

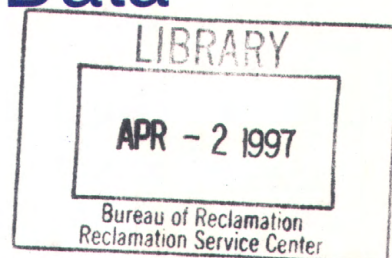


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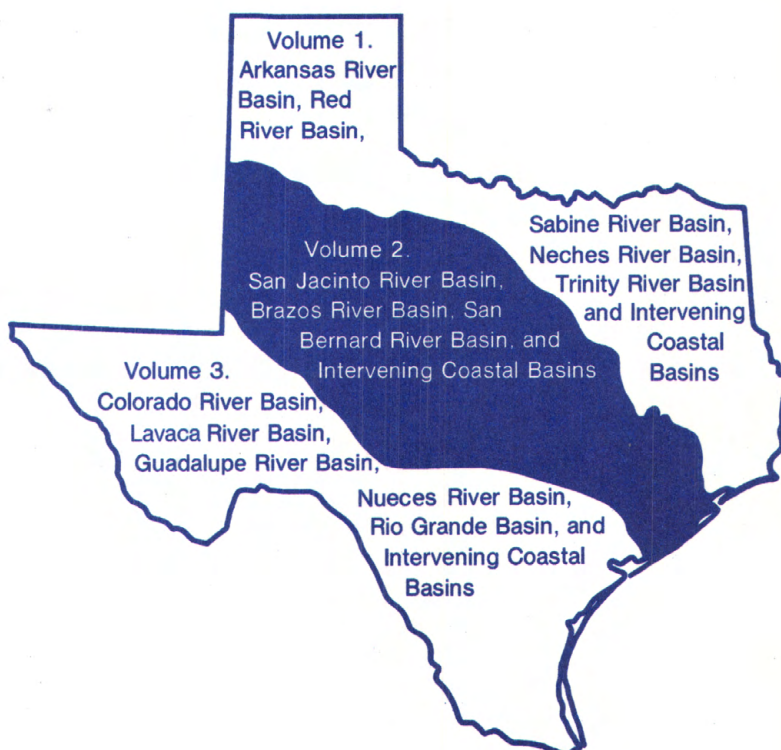
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Water Resources Data Texas Water Year 1996



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-96-2
Prepared in cooperation with the State of Texas
and with other agencies

CALENDAR FOR WATER YEAR 1996

1995

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
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22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
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1996

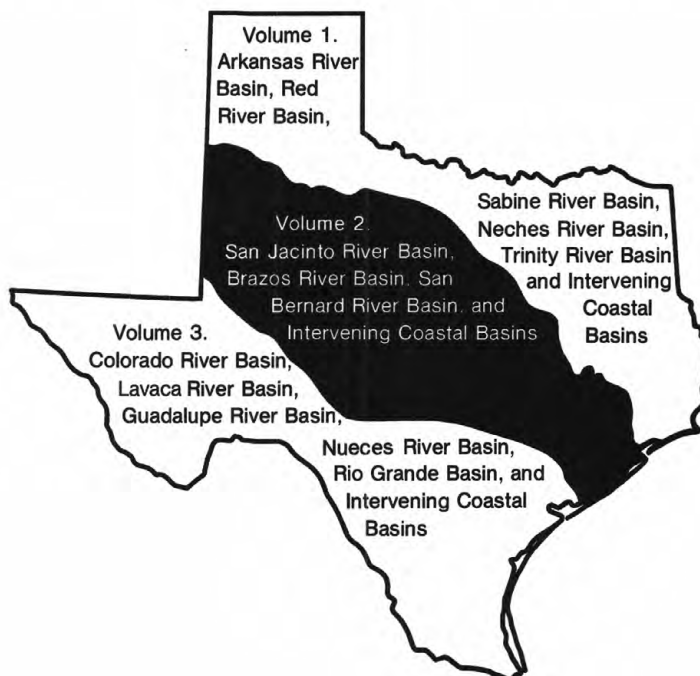
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APRIL							MAY							JUNE						
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Water Resources Data Texas Water Year 1996

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

by S.C. Gandara, W.J. Gibbons, F.L. Andrews, R.E. Jones, and D.L. Barbie



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-96-2
Prepared in cooperation with the State of Texas
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Gordon P. Eaton, Director

**For additional information write to:
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U.S. Geological Survey
8011 Cameron Rd., Bldg. 1
Austin, Texas 78754-3898**

PREFACE

This edition of the annual hydrologic data report of Texas is one of a series of annual reports that document hydrologic data collected from the U.S. Geological Survey's collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by Federal, State, local agencies, and the private sector for developing and managing land and water resources in Texas which are contained in 4 volumes:

- 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 Bernard River Basin, and Intervening Coastal Basins
- Volume 3. Colorado River Basin, Lavaca River Basin, Guadalupe River Basin, Nueces River Basin, Rio Grande Basin, and Intervening Coastal Basins
- Volume 4. Ground-Water Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had the primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, most of the data were collected, computed, and processed from Subdistrict and Field Offices. The following supervised the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Texas and other agencies under the supervision of Richard O. Hawkinson, District Chief.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE February 1997		3. REPORT TYPE AND DATES COVERED Annual--Oct. 1, 1995 to Sept. 30, 1996
4. TITLE AND SUBTITLE Water Resources Data--Texas, Water Year 1996, Volume 2 San Jacinto River, Brazos River, San Bernard River Basins and Intervening Coastal Basins			5. FUNDING NUMBERS	
6. AUTHOR(S) S.C. Gandara, W.J. Gibbons, F.L. Andrews, R.E. Jones, and D.L. Barbie				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Texas District 8011 Cameron Road, Bldg. 1 Austin, TX 78754-3898			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-TX-96-2	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Texas District 8011 Cameron Road, Bldg. 1 Austin, TX 78754-3898			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WDR-TX-96-2	
11. SUPPLEMENTARY NOTES Prepared in cooperation with Federal, State, and local agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from National Technical Information Service Springfield, VA 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for the 1996 water year for Texas are presented in four volumes, and consist of records of stage, discharge, and water quality of streams and canals; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. Volume 2 contains records for water discharge at 74 gaging stations; stage only at 6 gaging stations; stage and contents at 19 lakes and reservoirs; water quality at 41 gaging stations; and data for 44 partial-record stations comprised of 18 flood-hydrograph, 10 low-flow, and 16 crest-stage stations. Also included are lists of discontinued surface-water discharge or stage-only stations and discontinued surface-water-quality stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in Texas. Records for a few pertinent stations in the bordering States also are included.				
14. SUBJECT TERMS *Texas, *hydrologic data, *surface water, *water quality, flow rate, gaging stations, lakes, reservoirs, chemical analyses, sediments, water temperature, sampling sites.			15. NUMBER OF PAGES 365	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT	

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

[Type of data collected: (d) discharge; (c) chemical; (b) biological; (t) water temperature;
(s) sediment; (e) elevation, gage heights, or contents.]

	Station number	Page
WESTERN GULF OF MEXICO BASINS		
SAN JACINTO RIVER BASIN		
West Fork San Jacinto River:		
Lake Conroe near Conroe (e) (c) (t) -----	08067600	25
West Fork San Jacinto River below Lake Conroe near Conroe (d) -----	08067650	32
West Fork San Jacinto River near Conroe (d) -----	08068000	33
West Fork San Jacinto River above Lake Houston near Porter (d) (c) (b) (t) -----	08068090	35
Spring Creek near Spring (d) (c) (b) (t) -----	08068500	37
Cypress Creek at Katy-Hockley Road near Hockley (d) -----	08068720	39
Cypress Creek at House and Hahl Road near Cypress (d) -----	08068740	40
Little Cypress Creek near Cypress (d) -----	08068780	41
Cypress Creek at Grant Road near Cypress (d) -----	08068800	42
Cypress Creek at Stuebner Airline Road near Westfield (d) -----	08068900	43
Cypress Creek near Westfield (d) (c) (b) (t) -----	08069000	44
East Fork San Jacinto River near Cleveland (d) -----	08070000	46
East Fork San Jacinto River near New Caney (d) (c) (b) (t) -----	08070200	47
Caney Creek near Splendora (d) (c) (b) (t) -----	08070500	52
San Jacinto River:		
Luce Bayou above Lake Houston near Huffman (d) (c) (b) (t) -----	08071280	54
Lake Houston near Sheldon (e) (c) (b) (t) -----	08072000	56
San Jacinto River near Sheldon (e) -----	08072050	67
Buffalo Bayou near Katy (d) -----	08072300	69
Barker Reservoir near Addicks (e) -----	08072500	70
South Mayde Creek:		
Bear Creek near Barker (d) -----	08072730	71
Langham Creek at West Little York Road near Addicks (d) -----	08072760	72
Addicks Reservoir near Addicks (e) -----	08073000	73
Buffalo Bayou near Addicks (d) -----	08073500	74
Buffalo Bayou at West Belt Drive, Houston (d) (c) (t) -----	08073600	75
Buffalo Bayou at Piney Point (d) -----	08073700	78
Buffalo Bayou at Houston (d) (c) (t) -----	08074000	79
Whiteoak Bayou:		
Cole Creek at Deihl Road, Houston (d) -----	08074150	85
Brickhouse Gulley at Costa Rica Street, Houston (d) -----	08074250	86
Whiteoak Bayou at Houston (d) (c) (b) (t) -----	08074500	87
Whiteoak Bayou at Main Street, Houston (e) (c) (t) -----	08074598	90
Buffalo Bayou at McKee Street, Houston (e) (c) (t) -----	08074610	97
Buffalo Bayou at Turning Basin, Houston (e) (c) (t) -----	08074710	104
Brays Bayou:		
Keegans Bayou at Roark Road near Houston (d) -----	08074800	112
Brays Bayou at Houston (d) (c) (b) (t) -----	08075000	113
Sims Bayou at Hiram Clarke Street, Houston (d) -----	08075400	116
Sims Bayou at Houston (d) (c) (b) (t) -----	08075500	117
Berry Bayou at Forest Oaks Street, Houston (e) -----	08075650	124
Vince Bayou at Pasadena (d) -----	08075730	126
Hunting Bayou at Interstate Highway 610, Houston (d) (c) (b) (t) -----	08075770	127
Greens Bayou near U.S. Highway 75 near Houston (d) -----	08075900	130
Greens Bayou near Houston (d) (c) (b) (t) -----	08076000	131
Garners Bayou near Humble (d) -----	08076180	133
Halls Bayou at Houston (d) -----	08076500	134
Greens Bayou at Ley Road, Houston (d) -----	08076700	135
CLEAR CREEK BASIN		
Clear Creek at Friendswood (d) -----	08077540	136
COASTAL BASIN		
Moses Lake-Galveston Bay near Texas City (e) -----	08077650	137
HIGHLAND BAYOU BASIN		
Highland Bayou Diversion Channel:		
LaMarque Levee Pump Station near LaMarque (e) -----	08077740	139
CHOCOLATE BAYOU BASIN		
Chocolate Bayou near Alvin (d) -----	08078000	142

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

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	Station number	Page
WESTERN GULF OF MEXICO BASINS--Continued		
BRAZOS RIVER BASIN		
Double Mountain Fork Brazos River (head of Brazos River):		
Double Mountain Fork Brazos River at Justiceburg (d) (c) (t) -----	08079600	143
Double Mountain Fork Brazos River near Aspermont (d) (c) (t) -----	08080500	147
Salt Fork Brazos River near Aspermont (d) -----	08082000	149
Brazos River:		
Brazos River at Seymour (d) -----	08082500	151
Millers Creek near Munday (d) -----	08082700	152
Clear Fork Brazos River near Roby (d) -----	08083100	153
Clear Fork Brazos River at Nugent (d) -----	08084000	154
Paint Creek:		
California Creek near Stamford (d) -----	08084800	155
Clear Fork Brazos River at Fort Griffin (d) -----	08085500	156
Hubbard Creek below Albany (d) (c) (t) -----	08086212	157
Big Sandy Creek above Breckenridge (d) (c) (t) -----	08086290	164
Hubbard Creek Reservoir near Breckenridge (e) (c) (t) -----	08086400	171
Brazos River near South Bend (d) -----	08088000	178
Salt Creek:		
Lake Graham near Graham (e) -----	08088400	180
Possum Kingdom Lake near Graford (e) (c) (t) -----	08088500	181
Brazos River near Graford (d) -----	08088610	193
Brazos River near Palo Pinto (d) -----	08089000	194
Brazos River near Dennis (d) (c) -----	08090800	195
Lake Granbury near Granbury (e) (c) (t) -----	08090900	197
Brazos River near Glen Rose (d) -----	08091000	207
Paluxy River at Glen Rose (d) -----	08091500	209
Squaw Creek Reservoir near Glen Rose (e) -----	08091730	210
Squaw Creek near Glen Rose (d) -----	08091750	211
Nolan River at Blum (d) -----	08092000	212
Lake Whitney near Whitney (e) -----	08092500	213
Brazos River at Whitney Dam near Whitney (c) (t) -----	08092600	214
Brazos River near Aquilla (d) -----	08093100	217
Aquilla Lake above Aquilla (e) -----	08093350	218
Aquilla Creek near Aquilla (d) -----	08093500	219
North Bosque River at Hico (d) -----	08094800	221
North Bosque River near Clifton (d) -----	08095000	222
North Bosque River at Valley Mills (d) -----	08095200	224
South Bosque River:		
Middle Bosque River near McGregor (d) -----	08095300	226
Hog Creek near Crawford (d) -----	08095400	227
Brazos River at Waco (d) -----	08096500	228
Brazos River near Highbank (d) (c) (t) -----	08098290	230
Leon River near De Leon (d) (c) (t) -----	08099100	236
Sabana River near De Leon (d) (c) (t) -----	08099300	239
Proctor Lake near Proctor (e) (c) (b) (t) -----	08099400	242
Leon River near Hasse (c) (t) -----	08099500	254
Leon River near Hamilton (d) -----	08100000	255
Leon River at Gatesville (d) -----	08100500	257
Leon River at North Fort Hood (c) (t) -----	08100600	258
Cowhouse Creek at Pidcoke (d) (c) (t) -----	08101000	260
Belton Lake near Belton (e) (c) (b) (t) -----	08102000	264
Leon River near Belton (d) (c) (t) -----	08102500	284
Lampasas River near Kempner (d) -----	08103800	287
Rocky Creek:		
South Fork Rocky Creek near Briggs (d) (c) (b) (t) (s) -----	08103900	289
Stillhouse Hollow Lake near Belton (e) (c) (t) -----	08104050	291
Little River near Little River (d) -----	08104500	301
San Gabriel River:		
Lake Georgetown near Georgetown (e) -----	08104650	302
North Fork San Gabriel River near Georgetown (d) -----	08104700	303
South Fork San Gabriel River at Georgetown (d) -----	08104900	304

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

	Station number	Page
WESTERN GULF OF MEXICO BASINS--Continued		
BRAZOS RIVER BASIN--Continued		
Brazos River:		
Little River:		
San Gabriel River:		
Berry Creek near Georgetown (d) -----	08105100	305
Granger Lake near Granger (e) -----	08105600	306
San Gabriel River at Laneport (d) -----	08105700	307
Little River near Rockdale (d) -----	08106350	308
Little River at Cameron (d) (c) (t) -----	08106500	309
Brazos River at State Highway 21 near Bryan (d) -----	08108700	316
Middle Yegua Creek (head of Yegua Creek) near Dime Box (d) -----	08109700	318
East Yegua Creek near Dime Box (d) -----	08109800	320
Somerville Lake near Somerville (e) -----	08109900	321
Davidson Creek near Lyons (d) -----	08110100	322
Navasota River above Groesbeck (d) -----	08110325	323
Big Creek near Freestone (d) -----	08110430	324
Lake Limestone near Marquez (e) (c) (t) -----	08110470	325
Navasota River near Easterly (d) -----	08110500	332
Navasota River near Bryan (d) -----	08111000	334
Brazos River near Hempstead (d) -----	08111500	335
Brazos River at Richmond (d) (c) (t) -----	08114000	336
Big Creek near Needville (d) -----	08115000	340
Brazos River near Rosharon (d) -----	08116650	341
SAN BERNARD RIVER BASIN		
San Bernard River near Boling (d) -----	08117500	342

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Texas have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the title page of this report.

[Letters after station name designate the type of data collected: (d) discharge, (e) elevation (stage only).]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Weich Branch near Huntsville (e)	08067550	2.35	1965-74
Lake Conroe near Montgomery (e)	08067580	445	1973-76
Lake Conroe at Outflow Weir near Conroe (d)	08067610	445	1974, 1977-89
Caney Creek near Dobbin (d)	08067700	40.40	1963-65
Landrum Creek Tributary near Montgomery (e)	08067750	0.13	1965-74
Lake Creek near Conroe (e)	08067900	291	1969-89
West Fork San Jacinto River near Porter (e)	08068100	970	1970-76
Mill Creek Tributary near Dobbin (e)	08068300	4.07	1967-73
Panther Branch near Conroe (e)	08068400	25.9	1974-76, 1980-88
SWALE No. 8 at Woodlands (e)	08068438	0.55	1975-76, 1980-88
Panther Branch near Spring (e)	08068450	34.5	1972-76, 1980-88
Spring Creek near Spring (d)	08068500	409	1939-76
Spring Creek near Humble (e)	08068600	435	1971-76
Cypress Creek at Sharp Road near Hockley (d)	08068700	N/A	1975-85
Cypress Creek near Cypress (e)	08068750*	138	1971-76
Little Cypress Creek near Cypress (d)	08068780*	41.0	1983-92
Cypress Creek at Grant Road near Houston (d)	08068800*	214	1983-92
Cypress Creek at Stuebner-Airline Road near Westfield (d)	08068900*	248	1982-87
Cypress Creek near Humble (e)	08069200	319	1971-76
West Fork San Jacinto River near Humble (d)	08069500	1,741	1929-54
Bear Creek near Cleveland (e)	08069850	1.46	1967-73
Caney Creek near New Caney (e)	08070600	178	1970-76
Peach Creek at Splendora (d)	08071000	117	1944-77
Peach Creek near New Caney (e)	08071100	155	1970-76
Tarkington Bayou near Dayton (e)	08071200	142	1964-76
Luce Bayou near Huffman (e)	08071300	226	1971-76
San Jacinto River near Huffman (d)	08071500	2,800	1937-53
Langham Creek at West Little York Road, Addicks (d)	08072760*	25.0	1977-85
Cole Creek at Guhn Road at Houston (e)	08074100	7.05	1964-72
Bingle Road Storm Sewer at Houston (e)	08074145	0.21	1980-88
Cole Creek at Deihl Road at Houston ((d)	08074150*	7.50	1964-86
Brickhouse Gully at Costa Rica Street at Houston (d)	08074250*	11.4	1964-81
Lazybrook Street Storm Sewer at Houston (e)	08074400	0.13	1978-88
Little White Oak Bayou at Houston (e)	08074550	20.9	1971-79
Buffalo Bayou at Main St., Houston (d)	08074600*	469	1962-94
Buffalo Bayou at 69th Street, Houston (e)	08074700	476	1961-86
Brays Bayou at Alief Road, Alief (e)	08074760*	12.9	1977-85
Keegans Bayou at Keegans Road near Houston (e)	08074780*	7.47	1964-71
Keegans Bayou at Roark Road near Houston (d)	08074800*	13.0	1964-85
Bintliff Ditch at Bissonnet Street, Houston (e)	08074850	4.38	1968-82
Brays Bayou at Scott Street, Houston (e)	08075100	106	1971-81
Sims Bayou at Carlsbad Street, Houston (e)	08075300	3.81	1964-72
Halls Bayou at Deertrail Street at Houston (e)	08076200	8.69	1965-84
Clear Creek near Pearland (d)	08077000	38.8	1944-45, 1946-60, 1963-94
Clear Creek Tributary at Hall Road, Houston (e)	08077100	1.31	1965-86
Cowart Creek near Friendswood (e)	08077550	18	1965-74
Clear Creek near Friendswood (e)	08077600	126	1966-94
Taylor Lake near Seabrook (e)	08077635	10.5	1986-87
Highland Bayou at Hitchcock (e)	08077700	15.6	1963-82
Highland Bayou near Texas City (e)	08077780	20.8	1965-88
Oyster Creek near Angleton (d)	08079000	171	1945-80
North Fork Double Mountain Fork Brazos River at Lubbock (d)	08079500	5,300	1940-49

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
North Fork Double Mountain Fork Brazos River above Buffalo Springs nr Lubbock (e)	08079530	29.3	1952-54, 1957, 1962, 1967-76
Buffalo Springs Lake near Lubbock (e)	08079550	236	1967-77
Barnum Springs Draw near Post (e)	08079570	4.99	1965-73
North Fork Double Mountain Fork Brazos River near Post (d)	08079575	438	1984-93
Double Mountain Fork Brazos River near Rotan (d)	08080000	8,536	1950-51
Guest-Flowers Draw near Aspermont (e)	08080510	3.02	1965-74
McDonald Creek near Post (d)	08080540	103	1966-78
Running Water Draw at Plainview (d)	08080700	1,291	1939-53, 1957-78
Callahan Draw near Lockney (e)	08080750	37.5	1966-77
White River near Crosbytown (e)	08080800	529	1951-64
White River below falls near Crosbytown (e)	08080900	529	1951-64
White River Reservoir near Spur (e)	08080910	689	1965-76
Salt Fork Brazos River at Farm Road 1081 near Clairemont (e)	08080916	1,135	1968-77
Red Mud Creek near Spur (e)	08080918	65.1	1967-74
Salt Fork Brazos River at State Highway 208 near Clairemont (e)	08080940	1,357	1968-77
Duck Creek near Girard (d)	08080950	431	1965-89
Salt Fork Brazos River at U.S. Highway 380 near Jayton (e)	08080959	1,797	1968-77
Salt Fork Brazos River near Peacock (d)	08081000	4,619	1950-51, 1965-86
Short Croton Creek at mouth near Jayton (e)	08081050	18.1	1959-82
Croton Creek below Short Croton Creek near Jayton (e)	08081100	250	1959-82
Croton Creek near Jayton (d)	08081200	290	1959-86
Salt Croton Creek at Weir D near Aspermont (e)	08081400	55.5	1957-76
Haystack Creek at Weir E near Aspermont (e)	08081450	15.1	1957-77
Salt Croton Creek near Aspermont (d)	08081500	64.30	1957-77
Stinking Creek near Aspermont (d)	08082100	88.80	1966-83
North Croton Creek near Knox City (d)	08082180	251	1965-86
North Elm Creek near Throckmorton (e)	08082900	3.58	1965-77
Elm Creek near Proffitt (e)	08082950	275	1969-85
Brazos River near Graham (d)	08083000	16,830	1916-20
Lake Sweetwater near Sweetwater (e)	08083200	104	1937-74
Clear Fork Brazos River at Hawley (d)	08083240	1,416	1968-89
Mulberry Creek near Hawley (d)	08083245	205	1968-89
Elm Creek near Abilene (d)	08083300	133	1964-79
Little Elm Creek near Abilene (d)	08083400	39.10	1964-79
Cat Claw Creek at Abilene (d)	08083420*	13	1971-79
Elm Creek at Abilene (d)	08083430	422	1980-83
Cedar Creek at Abilene (d)	08083470	119	1971-84
Fort Phantom Hill Reservoir near Nugent (e)	08083500	470	1940-85
Lake Stamford near Haskell (e)	08084500	368	1953-86
Paint Creek near Haskell (d)	08085000	914	1950-51
Humphries Draw near Haskell (e)	08085300	3.51	1965-77
Clear Fork Brazos River at Crystall Falls (d)	08086000	4,323	1922-29
Hubbard Creek near Sedwick (d)	08086015	128	1964-66
Hubbard Creek at Highway 380 near Moran (e)	08086020	152	1963-76
Deep Creek near Putnam (e)	08086030	33.8	1963-66
Brushy Creek near Putnam (e)	08086040	27.6	1963-66
Mexia Creek near Putnam (e)	08086045	67.0	1963-66
Deep Creek at Moran (d)	08086050	228	1963-75
Hubbard Creek near Albany (d)	08086100	454	1962-75
Salt Prong Hubbard Creek below Lake McCarty near Albany (e)	08086110	45.5	1963-66
Salt Prong Hubbard Creek at U.S. 380 near Albany (d)	08086120	61	1964-68
Cook Creek near Albany (e)	08086130	11.3	1963-76
North Fork Hubbard Creek near Albany (d)	08086150	39.3	1963-90

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Salt Prong Hubbard Creek near Albany (d)	08086200	115	1962-63
Snailum Creek near Albany (d)	08086210	22.90	1964-66
Big Sandy Creek near Eolian (e)	08086220	91.4	1963-76
Battle Creek near Moran	08086235	108	1967-68
Battle Creek near Eolian (e)	08086240	137	1963-66
Pecan Creek at FM 1853 near Eolian (e)	08086250	6.95	1963-66
Pecan Creek near Eolian (d)	08086260	26.40	1967-75
Big Sandy Creek near Breckenridge (e)	08086300	288	1962-75
Hubbard Creek near Breckenridge (d)	08086500	1,089	1955-86
Clear Fork Brazos River at Eliasville (d)	08087300	5,697	1916-20, 1924-25, 1928-51, 1962-82
Salt Creek at Olney (d)	08088100	11.80	1958-77
Salt Creek near Newcastle (d)	08088200	120	1958-60
Briar Creek near Graham (d)	08088300	24.20	1958-89
Brazos River at Farm Road 1287 near Graham (e)	08088420	13,432	1970-77
Big Cedar Creek near Ivan (d)	08088450	97	1965-89
Elm Creek Tributary near Graford (e)	08089100	1.10	1965-74
Lake Palo Pinto near Santo (e)	08090300	461	1964-82
Palo Pinto Creek near Santo (d)	08090500	573	1925, 1951-76
Cidwell Branch near Granbury (e)	08090850	3.37	1966-73
Morris Branch near Bluff Dale (e)	08091200	0.06	1965-73
Panter Branch near Tolar (e)	08091700	7.82	1966-74
Lake Pat Cleburne near Cleburne (d)	08091900	100	1965-85
Nolan River at Blum (d)	08092000*	282.0	1924-87
Brazos River near Whitney (d)	08093000	17,648	1939-74
Bond Branch near Hillsboro (e)	08093200	0.36	1965-74
Hackberry Creek at Hillsboro (d)	08093250	57.9	1980-92
Hackberry Creek below Hillsboro (e)	08093260	86.8	1980-92
Aquilla Creek above Aquilla (d)	08093360*	255.0	1980-92
Cobb Creek near Abbott (d)	08093400	12.40	1967-79
North Bosque River at Stephenville (d)	08093700	95.90	1958-79
Green Creek SWS #1 near Dublin (d)	08094000	4.19	1955-77
Green Creek near Alexander (d)	08094500	45.40	1958-73
South Bosque River near McGregor (e)	08095220	15.9	1967-73
Willow Branch at McGregor (e)	08095250	2.52	1966-73
Middle Bosque River near McGregor (d)	08095300*	182.0	1959-86
Hog Creek near Crawford (d)	08095400*	78.0	1959-86
South Bosque River near Speegleville (d)	08095500	386	1924-30
Bosque River near Waco (d)	08095600	1,656	1960-82
Box Branch at Robinson (e)	08096550	0.34	1965-73
Cow Bayou at Mooreville (d)	08097000	83.50	1958-75
Brazos River near Marlin (d)	08097500	30,211	1939-51
Deer Creek at Chilton (d)	08098000	84.50	1934-36
Little Pond Creek near Burlington (d)	08098300	23	1963-82
Leon Reservoir near Ranger (e)	08099000	259	1955-82
Leon River near De Leon (d)	08099100*	479.0	1960-87
Sabana River near De Leon (d)	08099300*	264.0	1960-87
Sabana River Tributary near De Leon (e)	08099350	0.48	1966-74
Leon River near Hasse (d)	08099500	1,261	1939-91
Edison Creek near Hamilton (e)	08100100	2.91	1965-73
Bermuda Branch near Gatesville (e)	08100400	0.50	1966-73
Hoffman Branch near Hamilton (e)	08100800	5.56	1966-74
Cowhouse Creek near Killeen (d)	08101500	667	1925, 1939-42
Nolan Creek at Belton (d)	08102600	112	1974-82
School Branch near Lampasas (e)	08102900	0.90	1966-73
Fleece Branch near Lampasas (e)	08103450	1.08	1965-74
Lampasas River at Youngsfort (d)	08104000	1,240	1924-80

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Lampasas River near Belton (d)	08104100*	1,321	1963-89
Salado Creek above Salado (e)	08104290*	134	1985-88
Salado Creek below Salado Springs (d)	08104310*	136	1985-87
North Fork San Gabriel River upstream from State Highway 418 at Georgetown (e)	08104795*	271	1985-88
North Fork San Gabriel River at Georgetown (d)	08104800	268	1964-68
South Fork San Gabriel River near Bertram (e)	08104850	8.9	1967-74
South Fork San Gabriel River upstream from State Highway 418 at Georgetown (e)	08104950*	136	1985-88
San Gabriel River at Georgetown (d)	08105000*	405	1924-25, 1934-73, 1984-87
Berry Creek at State Hwy. 971 near Georgetown (d)	08105200*	117	1985-87
San Gabriel River near Weir (d)	08105300*	563	1977-90
San Gabriel River near Circleville (d)	08105400	599	1924-34, 1967-77
Avery Branch near Taylor (e)	08105900	3.52	1966-73
Brushy Creek at Coupland (d)	08106000	205.0	1924-26
Brushy Creek near Rockdale (d)	08106300	505	1967-80
San Gabriel River near Rockdale (d)	08106310	1,359	1975-92
Big Elm Creek near Temple (d)	08107000	74.70	1934-36
Big Elm Creek near Buckholts (d)	08107500	171	1934-36
North Elm Creek near Ben Arnold	08108000	32.20	1935-36
North Elm Creek near Cameron (d)	08108200	44.80	1963-73
Little Branch near Bryan (e)	08108800	0.14	1966-73
Brazos River near Bryan (d)	08109000	39,515	1899-1903, 1918-92
Brazos River near College Station (d)	08109500	30,033	1899-1902, 1918-25
Yegua Creek near Somerville (d)	08110000	1,009	1924-92
Brazos River at Washington (e)	08110200	41,192	1966-96
Lake Mexia near Mexia (e)	08110300	196	1961-86
Plummers Creek at Mexia (e)	08110350	4.42	1965-73
Navasota River near Groesbeck (d)	08110400	311	1965-79
Navasota River near College Station (d)	08111010	1,809	1977-85
Burton Creek at Villa Maria Road, Bryan (d)	08111025	1.33	1968-70
Hudson Creek near Bryan (d)	08111050	1.94	1968-70
Winkelman Creek near Brenham (e)	08111100	0.75	1965-73
Piney Creek near Bellville (e)	08111600	30.7	1948, 1955, 1958, 1964-89
West Fork Mill Creek near Industry (e)	08111650	15.3	1964-89
Mill Creek near Bellville (d)	08111700	376	1963-93
Brazos River near San Felipe (d)	08112000	35,100	1939-57
Brazos River Authority Canal A near Fulshear (d)	08112500	N/A	1932-54, 1958-73
Richmond Irrigation Co. Canal near Richmond (d)	08113500	N/A	1932-54, 1956-78
Brazos River near Juliff (d)	08114500	45,084	1949-69
Seabourne Creek near Rosenberg (e)	08114900	5.78	1968-74
Fairchild Creek near Needville (d)	08115500	26.20	1947-55
Big Creek near Guy (d)	08116000	116	1947-50
Dry Creek near Rosenberg	08116400	8.65	1959-79
Dry Creek near Richmond (d)	08116500	12.20	1947-50, 1957-58
San Bernard River near West Columbia (e)	08117700	766	1949, 1971-77
Mound Creek Tributary at Guy (e)	08117800	1.48	1966-73
Big Boggy Creek near Wadsworth (d)	08117900	10.30	1970-77

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

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The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1996 water year. Daily records of specific conductance, temperature, sediment, color, pH, dissolved oxygen, or chloride were collected and published for the record shown for each station.

[SC, specific conductance; T, temperature; S, sediment; C, color; pH, pH; DO, dissolved oxygen; Cl, chloride.]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
West Fork San Jacinto River near Conroe	08068000	828	SC, T	1962-90
			DO	1979-81
Panther Branch near Spring	08068450	34.50	S	1975-76
West Fork San Jacinto River near Humble	08069500	1,741	SC, Cl	1945-46
San Jacinto River near Huffman	08071500	2,800	SC	1945-54,
			T	1949-54
Buffalo Bayou at West Belt Drive at Houston	08073600	307	SC, T	1979-81
Buffalo Bayou at Main Street, Houston	08074600	469	SC, T, DO	1986-92
Chocolate Bayou near Alvin	08078000	87.70	SC, T	1978-81
North Fork Double Mountain Fork Brazos River near Post	08079575	438	SC, T	1984-93
Double Mountain Fork Brazos River near Rotan	08080000	8,536	SC, T	1950-51
McDonald Creek near Post	08080540	103	SC, T	1964-78
Salt Fork Brazos River near Peacock	08081000	4,619	SC, T	1950-51,
				1965-86
Croton Creek near Jayton	08081200	290	SC, T	1961-80
Salt Croton Creek near Aspermont	08081500	64.30	SC	1969-77,
			T	1972-73
Salt Fork Brazos River near Aspermont	08082000	5,130	SC, T, pH, Cl	1949-51,
			SC, T	1957-82
Stinking Creek near Aspermont	08082100	88.80	T	1950,
			SC, T	1966-69
North Croton Creek near Knox City	08082180	251	SC, T	1966-86
Clear Fork Brazos River at Hawley	08083240	1,416	SC, T	1968-79,
				1982-84
Clear Fork Brazos River at Nugent	08084000	2,199	SC, T, pH, Cl	1948-53
California Creek near Stamford	08084800	478	SC, T	1963-79
Paint Creek near Haskell	08085000	914	SC, T	1950-51
Clear Fork Brazos River at Fort Griffin	08085500	3,988	SC, T, S	1950-51,
			SC, T	1968-79,
				1982-84
Hubbard Creek near Sedwick	08086015	128	SC, T	1964-66
Deep Creek at Moran	08086050	228	SC, T	1963-75
Hubbard Creek near Albany	08086100	454	SC, T	1962-75
Salt Prong Hubbard Creek at U.S. Highway 380 near Albany	08086120	61	SC, T	1964-68
North Fork Hubbard Creek near Albany	08086150	39.30	SC, T	1964-90
Salt Prong Hubbard Creek near Albany	08086200	115	SC, T	1962-63
Snailum Creek near Albany	08086210	22.90	SC, T	1964-66
Battle Creek near Moran	08086235	108	SC, T	1967-68
Pecan Creek near Eolian	08086260	26.40	SC, T	1967-75
Big Sandy Creek near Breckenridge	08086300	288	SC, T	1962-77
Hubbard Creek near Breckenridge	08086500	1,089	SC, T	1955-75
Clear Fork Brazos River at Eliasville	08087300	5,697	SC, T	1962-82
Brazos River near South Bend	08088000	22,673	SC, Cl	1942-48
			SC, T	1978-81
Salt Creek at Olney	08088100	11.80	SC, T	1958-60
Salt Creek near Newcastle	08088200	120	SC, T	1958-60
Brazos River at Morris Sheppard Dam near Graford	08088600	23,596	SC	1942-91
			T	1950-55,
				1966-91
Aquilla Creek above Aquilla	08093360	255	SC, T	1980-83

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record (water years)
Aquilla Creek near Aquilla	08093500	308	SC, T	1966, 1968-82
Brazos River near Highbank	08098290	30,436	T	1968-84
Leon River near Eastland	08098500	235	SC, T	1950-53
Leon River near Belton	08102500	3,542	T	1957-72
South Fork Rocky Creek near Briggs	08103900	33.30	S	1963-65
Lampasas River at Youngsfort	08104000	1,240	SC, T	1961-64
Little River near Little River	08104500	5,228	SC, T	1965-73, 1980-82
San Gabriel River near Weir	08105300	563	T	1977-82
San Gabriel River at Laneport	08105700	738	T	1977-82
Brazos River at State Highway 21 near Bryan	08108700	39,049	SC, T	1961-65
Brazos River near Bryan	08109000	39,515	SC, T	1966
Brazos River near College Station	08109500	39,599	SC, T	1961-84
Yegua Creek near Somerville	08110000	1,009	SC, T	1961-67
Navasota River above Groesbeck	08110325	239	SC, T	1968-89
Navasota River near Groesbeck	08110400	311	SC, T	1968-78
Navasota River near Easterly	08110500	968	SC	1942-43, 1947
Navasota River near Bryan	08111000	1,454	SC, T	1959-81, 1976-81
Brazos River near Richmond	08114000	45,007	S	1966-86
Brazos River near Rossharon	08116650	45,399	SC, T	1969-80
Brazos River at Harris Reservoir near Angleton	08116700	44,000	SC	1962-77
			T	1967-77
Brazos River at Brazoria Reservoir near Brazoria	08117200	44,000	SC	1962-77
			T	1967-77
San Bernard River near Boling	08117500	727	SC, T	1978-81

WATER RESOURCES DATA—TEXAS, 1996

VOLUME 2

SAN JACINTO RIVER BASIN, BRAZOS RIVER BASIN, SAN BERNARD RIVER BASIN, AND INTERVENING COASTAL BASINS

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with Federal, State, and City agencies, obtains a large amount of data pertaining to the water resources of Texas each water year. Such data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the U.S. Geological Survey, the data are published annually in four volumes of this report series entitled "Water Resources Data - Texas."

This report series includes records of stage, discharge, and water quality of streams and canals; stage, contents, and water quality of lakes and reservoirs and water levels and water quality of ground-water wells. Volume 2 contains records for water discharge at 74 gaging stations; stage only at 6 gaging stations; stage and contents at 19 lakes and reservoirs; and water quality at 41 gaging stations. Also included are data for 44 partial-record stations comprised of 18 flood-hydrograph, 10 low-flow, and 16 crest stage stations. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating Federal, State, and City agencies in Texas.

This series of annual reports for Texas began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report was changed to its present format, with data on quantities and quality of surface water contained in each of three volumes. Ground-water levels and water quality have been published in a separate volume beginning with the 1991 water year.

Prior to introduction of this series and for several water years concurrent with it, water resources data for Texas were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-

Water Supply of the United States, Parts 7 and 8." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Bldg. 41, Box 25425 Denver, CO 80225.

Publications similar to this report are published annually by the U.S. Geological Survey for all States. These official U.S. Geological Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water Data Report TX-96-2." For archiving and general distribution, the reports for the 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or may be purchased on microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including the current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (512) 873-3000.

COOPERATION

Federal agencies that assisted the U.S. Geological Survey in the collection of data in this report in the form of funds or services in 1996 are:

- ☐ Corps of Engineers, U.S. Army.
- ☐ International Boundary and Water Commission, United States and Mexico, U.S. Section.
- ☐ U.S. Bureau of Reclamation.

Organizations that assisted in the collection of data in this report through joint funding agreements through the Texas Water Development Board or through direct joint funding agreements with the U.S. Geological Survey are:

Texas Water Development Board, G.E. Kretzschmar, Executive Administrator; the cities of Abilene, Arlington, Austin, Corpus Christi, Fort Worth, Gainesville, Garland, Georgetown, Graham, Houston, Lubbock, Nacogdoches, San Angelo, and Wichita Falls; Bexar, Medina, and Atascosa Counties Water Improvement District No. 1; Barton Springs/Edwards Aquifer Conservation District; Brazos River Authority; Canadian Municipal Water Authority; Coastal Water Authority; Colorado River Municipal Water District; Dallas Public Works Department; Dallas Water Utilities; Edwards Underground Water District; Fort Bend Subsidence District; Franklin County Water District; Galveston County; Greenbelt Municipal and Industrial Water Authority; Guadalupe-Blanco River Authority; Harris-Galveston Coastal Subsidence District; Harris County Flood Control District; Houston-Galveston Area Council; Lavaca-Navidad River Authority; Lower Colorado River Authority; Lower Neches Valley Authority; North Central Texas Council of Governments; North Central Texas Municipal Water Authority; Northeast Texas Municipal Water District; North Texas Municipal Water District; Pecos River Commission; Red Bluff Water Power Control District; Red River Authority; Sabine River Authority of Texas; Sabine River Compact Administration; San Antonio City Public Service Board; San Antonio River Authority; San Antonio Water System; San Jacinto River Authority; Somervell County Water District; Tarrant Regional Water District; Texas Soil & Water Conservation Board; Texas State Department of Highways & Public Transportation; Texas Natural Resources Conservation Commission; Texas Water Development Board; Titus County Fresh Water Supply District No. 1; Trinity River Authority; Upper Guadalupe River Authority; Upper Neches River Municipal Water Authority; West Central Texas Municipal Water District; and Wichita County Water Improvement District No. 2.

HYDROLOGIC CONDITIONS

Large variations in precipitation, runoff, and streamflow characterize the usual hydrologic conditions in Texas. In the eastern part of the State, streams typically are deep with wide alluvial flood plains, and streamflow is perennial. In the western part of the State, most streams flow through arroyos, and streamflow usually is ephemeral.

Although drought conditions occurred in places, streamflow throughout the State during water year 1996 ranged from normal (discharges between the 25 percentile and the 75 percentile of record) to above normal (discharges within the upper 25 percentile of record).

Conservation storage in 77 selected reservoirs throughout the State, with a combined conservation capacity of 34,558,000 acre-feet, decreased from 82 percent at the end of September 1995 to 72 percent at the end of September 1996. Records from these reservoirs indicate that storage increased in 12, decreased in 60, and remained the same in 5.

The area for which water resources data are presented in volume 2 extends from the New Mexico border in northwestern Texas, southeastward across the central part of the State, to the upper middle Texas Gulf Coast. Normal annual precipitation ranges from less than 17 inches in the westernmost part of the area to nearly 50 inches along the Texas Gulf Coast. Average annual runoff ranges from less than 1 inch in the west to more than 15 inches in places along the Texas Gulf Coast. The area described in volume 2 and the location of selected streamflow-gaging stations in the area are shown in figure 1.

Streamflow

Streamflow ranged from normal to above normal during water year 1996 in the area covered in volume 2. Streamflow for water year 1996 and for the period of record at six selected stations (fig. 1) for which data are included in volume 2 is presented in table 1.

At the four long-term hydrologic index stations in the State, monthly mean streamflow during water year 1996 ranged from below normal to above normal. Monthly mean discharges for water year 1996 and the median of the long-term monthly means for water years 1961–90 for the four long-term hydrologic index stations in the State are shown in figure 2. Streamflow at the hydrologic index station North Bosque River near Clifton was below normal during May, above normal during November, August, and September, and normal for the remaining 8 months of water year 1996. Streamflow at the station Neches River near Rockland was normal during October, November, and December, above normal in August and September, and below normal for the remaining 7 months. The station North Concho River near Carlsbad had below normal streamflow during May, above normal streamflow during August and September, and normal streamflow for the remaining 9 months. Streamflow for the station Guadalupe River near Spring Branch was below normal from February through

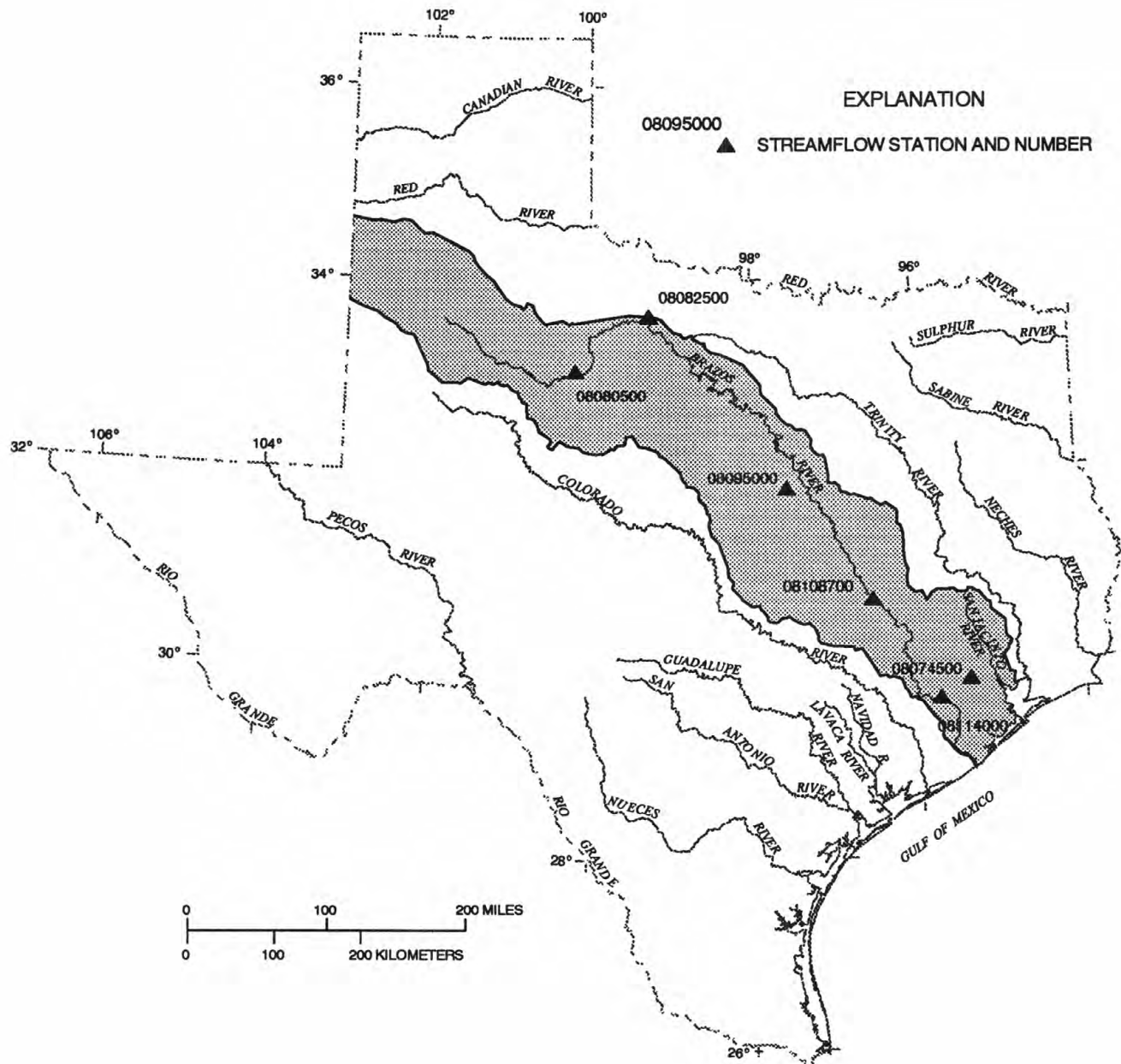


Figure 1. Area of Texas covered by volume 2 (shaded) and location of selected streamflow stations in volume 2.

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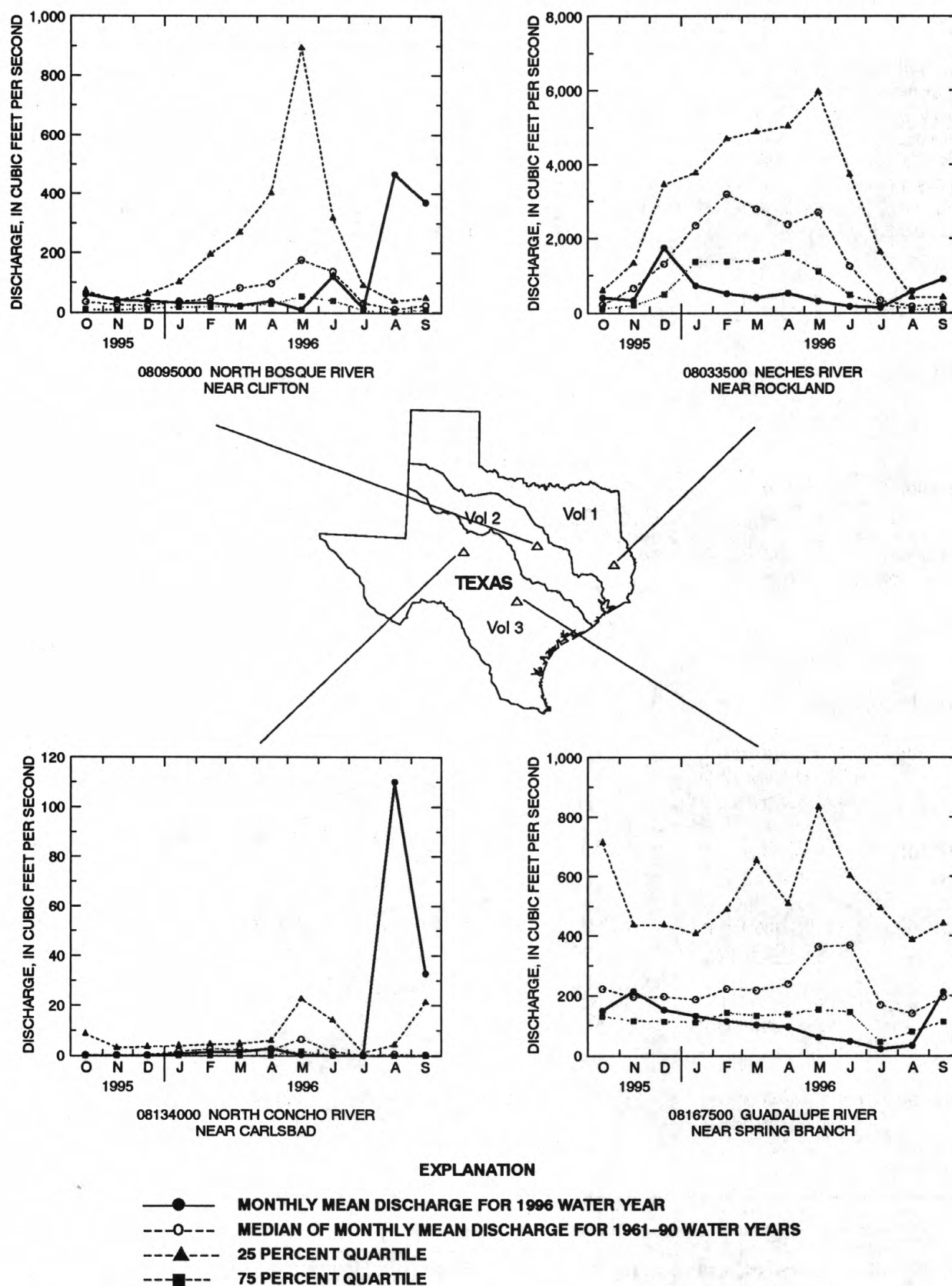


Figure 2. Monthly mean discharges at four long-term hydrologic index stations during 1996 water year and median of the monthly mean discharges for 1961–90 water years.

5

Water Quality

Dissolved-solids concentrations in most streams in the State are inversely related to streamflow discharges. During years when precipitation and runoff are less than normal, streamflow commonly is more mineralized than during years when precipitation and runoff are normal or greater than normal. However, for streams in which discharge is controlled by reservoirs, the dissolved-solids concentrations may remain relatively constant despite substantial fluctuations in precipitation and runoff.

Station no. and name	Discharge during 1996 water year (cubic feet per second)			Discharge during period of record (cubic feet per second)		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean
	instantaneous	daily mean		instantaneous	daily mean	
<u>San Jacinto River Basin</u>						
08074500 Whiteoak Bayou at Houston, Tex.	9,630	28	112	25,100	0.20 (1936-96)	98.2
<u>Brazos River Basin</u>						
08080500 Double Mountain Fork Brazos River nr Aspermont, Tex.	2,670	0	32.5	91,400	0 (1924-96)	152
08082500 Brazos River at Seymour, Tex.	15,300	0	179	95,400	0 (1924-96)	368
08095000 North Bosque River near Clifton, Tex. 1/	17,200	2.4	104	200,000	.01 (1968-96)	230
08108700 Brazos River at State Hwy. 21 near Bryan, Tex.	16,300	169	1,212	38,500	169 (1993-96)	3,450
08114000 Brazos River at Richmond, Tex.	24,700	276	1,885	119,000	55 (1941-96)	7,500

1/ Hydrologic index station.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of the constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NAPD/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NAPD>

National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. There are currently two NAWQA Programs operating in Texas; the Trinity NAWQA and the South Central Texas NAWQA.

Additional information about the NAWQA Program is available through the world wide web at:

http://www.rvares.er.usgs.gov/nawqa/nawqa_home.html
<http://www.cr.usgs.gov/trin/index.html>
<http://www.cr.usgs.gov/sctx/index.html>

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1996 water year that began October 1, 1995, and ended September 30, 1996. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface water. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Texas, for surface-water stations where only miscellaneous measurements are made.

Downstream Order Numbering

Since October 1, 1950, the order of listing hydrologic-station records in U.S. Geological Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 08057000, which appears just to the left of the station name, includes the 2-digit Part number "08" plus the 6-

digit downstream-order number "057000." The Part number designates the major river basin; for example, Part "08" is the Western Gulf of Mexico basin.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the U.S. Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) Logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. 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 determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations, that the daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the 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.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves, or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may increase in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For 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 from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consists of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly-mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given

for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years which the revisions apply to. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level, and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error. Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscripts published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check, because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table for stream-gaging stations gives 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"). Figures for cubic feet per second per square mile and runoff 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 figures shown are the appropriate discharges for the calendar and water

years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the daily mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period, expressed as "FOR WATER YEARS ____-____, BY WATER YEAR (WY)," will list the first and last water years of the range selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS ____-____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. However, data for partial water years, if any, will only be used in the statistical calculations, if appropriate. For example, all of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period

of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the column heading. When this occurs, it should be noted in the REMARKS paragraph or in footnotes. Selected stream-flow duration curve statistics and runoff data are also given. Runoff data is omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period.

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

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

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent.

Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables, is on file in the Texas District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications.

A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin. A careful distinction needs to be made between "continuing records", as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values obtained by data logger. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the sam-

ples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory.

Procedures for on site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Detailed information on collecting, treating, and shipping samples may be obtained from the Texas Office of the Central Region Office.

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 for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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 a reported pH value and the relative abundance of carbon dioxide species (alkalinity), the inconsistency is 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 alkalinity in the laboratory.

For chemical-quality stations equipped with water-quality monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Texas District Office. The address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-

discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; 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 recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Texas District Office.

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 sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge-weighted average). Therefore, for those days when the published sediment discharge value 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 discharges of suspended sediment were estimated on the basis of water discharge, 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 predicting long-term sediment-discharge characteristics of the stream.

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally.

All other samples are analyzed in the U.S. Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Historical and current (1996) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radio-chemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. These periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

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REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remarks Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
e or E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (Organism may be observed rather than counted).

D Biological organism count equal to or greater than 15 percent (dominant).

& Biological organism estimated as dominant.

Dissolved Trace-Element Concentrations

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE: Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (303-491-5643).

ACCESS TO WATSTORE DATA

The National WATER Data STORage and RETrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the U.S. Geological Survey at the National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the District office (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

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 or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

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

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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 a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 24 hours at 35 °C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24

hours when incubated at +35 °C or -1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at +44.5 °C or -0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at +35 °C or -1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

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

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

Dry mass refers to the mass of residue present after drying in an oven at 105 °C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

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

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which 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, usually milliliters or liters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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

Color Unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

Control designates a feature downstream from the 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.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic-foot-per-second day [(ft³/s)/d] 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, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Cubic feet per second per square mile [(ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 mm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$d = - \sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Supplementary gage is a gage used to obtain additional data. A supplementary gage may be used in place of the principal gage if the latter is isolated or cut off from the channel, or registers only above (or below) a certain gage height. One or more supplementary gages may be used on bypass channels or overflow channels, or on streams that flow in several channels, each of which is rated independently.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Benchmark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (mg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, mg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 284 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are: (1) To obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for; (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs; (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics; and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

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 meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (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.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The U.S. Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either 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).

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

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter 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.

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, mass, or volume.

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

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

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).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they 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. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

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.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary

production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes and [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

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.

Sea level was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed-load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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 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 of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) \times discharge (ft^3/s) \times 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total-sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hard-board) for benthic organism collection, and plexi-glass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas

are computed from the best maps available at the time planimeted. All areas shown are those for the stage when the planimeted map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 mm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total-recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 mm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchal scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom Animal
 Phylum Arthropoda
 Class Insecta
 Order Ephemeroptera
 Family Ephemeridae
 Genus Hexagenia
 Species Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Com-

plete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1990, is called the "water year 1990."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate 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.

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

PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. **Water temperature-influential factors, field measurement, and data presentation**, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p.
- 1-D2. **Guidelines for collection and field analysis of ground-water samples for selected unstable constituents**, by W.W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 p.
- 2-D1. **Application of surface geophysics to ground-water investigations**, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 p.
- 2-D2. **Application of seismic-refraction techniques to hydrologic studies**, by F.P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 p.
- 2-E1. **Application of borehole geophysics to water-resources investigations**, by W.S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 p.
- 2-E2. **Borehole geophysics applied to ground-water investigations**, by W. Scott Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 p.
- 2-F1. **Application of drilling, coring, and sampling techniques to test holes and wells**, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 p.
- 3-A1. **General field and office procedures for indirect discharge measurements**, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 p.
- 3-A2. **Measurement of peak discharge by the slope-area method**, by Tate Dalrymple and M.A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 p.
- 3-A3. **Measurement of peak discharge at culverts by indirect methods**, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 p.
- 3-A4. **Measurement of peak discharge at width contractions by indirect methods**, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 p.
- 3-A5. **Measurement of peak discharge at dams by indirect methods**, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 p.
- 3-A6. **General procedure for gaging streams**, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 p.
- 3-A7. **Stage measurements at gaging stations**, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 p.
- 3-A8. **Discharge measurements at gaging stations**, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 p.
- 3-A9. **Measurement of time of travel in streams by dye tracing**, by F.A. Kilpatrick, and J.F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 p.
- 3-A10. **Discharge ratings at gaging stations**, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 p.
- 3-A11. **Measurement of discharge by moving-boat method**, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 p.
- 3-A12. **Fluorometric procedures for dye tracing**, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12, 1986. 41 p.
- 3-A13. **Computations of continuous records of streamflow**, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A13, 1983. 53 p.
- 3-A14. **Use of flumes in measuring discharge**, by F.A. Kilpatrick and V.R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 p.
- 3-A15. **Computation of water-surface profiles in open channels**, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 p.
- 3-A16. **Measurement of discharge using tracers**, by F.A. Kilpatrick and E.D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 p.
- 3-A17. **Acoustic velocity meter systems**, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 p.
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- 3-A19. **Levels of streamflow gaging stations**, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 p.
- 3-A20. **Simulation of soluble waste transport and buildup in surface waters using tracers**, by F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 p.
- 3-A21. **Stream-gaging cableways**, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 p.
- 3-B1. **Aquifer-test design, observation, and data analysis**, by R.W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 p.
- 3-B2. **Introduction to ground-water hydraulics, a programmed text for self instruction**, by G.D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 p.
- 3-B3. **Type curves for selected problems of flow to wells in confined aquifers**, by J.E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 p.

- 3-B4. *Regression modeling of ground-water flow*, by Richard L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley. USGS--TWRI Book 3, Chapter B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 p.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 p.
- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 p.
- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 p.
- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 p.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 p.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 p.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 p.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 p.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 p.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 p.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 p.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS--TWRI Book 6, Chapter A5. 1993. 243 p.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler. 1995. 125 p.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 p.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 p.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1983. 110 p.

WATER RESOURCES DATA—TEXAS, 1996

8-A1. ***Methods of measuring water levels in deep wells***, by M.S. Garber and F.C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 p.

8-A2. ***Installation and service manual for U.S. Geological Survey manometers***, by J.D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 p.

8-B2. ***Calibration and maintenance of vertical-axis type current meters***, by G.F. Smoot and C.E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 p.

0806/600 LAKE CONROE NEAR CONROE, TX

LOCATION.--Lat 30°21'30", long 95°33'39", Montgomery County, Hydrologic Unit 12040101, at service outlet tower at Conroe Dam on West Fork San Jacinto River, 140 ft upstream from centerline of dam, and 7.4 mi west of Conroe.

DRAINAGE AREA.--445 mi².

WATER-CONTENT RECORDS

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

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

REMARKS.--The lake is formed by an earthfill dam 11,300 ft long, including a controlled spillway. The dam was completed Sept. 1, 1972, and deliberate impoundment began Jan. 9, 1973. Water is used for municipal and industrial purposes in the Houston metropolitan area. A small diversion is also made for cooling purposes at the Gulf State Utilities generating plant on Lewis Creek Reservoir near Conroe. During the current year, 6,023 acre-ft were diverted to Lewis Creek Reservoir for that purpose. A spillway with five 40- x 30-foot tainter gates is located near the center of dam. Low-flow releases are made through a separate multi-gated inlet tower. The tower has three gated openings and one uncontrolled opening. It is connected to a stilling basin and a concrete weir by a 14-foot-diameter conduit through the dam. Figures given herein represent total contents. 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	513,100
Top of tainter gates.....	202.5	446,900
Top of conservation pool (uncontrolled tower outlet).....	201.0	416,200
Crest of spillway (sill of tainter gates).....	173.0	66,270
Lowest gated outlet (invert).....	144.5	40

COOPERATION.--The capacity table, furnished by the Texas Water Development Board dated July 19, 1996, is based on a survey of April 1996.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 534,900 acre-ft Oct. 17, 1994 (elevation, 205.61 ft); minimum since normal operating level was reached, 336,900 acre-ft Jan. 11, 1989 (elevation, 196.17 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 425,500 acre-ft Dec. 20, at 0200 hours (elevation, 201.46 ft); minimum daily, 385,400 acre-ft Aug. 18 (elevation, 199.39 ft).

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

196.0	325,500	200.0	396,700	204.0	479,100
197.0	342,400	201.0	416,200	205.0	501,500
198.0	360,000	202.0	436,400	206.0	524,700
199.0	378,100	203.0	457,400		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	407700	404900	400200	417200	415800	414900	409600	413100	406900	401600	389100	392100
2	411000	404900	400200	416400	415100	414700	409000	413100	407300	401200	388400	392500
3	410400	404900	400400	415300	414900	413900	409000	412900	407100	401000	388000	392500
4	410400	403000	400200	415500	413900	413900	409400	412700	406500	400600	387400	392500
5	410400	403000	400200	416600	413700	414300	410800	412900	405900	400100	387100	394700
6	409600	403000	400400	415800	414500	414900	410400	412900	405500	399700	386900	394700
7	409400	402400	400100	414700	414700	413700	410000	412900	405900	398900	386700	394700
8	408800	402400	402000	413500	414900	413900	410200	412700	405100	398300	386500	394300
9	408800	402000	400800	413500	415100	412900	409800	412700	404500	397900	386500	394500
10	407700	401400	400100	413500	415500	412300	409600	412900	403600	397700	386300	394500
11	407700	404000	399700	413700	415600	411900	409400	413300	403200	396900	387100	394500
12	407700	401600	399500	413700	415300	411700	409800	412700	402800	396700	386900	394500
13	407100	400600	399700	413500	414700	411600	409400	412300	402800	396200	386500	394100
14	407700	400600	399700	413500	414700	411900	410800	411900	402400	395800	387200	394100
15	407100	400600	400800	413700	415100	412100	409600	411400	402200	395600	386700	392800
16	406500	400600	401200	413700	414500	412100	408800	411400	402000	394900	386500	393000
17	406100	400400	412300	413500	414100	412100	408600	411200	401600	394900	386100	404700
18	405900	401000	420500	415100	413500	411900	408400	410400	401600	394700	385800	405700
19	405500	401000	425300	413900	414500	411600	408400	410000	401200	394500	385900	393000
20	406100	401400	425300	414300	414100	410800	408400	409600	401000	393900	385900	393000
21	406100	402800	424300	414300	414100	410400	408200	409600	400600	393900	385400	393000
22	404500	402200	422700	414100	413900	410000	411400	409200	400400	393400	386100	393000
23	403000	402800	420500	416200	414900	410000	410600	408600	401200	393400	387200	393000
24	404000	402000	418700	415300	414100	410200	409800	408400	401400	392600	387600	396700
25	404000	401400	417600	414700	414100	410400	409600	408000	401600	392300	387600	394900
26	403000	401000	417000	416600	414700	409800	409800	407800	401600	391900	387200	394900
27	402600	402200	417000	415100	415300	410200	409400	407800	401600	391200	386900	396700
28	402600	401200	417000	414900	415300	410000	409400	407700	402600	390800	387800	396700
29	402600	400400	416600	415100	415100	409800	413900	406900	402200	390400	389100	396700
30	402000	400200	416800	415600	---	410800	413300	407300	401800	390000	390400	396700
31	402000	---	416200	414900	---	410000	---	406700	---	389900	391900	---
MAX	411000	404900	425300	417200	415800	414900	413900	413300	407300	401600	391900	405700
MIN	402000	400200	399500	413500	413500	409800	408200	406700	400400	389900	385400	392100
(+)	200.27	200.18	201.00	200.93	200.94	200.68	200.85	200.51	200.26	199.63	199.74	200.00
(@)	-13500	-1800	+16000	-1500	+200	-5100	+3500	-6600	-4900	-11900	+2000	+4800
CAL YR 1995	MAX 461300	MIN 399500	(@) 15600									
WTR YR 1996	MAX 425300	MIN 385400	(@) -24500									

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre-feet.

SAN JACINTO RIVER MAIN STEM

08067600 LAKE CONROE NEAR CONROE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: September 1973 to current year.

302127095335501 - LAKE CONROE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	
FEB													
06...	1045	414000	1.00	165	7.7	8.5	1.00	11.5	97	51	14	18	
06...	1047	--	10.0	165	7.6	8.5	--	11.2	94	--	--	--	
06...	1049	--	20.0	165	7.6	8.5	--	11.2	94	--	--	--	
06...	1051	--	30.0	165	7.6	8.5	--	11.3	95	--	--	--	
06...	1053	--	40.0	170	7.5	8.5	--	11.0	93	--	--	--	
06...	1055	--	54.0	170	7.4	8.5	--	10.7	90	54	15	19	
JUN													
19...	0936	401000	1.00	190	7.9	28.5	1.40	6.9	89	59	5	21	
19...	0938	--	10.0	190	7.1	27.5	--	5.3	67	--	--	--	
19...	0940	--	20.0	190	6.9	26.5	--	3.7	46	--	--	--	
19...	0942	--	30.0	190	6.8	26.0	--	1.9	23	--	--	--	
19...	0944	--	40.0	190	6.9	25.0	--	1.2	15	--	--	--	
19...	0946	--	51.0	220	7.0	22.0	--	0.8	9	70	0	25	
AUG													
14...	1040	387000	1.00	195	8.4	30.0	0.70	7.0	93	62	5	22	
14...	1042	--	10.0	195	7.2	29.5	--	3.6	47	--	--	--	
14...	1044	--	20.0	195	7.1	29.0	--	2.8	37	--	--	--	
14...	1046	--	30.0	195	6.9	28.0	--	0.6	8	--	--	--	
14...	1048	--	40.0	215	6.9	25.0	--	0.4	5	--	--	--	
14...	1050	--	49.0	230	6.8	24.0	--	0.4	5	70	0	25	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
FEB													
06...	1.5	9.6	0.6	2.5	3/	6.6	14	<0.10	7.1	83	0.270	0.270	
06...	--	--	--	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	--	0.240	0.240	
06...	--	--	--	--	--	--	--	--	--	--	--	--	
06...	1.5	9.7	0.6	2.5	39	6.7	19	0.10	7.3	90	0.240	--	
JUN													
19...	1.7	10	0.6	2.8	54	8.0	16	0.10	3.7	96	--	--	
19...	--	--	--	--	--	--	--	--	--	--	--	--	
19...	--	--	--	--	--	--	--	--	--	--	--	--	
19...	--	--	--	--	--	--	--	--	--	--	--	--	
19...	--	--	--	--	--	--	--	--	--	--	--	--	
19...	1.9	9.5	0.5	2.7	72	8.1	19	0.10	5.2	122	--	--	
AUG													
14...	1.8	11	0.6	3.8	57	7.6	17	0.10	5.4	103	--	--	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	1.9	10	0.5	3.0	84	1.7	16	0.10	13	130	--	--	

0806/600 LAKE CONROE NEAR CONROE, TX--Continued

302127095335501 - LAKE CONROE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
FEB										
06...	0.010	0.280	0.280	0.020	0.28	0.30	0.030	0.010	10	<10
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	0.010	0.250	0.250	0.030	0.37	0.40	0.030	<0.010	10	<10
06...	--	--	--	--	--	--	--	--	--	--
06...	<0.010	0.240	0.240	0.030	0.27	0.30	<0.010	<0.010	20	<10
JUN										
19...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	5.0	15
19...	--	--	--	--	--	--	--	--	--	--
19...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	6.0	47
19...	<0.010	--	<0.050	0.030	0.27	0.30	<0.010	0.010	76	250
19...	--	--	--	--	--	--	--	--	--	--
19...	<0.010	--	<0.050	0.550	0.25	0.80	0.250	0.290	2000	4000
AUG										
14...	<0.010	--	<0.050	0.060	0.34	0.40	<0.010	0.010	5.0	17
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	<0.010	--	<0.050	0.140	0.36	0.50	<0.010	0.010	110	370
14...	--	--	--	--	--	--	--	--	--	--
14...	<0.010	--	<0.050	1.60	0.30	1.9	0.360	0.360	1900	3800

302132095333701 - LAKE CONROE SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB								
06...	1115	1.00	160	7.7	8.5	0.90	11.4	96
06...	1117	10.0	160	7.6	8.5	--	11.3	95
06...	1119	20.0	160	7.6	8.5	--	11.3	95
06...	1121	30.0	160	7.6	8.5	--	11.3	95
06...	1123	40.0	160	7.6	8.5	--	11.3	95
06...	1125	55.0	160	7.6	8.5	--	11.3	95
JUN								
19...	0958	1.00	190	7.8	28.5	--	6.8	88
19...	1000	10.0	190	7.5	28.0	--	6.4	82
19...	1002	20.0	190	7.0	26.5	--	3.6	45
19...	1004	30.0	190	6.9	26.0	--	2.8	35
19...	1006	40.0	190	7.0	24.5	--	0.8	10
19...	1008	50.0	215	7.1	22.0	--	0.8	9
19...	1010	63.0	220	7.1	21.5	--	0.8	9
AUG								
14...	1105	1.00	195	8.6	30.0	0.80	7.2	96
14...	1107	10.0	195	7.9	29.5	--	5.5	72
14...	1109	20.0	195	7.2	29.0	--	3.2	42
14...	1111	30.0	195	7.0	28.0	--	0.5	6
14...	1113	40.0	215	7.0	25.5	--	0.4	5
14...	1115	50.0	230	6.9	23.5	--	0.4	5
14...	1117	62.0	230	6.9	23.5	--	0.5	6

302245095365301 - LAKE CONROE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB								
06...	1010	1.00	160	7.8	8.5	0.80	11.6	98
06...	1012	10.0	160	7.7	8.0	--	11.9	99
06...	1014	20.0	160	7.7	7.5	--	11.9	98
06...	1016	28.0	170	7.4	7.5	--	11.7	96
JUN								
19...	0920	1.00	190	8.0	29.0	--	6.9	90
19...	0922	10.0	190	7.4	28.5	--	5.8	75
19...	0924	20.0	190	6.7	26.5	--	1.8	22
19...	0926	28.0	195	6.7	26.5	--	1.2	15
AUG								
14...	1025	1.00	195	8.5	30.0	0.58	6.8	90
14...	1027	10.0	195	8.4	30.0	--	6.8	90
14...	1029	20.0	200	6.9	29.5	--	1.2	16
14...	1031	27.0	200	6.8	29.0	--	0.4	5

SAN JACINTO RIVER MAIN STEM

08067600 LAKE CONROE NEAR CONROE, TX--Continued

302323095341201 - LAKE CONROE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB								
06...	1150	1.00	160	7.8	9.0	0.80	11.4	97
06...	1152	10.0	160	7.7	8.5	--	11.2	94
06...	1154	20.0	160	7.7	8.5	--	11.2	94
06...	1156	30.0	160	7.7	8.5	--	11.2	94
06...	1158	40.0	160	7.6	8.5	--	11.2	94
06...	1200	50.0	160	7.6	8.5	--	11.2	94
JUN								
19...	1018	1.00	190	7.8	28.5	--	6.5	84
19...	1020	10.0	190	7.6	28.5	--	6.3	81
19...	1022	20.0	190	6.9	27.0	--	3.2	40
19...	1024	30.0	190	7.0	26.0	--	2.1	26
19...	1026	40.0	200	7.0	24.5	--	0.8	10
19...	1028	47.0	210	7.1	24.0	--	0.9	11
AUG								
14...	1130	1.00	190	8.6	30.0	0.80	7.2	96
14...	1132	10.0	190	8.4	29.5	--	6.6	87
14...	1134	20.0	195	7.8	29.0	--	4.9	64
14...	1136	30.0	200	7.0	28.0	--	0.5	6
14...	1138	40.0	220	7.0	25.5	--	0.5	6
14...	1140	53.0	230	6.9	24.5	--	0.5	6

302320095334001 - LAKE CONROE SITE CL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB								
06...	1208	1.00	160	7.8	9.0	0.80	11.4	97
06...	1210	10.0	160	7.7	8.5	--	11.2	94
06...	1212	20.0	160	7.7	8.5	--	11.1	93
06...	1214	30.0	160	7.6	8.5	--	11.0	93
06...	1216	42.0	160	7.6	8.5	--	11.0	93
JUN								
19...	1033	1.00	190	7.6	28.5	--	6.2	80
19...	1035	10.0	190	7.5	28.0	--	6.0	77
19...	1037	20.0	190	7.1	27.5	--	4.9	62
19...	1039	30.0	190	6.9	26.0	--	2.6	32
19...	1041	41.0	190	6.9	25.5	--	1.4	17
AUG								
14...	1145	1.00	190	8.6	30.0	0.90	7.1	94
14...	1147	10.0	190	8.3	29.5	--	6.2	82
14...	1149	20.0	195	7.3	29.0	--	3.3	43
14...	1151	30.0	200	7.1	28.5	--	1.2	16
14...	1153	42.0	220	7.0	25.5	--	0.6	7

302448095374101 - LAKE CONROE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB								
06...	1230	1.00	160	7.7	8.5	0.80	11.7	99
06...	1232	10.0	160	7.6	8.0	--	11.5	96
06...	1234	20.0	160	7.5	8.0	--	11.3	94
06...	1236	26.0	160	7.3	8.0	--	11.2	93
JUN								
19...	1052	1.00	185	8.0	29.5	--	6.6	87
19...	1054	10.0	185	7.8	29.0	--	6.3	82
19...	1056	20.0	190	6.9	28.0	--	2.5	32
19...	1058	27.0	190	6.9	27.5	--	2.1	27
AUG								
14...	1220	1.00	195	8.7	30.5	0.60	7.1	95
14...	1222	10.0	195	8.5	30.0	--	6.2	82
14...	1224	20.0	200	7.1	29.5	--	0.7	9
14...	1226	26.0	210	7.2	29.5	--	0.7	9

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08067600 LAKE CONROE NEAR CONROE, TX--Continued

302607095360901 - LAKE CONROE SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATURATION)	HARDNESS TOTAL (MG/L AS CaCO3)	HARDNESS DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
FEB												
06...	1300	1.00	160	7.9	9.0	0.72	11.8	101	51	11	18	1.5
06...	1302	10.0	160	7.6	8.5	--	11.3	95	--	--	--	--
06...	1304	20.0	160	7.6	8.0	--	11.3	94	--	--	--	--
06...	1306	30.0	155	7.6	8.0	--	11.3	94	--	--	--	--
06...	1308	37.0	155	7.6	8.0	--	11.3	94	51	13	18	1.5
JUN												
19...	1105	1.00	185	8.2	29.5	1.40	6.9	91	62	8	22	1.7
19...	1107	10.0	185	8.0	29.0	--	6.6	86	--	--	--	--
19...	1109	20.0	190	7.4	28.5	--	5.4	70	--	--	--	--
19...	1111	30.0	190	6.8	26.0	--	0.9	11	--	--	--	--
19...	1113	37.0	190	6.9	26.0	--	0.9	11	62	5	22	1.8
AUG												
14...	1235	1.00	195	8.7	30.5	0.60	7.4	99	65	8	23	1.9
14...	1237	10.0	195	8.4	30.0	--	6.3	84	--	--	--	--
14...	1239	20.0	195	7.9	29.5	--	4.7	62	--	--	--	--
14...	1241	30.0	200	7.1	28.5	--	0.8	10	--	--	--	--
14...	1243	37.0	225	7.1	28.0	--	0.6	8	73	0	26	2.0

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY WATER DIS-SOLVED FIELD (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB											
06...	9.7	0.6	2.5	40	6.7	17	0.10	7.0	88	0.230	0.230
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	9.4	0.6	2.5	38	6.6	14	<0.10	7.1	83	0.240	--
JUN											
19...	10	0.6	2.8	54	8.0	16	0.10	3.5	96	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	10	0.6	2.8	57	7.5	15	0.10	5.8	100	--	--
AUG											
14...	11	0.6	3.0	57	7.6	17	0.10	5.9	104	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	11	0.6	3.1	82	3.3	16	0.10	8.2	124	--	--

DATE	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
FEB											
06...	0.010	0.240	0.240	<0.015	--	0.30	0.010	<0.010	--	20	<10
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<0.010	0.240	0.240	0.020	0.28	0.30	0.010	<0.010	--	10	<10
JUN											
19...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	5.0	10
19...	--	--	--	--	--	--	--	--	--	--	--
19...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<3.0	33
19...	--	--	--	--	--	--	--	--	--	--	--
19...	<0.010	--	<0.050	0.060	0.34	0.40	<0.010	<0.010	--	6.0	490
AUG											
14...	<0.010	--	<0.050	0.020	0.38	0.40	<0.010	<0.010	--	<3.0	25
14...	--	--	--	--	--	--	--	--	--	--	--
14...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	11	220
14...	--	--	--	--	--	--	--	--	--	--	--
14...	<0.010	--	<0.050	1.20	0.20	1.4	0.110	0.150	0.46	470	2600

SAN JACINTO RIVER MAIN STEM

08067600 LAKE CONROE NEAR CONROE, TX--Continued

302714095372201 - LAKE CONROE SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB								
06...	1334	1.00	160	7.7	8.0	0.70	11.7	97
06...	1336	10.0	160	7.6	8.0	--	11.6	97
06...	1338	21.0	160	7.5	7.5	--	11.5	95
JUN								
19...	1130	1.00	185	7.8	29.5	--	6.1	80
19...	1132	10.0	185	7.8	29.5	--	6.1	80
19...	1134	20.0	190	7.1	29.0	--	2.3	30
AUG								
14...	1255	1.00	195	8.8	31.0	0.60	7.0	95
14...	1257	10.0	195	8.6	31.0	--	6.1	82
14...	1259	18.0	200	7.5	30.0	--	2.3	31

303129095360501 - LAKE CONROE SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLO. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB												
06...	1535	1.00	150	7.6	7.5	0.42	12.2	101	46	11	16	1.5
06...	1537	10.0	160	7.4	6.5	--	11.7	94	--	--	--	--
06...	1539	20.0	160	7.4	6.5	--	11.6	93	--	--	--	--
06...	1541	27.0	165	7.3	6.5	--	11.5	93	46	10	16	1.5
JUN												
19...	1203	1.00	205	7.7	30.5	0.70	6.0	80	63	6	22	1.9
19...	1205	10.0	205	7.7	30.5	--	5.6	75	--	--	--	--
19...	1207	20.0	210	7.4	30.0	--	5.1	68	--	--	--	--
19...	1209	27.0	210	7.4	30.0	--	4.9	65	66	9	23	2.0
AUG												
14...	1330	1.00	205	8.2	30.0	0.40	5.5	73	68	8	24	2.0
14...	1332	10.0	210	7.4	30.0	--	2.9	39	--	--	--	--
14...	1334	20.0	215	7.2	30.0	--	1.5	20	--	--	--	--
14...	1336	25.0	215	7.2	30.0	--	1.1	15	69	8	24	2.1

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
FEB											
06...	10	0.6	2.8	35	7.3	17	<0.10	7.9	85	0.220	0.220
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	12	0.8	3.2	36	8.6	18	<0.10	11	93	0.310	--
JUN											
19...	10	0.5	2.8	57	8.5	22	0.10	5.1	112	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	12	0.6	3.1	57	8.6	20	0.10	6.0	109	--	--
AUG											
14...	13	0.7	3.3	60	7.6	19	0.10	8.4	113	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	13	0.7	3.3	61	7.4	20	0.10	8.9	116	--	--

0806/600 LAKE CONROE NEAR CONROE, TX--Continued

303129095360501 - LAKE CONROE SITE GC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
FEB											
06...	0.010	0.230	0.230	0.020	0.38	0.40	0.020	<0.010	--	10	<10
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<0.010	0.310	0.310	0.050	0.35	0.40	0.020	0.010	0.03	30	<10
JUN											
19...	<0.010	--	<0.050	<0.015	--	0.30	0.030	<0.010	--	1900	4000
19...	--	--	--	--	--	--	--	--	--	--	--
19...	<0.010	--	<0.050	<0.015	--	0.60	<0.010	<0.010	--	<3.0	54
19...	<0.010	--	<0.050	0.030	0.37	0.40	<0.010	<0.010	--	7.0	91
AUG											
14...	<0.010	--	<0.050	0.040	0.66	0.70	<0.010	<0.010	--	<3.0	16
14...	<0.010	--	<0.050	0.080	0.42	0.50	<0.010	<0.010	--	<3.0	79
14...	--	--	--	--	--	--	--	--	--	--	--
14...	<0.010	--	<0.050	0.210	0.29	0.50	<0.010	<0.010	--	<3.0	200

LOCATION.--Lat 30°20'31", long 95°32'34", Montgomery County, Hydrologic Unit 12040101, on right bank at downstream side of bridge on State Highway 105, 3.0 mi downstream from Lake Conroe Dam, and 5.9 mi west of Conroe.

PERIOD OF RECORD.--August 1972 to 1989 (discharge for periods of outflow from Lake Conroe only), Oct. 1989 to Sept. 1993 (daily discharges 10 ft³/s or greater), Oct. 1993 to Sept. 1994 (daily discharges 100 ft³/s or greater), Oct. 1994 to current year (daily discharges 20 ft³/s or greater).

Water-quality records.--Chemical, biochemical and pesticide analyses: October 1972 to September 1986, and October 1987 to August 1989.

REVISIONS.--The maximum discharge for calendar year 1994 and water year 1995 has been revised to 56,000 ft³/s, Oct. 17, 1994, gage height 42.68 ft, from floodmark; revised daily discharges are given as follows. These figures supersede those in the report WDR IX-95-2.

GAGE.--Water-stage recorder. Datum of gage is 116.06 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. Daily discharges below 20 ft³/s are not published.

AVERAGE DISCHARGE.--1/ years (water years 1973-89), 226 ft³/s (163,700 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,000 ft³/s Oct. 17, 1994 (gage height, 42.68 ft); no flow for many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1940 reached a stage of 41.94 ft, from information by the Texas Department of Transportation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,460 ft³/s Dec. 18 at 0830 hours (gage height, 23.45 ft).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

[illegible]

08068000 WLST FORK SAN JACINTO RIVER NEAR CONROE, TX

LOCATION.--Lat 30°14'40", long 95°27'25", Montgomery County, Hydrologic Unit 12040101, near right bank at downstream side of pier of bridge on Interstate Highway 45 and U.S. Highway 75, 300 ft upstream from Missouri Pacific Railroad Co. bridge, 3.5 mi downstream from Lake Creek, 4.2 mi south of Conroe, and at mile 79.

DRAINAGE AREA.--828 mi².

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

Water-quality records.--Chemical and biochemical analyses: March 1959 to September 1994. Pesticide analyses: May 1975 to June 1982. Sediment records: February 1966 to September 1967, October 1974 to September 1994. Specific conductance: October 1961 to September 1990. Water temperature: October 1961 to September 1990. Dissolved oxygen: August 1979 to May 1981.

REVISED RECORDS.--WSP 1058: 1926. WSP 1732: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 95.03 ft above sea level. May 7, 1924, to Sept. 30, 1927, nonrecording gage at railroad bridge 285 ft downstream at datum 30.10 ft higher. July 13, 1939, to Sept. 30, 1963, water-stage recorder at datum 5.0 ft higher.

REMARKS.--Records fair. Since Jan. 9, 1973, flow regulated by Lake Conroe (station 08067600), capacity 532,000 acre-ft, 14.5 mi upstream from station. There are no large diversions above station. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--36 years (water years 1925-27, 1940-72) prior to regulation by Lake Conroe, 477 ft³/s (345,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1925-27, 1940-72).--Maximum discharge, 110,000 ft³/s Nov. 25, 1940 (gage height, 30.85 ft), present datum, from rating curve extended above 43,000 ft³/s on basis of velocity-area studies; no flow June 14, 1956, and Sept. 19 to Oct. 1, 1965, result of temporary dams. Maximum stage since at least December 1913, that of Nov. 25, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1913 reached a stage of 30.2 ft, present site and datum, from information by Missouri Pacific Railroad Co., discharge 101,000 ft³/s, from rating curve as explained above.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	108	e23	e100	55	50	24	261	30	23	19	99
2	28	90	e23	76	48	32	25	329	26	20	19	109
3	102	63	e22	88	61	30	25	195	22	19	16	128
4	51	49	e22	71	51	27	25	110	29	16	15	88
5	33	33	e22	64	45	27	25	69	22	15	15	59
6	239	32	e22	256	42	28	26	55	22	15	15	e56
7	219	39	e21	362	57	72	27	49	21	15	15	e120
8	95	34	e24	96	54	79	29	44	21	15	14	e60
9	57	29	e45	58	51	47	55	41	21	16	14	78
10	48	29	e38	47	47	34	42	40	22	23	83	179
11	40	30	e32	46	44	30	34	36	22	22	65	73
12	37	46	e27	e44	47	31	27	32	21	20	251	45
13	32	28	e26	e42	38	31	24	31	21	19	73	36
14	30	25	e24	e40	33	30	18	31	29	16	44	33
15	29	24	e23	e38	33	30	19	31	42	15	33	31
16	27	22	48	e40	39	30	39	31	21	15	e30	34
17	25	25	516	47	51	30	24	31	19	15	e25	30
18	24	41	2030	57	31	29	19	31	31	16	e24	42
19	22	39	1810	108	31	66	17	30	20	14	e22	52
20	31	47	2990	56	34	35	16	30	19	13	e28	42
21	27	33	3970	48	34	36	14	30	18	12	33	40
22	24	30	1960	47	32	33	19	30	18	11	107	33
23	22	e28	1190	49	31	29	69	30	18	11	107	29
24	20	e27	e950	66	31	22	44	30	35	19	70	169
25	20	e25	e700	56	31	22	44	26	43	26	35	225
26	21	e24	e450	58	31	33	40	26	46	e28	28	173
27	23	e24	e300	90	31	30	36	23	29	e33	41	841
28	21	e23	e150	64	31	24	31	23	24	e31	101	330
29	19	e22	e120	54	43	23	102	23	41	e31	283	171
30	22	e23	e100	53	---	21	95	32	30	e25	328	123
31	23	---	e300	57	---	20	---	34	---	19	143	---
TOTAL	1440	1092	17978	2378	1187	1061	1034	1814	783	588	2096	3528
MEAN	46.5	36.4	580	76.7	40.9	34.2	34.5	58.5	26.1	19.0	67.6	118
MAX	239	108	3970	362	61	79	102	329	46	33	328	841
MIN	19	22	21	38	31	20	14	23	18	11	14	29
AC-FT	2860	2170	35660	4720	2350	2100	2050	3600	1550	1170	4160	7000

SAN JACINTO RIVER MAIN STEM

08068000 WEST FORK SAN JACINTO RIVER NEAR CONROE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1996#, BY WATER YEAR (WY)

MEAN	564	432	660	867	876	649	768	768	675	124	83.5	256
MAX	7836	2080	2064	2889	3258	1705	4185	4153	2609	392	368	1945
(WY)	1995	1975	1977	1995	1992	1995	1979	1983	1979	1989	1983	1979
MIN	18.8	25.7	31.4	44.5	40.9	34.2	34.5	37.6	26.1	19.0	18.9	21.0
(WY)	1991	1991	1981	1981	1996	1996	1996	1978	1996	1996	1981	1990

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1973 - 1996#

ANNUAL TOTAL	240631		34979		558	
ANNUAL MEAN	659		95.6		1444	1995
HIGHEST ANNUAL MEAN					95.6	1996
LOWEST ANNUAL MEAN					97200	Oct 18 1994
HIGHEST DAILY MEAN	15200	Jan 27	3970	Dec 21	11	Aug 20 1981
LOWEST DAILY MEAN	19	Sep 10	11	Jul 22	11	Aug 18 1981
ANNUAL SEVEN-DAY MINIMUM	21	Oct 23	13	Jul 17	115000	Oct 18 1994
INSTANTANEOUS PEAK FLOW			4700	Dec 21	32.30	Oct 18 1994
INSTANTANEOUS PEAK STAGE			14.97	Dec 21		
ANNUAL RUNOFF (AC-FT)	477300		69380		404300	
10 PERCENT EXCEEDS	1980		109		1500	
50 PERCENT EXCEEDS	74		31		95	
90 PERCENT EXCEEDS	24		19		24	

e Estimated

Period of regulated streamflow.

08068090 WEST FORK SAN JACINTO RIVER ABOVE LAKE HOUSTON NEAR PORTER, TX

LOCATION.--Lat 30°05'09", long 95°17'59", Montgomery County, Hydrologic Unit 12040101, on left bank, 4.4 mi southwest of Porter, 5.0 mi upstream from Spring Creek and 6.2 mi northwest of Humble.

DRAINAGE AREA.--962 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, at site 1.7 mi downstream, water years 1968-72, 1974-75. February to March 1984 (discharge measurements only), May 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 33 ft above sea level, from topographic map and levels.

REMARKS.--No estimated daily discharges. Records good. There is considerable regulation during high flow periods by Lake Conroe (capacity 532,000 acre-ft) 34.3 mi upstream. During periods of low base flow into Lake Houston, occasional releases are made from Lake Conroe in order to maintain water levels in Lake Houston, which has several large diversions. There are no large diversions upstream from station. There is only minor wastewater effluent being discharged by the city of Conroe and by other smaller communities into the river upstream from station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	101	28	479	90	96	42	227	40	45	23	389
2	66	415	27	185	81	88	47	542	43	37	21	233
3	239	142	26	162	84	69	46	450	89	32	19	229
4	224	113	26	138	88	61	49	239	64	30	18	171
5	98	67	26	111	78	59	53	139	42	28	18	104
6	134	50	25	195	71	58	54	98	36	27	17	81
7	362	43	25	602	79	52	56	80	33	27	18	151
8	218	43	25	366	96	127	61	69	31	25	20	84
9	110	38	29	142	91	79	67	62	29	24	20	84
10	75	35	47	103	82	58	89	57	28	356	32	341
11	62	35	40	92	78	50	77	56	28	107	113	272
12	53	33	31	84	72	49	69	55	27	44	402	123
13	48	40	29	86	76	48	108	50	26	33	242	73
14	47	31	28	75	66	47	75	47	27	32	100	54
15	44	28	28	70	64	46	56	44	33	31	59	51
16	42	27	29	68	60	47	54	42	44	44	46	54
17	40	28	615	67	72	47	80	40	29	31	34	45
18	38	34	3070	67	71	44	59	37	31	33	36	55
19	37	50	2860	103	60	51	57	37	46	37	31	195
20	40	56	2600	115	59	68	62	36	32	27	50	173
21	42	51	4030	74	57	52	67	34	29	25	40	114
22	39	39	2860	67	54	53	65	32	42	23	74	73
23	36	33	1650	67	52	45	167	31	63	21	415	52
24	32	30	1330	80	52	44	163	30	70	22	234	118
25	31	30	1030	95	50	44	86	31	102	34	159	991
26	31	29	687	78	50	44	64	30	163	32	78	497
27	35	29	368	107	50	58	56	30	82	37	71	2050
28	32	26	186	137	52	51	53	30	49	35	202	1710
29	31	25	143	99	74	48	75	29	42	36	684	725
30	31	27	138	88	---	50	335	31	59	47	1150	408
31	31	---	451	81	---	46	---	37	---	27	687	---
TOTAL	2398	1728	22487	4283	2009	1779	2392	2752	1459	1389	5113	9700
MEAN	77.4	57.6	725	138	69.3	57.4	79.7	88.8	48.6	44.8	165	323
MAX	362	415	4030	602	96	127	335	542	163	356	1150	2050
MIN	31	25	25	67	50	44	42	29	26	21	17	45
AC-FT	4760	3430	44600	8500	3980	3530	4740	5460	2890	2760	10140	19240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1996, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	1104	439	878	1176	1095	952	724	717	859	150	99.9	102	
MAX	10910	2259	1881	2726	3763	2041	2229	2174	3169	536	223	323	
(WY)	1995	1986	1992	1992	1992	1992	1991	1993	1993	1989	1995	1996	
MIN	22.2	29.8	42.7	138	69.3	57.4	73.0	59.4	42.0	40.5	30.5	33.5	
(WY)	1991	1991	1990	1996	1996	1996	1986	1988	1990	1994	1990	1990	

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1984 - 1996

	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1984 - 1996
ANNUAL TOTAL	251147	57489	
ANNUAL MEAN	688	157	698
HIGHEST ANNUAL MEAN			1694
LOWEST ANNUAL MEAN			157
HIGHEST DAILY MEAN	9950	4030	113000
LOWEST DAILY MEAN	15	17	15
ANNUAL SEVEN-DAY MINIMUM	17	19	17
INSTANTANEOUS PEAK FLOW		4250	130000
INSTANTANEOUS PEAK STAGE		19.21	40.10
ANNUAL RUNOFF (AC-FT)	498200	114000	505700
10 PERCENT EXCEEDS	2610	240	1920
50 PERCENT EXCEEDS	120	54	111
90 PERCENT EXCEEDS	30	28	33

a From floodmark.

SAN JACINTO RIVER MAIN STEM

08068090 WEST FORK SAN JACINTO RIVER ABOVE LAKE HOUSTON NEAR PORTER, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: February 1984 to current year. Pesticide analyses: February 1984 to September 1990.

INSTRUMENTATION.--Stage-activated water sampler since January 1985 provides water-quality samples over selected runoff events.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)	
JAN 30...		1155	88	388	8.1	16.5	10.3	106	68	24	100
JUN 05...		1030	43	318	7.6	25.0	6.9	83	250	130	67
AUG 16...		0945	48	420	7.0	28.0	6.5	83	170	440	71
DATE		HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CaCO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 30...		28	34	3.6	36	2	5.5	72	17	72	0.30
JUN 05...		0	21	3.5	52	3	5.0	67	16	71	0.20
AUG 16...		9	23	3.4	54	3	4.5	62	23	69	0.40
DATE		SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
JAN 30...		16	231	0.690	--	<0.010	0.690	0.690	<0.015	1.2	0.50
JUN 05...		15	229	0.820	0.820	0.080	0.900	0.900	0.360	1.9	0.64
AUG 16...		15	235	0.940	0.940	0.060	1.00	1.00	0.230	1.9	0.67
DATE		NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS Fe)	MANGA-NESE, DIS-SOLVED (UG/L AS Mn)
JAN 30...		--	0.20	0.50	0.190	0.130	0.110	0.34	6.9	40	40
JUN 05...		0.34	0.70	1.0	0.440	0.270	0.270	0.83	7.9	13	120
AUG 16...		0.27	0.50	0.90	0.250	0.130	0.160	0.49	8.2	8.0	50

08068500 SPRING CREEK NEAR SPRING, TX

LOCATION.--Lat 30°06'37", long 95°26'10", Harris-Montgomery County line, Hydrologic Unit 12040102, near right bank at downstream side of the northbound feeder road of Interstate Highway 45, 4,500 ft upstream from Missouri Pacific Railroad bridge, 2.4 miles northeast of Spring, Harris County and 4 miles downstream from Willow Creek.

DRAINAGE AREA.--409 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1939 to current year. From 1975 to 1995 published as "at Spring".

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 72.6 ft above sea level. Prior to Jan. 5, 1946, nonrecording gage, and Jan. 6, 1946, to Feb. 19, 1965, water-stage recorder at datum 5.5 ft higher. Feb. 16, 1976 to Sep. 30, 1995, water-stage recorder at former site 3.6 miles downstream at datum 10.43 ft lower; unadjusted for land-surface subsidence.

REMARKS.--Records good. No known diversions above station. Radio telemeter at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1879, 34.3 ft, May 30, 1929, from floodmarks identified by local residents, discharge, 48,300 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	1700	3,010	11.94	Sept. 27	1400	2,550	10.94

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e28	162	20	87	29	91	22	34	39	26	13	393
2	e38	436	18	57	30	53	20	41	35	19	13	253
3	e250	131	18	44	30	39	21	40	32	17	12	116
4	e130	49	18	40	29	33	21	37	30	16	11	69
5	e60	35	18	40	28	29	20	35	28	16	12	49
6	49	30	19	96	29	27	26	33	25	14	11	41
7	37	27	19	65	35	28	25	32	25	13	11	37
8	31	30	21	44	37	24	23	30	24	13	11	29
9	30	23	25	40	36	21	22	30	23	12	12	31
10	28	22	20	36	34	21	22	29	23	13	27	80
11	27	25	19	35	34	21	23	28	23	12	363	37
12	26	22	18	33	31	20	41	29	22	12	230	36
13	26	22	18	30	28	20	141	29	47	11	93	27
14	25	21	18	30	27	21	61	28	38	12	39	24
15	24	20	19	30	27	21	43	28	31	12	33	38
16	25	e19	19	30	26	20	35	28	32	12	24	59
17	24	22	1440	30	26	20	34	28	27	16	27	43
18	24	31	1500	34	25	21	33	26	26	13	22	90
19	24	44	829	32	25	20	31	25	32	13	156	292
20	25	38	490	31	25	19	33	26	28	12	272	577
21	23	34	410	32	24	19	37	25	25	12	90	953
22	22	32	146	32	24	19	48	24	26	12	148	1050
23	23	29	89	32	24	18	127	24	34	11	179	220
24	22	23	68	36	23	20	73	24	52	20	100	895
25	21	21	58	35	25	20	46	23	112	62	63	1460
26	24	20	52	35	25	19	37	23	87	24	62	497
27	24	20	47	39	25	20	33	23	39	21	90	1760
28	21	18	45	34	33	20	31	25	37	18	326	1660
29	21	18	43	34	90	20	42	24	193	17	333	1010
30	22	17	55	33	---	21	40	25	46	15	1130	251
31	22	---	147	32	---	21	---	38	---	14	505	---
TOTAL	1176	1441	5726	1238	884	786	1211	894	1241	510	4418	12077
MEAN	37.9	48.0	185	39.9	30.5	25.4	40.4	28.8	41.4	16.5	143	403
MAX	250	436	1500	96	90	91	141	41	193	62	1130	1760
MIN	21	17	18	30	23	18	20	23	22	11	11	24
AC-FT	2330	2860	11360	2460	1750	1560	2400	1770	2460	1010	8760	23950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, BY WATER YEAR (WY)

	194	252	233	333	352	222	350	348	293	93.3	72.9	120
MEAN	194	252	233	333	352	222	350	348	293	93.3	72.9	120
MAX	5189	2536	1949	1710	1932	936	2106	1541	1519	577	1208	1184
(WY)	1995	1941	1941	1979	1992	1941	1979	1993	1973	1946	1945	1979
MIN	3.06	3.55	8.88	4.52	13.1	11.6	13.2	9.10	6.57	5.58	2.84	3.86
(WY)	1957	1957	1957	1957	1957	1971	1971	1956	1971	1956	1956	1956

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1939 - 1996

ANNUAL TOTAL	88608	31602	
ANNUAL MEAN	243	86.3	
HIGHEST ANNUAL MEAN			239
LOWEST ANNUAL MEAN			819
HIGHEST DAILY MEAN	4260	1760	55900
LOWEST DAILY MEAN	17	11	1.1
ANNUAL SEVEN-DAY MINIMUM	18	11	1.6
INSTANTANEOUS PEAK FLOW		3010	76500
INSTANTANEOUS PEAK STAGE		11.94	39.56
ANNUAL RUNOFF (AC-FT)	175800	62680	173200
10 PERCENT EXCEEDS	554	134	410
50 PERCENT EXCEEDS	69	28	42
90 PERCENT EXCEEDS	22	18	11

e Estimated

SAN JACINTO RIVER BASIN
08068500 SPRING CREEK NEAR SPRING, TX--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: August 1983 to current year. Pesticide analyses: August 1983 to September 1990.

INSTRUMENTATION.--Stage-activated water sampler since October 1984 provides water-quality samples over selected runoff events.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)
JAN 31...	0948	71	514	7.8	11.5	9.8	90	80	92	74
JUN 06...	1335	56	754	8.0	31.0	9.9	134	150	120	54
AUG 13...	1250	123	276	7.0	30.0	6.5	86	2200	1200	44
DATE	HARD- NESS NONCARB DISSOLV F.I.D. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JAN 31...	0	20	5.9	89	4	10	100	28	97	0.60
JUN 06...	0	16	3.5	130	8	8.1	150	26	110	0.50
AUG 13...	0	14	2.2	39	3	6.1	72	10	31	0.20
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
JAN 31...	18	351	4.25	4.25	0.050	4.30	4.30	0.030	5.0	0.67
JUN 06...	16	411	1.65	1.65	0.050	1.70	1.70	0.110	2.6	0.79
AUG 13...	7.4	159	1.16	1.16	0.040	1.20	1.20	0.160	2.1	0.74
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 31...	0.57	0.60	0.70	0.910	0.930	0.790	2.4	6.5	20	<10
JUN 06...	0.59	0.70	0.90	2.00	1.80	1.70	5.2	9.5	11	70
AUG 13...	0.54	0.70	0.90	0.320	0.250	0.270	0.83	12	26	37

08068720 CYPRESS CREEK AT KATY-HOCKLEY ROAD NEAR HOCKLEY, TX

LOCATION.--Lat 29°57'00", long 95°48'29", Harris County, Hydrologic Unit 12040102, on left bank at bridge on Katy-Hockley Road, 3.3 mi downstream from station 08068700, 5.6 mi southeast of Hockley, and 6.3 mi upstream from station 08068740.

DRAINAGE AREA.--110 mi².

PERIOD OF RECORD.--June 1975 to July 1983, February 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. A concrete weir located 0.9 mi downstream from the gage, washed out on Aug. 11, 1991. Datum of gage is 100.00 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions and return flow for irrigation occur upstream from station. Radio telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in June 1960 reached a stage of 62.0 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.07	e.20	2.1	.38	3.6	.54	.03	.00	.10	.00	64
2	.22	14	e.10	2.0	.33	4.8	.37	.00	.00	.00	.00	14
3	50	16	e.05	1.3	.21	2.2	.27	.02	.00	.00	.14	12
4	110	7.1	e.20	.69	.14	.27	.19	.06	.00	.00	2.6	2.6
5	25	3.1	e.05	2.4	.10	.12	.14	.01	.00	.00	13	.76
6	5.9	2.6	.01	3.2	.14	.21	.11	.00	.00	.00	12	.59
7	.99	2.9	.00	2.8	.41	.11	.04	.00	.00	.00	7.9	1.7
8	.23	7.8	.00	1.8	.62	.08	.01	.00	.00	.00	7.3	4.1
9	2.1	9.5	.00	1.4	.93	.17	26	.00	.00	.00	.42	1.0
10	.92	8.5	.00	1.3	1.7	.18	.49	.00	.00	.00	.36	.22
11	.74	6.5	.00	.36	1.6	.16	.03	.00	.00	.00	3.2	.46
12	.91	3.4	.00	.00	.94	.14	.00	.00	.00	.00	18	1.7
13	.57	2.6	.00	.03	.55	.13	.00	.00	.00	.00	2.5	.68
14	.39	1.9	.00	.17	.44	.14	.00	.00	.00	.00	.30	.02
15	.27	.79	.00	.08	.34	.15	.01	.00	.00	.00	.12	.05
16	.20	.22	.00	.00	.18	.13	.02	.00	.00	.00	.00	.07
17	.13	e6.0	3.4	.01	.07	.12	.00	.00	.00	.00	.00	.01
18	.12	e9.0	57	.03	.02	.10	.00	.00	.00	.00	.00	.00
19	.10	e8.5	109	.00	.00	.08	.00	.00	.00	.00	.00	199
20	.07	e6.0	25	.10	.00	.07	.00	.00	.00	.00	.00	212
21	.02	e3.0	7.9	.16	.00	.15	.00	.00	.00	2.3	.00	136
22	.01	e1.5	3.6	.12	.00	.12	8.1	.00	.00	.28	.00	59
23	.00	e1.0	1.8	.34	.00	.07	34	.00	.00	1.9	.00	31
24	.00	e.80	1.4	.81	.00	.05	2.8	.00	2.3	25	.00	49
25	.00	e.50	.81	.86	.00	.04	.38	.00	15	35	.00	76
26	.00	e.30	.43	.48	.01	.02	.27	.00	11	14	.01	47
27	.00	e.20	.33	.86	.00	.05	.12	.00	5.5	6.1	3.0	42
28	.00	e.10	.27	4.3	.00	.04	.07	.00	1.7	.06	2.5	78
29	.00	e1.0	.14	1.2	1.1	.26	.04	.00	.91	.00	.27	31
30	.03	e.50	.26	.20	---	.50	.13	.00	.29	.00	.85	14
31	.00	---	2.4	.14	---	.62	---	.00	---	.00	42	---
TOTAL	199.24	125.38	214.35	29.24	10.21	14.88	74.13	0.12	36.70	84.74	116.47	1077.96
MEAN	6.43	4.18	6.91	.94	.35	.48	2.47	.004	1.22	2.73	3.76	35.9
MAX	110	16	109	4.3	1.7	4.8	34	.06	15	35	42	212
MIN	.00	.07	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
AC-FT	395	249	425	58	20	30	147	.2	73	168	231	2140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996h, BY WATER YEAR (WY)

	MEAN	41.0	51.9	72.0	103	87.3	48.1	67.3	91.1	101	18.1	5.54	30.4
MAX	367	229	257	508	534	196	344	377	375	98.7	24.8	358	
(WY)	1995	1986	1977	1979	1992	1992	1991	1993	1987	1979	1994	1979	
MIN	.090	.091	.000	.85	.000	.48	.10	.004	.22	.17	.019	.010	
(WY)	1989	1978	1989	1990	1976	1996	1987	1996	1988	1988	1988	1988	

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1975 - 1996h

ANNUAL TOTAL	14220.82	1983.42	59.3	
ANNUAL MEAN	39.0	5.42	186	1979
HIGHEST ANNUAL MEAN			5.01	1990
LOWEST ANNUAL MEAN			2240	Jan 20 1979
HIGHEST DAILY MEAN	950	212	.00	Sep 20
LOWEST DAILY MEAN	.00	.00	.00	Oct 23
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00	Oct 23
INSTANTANEOUS PEAK FLOW		257	2370	Sep 19
INSTANTANEOUS PEAK STAGE		51.05	63.49	Sep 19
ANNUAL RUNOFF (AC-FT)	28210	3930	42980	Oct 18 1994
10 PERCENT EXCEEDS	69	8.6	115	
50 PERCENT EXCEEDS	2.6	.13	2.9	
90 PERCENT EXCEEDS	.11	.00	.00	

e Estimated

h See PERIOD OF RECORD paragraph.

