398-399	at Houston.....	119-122
Millers Creek near Munday.....	204	Snailum Creek near Albany.....	247
Milligrams per litre, definition of.....	7	Sodium adsorption ratio, definition of.....	11
Miscellaneous measurements.....	432	Solute, definition of.....	11
Moses Lake-Galveston Bay near Texas City.....	148	collection and examination.....	20
Mulberry Creek near Hawley.....	212-213	Somerville Lake near Somerville.....	377-378
National stream-quality accounting network, definition of.....	12	South Fork Rocky Creek near Briggs.....	347-349
Navasota River, above Groesbeck.....	429	South Fork San Gabriel River at Georgetown.....	357
near Bryan.....	391-396	South Levee Ditch-Gulf of Mexico near Freeport.....	156
near Easterly.....	389-390		
near Groesbeck.....	386-388		
Nolan Creek at Belton.....	345		

	Page		Page
South Mayde Creek near Addicks.....	430	Total (in tables of chemical analyses), definition of.....	12
Special networks and programs.....	12	Total coliform bacteria, definition of.....	4
Specific conductance, definition of.....	11	Total organism count, definition of.....	9
Spring Creek, near Humble.....	428		
near Spring.....	58-59	Vince Bayou at Pasadena.....	126
Squaw Creek near Glen Rose.....	293		
Stage-discharge relation, definition of.....	14	Waco Lake near Waco.....	316-317
Station numbers and downstream order.....	13	Weighted average, definition of.....	12
Stillhouse Hollow Lake near Belton.....	351-352	West Fork Mill Creek near Industry.....	429
Stinking Creek near Aspermont.....	191-192	West Fork San Jacinto River, below Lake Conroe	
Stream-gaging station, definition of.....	6	near Conroe.....	33-35
Suspended sediment, definition of.....	11	near Conroe.....	37-45
Suspended-sediment discharge, definition of.....	11	near Humble.....	65
Suspended-sediment concentration, definition of.....	11	near Porter.....	428
Swale No. 8 at Woodlands.....	430	Whiteoak Bayou at Houston.....	95-98
		White River below falls near Crosbyton.....	428
Tarkington Bayou near Dayton.....	428	White River Reservoir near Spur.....	166-167
Temperature, collection and examination.....	21	Whitney Lake near Whitney.....	298-299
Terms, definition of.....	3	WRD, definition of.....	12
Thermograph, definition of.....	11	WSP, definition of.....	12
Tons per acre-foot, definition of.....	12		
Tons per day, definition of.....	12	Yegua Creek near Somerville.....	379-380

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
630 Federal Building
300 East 8th Avenue
Austin TX 78701

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT 413

USGS LIBRARY - RESTON



3 1818 00455325 9