SAN JACINTO RIVER BASIN

08068740 CYPRESS CREEK AT HOUSE AND HAHN ROAD NEAR CYPRESS, TX

LOCATION.--Lat 29°57'32", long 95°43'03", Harris County, Hydrologic Unit 12040102, on right bank at bridge on House and Hahn Road, 1.4 mi southwest of Cypress, and 6.3 mi downstream from station 08068720.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--June 1975 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 100.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. Stage discharge relationship affected by seasonal vegetal growth during most years. Considerable diversions and return flow from irrigation occurs upstream from station, especially during the period April through October.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since about 1908, about 49 ft in 1937, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	20	.74	3.2	.90	7.3	.67	.44	.25	1.3	5.6	24
2	3.0	10	.62	2.9	1.0	5.4	.68	.44	.23	.85	7.8	9.9
3	26	18	.51	1.8	.99	4.2	.45	.57	.23	.59	4.5	7.4
4	131	8.6	.77	1.5	.97	1.8	.55	.43	.24	.44	2.0	4.1
5	28	5.9	.50	1.7	.97	1.6	.65	.40	.24	.40	.80	2.2
6	8.0	4.0	.54	5.6	1.1	1.4	.69	.40	.24	.40	8.9	3.2
7	4.4	2.9	.61	2.9	2.1	1.0	1.0	.40	.43	.40	5.1	28
8	2.6	4.1	.62	1.9	1.2	.96	.74	.38	.52	.43	1.8	5.2
9	2.4	7.4	.87	1.5	1.0	.94	21	.38	.25	.43	2.5	3.3
10	3.7	6.8	.86	1.4	1.0	.97	2.8	.39	.21	.43	2.4	3.0
11	2.5	5.8	1.1	1.2	1.0	.96	.70	.38	.19	.43	1.5	1.0
12	3.1	4.6	1.0	1.1	1.0	.94	.90	.43	.19	.43	1.1	.50
13	3.0	3.2	.61	.74	.97	.96	1.5	.48	.19	.43	.94	.40
14	2.4	2.5	.52	.78	.91	.91	.98	.35	4.0	.43	.83	.35
15	1.8	2.8	.58	1.0	.85	.77	.64	.33	2.2	.43	.80	1.3
16	1.5	4.8	.55	1.0	.84	.85	.49	.32	1.7	.46	1.6	3.9
17	1.5	7.5	4.1	1.1	.84	.73	.47	.32	.98	.51	2.5	.63
18	1.3	10	.95	1.0	.87	.73	.50	.32	.40	.59	2.1	.44
19	1.2	10	116	.96	.91	.63	.50	.30	.38	1.2	7.3	603
20	1.2	8.1	31	.97	.83	.61	.47	.31	.40	.63	17	634
21	.99	3.9	8.6	.98	.80	.63	1.1	.32	.40	.43	9.1	282
22	.99	2.5	5.2	1.0	.81	.69	15	.30	.40	.43	3.0	86
23	1.0	1.8	2.4	.99	.78	1.1	45	.30	1.6	.45	1.4	42
24	1.2	1.7	3.7	.90	.78	.91	5.0	.30	5.8	.43	2.8	51
25	.95	1.4	3.0	.96	.71	.71	.73	.29	8.7	.52	3.2	102
26	.98	1.2	2.4	1.1	.72	.61	.55	.27	12	.65	27	60
27	.83	1.1	2.1	.99	.71	.71	.51	.27	4.9	3.2	53	58
28	.84	.99	1.7	4.2	1.1	.87	.47	.27	1.7	1.3	19	100
29	.92	1.8	1.5	3.0	7.3	.65	.77	.26	2.7	.91	12	53
30	1.5	1.2	4.0	1.7	---	.60	.80	.25	2.5	11	18	21
31	1.8	---	8.1	1.0	---	.58	---	.27	---	6.8	15	---
TOTAL	242.90	164.59	299.80	51.07	33.96	41.72	106.31	10.87	54.17	37.33	240.57	2190.82
MEAN	7.84	5.49	9.67	1.65	1.17	1.35	3.54	.35	1.81	1.20	7.76	73.0
MAX	131	20	116	5.6	7.3	7.3	45	.57	12	11	53	634
MIN	.83	.99	.50	.74	.71	.58	.45	.25	.19	.40	.80	.35
AC-FT	482	326	595	101	67	83	211	22	107	74	477	4350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, BY WATER YEAR (WY)

	MEAN	49.7	64.3	94.3	126	111	60.0	90.4	120	138	27.1	16.9	48.9
MAX	396	254	336	685	649	257	463	513	625	120	214	537	
(WY)	1995	1986	1977	1979	1992	1995	1991	1993	1993	1979	1983	1979	
MIN	.95	.27	.26	1.65	.065	1.27	.16	.35	.93	1.20	1.55	.86	
(WY)	1989	1978	1989	1996	1976	1986	1987	1996	1988	1996	1988	1988	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1975 - 1996

ANNUAL TOTAL	20106.17	3474.11	78.4
ANNUAL MEAN	55.1	9.49	255
HIGHEST ANNUAL MEAN			9.49
LOWEST ANNUAL MEAN			2550
HIGHEST DAILY MEAN	1080	Mar 16	2550
LOWEST DAILY MEAN	.48	Sep 9	.00
ANNUAL SEVEN-DAY MINIMUM	.57	Sep 4	.00
INSTANTANEOUS PEAK FLOW			5200
INSTANTANEOUS PEAK STAGE			47.61
ANNUAL RUNOFF (AC-FT)	39880	6890	56800
10 PERCENT EXCEEDS	106	10	161
50 PERCENT EXCEEDS	5.8	1.0	5.3
90 PERCENT EXCEEDS	1.1	.40	.30

SAN JACINTO RIVER BASIN

41

08068780 LITTLE CYPRESS CREEK NEAR CYPRESS, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°00'5"/, long 95°41'50", Harris County, Hydrologic Unit 12040102, on right bank at downstream side of bridge on Cypress-Rose Hill Road, 3.2 mi north of Cypress, and 6.9 mi upstream from mouth.

DRAINAGE AREA.--41.0 mi².

PERIOD OF RECORD.--May 1982 to Sept. 30, 1992 (daily mean discharge). Oct. 1, 1992 to current year (peak discharges greater than base discharge).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 80.00 ft above sea level, 1973 adjustment.

REMARKS.--No known regulation or diversions. Rain gage at station. Radio telemeter at station.

AVERAGE DISCHARGE.--10 years (water years 1983-92) 24.0 ft³/s (17,370 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 4,520 ft³/s Oct. 18, 1994 (gage height 81.41 ft).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

SAN JACINTO RIVER BASIN

08068800 CYPRESS CREEK AT GRANT ROAD NEAR CYPRESS, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°58'24", long 95°35'54", Harris County, Hydrologic Unit 12040102, on right bank at downstream side of bridge on Grant Road and 6.0 mi east of Cypress.

DRAINAGE AREA.--214 mi².

PERIOD OF RECORD.--May 1982 (discharge measurements only). October 1982 to Sept. 30, 1992 (daily mean discharge).
Oct. 1, 1992 to current year (peak discharges greater than base discharge).

GAGE.--Water-stage recorder. Datum of gage is 80.00 ft above sea level, 1973 adjustment.

REMARKS.--Records fair. Base flow sustained by effluent from urbanized farming areas in the basin. Radio telemeter at station.

AVERAGE DISCHARGE.--10 years (water years 1983-92) 116 ft³/s (83,910 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,500 ft³/s Oct. 18, 1994 (gage height 47.38 ft).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

SAN JACINTO RIVER BASIN

43

08068900 CYPRESS CREEK AT STUEBNER-AIRLINE ROAD NEAR WESTFIELD, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°00'23", long 95°30'42", Harris County, Hydrologic Unit 12040102, on right bank at downstream side of bridge on Stuebner-Airline Road, 1.3 mi upstream from Spring Gulley, and 6.5 mi west of Westfield.

DRAINAGE AREA.--248 mi².

PERIOD OF RECORD.--June 1982 to May 1986 and February to September 1987 (gage heights and discharge measurements only).
October 1987 to September 1989 (daily mean discharge). October 1989 to September 1992 (annual maximum gage height and discharge). October 1992 to current year (peak discharges greater than base discharge).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 70.00 ft above sea level, 1973 adjustment.

REMARKS.--Records fair. Low flow is sustained by wastewater effluent from urbanized areas and drainage from irrigated farm land. Radio telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s Oct. 19, 1994 (gage height, 39.61 ft).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges above base discharge of 2,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep. 24	1545	2,260	26.36				

08069000 CYPRESS CREEK NEAR WESTFIELD, TX

LOCATION.--Lat 30°02'08", long 95°25'43", Harris County, Hydrologic Unit 12040102, on left bank at downstream side of downstream bridge on Interstate Highway 45 and U.S. Highway 75, 0.9 mi upstream from Senger Gully, 1.8 mi northwest of Westfield, 2.0 mi upstream from Missouri Pacific Railroad Co. bridge, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--285 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 63.89 ft above sea level; unadjusted for land-surface subsidence. Prior to Mar. 17, 1951, water-stage recorder at upstream side of bridge at datum 12.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Low flow is maintained by waste water effluent. Channel below gage was rectified in 1950-51, 1975, and 1981. Radio telemetry at station. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 34 ft May 1929 (discharge, 26,000 ft³/s), present datum, from information by local resident. Flood in November 1940 reached a stage of about 32 ft, present datum (discharge, 15,000 ft³/s), from information by State Department of Highways and Public Transportation.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	Unknown	Unknown	Unknown	Sept. 27	1030	2,670	12.28
Sept. 24	1630	3,190	13.50				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	155	e20	e71	e27	116	25	31	37	45	33	71
2	179	166	e20	e53	e33	57	23	27	67	37	33	60
3	685	217	e20	e39	e30	44	22	26	48	32	33	52
4	134	82	e19	e39	e32	41	22	27	34	31	34	51
5	168	55	e19	e69	e31	37	27	27	34	29	35	38
6	72	48	e20	e138	e30	35	37	31	35	27	35	44
7	42	37	e21	e54	e30	34	28	29	33	28	36	172
8	32	31	e25	e44	e28	31	26	27	29	31	31	77
9	30	28	e31	e38	e25	32	26	27	30	30	43	148
10	28	32	e23	e36	e23	32	46	28	29	29	321	78
11	25	56	e23	e38	e23	32	36	27	28	28	666	36
12	28	38	e20	e31	e22	30	41	32	29	30	58	29
13	28	34	e21	e29	e21	29	69	32	37	28	37	27
14	27	30	e21	e30	e22	29	39	31	113	27	55	26
15	26	28	e21	e30	e21	30	30	30	48	194	40	62
16	28	28	e22	e30	e20	27	26	28	34	142	31	50
17	26	27	e1290	e29	e21	26	25	28	43	43	29	33
18	25	e53	e1920	e36	e22	26	25	28	326	35	30	147
19	26	e145	e426	e31	e22	23	26	29	595	44	33	694
20	32	e58	e259	e33	e21	21	25	31	72	32	91	1060
21	25	e37	e181	e36	e21	21	27	29	78	28	88	657
22	25	e35	e101	e31	e21	22	221	29	72	28	204	284
23	28	e28	e73	e32	22	22	290	29	246	32	86	125
24	26	e26	e49	e33	23	23	97	31	207	55	54	1250
25	23	e21	e41	e32	22	26	52	32	325	51	60	448
26	27	e20	e38	e33	24	26	37	31	152	35	336	205
27	33	e21	e37	e33	23	22	32	29	70	31	170	1350
28	25	e19	e37	e31	28	23	30	32	49	65	216	310
29	24	e18	e34	e31	139	24	78	31	169	34	512	163
30	34	e18	e112	e29	---	23	40	115	71	29	876	90
31	31	---	e200	e29	---	24	---	61	---	28	175	---
TOTAL	2089	1591	5144	1248	827	988	1528	1025	3137	1338	4481	7837
MEAN	67.4	53.0	166	40.3	28.5	31.9	50.9	33.1	105	43.2	145	261
MAX	685	217	1920	138	139	116	290	115	595	194	876	1350
MIN	23	18	19	29	20	21	22	26	27	27	29	26
AC-FT	4140	3160	10200	2480	1640	1960	3030	2030	6220	2650	8890	15540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1996, BY WATER YEAR (WY)

	MEAN	164	163	183	233	230	112	209	274	251	85.8	59.9	129
MAX	1768	1788	931	1168	1322	516	1133	1260	1157	588	562	862	
(WY)	1995	1947	1992	1979	1992	1993	1973	1953	1960	1960	1945	1961	
MIN	.13	.023	.15	.60	1.39	.21	1.50	1.77	1.64	.26	.087	1.21	
(WY)	1957	1956	1951	1951	1951	1956	1963	1956	1958	1958	1948	1956	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1944 - 1996

ANNUAL TOTAL	68457	31233	174
ANNUAL MEAN	188	85.3	510
HIGHEST ANNUAL MEAN			1992
LOWEST ANNUAL MEAN			1956
HIGHEST DAILY MEAN	3020	Jan 27	15600
LOWEST DAILY MEAN	10	Jan 11	.00
ANNUAL SEVEN-DAY MINIMUM	15	Jan 5	.00
INSTANTANEOUS PEAK FLOW			22100
INSTANTANEOUS PEAK STAGE			33.44
ANNUAL RUNOFF (AC-FT)	135800	61950	126300
10 PERCENT EXCEEDS	497	169	390
50 PERCENT EXCEEDS	44	32	26
90 PERCENT EXCEEDS	22	22	1.4

e Estimated

SAN JACINTO RIVER BASIN

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08069000 CYPRESS CREEK NEAR WESTFIELD, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: March 1959 to April 1964, October 1977 to June 1978, August 1983 to current year.
 Chemical and biochemical analyses: August 1983 to current year. Pesticide analyses: August 1983 to September 1990.
 Sediment analyses: October 1976 to September 1979. October 1986 to April 1990.

INSTRUMENTATION. --Stage-activated water sampler since October 1984 provides water-quality samples over selected runoff events.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CaCO3)
JAN 31...	1057	113	855	8.3	14.0	8.8	85	2300	130	120
JUN 06...	1415	35	820	7.8	27.5	7.5	96	830	290	98
AUG 13...	1145	41	548	7.3	30.0	5.2	69	2700	780	84
DATE	HARDNESS NONCARBONIC, DIS-SOLVED (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY, WATER DIS-SOLVED (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)
JAN 31...	0	38	5.9	130	5	10	190	28	110	0.60
JUN 06...	0	31	5.0	130	6	9.9	190	30	100	0.60
AUG 13...	0	27	4.0	80	4	8.1	140	20	67	0.40
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
JAN 31...	18	506	9.77	9.77	0.130	9.90	9.90	0.080	11	1.0
JUN 06...	20	455	0.990	0.990	0.110	1.10	1.10	0.370	2.5	1.0
AUG 13...	16	323	2.49	2.49	0.110	2.60	2.60	0.500	4.0	0.90
DATE	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS Fe)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
JAN 31...	0.82	0.90	1.1	2.70	2.80	2.40	7.4	6.2	20	<10
JUN 06...	0.73	1.1	1.4	2.50	2.50	2.20	6.7	8.3	10	7.0
AUG 13...	0.90	1.4	1.4	1.30	1.20	1.20	3.7	11	33	37

LOCATION.--Lat 30°20'11", long 95°06'14", Liberty County, Hydrologic Unit 12040103, near left bank at downstream side of bridge on State Highway 105, 1,880 ft downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.2 mi west of Cleveland, and 4.3 mi downstream from Winter Creek.

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

Water-quality records.--Chemical analyses: September 1961 to April 1964, January 1968 to September 1989.

Biochemical analyses: August 1983 to September 1989. Pesticide analyses: January to August 1984.

GAGE.--Water-stage recorder. Datum of gage is 107.98 ft above sea level. Prior to Sept. 13, 1955, at site 1,800 ft upstream at datum 5.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. There are no large diversions above station. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 5, 1935, reached a stage of 23.6 ft (discharge, 53,500 ft³/s), present site and datum, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2100	4,360	15.96				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	50	33	117	64	66	41	125	26	30	17	136
2	30	125	34	97	64	61	38	78	22	23	15	59
3	75	83	34	86	66	53	40	56	31	21	15	39
4	141	69	34	79	62	50	38	46	26	19	14	30
5	125	50	34	81	60	49	37	40	23	18	14	27
6	71	51	36	115	61	52	39	38	26	16	14	24
7	47	51	35	138	65	50	47	36	23	16	17	22
8	38	43	35	103	66	45	96	34	21	15	22	22
9	34	37	39	90	67	43	71	33	20	15	24	24
10	31	34	54	84	68	43	53	31	19	162	26	22
11	29	34	46	79	67	44	45	30	19	424	24	18
12	28	33	42	76	62	43	70	29	18	83	22	17
13	28	32	42	71	57	42	72	30	20	40	24	17
14	28	30	42	70	56	44	51	31	19	31	21	16
15	29	30	40	69	57	44	41	28	18	29	17	20
16	27	29	41	69	53	45	38	27	18	26	15	18
17	26	33	266	68	50	45	35	27	17	23	15	17
18	26	42	1500	72	50	46	35	26	17	24	14	17
19	26	63	3480	85	51	42	35	25	24	26	13	23
20	26	59	4070	80	50	39	34	24	45	22	13	38
21	28	60	2890	80	50	38	33	24	26	19	19	41
22	27	49	1090	75	49	37	48	23	22	18	26	43
23	25	44	230	75	49	38	406	23	24	17	23	28
24	24	40	151	87	47	38	215	23	26	16	28	31
25	24	38	110	117	47	39	105	22	33	18	41	103
26	24	35	107	87	46	39	71	21	29	21	37	85
27	24	35	99	84	47	39	53	20	38	26	26	884
28	25	34	91	78	49	40	46	20	30	25	44	636
29	24	33	86	71	63	42	44	21	34	19	189	454
30	23	33	85	70	---	42	160	28	48	27	210	210
31	23	---	113	68	---	43	---	33	---	21	194	---
TOTAL	1162	1379	14989	2621	1643	1381	2137	1052	762	1290	1193	3121
MEAN	37.5	46.0	484	84.5	56.7	44.5	71.2	33.9	25.4	41.6	38.5	104
MAX	141	125	4070	138	68	66	406	125	48	424	210	884
MIN	23	29	33	68	46	37	33	20	17	15	13	16
AC-FT	2300	2740	29730	5200	3260	2740	4240	2090	1510	2560	2370	6190
CFSM	.12	.14	1.49	.26	.17	.14	.22	.10	.08	.13	.12	.32
IN.	.13	.16	1.72	.30	.19	.16	.24	.12	.09	.15	.14	.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, BY WATER YEAR (WY)

MEAN	154	264	261	370	379	264	349	307	266	90.8	52.7	85.0
MAX	2964	3101	1613	1723	1336	748	2302	1473	2023	676	939	894
(WY)	1995	1941	1941	1995	1992	1973	1945	1983	1973	1989	1983	1961
MIN	5.61	9.58	14.6	13.0	20.2	17.1	15.5	18.1	12.0	5.70	5.51	4.46
(WY)	1957	1957	1957	1957	1971	1971	1971	1963	1954	1971	1956	1956

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1939 - 1996
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ANNUAL TOTAL	141698		32730			
ANNUAL MEAN	388		89.4		235	
HIGHEST ANNUAL MEAN					733	1941
LOWEST ANNUAL MEAN					22.8	1971
HIGHEST DAILY MEAN	9920	Jan 28	4070	Dec 20	44200	Oct 18 1994
LOWEST DAILY MEAN	23	Oct 30	13	Aug 19	3.0	Aug 23 1956
ANNUAL SEVEN-DAY MINIMUM	24	Oct 25	15	Aug 1	3.2	Aug 19 1956
INSTANTANEOUS PEAK FLOW			4360	Dec 19	63000	Oct 18 1994
INSTANTANEOUS PEAK STAGE			15.96	Dec 19	24.57	Oct 18 1994
ANNUAL RUNOFF (AC-I T)	281100		64920		170400	
ANNUAL RUNOFF (CFSM)	1.19		.28		.72	
ANNUAL RUNOFF (INCHES)	16.22		3.75		9.83	
10 PERCENT EXCEEDS	919		98		476	
50 PERCENT EXCEEDS	89		38		49	
90 PERCENT EXCEEDS	29		19		13	

08070200 EAST FORK SAN JACINTO RIVER NEAR NEW CANEY, TX

LOCATION.--Lat 30°08'43", long 95°07'27", Montgomery County, Hydrologic Unit 12040103, on right bank at downstream side of bridge on Farm Road 1485, 1.0 mi upstream from Church House Gully, 5.5 mi east of New Caney, and 5.9 mi upstream from Caney Creek.

DRAINAGE AREA.--388 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1952-58, 1969-76, 1983-84, May 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 43.98 ft above sea level (Texas Highway Department benchmark).

REMARKS.--Records good except those for estimated daily discharges, which are fair. There are no known diversions. The maximum discharge for period of record is from rating curve extended above 6,200 ft³/s on basis of a velocity-area study. Rain gage at station. Radio telemeter at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 19/3 reached a stage of 29.6 ft, from floodmark on left bank, identified by local resident. Flood in November 1940 may have been slightly higher.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft³/s :

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 21	0500	3,400	15.40				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	33	39	138	90	74	e45	146	38	47	32	212
2	35	71	39	134	90	78	e44	105	35	34	25	139
3	63	109	40	116	90	74	44	76	30	26	23	77
4	84	78	40	108	87	66	45	62	31	22	22	57
5	128	68	40	100	85	60	46	55	28	20	20	46
6	109	55	40	126	82	61	45	50	23	19	20	40
7	70	53	39	157	78	61	47	47	23	17	20	37
8	55	53	39	156	80	60	e120	43	24	16	21	35
9	47	48	40	124	83	57	83	41	21	16	24	33
10	42	44	41	107	84	56	63	39	19	15	52	43
11	40	41	53	99	85	55	54	35	18	124	105	41
12	39	40	50	93	85	54	68	33	16	313	56	32
13	38	40	47	89	81	55	112	32	17	99	38	28
14	36	39	46	86	77	54	70	31	26	60	36	27
15	36	37	45	82	74	54	54	32	22	48	34	26
16	37	36	44	81	74	54	48	31	17	42	29	26
17	35	36	102	78	72	54	45	31	17	40	26	27
18	34	37	733	78	68	54	43	31	19	35	24	26
19	34	56	1490	87	66	54	43	33	24	34	22	26
20	33	140	2460	97	66	53	42	33	26	36	21	26
21	33	/3	3270	91	65	51	40	32	51	34	21	40
22	34	65	2510	90	65	50	47	31	31	30	28	45
23	35	54	1110	87	63	49	e500	30	26	28	38	49
24	32	49	322	89	61	49	e275	29	31	27	41	41
25	31	46	203	102	59	48	128	28	40	26	47	81
26	32	44	161	133	59	47	97	27	60	24	54	101
27	32	42	142	113	58	47	78	26	36	30	51	1050
28	31	40	131	109	58	46	65	25	39	34	39	1780
29	29	39	117	103	60	e46	60	25	34	34	64	892
30	30	39	109	96	---	e45	e190	32	33	28	256	483
31	30	---	115	92	---	e46	---	39	---	32	269	---
TOTAL	1381	1605	13657	3241	2145	1712	2641	1310	855	1390	1558	5566
MEAN	44.5	53.5	441	105	74.0	55.2	88.0	42.3	28.5	44.8	50.3	186
MAX	128	140	3270	157	90	78	500	146	60	313	269	1780
MIN	29	33	39	78	58	45	40	25	16	15	20	26
AC-FT	2740	3180	27090	6430	4250	3400	5240	2600	1700	2760	3090	11040
CFSM	.11	.14	1.14	.27	.19	.14	.23	.11	.07	.12	.13	.48
IN.	.13	.15	1.31	.31	.21	.16	.25	.13	.08	.13	.15	.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1996, BY WATER YEAR (WY)

	304	1/2	363	536	501	471	348	349	396	166	49.3	57.8
MEAN	304	1/2	363	536	501	471	348	349	396	166	49.3	57.8
MAX	2843	626	828	1711	1557	981	958	1330	1596	849	189	186
(WY)	1995	1986	1987	1995	1992	1992	1991	1989	1986	1989	1995	1996
MIN	15.7	20.6	31.2	99.5	74.0	55.2	68.8	42.3	28.5	27.7	20.8	17.6
(WY)	1989	1991	1990	1986	1996	1996	1986	1996	1996	1988	1990	1988

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1984 - 1996
ANNUAL TOTAL	148314	37061	
ANNUAL MEAN	406	101	310
HIGHEST ANNUAL MEAN			660
LOWEST ANNUAL MEAN			101
HIGHEST DAILY MEAN	8060	3270	46600
LOWEST DAILY MEAN	29	15	9.8
ANNUAL SEVEN-DAY MINIMUM	31	18	10
INSTANTANEOUS PEAK FLOW		3400	74100
INSTANTANEOUS PEAK STAGE		15.40	33.00
ANNUAL RUNOFF (AC-FT)	294200	/3510	224800
ANNUAL RUNOFF (CFSM)	1.05	.26	.80
ANNUAL RUNOFF (INCHES)	14.22	3.55	10.87
10 PERCENT EXCEEDS	1040	118	/90
50 PERCENT EXCEEDS	113	46	81
90 PERCENT EXCEEDS	40	26	25

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: August 1983 to current year. Pesticide analyses: August 1985 to September 1990.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1984 to current year.

WATER TEMPERATURE: June 1984 to current year.

INSTRUMENTATION.--From June 1984 to current year, a water-quality monitor continuously recorded specific conductance and water temperature at this station. Since June 1984, a stage-activated water sampler provides water-quality samples over selected runoff events.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relation between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 870 microsiemens May 7, 1985; minimum, 19 microsiemens Nov. 17, 1992.

WATER TEMPERATURE: Maximum, 32.0°C June 29, 1996; minimum, 1.0 °C Dec. 24, 1989.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 581 microsiemens Dec. 15; minimum, 51 microsiemens Dec. 17.

WATER TEMPERATURE: Maximum, 32.0°C June 29; minimum, 4.5°C Feb. 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)	
DATE	TIME										
JAN 30...	0858	96	244	7.5	13.0	9.1	87	110	100	55	
JUN 03...	1315	29	211	7.2	26.5	7.5	93	64	52	44	
AUG 14...	1045	26	119	6.5	27.0	6.2	77	180	330	26	
DATE	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	
	JAN 30...	17	18	2.5	20	1	2.7	38	6.5	45	<0.10
	JUN 03...	8	14	2.2	23	2	2.4	36	4.1	38	0.10
	AUG 14...	5	8.1	1.5	10	0.8	2.5	21	6.0	15	<0.10
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	
	JAN 30...	16	134	0.120	--	<0.010	0.120	0.120	<0.015	0.42	0.30
	JUN 03...	12	120	0.500	--	<0.010	0.500	0.500	0.040	0.80	0.26
	AUG 14...	8.4	66	0.320	0.320	0.010	0.330	0.330	0.070	0.93	0.53
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
	JAN 30...	--	<0.20	0.30	0.030	0.030	0.020	0.06	6.6	130	30
	JUN 03...	0.26	0.30	0.30	0.120	0.080	0.040	0.12	6.1	130	68
	AUG 14...	0.33	0.40	0.60	0.110	0.060	0.040	0.12	9.2	81	89

SAN JACINTO RIVER BASIN

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08070200 EAST FORK SAN JACINTO RIVER NEAR NEW CANEY, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	232	177	194	267	257	261	375	370	373	213	194	204
2	185	135	169	262	249	253	383	375	378	219	194	201
3	161	129	150	249	219	235	390	378	385	232	194	202
4	152	136	142	219	196	201	378	369	372	226	191	198
5	146	105	132	203	201	202	397	374	385	213	197	201
6	144	97	122	209	203	206	422	396	404	204	188	195
7	138	106	121	233	209	216	424	369	406	213	200	204
8	116	112	114	245	220	232	369	361	365	207	169	181
9	141	114	126	252	234	243	388	364	372	188	175	179
10	155	141	148	255	248	251	460	384	432	191	185	189
11	164	155	160	285	252	270	461	374	442	200	191	196
12	175	164	170	288	268	279	374	190	225	204	197	199
13	238	173	188	295	279	285	213	196	205	210	200	207
14	180	173	176	286	280	282	213	179	188	226	210	217
15	179	171	174	294	286	289	581	200	542	232	226	228
16	188	176	180	299	293	297	535	91	339	226	219	221
17	209	188	195	295	292	293	122	51	74	219	210	214
18	241	207	222	304	294	301	185	122	164	216	207	211
19	276	240	261	306	122	271	179	138	155	210	207	208
20	300	187	253	144	112	125	179	103	134	213	210	211
21	310	257	289	128	112	120	135	103	120	---	---	---
22	257	242	250	195	105	144	172	128	152	215	210	211
23	253	240	249	141	123	136	188	166	180	226	215	219
24	280	252	263	138	135	137	222	182	202	239	226	236
25	301	279	285	152	136	144	244	222	230	242	236	237
26	304	293	297	166	152	159	241	213	226	245	231	238
27	296	279	289	190	166	176	260	232	245	236	222	228
28	283	276	279	201	190	195	247	219	226	256	229	240
29	282	271	276	301	201	239	235	207	223	259	229	241
30	271	265	267	374	301	334	207	197	202	241	230	236
31	265	258	261	---	---	---	216	197	208	239	231	237
MONTH	310	97	207	374	105	226	581	51	276	259	169	213

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	250	238	245	254	249	252	260	255	256	---	---	---
2	250	239	245	258	250	255	271	259	262	---	---	---
3	242	237	239	256	247	252	287	271	280	---	---	---
4	243	238	241	250	232	239	287	255	276	---	---	---
5	246	241	243	235	225	232	255	241	251	---	---	---
6	247	241	244	231	222	226	242	231	237	---	---	---
7	243	240	241	236	228	231	237	231	232	---	---	---
8	244	240	242	244	234	237	---	---	---	---	---	---
9	244	241	243	252	244	248	---	---	---	---	---	---
10	242	236	240	252	248	250	---	---	---	---	---	---
11	237	234	236	250	245	247	---	---	---	---	---	---
12	237	232	234	253	247	250	---	---	---	---	---	---
13	245	235	239	254	248	251	---	---	---	---	---	---
14	257	244	252	257	251	254	---	---	---	---	---	---
15	268	257	260	256	248	253	---	---	---	---	---	---
16	273	268	271	257	246	248	---	---	---	---	---	---
17	278	260	274	258	241	247	---	---	---	240	234	238
18	270	260	265	249	241	247	---	---	---	240	235	238
19	269	260	264	249	247	248	---	---	---	242	235	239
20	267	260	263	250	246	248	---	---	---	253	239	245
21	268	258	263	255	249	252	---	---	---	265	251	257
22	261	256	259	262	253	259	---	---	---	278	260	267
23	259	256	257	271	202	236	---	---	---	270	256	265
24	259	251	255	207	204	206	---	---	---	272	238	260
25	256	249	252	244	204	234	---	---	---	241	123	209
26	253	246	250	239	231	234	---	---	---	131	121	126
27	258	249	254	260	236	253	---	---	---	123	116	120
28	259	250	255	274	240	255	---	---	---	123	115	120
29	254	252	253	301	249	283	---	---	---	151	106	117
30	---	---	---	312	242	287	---	---	---	363	151	294
31	---	---	---	304	254	264	---	---	---	322	220	297
MONTH	278	232	251	312	202	248	287	231	256	363	106	219

SAN JACINTO RIVER BASIN

08070200 EAST FORK SAN JACINTO RIVER NEAR NEW CANEY, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	249	199	225	180	170	172	190	190	190	140	115	122
2	247	199	227	190	180	181	190	185	189	156	130	139
3	219	196	213	190	170	178	193	187	190	166	148	158
4	256	198	219	170	150	155	195	192	193	175	163	169
5	256	222	240	150	140	140	194	184	188	188	175	181
6	247	221	234	170	140	151	187	178	182	196	187	193
7	221	201	208	190	170	177	186	179	182	200	195	198
8	213	186	197	200	190	198	198	185	192	203	198	201
9	188	181	185	210	200	202	204	198	202	207	203	205
10	188	182	185	220	200	216	206	180	201	212	203	206
11	188	178	181	230	120	202	180	99	141	211	202	206
12	181	178	179	120	70	77	102	93	97	211	206	208
13	183	180	181	90	80	86	120	102	115	207	197	203
14	190	181	187	100	90	99	142	118	126	205	196	199
15	---	---	---	110	100	107	166	142	154	210	205	208
16	---	---	---	130	110	118	174	166	168	214	207	211
17	---	---	---	140	120	132	175	170	172	217	214	215
18	---	---	---	150	140	145	181	175	179	218	182	197
19	---	---	---	160	150	151	186	180	182	184	180	182
20	---	---	---	190	150	169	196	184	186	187	184	186
21	---	---	---	230	170	184	195	184	188	190	185	188
22	---	---	---	230	170	185	186	180	183	189	182	185
23	---	---	---	220	180	189	192	183	189	192	168	181
24	---	---	---	190	180	185	190	178	185	168	134	151
25	150	130	144	210	180	185	197	189	192	145	102	124
26	150	140	144	200	180	188	196	171	178	176	102	139
27	160	150	154	240	190	196	188	179	185	274	176	256
28	150	150	150	200	190	195	207	188	194	---	---	---
29	170	150	160	210	200	204	206	177	192	---	---	---
30	170	170	170	220	200	209	196	109	151	---	---	---
31	---	---	---	230	190	200	123	107	115	---	---	---
MONTH	256	130	189	240	70	167	207	93	174	274	102	186
YEAR	581	51	216									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.5	24.0	25.0	20.0	19.0	19.5	14.0	12.0	13.5	12.0	10.5	11.5
2	25.0	24.0	24.5	20.5	19.0	20.0	15.5	13.5	14.5	11.0	9.0	10.0
3	24.0	23.0	23.5	19.5	18.0	19.0	17.0	15.0	16.0	11.0	9.0	10.0
4	24.0	22.0	23.0	18.0	16.0	17.0	17.0	15.5	16.5	11.0	10.0	11.0
5	23.0	21.5	22.0	16.0	14.5	15.5	18.5	16.5	17.5	10.5	8.5	10.0
6	22.0	20.5	21.0	16.0	14.5	15.5	19.0	18.0	18.5	9.0	6.5	8.0
7	21.5	19.0	20.0	17.5	16.0	16.5	18.0	16.5	17.5	7.5	6.0	7.0
8	21.0	18.0	19.5	17.0	15.5	16.5	17.5	16.0	17.0	8.0	6.0	7.0
9	20.5	18.0	19.5	17.0	15.0	16.0	16.0	12.5	14.5	8.5	7.0	8.0
10	21.0	18.5	20.0	18.5	17.0	17.5	12.5	10.5	12.0	10.0	8.5	9.0
11	21.5	19.0	20.0	18.5	15.5	17.0	12.0	10.0	11.0	10.5	8.5	9.5
12	21.5	19.5	20.5	16.0	14.0	15.0	13.0	11.0	12.0	10.5	8.5	10.0
13	21.5	20.5	21.0	16.5	14.5	15.5	14.0	12.0	13.5	11.5	10.0	11.0
14	21.0	20.0	21.0	16.0	14.5	15.0	16.0	13.5	15.0	13.5	11.5	12.5
15	20.5	18.0	19.5	15.5	13.5	14.5	18.0	16.0	17.0	14.5	13.5	14.0
16	20.5	18.0	19.0	15.5	14.0	15.0	18.0	17.0	17.5	15.5	14.5	15.0
17	20.0	17.5	19.0	15.0	14.0	14.5	17.5	16.0	17.0	15.0	11.5	13.0
18	20.5	18.0	19.0	16.0	14.5	15.0	16.0	13.5	14.5	12.5	10.5	11.5
19	21.0	19.0	20.0	16.0	15.0	15.5	13.5	12.0	12.5	11.0	10.5	10.5
20	20.5	19.0	20.0	17.0	15.5	16.0	12.0	10.5	11.0	11.0	10.5	11.0
21	19.0	16.5	18.0	17.0	16.0	16.5	10.5	10.0	10.0	---	---	---
22	19.5	17.0	18.5	17.0	15.0	16.0	10.0	9.5	10.0	12.0	11.0	11.5
23	20.0	18.5	19.0	17.5	15.5	16.5	10.0	9.5	10.0	13.5	12.0	12.5
24	20.0	18.0	19.0	16.5	15.0	16.0	10.5	9.5	10.0	13.0	11.5	12.5
25	20.0	17.0	18.5	15.5	14.0	15.0	10.5	9.0	10.0	14.0	12.0	13.0
26	21.0	19.0	20.0	16.0	14.0	15.0	10.5	9.0	9.5	14.0	13.0	13.5
27	22.0	20.0	21.0	17.0	15.5	16.5	10.0	8.5	9.5	13.5	12.0	12.5
28	21.5	19.5	20.5	16.5	13.5	15.0	9.5	8.5	9.5	12.0	11.0	11.5
29	20.0	18.5	19.0	14.0	12.5	13.5	10.5	9.5	10.0	13.5	11.5	12.5
30	19.5	18.0	18.5	13.5	12.0	12.5	12.0	10.5	11.5	13.5	12.0	13.0
31	19.5	18.0	19.0	---	---	---	13.0	12.0	12.5	12.5	11.0	12.0
MONTH	26.5	16.5	20.5	20.5	12.0	16.0	19.0	8.5	13.0	15.5	6.0	11.0

08070200 EAST FORK SAN JACINTO RIVER NEAR NEW CANEY, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	11.0	10.0	10.5	14.5	12.0	13.5	22.5	20.5	21.5	---	---	---
2	10.0	8.0	8.5	14.5	11.5	13.0	21.5	19.0	21.0	---	---	---
3	8.0	6.5	7.0	15.0	11.5	13.5	21.5	19.5	21.0	---	---	---
4	7.0	5.5	6.0	15.0	13.0	14.5	22.0	20.5	21.5	---	---	---
5	6.5	4.5	6.0	16.5	15.0	15.5	22.0	20.5	22.0	---	---	---
6	7.5	6.5	7.0	17.5	16.0	16.5	23.0	20.5	21.5	---	---	---
7	10.5	7.5	9.0	16.0	14.0	15.0	21.5	20.5	21.5	---	---	---
8	12.0	9.5	11.0	14.0	12.0	13.0	---	---	---	---	---	---
9	14.0	11.5	12.5	12.5	10.5	11.5	---	---	---	---	---	---
10	15.0	13.0	14.0	12.5	10.0	11.5	---	---	---	---	---	---
11	15.5	13.5	14.5	12.5	10.0	11.5	---	---	---	---	---	---
12	14.5	12.5	13.5	13.5	10.0	12.0	---	---	---	---	---	---
13	14.0	12.0	13.0	15.0	11.5	14.0	---	---	---	---	---	---
14	15.0	12.0	13.5	16.0	14.5	15.0	---	---	---	---	---	---
15	15.5	13.5	14.5	17.5	16.0	17.0	---	---	---	---	---	---
16	14.0	12.0	13.0	19.0	17.0	18.0	---	---	---	---	---	---
17	13.5	11.0	12.5	20.0	15.5	18.0	---	---	---	26.0	23.0	25.0
18	14.0	11.0	12.5	17.5	14.0	16.0	---	---	---	25.5	23.0	25.0
19	15.5	13.5	14.5	16.0	13.0	14.5	---	---	---	26.0	23.0	25.0
20	16.5	13.0	15.0	16.5	13.0	15.0	---	---	---	25.5	24.0	24.5
21	18.0	15.5	17.0	16.5	14.5	15.5	---	---	---	26.0	23.0	25.5
22	19.5	16.5	18.0	16.5	16.0	16.5	---	---	---	26.0	23.0	24.5
23	20.5	18.0	19.5	17.0	14.0	16.0	---	---	---	25.5	23.0	25.0
24	19.5	17.5	19.0	16.0	13.5	15.5	---	---	---	26.0	23.0	24.5
25	20.5	19.0	20.0	18.5	15.5	17.0	---	---	---	26.5	23.5	25.0
26	21.0	19.5	20.5	19.0	16.0	18.0	---	---	---	26.5	25.0	26.5
27	21.0	19.0	20.0	18.5	16.0	18.0	---	---	---	26.5	26.0	26.0
28	19.0	16.0	17.5	19.5	17.0	18.5	---	---	---	26.0	25.5	25.5
29	16.0	14.0	15.0	20.5	18.0	19.5	---	---	---	26.5	25.5	26.0
30	---	---	---	19.0	17.5	18.5	---	---	---	26.0	24.0	26.0
31	---	---	---	21.5	20.5	21.5	---	---	---	26.5	25.5	26.5
MONTH	21.0	4.5	13.5	21.5	10.0	15.5	23.0	19.0	21.5	26.5	23.0	25.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	26.0	25.0	26.0	30.0	26.5	28.0	30.0	27.5	28.5	25.5	24.5	25.0
2	25.5	23.0	24.5	30.5	26.0	28.5	30.5	27.5	29.0	26.5	24.5	25.5
3	26.5	24.0	25.5	31.0	27.5	29.0	31.0	28.0	29.5	27.0	24.5	26.0
4	26.0	24.0	25.0	31.5	27.5	29.0	30.5	28.0	29.5	28.0	25.0	26.5
5	25.5	23.0	24.5	31.0	27.0	29.0	30.5	28.0	29.5	27.5	25.5	26.5
6	26.0	23.5	25.5	31.0	27.5	29.5	30.0	28.0	29.0	28.5	25.5	27.0
7	25.0	23.5	24.5	31.5	28.0	29.5	30.5	27.0	28.5	28.0	25.5	26.5
8	26.0	23.5	24.5	31.0	28.0	29.5	29.0	27.5	28.5	27.5	25.5	26.5
9	26.5	24.0	26.0	31.5	28.5	30.0	30.0	27.0	28.0	27.5	25.5	26.5
10	26.0	23.5	25.0	31.0	28.0	29.5	29.0	26.5	27.5	27.5	25.0	26.0
11	26.0	23.5	24.0	30.0	28.0	29.0	28.0	26.0	27.0	27.5	24.5	26.0
12	26.0	23.0	25.0	28.0	26.0	27.0	28.5	25.5	27.0	27.0	24.5	25.5
13	26.0	23.0	25.0	29.0	26.5	27.5	29.5	26.5	27.5	26.5	24.5	25.5
14	25.5	23.0	25.0	30.0	27.0	28.5	29.0	26.5	28.0	27.0	24.5	25.5
15	---	---	---	29.5	27.5	28.5	29.0	26.5	27.5	26.5	25.0	26.0
16	---	---	---	30.0	27.0	28.0	29.0	26.0	27.5	28.5	25.5	27.0
17	---	---	---	30.0	27.5	28.5	29.0	26.0	27.5	28.5	26.0	27.5
18	---	---	---	29.0	27.5	28.0	29.0	26.0	27.5	27.5	25.5	27.0
19	---	---	---	29.0	27.0	28.0	28.5	26.0	27.5	28.0	25.5	26.5
20	---	---	---	30.0	27.0	28.5	28.5	25.5	27.0	27.5	25.5	26.5
21	---	---	---	31.0	27.0	29.0	27.5	26.0	26.5	28.0	25.5	26.5
22	---	---	---	30.5	27.5	29.0	26.5	25.0	25.5	27.0	24.0	25.5
23	---	---	---	30.5	28.0	29.0	27.0	25.0	25.5	26.5	24.0	25.5
24	---	---	---	29.5	27.5	28.0	27.5	25.0	26.0	25.5	24.5	24.5
25	25.5	25.5	25.5	29.0	26.5	27.5	27.5	25.0	26.0	25.5	24.0	24.5
26	28.5	25.0	26.5	28.5	27.0	27.5	26.5	25.5	26.0	25.0	24.0	24.5
27	29.0	26.0	27.5	29.5	26.0	27.5	27.0	25.0	26.0	25.0	22.5	23.5
28	29.5	27.0	28.0	29.0	26.5	27.5	26.5	25.5	26.0	22.5	20.5	21.5
29	32.0	26.5	28.0	30.0	26.5	28.0	26.5	25.0	25.5	21.0	20.0	20.5
30	30.0	27.0	28.0	30.0	27.0	28.5	25.5	24.5	25.0	20.5	19.5	20.0
31	---	---	---	29.5	25.5	28.5	25.5	24.0	24.5	---	---	---
MONTH	32.0	23.0	25.5	31.5	25.5	28.5	31.0	24.0	27.5	28.5	19.5	25.5
YEAR	32.0	4.5	20.0									

LOCATION.--lat 30°15'34", long 95°18'08", Montgomery County, Hydrologic Unit 12040103, on left bank at downstream side of bridge on Farm Road 2090, 4 mi downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 8 mi west of Splendora.

WATER-DISCHARGE RECORDS

REVISÉD RECORDS.--WSP 1/32: Drainage area.

REMARKS.--No estimated daily discharges. Records good. No diversions above station. Minimum discharge for period of record was caused by construction upstream. Satellite telemeter at gage.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, 27.0 ft in November 1940, present site and datum, from information by local resident. Flood in May 1935 reached a stage of 24.3 ft, present site and datum, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1800	3,310	16.58	Dec. 19	1400	1,960	13.48

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	52	22	53	33	32	27	47	21	17	17	46
2	24	59	22	46	33	32	27	36	21	16	16	35
3	47	43	22	45	33	29	27	32	29	18	14	30
4	45	37	22	43	32	27	27	29	25	17	13	26
5	33	30	22	42	31	29	27	29	20	17	13	24
6	26	27	23	52	32	30	28	28	20	16	12	22
7	24	27	23	53	34	30	32	27	19	15	11	22
8	23	26	22	45	33	27	30	25	19	15	11	24
9	22	24	29	43	32	26	28	25	18	54	13	31
10	22	22	32	42	31	26	27	24	19	200	20	32
11	22	22	26	42	30	26	27	23	19	27	25	27
12	22	22	24	41	29	26	29	23	19	20	26	23
13	22	21	24	35	30	27	30	24	21	19	19	21
14	23	21	24	35	30	28	29	23	20	17	16	21
15	22	22	24	35	29	29	27	22	18	20	15	21
16	21	23	25	36	28	29	25	21	16	24	14	20
17	21	23	236	38	28	28	24	21	16	20	15	18
18	21	24	2090	39	29	29	24	21	18	20	16	16
19	21	27	1600	41	29	26	25	20	37	18	14	18
20	24	28	252	39	28	26	25	20	34	23	14	84
21	24	28	99	38	27	26	25	19	24	20	17	36
22	22	24	72	38	27	27	28	20	20	15	29	25
23	21	23	57	38	27	28	130	19	22	14	27	22
24	21	22	49	40	26	29	52	19	28	16	28	45
25	20	21	44	43	26	29	41	19	30	15	35	122
26	21	21	43	39	26	29	33	18	33	16	27	56
27	22	22	40	42	25	28	28	18	27	17	24	503
28	23	23	43	38	25	28	26	18	20	17	59	144
29	22	23	46	36	27	29	153	18	24	15	75	59
30	21	23	46	35	---	28	190	20	18	14	95	39
31	22	---	62	34	---	28	---	20	---	15	70	---
TOTAL	749	810	5165	1266	850	871	1251	728	675	767	800	1612
MEAN	24.2	27.0	167	40.8	29.3	28.1	41.7	23.5	22.5	24.7	25.8	53.7
MAX	47	59	2090	53	34	32	190	47	37	200	95	503
MIN	20	21	22	34	25	26	24	18	16	14	11	16
AC-FT	1490	1610	10240	2510	1690	1730	2480	1440	1340	1520	1590	3200
CFSM	.23	.26	1.59	.39	.28	.27	.40	.22	.21	.24	.25	.51
IN.	.27	.29	1.83	.45	.30	.31	.44	.26	.24	.27	.28	.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1996, BY WATER YEAR (WY)

MEAN	64.1	73.5	83.2	119	118	85.9	110	103	95.1	39.0	28.0	38.0
MAX	895	817	277	497	368	245	606	542	843	190	262	296
(WY)	1995	1947	1977	1995	1961	1973	1945	1983	1973	1979	1983	1961
MIN	6.57	8.20	10.5	10.7	13.6	12.2	13.6	13.8	10.1	7.28	6.69	5.91
(WY)	1957	1957	1957	1957	1971	1971	1971	1956	1954	1971	1956	1956

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1944 - 1996
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ANNUAL TOTAL	43929		15544			
ANNUAL MEAN	120		42.5		79.3	
HIGHEST ANNUAL MEAN					192	1995
LOWEST ANNUAL MEAN					15.9	1971
HIGHEST DAILY MEAN	4890	Jan 21	2090	Dec 18	11100	Jun 14 1973
LOWEST DAILY MEAN	20	Oct 25	11	Aug 7	5.4	Sep 21 1956
ANNUAL SEVEN-DAY MINIMUM	21	Oct 22	12	Aug 3	5.5	Sep 21 1956
INSTANTANEOUS PEAK FLOW			3310	Dec 18	36000	Oct 17 1994
INSTANTANEOUS PEAK STAGE			16.58	Dec 18	26.40	Oct 17 1994
ANNUAL RUNOFF (AC-IT)	87130		30830		57440	
ANNUAL RUNOFF (CFSM)	1.15		.40		.76	
ANNUAL RUNOFF (INCHES)	15.56		5.51		10.26	
10 PERCENT EXCEEDS	176		45		112	
50 PERCENT EXCEEDS	45		26		27	
90 PERCENT EXCEEDS	23		17		12	

SAN JACINTO RIVER BASIN

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08070500 CANEY CREEK NEAR SPLENDORA, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1962 to April 1964. Chemical and biochemical analyses: August 1983 to current year. Pesticide analyses: August 1983 to September 1990. Sediment analyses: February 1966, April 1973 to March 1975.

INSTRUMENTATION.--Stage-activated water sampler since November 1984 provides water-quality samples over selected runoff events.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CaCO3)
JAN 31...	0822	45	132	7.6	11.0	9.9	89	60	110	33
JUN 06...	1110	29	103	6.8	23.5	7.4	87	84	120	23
AUG 14...	1300	16	91	6.7	26.5	7.2	89	980	3700	19
DATE	HARDNESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)
JAN 31...	10	10	1.9	10	0.8	1.1	23	3.4	19	<0.10
JUN 06...	3	6.6	1.6	9.7	0.9	1.5	20	2.1	15	<0.10
AUG 14...	3	5.1	1.5	7.8	0.8	2.2	16	2.9	12	<0.10
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
JAN 31...	14	75	0.270	--	<0.010	0.270	0.270	<0.015	--	--
JUN 06...	13	67	1.20	--	<0.010	1.20	1.20	0.060	1.5	0.24
AUG 14...	13	56	0.300	0.300	0.010	0.310	0.310	0.040	0.71	0.36
DATE	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JAN 31...	--	<0.20	<0.20	<0.010	<0.010	0.010	0.03	3.9	290	30
JUN 06...	--	<0.20	0.30	0.160	0.100	0.090	0.28	1.7	220	52
AUG 14...	0.16	0.20	0.40	0.030	<0.010	0.010	0.03	4.0	180	47

08071280 LUCE BAYOU ABOVE LAKE HOUSTON NEAR HUFFMAN, TX

LOCATION.--Lat 30°06'34", long 95°03'35", Liberty County, Hydrologic Unit 12040103, on left bank, in Tricontinental Pipeline Co. right-of-way, 1.1 mi upstream from Key Gully, 3.1 mi east of Huffman-Cleveland Road, and 6.3 mi north-east of Huffman.

DRAINAGE AREA.--218 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, at site 2.2 mi downstream, water years, 1970, 1972, 1975; February to April 1984 (discharge measurements only), May 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 39.91 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. There are diversions above station for irrigation, but amounts are unknown. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1700	1,230	20.41	Sept. 29	1045	4,470	24.80

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.79	2.7	21	6.6	4.4	.35	1.9	2.7	2.5	.09	84
2	1.7	1.4	2.7	22	6.1	4.3	.44	1.4	1.0	1.5	.07	61
3	24	17	2.6	18	6.2	4.3	.73	1.1	.59	1.3	.05	29
4	31	33	6.0	20	9.0	5.3	.77	.93	.53	1.1	.05	8.1
5	30	13	10	44	8.2	5.2	.83	.85	.44	.75	.04	4.0
6	14	6.6	8.8	47	6.7	4.6	.84	.72	.53	.58	.04	2.3
7	4.3	4.0	11	49	6.1	4.0	.86	.61	3.3	.43	.04	2.2
8	2.5	2.7	6.1	56	5.7	3.6	.95	.52	2.5	.39	.04	4.7
9	1.7	1.9	5.8	59	5.4	3.4	.99	.47	1.0	.51	.05	23
10	1.3	1.6	4.8	53	5.3	3.2	1.1	.41	.59	.40	2.6	14
11	1.2	1.3	4.4	48	5.0	3.2	1.1	4.8	.36	.52	4.5	22
12	.89	1.1	4.0	26	4.5	3.3	1.2	1.4	.26	.34	22	26
13	.70	1.1	3.7	14	4.3	3.3	1.1	.53	.19	.23	42	12
14	.63	1.1	3.5	11	4.3	3.1	12	.42	.18	.17	17	6.3
15	.56	1.1	3.1	9.8	4.2	3.0	54	.36	.18	.13	4.7	4.1
16	.55	1.0	3.2	8.8	3.9	3.0	21	.39	.14	.10	2.3	3.2
17	.54	1.0	11	8.0	12	3.0	8.3	.34	.11	.07	1.3	2.2
18	.50	1.1	791	7.6	24	2.9	4.4	.21	.11	.05	.83	2.0
19	.50	30	1000	7.1	5.1	2.7	2.7	.16	1.5	.05	.58	1.8
20	.46	84	839	6.8	3.6	2.7	1.8	.14	31	.55	.38	1.5
21	.40	69	758	6.8	3.8	2.6	1.3	.12	43	.89	.67	1.3
22	.41	53	715	7.6	4.1	2.5	1.4	.10	12	.59	1.1	1.3
23	.42	29	476	7.5	3.8	2.6	5.3	.08	3.8	.43	7.8	1.1
24	.38	12	125	7.9	3.5	2.6	9.3	.06	36	.32	8.2	.97
25	.36	7.4	75	8.1	3.5	2.7	53	.05	57	.28	28	1.3
26	.36	5.4	64	13	3.5	2.7	44	.05	69	1.0	8.7	3.3
27	.34	4.2	46	16	3.5	2.7	20	.05	12	.60	3.7	748
28	.31	4.6	36	12	3.4	2.1	7.2	.05	19	.36	2.6	3710
29	.29	3.1	28	10	3.8	.88	4.4	.05	9.5	.30	5.2	4220
30	.30	2.8	22	9.0	---	.60	2.8	.05	4.6	.18	33	2820
31	.41	---	20	9.3	---	.44	---	2.4	---	.14	74	---
TOTAL	122.41	395.29	5088.4	643.3	169.1	94.92	264.16	20.72	313.11	16.76	271.63	11820.67
MEAN	3.95	13.2	164	20.8	5.83	3.06	8.81	.67	10.4	.54	8.76	394
MAX	31	84	1000	59	24	5.3	54	4.8	69	2.5	74	4220
MIN	.29	.79	2.6	6.8	3.4	.44	.35	.05	.11	.05	.04	.97
AC-FT	243	784	10090	1280	335	188	524	41	621	33	539	23450
CFSM	.02	.06	.75	.10	.03	.01	.04	.00	.05	.00	.04	1.81
IN.	.02	.07	.87	.11	.03	.02	.05	.00	.05	.00	.05	2.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1996, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	275	94.6	223	263	300	343	211	272	446	65.2	12.6	38.0	
MAX	2988	490	831	826	980	878	1047	2443	1965	334	103	394	
(WY)	1995	1987	1987	1992	1992	1993	1991	1989	1993	1987	1995	1996	
MIN	.009	.17	1.43	6.22	5.83	3.06	3.06	.67	2.24	.54	1.09	.034	
(WY)	1993	1989	1989	1989	1996	1996	1987	1996	1990	1996	1992	1992	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1984 - 1996

ANNUAL TOTAL	74086.30	19220.47	217
ANNUAL MEAN	203	52.5	453
HIGHEST ANNUAL MEAN			52.5
LOWEST ANNUAL MEAN			1995
HIGHEST DAILY MEAN	4420	Sep 29	23000
LOWEST DAILY MEAN	.29	Oct 29	.00
ANNUAL SEVEN-DAY MINIMUM	.33	Oct 24	.00
INSTANTANEOUS PEAK FLOW			.00
INSTANTANEOUS PEAK STAGE			.00
ANNUAL RUNOFF (AC-I)	147000	38120	25900
ANNUAL RUNOFF (CFSM)	.93	.24	35.08
ANNUAL RUNOFF (INCHES)	12.64	3.28	13.50
10 PERCENT EXCEEDS	586	34	407
50 PERCENT EXCEEDS	21	2.9	8.8
90 PERCENT EXCEEDS	1.7	.22	.25

SAN JACINTO RIVER BASIN

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08071280 LUCE BAYOU ABOVE LAKE HOUSTON NEAR HUFFMAN, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical February 1984 to current year. Pesticide analyses: February 1984 to September 1990.

INSTRUMENTATION.--Stage-activated water sampler since May 1984 provides water-quality samples over selected runoff events.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)
JAN 30...	1016	9.1	258	7.8	13.0	7.4	70	84	130	54	
JUN 04...	1110	0.38	227	7.1	24.0	2.5	30	110	150	55	
AUG 16...	1245	2.1	127	6.5	26.0	5.5	67	130	160	27	
DATE	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CaCO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	
JAN 30...	0	17	2.7	28	2	2.5	54	8.2	37	0.20	
JUN 04...	0	17	3.0	22	1	3.7	59	2.6	30	0.20	
AUG 16...	0	8.4	1.5	13	1	2.9	30	5.6	15	0.10	
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	
JAN 30...	11	142	0.720	--	<0.010	0.720	0.720	<0.015	1.6	0.90	
JUN 04...	3.7	119	0.140	0.140	0.010	0.150	0.150	0.110	0.95	0.69	
AUG 16...	4.1	70	0.290	0.290	0.010	0.300	0.300	0.050	0.90	0.55	
DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS Fe)	MANGA-NESE, DIS-SOLVED (UG/L AS Mn)	
JAN 30...	--	0.50	0.90	0.100	0.020	0.020	0.06	15	140	50	
JUN 04...	0.49	0.60	0.80	0.120	0.040	0.030	0.09	16	170	450	
AUG 16...	0.45	0.50	0.60	0.100	0.080	0.090	0.28	15	110	61	

08072000 LAKE HOUSTON NEAR SHELDON, TX

LOCATION.--Lat 29°54'58", long 95°08'28", Harris County, Hydrologic Unit 12040101, at intake structure on San Jacinto River near right bank 100 ft upstream from Lake Houston Dam, 4.0 mi north of Sheldon, 4.6 mi upstream from bridge on U.S. Highway 90, and 18 mi northeast of Houston.

DRAINAGE AREA.--2,828 mi².

WATER-CONTENT RECORDS

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

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage at dam is 0.70 ft below sea level; unadjusted for land-surface subsidence.

REMARKS.--The lake is formed by two earthfill embankment sections and a 3,160-foot long concrete spillway midway between the embankment sections. The dam was completed and storage began Apr. 9, 1954. The spillway includes two tainter gates, 18.0 x 20.5 ft, that can be used for control of releases below gage heights of 44.5 ft and above 28.0 ft. In addition, there is a 36-inch-diameter sluice gate that is used for low-flow releases. Water is used for irrigation, municipal, and industrial supply in the Houston metropolitan area. Figures given herein represent total contents. Satellite telemeter at station. 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	-
Crest of spillway.....	44.5	134,000
Crest of tainter gates (sill).....	28.0	18,870
Lowest gated outlet (invert).....	22.0	5,940

COOPERATION.--The capacity table, furnished by the city of Houston, is based on a bathymetric survey made in 1994 by Texas Water Development Board. Records of diversions were furnished by the San Jacinto River Authority and the city of Houston.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 249,900 acre-ft Oct. 19, 1994 (gage height, 52.79 ft); minimum since first filling of lake in August 1954, 53,380 acre-ft Dec. 1, 1971 (gage height, 34.08 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 157,200 acre-ft Dec. 18 at 2200 hours (gage height, 46.36 ft); minimum, 132,200 acre-ft Aug. 9-10 (gage height, 44.33 ft).

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

34.0	46,820	42.0	108,760	50.0	207,880
36.0	59,730	44.0	128,700	51.0	229,930
38.0	74,460	46.0	152,630	52.0	237,980
40.0	90,780	48.0	178,660	53.0	253,030

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140800	136100	138500	143800	140100	140300	133000	139300	134500	143100	134800	144600
2	143800	140000	138400	141400	139200	140300	133000	139900	134700	142500	134400	143400
3	145100	140000	138500	140800	138100	140500	133200	140100	134700	142000	134000	142800
4	143900	140000	138400	141300	138100	140500	133500	140100	136400	141100	133800	142000
5	143400	140400	138300	142500	138100	140900	134300	139900	136300	140700	133400	141300
6	142500	140500	138400	141600	138500	142100	133400	139500	136100	140100	133400	140800
7	142300	140700	138100	139700	138900	137100	133100	139100	136300	139600	133200	141000
8	142000	140300	139600	138500	139600	136700	133200	138500	135600	139100	132900	140700
9	141900	140500	137500	139500	139900	136400	133400	138100	134900	138700	132600	140700
10	141600	140500	136900	140100	140300	136400	132700	138100	134400	139100	134500	140800
11	141300	139500	137100	140100	140100	136500	132700	138700	134400	139300	137500	141000
12	140900	139200	137200	140400	139700	136800	133000	138500	134100	139900	139200	140500
13	140800	139500	137300	140500	139700	136900	133500	138100	133800	139600	139700	140000
14	139600	139200	137500	140800	139900	137300	134900	137600	134000	139200	140400	139300
15	138800	138900	137600	141000	139700	137500	133700	137700	133800	139100	140100	139500
16	138400	138800	137900	141000	138800	137700	133200	137300	133900	139200	139600	139500
17	138100	139200	146900	140500	138800	137900	133100	136900	133500	138800	139100	139100
18	138000	139200	156900	138800	138400	135700	133600	136400	135700	138500	138800	140000
19	137900	142900	154600	138100	139300	135300	133400	136100	137700	138000	138500	142900
20	137100	143800	151400	138900	139300	134100	133500	135600	139900	137600	138700	143200
21	136300	143500	151700	139200	139500	134000	133400	135500	140300	137100	139500	144000
22	136100	143100	150100	139500	139500	133900	136800	135300	140300	136700	141100	143500
23	136700	143100	146800	141000	139600	134000	137600	135100	143700	136700	142100	142800
24	135700	142000	144700	140100	139200	134300	138800	134900	144500	136400	142100	144100
25	135300	141100	143800	140300	139100	134500	139500	134800	147200	136400	141600	145900
26	134800	140900	143700	141400	139100	133500	139700	134500	146400	136500	141600	144700
27	135600	141300	143500	140100	139900	133200	139500	134700	145000	136100	142000	156000
28	135300	139600	143100	140300	139500	133200	139600	134400	144100	136100	143400	154100
29	135200	139100	142700	140500	139900	133100	138300	134300	144100	136000	143900	150700
30	135200	138700	142900	141600	---	133200	138800	134300	143400	135700	148400	147800
31	135200	---	143500	140100	---	133400	---	134300	---	135200	146300	---
MAX	145100	143800	156900	143800	140300	142100	139700	140100	147200	143100	148400	156000
MIN	134800	136100	136900	138100	138100	133100	132700	134300	133500	135200	132600	139100
(+)	44.59	44.85	45.24	44.96	44.94	44.44	44.86	44.52	45.23	44.59	45.47	45.60
(@)	-5700	+3500	+4800	-3400	-200	-6500	+5400	-4500	+9100	-8200	+11100	+1500
(++)	11280	10370	11670	9350	8000	8360	8930	10540	9450	11190	11920	14130

CAL YR 1995 MAX 164700 MIN 132500 (@) -2700 (++) 137370
WTR YR 1996 MAX 156900 MIN 132600 (@) +6900 (++) 125190

(+) Gage height, in feet, at end of month.

(@) Change in contents, in acre-feet.

(++) Diversions, in acre-feet, for the municipal and industrial use by the city of Houston and by the San Jacinto River Authority.

SAN JACINTO RIVER BASIN

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08072000 LAKE HOUSTON NEAR SHELTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: July 1961 to April 1964, December 1969 to current year. Biochemical analyses: August 1983 to current year. Pesticide analyses: May 1968 to August 1972, August 1983 to current year.

295516095080801 - LAKE HOUSTON SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
JAN											
30...	0950	142000	1.00	150	7.4	13.0	0.30	10.0	95	550	320
30...	0952	--	10.0	150	7.4	12.0	--	9.9	92	--	--
30...	0954	--	20.0	150	7.5	11.5	--	10.0	92	--	--
30...	0956	--	30.0	150	7.4	11.5	--	9.9	91	--	--
30...	0958	--	43.0	150	7.2	11.5	--	9.7	89	--	--
APR											
22...	0955	137000	1.00	225	7.4	22.0	--	8.5	98	28	38
22...	0957	--	10.0	225	7.2	21.0	--	8.1	91	--	--
22...	0959	--	20.0	225	7.1	20.5	--	7.9	88	--	--
22...	1003	--	40.0	225	7.0	20.0	--	7.4	82	--	--
22...	1004	--	30.0	225	7.1	20.5	--	7.9	88	--	--
JUN											
18...	0855	136000	1.00	285	8.0	29.0	0.90	6.0	78	K1	K2
18...	0857	--	10.0	285	7.7	28.5	--	6.0	77	--	--
18...	0859	--	20.0	280	7.2	27.5	--	4.1	52	--	--
18...	0901	--	30.0	280	7.0	27.0	--	3.1	39	--	--
18...	0903	--	41.0	280	7.0	27.0	--	2.7	34	--	--
AUG											
13...	0935	140000	1.00	310	8.0	30.0	0.80	6.0	79	K4	K2
13...	0937	--	10.0	310	7.9	30.0	--	5.8	77	--	--
13...	0939	--	20.0	310	7.2	29.5	--	2.5	33	--	--
13...	0941	--	30.0	310	7.1	29.5	--	2.0	26	--	--
13...	0943	--	44.0	315	7.1	29.5	--	0.4	5	--	--

DATE	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLO. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JAN											
30...	3/	1	12	1.7	14	1	3.1	36	5.8	19	<0.10
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	<0.01	<0.01
30...	--	--	--	--	--	--	--	--	--	--	--
30...	3/	1	12	1.8	14	1	3.2	36	5.7	18	<0.10
APR											
22...	46	0	15	2.1	23	1	3.1	49	9.8	30	0.10
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	4/	0	15	2.2	23	1	3.4	48	9.9	30	0.10
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
18...	59	0	19	2.7	33	2	3.7	63	10	40	0.20
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	58	0	19	2.6	31	2	3.7	62	10	38	0.20
AUG											
13...	61	0	20	2.7	35	2	4.1	74	9.7	41	0.20
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	61	0	20	2.7	34	2	3.9	74	9.4	42	0.20

SAN JACINTO RIVER BASIN

08072000 LAKE HOUSTON NEAR SHELDON, TX--Continued

295516095080801 - LAKE HOUSTON SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
JAN											
30...	--	7.7	87	0.300	0.300	0.010	0.310	0.310	0.040	0.91	0.56
30...	--	--	--	--	--	--	--	--	--	--	--
30...	<0.010	--	--	0.300	0.300	0.010	0.310	0.310	0.040	0.91	0.56
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	7.8	86	0.290	0.290	0.020	0.310	0.310	0.040	0.91	0.56
APR											
22...	--	4.7	118	0.200	0.200	0.030	0.230	0.230	0.020	0.73	0.48
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	0.210	0.210	0.040	0.250	0.250	0.030	0.75	0.47
22...	--	5.2	119	0.200	0.200	0.040	0.240	0.240	0.030	0.84	0.57
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
18...	--	2.2	149	--	--	<0.010	--	<0.050	<0.015	0.50	0.50
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	0.020	--	<0.050	<0.015	0.40	0.40
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	3.2	146	0.030	0.030	0.030	0.060	0.060	0.040	0.46	0.36
AUG											
13...	--	6.0	164	--	--	<0.010	--	<0.050	0.050	0.50	0.45
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	0.030	0.030	0.020	0.050	0.050	0.120	0.55	0.38
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	6.7	165	--	--	0.020	--	<0.050	0.260	0.70	0.44
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
JAN											
30...	0.36	0.40	0.60	0.130	0.110	0.070	0.21	10	8.3	4.70	0.200
30...	--	--	--	--	--	--	--	--	--	--	--
30...	0.36	0.40	0.60	0.140	0.080	0.080	0.25	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	0.36	0.40	0.60	0.090	0.080	0.070	0.21	9.4	8.6	--	--
APR											
22...	0.18	0.20	0.50	0.120	0.050	0.050	0.15	7.5	6.2	0.900	<0.100
22...	--	--	--	--	--	--	--	--	--	--	--
22...	0.27	0.30	0.50	0.110	0.040	0.050	0.15	--	--	--	--
22...	0.27	0.30	0.60	0.120	0.030	0.040	0.12	7.9	5.9	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
JUN											
18...	--	0.20	0.50	0.070	0.070	0.060	0.18	7.5	5.3	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	0.30	0.40	0.070	0.070	0.070	0.21	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	0.26	0.30	0.40	0.090	0.080	0.070	0.21	9.9	5.3	--	--
AUG											
13...	0.25	0.30	0.50	0.170	0.130	0.160	0.49	8.4	5.3	14.0	0.500
13...	--	--	--	--	--	--	--	--	--	--	--
13...	0.38	0.50	0.50	0.220	0.170	0.170	0.52	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	0.24	0.50	0.70	0.180	0.120	0.140	0.43	8.3	5.2	--	--

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08072000 LAKE HOUSTON NEAR SHELDON, TX--Continued

295516095080801 - LAKE HOUSTON SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible][illegible]

SAN JACINTO RIVER BASIN

08072000 LAKE HOUSTON NEAR SHELTON, TX--Continued

295516095080801 - LAKE HOUSTON SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	PHORATE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
JAN										
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR										
22...	<0.010	<0.010	<0.100	<0.010	<0.010	<1.00	<0.010	<0.010	<0.010	<0.010
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
JUN										
18...	<0.010	<0.010	<0.100	<0.010	<0.010	<1.00	<0.010	0.020	<0.010	<0.010
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
AUG										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--

295702095091401 - LAKE HOUSTON SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPL- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN								
30...	1025	1.00	150	7.5	13.0	0.30	10.0	95
30...	1027	10.0	150	7.4	12.0	--	9.8	91
30...	1029	20.0	150	7.4	11.5	--	9.9	91
30...	1031	30.0	150	7.3	11.5	--	9.8	90
30...	1033	38.0	150	7.3	11.5	--	9.8	90
APR								
22...	1025	1.00	230	7.4	22.0	--	8.4	96
22...	1027	10.0	230	7.4	22.0	--	8.4	96
22...	1029	20.0	230	7.3	21.5	--	8.4	95
22...	1031	30.0	235	7.1	21.0	--	7.4	83
22...	1033	38.0	235	7.1	20.5	--	7.0	78
JUN								
18...	0925	1.00	280	8.1	29.5	--	6.7	88
18...	0927	10.0	280	7.5	29.0	--	5.4	70
18...	0929	20.0	280	7.1	27.5	--	2.7	34
18...	0931	30.0	280	7.1	27.0	--	2.4	30
18...	0933	38.8	280	7.2	27.0	--	2.2	28
AUG								
13...	1000	1.00	310	7.6	29.5	0.70	4.8	63
13...	1002	10.0	310	7.6	29.5	--	4.7	62
13...	1004	20.0	310	7.6	29.5	--	4.6	61
13...	1006	30.0	310	7.5	29.5	--	4.3	57
13...	1008	36.0	310	7.5	29.5	--	4.2	55

SAN JACINTO RIVER BASIN

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08072000 LAKE HOUSTON NEAR SHELTON, TX--Continued

295902095074201 - LAKE HOUSTON SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML)
JAN										
30...	1045	1.00	160	7.4	13.0	0.30	9.9	94	170	--
30...	1047	10.0	160	7.4	12.5	--	9.9	93	--	--
30...	1049	20.0	180	7.3	12.0	--	9.8	91	--	--
30...	1051	30.0	185	7.4	12.0	--	9.7	90	--	--
APR										
22...	1045	1.00	260	7.6	23.0	--	8.6	101	26	30
22...	1047	10.0	260	7.5	23.0	--	8.3	97	--	--
22...	1049	20.0	260	7.5	23.0	--	8.3	97	--	--
22...	1051	29.0	260	7.5	23.0	--	8.3	97	--	--
JUN										
18...	0943	1.00	300	7.8	30.0	0.90	5.6	74	K8	K1
18...	0945	10.0	300	7.6	30.0	--	4.9	65	--	--
18...	0947	20.0	310	7.3	29.5	--	3.4	44	--	--
18...	0949	28.0	315	7.2	29.0	--	2.1	27	--	--
AUG										
13...	1015	1.00	315	7.7	29.5	0.50	4.8	63	K10	K6
13...	1017	10.0	315	7.7	29.5	--	4.7	62	--	--
13...	1019	20.0	315	7.6	29.5	--	4.5	59	--	--
13...	1021	28.0	320	7.4	29.5	--	3.2	42	--	--

DATE	HARDNESS TOTAL (MG/L AS CAC03)	HARDNESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
JAN										
30...	37	1	12	1.8	14	1	3.1	36	6.2	18
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	43	2	14	2.0	18	1	3.1	41	7.4	23
APR										
22...	52	0	17	2.4	30	2	3.2	54	11	36
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	52	0	17	2.3	30	2	3.2	54	11	36
JUN										
18...	61	0	20	2.8	35	2	3.9	62	10	43
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	64	0	21	2.9	37	2	4.0	72	10	46
AUG										
13...	59	0	19	2.7	37	2	4.0	69	10	43
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	61	0	20	2.8	38	2	4.2	72	9.9	42

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)
JAN										
30...	0.10	8.3	87	0.360	0.360	0.010	0.370	0.370	0.030	0.37
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	0.10	9.9	105	0.560	0.560	0.010	0.570	0.570	0.020	0.38
APR										
22...	0.10	3.6	136	--	--	<0.010	--	<0.050	0.030	0.17
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	0.10	3.6	136	--	--	<0.010	--	<0.050	0.030	0.27
JUN										
18...	0.20	3.1	155	--	--	<0.010	--	<0.050	<0.015	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	0.20	4.1	169	--	--	<0.010	--	<0.050	0.100	0.30
AUG										
13...	0.20	6.9	173	2.00	--	<0.010	2.00	2.00	0.050	0.35
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	0.20	7.2	168	--	--	<0.010	--	<0.050	0.170	0.23

SAN JACINTO RIVER BASIN

08072000 LAKE HOUSTON NEAR SHELDON, TX--Continued

2959020950/4201 - LAKE HOUSTON SITE CC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN										
30...	0.40	0.090	0.090	0.28	11	8.6	3.90	0.300	40	<10
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	0.40	0.120	0.110	0.34	9.2	7.8	--	--	80	<10
APR										
22...	0.20	0.030	0.040	0.12	7.4	5.4	2.60	<0.100	18	4.0
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	0.30	0.040	0.040	0.12	7.4	5.5	--	--	36	9.0
JUN										
18...	0.20	0.100	0.090	0.28	7.8	5.3	--	--	<3.0	12
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	0.40	0.150	0.150	0.46	7.6	5.4	--	--	5.0	300
AUG										
13...	0.40	0.190	0.020	0.06	7.8	5.7	18.0	0.600	<3.0	4.0
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	0.40	0.170	0.200	0.61	9.6	5.2	--	--	5.0	75

3000160950/3401 - LAKE HOUSTON SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN								
30...	1110	1.00	170	7.5	13.0	0.30	10.0	95
30...	1112	10.0	170	7.4	12.0	--	9.9	92
30...	1114	22.0	190	7.3	12.0	--	9.7	90
APR								
22...	1110	1.00	260	7.7	23.0	--	8.5	99
22...	1112	10.0	260	7.6	23.0	--	8.4	98
22...	1114	21.0	255	7.6	23.0	--	8.3	97
JUN								
18...	1004	1.00	300	8.0	30.0	--	5.9	78
18...	1006	10.0	300	7.9	30.0	--	5.6	74
18...	1008	20.0	310	7.4	29.5	--	3.5	46
AUG								
13...	1035	1.00	320	7.9	29.5	0.52	5.2	68
13...	1037	10.0	320	7.8	29.5	--	4.9	64
13...	1039	21.0	325	7.8	29.5	--	4.4	58

3001580950/4601 - LAKE HOUSTON SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)
JAN											
30...	1225	1.00	170	7.6	14.0	0.28	10.3	100	46	26	41
30...	1227	10.0	165	7.2	12.0	--	9.8	91	--	--	--
30...	1229	21.0	160	7.2	12.0	--	9.8	91	--	--	38
APR											
22...	1220	1.00	275	7.7	23.5	--	7.6	90	K2	K6	52
22...	1222	10.0	310	7.7	23.5	--	7.7	91	--	--	--
22...	1224	20.0	310	7.7	23.0	--	7.7	90	--	--	58
JUN											
18...	1051	1.00	290	8.1	31.5	0.70	5.9	80	K2	K2	61
18...	1053	10.0	285	7.1	30.0	--	2.5	33	--	--	--
18...	1055	19.0	275	7.2	29.5	--	0.9	12	--	--	58
AUG											
13...	1133	1.00	270	7.7	30.5	0.40	5.5	73	K6	K8	50
13...	1135	10.0	275	7.5	30.0	--	4.8	63	--	--	--
13...	1137	19.0	280	7.7	30.0	--	4.7	62	--	--	53

SAN JACINTO RIVER BASIN

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08072000 LAKE HOUSTON NEAR SHELTON, TX--Continued

3001580950/74601 - LAKE HOUSTON SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	HARD- NESS NONCARB DISSOLV FID. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
JAN											
30...	8	13	2.0	16	1	2.7	33	6.5	24	<0.10	10
30...	--	--	--	--	--	--	--	--	--	--	--
30...	10	12	2.0	15	1	1.9	28	5.9	25	<0.10	13
APR											
22...	0	17	2.4	32	2	3.3	54	11	41	0.10	4.5
22...	--	--	--	--	--	--	--	--	--	--	--
22...	0	19	2.6	39	2	3.6	64	12	46	0.20	4.0
JUN											
18...	0	20	2.7	32	2	3.7	64	9.6	44	0.20	4.9
18...	--	--	--	--	--	--	--	--	--	--	--
18...	0	19	2.6	29	2	3.5	61	7.5	40	0.20	5.6
AUG											
13...	0	16	2.4	31	2	3.7	66	8.7	37	0.20	8.1
13...	--	--	--	--	--	--	--	--	--	--	--
13...	0	17	2.5	33	2	<0.10	62	9.2	39	0.20	8.0

DATE	SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)
JAN											
30...	96	0.400	--	<0.010	0.400	0.400	<0.015	1.1	0.70	--	0.30
30...	--	--	--	--	--	--	--	--	--	--	--
30...	93	0.220	0.220	0.010	0.230	0.230	<0.015	0.63	0.40	--	0.20
APR											
22...	144	--	--	<0.010	--	<0.050	0.020	0.30	0.28	0.18	0.20
22...	--	--	--	--	--	--	--	--	--	--	--
22...	165	--	--	<0.010	--	<0.050	<0.015	0.70	0.70	--	0.30
JUN											
18...	156	--	--	<0.010	--	<0.050	<0.015	0.70	0.70	--	0.30
18...	--	--	--	--	--	--	--	--	--	--	--
18...	145	--	--	<0.010	--	<0.050	0.070	0.70	0.63	0.33	0.40
AUG											
13...	147	--	--	<0.010	--	<0.050	0.050	0.70	0.65	0.25	0.30
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	<0.010	--	<0.050	0.070	0.60	0.53	0.23	0.30

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	IRON, DIS- SOLVED (UG/L AS FE)
JAN										
30...	0.70	0.130	0.060	0.050	0.15	9.1	8.4	12.0	1.20	50
30...	--	--	--	--	--	--	--	--	--	--
30...	0.40	0.040	0.020	0.030	0.09	7.4	6.1	--	--	360
APR										
22...	0.30	0.050	0.030	0.040	0.12	7.4	5.1	2.10	<0.100	5.0
22...	--	--	--	--	--	--	--	--	--	--
22...	0.70	0.150	0.050	0.060	0.18	7.4	5.3	--	--	8.0
JUN										
18...	0.70	0.110	0.090	0.080	0.25	7.5	5.9	--	--	19
18...	--	--	--	--	--	--	--	--	--	--
18...	0.70	0.130	0.090	0.070	0.21	6.1	5.9	--	--	44
AUG										
13...	0.70	0.150	0.080	0.110	0.34	9.6	5.7	15.0	0.600	4.0
13...	--	--	--	--	--	--	--	--	--	--
13...	0.60	0.180	0.130	0.130	0.40	9.1	5.7	--	--	4.0

SAN JACINTO RIVER BASIN

08072000 LAKE HOUSTON NEAR SHELTON, TX--Continued

300158095074601 - LAKE HOUSTON SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	PCB, TOTAL (UG/L)	PCNS UNFILT RECOVER (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L)	P,P'- DDD UNFILT RECOVER (UG/L)	DDE, TOTAL (UG/L)	P,P'- DDT UNFILT RECOVER (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
JAN										
30...	<10	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	<10	--	--	--	--	--	--	--	--	--
APR										
22...	1.0	<0.100	<0.100	<0.010	<0.100	<0.010	<0.010	<0.010	0.010	<0.010
22...	--	--	--	--	--	--	--	--	--	--
22...	4.0	--	--	--	--	--	--	--	--	--
JUN										
18...	28	<0.100	<0.100	<0.010	<0.100	<0.010	<0.010	<0.010	<0.010	<0.010
18...	--	--	--	--	--	--	--	--	--	--
18...	460	--	--	--	--	--	--	--	--	--
AUG										
13...	4.0	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	14	--	--	--	--	--	--	--	--	--

DATE	DISUL- FOTON UNFILT RECOVER (UG/L)	ENDO- SULFAN, I TOTAL (UG/L)	ENDRIN WATER UNFILT REC (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)
JAN										
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR										
22...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
JUN										
18...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
AUG										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--

DATE	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	PHORATE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
JAN										
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR										
22...	<0.010	<0.010	<0.100	<0.010	<0.010	<1.00	<0.010	<0.010	<0.010	<0.010
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
JUN										
18...	<0.010	<0.010	<0.100	<0.010	<0.010	<1.00	<0.010	0.020	<0.010	<0.010
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
AUG										
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--

300209095091201 - LAKE HOUSTON SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)
JAN											
30...	1150	1.00	335	8.4	14.5	0.38	11.1	109	24	30	85
30...	1152	11.0	400	7.7	12.5	--	9.4	88	--	--	71
APR											
22...	1140	1.00	425	8.1	24.0	--	8.1	97	K6	K16	67
22...	1142	9.20	420	8.0	24.0	--	7.9	94	--	--	67
JUN											
18...	1026	1.00	445	8.9	31.5	0.45	5.8	79	K1	K2	76
18...	1028	12.0	530	8.5	30.5	--	1.0	13	--	--	83
AUG											
13...	1100	1.00	460	8.7	30.0	0.40	5.8	77	44	24	61
13...	1102	10.0	365	7.7	29.0	--	2.9	38	--	--	--

08072000 LAKE HOUSTON NEAR SHELDON, TX--Continued

300209095091201 - LAKE HOUSTON SITE FC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible][illegible]

SAN JACINTO RIVER MAIN STEM

6/

08072050 SAN JACINTO RIVER NEAR SHELDON, TX

LOCATION.--Lat 29°52'34", long 95°05'37", Harris County, Hydrologic Unit 12040104, on left bank at U.S. Highway 90 bridge, 0.3 mi downstream from Southern Pacific Railway Co. bridge, 1.5 mi east of Sheldon, 4.6 mi downstream from Lake Houston, and 21 mi northeast of Houston.

DRAINAGE AREA.--2,879 mi².

PERIOD OF RECORD.--February 1970 to current year (elevations prior to 1973; gage heights only, beginning 1973).
Eleven discharge measurements, May 19, 1989 to Oct. 19, 1995.

Water-quality records.--Chemical and biochemical analyses: February 1970 to September 1972.
Pesticide analyses: May 1971 to September 1972.

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

REMARKS.--Records good. Gage heights reflect tidal fluctuations. Radio telemeter at station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 27.09 ft Oct. 19, 1994; minimum, -2.52 ft Oct. 28, 1985. A discharge measurement of 356,000 ft³/s was made near the peak of Oct. 19, 1994 (gage height, 27.00 ft).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since at least 1875, 31.5 ft Nov. 26, 1940, at site 0.3 mi upstream at Southern Pacific Railway Co. bridge.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.6/ ft Dec. 18 at 1000 hours; minimum, -2.34 ft Jan. 19.

DAY	GAGE HEIGHT, FEET, WATER YEAR		OCTOBER 1995		TO SEPTEMBER 1996							
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.00	2.26	3.32	1.83	2.64	1.23	2.63	1.22	2.25	1.03	2.53	.93
2	4.11	2.44	2.97	1.46	2.31	.84	1.81	-1.00	2.07	-.50	2.29	.80
3	4.12	1.51	1.87	.21	2.26	.68	.88	-1.41	.65	-.76	2.20	1.10
4	3.11	1.39	2.84	1.24	2.18	.27	2.11	.33	1.27	-.60	2.75	1.70
5	3.77	2.00	3.04	1.30	2.23	.40	2.03	.33	1.97	.97	3.00	1.83
6	2.57	1.41	3.03	1.29	2.17	.16	1.65	-.80	1.97	.77	2.69	1.56
7	3.43	1.17	2.80	.51	2.25	.01	-.28	-1.54	2.06	.84	1.75	-1.04
8	3.09	1.20	2.55	.47	2.90	1.17	1.47	-.56	2.06	.70	1.45	-1.12
9	3.02	1.21	3.28	1.51	2.19	-1.05	1.49	-.05	1.95	.98	2.40	.31
10	2.89	.91	3.36	1.95	2.17	.43	1.36	-.08	2.00	.76	2.29	.87
11	2.74	1.16	3.22	-.59	2.45	1.04	1.45	.00	1.93	.35	2.41	.85
12	3.00	1.68	2.04	.70	2.71	1.14	.98	-.22	1.64	-.62	2.84	.90
13	3.28	1.58	2.79	.82	2.58	1.27	1.66	.04	1.88	.21	2.80	1.01
14	3.09	.46	2.19	1.01	2.33	1.47	2.02	.54	1.98	.35	2.52	.92
15	2.78	.69	2.55	.90	2.78	1.35	1.94	.26	1.92	-.04	2.57	.82
16	3.13	1.56	2.04	.98	2.52	1.19	2.10	.28	1.01	-1.04	2.67	1.19
17	3.25	1.82	2.41	1.21	3.75	1.93	3.39	1.06	2.04	.24	2.69	1.21
18	3.55	1.71	2.48	1.19	4.67	3.07	3.52	-.62	2.04	.28	2.59	-.40
19	3.14	1.71	2.73	1.43	4.29	2.31	.90	-2.34	2.67	.56	.12	-1.33
20	2.55	.46	2.51	.68	2.59	1.46	2.27	.77	2.20	.32	-.11	-1.31
21	3.01	1.31	2.42	.61	3.44	2.14	2.27	.57	2.02	.70	1.36	-1.41
22	3.43	1.98	2.80	.87	3.51	1.78	2.38	.64	2.04	.55	1.69	.05
23	3.50	1.73	2.80	.51	2.86	1.04	2.55	1.51	2.00	.60	2.31	.48
24	2.55	.11	2.19	-.19	2.28	.64	2.16	.29	1.84	.19	2.89	1.13
25	3.28	1.26	2.31	.73	2.13	.25	3.22	1.19	2.08	.49	2.58	.44
26	3.28	1.63	2.45	1.06	1.64	.09	3.22	1.44	2.24	.71	2.32	.17
27	3.46	1.40	2.90	.88	1.57	.35	1.64	.10	2.41	.99	2.61	1.15
28	2.92	1.03	1.98	-.03	2.10	.94	2.86	1.02	1.92	.25	2.09	.62
29	4.01	2.03	1.52	.59	2.38	1.12	2.66	1.05	1.93	.37	2.32	.51
30	4.35	2.80	2.15	.76	2.92	1.74	2.26	.71	---	---	2.63	1.22
31	3.96	1.83	---	---	2.64	1.12	1.83	-.05	---	---	1.99	.17
MONTH	4.35	.11	3.36	-.59	4.6/	-1.05	3.52	-2.34	2.67	-1.04	3.00	-1.41

[illegible]

08072300 BUFFALO BAYOU NEAR KATY, TX

LOCATION.--lat 29°44'35", long 95°48'24", Fort Bend County, Hydrologic Unit 12040104, on left bank at bridge on Greenbush Road, 2.5 mi downstream from confluence of Willow Fork and Cane Island Branch of Buffalo Bayou, and 3.1 mi southeast of Katy.

DRAINAGE AREA.--63.3 mi².

PERIOD OF RECORD.--July 1977 to current year.

Water-quality records: Chemical and biochemical analyses: June 1978 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 75.02 ft above sea level, 1973 adjustment. All records adjusted to original site and datum.

REMARKS.--No estimated daily discharges. Records fair. Stage-discharge relationship affected by seasonal vegetation during most years. Gage located at temporary site 250 ft upstream Jan. 18 to Sept. 30, 1985. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,150 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
------	------	-----------------------------------	---------------------	------	------	-----------------------------------	---------------------

No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	25	2.1	35	1.7	13	1.7	2.7	5.6	10	30	160
2	6.9	60	1.5	22	1.7	3.5	1.5	2.0	7.0	6.5	14	100
3	15	92	1.7	14	2.0	2.7	1.5	1.8	2.4	4.2	4.3	64
4	10	59	1.6	8.6	2.5	2.5	1.5	1.5	5.0	3.3	5.9	44
5	6.9	26	1.5	15	2.6	2.1	3.3	1.5	7.4	2.8	5.1	27
6	21	15	1.4	34	5.3	2.8	3.3	1.6	5.4	2.7	8.4	18
7	21	9.9	1.3	15	7.2	2.1	1.5	1.5	10	2.9	9.2	14
8	8.7	6.1	2.0	8.2	3.2	1.7	1.6	1.7	8.1	3.4	7.1	11
9	5.1	3.6	2.0	5.1	2.6	1.9	1.9	1.6	3.4	4.3	13	16
10	3.1	2.4	1.8	3.8	2.1	1.7	1.5	1.7	2.8	4.7	9.2	23
11	2.4	3.5	2.1	8.8	2.1	1.7	1.5	1.5	2.9	3.7	3.9	8.9
12	2.1	5.5	1.5	3.4	1.8	1.6	1.5	2.1	2.0	2.8	2.7	7.0
13	3.4	2.8	1.5	1.9	1.5	1.6	1.9	1.9	1.7	2.7	4.1	7.9
14	3.8	1.8	2.3	2.2	1.4	1.6	3.8	1.8	18	5.5	21	8.0
15	3.7	1.6	2.6	3.5	1.4	1.5	2.5	2.6	28	7.3	18	13
16	3.5	1.5	2.3	3.3	1.5	1.5	1.7	2.4	27	5.1	27	8.6
17	5.7	31	49	4.4	1.4	1.5	1.5	2.5	22	4.3	23	7.5
18	29	42	191	5.9	1.4	1.6	1.6	2.2	14	8.1	9.7	11
19	19	36	90	2.9	1.6	1.4	2.0	1.9	9.3	3.3	16	234
20	10	23	35	2.2	1.6	1.4	1.9	2.8	8.1	5.7	16	147
21	8.7	29	19	2.2	1.7	1.6	1.7	1.9	11	41	12	126
22	9.9	25	16	2.1	1.6	1.7	4.7	1.5	11	19	12	81
23	9.5	15	10	3.9	1.5	1.6	8.0	1.9	35	12	17	52
24	8.2	7.4	8.1	10	1.5	1.6	14	1.9	35	25	24	67
25	8.4	4.7	6.1	5.0	1.6	1.7	5.6	2.2	47	18	31	67
26	7.6	3.6	6.6	6.6	1.6	1.5	3.6	2.2	42	27	24	47
27	14	3.8	6.5	4.2	1.5	1.8	4.8	1.8	39	34	58	68
28	12	4.9	5.4	2.5	1.6	1.8	2.8	2.0	31	23	103	57
29	6.0	3.0	5.6	2.2	19	1.7	5.4	8.2	36	11	130	33
30	12	1.9	58	2.0	---	1.7	3.0	5.5	19	20	442	21
31	26	---	97	1.9	---	1.7	---	4.7	---	18	321	---
TOTAL	308.0	546.0	632.5	241.8	78.2	67.8	92.8	73.1	496.1	341.3	1421.6	1548.9
MEAN	9.94	18.2	20.4	7.80	2.70	2.19	3.09	2.36	16.5	11.0	45.9	51.6
MAX	29	92	191	35	19	13	14	8.2	47	41	442	234
MIN	2.1	1.5	1.3	1.9	1.4	1.4	1.5	1.5	1.7	2.7	2.7	7.0
AC-FT	611	1080	1250	480	155	134	184	145	984	677	2820	3070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

	40.7	51.2	63.2	69.2	76.9	34.8	48.8	61.5	70.7	27.7	27.2	48.9
MEAN	236	223	376	224	356	129	330	173	292	136	76.7	320
MAX (WY)	1995	1983	1992	1979	1992	1992	1991	1993	1993	1981	1989	1979
MIN (WY)	2.07	4.95	2.17	4.64	2.64	1.57	2.91	2.36	2.73	3.43	6.86	1.90
	1988	1981	1990	1986	1988	1981	1987	1996	1990	1994	1977	1982

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1977 - 1996
ANNUAL TOTAL	12443.21	5848.1	
ANNUAL MEAN	34.1	16.0	51.7
HIGHEST ANNUAL MEAN			137
LOWEST ANNUAL MEAN			12.4
HIGHEST DAILY MEAN	685	442	2810
LOWEST DAILY MEAN	.29	1.3	.29
ANNUAL SEVEN-DAY MINIMUM	.38	1.5	.34
INSTANTANEOUS PEAK FLOW		823	3780
INSTANTANEOUS PEAK STAGE		29.81	38.85
ANNUAL RUNOFF (AC-FT)	24680	11600	37490
10 PERCENT EXCEEDS	86	35	103
50 PERCENT EXCEEDS	8.5	4.7	7.4
90 PERCENT EXCEEDS	.98	1.6	1.5

08072500 BARKER RESERVOIR NEAR ADDICKS, TX

LOCATION.--Lat 29°46'11", long 95°38'49", Harris County, Hydrologic Unit 12040104, at dam on Buffalo Bayou, 45 ft upstream from reservoir outlet works, 1,160 ft upstream from Addicks-Howell county road, 1.1 mi south of Addicks, and 1.2 mi upstream from South Mayde Creek.

DRAINAGE AREA.--128 mi². Prior to August 1977, 134 mi². Basin boundary change due to relocation of drainage ditches. During extreme floods, basin may receive and (or) lose runoff due to basin interchange.

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

Water-quality records.--Chemical and biochemical analyses: June 1978 to September 1981.

GAGE.--Water-stage recorders. Datum of gage is sea level, 1973 adjustment; unadjusted for land-surface subsidence (since 1973). Prior to Oct 1, 1980, 0.33 ft below sea level, unadjusted for land-surface subsidence.

REMARKS.--The reservoir is formed by a rolled earthfill dam 71,900 ft 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 x 7 ft wide, each controlled by a vertical slide gate. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	114.7	
Ground elevation at ends of dam.....	106.0	209,000
Design flood.....	105.4	199,000
Crest of spillway (invert).....	73.2	0

COOPERATION.--The capacity table, furnished by the U.S. Army Corps of Engineers, is based on extensive releveing survey made in 1974 using sea level, 1973 adjustment as base.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 66,780 acre-ft Mar. 6-7, 1992 (elevation, 95.89 ft); minimum, reservoir dry at times.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 6,970 acre-ft Sept. 4 at 1000 hours (elevation, 87.41 ft); minimum, 0.11 acre-ft Dec. 11-17, May 11 (elevation, 73.64 ft).

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

73.2	0	80.4	49	85.0	2,430	91.0	20,530
76.3	2	81.0	100	86.0	3,980	92.0	27,320
76.9	4	81.6	192	87.0	6,000	93.0	35,800
77.6	8	82.2	331	88.0	8,580	94.0	46,290
78.4	14	83.0	666	89.0	11,760	95.0	56,420
79.2	22	84.0	1,370	90.0	15,620	96.0	68,160
79.8	32						

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.30	.12	.38	.12	.40	242	.13	.12	.20	.19	6620
2	.14	.27	.12	.26	.12	.25	265	.12	.12	.16	.20	6800
3	.28	.73	.12	.21	.13	.19	287	.12	.15	.14	.18	6800
4	.20	.36	.12	.18	.13	.17	306	.12	.15	.13	.16	6890
5	.16	.26	.12	.18	.14	.16	337	.12	.14	.13	.16	6530
6	.14	.20	.12	.40	.14	.15	397	.12	.13	.12	.16	5860
7	.14	.17	.12	.26	.20	.15	438	.12	.12	.13	.16	5260
8	.14	.15	.12	.20	.17	.14	356	.11	.12	.13	.16	5340
9	.13	.14	.12	.17	.15	.14	387	.11	.12	.13	.15	5500
10	.13	.13	.11	.15	.14	.14	412	.11	.13	.13	.19	5050
11	.12	.13	.11	.14	.13	.15	438	.15	.12	.13	.17	3730
12	.12	.12	.11	.13	.13	.15	47.0	.22	.12	.13	.32	1830
13	.12	.12	.11	.13	.13	1.58	.19	.16	.12	.13	.40	4.18
14	.12	.12	.11	.12	.13	4.79	.18	.12	.14	.13	.26	.14
15	.12	.12	.11	.12	.13	9.70	.12	.12	.13	.13	.21	12.4
16	.12	.12	.11	.13	.12	14.8	.12	.12	.21	.12	.28	.21
17	.12	.32	85.1	.13	.12	20.1	.12	.12	.17	.12	4.18	.16
18	.12	.37	1730	.14	.12	26.8	.12	.12	.14	.12	.35	.21
19	.14	.40	2620	.14	.13	33.7	.12	.12	.14	.12	.48	1150
20	.13	.39	1570	.13	.12	42.1	.12	.12	.13	.12	.47	3290
21	.13	.26	816	.13	.12	52.1	.12	.12	.18	.12	12.0	4220
22	.13	.21	160	.14	.12	71.3	.21	.12	.18	.16	77.5	4370
23	.13	.18	.34	.14	.12	30.5	.25	.12	.43	.16	238	2800
24	.12	.16	.28	.13	.12	40.3	.19	.12	108	.15	380	2040
25	.13	.14	.24	.14	.12	54.1	.12	.12	492	.18	678	2290
26	.13	.13	.22	.14	.13	77.5	.13	.12	803	.17	1040	2520
27	.13	.12	.14	.13	.13	105	.12	.12	672	.18	1430	2970
28	.13	.12	.13	.13	.16	138	.12	.12	331	.34	1830	3000
29	.12	.12	.13	.14	.49	173	.17	.12	133	.27	2200	1860
30	.18	.12	9.63	.13	---	199	.15	.12	14.6	.19	3320	466
31	.16	---	19.2	.12	---	223	---	.12	---	.19	5560	---
MAX	.28	.73	2620	.40	.49	223	438	.22	803	.34	5560	6890
MIN	.12	.12	.11	.12	.12	.14	.12	.11	.12	.12	.15	.14
CAL YR 1995	MAX	12110	MIN	.11								
WTR YR 1996	MAX	6890	MIN	.11								

SAN JACINTO RIVER BASIN

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080/2730 BEAR CREEK NEAR BARKER, TX

LOCATION.--Lat 29°49'50", long 95°41'12", Harris County, Hydrologic Unit 12040104, on right bank at upstream side of bridge on Clay Road, 2.5 mi west of State Highway 6, and 4.1 mi upstream from mouth of Langham Creek.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--July 1977 to current year.

Water-quality records.--Chemical and biochemical analyses: June 1978 to September 1981.

REVISED RECORDS.--WDR IX-88-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 100.00 ft above sea level. Mar. 1, 1984, to Mar. 12, 1985, at site 1,100 ft downstream, same datum.

REMARKS.--Records fair. Channel was rectified in 1981 and 1987 water years. Considerable diversions and return of irrigation water from area above station. Maximum gage height for period of record occurred prior to channel rectification. Gage at temporary location 1,100 ft downstream Mar. 1, 1984, to Mar. 12, 1985. Satellite telemeter at station.

PEAK DISCHARGE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	4.6	.44	23	.35	7.1	.72	.42	.49	2.4	.01	28
2	1.5	18	.47	9.9	.35	.90	.76	.17	.48	.91	.00	13
3	42	35	.49	3.3	.38	.47	.91	.21	.42	.29	.00	8.4
4	15	15	.49	1.4	.47	.32	1.0	.17	.64	.11	.04	5.7
5	4.0	9.4	.49	5.5	.57	.35	1.2	.17	.76	.05	.13	3.7
6	12	7.1	.49	31	.73	.40	1.8	.31	.80	.02	.18	2.4
7	18	5.0	.48	5.2	2.1	.25	.94	.35	.81	.01	.13	2.1
8	9.2	3.0	.47	1.5	.89	.25	.59	.17	.81	.01	.05	1.9
9	3.0	2.1	.57	.92	.62	.25	.51	.17	.77	.00	.12	1.1
10	1.1	1.6	.64	.59	.58	.25	.46	.20	.65	.00	8.1	2.9
11	.44	1.2	.68	.47	.48	.28	.46	1.4	.58	.00	44	5.3
12	.27	.98	.81	.39	e.30	.34	.49	2.5	.58	.00	12	3.0
13	.27	.76	.86	.39	.20	.33	.90	1.6	1.6	1.9	16	1.3
14	.26	.66	.84	.39	.28	.35	.81	.62	1.4	7.5	11	.50
15	.19	.56	.99	.39	.30	.35	.45	.57	2.6	4.8	5.3	.81
16	.15	.49	.97	.39	e.24	.35	.53	.38	18	2.3	2.2	1.5
17	.15	1/	41	.38	e.28	.34	.49	.40	17	1.1	2.5	1.9
18	.20	39	140	.42	.32	.52	.49	.22	7.3	.51	2.7	1.5
19	.22	13	47	.45	.54	.65	1.7	.18	1.8	.24	1.5	131
20	.23	8.1	23	.42	.53	.54	7.8	.29	.58	.13	3.0	130
21	.41	3.5	9.2	.41	.21	.50	4.0	.27	1.1	.12	3.8	75
22	.53	1.8	4.4	.35	e.17	.52	3.3	.41	1.9	.18	3.1	29
23	.52	1.2	2.1	.36	.18	.64	11	.34	5.3	.19	5.0	12
24	.37	.87	1.1	.42	.29	.71	3.9	.44	27	.19	14	47
25	.24	.67	.85	.55	.50	.83	1.0	.33	44	.37	23	59
26	.21	.58	.69	.51	.31	.88	.43	.31	80	1.2	51	20
27	.21	.54	.58	.42	.30	1.0	.25	.27	45	.98	72	95
28	.21	.49	.54	.43	.29	1.0	.17	.48	23	1.4	56	72
29	.47	.48	.38	.42	b.3	.92	.46	.66	12	1.7	43	19
30	.70	.46	28	.41	---	.87	1.1	1.3	5.5	.59	103	8.9
31	.63	---	51	.38	---	.71	---	.57	---	.08	81	---
TOTAL	113.49	193.14	360.02	91.06	19.06	23.17	48.62	15.88	302.87	29.28	563.86	782.91
MEAN	3.66	6.44	11.6	2.94	.66	.75	1.62	.51	10.1	.94	18.2	26.1
MAX	42	39	140	31	6.3	7.1	11	2.5	80	7.5	103	131
MIN	.15	.46	.38	.35	.17	.25	.17	.17	.42	.00	.00	.50
AC-FT	225	383	714	181	38	46	96	31	601	58	1120	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	19.8	21.7	22.0	24.5	24.9	13.0	17.0	26.4	30.2	10.9	12.0	19.4								
MAX	143	98.2	131	91.0	120	52.7	119	89.5	106	45.3	53.1	128								
(WY)	1995	1983	1992	1979	1992	1993	1991	1983	1986	1983	1983	1979								
MIN	.010	.034	.098	.75	.61	.26	.029	.51	1.19	.94	.76	.10								
(WY)	1989	1989	1990	1986	1988	1982	1987	1996	1980	1996	1990	1990								

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1977 - 1996
ANNUAL TOTAL	5222.86	2543.36	
ANNUAL MEAN	14.3	6.95	20.2
HIGHEST ANNUAL MEAN			48.4
LOWEST ANNUAL MEAN			4.45
HIGHEST DAILY MEAN	256 Jun 1	140 Dec 18	1120 Aug 31 1981
LOWEST DAILY MEAN	.14 Apr 27	.00 Jul 9	.00 Nov 20 1977
ANNUAL SEVEN-DAY MINIMUM	.16 Jun 22	.01 Jul 6	.00 Mar 16 1978
INSTANTANEOUS PEAK FLOW		294 Dec 18	2060 Aug 31 1981
INSTANTANEOUS PEAK STAGE		7.08 Dec 18	16.72 Sep 20 1979
ANNUAL RUNOFF (AC-FT)	10360	5040	14640
10 PERCENT EXCEEDS	41	18	47
50 PERCENT EXCEEDS	1.7	.64	1.8
90 PERCENT EXCEEDS	.27	.20	.05

e Estimated

SAN JACINTO RIVER BASIN

08072760 LANGHAM CREEK AT WEST LITTLE YORK ROAD NEAR ADDICKS, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°52'01", long 95°38'47", Harris County, Hydrologic Unit 12040104, at bridge on West Little York Road, 500 ft upstream from former site, 2.1 mi downstream from Dinners Creek, and 5.7 mi north of Addicks.

DRAINAGE AREA.--24.6 mi².

PERIOD OF RECORD.--July 1977 to September 1980 (daily mean discharge). October 1980 to September 1982 (peak discharges greater than base discharge and annual maximum), October 1982 to September 1989 (annual maximum). October 1989 to current year (peak discharges greater than base discharge).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 90.00 ft above sea level, 1973 adjustment.

REMARKS.--Records good. Rain gage at station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s June 19, 1993 (gage height 22.65 ft); maximum gage height 24.42 ft Sept. 19, 1979; no flow for a few days during period July to September 1977, and during the 1978 and 1980 water years.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	0730	580	17.94	Aug. 26	1730	947	19.65
Dec. 30	1930	454	17.27				

08073000 ADDICKS RESERVOIR NEAR ADDICKS, TX

LOCATION.--Lat 29°47'28", long 95°37'24", Harris County, Hydrologic Unit 12040104, at dam on South Mayde Creek, 65 ft upstream from reservoir outlet works, 2,700 ft upstream from U.S. Highway 90 and Interstate Highway 10, 1.2 mi east of Addicks, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--136 mi².

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

Water-quality records.--Chemical and biochemical analyses: June 1978 to September 1981.

REVISED RECORDS.--WDR IX--2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level, 1973 adjustment; unadjusted for land-surface subsidence (since 1973). Prior to Oct. 1, 1980, datum of gage was sea level, unadjusted for land-surface subsidence that occurred prior to that date.

REMARKS.--The reservoir is formed by a rolled earthfill dam 61,166 ft 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 x 6 ft wide, each controlled by a vertical slide gate. Runoff in excess of maximum design capacity will be discharged around both ends of dam. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	122.7	-
Design flood.....	112.7	212,500
Ground elevation at ends of dam.....	112.0	200,800
Crest of spillway (invert).....	71.1	0

COOPERATION.--The capacity table, furnished by the U.S. Army Corps of Engineers, was based on extensive releveling survey in 1974, using sea level, 1973 adjustment.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 57,950 acre-ft Mar. 9, 1992 (elevation, 100.58 ft); minimum, reservoir was dry at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1935 reached a stage of 89.9 ft, former datum, at bridge on U.S. Highway 90, 2,700 ft downstream from gage, from information by the U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 7,610 acre-ft Sept. 1 at 1545 hours (elevation, 91.03 ft); minimum, 0.37 acre-ft May 3-4 (elevation, 71.69 ft).

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

71.1	0	75.5	13	81.0	295	87.0	2,320	92.0	9,930	97.0	32,040
71.9	0.5	76.0	21	82.0	414	88.0	3,190	93.0	12,980	98.0	38,460
72.4	1	77.0	47	83.0	598	89.0	4,300	94.0	16,700	99.0	45,500
73.6	2	78.0	85	84.0	870	90.0	5,710	95.0	21,120	100.0	53,180
74.6	4	79.0	134	85.0	1,220	91.0	7,540	96.0	26,260	101.0	61,570
75.1	8	80.0	202	86.0	1,680						

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	19	.57	293	.44	.47	417	.39	.43	158	.55	7540
2	.68	36	.57	.99	.47	.55	438	.40	.43	.54	.55	7240
3	127	133	.63	.66	.47	.50	460	.37	.43	.47	.52	7020
4	31	1.2	.62	.54	.47	.49	481	.41	.42	.55	.60	6830
5	.73	1.0	.63	1.0	.47	.47	495	.39	.43	.48	.59	6330
6	.52	.98	.78	33	.47	.48	554	.43	.43	.51	.55	5690
7	.59	.83	.62	.90	.62	.45	582	.41	.41	.53	.59	5280
8	.59	.91	.57	.57	.46	.45	533	.41	.40	.54	.58	5340
9	.52	.76	.86	.50	.45	.47	509	.42	.41	.51	.82	5410
10	.49	.64	.67	.47	.46	.47	533	.43	.43	.50	3.6	5060
11	.48	1.1	.66	.46	.45	.47	552	.74	.42	.50	131	4070
12	.49	.73	.61	.45	.45	.47	302	.45	.41	.50	.42	2440
13	.47	.65	.64	.45	.45	26	48	.44	.55	.57	1.6	722
14	.53	.57	.59	.45	.46	51	.70	.43	.69	.70	.62	.87
15	.50	.67	.62	.45	.45	74	.43	.43	.62	.70	.46	76
16	.51	.59	.77	.45	.45	96	.39	.43	8.7	.68	1.0	.75
17	.47	70	580	.44	.45	119	.40	.43	.74	.61	9.2	.44
18	.47	143	2670	.47	.45	145	.39	.46	.49	.64	.88	.79
19	.47	12	3320	.47	.45	164	.40	.45	.45	.61	1.9	1210
20	.47	1.2	2100	.45	.45	184	.43	.45	.43	.65	1.7	2490
21	.47	.95	1250	.47	.45	204	.44	.46	.93	.76	61	3100
22	.47	.77	781	.47	.43	224	1.4	.46	.55	.76	170	3000
23	.55	.74	365	.45	.43	191	1.6	.47	19	.70	346	2050
24	.49	.69	54	.47	.43	214	.59	.47	330	.68	836	1810
25	.52	.64	.69	.46	.43	243	.42	.47	910	.93	1230	2370
26	.52	.61	.65	.44	.43	269	.43	.47	1330	1.2	1990	2570
27	.55	.67	.45	.46	.41	293	.38	.47	1330	1.0	3790	3110
28	.55	.57	.44	.47	.43	320	.43	.47	1060	1.0	4530	3400
29	.61	.54	.44	.46	.47	346	.82	.44	798	.89	5130	2520
30	.93	.59	91	.45	---	370	.45	.44	535	.64	6350	1160
31	.71	---	468	.44	---	392	---	.43	---	.60	7340	---
MAX	127	143	3320	293	.62	392	582	.74	1330	158	7340	7540
MIN	.47	.54	.44	.44	.41	.45	.38	.37	.40	.47	.46	.44
CAI YR 1995	MAX	10010	MIN	.37								
WTR YR 1996	MAX	7540	MIN	.37								

LOCATION.--Lat 29°45'42", long 95°36'20", Harris County, Hydrologic Unit 12040104, near right bank at bridge on Dairy-Ashford Road over rectified channel, 1.8 mi downstream from South Mayde Creek, and 2.6 mi southeast of Addicks.

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

Water-quality records.--Chemical analyses: October 1962 to March 1963. Chemical, biochemical, and pesticide analyses: August 1970 to September 1982.

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

REMARKS.--No estimated daily discharges. Records fair. Floodflows are regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000), 3.2 and 3.0 mi upstream, respectively (total capacity, 315,900 acre-ft). Extreme low flow is sustained by drainage from irrigated lands, and from minor wastewater effluent.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1896, 85.6 ft in December 1935, adjusted to former site from floodmark 0.5 mi downstream, on basis of slope of flood of Aug. 29, 1945, from information by local resident.

ANNUAL TOTAL	103667		45262.9						
ANNUAL MEAN	284		124			234			
HIGHEST ANNUAL MEAN						784			1992
LOWEST ANNUAL MEAN						23.3			1951
HIGHEST DAILY MEAN	1700	Mar 18	1520	Sep 13	6790			Jun 28	1960
LOWEST DAILY MEAN	15	Jul 18	8.3	Mar 18		.00		Jun 22	1948
ANNUAL SEVEN-DAY MINIMUM	24	Jun 22	9.0	Mar 15		.00		Jun 22	1948
INSTANTANEOUS PEAK FLOW			1810	Dec 18	11200			Aug 29	1945
INSTANTANEOUS PEAK STAGE			60.90	Dec 18		81.23		Aug 29	1945
ANNUAL RUNOFF (AC-FT)	205600		89780			169300			
10 PERCENT EXCEEDS	923		299			750			
50 PERCENT EXCEEDS	91		41			47			
90 PERCENT EXCEEDS	32		28			5.2			

SAN JACINTO RIVER BASIN

/5

08073600 BUFFALO BAYOU AT WEST BELT DRIVE, HOUSTON, TX

LOCATION.--Lat 29°45'43", long 95°33'27", Harris County, Hydrologic Unit 12040104, at downstream side of bridge on West Belt Drive in west Houston, 100 ft downstream from Rummel Creek, 3.5 mi downstream from station 08073500, and 3.7 mi upstream from station 08073700.

DRAINAGE AREA.--307 mi², unadjusted for basin boundary changes.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1971 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 0.67 ft below sea level.

REMARKS.--Records fair. Stage discharge relationship is affected by seasonal vegetal growth during most years. High water flow is a combination of regulated flow from Barker and Addicks Reservoirs (stations 08072500 and 08073000, located 10.1 and 10.3 mi upstream, respectively), and runoff from highly urbanized areas below these reservoirs. Low flow is mostly sustained by wastewater effluent. Rain gage at station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	116	48	e530	46	315	22	56	49	299	52	167
2	72	384	43	e375	55	117	19	46	49	182	50	466
3	375	360	42	e130	56	68	19	46	50	49	51	486
4	351	336	42	86	57	54	18	45	58	44	50	261
5	136	133	48	138	56	48	22	46	60	42	54	519
6	53	95	45	389	56	46	25	43	50	38	52	769
7	44	67	50	252	86	47	19	48	45	34	52	720
8	47	60	62	115	69	45	90	43	44	37	53	45
9	45	57	67	82	53	45	43	46	43	38	73	42
10	37	48	55	71	50	44	20	46	46	38	270	344
11	39	59	46	65	49	45	18	227	47	38	529	873
12	40	58	42	59	47	41	257	120	44	36	501	1340
13	39	47	40	56	47	35	342	69	43	37	406	1450
14	42	41	42	51	47	20	94	51	138	38	161	808
15	42	37	36	50	43	17	43	46	73	43	77	92
16	39	38	40	48	42	20	39	42	196	47	97	160
17	37	358	1210	50	45	18	39	46	158	45	602	127
18	38	372	1350	62	43	19	36	46	73	44	311	101
19	42	520	900	65	41	19	36	49	69	46	176	949
20	45	292	1460	56	43	21	37	44	143	46	310	277
21	42	148	1120	53	42	20	41	46	154	46	196	134
22	41	96	662	48	40	20	279	46	136	50	247	434
23	38	70	531	50	38	86	328	43	327	52	256	799
24	39	63	311	53	38	21	139	46	367	46	375	1330
25	37	57	140	53	36	22	e80	43	325	49	80	248
26	39	53	78	50	39	22	60	43	64	87	675	317
27	41	49	71	53	39	23	50	46	116	76	363	218
28	46	50	68	52	91	22	48	45	335	72	96	189
29	50	49	67	48	261	20	133	41	342	127	97	1070
30	69	45	147	44	---	22	88	41	304	74	598	1110
31	58	---	168	50	---	21	---	46	---	55	285	---
TOTAL	2110	4158	9031	3284	1655	1383	2484	1691	3948	1955	7195	15845
MEAN	68.1	139	291	106	57.1	44.6	82.8	54.5	132	63.1	232	528
MAX	375	520	1460	530	261	315	342	227	367	299	675	1450
MIN	37	37	36	44	36	17	18	41	43	34	50	42
AC-FT	4190	8250	17910	6510	3280	2740	4930	3350	7830	3880	14270	31430

SAN JACINTO RIVER BASIN

08073600 BUFFALO BAYOU AT WEST BELT DRIVE, HOUSTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1996, BY WATER YEAR (WY)

MEAN	271	349	343	398	417	309	306	375	439	269	199	328
MAX	861	1027	961	1133	1619	1701	1639	965	1129	956	784	1278
(WY)	1995	1995	1977	1992	1992	1992	1992	1992	1973	1993	1983	1981
MIN	58.5	38.4	62.4	84.8	36.2	39.6	46.0	54.5	65.7	63.1	67.4	60.0
(WY)	1979	1972	1990	1986	1976	1976	1978	1996	1982	1996	1980	1988

SUMMARY STATISTICS

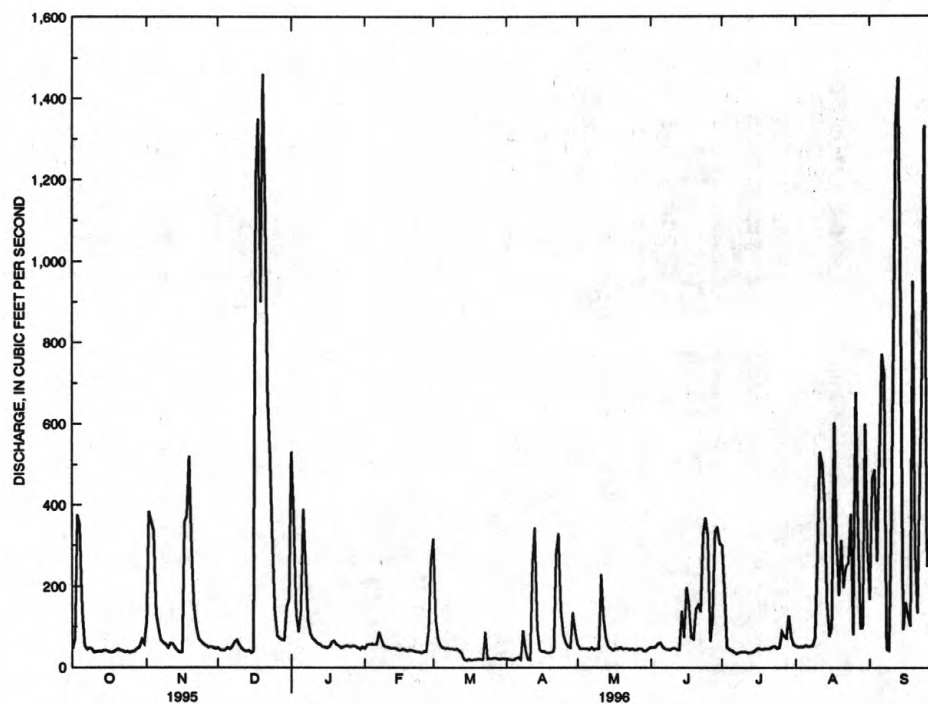
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1971 - 1996

ANNUAL TOTAL	113637	54739										
ANNUAL MEAN	311	150										
HIGHEST ANNUAL MEAN										332		
LOWEST ANNUAL MEAN										854		1992
HIGHEST DAILY MEAN										142		1988
LOWEST DAILY MEAN	1710	Mar 18	1460	Dec 20						3820	Aug 31	1981
ANNUAL SEVEN-DAY MINIMUM	16	Jul 3	17	Mar 15						16	Jul 3	1995
INSTANTANEOUS PEAK FLOW	28	Jun 22	19	Mar 14						19	Mar 14	1996
INSTANTANEOUS PEAK STAGE			2380	Dec 18						7290	Mar 4	1992
ANNUAL RUNOFF (AC-FT)	225400		53.39	Dec 18						68.30	Mar 4	1992
10 PERCENT EXCEEDS	1050		108600							240800		
50 PERCENT EXCEEDS	97		368							991		
90 PERCENT EXCEEDS	39		51							108		
			37							46		

e Estimated

08073600 BUFFALO BAYOU AT WEST BELT DRIVE, HOUSTON, TX
MEAN DAILY DISCHARGE (CFS)

SAN JACINTO RIVER BASIN

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08073600 BUFFALO BAYOU AT WEST BELT DRIVE, HOUSTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: June 1978 to current year. Chemical and biochemical analyses: June 1978 to August 1986. Pesticide analyses: June 1978 to March 1983. Sediment analyses: May 1979 to August 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1979 to September 1981.

WATER TEMPERATURES: June 1979 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 922 microsiemens June 25, 1979; minimum daily, 78 microsiemens Aug. 31, 1981.

WATER TEMPERATURE: Maximum daily, 30.5°C July 1, 1979; minimum daily, 1.0°C Nov. 27, 1980.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOIE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)
FEB 29...	0935	76	635	7.3	15.5	27	16	8.5	85	4.8
MAY 08...	1000	42	860	7.4	25.0	15	3.1	5.3	64	0.8
JUL 30...	1208	77	620	7.7	29.0	52	32	7.5	97	2.1
AUG 29...	0845	88	430	7.1	27.0	80	31	5.2	66	2.0
DATE	BOD OXYGEN DEMAND, BIOCHEM CARBON, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CaCO3)	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY DIS FIX END FIELD CaCO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)
FEB 29...	4.2	190	50	72	2.4	39	1	2.3	140	33
MAY 08...	1.2	130	0	40	7.3	120	5	9.1	180	43
JUL 30...	1.8	110	0	35	5.9	76	3	8.0	140	23
AUG 29...	1.5	93	0	30	4.4	49	2	5.2	110	21
DATE	CHLORIDE, DIS-SOLVED (MG/L AS Cl)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
FEB 29...	75	0.40	13	342	34	13	21	3.80	3.80	0.100
MAY 08...	110	0.50	18	500	34	14	20	7.70	7.70	0.100
JUL 30...	80	0.40	16	347	62	16	46	3.15	3.15	0.050
AUG 29...	46	0.40	13	240	46	<1	--	1.14	1.14	0.060
DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	
FEB 29...	3.90	3.90	0.180	0.72	0.90	1.20	1.10	3.4	9.8	
MAY 08...	7.80	7.80	0.070	0.73	0.80	2.10	2.00	6.1	6.9	
JUL 30...	3.20	3.20	0.050	0.65	0.70	1.20	1.20	3.7	9.6	
AUG 29...	1.20	1.20	0.140	0.56	0.70	0.360	0.360	1.1	9.5	

0807300 BUFFALO BAYOU AT PINEY POINT, TX

LOCATION.--Lat 29°44'48", long 95°31'24", Harris County, Hydrologic Unit 12040104, on right bank at upstream side of bridge on Piney Point Road, village of Piney Point, 3.7 mi downstream from Rummel Creek, 7.2 mi downstream from gage near Addicks (station 08073500), and 12.5 mi upstream from gage at Houston (station 08074000).

DRAINAGE AREA.--317 mi².

PERIOD OF RECORD.--October 1963 to September 1976 and October 1984 to current year. October 1976 to September 1984 (gage heights only).

Water-quality records.--Chemical, biochemical, and pesticide analyses: October 1970 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 1.35 ft below sea level.

REMARKS.--No estimated daily discharges. Records good. High-water flow is a combination of regulated flow from Barker and Addicks Reservoirs (stations 08072500 and 08073000), located 14.0 and 13.8 mi upstream from gage, respectively, and runoff from highly urbanized areas below these reservoirs. Low flow is mostly sustained by wastewater effluent. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	128	65	526	57	348	31	64	45	321	62	138
2	113	414	62	394	67	157	29	53	44	227	61	451
3	418	388	62	154	65	85	30	51	44	59	61	517
4	362	350	62	98	65	67	30	49	55	52	58	263
5	180	165	64	125	66	59	30	49	64	49	59	481
6	76	117	67	396	67	59	34	47	54	48	57	718
7	62	90	70	279	100	55	30	50	48	44	56	691
8	68	76	74	133	89	50	95	45	46	46	58	91
9	65	73	104	97	66	50	57	46	45	46	67	62
10	57	66	75	82	62	49	34	46	48	45	265	279
11	54	79	65	75	59	51	29	220	50	47	582	815
12	52	74	64	66	55	50	210	167	48	46	481	1300
13	52	64	63	66	55	47	369	83	45	47	453	1440
14	54	58	67	61	55	33	124	61	142	46	197	884
15	54	53	61	61	53	31	54	52	121	49	103	199
16	51	55	64	60	50	32	48	48	193	50	86	181
17	51	378	1270	62	52	31	47	49	176	51	526	216
18	51	390	1710	77	51	31	47	46	76	49	392	161
19	55	628	664	78	53	29	46	49	60	49	232	1060
20	58	331	1390	73	52	31	47	46	146	47	316	366
21	54	182	1130	70	53	30	49	46	160	47	250	164
22	54	120	649	65	50	30	288	45	171	53	295	438
23	53	96	541	66	49	94	388	45	353	61	277	692
24	53	84	334	69	48	34	154	44	393	58	478	1400
25	51	76	172	69	46	33	85	43	395	60	104	283
26	54	70	86	69	50	31	65	44	98	118	500	378
27	55	67	77	69	50	32	56	46	105	96	506	280
28	66	65	72	67	120	32	51	48	365	87	101	167
29	57	60	67	66	296	30	154	45	369	139	96	960
30	96	60	183	62	---	32	105	40	335	90	513	1030
31	81	---	118	63	---	31	---	43	---	66	332	---
TOTAL	2671	4857	9552	3698	2001	1754	2816	1810	4294	2293	7624	16105
MEAN	86.2	162	308	119	69.0	56.6	93.9	58.4	143	74.0	246	537
MAX	418	628	1710	526	296	348	388	220	395	321	582	1440
MIN	51	53	61	60	46	29	29	40	44	44	56	62
AC-FT	5300	9630	18950	7330	3970	3480	5590	3590	8520	4550	15120	31940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996h, BY WATER YEAR (WY)

	MEAN	264	335	276	332	382	347	306	431	449	243	194	259
MAX	1101	1068	945	1156	1673	1804	1708	1584	1295	1027	534	848	
(WY)	1971	1995	1986	1992	1992	1992	1992	1968	1992	1993	1989	1974	
MIN	30.4	11.2	31.5	28.3	29.9	13.8	22.6	37.9	30.9	58.5	61.8	70.5	
(WY)	1964	1967	1971	1971	1967	1967	1965	1964	1965	1965	1967	1988	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1964 - 1996h

ANNUAL TOTAL	119919	59475	
ANNUAL MEAN	329	162	
HIGHEST ANNUAL MEAN			315
LOWEST ANNUAL MEAN			907
HIGHEST DAILY MEAN	1850	Jan 13	77.5
LOWEST DAILY MEAN	21	Jul 3	4740
ANNUAL SEVEN-DAY MINIMUM	34	Jun 22	6.0
INSTANTANEOUS PEAK FLOW			7.0
INSTANTANEOUS PEAK STAGE			7500
ANNUAL RUNOFF (AC-FT)	237900	118000	61.23
10 PERCENT EXCEEDS	1100	394	946
50 PERCENT EXCEEDS	105	65	103
90 PERCENT EXCEEDS	47	45	30

h See PERIOD OF RECORD paragraph.

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LOCATION.--Lat 29°45'36", long 95°24'30", Harris County, Hydrologic Unit 12040104, on right bank at downstream side of bridge on Shepherd Drive in Houston and 0.8 mi upstream from Waugh Drive.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1936 to September 1957, October 1957 to December 1961 (high-water records and discharge measurements), January 1962 to September 1975, October 1975 to current year (high-water records and discharge measurements).

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1.36 ft below sea level, 1973 adjustment; 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 mi downstream at 4.08-foot lower datum. Jan. 17, 1962, to Sept. 30, 1973, auxiliary water-stage recorder 0.8 mi downstream. Water-stage recorder at Main Street (station 08074598) used as auxiliary gage after Sept. 30, 1993.

REMARKS.--No estimated daily discharges. Records fair. Although floodflows are regulated by Barker and Addicks Reservoirs (stations 08072500 and 08073000) located 26.3 and 26.8 mi upstream, respectively, flood peaks from the urbanized areas below these reservoirs are often independent of the regulation. Discharge is computed using a stage-fall-discharge relation for all storms that produce peak discharges above 2,000 ft³/s. Discharges below 1,000 ft³/s are computed or estimated following designated storm periods only. Low flow is mostly sustained by waste water effluent from Houston suburbs. Gage heights are affected by tides, backwater from Whiteoak Bayou, and other streams. Satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s Mar. 4, 1992 (gage height, 34.63 ft); minimum daily, 1.3 ft/s May 24, 1939, Nov. 5, 1950, occurred prior to urban development and accompanying wastewater effluent releases.

EXTREMES OUTSIDE PERIOD OF RECORD.--All flood data at site 0.8 mi downstream at present datum. Maximum gage height since at least 1835, 49.0 ft Dec. 9, 1935 (discharge, 40,000 ft³/s); furnished by engineer for Harris County. Flood of May 31, 1929, reached a gage height of 43.5 ft (discharge, 19,000 ft³/s), at bridge on Capitol Avenue, affected by bridge; furnished by city of Houston.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,370 ft³/s Dec. 18 at 1100 hours (gage height, 19.96 ft); minimum discharges not determined (affected by tides).

[illegible]

SAN JACINTO RIVER BASIN

08074000 BUFFALO BAYOU AT HOUSTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to July 1981. Pesticide analyses: February 1 1969 to July 1981.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1986 to current year.

WATER TEMPERATURE: April 1986 to current year.

DISSOLVED OXYGEN: April 1986 to current year.

INSTRUMENTATION.--Since April 1986, a three-parameter water-quality monitor continuously records specific conductance, water temperature, and dissolved oxygen at this station.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,040 microsiemens Dec. 1, 1994; minimum 29 microsiemens May 8, 1995.

WATER TEMPERATURE: Maximum, 32.5°C July 9, 1996; minimum 5.0°C Dec. 24, 1989.

DISSOLVED OXYGEN: Maximum, 16.5 mg/L Apr. 10, 1996; minimum, 1.1 Aug. 9, 1988.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 996 microsiemens Mar. 24; minimum, 33 microsiemens Sept. 18, 19.

WATER TEMPERATURE: Maximum, 32.5°C July 9; minimum, 7.5°C Jan. 8, Feb. 4, 5.

DISSOLVED OXYGEN: Maximum, 16.5 mg/L Apr. 10; minimum, 1.8 mg/L June 16.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	745	701	727	739	263	591	839	800	822	598	276	397
2	758	650	741	564	142	453	836	806	823	356	281	323
3	650	213	324	428	179	258	850	829	840	475	356	424
4	447	248	297	428	293	345	867	834	850	567	475	512
5	363	266	318	432	346	389	875	858	865	601	567	590
6	506	363	427	575	432	510	866	756	810	606	381	506
7	580	496	551	636	575	609	831	810	823	417	395	405
8	672	570	635	695	635	664	829	89	762	465	417	438
9	738	652	704	700	674	686	690	332	575	527	465	487
10	725	694	711	726	700	713	706	637	661	602	526	558
11	771	717	747	717	603	672	801	653	751	670	598	621
12	801	768	786	709	664	690	797	783	791	711	635	683
13	796	769	782	745	673	719	813	785	799	754	681	735
14	781	759	770	787	725	758	830	800	814	785	733	768
15	800	772	788	789	765	778	852	815	835	812	767	788
16	809	783	797	800	771	788	851	830	841	807	786	798
17	820	771	799	812	234	608	850	63	394	833	791	811
18	816	799	810	411	215	302	142	78	109	841	772	810
19	817	789	804	375	84	245	245	122	197	822	771	800
20	825	799	812	389	146	286	245	156	167	811	771	788
21	824	777	806	433	364	401	196	164	175	800	776	788
22	808	776	798	537	426	481	228	196	220	817	773	785
23	819	773	808	591	520	557	247	226	239	817	784	798
24	818	806	811	650	591	620	321	247	298	819	784	807
25	818	801	809	672	650	662	388	312	354	823	794	814
26	836	791	816	717	669	700	503	388	428	817	583	781
27	836	788	820	765	699	739	646	503	594	821	776	808
28	836	772	807	801	756	776	697	646	679	832	795	811
29	814	717	780	819	787	799	718	695	709	822	798	810
30	717	570	665	824	792	810	740	446	642	837	797	815
31	685	624	653	---	---	---	490	431	451	868	826	848
MONTH	836	213	707	824	84	587	875	63	591	868	276	681

08074000 BUFFALO BAYOU AT HOUSTON, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	887	854	874	535	296	386	936	924	930	717	561	672
2	885	801	846	472	358	428	942	928	937	749	688	713
3	835	791	814	567	472	511	958	920	934	803	724	764
4	855	835	847	638	567	614	947	894	925	823	782	807
5	874	826	857	701	614	675	954	912	939	864	783	825
6	857	839	847	748	692	718	913	821	866	860	832	847
7	854	840	847	802	723	774	914	833	874	874	852	862
8	851	792	819	830	782	810	915	890	902	882	861	872
9	814	759	785	850	816	830	935	861	903	901	871	885
10	800	775	785	864	834	850	878	854	866	909	884	895
11	794	775	784	874	849	863	905	872	892	898	379	797
12	801	774	791	876	864	870	919	848	868	610	258	346
13	845	798	820	875	859	865	953	745	812	644	341	529
14	846	811	834	907	870	885	819	803	815	702	541	626
15	876	840	859	907	887	895	838	816	823	728	702	716
16	877	863	870	911	895	900	876	838	860	792	710	760
17	887	865	876	919	891	905	869	854	861	857	781	814
18	884	869	876	940	915	926	885	847	870	863	829	848
19	886	876	881	948	913	930	912	879	896	865	836	854
20	884	860	869	946	928	935	917	895	906	933	853	874
21	889	864	873	964	933	951	925	905	915	877	836	868
22	917	864	883	977	958	963	908	131	730	910	847	877
23	917	891	902	966	947	957	474	172	296	887	828	870
24	911	889	897	996	889	958	468	361	417	896	839	883
25	909	891	900	889	835	852	632	468	521	902	795	862
26	908	887	896	896	850	881	671	621	641	907	827	884
27	911	891	900	921	888	905	750	671	719	905	828	880
28	907	585	828	938	916	927	775	738	761	892	800	850
29	767	276	481	942	890	928	772	364	608	886	800	845
30	---	---	---	968	925	944	562	405	476	880	795	854
31	---	---	---	952	931	941	---	---	---	874	831	845
MONTH	917	276	839	996	296	832	958	131	792	933	258	801
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	892	844	865	402	357	388	760	681	736	391	275	338
2	884	867	875	398	372	383	815	760	793	434	249	335
3	887	869	875	504	385	443	837	809	821	281	145	252
4	881	811	856	666	504	598	851	837	845	297	130	225
5	860	493	710	759	663	727	846	834	839	422	225	271
6	846	785	809	774	730	757	847	730	815	255	201	221
7	824	779	804	802	756	779	837	643	751	233	190	212
8	814	777	799	813	781	800	860	827	846	340	215	262
9	841	796	823	828	797	816	862	779	838	509	340	414
10	869	818	838	825	815	819	844	158	535	661	509	605
11	861	814	833	841	819	831	325	88	217	589	223	265
12	873	824	841	858	814	841	350	235	299	241	218	223
13	885	868	876	864	837	853	324	195	264	280	234	257
14	873	706	813	876	851	864	417	284	344	300	276	287
15	845	500	595	880	847	866	505	417	467	428	257	339
16	586	297	463	873	852	865	622	504	557	451	346	386
17	641	441	492	873	810	854	674	284	541	635	73	467
18	571	441	496	839	806	829	289	147	228	429	33	282
19	675	566	617	828	789	811	420	184	338	210	33	142
20	710	254	636	824	794	809	458	249	357	248	169	206
21	407	213	321	857	810	835	331	208	301	348	217	280
22	566	96	356	871	834	853	321	217	291	373	192	291
23	327	88	228	877	842	864	312	92	242	216	185	206
24	372	192	272	864	536	830	257	117	194	192	150	163
25	285	161	219	857	830	841	372	242	308	280	69	208
26	369	176	273	861	103	626	443	171	367	255	204	216
27	515	369	435	636	285	523	246	115	176	248	130	205
28	609	336	429	749	575	687	397	242	313	311	195	247
29	376	338	361	759	659	706	525	318	439	324	311	323
30	395	354	376	747	542	617	520	130	389	---	---	---
31	---	---	---	681	549	625	275	159	220	---	---	---
MONTH	892	88	606	880	103	740	862	88	473	661	33	280
YEAR	996	33	662									

SAN JACINTO RIVER BASIN

08074000 BUFFALO BAYOU AT HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	28.0	27.0	27.5	24.0	22.0	22.5	17.5	15.0	16.5	18.0	16.5	17.0
2	27.5	26.0	27.0	24.5	23.0	23.5	19.5	17.5	18.5	17.0	14.5	16.0
3	26.0	23.5	24.5	23.0	20.0	21.5	21.5	19.5	20.5	14.5	12.0	13.0
4	24.0	22.5	23.5	20.0	17.0	18.5	21.5	20.5	21.0	13.0	11.0	12.0
5	24.0	22.5	23.0	17.0	16.5	16.5	22.0	20.5	21.5	14.5	13.0	13.5
6	23.5	21.5	22.5	18.0	16.0	17.0	22.5	22.0	22.0	14.5	11.5	13.5
7	22.5	21.0	21.5	20.0	18.0	19.0	22.0	20.0	21.0	11.5	9.0	10.5
8	22.5	20.5	21.5	20.0	18.5	19.0	20.0	18.5	19.5	9.0	7.5	8.5
9	23.0	21.0	22.0	19.5	18.0	18.5	19.0	15.5	17.5	10.0	8.0	9.0
10	23.5	21.5	22.5	21.5	19.5	20.5	15.5	13.0	14.0	12.0	9.5	10.5
11	24.0	22.0	23.0	22.0	18.5	20.5	14.0	12.0	13.0	14.0	12.0	12.5
12	24.0	22.5	23.0	18.5	17.0	17.5	16.5	14.0	15.5	14.0	12.5	13.0
13	24.0	23.5	23.5	19.0	17.5	18.0	18.5	16.5	17.5	14.5	12.5	13.5
14	24.0	22.0	23.0	19.0	17.5	18.5	19.5	17.5	18.5	15.5	13.0	14.5
15	22.0	20.5	21.0	18.5	17.0	18.0	21.5	19.5	20.5	17.0	15.0	16.0
16	22.0	20.0	21.0	19.0	17.5	18.0	22.0	21.0	21.5	19.0	17.0	18.0
17	22.0	20.0	21.0	18.0	17.5	18.0	22.0	19.0	20.0	19.5	18.5	19.0
18	23.0	21.0	22.0	18.5	17.5	18.0	19.0	18.5	19.0	19.0	14.5	17.5
19	24.0	22.0	23.0	18.5	17.5	18.0	18.5	15.0	17.5	14.5	12.0	13.0
20	24.0	21.5	23.0	19.5	18.5	19.0	15.5	13.5	14.5	13.5	12.0	12.5
21	21.5	20.0	21.0	20.0	19.0	19.5	13.5	12.0	13.0	14.5	13.5	14.0
22	22.5	20.0	21.0	19.5	18.5	19.0	12.0	11.5	12.0	16.5	14.0	15.0
23	23.0	21.5	22.0	20.0	19.0	19.5	12.0	11.0	11.5	18.0	16.5	17.5
24	22.5	21.0	22.0	19.5	18.0	18.5	11.5	11.0	11.5	17.5	15.0	16.0
25	22.5	20.5	21.5	18.5	17.0	17.5	12.0	11.0	11.5	15.5	13.5	14.5
26	24.0	22.0	23.0	19.0	17.5	18.0	12.0	11.0	11.5	17.5	15.0	16.0
27	25.5	23.5	24.5	20.5	18.5	19.5	13.0	11.5	12.5	15.5	13.0	14.0
28	25.0	23.5	24.0	20.0	17.0	18.5	13.5	12.5	13.0	13.5	12.5	13.0
29	23.5	21.5	22.5	17.0	15.0	16.0	12.5	11.5	12.0	16.5	13.5	15.0
30	22.0	20.5	21.0	15.5	14.5	15.0	15.5	12.5	13.5	18.5	16.0	17.0
31	22.0	20.5	21.0	---	---	---	17.0	15.0	16.0	17.5	14.0	15.5
MONTH	28.0	20.0	22.5	24.5	14.5	18.5	22.5	11.0	16.5	19.5	7.5	14.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	14.0	12.0	13.0	14.0	12.5	13.0	21.5	18.5	20.0	23.5	20.5	22.0
2	12.0	9.0	10.5	15.0	12.0	13.5	20.5	18.0	19.5	25.0	22.5	23.5
3	9.0	8.0	8.5	16.5	13.5	15.0	21.0	19.0	20.0	24.5	24.0	24.0
4	9.5	7.5	8.0	18.0	16.0	17.0	22.0	20.0	21.0	26.0	23.0	24.5
5	10.0	7.5	8.5	19.5	18.0	18.5	21.5	18.5	20.5	27.0	25.0	26.0
6	12.0	10.0	11.0	21.0	19.5	20.0	19.5	16.5	18.0	27.0	25.5	26.5
7	15.5	12.0	13.5	19.5	15.5	17.5	19.5	16.5	18.0	27.5	25.5	26.5
8	17.0	15.0	15.5	15.5	13.5	14.5	21.5	18.0	19.5	27.5	26.0	26.5
9	18.0	16.0	17.0	14.5	12.5	13.5	22.0	20.0	21.0	27.5	26.0	26.5
10	20.0	18.0	19.0	15.0	11.5	13.5	22.5	20.5	21.5	27.0	26.0	26.5
11	19.5	17.5	19.0	16.0	12.5	14.5	23.0	21.5	22.5	27.0	25.5	26.5
12	17.5	15.5	16.5	17.5	14.0	15.5	23.0	22.0	22.5	27.0	25.5	26.0
13	17.0	14.5	16.0	19.5	16.0	17.5	23.5	21.0	22.0	27.0	25.0	26.0
14	18.0	15.0	16.5	19.5	18.5	19.0	24.0	22.5	23.0	27.5	25.5	26.5
15	19.0	17.0	18.0	21.0	19.0	20.0	23.5	21.0	22.5	27.5	26.0	26.5
16	17.5	15.0	16.0	22.0	20.5	21.0	22.5	19.5	21.0	28.0	26.0	27.0
17	16.0	13.5	15.0	23.5	21.0	22.0	23.0	20.5	21.5	28.5	26.0	27.0
18	17.0	14.5	16.0	23.0	20.0	21.5	25.0	22.0	23.0	29.0	26.5	27.5
19	20.0	17.0	18.0	20.0	17.5	19.0	26.0	24.0	25.0	29.0	26.5	27.5
20	20.0	17.5	19.0	18.5	16.0	17.5	27.0	25.0	26.0	29.0	26.5	27.5
21	22.0	19.0	20.5	18.5	14.5	16.5	26.5	25.0	25.5	29.5	27.0	28.0
22	23.0	20.5	21.5	19.0	15.5	17.5	25.5	22.5	24.5	29.5	27.0	28.5
23	24.0	21.5	22.5	20.0	17.5	18.5	24.0	22.5	23.0	30.0	27.5	29.0
24	23.0	21.0	22.0	20.0	19.5	20.0	24.0	21.0	22.5	29.5	28.0	29.0
25	23.0	21.5	22.5	20.0	19.0	19.5	25.0	22.0	23.5	29.5	28.0	28.5
26	24.0	22.0	23.0	19.0	16.0	17.0	24.5	24.0	24.0	29.5	28.0	29.0
27	24.0	23.0	23.5	16.0	15.0	15.5	25.5	23.5	24.5	29.5	28.5	29.0
28	23.5	17.5	20.5	19.0	15.5	17.0	27.0	24.5	25.5	30.0	28.0	29.0
29	18.5	13.0	15.5	19.5	16.5	18.0	27.0	22.5	24.0	31.0	28.5	29.5
30	---	---	---	22.0	18.5	20.0	23.0	20.0	21.5	30.5	28.5	29.0
31	---	---	---	22.0	19.5	21.0	---	---	---	29.5	27.5	28.5
MONTH	24.0	7.5	17.0	23.5	11.5	17.5	27.0	16.5	22.0	31.0	20.5	27.0

SAN JACINTO RIVER BASIN

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08074000 BUFFALO BAYOU AT HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	29.0	28.0	28.5	30.5	28.5	29.5	31.5	29.5	30.5	27.5	25.5	26.5
2	29.5	27.0	28.0	30.5	28.5	29.5	32.0	29.5	30.5	27.5	27.0	27.0
3	28.5	27.5	28.0	31.0	28.0	29.5	32.0	29.5	30.5	27.5	26.0	27.0
4	28.0	26.5	27.0	31.5	28.5	30.0	32.0	29.5	30.5	28.5	26.0	27.5
5	28.0	25.0	26.5	32.0	29.0	30.5	31.5	29.5	30.5	28.0	26.5	27.5
6	29.0	26.5	27.5	32.0	29.5	30.5	31.0	29.5	30.0	27.5	26.5	27.0
7	28.5	27.0	27.5	32.0	29.5	30.5	30.5	29.0	29.5	27.5	27.0	27.5
8	28.0	25.5	27.0	31.5	29.5	30.5	29.5	28.5	29.0	28.0	27.0	27.5
9	28.0	25.0	26.5	32.5	30.0	31.0	30.0	28.0	29.0	28.5	27.0	27.5
10	28.0	26.0	27.0	32.0	30.0	31.0	29.0	27.0	28.5	29.0	27.0	28.0
11	28.5	26.0	27.5	31.5	29.5	30.5	28.5	26.0	27.0	28.5	27.0	27.5
12	29.5	27.0	28.0	32.0	29.0	30.5	28.5	27.0	27.5	27.5	27.0	27.5
13	29.5	28.0	28.5	32.0	29.5	30.5	28.5	27.0	28.0	27.0	26.5	27.0
14	30.5	28.0	29.0	32.0	29.5	30.5	29.0	27.5	28.5	27.0	26.5	26.5
15	30.0	27.5	29.0	31.0	29.5	30.0	29.5	27.5	28.5	27.5	26.5	27.0
16	30.5	28.0	29.0	31.5	29.0	30.0	29.5	27.5	28.5	28.5	27.0	27.5
17	29.5	28.0	29.0	31.0	29.5	30.0	29.0	27.0	28.0	28.5	25.0	27.5
18	31.0	28.5	29.5	30.0	29.0	29.5	27.0	26.5	27.0	27.0	24.5	26.5
19	31.0	28.5	29.5	30.5	28.0	29.0	28.0	27.0	27.0	25.5	24.5	25.5
20	30.5	27.5	29.0	31.0	28.5	29.5	28.5	26.5	27.5	26.5	25.5	26.0
21	29.0	27.0	28.0	31.5	29.0	30.0	27.5	26.5	27.0	27.5	25.5	26.5
22	28.5	26.0	27.5	32.0	29.0	30.5	27.0	26.5	27.0	27.5	26.0	26.5
23	27.0	25.0	26.5	31.5	29.5	30.5	27.0	25.5	26.5	27.0	26.0	26.5
24	27.0	26.0	26.5	30.5	29.5	30.0	27.0	25.5	26.5	27.0	26.5	26.5
25	26.5	26.0	26.0	30.0	29.0	29.5	28.0	26.5	27.0	27.5	26.0	26.5
26	28.5	26.0	27.0	29.0	25.5	28.0	27.5	26.0	27.0	27.5	26.5	27.0
27	30.0	27.5	28.5	29.5	27.0	28.0	28.0	25.5	26.0	27.0	24.5	26.0
28	29.0	28.5	29.0	30.0	28.0	29.0	28.0	26.5	27.0	25.0	23.5	24.0
29	29.0	27.5	28.5	30.5	28.0	29.0	27.5	27.0	27.5	23.5	22.0	23.0
30	30.0	28.0	29.0	30.5	28.5	29.5	27.5	25.5	26.5	22.5	22.0	22.5
31	---	---	---	31.5	29.0	30.0	26.5	25.5	26.0	---	---	---
MONTH	31.0	25.0	28.0	32.5	25.5	30.0	32.0	25.5	28.0	29.0	22.0	26.5
YEAR	32.5	7.5	22.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.6	5.0	5.6	7.2	5.4	6.5	8.4	8.0	8.2	8.0	6.6	7.5
2	5.9	4.8	5.2	7.6	5.1	5.8	8.2	7.6	7.9	8.6	7.9	8.2
3	6.1	4.6	5.1	7.1	5.5	6.1	7.8	7.1	7.5	9.3	8.6	9.0
4	6.0	4.8	5.6	8.5	7.0	7.8	7.7	6.8	7.1	9.6	8.9	9.2
5	6.1	5.7	6.0	9.0	8.5	8.8	7.5	6.6	7.0	8.9	8.5	8.8
6	6.1	5.6	5.8	9.4	8.8	9.1	6.7	6.0	6.5	9.1	7.9	8.3
7	6.5	5.6	6.0	9.0	8.3	8.8	7.7	6.2	6.9	10.2	9.0	9.7
8	6.8	5.9	6.3	9.0	8.3	8.6	9.9	6.9	7.4	10.6	10.2	10.4
9	6.9	6.1	6.5	9.6	8.5	8.9	7.7	5.4	6.2	10.6	10.2	10.4
10	7.6	6.4	6.8	9.1	8.3	8.7	7.3	5.7	6.6	10.2	9.6	9.9
11	7.5	6.2	6.7	8.8	7.2	8.0	9.2	7.3	8.4	9.6	8.9	9.3
12	7.2	5.9	6.5	9.2	7.7	8.5	8.8	8.0	8.5	9.0	8.7	8.8
13	6.5	5.5	5.9	10.0	8.6	9.4	8.2	7.7	8.0	9.0	8.6	8.8
14	6.4	5.1	5.7	10.2	9.4	9.7	8.0	7.2	7.6	8.9	8.6	8.7
15	7.0	6.0	6.3	10.2	9.3	9.7	7.6	6.7	7.1	8.8	8.4	8.6
16	7.3	6.3	6.7	10.8	9.4	10.0	7.2	6.4	6.7	8.5	8.0	8.3
17	7.2	6.3	6.7	10.7	9.3	9.9	9.5	6.2	7.4	8.2	7.7	7.9
18	7.0	6.2	6.6	10.0	9.3	9.6	8.3	7.2	7.7	8.0	6.8	7.5
19	7.1	6.2	6.5	10.9	9.1	9.9	8.2	6.6	7.0	8.9	7.3	8.2
20	7.0	6.1	6.5	9.1	6.6	7.5	8.3	7.7	8.0	9.3	8.3	8.9
21	7.2	6.5	6.8	7.2	6.9	7.1	8.6	8.3	8.4	9.0	8.3	8.7
22	7.8	6.6	7.1	7.3	6.9	7.1	9.4	8.3	9.0	8.6	8.1	8.4
23	7.7	6.7	7.1	7.1	6.8	6.9	9.6	9.4	9.5	8.5	7.7	8.1
24	7.6	6.7	7.1	7.4	6.9	7.1	9.6	9.4	9.5	8.8	7.7	8.2
25	8.2	6.7	7.3	7.8	7.2	7.5	9.6	9.3	9.5	8.7	8.1	8.3
26	7.8	6.5	7.1	7.6	7.3	7.5	9.3	9.0	9.2	8.5	7.8	8.1
27	7.3	6.1	6.6	7.6	7.1	7.3	9.1	8.8	9.0	8.9	7.9	8.5
28	6.7	5.4	6.0	7.6	6.9	7.3	8.8	8.7	8.8	9.1	8.5	8.8
29	6.2	5.4	5.8	8.3	7.2	7.8	9.1	8.7	8.8	9.3	8.6	8.9
30	7.0	5.7	6.5	8.5	7.9	8.2	8.9	8.0	8.6	8.9	8.2	8.5
31	6.8	5.7	6.1	---	---	---	8.0	6.7	7.3	9.0	7.9	8.4
MONTH	8.2	4.6	6.3	10.9	5.1	8.2	9.9	5.4	7.9	10.6	6.6	8.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		

1	8.4	8.1	8.2	7.9	7.4	7.7	9.5	6.7	7.9	9.5	6.6	7.7
2	9.0	8.3	8.7	7.8	7.4	7.7	9.9	6.7	8.2	12.1	6.6	8.7
3	8.9	8.4	8.7	8.0	7.4	7.6	9.0	6.9	7.9	10.5	6.3	8.0
4	8.9	8.5	8.7	7.8	7.4	7.6	8.6	6.3	7.4	12.9	6.4	9.0
5	8.8	8.4	8.6	8.1	7.3	7.6	7.3	6.1	6.6	10.8	6.1	8.1
6	8.5	8.2	8.3	7.6	6.8	7.2	7.6	4.4	6.1	10.6	6.0	7.9
7	8.6	7.9	8.2	8.4	6.9	7.6	7.8	4.6	6.1	10.4	5.9	7.8
8	8.3	7.4	7.8	8.4	7.8	8.1	8.6	6.3	7.4	9.6	5.7	7.5
9	8.0	7.4	7.8	7.9	7.6	7.7	11.7	6.2	8.5	7.1	5.2	5.8
10	8.5	7.3	7.8	---	---	---	16.5	7.1	11.4	---	---	---
11	8.5	7.2	7.8	---	---	---	14.9	7.7	10.8	---	---	---
12	9.1	7.5	8.2	---	---	---	11.7	7.3	10.4	---	---	---
13	9.0	7.9	8.4	---	---	---	8.1	5.5	6.7	6.5	5.7	6.4
14	8.4	6.3	7.8	---	---	---	9.9	6.0	7.4	7.8	5.5	6.4
15	6.3	5.3	5.6	---	---	---	12.4	5.8	7.8	10.3	5.8	7.7
16	5.4	5.1	5.3	---	---	---	15.2	6.6	10.3	11.8	5.7	8.4
17	5.3	5.0	5.2	---	---	---	11.1	6.3	8.5	11.2	6.1	8.1
18	5.3	5.1	5.2	---	---	---	9.9	6.6	8.0	12.4	5.9	8.5
19	5.4	5.0	5.2	---	---	---	9.4	6.2	7.5	10.0	6.3	8.0
20	5.6	5.0	5.2	9.6	8.2	8.7	9.0	6.0	7.3	10.1	6.4	7.9
21	5.7	5.1	5.4	10.0	7.8	8.7	8.1	5.0	6.6	10.5	6.4	8.0
22	6.0	5.2	5.5	9.7	7.8	8.6	9.1	5.9	6.6	12.3	6.1	8.4
23	6.3	5.3	5.7	9.0	7.5	8.2	6.5	4.7	5.1	11.0	6.0	8.1
24	6.4	5.4	5.7	8.1	6.6	7.0	6.1	5.0	5.6	9.8	6.0	7.6
25	6.5	5.6	6.0	11.6	5.7	8.3	6.7	5.6	6.1	9.6	6.2	7.6
26	6.9	5.6	6.2	9.2	7.5	8.4	6.9	5.6	6.2	8.8	6.0	7.3
27	6.9	5.8	6.2	9.5	7.0	8.1	8.7	5.9	7.2	8.9	6.1	7.4
28	6.7	5.7	6.1	8.8	7.1	7.9	10.3	5.7	7.9	9.8	6.3	7.9
29	7.6	4.5	5.8	8.2	7.1	7.6	8.8	4.8	6.2	9.0	6.4	7.5
30	---	---	---	8.6	6.6	7.5	6.7	4.7	5.6	7.8	5.8	6.7
31	---	---	---	8.6	6.3	7.4	---	---	---	8.4	5.5	6.8
MONTH	9.1	4.5	6.9	11.6	5.7	7.9	16.5	4.4	7.5	12.9	5.2	7.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.9	5.9	6.8	5.7	5.0	5.3	9.8	5.5	6.9	5.9	5.5	5.7
2	8.5	5.3	6.7	5.0	4.6	4.8	10.7	5.9	7.5	6.1	5.5	5.8
3	7.0	5.6	6.2	5.3	4.4	4.8	10.5	6.2	7.7	6.3	5.8	6.2
4	5.9	5.0	5.5	7.8	4.6	5.9	10.3	6.1	7.6	5.8	4.3	4.7
5	---	---	---	11.0	4.8	7.4	10.8	6.1	7.8	5.8	4.5	5.5
6	---	---	---	13.3	5.5	8.6	7.7	5.2	6.3	5.8	5.1	5.4
7	---	---	---	11.5	5.5	8.0	7.5	2.9	5.5	5.2	4.9	5.1
8	---	---	---	9.6	5.6	7.2	7.5	5.5	6.3	5.1	4.6	4.9
9	---	---	---	9.0	5.2	6.7	7.2	5.8	6.3	5.2	4.6	4.9
10	8.8	7.0	8.4	8.4	4.8	6.3	6.4	3.3	4.9	6.4	3.9	5.1
11	9.0	5.7	7.0	8.4	5.0	6.4	6.4	4.0	4.8	4.8	3.9	4.4
12	9.9	5.1	6.8	8.5	5.0	6.4	5.9	4.7	5.2	4.5	3.4	3.8
13	7.1	5.1	5.8	9.2	5.0	6.6	5.0	4.1	4.7	3.6	3.0	3.4
14	7.2	3.2	5.1	8.6	5.2	6.6	5.1	4.8	5.0	3.5	2.8	3.2
15	5.0	3.7	4.3	7.8	5.4	6.4	5.8	5.1	5.4	5.5	2.8	3.6
16	4.4	1.8	3.4	7.8	5.4	6.5	6.9	5.2	5.8	3.7	2.7	3.3
17	4.8	3.7	4.4	6.8	3.7	5.6	6.1	4.7	5.4	7.3	3.4	5.2
18	5.5	4.3	4.8	6.8	3.7	5.5	5.6	3.8	4.9	9.8	4.8	5.3
19	6.8	4.5	5.4	7.1	5.2	5.9	5.7	4.1	5.3	9.8	6.0	7.0
20	6.8	2.3	4.8	6.7	5.2	5.9	5.7	4.2	4.9	6.0	5.6	5.8
21	3.3	2.4	2.9	7.0	5.4	6.0	5.9	4.7	5.5	5.8	5.3	5.6
22	5.4	2.8	4.1	8.6	5.4	6.6	5.5	4.4	4.9	6.7	5.5	6.1
23	7.4	4.1	5.1	7.7	5.6	6.4	8.1	4.6	5.3	6.9	6.6	6.8
24	4.8	4.0	4.4	7.5	5.6	6.5	6.6	4.9	5.5	6.7	6.1	6.4
25	5.3	4.0	4.6	7.9	5.6	6.5	5.0	4.2	4.6	9.5	4.9	5.6
26	4.6	3.6	4.1	7.6	2.9	5.6	6.5	3.7	4.6	7.1	5.5	6.6
27	4.0	3.6	3.8	4.7	2.9	3.8	5.6	4.7	5.2	9.6	6.0	6.7
28	5.2	3.6	4.5	5.8	4.1	5.1	5.0	4.7	4.9	6.4	5.9	6.3
29	5.6	5.1	5.3	6.9	2.3	5.8	5.2	4.3	4.7	7.7	6.3	7.2
30	5.8	5.0	5.4	5.9	3.7	5.4	6.9	4.9	5.4	8.3	7.7	8.0
31	---	---	---	7.9	5.3	6.3	6.0	5.4	5.7	---	---	---
MONTH	9.9	1.8	5.2	13.3	2.3	6.2	10.8	2.9	5.6	9.8	2.7	5.5
YEAR	16.5	1.8	7.0									

SAN JACINTO RIVER BASIN

85

08074150 COLE CREEK AT DEIHL ROAD, HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°51'04", long 95°29'16", Harris County, Hydrologic Unit 12040104, on downstream side of bridge at Deihl Road in northwest Houston and 1.8 mi upstream from mouth.

DRAINAGE AREA.--7.50 mi².

PERIOD OF RECORD.--April 1964 to September 1986 (daily mean discharge). October 1986 to September 1992 (annual maximum discharge). October 1992 to current (peak discharges greater than base discharge).

REVISED RECORDS.--WDR IX-74-1: Drainage area.

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

REMARKS.--Records good. Recording rain gage at station. Radio telemeter at station.

AVERAGE DISCHARGE.--22 years, (water years 1965-86) 8.08 ft³/s, (5,850 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,780 ft³/s Mar. 4, 1992 (elevation, 80.73 ft); no flow at times.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 18	0700	780	75.81	Aug. 26	1830	588	74.82
Aug. 9	2330	643	75.12	Sept. 19	0330	558	74.64
Aug. 10	2200	851	76.12				

SAN JACINTO RIVER BASIN

08074250 BRICKHOUSE GUILLEY AT COSTA RICA STREET, HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°49'40", long 95°28'09", Harris County, Hydrologic Unit 12040104, at downstream side of bridge at Costa Rica Street in northwest Houston and 1.0 mi upstream from Whiteoak Bayou.

DRAINAGE AREA.--11.4 mi².

PERIOD OF RECORD.--August 1964 to September 1981 (daily mean discharge). October 1982 to September 1983 (peak discharges greater than base discharge or annual maximum). October 1983 to September 1992 (annual maximum). October 1992 to current year (peak discharges greater than base discharge).

Water-quality records.--Chemical and biochemical analyses: October 1981 to September 1982.

REVISED RECORDS.--WRD IX-74-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Low-water concrete control since Dec. 9, 1970. Datum of gage is sea level; unadjusted for land-surface subsidence.

REMARKS.--Records good. Low flow is partially sustained by wastewater effluent. No known diversion above station. Stage and rainfall telemeter at station owned and operated by Harris County Flood Control District.

AVERAGE DISCHARGE.--17 years (1965-1981), 14.0 ft³/s, 10,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,580 ft³/s Mar. 4, 1992, elevation, 71.26 ft; no flow at times.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges above base discharge of 1,600 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 17	0930	1,720	61.81	Aug. 26	1715	2,810	64.34
Dec. 18	0615	3,870	66.35	Sept. 17	1745	2,570	63.84
Aug. 9	2200	2,490	63.85	Sept. 19	0245	1,980	62.48
Aug. 10	2030	4,160	66.83				

SAN JACINTO RIVER BASIN

8/

080/4500 WHITEOAK BAYOU AT HOUSTON, TX

LOCATION.--Lat 29°46'30", long 95°23'49", Harris County, Hydrologic Unit 12040104, at downstream side of downstream bridge on Heights Boulevard in Houston, 560 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.4 mi upstream from Little Whiteoak Bayou, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--86.3 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR TX-6-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 7.35 ft below 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 upstream at same datum.

REMARKS.--Records good. Low flow is sustained by wastewater effluent. No diversions above station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1919, 51.5 ft Dec. 9, 1935, prior to channel rectification, present site and datum (discharge, 14,750 ft³/s), furnished by the engineer for Harris County. The flood of May 31, 1929, reached a stage of 47.0 ft, prior to channel rectification, present site and datum (discharge, 9,360 ft³/s), computed on basis of current-meter measurement at stage 1.0 ft below crest, furnished by city of Houston.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 19	1400	6,200	30.00	Dec. 18	0800	9,630	34.56
Dec. 17	1030	4,740	27.80	Sept. 19	0330	6,620	30.61

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	162	32	49	43	201	93	39	32	38	31	87
2	123	269	33	41	76	54	81	35	31	35	32	51
3	598	190	33	40	45	42	73	33	32	36	34	228
4	90	42	33	39	43	40	71	33	230	34	35	98
5	43	39	33	113	46	40	68	38	78	33	34	40
6	36	43	33	342	46	39	73	37	37	33	144	37
7	34	37	32	64	62	37	49	36	31	32	34	487
8	34	36	139	47	45	35	41	34	31	32	31	115
9	34	34	106	41	42	29	43	34	28	31	93	171
10	38	33	35	38	44	32	37	35	31	32	844	99
11	34	86	34	35	47	37	37	174	30	32	563	41
12	34	36	40	36	42	36	39	51	30	33	136	35
13	37	34	34	34	41	40	85	35	208	31	175	34
14	35	35	35	35	44	41	49	33	171	31	86	35
15	33	33	34	37	46	47	40	32	66	48	39	150
16	32	31	36	37	46	51	39	32	38	91	37	73
17	34	365	1720	37	47	53	40	30	34	159	80	461
18	32	232	2620	60	50	52	44	31	36	38	136	177
19	33	1050	236	39	57	54	58	31	78	33	237	1830
20	34	139	79	47	56	53	53	33	296	32	185	312
21	31	49	55	46	50	59	54	32	302	29	148	128
22	31	37	61	39	51	74	62	31	198	29	e267	55
23	31	33	44	43	55	80	352	31	882	29	e416	46
24	36	30	42	43	58	99	56	29	e489	31	e1140	273
25	31	30	41	36	61	124	37	30	e319	32	e165	541
26	33	29	39	41	59	97	34	29	332	249	684	182
27	38	34	39	37	57	97	33	30	55	84	549	650
28	34	30	36	38	116	103	34	33	40	67	166	297
29	34	30	35	39	408	102	174	31	133	37	175	72
30	68	31	255	38	---	117	51	109	70	33	770	51
31	37	---	242	38	---	112	---	45	---	33	316	---
TOTAL	1924	3259	6266	1649	1883	2077	2000	1266	4368	1517	7782	6856
MEAN	62.1	109	202	53.2	64.9	67.0	66.7	40.8	146	48.9	251	229
MAX	598	1050	2620	342	408	201	352	174	882	249	1140	1830
MIN	31	29	32	34	41	29	33	29	28	29	31	34
AC-FT	3820	6460	12430	3270	3730	4120	3970	2510	8660	3010	15440	13600

SAN JACINTO RIVER BASIN

08074500 WHITEOAK BAYOU AT HOUSTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1996, BY WATER YEAR (WY)

MEAN	87.4	105	97.3	114	112	88.7	88.4	122	118	78.5	73.8	89.7
MAX	560	774	378	437	472	517	408	558	556	439	535	578
(WY)	1995	1947	1992	1944	1992	1992	1991	1989	1973	1942	1983	1941
MIN	.71	.93	2.22	1.70	5.12	1.10	1.35	.75	2.93	2.19	.61	1.07
(WY)	1949	1940	1949	1940	1951	1940	1939	1937	1954	1944	1940	1948

SUMMARY STATISTICS

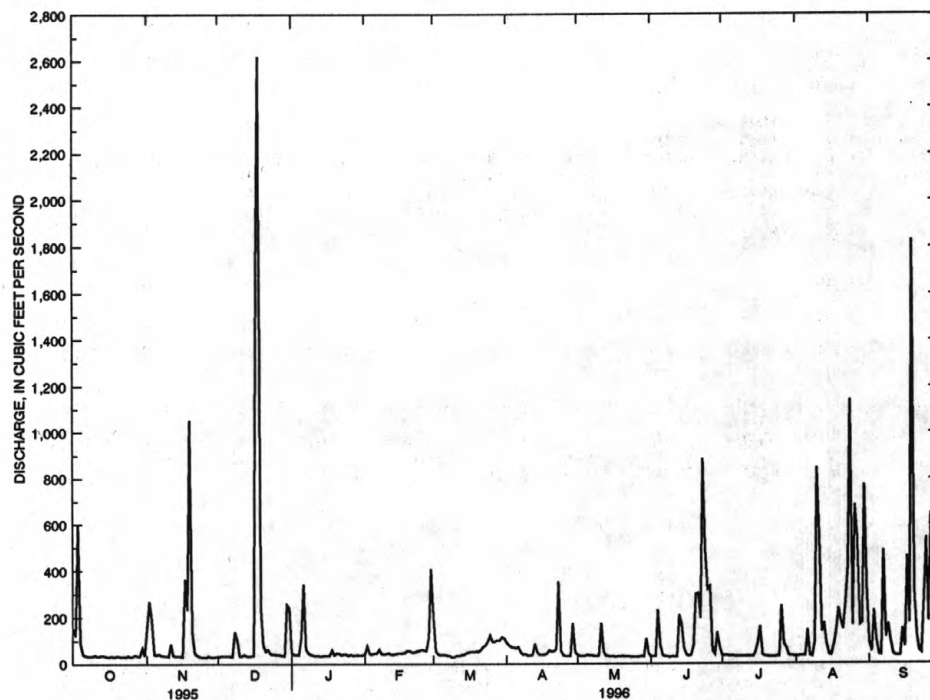
FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1936 - 1996

ANNUAL TOTAL	53111			40847								
ANNUAL MEAN	146			112						98.2		
HIGHEST ANNUAL MEAN										267		1992
LOWEST ANNUAL MEAN										10.9		1951
HIGHEST DAILY MEAN	2620	Dec 18		2620	Dec 18					10700	May 18	1989
LOWEST DAILY MEAN	29	Nov 26		28	Jun 9					.20	Aug 7	1940
ANNUAL SEVEN-DAY MINIMUM	31	Nov 24		30	May 21					.26	Aug 12	1951
INSTANTANEOUS PEAK FLOW				9630	Dec 18					25100	Mar 4	1992
INSTANTANEOUS PEAK STAGE				34.56	Dec 18					50.43	Mar 4	1992
ANNUAL RUNOFF (AC-FT)	105300			81020						71110		
10 PERCENT EXCEEDS	307			236						200		
50 PERCENT EXCEEDS	44			41						27		
90 PERCENT EXCEEDS	33			31						2.2		

e Estimated

08074500 WHITEOAK BAYOU AT HOUSTON, TX
MEAN DAILY DISCHARGE (CFS)

08074500 WHITEOAK BAYOU AT HOUSTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to current year. Pesticide analyses: February 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	BOD OXYGEN DEMAND, BIOCHEM CARBON, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 MI)
FEB 27...	0728	47	920	8.1	22.5	14	0.80	4.2	49	3.6	1.8	2500
MAY 29...	1105	27	885	8.5	29.0	10	3.0	12.6	165	1.3	1.4	4100
AUG 26...	1154	68	379	8.4	28.0	50	0.40	10.6	136	2.3	2.0	6700
DATE	STREP- TOCOC- FECAL, KF AGAR (COLS. PER 100 MI)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD, AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
FEB 27...	3600	170	0	51	9.9	130	4	8.9	240	37	110	0.60
MAY 29...	550	150	0	47	8.2	120	4	7.7	210	37	110	0.60
AUG 26...	3700	91	0	30	3.8	39	2	5.1	110	15	36	0.30
DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L)	RESIDUE FIXED NON FILTER- ABLE (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)
FEB 27...	21	535	6	12	0	3.57	3.57	0.330	3.90	3.90	0.200	2.1
MAY 29...	24	508	18	7	11	4.76	4.76	0.140	4.90	4.90	0.090	0.71
AUG 26...	13	219	<1	8	--	1.93	1.93	0.070	2.00	2.00	0.070	0.53
DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
FEB 27...	2.3	1.60	1.00	3.1	7.1	8	140	<0.50	<1.0	<5.0	<3.0	<10
MAY 29...	0.80	1.60	1.10	3.4	7.4	16	130	<0.50	<1.0	<5.0	<3.0	<10
AUG 26...	0.60	0.540	0.550	1.7	8.5	5	110	<0.50	<1.0	<5.0	<3.0	<10
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB 27...	37	10	21	29	<0.1	10	<10	1	<1.0	420	<6	23
MAY 29...	18	<10	23	11	<0.1	<10	<10	3	<1.0	390	<6	24
AUG 26...	14	<10	8	5.0	<0.1	<10	<10	<1	<1.0	180	<6	21
DATE	AME- TRYNE TOTAL (UG/L)	ATRA- ZINE WATER UNFLTRD REC (UG/L)	CYAN- AZINE TOTAL (UG/L)	METHI- NYL TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PRO- PAZINE TOTAL (UG/L)	PROPHAM TOTAL (UG/L)	CARB- ARYL UNFILT RECOVER (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	
FEB 27...	<0.100	0.200	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	
MAY 29...	<0.100	<0.100	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	
AUG 26...	<0.100	0.300	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	

SAN JACINTO RIVER BASIN

08074598 WHITEOAK BAYOU AT MAIN STREET, HOUSTON, TX

LOCATION.--Lat 29°45'59", long 95°21'30", Harris County, Hydrologic Unit 12040104, on right bank at Main street bridge, 3 miles downstream from station 08074500, and 700 ft. upstream from Buffalo Bayou.

DRAINAGE AREA.--127 mi².

WATER-STAGE RECORDS

PERIOD OF RECORD.--November 1992 to current year.

GAGE.--Water-stage recorder and data logger. Datum of gage is sea level, 1978 adjustment, unadjusted for land-surface subsidence.

REMARKS.--Records good. Mostly tidal, affected by local runoff. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height 21.60 ft Oct. 17, 1994 at 2215 hours; minimum, minus 1.57 ft Aug. 14, 1994 at 2215 hours.

EXTREMES FOR CURRENT YEAR.--Maximum gage height 15.29 ft Dec. 18 at 0900 hours; minimum, minus .90 ft Jan. 19 at 1415 hours.

DAY	GAGE HEIGHT, FEET, WATER YEAR		OCTOBER 1995		TO SEPTEMBER 1996							
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.79	4.03	4.92	3.50	4.30	2.82	4.20	2.84	3.97	2.21	4.22	2.72
2	5.96	4.37	6.14	3.52	3.89	2.45	3.14	.42	3.77	1.18	3.88	2.49
3	6.54	3.12	4.00	2.08	3.85	2.26	2.52	.21	2.45	.89	3.87	2.66
4	4.90	3.06	4.54	2.95	3.72	1.91	3.68	1.82	2.89	1.14	4.30	3.13
5	5.54	3.72	4.76	2.94	3.82	1.98	3.61	1.96	3.64	2.20	4.46	3.24
6	4.33	3.22	4.59	3.00	3.72	1.78	3.52	.76	3.60	2.25	4.13	2.58
7	5.19	2.97	4.33	2.19	3.91	1.74	1.23	-.10	3.72	2.62	2.75	-.03
8	4.87	2.93	4.28	2.20	4.56	2.68	3.16	1.01	3.78	2.41	2.65	.28
9	4.62	3.05	5.00	3.13	4.35	.53	3.16	1.45	3.62	2.72	3.53	1.47
10	4.52	2.68	5.09	3.53	3.74	2.05	2.92	1.52	3.62	2.45	3.36	2.05
11	4.56	2.82	4.79	1.14	4.18	2.64	2.97	1.58	3.60	1.92	3.67	2.08
12	4.84	3.48	3.79	2.42	4.29	2.74	2.64	1.32	3.34	1.16	4.15	2.10
13	4.97	3.26	4.49	2.53	4.16	2.73	3.29	1.62	3.50	1.86	4.20	2.30
14	4.83	2.10	4.00	2.72	3.97	2.99	3.52	2.14	3.60	1.89	3.90	2.09
15	4.46	2.67	4.24	2.58	4.33	2.99	3.52	1.84	3.33	1.57	3.91	2.20
16	4.77	3.17	3.73	2.69	4.04	2.78	3.73	1.86	2.70	.60	4.17	2.55
17	4.92	3.50	4.39	2.96	11.29	3.68	4.93	2.61	3.61	1.80	4.11	2.71
18	5.09	3.40	4.24	2.99	15.29	4.73	5.22	.59	3.54	1.83	4.04	.93
19	4.78	3.53	10.90	3.18	4.73	.81	2.62	-.90	4.28	2.17	1.75	-.04
20	4.59	2.23	4.98	2.51	3.76	1.75	3.93	2.20	3.71	2.04	1.23	.12
21	4.63	3.03	4.04	2.30	4.40	2.65	3.93	2.07	3.78	2.32	2.88	.14
22	5.00	3.55	4.37	2.56	4.45	2.22	4.04	2.30	3.80	2.34	3.19	1.45
23	5.08	3.36	4.39	2.20	4.00	1.93	4.21	2.93	3.68	2.37	3.85	1.66
24	4.18	1.72	3.85	1.49	3.79	1.80	3.65	1.96	3.66	1.98	4.51	2.67
25	4.87	2.88	3.98	2.27	3.70	1.83	4.98	2.78	3.97	2.28	3.93	2.01
26	4.87	3.08	4.14	2.61	3.36	1.44	4.89	2.81	3.94	2.45	4.21	1.80
27	5.02	3.06	4.47	2.44	3.14	1.88	3.44	1.81	4.11	2.64	4.42	2.69
28	4.72	2.78	3.87	1.45	3.88	2.58	4.60	2.71	3.49	1.52	3.78	2.16
29	5.90	3.60	3.15	2.25	4.12	2.63	4.32	2.69	3.93	1.61	4.08	2.21
30	6.14	4.45	3.78	2.54	4.51	3.35	3.92	2.41	---	---	4.20	2.91
31	5.65	3.56	---	---	4.21	2.49	3.38	1.36	---	---	3.46	1.70
MONTH	6.54	1.72	10.90	1.14	15.29	.53	5.22	-.90	4.28	.60	4.51	-.04

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DAY	MAX		MIN		GAGE HEIGHT, FEET		FLEET, WATER YEAR		OCTOBER 1995 TO SEPTEMBER 1996		MAX		MIN		MAX		MIN							
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN						
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER			
1	3.47	1.77	4.53	2.72	4.92	3.32	4.04	2.21	3.95	2.58	4.37	2.85												
2	4.04	2.38	4.36	2.69	4.48	2.66	4.24	2.24	3.78	2.32	4.26	2.66												
3	3.95	2.64	4.49	2.49	4.43	2.26	4.06	2.22	3.88	2.48	4.37	3.03												
4	3.81	2.46	4.52	2.65	4.74	2.20	3.81	2.15	4.13	2.93	4.22	2.31												
5	3.96	2.16	4.48	2.57	4.48	2.52	3.81	2.28	4.21	2.91	4.10	2.81												
6	3.35	1.73	4.65	2.32	4.60	2.47	3.81	2.51	4.34	2.95	4.19	2.61												
7	4.16	1.81	4.71	2.56	3.95	2.54	3.92	2.72	4.42	2.96	5.89	2.57												
8	4.01	2.30	4.90	2.89	2.86	1.64	3.87	2.05	4.54	2.50	3.97	2.37												
9	4.24	2.01	5.00	3.21	3.72	1.98	4.00	2.05	5.53	2.48	3.83	2.26												
10	4.57	2.39	4.75	3.38	4.00	2.37	3.57	2.10	10.97	3.15	3.73	2.32												
11	4.56	2.11	5.00	2.90	4.01	2.50	3.62	1.92	10.93	3.19	3.93	2.31												
12	4.70	2.87	4.12	2.77	4.12	2.36	3.66	1.99	3.66	2.13	4.28	2.84												
13	4.25	2.64	4.29	2.84	4.12	2.38	3.74	2.04	4.03	2.34	4.39	3.13												
14	4.26	2.54	4.17	2.49	3.90	2.31	4.05	2.08	4.17	2.07	4.44	3.34												
15	3.06	1.99	4.96	3.00	3.94	2.13	3.92	2.16	3.85	2.20	4.69	3.83												
16	3.92	1.15	4.37	2.74	3.89	2.16	4.25	2.13	3.78	2.52	4.47	2.38												
17	4.16	2.65	4.40	2.69	3.84	2.08	4.55	2.79	4.00	2.76	5.64	2.67												
18	4.41	2.75	4.69	2.83	3.83	2.06	4.67	2.95	4.20	3.27	7.01	2.85												
19	4.32	2.58	4.48	2.64	4.05	2.03	4.34	2.95	4.07	2.89	13.24	3.41												
20	4.54	2.65	4.79	2.81	4.92	2.17	4.12	2.72	4.13	3.19	4.65	3.04												
21	5.11	2.77	4.62	2.77	4.29	2.51	4.09	2.77	5.29	3.44	4.98	2.64												
22	9.42	3.58	4.45	2.50	4.70	2.52	3.62	2.51	6.01	3.99	4.35	2.75												
23	5.61	2.23	4.46	2.53	10.24	3.13	3.37	2.19	7.26	4.41	4.73	2.72												
24	4.22	1.89	4.76	3.27	4.56	2.94	3.67	2.21	6.63	3.13	5.25	3.23												
25	4.58	3.16	4.74	3.59	5.42	2.85	3.57	2.04	4.53	2.91	5.86	3.47												
26	4.05	2.52	5.18	3.91	4.11	2.46	4.53	2.13	6.84	2.79	5.42	3.91												
27	4.25	2.51	4.81	3.42	3.83	2.17	4.33	2.																

08074598 WHITEOAK BAYOU AT MAIN STREET, HOUSTON, TX--Continued

WATER QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1992 to current year.

WATER TEMPERATURE: May 1992 to current year.

DISSOLVED OXYGEN: May 1992 to current year.

INSTRUMENTATION:--Since May 1992, a three-parameter water-quality monitor continuously records specific conductance, water temperature and dissolved oxygen at this station.

REMARKS:--Interruptions in the record were due to malfunctions of the instrumentation. Due to tidal effects, backwater, probe location, channel morphology, the water-quality data collected at this location may not be representative of the entire flow through the cross-section.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,400 microsiemens on Apr. 8, 1996; minimum, 12 microsiemens June 4, 1994.

WATER TEMPERATURE: Maximum, 34.0°C on Aug. 10, 1993; minimum, 8.0 °C Feb. 2-4, 1996.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L on several days during period of record; minimum, 0.1 mg/L, July 20, 1994, and on several days in Apr., 1996.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 6,400 microsiemens Apr. 8; minimum, 58 microsiemens Dec. 18.

WATER TEMPERATURE: Maximum, 33.5°C on July 8-11; minimum, 8.0°C Feb. 2-4.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L on several days during the year; minimum, 0.1 mg/L on several days in April.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	840	440	659	802	331	600	1300	907	994	432	298	365
2	520	400	459	515	134	422	1310	937	1030	555	432	500
3	410	120	224	453	210	339	1310	918	1060	638	555	596
4	460	270	364	533	453	500	1270	949	1010	693	638	666
5	620	320	509	654	524	619	1500	965	1070	731	429	679
6	710	530	659	731	627	704	1490	943	1060	429	291	327
7	790	690	761	762	666	733	1150	987	1040	528	404	460
8	840	780	825	810	697	786	1230	305	944	646	528	583
9	870	810	845	867	774	843	738	305	557	760	646	701
10	880	790	836	901	799	868	785	727	757	820	760	797
11	890	790	837	915	534	706	915	777	876	840	790	821
12	899	800	841	792	736	772	1000	905	956	860	820	844
13	960	815	888	834	786	811	984	890	953	860	840	848
14	914	804	860	906	807	872	1040	958	995	890	840	869
15	887	855	871	953	896	934	1200	986	1030	1020	840	884
16	897	845	862	977	943	964	1280	1020	1100	1140	870	904
17	1110	807	888	997	323	729	1260	130	538	1040	860	896
18	1060	835	944	478	347	390	227	60	142	860	720	797
19	1010	872	953	574	80	359	268	181	214	820	780	804
20	951	770	846	412	208	324	357	268	316	830	770	810
21	791	769	781	540	412	482	436	357	397	770	710	737
22	793	783	788	670	540	632	480	436	459	790	760	780
23	818	785	795	791	666	752	536	480	516	810	780	800
24	809	735	764	835	757	804	606	511	553	800	690	748
25	814	736	780	854	807	824	641	569	605	820	770	797
26	1150	797	884	856	810	834	689	641	670	840	740	814
27	1490	782	1110	860	742	810	725	689	711	780	740	768
28	1570	795	971	890	723	838	762	699	747	820	780	807
29	1840	782	861	949	872	913	801	762	780	830	810	821
30	836	548	694	946	891	921	807	348	580	960	830	867
31	788	634	737	---	---	---	406	254	313	1030	869	888
MONTH	1840	120	777	997	80	703	1500	60	741	1140	291	741

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1630	778	942	495	472	480	2900	1010	1530	770	620	694
2	888	628	797	580	495	538	4950	990	2050	830	730	778
3	796	757	776	678	580	640	3860	1030	1780	860	730	813
4	816	794	800	765	668	718	2000	980	1360	900	830	861
5	824	794	817	810	765	793	2550	810	1240	910	830	883
6	822	811	814	820	720	798	910	810	875	890	800	862
7	829	771	791	860	820	848	2880	870	1300	900	880	890
8	829	769	790	880	820	838	6400	1010	2840	910	880	895
9	846	768	792	850	830	837	3460	1040	1570	910	890	905
10	990	807	860	870	820	854	1630	970	1270	920	890	904
11	990	814	876	880	830	866	1980	930	1200	910	220	754
12	832	814	824	890	870	878	1780	950	1160	670	440	590
13	966	822	891	890	870	884	950	750	818	810	640	726
14	1260	888	1020	870	840	864	790	740	765	920	760	852
15	2180	906	1190	890	850	866	810	760	787	940	750	884
16	1140	843	899	1070	880	940	870	800	845	950	880	913
17	1320	844	996	1570	950	1120	950	840	885	940	860	912
18	1820	879	1030	1760	940	1240	1550	900	1130	950	860	909
19	1840	881	1200	940	880	910	1320	900	986	960	900	940
20	1340	874	989	900	880	889	2180	880	1290	950	910	930
21	1420	855	997	1020	880	914	2130	960	1290	960	890	930
22	1420	889	1060	1050	940	985	1060	120	762	970	920	950
23	1180	913	1000	1070	940	992	320	180	259	970	930	955
24	1160	877	925	970	910	930	380	320	360	950	900	924
25	900	867	886	910	860	879	420	380	406	970	940	958
26	914	891	899	880	860	872	460	420	445	960	940	951
27	927	884	905	890	880	882	560	460	500	960	940	950
28	919	700	853	1330	870	929	700	560	640	960	930	947
29	732	493	635	1830	890	1190	730	540	606	960	920	940
30	---	---	---	4940	960	2150	640	590	620	960	520	853
31	---	---	---	3210	1020	1890	---	---	---	640	520	571
MONTH	2180	493	905	4940	472	949	6400	120	1050	970	220	865

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	800	640	720	680	600	657	890	790	843	523	374	451
2	880	800	847	760	660	731	890	830	869	625	513	574
3	910	860	885	820	730	783	906	834	869	688	153	547
4	910	240	720	820	770	798	861	809	842	515	228	367
5	590	300	464	840	790	825	865	797	836	695	515	609
6	710	590	686	880	810	856	859	264	622	768	308	672
7	830	710	800	910	850	881	716	409	561	796	113	476
8	870	830	856	910	840	871	800	706	753	488	210	328
9	900	870	885	910	840	874	796	181	731	584	193	450
10	920	865	896	930	860	896	248	76	172	530	247	387
11	887	805	854	950	870	915	292	76	182	611	530	580
12	936	832	880	940	860	908	328	189	245	700	611	675
13	1240	181	840	970	860	917	412	271	343	758	686	737
14	403	228	326	960	890	943	491	363	448	786	742	771
15	545	342	469	940	500	890	579	490	554	823	315	652
16	536	342	453	880	500	787	649	579	626	604	457	554
17	617	536	584	500	300	411	711	481	642	659	81	509
18	662	615	635	660	470	603	668	390	541	414	245	325
19	677	482	513	740	650	701	573	412	509	88	58	67
20	617	272	500	820	720	800	491	374	437	---	---	---
21	450	120	328	870	790	842	555	245	436	---	---	---
22	470	240	354	870	820	853	419	244	317	---	---	---
23	430	80	275	880	830	856	426	87	352	673	657	665
24	350	210	302	910	770	863	351	114	256	713	203	535
25	430	170	299	860	770	832	446	230	323	277	94	199
26	420	280	338	900	200	639	505	92	351	377	211	293
27	590	420	502	580	300	437	290	139	206	484	120	303
28	670	590	639	720	210	547	371	290	335	379	206	282
29	760	220	553	740	260	627	480	358	436	502	379	452
30	600	290	441	810	720	784	442	117	292	640	430	592
31	---	---	---	840	780	814	374	223	284	---	---	---
MONTH	1240	80	595	970	200	779	906	76	491	823	58	483
YEAR	6400	58	759									

SAN JACINTO RIVER BASIN

08074598 WHITEOAK BAYOU AT MAIN STREET, HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	31.5	27.5	29.0	25.0	21.5	23.0	20.0	16.5	17.5	19.0	18.0	18.5
2	29.5	27.5	28.0	25.5	22.0	24.0	22.0	16.5	20.0	18.5	13.0	14.5
3	28.0	23.0	24.0	22.0	18.0	19.5	23.5	18.5	21.5	14.0	11.5	13.0
4	26.5	22.0	23.5	18.5	15.5	16.5	24.5	21.5	23.0	16.5	12.0	13.5
5	26.5	24.0	25.0	16.0	15.5	16.0	23.0	21.5	22.5	17.5	15.0	17.0
6	26.5	23.0	24.0	19.0	15.5	17.0	24.0	22.5	23.5	15.0	10.0	12.5
7	25.0	22.5	23.5	23.0	19.0	21.0	24.0	20.5	22.0	12.0	8.5	10.5
8	25.0	22.5	23.5	23.0	20.0	21.0	20.5	18.0	19.5	13.5	9.0	11.0
9	25.0	23.0	23.5	21.5	19.5	20.0	18.0	14.5	16.0	15.5	11.0	13.0
10	25.5	23.5	24.5	22.0	19.5	21.0	14.5	12.0	13.0	16.5	13.0	14.5
11	26.0	23.5	24.5	23.5	18.5	20.5	14.0	13.0	13.5	17.0	15.5	16.0
12	25.0	24.0	24.5	18.5	16.5	17.5	18.5	14.0	16.5	16.5	13.5	15.0
13	25.5	24.0	25.0	20.5	17.5	19.0	20.0	16.0	18.5	16.5	14.0	15.0
14	25.5	23.0	24.0	21.5	18.5	19.5	21.5	17.5	20.0	18.0	15.5	16.0
15	23.0	21.0	22.0	20.5	18.5	19.5	23.0	18.5	21.5	20.0	17.0	18.0
16	23.0	21.5	22.0	20.5	19.0	19.5	23.0	20.0	22.0	20.5	16.5	19.5
17	23.5	22.0	22.5	20.0	17.0	18.5	23.5	18.0	20.0	20.5	19.0	20.0
18	24.5	22.0	23.0	19.0	17.0	17.5	19.0	17.5	18.5	20.0	12.5	18.0
19	26.0	22.5	23.5	19.0	17.5	18.5	17.5	13.5	15.0	14.0	10.5	12.0
20	26.0	23.5	24.0	22.0	18.5	20.0	14.5	13.0	13.5	15.5	12.0	13.0
21	23.5	20.5	21.5	22.0	20.0	20.5	14.0	12.5	13.0	15.5	15.0	15.5
22	22.0	20.5	21.5	22.0	20.0	20.5	15.5	13.0	14.0	17.5	15.0	16.5
23	23.5	21.5	22.5	21.5	20.0	21.0	15.5	13.0	14.0	20.0	17.5	19.0
24	25.0	22.0	22.5	21.0	18.5	19.5	14.5	12.5	13.5	20.0	15.0	17.0
25	23.0	21.5	22.0	19.0	18.0	18.5	16.0	13.5	14.5	17.5	14.5	15.5
26	25.0	22.0	23.5	20.0	18.5	19.0	15.5	13.5	14.5	18.5	15.0	17.0
27	26.5	23.0	24.5	22.0	19.0	20.5	16.5	14.0	15.0	17.5	13.0	14.0
28	26.0	23.5	24.5	21.5	16.5	19.0	16.5	14.0	14.5	15.5	13.0	14.0
29	23.5	21.0	22.5	17.0	14.5	15.5	14.5	12.5	13.0	17.5	13.5	15.5
30	21.0	20.0	20.5	17.0	15.0	16.0	16.5	13.0	15.0	20.0	14.5	18.0
31	22.0	20.5	21.0	---	---	---	20.0	16.5	18.0	21.0	13.0	16.0
MONTH	31.5	20.0	23.5	25.5	14.5	19.5	24.5	12.0	17.5	21.0	8.5	15.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.5	12.0	13.0	16.0	11.5	13.0	22.0	18.0	19.5	25.0	21.0	22.5
2	12.0	8.0	10.0	17.0	13.5	14.5	22.0	19.0	20.0	25.5	23.0	24.5
3	9.5	8.0	8.5	18.0	15.5	17.0	21.5	19.5	20.5	27.0	24.0	25.0
4	11.5	8.0	9.5	19.5	15.5	18.0	23.5	20.0	21.5	27.0	24.0	24.5
5	12.0	9.5	10.5	20.5	19.0	19.5	24.0	18.0	21.5	28.0	25.5	26.5
6	15.0	12.0	13.0	22.0	19.0	21.0	20.0	15.5	17.0	28.0	26.0	27.0
7	19.0	15.0	16.0	21.5	14.0	16.5	20.0	17.0	18.0	27.5	26.0	26.5
8	19.0	15.0	18.0	15.0	11.0	13.0	21.5	18.5	19.5	28.5	26.0	27.0
9	20.0	16.5	19.0	14.5	11.0	12.0	23.0	20.0	21.5	28.0	26.0	27.0
10	21.5	18.0	20.0	15.0	12.0	13.5	24.0	21.5	22.5	27.5	26.0	26.5
11	21.5	18.5	20.0	17.0	13.5	15.0	24.0	22.0	23.0	28.0	26.0	27.0
12	18.5	15.0	16.5	18.0	14.5	16.0	24.0	22.5	23.0	29.0	26.0	26.5
13	17.5	15.0	16.5	21.0	17.0	18.0	27.0	22.0	23.5	29.0	26.5	27.5
14	19.5	16.0	17.0	21.0	19.0	20.0	28.0	24.0	25.0	29.5	26.5	27.5
15	20.0	18.0	19.0	22.0	20.0	20.5	26.0	19.5	22.5	28.5	26.5	27.5
16	20.0	15.0	16.5	23.0	19.5	21.5	23.5	19.5	21.0	28.0	26.0	27.0
17	17.0	14.0	15.0	24.0	20.0	22.0	23.5	21.5	22.0	29.0	26.5	27.5
18	18.5	16.0	17.0	24.0	19.0	21.5	25.5	22.0	23.0	29.5	27.5	28.0
19	21.0	16.5	19.0	20.5	16.0	18.0	27.0	24.5	25.5	29.5	27.0	28.0
20	21.5	18.0	20.0	19.0	15.0	17.0	27.5	24.0	26.0	29.5	26.5	27.5
21	22.5	19.0	21.0	19.0	14.0	16.0	27.5	25.0	26.0	29.5	27.0	28.0
22	23.5	20.0	22.0	20.5	17.0	18.5	25.5	22.5	24.5	30.5	27.5	29.0
23	24.5	21.5	23.0	20.5	18.0	19.0	27.0	20.0	23.0	30.5	27.5	29.0
24	24.5	21.0	22.0	21.0	19.5	20.0	25.0	21.0	22.5	30.0	28.0	29.0
25	23.5	21.5	22.5	21.0	20.0	20.5	25.5	22.0	23.5	29.5	28.0	28.5
26	24.0	22.0	23.0	20.0	15.0	16.5	26.5	24.0	25.0	29.5	28.5	29.0
27	24.5	23.0	23.5	15.5	14.0	14.5	26.0	24.0	25.0	29.5	28.5	29.0
28	24.0	16.0	20.5	20.0	15.0	16.5	27.0	25.5	26.0	31.0	28.5	29.5
29	16.0	12.0	13.5	20.0	17.5	18.5	28.0	21.0	23.5	31.5	29.0	30.0
30	---	---	---	21.0	18.0	19.0	23.5	19.0	20.5	31.5	27.5	30.0
31	---	---	---	22.0	19.0	20.5	---	---	---	29.5	27.0	27.5
MONTH	24.5	8.0	17.5	24.0	11.0	17.5	28.0	15.5	22.5	31.5	21.0	27.5

SAN JACINTO RIVER BASIN

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08074598 WHITLOAK BAYOU AT MAIN STREET, HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	30.0	28.0	29.0	32.5	29.5	30.5	32.5	30.5	31.0	31.0	26.5	28.0
2	30.5	27.0	28.0	32.0	29.0	30.0	33.0	30.0	31.0	31.0	27.5	29.0
3	31.0	27.5	28.5	32.0	29.0	30.5	32.5	30.0	31.0	31.5	27.0	28.5
4	29.5	24.5	28.0	32.5	29.5	31.0	32.5	29.5	31.0	31.5	27.0	28.5
5	29.5	24.5	25.5	33.0	29.5	31.0	32.0	30.0	31.0	31.5	28.0	29.5
6	30.0	27.0	28.0	33.0	30.0	31.5	32.0	29.5	31.0	31.5	28.0	29.5
7	30.0	27.0	28.0	33.0	30.0	31.5	31.0	29.0	30.0	31.5	27.0	28.5
8	29.5	25.5	27.5	33.5	30.5	31.5	31.0	28.5	30.0	30.5	26.5	28.0
9	29.5	25.0	27.0	33.5	30.0	31.5	31.0	26.5	29.5	31.0	28.0	28.5
10	30.0	27.0	28.0	33.5	30.0	31.5	31.5	26.0	27.5	31.5	26.5	28.5
11	30.0	26.5	28.0	33.5	30.0	31.5	32.0	26.0	28.0	31.0	28.0	29.0
12	30.5	28.0	28.5	33.0	29.5	31.0	31.5	27.0	28.5	31.0	27.5	28.5
13	31.0	27.0	29.0	33.0	30.0	31.5	31.5	27.0	29.0	30.0	27.5	28.5
14	31.5	26.5	28.5	33.0	30.5	31.5	31.5	28.5	29.5	29.0	27.5	28.0
15	32.0	28.5	29.5	32.5	29.5	31.0	31.0	28.5	29.5	30.0	27.5	28.5
16	32.5	28.0	29.0	32.5	29.0	30.0	31.5	28.5	29.5	31.5	27.5	29.0
17	32.5	29.0	30.0	31.0	28.5	29.5	31.5	28.5	29.5	31.0	25.5	28.5
18	32.0	29.5	30.5	30.5	28.5	29.5	31.0	28.0	29.0	28.5	27.0	27.5
19	32.5	28.5	29.5	31.5	28.5	29.5	29.0	26.5	27.0	28.0	24.5	26.0
20	32.5	27.0	29.5	32.5	29.0	30.5	32.5	25.5	28.5	28.5	25.5	27.0
21	31.0	26.5	27.5	32.5	29.5	31.0	31.5	28.5	29.0	31.0	25.5	27.5
22	29.0	27.0	28.0	33.0	29.0	31.0	29.0	26.5	27.0	30.0	26.0	27.5
23	28.5	25.0	26.5	32.5	29.5	31.0	28.5	26.0	26.5	30.5	26.5	27.5
24	29.5	25.5	27.0	32.5	29.5	31.0	29.5	26.5	27.5	30.0	25.0	27.5
25	28.5	26.0	27.0	31.0	28.5	29.5	30.5	26.0	27.5	29.0	24.5	26.0
26	32.5	26.0	28.5	30.5	27.0	29.0	30.0	25.5	27.5	30.0	26.0	27.5
27	32.0	28.0	29.5	31.5	26.5	28.0	29.5	25.0	27.0	28.5	23.0	26.0
28	32.0	29.0	30.0	32.5	28.5	30.0	30.5	26.5	28.0	26.0	21.0	23.5
29	32.0	28.5	29.5	32.0	28.5	29.5	29.5	26.5	27.5	25.0	21.0	22.5
30	33.0	27.5	29.0	32.5	29.5	30.5	28.0	25.5	26.0	25.5	22.5	23.5
31	---	---	---	32.5	30.0	30.5	30.0	25.0	27.0	---	---	---
MONTH	33.0	24.5	28.5	33.5	26.5	30.5	33.0	25.0	29.0	31.5	21.0	27.5
YEAR	33.5	8.0	23.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.5	.4	3.4	8.6	5.2	6.7	8.9	3.7	5.9	---	---	---
2	6.2	2.7	3.4	8.5	1.2	5.3	8.6	3.4	5.0	---	---	---
3	6.4	3.2	5.8	11.2	6.4	8.9	8.6	2.5	4.4	---	---	---
4	7.4	5.0	5.7	16.2	6.5	11.3	7.8	3.3	5.0	---	---	---
5	8.2	3.3	5.0	>20.0	15.7	>17.7	8.2	3.5	4.8	7.2	5.9	6.6
6	9.3	4.2	5.9	>20.0	11.4	>19.0	7.2	2.8	4.1	9.5	7.2	8.4
7	9.7	5.1	6.5	>20.0	6.9	>14.7	8.1	3.4	5.6	12.2	9.1	10.2
8	10.2	5.2	6.8	>20.0	6.0	>12.7	8.3	4.3	6.3	11.0	10.0	10.8
9	9.7	5.5	7.0	9.1	5.1	6.4	9.0	5.8	7.2	12.5	7.9	9.1
10	10.8	4.3	7.2	7.6	3.7	5.6	9.4	6.0	7.6	12.4	7.8	9.8
11	7.3	2.9	5.0	9.8	4.4	6.9	9.6	6.7	7.8	13.0	6.7	9.3
12	6.8	3.6	4.9	9.5	5.7	7.0	9.0	5.7	7.1	14.5	7.3	10.2
13	9.4	4.5	6.2	9.3	5.4	7.0	7.8	4.4	5.7	14.8	7.0	9.4
14	13.3	4.5	7.4	9.2	4.4	6.3	8.0	4.0	5.5	14.9	6.9	9.5
15	12.6	5.8	8.4	11.5	5.5	7.6	11.5	1.6	7.0	14.3	6.0	8.9
16	11.6	5.4	8.1	12.2	6.1	7.8	6.3	1.6	3.7	14.0	5.4	7.1
17	11.7	5.1	7.0	11.7	6.5	8.9	>20.0	1.9	>14.3	12.9	5.4	6.6
18	11.2	4.3	6.0	11.1	8.7	9.9	>20.0	7.8	>12.2	13.5	3.9	8.7
19	9.5	3.6	4.9	14.0	6.5	10.5	11.6	7.9	9.6	17.0	8.6	12.3
20	9.7	3.4	6.1	11.2	6.9	9.3	12.4	11.6	12.3	15.5	8.4	10.5
21	9.4	4.0	5.9	9.4	4.4	7.4	---	---	---	11.8	6.6	8.4
22	9.8	4.7	6.5	13.0	3.6	8.4	---	---	---	12.7	6.0	9.0
23	7.1	4.1	5.3	16.4	10.5	12.8	---	---	---	11.3	1.7	4.8
24	10.9	4.0	6.9	>20.0	10.9	>16.3	---	---	---	14.7	1.9	7.7
25	11.7	5.2	7.6	>20.0	14.0	>17.2	---	---	---	14.0	4.5	8.3
26	8.2	4.2	5.9	>20.0	13.0	>13.6	---	---	---	14.8	3.8	7.9
27	7.7	3.7	5.3	>20.0	9.8	>13.6	---	---	---	16.3	5.9	8.0
28	8.7	4.4	6.0	>20.0	6.4	>10.4	---	---	---	17.2	3.2	8.9
29	12.9	5.2	7.8	9.8	5.4	7.1	---	---	---	16.4	.5	7.5
30	9.4	4.9	6.9	9.1	5.1	6.4	---	---	---	10.7	1.6	5.3
31	11.1	5.7	7.7	---	---	---	---	---	---	13.1	5.2	7.8
MONTH	13.3	.4	6.2	>20.0	1.2	>10.1	>20.0	1.6	>7.1	17.2	.5	8.6

> Actual value is known to be greater than the value shown

08074598 WHITEOAK BAYOU AT MAIN STREET, HOUSTON, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	15.4	7.3	10.1	5.5	.7	2.5	15.7	2.4	5.8	11.8	4.4	7.1
2	14.0	9.5	11.6	3.5	.3	1.2	15.8	2.1	6.4	11.5	4.1	6.7
3	17.5	10.5	13.3	5.0	.3	1.9	15.1	3.6	6.7	12.6	3.3	6.2
4	18.8	10.5	14.4	7.4	.7	3.4	11.1	2.4	5.9	12.2	4.5	7.1
5	18.5	9.5	13.2	8.4	4.3	5.8	10.8	1.9	4.0	13.5	3.5	7.3
6	16.0	7.5	9.8	9.2	3.6	5.8	12.1	.6	4.8	13.6	2.9	5.7
7	16.6	6.3	10.1	13.0	5.8	9.1	12.1	.3	3.7	11.2	2.8	5.7
8	14.2	5.4	8.6	13.4	7.4	9.7	11.3	.1	2.9	10.6	1.7	4.7
9	11.7	4.3	7.0	13.9	8.4	9.9	7.7	.4	2.5	8.8	.8	4.3
10	13.4	3.6	6.9	15.1	7.6	10.2	9.5	.1	3.2	8.5	1.7	4.2
11	17.8	3.6	8.2	16.5	6.9	10.1	9.9	1.1	3.6	7.8	1.4	3.2
12	17.8	6.4	10.2	16.9	6.4	9.4	9.0	1.4	3.6	---	---	---
13	19.4	5.7	10.3	17.2	5.4	9.1	7.2	.1	3.2	---	---	---
14	18.4	3.3	8.4	18.1	4.5	8.9	9.3	.1	2.5	7.1	4.0	4.3
15	18.0	3.8	9.1	13.4	3.9	6.8	13.0	1.7	5.9	9.0	4.3	5.9
16	18.5	5.5	11.3	13.6	3.3	6.3	13.5	1.2	5.0	10.1	3.8	6.6
17	18.5	6.6	10.5	16.2	1.7	6.4	15.1	4.8	8.2	10.5	4.0	6.6
18	19.2	5.9	10.5	16.5	1.2	9.8	14.9	5.4	8.6	10.4	4.0	6.7
19	15.7	5.5	8.4	>20.0	5.7	>12.2	16.6	3.7	6.6	10.0	3.4	5.9
20	16.5	5.3	8.6	>20.0	5.9	>12.9	13.5	3.5	6.7	10.2	2.0	4.9
21	16.9	5.1	8.4	19.0	4.1	9.5	14.4	3.1	7.1	9.3	1.5	5.0
22	15.2	3.1	6.5	20.5	5.3	10.4	10.5	3.0	6.1	9.7	2.2	5.3
23	13.2	1.4	5.8	19.2	6.3	9.2	6.1	3.7	5.5	9.2	1.8	4.7
24	11.4	.2	3.7	18.8	4.4	9.7	5.3	.8	2.6	9.4	2.9	5.6
25	10.6	.2	3.2	18.5	2.8	8.1	6.3	.1	3.0	9.0	3.3	5.9
26	8.5	.4	3.3	17.9	4.2	7.4	7.0	.1	2.6	8.2	4.1	5.7
27	7.1	.2	2.3	14.0	5.4	8.0	7.3	.2	2.9	8.3	3.3	5.2
28	5.0	.2	2.3	18.2	4.9	10.0	7.9	1.0	4.0	11.3	3.7	6.9
29	8.6	2.2	5.7	14.9	3.4	6.7	11.4	2.1	6.5	11.8	2.5	6.0
30	---	---	---	5.9	1.5	4.1	10.6	3.0	5.5	11.3	3.9	6.7
31	---	---	---	15.7	2.5	5.4	---	---	---	7.8	2.2	3.5
MONTH	19.4	.2	8.3	>20.0	.3	>7.7	16.6	.1	4.9	13.6	.8	5.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	8.9	2.6	5.1	10.8	3.4	4.7	14.2	4.2	7.4	6.6	3.3	4.6
2	11.9	3.7	6.2	12.2	3.1	5.4	14.4	2.8	7.1	7.7	2.3	4.4
3	12.0	3.0	5.3	13.1	3.4	7.2	13.1	3.0	7.3	13.5	2.1	5.1
4	11.4	2.7	6.5	14.1	2.7	7.0	14.2	2.5	7.6	10.5	3.5	5.6
5	12.0	5.4	6.7	13.8	3.3	8.1	12.3	2.8	7.3	11.9	2.9	6.0
6	12.9	6.4	8.8	12.0	1.9	7.0	11.1	2.7	6.5	12.4	3.5	6.7
7	---	---	---	12.1	2.1	6.3	---	---	---	12.0	3.8	6.1
8	---	---	---	12.6	2.1	6.8	---	---	---	10.0	5.0	6.6
9	---	---	---	12.1	1.0	5.7	---	---	---	9.4	4.0	5.4
10	14.8	4.1	5.6	11.8	1.3	5.3	---	---	---	10.4	5.5	7.4
11	14.2	3.8	7.6	11.7	1.0	3.7	---	---	---	11.2	4.2	5.9
12	14.8	4.1	7.5	13.1	1.3	4.1	---	---	---	12.3	3.8	6.3
13	13.9	3.4	6.5	13.1	.9	4.0	---	---	---	13.2	3.9	7.1
14	7.9	4.2	5.3	13.8	2.3	5.9	---	---	---	13.5	4.0	7.8
15	12.3	2.3	4.6	14.2	3.1	6.9	---	---	---	14.3	5.0	8.0
16	10.9	2.0	3.8	5.8	3.1	4.1	---	---	---	12.8	4.8	7.4
17	11.4	2.3	5.0	3.9	2.2	3.3	---	---	---	12.0	3.5	6.0
18	11.4	2.2	5.5	---	---	---	---	---	---	8.2	1.9	5.1
19	12.1	2.3	4.9	6.8	2.4	2.9	---	---	---	9.9	4.9	7.5
20	11.0	2.3	5.1	9.2	1.7	4.3	9.0	7.6	8.5	6.8	4.4	5.6
21	8.5	4.4	5.5	10.3	2.1	5.2	8.4	3.8	4.6	7.5	3.8	5.6
22	7.3	3.5	4.7	10.5	2.0	6.0	6.4	3.9	5.0	9.5	1.6	5.1
23	7.3	3.5	5.4	8.6	1.4	4.0	7.9	5.0	5.9	11.1	3.2	5.7
24	6.9	5.3	5.9	6.8	.8	3.1	7.7	5.8	6.5	9.9	4.0	5.9
25	6.8	3.3	5.4	6.1	.5	2.4	7.5	4.3	5.8	7.7	4.6	6.3
26	7.5	4.7	5.8	6.1	1.0	3.9	7.8	2.4	4.8	6.8	3.7	4.5
27	7.6	2.5	4.5	7.5	2.8	4.0	6.2	3.9	5.1	7.2	3.0	5.0
28	7.8	1.4	3.5	10.0	1.5	3.3	5.3	2.7	3.7	7.4	5.1	6.1
29	6.4	3.0	3.2	9.3	1.2	2.8	6.1	2.9	3.8	6.9	4.1	5.1
30	---	---	---	10.9	2.5	5.0	8.0	3.5	5.4	6.3	2.7	4.5
31	---	---	---	12.5	3.8	6.4	6.5	5.0	5.6	---	---	---
MONTH	14.8	1.4	5.5	14.2	.5	5.0	14.4	2.4	6.0	14.3	1.6	5.9
YEAR	>20.0	.1	>6.8									

SAN JACINTO RIVER BASIN

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08074610 BUFFALO BAYOU AT MCKEE STREET, HOUSTON, TX

LOCATION.--Lat 29°45'57", long 95°52'07", Harris County, Hydrologic Unit 12040104, on left bank at McKee street bridge over Buffalo Bayou 0.8 mi downstream from station 08074598, 5.5 mi upstream from station 08074710.

DRAINAGE AREA.--Not determined.

WATER-ELEVATION RECORDS

PERIOD OF RECORD.--February 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level, 1978 adjustment, unadjusted for land-surface subsidence.

REMARKS.--Records good. Mostly tidal, affected by local runoff. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 17.7 ft Oct. 17, 1994 at 2300 hours; minimum, -2.4 ft Jan. 19, 1996 at 1400 hours.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 9.8 ft Sept. 19 at 0430 hours; minimum, -2.4 ft Jan. 19 at 1400 hours.

DAY	ELEVATION (FEET NGVD), WATER YEAR		OCTOBER 1995		TO SEPTEMBER 1996							
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.0	2.3	3.2	1.9	2.6	1.1	2.3	1.0	2.2	.6	2.4	1.0
2	4.1	2.6	3.9	1.8	2.1	.8	1.2	-1.5	1.9	-.5	2.1	.8
3	4.5	1.3	2.0	.4	2.1	.6	.6	-1.6	.6	-.8	2.1	.9
4	3.1	1.2	2.9	1.3	2.0	.2	1.8	.0	1.1	-.6	2.4	1.4
5	3.7	1.9	3.1	1.3	2.1	.3	1.7	.1	1.9	.5	2.7	1.5
6	2.5	1.4	2.9	1.4	2.0	.1	1.6	-1.2	1.8	.5	2.3	.8
7	3.3	1.1	2.6	.6	2.2	.1	-.7	-1.7	2.0	.9	1.0	-1.6
8	3.0	1.2	2.6	.5	2.9	1.1	1.3	-.8	2.0	.6	.9	-1.4
9	2.8	1.3	3.3	1.5	2.6	-1.1	1.3	-.1	1.9	1.0	1.7	-.2
10	2.7	1.0	3.4	1.9	2.1	.5	1.2	-.1	1.9	.7	1.6	.3
11	2.8	1.1	3.1	-.6	2.5	1.0	1.2	-.1	1.8	.2	1.9	.3
12	3.0	1.7	2.1	.7	2.6	1.1	.9	-.4	1.5	-.6	2.4	.4
13	3.2	1.6	2.7	.8	2.5	1.1	1.6	.0	1.7	.1	2.4	.6
14	3.1	.5	2.2	1.1	2.3	1.4	1.8	.4	1.9	.1	2.0	.4
15	2.7	1.0	2.5	.9	2.6	1.3	1.7	.1	1.5	-.3	2.1	.4
16	3.0	1.5	2.0	1.0	2.4	1.1	2.0	.1	.9	-1.1	2.3	.9
17	3.2	1.8	2.5	1.3	9.6	2.0	3.2	-2.4	1.8	.1	2.3	1.0
18	3.3	1.7	2.5	1.3	---	2.2	3.4	-1.1	1.7	.1	2.3	-.8
19	3.1	1.8	7.2	1.6	2.2	-1.2	.9	-1.6	2.4	.4	-.1	-1.6
20	2.8	.5	2.9	.9	1.7	-.6	2.2	.5	1.9	.3	-.6	-1.6
21	2.9	1.3	2.4	.6	2.4	.5	2.2	.4	2.0	.5	1.0	-1.6
22	3.3	1.9	2.7	.9	2.4	.2	2.3	.6	2.0	.6	1.4	-.3
23	3.4	1.7	2.7	.6	2.0	.0	2.4	1.2	1.9	.6	2.1	.0
24	2.5	.1	2.1	-.1	1.8	-.1	1.9	.2	1.8	.3	2.7	.9
25	3.2	1.2	2.3	.7	1.8	-.1	3.2	1.1	2.2	.5	2.2	.3
26	3.2	1.4	2.5	1.0	1.4	-.5	3.0	1.2	2.2	.7	2.5	.1
27	3.3	1.4	2.8	.8	1.3	.0	1.6	.1	2.4	.9	2.6	1.0
28	2.9	1.1	2.1	-.1	2.0	.8	2.8	1.0	1.7	-.2	2.0	.5
29	4.2	1.9	1.4	.6	2.2	.8	2.6	1.0	2.0	-.1	2.2	.5
30	4.4	2.8	2.0	.9	2.6	1.5	2.2	.7	---	---	2.4	1.2
31	4.0	1.9	---	---	2.3	.7	1.6	-.3	---	---	1.7	.0
MONTH	4.5	.1	7.2	-.6	---	-1.2	3.4	-2.4	2.4	-1.1	2.7	-1.6

SAN JACINTO RIVER BASIN

08074610 BUFFALO BAYOU AT MCKEE STREET, HOUSTON, TX--Continued

DAY	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996											
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.7	.0	2.7	1.0	3.1	1.6	2.3	.5	2.2	.8	2.6	1.1
2	2.2	.7	2.5	.9	2.7	1.0	2.5	.5	2.0	.6	2.5	.9
3	2.1	.9	2.6	.7	2.6	.6	2.2	.6	2.0	.8	2.5	1.3
4	2.0	.7	2.7	.9	2.8	.5	2.0	.4	2.3	1.2	2.4	.6
5	2.2	.4	2.6	.9	2.6	.8	2.0	.5	2.4	1.2	2.4	1.1
6	1.5	-1.0	2.8	.6	2.8	.8	2.0	.8	2.5	1.2	2.4	.7
7	2.4	.1	2.9	.8	2.1	.9	2.1	1.0	2.6	1.2	3.2	.7
8	2.3	.6	3.1	1.2	1.1	-.1	2.1	.3	2.7	.8	2.2	.6
9	2.5	.3	3.2	1.5	1.9	.2	2.2	.3	2.2	.8	2.0	.5
10	2.8	.7	2.9	1.6	2.2	.6	1.8	.4	6.2	1.3	2.0	.5
11	2.8	1.1	2.9	1.1	2.3	.8	1.8	.2	6.2	1.2	2.1	.5
12	3.0	1.2	2.3	1.1	2.4	.6	1.9	.3	1.8	.3	2.4	1.0
13	2.5	1.0	2.4	1.2	2.2	.7	1.9	.4	2.2	.5	2.5	1.2
14	2.4	.9	2.4	.7	2.1	.5	2.3	.4	2.3	.4	2.7	1.4
15	1.3	-.7	3.2	1.3	2.1	.4	2.1	.5	2.1	.5	3.0	2.0
16	2.1	-.5	2.6	1.0	2.0	.4	2.4	.5	2.0	.8	2.7	.6
17	2.4	.9	2.6	1.0	2.0	.4	2.8	1.1	2.2	1.0	2.3	.8
18	2.7	1.1	2.9	1.1	2.1	.4	2.9	1.3	2.4	1.4	4.4	1.1
19	2.5	.9	2.7	.9	2.0	.3	2.5	1.2	2.4	1.0	9.8	1.5
20	2.7	.9	3.0	1.1	2.0	.3	2.3	1.0	2.4	1.4	3.0	1.3
21	3.5	1.1	2.8	1.0	3.2	.5	2.2	1.1	3.5	1.7	3.4	.9
22	6.4	2.0	2.6	.7	2.8	.8	1.8	.8	4.2	2.2	2.6	1.0
23	3.3	.4	2.7	.8	6.7	1.5	1.6	.5	4.4	2.6	3.0	1.0
24	2.5	.2	2.9	1.6	2.8	1.2	1.9	.5	3.9	1.3	3.3	1.4
25	2.8	1.6	2.9	1.9	3.2	1.2	1.8	.4	2.8	1.1	3.5	1.5
26	2.3	.8	3.4	2.1	2.4	.8	2.3	.4	4.0	1.1	3.7	2.1
27	2.5	.8	3.0	1.6	2.1	.5	2.6	.5	3.0	1.7	5.4	1.9
28	3.1	1.9	2.6	1.2	2.5	.3	2.4	.8	2.7	1.1	2.5	.6
29	2.9	-.1	3.2	1.0	2.2	.3	2.6	.5	3.0	1.0	3.2	1.6
30	2.2	-.4	3.5	1.3	2.7	.3	2.7	.7	3.0	1.0	3.3	1.5
31	---	---	3.0	1.0	---	---	2.4	.8	2.9	1.2	---	---
MONTH	6.4	-1.0	3.5	.6	6.7	-.1	2.9	.2	6.2	.3	9.8	.5

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08074610 BUFFALO BAYOU AT MCKEE STREET, HOUSTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1992 to current year.

WATER TEMPERATURE: February 1992 to current year.

DISSOLVED OXYGEN: February 1992 to current year.

INSTRUMENTATION.-- Since February 1992 a three-parameter water-quality monitor continuously records specific conductance, water temperature, and dissolved oxygen at this station.

REMARKS.-- Interruption in the record was due to malfunctions of the instrumentation. Due to tidal effects, probe location, channel morphology, the water-quality data collected at this location may not be representative of the entire flow through the cross-section.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, >2000 microsiemens on several days in 1996, 52 microsiemens Sept. 3, 1994.

WATER TEMPERATURE: Maximum 33.0°C June 23, 1995, July 8, 9, 1996; minimum, 6.0°C on Feb. 10, 11, 1994.

DISSOLVED OXYGEN: Maximum, 15.5 mg/L May 2, 1995; minimum, 0.1 mg/L on several days in 1995, 1996.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, >2000 microsiemens Feb. 15, Mar. 30 - Apr. 3; minimum, 75 microsiemens Sept. 19.

WATER TEMPERATURE: Maximum, 33.0°C July 8, 9; minimum, 7.5°C Feb. 3, 4, 5.

DISSOLVED OXYGEN: Maximum, 15.3 mg/L Mar. 29; minimum, 0.1 mg/L June 26, July 10, 11, 24, 29.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	742	599	695	828	462	700	1190	972	1100	560	272	377
2	714	524	616	522	171	396	1160	913	1010	340	279	311
3	595	197	289	280	169	223	1140	907	1000	435	340	395
4	397	270	315	397	280	338	1220	926	1040	515	423	477
5	358	279	311	405	315	374	1350	997	1180	630	515	563
6	413	357	391	488	404	450	1330	1040	1190	573	392	424
7	481	412	462	586	488	548	1930	1080	1360	---	---	---
8	606	481	562	627	586	615	1910	479	1500	425	381	409
9	692	580	641	705	622	646	569	569	484	534	416	487
10	826	668	735	762	676	721	587	499	543	598	534	567
11	905	749	800	1220	626	748	665	564	628	700	590	644
12	1010	858	909	645	629	636	770	665	711	719	644	681
13	1090	865	972	744	638	667	811	754	784	859	719	798
14	1310	1050	1140	831	705	766	892	782	832	1100	841	998
15	1390	975	1180	924	789	831	970	844	906	1250	902	1080
16	1190	890	1040	1050	854	928	975	881	930	1280	984	1150
17	1240	1010	1120	1500	326	786	---	---	---	1270	1010	1160
18	1240	954	1100	326	233	258	124	97	103	1410	985	1220
19	1170	992	1090	385	98	252	252	124	193	1080	1020	1040
20	1960	1000	1250	295	123	220	253	163	194	1080	864	945
21	1320	952	1060	405	295	370	200	177	187	923	770	839
22	1340	1070	1190	467	391	441	270	194	248	1190	860	995
23	1370	995	1120	540	467	506	294	234	270	1190	884	961
24	1470	951	1170	590	540	577	377	253	324	1110	911	1000
25	1470	1010	1230	639	585	616	430	338	389	1370	906	1040
26	1440	948	1170	849	636	709	504	430	474	1370	927	1100
27	1490	1050	1240	864	757	808	571	503	539	1200	931	1000
28	1370	1050	1200	1130	843	968	661	570	630	1350	973	1150
29	1860	1290	1490	1190	791	988	715	661	695	1290	970	1070
30	1890	743	1340	1160	943	1050	790	457	629	1170	975	1060
31	786	668	724	---	---	---	515	272	375	1550	1070	1420
MONTH	1960	197	921	1500	98	605	1930	97	682	1550	272	845

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1660	1120	1370	368	296	320	>2000	1820	>1970	581	480	522
2	1960	1030	1500	502	368	436	>2000	2000	>2000	739	552	643
3	1190	1030	1110	498	447	481	>2000	2000	>2000	785	731	742
4	1280	996	1150	580	498	563	1900	1570	1750	826	743	775
5	1300	943	1130	682	568	638	1810	1440	1710	954	793	872
6	1250	969	1110	736	680	720	1960	1730	1920	1150	831	940
7	1170	964	1060	795	732	768	1950	1280	1650	968	896	927
8	1140	966	1060	821	779	809	1780	1460	1690	1020	905	956
9	1030	898	970	831	815	820	1860	1470	1690	1020	911	965
10	1220	927	1050	992	831	908	1870	1260	1620	982	913	946
11	1840	987	1380	1090	966	1020	1830	1230	1550	1080	427	856
12	1560	1330	1460	1200	974	1070	1860	1370	1670	618	343	447
13	1770	1250	1480	1230	956	1020	1860	726	1130	455	355	397
14	1770	1310	1530	1190	929	1030	814	726	780	622	455	540
15	>2000	1450	>1760	1280	996	1100	837	756	789	703	622	680
16	1930	1480	1700	1450	1050	1220	1260	798	1010	778	682	741
17	1940	1300	1610	1950	1160	1390	1190	1010	1100	803	778	790
18	1900	1230	1610	1900	1390	1670	1490	1090	1320	838	802	818
19	1850	1360	1610	1560	1340	1410	1540	1240	1420	925	838	874
20	1670	1300	1490	1600	1340	1460	1810	1290	1500	1030	887	934
21	1820	1310	1450	1980	1430	1700	1950	1340	1670	996	900	936
22	1600	1250	1420	1980	1730	1880	1980	189	1340	1120	931	1000
23	1630	1400	1500	1980	1340	1750	294	189	249	1190	953	1040
24	1660	1210	1480	1920	1270	1540	465	286	420	1150	1010	1070
25	1490	1120	1220	1580	1110	1280	502	405	455	1110	1010	1060
26	1310	1090	1200	1820	1420	1720	586	502	556	1190	1040	1100
27	1230	1020	1080	1960	1240	1740	682	586	659	1110	984	1050
28	1630	1020	1200	1830	1090	1420	742	682	715	1240	1010	1120
29	1080	250	643	1920	1270	1620	773	472	647	1250	1000	1100
30	---	---	---	>2000	1350	>1710	605	294	554	1980	772	1410
31	---	---	---	>2000	1470	>1870	---	---	---	939	752	818
MONTH	>2000	250	>1320	>2000	296	>1200	>2000	189	>1250	1980	343	873
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	923	783	849	446	374	399	702	532	640	386	246	324
2	1220	885	1010	456	393	421	802	594				

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08074610 BUFFALO BAYOU AT MCKEE STREET, HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	29.5	27.0	28.0	23.5	20.5	22.0	17.5	15.5	16.5	18.0	16.0	17.0
2	29.0	27.0	28.0	24.0	22.0	23.5	19.5	17.5	18.5	16.5	14.0	15.0
3	27.5	23.5	24.0	22.0	20.0	21.0	22.0	19.0	20.5	14.5	12.0	13.0
4	24.0	23.0	23.5	20.0	17.5	18.5	22.5	21.0	21.5	12.5	12.0	12.0
5	24.0	23.0	23.5	17.5	16.0	16.5	22.0	21.0	21.5	15.0	12.0	13.5
6	24.5	23.0	23.5	17.0	16.0	16.5	23.0	21.5	22.5	15.0	10.5	12.5
7	23.5	22.5	23.0	20.0	17.0	18.5	22.5	21.0	22.0	11.0	9.5	10.5
8	24.0	22.0	23.0	20.5	19.0	20.0	21.0	18.5	20.0	9.5	8.0	8.5
9	24.0	22.0	23.0	20.0	19.5	19.5	18.5	16.0	17.0	10.0	8.0	9.0
10	24.5	22.0	23.0	20.5	19.5	20.0	16.0	14.0	15.0	11.5	9.5	10.5
11	24.5	22.5	23.5	21.0	19.5	20.5	14.0	13.0	13.5	13.0	11.0	12.5
12	24.5	23.0	24.0	19.5	18.5	19.0	15.0	13.5	14.0	14.5	12.5	13.0
13	24.5	23.5	24.0	20.0	18.0	18.5	17.5	15.0	16.5	15.0	12.5	13.5
14	24.0	23.0	23.5	20.0	18.0	19.0	19.5	17.0	18.5	15.0	13.0	14.0
15	23.0	22.0	22.5	20.5	18.5	19.0	20.5	18.5	19.5	17.0	14.5	16.0
16	22.5	21.5	22.0	20.0	18.0	19.0	23.0	20.0	21.0	18.0	16.5	17.0
17	22.5	21.0	21.5	19.0	17.5	18.5	---	---	---	18.5	17.0	18.0
18	23.0	21.5	22.0	18.5	17.5	18.0	18.5	18.0	18.5	18.5	15.5	17.5
19	24.0	22.0	23.0	18.5	18.0	18.5	18.0	15.5	16.5	15.5	15.5	13.0
20	23.5	22.5	23.0	20.0	18.5	19.5	15.5	13.5	14.5	12.5	11.5	12.0
21	23.0	21.5	22.5	20.0	19.5	20.0	13.5	12.0	12.5	14.0	12.5	13.5
22	22.0	21.0	21.5	20.0	19.5	20.0	12.0	11.5	12.0	15.0	13.5	14.5
23	22.5	21.0	21.5	20.0	19.5	20.0	12.0	11.0	11.5	17.0	15.0	16.0
24	22.5	21.5	22.0	20.0	19.5	19.5	11.5	11.0	11.0	17.0	15.5	16.5
25	22.5	21.0	22.0	19.5	18.5	19.0	12.0	11.0	11.5	16.5	15.0	15.5
26	23.5	22.0	22.5	19.0	18.0	18.5	12.5	12.0	12.0	16.0	15.0	15.5
27	24.5	23.0	23.5	20.0	18.0	19.0	13.0	12.0	12.0	15.5	14.0	15.0
28	24.5	23.5	24.0	19.5	18.0	19.0	13.5	12.0	12.5	14.0	13.5	13.5
29	23.5	22.0	23.0	18.0	16.0	17.0	12.5	12.0	12.5	15.5	13.0	14.0
30	22.5	20.5	21.5	17.5	15.5	16.0	15.0	12.0	13.0	18.0	15.0	16.5
31	20.5	20.5	20.5	---	---	---	17.5	14.5	16.0	17.5	14.5	16.0
MONTH	29.5	20.5	23.0	24.0	15.5	19.0	23.0	11.0	16.0	18.5	8.0	14.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	14.5	12.0	13.0	13.5	12.5	12.5	21.5	19.5	20.0	23.0	20.5	21.5
2	12.0	9.0	10.5	13.5	13.0	13.5	24.0	18.5	20.0	24.0	21.5	22.5
3	9.0	7.5	8.5	16.0	13.0	15.0	22.5	19.0	20.0	24.0	22.5	23.5
4	8.5	7.5	8.0	17.0	15.0	16.0	21.5	19.5	20.5	25.0	23.5	24.0
5	9.0	7.5	8.5	18.5	16.5	17.5	21.0	19.0	20.5	25.5	24.0	25.0
6	11.0	9.0	10.0	20.5	18.0	19.5	19.0	17.0	18.0	26.0	25.0	25.5
7	14.0	11.0	13.0	19.5	18.5	18.5	19.0	17.0	18.0	27.5	25.5	26.5
8	16.0	14.0	15.0	16.0	14.0	14.5	20.0	18.0	18.5	27.5	26.0	26.5
9	17.5	15.5	17.0	14.0	12.5	13.5	21.0	19.0	19.5	27.5	26.0	26.5
10	19.0	17.5	18.0	15.5	12.5	13.5	22.0	20.5	21.0	28.0	26.0	26.5
11	19.0	17.5	18.5	16.5	13.0	14.0	22.5	21.0	22.0	28.0	26.5	27.0
12	17.5	15.5	16.5	17.5	14.0	15.0	22.5	21.5	22.0	27.0	26.0	26.5
13	17.0	15.5	15.5	19.0	15.0	17.0	23.0	21.5	22.0	28.5	26.0	27.0
14	17.5	15.0	16.0	19.0	17.0	18.5	24.0	23.0	23.5	28.5	26.5	27.0
15	18.0	16.5	17.5	21.0	18.5	20.0	23.5	22.0	22.5	27.0	26.5	26.5
16	17.5	15.5	16.5	21.5	20.0	21.0	22.5	20.5	21.5	28.0	26.5	27.0
17	16.0	14.5	15.5	23.0	21.0	22.0	22.0	20.5	21.5	28.0	26.5	27.0
18	16.5	15.0	15.5	22.0	20.0	21.0	24.0	21.0	22.0	28.0	26.5	27.5
19	18.5	16.0	17.5	---	---	---	25.0	22.5	24.0	28.5	27.0	27.5
20	19.5	18.0	18.5	17.5	16.0	17.5	26.0	24.0	24.5	28.5	27.0	27.5
21	21.0	18.5	19.5	19.0	16.0	17.0	25.5	24.5	25.0	29.0	27.5	27.5
22	22.0	20.0	21.0	19.0	16.5	17.5	25.0	22.0	24.0	29.5	27.5	28.0
23	23.0	21.0	22.0	19.0	17.5	18.0	23.5	21.0	22.0	30.0	28.0	28.5
24	23.0	21.5	22.0	19.5	18.5	19.0	24.5	21.5	22.5	29.5	28.0	28.5
25	23.0	21.5	22.0	20.5	19.5	20.0	24.0	21.5	23.0	29.5	28.0	28.5
26	23.5	22.0	22.5	19.5	17.5	18.5	24.0	23.0	23.5	29.5	28.0	28.5
27	23.5	22.5	23.0	17.5	15.5	16.5	25.5	23.5	24.5	29.5	28.5	28.5
28	23.0	18.0	21.0	18.0	15.5	16.5	26.0	24.0	24.5	30.0	28.5	29.0
29	18.0	12.5	15.0	18.5	16.5	18.0	25.0	22.0	23.5	30.5	28.5	29.0
30	---	---	---	20.5	18.0	19.0	24.0	21.0	22.0	30.0	28.0	29.0
31	---	---	---	21.0	19.5	20.5	---	---	---	30.0	28.5	29.5
MONTH	23.5	7.5	16.5	23.0	12.5	17.5	26.0	17.0	22.0	30.5	20.5	27.0

SAN JACINTO RIVER BASIN

08074610 BUFFALO BAYOU AT MCKEE STREET, HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNL			JULY			AUGUST			SEPTEMBER		
1	29.0	28.5	28.5	30.0	29.0	29.5	32.0	30.0	30.5	28.0	26.5	27.0
2	29.5	27.0	28.5	30.0	29.5	29.5	32.5	30.5	31.0	28.5	27.0	27.5
3	29.0	28.0	28.5	31.5	29.5	30.5	32.5	30.5	31.0	29.0	27.0	27.5
4	28.5	25.0	27.5	31.5	30.0	30.5	32.0	30.5	31.0	28.0	26.0	27.0
5	27.5	25.0	26.0	32.5	30.0	31.0	32.0	30.0	31.0	28.5	27.5	28.0
6	28.5	26.5	27.5	32.5	30.5	31.0	31.0	29.5	30.5	28.0	27.0	27.5
7	28.5	27.5	28.0	32.5	30.5	31.5	30.5	30.0	30.5	28.5	27.0	27.5
8	29.0	27.0	27.5	33.0	30.5	31.5	30.0	30.0	30.0	28.0	27.0	27.0
9	28.5	26.5	27.0	33.0	30.5	31.5	---	---	---	30.0	28.0	28.5
10	28.5	26.0	27.0	32.5	30.5	31.5	---	---	---	29.0	27.5	28.0
11	28.5	26.5	27.5	32.5	30.5	31.0	---	---	---	29.0	27.0	28.0
12	29.0	27.0	28.0	32.5	30.5	31.0	29.5	27.0	28.0	28.0	27.0	27.5
13	30.0	27.5	28.5	32.5	30.5	31.0	29.5	27.5	28.5	27.5	27.0	27.0
14	29.5	27.0	28.0	32.0	30.5	31.0	29.0	28.0	28.5	27.0	26.5	27.0
15	31.0	29.5	29.5	32.0	30.0	30.5	30.0	28.5	29.0	27.5	27.0	27.0
16	30.5	28.5	29.0	31.0	30.0	30.5	30.5	28.5	29.0	29.0	27.5	28.0
17	30.5	29.0	29.5	31.0	29.0	29.5	30.0	28.5	29.0	29.5	25.5	28.0
18	29.5	28.5	29.5	30.0	29.0	30.0	29.0	26.5	27.5	27.5	25.5	26.5
19	31.0	30.0	30.0	31.0	29.5	30.0	28.5	26.5	27.5	27.0	24.5	25.5
20	30.0	28.0	29.5	32.0	29.5	30.0	29.0	26.5	27.5	27.0	25.5	26.0
21	29.0	27.0	27.5	32.0	30.0	30.5	29.0	27.5	28.0	27.5	26.0	26.5
22	28.5	26.5	28.0	32.5	30.0	31.0	27.5	26.5	27.0	28.0	26.5	27.0
23	27.0	25.0	26.0	32.5	30.0	31.0	27.5	26.0	26.5	27.0	26.5	27.0
24	28.0	26.0	26.5	31.5	30.5	30.5	28.0	26.0	26.5	27.0	26.0	26.5
25	27.5	26.0	26.5	30.5	29.5	30.0	28.0	26.5	27.0	28.0	25.5	26.0
26	29.5	26.0	27.0	29.5	26.5	28.5	28.5	25.5	27.5	28.0	26.5	27.0
27	29.5	28.5	29.0	28.5	27.0	27.5	27.5	25.0	26.0	27.5	24.0	26.0
28	29.5	29.0	29.0	30.5	28.0	29.0	28.5	27.0	27.5	24.0	23.0	23.5
29	29.0	28.5	29.0	31.0	29.5	30.0	28.5	27.5	27.5	24.5	22.0	23.5
30	29.5	28.5	29.0	31.5	29.5	30.0	28.5	25.5	26.5	23.0	22.5	22.5
31	---	---	---	32.0	29.5	30.0	27.5	25.5	26.0	---	---	---
MONTH	31.0	25.0	28.0	33.0	26.5	30.5	32.5	25.0	28.5	30.0	22.0	26.5
YEAR	33.0	7.5	22.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.2	2.8	4.0	5.3	3.4	4.4	9.2	6.9	7.9	3.9	1.9	3.2
2	4.6	2.8	3.8	5.7	2.9	4.0	9.3	5.6	7.7	5.3	2.8	4.0
3	6.0	4.0	5.0	5.2	3.8	4.3	6.2	3.8	5.3	6.1	3.1	4.5
4	5.5	3.9	4.6	5.6	4.2	5.0	7.6	5.0	6.2	5.1	3.5	4.1
5	5.6	4.6	5.1	6.1	4.9	5.6	7.5	5.2	6.1	4.1	2.2	3.3
6	5.7	3.8	4.9	6.2	4.8	5.6	6.3	3.4	4.9	3.5	1.8	3.0
7	5.3	3.1	4.0	6.0	4.2	5.3	5.0	2.6	3.6	7.1	3.3	5.1
8	5.9	3.4	4.6	4.9	3.4	4.3	7.3	2.4	4.3	---	---	---
9	6.6	3.2	5.1	4.4	3.0	3.6	6.7	4.4	5.6	9.6	9.1	9.5
10	7.3	4.6	5.6	4.5	2.7	3.8	4.7	3.7	4.2	9.9	8.5	9.1
11	7.3	5.0	6.0	4.2	2.4	3.2	6.1	3.7	4.9	9.6	8.1	8.7
12	7.3	4.5	5.7	3.7	2.0	2.9	6.6	4.8	5.6	8.7	7.1	8.0
13	6.5	3.5	5.1	5.3	2.0	3.9	6.7	5.1	6.0	8.5	6.6	7.4
14	5.3	3.6	4.4	6.1	4.2	5.2	5.8	4.0	5.2	8.3	6.6	7.2
15	6.8	3.4	4.7	6.3	4.0	5.3	5.2	2.7	4.5	8.3	6.6	7.1
16	6.7	3.9	5.0	6.3	4.6	5.5	4.9	2.7	3.7	9.0	6.8	7.5
17	7.0	3.8	5.3	7.6	3.7	5.8	---	---	---	7.2	6.2	6.8
18	7.3	4.1	5.4	6.7	5.9	6.3	7.5	6.4	7.2	7.0	3.8	5.5
19	7.3	3.4	5.4	8.9	5.9	7.0	6.4	6.0	6.2	7.7	5.9	6.8
20	6.2	3.7	4.8	7.6	5.7	6.3	7.0	6.1	6.7	9.2	6.9	7.7
21	6.3	4.0	5.1	6.8	5.6	6.2	7.5	7.0	7.3	8.4	7.0	7.5
22	6.4	3.5	5.2	7.0	5.3	6.3	7.7	7.1	7.4	8.6	6.9	7.6
23	6.7	4.0	5.5	6.9	5.3	6.1	8.2	7.7	8.0	8.0	6.1	7.1
24	7.4	5.0	6.0	7.1	5.6	6.2	8.2	7.7	7.9	7.0	4.8	5.7
25	7.3	4.2	5.8	7.3	5.2	6.2	8.0	7.1	7.7	7.8	4.8	6.7
26	7.3	4.7	5.7	8.3	5.9	6.8	7.3	5.5	6.6	8.3	5.2	6.6
27	6.2	3.8	5.0	8.2	6.0	7.1	6.9	4.9	6.0	5.3	4.2	4.8
28	5.8	4.0	4.9	7.9	6.0	6.8	6.9	4.9	5.7	7.1	4.2	6.1
29	4.7	3.7	4.3	8.8	6.1	7.4	6.1	4.3	5.3	9.4	5.2	7.5
30	4.4	3.3	3.9	9.6	6.6	8.0	5.8	4.1	4.9	9.8	6.1	7.9
31	5.0	2.8	4.1	---	---	---	4.8	2.1	3.9	7.6	5.6	6.3
MONTH	7.4	2.8	5.0	9.6	2.0	5.5	9.3	2.1	5.9	9.9	1.8	6.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.9	5.6	6.3	9.6	8.7	9.1	---	---	---	7.2	3.0	5.1
2	8.1	6.4	7.1	9.6	8.3	8.9	---	---	---	8.9	4.2	6.4
3	8.5	7.4	7.9	9.2	7.1	8.4	13.0	9.6	11.2	7.9	5.4	6.6
4	8.4	6.9	7.4	8.9	6.6	7.9	12.6	6.7	9.2	10.9	4.9	7.3
5	7.5	6.7	7.1	8.0	5.6	7.1	8.6	4.5	6.9	10.4	6.0	7.7
6	7.2	6.4	6.9	7.0	5.0	6.2	5.3	3.8	4.5	10.1	6.6	8.3
7	8.0	6.3	6.7	7.4	5.5	6.7	8.2	5.0	6.6	12.3	5.9	8.3
8	7.7	4.0	6.6	8.6	6.8	7.9	9.7	3.0	5.6	12.0	7.0	8.7
9	6.5	1.3	4.9	8.2	7.1	7.7	4.8	3.3	3.8	10.6	6.7	8.3
10	6.2	4.1	5.3	8.5	6.7	7.5	5.2	4.1	4.5	10.2	6.6	8.0
11	8.1	4.6	6.3	8.5	7.2	7.7	6.1	2.3	5.0	9.4	4.3	7.0
12	9.2	5.9	7.3	7.6	6.0	6.6	7.9	5.9	6.9	4.3	1.3	2.3
13	9.1	6.0	7.2	7.4	6.3	6.9	9.5	5.6	7.6	4.7	1.3	2.2
14	7.4	6.1	6.7	9.0	7.0	8.0	12.6	6.5	8.2	8.1	1.4	3.3
15	10.1	6.8	8.1	9.9	7.2	8.5	14.5	7.1	9.9	5.6	2.4	3.9
16	6.8	4.3	5.5	11.3	6.7	9.3	14.7	7.0	10.7	8.4	2.5	5.4
17	5.2	3.4	4.4	12.0	5.1	9.5	13.6	7.8	11.2	9.9	3.5	6.4
18	5.3	3.9	4.8	12.6	5.4	9.2	11.5	7.2	9.5	8.6	3.3	6.1
19	6.4	5.0	5.6	11.5	8.3	9.9	11.5	6.3	8.5	8.2	3.8	6.0
20	5.5	5.0	5.3	10.9	7.4	8.8	10.6	4.4	6.6	8.3	3.9	5.9
21	7.1	5.5	6.2	8.8	6.0	7.4	7.6	5.1	6.1	9.0	4.7	6.1
22	8.5	6.6	7.7	9.4	6.0	6.8	7.0	3.4	5.1	10.7	4.9	7.0
23	9.6	6.8	8.2	13.0	6.6	10.3	6.3	4.0	4.5	10.1	4.9	6.9
24	10.4	6.5	8.4	11.3	7.8	9.7	4.8	2.8	3.8	10.0	4.9	7.1
25	11.0	6.6	8.6	8.3	4.3	6.2	5.0	3.2	4.3	11.5	3.8	7.5
26	9.8	6.3	8.1	9.7	4.3	7.1	4.9	2.7	4.0	10.3	5.4	7.2
27	10.7	6.6	8.7	11.2	3.9	6.8	5.4	2.7	3.8	9.0	4.1	6.1
28	7.7	5.2	6.6	15.2	5.4	8.9	7.4	3.0	4.7	8.9	2.6	5.8
29	9.7	5.3	7.2	15.3	6.3	10.0	7.5	4.1	5.3	9.6	3.0	6.0
30	---	---	---	9.6	5.3	7.6	6.4	3.3	4.6	7.1	1.9	5.0
31	---	---	---	---	---	---	---	---	---	6.3	2.8	5.0
MONTH	11.0	7.3	6.8	15.3	3.9	8.1	14.7	2.3	6.5	12.3	7.3	6.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.5	2.7	4.9	5.1	4.7	4.8	7.1	1.9	4.1	6.6	4.5	5.3
2	8.1	2.3	5.0	5.3	3.8	4.6	9.0	4.2	5.5	6.9	4.7	5.6
3	7.4	2.1	5.2	5.1	2.8	4.4	10.3	4.6	6.9	8.0	5.5	5.9
4	5.2	1.2	3.2	8.3	1.6	4.5	11.0	5.2	7.6	5.5	3.5	4.5

SAN JACINTO RIVER BASIN

08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX

LOCATION.--lat 29°44'51", long 95°17'27", Harris County, Hydrologic Unit 12040104, on left bank at Wharf No. 5 at end of private road, 1.0 mi downstream from station 08074700, 1.8 mi upstream from Brays Bayou and 4.9 mi east of downtown Houston.

DRAINAGE AREA.--Not determined.

WATER-ELEVATION RECORDS

PERIOD OF RECORD.--January 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level, 1978 adjustment, unadjusted for land-surface subsidence.

REMARKS.--Records fair. Only very large storms or hurricane surge produces elevations above normal tidal fluctuations. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 9.1 ft June 26, 1989; minimum, -3.1 ft Mar. 6, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 3.9 ft Oct. 30 at 0900 hours; minimum, -2.8 ft Jan. 19.

DAY	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	3.6	1.9	2.9	2.8	1.5	2.2	2.1	.8	1.5	1.8	.5	1.2
2	3.7	2.2	3.2	2.8	1.3	2.0	1.7	.4	1.2	.8	.1	.2
3	3.9	1.0	2.2	1.4	.3	.8	1.7	.3	1.1	1.0	.1	2.0
4	2.7	.9	2.2	2.4	1.0	1.6	1.5	.3	.8	3.4	.5	1.5
5	3.3	1.5	2.4	2.6	1.1	2.0	1.6	.3	1.0	1.4	.2	.7
6	2.1	1.0	1.5	2.5	.8	1.9	1.6	.3	.9	1.1	-1.5	-.4
7	2.9	.8	1.9	2.1	.1	1.0	1.7	.3	.9	-1.0	-2.3	-1.6
8	2.6	.8	1.7	2.0	.1	.8	2.3	.7	1.6	.9	-1.2	-.5
9	2.4	.9	1.8	2.6	1.0	1.9	2.0	.3	.5	.9	-.6	.3
10	2.3	.6	1.5	2.7	1.4	2.2	1.6	.3	.6	.7	-.6	.1
11	2.4	.7	1.6	2.5	.1	.7	1.8	.5	1.2	.8	-.5	.2
12	2.6	1.4	2.2	1.5	.2	.8	2.0	.5	1.3	.5	-.8	-.2
13	2.8	1.2	2.1	2.1	.4	1.3	1.8	.6	1.2	1.2	-.5	.4
14	2.6	.2	1.4	1.7	.6	1.1	1.6	.8	1.2	1.3	.0	.8
15	2.3	.5	1.6	2.1	.6	1.3	2.0	.8	1.3	1.3	-.3	.6
16	2.6	1.2	1.9	1.6	.7	1.0	1.7	.6	1.3	1.5	-.3	.8
17	2.8	1.4	2.2	1.9	.9	1.5	3.3	1.4	2.3	2.7	.5	1.6
18	3.0	1.4	2.3	2.0	.9	1.6	3.7	.7	2.0	3.0	-1.5	.6
19	2.6	1.4	2.3	2.3	1.0	1.8	.7	.1	.1	.4	-2.8	-1.6
20	2.3	.2	1.2	2.0	.5	1.4	1.1	.1	.3	1.7	.1	.9
21	2.4	1.0	1.6	1.9	.3	1.2	2.0	.1	1.1	1.8	.0	1.1
22	2.9	1.5	2.1	2.2	.5	1.5	2.0	.1	1.1	1.8	.2	1.1
23	2.9	1.4	2.2	2.3	.3	1.5	1.7	.1	.8	2.0	.8	1.5
24	2.0	.2	1.0	1.7	.2	.8	1.5	.1	.8	1.5	-3.0	.5
25	2.7	1.1	1.8	1.8	.3	1.2	1.4	.1	.7	2.7	.7	1.6
26	2.7	1.2	2.1	2.0	.6	1.4	1.0	.1	.3	2.6	.8	1.8
27	2.8	1.1	2.1	2.3	.5	1.6	.9	.1	.4	1.2	-.3	.5
28	2.5	.8	1.7	1.7	.3	.7	1.5	.4	.9	2.4	.6	1.5
29	3.6	1.7	2.6	1.0	.3	.8	1.8	.4	1.2	2.1	.6	1.5
30	3.9	2.5	3.1	1.6	.5	1.1	2.1	1.1	1.7	1.7	.2	1.1
31	3.5	1.5	2.7	---	---	---	1.9	.3	1.3	1.2	-.8	.4
MONTH	3.9	.2	2.0	2.8	.1	1.4	3.7	.1	1.1	3.4	-3.0	.7

SAN JACINTO RIVER BASIN

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08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX--Continued

DAY	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996									MAX	MIN	MEAN
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
	FEBRUARY			MARCH			APRIL					
1	1.8	.1	1.1	1.9	.5	1.4	1.2	-.4	.3	2.3	.7	1.6
2	1.6	-.9	.1	1.7	.6	1.1	1.8	.3	1.1	2.1	.6	1.5
3	.2	-1.2	-.3	1.6	.5	1.1	1.7	.6	1.2	2.1	.4	1.5
4	.7	-1.0	-.2	2.0	1.0	1.5	1.6	.4	1.0	2.3	.5	1.5
5	1.4	.0	.7	2.2	1.1	1.6	1.7	.0	.7	2.2	.4	1.4
6	1.4	.2	.9	1.9	.6	1.4	1.1	-1.2	.0	2.3	.2	1.4
7	1.5	.4	1.0	.6	-2.2	-1.3	1.9	-.3	1.0	2.5	.4	1.6
8	1.5	.2	.9	.5	-1.8	-.7	1.8	.2	1.1	2.6	.8	1.8
9	1.4	.6	.9	1.3	-.6	.5	2.0	-.1	1.0	2.7	1.0	2.0
10	1.4	.3	1.0	1.1	-.1	.7	2.4	.3	1.4	2.4	1.2	2.0
11	1.4	-.2	.4	1.4	.0	.8	2.3	.7	1.6	2.4	.8	1.5
12	1.2	-1.0	.1	1.9	.0	1.1	2.5	.8	1.7	1.8	.6	1.2
13	1.3	-.3	.6	1.9	.6	1.2	2.0	.5	1.4	2.0	.8	1.4
14	1.4	-.3	.7	1.6	.0	1.0	1.9	.5	1.3	1.9	.4	1.4
15	1.1	-.5	.4	1.7	.6	1.1	.9	-1.1	-.2	2.6	.9	1.7
16	.4	-1.5	-.4	1.9	.4	1.2	1.8	.9	.7	2.1	.6	1.5
17	1.4	-.4	.5	1.9	.5	1.3	1.9	.5	1.4	2.1	.6	1.5
18	1.3	-.3	.6	1.8	-1.2	.3	2.2	.7	1.6	2.4	.7	1.6
19	2.0	.0	1.0	-.5	-2.1	-1.3	2.1	.4	1.4	2.3	.5	1.5
20	1.4	.0	.7	-1.0	-2.0	-1.5	2.3	.5	1.6	2.5	.7	1.7
21	1.5	.3	.9	.6	-1.9	-.6	3.0	.7	2.0	2.3	.6	1.5
22	1.6	.6	1.1	.9	-.8	.3	2.7	1.6	2.2	2.1	.4	1.2
23	1.5	.2	.9	1.6	-.4	.9	1.7	-.1	.7	2.2	.4	1.3
24	1.3	-.1	.7	2.2	.5	1.5	2.0	-.2	1.1	2.4	1.2	1.8
25	1.7	.1	1.1	1.8	.0	.5	2.4	1.1	1.8	2.4	1.5	1.9
26	1.7	.3	1.2	2.0	-.3	.8	1.9	.5	1.3	2.9	1.8	2.3
27	1.9	.5	1.2	2.2	.6	1.5	2.0	.4	1.1	2.5	1.4	2.1
28	1.3	-.6	.3	1.6	.0	.9	2.6	1.5	2.0	2.1	1.0	1.7
29	1.5	-.4	.5	1.8	.0	.9	2.2	-.6	.6	2.6	.7	1.6
30	---	---	---	1.9	.8	1.4	1.6	-.8	.5	3.0	1.0	1.9
31	---	---	---	1.3	-.5	.5	---	---	---	2.9	.7	2.0
MONTH	2.0	-1.5	.6	2.2	-2.2	.7	3.0	-1.2	1.2	3.0	.2	1.6

08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX--Continued

DAY	MAX	ELEVATION (FEET NGVD), WATER YEAR						OCTOBER 1995 TO SEPTEMBER 1996					
		MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
		JUNE		JULY			AUGUST			SEPTEMBER			
1	2.7	1.5	2.2	1.8	.1	1.2	1.6	.7	e1.2	e2.1	e.7	e1.2	
2	2.3	1.0	1.6	2.1	.1	1.3	1.5	.5	e1.0	e1.9	e.5	e1.4	
3	2.2	.4	1.4	1.7	.4	1.2	1.6	.4	1.1	e1.9	e.8	e1.4	
4	2.2	.2	1.3	1.6	.2	1.0	1.9	.9	1.4	e1.8	e.3	e1.4	
5	2.2	.5	1.5	1.5	.3	1.0	2.0	.9	1.6	1.9	.6	1.4	
6	2.4	.5	1.6	1.5	.5	1.0	2.0	.9	1.6	2.0	.3	1.3	
7	1.7	.5	1.1	1.7	.7	1.2	2.2	.9	1.7	1.9	.3	1.2	
8	.7	-.4	.2	1.7	.1	1.2	2.3	.5	1.6	1.8	.2	1.1	
9	1.5	-.1	.5	1.7	.1	1.0	1.8	.4	1.3	1.6	.1	1.1	
10	1.7	.3	1.1	1.3	.0	.8	1.5	.2	1.0	1.5	.1	.9	
11	1.8	.4	1.2	1.4	-.1	.9	1.4	.2	.9	1.6	.0	1.0	
12	1.9	.4	1.4	1.2	-.1	1.0	1.4	-.1	.8	1.8	.5	1.2	
13	1.8	.4	1.3	1.5	.0	e1.0	1.6	.3	1.0	1.9	.6	1.2	
14	1.7	.2	1.1	1.7	.0	e1.1	1.6	.0	1.1	2.2	.8	1.4	
15	1.7	-.1	1.0	1.6	.1	e1.0	1.4	.1	e1.3	2.5	1.6	2.0	
16	1.6	.0	1.0	2.0	.1	e1.3	1.6	.4	e1.3	2.3	.3	1.3	
17	1.6	.0	.9	2.3	.7	e1.7	1.7	.6	1.3	1.5	.3	1.1	
18	1.6	.0	.9	2.4	.9	e1.7	1.9	1.0	1.4	2.3	.7	1.5	
19	1.6	.0	1.0	2.0	.8	e.5	1.8	.5	1.2	3.3	.6	2.0	
20	1.8	.1	1.1	1.8	.6	e1.3	1.9	1.1	1.5	2.4	.8	1.7	
21	1.8	.6	1.2	1.7	.7	e1.2	2.9	1.2	2.0	2.7	.5	1.5	
22	2.2	.8	1.4	1.4	.4	e.9	3.6	1.8	2.8	2.1	.5	1.5	
23	3.0	1.2	1.7	1.1	.1	e.8	3.5	1.5	2.7	2.4	.5	1.8	
24	2.3	.9	1.6	1.4	.1	e.9	3.0	.8	2.1	2.2	.8	1.6	
25	2.1	.8	1.6	1.3	.0	e.8	2.3	.7	1.8	2.5	.6	1.7	
26	1.9	.4	1.4	1.7	.1	e1.1	2.3	.6	1.7	3.2	1.7	2.4	
27	1.7	.3	1.1	2.1	.2	e1.4	2.3	.5	1.7	2.8	1.3	2.0	
28	1.9	.0	1.0	2.0	.5	e1.3	2.2	.7	1.6	2.0	.2	.9	
29	1.6	-.1	1.0	2.2	.2	e1.5	e2.4	e.6	e1.4	2.6	1.0	1.7	
30	2.0	-.1	1.1	2.1	.4	e1.6	e2.4	e.6	e1.6	2.8	1.0	1.9	
31	---	---	---	2.0	.5	e1.4	e2.3	e.8	e1.5	---	---	---	
MONTH	3.0	-.4	1.2	2.4	-.1	1.1	3.6	-.1	1.5	3.3	.0	1.5	
YEAR	3.9	-3.0	1.2										

e Estimated

08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1986 to current year.
 WATER TEMPERATURE: April 1986 to current year.
 DISSOLVED OXYGEN: April 1986 to current year.

INSTRUMENTATION.--Since April 1986, a three-parameter water-quality monitor continuously records specific conductance, water temperature, and dissolved oxygen at this station. In September 1995, a digital QW multiprobe was installed as a replacement to the Mini-monitor.

REMARKS.--Water-quality monitor data have been collected one foot below the water surface since Feb. 3, 1988. From April 1986 to January 1987 data were collected at a fixed elevation of 6.5 ft below sea level using a submersible pump. From February 1987 until January 1988 data were collected at a fixed elevation of 5.5 ft below sea level using a submersible pump. Dissolved oxygen data are not corrected for salinity. The upper limit of the specific conductance instrument is 20,000 microsiemens. Due to tidal effects, location of probe units, and channel morphology, the water-quality data collected at this location may not be representative of the entire flow through the cross-section.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, >20,000 microsiemens Oct. 12-14, Dec. 13, 1988, Jan. 23, 1989; minimum, 60 microsiemens June 26, 1989.
 WATER TEMPERATURE: Maximum, 36.5°C Aug. 21, 1990; minimum, 8.0°C Feb. 10, 11, 1994.
 DISSOLVED OXYGEN: Maximum, 20.0 mg/L June 6, 1996; minimum, 0.0 mg/L on several days during 1987-88 water year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 19,400 microsiemens Apr. 2; minimum, 203 microsiemens Sept. 19.
 WATER TEMPERATURE: Maximum, 33.5°C on several days in July; minimum, 11.0°C Feb. 4.
 DISSOLVED OXYGEN: Maximum, 15.9 mg/L Apr. 4; minimum, 0.4 mg/L Mar. 17.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	6930	4720	5710	7760	4290	6340	9790	6360	8010	---	---	---
2	7450	4410	5330	6570	3910	5000	8570	5950	7580	---	---	---
3	6410	1560	3930	---	---	---	8750	5650	7080	6030	4210	5170
4	3300	2890	3240	---	---	---	9450	6070	7210	9120	5040	6090
5	---	---	---	---	---	---	12300	6350	8880	10500	4990	7080
6	6910	4810	5370	4540	2010	3400	10500	6350	8530	7100	4870	5990
7	9080	3770	5960	8910	4450	5930	12300	7190	9810	---	---	---
8	9860	4570	6480	10100	4800	7080	10700	8370	9880	9810	4590	5520
9	9120	4000	6370	8310	5880	7240	9160	6570	7570	9270	4360	6460
10	8950	4000	6390	9350	5060	7530	---	---	---	13100	4640	9240
11	9040	5530	7250	9270	6140	7360	6380	5160	5870	10200	7210	8460
12	8280	5750	6790	8380	6440	7320	7010	4050	5770	14400	7310	10600
13	9430	5470	7470	---	---	---	7670	4560	6220	13300	8510	10800
14	8850	5730	7720	7020	5950	6360	8800	5170	6660	10600	6940	8570
15	8900	5770	7320	9160	4920	7150	7600	5400	6160	9800	5890	7280
16	10100	5860	7540	9050	4830	6970	8280	5160	6750	10500	5590	7780
17	10500	6970	8500	8700	5510	7100	8540	7110	7540	11600	7600	9260
18	8860	6660	7590	---	---	---	---	---	---	12300	8760	10300
19	7730	6280	6960	---	---	---	---	---	---	12000	6500	8170
20	10200	5630	7630	---	---	---	---	---	---	10200	6700	8190
21	9990	7830	9090	---	---	---	---	---	---	11200	7140	9450
22	9970	7770	8620	---	---	---	---	---	---	8550	7140	7930
23	8760	4840	6730	---	---	---	---	---	---	9190	5810	7310
24	9920	6070	7750	---	---	---	---	---	---	10000	5190	7300
25	9380	6070	7880	---	---	---	---	---	---	11300	5650	8830
26	9040	7440	8340	---	---	---	---	---	---	11800	8380	10300
27	9550	6490	8450	7930	5010	5970	---	---	---	13200	7410	9730
28	9630	6580	7570	9550	4790	6710	---	---	---	13900	7710	10500
29	9790	6240	7920	9700	6390	7880	---	---	---	10700	6230	8170
30	9790	7110	8420	11200	8030	8790	---	---	---	8760	7020	7920
31	7880	6110	7150	---	---	---	---	---	---	14700	8390	9860
MONTH	10500	1560	7050	11200	2010	6710	12300	4050	7470	14700	4210	8290

08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	14700	8040	10400	---	---	---	19300	11000	14200	7510	5400	6170
2	13200	8220	10100	---	---	---	19400	13500	15700	7340	3910	5630
3	13400	9480	11000	---	---	---	15000	11600	13200	7730	4830	5620
4	15200	8230	10200	5000	4000	4120	14000	9850	11400	9890	4250	6110
5	15100	8800	10900	6050	4110	5080	18400	7430	11000	7350	4720	6140
6	11400	6420	8870	6690	3060	4080	18800	8870	13400	7520	3900	5920
7	11400	5850	8510	10700	5440	8670	16000	10600	12300	7450	5450	6400
8	11900	6310	9440	11900	6590	9170	13400	10500	11800	6480	4520	5530
9	9220	5590	7270	11500	6400	8910	13700	10400	11900	6770	5360	6030
10	8540	5880	6950	10100	4580	6610	12800	8370	10800	6880	4870	5590
11	15400	5790	8770	8520	4630	6410	12100	8150	10300	7500	4860	5830
12	14900	8380	11000	11200	7010	9180	10800	8190	9320	6120	3850	4750
13	14300	8010	11200	9590	7370	8190	9570	5560	7530	5810	2550	3640
14	13900	7800	8890	7910	5400	6920	6480	4020	4900	5850	3550	4750
15	17700	8370	11300	6980	4520	6140	15300	5410	8970	6790	4360	5650
16	12100	9630	10700	10800	6860	8600	13900	10300	11800	5410	4030	4750
17	13500	10500	11800	9580	7210	8400	13900	8850	10200	7420	4100	5390
18	11500	7980	9750	12600	7530	10100	10300	7600	8870	6280	4090	5320
19	13300	8330	10300	15400	10400	12000	10600	5790	8440	6180	4550	5150
20	13000	6920	9980	15400	9480	12400	10200	7370	8180	6250	4420	5350
21	11800	8300	10100	15400	10200	12300	8820	6420	7340	6730	4790	5890
22	10600	8200	9120	14000	8440	10800	8870	1570	6440	9440	4430	6670
23	10000	7720	8610	13000	8930	11000	1920	930	1320	8290	6150	7270
24	8800	6330	7810	11300	8810	10000	5130	1490	3260	9500	6380	7650
25	10800	6700	8120	---	---	---	5150	2500	3390	8380	6220	7270
26	10000	6580	8500	13700	10900	13000	5510	2470	3720	6980	5500	6270
27	8990	6090	7290	12900	8820	11100	6340	3430	4720	6650	4710	5500
28	8920	5490	7050	16900	9220	11600	7230	5160	5850	5560	4700	5000
29	---	---	---	14400	8920	11200	8730	4240	6240	10400	4700	7250
30	---	---	---	12100	9710	11200	7570	3490	5210	9440	6490	8200
31	---	---	---	17700	9600	12300	---	---	---	7310	6140	6700
MONTH	17700	5490	9430	17700	3060	9240	19400	930	8720	10400	2550	5920
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7150	5490	6260	3110	1070	1720	10100	3920	6190	---	---	---
2	8510	5860	7180	3510	1490	2470	10300	6060	7810	---	---	---
3	7970	6060	7180	6640	2820	4380	10600	6100	7440	---	---	---
4	9390	5690	7510	5460	2250	3370	10600	7020	7980	3450	1170	1570
5	7770	5580	6480	5330	2750	3930	8150	6590	7290	3220	1260	2050
6	6980	4270	5830	5220	3590	4640	7340	5620	6380	2050	1160	1600
7	10900	4260	6850	6340	4220	5260	6870	5570	6200	2650	626	1430
8	12700	6510	8320	6350	4030	5140	6910	5200	6040	1070	390	718
9	13100	7120	9430	7940	6080	7360	7860	5210	6560	---	---	---
10	10900	7930	9320	8700	5850	7220	8220	1030	2650	---	---	---
11	10600	7740	9200	6780	5010	5720	2750	610	1170	2550	1590	2260
12	11900	8290	9690	7630	4290	6110	1700	560	1180	2670	1150	1730
13	10400	7100	8680	7470	5010	6270	---	---	---	2050	735	1340
14	10700	7100	8530	9340	4860	6800	---	---	---	1600	590	1170
15	8740	5180	6660	7830	5770	6750	6700	3680	4080	2600	599	1470
16	7190	5280	6050	7990	5780	7100	7070	3100	5000	4900	1260	2400
17	5730	3660	4540	8140	5210	6400	8000	3390	4880	9020	1620	3990
18	8900	3770	5750	7760	4800	5960	5550	1950	3250	2740	812	1620
19	10200	6320	7700	8540	4960	6650	3880	1770	2990	4340	203	774
20	11500	5170	8720	10100	4180	6200	5520	1690	3460	466	250	347
21	3760	1570	2440	9970	5170	6510	5090	2500	3570	631	360	489
22	2870	1990	2430	7880	4840	6160	6850	3240	4720	1350	423	615
23	2870	330	1430	7880	5230	6270	4030	1290	2010	1700	605	897
24	710	370	487	9240	5810	7780	2060	498	912	2000	673	1130
25	920	420	601	10700	5580	7920	---	---	---	1550	399	672
26	560	320	397	10000	3940	7940	---	---	---	1050	421	672
27	1230	420	662	5830	2640	3850	---	---	---	2180	475	936
28	2470	1230	1640	5860	2920	4820	---	---	---	2080	440	771
29	6400	1090	2090	5000	3570	4190	---	---	---	1920	559	1300
30	2800	680	1420	6580	3340	4630	---	---	---	1400	428	754
31	---	---	---	8630	2660	5150	---	---	---	---	---	---
MONTH	13100	320	5450	10700	1070	5630	10600	498	4630	9020	203	1310
YEAR	19400	203	6690									

SAN JACINTO RIVER BASIN

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08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	30.5	28.0	29.0	24.5	23.5	24.0	21.5	20.0	20.5	18.0	16.0	17.5
2	29.0	27.5	28.5	25.0	23.0	24.0	22.0	20.5	21.5	16.0	15.0	15.5
3	28.0	25.5	27.0	23.5	21.5	22.0	22.5	21.5	22.0	15.0	13.5	14.5
4	26.5	25.0	26.0	22.0	19.5	20.5	23.0	21.5	22.0	16.5	13.0	15.0
5	27.5	25.0	26.0	21.0	19.0	20.0	22.5	20.5	22.0	17.0	15.0	16.0
6	27.0	25.0	26.0	22.0	19.5	21.0	23.5	22.0	22.5	16.5	13.5	14.5
7	27.5	24.0	26.0	22.5	21.0	21.5	22.5	20.0	21.5	13.5	12.0	12.5
8	27.5	24.5	26.0	23.0	20.0	21.5	22.0	19.0	21.0	14.0	11.5	12.5
9	27.5	25.5	26.5	22.5	21.0	21.5	20.5	17.5	19.0	14.5	11.5	13.5
10	27.5	25.5	26.5	23.5	21.5	22.5	19.0	16.0	18.0	15.5	13.0	14.0
11	28.0	26.0	27.0	23.5	20.0	21.5	19.5	16.0	18.0	16.5	13.5	14.5
12	27.5	26.0	27.0	21.5	19.0	20.5	21.0	18.0	19.5	15.0	13.5	14.0
13	27.0	26.5	26.5	22.5	20.0	21.5	21.0	19.0	20.0	16.5	14.0	15.0
14	27.0	25.0	26.0	23.0	20.5	21.5	21.5	19.5	20.5	18.0	14.5	16.0
15	27.0	23.5	25.5	22.5	21.0	21.5	22.0	20.5	21.5	18.5	16.0	17.0
16	26.5	24.5	25.5	22.0	20.5	21.0	22.5	21.5	22.0	19.0	17.5	18.0
17	27.0	24.5	26.0	22.0	20.0	21.0	22.0	19.0	20.5	18.5	17.5	18.0
18	27.0	25.0	26.0	20.0	18.5	19.0	19.0	18.5	19.0	19.0	14.5	16.5
19	28.0	25.5	26.5	19.5	18.0	19.0	18.5	17.5	18.0	16.0	13.0	14.5
20	27.0	24.5	25.5	20.0	18.5	18.5	18.0	15.5	17.0	16.5	13.0	15.0
21	25.5	23.5	24.5	21.5	19.5	20.5	15.5	13.5	14.5	17.0	14.5	15.5
22	26.0	24.0	25.0	21.5	20.0	20.0	14.0	13.0	13.5	18.0	14.5	16.5
23	26.0	24.5	25.5	22.5	20.0	21.5	14.5	12.5	14.0	19.0	16.5	18.0
24	25.5	23.0	24.5	21.0	19.0	20.0	15.0	13.0	13.5	17.0	14.5	16.0
25	25.5	23.0	25.0	21.5	19.0	20.5	15.0	13.5	14.0	16.5	14.5	15.5
26	26.5	24.5	25.5	22.5	20.0	21.0	15.0	13.5	14.0	18.0	15.5	17.0
27	26.5	25.5	26.0	22.5	20.5	21.5	16.5	14.5	15.5	16.5	14.0	15.5
28	26.0	24.5	25.5	21.5	18.0	20.0	18.0	15.0	16.5	16.5	14.5	15.0
29	25.0	23.0	24.0	20.5	18.0	19.5	16.5	14.0	15.0	18.0	16.0	17.0
30	25.0	22.5	23.5	20.5	18.5	19.5	18.0	14.0	16.5	18.5	17.5	18.0
31	24.5	23.0	23.5	---	---	---	17.5	15.0	16.0	18.0	14.5	15.5
MONTH	30.5	22.5	26.0	25.0	18.0	21.0	23.5	12.5	18.5	19.0	11.5	15.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	16.5	14.0	15.0	17.0	14.5	15.5	21.5	18.5	20.0	26.5	22.5	24.5
2	16.0	12.0	13.5	17.0	14.5	15.5	22.5	18.5	20.0	27.0	23.5	25.0
3	14.5	11.5	13.0	18.5	16.0	17.0	22.5	19.5	21.0	26.0	24.5	25.0
4	14.0	11.0	12.5	19.5	17.0	19.0	23.5	21.0	22.0	27.0	24.0	25.5
5	15.5	11.5	13.5	21.0	18.5	19.5	22.5	19.5	21.0	26.5	25.0	26.0
6	16.5	13.0	14.5	21.0	19.0	20.0	21.0	18.0	19.5	27.0	25.5	26.5
7	17.0	14.5	15.5	19.0	16.5	17.5	23.0	18.0	20.5	27.5	26.0	26.5
8	17.0	15.5	16.0	19.0	14.5	17.0	23.0	20.0	21.5	27.5	26.0	26.5
9	18.5	16.5	17.5	18.5	15.0	17.0	24.0	20.0	21.5	27.5	26.5	27.0
10	20.0	17.5	18.5	18.5	15.5	17.5	23.0	21.5	22.0	28.0	26.5	27.0
11	19.5	15.5	17.5	18.0	16.0	17.0	23.5	21.5	22.5	28.0	26.5	27.0
12	17.0	15.0	16.0	19.0	16.5	18.0	23.5	22.0	23.0	28.0	26.0	27.0
13	17.5	15.5	16.5	19.5	17.0	18.5	25.0	22.0	23.5	28.5	26.5	27.5
14	19.0	16.5	17.5	20.0	19.0	19.0	24.5	23.0	24.0	28.5	26.5	27.5
15	18.5	16.5	17.5	21.5	19.5	20.5	23.0	21.0	22.0	28.0	26.5	27.0
16	17.0	15.0	16.0	21.0	19.5	20.5	22.5	20.0	21.0	29.0	26.5	27.5
17	17.5	15.0	16.5	22.0	20.5	21.5	24.0	21.5	22.5	29.0	26.5	27.5
18	17.5	16.5	17.0	21.5	18.5	20.0	25.0	22.5	23.5	29.5	27.5	28.0
19	19.5	17.0	18.0	20.5	17.0	18.5	25.5	23.5	24.5	29.5	27.0	28.0
20	19.5	17.0	18.0	18.5	17.0	17.5	27.0	24.0	25.0	29.0	27.5	28.0
21	20.5	18.0	19.0	21.0	17.0	18.5	26.0	24.5	25.0	30.5	28.0	29.0
22	21.5	19.0	20.5	21.0	18.0	19.5	25.5	23.0	24.5	30.0	28.0	29.0
23	22.5	20.5	21.0	20.0	19.0	19.5	24.0	22.0	23.0	30.0	28.0	29.0
24	21.5	19.5	20.5	21.5	20.0	20.5	25.5	22.0	23.5	30.0	28.5	29.0
25	22.0	20.5	21.5	21.5	18.5	20.0	25.5	23.0	24.0	30.0	28.0	29.0
26	22.5	20.5	22.0	19.0	17.0	18.0	25.0	24.5	24.5	30.0	28.5	29.0
27	23.0	21.5	22.0	19.5	17.0	18.5	25.5	24.0	25.0	30.0	29.0	29.5
28	23.0	19.0	20.5	20.0	17.5	18.5	27.0	25.0	26.0	31.0	28.5	30.0
29	19.5	17.0	18.0	20.5	18.5	19.5	26.0	23.0	24.5	31.5	28.5	30.0
30	---	---	---	22.0	19.5	21.0	26.0	22.5	24.0	30.5	28.5	29.0
31	---	---	---	21.0	19.0	20.0	---	---	---	31.0	28.5	29.5
MONTH	23.0	11.0	17.5	22.0	14.5	18.5	27.0	18.0	23.0	31.5	22.5	27.5

SAN JACINTO RIVER BASIN

08074710 BUFFALO BAYOU AT TURNING BASIN, HOUSTON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	30.0	28.5	29.0	31.0	29.0	30.0	33.0	30.5	31.5	---	---	---
2	31.0	28.0	29.5	32.0	29.0	30.0	32.5	30.5	31.5	---	---	---
3	30.5	28.5	29.5	32.0	29.5	30.5	33.0	30.5	31.5	---	---	---
4	30.0	28.5	29.0	33.5	29.5	30.5	32.5	30.5	31.5	29.5	28.0	29.0
5	30.0	28.0	29.0	33.5	30.0	31.0	33.0	31.0	32.0	29.5	27.5	28.5
6	30.0	28.5	29.0	33.5	30.0	31.5	32.0	31.0	31.5	29.5	28.5	29.0
7	29.0	28.5	28.5	33.5	30.5	31.5	32.0	31.0	31.5	29.0	28.0	28.0
8	29.5	27.0	28.5	33.0	30.5	31.5	31.5	30.0	31.0	29.5	27.5	28.0
9	29.5	27.0	28.5	32.0	30.0	31.0	32.0	30.0	31.0	30.0	28.0	29.0
10	30.5	27.5	29.0	33.5	30.5	31.5	31.0	27.5	28.5	31.0	28.0	29.0
11	30.5	28.0	29.0	33.5	30.5	32.0	28.5	26.5	27.5	30.5	28.5	29.0
12	31.0	28.5	29.5	33.5	31.0	32.0	30.0	27.5	28.5	29.5	28.0	28.5
13	31.0	29.0	30.0	33.5	31.0	32.0	30.5	28.0	29.0	28.5	27.5	28.0
14	31.0	29.0	29.5	32.5	31.0	31.5	30.0	28.5	29.5	29.0	27.0	28.0
15	32.0	28.5	30.0	32.5	30.5	31.5	31.5	29.0	30.0	28.5	27.5	28.0
16	32.0	29.0	30.0	32.5	30.5	31.5	31.5	29.0	30.5	29.5	28.0	28.5
17	32.0	29.5	30.5	32.0	31.0	31.5	31.5	29.5	30.5	30.5	28.5	29.0
18	32.0	29.5	30.5	31.5	30.5	31.0	30.5	29.0	29.5	29.0	26.5	28.0
19	32.0	29.5	30.5	32.5	30.5	31.5	29.5	28.0	29.0	27.5	25.0	26.0
20	30.5	29.0	29.5	33.0	30.5	31.5	30.0	27.5	29.0	28.0	26.0	26.5
21	30.5	28.5	29.5	32.5	31.0	31.5	29.0	28.5	29.0	28.5	26.5	27.5
22	29.5	28.5	28.5	33.0	31.0	31.5	29.0	28.0	28.5	29.5	26.5	28.0
23	28.5	25.5	27.5	33.0	31.0	31.5	29.0	27.5	28.0	29.5	27.0	28.0
24	27.5	25.5	26.5	32.5	31.0	31.5	28.5	26.5	27.5	28.0	27.0	27.5
25	27.0	26.5	27.0	32.0	30.5	31.0	29.0	26.5	27.5	29.0	26.5	27.5
26	29.5	26.5	27.5	31.0	30.0	30.5	30.0	27.0	28.5	28.5	27.0	27.5
27	30.5	27.5	28.5	32.0	29.0	30.5	27.5	26.5	27.0	28.0	25.5	27.0
28	30.0	28.0	29.0	32.0	29.0	30.5	29.5	26.5	28.0	26.0	24.5	25.0
29	30.0	28.5	29.0	32.5	29.5	30.5	---	---	---	25.5	24.0	25.0
30	31.5	29.0	30.0	32.0	29.5	31.0	---	---	---	25.0	23.5	24.0
31	---	---	---	33.0	30.0	31.5	---	---	---	---	---	---
MONTH	32.0	25.5	29.0	33.5	29.0	31.0	33.0	26.5	29.5	31.0	23.5	27.5
YEAR	33.5	11.0	23.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.8	3.6	5.5	4.8	3.8	4.3	6.9	4.6	6.5	---	---	---
2	6.9	3.5	4.8	4.5	3.0	3.8	7.7	4.1	5.6	---	---	---
3	4.6	2.2	3.4	4.7	4.4	4.6	6.6	4.5	5.3	7.0	6.3	6.9
4	4.7	4.0	4.6	---	---	---	6.5	4.3	5.2	7.5	6.0	6.8
5	---	---	---	---	---	---	5.6	3.6	4.5	6.6	4.3	5.5
6	3.5	2.2	3.2	5.4	4.4	4.8	4.9	3.1	3.8	6.3	5.3	6.1
7	4.6	2.2	3.4	5.2	3.6	4.2	5.1	3.4	4.4	---	---	---
8	3.8	1.8	3.0	5.5	3.7	4.8	5.2	3.5	4.1	7.2	5.3	6.5
9	3.6	1.7	2.6	6.0	4.2	5.5	4.6	2.8	3.6	7.2	5.7	6.5
10	4.4	1.6	2.6	6.5	5.0	5.7	---	---	---	7.4	4.9	6.1
11	5.1	1.5	3.0	5.7	4.6	5.3	5.6	5.1	5.5	6.7	5.6	6.2
12	5.6	1.7	3.6	6.2	4.2	5.7	5.4	4.5	5.0	6.5	5.4	5.9
13	5.3	1.6	3.2	---	---	---	5.0	4.1	4.5	6.5	5.2	5.9
14	4.5	1.9	3.2	6.8	5.0	5.8	5.0	3.3	4.3	6.3	5.0	5.7
15	4.7	1.7	3.1	6.4	4.7	5.6	5.6	3.7	4.6	6.4	4.9	5.6
16	6.5	1.4	3.5	5.8	4.3	5.2	6.5	3.7	4.9	6.8	5.3	6.1
17	5.9	1.5	3.6	4.6	2.9	4.0	5.8	3.2	4.7	7.1	5.8	6.5
18	5.9	2.4	3.7	5.6	2.9	4.9	5.3	3.3	5.0	7.0	5.1	5.8
19	5.1	2.6	3.6	6.6	4.0	5.1	---	---	---	6.2	3.3	4.8
20	4.8	2.2	3.2	6.1	5.2	5.3	---	---	---	5.8	4.0	5.2
21	5.1	1.9	3.2	---	---	---	---	---	---	5.5	3.8	4.6
22	5.4	2.5	4.0	---	---	---	---	---	---	6.2	4.8	5.5
23	---	---	---	---	---	---	---	---	---	6.2	4.9	5.5
24	7.1	4.0	6.0	---	---	---	---	---	---	6.1	4.2	5.4
25	8.1	3.4	5.4	---	---	---	---	---	---	7.3	5.2	6.2
26	6.7	4.1	5.4	---	---	---	---	---	---	6.4	4.7	5.5
27	6.9	3.6	4.9	6.8	5.4	6.1	---	---	---	6.6	3.9	5.4
28	8.3	3.5	5.6	8.4	5.5	7.1	---	---	---	6.9	4.8	6.0
29	5.8	3.9	4.9	7.6	7.0	7.1	---	---	---	7.0	5.0	5.7
30	4.0	4.0	4.0	---	---	---	---	---	---	6.9	5.0	5.8
31	6.8	4.1	5.0	---	---	---	---	---	---	7.0	4.5	6.0
MONTH	9.8	1.4	4.0	8.4	2.9	5.2	7.7	2.8	4.8	7.5	3.3	5.8

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OXYGEN DISSOLVED (MG/L). WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	5.9	4.8	5.4	---	---	---	---	---	---	9.4	4.0	6.7
2	6.1	4.9	5.6	---	---	---	11.5	7.9	9.5	8.4	5.5	7.1
3	6.5	4.8	5.8	---	---	---	13.7	7.3	10.2	9.4	5.2	7.2
4	6.9	5.1	6.1	6.8	6.2	6.5	15.9	7.5	10.9	11.1	5.3	7.2
5	7.3	5.4	6.3	6.7	5.3	5.9	11.6	7.1	9.3	11.4	6.6	8.0
6	8.0	5.7	6.7	7.3	5.7	6.4	9.2	6.5	7.8	12.8	6.1	8.6
7	7.2	5.9	6.6	6.6	4.7	5.5	14.6	5.8	8.8	11.7	5.9	8.3
8	6.8	4.6	5.7	7.4	5.1	6.4	9.5	5.5	7.2	10.8	5.9	8.6
9	5.8	4.0	4.9	8.0	5.8	7.1	9.7	3.0	5.9	11.4	5.4	8.7
10	5.9	3.9	4.8	9.1	6.2	7.6	10.9	2.7	7.0	14.3	6.3	9.9
11	6.9	4.7	5.5	11.0	6.9	8.8	11.5	2.4	7.3	12.1	6.6	8.8
12	6.8	4.6	5.5	9.0	6.2	7.7	8.6	4.0	6.2	7.3	3.7	5.7
13	6.9	4.4	5.7	9.3	5.4	7.5	7.2	1.3	4.5	6.4	2.5	4.1
14	8.0	5.4	6.5	6.3	2.5	4.9	8.8	1.2	5.3	7.2	2.2	4.4
15	7.6	4.8	5.9	4.5	.6	2.7	8.2	3.7	5.7	7.5	2.4	4.9
16	6.2	4.7	5.4	4.8	.7	2.2	9.5	3.6	6.4	10.4	4.4	7.2
17	5.9	4.5	5.3	3.7	.4	1.7	11.5	6.0	8.2	11.1	4.7	7.3
18	6.3	5.0	5.6	6.9	1.9	4.4	13.5	6.4	9.2	14.2	5.6	8.8
19	6.1	4.3	5.3	7.6	2.6	5.1	10.2	6.6	8.6	13.4	6.5	9.2
20	5.7	4.3	5.0	8.0	3.0	5.5	10.9	4.6	7.4	10.7	5.4	8.0
21	5.3	4.3	4.6	7.5	3.6	6.2	8.6	5.0	6.5	13.4	4.9	7.8
22	4.5	3.3	3.9	11.2	6.0	8.0	6.4	1.2	4.1	9.9	3.4	6.2
23	4.9	2.7	3.8	9.8	7.1	8.2	2.9	1.0	1.8	9.1	3.3	5.1
24	7.1	3.2	4.7	8.5	6.9	7.5	---	---	---	13.0	6.0	8.9
25	6.5	2.8	4.5	---	---	---	---	---	---	13.1	5.9	8.8
26	6.7	2.4	4.6	8.2	6.4	7.0	---	---	---	12.3	6.0	8.4
27	7.6	2.5	4.6	7.9	5.8	6.8	---	---	---	13.1	6.6	9.6
28	5.4	2.6	3.4	7.4	5.8	6.7	---	---	---	12.9	8.5	10.7
29	---	---	---	13	6.1	8.9	---	---	---	11.7	4.6	8.6
30	---	---	---	11	6.4	9.3	5.1	4.2	4.4	11.2	4.4	8.1
31	---	---	---	---	---	---	---	---	---	14.6	5.2	10.0
MONTH	8.0	2.4	5.3	13.0	.4	6.3	15.9	1.0	7.1	14.6	2.2	7.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	14.9	7.1	10.0	3.9	1.6	2.8	---	---	---	---	---	---
2	11.4	3.9	8.5	4.6	2.1	3.4	6.6	3.1	5.8	---	---	---
3	12.2	5.0	6.8	3.0	2.2	2.5	9.3	2.7	5.5	---	---	---
4	10.2	4.9	6.9	4.8	1.3	2.9	13.5	2.7	6.9	3.6	1.6	3.1
5	13.1	4.7	7.8	6.7	2.3	3.8	12.9	5.2	8.0	3.2	1.5	2.5
6	8.1	6.3	6.7	11.9	2.3	5.4	12.8	4.2	7.9	3.9	1.6	2.9
7	---	---	---	9.6	3.0	5.6	7.2	2.3	5.1	4.6	2.7	3.9
8	---	---	---	7.8	3.0	4.9	6.7	2.2	4.0	4.0	2.0	3.1
9	---	---	---	8.2	1.5	4.7	6.3	1.3	3.7	3.9	2.0	2.8
10	---	---	---	11.0	3.3	5.8	4.2	1.5	2.6	3.9	1.6	2.9
11	12.8	7.4	9.6	13.3	3.8	7.5	4.8	2.0	3.5	3.3	1.7	2.3
12	12.2	3.9	7.4	12.9	5.4	8.3	4.7	2.4	3.7	3.7	1.9	2.9
13	13.0	4.1	7.4	13.4	6.0	9.0	4.5	2.0	3.2	2.9	2.1	2.5
14	7.7	2.5	3.8	8.8	5.4	7.5	4.2	1.7	3.1	3.9	1.9	2.8
15	5.3	1.3	2.6	10.5	3.5	6.9	4.6	1.0	3.4	3.6	2.5	2.9
16	7.9	1.7	4.1	9.0	3.3	5.8	4.8	2.0	3.5	3.5	1.3	2.7
17	9.6	2.4	5.1	7.1	3.4	5.3	6.0	2.3	3.7	3.8	1.0	2.3
18	6.0	1.5	3.4	6.3	2.1	4.2	4.6	2.0	3.3	4.0	2.1	3.1
19	5.6	1.6	3.5	6.3	2.0	4.1	4.0	1.5	2.5	5.8	3.3	4.9
20	---	---	---	10.0	2.2	5.3	3.9	1.7	2.8	5.1	3.6	4.5
21	2.6	1.1	1.7	7.7	2.6	5.5	3.9	1.5	2.5	4.9	3.3	4.0
22	3.7	.9	1.9	9.9	1.9	6.1	4.1	1.3	2.7	4.8	2.9	4.0
23	5.6	1.6	3.1	10.6	3.1	6.4	3.9	1.4	2.7	4.9	3.3	3.9
24	5.1	3.7	4.4	5.4	1.8	3.6	5.1	2.6	3.6	5.1	3.4	4.3
25	4.7	3.2	4.0	5.5	.8	2.7	4.7	2.9	3.7	5.4	3.9	4.5
26	4.9	2.8	4.4	4.0	1.0	1.4	4.5	1.7	2.9	5.0	3.2	4.4
27	4.8	2.8	3.5	---	---	---	5.2	2.5	3.7	5.7	2.8	4.2
28	4.1	2.3	3.0	---	---	---	4.2	2.5	3.4	6.1	4.0	5.1
29	3.4	1.0	2.6	---	---	---	---	---	---	5.2	3.2	4.5
30	4.2	2.4	3.4	---	---	---	---	---	---	6.1	4.1	5.2
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	14.9	.9	5.0	13.4	.8	5.1	13.5	1.0	4.0	6.1	1.0	3.6
YEAR	15.9	.4	5.3									

SAN JACINTO RIVER BASIN

08074800 KEEGANS BAYOU AT ROARK ROAD NEAR HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°39'23", long 95°33'43", Harris County, Hydrologic Unit 12040104, on right bank at upstream side of bridge on Roark Road in southwest Houston.

DRAINAGE AREA.--12.7 mi². Oct. 1, 1976, to Dec. 31, 1977, 12.0 mi²; August 1964 to Sept. 30, 1976, 11.6 mi². Drainage area changes were the result of ditch relocations or extensions.

PERIOD OF RECORD.--August 1964 to September 1981 (daily mean discharges). October 1981 to September 1992 (annual maximum discharge). October 1992 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WRD IX-74-1: Drainage area. WDR IX-77-2: Drainage area.

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

REMARKS.--Records good. Radio telemeter at station. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE.--17 years, (water years 1965-81) 12.3 ft³/s, (8,910 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s Mar. 4, 1992, elevation, 75.91 ft; no flow for many days.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges above base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 17	0930	2,970	73.11	Aug. 30	1530	2,380	72.05
Dec. 18	0700	2,050	71.46	Sept. 4	1930	1,490	70.34
Aug. 26	1615	2,240	71.81	Sept. 19	0245	2,730	72.70

LOCATION.--Lat 29°41'49", long 95°24'43", Harris County, Hydrologic Unit 12040104, near right bank at downstream side of Main Street Bridge in southwest Houston, 1.6 mi upstream from Harris Gully, and 11.6 mi upstream from Buffalo Bayou.

WATER-DISCHARGE RECORDS

REVISÉD RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.16 ft below sea level, 1973 adjustment; 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 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. There are no known diversions above station. Low flow is sustained mostly from wastewater effluent from Houston suburbs. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1911, 56.0 ft in June 1919 before channel rectification, former site, from information by engineer for city of Houston.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,300 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 19	1430	8,540	38.22	Jun. 23	1400	7,850	37.55
Dec. 17	1030	13,800	42.65	Sep. 19	0300	17,700	45.40
Dec. 18	0800	9,230	38.86				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	377	99	104	97	273	112	99	107	111	114	191
2	434	1270	97	102	123	114	111	98	132	110	112	147
3	519	487	99	99	103	108	108	99	384	110	107	622
4	104	110	97	97	102	109	110	99	140	106	111	743
5	95	100	98	210	104	106	132	99	109	103	113	414
6	94	99	98	259	103	109	128	101	105	103	107	183
7	94	101	95	113	113	105	105	101	103	104	105	161
8	93	96	165	104	94	104	106	103	101	112	120	214
9	97	94	161	101	90	102	105	101	101	102	122	247
10	99	95	98	101	91	122	108	100	110	102	190	126
11	100	142	98	96	125	107	104	552	104	101	232	110
12	95	100	98	95	100	100	110	235	104	101	204	108
13	104	100	99	96	96	115	128	111	101	99	108	106
14	104	97	99	96	91	108	111	101	104	100	172	107
15	101	97	102	99	89	110	106	98	126	104	292	242
16	103	98	106	101	88	114	100	98	125	110	160	180
17	102	883	5380	96	91	117	103	97	109	103	416	113
18	103	335	3160	118	140	113	101	96	104	131	259	137
19	101	1670	365	101	112	108	102	100	108	119	254	5280
20	106	329	181	118	104	104	100	101	514	124	185	2170
21	99	115	124	116	103	105	101	100	373	104	358	501
22	100	104	195	121	95	110	851	99	433	106	720	249
23	105	105	113	100	95	110	510	99	1510	108	776	158
24	105	99	102	99	93	127	113	100	633	107	653	393
25	99	97	99	98	94	124	104	99	1410	167	226	539
26	102	97	101	108	97	111	101	100	319	497	739	309
27	105	98	101	96	150	113	101	102	159	168	556	1190
28	110	96	99	102	213	115	101	109	457	113	238	288
29	130	96	99	106	667	110	340	107	249	140	337	109
30	262	96	212	109	---	110	120	115	118	112	2170	116
31	111	---	145	96	---	117	---	107	---	108	766	---
TOTAL	4079	/683	12185	3457	3663	3600	4632	3726	8552	3885	11022	15453
MEAN	132	256	393	112	126	116	154	120	285	125	356	515
MAX	519	1670	5380	259	667	273	851	552	1510	497	2170	5280
MIN	93	94	95	95	88	100	100	96	101	99	105	106
AC-FT	8090	15240	24170	6860	7270	7140	9190	7390	16960	7710	21860	30650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1996, BY WATER YEAR (WY)

MEAN	147	159	151	179	171	127	143	176	202	125	130	162
MAX	1029	719	626	760	893	577	713	586	941	519	880	857
(WY)	1995	1944	1992	1991	1992	1992	1991	1970	1973	1942	1983	1979
MIN	.58	.68	5.98	1.90	9.72	1.36	1.40	.95	3.78	1.72	.74	1.12
(WY)	1939	1939	1951	1940	1947	1940	1939	1937	1937	1937	1940	1939

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1936 - 1996
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ANNUAL TOTAL	107090		81937				
ANNUAL MEAN	293		224		156		
HIGHEST ANNUAL MEAN					430		1992
LOWEST ANNUAL MEAN					15.1		1940
HIGHEST DAILY MEAN	5380	Dec 17	5380	Dec 17	16300		Oct 18 1994
LOWEST DAILY MEAN	93	Oct 8	88	Feb 16		.10	Oct 11 1937
ANNUAL SEVEN-DAY MINIMUM	96	Oct 5	96	Oct 5		.19	Oct 6 1937
INSTANTANEOUS PEAK FLOW			17700	Sep 19	29000		Jun 15 1976
INSTANTANEOUS PEAK STAGE			45.40	Sep 19		52.13	Jun 15 1976
ANNUAL RUNOFF (AC-FT)	212400		162500		113300		
10 PERCENT EXCEEDS	399		387		276		
50 PERCENT EXCEEDS	119		107		58		
90 PERCENT EXCEEDS	99		97		5.4		

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical, biochemical, and pesticide analyses: October 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)
FEB 27...	1124	157	850	8.0	23.0	13	12	7.4	87	13	7.1
MAY 30...	1015	95	820	7.8	27.0	5	12	9.2	116	--	3.0
AUG 27...	1010	348	463	7.5	27.0	40	30	5.7	71	--	3.3
DATE	BOD OXYGEN DEMAND, BIOCHEM CARBON, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	SIREP-TOCOC-KE AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)
FEB 27...	6.5	2300	410	170	0	53	9.8	100	3	9.4	200
MAY 30...	3.1	2300	310	160	0	49	8.7	100	3	8.8	170
AUG 27...	2.0	6000	3200	110	0	34	5.3	46	2	5.9	110
DATE	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
FEB 27...	57	97	0.70	17	491	32	12	20	4.70	4.70	1.20
MAY 30...	60	96	0.60	20	477	21	9	12	5.18	5.18	0.720
AUG 27...	33	45	0.30	12	263	54	26	28	2.38	2.38	0.320
DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	
FEB 27...	5.90	5.90	0.070	4.6	4.7	1.30	1.10	3.4	9.6	1.4	
MAY 30...	5.90	5.90	0.570	0.83	1.4	0.660	0.610	1.9	7.6	--	
AUG 27...	2.70	2.70	0.690	0.51	1.2	0.410	0.410	1.3	8.4	--	
DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	
FEB 27...	3	73	<0.50	<1.0	<5.0	<3.0	<10	17	40	17	
MAY 30...	2	80	<0.50	<1.0	<5.0	<3.0	<10	14	10	18	
AUG 27...	3	71	<0.50	<1.0	<5.0	<3.0	<10	13	<10	8	
DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	AME-TRYNE TOTAL (UG/L)	
FEB 27...	26	<0.1	20	<10	<1	<1.0	420	<6	19	0.200	
MAY 30...	11	<0.1	20	<10	1	<1.0	430	7	43	<0.100	
AUG 27...	9.0	--	<10	<10	<1	<1.0	250	<6	18	<0.100	

SAN JACINTO RIVER BASIN

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08075000 BRAYS BAYOU AT HOUSTON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	ATRA- ZINE WATER UNFLTRD REC (UG/L)	CYAN- AZINE TOTAL (UG/L)	METHO- MYI TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PRO- PAZINE TOTAL (UG/L)	PROPHAM TOTAL (UG/L)	CARB- ARYL UNFILT RECOVER (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)
FEB 27...	0.300	<0.200	<0.017	<0.200	<0.100	0.200	<0.015	<0.013	<0.100	<0.100
MAY 30...	<0.100	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100
AUG 27...	0.200	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100

08075400 SIMS BAYOU AT HIRAM CLARKE STREET, HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°37'07", long 95°26'45", Harris County, Hydrologic Unit 12040104, on left bank at downstream side of bridge on Hiram Clarke in Southwest Houston, 12.7 mi upstream from gage Sims Bayou at Houston, and 19.7 mi upstream from mouth.

DRAINAGE AREA.--20.2 mi².

PERIOD OF RECORD.--October 1965 to September 1978 and October 1980 to September 1991 (daily mean discharge). Dec. 6, 1978 to Aug. 31, 1979 (discharge measurements and supplemental peak discharges only). October 1991 to September 1992 (annual maximum). October 1992 to current year (peak discharges greater than base discharge).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is sea level; unadjusted for land-surface subsidence.

REMARKS.--Satellite telemeter at station.

AVERAGE DISCHARGE.--24 years (water years 1966-78, 1981-91), 30.3 ft³/s (21,950 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,510 ft³/s Oct. 18, 1994 (elevation, 54.65 ft.); maximum elevation, 57.12 ft June 15, 1976, occurred prior to 1978 channel rectification; minimum daily discharge, 1.5 ft³/s July 26, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Nov. 2	1915	1,140	42.76	June 23	1515	1,520	44.00
Dec. 17	1115	3,150	47.94	June 25	1230	1,350	43.48
Dec. 18	0815	1,910	45.09				

SAN JACINTO RIVER BASIN

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08075500 SIMS BAYOU AT HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°40'2"/, long 95°17'21", Harris County, Hydrologic Unit 12040104, on left bank State Highway 35 in southeast Houston and 7.0 mi upstream from mouth.

DRAINAGE AREA.--63.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to September 1995. October 1995 to present (peak discharges greater than base discharge).

REVISED RECORDS.--WSP 1922: 1960. 1975(M). WDR IX-77-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.09 ft below sea level, 1973 adjustment; unadjusted for land-surface subsidence.

REMARKS.--Records poor. Low flow is largely sustained by wastewater effluent from Houston suburbs and from industrial wastes. Stage-discharge relationship is affected by seasonal vegetal growth during most years. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	1600	2,780	21.67				

08075500 SIMS BAYOU AT HOUSTON, TX.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical, biochemical, and pesticide analyses: October 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1993 to current year.

WATER TEMPERATURE: July 1993 to current year.

DISSOLVED OXYGEN: July 1993 to current year.

INSTRUMENTATION.--Since July 1993, a water-quality monitoring system continuously recorded specific conductance, water temperature, and dissolved oxygen at this station.

REMARKS.--Interruption in record was due to malfunctions of the instrumentation. Due to low flow wastewater effluent, Houston suburbs, industrial wastes, probe location, channel morphology, the water quality collected at this location may not be representative of the entire flow through the cross-section.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,870 microsiemens Dec. 12, 1995; minimum, 80 microsiemens Oct. 18, 1994, Sept. 20, 1995.

WATER TEMPERATURE: Maximum, 34.5°C July 27, 28, 1995; minimum, 9.5°C Feb. 4, 1996.

DISSOLVED OXYGEN: Maximum, 13.5 mg/L June 27, 1995; minimum, 1.0 mg/L July 20, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,870 microsiemens Dec. 12; minimum, 120 microsiemens Feb. 29.

WATER TEMPERATURE: Maximum, 32.5°C on several days in July, Aug. 1; minimum, 9.5°C Feb. 4.

DISSOLVED OXYGEN: Maximum, 11.2 mg/L July 5; minimum, 1.3 mg/L Nov. 14, 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	BOD OXYGEN DEMAND, BIOCHEM CARBON, 5 DAY (MG/L)	COIL- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
FEB 27...	0928	66	1100	7.9	22.5	17	24	4.8	56	8.1	3.0	750	
MAY 30...	0828	53	1350	7.6	29.0	5	15	4.8	63	3.9	3.2	170	
AUG 27...	0834	297	513	8.3	26.0	60	37	4.2	52	3.5	2.1	7300	
DATE	TIME	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
FEB 27...	680	190	16	60	10	140	4	10	180	110	160	0.90	
MAY 30...	340	190	13	60	9.1	200	6	11	170	230	160	0.80	
AUG 27...	9000	110	21	34	4.9	56	2	4.9	84	76	48	0.30	
DATE	TIME	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L)	RESIDUE VOLATILE, TILE, SUS- PENDE (MG/L)	RESIDUE FIXED NON FILTER- ABLE (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)
FEB 27...	12	641	51	15	36	4.76	4.76	0.940	5.70	5.70	4.00	1.5	
MAY 30...	13	811	23	9	14	3.53	3.53	0.570	4.10	4.10	1.60	1.1	
AUG 27...	8.7	293	58	<1	--	1.77	1.77	0.130	1.90	1.90	0.220	0.58	
DATE	TIME	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
FEB 27...	5.5	0.630	0.550	1.7	8.1	2	99	<0.50	<1.0	<5.0	<3.0	<10	
MAY 30...	2.7	0.600	0.550	1.7	9.2	2	100	<0.50	<1.0	<5.0	4.0	<10	
AUG 27...	0.80	0.250	0.240	0.74	9.0	2	70	<0.50	<1.0	<5.0	<3.0	<10	

080/5500 SIMS BAYOU AT HOUSTON, TX.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB 27...	8.0	20	15	83	<0.1	10	<10	<1	<1.0	420	<6	11
MAY 30...	5.0	30	15	56	<0.1	20	<10	<1	1.0	430	<6	25
AUG 27...	20	<10	5	6.0	<0.1	<10	10	<1	<1.0	210	<6	20

DATE	AME- TRYNE TOTAL (UG/L)	AIRA- ZINE WATER UNFLTRD REC (UG/L)	CYAN- AZINE TOTAL (UG/L)	METHO- MYL TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)	PROME- TRYNE TOTAL (UG/L)	PRO- PAZINE TOTAL (UG/L)	PROPHAM TOTAL (UG/L)	CARB- ARYL UNFILT RECOVER (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)
FEB 27...	<0.100	0.200	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100
MAY 30...	<0.100	0.200	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100
AUG 27...	<0.100	--	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	940	910	922	1260	480	970	1930	1270	1520	---	---	---
2	950	930	944	840	240	537	1270	1080	1200	---	---	---
3	---	---	---	360	240	294	1480	1200	1290	1250	1080	1130
4	---	---	---	940	310	604	1300	1230	1260	1370	1170	1240
5	---	---	---	1220	940	1140	1950	1620	1750	1340	730	1050
6	1040	950	970	1280	1020	1130	1940	1320	1540	950	660	797
7	1690	930	1190	1510	870	1200	1520	1220	1340	930	720	836
8	1850	1370	1640	1680	1150	1410	1460	1220	1370	1560	930	1170
9	1660	1330	1440	1260	900	1070	2190	1410	1670	1180	910	992
10	1480	1130	1300	1290	970	1130	1620	850	1190	1640	910	994
11	1540	1310	1410	2240	1000	1340	2070	860	1250	2220	1130	1790
12	1630	1330	1450	2410	1140	1490	2870	1120	1710	1130	900	944
13	1570	1060	1340	1200	880	1030	1620	1320	1500	1330	890	1140
14	1960	1050	1490	2380	910	1630	2400	1250	1910	2210	1200	1670
15	1530	970	1070	1460	1210	1330	1570	1180	1310	1900	1180	1470
16	1540	870	1080	1650	410	1110	1800	1300	1540	1430	1200	1280
17	1460	1210	1340	1100	460	762	1410	140	648	1570	1350	1470
18	1560	1230	1400	790	310	509	250	180	205	1650	1290	1460
19	1940	1260	1520	990	310	665	450	250	351	1630	1130	1490
20	1490	1060	1260	580	290	408	590	440	495	1500	1030	1250
21	2110	960	1350	750	500	584	660	590	640	1440	1030	1330
22	1380	960	1160	1000	750	889	670	650	659	1550	1070	1340
23	2820	1360	2180	1190	990	1110	830	670	755	1610	1270	1460
24	2510	1790	1920	1120	380	777	960	830	905	1320	1190	1240
25	1440	920	1110	1350	420	667	1010	950	987	1610	1200	1330
26	1600	1090	1210	2320	1340	1890	970	830	870	1220	850	1030
27	2510	1330	1920	1680	1280	1400	960	830	885	1950	840	1180
28	1880	1260	1570	1530	1240	1430	1030	960	988	1590	910	1030
29	1590	1220	1410	1420	1120	1250	1150	1030	1100	1990	970	1590
30	1380	890	1190	2070	1110	1530	---	---	---	1800	1210	1490
31	1300	860	1020	---	---	---	---	---	---	1390	1160	1250
MONTH	2820	860	1350	2410	240	1040	2870	140	1130	2220	660	1260

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1230	940	1080	990	630	798	---	---	---	---	---	---
2	2390	1020	1610	1030	860	931	---	---	---	---	---	---
3	1380	1220	1280	880	810	853	---	---	---	---	---	---
4	1640	1240	1390	860	820	837	---	---	---	---	---	---
5	1290	1100	1220	---	---	---	---	---	---	---	---	---
6	1290	1150	1240	---	---	---	---	---	---	---	---	---
7	1290	1090	1200	---	---	---	---	---	---	---	---	---
8	1720	1240	1460	---	---	---	---	---	---	---	---	---
9	1340	1020	1120	---	---	---	---	---	---	---	---	---
10	1320	1020	1200	---	---	---	---	---	---	---	---	---
11	1390	1130	1310	---	---	---	---	---	---	---	---	---
12	1940	1320	1440	---	---	---	---	---	---	---	---	---
13	2050	1110	1530	---	---	---	---	---	---	---	---	---
14	1410	1290	1350	---	---	---	---	---	---	---	---	---
15	1330	1200	1260	---	---	---	---	---	---	---	---	---
16	1330	1190	1260	---	---	---	---	---	---	---	---	---
17	1260	1180	1230	---	---	---	---	---	---	---	---	---
18	1230	1000	1070	---	---	---	---	---	---	---	---	---
19	1020	970	995	---	---	---	---	---	---	---	---	---
20	1000	960	974	---	---	---	---	---	---	2810	2010	2220
21	1040	1000	1020	---	---	---	---	---	---	2810	2120	2410
22	1060	1000	1030	---	---	---	---	---	---	2120	1710	1810
23	1070	1010	1040	---	---	---	---	---	---	1850	1480	1710
24	1100	1020	1080	---	---	---	---	---	---	1780	1360	1590
25	1250	1050	1080	---	---	---	---	---	---	1830	1270	1600
26	2090	1250	1680	---	---	---	---	---	---	1720	1510	1620
27	1280	1060	1100	---	---	---	---	---	---	1890	1520	1730
28	1080	290	673	---	---	---	---	---	---	1810	1520	1690
29	1030	120	511	---	---	---	---	---	---	1680	1340	1570
30	---	---	---	---	---	---	---	---	---	1620	1350	1460
31	---	---	---	---	---	---	---	---	---	2440	1280	1900
MONTH	2390	120	1190	1030	630	855	---	---	---	2810	1270	1780
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	2120	1290	1500	1320	1200	1280	1650	1530	1580	870	670	739
2	1660	450	1360	1380	1260	1330	1530	1360	1460	950	510	740
3	1040	450	757	1510	1380	1470	1360	1080	1170	1020	160	585
4	580	440	491	1490	1440	1480	1490	1080	1310	680	270	465
5	1150	450	760	1440	1350	1390	1340	1170	1260	1310	680	885
6	1590	930	1180	1490	1420	1460	1230	1020	1150	1310	940	1050
7	1560	1020	1200	1510	1410	1470	1530	970	1300	1040	290	779
8	1910	1070	1600	1680	1500	1580	1870	1130	1510	1220	640	803
9	2010	1320	1690	1740	1680	1720	1510	1150	1310	1160	810	999
10	1660	1420	1500	1710	1400	1520	1410	960	1230	1160	810	948
11	1670	1260	1520	1580	1510	1560	1310	1010	1170	1330	950	1190
12	1460	1190	1290	1520	1440	1490	1310	1020	1170	1460	920	1200
13	1700	1460	1620	1560	1500	1530	1100	880	971	1740	1020	1280
14	1730	1630	1690	1640	1530	1600	930	900	906	1780	1020	1470
15	1650	1520	1590	1610	1460	1520	1030	920	954	1500	910	1290
16	1580	1350	1470	1610	1530	1570	960	900	932	1300	920	1120
17	1500	1180	1260	1710	1540	1640	990	910	946	1260	940	1030
18	1390	1160	1280	1600	1240	1460	1220	990	1070	1130	890	1010
19	1520	1270	1440	1780	1570	1710	1210	780	1050	890	170	303
20	1800	1020	1500	1610	1490	1550	1070	780	916	380	270	351
21	1210	480	594	1590	1260	1350	1160	840	935	---	---	---
22	740	510	584	1790	1180	1520	1400	660	1020	---	---	---
23	1310	150	723	1840	1180	1610	700	450	584	---	---	---
24	470	240	364	1790	1270	1520	630	410	508	---	---	---
25	570	170	348	2070	1290	1640	770	510	636	---	---	---
26	570	290	506	2240	1290	1860	780	410	521	---	---	---
27	970	530	658	1920	1190	1490	790	410	566	708	388	648
28	1040	560	940	1420	1180	1320	1200	790	1010	498	349	402
29	750	530	623	1680	1400	1550	1140	310	795	637	497	566
30	1200	750	935	1570	1450	1530	1190	230	429	1150	635	837
31	---	---	---	1610	1540	1580	710	320	473	---	---	---
MONTH	2120	150	1100	2240	1180	1530	1870	230	995	1780	160	862
YEAR	2870	120	1190									

08075500 SIMS BAYOU AT HOUSTON, TX.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	30.0	27.5	29.0	24.5	22.0	23.5	19.5	16.0	18.0	20.0	18.5	19.5
2	29.0	28.5	28.5	25.0	22.5	24.0	21.5	19.0	20.5	18.5	14.0	16.5
3	---	---	---	22.5	17.5	20.0	23.0	21.0	22.0	14.0	12.0	12.5
4	---	---	---	17.5	16.5	17.0	23.5	22.0	22.5	15.0	13.0	13.5
5	---	---	---	17.0	16.0	16.5	23.0	22.0	22.5	17.0	15.0	16.5
6	25.5	24.0	25.0	20.0	17.0	18.5	23.0	22.0	22.5	16.0	12.5	14.5
7	25.0	23.5	24.0	23.0	20.0	21.5	22.5	20.5	22.0	12.5	10.5	11.5
8	25.0	23.0	24.0	22.5	21.0	22.0	20.5	19.0	20.0	11.5	10.0	10.5
9	26.0	23.5	24.5	21.5	20.5	21.0	19.0	15.0	17.5	13.5	11.0	12.5
10	26.5	24.5	25.0	23.5	21.0	22.5	15.0	12.0	13.5	16.0	13.0	15.0
11	26.5	25.0	25.5	23.5	20.0	22.0	14.5	12.0	13.0	17.5	15.5	16.5
12	26.5	25.0	25.5	20.0	18.0	19.0	18.0	14.5	16.5	17.0	15.5	16.0
13	26.0	25.5	26.0	21.0	18.0	19.0	20.0	18.0	19.0	17.5	15.0	16.0
14	25.5	23.5	25.0	21.0	19.0	19.5	21.5	19.0	20.0	18.0	15.5	16.5
15	23.5	21.5	22.5	20.0	18.0	19.0	22.5	20.5	21.5	19.5	16.5	18.0
16	24.0	21.5	22.5	20.5	18.5	19.5	23.5	22.0	22.5	20.0	18.5	19.0
17	24.5	22.5	23.5	19.5	18.0	19.0	22.5	18.0	20.0	20.0	19.0	19.5
18	25.5	23.5	24.5	18.5	17.5	18.0	19.0	18.0	18.5	20.0	16.0	18.5
19	26.5	24.5	25.5	19.5	18.5	19.0	18.5	14.5	16.0	16.0	11.5	14.0
20	26.0	24.0	25.0	19.5	19.0	19.5	14.5	13.5	14.0	14.5	11.0	13.0
21	24.0	21.0	22.0	21.0	19.5	20.0	14.0	13.5	14.0	16.5	14.5	15.5
22	23.5	21.0	22.0	20.5	19.5	20.0	15.0	13.0	14.0	17.5	16.5	17.0
23	25.0	22.5	24.0	21.5	19.5	20.5	14.5	13.0	14.0	19.5	17.5	18.5
24	24.5	21.0	23.0	20.5	18.5	19.5	13.0	12.5	13.0	19.0	17.0	18.0
25	23.5	21.0	22.0	19.0	17.0	18.0	14.0	13.0	13.5	17.5	15.5	16.5
26	26.0	23.5	25.0	20.0	17.5	18.5	14.0	13.5	13.5	18.0	16.0	17.0
27	27.0	25.5	26.0	21.5	19.0	20.0	14.0	13.0	13.5	17.5	15.0	16.5
28	26.5	24.0	25.5	20.5	18.0	19.5	15.0	13.5	14.0	16.0	14.0	15.0
29	24.0	21.5	23.0	18.0	15.0	16.5	14.0	12.5	---	18.0	15.0	16.5
30	21.5	20.0	21.0	17.0	14.5	15.5	16.5	13.5	15.0	21.0	18.0	19.5
31	22.0	20.5	21.5	---	---	---	19.0	16.5	18.0	20.0	16.0	18.0
MONTH	30.0	20.0	24.5	25.0	14.5	19.5	23.5	12.0	17.5	21.0	10.0	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	16.0	13.0	14.0	13.5	12.0	13.0	---	---	---	---	---	---
2	13.0	11.0	12.0	17.5	13.0	15.0	---	---	---	---	---	---
3	11.0	10.0	10.5	17.0	14.0	15.5	---	---	---	---	---	---
4	11.5	9.5	10.5	16.5	15.0	---	---	---	---	---	---	---
5	13.5	11.0	12.0	---	---	---	---	---	---	---	---	---
6	15.5	13.0	14.0	---	---	---	---	---	---	---	---	---
7	19.0	15.5	17.5	---	---	---	---	---	---	---	---	---
8	21.0	18.5	19.5	---	---	---	---	---	---	---	---	---
9	21.5	19.5	20.0	---	---	---	---	---	---	---	---	---
10	22.0	20.0	21.0	---	---	---	---	---	---	---	---	---
11	21.5	19.0	20.5	---	---	---	---	---	---	---	---	---
12	19.0	16.5	17.0	---	---	---	---	---	---	---	---	---
13	17.5	16.5	17.0	---	---	---	---	---	---	---	---	---
14	19.0	17.5	18.0	---	---	---	---	---	---	---	---	---
15	20.5	19.0	19.5	---	---	---	---	---	---	---	---	---
16	19.0	15.5	17.0	---	---	---	---	---	---	---	---	---
17	16.5	15.0	15.5	---	---	---	---	---	---	---	---	---
18	18.5	16.5	17.5	---	---	---	---	---	---	---	---	---
19	21.0	18.0	20.0	---	---	---	---	---	---	---	---	---
20	20.5	19.5	---	---	---	---	---	---	---	29.5	28.0	---
21	22.0	19.5	---	---	---	---	---	---	---	29.5	28.0	28.5
22	23.0	21.5	22.0	---	---	---	---	---	---	29.5	28.5	28.5
23	23.5	22.5	23.0	---	---	---	---	---	---	29.5	28.5	29.0
24	22.5	21.5	22.0	---	---	---	---	---	---	29.5	28.5	29.0
25	22.0	21.0	21.5	---	---	---	---	---	---	29.5	28.5	29.0
26	23.0	21.5	22.0	---	---	---	---	---	---	29.5	28.0	28.5
27	23.0	22.5	---	---	---	---	---	---	---	29.5	28.5	29.0
28	22.5	15.0	18.0	---	---	---	---	---	---	30.5	29.0	29.5
29	15.0	10.5	13.0	---	---	---	---	---	---	30.0	29.0	29.5
30	---	---	---	---	---	---	---	---	---	30.0	29.0	29.5
31	---	---	---	---	---	---	---	---	---	29.5	28.0	28.5
MONTH	23.5	9.5	17.5	17.5	12.0	14.5	---	---	---	30.5	28.0	29.0

080/5500 SIMS BAYOU AT HOUSTON, TX.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	29.5	28.5	29.0	31.5	30.0	30.5	32.5	30.5	31.5	29.0	27.0	27.5
2	29.0	25.0	27.5	31.5	30.0	30.5	32.0	31.0	31.5	29.0	28.0	28.5
3	27.5	25.0	27.0	31.5	30.0	30.5	32.0	30.5	31.0	30.5	25.5	28.5
4	27.0	26.0	26.5	32.0	30.0	31.0	31.5	31.0	31.0	28.5	26.0	27.0
5	27.5	26.0	27.0	32.5	30.5	31.5	31.5	30.5	31.0	29.5	27.5	28.5
6	29.0	27.5	28.0	32.5	31.0	32.0	31.5	31.0	31.0	30.5	28.5	---
7	29.0	28.0	28.5	32.5	31.0	32.0	31.0	30.0	30.5	30.5	28.0	29.0
8	28.5	27.0	28.0	32.5	31.5	32.0	31.0	30.0	30.5	29.0	28.0	28.5
9	28.0	26.5	27.5	32.5	31.0	31.5	30.5	29.5	30.0	29.5	28.0	29.0
10	29.0	27.0	27.5	32.5	31.0	31.5	30.5	29.0	29.5	31.0	28.5	29.5
11	29.5	27.5	28.5	32.5	31.0	31.5	30.5	29.5	30.0	31.5	29.5	30.0
12	30.5	28.5	29.0	32.0	30.5	31.5	30.5	30.0	30.5	30.5	28.5	29.0
13	31.0	29.5	30.0	32.5	30.5	31.5	31.5	30.0	---	29.0	28.0	28.5
14	31.5	30.0	30.5	32.5	31.0	31.5	31.5	29.5	30.0	29.5	27.0	28.0
15	31.0	30.0	30.5	32.0	30.5	31.5	30.0	29.0	29.5	29.0	28.5	29.0
16	31.0	29.5	30.5	31.5	30.0	30.5	31.5	28.5	29.5	30.0	28.0	29.0
17	31.5	30.0	---	31.5	30.5	31.0	31.5	29.0	30.0	31.0	29.0	29.5
18	31.5	30.5	31.0	31.0	30.0	30.5	30.0	28.5	29.5	30.0	28.5	29.5
19	31.5	30.0	30.5	30.0	29.0	29.5	29.0	27.5	28.5	28.5	24.5	26.0
20	31.0	28.0	30.0	31.0	29.0	30.0	30.0	27.5	28.5	27.0	25.5	26.5
21	28.0	27.0	---	32.0	30.0	31.0	30.0	28.5	29.5	28.5	26.5	---
22	29.0	28.0	28.5	32.0	30.5	31.0	28.5	26.5	27.0	29.0	26.5	28.0
23	29.0	25.0	27.0	32.0	30.5	31.5	27.5	26.0	---	29.0	27.5	28.0
24	28.0	25.5	26.5	32.0	30.5	31.0	28.5	26.0	27.0	29.0	26.5	28.0
25	28.0	24.5	26.0	31.0	29.5	30.0	28.0	27.0	27.5	28.0	26.5	27.0
26	29.0	26.0	27.0	30.0	29.0	29.5	28.5	26.5	27.5	28.5	27.5	28.0
27	30.5	29.0	29.5	29.5	28.0	28.5	29.0	26.0	27.0	28.5	25.0	27.5
28	30.5	28.5	30.0	31.0	29.5	30.0	30.5	28.5	29.0	25.0	23.0	23.5
29	30.0	28.5	29.0	31.0	30.0	30.5	29.0	27.0	28.0	24.0	22.5	23.5
30	31.0	29.5	30.0	31.5	30.5	31.0	27.0	25.5	---	25.0	23.5	24.0
31	---	---	---	32.0	30.5	31.5	27.5	25.5	26.0	---	---	---
MONTH	31.5	24.5	28.5	32.5	28.0	31.0	32.5	25.5	29.5	31.5	22.5	28.0
YEAR	32.5	9.5	23.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	5.6	4.1	4.4	5.8	4.8	5.2	---	---	---
2	---	---	---	6.2	3.5	4.5	---	---	---	---	---	---
3	---	---	---	6.3	5.0	5.8	---	---	---	7.2	6.4	7.1
4	---	---	---	6.3	5.9	6.2	---	---	---	7.2	6.3	6.7
5	---	---	---	6.2	5.7	6.0	---	---	---	7.2	5.2	6.3
6	4.1	3.7	4.1	6.2	5.0	5.7	---	---	---	7.3	6.2	6.9
7	4.7	3.7	4.2	5.9	4.0	4.8	---	---	---	7.2	6.8	7.0
8	4.7	4.1	4.3	5.3	3.5	4.3	6.7	6.1	6.4	7.5	6.7	7.1
9	5.0	4.4	4.8	5.6	4.1	4.6	7.1	6.1	6.6	7.4	5.5	6.5
10	5.2	4.0	4.6	4.2	2.8	3.6	8.3	7.1	7.8	8.4	3.6	5.0
11	4.0	2.4	3.5	4.1	2.9	3.5	8.8	7.6	8.3	5.8	4.3	5.1
12	3.6	2.1	3.0	4.8	3.0	4.1	8.2	6.2	7.6	5.9	4.5	5.0
13	2.7	2.1	2.4	4.7	2.7	4.0	6.8	5.6	6.1	4.7	3.2	3.9
14	3.9	2.5	3.5	2.7	1.3	2.0	5.8	4.6	5.5	3.9	2.7	3.4
15	4.8	3.9	4.5	4.2	1.3	2.7	5.8	4.1	5.0	3.9	2.5	3.2
16	6.4	4.8	5.2	3.8	2.1	2.7	5.3	4.3	4.8	4.3	2.5	3.4
17	5.3	4.4	4.9	7.0	3.0	5.2	8.5	4.8	6.2	5.1	3.7	4.2
18	4.4	4.0	4.2	7.3	5.6	6.5	7.1	6.1	6.4	5.3	4.0	4.5
19	4.1	3.6	3.8	6.9	4.5	5.6	6.9	5.2	6.3	6.9	4.6	5.7
20	3.9	3.1	3.6	6.6	5.7	6.2	5.7	5.0	5.1	6.9	5.6	6.1
21	4.7	3.0	4.3	5.8	5.1	5.5	---	---	---	---	---	---
22	4.8	4.6	4.7	6.2	5.1	5.6	6.2	6.1	6.2	---	---	---
23	5.4	4.2	4.5	6.0	5.4	5.7	6.3	5.9	6.1	---	---	---
24	5.3	4.4	4.7	6.1	5.4	5.7	6.6	5.9	6.3	---	---	---
25	5.6	4.6	5.1	7.0	5.7	6.3	6.3	5.4	6.0	---	---	---
26	5.0	3.1	4.5	6.7	5.9	6.5	5.4	4.6	5.0	---	---	---
27	4.3	2.8	3.6	5.9	5.2	5.7	4.7	4.2	4.6	---	---	---
28	4.5	3.5	4.0	5.5	4.4	5.0	---	---	---	---	---	---
29	4.7	3.8	4.3	6.2	4.9	5.4	---	---	---	---	---	---
30	5.8	4.3	4.9	6.4	5.7	6.0	---	---	---	5.4	5.2	5.4
31	5.1	4.1	4.6	---	---	---	---	---	---	6.6	5.2	5.7
MONTH	6.4	2.1	4.2	7.3	1.3	5.0	8.8	4.1	6.1	8.4	2.5	5.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	8.4	4.7	6.8	8.2	6.6	7.3	---	---	---	---	---	---
2	8.7	7.5	8.2	6.7	5.8	6.2	---	---	---	---	---	---
3	9.2	7.9	8.6	6.3	4.9	5.6	---	---	---	---	---	---
4	9.2	8.2	8.9	6.5	5.6	6.1	---	---	---	---	---	---
5	8.2	6.1	6.6	---	---	---	---	---	---	---	---	---
6	7.8	5.9	6.7	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	7.3	6.8	6.9	---	---	---	---	---	---	---	---	---
10	7.7	5.7	6.6	---	---	---	---	---	---	---	---	---
11	8.1	6.7	7.2	---	---	---	---	---	---	---	---	---
12	7.3	5.1	6.1	---	---	---	---	---	---	---	---	---
13	6.7	5.9	6.3	---	---	---	---	---	---	---	---	---
14	5.9	5.3	5.7	---	---	---	---	---	---	---	---	---
15	5.3	4.4	4.8	---	---	---	---	---	---	---	---	---
16	6.3	4.6	5.4	---	---	---	---	---	---	---	---	---
17	6.3	5.3	5.9	---	---	---	---	---	---	---	---	---
18	5.8	4.9	5.5	---	---	---	---	---	---	---	---	---
19	5.5	4.5	4.9	---	---	---	---	---	---	---	---	---
20	4.7	4.2	4.5	---	---	---	---	---	---	7.9	5.7	6.3
21	5.4	4.2	4.9	---	---	---	---	---	---	7.6	5.3	6.3
22	5.1	4.0	4.5	---	---	---	---	---	---	8.7	5.5	6.4
23	4.7	3.4	4.1	---	---	---	---	---	---	10.3	6.4	8.1
24	4.3	4.0	4.2	---	---	---	---	---	---	9.9	4.4	5.8
25	4.6	3.9	4.3	---	---	---	---	---	---	5.1	2.1	3.4
26	4.9	4.1	4.6	---	---	---	---	---	---	---	---	---
27	4.5	3.6	4.2	---	---	---	---	---	---	---	---	---
28	8.5	3.6	6.0	---	---	---	---	---	---	---	---	---
29	10.7	4.0	6.4	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.7	3.4	5.9	8.2	4.9	6.3	---	---	---	10.3	2.1	6.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	3.2	2.4	2.9	7.7	4.8	5.9	3.9	1.8	2.7
2	---	---	---	4.2	2.9	3.1	7.2	5.6	6.3	3.9	2.9	3.4
3	---	---	---	5.5	3.5	4.2	7.0	5.1	5.8	7.5	2.8	4.2
4	4.2	3.1	4.0	7.9	5.1	5.8	6.0	4.5	5.0	5.2	3.7	4.3
5	4.1	3.1	3.7	11.2	6.0	7.6	5.3	4.3	4.8	4.1	3.6	3.8
6	7.3	3.1	4.2	11.0	7.0	8.7	6.4	4.8	5.3	5.0	3.7	4.3
7	7.7	3.2	5.1	10.7	7.8	9.2	5.8	4.4	5.0	5.8	3.5	4.4
8	6.2	3.8	5.2	10.1	6.4	8.0	5.9	4.3	5.0	4.2	2.8	3.3
9	8.6	5.5	7.4	7.8	5.0	5.7	5.3	4.3	4.9	4.9	2.8	4.0
10	8.2	3.7	5.7	---	---	---	5.7	3.6	4.5	5.8	3.8	4.5
11	7.1	3.7	4.7	---	---	---	4.9	2.4	3.8	6.6	4.6	5.4
12	6.9	2.8	4.8	---	---	---	5.1	3.6	4.4	6.1	5.2	5.7
13	8.4	3.3	5.9	---	---	---	4.9	3.3	4.4	5.8	4.6	5.2
14	8.3	6.5	7.6	---	---	---	3.5	3.1	---	6.1	4.7	5.3
15	---	---	---	---	---	---	---	---	---	6.2	4.9	5.3
16	---	---	---	5.3	4.3	4.6	---	---	---	6.4	3.9	5.5
17	---	---	---	5.3	4.2	4.7	---	---	---	6.6	5.1	5.8
18	---	---	---	4.5	3.2	3.9	---	---	---	6.5	4.8	5.6
19	---	---	---	4.8	3.6	4.1	---	---	---	8.8	6.0	7.0
20	---	---	---	5.0	3.7	4.3	---	---	---	6.1	5.1	5.6
21	3.1	2.7	3.0	5.6	3.9	4.6	---	---	---	5.2	4.1	4.7
22	3.1	2.7	2.9	5.8	4.4	5.1	---	---	---	4.7	3.8	4.2
23	5.7	3.0	4.2	5.7	4.8	5.2	---	---	---	4.6	4.1	4.4
24	5.3	4.2	4.7	6.2	5.0	5.5	---	---	---	6.6	3.1	4.0
25	6.9	4.3	5.1	6.4	4.2	4.9	---	---	---	6.0	3.3	4.4
26	4.7	3.8	4.3	5.8	4.2	4.9	---	---	---	5.1	3.3	4.2
27	3.8	3.5	3.6	5.1	3.0	3.7	---	---	---	6.5	3.3	4.9
28	4.1	3.2	3.5	5.2	3.8	4.5	---	---	---	6.0	5.4	5.8
29	3.2	2.0	2.4	5.7	4.6	5.1	---	---	---	6.1	5.6	5.8
30	3.2	2.9	3.0	6.4	4.8	5.5	6.3	5.1	5.7	6.2	5.2	5.8
31	---	---	---	6.4	4.3	5.3	5.1	3.8	4.7	---	---	---
MONTH	8.6	2.0	4.5	11.2	2.4	5.2	7.7	2.4	5.0	8.8	1.8	4.8
YEAR	11.2	1.3	5.2									

SAN JACINTO RIVER BASIN

08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TX

LOCATION.--Lat 29°40'35", long 95°14'37", Harris County, Hydrologic Unit 12040104, on left bank at downstream side of bridge at Forest Oaks Street in southeast Houston, 0.8 mi upstream from mouth of Berry Creek, and 1.7 mi upstream from Sims Bayou.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--April 1964 to September 1966, daily mean discharge. October 1967 to September 1982, daily mean discharges greater than base discharge or flood-hydrograph partial-record station. October 1982 to current year, stages only.

Water-quality records.--Chemical, biochemical, and pesticide analyses: October 1968 to September 1981.
Water Temperature: April 1964 to September 1981.

REVISED RECORDS.--WDX IX-80-2: 1979(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2.72 ft below sea level, 1973 adjustment. June 1964 to January 1965, auxiliary nonrecording gage 0.8 mi downstream at same datum. January 1965 to September 1982, auxiliary water-stage recorder 0.8 mi downstream at same datum.

REMARKS.--Records fair. Low stages are affected by tides. Rises are occasionally affected by backwater from Sims Bayou. The reports "Hydrologic Data for Urban Studies in the Houston, Texas Metropolitan area", for water years 1965-82, contain additional storm runoff data for this station. Rain gage at station. Radio telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft³/s June 9, 1975; maximum gage height, 23.85 ft Sept. 20, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 16.64 ft Sept. 19 at 0200 hours; minimum, 3.39 ft July 24-25.

DAY	GAGE HEIGHT, FEET		WATER YEAR		OCTOBER 1995		TO SEPTEMBER 1996					
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.78	5.08	6.34	4.72	5.44	4.03	4.83	---	5.26	3.83	5.33	4.00
2	6.93	5.45	9.19	4.62	5.10	3.74	---	---	5.05	3.89	5.03	3.81
3	7.27	4.17	6.56	4.14	4.99	3.71	3.81	3.71	3.90	3.81	4.98	3.86
4	5.86	4.09	5.69	4.20	4.89	3.70	4.81	3.70	4.08	3.78	5.33	4.22
5	6.53	4.71	5.95	4.21	4.99	3.70	6.27	3.99	4.82	3.86	5.52	4.33
6	5.33	4.23	5.79	4.26	4.86	3.71	6.12	3.96	4.77	3.84	5.25	3.96
7	6.13	3.96	5.60	3.78	5.12	3.70	3.96	3.80	4.80	3.77	4.04	3.68
8	5.80	3.90	5.47	3.74	5.72	3.97	4.27	3.78	4.77	3.76	3.89	3.65
9	5.57	4.04	6.10	4.46	5.30	3.65	4.27	3.77	4.67	3.86	4.66	3.68
10	5.43	3.75	6.23	4.71	4.99	3.76	4.11	3.71	4.67	3.69	4.61	3.66
11	5.53	3.90	5.94	3.83	5.31	3.83	4.15	3.79	4.65	3.65	4.74	3.66
12	5.81	4.47	5.04	3.79	5.40	3.91	3.90	3.71	4.45	3.67	5.22	3.67
13	5.95	4.35	5.63	3.83	5.24	3.89	4.59	3.75	4.58	3.69	5.18	3.69
14	5.83	3.64	5.09	3.99	5.06	4.13	4.69	3.73	4.71	3.71	4.94	3.73
15	5.49	3.86	5.41	3.91	5.41	3.67	4.65	3.73	4.43	3.71	4.99	3.74
16	5.83	4.33	4.96	3.93	4.45	3.71	4.88	3.68	3.84	3.65	5.14	3.81
17	6.03	4.62	5.38	4.23	13.67	---	5.98	3.78	4.62	3.67	5.19	3.86
18	6.16	4.49	5.41	4.16	---	---	6.32	3.83	4.65	3.71	5.11	3.66
19	5.87	4.65	5.94	4.31	---	---	3.86	3.74	5.29	3.76	3.71	3.63
20	5.60	3.64	5.38	3.98	---	---	5.02	3.79	4.73	3.81	3.68	3.61
21	5.70	4.18	5.30	3.83	---	---	5.09	3.83	4.87	3.79	3.94	3.68
22	6.09	4.67	5.54	3.85	---	---	5.06	3.80	4.94	3.74	4.23	3.65
23	6.17	4.47	5.57	3.81	---	---	5.18	4.07	4.80	3.74	4.91	3.65
24	5.28	3.59	5.11	3.75	---	---	4.80	3.79	4.70	3.72	5.62	3.83
25	5.94	4.03	5.19	3.79	---	---	5.91	3.99	4.96	3.72	5.08	3.70
26	5.99	4.22	5.25	3.87	---	---	5.94	4.15	5.04	3.74	5.42	3.65
27	6.05	4.17	5.64	3.79	---	---	4.47	3.78	5.18	3.85	5.49	3.94
28	5.85	4.00	5.05	3.77	5.24	3.81	5.62	3.89	4.78	3.75	4.91	3.66
29	7.14	4.83	4.51	3.82	5.41	4.40	5.47	3.97	5.41	3.78	5.04	3.64
30	7.17	5.65	4.96	3.84	5.54	3.82	5.04	3.81	---	---	5.20	4.04
31	6.81	4.72	---	---	5.36	3.92	4.66	3.75	---	---	4.55	3.62
MONTH	7.27	3.59	9.19	3.74	---	---	---	---	5.41	3.65	5.62	3.61

SAN JACINTO RIVER BASIN

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08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TX--Continued

DAY	GAGE HEIGHT, FEET, WATER		YEAR OCTOBER 1995 TO SEPTEMBER 1996									
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.58	3.60	5.39	3.79	5.70	4.16	4.90	3.53	4.79	3.55	5.25	3.86
2	5.04	3.66	5.25	3.71	5.26	3.56	5.13	3.50	4.67	3.49	5.18	3.78
3	4.96	3.82	5.29	3.66	5.26	3.44	4.93	3.49	4.65	3.52	8.95	4.25
4	4.83	3.66	5.41	3.68	5.29	3.42	4.71	3.47	4.91	3.85	5.39	3.82
5	5.09	3.58	5.26	3.56	5.27	3.74	4.79	3.49	5.09	3.86	5.04	3.88
6	4.46	3.54	5.37	3.48	5.35	3.53	4.71	3.57	4.99	3.86	5.11	3.56
7	5.12	3.58	5.55	3.55	4.81	3.59	4.76	3.74	5.25	3.86	5.07	3.56
8	5.08	3.57	5.69	3.81	3.86	3.42	4.84	3.58	5.44	3.51	4.85	3.58
9	5.19	3.56	5.81	4.06	4.52	3.40	4.87	3.55	4.96	3.49	5.73	3.56
10	5.60	3.58	5.52	4.29	4.81	3.48	4.56	3.55	4.91	3.46	4.62	3.79
11	5.56	3.79	5.54	3.78	4.89	3.48	4.61	3.54	4.51	3.60	4.66	3.53
12	5.74	3.84	4.90	3.62	5.06	3.48	4.54	3.54	4.47	3.48	4.91	3.55
13	5.25	3.69	5.06	3.85	4.89	3.52	4.61	3.52	4.88	3.47	4.92	3.64
14	5.13	3.64	4.95	3.48	4.76	3.53	4.93	3.50	4.84	3.52	5.33	3.79
15	4.15	3.53	5.70	3.90	4.83	3.47	4.82	3.52	4.63	3.51	5.56	4.64
16	4.95	3.55	5.16	3.64	4.73	3.46	5.13	3.48	4.64	3.57	5.33	3.48
17	5.18	3.72	5.18	3.59	4.65	3.42	5.48	3.75	4.77	3.69	4.66	3.47
18	5.39	3.88	5.43	3.68	4.81	3.43	5.67	3.90	5.01	3.98	5.73	3.76
19	5.29	3.66	5.26	3.58	4.81	3.46	5.25	3.91	4.95	4.09	16.64	4.98
20	5.49	3.71	5.44	3.70	5.16	3.46	5.03	3.71	4.95	4.11	5.68	3.97
21	6.13	3.84	5.36	3.62	4.90	3.49	4.86	3.77	6.03	4.29	5.81	3.66
22	6.12	4.70	5.07	3.42	5.30	3.49	4.47	3.53	6.87	4.94	5.24	3.62
23	5.21	3.84	5.18	3.45	8.19	4.13	4.20	3.50	6.74	5.29	5.55	3.61
24	5.21	3.56	5.45	4.16	5.61	4.12	4.51	3.39	6.13	3.97	5.47	3.87
25	5.51	4.23	5.45	4.38	9.30	4.09	4.48	3.39	5.45	3.83	5.81	3.79
26	5.08	3.64	5.83	4.70	4.96	3.69	5.38	3.50	5.56	3.81	6.18	4.64
27	5.21	3.59	5.48	4.20	4.79	3.53	5.13	3.72	5.53	3.81	7.86	4.56
28	5.79	4.61	5.14	3.79	6.92	3.52	5.06	3.57	5.63	3.87	5.09	3.68
29	5.59	3.75	5.66	3.64	4.91	3.90	5.21	3.51	6.28	4.02	5.67	4.06
30	4.88	3.57	6.07	3.93	5.15	3.70	5.26	3.47	6.70	3.94	5.86	4.01
31	---	---	5.53	3.66	---	---	5.07	3.54	5.38	3.91	---	---
MONTH	6.13	3.53	6.07	3.42	9.30	3.40	5.67	3.39	6.87	3.46	16.64	3.47

08075730 VINCE BAYOU AT PASADENA, TX

LOCATION.--Lat 29°41'40", long 95°12'58", Harris County, Hydrologic Unit 12040104, on right bank of concrete-lined channel at end of West Ellaine Avenue in Pasadena and 2.4 mi upstream from mouth.

DRAINAGE AREA.--8.26 mi², revised.

PERIOD OF RECORDS.--October 1971 to current year.

Water-quality records.--Chemical, biochemical, and pesticide analyses: May 1971 to September 1973 and October 1976 to July 1979.

GAGE.--Water-stage recorder. Datum of gage is 2.54 ft below sea level, 1973 adjustment; unadjusted for land-surface subsidence (levels by the U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records fair.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	1030	1,790	14.44	Sept. 19	0200	3,820	17.61
Sept. 03	1715	1,470	13.87				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	74	1.2	.62	.38	2.2	.27	.50	3.9	3.3	1.6	26
2	16	96	1.1	.58	.61	.93	.32	.37	3.8	4.7	1.7	31
3	45	8.2	1.7	.47	.68	.67	.41	.48	.67	3.6	1.9	161
4	1.5	2.7	.82	.44	.75	.54	11	1.1	26	2.1	2.8	26
5	.91	1.5	1.6	11	.72	1.2	7.3	.99	4.8	2.3	2.1	7.6
6	1.1	1.2	.80	1.3	.69	.97	4.8	.92	1.3	2.8	2.1	4.3
7	1.1	1.1	1.4	1.1	.55	.45	4.2	2.5	1.7	1.8	3.1	3.2
8	1.2	1.3	.78	.89	3.0	.50	3.2	1.9	1.1	2.3	3.5	3.4
9	1.1	1.5	.80	.78	.78	.33	3.1	.70	.71	2.3	2.6	34
10	1.1	.99	1.1	.78	.58	.27	3.2	.69	.69	2.5	4.4	11
11	1.0	3.4	.79	1.0	.69	.50	4.2	21	.82	2.8	5.5	9.2
12	.84	1.1	.73	.86	.56	.48	2.9	2.5	1.3	4.8	2.6	6.0
13	2.0	1.2	1.5	.73	.55	.41	3.9	.60	6.5	5.0	12	3.3
14	4.6	1.9	.68	.72	.61	.49	2.3	.46	2.0	3.3	53	3.9
15	1.9	1.2	.30	.73	1.5	.37	2.0	.62	1.3	3.2	21	5.6
16	.75	2.2	.47	1.5	1.4	1.3	.74	1.3	1.3	2.9	7.1	3.4
17	.65	18	282	1.8	.79	.56	1.4	.77	2.6	4.9	2.3	5.8
18	.51	3.6	194	3.8	1.0	.34	.34	.61	4.4	18	1.7	24
19	.68	31	7.5	.92	1.8	.54	.25	.67	4.0	5.0	2.6	740
20	1.1	5.9	2.5	.73	1.9	.70	.22	.96	7.5	4.9	2.2	26
21	1.9	1.9	1.8	.91	2.5	.58	.67	1.5	6.0	1.9	1.8	7.2
22	1.8	4.8	1.2	.87	2.8	.81	39	1.1	9.0	2.4	55	4.9
23	1.0	1.9	.61	2.3	1.7	.57	6.8	1.1	90	1.6	39	3.4
24	1.5	1.5	.36	3.6	2.1	.42	.30	1.0	45	2.2	21	17
25	1.5	2.0	.35	.89	2.9	.63	.50	1.8	256	1.9	4.0	15
26	1.3	1.7	.33	13	2.4	.19	.21	2.5	21	10	6.6	37
27	1.2	1.5	.44	1.2	2.1	.27	.51	2.4	9.2	1.8	14	102
28	1.2	1.3	.53	.60	12	.23	.62	.92	105	1.4	64	12
29	3.2	1.3	.52	.80	2.6	.32	28	.83	32	1.5	46	4.0
30	14	1.5	13	1.1	---	.29	.60	1.1	4.7	1.8	67	3.4
31	1.9	---	1.1	.46	---	.29	---	1.5	---	1.7	11	---
TOTAL	115.44	277.39	522.01	56.48	50.64	18.35	133.26	55.39	654.29	110.7	465.2	1340.6
MEAN	3.72	9.25	16.8	1.82	1.75	.59	4.44	1.79	21.8	3.57	15.0	44.7
MAX	45	96	282	13	12	2.2	39	21	256	18	67	740
MIN	.51	.99	.30	.44	.38	.19	.21	.37	.67	1.4	1.6	3.2
AC-FT	229	550	1040	112	100	36	264	110	1300	220	923	2660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1996, BY WATER YEAR (WY)

	MEAN	14.6	15.9	13.4	18.7	12.9	11.3	12.2	17.8	27.7	14.7	13.4	18.6
MAX	87.4	41.1	35.0	57.7	40.3	36.8	57.6	49.8	87.0	87.4	78.1	113	
(WY)	1995	1987	1972	1980	1992	1979	1991	1981	1989	1979	1983	1979	
MIN	.64	1.71	1.49	1.82	1.67	.59	.38	.90	1.81	1.66	1.31	1.04	
(WY)	1979	1981	1989	1996	1988	1996	1983	1988	1990	1982	1980	1982	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1972 - 1996

ANNUAL TOTAL	5224.74	3799.75	
ANNUAL MEAN	14.3	10.4	
HIGHEST ANNUAL MEAN			15.9
LOWEST ANNUAL MEAN			32.1
HIGHEST DAILY MEAN	478	740	1610
LOWEST DAILY MEAN	.29	.19	.00
ANNUAL SEVEN-DAY MINIMUM	.45	.27	.04
INSTANTANEOUS PEAK FLOW		3820	4720
INSTANTANEOUS PEAK STAGE		17.61	18.30
ANNUAL RUNOFF (AC-FT)	10360	7540	11540
10 PERCENT EXCEEDS	23	17	26
50 PERCENT EXCEEDS	2.3	1.7	2.2
90 PERCENT EXCEEDS	.96	.50	.47

SAN JACINTO RIVER BASIN

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08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, HOUSTON, TX

LOCATION.--Lat 29°47'35", long 95°16'04", Harris County, Hydrologic Unit 12040104, on left bank at downstream side of downstream service road bridge of Interstate Highway 610 in northeast Houston and 8.8 mi upstream from mouth.

DRAINAGE AREA.--16.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1964 to current year. Prior to October 1973, published as "U.S. Highway 90-A, Houston".

REVISED RECORDS.--WDR IX-74-2: Drainage area, WDR IX-74-2: Drainage area, WDR IX-78-2: Drainage area, WDR IX-79-2: Drainage area, WDR IX-87-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is sea level, 1959 adjustment; unadjusted for land-surface subsidence. Prior to Oct. 1, 1972, water-stage recorder at site 1,800 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Low flow is largely maintained by wastewater and industrial effluent. The stage-discharge relationship is affected by seasonal vegetal growth during most years. Stage and rainfall radio-telemeter at station is operated by the Harris County Flood Control District. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 18	0900	1,450	32.87	June 25	1400	1,010	30.76
June 23	1800	1,120	31.30	Sept. 19	0400	1,460	34.09

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	19	4.7	5.2	3.8	5.8	3.0	3.5	2.8	8.2	3.8	7.2
2	44	27	5.0	5.1	3.8	5.4	2.9	6.8	17	6.7	3.7	6.0
3	30	37	5.0	4.7	3.7	4.4	3.2	3.8	7.7	5.2	3.5	6.2
4	5.5	5.5	4.9	4.3	3.6	4.0	3.2	3.6	4.6	4.6	3.5	6.8
5	3.5	3.8	5.3	7.0	3.7	3.6	3.3	3.6	8.8	4.6	3.5	5.2
6	3.1	3.4	6.5	11	3.7	3.4	3.3	3.4	7.2	4.5	6.3	4.7
7	3.0	3.2	5.4	5.9	3.8	3.1	3.3	3.2	4.0	4.5	5.9	14
8	2.9	3.6	18	5.3	3.6	2.9	3.2	3.5	3.7	5.1	4.7	9.8
9	2.8	3.1	23	5.1	3.5	2.9	3.1	4.5	5.7	4.4	4.2	30
10	3.0	2.6	6.7	5.1	3.5	2.9	3.2	3.5	4.2	4.3	45	9.9
11	3.5	6.9	6.0	4.8	3.5	2.8	3.2	3.7	3.7	4.4	50	5.1
12	3.6	3.2	6.0	4.5	3.4	2.7	3.2	3.5	3.6	4.1	35	4.8
13	3.5	2.7	6.9	4.5	3.2	2.7	3.5	3.4	3.4	4.2	26	4.4
14	3.3	2.9	5.7	4.7	3.3	3.0	3.5	3.8	3.6	4.1	17	4.3
15	3.0	2.9	5.6	4.5	3.3	3.0	3.3	3.5	5.1	4.0	7.4	6.9
16	3.0	3.4	5.6	3.9	3.2	3.0	3.1	3.4	4.0	4.0	5.5	5.9
17	3.0	4.1	338	6.3	3.1	3.1	3.1	3.5	3.6	6.3	22	26
18	3.1	6.3	567	4.1	3.1	3.2	3.1	3.4	4.4	7.2	19	18
19	3.1	92	37	4.7	3.4	3.2	3.3	3.2	4.0	4.8	8.3	606
20	3.8	30	13	4.6	3.7	5.7	3.2	3.1	49	4.3	5.6	38
21	3.1	9.8	11	5.1	3.8	8.2	3.2	2.9	25	4.1	6.4	17
22	2.9	6.4	9.9	4.3	3.6	4.0	130	3.0	199	4.0	41	8.2
23	2.8	5.9	6.3	4.8	3.5	3.8	143	3.0	384	3.9	16	6.1
24	2.4	5.3	5.6	6.3	3.5	4.4	8.3	3.1	173	9.7	7.4	22
25	2.7	5.1	5.4	4.2	3.5	4.6	5.5	2.9	438	7.4	6.4	24
26	3.0	5.0	5.2	4.9	3.3	3.2	4.7	2.9	58	14	8.9	22
27	3.0	4.9	5.0	5.5	3.1	2.9	4.4	3.1	15	6.5	10	322
28	3.2	5.0	5.1	4.2	3.1	3.0	4.6	3.0	12	4.4	6.1	46
29	2.9	5.1	5.0	4.2	3.1	3.1	18	2.7	36	4.1	66	11
30	3.5	4.9	6.7	4.0	---	3.4	5.7	2.6	39	3.9	41	7.5
31	3.4	---	6.3	3.8	---	3.1	---	2.8	---	3.8	15	---
TOTAL	167.2	320.0	1146.8	156.6	100.4	114.5	391.6	105.9	1529.1	165.3	504.1	1305.0
MEAN	5.39	10.7	37.0	5.05	3.46	3.69	13.1	3.42	51.0	5.33	16.3	43.5
MAX	44	92	567	11	3.8	8.2	143	6.8	438	14	66	606
MIN	2.4	2.6	4.7	3.8	3.1	2.7	2.9	2.6	2.8	3.8	3.5	4.3
AC-FT	332	635	2270	311	199	227	777	210	3030	328	1000	2590

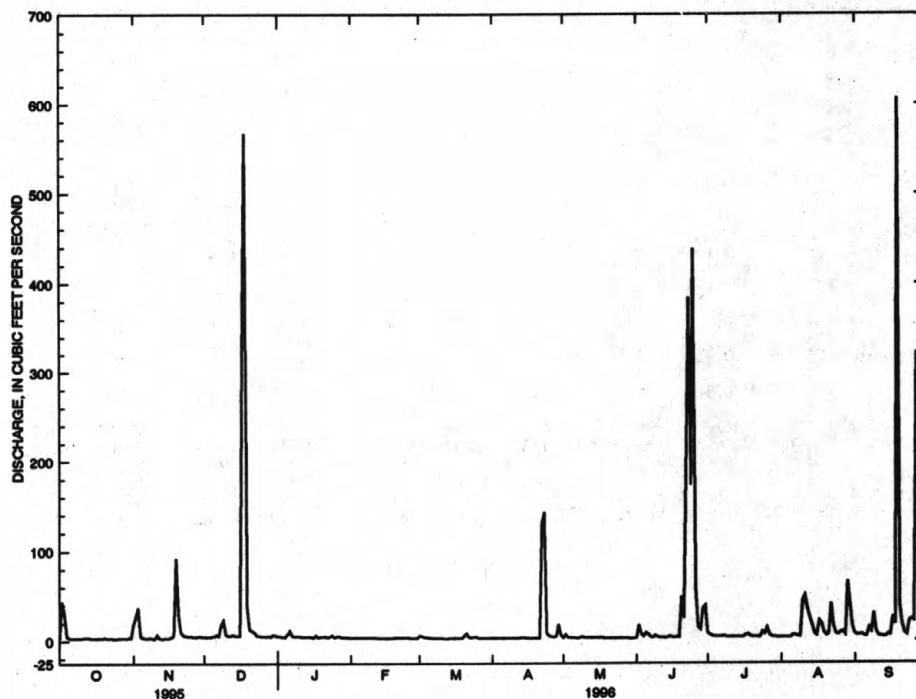
SAN JACINTO RIVER BASIN

08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, HOUSTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996, BY WATER YEAR (WY)

MEAN	24.9	20.0	21.2	28.6	24.8	24.5	22.4	29.4	35.8	17.2	17.9	26.8
MAX	154	51.8	68.0	99.4	107	113	83.0	91.1	136	83.4	121	194
(WY)	1995	1994	1987	1991	1992	1993	1979	1982	1973	1987	1983	1979
MIN	3.75	2.92	4.55	5.05	3.46	3.16	2.88	3.42	2.55	1.95	3.35	5.92
(WY)	1979	1968	1989	1996	1996	1965	1965	1996	1967	1964	1967	1982

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1964 - 1996
ANNUAL TOTAL	9219.2	6006.5	
ANNUAL MEAN	25.3	16.4	24.7
HIGHEST ANNUAL MEAN			45.2
LOWEST ANNUAL MEAN			6.97
HIGHEST DAILY MEAN	582 Jan 27	606 Sep 19	2730 Oct 18 1994
LOWEST DAILY MEAN	2.4 Oct 24	2.4 Oct 24	.88 Aug 24 1971
ANNUAL SEVEN-DAY MINIMUM	2.8 Oct 21	2.8 Oct 21	1.0 Jul 2 1965
INSTANTANEOUS PEAK FLOW		1460 Sep 19	3470 Jun 26 1989
INSTANTANEOUS PEAK STAGE		34.09 Sep 19	39.91 Jun 26 1989
ANNUAL RUNOFF (AC-FT)	18290	11910	17910
10 PERCENT EXCEEDS	33	22	39
50 PERCENT EXCEEDS	7.0	4.3	6.9
90 PERCENT EXCEEDS	3.3	3.0	3.2

08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, HOUSTON, TX
MEAN DAILY DISCHARGE (CFS)

08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, HOUSTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical, biochemical, and pesticide analyses: October 1968 to current year.

INSTRUMENTATION.--Stage-activated water sampler from July 1983 to September 1988 provided water-quality samples over selected runoff events.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	BOD OXYGEN DEMAND, BIOCHEM CARBON, 5 DAY (MG/L)	COLI-FORM, FECA, 0.7 UM-MF (COLS./100 ML)
FEB 26...	1130	5.4	865	7.8	22.0	13	7.5	11.0	125	3.0	2.8	150
MAY 29...	0944	3.6	972	7.9	28.0	15	15	5.3	68	3.6	3.0	310
AUG 26...	1042	4.7	695	7.4	28.0	25	7.4	5.2	67	1.7	1.2	2400
DATE	STREP-TOCOCCEI, FECA, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 26...	130	200	14	62	11	94	3	6.0	190	89	87	1.1
MAY 29...	630	210	34	65	11	110	3	8.2	170	110	110	1.1
AUG 26...	780	190	25	60	8.8	63	2	8.4	160	80	56	0.70
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+N03 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+N03 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
FEB 26...	6.0	501	19	15	4	6.90	6.90	0.100	7.00	7.00	0.030	0.77
MAY 29...	8.3	566	26	12	14	7.52	7.52	0.180	7.70	7.70	0.150	0.75
AUG 26...	12	411	19	<1	--	4.98	4.98	0.120	5.10	5.10	0.150	0.55
DATE	NITRO-GEN, AM-MONTA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
FEB 26...	0.80	0.630	0.520	1.6	7.3	3	90	<0.50	<1.0	<5.0	<3.0	<10
MAY 29...	0.90	0.930	0.900	2.8	9.7	5	95	<0.50	<1.0	<5.0	3.0	<10
AUG 26...	0.70	0.640	0.620	1.9	9.0	8	110	<0.50	<1.0	<5.0	<3.0	<10
DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB 26...	26	30	11	50	<0.1	<10	<10	<1	<1.0	370	<6	49
MAY 29...	9.0	<10	13	23	<0.1	<10	<10	<1	<1.0	390	8	42
AUG 26...	6.0	<10	9	65	<0.1	10	<10	<1	<1.0	380	<6	31
DATE	AME-IRYNE TOTAL (UG/L)	ATRA-ZINE WATER UNFLTRD REC (UG/L)	CYAN-AZINE TOTAL (UG/L)	METHO-MYL TOTAL (UG/L)	PROME-TONE TOTAL (UG/L)	PROME-TRYNE TOTAL (UG/L)	PRO-PAZINE TOTAL (UG/L)	PROPHAM TOTAL (UG/L)	CARB-ARYL UNFLT RECOVER (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIME-TRYNE TOTAL (UG/L)	
FEB 26...	<0.100	--	<0.200	<0.01/	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	
MAY 29...	<0.100	<0.200	<0.200	<0.01/	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	
AUG 26...	<0.100	--	<0.200	<0.01/	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	

SAN JACINTO RIVER BASIN

08075900 GREENS BAYOU NEAR U.S. HIGHWAY 75 NEAR HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°57'22", long 95°24'57", Harris County, Hydrologic Unit 12040104, on right bank at upstream side of bridge on Knobcrest Street, 600 ft downstream from U.S. Highway 75 access road bridge, 8.9 mi upstream from station 08076000, and 20.9 mi upstream from Halls Bayou.

DRAINAGE AREA.--36.6 mi².

PERIOD OF RECORD.--August 1965 to September 1980 and Mar. 27, 1981 to September 1992 (daily mean discharge). Oct. 1, 1980 to Mar. 26, 1981 (discharge measurements and supplemental peak discharges only). October 1992 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WDR TX-76-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is sea level; unadjusted for land-surface subsidence. Prior to July 19, 1989, water-stage recorder at site 600 ft upstream at present datum.

REMARKS.--Records good. Rain gage at station. Radio telemeter at station.

AVERAGE DISCHARGE.--26 years (water year 1966-80, 1982-1992), 40.5 ft³/s (29,370 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s June 26, 1989 (elevation, 90.20 ft. from peak mark at former site); maximum elevation, 91.09 ft Feb. 21, 1969 at former site, occurred prior to 1980-81 channel rectification; minimum daily discharge, 0.16 ft³/s Oct. 21, 22, 1969.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 18	0730	3,240	79.70	Sept. 24	1600	2,210	77.90
Aug. 10	2300	1,900	77.29				

080/6000 GREENS BAYOU NEAR HOUSTON, TX

LOCATION.--Lat 29°55'05", long 95°18'24", Harris County, Hydrologic Unit 12040104, on right bank at downstream side of bridge on U.S. Highway 59 access road, 10.5 mi northeast of Houston, 12.0 mi upstream from Halls Bayou, and 23.4 mi upstream from mouth.

DRAINAGE AREA.--68.7 mi². October 1952 to Sept. 30, 1973, 72.7 mi²; Oct. 1, 1973 to Sept. 30, 1988, 69.6 mi². Basin boundary changes due to relocation of drainage ditches.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1/32: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.66 ft below sea level, 1957 adjustment; unadjusted for land-surface subsidence.

REMARKS.--Records fair. Channel was rectified during water years 1974-75. No known diversion above station. Low flow is sustained by Houston Lighting and Power Co. effluent, (which is obtained from ground-water sources) and waste water effluent from Houston suburbs. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 19	1600	2,890	56.68	Sept. 19	0500	2,440	53.30
Dec. 18	0930	4,420	57.80	Sept. 27	1300	2,640	54.00

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	e/5	25	41	e28	56	25	28	25	29	28	89
2	254	e45	25	30	e41	35	26	25	145	29	27	44
3	695	e/3	27	28	e32	32	27	25	121	29	25	38
4	99	e28	27	26	e36	31	26	25	42	25	25	43
5	51	e58	25	44	e36	31	28	26	43	24	27	36
6	48	e36	27	263	38	31	38	28	31	24	35	46
7	50	e26	26	43	44	27	30	28	26	24	33	477
8	47	e24	54	35	35	20	26	27	24	26	29	64
9	46	e24	87	25	32	21	29	28	22	27	76	73
10	50	29	35	31	29	22	29	28	22	25	801	97
11	38	106	34	31	26	25	28	39	24	23	800	48
12	31	119	36	29	25	27	29	34	25	24	63	45
13	33	119	32	28	33	28	60	27	33	27	53	47
14	e28	e26	30	27	35	29	30	27	38	25	88	44
15	e26	e24	28	28	28	27	27	29	30	37	50	135
16	e26	e24	33	30	24	27	29	26	27	71	33	86
17	e24	75	892	30	22	26	28	25	27	89	30	53
18	e24	121	1860	40	29	25	27	22	35	33	30	162
19	e26	780	156	22	30	21	28	21	419	36	36	1100
20	e30	185	51	38	29	21	27	23	189	31	28	263
21	e26	47	39	49	28	20	27	23	123	28	73	118
22	e28	32	38	35	29	21	288	22	158	26	202	61
23	e26	30	32	35	28	25	449	23	709	26	82	53
24	e24	24	28	40	27	28	39	24	298	27	56	726
25	e24	26	27	28	28	31	27	25	901	30	36	672
26	e26	26	25	32	32	27	28	24	203	43	247	257
27	e24	28	28	28	35	25	28	22	53	37	229	1130
28	e24	27	27	29	49	25	27	24	33	39	107	212
29	e28	25	28	31	78	24	77	25	91	34	329	58
30	e34	24	124	29	---	27	43	23	51	29	1290	41
31	e28	---	285	24	---	27	---	29	---	43	263	---
TOTAL	2038	2286	4191	1229	966	842	1630	805	3968	1020	5231	6318
MEAN	65.7	76.2	135	39.6	33.3	27.2	54.3	26.0	132	32.9	169	211
MAX	695	780	1860	263	78	56	449	39	901	89	1290	1130
MIN	24	24	25	22	22	20	25	21	22	23	25	36
AC-FT	4040	4530	8310	2440	1920	1670	3230	1600	7870	2020	10380	12530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1996, BY WATER YEAR (WY)

MEAN	68.5	66.6	70.1	78.4	89.9	62.8	75.8	109	101	53.2	47.1	72.2
MAX	353	338	293	284	353	262	328	480	549	291	330	443
(WY)	1985	1975	1992	1991	1961	1992	1973	1989	1973	1961	1983	1961
MIN	.000	.000	.000	.058	.35	.045	.13	.25	.12	.45	.81	1.97
(WY)	1953	1956	1955	1957	1957	1955	1956	1956	1954	1957	1957	1956

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1953 - 1996

ANNUAL TOTAL	36085.9	30524	74.4
ANNUAL MEAN	98.9	83.4	180
HIGHEST ANNUAL MEAN			6.82
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	1860	Dec 18	10700
LOWEST DAILY MEAN	9.9	Jul 28	.00
ANNUAL SEVEN-DAY MINIMUM	14	Jul 22	.00
INSTANTANEOUS PEAK FLOW			16500
INSTANTANEOUS PEAK STAGE			66.04
ANNUAL RUNOFF (AC-FT)	71580	60540	53860
10 PERCENT EXCEEDS	186	138	131
50 PERCENT EXCEEDS	36	30	22
90 PERCENT EXCEEDS	22	24	1.7

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical, biochemical, and pesticide analyses: October 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	BOD OXYGEN DEMAND, BIOCHEM. CARBON, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	
FEB 26...	0935	34	815	8.3	22.0	22	20	6.7	77	2.4	2.0	100	
MAY 29...	0808	27	915	7.9	29.0	20	20	5.4	71	1.4	1.3	4000	
AUG 26...	0905	36	648	7.9	23.0	25	20	5.6	66	1.6	1.2	1200	
DATE	TIME	STREP-TOCOC1 FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CaCO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 26...	80	1/0	0	56	7.7	100	3	8.2	180	52	96	0.40	
MAY 29...	1200	180	12	60	7.4	110	4	8.5	170	80	110	0.50	
AUG 26...	1300	140	0	45	5.6	72	3	7.7	140	45	75	0.30	
DATE	TIME	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
FEB 26...	23		487	36	10	26	6.31	6.31	0.190	6.50	6.50	0.240	0.76
MAY 29...	30		538	41	9	32	5.23	5.23	0.070	5.30	5.30	0.110	0.69
AUG 26...	21		385	36	24	12	5.40	5.40	0.100	5.50	5.50	0.080	0.62
DATE	TIME	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
FEB 26...	1.0	2.00	1.90	5.8	6.8	8	240	<0.50	<1.0	<5.0	<3.0	<10	
MAY 29...	0.80	2.10	2.00	6.1	5.0	7	260	<0.50	<1.0	<5.0	<3.0	<10	
AUG 26...	0.70	1.60	1.50	4.6	7.3	8	210	<0.50	<1.0	<5.0	<3.0	<10	
DATE	TIME	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB 26...	15	<10		19	22	<0.1	20	<10	<1	<1.0	390	<6	21
MAY 29...	<3.0	40		19	11	<0.1	<10	<10	1	<1.0	430	<6	20
AUG 26...	<3.0	<10		12	9.0	<0.1	<10	<10	<1	<1.0	320	<6	19
DATE	TIME	AME-TRYNE TOTAL (UG/L)	ATRA-ZINE WATER UNFLTRD REC (UG/L)	CYAN-AZINE TOTAL (UG/L)	METHO-MYL TOTAL (UG/L)	PROME-TONE TOTAL (UG/L)	PROME-TRYNE TOTAL (UG/L)	PRO-PAZINE TOTAL (UG/L)	PROPHAM TOTAL (UG/L)	CARB-ARYL UNFILT RECOVER (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIME-TRYNE TOTAL (UG/L)	
FEB 26...		<0.100	0.100	<0.200	<0.017	<0.200	<0.100	0.200	<0.015	<0.013	<0.100	<0.100	
MAY 29...		<0.100	<0.100	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	
AUG 26...		<0.100	--	<0.200	<0.017	<0.200	<0.100	<0.100	<0.015	<0.013	<0.100	<0.100	

SAN JACINTO RIVER BASIN

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08076180 GARNERS BAYOU NR HUMBLE, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°56'03", long 95°14'02", Harris County, Hydrologic Unit 12040104, on left bank at downstream side of upstream bridge on Beltway 8, 0.2 mi downstream from Williams Gully, 1.2 mi upstream from Greens Bayou, and 4.5 mi southeast of Humble.

DRAINAGE AREA.--31.0 mi².

PERIOD OF RECORD.--February 1986 to September 1993 (daily mean discharge); October 1993 to present (peaks above base discharge).

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is sea level, 1978 adjustment, furnished by Harris County Flood Control District.

REMARKS.--Records fair. No known diversion above station. Low flow is sustained by wastewater effluent from Humble suburbs. Minor channel rectification made in 1988. Radio telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 18	0800	1,420	49.00	Sept. 27	1300	1,610	50.09

SAN JACINTO RIVER BASIN

08076500 HALLS BAYOU AT HOUSTON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°51'42", long 95°20'05", Harris County, Hydrologic Unit 12040104, on right bank, at downstream side of bridge on Jensen Drive in northeast section of Houston, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--28.7 mi². Oct. 1, 1973, to Sept. 30, 1977, 28.3 mi². Oct. 1, 1977 to Sept. 30, 1988, 27.6 mi². Prior to Oct. 1, 1973, 24.7 mi². Changes were the result of drainage ditch extensions or relocations.

PERIOD OF RECORD.--October 1952 to September 1993 (daily mean discharge); October 1993 to present (peak discharges greater than base discharge).

Water-quality records.--Chemical, biochemical, and pesticide analyses: October 1968 to September 1984.

REVISED RECORDS.--WSP 1/32: Drainage area.

GAGE.--Records good. Water-stage recorder. Datum of gage is 0.66 ft below sea level, 1957 adjustment; unadjusted for land-surface subsidence.

REMARKS.--Stage discharge relationship is affected by seasonal vegetal growth during most years. No known diversions above station. Low flow is sustained by wastewater effluent from Houston suburbs. Rain gage at station. Radio telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	0900	2,100	55.68	Sep. 27	1300	1,600	54.40

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LOCATION.--Lat 29°50'13", long 95°13'59", Harris County, Hydrologic Unit 12040104, on right bank at downstream side of Ley Road Bridge in northeast Houston and 300 ft downstream from mouth of Hall's Bayou.

PERIOD OF RECORD.--November 1962 to December 1964, May to September 1971 (discharge measurements only), October 1971 to Sept. 12, 1991, and August 12, 1992 to current year (highwater records only).

Water-quality records: Chemical, biochemical, and pesticide analyses: October 1970 to September 1981.

REMARKS.--Records good. Discharge is computed for all storms that produce peak discharges above 2,000 ft³/s. Gage was discontinued on Sept. 12, 1991 for bridge construction and temporarily relocated about 1 mile downstream at US Highway 90 to obtain stage data for the Harris County Flood Control District. Gage was moved back to Ley Road on Aug. 12, 1992 at current datum. Rain gage at station. Radio telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s June 27, 1989 (gage height, 39.40 ft, from peak mark); minimum not determined (affected by tide).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1430	6,490	23.30	Sept. 27	1830	4,930	20.45
Sept. 19	1100	4,210	18.77				

[illegible]

CLEAR CREEK BASIN

08077540 CLEAR CREEK AT FRIENDSWOOD TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°32'31", long 95°11'48", Harris-Galveston County line, Hydrologic Unit 12040204, on left bank at left downstream side of bridge on Farm Road 2351 at Friendswood.

DRAINAGE AREA.--99.6 mi².

PERIOD OF RECORD.--April 1994 to current year (peak discharges greater than base discharge).
Water-quality records.--Chemical analysis: May 1971 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is sea level, furnished by Harris County Flood Control District.

REMARKS.--Records good. Radio telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Elevation (ft)	Date	Time	Discharge (ft ³ /s)	Elevation (ft)
Dec. 17	2230	3,440	11.98	June 25	2000	2,820	10.39

08077650 MOSES LAKE-GALVESTON BAY NEAR TEXAS CITY, TX

LOCATION.--Lat 29°26'50", long 94°55'12", Galveston County, Hydrologic Unit 12040204, 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 mi north of Texas City.

PERIOD OF RECORD.--May 1967 to current year. Maximum and minimum elevations for Galveston Bay and maximum elevation for Moses Lake.

GAGE.--Water-stage recorders. Datum of gage is sea level (levels by county engineer, Galveston County), 1978 adjustment. Prior to May 19, 1983, datum of gage was 0.49 ft below sea level, 1973 adjustment. Prior records unadjusted for land-surface subsidence.

REMARKS.--Records poor. Moses Lake is connected to Galveston Bay by gated opening through levee. These gates are open during periods of normal tide and are closed during periods of high tide and hurricane surge. Rain gage at station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation (Moses Lake), 4.4 ft Sept. 20, 1979; minimum, -4.2 ft Feb. 28, 1983. Maximum elevation (Galveston Bay), about 10.0 ft (Hurricane Alicia) Aug. 18, 1983; minimum, about -4.2 ft Feb. 28, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum elevation (Moses Lake), 2.7 ft Oct. 31 at 0700 hours; minimum -2.6 ft Jan. 19 at 1200 hours. Maximum elevation (Galveston Bay), 3.0 ft Oct. 2 at 0930 hours; minimum, -3.3 Jan. 19 at 1045 hours.

DAY	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996											
	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN
		OCTOBER		NOVEMBER			DECEMBER			JANUARY		
1	2.0	2.8	1.3	1.7	1.8	.9	1.1	1.1	.2	1.1	1.2	.2
2	1.7	3.0	1.7	1.3	1.4	.8	.6	.6	-.2	.7	.5	-1.8
3	1.8	2.9	.7	1.0	1.0	.1	.6	.7	-.3	-.9	-.5	-2.3
4	1.5	2.1	1.1	1.5	1.5	.7	.5	.6	-.6	.2	.5	-1.1
5	2.0	2.2	.8	1.6	1.7	.7	.6	.7	-.6	.6	.6	-.6
6	1.2	1.3	.6	1.7	1.7	.5	.6	.7	-.7	.5	.6	-1.4
7	1.7	1.8	.6	1.3	1.3	-.2	.7	.8	-.7	-1.0	-1.2	-2.3
8	1.5	1.5	.4	.8	1.3	-.3	1.2	1.6	.1	-.5	-.2	-1.4
9	1.3	1.5	.5	1.5	1.7	.5	1.2	1.3	-1.1	.0	.1	-1.1
10	1.2	1.3	.2	2.0	2.0	.7	.3	.6	-.4	-.3	-.2	-1.0
11	1.2	1.6	.4	1.6	1.8	-1.3	.8	.9	-.2	.0	.0	-.8
12	2.0	1.9	.9	.4	1.0	-.3	1.0	1.1	-.1	-.4	-.2	-.9
13	1.9	1.9	.9	1.3	1.3	.0	.9	1.0	.0	.2	.3	-.6
14	1.9	2.0	.0	.8	1.0	.1	.7	1.1	.2	.5	.5	-.4
15	1.3	1.3	.6	1.0	1.1	.0	1.0	1.2	.3	.5	.5	-.7
16	1.7	1.7	.6	.6	.7	.0	.9	1.0	.3	.4	.8	-.8
17	1.9	1.9	1.0	1.1	1.1	.4	2.5	1.9	.5	1.2	1.7	-.3
18	2.0	2.1	1.0	1.2	1.2	.5	2.5	2.0	.1	1.7	1.9	-1.7
19	1.7	1.7	1.2	1.2	1.3	.6	.6	.1	-1.7	-1.0	-.5	-3.3
20	1.5	1.9	.2	1.2	1.2	-.1	-.1	.4	-1.6	.5	.9	-.5
21	1.1	1.2	.5	1.0	1.0	-.2	.8	1.2	-.5	1.0	1.0	-.4
22	1.6	1.6	.7	1.0	1.3	-.2	1.2	1.2	-.4	.6	.7	-.3
23	1.8	1.9	.9	1.3	1.5	-.2	.8	.9	-.8	.9	1.2	.1
24	1.2	1.2	-.5	1.0	1.1	-.9	.6	.7	-.7	.9	1.0	-.5
25	1.4	1.8	.5	.8	.9	-.5	.6	.6	-.7	1.3	1.5	.2
26	1.8	1.9	.2	1.0	1.0	-.3	.2	.2	-1.0	1.6	1.7	.8
27	1.8	1.9	.3	1.2	1.3	-.1	.0	.0	-.6	1.1	.8	-.4
28	1.5	1.7	.2	.8	1.0	-.8	.7	.7	.0	1.4	1.5	.3
29	2.1	2.1	1.2	.3	.4	-.2	.8	1.0	.1	1.4	1.5	.2
30	2.6	2.5	2.0	.7	1.0	.0	1.2	1.3	.6	1.0	1.1	-.3
31	2.7	2.7	1.1	---	---	---	1.2	1.2	.0	.7	.9	-.7
MONTH	2.7	3.0	-.5	2.0	2.0	-1.3	2.5	2.0	-1.7	1.7	1.9	-3.3

COASTAL BASIN

08077650 MOSES LAKE-GALVESTON BAY NEAR TEXAS CITY, TX--Continued

DAY	MAX	ELEVATION (FEET NGVD),				WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996				MAX	MAX	MIN
		MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN			
		FEBRUARY		MARCH		APRIL		MAY				
1	1.1	1.2	.0	1.0	1.2	.2	.2	.2	-.7	1.0	1.0	.0
2	1.2	1.2	-.6	1.1	1.2	.0	.5	.6	.0	1.0	1.0	-.1
3	.0	.0	-1.2	.6	.7	.0	.6	.6	.0	1.0	1.0	-.2
4	-.4	-.2	-1.2	.8	.9	.3	.6	.7	-.2	1.0	1.0	-.3
5	.3	.5	-.5	1.1	1.2	.5	.6	.8	-.3	1.0	1.0	-.3
6	.6	.7	-.2	1.0	1.0	.4	.2	.3	-.6	1.0	1.1	-.4
7	.4	.5	-.1	.8	.9	-1.8	.9	.9	-.4	1.2	1.2	-.2
8	.4	.5	-.2	-.3	-.2	-1.4	.8	.9	-.1	1.2	1.3	.0
9	.3	.5	.0	.4	.4	-.6	.9	.9	-.5	1.4	1.4	.2
10	.5	.6	-.1	.3	.3	-.4	1.1	1.2	-.1	1.3	1.3	.5
11	.5	.5	-.3	.4	.4	-.3	1.1	1.1	.2	.9	1.1	.3
12	.3	.4	-1.2	.9	.9	-.3	1.0	1.1	.2	.6	.6	.1
13	.3	.5	-.7	.7	.8	-.3	1.1	1.2	.1	.7	.8	.0
14	.4	.5	-.6	.8	.9	-.5	.7	.8	.1	.6	.7	-.1
15	.4	.4	-.7	.8	1.0	-.4	.7	.6	-1.1	1.0	1.0	-.2
16	.3	.1	-1.4	1.0	1.0	.0	.4	.4	-1.0	.9	.9	-.3
17	.2	.4	-.9	.9	1.0	.1	.8	.9	.0	.9	1.0	-.3
18	.3	.4	-.9	.9	1.0	-1.8	1.0	1.1	.1	1.1	1.2	-.2
19	.7	.9	-.2	-1.3	-1.2	-1.9	.9	.9	-.1	.9	1.0	-.3
20	.2	.2	-.6	-1.3	-1.3	-2.2	1.3	1.2	.1	1.2	1.2	-.2
21	.2	.3	-.3	-.6	-.5	-2.2	1.5	1.4	.0	1.1	1.1	.0
22	.4	.5	-.2	-.3	-.3	-1.0	1.6	1.6	.0	.7	.8	-.2
23	.3	.3	-.3	.6	.6	-.9	1.4	1.0	-.1	.8	.8	-.2
24	.3	.3	-.4	1.2	1.2	-.1	1.1	.9	-.5	1.0	1.0	---
25	.7	.7	-.5	.9	.8	-.1	1.1	.9	.0	1.2	1.2	.6
26	.7	.8	-.1	1.3	1.4	-.2	.7	.7	.1	1.4	1.5	.8
27	.7	.8	-.1	1.3	1.3	.4	.9	.8	-.2	1.4	1.4	.6
28	.7	.6	-.4	1.2	1.2	-.1	1.2	1.2	.6	1.1	1.2	.2
29	.8	1.0	-.3	.9	1.0	-.4	1.1	1.3	-.9	1.0	1.0	.2
30	---	---	---	1.0	1.1	.4	.4	.4	-.9	1.4	1.6	.1
31	---	---	---	.8	.8	-.4	---	---	---	1.5	1.5	.1
MONTH	1.2	1.2	-1.4	1.3	1.4	-2.2	1.6	1.6	-1.1	1.5	1.6	---
DAY	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN
		JUNE		JULY		AUGUST		SEPTEMBER				
1	1.6	1.7	.2	.9	1.0	-.3	.5	.6	-.2	1.0	1.0	.1
2	1.2	1.2	-.2	1.0	1.1	-.4	.3	.4	-.2	---	---	---
3	1.1	1.2	-.4	.8	.9	-.3	.4	.5	-.3	---	---	---
4	1.1	1.2	-.3	.6	.7	-.3	.6	.6	.0	---	---	-.2
5	.9	1.0	-.2	.5	.6	-.1	1.0	1.0	.0	1.1	1.2	.0
6	.9	1.0	-.2	.4	.5	.1	1.1	1.1	.1	1.0	1.1	-.3
7	.7	.8	.0	.6	.7	.2	1.3	1.5	.1	.8	.9	-.2
8	.4	.2	-.6	.7	.8	-.5	1.2	1.2	-.2	.7	.9	-.4
9	.0	.1	-.5	.5	.6	-.3	.9	.9	-.4	.7	.8	-.4
10	.4	.6	-.5	.4	.5	-.6	.6	.6	-.5	.6	.8	-.3
11	.7	.8	-.3	---	---	-.7	.5	.5	-.9	.6	.6	-.4
12	.9	1.0	-.2	.6	.6	-.8	.3	.4	-.9	.7	.7	.0
13	.9	.9	-.4	.5	.5	-.8	.5	.5	-.8	.8	.8	.1
14	---	---	---	.7	.7	-.7	.4	.5	-.5	.9	.9	.3
15	---	---	---	.6	.6	-.6	.5	.5	-.5	1.2	1.2	.5
16	---	---	---	.9	.9	-.7	.5	.5	-.1	1.0	1.0	-.5
17	---	---	---	1.2	1.2	-.1	.6	.7	.2	.6	.6	-.4
18	---	.8	---	1.2	1.2	.2	---	---	---	1.1	1.3	.1
19	---	.5	-.6	1.0	.9	.0	---	---	---	1.3	1.5	.1
20	---	---	-.5	.6	.6	-.1	1.1	1.1	.3	1.3	1.4	.0
21	---	---	---	.5	.5	-.1	---	---	---	1.2	1.5	-.2
22	---	.6	-.1	.4	.3	-.5	2.5	---	---	1.0	1.1	-.1
23	---	1.1	.0	.2	.1	-.9	2.2	2.6	.9	1.3	1.3	.2
24	---	.9	.0	.4	.4	-.8	1.9	1.9	.3	1.3	1.5	.2
25	1.0	1.1	.0	.4	.4	-.9	1.4	1.5	---	1.2	1.2	.1
26	.8	.9	-.3	.6	.7	-.7	---	---	---	1.6	1.7	.7
27	.6	.8	-.6	1.0	1.0	-.4	---	---	---	1.6	1.6	.5
28	.6	.8	-.6	---	---	---	---	---	---	1.1	.9	.0
29	.7	.8	-.6	---	---	---	1.1	1.2	---	1.3	1.6	.6
30	.8	.9	-.6	1.1	1.0	---	1.1	1.1	.2	1.6	1.6	.5
31	---	---	---	.8	.9	-.4	.9	1.0	.3	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

HIGHLAND BAYOU BASIN

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08077740 LAMARQUE LEVEE PUMP STATION NEAR LAMARQUE, TX

LOCATION.--Lat 29°20'44", long 94°57'47", Galveston County, Hydrologic Unit 12040204, in the LaMarque Levee pumping station on the LaMarque hurricane protection levee, one orifice located landward and one seaward, 0.5 mi southwest of Interstate Highway 45, 0.9 mi south of LaMarque, 4.8 mi northwest of Virginia Point.
 Supplementary gage (station 08077752).--Lat 29°20'26", long 94°51'00", 4,000 ft southeast along LaMarque Levee from LaMarque Levee Pumping Station.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Water-stage recorders. Datum of gages are sea level, (levels by Galveston County Engineer).

REMARKS.--Records fair. Landward orifice records elevation of flood runoff behind levee. This runoff is pumped into Jones Bay. Only maximum landward elevations equal or exceeding, -3.0 ft are shown. Seaward records are tidal but influenced by runoff in Highlands Bayou. Rain gage at station. Radio and telephone telemeter at station.
 Supplementary gage: Records fair. Landward orifice records elevation of flood runoff behind levee. Seaward records are equivalent to seaward records at primary station. A channel connects site to pumping station. Water will be pumped, or drained by gravity, into Jones Bay depending on elevation of seaward water-surface. Only elevations equal or exceeding -2.0 ft are shown. Radio telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation (landward) 3.5 ft July 26, 1989; maximum elevation (seaward) 3.6 ft Oct. 15, 1989; minimum (seaward), -2.0 ft Apr. 11, 1988. Supplementary gage: Maximum elevation (landward) 11.0 ft June 7, 1992; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation (landward), 3.4 ft Dec. 17 at 1900; maximum elevation (seaward), 3.3 ft Dec. 17 at 1930 hours; minimum (seaward), -1.4 ft Jan. 3 at 1330 hours.
 Supplemental gage: Maximum elevation (landward), 3.1 ft Dec. 17 at 1900 hours; minimum not determined.

DAY	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996											
	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX
	OCTOBER				NOVEMBER				DECEMBER			
1	---	2.5	1.5	---	---	1.8	1.0	---	---	1.1	.3	---
2	---	2.9	1.9	---	---	1.4	.7	---	---	.7	.1	---
3	---	2.5	1.1	---	---	.8	.2	---	---	.8	-.1	---
4	---	2.2	1.2	---	---	1.6	.5	---	---	.6	-.3	---
5	---	2.2	1.1	---	---	1.7	.9	---	---	.6	-.2	---
6	---	1.4	.9	---	---	1.8	.8	---	---	.7	-.3	---
7	---	1.8	.7	---	---	1.3	.0	---	---	.8	-.4	---
8	---	1.5	.6	---	---	1.3	-.1	---	---	1.3	.4	---
9	---	1.5	.7	---	---	1.8	.8	---	---	.9	-.8	---
10	---	1.2	.3	---	---	2.0	1.0	---	---	.7	-.1	---
11	---	1.5	.5	---	---	1.6	-.5	---	---	1.0	.1	---
12	---	2.0	1.1	---	---	.9	.0	---	---	1.1	.2	---
13	---	1.9	1.0	---	---	1.3	.2	---	---	1.0	.1	---
14	---	1.8	.4	---	---	.9	.2	---	---	1.0	.3	---
15	---	1.5	.9	---	---	1.1	.2	---	---	1.1	.4	---
16	---	1.7	.7	---	---	.7	.1	-1.6	---	1.0	.3	---
17	---	1.9	1.1	---	---	1.0	.4	-1.7	3.4	3.3	.7	---
18	---	2.0	1.1	---	---	1.2	.7	---	2.9	3.0	.7	---
19	---	1.7	1.2	---	---	1.3	.6	---	---	.7	-.8	-1.7
20	---	1.5	.4	-1.5	---	1.2	.2	---	---	.3	-1.0	---
21	---	1.2	.5	---	---	1.0	.0	---	---	1.1	-.2	---
22	---	1.6	1.0	---	---	1.3	.2	---	---	1.3	.0	---
23	---	1.9	1.0	---	---	1.5	.2	---	---	1.0	-.2	---
24	---	1.1	.0	---	---	.9	-.4	---	---	.7	-.3	---
25	---	1.7	.6	---	---	.9	-.1	---	---	.6	-.4	---
26	---	1.8	.7	---	---	1.1	.1	---	---	.2	-.7	---
27	---	1.9	.7	---	---	1.3	.1	---	---	.1	-.4	---
28	---	1.4	.5	---	---	.8	-.4	---	---	.8	.1	---
29	---	2.1	1.3	---	---	.5	-.1	---	---	1.0	.2	---
30	---	2.6	2.0	---	---	.9	.1	---	---	1.2	.7	---
31	---	2.8	1.3	---	---	---	---	---	---	1.2	.2	---
MONTH	---	2.9	.0	---	---	2.0	-.5	---	---	3.3	-1.0	---

HIGHLAND BAYOU BASIN

08077740 LAMARQUE LEVEE PUMP STATION NEAR LAMARQUE, TX--Continued

DAY	MAX	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996										
		MAX	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX
		JANUARY				FEBRUARY				MARCH		
1	---	1.2	.4	---	---	1.1	.1	---	---	1.1	.5	---
2	---	.5	-1.3	---	---	1.0	-.4	---	---	1.0	.2	---
3	---	-.6	-1.4	---	---	.1	-.8	---	---	.6	.1	---
4	---	.4	-.6	---	---	-.2	-.9	---	---	.9	.5	---
5	---	.6	-.2	---	---	.5	-.2	---	---	1.2	.7	---
6	---	.5	-.8	---	---	.7	.0	---	---	1.0	.3	---
7	---	-.7	-1.4	---	---	.5	.0	---	---	.3	-1.3	---
8	---	-.2	-1.3	---	---	.5	.0	---	---	-.3	-1.3	---
9	---	.1	-.7	---	---	.5	.1	---	---	.5	-.6	---
10	---	.2	-.7	---	---	.6	.0	---	---	.3	-.3	---
11	---	.0	-.8	---	---	.4	-.4	---	---	.4	-.4	---
12	---	-.4	-1.1	---	---	.4	-.9	---	---	.9	-.2	---
13	---	.3	-.7	---	---	.4	-.5	---	---	.8	.0	---
14	---	.5	-.3	---	---	.4	-.4	---	---	.8	-.2	---
15	---	.5	-.4	---	---	.4	-.6	---	---	.9	-.2	---
16	---	.7	-.3	---	---	.1	-1.1	---	---	1.0	.1	---
17	---	1.7	.2	-1.6	---	.2	-.6	---	---	1.1	.3	---
18	---	1.9	-.7	---	---	.4	-.4	---	---	1.1	-1.0	---
19	---	-.4	-1.4	---	---	.8	.0	---	---	-1.0	-1.4	---
20	---	.8	-.4	---	---	.3	-.3	---	---	-.8	-1.4	---
21	---	1.0	-.1	---	---	.4	-.1	---	---	-.6	-1.4	---
22	---	.8	.0	---	---	.5	-.2	---	---	-.2	-1.0	---
23	---	1.0	.4	---	---	.4	-.1	---	---	.6	-.7	---
24	---	.7	-.3	---	---	.3	-.4	---	---	1.2	.2	---
25	---	1.4	.1	---	---	.8	-.2	---	---	.9	.0	---
26	---	1.5	.8	---	---	.8	.1	---	---	1.2	-.3	---
27	---	.8	-.2	---	---	.8	.0	-1.6	---	1.3	.7	---
28	---	1.4	.2	---	---	.5	-.5	---	---	1.0	.1	---
29	---	1.4	.4	---	---	1.0	-.2	---	---	.9	-.3	---
30	---	1.0	.1	---	---	---	---	---	---	1.0	.4	---
31	---	.7	-.5	---	---	---	---	---	---	.7	-.3	---
MONTH	---	1.9	-1.4	---	---	1.1	-1.1	---	---	1.3	-1.4	---
DAY	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX	MIN	MAX
		APRIL				MAY				JUNE		
1	---	.2	-.4	---	---	.9	.1	---	---	1.6	.5	---
2	---	.6	-.1	---	---	.9	.2	---	---	1.2	.3	---
3	---	.7	.2	---	---	1.0	.1	---	---	1.1	-.1	---
4	---	.6	.0	---	---	.9	.1	---	---	1.0	-.1	---
5	---	.5	-.2	---	---	1.0	.1	---	---	.9	.1	---
6	---	.3	-.5	---	---	1.0	.0	---	---	.9	.1	-.9
7	---	1.0	-.3	---	---	1.1	.0	---	---	.7	.1	---
8	---	.9	.0	---	---	1.2	.3	---	---	.3	-.6	---
9	---	.9	-.3	---	---	1.4	.4	---	---	.3	-.4	---
10	---	1.1	.0	---	---	1.4	.7	---	---	.6	-.1	---
11	---	1.1	.3	---	---	1.0	.3	---	---	.7	.0	---
12	---	1.2	.4	---	---	.6	.2	---	---	.9	.0	---
13	---	1.2	.2	---	---	.8	.1	---	---	.9	.0	---
14	---	.8	.2	---	---	.8	.1	---	---	.7	-.1	---
15	---	.4	-.7	---	---	1.1	.3	---	---	.7	-.2	---
16	---	.4	-.8	---	---	.9	.2	---	---	.8	-.2	---
17	---	.8	.0	---	---	1.0	.0	---	---	.6	-.3	---
18	---	1.1	.3	---	---	1.1	.2	---	---	.6	-.3	---
19	---	.9	.1	---	---	.9	.1	---	---	.5	-.3	---
20	---	1.2	.2	---	---	1.1	.2	---	---	.5	-.3	---
21	---	1.6	.3	---	---	1.1	.2	---	---	.7	-.2	---
22	---	1.5	.9	---	---	.7	.0	---	---	.9	.1	---
23	---	1.0	.0	---	---	.8	.0	---	---	.9	.3	---
24	---	.9	-.3	---	---	1.0	.4	---	---	1.0	.2	---
25	---	1.0	.5	---	---	1.1	.6	---	---	.9	.3	---
26	---	.7	.1	---	---	1.5	1.0	---	---	.8	-.1	---
27	---	.8	-.1	---	---	1.4	.7	---	---	.7	-.2	---
28	---	1.2	.7	---	---	1.1	.3	---	---	.6	-.3	---
29	---	1.0	-.6	---	---	.9	.3	---	---	.7	-.3	---
30	---	.4	-.7	---	---	1.5	.5	---	---	.9	-.3	---
31	---	---	---	---	---	1.5	.4	---	---	---	---	---
MONTH	---	1.6	-.8	---	---	1.5	.0	---	---	1.6	-.6	---

HIGHLAND BAYOU BASIN

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08077740 LAMARQUE LEVEE PUMP STATION NEAR LAMARQUE, TX--Continued

DAY	MAX	ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996										MIN	MAX
		MAX	MIN	MAX	MAX	MAX	MIN	MAX	MAX	MAX			
		JULY						AUGUST			SEPTEMBER		
1	---	.9	-.2	---	---	.6	.0	---	-2.7	.9	.3	---	
2	---	1.1	-.1	---	---	.4	-.2	---	---	.9	.2	---	
3	---	.9	-.1	---	---	.4	-.2	---	---	.9	.0	---	
4	---	.6	-.2	---	---	.7	.1	---	---	.8	.2	---	
5	---	.5	-.1	---	---	.9	.2	---	---	1.0	.2	---	
6	---	.4	-.1	---	---	1.0	.2	---	---	.9	.0	---	
7	---	.6	.1	---	---	1.2	.4	---	---	1.0	-.1	---	
8	---	.7	-.3	---	---	1.3	.0	---	-1.5	.7	-.2	-1.7	
9	---	.5	-.3	---	---	.9	-.1	---	-1.2	.7	-.2	-1.4	
10	---	.3	-.5	---	-2.6	.6	-.2	---	-1.3	.4	-.1	-1.5	
11	---	.5	-.5	---	-2.4	.4	-.3	---	---	.6	-.2	---	
12	---	.5	-.4	---	-3.0	.3	-.4	---	---	.7	.0	---	
13	---	.5	-.4	---	---	.5	-.3	---	---	.7	.2	---	
14	---	.7	-.4	---	-2.5	.4	-.4	---	---	.9	.3	---	
15	---	.5	-.3	---	---	.6	-.4	---	---	1.4	.8	---	
16	---	.8	-.3	---	---	.5	-.1	---	---	1.0	.0	---	
17	---	1.1	.1	---	---	.6	.1	---	---	.6	-.1	---	
18	---	1.1	.4	---	---	.7	.3	---	---	1.0	.2	---	
19	---	.9	.4	-.7	---	.7	.1	---	---	1.2	.3	---	
20	---	.6	.1	---	---	1.0	.5	---	---	1.3	.2	---	
21	---	.5	.0	---	---	1.6	.9	---	---	1.2	.1	---	
22	---	.3	-.2	---	---	2.3	1.5	---	---	1.0	.1	---	
23	---	.1	-.4	---	---	2.4	1.1	---	---	1.3	.2	---	
24	---	.3	-.4	---	---	1.8	.5	---	---	1.2	.4	---	
25	---	.2	-.5	---	---	1.4	.4	---	---	1.2	.3	---	
26	---	.5	-.5	---	---	1.4	.3	---	---	1.7	.8	---	
27	---	1.0	-.4	---	---	1.2	.2	---	-2.0	1.4	.6	---	
28	---	.9	.0	---	---	1.2	.2	---	-2.1	1.0	.1	---	
29	---	1.0	-.1	---	---	.9	.2	---	---	1.5	.6	---	
30	---	1.1	.0	---	---	1.0	.2	---	---	1.6	.7	---	
31	---	.9	.1	---	---	.9	.3	---	---	---	---	---	
MONTH	---	1.1	-.5	---	---	2.4	-.4	---	---	1.7	-.2	---	

08078000 CHOCOLATE BAYOU NEAR ALVIN, TX

LOCATION.--lat 29°22'09", long 95°19'14", Brazoria County, Hydrologic Unit 12040204, on right bank 800 ft downstream from bridge on Farm Road 1462, 5.9 mi southwest of Alvin, and 6.9 mi upstream from State Highway 35.

DRAINAGE AREA.--87.7 mi². During extreme flooding, overflow from about 11 mi² of the Mustang Bayou drainage basin enters the Chocolate Bayou basin upstream from gage.

PERIOD OF RECORD.--August to October 1944, and March to December 1946 (low-water records during irrigation season); January 1947 to February 1958, and March 1958 to February 1959 (discharge measurements only); March 1959 to current year.

Water-quality records.--Chemical and biochemical analyses: May 1971 to September 1985. Pesticide analyses: May 1971 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft above sea level. Prior to May 3, 1959, nonrecording gage or water-stage recorders located at various sites from 900 to 1,400 ft upstream and at datum 3.00 ft higher. May 3, 1959, to Sept. 30, 1987, present site, at datum 10.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Stage-discharge relation is affected by seasonal vegetation during most years. Large area of riceland above station is irrigated with water diverted from the Brazos River. Low flow from April to October is largely drainage from these irrigated lands. Diversions for irrigation occur above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 14, 1939, reached a stage of 32.5 ft, present site and datum, adjusted from floodmark 1,700 ft to right and 550 ft upstream from present gage, on basis of slope of flood of Oct. 8, 1949, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 4	0300	1,860	26.20	Jun. 26	1400	2,250	27.91
Dec. 18	2300	2,810	29.44	Aug. 31	0900	1,760	25.74

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	8.4	4.6	27	13	22	5.4	8.1	21	43	36	791
2	3.5	117	4.4	23	16	13	5.1	8.4	28	37	32	141
3	36	1550	4.2	17	16	8.1	5.7	18	38	38	30	73
4	43	1540	4.0	13	12	6.4	5.5	11	43	31	23	109
5	16	280	3.7	14	9.8	5.8	5.1	10	56	35	20	48
6	8.0	63	3.5	147	9.6	5.8	5.0	9.5	50	38	19	29
7	8.2	38	3.4	120	9.9	5.7	5.9	6.4	40	38	20	19
8	5.5	24	3.3	60	9.7	4.9	6.3	6.8	24	40	28	46
9	6.0	13	3.2	41	9.3	4.1	1.6	4.0	21	42	32	35
10	8.2	8.2	3.1	33	8.3	3.7	2.7	11	20	46	29	23
11	5.7	6.6	3.2	28	7.5	3.6	13	19	13	47	34	15
12	3.6	5.3	3.3	23	6.7	3.6	26	31	29	44	31	9.5
13	2.3	4.2	3.3	17	6.2	3.7	30	37	29	46	28	7.4
14	1.9	3.6	3.4	14	5.9	4.0	23	25	37	44	31	7.1
15	1.3	3.2	2.9	13	6.0	6.4	24	16	41	45	25	6.9
16	1.1	2.8	2.9	12	5.3	5.6	18	14	45	47	15	7.3
17	1.5	13	738	11	4.8	4.8	5.4	18	44	48	8.2	8.6
18	1.1	95	2600	12	4.8	4.3	3.9	31	41	52	5.3	9.3
19	.62	90	2600	10	5.1	3.7	8.3	17	35	63	5.2	73
20	.65	107	1250	8.5	5.0	3.3	11	24	38	63	5.4	311
21	.79	62	164	8.6	4.7	3.4	19	18	138	47	4.9	213
22	.97	37	260	8.7	4.3	4.4	28	10	92	38	199	76
23	1.0	24	167	8.9	4.0	4.7	59	8.4	68	38	798	38
24	1.1	16	84	9.3	4.0	4.8	60	5.8	114	35	455	29
25	1.1	11	56	9.0	3.9	5.6	37	17	807	44	133	40
26	.94	8.0	41	146	3.5	5.6	17	22	2160	62	134	28
27	.70	6.8	32	76	3.4	5.7	10	25	1400	67	466	22
28	.56	6.0	26	39	4.8	7.2	7.4	26	225	52	217	22
29	.50	5.4	21	29	8.7	11	12	27	81	46	540	18
30	5.0	5.0	20	23	---	6.8	12	16	57	42	485	12
31	17	---	28	17	---	6.0	---	20	---	38	1670	---
TOTAL	185.23	4153.5	8143.4	1018.0	212.2	187.7	472.3	520.4	5835	1396	5559.0	2267.1
MEAN	5.98	138	263	32.8	7.32	6.05	15.7	16.8	194	45.0	179	75.6
MAX	43	1550	2600	147	16	22	60	37	2160	67	1670	791
MIN	.50	2.8	2.9	8.5	3.4	3.3	1.6	4.0	13	31	4.9	6.9
AC-FT	367	8240	16150	2020	421	372	937	1030	11570	2770	11030	4500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1996, BY WATER YEAR (WY)

	MEAN	71.3	88.6	104	131	107	69.6	90.7	137	224	165	114	131
MAX	522	378	378	464	508	359	359	431	528	876	1659	642	843
(WY)	1995	1975	1977	1992	1992	1985	1973	1992	1968	1979	1989	1979	1979
MIN	.52	1.08	.77	3.49	2.38	3.38	8.57	16.8	18.2	45.0	15.2	7.74	7.74
(WY)	1978	1981	1990	1971	1976	1981	1987	1996	1990	1996	1972	1989	1989

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1959 - 1996

ANNUAL TOTAL	56277.63	29949.83	
ANNUAL MEAN	154	81.8	119
HIGHEST ANNUAL MEAN			340
LOWEST ANNUAL MEAN			39.6
HIGHEST DAILY MEAN	2600	Dec 18	15700
LOWEST DAILY MEAN	.50	Oct 29	.03
ANNUAL SEVEN-DAY MINIMUM	.84	Oct 23	.08
INSTANTANEOUS PEAK FLOW		Dec 18	21500
INSTANTANEOUS PEAK STAGE	29.44	Dec 18	33.88
ANNUAL RUNOFF (AC-FT)	111600	59410	85860
10 PERCENT EXCEEDS	283	99	206
50 PERCENT EXCEEDS	38	16	32
90 PERCENT EXCEEDS	3.1	3.5	3.7

BRAZOS RIVER MAIN STEM

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08079600 DOUBLE MOUNTAIN FORK BRAZOS RIVER AT JUSTICEBURG, TX

LOCATION.--Lat 33°02'18", long 101°11'50", Garza County, Hydrologic Unit 12050004, on right bank at downstream side of bridge on U.S. Highway 84 at Justiceburg, 250 ft downstream from Panhandle and Santa Fe Railroad, and at mile 143.4 measured from confluence with Salt Fork Brazos River at mile 923.2 on the Brazos River.

DRAINAGE AREA.--1,466 mi², of which 1,222 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

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.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,222.47 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1895, 25.8 ft in 1914 and 22.2 ft in September 1955, from information by local resident. Flood in July 1961 reached a stage of 18.2 ft, from floodmark.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 15	0230	2,560	a8.21	Aug. 28	2300	4,290	a9.04
Aug. 25	2300	4,700	a9.21				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.7
2	.69	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	2.4
3	13	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	1.1
4	1.5	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
5	.15	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00
6	.07	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00
7	e.05	.00	.00	.00	.00	.00	.00	.00	29	.00	.00	.00
8	e.03	.00	.00	.00	.00	.00	.00	.00	2.6	.00	.00	.00
9	e.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	e.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.02	.00	.00	.00	.00	.00	.00	.00	.00	205	.00	.00
12	e.01	.00	.00	.00	.00	.00	.00	.00	.00	4.1	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	e4.3	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.7	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	465	5.0	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	20	.55	.64	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	1.3	.00	38	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.56	.00	13	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4	168
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.7
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	504	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.97	.00	291	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.41	.00	487	.00
26	.00	.00	.00	.00	.00	.00	.00	5.1	.00	.00	320	50
27	.00	e.01	.00	.00	.00	.00	.00	1.9	.00	.00	33	2.7
28	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	587	.29
29	.00	e.01	.00	.00	.00	.00	.00	.00	.00	.00	610	.00
30	.00	e.01	.00	.01	---	.00	.00	.00	.00	.00	276	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	17	---
TOTAL	15.58	0.04	0.00	0.33	0.00	0.00	0.00	7.00	519.84	222.65	3178.04	232.89
MEAN	.50	.001	.000	.011	.000	.000	.000	.23	17.3	7.18	103	7.76
MAX	13	.01	.00	.10	.00	.00	.00	5.1	465	205	610	168
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	31	.08	.00	.7	.00	.00	.00	14	1030	442	6300	462
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.07	.03	.42	.03
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.08	.03	.48	.04

BRAZOS RIVER MAIN STEM

08079600 DOUBLE MOUNTAIN FORK BRAZOS RIVER AT JUSTICEBURG, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

MEAN	31.9	5.92	4.86	2.32	4.82	7.11	10.9	55.5	69.8	29.1	37.3	55.1
MAX	276	38.7	87.7	30.9	56.1	81.6	120	357	510	249	408	321
(WY)	1986	1969	1992	1992	1992	1970	1966	1969	1967	1979	1972	1962
MIN	.000	.000	.000	.000	.000	.000	.000	.014	.052	.000	.000	.000
(WY)	1965	1978	1974	1974	1965	1971	1964	1989	1994	1964	1987	1968

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1962 - 1996

ANNUAL TOTAL	6417.12	4176.37	25.8
ANNUAL MEAN	17.6	11.4	69.8
HIGHEST ANNUAL MEAN			1.65
LOWEST ANNUAL MEAN			1967
HIGHEST DAILY MEAN	1710 Sep 19	610 Aug 29	9920 Aug 13 1972
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 13	.00 Feb 17 1962
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 13	.00 Mar 3 1962
INSTANTANEOUS PEAK FLOW		4700 Aug 25	49600 May 6 1969
INSTANTANEOUS PEAK STAGE		a9.21 Aug 25	19.80 May 6 1969
ANNUAL RUNOFF (AC-FT)	12730	8280	18670
ANNUAL RUNOFF (CFSM)	.072	.047	.11
ANNUAL RUNOFF (INCHES)	.98	.64	1.44
10 PERCENT EXCEEDS	.48	.58	9.9
50 PERCENT EXCEEDS	.00	.00	.03
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

a From floodmark.

08079600 DOUBLE MOUNTAIN FORK BRAZOS RIVER AT JUSTICEBURG, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Chemical analyses: December 1964 to September 1965, and October 1975 to current year.
Sediment analyses: June 1977 to June 1982.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1975 to current year.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relation between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 31,400 microsiemens Dec. 6, 1994; minimum daily, 370 microsiemens Oct. 20, 1983.

WATER TEMPERATURES: Maximum daily, 34.0°C Aug. 18, 1991, July 15, 1996; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 24,600 microsiemens Jan. 4; minimum daily, 545 microsiemens July 11.

WATER TEMPERATURE: Maximum daily, 34.0°C July 15; minimum daily, 0.0°C Jan. 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 05...	1510	0.19	8440	25.0	730	560	170	75	1600
NOV 28...	0940	0.01	22300	3.0	2000	1800	440	210	4500
JAN 30...	0810	0.01	24500	1.0	2500	2300	470	310	5100
JUN 17...	1048	1.2	5710	28.5	480	330	120	43	1000

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT 05...	26	12	180	330	2500	0.90	12	4810
NOV 28...	44	17	190	860	7300	0.90	10	13500
JAN 30...	45	16	190	990	8400	0.80	8.6	15400
JUN 17...	20	7.3	150	220	1600	1.3	11	3090

MONTH YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- SIEMENS)	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. 1995	15.58	2150	1170	49	610	26	90	3.8	130
NOV. 1995	0.04	22000	13500	1.5	7400	0.8	920	0.1	*
DEC. 1995	0.00	*	*	0.00	*	0.00	*	0.00	*
JAN. 1996	0.33	19600	11900	11	6500	5.8	820	0.7	*
FEB. 1996	0.00	*	*	0.00	*	0.00	*	0.00	*
MAR. 1996	0.00	*	*	0.00	*	0.00	*	0.00	*
APR. 1996	0.00	*	*	0.00	*	0.00	*	0.00	*
MAY 1996	7.00	2990	1630	31	850	16	130	2.4	180
JUNE 1996	519.84	859	461	647	240	338	36	50	50
JULY 1996	222.65	620	331	199	170	104	26	16	36
AUG. 1996	3178.04	924	495	4240	260	2210	39	331	54
SEPT 1996	232.89	1280	694	437	360	228	54	34	77
TOTAL	4176.37	**	**	5600	**	2930	**	438	**
WTD. AVG.	11	929	498	**	260	**	39	**	54

BRAZOS RIVER MAIN STEM

08079600 DOUBLE MOUNTAIN FORK BRAZOS RIVER AT JUSTICEBURG, TX--Continued

FROM DAILY OBSERVER
 SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
 DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7970	---	---	---	---	---	---	---	---	---	---	6200
2	4760	---	---	18100	---	---	---	---	---	---	---	8550
3	1540	---	---	17100	---	---	---	---	---	---	---	10200
4	4080	---	---	24600	---	---	---	---	---	---	---	---
5	8440	---	---	19300	---	---	---	---	---	---	---	---
6	9290	---	---	20600	---	---	---	---	---	---	---	---
7	e10000	---	---	---	---	---	---	---	2810	---	---	---
8	e12800	---	---	---	---	---	---	---	2890	---	---	---
9	e13100	---	---	---	---	---	---	---	---	---	---	---
10	e15200	---	---	---	---	---	---	---	---	---	---	---
11	e16600	---	---	---	---	---	---	---	---	545	---	---
12	e17000	---	---	---	---	---	---	---	---	1850	---	---
13	---	---	---	---	---	---	---	---	---	e1720	---	---
14	---	---	---	---	---	---	---	---	---	1470	---	---
15	---	---	---	---	---	---	---	---	700	958	---	---
16	---	---	---	---	---	---	---	---	603	1960	1100	---
17	---	---	---	---	---	---	---	---	5710	---	815	---
18	---	---	---	---	---	---	---	---	11400	---	971	---
19	---	---	---	---	---	---	---	---	---	---	5410	997
20	---	---	---	---	---	---	---	---	---	---	---	1350
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	750	---
24	---	---	---	---	---	---	---	---	4790	---	864	---
25	---	---	---	---	---	---	---	---	3820	---	1210	---
26	---	---	---	---	---	---	---	2160	---	---	1090	1080
27	---	e19700	---	---	---	---	---	5220	---	---	1120	3390
28	---	22300	---	---	---	---	---	---	---	---	649	7980
29	---	e22800	---	---	---	---	---	---	---	---	866	---
30	---	e23200	---	24500	---	---	---	---	---	---	1110	---
31	---	---	---	---	---	---	---	---	---	---	3770	---
MEAN	10100	22000	---	20700	---	---	---	3690	4090	1420	1520	4970

e Estimated

FROM DAILY OBSERVER
 WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
 DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	---	---	---	---	---	---	---	---	---	---	21.0
2	20.0	---	---	3.5	---	---	---	---	---	---	---	21.0
3	14.0	---	---	5.0	---	---	---	---	---	---	---	20.5
4	14.5	---	---	9.0	---	---	---	---	---	---	---	---
5	12.5	---	---	4.0	---	---	---	---	---	---	---	---
6	10.5	---	---	.0	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	14.0	---	---	---
8	---	---	---	---	---	---	---	---	19.0	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	23.0	---	---
12	---	---	---	---	---	---	---	---	---	23.0	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	24.5	---	---
15	---	---	---	---	---	---	---	---	22.0	34.0	---	---
16	---	---	---	---	---	---	---	---	25.0	23.5	22.0	---
17	---	---	---	---	---	---	---	---	22.5	---	21.5	---
18	---	---	---	---	---	---	---	---	22.0	---	23.5	---
19	---	---	---	---	---	---	---	---	---	---	20.5	19.5
20	---	---	---	---	---	---	---	---	---	---	---	18.5
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	23.0	---
24	---	---	---	---	---	---	---	---	23.0	---	22.0	---
25	---	---	---	---	---	---	---	---	22.5	---	21.5	---
26	---	---	---	---	---	---	---	27.0	---	---	21.5	19.0
27	---	---	---	---	---	---	---	14.5	---	---	22.5	12.5
28	---	3.0	---	---	---	---	---	---	---	---	23.0	12.5
29	---	---	---	---	---	---	---	---	---	---	22.0	---
30	---	---	---	1.0	---	---	---	---	---	---	22.0	---
31	---	---	---	---	---	---	---	---	---	---	20.5	---
MEAN	14.4	3.0	---	3.7	---	---	---	20.7	21.2	25.6	22.0	18.1

08080500 DOUBLE MOUNTAIN FORK BRAZOS RIVER NEAR ASPERMONT, TX

LOCATION.--Lat 33°00'29", long 100°10'49", Stonewall County, Hydrologic Unit 12050004, on right bank at downstream side of bridge on U.S. Highway 83, 0.3 mi downstream from Hitson Creek, 10 mi south of Aspermont, and at mile 34.5, measured from confluence with Salt Fork Brazos River, which is at mile 923.2 on the Brazos River.

DRAINAGE AREA.--8,796 mi², of which 6,932 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1923 to September 1934, June 1939 to current year.

REVISED RECORDS.--WSP 733: 1927(M). WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,624.79 ft above sea level. Dec. 3, 1923, to Sept. 30, 1934, nonrecording gage at site 90 ft downstream at datum 2.0 ft higher, and June 8, 1939, to Aug. 12, 1972, water-stage recorder at present site and datum 2.0 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are small diversions above station for oil field operations. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,800 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	32	1.7	3.8	e.50	.33	.10	.01	8.5	1.1	.01	435
2	84	49	1.7	4.1	e.50	.33	e.07	.01	e2.8	.90	.00	241
3	65	35	1.7	4.1	e.50	e.33	e.04	.01	1.9	.72	.00	124
4	54	25	1.7	4.1	e.99	.33	.04	.01	.91	.56	.00	493
5	47	20	e1.5	4.1	.80	.33	.11	e.01	.11	.50	.00	366
6	41	16	1.5	3.8	1.1	e.33	2.8	.01	.11	.44	.00	82
7	39	12	1.4	2.4	1.4	.33	3.0	.01	29	e.38	.00	55
8	35	10	1.4	2.4	1.4	.33	2.2	.01	18	.38	.00	34
9	33	8.1	1.1	2.4	1.4	.33	.99	.01	e1.1	.28	.00	25
10	31	7.1	e1.1	2.2	1.2	.33	.72	.01	.20	.24	13	19
11	29	6.2	1.1	2.2	e1.1	.33	.28	.01	.09	5.1	11	16
12	27	4.4	1.1	2.0	1.1	.33	.20	e.01	.04	6.7	.72	15
13	22	4.1	.99	2.0	.99	.33	.14	.01	.11	3.6	.38	14
14	20	3.6	.99	2.0	.99	.28	.11	.00	227	e.28	.07	14
15	18	3.3	.90	2.2	.80	.20	.11	.00	33	23	.15	16
16	17	3.3	e.90	2.2	.72	.20	.09	.00	3.1	57	4.2	15
17	15	3.3	e.90	2.4	.64	e.17	.05	.00	e.05	29	5.5	12
18	14	3.0	e2.0	2.4	.56	.11	.05	.00	e.01	17	e.38	329
19	13	2.6	3.8	2.2	.56	.11	.05	.00	.00	11	.38	166
20	12	2.2	3.8	2.2	.50	.11	.05	.00	.00	6.2	e.38	81
21	11	2.2	3.3	e2.2	e.50	.11	e.05	.00	.00	e5.3	.38	531
22	9.8	2.4	3.3	2.2	.44	.11	.05	.00	.00	4.4	.33	465
23	8.4	2.2	3.3	2.2	.44	.09	.05	.00	.00	3.0	.71	107
24	6.9	2.2	e3.0	2.2	.33	e.09	.05	.00	246	2.0	188	119
25	7.6	2.2	2.8	2.0	e.33	e.09	.03	.00	1110	1.1	239	60
26	6.9	e2.2	2.4	e1.7	.33	e.09	.03	.00	57	.99	.72	38
27	6.2	2.2	2.4	e1.5	.33	e.09	.01	.00	10	5.7	187	30
28	5.6	1.8	2.2	e1.4	e.33	e.07	.01	.00	3.9	2.8	1140	28
29	5.6	1.8	2.0	e1.1	.33	e.05	.01	.00	2.6	1.1	881	34
30	5.6	1.8	1.7	.99	---	e.05	.01	3.0	1.5	e.44	747	27
31	7.9	---	e1.7	e.50	---	e.07	---	23	---	.17	1210	---
TOTAL	788.5	271.2	59.38	73.19	21.11	6.38	11.50	26.13	1757.03	191.38	4701.59	3991
MEAN	25.4	9.04	1.92	2.36	.73	.21	.38	.84	58.6	6.17	152	133
MAX	91	49	3.8	4.1	1.4	.33	3.0	23	1110	57	1210	531
MIN	5.6	1.8	.90	.50	.33	.05	.01	.00	.00	.17	.00	12
AC-FT	1560	538	118	145	42	13	23	52	3490	380	9330	7920
CFSM	.01	.00	.00	.00	.00	.00	.00	.00	.03	.00	.08	.07
IN.	.02	.01	.00	.00	.00	.00	.00	.00	.04	.00	.09	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996h, BY WATER YEAR (WY)

	MEAN	253	40.8	33.3	15.0	28.5	29.2	108	364	308	183	173	265
MAX	2640	261	354	129	427	259	1190	2785	1564	1202	2847	2712	
(WY)	1927	1985	1992	1992	1992	1955	1941	1941	1967	1960	1972	1955	
MIN	.000	.000	.000	.000	.000	.000	.000	.50	1.33	.000	.000	.000	
(WY)	1953	1925	1925	1952	1925	1925	1978	1984	1984	1934	1924	1939	

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1924 - 1996h
ANNUAL TOTAL	23041.68	11898.39	
ANNUAL MEAN	63.1	32.5	152
HIGHEST ANNUAL MEAN			525
LOWEST ANNUAL MEAN			16.7
HIGHEST DAILY MEAN	2790	May 30	55600
LOWEST DAILY MEAN	.00	Feb 4	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 19	.00
INSTANTANEOUS PEAK FLOW			91400
INSTANTANEOUS PEAK STAGE			29.50
ANNUAL RUNOFF (AC-FT)	45700	23600	110300
ANNUAL RUNOFF (CFSM)	.034	.017	.082
ANNUAL RUNOFF (INCHES)	.46	.24	1.11
10 PERCENT EXCEEDS	86	38	201
50 PERCENT EXCEEDS	.90	1.5	5.5
90 PERCENT EXCEEDS	.00	.01	.00

e Estimated

h See PERIOD OF RECORD paragraph.

BRAZOS RIVER MAIN STEM

08080500 DOUBLE MOUNTAIN FORK BRAZOS RIVER NEAR ASPERMONT, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1948 to November 1951, September 1956 to current year. Chemical and biochemical analyses: June 1978 to September 1993. Sediment analyses: September 1944 to November 1951, June 1978 to September 1993. Pesticide analyses: March to June 1979.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1948 to November 1951, September 1956 to September 1995.

WATER TEMPERATURE: November 1949 to November 1951, September 1956 to September 1995.

SUSPENDED-SEDIMENT DISCHARGE: November 1949 to September 1951.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily records or specific conductance and regression relation between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 13,100 microsiemens July 29, 1980; minimum daily, 720 microsiemens Oct. 18, 1985.

WATER TEMPERATURE: Maximum daily, 38.0°C July 18, 1966; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 28...	1415	1.8	8100	13.0	2400	680	160	1000	9	12	1900	1800
JAN 30...	1545	0.99	8410	10.0	2700	790	180	1100	9	12	2000	1900
APR 01...	1455	0.10	8790	27.5	3200	900	220	980	8	13	2100	2100
DATE		FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
NOV 28...		0.50	9.7	0.080	<0.010	0.080	0.080	0.090	<0.20	<0.010	<0.010	2
JAN 30...		0.50	6.2	0.070	<0.010	0.070	0.070	0.140	<0.20	<0.010	<0.010	1
APR 01...		0.50	6.7	0.060	<0.010	0.060	0.060	0.330	<0.20	<0.010	<0.010	2
DATE		BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 28...		<100	<1.0	<10	1.0	<10	2.0	270	<0.1	1	<1.0	<10
JAN 30...		100	<1.0	<1.0	<1.0	<10	<4.0	240	0.3	2	<1.0	<10
APR 01...		<100	<4.0	<1.0	<1.0	<10	<4.0	130	0.7	<1	<4.0	20

BRAZOS RIVER BASIN

149

08082000 SALT FORK BRAZOS RIVER NEAR ASPERMONT, TX

LOCATION.--Lat 33°20'02", long 100°14'16", Stonewall County, Hydrologic Unit 12050007, on left bank at downstream side of bridge on U.S. Highway 83, 5.5 mi downstream from Salt Croton Creek, 13.2 mi north of Aspermont, and at mile 27.3 measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 on the Brazos River.

DRAINAGE AREA.--5,130 mi², of which 2,634 mi² probably is noncontributing.

PERIOD OF RECORD.--December 1923 to August 1925, June 1939 to current year.

Water-quality records.--Chemical analyses: July 1941 to October 1951, and October 1956 to September 1974.
Chemical and biochemical analyses: October 1974 to August 1994. Pesticide analyses: March to June 1979. Sediment analyses: June 1961 to September 1965, and October 1974 to August 1994. Specific conductance and water temperature: October 1948 to October 1951 and October 1956 to September 1982.

REVISED RECORDS.--WDR 1X-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,588.70 ft above sea level. Dec. 5, 1923, to Aug. 29, 1925, nonrecording gage at site 6.7 mi 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 mi upstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are no large diversions above station. Some regulation by White River Reservoir (capacity, 44,900 acre-ft), 106 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1913 reached a stage of 14.4 ft, and flood in November 1934 reached a stage of 13.7 ft, from information by local residents.

PEAK DISCHARGE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	83	5.0	19	4.3	5.0	5.4	.27	22	.86	.15	487
2	123	85	5.4	36	5.1	5.9	4.1	.24	9.9	.45	.96	406
3	82	32	5.1	29	4.4	6.3	3.7	.20	5.8	.28	5.9	278
4	58	21	4.9	21	4.7	6.5	3.1	.18	27	.18	.13	235
5	26	17	4.8	17	6.8	6.2	6.8	.17	19	.12	.10	188
6	18	15	4.7	13	8.6	5.9	18	.17	5.0	.10	.09	398
7	14	12	4.4	12	9.5	4.9	19	.22	2.0	.09	.08	391
8	12	10	5.2	11	8.7	5.4	13	.18	1.1	.09	.06	231
9	11	8.8	4.3	11	7.9	5.9	9.3	.16	2.3	.10	4.1	199
10	9.7	8.1	4.3	11	7.6	6.5	6.7	.15	1.2	.10	7.1	196
11	8.5	6.6	4.5	9.2	6.0	6.5	5.4	.14	.67	12	72	156
12	7.4	6.1	4.9	8.4	5.4	6.5	4.3	.14	.44	16	5.5	149
13	6.1	5.3	5.1	e8.4	5.1	6.5	3.6	.15	.36	4.6	.88	138
14	5.1	5.3	5.0	8.4	5.5	6.5	2.6	.14	.32	11	.29	132
15	4.5	5.1	4.8	8.4	5.2	7.1	2.1	.12	.33	7.3	.13	126
16	4.0	5.2	4.7	8.4	4.9	7.1	2.0	.11	.32	1.7	3.7	116
17	3.6	5.5	9.1	7.1	5.2	e7.7	2.0	.10	.75	.55	4.6	102
18	3.3	5.7	40	6.5	5.6	16	1.8	.10	.30	.15	.64	2400
19	2.8	6.2	22	5.4	5.8	17	1.5	.10	.22	.08	.15	1670
20	2.3	6.2	16	e5.4	5.8	14	1.2	.10	.20	.06	.08	679
21	2.2	5.7	13	5.4	5.5	11	1.3	.10	.17	.05	.33	442
22	1.9	5.6	12	5.4	5.0	10	1.2	.11	.17	.04	.08	305
23	1.5	5.3	11	5.4	4.7	8.4	1.1	.09	.17	.03	.82	215
24	1.3	5.0	9.9	5.4	4.8	7.7	.96	.09	235	.03	226	313
25	1.3	4.8	9.7	5.4	5.1	7.7	.78	.10	202	.04	82	292
26	1.2	5.0	9.2	5.4	5.8	7.7	.68	.09	45	16	64	224
27	1.2	4.9	8.9	5.4	5.7	9.2	.56	24	20	99	105	170
28	1.1	4.4	8.5	5.4	5.0	19	.48	6.3	5.9	12	361	139
29	1.0	4.3	8.7	5.4	4.4	17	.31	1.1	2.4	2.2	1680	170
30	1.1	4.4	8.7	5.4	---	12	.25	53	1.5	.90	2620	166
31	2.4	---	9.2	4.3	---	7.7	---	133	---	.35	842	---
TOTAL	435.5	398.5	273.0	313.9	168.1	270.8	123.22	221.12	611.52	186.45	6087.87	11113
MEAN	14.0	13.3	8.81	10.1	5.80	8.74	4.11	7.13	20.4	6.01	196	370
MAX	123	85	40	36	9.5	19	19	133	235	99	2620	2400
MIN	1.0	4.3	4.3	4.3	4.3	4.9	.25	.09	.17	.03	.06	102
AC-FT	864	790	541	623	333	537	244	439	1210	370	12080	22040

BRAZOS RIVER BASIN

08082000 SALT FORK BRAZOS RIVER NEAR ASPERMONT, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996h, BY WATER YEAR (WY)

MEAN	195	31.3	20.6	12.9	17.5	20.4	72.6	253	256	90.9	112	150
MAX	2210	215	226	134	232	180	1006	2175	1283	642	1054	1605
(WY)	1942	1958	1992	1992	1992	1941	1925	1941	1957	1945	1972	1955
MIN	.059	.010	.11	.13	.007	.042	.26	.22	.013	.031	.024	.10
(WY)	1980	1940	1990	1953	1953	1946	1971	1945	1953	1974	1983	1947

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1924 - 1996h	
ANNUAL TOTAL	18824.03		20202.98		102	
ANNUAL MEAN	51.6		55.2		463	
HIGHEST ANNUAL MEAN					13.8	
LOWEST ANNUAL MEAN					23300	
HIGHEST DAILY MEAN	2440	Aug 2	2620	Aug 30		Sep 26 1955
LOWEST DAILY MEAN	.36	Sep 8	.03	Jul 23		Apr 22 1924
ANNUAL SEVEN-DAY MINIMUM	.57	Jul 25	.05	Jul 19		Jun 11 1924
INSTANTANEOUS PEAK FLOW			4950	Aug 30	52200	Sep 25 1955
INSTANTANEOUS PEAK STAGE			6.39	Aug 30	14.92	Sep 25 1955
ANNUAL RUNOFF (AC-FT)	37340		40070		74190	
10 PERCENT EXCEEDS	95		124		128	
50 PERCENT EXCEEDS	5.9		5.4		5.9	
90 PERCENT EXCEEDS	1.1		.15		.15	

e Estimated

h See PERIOD OF RECORD paragraph.

08082500 BRAZOS RIVER AT SEYMOUR, TX

LOCATION.--Lat 33°34'51", long 99°16'02", Baylor County, Hydrologic Unit 12060101, on left bank at downstream side of bridge on U.S. Highways 277 and 283, 0.8 mi upstream from Wichita Valley Railway bridge, 1.0 mi southwest of courthouse in Seymour, and at mile 847.4.

DRAINAGE AREA.--15,538 mi², approximately, of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--November 1923 to current year.

Water-quality records.--Chemical analyses: August 1959 to September 1995.

REVISED RECORDS.--WSP 808: 1924-29. WSP 1312: 1933. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,238.97 ft above sea level. Prior to Apr. 6, 1972, at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Small diversions upstream from station for irrigation and for oil field operations. For statement regarding upstream regulation by National Resource Conservation Service floodwater-retarding structures, see remarks paragraph for station 08080950. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in 1906 reached about the same stage as the flood in 1955.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 19	0830	15,300	12.02				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	390	23	106	11	11	46	6.1	5.1	71	12	1480
2	191	373	23	88	12	12	37	6.7	1.7	32	6.9	1530
3	356	280	22	56	17	12	32	6.5	78	19	3.7	1100
4	315	213	23	61	33	15	28	5.6	309	11	1.3	954
5	258	201	21	63	32	15	29	4.8	576	4.7	.62	1300
6	188	192	21	59	38	12	27	4.5	189	1.7	.26	689
7	149	152	20	58	31	10	24	4.0	133	.51	.40	807
8	124	126	22	62	32	13	26	3.4	104	.18	21	613
9	107	110	18	46	29	13	37	2.8	75	.00	4.1	571
10	92	94	20	39	25	13	40	2.6	42	.00	16	449
11	77	81	24	32	20	13	36	3.0	28	.00	31	364
12	65	75	22	33	21	13	34	2.5	23	.00	7.2	314
13	50	63	21	32	23	12	32	2.0	29	.00	12	276
14	43	61	20	31	22	11	24	1.9	110	44	4.8	264
15	36	57	20	30	20	10	21	1.8	21	34	16	344
16	31	54	21	29	19	10	19	1.3	11	400	65	274
17	28	48	41	34	18	10	17	.52	5.9	182	60	248
18	24	45	40	24	18	55	14	.08	3.5	91	16	7690
19	19	45	30	20	18	45	13	.00	13	36	5.8	13600
20	16	43	37	29	17	33	11	.00	10	14	3.8	4460
21	15	39	43	23	18	28	25	.00	5.1	21	1.1	2060
22	13	40	54	24	16	26	12	.00	2.4	13	.00	1090
23	9.8	36	59	21	13	25	12	.00	1.0	7.5	.00	769
24	9.7	33	49	22	13	21	11	.00	7.8	9.8	4.3	837
25	9.2	31	47	21	15	18	9.3	.00	.31	4.7	15	601
26	8.9	31	46	18	14	25	8.4	.00	.00	3.6	161	483
27	8.1	26	43	18	13	152	8.2	.00	185	7.0	381	465
28	7.9	24	41	19	11	127	7.8	.00	481	23	1240	306
29	7.9	24	39	17	11	82	7.1	.00	208	15	1020	248
30	8.1	23	40	16	---	65	6.7	44	117	4.5	1030	220
31	22	---	37	11	---	55	---	10	---	4.2	3070	---
TOTAL	2452.6	3010	987	1142	580	962	654.5	114.10	2774.81	1054.39	7210.28	44406
MEAN	79.1	100	31.8	36.8	20.0	31.0	21.8	3.68	92.5	34.0	233	1480
MAX	356	390	59	106	38	152	46	44	576	400	3070	13600
MIN	7.9	23	18	11	11	10	6.7	.00	.00	.00	.00	220
AC-FT	4860	5970	1960	2270	1150	1910	1300	226	5500	2090	14300	88080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996, BY WATER YEAR (WY)

	596	134	91.9	58.5	96.4	96.9	272	835	819	339	385	671
MEAN	596	134	91.9	58.5	96.4	96.9	272	835	819	339	385	671
MAX	5545	764	859	434	1481	640	2245	6746	3505	2100	4343	4581
(WY)	1942	1935	1931	1992	1938	1973	1925	1941	1990	1961	1926	1932
MIN	.000	.067	.000	.000	.40	.000	.000	2.88	6.75	.24	.000	.000
(WY)	1929	1940	1925	1929	1926	1925	1928	1937	1953	1970	1954	1931

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1924 - 1996

ANNUAL TOTAL	92785.65	65347.68	
ANNUAL MEAN	254	179	
HIGHEST ANNUAL MEAN			368
LOWEST ANNUAL MEAN			1294
HIGHEST DAILY MEAN	7150	13600	46.7
LOWEST DAILY MEAN	.85	.00	62600
ANNUAL SEVEN-DAY MINIMUM	1.6	.00	.00
INSTANTANEOUS PEAK FLOW		15300	.00
INSTANTANEOUS PEAK STAGE		12.02	23.00
ANNUAL RUNOFF (AC-FT)	184000	129600	266800
10 PERCENT EXCEEDS	519	307	627
50 PERCENT EXCEEDS	33	23	38
90 PERCENT EXCEEDS	9.8	2.3	.00

BRAZOS RIVER BASIN

08082700 MILLERS CREEK NEAR MUNDAY, TX

LOCATION.--Lat 33°19'45", long 99°27'53", Throckmorton County, Hydrologic Unit 12060101, near right bank at downstream side of bridge on Farm Road 1720, 12.7 mi southeast of Munday, and 24.6 mi upstream from mouth.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--July 1963 to current year.

Water-quality records.--Sediment records: October 1976 to September 1978.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,350 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1883 occurred June 13, 1930, and exceeded 18.0 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.05	.00	.00	.00	.00	.00	.00	34	e.00	e.00	.07
2	.46	.00	.00	.00	.00	.00	.00	.00	2.2	e.00	e.00	.00
3	12	.00	.00	.00	.00	.00	.00	.00	3.8	e.00	e.00	.00
4	12	.00	.00	.00	.00	.00	.00	.00	29	e.00	e.00	.00
5	2.5	.00	.00	.00	.00	.00	.00	.00	41	e.00	e.00	.00
6	.54	.00	.00	.00	.00	.00	.00	.00	19	e.00	e.00	.00
7	.13	.00	.00	.00	.00	.00	.00	.00	7.0	e.00	e.00	.00
8	.05	.00	.00	.00	.00	.00	.00	.00	2.5	e.00	e.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	1.2	e.00	e.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.81	e.00	e.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.75	e.00	e.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.69	e.00	e.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.96	.82	e.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	1.6	10	e.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.58	1.9	e.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.40	e.90	2.0	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	e.30	e.60	e.90	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	e.20	e.50	e.50	16
19	.00	.00	.00	.00	.00	.00	.00	.00	e.15	e.40	e.10	5.9
20	.00	.00	.00	.00	.00	.00	.00	.00	e.10	e.30	e.02	1.4
21	.00	.00	.00	.00	.00	.00	.00	.00	e.08	e.20	e.01	.98
22	.00	.00	.00	.00	.00	.00	.00	.00	e.06	e.15	.00	.13
23	.00	.00	.00	.00	.00	.00	.00	.00	e.04	e.10	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	e.02	e.07	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	e.01	e.04	.59	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	e.01	e.03	.12	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.02	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.01	6.4	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.01	15	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	4.0	.00
31	.02	---	.00	.00	---	.00	---	33	---	e.00	.59	---
TOTAL	27.74	0.05	0.00	0.00	0.00	0.00	0.00	33.00	146.46	16.05	30.23	24.48
MEAN	.89	.002	.000	.000	.000	.000	.000	1.06	4.88	.52	.98	.82
MAX	12	.05	.00	.00	.00	.00	.00	33	41	10	15	16
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	55	.1	.00	.00	.00	.00	.00	65	291	32	60	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1996, BY WATER YEAR (WY)

	5.08	1.59	.80	1.85	5.25	2.61	5.83	14.6	29.8	2.22	16.6	6.32
MEAN	5.08	1.59	.80	1.85	5.25	2.61	5.83	14.6	29.8	2.22	16.6	6.32
MAX	92.7	37.7	13.1	34.8	94.5	25.8	128	182	420	43.4	403	72.1
(WY)	1987	1973	1992	1968	1992	1973	1990	1982	1982	1967	1978	1988
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1964	1966	1964	1964	1966	1964	1964	1967	1966	1964	1964	1963

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1963 - 1996

ANNUAL TOTAL	1179.40	278.01	
ANNUAL MEAN	3.23	.76	
HIGHEST ANNUAL MEAN			7.76
LOWEST ANNUAL MEAN			50.7
HIGHEST DAILY MEAN	167	Aug 3	.033
LOWEST DAILY MEAN	.00	Jan 1	8730
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00
INSTANTANEOUS PEAK FLOW			.00
INSTANTANEOUS PEAK STAGE			.00
ANNUAL RUNOFF (AC-FT)	2340	551	34600
10 PERCENT EXCEEDS	5.8	.51	17.53
50 PERCENT EXCEEDS	.00	.00	5630
90 PERCENT EXCEEDS	.00	.00	1.3

e Estimated

LOCATION.--Lat 32°47'15", long 100°23'18", Fisher County, Hydrologic Unit 12060102, on right bank at downstream side of pile bent of bridge on State Highway 70, 3.0 mi north of Roby, 3.2 mi upstream from Cottonwood Creek, and 255.7 mi upstream from mouth.

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

GAGE.--Water-stage recorder. Datum of gage is 1.885.09 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. There are several small diversions above station. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since the 1890's, about 22 ft in May and June 1935, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 14	0430	527	10.62				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.36	9.5	.58	.66	.49	.45	.51	.18	.04	.01	.01	.76
2	e.30	3.6	.58	.65	.49	.45	.48	.17	.04	.00	.01	.45
3	e.26	1.3	.60	.55	.49	.45	.45	.18	.05	.00	.00	.27
4	e.22	.85	.60	.53	.49	.46	.41	.18	.06	1.1	.00	.15
5	.22	.76	.57	.49	.50	.47	.55	.21	.06	1.2	.00	.11
6	.21	.73	.58	.54	.53	.47	.68	.27	.07	.80	.00	.09
7	.23	.63	.57	.51	.55	.46	.63	.27	.06	.60	.00	.07
8	.26	.58	.59	.52	.52	.45	.55	.22	.06	.46	.05	.06
9	.28	.55	.52	.57	.51	.46	.49	.18	.06	.39	.04	.05
10	.26	.56	.55	.58	.53	.47	.48	.18	.06	.34	.01	.05
11	.23	.46	e.55	.57	.53	.48	.48	.15	.06	.35	.01	.04
12	.22	.48	e.55	.51	.53	.49	.44	.15	.05	.40	.00	.04
13	.20	.50	e.55	.53	.51	.51	.39	.14	4.3	.56	.00	.04
14	.19	.45	.62	.51	.52	.55	.38	.13	176	1.5	.00	.05
15	.20	.45	.58	.47	.55	.49	.33	.11	9.7	.31	.00	.07
16	.20	.44	.57	.50	.51	.47	.31	.10	1.6	.32	.01	.05
17	.21	.57	.61	.51	.52	.46	.32	.10	20	.16	.01	.05
18	.21	.62	.59	.59	.49	.44	.30	.09	7.1	.09	.01	.06
19	.21	.58	.59	.47	.53	.44	.29	.10	1.2	.06	.00	.08
20	.19	.56	.58	.49	.55	.44	.27	.09	.74	.04	.00	.06
21	.19	.53	.58	.49	.55	.44	.27	.07	.38	.02	.00	.07
22	.19	.52	.54	.54	.54	.44	.27	.07	.15	.01	.00	.08
23	.19	.47	.53	.55	.49	.44	.24	.07	.07	.00	.76	.08
24	.19	.49	.53	.50	.48	.44	.24	.06	.06	.00	.29	.08
25	.19	.52	.53	.49	.48	.42	.23	.06	.05	.00	3.6	.08
26	.20	.51	.53	.49	.49	.40	.22	.06	.04	.04	.24	.08
27	.19	.48	.53	.49	.47	.43	.21	.05	.04	.19	2.3	.08
28	.19	.48	.53	.50	.45	.45	.20	.05	.03	.15	7.3	.08
29	.19	.52	.53	.51	.45	.47	.19	.05	.03	.09	6.8	.08
30	.19	.54	.51	.50	---	.46	.18	.05	.01	.03	25	.09
31	.46	---	.53	.48	---	.44	---	.05	---	.01	4.1	---
TOTAL	7.03	29.23	17.40	16.29	14.74	14.19	10.99	3.84	222.17	9.23	50.55	3.40
MEAN	.23	.97	.56	.53	.51	.46	.37	.12	7.41	.30	1.63	.11
MAX	.46	9.5	.62	.66	.55	.55	.68	.27	176	1.5	25	.76
MIN	.19	.44	.51	.47	.45	.40	.18	.05	.01	.00	.00	.04
AC-FT	14	58	35	32	29	28	22	7.6	441	18	100	6.7
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.01	.00
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.01	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

MEAN	11.1	2.70	2.91	2.84	3.59	3.61	6.32	26.8	15.2	6.11	9.35	20.5
MAX	142	17.6	15.8	12.7	23.9	19.6	51.6	257	84.4	60.6	141	249
(WY)	1966	1987	1987	1987	1992	1987	1981	1982	1981	1975	1971	1969
MIN	.16	.26	.34	.36	.39	.34	.15	.12	.80	.17	.18	.060
(WY)	1980	1965	1990	1965	1990	1965	1965	1996	1984	1994	1989	1965

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1962 - 1996
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ANNUAL TOTAL	802.67		399.06				
ANNUAL MEAN	2.20		1.09			9.29	
HIGHEST ANNUAL MEAN						29.6	1982
LOWEST ANNUAL MEAN						1.09	1996
HIGHEST DAILY MEAN	90	May 6	176	Jun 14	3860		Oct 18 1965
LOWEST DAILY MEAN	.12	Sep 9	.00	Jul 2	.00		Apr 24 1963
ANNUAL SEVEN-DAY MINIMUM	.13	Sep 4	.00	Aug 1	.00		Aug 3 1964
INSTANTANEOUS PEAK FLOW			527	Jun 14	7050		Oct 18 1965
INSTANTANEOUS PEAK STAGE			10.62	Jun 14	21.52		Sep 19 1969
ANNUAL RUNOFF (AC-FT)	1590		792		6730		
ANNUAL RUNOFF (CFSM)	.010		.005		.041		
ANNUAL RUNOFF (INCHES)	.13		.07		.55		
10 PERCENT EXCEEDS	1.5		.60		7.1		
50 PERCENT EXCEEDS	.58		.44		1.7		
90 PERCENT EXCEEDS	.19		.04		.33		

e Estimated

08084000 CLEAR FORK BRAZOS RIVER AT NUGENT, TX

LOCATION.--Lat 32°41'24", long 99°40'09", Jones County, Hydrologic Unit 12060102, on right bank 33 ft downstream from bridge on Farm Road 600 at Nugent, 2 mi downstream from Elm Creek, 4 mi upstream from Deadman Creek, and 167.8 mi upstream from mouth.

DRAINAGE AREA.--2,199 mi².

PERIOD OF RECORD.--February 1924 to current year.

Water-quality records.--Chemical analyses: August 1948 to September 1953. Chemical and biochemical analyses: February 1968 to September 1981.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,531.91 ft above sea level (levels by Brazos River Authority). Prior to Dec. 12, 1933, nonrecording gage at site 575 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow is affected by four upstream reservoirs with a total capacity of 103,600 acre-ft. There are numerous diversions above station for municipal supply and oil field operation that materially affect streamflow.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--14 years (water years 1925-38) prior to completion of Fort Phantom Hill Reservoir, 186 ft³/s (134,800 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1925-38).--Maximum discharge observed, 47,000 ft³/s Sept. 8, 1932 (gage height, 27.05 ft), site then in use, from rating curve extended above 25,000 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 30 ft in 1876; floods in 1900 and May 1923 reached stages of 24 and 24.5 ft, respectively, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	23	13	15	12	10	11	7.8	2.4	2.6	.73	90
2	17	152	13	18	13	10	10	7.7	6.5	2.0	.63	73
3	17	537	13	18	13	9.9	9.5	6.7	6.2	2.8	.34	41
4	16	144	12	18	12	11	10	7.4	3.4	1.4	.20	25
5	17	35	12	17	13	11	24	7.3	5.0	1.3	.12	225
6	16	22	12	16	14	11	43	7.0	12	1.1	.09	506
7	15	17	12	15	14	11	82	11	97	.68	.07	326
8	15	14	12	14	14	10	78	40	63	.50	.31	106
9	14	13	12	14	14	10	57	23	29	.75	.86	43
10	14	12	11	14	14	11	36	12	14	1.4	.91	23
11	14	9.6	11	15	14	11	25	8.7	6.7	2.8	2.8	14
12	14	8.9	12	14	13	11	19	6.8	5.3	1.8	9.7	11
13	14	8.9	13	14	12	11	16	5.8	4.3	1.9	71	10
14	14	9.0	13	14	12	12	14	5.4	2.9	6.5	21	8.8
15	14	9.1	13	14	12	12	12	5.4	11	5.6	8.4	185
16	14	9.3	13	14	11	12	12	5.4	166	21	6.8	257
17	14	10	13	14	11	12	12	4.8	72	12	12	154
18	14	9.7	14	13	11	11	11	3.7	32	5.9	16	72
19	16	12	13	13	11	11	11	3.2	16	3.3	20	145
20	15	12	13	13	10	11	10	2.9	11	2.2	10	139
21	15	12	13	13	11	9.6	11	2.3	16	1.4	6.6	82
22	16	12	14	13	12	9.6	11	1.6	8.9	.88	4.2	41
23	16	13	14	13	11	9.6	11	1.5	5.1	.60	2.9	24
24	16	12	13	13	11	10	14	1.7	4.4	.27	2.7	43
25	16	11	13	13	11	9.2	15	1.8	3.2	.21	90	25
26	17	12	13	12	11	9.4	12	1.8	57	.13	152	15
27	17	12	13	12	13	16	10	1.8	37	.32	71	20
28	16	13	13	12	11	19	9.0	1.7	13	.24	36	14
29	17	13	14	12	10	17	7.1	1.2	6.4	.18	314	10
30	19	13	14	13	---	15	7.6	1.1	4.0	.12	384	8.6
31	20	---	14	12	---	14	---	2.0	---	.31	40	---
TOTAL	485	1190.5	398	435	351	357.3	610.2	200.5	720.7	82.19	1285.36	2736.4
MEAN	15.6	39.7	12.8	14.0	12.1	11.5	20.3	6.47	24.0	2.65	41.5	91.2
MAX	20	537	14	18	14	19	82	40	166	21	384	506
MIN	14	8.9	11	12	10	9.2	7.1	1.1	2.4	.12	.07	8.6
AC-FT	962	2360	789	863	696	709	1210	398	1430	163	2550	5430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996#, BY WATER YEAR (WY)

	MEAN	126	35.2	36.5	23.4	59.9	37.7	68.6	245	151	70.6	55.8	102
MAX	1438	516	683	244	1370	389	1159	4694	1385	728	496	610	
(WY)	1987	1975	1992	1992	1992	1987	1957	1957	1957	1945	1940	1969	
MIN	.000	.56	.090	.032	.046	.010	.017	2.28	1.88	.035	.000	.000	
(WY)	1953	1954	1955	1957	1954	1955	1955	1964	1984	1952	1956	1956	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1939 - 1996#

ANNUAL TOTAL	18251.28	8852.15	84.4
ANNUAL MEAN	50.0	24.2	662
HIGHEST ANNUAL MEAN			9.31
LOWEST ANNUAL MEAN			18800
HIGHEST DAILY MEAN	1980	Aug 6	May 26 1957
LOWEST DAILY MEAN	.00	Jul 14	Aug 10 1946
ANNUAL SEVEN-DAY MINIMUM	1.2	Jul 22	Aug 10 1946
INSTANTANEOUS PEAK FLOW			19500
INSTANTANEOUS PEAK STAGE			24.17
ANNUAL RUNOFF (AC-FT)	36200	17560	61170
10 PERCENT EXCEEDS	53	40	114
50 PERCENT EXCEEDS	13	12	12
90 PERCENT EXCEEDS	7.5	1.8	.73

Period of regulated streamflow.

08084800 CALIFORNIA CREEK NEAR STAMFORD, TX

LOCATION.--Lat 32°55'51", long 99°38'32", Jones County, Hydrologic Unit 12060103, near right bank at downstream side of bridge on Farm Road 142, 9 mi east of Stamford, and 19.4 mi upstream from Paint Creek.

DRAINAGE AREA.--478 mi².

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

Water-quality records.--Specific conductance: October 1962 to September 1979. Water temperature: October 1962 to September 1979.

REVISED RECORDS.--WSP 2122: 1965. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,470 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. There are three small diversions upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, 29.6 ft, present datum, on June 10, 1962, from floodmark; second highest flood in July 1961 (stage unknown); third highest flood in May 1957 (stage unknown) was about equal to flood on June 24, 1915; flood of September 1962 reached a stage of 28.1 ft, present datum; from information by local residents. Another large flood is reported to have occurred in June 1909.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 13	2330	619	12.22				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	6.7	2.6	3.4	2.4	2.0	3.5	.91	10	.09	.09	11
2	7.5	15	2.7	4.0	2.4	1.7	3.2	.92	1.9	.09	.09	8.8
3	26	56	2.6	3.2	2.4	1.7	3.1	.95	1.3	.08	.09	6.1
4	8.7	76	2.6	3.2	2.4	1.8	2.7	.85	2.0	.07	.09	5.0
5	7.4	31	2.6	3.6	2.5	1.9	4.3	.85	83	.07	.08	11
6	6.0	14	2.6	4.1	2.5	1.6	6.0	.80	26	.07	.07	84
7	5.6	8.5	2.6	3.6	2.6	1.5	6.7	.63	139	.07	.07	175
8	5.6	5.8	2.7	3.2	2.7	1.5	15	.60	56	.07	.18	165
9	5.4	4.2	2.6	3.0	2.7	1.5	16	.60	10	.07	.09	73
10	5.1	3.7	2.6	2.8	2.9	1.5	7.4	.68	3.5	.08	.09	29
11	4.7	3.3	2.6	2.7	2.7	1.7	6.0	.66	2.1	.11	.10	16
12	4.5	3.1	2.6	2.6	2.6	1.8	3.6	.60	1.5	.31	.09	12
13	4.6	2.9	2.6	2.6	2.8	1.8	2.6	.59	50	3.2	.09	8.2
14	4.5	2.9	3.1	2.6	3.0	1.8	2.1	.80	142	1.2	.09	3.8
15	4.3	2.7	2.9	2.4	2.9	1.9	2.0	.86	4.1	3.2	.10	7.9
16	4.5	2.8	2.6	2.5	2.6	1.7	1.9	.48	1.7	1.8	1.0	5.8
17	4.5	2.9	2.6	2.6	2.7	1.6	1.8	.39	.87	.93	.13	2.9
18	4.8	2.7	2.6	2.5	2.6	1.7	1.6	.30	.69	.81	.10	6.5
19	5.1	2.7	2.7	2.5	2.5	1.3	1.5	.28	.53	.72	.10	7.4
20	5.0	2.6	2.8	2.5	2.4	1.1	1.4	.23	.62	.44	.09	6.5
21	5.0	2.6	2.6	2.5	2.3	.95	1.5	.18	.66	.36	.09	41
22	5.1	2.6	2.6	2.4	2.2	1.4	1.7	.18	.54	.34	.09	39
23	4.7	2.6	3.4	2.5	2.1	1.4	1.5	.14	.41	.34	.10	22
24	3.8	2.5	3.3	2.5	2.0	1.3	1.5	.18	.32	.25	.12	14
25	4.0	2.6	2.9	2.5	2.1	1.1	1.3	.18	.23	.22	.23	9.4
26	4.6	2.6	2.8	2.8	2.2	1.1	1.3	.14	.18	.22	23	6.3
27	4.9	2.6	2.6	2.5	2.3	2.4	1.2	.14	.13	.22	9.5	4.6
28	4.7	2.7	2.6	2.4	2.1	2.8	1.2	.11	.11	.22	7.2	3.1
29	4.8	2.6	2.6	2.7	2.1	3.5	1.2	.11	.10	.16	9.5	2.5
30	4.7	2.6	2.6	2.2	---	2.6	1.2	1.1	.09	.12	6.8	1.3
31	4.9	---	2.6	2.2	---	2.3	---	19	---	.11	3.7	---
TOTAL	183.3	275.5	83.9	86.8	71.7	53.95	106.0	34.44	539.58	16.04	63.16	788.1
MEAN	5.91	9.18	2.71	2.80	2.47	1.74	3.53	1.11	18.0	.52	2.04	26.3
MAX	26	76	3.4	4.1	3.0	3.5	16	19	142	3.2	23	175
MIN	3.8	2.5	2.6	2.2	2.0	.95	1.2	.11	.09	.07	.07	1.3
AC-FT	364	546	166	172	142	107	210	68	1070	32	125	1560
CFSM	.01	.02	.01	.01	.01	.00	.01	.00	.04	.00	.00	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1996, BY WATER YEAR (WY)

	MEAN	43.8	15.8	12.7	11.8	36.9	14.5	21.8	82.4	70.5	20.6	64.7	55.3
MAX	481	229	169	84.0	750	132	174	741	400	234	930	575	
(WY)	1987	1973	1992	1968	1992	1973	1985	1982	1991	1992	1971	1980	
MIN	.002	.11	.10	.081	.15	.092	.25	1.11	.15	.000	.000	.017	
(WY)	1969	1971	1965	1965	1965	1966	1967	1996	1976	1964	1965	1968	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1963 - 1996

ANNUAL TOTAL	9736.07	2302.47	
ANNUAL MEAN	26.7	6.29	
HIGHEST ANNUAL MEAN			37.5
LOWEST ANNUAL MEAN			156
HIGHEST DAILY MEAN	916	175	1.95
LOWEST DAILY MEAN	.14	.07	20400
ANNUAL SEVEN-DAY MINIMUM	.19	.07	.00
INSTANTANEOUS PEAK FLOW		619	.00
INSTANTANEOUS PEAK STAGE		12.22	40000
ANNUAL RUNOFF (AC-FT)	19310	4570	31.00
ANNUAL RUNOFF (CFSM)	.056	.013	.079
10 PERCENT EXCEEDS	30	8.6	30
50 PERCENT EXCEEDS	2.7	2.5	2.7
90 PERCENT EXCEEDS	.99	.11	.10

BRAZOS RIVER BASIN

08085500 CLEAR FORK BRAZOS RIVER AT FORT GRIFFIN, TX

LOCATION.--Lat 32°56'04", long 99°13'27", Shackelford County, Hydrologic Unit 12060104, on right bank just downstream from pier of bridge on old Fort Griffin-Throckmorton Road, 0.4 mi northeast of Fort Griffin, 1.0 mi upstream from bridge on U.S. Highway 283, 1.7 mi upstream from Mill Creek, and 74.6 mi upstream from mouth.

DRAINAGE AREA.--3,988 mi².

PERIOD OF RECORD.--December 1923 to current year.

Water-quality records: Chemical analysis: November 1949 to September 1951, November 1967 to September 1979.

REVISED RECORDS.--WSP 1392: 1949. WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1.1/4.09 ft above sea level. Prior to June 23, 1932, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. There are diversions upstream from station for irrigation, municipal supply, and for oil field operations that materially affect low flow. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1900 reached a stage of 38.0 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,900 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	27	30	37	34	18	37	36	136	30	2.1	246
2	94	29	30	43	33	16	37	35	95	26	1.9	103
3	174	26	33	47	31	17	36	32	63	24	1.6	65
4	88	151	34	45	32	18	32	40	102	17	1.3	110
5	69	397	33	51	34	22	36	45	74	13	1.1	90
6	86	202	35	37	36	19	53	38	48	11	1.3	65
7	66	123	33	40	40	17	62	36	67	8.3	1.7	241
8	54	92	33	42	39	15	95	34	78	7.0	1.6	423
9	48	75	31	41	38	15	128	30	319	5.6	2.3	421
10	45	58	33	40	38	15	136	33	183	6.9	4.0	260
11	40	41	32	38	33	16	120	52	114	5.8	1.7	152
12	37	43	32	38	28	21	107	74	83	5.6	1.0	98
13	36	42	30	38	26	24	88	55	61	5.1	1.1	68
14	31	35	37	39	26	24	75	39	48	5.0	1.5	52
15	31	33	37	37	24	22	60	29	110	6.4	2.8	64
16	30	31	36	40	26	20	54	26	102	5.5	3.4	54
17	28	29	39	40	25	20	55	21	71	4.7	46	277
18	28	31	40	39	23	21	51	18	88	10	39	701
19	27	30	42	37	23	19	51	16	140	12	26	389
20	24	30	43	37	23	16	49	13	89	12	21	231
21	25	32	44	37	23	17	40	10	59	e12	16	211
22	25	32	41	34	33	18	37	8.1	47	e12	14	175
23	23	32	40	44	24	15	47	7.8	37	12	17	152
24	21	29	38	35	22	13	48	8.9	27	11	19	363
25	24	31	38	35	21	9.0	51	8.8	21	9.3	21	148
26	25	37	37	36	22	9.4	45	8.1	19	7.4	22	222
27	23	32	36	32	23	24	51	7.3	17	6.9	16	180
28	22	31	35	36	20	38	51	6.3	13	e6.1	205	132
29	25	30	33	35	19	33	44	6.8	11	e5.4	336	88
30	24	30	33	30	---	28	36	8.9	17	4.4	140	71
31	25	---	33	33	---	39	---	30	---	3.9	312	---
TOTAL	1368	1841	1101	1193	819	618.4	1812	813.0	2339	311.3	1280.4	5852
MEAN	44.1	61.4	35.5	38.5	28.2	19.9	60.4	26.2	78.0	10.0	41.3	195
MAX	174	397	44	51	40	39	136	74	319	30	336	701
MIN	21	26	30	30	19	9.0	32	6.3	11	3.9	1.0	52
AC-FT	2710	3650	2180	2370	1620	1230	3590	1610	4640	617	2540	11610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996, BY WATER YEAR (WY)

	MEAN	273	78.5	88.9	57.7	147	91.1	182	630	458	205	191	348
MAX	2866	1010	1593	689	4268	1066	3098	7312	2992	2278	6071	4665	
(WY)	1942	1975	1992	1992	1992	1992	1957	1957	1935	1932	1978	1932	
MIN	.000	.000	.000	.000	.000	.000	.000	4.90	.078	.000	.000	.000	
(WY)	1935	1944	1944	1950	1950	1928	1952	1960	1974	1952	1934	1931	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1924 - 1996

ANNUAL TOTAL	44198.4	19348.1	230
ANNUAL MEAN	121	52.9	1177
HIGHEST ANNUAL MEAN			8.78
LOWEST ANNUAL MEAN			1957
HIGHEST DAILY MEAN	6120	701	72800
LOWEST DAILY MEAN	3.7	1.0	.00
ANNUAL SEVEN-DAY MINIMUM	5.5	1.5	.00
INSTANTANEOUS PEAK FLOW		1490	149000
INSTANTANEOUS PEAK STAGE		6.35	38.88
ANNUAL RUNOFF (AC-FT)	87670	38380	166800
10 PERCENT EXCEEDS	159	110	315
50 PERCENT EXCEEDS	35	33	24
90 PERCENT EXCEEDS	18	8.0	.00

e Estimated

BRAZOS RIVER BASIN

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08086212 HUBBARD CREEK BELOW ALBANY, TX

LOCATION.--Lat 32°43'58", long 99°08'25", Shackelford County, Hydrologic Unit 12060105, on left bank 0.5 mi downstream from Salt Prong Hubbard Creek, 2.8 mi upstream from Newcomb Creek, 4.5 mi upstream from U.S. Highway 180, 9.1 mi east of Albany, 22.6 mi upstream from Hubbard Creek Reservoir, and 35.2 mi upstream from mouth.

DRAINAGE AREA.--613 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,184.99 ft above sea level. Prior to June 12, 1968, water-stage recorder at site 2.1 mi downstream at datum 7.63 ft lower.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 15	1545	j24,000	a29.87				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.5	1.4	2.6	.41	.81	2.3	.85	129	.14	5.4	2.7
2	3.4	2.3	1.4	2.5	.41	.76	1.8	.79	38	.15	5.4	2.0
3	10	2.3	1.3	2.3	.41	.72	1.4	.76	16	.29	2.5	1.2
4	12	2.3	1.3	2.2	.40	.78	1.2	.82	12	.30	1.6	1.5
5	8.1	2.2	1.2	2.2	.65	.76	8.5	.85	79	.22	1.1	30
6	6.0	2.3	1.2	2.1	.73	.72	62	.88	73	.20	.98	90
7	5.4	2.5	1.1	1.9	.53	.72	94	.75	43	.13	1.0	14
8	5.1	2.6	1.1	1.9	.51	1.0	53	.72	27	.07	.97	4.8
9	4.6	2.6	2.1	1.8	.61	1.1	25	.67	19	.03	.70	3.1
10	4.2	2.6	2.0	1.8	.70	.93	15	.69	11	.01	101	2.5
11	4.0	2.6	1.3	1.8	.61	.81	8.5	.46	7.2	.01	14	1.9
12	3.7	2.5	.90	1.9	.61	.81	5.7	.54	4.4	.01	3.6	1.8
13	3.2	2.2	.93	1.9	.61	.77	4.3	.52	2.7	.01	2.7	1.9
14	2.9	2.2	.90	1.9	.61	.72	3.2	.52	1.8	.02	2.3	2.0
15	2.5	2.2	.94	1.9	.61	.81	2.6	.67	1.2	.13	3.7	16400
16	2.5	2.1	1.0	1.9	.61	.76	2.0	.49	.85	.44	5.2	5520
17	2.5	2.0	1.0	2.0	.61	.72	1.5	.35	.58	.27	4.7	308
18	2.4	2.0	1.1	1.9	.61	.81	1.3	.24	.52	.16	4.2	163
19	2.3	1.9	1.5	4.2	1.7	.76	1.2	.22	.47	.05	3.9	284
20	2.3	1.7	1.5	3.2	1.8	.72	1.2	.13	.43	.01	3.3	184
21	2.1	1.6	1.4	1.5	1.0	.72	1.1	.05	.46	.00	3.1	107
22	2.0	1.6	1.4	.86	.82	.72	1.1	.04	.42	.00	2.6	68
23	2.0	1.5	1.4	.61	.55	.66	1.2	.03	.37	.00	2.0	48
24	2.0	1.5	1.3	.61	.51	.57	1.2	.01	.31	.00	1.7	93
25	1.9	1.3	1.2	.55	.60	.55	1.3	.00	.31	.00	1.7	119
26	2.0	1.3	1.1	.33	.72	.61	1.2	.00	.43	.00	1.6	63
27	2.5	1.5	1.1	.39	.74	2.4	1.1	.00	.59	.00	5.1	43
28	2.6	1.6	1.1	.47	.81	5.1	1.1	.00	.37	.52	11	30
29	2.6	1.3	1.1	.48	.81	4.6	1.0	.00	.28	8.0	38	23
30	2.5	1.4	1.4	.41	---	3.8	.97	.91	.20	4.3	10	19
31	2.4	---	2.2	.41	---	3.0	---	562	---	3.1	3.5	---
TOTAL	115.2	60.2	39.87	50.52	20.30	38.72	306.97	574.96	470.89	18.57	248.55	23631.4
MEAN	3.72	2.01	1.29	1.63	.70	1.25	10.2	18.5	15.7	.60	8.02	788
MAX	12	2.6	2.2	4.2	1.8	5.1	94	562	129	8.0	101	16400
MIN	1.9	1.3	.90	.33	.40	.55	.97	.00	.20	.00	.70	1.2
AC-FT	228	119	79	100	40	77	609	1140	934	37	493	46870
CFSM	.01	.00	.00	.00	.00	.00	.02	.03	.03	.00	.01	1.29
IN.	.01	.00	.00	.00	.00	.00	.02	.03	.03	.00	.02	1.43

BRAZOS RIVER BASIN

08086212 HUBBARD CREEK BELOW ALBANY, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1996, BY WATER YEAR (WY)

MEAN	101	14.5	52.6	66.5	75.2	39.6	55.9	133	48.4	6.27	129	85.7
MAX	1483	228	1161	1544	1532	243	502	906	268	46.1	3365	1170
(WY)	1982	1975	1992	1968	1992	1992	1968	1969	1989	1992	1978	1974
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1969	1971	1971	1969	1971	1971	1971	1984	1984	1974	1968	1968

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

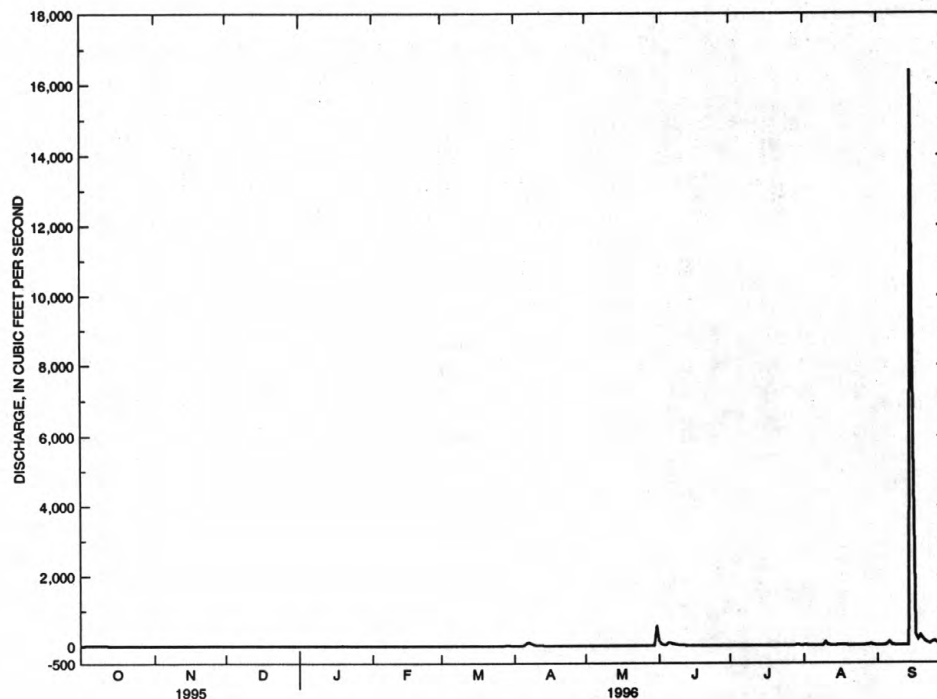
WATER YEARS 1967 - 1996

ANNUAL TOTAL	5833.50	25576.15	67.4
ANNUAL MEAN	16.0	69.9	303
HIGHEST ANNUAL MEAN			.49
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	2060	16400	94700
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		j24000	c330000
INSTANTANEOUS PEAK STAGE		a29.87	a41.41
ANNUAL RUNOFF (AC-FT)	11570	50730	48860
ANNUAL RUNOFF (CFSM)	.026	.11	.11
ANNUAL RUNOFF (INCHES)	.35	1.55	1.49
10 PERCENT EXCEEDS	8.3	13	45
50 PERCENT EXCEEDS	1.2	1.4	1.3
90 PERCENT EXCEEDS	.05	.26	.00

a From floodmark.

c From rating curve extended above 110 ft³/s on basis of step-backwater method and computation of flow-through-culverts, contracted-openings, and flow-over-road determination of 330,000 ft³/s at site 4.5 mi downstream.

j From field determination, based on 3-section slope-area measurement of peak flow.

08086212 HUBBARD CREEK BELOW ALBANY, TX
MEAN DAILY DISCHARGE (CFS)

BRAZOS RIVER BASIN

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08086212 HUBBARD CREEK BELOW ALBANY, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1966 to current year.

WATER TEMPERATURE: October 1966 to current year.

INSTRUMENTATION.--From December 1970 to March 1982, specific conductance is continuously recorded at this station. Since March 1982, specific conductance and water temperature are continuously recorded at this station.

REMARKS.--Estimated mean specific conductance values and interruptions in the mean temperature values were due to malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relation between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U. S. Geological Survey District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 21,200 microsiemens Feb. 15, 21, 1978; minimum measured, 180 microsiemens Oct. 27, 1984, May 13, 1985 and Oct. 6, 1986; minimum estimated, 129 microsiemens Aug. 4, 1978.

WATER TEMPERATURE (1966-80, 1983-current year): Maximum, 37.5°C July 20, 1986; minimum, 0.0°C on several days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,780 microsiemens Mar. 27; minimum, 186 microsiemens Sept. 15.

WATER TEMPERATURE: Maximum 36.0°C June 21, July 9; minimum recorded, 3.0°C Feb. 1, 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV F.L.D. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 04...	1059	12	1210	21.0	290	130	78	22	120
NOV 29...	1250	1.3	2300	11.5	510	310	130	45	260
JAN 31...	1505	0.39	2620	4.0	560	370	140	51	320
APR 02...	1137	1.8	2560	16.0	540	380	130	53	300
10...	0955	16	2410	17.0	540	400	130	52	270
MAY 22...	1825	0.04	2870	28.5	590	440	140	59	350
JUN 06...	1120	68	631	25.5	160	62	44	12	53
DATE		SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
OCT 04...		3	4.4	160	62	240	0.30	12	633
NOV 29...		5	4.6	200	130	520	0.30	8.8	1220
JAN 31...		6	4.2	190	170	620	0.40	7.3	1430
APR 02...		6	4.5	160	180	640	0.40	3.8	1410
10...		5	5.1	140	190	550	0.30	5.9	1290
MAY 22...		6	6.5	150	220	710	0.40	5.6	1580
JUN 06...		2	6.2	97	43	100	0.20	8.2	325

BRAZOS RIVER BASIN

08086212 HUBBARD CREEK BELOW ALBANY, TX--Continued

MONTH YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- SIEMENS)	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. 1995	115.2	1430	794	247	320	99	120	36	350
NOV. 1995	60.2	2080	1160	189	480	78	170	27	490
DEC. 1995	39.87	2560	1440	155	610	66	200	22	590
JAN. 1996	50.52	2530	1420	194	600	82	200	27	580
FEB. 1996	20.30	2570	1450	79	610	34	200	11	590
MAR. 1996	38.72	2840	1600	167	690	72	220	23	640
APR. 1996	306.97	1990	1120	924	460	383	160	133	470
MAY 1996	574.96	1860	1040	1610	420	659	150	234	440
JUNE 1996	470.89	753	416	529	160	203	63	80	190
JULY 1996	18.57	1620	901	45	360	18	130	6.6	390
AUG. 1996	248.55	773	427	287	160	111	64	43	190
SEPT 1996	23631.4	322	177	11300	66	4240	27	1720	83
TOTAL	25576.15	**	**	15700	**	6040	**	2370	**
WTD.AVG.	70	412	228	**	88	**	34	**	100

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	983	935	954	2020	1840	1930	2280	2240	2260	---	---	e2300
2	1040	962	995	2000	1820	1880	2280	2260	2270	---	---	e2300
3	1130	1040	1070	2060	1860	1940	2280	2260	2270	---	---	e2400
4	1230	1120	1150	2080	1900	2030	2300	2260	2290	---	---	e2400
5	1400	1100	1250	2060	1920	2010	2320	2280	2310	---	---	e2500
6	1440	1380	1400	2030	1920	1990	2360	2300	2320	---	---	e2500
7	1440	1400	1410	2030	1950	2000	2360	2320	2350	---	---	e2600
8	1410	1370	1390	2050	1950	2010	2380	2340	2370	---	---	e2600
9	1430	1390	1410	2030	1970	2000	2400	2360	2390	---	---	e2700
10	1430	1410	1420	2010	1990	2000	2380	2340	2360	---	---	e2700
11	1470	1410	1440	2110	1990	2040	2360	2320	2330	---	---	e2800
12	1510	1450	1470	2130	2070	2090	2360	2280	2340	---	---	e2800
13	1530	1490	1520	2150	2050	2100	2360	2340	2350	---	---	e2900
14	1610	1510	1560	2160	2030	2110	2400	2340	2370	---	---	e2900
15	1610	1520	1590	2180	2120	2160	2440	2340	2410	---	---	e3000
16	1600	1520	1560	2120	2080	2110	2480	2400	2450	---	---	e3000
17	1620	1580	1590	2120	2100	2110	---	---	e2500	---	---	e3100
18	1620	1560	1600	2120	2080	2100	---	---	e2500	---	---	e3100
19	1660	1600	1640	2120	2080	2110	---	---	e2600	---	---	e2000
20	1700	1600	1640	2140	2100	2120	---	---	e2600	---	---	e2000
21	1700	1660	1670	2160	2100	2130	---	---	e2700	---	---	e2100
22	1720	1660	1690	2180	2140	2160	---	---	e2700	---	---	e2100
23	1750	1660	1710	2200	2140	2160	---	---	e2800	---	---	e2200
24	1790	1670	1720	2230	2180	2210	---	---	e2800	---	---	e2200
25	1790	1690	1750	2230	2170	2220	---	---	e2900	---	---	e2300
26	1810	1730	1770	2250	2210	2230	---	---	e2900	---	---	e2300
27	1870	1750	1800	2310	2190	2240	---	---	e3000	---	---	e2400
28	1910	1730	1810	2330	2250	2270	---	---	e3000	---	---	e2400
29	1870	1750	1790	2280	2250	2260	---	---	e3100	---	---	e2500
30	1960	1810	1900	2280	2240	2260	---	---	e3100	---	---	e2500
31	1960	1760	1890	---	---	---	---	---	e2700	---	---	2600
MONTH	1960	935	1530	2330	1820	2100	2480	2240	2560	---	---	2520

e Estimated

08086212 HUBBARD CREEK BELOW ALBANY, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2780	2560	2660	2760	2620	2700	2640	2480	2530	2500	2420	2460
2	2660	2580	2620	2760	2640	2710	2680	2500	2570	2540	2440	2490
3	2760	2620	2690	2760	2660	2710	2740	2600	2640	2560	2500	2530
4	2820	2660	2750	2760	2720	2740	2740	2600	2630	2580	2500	2550
5	2760	2560	2660	2840	2720	2760	2740	2200	2470	2620	2540	2580
6	2640	2460	2560	2820	2760	2790	2520	540	1980	2660	2560	2600
7	2540	2380	2460	3020	2760	2840	1940	440	1360	2640	2600	2620
8	2480	2380	2440	3040	2900	2970	2740	1600	2230	2680	2640	2650
9	2500	2400	2470	2960	2780	2870	2740	2600	2660	2700	2660	2680
10	2520	2420	2480	2860	2740	2820	2720	2320	2460	2740	2680	2710
11	2600	2480	2520	2840	2780	2810	2360	2320	2330	2780	2680	2720
12	2600	2500	2550	2840	2780	2820	2620	2280	2340	2780	2700	2740
13	2560	2500	2530	2840	2760	2820	2400	2300	2350	2840	2740	2790
14	2560	2480	2520	2960	2800	2860	2480	2340	2370	2860	2780	2820
15	2620	2520	2560	3320	2840	2920	2540	2320	2390	2940	2780	2860
16	2640	2540	2600	3080	2900	2970	2460	2320	2380	3160	2840	2900
17	2640	2500	2590	3160	2920	3080	2400	2320	2350	3000	2840	2920
18	2620	2540	2580	3240	2940	3040	2400	2300	2350	3020	2840	2900
19	2680	2520	2600	3220	3000	3110	2380	2320	2350	3220	2900	2990
20	2680	2460	2530	3180	3000	3080	2400	2360	2370	3140	2880	2970
21	2640	2440	2490	3160	3020	3080	2420	2360	2390	3060	2900	2950
22	2640	2480	2500	3120	2980	3040	2460	2360	2410	---	---	2930
23	2560	2520	2540	3080	3020	3050	2580	2360	2410	2970	2910	2940
24	2600	2520	2560	3200	3040	3090	2560	2360	2400	2960	2910	2940
25	2620	2560	2600	3220	3080	3120	2560	2360	2400	---	---	---
26	2640	2560	2600	3280	3160	3210	2440	2360	2390	---	---	---
27	2680	2580	2620	3780	3080	3460	2440	2380	2410	---	---	---
28	2740	2660	2690	3080	2660	2800	2440	2440	2440	---	---	---
29	2780	2700	2740	2720	2560	2580	2480	2420	2440	---	---	---
30	---	---	---	2600	2520	2560	2480	2440	2470	2740	2420	2600
31	---	---	---	2780	2320	2640	---	---	---	3390	457	1840
MONTH	2820	2380	2580	3780	2320	2900	2740	440	2380	3390	457	2720
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	742	457	617	1740	1560	1610	1360	1260	1340	461	435	448
2	854	643	721	1740	1490	1610	1260	1200	1220	454	439	446
3	852	665	697	1830	1600	1680	1220	1200	1210	470	447	459
4	1020	792	945	1750	1600	1660	1210	1190	1210	811	463	547
5	---	---	770	1910	1620	1690	1210	1190	1200	547	392	454
6	---	---	630	1840	1640	1690	1230	1170	1220	526	431	482
7	1070	748	906	1790	1640	1680	1230	1200	1220	665	526	589
8	1200	719	887	1740	1670	1700	1220	1200	1210	670	624	652
9	859	718	794	1960	1700	1800	1440	782	1220	747	657	684
10	1090	859	998	1910	1700	1760	1420	454	985	791	723	754
11	1150	975	1070	1820	1730	1760	528	362	443	799	730	764
12	1180	1080	1130	1910	1740	1790	536	451	496	831	788	808
13	1270	1110	1160	1820	1680	1770	484	461	475	818	800	809
14	1330	1270	1300	1900	1760	1810	508	484	495	860	677	789
15	1420	1300	1350	2440	1460	1920	495	481	489	708	186	264
16	1430	1320	1380	2210	1800	1910	522	484	506	471	225	354
17	1400	1320	1370	1920	1780	1830	534	513	523	620	471	550
18	1430	1330	1380	1840	1780	1810	559	531	541	742	619	679
19	1480	1360	1420	1820	1790	1810	577	530	555	926	704	786
20	1490	1330	1410	1830	1790	1810	594	544	568	786	658	698
21	1530	1390	1460	---	---	---	614	547	581	717	654	685
22	1510	1390	1440	---	---	---	643	582	611	737	636	687
23	1520	1410	1460	---	---	---	681	601	637	802	735	772
24	1610	1450	1520	---	---	---	699	610	645	---	---	e900
25	1680	1470	1540	---	---	---	786	626	671	---	---	e1100
26	1890	1490	1600	---	---	---	790	618	679	---	---	1200
27	1780	1480	1580	---	---	---	1070	646	778	1320	1280	1300
28	1650	1510	1560	3400	2430	2880	730	438	639	1420	1310	1350
29	1600	1530	1560	2430	1480	1690	569	447	512	1440	1400	1420
30	1650	1550	1590	1480	1370	1420	448	425	437	1460	1420	1440
31	---	---	---	1620	1330	1370	452	431	441	---	---	---
MONTH	1890	457	1210	3400	1330	1770	1440	362	766	1460	186	762
YEAR	3780	186	1980									

e Estimated

08086212 HUBBARD CREEK BELOW ALBANY, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	19.0	16.5	18.0	13.5	10.5	12.0	---	---	---
2	---	---	---	18.0	14.0	16.0	15.0	12.0	13.5	---	---	---
3	---	---	---	14.0	12.5	13.0	14.5	12.0	13.0	---	---	---
4	---	---	22.5	12.5	11.5	12.0	14.0	11.0	12.5	---	---	---
5	22.5	20.0	21.5	13.0	11.0	12.0	13.0	11.5	12.5	---	---	---
6	22.0	19.0	20.5	14.0	12.5	13.5	13.0	10.0	11.5	---	---	---
7	21.0	18.0	19.5	16.5	13.5	15.0	11.5	10.0	10.5	---	---	---
8	21.5	19.0	20.0	15.0	12.5	14.0	13.5	9.5	11.0	---	---	---
9	22.5	20.0	21.5	16.0	13.0	14.5	10.0	8.0	9.0	---	---	---
10	24.0	21.0	22.5	17.0	14.0	15.5	9.0	7.0	8.0	---	---	---
11	24.0	21.0	22.5	15.0	12.5	13.5	10.5	7.0	9.0	---	---	---
12	23.5	21.0	22.5	14.5	10.5	12.5	11.5	8.5	10.0	---	---	---
13	24.0	20.5	22.0	15.5	12.0	13.5	12.5	10.0	11.0	---	---	---
14	22.0	18.5	20.5	14.0	12.0	13.5	12.5	10.0	11.0	---	---	---
15	21.0	17.5	19.5	15.5	12.0	14.0	12.0	10.0	11.0	---	---	---
16	20.5	17.5	19.0	14.0	12.0	13.0	11.5	10.0	11.0	---	---	---
17	20.5	16.5	18.5	13.5	12.5	13.0	---	---	---	---	---	---
18	20.5	17.0	19.0	14.0	12.0	13.0	---	---	---	---	---	---
19	22.5	18.0	20.0	15.0	12.5	13.5	---	---	---	---	---	---
20	20.5	16.0	18.0	16.0	13.0	14.5	---	---	---	---	---	---
21	19.0	14.5	17.0	15.0	13.0	14.0	---	---	---	---	---	---
22	19.5	14.5	17.0	16.0	13.0	14.5	---	---	---	---	---	---
23	20.0	16.5	18.5	14.5	12.5	13.5	---	---	---	---	---	---
24	18.0	14.5	16.5	14.0	11.5	12.5	---	---	---	---	---	---
25	19.0	15.5	17.0	14.0	11.5	12.5	---	---	---	---	---	---
26	20.5	17.5	19.0	14.0	11.5	13.0	---	---	---	---	---	---
27	20.5	17.5	19.0	14.0	12.0	13.0	---	---	---	---	---	---
28	19.5	16.5	18.0	12.5	10.5	11.5	---	---	---	---	---	---
29	18.0	16.0	17.5	12.0	9.5	11.0	---	---	---	---	---	---
30	17.5	17.0	17.5	13.0	9.5	11.0	---	---	---	---	---	---
31	18.0	17.0	17.5	---	---	---	---	---	---	---	---	4.0
MONTH	24.0	14.5	19.5	19.0	9.5	13.5	15.0	7.0	11.0	---	---	4.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.5	3.0	4.0	10.0	5.5	8.0	16.5	12.5	14.5	19.5	15.0	17.5
2	4.0	3.5	4.0	12.0	6.5	9.0	17.0	13.5	15.5	23.0	15.5	18.5
3	5.5	3.0	4.0	12.5	8.5	10.5	16.5	14.0	15.5	22.0	18.0	20.0
4	6.0	3.5	4.5	14.0	10.5	12.0	15.0	13.5	14.5	23.0	19.0	21.0
5	6.0	4.0	5.0	15.5	12.5	14.0	13.5	9.5	11.5	24.0	20.5	22.0
6	7.0	4.5	6.0	13.5	9.5	12.5	12.0	10.5	11.0	25.0	21.0	23.0
7	10.5	5.5	7.5	11.5	8.0	9.5	13.0	10.5	12.0	24.5	21.5	23.5
8	11.0	7.5	8.5	10.5	7.0	8.5	14.5	12.5	13.5	24.5	21.5	23.0
9	11.5	8.5	9.5	10.0	6.5	8.0	17.0	14.5	15.5	23.5	21.0	22.5
10	12.0	9.0	10.0	11.0	7.0	9.0	19.0	16.5	18.0	22.5	20.5	21.5
11	11.0	8.0	9.0	11.0	8.5	10.0	19.5	17.5	18.5	24.0	19.0	21.0
12	10.5	6.5	8.5	13.0	9.5	11.5	20.5	17.5	19.0	22.5	19.5	21.0
13	11.0	6.5	9.0	14.5	11.5	13.0	20.0	17.0	18.5	23.5	21.0	22.0
14	12.0	6.0	9.5	17.5	13.0	14.5	19.5	17.0	18.5	24.0	21.5	23.0
15	12.0	8.5	10.0	16.0	13.0	14.5	20.0	16.0	18.0	24.0	20.5	22.5
16	11.0	6.5	8.5	16.5	13.5	15.0	18.5	16.0	17.5	24.5	21.0	23.0
17	10.5	7.0	8.5	17.0	13.5	15.0	19.5	16.5	18.5	24.5	21.0	23.0
18	12.0	7.5	9.5	16.0	13.5	15.0	23.0	17.5	20.0	24.0	21.0	22.5
19	12.5	8.5	10.5	16.5	13.0	14.5	22.0	19.0	21.0	24.5	21.5	23.0
20	11.5	10.0	11.0	16.0	12.0	14.0	21.5	18.5	20.5	24.5	21.0	23.0
21	13.0	9.5	11.0	15.5	11.5	13.5	21.5	18.0	20.0	26.5	22.5	24.5
22	13.5	11.0	12.5	16.0	12.5	14.5	21.0	18.5	19.5	28.5	23.5	25.5
23	13.5	11.5	12.5	18.0	14.5	16.0	22.0	16.5	19.5	29.0	24.0	26.5
24	13.0	10.0	11.5	19.5	14.5	17.0	21.5	17.5	19.5	28.5	24.0	26.0
25	14.0	12.0	13.0	15.5	12.0	14.0	21.5	17.5	19.5	---	---	---
26	14.0	13.0	13.5	12.0	9.0	10.0	23.5	18.0	20.5	---	---	---
27	14.0	11.0	13.5	9.5	7.5	9.0	22.5	19.0	21.0	---	---	---
28	11.0	7.0	9.0	11.5	8.5	10.0	22.5	19.5	21.5	---	---	---
29	7.0	6.0	6.5	14.0	11.0	12.5	21.5	17.5	19.5	---	---	---
30	---	---	---	16.0	13.0	14.5	20.0	16.0	18.0	---	---	---
31	---	---	---	16.0	13.0	14.5	---	---	---	24.0	21.0	22.5
MONTH	14.0	3.0	9.0	19.5	5.5	12.5	23.5	9.5	17.5	29.0	15.0	22.5

BRAZOS RIVER BASIN

08086290 BIG SANDY CREEK ABOVE BRECKENRIDGE, TX

LOCATION.--Lat 32°38'54", long 99°00'15", Stephens County, Hydrologic Unit 12060105, on left bank 600 ft downstream from Battle Creek, 1.6 mi upstream from bridge on Farm Road 576, 9.8 mi southwest of Breckenridge, and about 14.6 mi upstream from Hubbard Creek Dam.

DRAINAGE AREA.--280 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1962 to current year. Prior to October 1975, published as "near Breckenridge."

REVISED RECORDS.--WDR IX-76-2: Drainage area at former site.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,185.83 ft above sea level. Prior to Oct. 1, 1975, at site 1.6 mi downstream at datum 7.41 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--According to information from State Department of Highways and Public Transportation, the floods of May 16, 1949, July 20, 1953, and Apr. 29, 1957, each reached a stage of 24.6 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 15	0945	15,000	26.53				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.08	.07	.04	.05	.05	.05	e.01	47	.00	.00	.08
2	.24	.07	.07	.04	.05	.05	.06	e.01	5.5	.00	.08	.02
3	.44	.07	.07	.05	.05	.05	e.06	e.01	.25	.00	.03	.00
4	.30	.07	.07	.05	.05	.05	e.06	e.01	233	.00	.00	.00
5	.22	.07	.07	.05	.05	.07	e5.0	e.01	173	.00	.00	271
6	.14	.07	.07	.05	.05	.07	e100	e200	110	.00	.00	136
7	.11	.07	.07	.05	.05	.06	e50	e50	13	.00	.00	22
8	.08	.05	.07	.05	.05	.05	e10	e12	.79	.00	.00	1.5
9	.07	.05	.07	.05	.05	.05	e2.0	e4.0	.11	.00	.00	.12
10	.05	.05	.07	.05	.05	.05	e2.5	e.50	.07	.00	99	.06
11	.05	.05	.07	.04	.05	.05	e1.0	e.20	.04	.00	11	.03
12	.04	.05	.08	.04	.05	.05	e.60	e.10	.02	.00	.07	.02
13	.04	.05	.09	.04	.05	.05	e.50	e.05	.01	.00	.01	.01
14	.03	.05	.09	.04	.05	.05	e.40	e.03	.01	.00	.00	15
15	.03	.05	.10	.04	.05	.05	e.30	e.03	.00	.00	.00	8470
16	.03	.05	.11	.04	.05	.05	e.30	e.03	.00	.00	.00	2230
17	.03	.07	.18	.04	.05	.05	e.20	e.02	.00	.00	.00	117
18	.04	.09	.24	.05	.05	.06	e.10	e.02	.00	.00	.00	61
19	.04	.09	.24	.05	.05	.07	e.08	e.02	.00	.00	.00	71
20	.04	.08	.21	.05	.05	.07	e.06	e.01	.00	.00	.00	128
21	.03	.07	.20	.05	.05	.07	e.05	.01	.00	.00	.00	75
22	.04	.07	.12	.05	.05	.07	e.05	.01	.00	.00	.00	30
23	.04	.07	.11	.05	.05	.06	e.04	.01	.00	.00	.00	16
24	.04	.07	.09	.05	.05	.05	e.04	.01	.00	.00	.00	123
25	.04	.07	.07	.05	.05	.05	e.03	.01	.00	.00	.00	64
26	.05	.06	.07	.05	.05	.05	e.03	.02	.00	.45	.00	22
27	.05	.05	.07	.05	.05	.12	e.02	.02	.00	.24	.00	11
28	.05	.05	.06	.05	.05	.08	e.02	.02	.00	.01	.00	6.7
29	.04	.05	.03	.05	.05	.05	e.02	.02	.00	.00	5.1	4.9
30	.04	.06	.03	.05	---	.05	e.02	.02	.00	.00	67	3.9
31	.04	---	.03	.05	---	.05	---	130	---	.01	.48	---
TOTAL	2.66	1.90	2.99	1.46	1.45	1.80	173.59	397.21	582.80	0.71	182.77	11879.34
MEAN	.086	.063	.096	.047	.050	.058	5.79	12.8	19.4	.023	5.90	396
MAX	.44	.09	.24	.05	.05	.12	100	200	233	.45	99	8470
MIN	.03	.05	.03	.04	.05	.05	.02	.01	.00	.00	.00	.00
AC-FT	5.3	3.8	5.9	2.9	2.9	3.6	344	788	1160	1.4	363	23560
CFSM	.00	.00	.00	.00	.00	.00	.02	.05	.07	.00	.02	1.41
IN.	.00	.00	.00	.00	.00	.00	.02	.05	.08	.00	.02	1.58

BRAZOS RIVER BASIN

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08086290 BIG SANDY CREEK ABOVE BRECKENRIDGE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

MEAN	54.9	12.0	17.4	19.8	24.8	24.7	30.1	67.0	32.6	5.72	19.5	32.8
MAX	1151	155	342	547	455	255	209	414	129	51.4	211	396
(WY)	1982	1965	1992	1968	1992	1992	1990	1965	1982	1962	1978	1996
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1969	1971	1971	1971	1962	1966	1980	1984	1964	1964	1980	1968

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1962 - 1996

ANNUAL TOTAL	8579.10	13228.68	28.5
ANNUAL MEAN	23.5	36.1	114
HIGHEST ANNUAL MEAN			2.47
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	3780	8470	28100
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		15000	i80000
INSTANTANEOUS PEAK STAGE		26.53	a28.60
ANNUAL RUNOFF (AC-FT)	17020	26240	20620
ANNUAL RUNOFF (CFSM)	.084	.13	.10
ANNUAL RUNOFF (INCHES)	1.14	1.76	1.38
10 PERCENT EXCEEDS	6.0	4.9	14
50 PERCENT EXCEEDS	.11	.05	.07
90 PERCENT EXCEEDS	.03	.00	.00

e Estimated

a From floodmark.

i From field determination, based on 2-section slope-area measurement of peak flow.

BRAZOS RIVER BASIN

08086290 BIG SANDY CREEK ABOVE BRECKENRIDGE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: November 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1975 to current year.

WATER TEMPERATURE: November 1975 to current year.

INSTRUMENTATION.--Since March 1982, specific conductance and water temperature are continuously recorded at this station.

REMARKS.--Estimated mean specific conductance values and interruptions in the mean temperature values were due to malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relation between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District Office upon request. Prior to November 1975, this station was published as 08086300 Big Sandy Creek near Breckenridge.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 28,700 microsiemens Apr. 5, 10, 1976; minimum, 95 microsiemens Oct. 13, 1981.

WATER TEMPERATURE: Maximum, 37.0°C Aug. 9, 1987, July 16, 1989; minimum, 0.0°C Jan. 9, 10, 1977, Dec. 2, 3, 1985.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 18,500 microsiemens May 6; minimum recorded, 115 microsiemens Aug. 10.

WATER TEMPERATURE: Maximum recorded, 35.5°C June 13; minimum recorded, 0.5°C Jan. 31.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 04...	0842	0.29	4560	16.5	830	650	250	49	600
NOV 29...	1528	0.05	12700	8.5	2300	2100	640	170	2000
JAN 31...	1320	0.06	15200	1.5	2800	2600	800	200	2400
APR 02...	0850	0.06	14300	15.0	2500	2400	720	170	2200
MAY 21...	1535	0.01	5310	26.0	920	770	270	60	740
JUN 06...	1420	61	343	26.0	110	33	37	5.1	19
DATE		SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)
OCT 04...		9	5.7	180	230	1200	0.20	13	2450
NOV 29...		18	4.8	220	690	4100	0.40	4.9	7740
JAN 31...		20	3.8	250	920	5200	0.20	6.6	9680
APR 02...		19	4.4	120	880	4700	0.20	0.20	8750
MAY 21...		11	5.8	150	260	1600	0.30	5.7	3030
JUN 06...		0.8	8.6	80	16	38	0.20	8.5	180

BRAZOS RIVER BASIN

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08086290 BIG SANDY CREEK ABOVE BRECKENRIDGE, TX--Continued

MONTH YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- SIEMENS)	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. 1995	2.66	6140	3510	25	1800	13	360	2.6	1100
NOV. 1995	1.90	11000	6600	34	3400	18	660	3.4	*
DEC. 1995	2.99	13300	8200	66	4300	35	820	6.6	*
JAN. 1996	1.46	13400	8240	32	4400	17	820	3.2	*
FEB. 1996	1.45	15700	9890	39	5300	21	970	3.8	*
MAR. 1996	1.80	16700	10600	52	5800	28	1000	5.0	*
APR. 1996	173.59	3200	1780	834	870	408	190	88	570
MAY 1996	397.21	6650	3860	4140	2000	2090	400	424	1200
JUNE 1996	582.80	516	276	435	130	205	30	47	92
JULY 1996	0.71	794	427	0.8	200	0.4	46	0.09	140
AUG. 1996	182.77	523	281	139	130	66	30	15	93
SEPT 1996	11879.34	296	158	5070	74	2390	17	544	53
TOTAL	13228.68	**	**	10900	**	5290	**	1140	**
WTD.AVG.	36	549	304	**	150	**	32	**	97

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	5810	4140	4860	---	---	e9100	13600	13200	13400	13000	12100	12600
2	6460	5470	5800	---	---	e9300	13600	13200	13400	12600	11900	12400
3	6960	5730	6200	---	---	e9400	13600	13100	13300	12600	11700	12300
4	---	---	5070	---	---	e9600	13800	13300	13400	12500	11500	12100
5	---	---	e5100	---	---	e9700	13800	13500	13500	12200	10200	11500
6	---	---	e5200	---	---	e9900	13600	13500	13500	10600	8680	9870
7	---	---	e5400	---	---	e10100	13900	13500	13600	12000	10400	11700
8	---	---	e5500	---	---	e10200	13900	13400	13600	12100	11800	11900
9	---	---	e5700	---	---	e10400	14400	13400	13700	12000	11900	12000
10	---	---	e5800	---	---	e10500	14600	13800	14100	12200	11800	12000
11	---	---	e6000	---	---	e10700	14700	14200	14400	12300	11300	11700
12	---	---	e6100	---	---	e10800	14200	13600	14000	12900	11600	12100
13	---	---	e6300	---	---	e11000	13900	13700	13800	13500	12300	13100
14	---	---	e6400	---	---	e11100	13800	13500	13700	13800	13000	13300
15	---	---	e6600	---	---	e11300	13800	13500	13600	13600	12000	13200
16	---	---	e6700	---	---	e11400	14300	13700	13900	14000	13600	13800
17	---	---	e6900	---	---	e11600	14200	13800	14000	13600	13500	13600
18	---	---	e7000	---	---	e11200	14400	13100	13800	14300	12600	13500
19	---	---	e7200	---	---	e11000	14300	11600	13200	14800	14200	14400
20	---	---	e7300	---	---	e11100	13900	12700	13300	15000	13800	14600
21	---	---	e7500	---	---	e11200	13400	12700	13100	14700	14400	14500
22	---	---	e7600	---	---	e11400	13300	11600	12800	14700	14400	14500
23	---	---	e7800	---	---	e11600	13000	12200	12600	14500	13600	14300
24	---	---	e7900	---	---	e11800	12400	11700	12100	14700	14200	14500
25	---	---	e8100	---	---	e12000	12100	11300	11700	14600	14400	14500
26	---	---	e8200	---	---	e12100	12400	11500	12000	14600	14300	14400
27	---	---	e8400	---	---	e12300	12800	12100	12300	15200	14300	14600
28	---	---	e8500	---	---	e12500	13400	10700	12400	15200	14700	14900
29	---	---	e8700	---	---	13000	13600	11300	12900	15000	14600	14800
30	---	---	e8800	13900	13200	13600	13400	11900	12800	15300	14700	15000
31	---	---	e9000	---	---	---	13300	12700	12900	16500	15200	15800
MONTH	6960	4140	6830	13900	13200	11000	14700	10700	13300	16500	8680	13300

e Estimated

08086290 BIG SANDY CREEK ABOVE BRECKENRIDGE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	17000	16200	16600	17100	16200	16700	14900	13700	14100	16500	15200	15600
2	16500	16200	16300	16600	16200	16400	15400	14700	15000	16900	16000	16300
3	16500	16200	16400	16500	16100	16300	15600	14900	15300	17300	16700	16900
4	16700	16000	16400	16300	16200	16300	15800	14900	15600	17900	17200	17400
5	16400	15900	16200	16300	16000	16200	15200	3220	9820	18400	17700	18000
6	16100	15600	15900	16200	15800	16000	9130	1240	3670	18500	1250	8340
7	15900	13800	15000	16600	16200	16300	2140	1280	1680	1250	842	936
8	14300	13700	14000	17100	16400	16700	2350	2140	2270	1200	948	1080
9	14600	13700	14100	17300	16300	16800	2530	2240	2370	1460	1200	1320
10	14900	13900	14600	17200	16200	16800	2870	2530	2670	1760	1460	1670
11	15500	14400	14700	17300	16700	16900	3180	2870	2990	2110	1760	1940
12	16200	14600	15400	17100	16800	16900	3590	3180	3350	2530	2090	2170
13	16200	15300	15800	17000	16700	16900	3840	3590	3770	2740	2480	2600
14	15500	15200	15400	16900	16300	16700	4460	3820	4110	3010	2740	2880
15	16000	15300	15400	16800	16300	16700	5060	4410	4640	3360	3010	3170
16	16300	15300	15800	16800	16100	16600	5220	4930	5050	3650	3350	3480
17	16300	15500	16000	16900	16200	16800	5770	5220	5400	4000	3630	3820
18	16000	15600	15800	16800	16400	16600	6520	5700	5970	4380	3940	4170
19	16300	15600	15900	16900	16700	16800	7210	6310	6560	4780	4340	4560
20	15900	15500	15700	17000	16800	16900	8360	6920	7380	5580	4670	5030
21	15700	15300	15600	17200	16200	16900	8950	7670	8130	5880	5330	5550
22	15700	15500	15600	17000	16200	16800	9650	8740	9240	6190	5770	5950
23	16000	15700	15800	17000	16900	17000	10800	9460	9890	6560	6160	6350
24	16300	15600	15800	17300	16900	17100	11300	10400	10800	6880	6230	6710
25	16300	15700	16000	17500	17200	17300	12500	11300	11800	7230	6860	7050
26	16200	15800	16000	17600	17400	17600	13500	12100	12500	7740	7230	7500
27	16000	15800	15900	17500	17300	17400	13700	12700	13100	8160	7630	7890
28	16400	15800	16100	17500	16600	17200	14500	13500	14000	8940	8150	8380
29	16900	16400	16600	17000	16100	16700	15300	14200	14400	9250	8680	8820
30	---	---	---	16700	14000	15800	15300	14600	15000	9320	8730	9140
31	---	---	---	15200	12500	13500	---	---	---	12000	507	6960
MONTH	17000	13700	15700	17600	12500	16600	15800	1240	8350	18500	507	6830
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	808	471	573	---	---	---	---	---	---	533	514	521
2	1110	723	1000	---	---	---	---	---	e500	561	533	544
3	1070	887	968	---	---	---	---	---	e550	---	---	---
4	1000	395	742	---	---	---	---	---	---	---	---	---
5	---	---	e300	---	---	---	---	---	---	735	370	509
6	---	---	348	---	---	---	---	---	---	370	332	350
7	374	337	351	---	---	---	---	---	---	340	330	334
8	464	374	421	---	---	---	---	---	---	350	339	344
9	588	464	522	---	---	---	---	---	---	369	350	356
10	685	506	595	---	---	---	1710	115	272	381	359	366
11	784	685	728	---	---	---	225	169	198	421	381	398
12	1040	772	930	---	---	---	283	209	248	461	421	438
13	1410	1010	1180	---	---	---	284	270	278	501	461	486
14	1420	1290	1350	---	---	---	---	---	---	620	392	515
15	---	---	---	---	---	---	---	---	---	392	196	233
16	---	---	---	---	---	---	---	---	---	416	241	319
17	---	---	---	---	---	---	---	---	---	588	416	501
18	---	---	---	---	---	---	---	---	---	760	588	677
19	---	---	---	---	---	---	---	---	---	852	760	805
20	---	---	---	---	---	---	---	---	---	864	797	819
21	---	---	---	---	---	---	---	---	---	911	806	842
22	---	---	---	---	---	---	---	---	---	1130	851	1010
23	---	---	---	---	---	---	---	---	---	1250	1130	1190
24	---	---	---	---	---	---	---	---	---	1240	992	1150
25	---	---	---	---	---	---	---	---	---	---	---	e950
26	---	---	---	1340	770	1080	---	---	---	---	---	e900
27	---	---	---	780	164	295	---	---	---	---	---	e1100
28	---	---	---	---	---	e300	---	---	---	---	---	e1300
29	---	---	---	---	---	---	2400	2360	2380	---	---	e1450
30	---	---	---	---	---	---	2360	559	806	---	---	e1600
31	---	---	---	---	---	e400	559	516	530	---	---	---
MONTH	1420	337	715	1340	164	519	2400	115	640	1250	196	715
YEAR	18500	115	9490									

e Estimated

BRAZOS RIVER BASIN

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08086290 BIG SANDY CREEK ABOVE BRECKENRIDGE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	25.5	21.0	23.0	---	---	---	11.5	9.5	10.5	8.0	4.0	6.5
2	24.0	20.5	22.0	---	---	---	13.0	10.5	12.0	5.5	4.0	5.0
3	22.5	18.0	20.5	---	---	---	13.0	10.5	12.0	6.5	5.5	6.0
4	---	---	19.0	---	---	---	12.5	9.5	11.0	7.0	5.5	6.5
5	---	---	---	---	---	---	11.5	10.5	11.0	7.0	5.5	6.5
6	---	---	---	---	---	---	10.5	8.0	9.5	5.5	3.0	4.5
7	---	---	---	---	---	---	10.5	9.0	9.5	5.5	2.5	4.0
8	---	---	---	---	---	---	10.5	8.5	10.0	5.5	3.0	5.0
9	---	---	---	---	---	---	9.5	5.0	7.0	6.0	5.0	5.5
10	---	---	---	---	---	---	6.5	3.5	5.5	6.5	4.5	5.5
11	---	---	---	---	---	---	8.0	4.0	6.0	7.5	5.0	6.5
12	---	---	---	---	---	---	9.5	7.0	8.0	7.0	4.5	6.0
13	---	---	---	---	---	---	10.5	9.0	10.0	7.5	4.5	6.0
14	---	---	---	---	---	---	11.5	10.0	11.0	7.5	5.5	7.0
15	---	---	---	---	---	---	12.0	11.0	11.5	7.0	5.0	6.0
16	---	---	---	---	---	---	12.5	11.0	12.0	6.5	4.5	6.0
17	---	---	---	---	---	---	12.0	11.0	11.5	7.5	6.0	7.0
18	---	---	---	---	---	---	11.5	8.5	10.5	7.5	3.0	4.5
19	---	---	---	---	---	---	10.0	8.5	9.0	4.0	1.5	3.0
20	---	---	---	---	---	---	9.5	8.5	9.0	5.0	2.5	3.5
21	---	---	---	---	---	---	9.5	8.5	9.0	5.0	3.0	4.5
22	---	---	---	---	---	---	9.0	8.5	9.0	7.0	4.5	6.0
23	---	---	---	---	---	---	9.0	8.0	8.5	7.0	6.0	6.5
24	---	---	---	---	---	---	9.5	8.0	8.5	6.0	3.5	4.5
25	---	---	---	---	---	---	9.0	8.0	8.5	5.0	3.5	4.5
26	---	---	---	---	---	---	8.5	6.0	7.5	5.0	3.5	4.5
27	---	---	---	---	---	---	8.0	5.5	7.0	5.0	2.5	4.0
28	---	---	---	---	---	---	7.5	5.0	6.5	5.0	3.0	4.0
29	---	---	---	---	---	9.0	7.0	4.5	6.0	5.0	3.5	4.5
30	---	---	---	10.5	7.5	9.5	8.0	6.5	7.5	4.5	2.5	3.5
31	---	---	---	---	---	---	8.0	6.5	7.5	2.5	.5	1.5
MONTH	25.5	18.0	21.0	10.5	7.5	9.0	13.0	3.5	9.0	8.0	.5	5.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	1.0	2.0	9.0	5.0	7.0	18.0	11.5	15.5	23.5	16.5	20.0
2	3.5	2.5	3.0	10.0	5.5	8.0	20.5	13.0	17.0	25.5	18.5	22.0
3	4.0	3.0	3.5	12.0	7.5	9.5	22.0	14.5	18.5	29.0	21.5	25.0
4	4.0	1.5	3.0	13.5	10.5	12.0	20.0	14.0	17.0	29.5	23.0	26.0
5	4.5	3.5	4.0	15.5	12.5	14.0	14.0	5.5	9.0	29.5	24.0	26.5
6	4.5	4.0	4.0	14.0	9.0	12.0	12.0	5.5	8.5	27.5	22.5	24.0
7	7.5	4.5	6.0	9.0	5.0	7.5	16.0	9.0	12.5	27.0	22.0	24.5
8	9.0	6.5	7.5	8.5	4.0	7.0	20.5	13.0	16.5	28.5	23.0	25.5
9	9.0	6.5	8.0	8.0	4.0	6.5	23.5	15.0	19.0	26.0	23.0	24.5
10	10.5	7.5	9.0	10.5	5.0	7.5	23.0	16.5	20.0	24.5	22.5	23.5
11	9.0	6.5	7.5	11.5	7.0	9.5	22.5	18.0	20.5	24.5	20.0	22.0
12	8.5	4.5	6.5	14.0	8.5	11.5	26.0	19.0	21.0	25.5	19.5	22.0
13	8.0	5.5	7.0	17.0	12.0	14.0	23.5	16.5	19.5	27.5	22.0	24.5
14	9.5	7.0	8.0	18.0	14.5	16.0	23.0	16.0	19.0	28.5	23.5	26.0
15	9.5	7.5	8.5	16.5	12.5	15.0	20.5	13.5	17.0	29.0	23.0	26.0
16	9.0	6.0	7.0	16.5	11.5	14.0	21.5	12.5	17.0	30.5	24.0	27.0
17	8.0	5.0	6.5	16.5	12.5	14.5	23.5	15.5	19.0	29.5	24.0	27.0
18	9.0	6.0	7.5	16.0	12.5	14.5	24.5	17.5	21.5	30.0	24.0	27.0
19	10.0	7.5	9.0	15.0	11.5	13.5	25.5	18.0	22.0	29.5	24.0	27.0
20	10.5	8.5	10.0	14.5	9.0	12.0	24.5	17.5	21.0	32.0	24.5	27.5
21	12.0	9.0	10.5	14.5	8.5	11.5	24.0	17.0	20.5	33.0	25.0	29.0
22	12.5	9.5	11.0	17.0	11.0	14.0	22.5	17.5	20.0	33.5	26.5	29.5
23	12.5	10.0	11.5	19.0	14.5	16.5	22.0	14.0	18.0	31.5	26.0	29.0
24	11.0	8.5	10.0	19.5	15.5	17.0	23.0	16.0	19.5	32.5	26.0	29.0
25	12.0	10.5	11.5	15.5	10.5	12.5	24.5	17.5	21.0	28.5	26.0	27.0
26	14.5	11.5	13.0	12.0	7.0	9.0	24.5	17.0	21.0	29.5	25.0	26.5
27	14.0	12.0	13.0	9.0	7.0	8.5	26.0	18.0	22.0	31.0	24.5	27.5
28	12.0	7.5	9.0	12.5	9.0	11.0	24.0	20.5	23.0	31.5	24.5	27.5
29	7.5	5.5	6.5	17.0	12.5	14.5	23.0	16.0	19.5	32.0	25.0	28.0
30	---	---	---	20.0	15.5	17.5	22.0	14.0	18.0	32.0	25.0	27.5
31	---	---	---	19.0	16.5	18.0	---	---	---	26.0	23.0	24.0
MONTH	14.5	1.0	7.5	20.0	4.0	12.0	26.0	5.5	18.5	33.5	16.5	26.0

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX

LOCATION.--Lat 32°49'53", long 98°58'03", Stephens County, Hydrologic Unit 12060105, on left bank just upstream from dam on Hubbard Creek, 1.4 mi upstream from U.S. Highway 183, 6.5 mi northwest of Breckenridge, and 12.6 mi upstream from mouth.

DRAINAGE AREA.--1,085 mi².

WATER-CONTENT RECORDS

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

REVISED RECORDS.--Wdk IX-76-2: Drainage area. WDR IX-95-2: 1990-94.

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

REMARKS.--The reservoir is formed by a rolled earthfill dam 5,630 ft long. There are two additional levees, the north and south, making an overall length of 3.5 mi. Storage began September 1962 and the dam was completed in December 1962. The emergency spillway is a 2,000-foot-wide 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 with a 17.5-foot head through a 22.0-foot-diameter concrete conduit. The dam is the property of the West Central Texas Municipal Water District. Figures given herein represent total contents. 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 emergency 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.--The capacity table was furnished by the West Central Texas Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 441,200 acre-ft Oct. 14, 1981, for several hours (elevation, 1,190.22 ft); minimum since normal operating level was reached in May 1969, 157,400 acre-ft Oct. 1, 1984 (elevation, 1,169.89 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 305,900 acre-ft Sept. 20, 22, 25 at 1300 hours (elevation, 1,182.21 ft); minimum, 214,500 acre-ft Aug. 27 (elevation, 1,175.30 ft).

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

1,169.0	149,100	1,180.0	274,200	1,187.0	382,800
1,174.0	199,700	1,183.0	317,800	1,189.0	418,600
1,177.0	235,000	1,185.0	349,300	1,191.0	456,100

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259500	252800	248900	245700	243800	241400	239800	239200	234500	229600	220600	218900
2	259800	252800	248900	245000	243700	241400	239700	239200	234500	229400	220200	218900
3	259800	252700	248900	246700	243700	241300	239400	239000	234500	229000	219800	218600
4	259900	252400	248900	247100	243600	241000	239300	238800	235500	228800	219800	218600
5	259300	252400	248400	246300	243700	240900	241900	238800	236500	228400	219300	220100
6	259000	252300	248400	246300	243800	240700	242700	238700	236500	228000	219300	221000
7	258900	252200	247900	246300	244000	240200	243200	238400	236600	227800	218100	221100
8	258600	252100	247600	246200	244000	239900	243300	238300	236400	227300	217400	221000
9	258600	251900	247600	246200	243900	239800	243600	238000	236100	226500	217400	220900
10	258600	251500	247500	246200	243800	239700	243300	237600	236000	226500	217800	220700
11	258200	251400	247500	246200	243700	239500	243200	237500	235800	226100	217700	220600
12	258200	251300	247500	246200	243700	239400	243100	237400	235600	226100	217600	220300
13	257600	251000	247500	246200	243700	239300	243100	237300	235500	226000	217400	220000
14	257600	250900	247200	246100	243400	239300	242400	237100	235300	226000	217400	220700
15	257400	250600	246800	246000	243300	239300	242400	236800	235000	225800	217100	283800
16	257000	250500	247200	246000	243200	239000	242200	236400	234800	225200	216900	302900
17	256900	250500	247700	245600	243100	238800	242100	236100	234500	224800	216800	303500
18	256600	250500	247500	245500	242900	238800	241800	235600	233300	224400	216400	304700
19	255600	250400	247500	245500	242900	238700	241700	235400	232900	224100	216100	305300
20	255600	250400	247400	245500	242800	238500	241400	235000	232600	223700	215800	305600
21	255300	250100	247200	245500	242800	238300	241600	234900	232200	223300	215500	305800
22	254900	250000	247100	245500	242800	238300	241700	234300	231700	223000	215000	305900
23	254800	250000	247000	245500	242800	238100	241700	233900	231300	222800	214900	305600
24	254700	249800	247000	245300	242800	237800	241300	233700	231000	222100	214700	305000
25	254400	249600	247000	245200	242800	237800	241000	233300	230700	222000	214700	305900
26	254100	249300	247000	244800	242700	237800	240900	233000	231100	221700	214700	304900
27	254000	249200	247000	244800	242300	240000	240400	232700	230600	221600	215500	304700
28	253600	248900	246800	244700	241600	240300	239800	232200	230400	221500	217600	304600
29	253500	248900	246600	244700	241400	240200	239500	231900	230100	221300	218400	304400
30	253200	248900	246500	244200	---	240000	239300	232600	229900	220700	218800	304300
31	253100	---	246300	243800	---	239900	---	233900	---	220400	219000	---
MAX	259900	252800	248900	247100	244000	241400	243600	239200	236600	229600	220600	305900
MIN	253100	248900	246300	243800	241400	237800	239300	231900	229900	220400	214700	218600
(+)	1178.42	1178.10	1177.90	1177.70	1177.51	1177.39	1177.34	1176.91	1176.58	1175.80	1175.68	1182.10
(@)	-6500	-4200	-2600	-2500	-2400	-1500	-600	-5400	-4000	-9500	-1400	+85300

CAL YR 1995 MAX 261500 MIN 239500 (@) -3500
WTR YR 1996 MAX 305900 MIN 214700 (@) +44700

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre-feet.

BRAZOS RIVER BASIN

08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD---Chemical and biochemical analyses: September 1963 to current year.

3249320985/5101 - HUBBARD CREEK RESERVOIR SITE P01

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
MAR											
22...	1046	239000	1.00	1300	8.2	13.0	1.22	10.2	102	290	180
22...	1050	--	10.0	1300	8.2	12.5	--	10.2	100	--	--
22...	1054	--	20.0	1300	8.2	12.5	--	10.2	100	--	--
22...	1058	--	30.0	1300	8.2	12.5	--	10.2	100	--	--
22...	1102	--	40.0	1300	8.2	12.5	--	10.1	99	--	--
22...	1106	--	50.0	1300	8.1	12.0	--	10.0	97	--	--
22...	1110	--	64.0	1310	8.1	12.0	--	9.3	90	290	190
SEP											
05...	1034	220100	1.0	1400	8.3	26.0	1.40	6.7	87	300	210
05...	1038	--	10.0	1400	8.3	26.0	--	6.7	87	--	--
05...	1042	--	20.0	1400	8.3	26.0	--	6.6	85	--	--
05...	1046	--	30.0	1400	8.2	26.0	--	6.4	83	--	--
05...	1050	--	40.0	1410	8.0	26.0	--	4.8	62	--	--
05...	1054	--	50.0	1410	8.0	25.5	--	4.4	56	--	--
05...	1057	--	58.0	1410	7.7	25.5	--	2.3	30	300	190

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SURP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
MAR										
22...	76	24	130	3	7.8	100	89	290	0.40	6.7
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	77	24	130	3	7.7	110	90	280	0.40	6.6
SEP										
05...	76	27	150	4	<0.10	95	97	320	0.40	7.3
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	74	27	140	4	8.1	100	93	310	0.40	8.1

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR										
22...	687	<0.010	<0.050	<0.015	--	0.30	<0.010	<0.010	<10	20
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	680	<0.010	<0.050	0.050	0.25	0.30	<0.010	<0.010	<10	200
SEP										
05...	--	<0.010	<0.050	<0.015	--	0.30	<0.010	<0.010	<3.0	5.0
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	723	0.010	<0.050	0.180	0.22	0.40	<0.010	<0.010	3.0	670

BRAZOS RIVER BASIN

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08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX--Continued

324649099000501 - HUBBARD CR RES SITE P09

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)
MAR										
22...	1017	1.00	1310	8.3	12.5	0.73	10.1	99	290	190
22...	1021	10.0	1310	8.3	12.5	--	10.1	99	--	--
22...	1025	20.0	1310	8.2	12.0	--	10.0	97	--	--
22...	1029	30.0	1310	8.2	12.0	--	9.9	96	--	--
22...	1031	44.0	1310	8.2	12.0	--	9.5	92	290	190
SEP										
05...	0957	1.00	1400	8.3	26.0	1.28	6.6	85	310	210
05...	1000	10.0	1400	8.3	26.0	--	6.4	83	--	--
05...	1003	20.0	1410	8.1	26.0	--	5.6	73	--	--
05...	1007	30.0	1410	8.0	25.5	--	4.5	58	--	--
05...	1011	41.0	1420	8.0	25.5	--	4.0	51	300	200

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
MAR										
22...	78	24	130	3	8.4	100	89	290	0.40	6.6
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	78	24	130	3	7.8	110	90	290	0.40	6.7
SEP										
05...	79	27	140	3	8.2	97	97	320	0.40	7.3
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	75	27	150	4	8.1	100	96	320	0.40	7.6

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR										
22...	688	<0.010	<0.050	<0.015	--	0.30	<0.010	<0.010	<10	<10
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	690	<0.010	<0.050	<0.015	--	0.30	<0.010	<0.010	<10	<10
SEP										
05...	737	<0.010	<0.050	<0.015	--	0.30	<0.010	<0.010	<3.0	2.0
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--
05...	744	<0.010	<0.050	0.050	0.35	0.40	0.020	<0.010	<3.0	87

324606099000201 - HUBBARD CR RES SITE P10

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
22...	1332	1.00	1340	8.2	13.5	13.0	132
22...	1334	10.0	1340	8.2	13.0	13.6	136
22...	1337	20.0	1340	8.2	13.0	13.8	138
22...	1340	33.0	1340	8.2	13.0	13.6	136
SEP							
05...	1255	1.00	1400	8.3	26.5	7.0	91
05...	1258	10.0	1400	8.3	26.0	6.7	87
05...	1300	20.0	1400	8.3	26.0	6.6	85
05...	1303	31.0	1360	8.2	25.5	6.2	80

BRAZOS RIVER BASIN

08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX--Continued

324514099010201 - HUBBARD CR RES SITE P11

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
22...	1244	1.00	1360	8.1	13.5	12.6	128
22...	1246	10.0	1360	8.1	13.5	12.7	129
22...	1248	22.0	1360	8.1	13.5	13.7	139
SEP							
05...	1319	1.00	1390	8.4	26.5	7.2	94
05...	1322	10.0	1380	8.4	26.0	6.4	83
05...	1326	23.0	1380	8.2	26.0	6.4	83

324301099001701 - HUBBARD CR RES SITE P12

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAR											
22...	1307	1.00	1470	8.2	14.5	0.18	13.2	137	330	210	89
22...	1317	9.00	1470	8.2	14.5	--	13.4	139	330	210	89
SEP											
05...	1356	1.00	1170	8.2	26.5	0.15	7.0	91	250	150	67
05...	1403	8.00	1090	8.0	25.5	--	5.7	73	260	170	71

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
MAR											
22...	26	150	4	7.8	120	99	330	0.40	5.3	778	--
22...	26	140	3	7.5	120	99	320	0.40	5.3	757	--
SEP											
05...	20	120	3	7.0	97	76	260	0.40	6.8	615	--
05...	21	120	3	6.8	89	69	230	0.30	6.2	578	0.100

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR										
22...	<0.010	--	<0.050	<0.015	--	0.40	<0.010	<0.010	<10	<10
22...	<0.010	--	<0.050	<0.015	--	0.40	<0.010	<0.010	<10	<10
SEP										
05...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	<3.0	11
05...	<0.010	0.100	0.100	0.020	0.28	0.30	0.020	<0.010	<3.0	4.0

BRAZOS RIVER BASIN

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08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX--Continued

324949098594301 - HUBBARD CR RES SITE P13

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
22...	1359	1.00	1320	8.2	13.0	12.8	127
22...	1402	10.0	1320	8.2	12.5	13.4	132
22...	1404	20.0	1320	8.2	12.5	13.3	131
22...	1407	30.0	1320	8.2	12.5	13.4	132
22...	1410	40.0	1320	8.2	12.5	13.2	130
22...	1413	50.0	1330	8.1	12.0	13.2	128
22...	1416	57.0	1330	8.0	12.0	13.0	127
SEP							
05...	1111	1.00	1400	8.4	26.5	7.1	93
05...	1113	10.0	1400	8.4	26.5	7.0	91
05...	1115	20.0	1400	8.3	26.0	6.7	87
05...	1117	30.0	1400	8.3	26.0	6.5	84
05...	1119	40.0	1400	8.1	26.0	5.5	71
05...	1121	51.0	1410	8.1	26.0	5.2	67

324802099021601 - HUBBARD CR RES SITE P15

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
22...	1434	1.00	1360	8.2	13.0	13.6	136
22...	1437	10.0	1330	8.2	13.0	13.1	131
22...	1441	20.0	1330	8.2	12.5	13.5	134
22...	1445	33.0	1330	8.2	12.5	13.6	135
SEP							
05...	1143	1.00	1380	8.3	26.5	6.9	90
05...	1146	10.0	1380	8.3	26.0	6.7	87
05...	1148	20.0	1360	8.2	26.0	6.3	82
05...	1150	29.0	1360	8.2	26.0	6.1	79

324653099032401 - HUBBARD CR RES SITE P16

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	
MAR											
22...	1459	1.00	1350	8.2	14.0	0.27	13.2	135	300	190	
22...	1503	10.0	1350	8.2	14.0	--	13.6	139	--	--	
22...	1508	18.0	1360	8.2	14.0	--	13.7	140	290	180	
SEP											
05...	1206	1.00	1360	8.4	26.0	0.55	7.1	92	290	200	
05...	1212	10.0	1360	8.3	25.5	--	6.6	85	--	--	
05...	1217	18.0	1360	8.2	25.5	--	6.2	80	290	200	
DATE		CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SURP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
MAR											
22...	79	25	130	3	7.3	110	90	290	0.40	6.4	
22...	--	--	--	--	--	--	--	--	--	--	
22...	78	24	130	3	7.6	110	90	290	0.40	6.5	
SEP											
05...	73	26	140	4	7.8	93	94	310	0.40	7.2	
05...	--	--	--	--	--	--	--	--	--	--	
05...	73	26	140	4	7.6	92	94	320	0.40	7.2	

BRAZOS RIVER BASIN

08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX--Continued

324653099032401 - HUBBARD CR RES SITE P16--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR									
22...	692	<0.010	<0.050	<0.015	0.20	<0.010	<0.010	<10	<10
22...	--	--	--	--	--	--	--	--	--
22...	692	<0.010	<0.050	<0.015	0.30	<0.010	<0.010	<10	<10
SEP									
05...	714	<0.010	<0.050	<0.015	0.30	0.020	<0.010	<3.0	<1.0
05...	--	--	--	--	--	--	--	--	--
05...	723	<0.010	<0.050	<0.015	0.30	<0.010	<0.010	<3.0	7.0

324608099042101 - HUBBARD CR RES SITE P17

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
22...	1645	1.00	1420	7.9	14.5	12.7	132
22...	1648	10.0	1410	7.8	13.5	11.9	121
22...	1651	16.0	1390	7.8	13.0	11.3	113
SEP							
05...	1552	1.00	984	8.2	26.0	5.8	75
05...	1554	14.0	1010	7.6	25.5	3.4	44

324541099053601 - HUBBARD CR RES SITE P18

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAR											
22...	1716	1.00	1730	8.0	16.5	0.37	12.2	132	410	260	110
22...	1722	10.0	1650	7.8	14.5	--	10.7	111	--	--	--
22...	1728	15.0	1650	7.7	14.5	--	10.4	108	380	230	100
SEP											
05...	1620	1.00	640	8.6	27.0	0.24	7.0	92	160	70	44
05...	1627	14.0	654	7.6	26.0	--	2.9	37	160	71	47

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
MAR											
22...	32	170	4	7.0	150	120	380	0.40	5.1	913	0.310
22...	--	--	--	--	--	--	--	--	--	--	--
22...	31	160	4	6.6	140	130	370	0.40	5.1	890	0.220
SEP											
05...	11	56	2	5.1	85	55	100	0.20	7.9	331	0.180
05...	11	57	2	5.1	92	56	100	0.20	8.2	341	0.200

BRAZOS RIVER BASIN

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08086400 HUBBARD CREEK RESERVOIR NEAR BRECKENRIDGE, TX--Continued

324541099053601 - HUBBARD CR RES SITE P18--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR											
22...	0.310	0.010	0.320	0.320	0.190	0.41	0.60	0.010	<0.010	<10	<10
22...	--	--	--	--	--	--	--	--	--	--	--
22...	0.220	0.010	0.230	0.230	0.250	0.35	0.60	0.010	<0.010	<10	20
SEP											
05...	0.180	0.050	0.230	0.230	0.040	0.26	0.30	<0.010	<0.010	<3.0	11
05...	0.200	0.050	0.250	0.250	0.180	0.32	0.50	<0.010	<0.010	3.0	200

BRAZOS RIVER MAIN STEM

08088000 BRAZOS RIVER NEAR SOUTH BEND, TX

LOCATION.--Lat 33°01'27", long 98°38'37", Young County, Hydrologic Unit 12060201, on left bank 225 ft downstream from bridge on State Highway 67, 1.8 mi downstream from Clear Fork Brazos River, 2.0 mi northeast of South Bend, and at mile 758.2.

DRAINAGE AREA.--22,673 mi², of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--September 1938 to current year.

Water-quality records: Chemical analyses: July 1941 to March 1948; Biochemical analyses: November 1977 to September 1991; Pesticide analyses: March 1968 to April 1982; Sediment analyses: May to September 1962 and November 1977 to September 1991.

REVISED RECORDS.--WRD TX-74-1: 1973. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,002.98 ft above sea level. Prior to Feb. 23, 1939, nonrecording gage at site 255 ft upstream; and Feb. 23, 1939, to Mar. 9, 1961, water-stage recorder at site 225 ft upstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are many small diversions upstream from station for municipal supply and oil field operations. Flow is also affected at times by discharge from the flood-detention pools of 12 floodwater-retarding structures with a combined detention capacity of 24,710 acre-ft. These structures control runoff from 108 mi² in the Duck Creek basin. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1876 reached a stage of 36.2 ft, from information by Texas Department of Transportation and U.S. Army Corps of Engineers. Flood of Sept. 24, 1900, reached a stage of 29.5 ft, and flood of June 16, 1930, reached a stage of 35.5 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 15	1130	16,900	20.96				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e239	99	62	71	e64	49	73	29	79	79	6.4	2020
2	e226	94	60	81	e61	49	65	31	62	56	6.8	1730
3	e232	141	59	84	e61	51	64	29	76	41	6.4	1250
4	e309	259	60	88	e59	53	59	26	152	34	6.0	e1240
5	e373	234	60	85	61	44	100	26	91	36	6.0	e1220
6	367	437	62	84	58	35	243	25	134	27	6.0	2130
7	324	359	62	103	57	35	396	24	387	19	6.0	1130
8	304	251	60	87	63	36	193	23	207	15	6.0	643
9	252	198	56	81	67	38	115	23	123	11	10	838
10	221	189	56	e79	71	40	106	19	183	8.2	53	672
11	199	189	57	e78	62	39	131	16	218	5.5	12	507
12	187	155	58	e77	64	39	115	18	138	19	7.7	356
13	171	129	59	e75	64	38	108	15	102	47	5.1	269
14	158	113	58	e73	64	36	92	18	79	31	3.8	216
15	149	98	56	e72	57	35	76	20	62	27	2.9	13900
16	141	87	54	e74	52	38	68	24	50	287	2.3	e8620
17	133	85	65	76	53	40	60	21	80	102	1.9	e3590
18	128	76	79	120	50	43	49	18	90	81	1.3	e3050
19	120	75	75	97	50	42	46	16	62	93	.98	7880
20	113	75	71	90	52	41	42	14	70	53	.72	8630
21	112	75	68	86	52	43	41	12	86	33	.50	4940
22	109	72	67	86	51	44	104	13	58	21	.41	1540
23	97	71	67	80	48	48	73	12	43	14	.73	886
24	95	70	69	82	49	40	52	12	34	9.4	1.5	662
25	96	68	70	82	54	34	38	11	28	7.9	2.6	868
26	95	67	73	77	57	35	39	12	23	8.2	4.0	850
27	89	68	73	71	51	99	41	11	19	8.0	8.2	794
28	86	68	70	74	47	160	36	12	16	7.1	760	725
29	89	67	70	69	48	118	32	12	13	6.6	5680	693
30	87	65	69	62	---	87	32	14	13	6.1	3600	566
31	86	---	68	e60	---	79	---	64	---	6.0	1520	---
TOTAL	5387	4034	1993	2504	1647	1608	2689	620	2778	1199.0	11729.24	72415
MEAN	174	134	64.3	80.8	56.8	51.9	89.6	20.0	92.6	38.7	378	2414
MAX	373	437	79	120	71	160	396	64	387	287	5680	13900
MIN	86	65	54	60	47	34	32	11	13	5.5	.41	216
AC-FT	10690	8000	3950	4970	3270	3190	5330	1230	5510	2380	23260	143600

BRAZOS RIVER MAIN STEM

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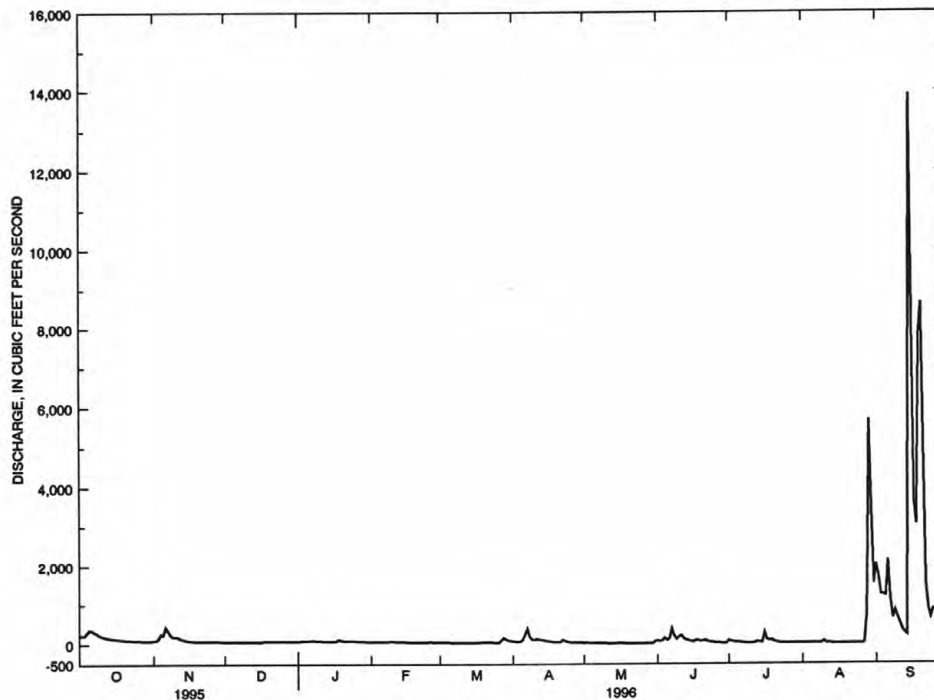
08088000 BRAZOS RIVER NEAR SOUTH BEND, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, BY WATER YEAR (WY)

MEAN	1264	362	292	201	405	329	737	2261	1778	698	654	1042
MAX	11620	2143	6024	1743	8987	4143	7910	22430	8652	4406	9363	7201
(WY)	1942	1975	1992	1968	1992	1992	1957	1957	1982	1961	1978	1955
MIN	.000	1.13	.39	.54	.60	.64	.82	20.0	5.61	1.51	.32	.000
(WY)	1953	1944	1939	1940	1953	1940	1971	1996	1984	1956	1970	1952

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1939 - 1996
ANNUAL TOTAL	149172	108603.24	
ANNUAL MEAN	409	297	
HIGHEST ANNUAL MEAN			837
LOWEST ANNUAL MEAN			3399
HIGHEST DAILY MEAN	10800	13900	59.9
LOWEST DAILY MEAN	44	.41	84300
ANNUAL SEVEN-DAY MINIMUM	48	.88	.00
INSTANTANEOUS PEAK FLOW		16900	.00
INSTANTANEOUS PEAK STAGE		20.96	.00
ANNUAL RUNOFF (AC-IT)	295900	215400	87400
10 PERCENT EXCEEDS	961	361	41.50
50 PERCENT EXCEEDS	108	65	606300
90 PERCENT EXCEEDS	58	11	1480
			115
			6.8

e Estimated



08088000 BRAZOS RIVER NEAR SOUTH BEND, TX
MEAN DAILY DISCHARGE (CFS)

08088400 LAKE GRAHAM NEAR GRAHAM, TX

LOCATION.--Lat 33°08'04", long 98°36'48", Young County, Hydrologic Unit 12060201, near left end of earthen dam on Salt Creek, 2.2 mi northwest of Graham, 5 mi downstream from Briar Creek, and 9.5 mi upstream from mouth.

DRAINAGE AREA.--221 mi².

PERIOD OF RECORD.--March 1958 to September 1963 (unpublished record), October 1963 to current year. Prior to October 1965, end of month contents only.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1.30 ft above sea level. Prior to October 1963, nonrecording gage at same site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam 5,000 ft long. Lake Graham was connected with Lake Eddleman in 1959 by a cut channel at a gage height of 1,050.0 ft. Deliberate impoundment began Apr. 28, 1958, and dam was completed in July 1958. The uncontrolled emergency spillway is a 1,050-foot-wide cut at the right end of dam. The spillway is designed to discharge 136,500 ft³/s at a gage height of 1,087.5 ft. 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 the 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. Figures given herein represent total contents. 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 provided by Freese and Nichols Inc., Consulting Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 63,280 acre-ft May 3, 1990 (gage height, 1,078.52 ft); minimum, 23,390 acre-ft May 1, 1980 (gage height, 1,061.23 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 52,710 acre-ft Sept. 28 at 2000 hours (gage height, 1,074.62 ft); minimum daily, 41,200 acre-ft Aug. 27 (gage height, 1,069.88).

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

1,060.0	21,240	1,069.0	39,180	1,075.0	53,680
1,064.0	28,580	1,071.0	43,820	1,077.0	58,990
1,067.0	34,760	1,073.0	48,660	1,080.0	67,660

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51750	50120	49030	48370	47640	47050	46950	46370	44880	43590	42160	42880
2	51750	49970	48930	48390	47540	47050	46900	46320	44850	43470	42110	42860
3	51750	49970	48930	48390	47610	46980	46900	46270	44800	43450	42040	42880
4	51700	49950	48930	48390	47610	46950	46900	46270	45140	43380	41850	42810
5	51550	49900	48830	48250	47560	46950	47240	46100	45190	43210	41710	42840
6	51510	49850	48830	48250	47560	46590	47290	46100	45120	43140	41570	42880
7	51370	49800	48810	48250	47560	46630	47290	46100	45380	43050	41500	42910
8	51290	49800	48510	48270	47610	46610	47320	46050	45380	42930	41570	42880
9	51290	49700	48660	48270	47590	46540	47240	46000	45360	42860	41570	42880
10	51240	49480	48640	48250	47490	46540	47170	45910	45360	42950	41480	42840
11	51190	49650	48590	48150	47490	46490	47070	45910	45310	42930	41530	42700
12	51170	49600	48560	48170	47490	46460	47070	45840	45280	43000	41530	42740
13	51040	49530	48510	48170	47510	46460	47030	45810	45190	43210	41480	42700
14	51020	49550	48510	48170	47420	46370	46880	45720	45140	43350	41430	42650
15	50940	49550	48490	48100	47340	46440	46900	45640	45070	43490	41410	48510
16	50940	49530	48490	48100	47390	46390	46830	45600	44970	43470	41620	48760
17	50870	49480	48640	48070	47390	46440	46780	45500	44920	43280	41570	48780
18	50790	49480	48540	48030	47320	46460	46760	45400	44760	43280	41570	48730
19	50640	49400	48560	48000	47370	46390	46730	45310	44830	43120	41600	48730
20	50640	49430	48560	47980	47370	46370	46680	45280	44760	43020	41570	52460
21	50570	49400	48540	48030	47290	46370	46610	45190	44660	42950	41480	52460
22	50470	49350	48460	47950	47290	46290	46780	45160	44560	42840	41430	52460
23	50350	49280	48460	47930	47220	46220	46830	45040	44490	42810	41360	52510
24	50350	49280	48460	47930	47220	46100	46730	44950	44420	42670	41270	52440
25	50320	49280	48490	47850	47240	46120	46710	44900	44320	42650	41300	52380
26	50220	49210	48440	47830	47240	46270	46660	44730	44250	42510	41270	52280
27	50220	49080	48420	47830	47170	46830	46590	44730	44160	42510	41200	52280
28	50170	49060	48390	47760	46980	46980	46420	44660	43840	42440	41200	52660
29	50070	49060	48370	47780	47050	47000	46460	44560	43750	42350	41200	52660
30	50070	49030	48370	47640	---	46930	46390	44900	43660	42280	42460	52640
31	50050	---	48320	47680	---	46950	---	44900	---	42280	42460	---
MAX	51750	50120	49030	48390	47640	47050	47320	46370	45380	43590	42460	52660
MIN	50050	49030	48320	47640	46980	46100	46390	44560	43660	42280	41200	42650
(+)	1073.56	1073.15	1072.86	1072.60	1072.31	1072.30	1072.07	1071.45	1070.93	1070.34	1070.42	1074.59
(@)	-1780	-1020	-710	-640	-630	-100	-560	-1490	-1240	-1380	+180	+10180

WTR YR 1996 MAX 52660 MIN 41200 (@) +810
CAL YR 1995 MAX 55660 MIN 48320 (@) -5730

(+) Gage-height, in feet, at end of month.
(@) Change in contents, in acre-feet.

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX

LOCATION.--Lat 32°52'20", long 98°25'32", Palo Pinto County, Hydrologic Unit 12060201, at Morris Sheppard Dam on the Brazos River, 2.6 mi upstream from Loving Creek, 11.3 mi southwest of Grafard, and at mile 687.5.

DRAINAGE AREA.--23,596 mi², approximately, of which 9,566 mi² probably is noncontributing.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--March 1941 to current year. Prior to October 1977, published as Possum Kingdom Reservoir.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.10 ft above sea level. Prior to Mar. 19, 1968, mercury U-tube in powerhouse at present site and datum.

REMARKS.--The lake 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 long. The dam was completed and storage begun Mar. 21, 1941. The spillway has nine roof-weir gates (modified bear-trap type) that are 73.66 by 13 ft each and are designed to discharge about 100,000 ft³/s at a gage height of 1,000.0 ft. The outlet works consist of one controlled 54-inch diameter conduit. Water is used for power development, irrigation, municipal, industrial, and recreational purposes. Two generators located in the powerhouse at dam can produce 22,500 kilowatts at a 1,000-foot gage height. Eleven major reservoirs, with a combined capacity of 607,800 acre-ft, largely regulate the inflow. For statement regarding regulation by National Resources Conservation Service floodwater-retarding structures, see station 08080950. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake 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	556,200
Crest of spillway.....	987.0	364,900
Invert of penstock.....	911.5	4,400
Lowest gated outlet (invert of 54-inch conduit).....	874.8	0

COOPERATION.--Capacity table 3-C was provided by the Brazos River Authority. Capacity table 4-C, provided by the Texas Water Development Board, was put into use Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 743,700 acre-ft Oct. 5, 1941 (gage height, 1,001.0 ft); maximum gage height, 1,003.60 ft Oct. 13, 1981; minimum contents observed, 273,000 acre-ft Feb. 19 to Mar. 17, 1953 (gage height, 967.0 ft), using capacity table 3-C.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 545,500 acre-ft Sept. 23 at 1700 hours (gage height, 999.38 ft); minimum daily, 446,300 acre-ft Aug. 25, (gage height, 993.21 ft).

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

967.0	183,000	982.0	309,000	997.0	505,400
970.0	204,200	985.0	341,600	1000.0	556,200
973.0	227,100	988.0	377,000	1001.0	579,000
976.0	252,000	991.0	415,300		
979.0	279,200	994.0	458,000		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	531500	520900	507900	495800	480600	472600	461900	461600	456700	456400	453000	492600
2	532300	519200	508200	495400	479100	472600	461700	461100	456700	455700	452400	496700
3	533000	518500	507800	495000	479100	472400	461700	460800	458500	455500	452300	500400
4	533500	516200	507400	495200	477800	472100	462000	460600	458300	455500	450900	502800
5	533200	515700	507400	494900	477300	472400	463900	461600	458000	454500	450000	504900
6	533700	517200	507100	493400	477300	471200	464500	460300	458300	454500	450000	508700
7	534000	516400	505600	492100	477600	470100	464900	460000	460600	454000	449300	513200
8	533700	516200	506400	491500	477800	468800	466000	459700	460800	453600	448800	514900
9	533900	515700	504800	491800	477600	468000	466300	459600	461100	452600	448700	515900
10	534500	516400	504500	491800	478000	468000	466200	459100	461300	457000	448800	517200
11	534500	514700	504500	491800	477300	466800	466300	459400	461400	456800	451100	518200
12	534400	515000	504300	491900	477200	466800	466200	459100	461400	456500	449000	518900
13	534000	514100	503800	491100	477300	466600	466500	458600	461400	456400	448700	519500
14	533700	514200	503600	491000	477300	466600	465900	458300	461400	456800	448300	520900
15	533700	514100	503200	489400	477300	466300	465700	457900	461600	456800	448000	536200
16	533500	514200	503000	489800	476700	466200	465400	457600	461400	456500	448800	524100
17	533500	513400	504000	489800	476700	464300	465200	457000	460900	456300	448800	526800
18	532000	513200	502700	487000	477300	465200	464300	456500	461100	456300	448300	530500
19	530700	512900	501900	486700	476700	464500	464300	455700	460600	456100	447700	531500
20	529600	511700	501900	486800	476400	463400	463700	456000	460300	455700	448100	525100
21	528600	511400	501500	487000	476500	463400	463600	455500	459600	455500	447500	532900
22	526600	511200	501400	487400	475600	463100	463100	454600	458800	455200	447100	542200
23	526300	510900	499900	486800	475300	462500	463600	454300	458800	454800	446800	544600
24	525600	510600	500200	485500	475000	462000	462900	453400	458200	454300	446500	541900
25	525100	510400	499300	485100	475000	460900	463100	453000	457900	454200	446300	541400
26	524200	510400	498100	484600	474800	460900	463100	452800	458000	451100	446300	539800
27	522700	509200	497000	483800	474500	461100	462600	452400	457700	454000	446900	539100
28	521700	508200	496000	484400	472900	461600	462900	452100	457300	454200	446700	538600
29	520500	508100	494900	483300	472600	461300	461700	451500	457100	453700	4471800	538300
30	520200	507600	495200	482500	---	461700	461300	456400	456800	453700	4482100	537100
31	521200	---	494900	480300	---	461600	---	456500	---	453100	4489400	---
MAX	534500	520900	508200	495800	480600	472600	466500	461600	461600	457000	4489400	544600
MIN	520200	507600	494900	480300	472600	460900	461300	451500	456700	451100	446300	492600
(+)	997.95	997.13	996.35	995.44	994.95	994.23	994.21	993.90	993.92	993.67	996.01	998.89
(#)	-10300	-13600	-12700	-14600	-7700	-11000	-300	-4800	+300	-3700	+36300	+47700

CAL YR 1995 MAX 559800 MIN 494900 (#) 221/0
WTR YR 1996 MAX 544600 MIN 446300 (#) +5600

(+) Gage height, in feet, at end of month.

(#) Change in contents, in acre-feet.

BRAZOS RIVER MAIN STEM

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: March 1962 to September 1977. Chemical and biochemical analyses: February 1978 to current year.

325208098254201 - POSSUM KINGDOM LK SITE AR

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1100	1.00	2810	7.8	15.0	7.1	74
14...	1102	10.0	2810	7.8	14.5	7.0	72
14...	1105	20.0	2800	7.8	14.5	7.0	72
14...	1107	30.0	2800	7.8	14.5	6.9	71
14...	1110	40.0	2800	7.8	14.5	6.9	71
14...	1113	50.0	2800	7.8	14.5	6.7	69
14...	1116	60.0	2800	7.8	14.5	6.8	70
14...	1119	75.0	2800	7.8	14.5	7.1	73
MAR							
29...	1021	1.00	2830	8.0	12.0	10.1	99
29...	1024	10.0	2830	8.0	12.0	10.1	99
29...	1027	20.0	2830	8.0	11.5	10.0	97
29...	1030	30.0	2830	7.9	11.5	10.0	97
29...	1033	40.0	2830	7.8	11.5	9.6	93
29...	1036	50.0	2850	7.8	11.0	9.1	87
29...	1039	60.0	2900	7.7	10.0	7.7	72
29...	1042	70.0	2980	7.7	8.5	6.3	57
29...	1045	80.0	3030	7.5	8.5	5.6	51
29...	1048	88.0	3040	7.5	9.0	5.8	53
JUN							
12...	1105	1.00	2890	8.4	27.5	7.8	104
12...	1108	10.0	2880	8.4	26.0	8.2	107
12...	1111	20.0	2870	8.4	25.5	8.3	107
12...	1113	30.0	2870	8.3	24.0	7.5	94
12...	1116	40.0	2890	7.8	19.5	5.2	60
12...	1119	50.0	2840	7.6	14.0	5.1	52
12...	1122	60.0	2830	7.5	14.0	5.1	52
12...	1125	70.0	2850	7.4	13.5	3.6	36
12...	1128	80.0	2870	7.2	13.0	1.6	16
12...	1131	86.0	2880	7.2	13.0	1.6	16
SEP							
04...	1050	1.00	2930	8.3	26.5	7.3	95
04...	1053	10.0	2900	8.2	26.0	6.7	87
04...	1056	20.0	2890	8.1	26.0	6.0	78
04...	1059	30.0	2910	7.9	25.5	4.5	58
04...	1102	40.0	2920	7.4	23.5	0.2	2
04...	1105	50.0	2820	7.3	18.0	0.4	4
04...	1109	60.0	2850	7.3	16.0	0.8	8
04...	1112	70.0	2870	7.3	15.0	0.3	3
04...	1115	80.0	2870	7.3	14.0	0.3	3
04...	1118	87.0	2870	7.3	14.0	0.4	4

BRAZOS RIVER MAIN STEM

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08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325218098254101 - POSSUM KINGDOM LK SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
DEC												
14...	1014	504000	1.00	2800	7.8	14.5	3.41	7.1	73	410	310	110
14...	1018	--	10.0	2800	7.8	14.5	--	7.0	72	--	--	--
14...	1021	--	20.0	2800	7.8	14.5	--	7.0	72	--	--	--
14...	1025	--	30.0	2800	7.8	14.5	--	7.0	72	--	--	--
14...	1029	--	40.0	2800	7.8	14.5	--	6.6	68	--	--	--
14...	1033	--	50.0	2800	7.8	14.5	--	6.8	70	--	--	--
14...	1036	--	60.0	2800	7.8	14.5	--	6.6	68	--	--	--
14...	1040	--	70.0	2800	7.8	14.5	--	6.7	69	--	--	--
14...	1043	--	80.0	2800	7.8	14.5	--	6.7	69	--	--	--
14...	1047	--	90.0	2790	7.8	14.5	--	6.9	71	--	--	--
14...	1051	--	98.0	2780	7.9	14.0	--	7.2	73	410	300	110
MAR												
29...	0939	477000	1.00	2830	8.0	12.0	3.78	10.0	98	470	360	130
29...	0943	--	10.0	2830	8.0	12.0	--	10.0	98	--	--	--
29...	0947	--	20.0	2840	8.0	12.0	--	9.9	97	--	--	--
29...	0950	--	30.0	2840	7.9	11.5	--	9.8	95	--	--	--
29...	0953	--	40.0	2840	7.8	11.5	--	9.6	93	--	--	--
29...	0957	--	50.0	2850	7.8	11.0	--	9.2	88	--	--	--
29...	1000	--	60.0	2900	7.7	9.5	--	7.4	68	--	--	--
29...	1003	--	70.0	2960	7.7	9.0	--	6.5	59	--	--	--
29...	1007	--	80.0	3030	7.6	8.5	--	5.1	46	--	--	--
29...	1010	--	90.0	3060	7.5	8.0	--	4.6	41	--	--	--
29...	1014	--	96.0	3060	7.4	8.0	--	3.6	32	510	390	140
JUN												
12...	1012	477000	1.00	2880	8.4	27.5	5.82	7.8	104	470	360	130
12...	1016	--	10.0	2870	8.4	26.0	--	8.2	107	--	--	--
12...	1021	--	20.0	2870	8.3	25.0	--	8.1	103	--	--	--
12...	1025	--	30.0	2870	7.9	24.5	--	7.7	97	--	--	--
12...	1030	--	40.0	2870	7.9	20.5	--	5.3	86	--	--	--
12...	1035	--	50.0	2830	7.8	16.0	--	5.3	57	--	--	--
12...	1039	--	60.0	2830	7.8	14.0	--	5.1	52	--	--	--
12...	1043	--	70.0	2840	7.7	13.5	--	4.2	42	--	--	--
12...	1048	--	80.0	2860	7.5	12.5	--	2.3	23	--	--	--
12...	1053	--	90.0	2880	7.5	12.5	--	1.6	16	--	--	--
12...	1057	--	96.0	2880	7.4	12.0	--	0.7	7	500	380	140
SEP												
04...	0957	516000	1.00	2930	8.3	26.5	2.93	7.3	95	490	390	130
04...	1001	--	10.0	2940	8.2	26.0	--	6.6	85	--	--	--
04...	1005	--	20.0	2890	8.1	26.0	--	6.3	81	--	--	--
04...	1009	--	30.0	2910	8.0	26.0	--	5.0	65	--	--	--
04...	1013	--	40.0	2920	7.4	23.5	--	0.2	2	--	--	--
04...	1018	--	50.0	2880	7.4	18.5	--	0.2	2	--	--	--
04...	1023	--	60.0	2850	7.3	15.5	--	0.8	8	--	--	--
04...	1028	--	70.0	2860	7.3	14.5	--	0.6	6	--	--	--
04...	1032	--	80.0	2860	7.3	13.5	--	0.3	3	--	--	--
04...	1037	--	90.0	2860	7.3	13.5	--	0.3	3	--	--	--
04...	1045	--	97.0	2860	7.3	13.5	--	0.5	5	480	330	130

BRAZOS RIVER MAIN STEM

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325218098254101 - POSSUM KINGDOM LK SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC												
14...	34	380	8	8.2	110	320	610	0.40	7.1	1540	0.210	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	34	350	7	8.1	110	320	620	0.50	7.1	1520	0.180	0.180
MAR												
29...	36	400	8	7.7	110	340	640	0.40	6.0	1630	0.080	0.080
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	38	430	8	7.6	120	360	700	0.40	8.0	1760	0.270	--
JUN												
12...	36	390	8	1.6	110	350	640	0.40	5.4	1620	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	0.070	0.070
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	37	390	8	8.1	120	340	670	0.40	9.6	1670	0.210	0.210
SEP												
04...	39	430	8	7.5	100	350	640	0.40	4.9	1660	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	38	420	8	7.5	150	340	620	0.40	9.7	1660	--	--

BRAZOS RIVER MAIN STEM

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08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325218098254101 - POSSUM KINGDOM LK SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
14...	<0.010	0.210	0.210	<0.015	--	0.30	0.020	0.020	0.06	<10	40
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	0.010	0.190	0.190	0.040	0.26	0.30	0.020	0.020	0.06	<10	10
MAR											
29...	0.010	0.090	0.090	0.020	0.28	0.30	0.010	<0.010	--	15	43
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.010	0.270	0.270	0.060	0.24	0.30	0.030	0.030	0.09	62	210
JUN											
12...	<0.010	--	<0.050	0.040	0.26	0.30	0.020	<0.010	--	12	<3.0
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.010	0.080	0.080	0.120	0.28	0.40	<0.010	<0.010	--	15	4.0
12...	<0.010	--	<0.050	0.060	0.34	0.40	<0.010	<0.010	--	10	6.0
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.020	0.230	0.230	0.330	0.27	0.60	0.080	0.090	0.28	140	700
SEP											
04...	<0.010	--	<0.050	<0.020	--	0.30	<0.010	<0.010	--	<9.0	<3.0
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	12	4.0
04...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<9.0	28
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.860	0.24	1.1	0.160	0.170	0.52	38	840

BRAZOS RIVER MAIN STEM

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325250098275301 - POSSUM KINGDOM LK SITE BR

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1206	1.00	2760	7.9	14.5	8.3	85
14...	1208	10.0	2760	7.9	14.5	8.3	85
14...	1211	20.0	2760	7.9	14.5	8.3	85
14...	1213	30.0	2760	7.9	14.5	8.4	86
14...	1215	40.0	2760	7.9	14.5	8.4	86
14...	1217	54.0	2750	7.9	14.5	8.6	88
MAR							
29...	1135	1.00	2830	8.1	12.5	10.0	99
29...	1138	10.0	2840	8.1	12.5	10.0	99
29...	1141	20.0	2840	8.0	12.0	9.9	97
29...	1145	30.0	2840	8.0	12.0	9.9	97
29...	1150	40.0	2850	7.9	11.5	9.7	94
29...	1154	50.0	2850	7.9	11.5	9.6	93
JUN							
12...	1246	1.00	2900	8.4	28.0	8.1	109
12...	1249	10.0	2900	8.4	26.5	8.4	110
12...	1251	20.0	2900	8.3	26.0	8.2	107
12...	1254	30.0	2930	8.2	25.5	7.1	92
12...	1257	40.0	2950	7.6	20.5	4.2	49
12...	1300	50.0	2950	7.4	17.0	3.4	37
12...	1306	56.0	2920	7.3	15.0	2.6	27
SEP							
04...	1211	1.00	2890	8.3	27.0	7.4	98
04...	1214	10.0	2890	8.3	27.0	7.3	97
04...	1217	20.0	2920	8.1	26.5	6.0	79
04...	1220	30.0	2980	7.9	26.0	5.0	65
04...	1224	40.0	2990	7.3	23.5	0.3	4
04...	1227	49.0	2960	7.3	19.5	0.5	6

325256098275301 - POSSUM KINGDOM LK SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1133	1.00	2760	7.9	14.5	7.9	81
14...	1136	10.0	2760	7.9	14.5	7.9	81
14...	1138	20.0	2760	7.9	14.5	7.9	81
14...	1141	30.0	2760	7.9	14.5	8.0	82
14...	1144	40.0	2760	7.9	14.5	7.8	80
14...	1147	50.0	2760	7.9	14.5	7.8	80
14...	1150	60.0	2760	7.9	14.5	7.7	79
14...	1153	70.0	2760	7.9	14.5	7.5	77
14...	1157	80.0	2770	7.8	14.0	7.2	73
14...	1200	91.0	2780	7.8	14.5	7.2	74
MAR							
29...	1104	1.00	2840	8.1	13.0	9.9	99
29...	1106	10.0	2840	8.1	12.5	9.9	98
29...	1109	20.0	2840	8.0	12.0	9.8	96
29...	1111	30.0	2850	8.0	12.0	9.0	88
29...	1114	40.0	2850	7.9	12.0	9.7	95
29...	1117	50.0	2850	7.9	11.5	9.3	90
29...	1120	60.0	2860	7.7	11.0	8.9	85
29...	1122	70.0	2860	7.7	9.5	6.5	60
29...	1125	80.0	3030	7.6	9.0	4.3	39
29...	1128	89.0	3040	7.5	9.0	4.5	41
JUN							
12...	1150	1.00	2900	8.4	28.0	7.9	107
12...	1153	10.0	2880	8.4	26.5	8.1	106
12...	1156	20.0	2880	8.4	25.5	8.0	103
12...	1200	30.0	2940	8.1	24.0	6.2	78
12...	1203	40.0	2960	7.6	21.0	4.1	49
12...	1207	50.0	2930	7.4	16.0	3.6	38
12...	1210	60.0	2890	7.4	14.0	3.2	33
12...	1214	70.0	2890	7.3	13.0	1.9	19
12...	1217	80.0	2880	7.2	13.0	1.1	11
12...	1220	87.0	2880	7.2	13.0	1.2	12
SEP							
04...	1135	1.00	2890	8.3	27.0	7.3	96
04...	1138	10.0	2890	8.3	27.0	7.2	95
04...	1141	20.0	2890	8.2	26.5	7.0	91
04...	1144	30.0	2940	8.0	26.0	5.9	76
04...	1147	40.0	2970	7.3	23.0	0.2	2
04...	1150	50.0	2970	7.3	18.5	0.2	2
04...	1153	60.0	2960	7.3	16.5	0.3	3
04...	1156	70.0	2920	7.3	15.0	0.3	3
04...	1159	80.0	2910	7.3	14.5	0.4	4
04...	1202	90.0	2890	7.3	14.0	0.4	4

BRAZOS RIVER MAIN STEM

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08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325129098311801 - POSSUM KINGDOM LK SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1316	1.00	2710	8.0	14.0	8.9	90
14...	1318	10.0	2720	8.0	14.0	8.9	90
14...	1321	20.0	2720	8.0	13.5	8.8	88
14...	1323	30.0	2720	8.0	13.5	8.8	88
14...	1325	40.0	2720	8.0	13.5	8.8	88
14...	1328	50.0	2730	8.0	13.0	8.8	87
14...	1330	60.0	2740	8.1	12.5	8.6	84
14...	1333	70.0	2740	8.1	12.5	8.8	86
14...	1336	75.0	2740	8.1	12.5	8.8	86
MAR							
29...	1247	1.00	2950	8.1	12.0	9.4	92
29...	1250	10.0	2950	8.1	12.0	9.4	92
29...	1252	20.0	2950	8.1	12.0	9.4	92
29...	1255	30.0	2950	8.1	11.5	9.3	90
29...	1257	40.0	2950	8.0	11.5	9.0	87
29...	1300	40.0	2950	8.0	11.5	8.9	86
29...	1302	60.0	2950	8.0	11.5	8.6	83
29...	1305	68.0	3000	7.7	11.5	7.2	70
JUN							
12...	1415	1.00	3030	8.4	28.0	8.2	110
12...	1417	10.0	3030	8.4	26.5	8.6	112
12...	1420	20.0	3030	8.4	25.5	7.8	100
12...	1423	30.0	3040	8.1	24.5	6.0	75
12...	1426	40.0	3060	7.4	19.5	1.9	22
12...	1428	50.0	3030	7.2	16.0	0.4	4
12...	1432	60.0	2980	7.2	14.5	0.4	4
12...	1435	71.0	2960	7.2	14.5	0.6	6
SEP							
04...	1326	1.00	3010	8.4	27.0	7.7	101
04...	1328	10.0	3010	8.4	27.0	7.5	99
04...	1332	20.0	3010	8.3	26.5	7.1	93
04...	1335	30.0	3100	8.1	26.0	5.7	74
04...	1337	40.0	3130	7.8	25.0	4.0	51
04...	1340	50.0	3050	7.3	18.5	0.3	3
04...	1343	60.0	3000	7.2	16.5	0.3	3
04...	1346	74.0	2960	7.2	16.5	0.5	5

325327098314001 - POSSUM KINGDOM LK SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC												
14...	1447	1.00	2710	8.2	13.5	1.10	9.2	93	140	28	36	11
14...	1450	10.0	2710	8.1	13.0	--	8.8	88	--	--	--	--
14...	1454	20.0	2720	8.1	13.0	--	8.6	86	--	--	--	--
14...	1457	30.0	2720	8.1	13.0	--	8.5	85	--	--	--	--
14...	1500	40.0	2730	8.1	12.5	--	8.4	83	--	--	--	--
14...	1503	50.0	2750	8.2	12.0	--	8.4	82	--	--	--	--
14...	1507	60.0	2750	8.2	12.0	--	8.4	82	--	--	--	--
14...	1511	69.0	2750	8.1	12.0	--	8.4	82	410	300	110	33
MAR												
29...	1420	1.00	2980	8.2	13.0	0.98	9.6	96	480	360	130	37
29...	1423	10.0	2980	8.2	13.0	--	9.6	96	--	--	--	--
29...	1427	20.0	2980	8.2	12.5	--	9.5	94	--	--	--	--
29...	1430	30.0	2980	8.2	12.5	--	9.5	94	--	--	--	--
29...	1434	40.0	2980	8.2	12.5	--	9.3	92	--	--	--	--
29...	1437	50.0	2990	8.1	12.0	--	8.6	84	--	--	--	--
29...	1441	60.0	2990	8.1	12.0	--	8.2	80	--	--	--	--
29...	1445	66.0	3050	7.9	12.0	--	7.2	70	480	360	130	37
JUN												
12...	1602	1.00	3090	8.4	29.5	2.56	7.8	107	510	400	140	39
12...	1606	10.0	3040	8.4	26.5	--	8.4	110	--	--	--	--
12...	1610	20.0	3080	8.3	26.0	--	7.1	92	--	--	--	--
12...	1615	30.0	3140	7.9	24.5	--	4.5	57	--	--	--	--
12...	1620	40.0	3120	7.4	20.5	--	1.1	13	--	--	--	--
12...	1626	50.0	3050	7.2	16.5	--	0.2	2	--	--	--	--
12...	1632	65.0	3010	7.2	15.5	--	0.2	2	480	360	130	38
SEP												
04...	1509	1.00	3100	8.5	27.5	1.55	8.2	109	470	380	120	41
04...	1514	10.0	3100	8.5	27.5	--	8.0	106	--	--	--	--
04...	1519	20.0	3120	8.5	27.0	--	7.7	101	--	--	--	--
04...	1525	30.0	3150	8.1	25.5	--	5.8	74	--	--	--	--
04...	1530	40.0	3180	7.7	25.5	--	4.3	55	--	--	--	--
04...	1535	50.0	3080	7.2	19.0	--	0.2	2	--	--	--	--
04...	1540	60.0	3020	7.2	16.5	--	0.3	3	--	--	--	--
04...	1544	67.0	3000	7.2	16.5	--	0.4	4	490	340	130	39

BRAZOS RIVER MAIN STEM

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325327098314001 - POSSUM KINGDOM LK SITE DC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	AIKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC											
14...	120	4	8.2	110	320	600	0.40	6.7	1170	0.050	0.050
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	350	8	8.1	110	320	620	0.40	6.6	1510	--	--
MAR											
29...	410	8	7.4	110	350	690	0.40	5.9	1700	0.050	0.050
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	420	8	7.7	120	360	700	0.40	6.4	1730	0.050	0.050
JUN											
12...	420	8	41	110	370	700	0.40	5.3	1780	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	0.170	0.170
12...	--	--	--	--	--	--	--	--	--	--	--
12...	410	8	7.7	120	360	680	0.40	8.1	1710	0.210	0.210
SEP											
04...	460	9	8.1	91	370	670	0.40	5.5	1730	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	440	9	7.7	150	340	690	0.40	10	1750	--	--
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
14...	0.010	0.060	0.060	0.050	0.25	0.30	<0.010	<0.010	--	20	<10
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	<0.010	--	<0.050	0.060	0.34	0.40	0.010	<0.010	--	20	<10
MAR											
29...	0.010	0.060	0.060	0.040	0.26	0.30	<0.010	<0.010	--	<9.0	<3.0
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	0.020	0.070	0.070	0.140	0.26	0.40	<0.010	<0.010	--	40	62
JUN											
12...	<0.010	--	<0.050	0.050	0.25	0.30	<0.010	<0.010	--	<9.0	13
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<0.010	--	<0.050	0.040	0.26	0.30	0.030	<0.010	--	<9.0	8.0
12...	0.020	0.190	0.190	0.090	0.21	0.30	0.020	<0.010	--	14	120
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.020	0.230	0.230	0.190	0.31	0.50	0.080	0.080	0.25	170	610
SEP											
04...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<9.0	4.0
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<9.0	18
04...	<0.010	--	<0.050	0.630	0.37	1.0	0.110	0.130	0.40	190	730
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.940	0.16	1.1	0.220	0.250	0.77	140	690

BRAZOS RIVER MAIN STEM

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08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325347098265701 - POSSUM KINGDOM LK SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1525	1.00	2720	8.3	14.0	9.8	100
14...	1528	10.0	2720	8.3	13.5	9.7	98
14...	1531	20.0	2730	8.2	13.0	9.4	94
14...	1534	30.0	2750	8.2	12.0	9.2	90
14...	1537	40.0	2810	8.2	12.0	8.6	84
14...	1541	53.0	2850	8.1	12.0	7.9	77
MAR							
29...	1503	1.00	3160	8.2	12.0	9.2	90
29...	1505	10.0	3170	8.2	12.0	9.1	89
29...	1507	20.0	3180	8.2	11.5	9.0	87
29...	1509	30.0	3190	8.2	11.5	8.9	86
29...	1511	40.0	3190	8.1	11.5	8.7	84
29...	1513	50.0	3200	8.1	12.5	8.4	83
JUN							
12...	1707	1.00	3180	8.3	29.5	8.0	110
12...	1710	10.0	3140	8.4	27.0	8.6	113
12...	1713	20.0	3210	8.2	26.0	7.2	93
12...	1717	30.0	3260	7.8	25.0	4.2	53
12...	1720	40.0	3210	7.4	22.0	0.8	10
12...	1724	49.0	3100	7.3	18.5	0.2	2
SEP							
04...	1613	1.00	3120	8.5	26.5	7.9	103
04...	1616	10.0	3100	8.5	26.5	7.8	102
04...	1618	20.0	3160	8.2	26.0	6.4	83
04...	1621	30.0	3160	8.1	26.0	6.0	78
04...	1624	40.0	3140	8.0	24.5	5.4	68
04...	1627	51.0	3120	7.2	20.5	0.4	5

325557098264401 - POSSUM KINGDOM LK SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1608	1.00	2760	8.4	12.5	10.5	104
14...	1612	10.0	2760	8.4	12.5	10.1	100
14...	1616	20.0	2800	8.3	11.5	9.4	91
14...	1619	30.0	2910	8.1	11.0	7.9	76
14...	1622	37.0	2920	8.1	11.5	7.7	74
MAR							
29...	1540	1.00	3230	8.2	12.5	9.7	96
29...	1542	10.0	3230	8.2	12.5	9.6	95
29...	1544	20.0	3240	8.0	11.5	8.3	80
29...	1546	30.0	3840	8.2	11.5	8.3	81
29...	1549	35.0	3860	8.0	11.5	8.3	81
JUN							
12...	1744	1.00	3260	8.4	30.5	8.1	113
12...	1747	10.0	3300	8.4	27.0	8.7	115
12...	1750	20.0	3440	8.0	26.0	5.1	66
12...	1753	34.0	3580	7.5	26.0	1.6	21
SEP							
04...	1655	1.00	1600	8.4	26.5	7.6	99
04...	1658	10.0	2170	8.3	26.0	6.8	88
04...	1701	20.0	2970	7.7	26.0	3.0	39
04...	1705	34.0	3140	7.6	26.0	2.2	28

BRAZOS RIVER MAIN STEM

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325715098250501 - POSSUM KINGDOM LK SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATURATION)	HARDNESS TOTAL (MG/L AS CAC03)	HARDNESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)
DEC												
14...	1644	1.00	2800	8.4	12.5	0.70	10.2	101	410	300	110	33
14...	1649	10.0	2850	8.4	11.5	--	9.3	90	--	--	--	--
14...	1654	24.0	2950	8.1	11.5	--	8.5	82	440	320	120	34
MAR												
29...	1605	1.00	3650	8.2	13.0	0.48	9.4	94	560	440	150	45
29...	1610	10.0	3660	8.2	12.0	--	9.1	89	--	--	--	--
29...	1616	22.0	4400	8.0	12.0	--	8.4	83	660	540	170	56
JUN												
12...	1810	1.00	3330	8.4	31.5	0.94	8.4	120	560	450	150	44
12...	1816	10.0	3460	8.4	27.0	--	8.9	117	--	--	--	--
12...	1822	21.0	3560	7.6	26.5	--	2.6	34	570	450	150	47
SEP												
04...	1737	1.00	2100	8.0	26.5	0.27	5.8	75	320	240	85	27
04...	1747	10.0	2840	7.7	26.0	--	3.2	41	--	--	--	--
04...	1801	23.0	4630	7.6	26.0	--	4.6	60	590	510	180	33
DATE		SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)
DEC												
14...		380	8	8.5	110	330	620	0.40	6.5	1550	--	--
14...		--	--	--	--	--	--	--	--	--	--	--
14...		370	8	8.0	120	340	660	0.40	6.7	1610	0.040	0.040
MAR												
29...		520	10	8.2	120	420	830	0.40	5.1	2050	--	--
29...		--	--	--	--	--	--	--	--	--	--	--
29...		650	11	8.3	120	500	1100	0.40	4.8	2560	0.040	0.040
JUN												
12...		470	9	8.7	110	400	740	0.40	5.4	1880	--	--
12...		--	--	--	--	--	--	--	--	--	--	--
12...		490	9	9.1	120	420	770	0.40	6.2	1960	--	--
SEP												
04...		290	7	6.5	79	230	450	0.30	7.2	1150	0.350	0.350
04...		--	--	--	--	--	--	--	--	--	0.120	0.120
04...		750	13	9.0	75	480	1100	0.30	8.3	2610	0.440	0.440
DATE		NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
DEC												
14...		<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<10	10
14...		--	--	--	--	--	--	--	--	--	--	--
14...		0.010	0.050	0.050	0.040	0.26	0.30	<0.010	<0.010	--	10	20
MAR												
29...		0.010	--	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	<9.0	5.0
29...		--	--	--	--	--	--	--	--	--	--	--
29...		0.010	0.050	0.050	0.070	0.33	0.40	0.010	<0.010	--	<9.0	32
JUN												
12...		<0.010	--	<0.050	0.040	0.26	0.30	0.020	<0.010	--	<9.0	5.0
12...		--	--	--	--	--	--	--	--	--	--	--
12...		<0.010	--	<0.050	0.080	0.32	0.40	0.030	<0.010	--	<9.0	330
SEP												
04...		0.040	0.390	0.390	0.100	0.30	0.40	0.040	0.020	0.06	13	5.0
04...		0.020	0.140	0.140	0.220	0.28	0.50	<0.010	0.020	0.06	<9.0	9.0
04...		0.110	0.550	0.550	0.160	0.24	0.40	<0.010	0.020	0.06	13	63

BRAZOS RIVER MAIN STEM

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08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325047098291201 - POSSUM KINGDOM LK SITE P03

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1233	1.00	2720	7.9	14.5	8.5	87
14...	1235	10.0	2720	7.9	14.0	8.4	85
14...	1238	20.0	2720	7.9	14.0	8.5	86
14...	1240	30.0	2720	7.9	14.0	8.5	86
14...	1243	40.0	2720	7.9	14.0	8.4	85
14...	1246	50.0	2720	7.9	14.0	8.6	87
14...	1249	58.0	2720	7.8	14.5	8.6	88
MAR							
29...	1210	1.00	2860	8.2	13.0	9.9	99
29...	1212	10.0	2860	8.2	12.5	9.8	97
29...	1214	20.0	2870	8.2	12.0	9.6	94
29...	1217	30.0	2860	8.2	11.5	9.4	91
29...	1219	40.0	2860	8.2	11.5	9.3	90
29...	1222	50.0	2870	8.1	11.5	8.9	86
29...	1225	55.0	2890	8.0	11.5	7.8	75
JUN							
12...	1326	1.00	2910	8.4	28.0	8.3	111
12...	1330	10.0	2930	8.4	26.0	8.7	112
12...	1334	20.0	2940	8.3	25.5	7.4	95
12...	1338	30.0	2940	8.0	24.0	5.7	71
12...	1342	40.0	2980	7.4	21.0	1.7	20
12...	1346	54.0	2960	7.3	15.5	0.5	5
SEP							
04...	1240	1.00	2620	8.1	26.5	6.8	89
04...	1243	10.0	2840	8.2	26.5	7.0	91
04...	1246	20.0	2950	8.1	26.0	5.8	75
04...	1249	30.0	2970	7.8	26.0	4.6	59
04...	1252	40.0	2750	7.4	24.0	1.3	16
04...	1256	50.0	2990	7.3	19.0	0.3	3
04...	1259	56.0	2980	7.3	18.0	0.5	6

325125098323/01 - POSSUM KINGDOM LK SITE P05

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1351	1.00	2700	8.2	13.5	9.8	98
14...	1354	10.0	2700	8.2	13.0	9.5	94
14...	1357	25.0	2690	8.1	13.5	8.9	89
MAR							
29...	1324	1.00	2930	8.2	12.0	9.9	97
29...	1327	10.0	2930	8.1	12.5	9.8	97
29...	1329	23.0	2930	8.1	12.0	9.5	93
JUN							
12...	1448	1.00	3030	8.4	29.0	8.0	109
12...	1451	10.0	3010	8.4	26.5	8.3	108
12...	1454	22.0	3000	8.0	26.0	5.3	69
SEP							
04...	1400	1.00	2340	8.3	27.0	7.4	97
04...	1402	10.0	2750	7.9	26.5	4.9	64
04...	1405	24.0	2900	7.9	26.5	4.8	63

BRAZOS RIVER MAIN STEM

08088500 POSSUM KINGDOM LAKE NEAR GRAFORD, TX--Continued

325301098342901 - POSSUM KINGDOM LK SITE P07

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
14...	1415	1.00	2650	8.3	13.5	10.0	101
14...	1418	10.0	2650	8.3	13.0	9.5	95
14...	1420	20.0	2660	8.2	13.0	9.0	90
14...	1423	30.0	2660	8.2	13.0	8.3	83
14...	1426	40.0	2670	8.0	12.5	7.6	75
14...	1429	50.0	2650	8.1	12.5	7.0	69
14...	1432	60.0	2650	8.0	12.5	6.6	65
MAR							
29...	1350	1.00	2930	8.2	13.5	9.5	96
29...	1352	10.0	2930	8.2	13.0	9.4	94
29...	1354	20.0	2930	8.1	12.5	9.1	90
29...	1356	30.0	2930	8.0	12.0	8.6	84
29...	1358	40.0	2930	8.0	12.0	8.3	81
29...	1400	50.0	2960	7.9	12.0	7.2	70
29...	1403	57.0	2970	7.7	12.0	6.5	64
JUN							
12...	1521	1.00	3040	8.4	29.0	8.0	109
12...	1525	10.0	3030	8.4	27.5	8.6	114
12...	1528	20.0	3030	8.3	26.5	7.5	98
12...	1532	30.0	3040	7.5	24.0	2.2	27
12...	1536	40.0	3050	7.3	20.5	0.5	6
12...	1540	50.0	3050	7.3	18.0	0.2	2
12...	1544	56.0	3050	7.2	18.0	0.4	4
SEP							
04...	1429	1.00	2920	8.4	27.0	7.9	104
04...	1432	10.0	2930	8.4	27.0	7.8	103
04...	1436	20.0	2980	8.4	27.0	7.2	95
04...	1439	30.0	2990	8.2	26.5	6.2	81
04...	1444	40.0	2980	7.6	26.0	2.5	32
04...	1448	50.0	3060	7.2	19.0	0.2	2
04...	1451	57.0	3080	7.2	18.0	0.3	3

BRAZOS RIVER MAIN STEM

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08088610 BRAZOS RIVER NEAR GRAFORD, TX

LOCATION.--Lat 32°51'29", long 98°24'41", Palo Pinto County, Hydrologic Unit 1206021, on State Highway 16 1.25 mi downstream of Morris Sheppard Dam (formerly Possum Kingdom Dam), 1.3 mi upstream from Loving Creek, 11.3 mi southwest of Graford, and 18.8 mi upstream from gaging station Brazos River near Palo Pinto (08089000). Prior to Feb. 8, 1995 at site 1.25 mi. upstream.

DRAINAGE AREA.--23,596 mi², approximately, of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--October 1989 to current year. Prior to Feb. 8, 1995, published as Brazos River at Morris Sheperd Dam near Graford (station 08088600).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 800.00 ft above sea level. Prior to Feb. 8, 1995 at datum 4.92 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Possum Kingdom Lake (station 08088500).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	168	64	69	66	116	72	59	63	56	39	84
2	69	269	64	157	688	121	85	60	62	39	33	84
3	68	70	63	65	64	125	105	63	66	39	32	85
4	64	963	64	159	413	125	62	60	65	39	33	86
5	63	437	64	64	487	124	70	59	62	41	165	85
6	63	83	64	593	50	135	63	64	62	46	35	84
7	63	316	285	476	66	298	62	63	81	39	32	86
8	259	284	67	477	70	378	67	57	62	39	31	87
9	77	279	235	63	66	480	95	56	63	39	38	87
10	69	279	64	64	53	101	95	55	64	43	51	90
11	71	79	254	64	53	368	97	54	64	54	45	87
12	70	72	215	64	63	101	97	55	66	42	39	86
13	70	477	280	264	74	100	97	58	64	40	40	87
14	70	80	72	258	60	97	96	66	64	45	40	88
15	70	71	67	488	60	97	97	70	64	43	43	5830
16	73	71	67	183	60	97	97	70	64	42	49	10600
17	72	301	73	65	61	343	99	69	67	42	49	3330
18	539	69	497	1010	61	102	493	71	67	40	48	1160
19	567	262	269	163	88	199	83	68	68	40	50	4650
20	174	492	71	64	225	365	60	64	68	41	45	7610
21	275	292	265	64	76	311	58	66	71	40	46	4280
22	860	69	67	64	394	65	58	65	75	39	40	1570
23	80	67	563	64	84	66	58	63	77	36	40	1700
24	68	66	71	574	75	272	58	63	85	36	38	2830
25	368	66	456	271	75	327	58	61	84	34	37	1600
26	480	67	452	63	70	161	58	63	85	36	37	1830
27	604	260	456	265	66	490	64	61	79	37	39	1040
28	265	266	369	64	516	71	64	64	76	36	174	1100
29	273	246	477	373	72	262	59	63	78	36	88	1110
30	271	65	64	284	---	64	60	76	80	40	83	1080
31	284	---	252	674	---	63	---	65	---	41	84	---
TOTAL	6686	6586	6391	7570	4256	6024	2687	1951	2096	1260	1643	52526
MEAN	216	220	206	244	147	194	89.6	62.9	69.9	40.6	53.0	1751
MAX	860	963	563	1010	688	490	493	76	85	56	174	10600
MIN	63	65	63	63	50	63	58	54	62	34	31	84
AC-FT	13260	13060	12680	15020	8440	11950	5330	3870	4160	2500	3260	104200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996#, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	474	318	1276	507	1419	1226	1535	2049	2997	523	656	875
MAX	1819	656	7172	2197	8659	4948	7952	8503	8024	1201	1228	1751
(WY)	1992	1992	1992	1992	1992	1992	1990	1990	1992	1992	1995	1996
MIN	142	109	78.9	93.5	58.6	79.2	89.6	62.9	69.9	40.6	53.0	287
(WY)	1993	1994	1994	1994	1994	1994	1996	1996	1996	1996	1996	1993

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1990 - 1996#

ANNUAL TOTAL	151102	99676	1150
ANNUAL MEAN	414	272	3170
HIGHEST ANNUAL MEAN			272
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	6840	10600	43800
LOWEST DAILY MEAN	61	31	14
ANNUAL SEVEN-DAY MINIMUM	64	36	17
INSTANTANEOUS PEAK FLOW		14000	43800
INSTANTANEOUS PEAK STAGE		81.99	89.79
ANNUAL RUNOFF (AC-FT)	299700	197700	832900
10 PERCENT EXCEEDS	745	478	1720
50 PERCENT EXCEEDS	287	70	303
90 PERCENT EXCEEDS	68	41	38

Period of regulated streamflow.

BRAZOS RIVER MAIN STEM

08089000 BRAZOS RIVER NEAR PALO PINTO, TX

LOCATION.--Lat 32°51'45", long 98°18'08", Palo Pinto County, Hydrologic Unit 12060201, on right bank 100 ft upstream from bridge on Farm Road 4, 300 ft downstream from Dark Valley Creek, 6.5 mi north of Palo Pinto, and at mile 667.3.

DRAINAGE AREA.--23,811 mi², of which 9,566 mi² probably is noncontributing.

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.

REVISED RECORDS.--WSP 1512: 1924-25, 1929, 1932-34. WSP 1712: 1935-36, 1937-38(M), 1939, 1940(M). WDR TX-76-2:
Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 834.23 ft above sea level. Prior to Nov. 15, 1933, nonrecording gage at site 19 mi downstream at datum 38.19 ft lower. Nov. 15, 1933 to Apr. 10, 1989 at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Since 1941, flow largely regulated by Possum Kingdom Lake (station 08088500) 20 mi upstream. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--16 years (water years 1925-40) prior to completion of Possum Kingdom Lake, 1,262 ft³/s (914,300 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1925-40).--Maximum discharge, 95,600 ft³/s June 16, 1930, at site 19 mi downstream from Mineral Wells (gage height, 30 ft, present site and datum); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage occurred in 1876, from data by U.S. Army Corps of Engineers, and was several feet higher than the flood of June 16, 1930, which reached a stage of about 30 ft and was the highest since at least 1876.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	358	71	283	535	138	90	63	209	68	28	409
2	324	266	59	118	693	138	94	69	101	62	24	311
3	140	194	56	151	337	156	118	68	83	12	24	265
4	70	380	54	81	389	157	181	66	97	12	23	244
5	51	871	53	149	688	160	156	65	123	11	16	219
6	47	554	54	538	259	154	161	67	85	11	151	203
7	46	93	53	667	69	319	106	66	599	11	93	179
8	46	502	300	682	60	542	87	63	238	11	52	150
9	237	312	111	215	71	650	85	60	114	11	55	137
10	89	303	243	71	65	337	132	58	90	12	43	139
11	52	183	177	56	51	358	143	61	80	89	47	138
12	48	63	250	51	44	301	140	57	76	213	37	141
13	45	52	186	142	53	138	142	54	75	185	32	152
14	44	544	324	192	66	118	132	56	85	62	30	149
15	44	96	102	454	58	114	130	59	80	39	30	6720
16	44	56	64	516	48	110	125	64	72	29	44	21500
17	46	195	71	200	47	110	125	63	67	21	47	8510
18	48	180	75	757	50	456	121	63	68	15	43	1270
19	702	62	625	713	49	177	757	64	66	15	38	5380
20	696	410	345	164	77	364	191	66	65	16	38	12700
21	157	615	220	66	223	865	104	68	64	15	41	8820
22	445	223	201	56	111	372	92	69	68	13	42	2000
23	901	68	251	53	469	154	91	66	68	13	42	2150
24	100	53	547	288	121	109	84	64	63	14	41	3420
25	307	47	184	634	70	651	73	64	68	15	44	2170
26	343	45	669	197	70	332	79	66	76	17	49	2260
27	804	111	640	168	65	467	76	78	75	248	56	1810
28	439	303	774	204	59	643	70	76	71	170	4010	1460
29	286	275	619	321	669	306	72	72	69	64	1560	1560
30	297	191	264	227	---	305	68	135	67	39	560	1570
31	302	---	76	760	---	121	---	750	---	31	325	---
TOTAL	7363	7605	7718	9174	5566	9322	4025	2760	3162	1544	7665	86136
MEAN	238	253	249	296	192	301	134	89.0	105	49.8	247	2871
MAX	901	871	774	760	693	865	757	750	599	248	4010	21500
MIN	44	45	53	51	44	109	68	54	63	11	16	137
AC-FT	14600	15080	15310	18200	11040	18490	7980	5470	6270	3060	15200	170900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1996#, BY WATER YEAR (WY)

MEAN	1387	527	480	439	530	506	887	2107	1836	891	755	1053
MAX	13140	3020	7800	2254	9064	5280	8881	30210	10540	3971	7486	7650
(WY)	1942	1975	1992	1992	1992	1992	1957	1957	1941	1961	1978	1966
MIN	22.6	34.1	29.5	25.7	12.4	23.0	26.5	26.9	53.8	34.2	78.9	30.4
(WY)	1953	1953	1955	1953	1971	1976	1971	1971	1978	1971	1988	1988

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1941 - 1996#
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ANNUAL TOTAL	202419		152040			
ANNUAL MEAN	555		415		952	
HIGHEST ANNUAL MEAN					4145	1957
LOWEST ANNUAL MEAN					98.5	
HIGHEST DAILY MEAN	9740	Aug 8	21500	Sep 16	81700	Apr 29 1957
LOWEST DAILY MEAN	44	Oct 14	11	Jul 5	3.4	Apr 15 1949
ANNUAL SEVEN-DAY MINIMUM	46	Oct 12	11	Jul 3	5.6	Nov 2 1940
INSTANTANEOUS PEAK FLOW			23300	Sep 16	85400	Apr 29 1957
INSTANTANEOUS PEAK STAGE			15.93	Sep 16	28.87	Apr 29 1957
ANNUAL RUNOFF (AC-I T)	401500		301600		689500	
10 PERCENT EXCEEDS	995		656		1690	
50 PERCENT EXCEEDS	390		105		217	
90 PERCENT EXCEEDS	82		42		30	

Period of regulated streamflow.

08090800 BRAZOS RIVER NEAR DENNIS, TX

LOCATION.--Lat 32°36'56", long 97°55'32", Parker County, Hydrologic Unit 12060201, on right bank at downstream side of highway embankment of bridge on Farm Road 1189, 0.2 mi south of Dennis, 1.0 mi upstream from Patrick Creek, and at mile 589.98.

DRAINAGE AREA.--25,237 mi², of which 9,566 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1968 to current year.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 697.67 ft above sea level.

REMARKS.--Records good. Flow is largely regulated by releases from Possum Kingdom lake (station 08088500) 96 mi upstream on the Brazos River, and by Lake Palo Pinto (44,090 acre-ft) upstream on Palo Pinto Creek. Flow may be affected at times by discharge from the flood-detention pools of twelve floodwater-retarding structures with a combined detention capacity of 13,840 acre-ft. These structures control runoff from a 53.0 mi² area in the East Keechi and Pollard Creeks drainage basins. There are many diversions above station for irrigation, municipal supply and oil field operations. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1930, 31.8 ft in May 1957, from floodmark, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	578	348	279	405	263	94	214	50	1330	44	76	e1140
2	539	343	281	250	382	180	177	50	442	34	59	e992
3	331	362	207	188	355	224	133	48	277	34	48	1650
4	291	275	153	242	256	154	112	52	202	40	41	1240
5	258	299	131	183	294	128	135	58	285	42	33	987
6	193	460	110	178	257	133	275	64	157	31	23	591
7	159	575	106	151	494	129	271	63	383	27	19	383
8	136	489	104	241	360	129	188	64	832	25	16	288
9	123	289	104	536	211	123	147	64	314	25	19	248
10	111	287	104	573	150	231	123	54	298	28	29	313
11	102	349	188	382	118	372	97	49	189	27	65	316
12	172	309	181	228	109	326	85	56	137	32	52	246
13	160	302	199	165	104	199	82	56	109	178	38	208
14	125	217	195	137	99	269	102	46	93	162	35	185
15	112	161	236	123	91	194	100	41	85	171	30	2050
16	106	257	221	151	82	147	94	38	76	197	27	11300
17	97	265	264	259	82	134	99	36	68	122	2010	21400
18	93	184	215	455	86	127	97	35	68	78	375	10100
19	92	147	162	314	85	122	95	33	63	58	161	4700
20	88	193	146	517	79	144	94	33	58	47	106	7790
21	296	200	274	476	81	215	213	38	50	38	81	14100
22	484	170	314	305	83	166	200	42	48	33	79	10400
23	298	463	259	205	83	267	146	38	51	21	74	3410
24	451	353	243	150	130	287	110	37	50	18	64	2620
25	570	223	207	127	190	179	87	42	41	23	61	3070
26	289	162	377	109	217	129	73	45	43	22	60	2860
27	192	132	264	339	151	160	66	45	46	71	85	2260
28	281	113	392	311	115	355	65	43	44	47	1070	2380
29	580	108	494	194	99	271	59	36	43	40	5910	1620
30	455	133	589	186	---	380	51	40	44	60	7330	1550
31	291	---	529	181	---	240	---	476	---	102	e2350	---
TOTAL	8053	8168	7528	8261	5106	6208	3790	1872	5926	1877	20426	110397
MEAN	260	272	243	266	176	200	126	60.4	198	60.5	659	3680
MAX	580	575	589	573	494	380	275	476	1330	197	7330	21400
MIN	88	108	104	109	79	94	51	33	41	18	16	185
AC-FT	15970	16200	14930	16390	10130	12310	7520	3710	11750	3720	40510	219000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996#, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	1672	728	825	509	772	966	1109	2036	2214	700	891	850																	
MAX	17690	5000	12240	2835	9530	5970	13320	12090	13490	4376	7600	3680																	
(WY)	1982	1975	1992	1992	1992	1992	1990	1990	1982	1978	1978	1996																	
MIN	69.6	78.9	73.0	78.8	33.9	26.7	27.1	30.4	61.7	37.0	56.6	14.9																	
(WY)	1983	1980	1969	1969	1971	1971	1971	1988	1971	1978	1988	1984																	

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1968 - 1996#
ANNUAL TOTAL	280763	187612	
ANNUAL MEAN	769	513	1108
HIGHEST ANNUAL MEAN			4141
LOWEST ANNUAL MEAN			120
HIGHEST DAILY MEAN	18200	21400	87700
LOWEST DAILY MEAN	88	16	1.2
ANNUAL SEVEN-DAY MINIMUM	102	26	3.0
INSTANTANEOUS PEAK FLOW		23300	96600
INSTANTANEOUS PEAK STAGE		18.67	31.85
ANNUAL RUNOFF (AC-FT)	556900	372100	802800
10 PERCENT EXCEEDS	1150	537	2120
50 PERCENT EXCEEDS	401	152	282
90 PERCENT EXCEEDS	162	40	47

e Estimated

Period of regulated streamflow.

BRAZOS RIVER MAIN STEM

08090800 BRAZOS RIVER NEAR DENNIS, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1970 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1970 to September 1995.

WATER TEMPERATURE: October 1970 to September 1995.

REMARKS.--Mean monthly, annual concentrations, and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 5,410 microsiemens Apr. 18, 1984; minimum daily, 200 microsiemens Oct. 13, 1981.
WATER TEMPERATURE: Maximum daily, 38.5°C July 26, 1976; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,040 microsiemens Oct. 3; minimum daily, 284 microsiemens Aug. 3.

WATER TEMPERATURE: Maximum daily, 35.0°C on July 11 and 28; minimum daily, 5.0°C Jan. 5, 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 30...	1009	106	2630	8.2	10.5	460	320	120	39
FEB 08...	0835	389	2730	8.0	10.5	460	350	120	38
APR 09...	1115	148	2030	8.0	18.5	380	260	100	31
MAY 21...	1045	38	2890	7.8	27.0	450	350	110	43
JUL 11...	1046	33	1880	8.0	26.5	290	200	72	26
SEP 11...	0757	332	672	8.2	24.5	170	64	48	11

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)
NOV 30...	370	8	7.2	140	300	570	0.30	3.4	1490
FEB 08...	390	8	7.8	110	310	610	0.40	4.4	1550
APR 09...	280	6	6.5	120	250	420	0.30	1.0	1160
MAY 21...	410	8	9.0	100	360	660	0.40	1.3	1660
JUL 11...	250	6	6.8	91	200	400	0.40	3.4	1010
SEP 11...	65	2	4.6	100	67	94	0.20	8.0	358

08090900 LAKE GRANBURY NEAR GRANBURY, TX

LOCATION.--Lat 32°22'2"/, long 97°41'20", Hood County, Hydrologic Unit 12060201, at right end of spillway of DeCordova Bend Dam on Brazos River, 2.6 mi upstream from Fall Creek, 7.5 mi southeast of Granbury, and at mile 542.5.

DRAINAGE AREA.--25,6/9 mi², of which 9,566 mi² probably is noncontributing.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1.11 ft below sea level.

REMARKS.--The lake is formed by an Ambursen-type concrete and earthfill dam 2,256 ft long, including a 932-foot concrete spillway. The dam was completed on Aug. 30, 1969, and deliberate impoundment began Sept. 15, 1969. The spillway consists of sixteen 36- by 35-foot tainter gates and two 7- by 8-foot sluice gates. Outflow through the sluice gates discharges into a bay where the outflow is then controlled by two 4- by 4.5-foot sluice gates with invert at 625.8 ft. Flow is affected at times by discharge from the flood-detention pools of 12 floodwater-retarding structures with a combined detention capacity of 13,940 acre-ft. These structures control runoff from 53.9 mi² in the East Keechi, Kickapoo, and Ruckers Creeks drainage basins. The lake was built by the Brazos River Authority for the conservation of water for irrigation, municipal, and industrial uses. Water is also diverted into Squaw Creek Reservoir. The city of Granbury returns wastewater effluent into Lake Granbury. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam.....	706.5	-
Top of tainter gates (design flood).....	693.0	136,800
Crest of spillway.....	658.0	11,980
Lowest gated outlet (invert).....	640.0	1,140

COOPERATION.--The capacity table, No. 2, was provided by the Texas Water Development Board and put into use Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 158,800 acre-ft Mar. 27, 1977 (gage height, 693.60 ft); minimum since normal operating level was reached in October 1969, 97,600 acre-ft Aug. 9, 1978 (gage height, 685.28 ft) using capacity table No. 1.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 136,300 acre-ft Sept. 16 at 0715 hours (gage height, 692.92 ft); minimum daily, 119,100 acre-ft Aug. 16 (gage height, 690.69 ft).

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

685.0	83,100	689.0	107,200	693.0	136,800
687.0	94,400	692.0	129,000	694.0	145,700

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132900	132900	133500	133500	130800	132900	133500	130600	128200	128200	122300	135300
2	133100	133100	133500	132700	130700	132200	133000	130500	129000	127600	122300	133600
3	131400	133000	133500	132000	131200	132100	132700	129800	129100	127600	122100	134700
4	130800	132900	133500	132100	131300	132000	133600	129900	129700	127000	121600	133200
5	131400	132800	133500	132700	132100	132200	134300	129700	129800	126900	121400	134600
6	131400	132900	133300	132200	132300	133200	133600	129900	130000	126300	121000	134800
7	131300	133100	132600	131900	133100	132300	133500	129800	130700	126100	120300	135300
8	131300	132900	133500	131400	134500	132200	133000	129700	132200	125500	120700	135200
9	131300	132700	132700	132000	134700	132100	133100	129600	132500	125200	120900	133800
10	131300	133700	132600	133000	136100	131600	132900	129700	133200	124600	120800	133100
11	131300	132900	132700	133100	135200	132200	132600	129600	133300	125400	120700	133200
12	131300	132800	132700	133100	134700	132900	133100	129600	133300	125400	120700	133800
13	131400	132900	132700	133000	134600	132400	132800	129200	133300	125300	120000	133600
14	131200	132800	132000	132900	134600	133100	133100	129000	133300	125500	119800	132300
15	131200	132600	132600	132200	134000	133100	132200	128800	133100	126000	119300	133200
16	130700	131900	132600	132200	133500	133000	132000	128200	133100	126000	119100	126600
17	130700	131900	133000	133100	133100	133000	131400	128100	132600	125900	122400	128300
18	130700	131900	133500	132300	132800	132300	132000	127500	132300	125300	123200	127500
19	130700	131900	132500	131600	132800	131600	132000	127500	132300	125300	123700	126900
20	130500	131800	131700	132400	132200	131500	131900	127400	131900	124700	123500	126000
21	129900	131400	131700	133300	132100	131600	131200	127200	131500	124600	123000	132200
22	130600	131900	131900	133900	132100	131400	132700	126800	131000	124400	122900	131500
23	131400	132000	131900	132200	134500	131400	132700	125900	130800	123700	122900	127000
24	131400	132800	131900	133800	132100	133100	132000	125700	130700	123500	122800	128200
25	132100	132900	131900	133100	132900	132600	132200	125300	129900	123100	122800	129200
26	132300	133000	132000	133500	133100	133000	132000	125300	129900	122800	122300	129700
27	133000	133500	132600	133100	133700	133200	131300	125100	129400	123000	122400	127600
28	132800	133400	132600	133100	133700	133500	131900	125100	129200	123000	126100	128100
29	132900	133500	131900	133500	133100	133500	131300	124500	129000	122800	134600	127500
30	133100	133500	132700	132600	---	134400	130600	123500	128400	122400	132200	126900
31	133500	---	133000	132000	---	133600	---	125300	---	122300	134000	---
MAX	133500	133700	133500	134500	136100	134400	134300	130600	133300	128200	134600	135300
MIN	129900	131400	131700	131400	130700	131400	130600	123500	128200	122300	119100	126000
(+)	692.59	692.59	692.51	692.40	692.52	692.60	692.20	691.52	691.93	691.13	692.64	691.73
(@)	+510	0	-500	-1000	+1100	+500	-3000	-5300	+3100	-6100	+11700	-7100
CAL YR 1995	MAX	151600	MIN	129900	(@)	+1000						
WTR YR 1996	MAX	136100	MIN	119100	(@)	-6090						

(+) Elevation, in feet, at end of month.

(@) Change in contents, in acre-feet.

BRAZOS RIVER MAIN STEM

08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: September 1970 to current year.

322227097412101 - LAKE GRANBURY SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPL- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
DEC												
12...	1004	149000	1.00	1650	8.4	13.0	1.07	7.7	75	300	170	80
12...	1007	--	10.0	1650	8.3	12.5	--	7.7	74	--	--	--
12...	1011	--	20.0	1640	8.2	12.5	--	7.6	73	--	--	--
12...	1014	--	30.0	1640	8.2	12.5	--	7.5	72	--	--	--
12...	1018	--	40.0	1640	8.2	12.5	--	7.6	73	--	--	--
12...	1022	--	50.0	1630	8.1	12.5	--	7.5	72	--	--	--
12...	1025	--	62.0	1630	8.0	12.5	--	7.6	73	300	180	80
MAR												
26...	0949	149000	1.00	1920	8.3	13.0	1.01	9.4	91	350	220	95
26...	0953	--	10.0	1930	8.3	13.0	--	9.4	91	--	--	--
26...	0957	--	20.0	1930	8.3	13.0	--	9.4	91	--	--	--
26...	1000	--	30.0	1930	8.2	13.0	--	9.4	91	--	--	--
26...	1004	--	40.0	1930	8.2	13.0	--	9.3	90	--	--	--
26...	1007	--	50.0	1940	8.2	13.0	--	9.3	90	--	--	--
26...	1010	--	62.0	1950	8.1	12.5	--	8.9	85	360	220	97
JUN												
06...	1036	146000	1.00	2170	8.2	26.5	1.98	6.7	87	370	240	98
06...	1041	--	10.0	2170	8.2	26.5	--	6.6	85	--	--	--
06...	1047	--	20.0	2170	8.1	25.5	--	6.2	79	--	--	--
06...	1053	--	30.0	2150	7.7	24.5	--	2.4	30	--	--	--
06...	1100	--	40.0	2110	7.4	21.5	--	0	0	--	--	--
06...	1106	--	50.0	2070	7.4	19.5	--	0.1	1	--	--	--
06...	1111	--	62.0	2060	7.4	19.0	--	0.2	2	360	220	98
SEP												
11...	0912	150000	1.00	1830	8.5	29.0	1.30	9.8	132	280	200	69
11...	0914	--	10.0	1940	8.4	28.5	--	8.7	116	--	--	--
11...	0916	--	20.0	2140	7.6	27.5	--	2.8	37	--	--	--
11...	0918	--	30.0	2180	7.5	27.0	--	1.8	23	--	--	--
11...	0920	--	40.0	2190	7.4	26.5	--	0	0	--	--	--
11...	0922	--	50.0	2180	7.4	25.0	--	0	0	--	--	--
11...	0924	--	60.0	2170	7.2	21.0	--	0	0	--	--	--
11...	0926	--	68.0	2170	7.0	21.0	--	0	0	380	160	100

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC												
12...	25	220	6	6.9	130	170	320	0.30	6.0	905	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	25	210	5	7.2	130	170	320	0.30	6.2	895	--	--
MAR												
26...	28	250	6	6.3	140	220	400	0.30	4.9	1090	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	28	250	6	7.2	140	230	410	0.30	5.0	1110	--	--
JUN												
06...	31	280	6	7.1	130	250	460	0.40	4.7	1210	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	0.100	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	29	270	6	6.5	150	230	420	0.40	6.5	1150	0.070	0.070
SEP												
11...	27	250	6	6.5	85	210	390	0.30	6.3	1010	0.060	0.060
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	0.030	0.030
11...	--	--	--	--	--	--	--	--	--	--	0.00	0.00
11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	32	280	6	7.0	220	210	450	0.30	12	1230	0.010	0.010

BRAZOS RIVER MAIN STEM

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08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

32222709/412101 - LAKE GRANBURY SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
12...	<0.010	--	<0.050	0.070	0.23	0.30	<0.010	<0.010	--	20	<10
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.010	--	<0.050	0.110	0.29	0.40	<0.010	<0.010	--	20	120
MAR											
26...	0.010	--	<0.050	0.040	0.26	0.30	0.040	<0.010	--	<10	<10
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	0.010	--	<0.050	0.040	0.26	0.30	0.040	<0.010	--	<10	40
JUN											
06...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	10	<3
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<0.010	--	<0.050	0.020	0.38	0.40	0.010	<0.010	--	<9	6
06...	<0.010	0.100	0.100	0.020	0.28	0.30	<0.010	<0.010	--	<9	6
06...	--	--	--	--	--	--	--	--	--	--	--
06...	0.030	0.100	0.100	0.300	0.30	0.60	0.080	0.070	0.21	260	830
SEP											
11...	0.010	0.070	0.070	<0.015	--	0.30	<0.010	<0.010	--	<3	3
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
11...	0.060	0.090	0.090	0.030	0.27	0.30	<0.010	<0.010	--	21	63
11...	0.170	0.170	0.170	0.060	0.34	0.40	<0.010	<0.010	--	29	45
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
11...	0.060	0.070	0.070	3.70	0.0	3.7	0.440	0.560	1.7	63	1100

322231097412001 - LAKE GRANBURY SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1036	1.00	1650	8.2	13.0	7.8	76
12...	1039	10.0	1650	8.2	13.0	7.8	76
12...	1042	20.0	1640	8.2	12.5	7.8	75
12...	1047	30.0	1640	8.2	12.5	7.8	75
12...	1050	40.0	1640	8.2	12.5	7.7	74
12...	1052	54.0	1640	8.2	12.5	7.6	73
MAR							
26...	1017	1.00	1920	8.3	13.0	9.4	91
26...	1020	10.0	1920	8.3	13.0	9.4	91
26...	1023	20.0	1920	8.3	13.0	9.4	91
26...	1025	30.0	1920	8.3	13.0	9.4	91
26...	1027	40.0	1920	8.3	13.0	9.4	91
26...	1029	52.0	1920	8.3	13.0	9.5	92
JUN							
06...	1117	1.00	2170	8.2	26.5	6.6	85
06...	1120	10.0	2170	8.2	26.0	6.5	83
06...	1123	20.0	2170	8.2	26.0	6.4	82
06...	1126	30.0	2150	7.7	24.5	2.6	32
06...	1130	40.0	2120	7.4	21.5	0.3	4
06...	1133	50.0	2070	7.4	19.0	0.1	1
06...	1136	56.0	2070	7.4	19.0	0.4	4
SEP							
11...	0957	1.00	1840	8.5	29.0	9.6	130
11...	0959	10.0	1860	8.3	28.5	8.5	114
11...	1002	20.0	2150	7.4	27.5	3.0	39
11...	1005	30.0	2180	7.3	27.0	1.6	21
11...	1007	40.0	2180	7.2	27.0	0.1	1
11...	1009	50.0	2250	7.1	25.0	0	0
11...	1011	58.0	2240	7.0	22.0	0	0

BRAZOS RIVER MAIN STEM

08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

32234509/421901 - LAKE GRANBURY SITE BR

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1044	1.00	1640	8.3	13.0	8.7	85
12...	1046	10.0	1640	8.3	13.0	8.7	85
12...	1048	20.0	1650	8.3	12.5	8.7	84
12...	1051	30.0	1650	8.3	12.5	8.7	84
12...	1054	42.0	1650	8.4	12.5	8.8	85
MAR							
26...	1103	1.00	1920	8.4	13.5	9.5	93
26...	1105	10.0	1920	8.4	13.5	9.5	93
26...	1108	20.0	1920	8.4	13.5	9.4	92
26...	1110	30.0	1920	8.4	13.5	9.4	92
26...	1113	40.0	1920	8.4	13.5	9.4	92
26...	1116	48.0	1920	8.4	13.5	9.3	91
JUN							
06...	1214	1.00	2180	8.3	27.5	7.9	104
06...	1217	10.0	2180	8.3	27.5	7.9	104
06...	1221	20.0	2180	8.3	27.0	7.6	99
06...	1225	30.0	2180	7.7	25.5	2.7	34
06...	1229	42.0	2140	7.4	23.0	0.3	4
SEP							
11...	1108	1.00	1610	8.5	29.0	8.8	119
11...	1110	10.0	1590	8.4	28.5	8.2	110
11...	1112	20.0	1770	7.6	27.5	3.6	47
11...	1114	30.0	1940	7.3	27.5	1.5	20
11...	1116	40.0	2030	7.4	27.5	1.1	14

32234109/420601 - LAKE GRANBURY SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC								
12...	1107	1.00	1650	8.3	13.0	1.01	9.1	89
12...	1111	10.0	1650	8.3	13.0	--	8.3	81
12...	1116	20.0	1650	8.2	12.5	--	7.9	76
12...	1121	30.0	1650	8.2	12.5	--	8.0	77
12...	1126	40.0	1650	8.3	12.5	--	8.1	78
12...	1131	50.0	1650	8.3	12.5	--	8.0	77
12...	1136	60.0	1660	8.3	12.5	--	7.8	75
MAR								
26...	1040	1.00	1930	8.4	13.0	1.13	9.5	92
26...	1042	10.0	1920	8.4	13.0	--	9.5	92
26...	1045	20.0	1920	8.4	13.0	--	9.4	91
26...	1048	30.0	1920	8.3	13.0	--	9.4	91
26...	1051	40.0	1920	8.3	13.0	--	9.3	90
26...	1054	50.0	1920	8.3	13.0	--	9.3	90
26...	1057	60.0	1920	8.3	13.0	--	9.2	89
JUN								
06...	1149	1.00	2180	8.3	27.5	1.68	7.9	104
06...	1152	10.0	2180	8.3	27.0	--	7.8	102
06...	1155	20.0	2180	8.3	26.5	--	7.0	90
06...	1158	30.0	2180	7.6	25.0	--	2.0	25
06...	1201	40.0	2140	7.4	22.5	--	0.1	1
06...	1203	50.0	2120	7.4	19.5	--	0.1	1
06...	1206	58.0	2080	7.4	19.5	--	0.2	2
SEP								
11...	1044	1.00	1570	8.4	29.0	1.10	8.8	119
11...	1046	10.0	1570	8.4	28.5	--	8.2	110
11...	1048	20.0	1940	7.6	27.5	--	4.3	57
11...	1050	30.0	1940	7.2	27.0	--	1.5	20
11...	1052	40.0	2120	7.2	27.0	--	0.4	5
11...	1054	50.0	2170	7.2	26.0	--	0.3	4
11...	1056	64.0	2280	6.9	22.5	--	0.3	4

BRAZOS RIVER MAIN STEM

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08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

322337097415401 - LAKE GRANBURY SITE BL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1206	1.00	1650	8.3	13.0	8.6	84
12...	1208	10.0	1650	8.3	13.0	8.5	83
12...	1210	20.0	1650	8.3	13.0	8.3	81
12...	1212	28.0	1650	8.2	13.0	8.5	83
MAR							
26...	1123	1.00	1930	8.4	13.5	9.5	93
26...	1125	10.0	1930	8.4	13.5	9.5	93
26...	1128	20.0	1920	8.4	13.5	9.5	93
26...	1131	30.0	1920	8.4	13.5	9.4	92
JUN							
06...	1237	1.00	2180	8.3	27.5	7.9	104
06...	1240	10.0	2180	8.3	27.5	7.9	104
06...	1243	20.0	2180	8.2	27.0	6.5	85
06...	1247	28.0	2180	7.9	26.0	4.5	58
SEP							
11...	1027	1.00	1600	8.6	28.5	8.9	119
11...	1029	10.0	1600	8.4	28.5	8.2	110
11...	1031	20.0	1930	7.6	27.5	4.2	55
11...	1033	30.0	1930	7.3	27.5	1.0	13

322537097414501 - LAKE GRANBURY SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC								
12...	1226	1.00	1670	8.3	13.5	1.01	8.9	88
12...	1228	5.00	1670	8.3	13.0	--	8.7	85
12...	1231	13.0	1640	8.3	12.5	--	8.7	84
MAR								
26...	1149	1.00	1930	8.5	13.0	0.94	10.0	97
26...	1151	13.0	1900	8.6	12.5	--	10.2	98
JUN								
06...	1301	1.00	2200	8.4	28.5	0.91	7.6	102
06...	1304	13.0	2170	8.3	28.5	--	6.6	88
SEP								
11...	1132	1.00	1570	8.3	28.5	0.98	7.0	94
11...	1134	10.0	1640	8.2	28.5	--	5.2	70
11...	1136	15.0	1620	8.2	28.5	--	5.4	72

BRAZOS RIVER MAIN SLM

08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

322422097423901 - LAKE GRANBURY SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SFECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC								
12...	1250	1.00	1660	8.2	15.5	0.85	7.9	81
12...	1253	10.0	1670	8.2	14.5	--	7.6	77
12...	1256	20.0	1670	8.1	13.5	--	7.3	72
12...	1259	30.0	1670	8.1	13.0	--	7.8	76
12...	1302	40.0	1660	8.1	13.0	--	7.7	75
12...	1305	53.0	1660	8.0	13.0	--	7.1	69
MAR								
26...	1208	1.00	1960	8.4	16.0	1.13	9.4	97
26...	1211	10.0	1990	8.4	14.5	--	9.1	91
26...	1214	20.0	1980	8.4	14.5	--	9.0	90
26...	1217	30.0	1970	8.4	14.5	--	9.0	90
26...	1220	40.0	2000	8.3	14.0	--	8.4	83
26...	1223	53.0	2000	8.1	13.5	--	7.4	73
JUN								
06...	1320	1.00	2210	8.4	29.0	1.55	7.5	101
06...	1322	10.0	2210	8.3	28.0	--	7.2	96
06...	1325	20.0	2300	7.8	26.5	--	2.9	37
06...	1328	30.0	2310	7.6	25.5	--	1.6	20
06...	1331	40.0	2210	7.5	23.0	--	0.2	2
06...	1334	52.0	2150	7.4	20.5	--	0.3	3
SEP								
11...	1148	1.00	1470	8.0	30.0	0.91	4.9	67
11...	1150	10.0	1250	7.6	27.5	--	3.4	45
11...	1152	20.0	952	7.0	26.5	--	0.6	8
11...	1154	30.0	1840	7.1	26.5	--	0.6	8
11...	1156	40.0	1950	7.2	26.0	--	0.6	8
11...	1158	50.0	2150	7.0	24.5	--	0.6	7
11...	1200	56.0	2170	7.1	25.0	--	0.6	8

322437097423901 - LAKE GRANBURY SITE DL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1312	1.00	1670	8.2	16.0	7.9	82
12...	1315	10.0	1680	8.2	14.0	7.2	72
12...	1317	19.0	1660	8.1	13.5	7.4	73
MAR							
26...	1229	1.00	1960	8.3	15.5	9.4	96
26...	1231	10.0	1990	8.3	14.5	9.0	90
26...	1234	20.0	2000	8.3	15.0	8.8	89
JUN							
06...	1342	1.00	2210	8.4	28.5	7.5	100
06...	1346	10.0	2210	8.3	28.5	7.3	98
06...	1349	19.0	2260	7.8	27.5	3.4	45
SEP							
11...	1209	1.00	1460	8.0	29.5	5.7	77
11...	1211	10.0	1340	7.8	28.0	4.4	58
11...	1213	21.0	942	7.2	26.5	0.6	8

BRAZOS RIVER MAIN STEM

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08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

322458097443101 - LAKE GRANBURY SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1327	1.00	1670	8.2	15.0	8.3	85
12...	1329	10.0	1670	8.2	14.5	8.2	83
12...	1331	20.0	1670	8.2	14.0	8.1	81
12...	1334	30.0	1670	8.2	13.5	8.0	79
12...	1337	40.0	1680	8.2	13.0	7.9	77
12...	1340	50.0	1690	8.2	13.0	7.8	76
MAR							
26...	1243	1.00	1990	8.3	14.0	9.3	92
26...	1245	10.0	1990	8.3	14.0	9.2	91
26...	1248	20.0	1990	8.3	14.0	9.1	90
26...	1251	30.0	2010	8.3	13.5	8.0	79
26...	1254	40.0	2030	8.2	13.5	7.2	71
26...	1257	50.0	2040	8.1	13.5	6.5	64
JUN							
06...	1400	1.00	2220	8.3	29.0	7.5	101
06...	1403	10.0	2230	8.3	29.0	7.4	100
06...	1406	20.0	2230	8.3	28.5	6.9	92
06...	1409	30.0	2370	7.8	26.5	3.3	43
06...	1413	40.0	2280	7.5	24.5	0.4	5
06...	1416	48.0	2170	7.5	21.5	0.2	2
SEP							
11...	1226	1.00	1520	8.5	30.5	8.1	112
11...	1228	10.0	1460	8.4	28.0	6.9	91
11...	1230	20.0	832	7.3	26.5	0.2	3
11...	1232	30.0	1270	7.2	26.5	0.2	3
11...	1234	40.0	1860	7.2	26.5	0.2	3
11...	1236	54.0	1940	7.2	26.0	0.2	3

322619097463301 - LAKE GRANBURY SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC											
12...	1414	1.00	1690	8.3	12.5	8.8	85	310	180	83	26
12...	1418	10.0	1700	8.3	12.5	8.7	84	--	--	--	--
12...	1423	20.0	1750	8.2	12.0	8.3	79	--	--	--	--
12...	1428	30.0	1820	8.1	11.5	8.1	76	--	--	--	--
12...	1433	37.0	1860	8.1	11.5	7.9	75	340	210	91	28
MAR											
26...	1407	1.00	2100	8.3	13.5	9.3	91	370	230	100	30
26...	1410	10.0	2100	8.3	13.5	9.3	91	--	--	--	--
26...	1414	20.0	2100	8.3	13.5	9.3	91	--	--	--	--
26...	1418	30.0	2100	8.4	13.5	9.3	91	--	--	--	--
26...	1422	37.0	2130	8.4	13.5	8.9	87	400	260	110	31
JUN											
06...	1452	1.00	2220	8.4	29.0	8.2	111	380	250	99	32
06...	1457	10.0	2220	8.4	28.5	8.0	107	--	--	--	--
06...	1502	20.0	2260	8.2	28.0	6.6	88	--	--	--	--
06...	1507	30.0	2380	7.9	27.5	4.3	57	--	--	--	--
06...	1512	37.0	2460	7.7	27.0	2.2	29	420	280	110	36
SEP											
11...	1255	1.00	1030	8.8	29.5	9.8	133	190	100	50	16
11...	1257	10.0	1090	8.4	27.5	5.7	75	--	--	--	--
11...	1259	20.0	642	7.4	26.0	0.2	3	--	--	--	--
11...	1301	30.0	1360	7.3	26.0	0.2	3	--	--	--	--
11...	1303	42.0	1630	7.3	26.5	0.2	3	280	180	71	24

BRAZOS RIVER MAIN STEM

08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

322619097463301 - LAKE GRANBURY SITE FC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC											
12...	220	5	6.3	130	180	340	0.30	5.9	939	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	240	6	6.4	130	200	370	0.30	5.9	1020	--	--
MAR											
26...	290	7	6.3	140	260	430	0.30	4.1	1200	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	270	6	6.5	140	260	460	0.30	4.1	1230	--	--
JUN											
06...	300	7	6.8	130	260	480	0.40	4.2	1260	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	330	7	7.6	140	290	510	0.50	5.4	1380	--	--
SEP											
11...	130	4	5.2	88	110	200	0.30	6.9	571	--	--
11...	--	--	--	--	--	--	--	--	--	0.070	0.070
11...	--	--	--	--	--	--	--	--	--	0.110	0.110
11...	--	--	--	--	--	--	--	--	--	--	--
11...	200	5	6.5	100	170	350	0.30	7.6	891	0.020	0.020
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
12...	<0.010	--	<0.050	0.020	0.18	0.20	<0.010	<0.010	--	<10	<10
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	<0.010	--	<0.050	0.050	0.25	0.30	<0.010	<0.010	--	<10	20
MAR											
26...	0.010	--	<0.050	0.020	0.28	0.30	0.040	0.010	0.03	<10	<10
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.010	--	<0.050	0.030	0.27	0.30	0.040	<0.010	--	<10	<10
JUN											
06...	<0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<9	<3
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	<0.010	--	<0.050	0.130	0.37	0.50	<0.010	<0.010	--	<9	170
SEP											
11...	<0.010	--	<0.050	<0.015	--	0.40	<0.010	<0.010	--	5	2
11...	0.010	0.080	0.080	<0.015	--	0.30	<0.010	<0.010	--	11	9
11...	0.150	0.260	0.260	0.060	0.34	0.40	<0.010	0.020	0.06	51	150
11...	--	--	--	--	--	--	--	--	--	--	--
11...	0.070	0.090	0.090	0.450	0.25	0.70	0.030	0.030	0.09	110	310

322703097451401 - LAKE GRANBURY SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1448	1.00	1730	8.1	12.0	9.1	87
12...	1451	10.0	1730	8.1	11.5	9.2	87
12...	1454	23.0	1730	8.0	11.5	8.8	84
MAR							
26...	1436	1.00	2160	8.4	13.0	9.6	93
26...	1438	10.0	2160	8.3	13.0	9.3	90
26...	1441	22.0	2160	8.3	13.0	9.0	87
JUN							
06...	1526	1.00	2240	8.4	29.0	8.4	113
06...	1528	10.0	2240	8.4	29.0	8.4	113
06...	1530	22.0	2240	8.3	29.0	7.9	107
SEP							
11...	1332	1.00	830	8.8	29.0	9.5	128
11...	1334	14.0	1020	8.4	27.5	6.0	79

BRAZOS RIVER MAIN STEM

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08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

322834097470801 - LAKE GRANBURY SITE HC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1515	1.00	1900	8.3	11.0	9.1	86
12...	1517	10.0	1980	8.3	10.0	8.8	81
12...	1519	20.0	1990	8.3	10.0	8.8	81
12...	1522	30.0	2070	8.3	10.5	8.9	83
MAR							
26...	1505	1.00	2400	8.3	13.0	9.3	90
26...	1507	10.0	2400	8.3	13.0	9.3	90
26...	1510	20.0	2450	8.3	13.0	9.2	89
26...	1512	30.0	2480	8.3	12.5	8.9	86
JUN							
06...	1552	1.00	2350	8.3	28.5	7.7	103
06...	1554	10.0	2420	8.2	27.5	6.7	88
06...	1557	20.0	2420	8.0	27.5	5.7	75
06...	1559	29.0	2460	7.8	28.0	3.4	45
SEP							
11...	1402	1.00	456	8.7	30.0	8.3	113
11...	1404	10.0	466	7.5	26.5	0.7	9
11...	1406	20.0	487	7.4	26.0	0.2	3
11...	1408	32.0	593	7.4	26.0	0.2	3

322819097483201 - LAKE GRANBURY SITE IC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1540	1.00	2010	7.9	10.5	9.2	85
12...	1542	13.0	2050	8.0	10.5	9.1	85
MAR							
26...	1523	1.00	2500	8.3	11.5	9.9	93
26...	1525	13.0	2510	8.3	11.5	9.8	92
JUN							
06...	1612	1.00	2420	8.3	28.5	7.3	98
06...	1614	13.0	2450	7.8	27.5	4.3	57
SEP							
11...	1423	1.00	451	8.7	30.5	8.4	116
11...	1425	10.0	449	7.5	27.0	1.9	25
11...	1427	19.0	432	7.5	27.0	0.2	3

323318097480101 - LAKE GRANBURY SITE JC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
12...	1603	1.00	2520	8.1	11.5	8.2	78
12...	1606	10.0	2520	8.1	11.5	8.3	79
12...	1609	21.0	2500	8.1	11.5	7.7	73
MAR							
26...	1551	1.00	2690	8.1	14.0	8.8	88
26...	1554	10.0	2690	8.1	13.5	8.3	82
26...	1557	21.0	2630	8.2	12.5	9.1	88
JUN							
06...	1639	1.00	1350	8.2	28.5	6.2	83
06...	1641	10.0	1110	7.7	27.5	3.6	47
06...	1644	20.0	2100	7.4	27.0	0.3	4
SEP							
11...	1507	1.00	567	8.6	29.5	8.6	117
11...	1509	10.0	502	7.7	26.5	2.7	35
11...	1511	23.0	280	7.5	25.5	0.2	3

BRAZOS RIVER MAIN STEM
08090900 LAKE GRANBURY NEAR GRANBURY, TX--Continued

323435097492001 - LAKE GRANBURY SITE KC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	
DEC												
12...	1624	1.00	2430	8.0	11.5	9.4	90	450	300	120	37	
12...	1630	10.0	2430	7.9	10.5	9.2	86	--	--	--	--	
12...	1635	16.0	2440	7.9	10.5	9.1	85	430	270	110	37	
MAR												
26...	1618	1.00	2740	8.2	14.5	8.8	89	480	360	130	38	
26...	1623	10.0	2730	8.2	14.5	8.8	89	--	--	--	--	
26...	1627	17.0	2740	8.2	14.0	8.6	86	460	330	120	38	
JUN												
06...	1702	1.00	1850	8.5	30.5	7.9	109	290	200	76	25	
06...	1707	10.0	1970	8.3	29.5	6.4	87	--	--	--	--	
06...	1713	15.0	2160	8.0	29.0	4.7	63	340	250	89	29	
SEP												
11...	1528	1.00	773	8.2	30.0	6.4	88	180	62	53	12	
11...	1530	10.0	710	7.8	27.5	3.3	43	--	--	--	--	
11...	1532	18.0	350	7.4	25.5	0.2	3	110	13	33	5.8	
DATE		SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)
DEC												
12...		340	7	6.9	150	280	510	0.30	3.5	1390	--	--
12...		--	--	--	--	--	--	--	--	--	--	--
12...		340	7	6.9	150	280	500	0.30	3.5	1370	--	--
MAR												
26...		370	7	7.7	120	340	610	0.40	0.80	1570	--	--
26...		--	--	--	--	--	--	--	--	--	--	--
26...		390	8	7.5	120	340	600	0.40	0.80	1570	--	--
JUN												
06...		240	6	7.3	94	210	380	0.40	4.3	999	--	--
06...		--	--	--	--	--	--	--	--	--	--	--
06...		290	7	7.5	87	250	460	0.40	4.1	1180	--	--
SEP												
11...		77	2	4.6	120	78	120	0.20	8.8	426	0.060	--
11...		--	--	--	--	--	--	--	--	--	--	--
11...		24	1	4.2	93	25	34	0.20	8.5	191	0.040	0.040
DATE		NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC												
12...		<0.010	--	<0.050	<0.015	--	<0.20	<0.010	<0.010	--	10	<10
12...		--	--	--	--	--	--	--	--	--	--	--
12...		<0.010	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	10	<10
MAR												
26...		<0.010	--	<0.050	0.030	0.27	0.30	0.020	0.010	0.03	<10	<10
26...		--	--	--	--	--	--	--	--	--	--	--
26...		<0.010	--	<0.050	0.020	0.28	0.30	0.050	<0.010	--	<10	20
JUN												
06...		<0.010	--	<0.050	0.020	0.38	0.40	0.020	<0.010	--	<3	<1
06...		--	--	--	--	--	--	--	--	--	--	--
06...		<0.010	--	<0.050	0.030	0.47	0.50	0.030	0.010	0.03	<9	31
SEP												
11...		<0.010	0.060	0.060	<0.015	--	0.30	<0.010	<0.010	--	<3	22
11...		--	--	--	--	--	--	--	--	--	--	--
11...		0.020	0.060	0.060	0.120	0.38	0.50	<0.010	0.010	0.03	46	510

BRAZOS RIVER MAIN STEM

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08091000 BRAZOS RIVER NEAR GLEN ROSE, TX

LOCATION.--Lat 32°16'18", long 97°39'48", Somervell County, Hydrologic Unit 12060201, at downstream side of bridge on U.S. Highway 67, 600 ft downstream from George's Creek, 4.1 mi upstream from Paluxy River, 6 mi northeast of Glen Rose, and at mile 511.2.

DRAINAGE AREA.--25,818 mi², of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--October 1923 to current year.

Water-quality records.--Chemical analyses: August to November 1946. Chemical and biochemical analyses: October 1980 to June 1987.

REVISED RECORDS.--WSP 1058: 1932. WSP 1512: 1946-47, 1949. WSP 1712: 1928(M). WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 567.82 ft above sea level. Prior to May 7, 1931, nonrecording gage at site 2.5 mi downstream at same datum. May 7, 1931, to Sept. 30, 1957, water-stage recorder at site 2.4 mi downstream at same datum, used as supplementary gage Oct. 1, 1957 to Apr. 1, 1959. Apr. 27, 1950 to Sept. 30, 1957, water-stage recorder, present gage, used as supplementary gage.

REMARKS.--No estimated daily discharges. Records good. Since September 1969, flow largely regulated by Lake Granbury (station 08090900) 31 mi upstream. There are many diversions above station for irrigation and municipal supplies, and for oil field operations. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--46 years (water years 1924-69) prior to regulation by Lake Granbury, 1,567 ft³/s (1,135,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1924-69).--Maximum discharge, 97,600 ft³/s May 18, 1935 (gage height, 23.68 ft, from floodmarks); no flow at times prior to construction of Morris Sheppard Dam (1941) on the Brazos River, forming Possum Kingdom Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Second highest known flood since at least 1876 occurred in May 1922 and reached a stage of 29.5 ft, and flood in May 1908 reached a stage of 27 ft, each at site 2.4 mi downstream, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	489	817	33	278	379	220	231	17	28	9.2	12	2050
2	482	780	41	1270	1190	268	224	25	44	9.4	11	3190
3	1210	231	224	429	392	286	225	22	36	8.9	12	1640
4	1490	204	224	291	245	278	206	20	39	13	11	3090
5	350	208	223	284	241	205	133	17	35	9.2	8.4	726
6	113	209	220	281	194	100	211	19	31	20	6.1	176
7	73	223	220	286	102	66	456	20	27	17	6.7	116
8	55	827	227	285	79	49	458	18	18	12	12	395
9	46	376	164	288	71	59	338	16	14	7.1	24	422
10	45	224	70	266	64	61	105	18	7.2	14	101	1420
11	45	195	44	263	55	53	57	20	7.7	45	101	408
12	39	243	38	274	71	55	42	20	8.2	60	63	121
13	58	237	52	262	251	53	36	17	7.8	59	30	74
14	51	222	235	262	261	61	33	17	8.7	50	21	299
15	63	227	566	259	266	177	29	13	12	47	17	695
16	45	232	255	275	293	75	30	10	19	44	20	5920
17	40	226	270	222	260	202	39	9.8	11	43	34	19300
18	39	228	280	103	258	224	30	8.2	25	26	40	16200
19	36	228	479	918	264	240	25	7.3	15	16	59	6840
20	36	219	507	360	260	198	23	7.8	16	11	65	6400
21	34	212	496	121	252	91	23	8.3	12	9.1	59	7140
22	35	195	252	76	232	52	36	8.6	8.4	9.5	55	11300
23	43	98	92	74	120	39	43	8.1	14	11	70	9520
24	32	54	244	232	68	35	43	12	8.3	19	73	2380
25	35	39	266	229	52	31	34	24	7.4	16	76	2280
26	35	39	268	243	49	31	25	18	8.8	14	73	2420
27	35	41	269	255	51	45	21	17	11	21	59	3670
28	36	34	268	238	52	54	21	10	17	14	74	2260
29	133	32	268	246	45	68	18	15	16	15	476	2240
30	198	32	807	242	---	227	16	16	13	15	10600	2140
31	197	---	296	1030	---	244	---	28	---	14	5040	---
TOTAL	5618	7132	7898	10142	6117	3847	3211	487.1	525.5	678.4	17309.2	114832
MEAN	181	238	255	327	211	124	107	15.7	17.5	21.9	558	3828
MAX	1490	827	807	1270	1190	286	458	28	44	60	10600	19300
MIN	32	32	33	74	45	31	16	7.3	7.2	7.1	6.1	74
AC-FT	11140	14150	15670	20120	12130	7630	6370	966	1040	1350	34330	227800

BRAZOS RIVER MAIN STEM

08091000 BRAZOS RIVER NEAR GLEN ROSE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1996#, BY WATER YEAR (WY)

MEAN	1752	848	1015	573	938	1126	1222	2117	2499	586	778	806
MAX	17860	6209	14960	3099	11290	6684	14360	13920	13660	4873	6621	3828
(WY)	1982	1975	1992	1992	1992	1992	1990	1990	1982	1982	1978	1996
MIN	22.3	13.7	25.1	34.4	15.9	34.3	9.99	15.7	17.5	12.1	17.2	20.7
(WY)	1989	1989	1989	1989	1984	1974	1974	1996	1996	1978	1984	1984

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1970 - 1996#

ANNUAL TOTAL	290969		177797.2									
ANNUAL MEAN	797		486									
HIGHEST ANNUAL MEAN										1189		1992
LOWEST ANNUAL MEAN										4605		1988
HIGHEST DAILY MEAN	27600	Aug 3	19300	Sep 17						115		1991
LOWEST DAILY MEAN	32	Oct 24	6.1	Aug 6						82100		1984
ANNUAL SEVEN-DAY MINIMUM	36	Oct 21	8.3	May 17						.17		1974
INSTANTANEOUS PEAK FLOW			22100	Sep 17						5.8		1991
INSTANTANEOUS PEAK STAGE			17.65	Sep 17						89600		1991
ANNUAL RUNOFF (AC-FT)	577100		352700							35.76		1990
10 PERCENT EXCEEDS	1560		499							861100		
50 PERCENT EXCEEDS	296		62							2250		
90 PERCENT EXCEEDS	52		12							237		
										27		

Period of regulated streamflow.

BRAZOS RIVER BASIN

08091500 PALUXY RIVER AT GLEN ROSE, TX

LOCATION.--Lat 32°13'53", long 97°46'37", Somervell County, Hydrologic Unit 12060202, on left bank at downstream side of remaining pier of dismantled highway bridge, 500 ft upstream from bridge on U.S. Highway 67, 1.0 mi upstream from Cross Branch, 1.2 mi southwest of Glen Rose, and 5.1 mi upstream from mouth.

DRAINAGE AREA.--410 mi².

PERIOD OF RECORD.--October 1923 to September 1925, May 1947 to current year (water year 1924 is not complete). Prior to October 1965, published as Paluxy Creek at Glen Rose.

REVISED RECORDS.--WSP 1392: 1949, 1952. WSP 2122: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.66 ft above sea level. Oct. 27, 1923 to Sept. 30, 1925, nonrecording gage at bridge 1.8 mi downstream at datum 13.62 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow is affected at times by discharge from the flood-detention pools of fourteen floodwater-retarding structures with a combined capacity of 20,100 acre-ft. These structures control runoff from 90.8 mi² above this station. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1877, 27.2 ft Apr. 17, 1908, present site and datum (discharge, 59,000 ft³/s). Flood of May 21, 1922, reached a stage of 26.0 ft, present site and datum (discharge, 53,000 ft³/s). Flood in November 1918 reached about the same stage as flood of May 21, 1922, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	33	28	30	27	21	21	21	140	3.4	4.0	489
2	45	33	28	30	27	21	21	21	42	2.7	2.8	114
3	47	33	28	30	27	21	21	21	27	2.7	1.9	406
4	49	33	28	29	27	21	21	20	26	2.6	1.2	54
5	46	33	28	27	25	21	24	17	20	2.2	.76	39
6	43	33	28	27	25	21	25	17	15	1.6	.37	33
7	42	32	28	27	25	21	32	17	179	1.5	.25	28
8	41	32	28	27	25	20	37	17	165	1.1	.27	25
9	40	32	28	27	25	20	32	15	59	.93	.39	23
10	38	32	27	27	24	20	29	14	36	.69	10	23
11	34	28	27	27	22	20	27	14	28	4.9	76	21
12	33	28	27	27	21	20	27	14	24	7.0	33	18
13	33	28	27	27	21	20	26	14	22	7.0	17	17
14	33	28	27	27	21	20	25	14	18	7.0	11	17
15	33	28	27	27	21	20	23	13	16	16	8.2	24
16	33	28	27	27	21	20	21	12	14	9.7	6.7	124
17	33	28	30	27	21	20	21	11	12	6.4	162	57
18	33	29	35	27	21	20	21	10	11	5.6	72	45
19	33	29	33	27	21	20	21	9.1	8.4	5.2	36	458
20	33	29	32	27	21	20	21	8.4	8.4	4.4	30	441
21	31	28	32	27	21	20	21	8.4	7.7	2.9	45	185
22	27	28	32	27	21	20	23	8.1	6.4	2.1	22	136
23	27	28	32	27	21	20	24	7.3	6.2	1.6	17	84
24	27	28	31	27	21	20	24	6.4	5.3	1.6	17	59
25	27	28	30	27	21	20	23	6.3	4.2	1.4	15	47
26	27	28	30	27	21	20	23	5.8	4.2	1.4	40	42
27	27	28	30	27	21	21	23	6.4	4.2	1.9	32	37
28	27	28	30	27	21	25	23	6.0	4.4	1.7	35	33
29	27	28	30	27	21	31	23	5.7	4.1	4.9	424	31
30	27	27	30	27	---	28	22	5.3	3.8	5.2	778	28
31	31	---	30	27	---	24	---	85	---	5.1	228	---
TOTAL	1072	888	908	848	657	656	725	450.2	921.3	122.42	2126.84	3138
MEAN	34.6	29.6	29.3	27.4	22.7	21.2	24.2	14.5	30.7	3.95	68.6	105
MAX	49	33	35	30	27	31	37	85	179	16	778	489
MIN	27	27	27	27	21	20	21	5.3	3.8	.69	.25	17
AC-FT	2130	1760	1800	1680	1300	1300	1440	893	1830	243	4220	6220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1996h, BY WATER YEAR (WY)

	MEAN	65.2	31.4	56.4	44.9	66.9	79.4	120	246	99.4	32.7	29.2	31.8
MAX	724	211	1382	380	933	487	827	1191	890	245	721	335	
(WY)	1960	1992	1992	1992	1992	1968	1990	1949	1989	1995	1995	1955	
MIN	.000	1.05	3.47	4.70	5.49	5.84	6.46	3.34	1.48	.000	.000	.000	
(WY)	1979	1984	1989	1984	1984	1956	1986	1988	1974	1978	1978	1984	

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1924 - 1996h	
ANNUAL TOTAL	74806		12512.76		75.9	
ANNUAL MEAN	205		34.2		361	
HIGHEST ANNUAL MEAN					6.24	
LOWEST ANNUAL MEAN					26600	
HIGHEST DAILY MEAN	9130	Jun 11	778	Aug 30	May 17	1949
LOWEST DAILY MEAN	25	Jul 30	.25	Aug 7	Jul 13	1925
ANNUAL SEVEN-DAY MINIMUM	27	Oct 22	.73	Aug 3	Jul 20	1925
INSTANTANEOUS PEAK FLOW			2140	Aug 30	Oct 4	1959
INSTANTANEOUS PEAK STAGE			5.73	Aug 30	Oct 4	1959
ANNUAL RUNOFF (AC-FT)	148400		24820		54950	
10 PERCENT EXCEEDS	223		40		103	
50 PERCENT EXCEEDS	68		25		14	
90 PERCENT EXCEEDS	28		5.0		1.6	

h See PERIOD OF RECORD paragraph.

08091730 SQUAW CREEK RESERVOIR NEAR GLEN ROSE, TX

LOCATION.--Lat 32°18'00", long 97°47'12", Somervell County, Hydrologic Unit 12060202, on upstream side of intake structure near power house on Squaw Creek, 1.8 mi upstream from dam, 3.9 mi north of Glen Rose, and 6.1 mi upstream from mouth.

DRAINAGE AREA.--64.0 mi².

PERIOD OF RECORD.--February 1977 to current year.

Water-quality records.--Chemical analyses: October 1982 to September 1984.

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

REMARKS.--The reservoir is formed by a rolled earthfill dam 4,360 ft long. Deliberate impoundment began in February 1977, and the dam was completed in June 1977. The flood-control outlet works consist of an ungated 100-foot-long concrete ogee spillway located at right end of dam. The low-flow outlet works consist of a concrete outlet tower with three 4- X 6-foot slide gates and one 6- X 6-foot slide gate, which feed into a 6-foot inside diameter concrete conduit that extends through the dam. Water can be diverted by pipeline from Lake Granbury into this reservoir. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	796.0	228,100
Crest of spillway.....	783.0	178,100
Crest of spillway (normal operating level).....	775.0	151,000
Invert of slide gate (No. 1).....	764.0	117,300
Invert of slide gate (No. 2).....	715.0	24,670
Invert of slide gate (No. 3).....	666.5	380
Lowest gated outlet (invert).....	653.0	0

COOPERATION.--The capacity table, provided by Texas Utilities Services, Inc., was prepared by Freese and Nichols, Inc., Consulting Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 164,700 acre-ft Dec. 19, 1991 (elevation, 779.14 ft); minimum since normal operating level was reached in 1979, 141,200 acre-ft Sept. 16, 1992 (elevation, 771.98 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 154,100 acre-ft Aug. 31 at 1900 hours (elevation, 775.97 ft); minimum, 143,500 acre-ft Mar. 7 (elevation, 772.70 ft).

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

771.0	138,200	774.0	147,700	777.0	157,600
772.0	141,300	775.0	151,000	778.0	160,900
773.0	144,500	776.0	154,200	780.0	167,700

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150000	150300	149800	147000	145700	143700	145800	150400	150800	150200	150400	153600
2	150200	150200	149800	146700	145700	143700	145900	150400	150800	150200	150300	153200
3	150100	150200	149700	146600	145700	143700	146000	150400	150900	150200	150200	153100
4	150200	150200	149600	146500	145600	143700	146200	150500	151100	150200	150000	152800
5	150100	150200	149500	146400	145600	143700	146800	150500	151000	150100	149900	152500
6	150000	150300	149400	146300	145500	143700	146900	150600	150900	150000	149800	152300
7	150100	150200	149300	146100	145500	143600	147100	150600	150800	150000	149700	152200
8	150100	150300	149200	146000	145500	143600	147200	150700	150500	150000	149800	152000
9	150200	150200	148900	145900	145500	143700	147400	150700	150400	149900	150300	151900
10	150200	150200	148800	145900	145600	143800	147500	150700	150300	150000	150300	151700
11	150300	150200	148600	145700	145300	143800	147600	150700	150200	150300	150300	151600
12	150400	150200	148600	145800	145200	143900	147800	150700	150200	150400	150300	151500
13	150400	150200	148500	145800	145100	144000	148000	150700	150400	150500	150400	151300
14	150300	150200	148500	145800	145200	144100	148100	150700	150400	150600	150300	151100
15	150300	150300	148400	145800	145100	144200	148100	150600	150400	150900	150300	151200
16	150300	150300	148300	145900	144800	144400	148300	150500	150500	150900	150300	151000
17	150300	150500	148500	145900	144700	144400	148400	150400	150500	150900	150400	150900
18	150300	150500	148300	145700	144700	144500	148600	150400	150500	150900	150400	150800
19	150200	150600	148200	145700	144600	144500	148700	150400	150500	150900	150400	151000
20	150100	150700	148100	145600	144500	144500	148900	150400	150400	150900	150400	150900
21	150100	150700	148000	145700	144500	144700	149000	150500	150400	150900	150400	150800
22	150000	150600	147900	145700	144400	144700	149400	150500	150400	150900	150400	150600
23	149900	150500	147700	145700	144300	144900	149600	150500	150300	151000	150700	150500
24	149900	150500	147600	145700	144200	145000	149600	150400	150300	151000	150700	150400
25	149900	150500	147500	145700	144200	144900	149800	150400	150300	151000	150800	150200
26	149900	150400	147500	145700	144100	145000	149900	150400	150200	150900	150800	150100
27	149900	150400	147400	145700	144000	145300	149900	150400	150200	150900	150900	149800
28	149800	150200	147300	145700	143800	145400	150200	150500	150200	150800	151400	149600
29	149800	150000	147200	145700	143700	145600	150100	150500	150200	150700	151600	149600
30	149800	149900	147100	145700	---	145600	150300	150600	150200	150600	153400	149400
31	150000	---	147000	145700	---	145700	---	150700	---	150500	154100	---
MAX	150400	150700	149800	147000	145700	145700	150300	150700	151100	151000	154100	153600
MIN	149800	149900	147000	145600	143700	143600	145800	150400	150200	149900	149700	149400
(+)	774.70	774.69	773.79	773.38	772.75	773.39	774.79	774.93	774.76	774.85	775.96	774.53
(@)	0	-100	-2900	-1300	-2000	+2000	+4600	+400	-500	+300	+3600	-4700

CAL YR 1995 MAX 157300 MIN 142300 (@) -400
WTR YR 1996 MAX 154100 MIN 143600 (@) -600

(+) Elevation, in feet, at end of month.

(@) Change in contents, in acre-feet.

08091750 SQUAW CREEK NEAR GLEN ROSE, TX

LOCATION.--Lat 32°16'12", long 97°43'56", Somervell County, Hydrologic Unit 12060202, on left bank at downstream side of highway embankment 25 ft left of left end of bridge on State Highway 144, 2.1 mi upstream from mouth, 2.5 mi downstream from Squaw Creek Dam, and 2.8 mi northeast of Glen Rose.

DRAINAGE AREA.--70.3 mi².

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

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 599.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. No known diversions between Squaw Creek Reservoir and this station. Flow regulated since Feb. 15, 1977 by Squaw Creek Reservoir. During the year, low flows were sustained by releases from a pipeline used to divert water from Lake Granbury (station 08090900) to Squaw Creek Reservoir (station 08091730). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--4 years (1974-77) prior to regulation by Squaw Creek Reservoir 8.41 ft³/s (6,090 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1974-77).--Maximum discharge 9,030 ft³/s Apr. 8, 1975 (gage height, 11.90 ft), from rating curve extended above 1,000 ft³/s on basis of area-velocity study; minimum, 0.02 ft³/s Aug. 28 and 29, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1934, about 20.5 ft in May 1957, from information by Texas Department of Transportation (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	5.8	4.0	3.8	3.8	1.4	1.3	2.3	6.9	3.1	2.2	194
2	4.6	4.7	4.0	3.8	4.0	1.4	1.4	2.4	6.3	3.1	2.2	139
3	4.5	4.5	4.0	3.7	3.9	1.3	1.6	2.6	5.9	2.7	2.3	112
4	4.3	4.5	4.0	3.8	4.2	1.4	1.6	2.2	6.6	2.4	1.2	97
5	5.2	4.1	4.0	3.8	4.2	1.3	4.4	2.1	3.0	3.1	.54	80
6	4.5	4.2	4.0	3.8	4.4	1.2	2.4	2.3	2.9	2.9	1.8	68
7	4.4	4.5	4.0	3.8	4.8	1.5	1.9	2.9	3.9	2.9	2.5	53
8	4.2	4.4	3.9	3.8	5.0	1.7	2.0	2.6	3.7	2.9	2.6	46
9	4.4	4.4	3.8	3.8	4.8	1.8	2.5	2.6	2.9	2.9	3.3	35
10	4.4	5.2	3.8	3.9	4.7	1.8	2.5	2.6	2.7	2.9	3.5	22
11	4.4	6.9	3.9	4.1	4.5	1.9	2.4	2.7	2.6	5.1	3.0	12
12	4.4	4.2	3.9	4.2	4.4	1.7	2.5	2.5	2.6	3.1	2.7	6.5
13	4.3	4.3	3.8	4.2	4.5	1.7	2.6	2.4	2.6	3.1	2.6	4.2
14	4.4	4.2	3.8	4.5	4.4	1.8	2.6	2.4	2.5	3.2	2.5	3.8
15	4.4	4.0	3.8	4.3	4.2	1.8	2.8	2.7	2.3	3.7	2.5	6.4
16	4.3	4.3	3.7	4.2	3.9	2.3	2.6	2.7	2.2	3.3	2.7	5.2
17	4.2	4.2	4.1	4.4	1.7	2.5	2.6	2.6	2.2	3.0	3.4	3.5
18	4.1	4.1	4.3	6.0	1.1	2.4	2.5	2.6	2.3	3.0	2.8	3.6
19	4.3	4.1	4.6	4.1	.93	2.3	2.6	2.5	2.4	2.9	2.8	5.7
20	4.5	4.1	3.8	4.3	1.0	2.1	2.5	2.7	2.6	2.9	2.7	3.9
21	4.1	4.4	3.8	4.3	1.2	2.0	2.5	2.6	2.7	2.8	2.7	3.5
22	4.4	4.1	3.7	4.4	1.2	1.9	3.8	2.8	2.9	2.8	2.7	3.4
23	4.7	4.3	3.5	4.4	1.1	2.0	2.3	2.6	3.6	3.7	4.0	3.3
24	4.6	4.0	3.4	4.3	1.2	2.0	2.2	2.7	3.4	3.6	2.1	3.2
25	4.6	4.0	3.3	4.3	1.3	1.9	2.1	2.8	3.5	2.9	2.4	3.2
26	4.5	5.0	3.4	4.4	1.4	2.1	2.2	2.8	3.7	2.8	2.3	3.4
27	4.2	4.7	3.4	4.2	1.3	3.0	2.6	3.1	3.8	3.1	2.6	3.3
28	4.3	4.6	3.4	4.2	1.4	2.1	2.8	4.0	3.7	2.9	3.5	3.2
29	4.2	4.0	3.5	4.3	1.3	1.9	5.3	3.9	3.5	2.7	16	3.2
30	4.4	4.0	3.6	4.0	---	1.4	2.7	3.9	3.3	2.6	184	3.2
31	4.5	---	3.8	3.8	---	1.3	---	8.3	---	2.4	160	---
TOTAL	136.7	133.8	118.0	128.9	85.83	56.9	75.8	89.9	103.2	94.5	432.14	933.7
MEAN	4.41	4.46	3.81	4.16	2.96	1.84	2.53	2.90	3.44	3.05	13.9	31.1
MAX	5.2	6.9	4.6	6.0	5.0	3.0	5.3	8.3	6.9	5.1	184	194
MIN	4.1	4.0	3.3	3.7	.93	1.2	1.3	2.1	2.2	2.4	.54	3.2
AC-FT	271	265	234	256	170	113	150	178	205	187	857	1850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996#, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	10.4	8.50	26.3	8.14	14.3	24.1	21.2	53.7	46.0	7.49	12.6	6.63							
MAX	110	81.5	416	66.0	162	132	169	336	362	36.0	143	31.1							
(WY)	1992	1992	1992	1992	1992	1992	1990	1989	1989	1995	1995	1996							
MIN	1.54	1.95	2.36	2.30	2.46	1.61	1.78	2.39	1.28	1.59	1.47	1.91							
(WY)	1993	1993	1978	1994	1978	1978	1978	1978	1978	1978	1992	1994							

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1978 - 1996#

	1995 CALENDAR YEAR	1996 WATER YEAR	WATER YEARS 1978 - 1996#
ANNUAL TOTAL	7780.8	2389.37	
ANNUAL MEAN	21.3	6.53	20.0
HIGHEST ANNUAL MEAN			89.9
LOWEST ANNUAL MEAN			2.18
HIGHEST DAILY MEAN	927	194	4380
LOWEST DAILY MEAN	2.6	.54	.54
ANNUAL SEVEN-DAY MINIMUM	2.7	1.1	.70
INSTANTANEOUS PEAK FLOW		561	8940
INSTANTANEOUS PEAK STAGE		5.20	11.85
ANNUAL RUNOFF (AC-FT)	15430	4740	14470
10 PERCENT EXCEEDS	41	4.7	20
50 PERCENT EXCEEDS	4.3	3.5	4.0
90 PERCENT EXCEEDS	3.0	1.9	2.3

Period of regulated streamflow.

BRAZOS RIVER BASIN

08092000 NOLAN RIVER AT BLUM, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 32°09'02", long 97°24'09", Hill County, Hydrologic Unit 12060202, on right bank 60 ft upstream from bridge on Farm Road 933, 0.6 mi northwest of Blum 2.8 mi downstream from Mustang Creek, 3.0 mi downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.2 mi upstream from Rock Creek, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--July 1924 to September 1925. November 1947 to September 1985. October 1985 to current year (peaks above base discharge).

REVISED RECORDS.--WSP 1312: 1925(M). WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 551.48 ft above 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 mi upstream at datum 5.00 ft higher. May 29 to July 7, 1949, nonrecording gage at present site and datum then in use (5.00 ft higher than present datum).

REMARKS.--Records good. Daily values and peak discharges less than 1,200 ft³/s are not published. Since August 1964, flow from 100 mi² above this station has been affected by storage in Lake Pat Cleburne (47,890 acre-ft./yr) located 13 mi upstream. The city of Cleburne diverts water from Lake Pat Cleburne and returns wastewater effluent to a tributary upstream from the station. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE.--18 years (water years 1925, 1949-64) prior to regulation by Lake Pat Cleburne, 66.1 ft³/s (47,890 acre-ft./yr); 21 years (water years 1965-85) regulated, 81.2 ft³/s (58,830 acre-ft./yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 62,200 ft³/s May 7, 1969 (gage height, 31.23 ft), from rating curve extended above 22,200 ft³/s on basis of contracted-opening measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1887, 35.0 ft May 8, 1922, present site and datum, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 30	0545	7350	10.96				

08092500 LAKE WHITNEY NEAR WHITNEY, TX

LOCATION.--Lat 31°51'55", long 97°22'18", Bosque County, Hydrologic Unit 12060202, on State Highway 22, in intake structure of Whitney Dam on Brazos River, 2.4 mi upstream from Coon Creek, 3.5 mi upstream from Iron Creek, 7.4 mi southwest of Whitney, at mile 442.4.

DRAINAGE AREA.--27,189 mi², approximately, of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--December 1951 to current year. Prior to October 1970, published as Whitney Reservoir. Prior to October 1980, published as Whitney Lake.

Water-quality records.--Chemical analyses: March 1960 to September 1987. Chemical and biochemical analyses: September 1970 to August 1987.

REVISED RECORDS.--WDR IX-6-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--The lake is formed by a concrete-gravity and rolled earthfill dam 17,695 ft long, including spillway. The dam was completed in April 1951, and deliberate impoundment began Dec. 10, 1951. Concrete spillway is 680 ft long and includes 17 tainter gates 38.0 by 40.0 ft each. Outlet works are comprised of 16 gate-operated conduits that are 5.0- by 9.0 ft each. The space between elevations 522.0 and 571.0 ft is reserved for flood-control storage. At maximum design elevation of 573.0 ft the spillway is designed to discharge 684,000 ft³/s. The capacity table is based on a survey made in April and May 1959. Satellite telemeter at station. Figures given herein represent total contents. 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).....	533.0	627,100
Lowest controlled outlet (invert).....	448.83	4,270

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,980,000 acre-ft May 29, 1957 (elevation, 570.25 ft); minimum since power pool elevation first reached in April 1954, 250,200 acre-ft Nov. 1, 1956 (elevation 509.52 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 630,100 acre-ft Sept. 24, (elevation, 533.12 ft); minimum, 408,900 acre-ft Aug. 21 (elevation, 521.86 ft).

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

521.0	395,100	540.0	807,600	556.0	1,342,000
524.0	444,100	544.0	925,700	558.0	1,420,000
525.0	461,200	548.0	1,053,000	560.0	1,501,000
530.0	559,400	551.0	1,156,000	561.0	1,542,000
535.0	675,700	554.0	1,266,000	571.0	2,000,000

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	615600	584100	558100	552900	528600	518000	500000	498300	489900	467200	421600	462400
2	616100	585700	558300	551000	526800	516800	499300	497900	490100	464700	420400	468000
3	615800	583200	558500	548600	527800	517400	499300	497000	490100	462400	419500	473900
4	616100	581000	556600	549300	525900	517600	501400	497300	490300	458800	418200	478100
5	617200	579700	557700	548800	524500	517800	504300	497300	489600	456300	416500	480500
6	616800	578500	557700	545800	524100	521000	504300	497500	489600	455300	415400	480100
7	614200	578100	556100	542200	524700	515800	503900	497100	490100	455000	414100	479600
8	613000	577200	558500	540500	525100	513000	504900	497100	489400	452700	413600	479700
9	612400	576300	554600	540500	525100	511600	505700	496800	488600	450700	412500	479400
10	610700	580100	552700	539900	526800	511200	505500	496800	488400	448100	412900	479000
11	609100	575000	551800	539900	525300	510000	505500	497000	487500	449200	411600	478600
12	607700	574300	550800	539700	524100	509600	506600	496800	486900	448100	411200	477400
13	607500	573900	549700	539100	523300	508600	505500	496400	486000	447100	410700	475700
14	605900	572100	549500	539100	523500	509000	506800	495200	485100	446600	410200	475200
15	604500	570600	550800	538000	524100	508400	505300	495000	484700	446500	409500	477600
16	603100	568800	551400	537000	522300	508600	504700	494500	484500	442800	409400	479900
17	601500	568600	553800	539700	522300	508400	503700	494100	483800	440900	409900	510000
18	600200	568800	554000	535900	522300	508000	503500	493700	482100	439200	409700	547500
19	599500	569200	552300	533200	522100	507200	502700	493100	481000	437900	409400	567900
20	596300	568100	551800	534000	521900	507000	502700	493100	479600	436400	409100	580800
21	595200	567700	551800	532800	521200	505500	501200	493000	478300	434800	408900	591800
22	593600	567500	552000	532400	520400	504100	502900	492200	477900	432900	409100	609100
23	594000	567900	551800	534400	521400	504100	502400	489900	477000	433100	409400	627500
24	592200	566000	551800	532400	521000	507200	501200	488100	476100	431400	409900	630100
25	590200	565500	552000	530500	520200	503900	501600	487300	474700	430000	409900	625900
26	588600	564600	552000	531300	520200	502500	500600	486900	473600	428600	409900	627100
27	586800	565100	552300	530100	521200	501600	499300	487100	472500	428000	410700	629000
28	586100	561100	550500	530500	519000	501000	502000	488800	470400	426500	411500	628500
29	584800	559600	549300	530700	518000	499600	499600	488400	470000	425200	416500	627500
30	584800	557900	550300	531300	---	501200	498500	489000	469600	424000	437900	627500
31	584800	---	551400	528600	---	500200	---	489900	---	423200	454600	---
MAX	617200	585700	558500	552900	528600	521000	506800	498300	490300	467200	454600	630100
MIN	584800	557900	549300	528600	518000	499600	498500	486900	469600	423200	408900	462400
(+)	531.15	529.93	529.63	528.55	528.03	527.13	527.04	526.59	525.57	522.74	524.62	533.01
(@)	-32000	-26900	-6500	-22800	-10600	-17800	-1700	-8600	-20300	-46400	+31400	+172900
CAL YR 1995	MAX	744700	MIN	549300	(@)	-86300						
WTR YR 1996	MAX	630100	MIN	408900	(@)	+10700						

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre feet.

BRAZOS RIVER MAIN STEM

08092600 BRAZOS RIVER AT WHITNEY DAM NEAR WHITNEY, TX

LOCATION.--Lat 31°52'00", long 97°22'00", Hill County, Hydrologic Unit 12060202, immediately below Whitney Dam, 3.4 mi upstream from gaging station near Whitney, 4.0 mi upstream from Iron Creek, and 7.4 mi southwest of Whitney.

DRAINAGE AREA.--27,189 mi², of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1946 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1947 to current year.

WATER TEMPERATURE: October 1947 to current year.

INSTRUMENTATION.--from July 1953 to September 1966, water temperature was continuously recorded at this station.

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. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,620 microsiemens Aug. 24, 1978; minimum daily, 203 microsiemens May 23, 1952.

WATER TEMPERATURES: Maximum daily, 33.5°C July 3, 1973; minimum daily, 0.0°C Jan. 28, 29, 1948.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,330 microsiemens Sept. 26; minimum daily, 1,010 microsiemens Oct. 4.

WATER TEMPERATURE: Maximum daily, 26.5°C Aug. 9, 14, and 20; minimum daily, 6.0°C Feb. 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JAN 23...	1318	46	1140	8.3	9.0	240	110	63	19
APR 09...	1403	43	1050	8.5	22.0	250	120	67	19
MAY 03...	1302	117	1180	8.4	19.5	250	120	67	19
JUN 21...	1418	72	1200	7.8	27.0	250	130	69	20
JUL 11...	1321	60	1200	7.7	27.5	240	120	64	20
SEP 11...	1105	136	1220	7.9	23.0	260	110	71	20
DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JAN 23...	120	3	5.2	120	120	200	0.30	7.3	607
APR 09...	140	4	5.4	120	120	210	0.30	5.9	641
MAY 03...	140	4	5.3	120	130	210	0.30	6.1	653
JUN 21...	140	4	5.5	130	130	220	0.40	7.2	669
JUL 11...	140	4	5.4	120	120	220	0.30	7.8	651
SEP 11...	130	4	5.5	150	110	220	0.30	11	657

BRAZOS RIVER MAIN STEM

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08092600 BRAZOS RIVER AT WHITNEY DAM NEAR WHITNEY, TX--Continued

MONTH YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- SIEMENS)	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. 1995	17867	1050	584	28200	190	8970	120	5600	230
NOV. 1995	19447	1080	601	31600	190	10100	120	6290	240
DEC. 1995	15178	1100	612	25100	200	8040	120	5010	240
JAN. 1996	21145	1120	622	35500	200	11400	120	7110	240
FEB. 1996	12083	1140	634	20700	200	6660	130	4150	250
MAR. 1996	12262	1150	643	21300	210	6870	130	4280	250
APR. 1996	4595	1050	585	7260	190	2310	120	1440	230
MAY 1996	3294.7	1200	669	5950	220	1930	140	1200	260
JUNE 1996	7924.7	1210	677	14500	220	4700	140	2930	260
JULY 1996	22970	1200	672	41700	220	13500	140	8430	260
AUG. 1996	9232	1220	682	17000	220	5530	140	3450	260
SEPT 1996	34236	1300	727	67200	240	22100	150	13700	270
TOTAL	180234.4	**	**	316000	**	102000	**	63600	**
WTD.AVG.	492	1160	649	**	210	**	130	**	250

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1100	1060	1100	e1110	1130	1140	e1070	1190	e1200	1200	1210	e1220
2	1050	1070	e1090	1110	e1130	e1150	e1050	1190	e1200	1200	1220	e1220
3	1040	1070	e1090	1110	e1130	e1150	e1020	1190	1200	1200	e1220	e1220
4	1010	e1070	1090	1110	e1140	1140	e1050	e1190	e1200	e1200	e1210	e1230
5	1110	e1070	1090	1110	1130	1140	e1020	e1190	1200	1200	1210	1240
6	1040	1070	1090	e1110	1130	1140	e1030	1190	1210	e1200	1210	e1250
7	e1010	1070	1090	e1110	1130	1150	e1040	1190	1200	e1200	1210	e1260
8	e1030	1070	1100	1110	1130	e1150	e1030	1190	e1200	1200	1220	e1270
9	e1040	1070	e1100	1110	1130	e1150	e1050	1190	e1200	1200	1230	1270
10	1040	e1070	e1100	1110	e1140	e1150	e1080	1190	1200	1200	e1230	1290
11	1040	e1070	1100	1120	e1140	1150	e1100	e1200	1200	1200	e1230	1220
12	1040	e1070	1100	1120	1140	1150	e1110	e1200	1210	e1220	1230	1280
13	1040	1080	1100	e1120	1140	1150	e1110	1200	1210	e1210	1230	1290
14	e1070	1080	1100	e1120	1140	1150	e1110	1200	1210	e1210	1260	e1300
15	e1060	1080	1100	e1120	1140	1150	e1070	1190	e1210	1200	1230	e1300
16	1050	1080	e1100	1120	1140	e1150	e1060	1200	e1210	1200	1220	1300
17	1040	1080	e1100	1120	e1150	e1150	e1060	1200	1210	1200	e1230	1270
18	1040	e1080	1100	1120	e1150	1150	e1050	e1200	1210	1200	e1230	1310
19	1050	e1090	1100	1120	e1140	1160	e1070	e1200	1210	1200	1230	1310
20	1050	1090	1100	e1120	1140	1160	e1040	1200	e1220	e1210	1220	1300
21	e1070	1090	1100	e1120	1140	1160	e1070	1200	1210	e1210	1230	e1300
22	e1060	e1060	1100	e1120	1140	1160	e1080	1200	e1220	1200	1230	e1300
23	1050	e1090	e1110	1120	1140	e1170	e1090	1200	e1220	1200	1220	1300
24	1050	1090	e1110	1120	e1150	e1170	e1050	1200	1210	1200	e1230	1300
25	1060	e1100	e1110	1120	e1150	1160	e1060	e1200	1210	1210	e1230	1290
26	1060	e1100	1110	1120	1140	1160	e1080	e1200	1210	1200	1240	1330
27	1060	1100	1110	e1130	1140	1160	e1100	e1200	1210	e1200	1240	1310
28	e1070	1100	1110	e1130	1140	1160	e1130	1200	e1210	e1210	1230	e1310
29	e1070	1100	1110	1120	1140	1160	e1150	1200	e1210	1210	e1230	e1310
30	1060	1100	e1110	1130	---	e1100	e1170	1210	e1200	1200	1230	1310
31	1060	---	e1110	1130	---	e1070	---	1200	---	1200	e1230	---
MEAN	1050	1080	1100	1120	1140	1150	1070	1200	1210	1200	1230	1280

e Estimated

BRAZOS RIVER MAIN STEM

08092600 BRAZOS RIVER AT WHITNEY DAM NEAR WHITNEY, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.0	14.5	---	7.5	10.5	---	17.5	---	24.5	25.0	---
2	23.5	19.0	---	10.0	---	---	---	18.0	---	24.5	25.0	---
3	23.0	17.0	---	9.5	---	---	14.0	19.0	23.5	24.5	---	---
4	23.0	---	15.0	10.0	---	12.0	15.0	---	---	---	---	---
5	22.5	---	15.0	10.0	6.0	13.0	---	---	23.5	24.0	25.0	25.5
6	22.5	18.0	15.0	---	7.5	12.5	---	19.0	23.5	---	25.5	---
7	---	18.0	13.5	---	8.0	10.0	---	24.0	23.5	---	25.0	---
8	---	17.5	14.5	8.0	9.0	---	13.5	19.0	---	25.0	25.5	---
9	---	17.0	---	8.5	8.5	---	22.0	19.5	---	24.5	26.5	25.0
10	22.0	---	---	9.0	---	---	---	19.5	23.5	24.5	---	24.5
11	22.5	---	12.5	8.5	---	10.0	---	---	23.5	27.5	---	25.0
12	21.5	---	13.0	9.0	8.0	10.5	14.5	---	24.0	---	26.0	26.0
13	22.0	17.5	13.5	---	9.5	11.5	---	20.0	24.0	---	26.0	25.0
14	---	16.5	13.5	---	8.5	12.0	---	20.0	24.0	---	26.5	---
15	---	16.0	14.5	---	8.5	12.0	15.0	21.0	---	24.5	26.0	---
16	21.0	16.0	---	9.0	9.5	---	---	20.0	---	24.5	26.0	24.5
17	21.0	16.0	---	11.0	---	---	---	20.5	24.0	24.5	---	25.0
18	21.5	---	14.0	9.0	---	12.5	---	---	24.0	24.5	---	25.0
19	21.5	---	12.5	8.5	---	12.5	---	---	24.5	25.0	26.0	25.0
20	21.0	16.0	12.5	---	10.0	11.5	---	21.0	---	---	26.5	24.5
21	---	16.0	12.0	---	10.0	12.5	---	21.5	24.5	---	26.0	---
22	---	---	11.5	---	11.0	13.5	---	22.5	---	24.5	26.0	---
23	21.0	---	---	10.5	11.0	---	---	21.5	---	25.0	25.5	25.5
24	19.5	16.0	---	8.5	---	---	---	22.5	25.0	24.5	---	25.5
25	19.5	---	---	9.0	---	12.0	---	---	24.0	25.0	---	25.5
26	20.5	---	11.0	10.0	11.0	12.0	---	---	24.5	25.5	26.0	25.0
27	20.5	16.0	11.5	---	11.5	12.0	---	---	24.5	---	26.0	24.0
28	---	14.5	11.0	---	10.5	12.5	---	23.0	---	---	26.0	---
29	---	14.0	10.5	9.0	10.0	13.5	---	23.0	---	25.0	---	---
30	19.5	14.0	---	9.0	---	---	---	24.0	---	24.5	25.5	23.0
31	20.0	---	---	7.5	---	---	---	23.5	---	24.5	---	---
MEAN	21.4	16.6	13.0	9.2	9.2	11.9	14.4	20.9	24.0	24.6	25.8	24.9

08093100 BRAZOS RIVER NEAR AQUILLA, TX

LOCATION.--Lat 31°48'44", long 97°17'51", Bosque County, Hydrologic Unit 12060202, on right bank at downstream side of highway embankment near right end of bridge on Farm Road 2114, 2.0 mi downstream from Tener Creek, 4.9 mi downstream from Iron Creek, 5.4 mi southwest of Aquilla, 9.0 mi downstream from Whitney Dam, and at mile 434.0.

DRAINAGE AREA.--27,244 mi², of which 9,566 mi², probably is noncontributing.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1974, published as Brazos River near Whitney.

REVISED RECORDS.--WDK TX-6-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 404.29 ft above sea level. Prior to Oct. 1, 1948, nonrecording gage at site 13.9 mi upstream at datum 27.77 ft higher. Oct. 1, 1948, to Feb. 12, 1975, at site 5.6 mi upstream at datum 13.10 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Most flow occurs as releases from Lake Whitney (station 08092500) 9.0 mi upstream. The Brazos River at Whitney Dam (station 08092600) uses the discharge record at this station for publication of water-quality records. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--13 years (water years 1939-51) prior to regulation by Lake Whitney, 1,802 ft³/s (1,306,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1939-51).--Maximum discharge, 71,800 ft³/s May 18, 1949 (gage height, 31.03 ft), at site and datum then in use (Oct. 1, 1948 to Feb. 12, 1975).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1853, 45 ft May 9, 1922, at site and datum in use Oct. 1, 1948, to Feb. 12, 1975, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	807	e226	365	1240	30	50	74	29	895	e1270	25
2	478	911	e845	989	1340	576	257	292	7.7	1350	e726	24
3	482	728	e952	964	366	63	319	345	11	1260	e521	25
4	617	1440	e766	841	783	31	246	182	19	1340	e569	343
5	297	574	e1110	753	1130	190	411	39	40	1110	e667	559
6	32	923	e95	1540	444	418	62	22	26	823	e851	552
7	496	700	185	1390	59	962	26	18	75	e124	e622	532
8	713	682	573	1330	39	1020	382	15	96	e883	e501	187
9	549	576	982	614	188	778	47	14	171	e1180	467	324
10	709	660	959	477	55	55	31	16	198	1090	235	805
11	1140	922	568	199	32	299	33	11	234	708	415	929
12	750	553	632	628	578	349	31	9.7	312	623	477	876
13	741	670	718	414	432	197	33	11	383	716	265	1180
14	244	197	372	206	466	428	21	13	373	271	116	105
15	408	362	184	828	50	415	276	22	168	153	114	98
16	568	488	34	968	570	260	e239	52	17	1120	119	268
17	705	618	36	71	426	129	e158	54	224	1250	130	533
18	722	622	853	1520	55	346	e522	31	497	739	129	568
19	933	908	673	1030	425	356	e47	17	549	505	151	453
20	880	924	450	1060	216	390	e596	16	617	561	135	1820
21	162	184	804	612	535	456	e58	22	554	662	125	1990
22	32	43	192	434	580	349	e24	67	197	843	98	2110
23	620	659	257	55	304	206	e363	360	22	215	22	2330
24	499	530	31	651	36	31	e154	1330	301	553	27	2100
25	736	767	202	426	238	892	e37	71	631	613	21	4240
26	827	863	214	428	390	576	e48	14	532	407	20	2420
27	1360	1410	215	591	44	1120	e34	11	553	321	24	2060
28	177	200	776	58	632	552	e33	12	798	471	58	2320
29	148	161	967	387	430	418	e30	39	253	428	287	2300
30	339	365	269	236	---	342	27	65	37	456	45	2160
31	203	---	38	1080	---	28	---	50	---	1300	25	---
TOTAL	17867	19447	15178	21145	12083	12262	4595	3294.7	7924.7	22970	9232	34236
MEAN	576	648	490	682	417	396	153	106	264	741	298	1141
MAX	1360	1440	1110	1540	1340	1120	596	1330	798	1350	1270	4240
MIN	32	43	31	55	32	28	21	9.7	7.7	124	20	24
AC-FT	35440	38570	30110	41940	23970	24320	9110	6540	15720	45560	18310	67910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1996#, BY WATER YEAR (WY)

	MEAN	1483	1025	854	1226	1021	1321	1273	3532	3526	1391	973	1013
MAX	12300	7201	7148	18010	11190	13700	7285	29670	35640	8110	5252	8249	
(WY)	1982	1975	1992	1992	1992	1992	1990	1957	1957	1982	1995	1966	
MIN	24.5	29.0	29.0	9.92	15.6	26.7	12.5	13.0	264	28.6	61.5	32.7	
(WY)	1989	1984	1984	1953	1984	1953	1953	1988	1996	1978	1988	1984	

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1952 - 1996#

ANNUAL TOTAL	699221.9	180234.4	
ANNUAL MEAN	1916	492	1556
HIGHEST ANNUAL MEAN			6566
LOWEST ANNUAL MEAN			141
HIGHEST DAILY MEAN	19400	Aug 5	55700
LOWEST DAILY MEAN	5.3	Mar 5	.40
ANNUAL SEVEN-DAY MINIMUM	194	Feb 22	.80
INSTANTANEOUS PEAK FLOW			58200
INSTANTANEOUS PEAK STAGE			27.34
ANNUAL RUNOFF (AC-FT)	1387000	357500	1127000
10 PERCENT EXCEEDS	4220	1100	3050
50 PERCENT EXCEEDS	1100	390	600
90 PERCENT EXCEEDS	237	29	40

e Estimated

Period of regulated streamflow.

08093350 AQUILLA LAKE ABOVE AQUILLA, TX

LOCATION.--Lat 31°53'59", long 97°12'09", Hill County, Hydrologic Unit 12060202, 450 ft upstream from Farm Road 310 it runs along top of Aquilla Dam on Aquilla Creek, and 3.4 miles north-northeast of Aquilla.

DRAINAGE AREA.--255 mi².

PERIOD OF RECORD.--October 1983 to current year.

Water Quality records.--Chemical and biochemical analyses: February 1984 to July 1992.

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

REMARKS.--The lake is formed by an earthfill dam with a crest length of 11,890 ft and a top width of 38.0 ft. A reinforced concrete inlet structure, near center of dam, houses the flood-control gates and operating equipment. Closure of the dam began Mar. 20, 1982, and the dam was completed in January 1983. The dam was built and is owned by the U.S. Army Corps of Engineers. Deliberate impoundment began Apr. 29, 1983. The lake was built for water supply, flood control, and recreation purposes. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-ft)
Top of dam.....	582.5	-
Spillway crest (uncontrolled).....	564.5	207,300
Top of flood-control pool.....	556.0	139,600
Top of conservation pool.....	537.5	45,960
Invert, lowest gated outlet.....	503.0	291

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by the Texas Water Development Board, was put into use beginning Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 119,000 acre-ft, Dec. 23, 1991 (elevation, 551.89 ft); minimum observed, 4,600 acre-ft Oct. 6-10, 1983 (elevation, 511.31 ft Oct. 6, 7, 9, 10 and 511.30 ft Oct. 8).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 52,700 acre-ft Oct. 1 (elevation, 539.46 ft); minimum daily, 35,520 acre-ft Aug. 23 (elevation, 533.91 ft).

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

511.0	2,834	539.0	51,050	548.0	90,330
520.0	10,480	542.0	62,360	550.0	101,400
530.0	26,570	544.0	70,850	551.0	107,300
535.0	38,400	546.0	80,160	552.0	113,300
536.0	41,300				

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52720	50640	49470	48870	48040	47520	46820	47300	45860	44240	42500	44910
2	52660	50640	49440	48750	48070	47330	46700	47300	45800	44160	42390	38760
3	52590	50480	49470	48630	48010	47270	46670	47240	45740	44100	42280	38820
4	52490	50450	49410	48660	47950	47270	46910	47240	45770	43960	42140	38820
5	52390	50390	49410	48660	47920	47300	47610	47240	45680	43900	42080	38790
6	52300	50320	49380	48590	47880	47460	47920	47300	45620	43780	42000	38760
7	52200	50360	49280	48500	47950	47210	47950	47240	45710	43700	41970	38740
8	52130	50260	49380	48440	47980	47180	47980	47210	45620	43610	41970	38680
9	52070	50130	49190	48440	47980	47090	47980	47150	45530	43580	42140	38620
10	52030	50390	49090	48410	48070	47060	47880	47120	45560	43470	42140	38560
11	52000	50170	49030	48410	47980	46910	47850	47120	45500	43640	36090	38510
12	51940	50010	49000	48380	47950	46880	47950	47060	45470	43610	36060	38480
13	51940	50010	49030	48320	47880	46850	47820	47000	45410	43580	35980	38540
14	51810	49940	49030	48320	47880	46940	47950	46910	45390	43550	35930	38510
15	51810	49940	49060	48320	47920	46940	47820	46850	45300	43500	41860	39510
16	51610	49880	49090	48250	47820	46910	47700	46790	45240	43380	41810	39600
17	51550	50010	49190	48470	47760	46880	47610	46670	45210	43270	41750	39570
18	51510	50010	49310	48440	47670	46850	47640	46610	45090	43210	41700	39800
19	51480	49980	49190	48380	47730	46760	47640	46490	45060	43130	41640	39830
20	51350	49980	49120	48320	47700	46700	47640	46460	45000	43010	41580	44580
21	51160	49940	49090	48250	47700	46670	47520	46430	44890	42960	41530	45370
22	51060	49850	49060	48250	47670	46490	47950	46310	44800	42840	41420	45440
23	51090	49850	49000	48320	47670	46460	47920	46190	44710	43130	35520	45370
24	51030	49820	48940	48280	47610	46790	47760	46130	44710	43100	35650	45440
25	50900	49690	48940	48160	47550	46790	47790	46010	44620	43040	35630	45310
26	50870	49630	48910	48220	47580	46730	47730	45950	44560	42900	41560	45370
27	50900	49690	48870	48190	47670	46910	47580	45920	44510	42870	41530	45280
28	50840	49560	48840	48100	47550	46940	47700	45950	44480	42810	41890	45180
29	50640	49530	48780	48130	47520	46880	47550	45890	44390	42700	43130	45150
30	50610	49470	48750	48130	---	46970	47360	45920	44330	42620	44300	45120
31	50580	---	48780	48070	---	46850	---	45890	---	42560	44970	---
MAX	52720	50640	49470	48870	48070	47520	47980	47300	45860	44240	44970	45440
MIN	50580	49470	48750	48070	47520	46460	46670	45890	44330	42560	35520	38480
(+)	536.95	536.60	536.38	536.15	535.97	535.75	535.92	537.50	537.00	536.40	537.20	537.20
(@)	-2110	-1110	-690	-710	-550	-670	+150	-1470	-1560	-1770	+2410	+510

CAL YR 1995 MAX 106100 MIN 48750 (@) -11210
WTR YR 1996 MAX 52720 MIN 35520 (@) -7570

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre feet.

08093500 AQUILLA CREEK NEAR AQUILLA, TX

LOCATION.--Lat 31°50'40", long 97°12'04", Hill County, Hydrologic Unit 12060202, at downstream side of highway embankment near left end of bridge on Farm Road 1304, 1.0 mi southeast of Aquilla, 1.2 mi downstream from Cobb Creek, 4.7 mi below Aquilla Dam, and 18.2 mi upstream from mouth.

DRAINAGE AREA.--308 mi².

PERIOD OF RECORD.--December 1938 to current year. Records of daily discharges for December 1924 to August 1925, published in WSP 608, are unreliable, and should not be used.

Water-quality records.--Chemical analysis: March 1960 to June 1966, October 1967 to September 1993. Chemical and biochemical analysis: January 1968 to September 1992. Specific conductance: May 1965 to June 1966, November 1967 to September 1982. Water temperature: May 1965 to June 1966, November 1967 to September 1982.

REVISED RECORDS.--WSP 1/12: 1944(M), 1957-58. WDR IX-76-2: Drainage area. See PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 451.48 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges and those for daily discharges below 5 ft³/s, which are poor. Since May 1983, flow from 252 mi² above this station has been regulated by Aquilla Lake (station 08093350) 4.7 mi upstream. Deliberate impoundment of water began Apr. 24, 1983. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--43 years (water years 1940-82) 119 ft³/s (5.25 in/yr), 86,220 acre-ft/yr.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1939-82).--Maximum discharge, 53,300 ft³/s June 16, 1981 (gage height, 31.35 ft), from rating curve extended above 25,900 ft³/s on basis of slope-area measurement of 74,200 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 31, 1887, reached a stage of 34 ft, from information by local resident. Flood of Sept. 27, 1936, was the highest since 1887 and reached a stage of 33 ft from floodmark; discharge 84,500 ft³/s (by slope-area measurements at site 9 mi downstream) and 74,200 ft³/s (adjusted to gage site).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	5.4	4.8	6.7	e3.9	1.7	.55	.62	1.2	.00	.09	290
2	2.2	4.8	4.9	5.6	e2.6	1.6	.68	.65	1.4	.00	.12	.24
3	2.4	4.8	5.0	6.4	e1.8	1.8	.73	.77	1.6	.00	.09	.00
4	2.4	5.0	4.7	6.7	e1.1	1.4	.85	.88	1.9	.00	.02	.00
5	2.6	5.2	4.6	6.8	e.96	1.1	151	.91	2.0	.00	.00	.00
6	e2.8	5.2	5.0	6.9	e.91	.99	57	.66	2.1	.00	.00	.00
7	e2.8	5.7	5.0	6.5	.94	.86	13	.52	2.1	.00	.00	.00
8	e3.1	5.7	5.1	6.1	.90	.83	5.2	.52	2.4	.00	.00	.00
9	e3.4	5.5	5.1	7.0	.82	.71	1.9	.52	e2.4	.00	.00	.00
10	e3.7	5.9	5.2	7.9	.98	.59	6.6	.43	e2.5	.00	.00	.00
11	e4.1	6.5	5.1	8.4	1.3	.12	9.3	.39	3.0	.00	.00	.00
12	e4.2	6.4	5.1	8.2	1.7	.10	7.5	.28	2.5	.00	.00	.00
13	e4.4	6.4	5.4	8.2	2.1	.08	2.9	.41	2.2	.00	.03	.00
14	e4.5	6.8	5.2	8.2	3.1	.00	1.2	.55	1.8	.01	.09	.00
15	e4.6	6.7	5.1	8.0	2.9	.00	.10	.46	.91	.47	.10	42
16	e4.7	7.3	5.0	7.8	2.6	.10	.07	.38	.67	1.1	.14	.22
17	e5.0	7.9	5.6	7.8	2.1	.13	.18	.30	.51	1.2	.32	.00
18	e5.0	7.2	5.5	7.9	1.7	.13	.60	.23	.34	1.3	.53	2.6
19	4.8	6.2	5.4	6.1	1.6	.38	1.2	.21	.32	1.2	.35	1.4
20	4.8	6.6	5.3	6.5	1.4	.52	1.9	.25	.27	.77	.10	431
21	4.9	6.1	5.4	e6.7	1.8	.37	1.8	.16	.04	.33	.02	59
22	4.8	5.6	5.6	e6.8	2.4	.39	6.7	.44	.00	.05	.00	2.2
23	4.8	5.8	5.6	e6.7	1.6	.39	1.9	.56	.00	.15	.00	.01
24	4.6	5.8	5.8	e6.7	2.0	.41	.45	.68	.00	1.2	.54	.00
25	4.4	5.6	6.4	e6.8	2.0	.34	.42	.70	.00	1.3	2.2	.00
26	4.1	5.7	6.2	e6.8	1.8	.35	.57	.70	.00	1.9	2.7	.00
27	4.2	5.6	6.5	e6.7	1.5	.61	.14	.65	.00	1.6	2.7	.04
28	4.2	5.0	6.7	e6.4	1.9	.72	.16	.69	.00	1.5	4.4	.01
29	4.2	4.8	6.9	e5.7	1.6	.34	.23	.81	.00	1.1	191	.00
30	4.3	4.9	7.0	e5.6	---	.38	.34	.95	.00	.73	35	.00
31	4.6	---	7.1	e5.3	---	.55	---	1.1	---	.25	120	---
TOTAL	122.7	176.1	171.3	213.9	52.01	17.99	275.17	17.38	32.16	16.16	360.54	828.72
MEAN	3.96	5.87	5.53	6.90	1.79	.58	9.17	.56	1.07	.52	11.6	27.6
MAX	5.0	7.9	7.1	8.4	3.9	1.8	151	1.1	3.0	1.9	191	431
MIN	2.1	4.8	4.6	5.3	.82	.00	.07	.16	.00	.00	.00	.00
AC-FT	243	349	340	424	103	36	546	34	64	32	715	1640

BRAZOS RIVER BASIN

08093500 AQUILLA CREEK NEAR AQUILLA, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996#, BY WATER YEAR (WY)

MEAN	46.0	61.9	136	146	139	221	111	240	217	28.0	17.2	7.41
MAX	237	392	640	1221	589	1054	674	1281	717	111	122	39.8
(WY)	1994	1992	1992	1992	1992	1992	1995	1995	1987	1987	1995	1991
MIN	.000	.15	.32	.59	.18	.58	1.00	.021	.043	.000	.000	.000
(WY)	1983	1983	1990	1984	1984	1996	1984	1984	1984	1984	1984	1983

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1983 - 1996#

ANNUAL TOTAL	101622.44	2284.13	114
ANNUAL MEAN	278	6.24	396
HIGHEST ANNUAL MEAN			2.24
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	3520 May 8	431 Sep 20	3990 Dec 21
LOWEST DAILY MEAN	.22 Jul 26	.00 Mar 14	.00 Oct 1
ANNUAL SEVEN-DAY MINIMUM	.54 Jul 23	.00 Jun 22	.00 Oct 1
INSTANTANEOUS PEAK FLOW		1340 Sep 1	53300 Jun 16
INSTANTANEOUS PEAK STAGE		14.28 Sep 1	31.35 Jun 16
ANNUAL RUNOFF (AC-I T)	201600	4530	82660
10 PERCENT EXCEEDS	820	6.7	371
50 PERCENT EXCEEDS	36	1.6	5.1
90 PERCENT EXCEEDS	2.0	.00	.00

e Estimated

Period of regulated streamflow.

08094800 NORTH BOSQUE RIVER AT HICO, TX

LOCATION.--Lat 31°58'41", long 98°02'04", Hamilton County, Hydrologic Unit 12060204, on left bank at downstream side of bridge on U.S. Highway 281 near south boundary of Hico, 2.6 mi downstream from Gilmore Creek, 5.0 mi upstream from Honey Creek, and 92.4 mi upstream from mouth.

DRAINAGE AREA.--359 mi².

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

Water-quality records.--Chemical and biochemical analyses: September 1991 to March 1994.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 982.46 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow is affected at times by discharge from the flood-detention pools of 40 floodwater-retarding structures with a combined detention capacity of 65,720 acre-ft. These structures control runoff from 202 mi² in the North Bosque River and Green Creek drainage basins. The city of Stephenville discharges wastewater effluent into the river above this station. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--11 years (1963-73) 50.5 ft³/s (36,590 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1963-73).--Maximum discharge, 16,800 ft³/s May 16, 1965 (gage height, 21.83 ft); no flow at times in 1962-65, 1967-68, and 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1880, 27.6 ft May 23, 1952, from floodmarks (discharge, 87,800 ft³/s, by contracted-opening measurement).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	73	9.7	7.1	2.7	4.5	3.2	1.7	182	.32	2.0	988
2	21	85	8.3	7.1	3.0	4.5	2.2	3.8	145	.36	1.2	725
3	30	44	7.7	7.1	3.6	4.5	1.3	1.3	108	.44	.79	479
4	25	31	6.9	7.1	4.5	4.5	1.1	1.1	88	.43	.59	372
5	20	26	6.9	7.1	4.5	4.5	27	2.2	68	.39	.43	302
6	17	19	6.6	7.1	5.1	4.5	118	3.0	23	.43	.27	259
7	16	17	6.9	7.1	7.3	4.5	68	2.7	621	1.3	.18	227
8	16	14	7.9	5.5	8.3	4.5	40	6.1	248	1.2	.21	174
9	15	14	6.7	e7.2	8.6	3.9	25	1.1	101	1.4	.42	205
10	15	13	6.1	e8.1	8.5	3.9	18	.91	61	1.3	.88	167
11	15	11	6.1	e8.3	8.3	3.9	13	.83	40	1.3	207	134
12	14	11	5.5	7.7	7.0	3.9	13	.81	27	.73	61	103
13	12	12	10	8.2	6.6	4.2	11	.81	24	.48	23	86
14	12	11	4.7	8.3	6.1	4.7	8.4	.70	16	.57	9.5	75
15	e11	12	5.2	8.5	5.7	4.1	6.1	1.1	13	1.0	3.8	90
16	e11	15	5.3	8.3	5.0	3.5	5.4	1.3	9.2	.70	471	250
17	e11	e27	11	6.7	4.5	4.1	5.8	1.0	7.7	.56	344	221
18	e11	e16	37	11	5.0	4.1	4.4	1.2	6.2	.42	202	224
19	e11	e11	27	12	6.1	2.6	1.9	1.1	3.7	.31	125	463
20	e11	e10	18	12	5.3	1.8	1.4	.82	1.6	.26	77	435
21	e11	9.2	14	9.2	5.3	1.3	3.4	.60	.87	.18	50	521
22	e11	6.5	12	8.2	5.3	2.4	12	.48	.84	.08	37	362
23	e11	4.5	11	7.7	5.3	3.0	17	.54	.64	.06	30	275
24	16	6.8	9.0	5.9	5.4	3.5	7.9	.69	.63	.02	33	230
25	19	9.2	8.3	4.4	6.1	1.7	5.1	.83	.83	.22	18	199
26	21	8.4	8.2	3.9	6.1	1.3	2.4	.90	.50	.09	10	165
27	21	4.8	6.9	3.1	6.1	6.1	1.9	.90	.45	1.1	6.6	106
28	17	4.5	6.1	2.8	5.5	18	3.5	.77	.83	70	68	63
29	15	4.5	6.1	3.4	4.5	18	1.6	.51	1.1	86	2780	46
30	15	7.7	6.9	3.8	---	13	1.2	4.1	.40	22	1250	34
31	15	---	7.1	2.8	---	6.8	---	237	---	6.2	981	---
TOTAL	488	538.1	299.1	216.7	165.3	155.8	430.2	280.90	1800.49	199.85	6922.57	7980
MEAN	15.7	17.9	9.65	6.99	5.70	5.03	14.3	9.06	60.0	6.45	223	266
MAX	30	85	37	12	8.6	18	118	237	621	86	2780	988
MIN	11	4.5	4.7	2.8	2.7	1.3	1.1	.48	.40	.02	.18	34
AC-FT	968	1070	593	430	328	309	853	557	3570	396	13730	15830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1996#, BY WATER YEAR (WY)

	MEAN	37.4	23.8	71.1	33.2	66.5	58.9	82.0	189	130	14.1	51.7	33.6
MAX	348	189	1288	410	754	261	507	768	740	52.5	552	266	
(WY)	1992	1992	1992	1992	1992	1977	1990	1990	1986	1995	1995	1996	
MIN	.000	.000	.42	1.06	1.59	1.59	1.06	1.25	.57	.000	.000	.000	
(WY)	1979	1981	1979	1986	1976	1976	1981	1981	1974	1974	1978	1981	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1974 - 1996#

ANNUAL TOTAL	48617.2	19477.01	65.9
ANNUAL MEAN	133	53.2	303
HIGHEST ANNUAL MEAN			3.42
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	4060	2780	13500
LOWEST DAILY MEAN	4.5	.02	.00
ANNUAL SEVEN-DAY MINIMUM	6.1	.13	.00
INSTANTANEOUS PEAK FLOW		7270	27000
INSTANTANEOUS PEAK STAGE		15.85	23.27
ANNUAL RUNOFF (AC-FT)	96430	38630	47740
10 PERCENT EXCEEDS	187	111	108
50 PERCENT EXCEEDS	58	7.1	5.7
90 PERCENT EXCEEDS	11	.76	.42

e Estimated

Period of regulated streamflow.

BRAZOS RIVER BASIN

08095000 NORTH BOSQUE RIVER NEAR CLIFTON, TX
(Hydrologic index station)

LOCATION.--Lat 31°47'09", long 97°34'04", Bosque County, Hydrologic Unit 12060204, near right bank at downstream side of bridge on Farm Road 219, 0.5 mi northeast of Clifton, 2.5 mi downstream from Meridian Creek, and 42.0 mi upstream from mouth.

DRAINAGE AREA.--968 mi².

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--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. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder, and crest-stage gage. Datum of gage is 605.43 ft above sea level. Prior to Oct. 1, 1955, and from Apr. 23, 1957 to Mar. 26, 1958, nonrecording gage at site 1.1 mi upstream at datum 17.02 ft 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.

REMARKS.--Records good. The city of Clifton diverts water from the river upstream from this station for municipal use. The cities of Clifton and Meridian discharge wastewater effluent into the river upstream and downstream, respectively, from the station. For statement regarding regulation by National Resources Conservation Service floodwater-retarding structures, see station 08094800. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--44 years (water years 1924-67), 195 ft³/s (141,300 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1924-67).--Maximum discharge, 92,800 ft³/s Oct. 4, 1959 (gage height, 34.88 ft), from rating curve extended above 34,000 ft³/s on basis of contracted-opening measurement of 92,800 ft³/s; and step back water computation of 200,000 ft³/s; no flow at times. Maximum stage since at least 1854, that of Dec. 20, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 9, 1922, reached a stage of about 32 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,300 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 29	1515	14,800	14.28	Aug. 30	0530	17,200	15.76

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	54	35	33	35	28	29	16	82	7.0	25	1500
2	74	53	36	32	37	28	25	15	147	6.8	e20	644
3	72	67	35	32	33	26	22	15	104	5.8	15	1320
4	70	76	35	33	32	23	21	14	121	4.9	11	1240
5	70	63	36	32	33	23	63	13	200	4.2	8.4	383
6	73	54	35	31	33	21	139	14	76	3.7	6.9	236
7	69	47	34	30	34	20	164	13	1250	3.3	5.5	159
8	67	41	35	31	34	20	112	12	770	2.8	4.4	125
9	66	37	33	32	36	20	75	13	242	2.8	3.6	100
10	65	39	35	32	35	20	55	13	124	2.6	8.8	87
11	64	35	36	32	33	20	43	12	76	16	7.3	89
12	63	34	36	32	31	20	37	12	59	35	112	72
13	63	35	35	31	31	21	33	13	49	20	71	65
14	60	34	35	32	31	20	30	12	40	63	43	58
15	59	34	34	32	30	20	26	11	34	58	30	80
16	58	33	33	32	28	20	22	9.2	30	34	23	114
17	57	36	35	33	28	19	21	7.8	27	20	259	115
18	57	40	55	35	29	19	20	7.2	26	14	198	437
19	57	43	60	32	29	20	20	7.0	25	11	123	931
20	55	42	51	33	29	20	18	6.2	22	9.1	84	880
21	54	41	55	33	29	20	18	4.9	18	7.7	62	677
22	54	40	47	33	29	20	19	4.1	17	6.5	46	477
23	53	39	42	35	29	18	19	3.1	14	5.5	38	296
24	52	36	39	33	29	17	19	2.5	13	6.2	46	214
25	50	36	37	33	29	17	19	2.4	12	5.3	42	176
26	52	36	36	33	29	18	19	3.0	11	4.7	34	157
27	53	36	34	31	29	22	20	2.8	10	4.5	32	156
28	51	34	33	31	27	26	19	3.0	8.8	4.7	29	124
29	51	34	33	31	27	27	17	3.0	8.3	4.4	4910	97
30	52	34	33	33	---	29	16	3.8	7.6	3.8	6460	84
31	52	---	33	35	---	27	---	14	---	18	1730	---
TOTAL	1869	1263	1181	1003	898	669	1160	282.0	3623.7	395.3	14487.9	11093
MEAN	60.3	42.1	38.1	32.4	31.0	21.6	38.7	9.10	121	12.8	467	370
MAX	76	76	60	35	37	29	164	16	1250	63	6460	1500
MIN	50	33	33	30	27	17	16	2.4	7.6	2.6	3.6	58
AC-FT	3710	2510	2340	1990	1780	1330	2300	559	7190	784	28740	22000

BRAZOS RIVER BASIN

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08095000 NORTH BOSQUE RIVER NEAR CLIFTON, TX--Continued
(Hydrologic index station)

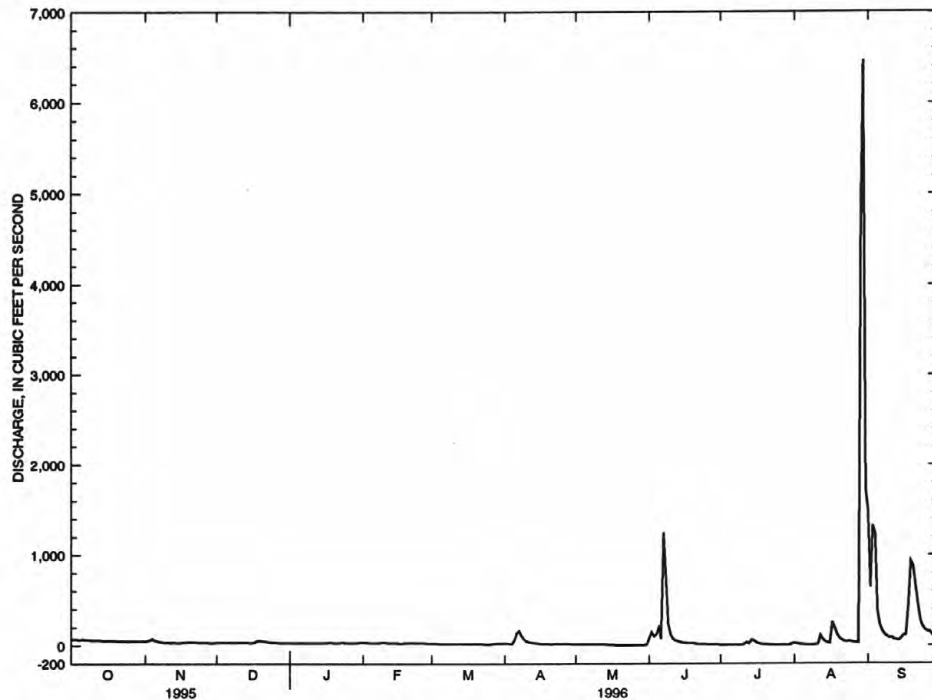
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996#, BY WATER YEAR (WY)

MEAN	126	60.4	342	158	271	295	371	567	332	75.8	92.4	69.0
MAX	1206	430	7330	1405	3738	1316	2340	2412	1517	799	1238	449
(WY)	1972	1992	1992	1992	1992	1992	1990	1968	1989	1968	1995	1986
MIN	.79	.58	.85	2.93	9.77	6.30	2.74	1.40	.44	.17	.16	.088
(WY)	1979	1984	1984	1984	1976	1986	1983	1984	1984	1984	1984	1984

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1968 - 1996#

ANNUAL TOTAL	188891		37924.9									
ANNUAL MEAN	518		104									
HIGHEST ANNUAL MEAN										230		
LOWEST ANNUAL MEAN										1366		1992
HIGHEST DAILY MEAN	16300	Jun 11		6460	Aug 30					11.7		1984
LOWEST DAILY MEAN	33	Nov 16		2.4	May 25					96800	Dec 21	1991
ANNUAL SEVEN-DAY MINIMUM	34	Dec 25		2.8	May 23					.01	Oct 28	1983
INSTANTANEOUS PEAK FLOW				17200	Aug 30					.03	Oct 28	1983
INSTANTANEOUS PEAK STAGE				15.76	Aug 30					200000	Dec 20	1991
ANNUAL RUNOFF (AC-FT)	374700			75220						a38.30	Dec 20	1991
10 PERCENT EXCEEDS	814			113						166500		
50 PERCENT EXCEEDS	186			33						354		
90 PERCENT EXCEEDS	36			7.3						28		
										3.1		

e Estimated
Period of regulated streamflow
a From floodmark



08095000 NORTH BOSQUE RIVER NEAR CLIFTON, TX
MEAN DAILY DISCHARGE (CFS)

08095200 NORTH BOSQUE RIVER AT VALLEY MILLS, TX

LOCATION.--Lat 31°40'10", long 97°28'09", Bosque County, Hydrologic Unit 12060204, on right bank at downstream side of bridge on Farm Road 56, about 0.8 mi downstream from Thompson Hollow, 0.8 mi north of intersection of State Highway 6 and Farm Road 56 in Valley Mills, and 28.0 mi upstream from mouth.

DRAINAGE AREA.--1,146 mi².

PERIOD OF RECORD.--August 1959 to current year.

Water-quality records.--Chemical and biochemical analyses: October 1980 to September 1982.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 524.55 ft above sea level. Prior to Dec. 29, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow is affected at times by discharge from the flood-detention pools of 42 floodwater-retarding structures with a combined detention capacity of 66,800 acre-ft. These structures control runoff of 207 mi². There are several small diversions above station. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--8 years (water years 1960-67), 263 ft³/s (190,500 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1960-67).--Maximum discharge, 107,000 ft³/s Oct. 4, 1959, (gage height, 40.22 ft, from floodmarks), from rating curve extended above 28,200 ft³/s on basis of slope-area measurement of 107,000 ft³/s; no flow Oct. 5-12, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1868, 44.6 ft (from floodmark) on Dec. 21, 1991. Flood in May 1908, reached a stage of 43 ft, floods in September 1936, and April 1945, reached a stage of about 38 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 29	1830	14,700	20.39	Aug. 30	0815	24,700	26.27

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	62	53	44	47	34	31	19	61	20	41	2060
2	95	54	54	43	52	34	29	19	196	17	30	996
3	81	54	54	42	47	33	25	19	153	16	21	1340
4	75	123	52	41	42	32	23	18	280	14	16	1690
5	68	107	54	40	43	35	56	17	394	12	13	748
6	69	92	53	39	44	32	126	17	225	10	11	480
7	63	81	51	36	47	29	171	18	1110	8.8	9.7	320
8	60	69	55	36	49	27	136	16	1190	8.1	8.6	248
9	57	64	50	38	54	26	87	15	519	6.9	8.0	178
10	56	65	51	38	55	27	61	16	286	6.8	8.6	129
11	53	60	54	39	55	29	50	16	195	22	27	134
12	51	56	55	37	51	29	44	16	145	41	116	117
13	50	57	55	38	50	29	39	15	119	40	164	99
14	48	58	53	37	52	28	36	16	105	40	77	84
15	48	57	51	38	53	25	33	15	89	149	48	103
16	52	55	48	37	50	25	30	14	77	67	30	199
17	55	59	56	40	49	24	27	13	67	34	e25	157
18	60	70	72	50	50	23	27	12	63	21	e225	543
19	61	71	107	41	51	22	25	12	63	16	e175	1280
20	58	71	77	40	52	22	24	11	59	13	e110	1380
21	56	67	78	39	49	21	23	10	54	11	e75	1140
22	55	63	70	40	48	20	26	9.0	49	9.0	55	734
23	54	62	60	42	46	21	27	8.2	47	9.1	47	507
24	50	59	53	43	41	19	25	7.8	41	9.0	58	364
25	49	57	51	42	43	17	24	7.1	37	8.3	49	294
26	51	56	47	42	41	18	24	6.7	35	8.0	39	258
27	52	56	45	41	40	23	23	7.3	32	7.1	39	257
28	49	51	44	41	36	35	25	7.5	28	6.9	39	212
29	48	51	43	40	33	30	22	7.4	24	6.7	4710	148
30	49	52	45	40	---	32	20	11	22	6.7	9340	123
31	50	---	45	47	---	29	---	556	---	7.2	1950	---
TOTAL	1825	1959	1736	1251	1370	830	1319	952.0	5765	651.6	17564.9	16322
MEAN	58.9	65.3	56.0	40.4	47.2	26.8	44.0	30.7	192	21.0	567	544
MAX	102	123	107	50	55	35	171	556	1190	149	9340	2060
MIN	48	51	43	36	33	17	20	6.7	22	6.7	8.0	84
AC-FT	3620	3890	3440	2480	2720	1650	2620	1890	11430	1290	34840	32370

BRAZOS RIVER BASIN

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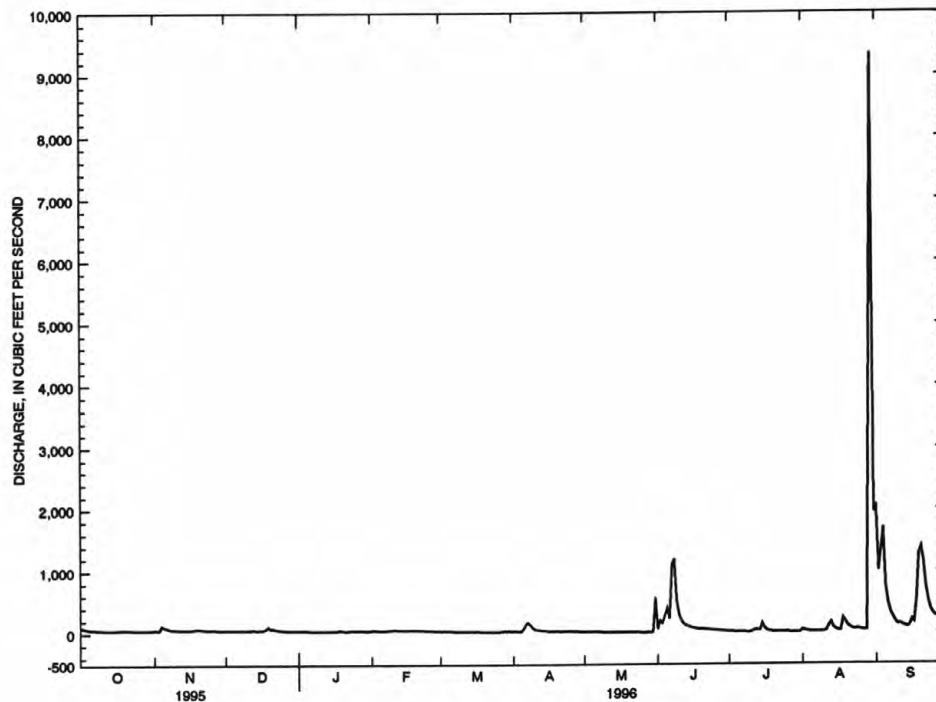
08095200 NORTH BOSQUE RIVER AT VALLEY MILLS, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996#, BY WATER YEAR (WY)

MEAN	147	80.6	365	193	356	378	430	695	419	94.5	119	87.1
MAX	1349	549	7469	1760	5156	2126	2392	2776	1609	712	1625	544
(WY)	1972	1992	1992	1992	1992	1992	1977	1968	1989	1968	1995	1996
MIN	1.35	2.69	4.10	6.78	14.5	15.4	6.02	2.94	.63	.11	1.43	.000
(WY)	1979	1984	1979	1984	1984	1986	1984	1984	1984	1984	1978	1984

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1968 - 1996#	
ANNUAL TOTAL	268292		51545.5			
ANNUAL MEAN	735		141			
HIGHEST ANNUAL MEAN					280	
LOWEST ANNUAL MEAN					1664	
HIGHEST DAILY MEAN					14.6	
LOWEST DAILY MEAN					123000	
ANNUAL SEVEN-DAY MINIMUM	25000 May 8		9340 Aug 30		1992	
INSTANTANEOUS PEAK FLOW	43 Dec 29		6.7 May 26		Dec 21 1991	
ANNUAL RUNOFF (AC-FT)	46 Dec 25		7.3 Jul 25		Jun 1 1984	
10 PERCENT EXCEEDS			24700 Aug 30		220000	
50 PERCENT EXCEEDS			26.27 Aug 30		44.60	
90 PERCENT EXCEEDS					202800	
	532200		102200		456	
	1230		172		42	
	220		47		6.9	
	54		13			

e Estimated
Period or regulated streamflow.



08095200 NORTH BOSQUE RIVER AT VALLEY MILLS, TX
MEAN DAILY DISCHARGE (CFS)

BRAZOS RIVER BASIN

08095300 MIDDLE BOSQUE RIVER NEAR MCGREGOR, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 31°30'34", long 97°21'55", McLennan County, Hydrologic Unit 12060203, at left downstream side of bridge on Farm Road 3047, 1,100 ft downstream from Pecan Creek, 5.0 mi upstream from mouth, and 5.2 mi northeast of McGregor.

DRAINAGE AREA.--182 mi².

PERIOD OF RECORD.--August 1959 to September 1985 (continuous record). October 1985 to current year (peaks above base or annual maximum).

GAGE.--Water-stage recorder, and concrete control. Datum of gage is 530.51 ft above sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good. No known diversions above station. Recording rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE.--26 years (1960-1985), 78.4 ft³/s (56,800 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,300 ft³/s Oct. 31, 1974 (gage height, 24.62 ft); no flow at times in 1960-64, 1967, 1971, 1978-79, 1981-84, and 1994.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1889, which reached a stage of 28.5 ft. A flood in 1957 reached a stage of 28.2 ft; and floods in 1913 and 1942 or 1943 reached a stage of about 28 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 5	1300	8,780	10.63				

BRAZOS RIVER BASIN

227

08095400 HOG CREEK NEAR CRAWFORD, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 31°33'20", long 97°21'22", McLennan County, Hydrologic Unit 12060203, on downstream side of bridge on Farm Road 185, 5.6 mi east of Crawford, and 9.8 mi upstream from South Bosque River.

DRAINAGE AREA.--78.2 mi².

PERIOD OF RECORD.--August 1959 to September 1985 (continuous record). October 1985 to current year (peaks above base or annual maximum).

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 560.54 ft above sea level. Prior to Oct. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow affected at times by discharge from the flood-detention pools of two floodwater-retarding structures with a detention capacity of 9,600 acre-ft. These structures control runoff from 42.0 mi² in the Hog Creek drainage basin. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE.--26 years (1959-1985), 32.3 ft³/s (23,400 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,400 ft³/s Oct. 4, 1959 (gage height, 14.31 ft); no flow at times in 1959, 1963-64, 1971, 1978-79, and 1983-85.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, 17.5 ft Sept. 26, 1936. Flood in April or May 1957 reached a stage of 15.7 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 30	1515	3,120	6.74				

BRAZOS RIVER MAIN STEM

08096500 BRAZOS RIVER AT WACO, TX

LOCATION.--Lat 31°32'09", long 97°04'23", McLennan County, Hydrologic Unit 12060202, on left bank 2.2 mi downstream from bridge on LaSalle Avenue and at mile 400.7.

DRAINAGE AREA.--29,573 mi², approximately, of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--September 1898 to current year (January 1912 to September 1914 monthly records only, published in WSP 1312).

REVISED RECORDS.--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. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 349.34 ft above sea level. Sept. 14, 1898 to Mar. 28, 1918, May 6, 1922 to Feb. 12, 1925, nonrecording gage, and Mar. 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 mi upstream at datum 7.46 ft higher.

REMARKS.--Records good. Flow is largely regulated by Lake Whitney and by Waco Lake (stations 08092500 and 08095550). The combined capacity for 18 reservoirs above station is 4,135,000 acre-ft, of which 2,194,000 acre-ft is flood-control storage in Lake Whitney and in Waco Lake. The City of Waco diverts water above station for municipal use, and the Brazos River Authority returns treated wastewater effluent to the river above station. There are many other small diversions above station for municipal supply, irrigation, and for oil field operations that will not appreciably affect flow. Flow is affected at times by discharge from the flood-detention pools of eleven floodwater-retarding structures with a combined detention capacity of 6,420 acre-ft. These structures control runoff from 20.4 mi² in the Aquilla and Hackberry Creeks drainage basins. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--42 years (water years 1899-1940), 2,560 ft³/s (1,855,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1899-1940).--Maximum discharge since 1847, 246,000 ft³/s Sept. 27, 1936 (gage height, 40.90 ft), at former site and datum, levee on left bank was overtopped and broken by flood; no flow Aug. 20, 21, 1918, and probably for several days in August 1923.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage for 1847-98, 34.63 ft May 28, 1885, from floodmark at site 3.9 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	370	634	175	101	156	104	40	102	43	305	1990
2	1350	1010	178	547	146	172	184	83	51	948	649	1030
3	778	969	110	775	210	477	250	235	47	1110	349	851
4	789	869	449	1070	96	110	416	203	361	1080	169	1370
5	1110	1670	925	663	666	103	892	103	48	1620	223	2210
6	335	783	181	374	859	339	804	290	45	1200	616	2320
7	263	1000	131	494	427	358	187	62	212	305	316	2320
8	1480	972	590	1110	135	418	348	51	87	81	535	2230
9	723	498	371	572	102	428	189	46	193	822	373	1940
10	726	916	682	472	196	197	97	45	203	951	476	1650
11	1100	791	544	436	99	120	86	36	213	1300	206	1440
12	1400	398	629	498	202	535	110	31	314	1100	414	1390
13	1110	767	642	415	407	177	62	28	357	770	350	1300
14	1000	565	943	418	473	373	114	27	373	780	103	1160
15	334	1140	290	510	381	425	208	27	349	310	67	309
16	747	1140	191	1070	104	404	104	25	88	91	103	335
17	835	1290	358	633	198	177	96	25	46	1690	67	470
18	1080	1280	257	212	349	376	147	32	202	829	108	2370
19	990	235	1190	619	153	154	429	56	428	747	68	2740
20	1460	213	450	927	347	473	527	38	478	538	96	2780
21	803	906	735	597	375	394	155	24	460	546	73	4850
22	213	509	532	619	611	560	380	22	426	726	116	4180
23	254	444	398	422	456	282	516	21	92	775	113	4110
24	659	152	137	319	152	181	141	869	54	155	679	4300
25	605	718	112	407	88	284	91	692	317	701	74	5570
26	1050	242	211	460	504	699	108	89	565	548	34	4220
27	831	658	204	294	852	905	333	59	470	446	282	2970
28	1410	603	308	362	28	1160	155	36	462	372	273	2210
29	206	1060	761	158	382	388	55	33	766	511	1720	2460
30	434	770	858	376	---	668	42	74	95	361	1170	2840
31	323	---	200	112	---	158	---	191	---	466	837	---
TOTAL	26198	22938	14201	16116	9099	11651	7330	3593	7904	21922	10964	69915
MEAN	845	765	458	520	314	376	244	116	263	707	354	2330
MAX	1800	1670	1190	1110	859	1160	892	869	766	1690	1720	5570
MIN	206	152	110	112	28	103	42	21	45	43	34	309
AC-FT	51960	45500	28170	31970	18050	23110	14540	7130	15680	43480	21750	138700

BRAZOS RIVER MAIN STEM

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08096500 BRAZOS RIVER AT WACO, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1996#, BY WATER YEAR (WY)

MEAN	2018	1473	1464	1857	1977	2210	2839	5615	4446	1711	1116	1274
MAX	13540	11150	15070	28140	16860	20260	22470	36340	37140	9427	7300	9492
(WY)	1960	1975	1992	1992	1992	1992	1942	1957	1957	1982	1995	1966
MIN	46.6	55.8	40.8	44.6	28.0	77.3	160	43.5	263	49.2	98.3	97.5
(WY)	1984	1984	1955	1955	1984	1971	1955	1988	1996	1978	1988	1983

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1941 - 1996#
ANNUAL TOTAL	1370347	221831	
ANNUAL MEAN	3754	606	
HIGHEST ANNUAL MEAN			2334
LOWEST ANNUAL MEAN			9611
HIGHEST DAILY MEAN			322
LOWEST DAILY MEAN			121000
ANNUAL SEVEN-DAY MINIMUM	29200	May 12	5570
INSTANTANEOUS PEAK FLOW	12	Sep 14	21
INSTANTANEOUS PEAK STAGE	272	Dec 22	28
INSTANTANEOUS LOW FLOW			9580
ANNUAL RUNOFF (AC-FT)	2718000		10.87
10 PERCENT EXCEEDS	9430		1280
50 PERCENT EXCEEDS	1940		398
90 PERCENT EXCEEDS	447		71

Period of regulated streamflow.

08098290 BRAZOS RIVER NEAR Highbank, TX

LOCATION.--Lat 31°08'02", long 96°49'29", Falls County, Hydrologic Unit 12070101, near right bank 45 ft downstream from bridge on Farm Road 413, 1.4 mi downstream from Highbank Slough and Spring Branch, 2.6 mi south of Highbank, and at mile 346.6.

DRAINAGE AREA.--30,436 mi², of which 9,566 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WDR 1X-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 279.29 ft above sea level.

REMARKS.--Records good. Many diversions above station for municipal supply, irrigation, and industrial uses. Flow is affected by 20 upstream reservoirs with a total combined capacity of 4,181,000 acre-ft. Water is diverted from the river about 52 miles upstream from this station by Texas Power and Light Co. to Tradinghouse Reservoir. Flow is affected at times by discharge from the flood-detention pools of 76 floodwater-retarding structures with a total combined detention capacity of 83,290 acre-ft. These structures control runoff from 238 mi² in the Aquilla, Tehuacana, Castleman Creeks, and Cow Bayou basins. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1909, 42 ft in December 1913 and 40 ft in September 1936, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	557	1060	699	451	305	860	171	257	443	374	3160
2	1610	435	860	387	984	357	400	119	481	172	388	3400
3	1490	825	444	368	1310	340	314	97	421	372	426	2100
4	772	1060	280	910	1330	393	400	120	380	1020	442	1740
5	704	980	217	1040	1080	470	544	302	572	1010	296	1670
6	901	1580	778	1010	896	368	984	373	751	1330	177	2370
7	569	887	560	870	1270	278	1550	747	554	1210	282	2420
8	348	1080	295	1400	944	335	1200	583	494	529	406	2400
9	946	1070	306	1640	730	795	612	379	750	314	361	2330
10	778	834	567	1380	439	976	544	235	e550	396	415	2030
11	649	782	987	889	e310	949	496	193	e300	1020	381	1840
12	859	836	972	662	217	687	376	166	235	1200	416	1590
13	1210	1000	727	405	n154	581	302	157	246	921	277	1520
14	933	774	733	614	343	602	287	120	327	1060	331	1500
15	860	563	829	464	428	504	264	e100	361	817	289	1460
16	563	1070	700	371	422	497	255	e75	350	554	178	722
17	470	1170	443	717	282	585	281	e55	322	356	123	580
18	706	1260	347	852	358	594	288	e50	156	1110	111	604
19	885	1350	419	431	395	469	268	e50	106	1000	115	4360
20	829	658	877	1170	313	473	247	e50	179	793	107	3910
21	1220	295	774	1080	276	462	443	e45	373	571	109	5280
22	877	558	585	875	311	586	553	e50	391	551	82	4970
23	549	700	851	668	440	628	369	e55	394	641	132	4370
24	335	504	500	611	539	714	604	e55	336	754	238	4380
25	551	368	458	427	463	650	517	e65	151	539	792	4340
26	690	348	340	574	291	568	300	1060	104	487	526	5900
27	1010	575	259	596	227	734	194	505	360	612	268	4310
28	971	344	305	560	716	993	148	275	456	455	179	3170
29	1420	782	332	675	655	1170	333	260	442	415	530	3140
30	605	1070	678	571	---	1190	257	250	632	402	3770	3120
31	358	---	1010	419	---	1010	---	244	---	416	3770	---
TOTAL	26358	24315	18493	23335	16574	19263	14190	7006	11431	21470	16291	84686
MEAN	850	810	597	753	572	621	473	226	381	693	526	2823
MAX	1690	1580	1060	1640	1330	1190	1550	1060	751	1330	3770	5900
MIN	335	295	217	368	154	278	148	45	104	172	82	580
AC-FT	52280	48230	36680	46280	32870	38210	28150	13900	22670	42590	32310	168000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1996#, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	1760	2118	2196	2624	2748	3376	3380	6184	5248	1816	1312	1324																			
MAX	13740	18050	16830	31930	21820	22730	15700	30140	17520	10050	8600	9865																			
(WY)	1982	1975	1992	1992	1992	1992	1977	1990	1989	1982	1995	1966																			
MIN	93.6	72.6	163	167	30.8	84.7	196	179	381	84.4	167	127																			
(WY)	1984	1984	1984	1984	1984	1971	1978	1988	1996	1978	1988	1983																			

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1966 - 1996#
ANNUAL TOTAL	1481114	283412	
ANNUAL MEAN	4058	774	2839
HIGHEST ANNUAL MEAN			11320
LOWEST ANNUAL MEAN			329
HIGHEST DAILY MEAN	29800	May 12	70300
LOWEST DAILY MEAN	217	Dec 5	23
ANNUAL SEVEN-DAY MINIMUM	410	Dec 24	23
INSTANTANEOUS PEAK FLOW			78700
INSTANTANEOUS PEAK STAGE			30.78
ANNUAL RUNOFF (AC-FT)	2938000	562100	2057000
10 PERCENT EXCEEDS	10300	1410	6240
50 PERCENT EXCEEDS	1830	551	1030
90 PERCENT EXCEEDS	568	189	228
e Estimated			
# Period of regulated streamflow.			

08098290 BRAZOS RIVER NEAR Highbank, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: November 1967 to current year. Pesticide analyses: November 1976 to June 1981. Sediment analyses: October 1974 to July 1994.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1967 to current year.

WATER TEMPERATURES: November 1967 to February 1984, December 1989 to current year.

INSTRUMENTATION.--Since September 1980, specific conductance is recorded continuously at this station. From October 1980 to February 1984, and since December 1989, water temperature is recorded continuously at this station.

REMARKS.--Interruptions in the record were due to malfunctions of the instruments, siltation over probes, and water level dropping below probes. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituents and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens Aug. 24, 1978; minimum, 140 microsiemens Mar. 8, 1984.

WATER TEMPERATURE: (1980-84, 1989-90): Maximum, 35.5°C July 15, 16, 1978; minimum, 0.0°C on several days during December 1983 and December 1989.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,290 microsiemens Oct. 6; minimum, 307 microsiemens Sept. 8.

WATER TEMPERATURE: Maximum, 34.5°C June 15, 17-20; minimum, 2.5°C Feb. 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	
FEB 20...	1225	341	1040	8.4	17.5	11.8	126	230	93	65	
APR 29...	1314	425	838	8.1	20.0	8.4	93	200	69	58	
JUN 12...	1645	235	862	8.4	31.5	10.1	140	180	59	45	
AUG 14...	1140	373	1220	7.9	30.0	7.1	95	230	81	57	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB 20...	1/	120	3	5.6	140	110	170	0.30	0.40	573	
APR 29...	14	89	3	5.5	130	93	120	0.40	2.8	467	
JUN 12...	1/	110	4	5.2	120	90	120	0.50	14	476	
AUG 14...	20	140	4	6.3	150	130	210	0.30	9.5	663	
DATE		NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
FEB 20...	--	--	0.020	--	<0.050	0.040	0.46	0.50	0.060	0.050	
APR 29...	0.780	0.780	0.070	0.850	0.850	0.050	0.45	0.50	0.110	0.110	
JUN 12...	0.050	0.050	0.010	0.060	0.060	0.030	0.47	0.50	0.030	0.040	
AUG 14...	0.400	0.400	0.030	0.430	0.430	0.080	0.32	0.40	0.050	0.050	
DATE		PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
FEB 20...	0.15	2	85	<0.50	<1.0	<5.0	<3.0	<10	14	<10	
APR 29...	0.34	--	--	--	--	--	--	--	--	--	
JUN 12...	0.12	--	--	--	--	--	--	--	--	--	
AUG 14...	0.15	3	110	<0.50	<1.0	<5.0	<3.0	<10	<3.0	10	

BRAZOS RIVER MAIN STEM

08098290 BRAZOS RIVER NEAR Highbank, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB 20...	15	44	<0.1	10	<10	<1	<1.0	800	<6	<3.0
APR 29...	--	--	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--
AUG 14...	14	8.0	0.1	<10	<10	<1	2.0	890	<6	<3.0

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	e1200	1010	990	1000	1050	1040	1050	1020	1010	1010
2	---	---	e1200	1010	910	987	1050	1020	1030	1020	1010	1020
3	---	---	e1200	990	960	972	1060	1040	1050	1020	1000	1010
4	---	---	e1220	1000	970	991	1080	1060	1080	1040	1000	1020
5	---	---	e1240	1000	970	990	1120	1080	1110	1050	1040	1040
6	1290	1200	1260	970	900	932	1130	1100	1120	1070	1050	1060
7	1280	1250	1270	980	930	951	1120	1100	1100	1070	1040	1050
8	1260	1200	1230	1000	910	984	1100	1090	1100	1090	1070	1080
9	1230	1100	1170	---	---	e1020	1120	1090	1110	1090	1070	1090
10	1140	1100	1130	1080	1060	1070	1110	1060	1090	1110	1090	1100
11	1180	980	1090	1090	1070	1080	1060	1010	1030	1120	1110	1120
12	1120	930	986	1090	1070	1080	1070	1050	1060	1120	1090	1110
13	990	900	940	1070	1040	1050	1050	1040	1050	1100	1080	1090
14	990	960	971	1090	1050	1070	1070	1050	1060	1100	1070	1090
15	970	940	955	1100	1090	1100	1070	1050	1060	1090	1060	1080
16	1010	910	973	1090	1060	1080	1080	1060	1070	1080	1050	1070
17	1030	1000	1010	1060	1020	1040	1080	1070	1080	1090	1050	1070
18	1040	1030	1030	1030	972	993	1100	1080	1090	1060	1030	1050
19	1040	980	1030	1030	990	1020	1110	1100	1100	1060	1040	1050
20	990	960	971	1070	1030	1060	1120	1080	1100	1070	1050	1060
21	970	940	955	1090	1070	1080	1080	1010	1040	1050	1040	1050
22	970	950	962	1100	1070	1090	1010	933	953	---	---	e1080
23	1000	900	969	1080	1070	1080	1040	953	1010	---	---	e1080
24	1010	910	994	1090	1070	1080	1050	1040	1050	---	---	e1070
25	1020	990	1010	1090	1080	1090	1050	1030	1040	1080	1070	1070
26	1000	910	985	1100	1060	1090	1090	1050	1070	1090	1070	1070
27	1020	950	997	1060	1040	1050	1110	1090	1100	1090	1070	1080
28	1010	990	999	1060	1040	1050	1120	1100	1110	1080	1060	1070
29	990	940	958	1080	1040	1060	1110	1070	1090	1080	1050	1060
30	980	950	963	1080	1040	1070	1070	994	1020	1090	1060	1070
31	1020	980	1000	---	---	---	1030	1010	1030	1110	1080	1100
MONTH	1290	900	1060	1100	900	1040	1130	933	1070	1120	1000	1070

e Estimated

08098290 BRAZOS RIVER NEAR Highbank, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1100	1080	1090	1080	1040	1060	1090	1050	1070	---	---	e886
2	1080	1070	1070	1090	1070	1080	1160	1070	1090	---	---	e880
3	1070	1010	1050	1100	1090	1100	1160	1080	1100	---	---	e880
4	1070	1010	1030	1120	1080	1100	1090	1060	1080	---	---	e900
5	1070	1070	1070	1080	1050	1060	1120	1070	1100	---	---	e890
6	1090	1020	1060	1080	1060	1070	1120	1060	1100	922	877	901
7	1090	1060	1070	1100	1030	1090	1080	1060	1070	915	859	895
8	1090	1070	1080	1100	1090	1090	1070	979	1030	859	651	698
9	1080	1060	1070	1090	1050	1070	982	902	954	763	655	711
10	1090	1050	1070	1080	1050	1060	941	892	903	---	---	e800
11	1100	1040	1080	1050	1000	1030	999	941	960	---	---	e900
12	1100	1040	1080	1000	976	988	989	953	975	---	---	e950
13	1130	1050	1110	1010	985	999	973	963	969	---	---	e1000
14	1140	1090	1110	1100	1010	1010	971	946	959	---	---	e1000
15	1130	1110	1120	1140	1100	1130	997	948	973	---	---	e1000
16	1120	1090	1100	1130	1090	1110	1040	962	1000	---	---	e1020
17	1100	1090	1100	1110	1100	1100	1060	1000	1040	---	---	e1020
18	1120	1080	1100	1120	1060	1100	1060	1020	1040	---	---	e1020
19	1080	1040	1060	1130	1110	1120	1050	1000	918	---	---	e1020
20	1050	1010	1030	1140	1120	1130	1040	979	1010	---	---	e1020
21	1070	1040	1050	1160	1120	1140	1030	916	994	---	---	e1040
22	1080	1050	1070	1150	1100	1130	926	874	898	---	---	e1050
23	1090	1070	1080	1110	1080	1090	906	878	894	---	---	e1060
24	1080	1020	1060	1100	1100	1100	899	839	870	---	---	e1060
25	1060	1050	1060	1120	1090	1100	856	828	844	---	---	e1060
26	1080	1060	1070	1140	1110	1140	957	846	872	1110	996	1070
27	1090	1070	1090	1150	1070	1120	---	---	e880	996	934	961
28	1070	1050	1070	1080	1050	1070	---	---	e880	---	---	e1000
29	1060	1030	1040	1100	1050	1070	877	833	852	---	---	e1000
30	---	---	---	---	---	e1060	893	848	881	---	---	e1000
31	---	---	---	1080	1040	1060	---	---	---	---	---	e1000
MONTH	1140	1010	1070	1160	976	1080	1160	828	974	1110	651	958

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	e1020	1150	1130	1140	1180	1170	1180	526	343	434
2	1010	849	973	1170	1150	1160	1180	1160	1170	683	319	501
3	---	---	e985	1180	1170	1170	1160	1120	1140	574	401	488
4	---	---	e950	1200	1150	1180	1160	1140	1150	417	381	396
5	---	---	e950	1190	1160	1180	1170	1160	1170	430	363	404
6	959	900	930	1200	1190	1190	1190	1170	1180	375	323	349
7	---	---	e880	1200	1190	1200	1190	1170	1180	323	309	313
8	---	---	e860	1220	1200	1210	1180	1170	1170	315	307	311
9	---	---	e900	1230	1210	1220	1180	1160	1170	330	311	322
10	---	---	e900	1240	1220	1230	1170	1140	1160	385	330	360
11	---	---	e880	1220	1050	1120	1180	1160	1170	440	385	423
12	885	827	864	1180	1120	1160	1180	1170	1170	418	400	409
13	852	822	837	1170	1140	1150	1190	1130	1170	482	397	414
14	822	802	812	1150	1050	1110	1180	1150	1170	653	482	515
15	833	797	814	1140	1060	1110	1190	1170	1180	791	653	735
16	880	810	864	1140	1120	1120	1190	1180	1190	849	743	814
17	908	880	898	1120	968	1040	1190	1100	1130	849	782	825
18	971	896	925	1080	951	1020	1180	1040	1170	782	694	747
19	1000	968	980	1120	1070	1090	1180	1180	1180	784	334	583
20	1020	989	1010	1150	1120	1140	1180	1160	1170	771	411	518
21	1020	990	1010	1190	1150	1170	1190	1170	1180	677	385	557
22	1040	997	1030	1200	1080	1190	1190	1160	1180	585	337	421
23	1040	1020	1030	1200	1190	1200	1170	1070	1150	663	525	599
24	1060	1010	1050	1200	1160	1190	1080	1040	1060	758	568	694
25	1080	1060	1070	1180	1160	1170	1080	997	1040	863	655	770
26	1100	1070	1080	1190	1170	1180	997	921	959	929	664	836
27	1100	1080	1100	1210	1150	1190	996	959	978	963	928	951
28	1130	1100	1120	1190	1170	1180	1030	994	1010	962	933	947
29	1120	1090	1110	1190	1170	1180	1030	909	982	1010	874	961
30	1140	1090	1120	1190	1160	1180	909	333	656	1090	884	1010
31	---	---	---	1180	1170	1170	449	342	402	---	---	---
MONTH	1140	797	965	1240	951	1160	1190	333	1100	1090	307	587
YEAR	1290	307	1010									

e Estimated

BRAZOS RIVER MAIN STEM

08098290 BRAZOS RIVER NEAR Highbank, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	15.0	12.0	13.5	12.0	10.0	11.5
2	---	---	---	---	---	---	17.5	14.5	16.0	10.0	8.0	8.5
3	---	---	---	---	---	---	19.5	17.0	18.0	9.0	6.0	7.5
4	---	---	---	---	---	---	18.0	16.0	17.5	9.5	6.5	8.0
5	---	---	---	---	---	---	19.0	16.0	17.5	9.0	7.5	8.5
6	---	---	---	---	---	---	18.5	16.0	17.0	8.0	5.0	7.0
7	---	---	---	---	---	---	16.5	14.5	15.5	5.5	3.5	4.5
8	---	---	---	---	---	---	14.5	12.5	13.5	5.5	3.5	4.5
9	---	---	---	---	---	---	12.5	8.0	10.0	7.5	4.5	6.0
10	---	---	---	20.0	17.0	18.5	9.0	7.0	8.0	9.5	6.0	8.0
11	---	---	---	18.5	14.5	15.5	9.0	7.0	8.5	11.0	9.0	10.0
12	---	---	---	15.5	13.0	14.5	13.5	9.0	11.0	11.0	8.5	9.5
13	---	---	---	16.0	13.0	14.5	16.5	13.0	15.0	12.0	8.5	10.5
14	---	---	---	16.0	14.0	15.0	18.5	16.0	17.0	13.0	10.0	11.5
15	---	---	---	16.5	14.0	15.5	19.5	18.0	18.5	14.0	12.0	13.0
16	---	---	---	17.0	14.5	16.0	18.5	17.0	17.5	15.0	11.5	13.0
17	---	---	---	16.0	15.0	15.5	17.0	17.0	17.0	16.5	14.0	15.0
18	---	---	---	16.5	14.5	15.5	17.0	13.0	15.5	16.0	9.0	12.5
19	---	---	---	17.0	14.5	16.0	13.0	10.5	11.0	9.0	7.0	8.0
20	---	---	---	---	---	---	10.5	9.5	10.0	9.5	7.0	8.0
21	---	---	---	18.5	16.5	17.5	10.0	8.5	9.5	---	---	---
22	---	---	---	18.5	15.5	17.0	10.5	9.0	9.5	---	---	---
23	---	---	---	18.0	16.0	17.0	10.0	8.5	9.5	15.0	12.5	13.5
24	---	---	---	16.5	14.0	15.5	9.5	7.0	8.5	13.0	11.0	12.0
25	---	---	---	16.5	13.5	15.0	10.5	8.0	9.0	13.0	9.5	11.5
26	---	---	---	18.0	14.0	16.0	9.5	7.5	8.5	14.0	11.5	13.0
27	---	---	---	18.0	15.5	17.0	10.0	7.0	9.0	11.5	9.0	10.0
28	---	---	---	15.5	11.5	13.5	10.0	7.0	9.0	10.0	8.5	9.5
29	---	---	---	13.5	11.0	12.5	9.5	6.5	8.5	13.5	10.0	11.5
30	---	---	---	13.5	11.0	12.5	10.0	8.5	9.5	13.5	10.0	12.0
31	---	---	---	---	---	---	12.5	10.0	11.0	10.0	6.0	7.5
MONTH	---	---	---	20.0	11.0	15.5	19.5	6.5	12.5	16.5	3.5	10.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	6.0	4.5	5.0	12.0	9.5	10.5	19.5	16.0	18.0	24.5	19.5	21.5
2	4.5	3.5	4.0	13.5	9.0	11.5	18.5	16.0	17.5	---	---	---
3	4.5	3.0	3.5	15.5	10.5	13.5	19.5	17.0	18.5	---	---	---
4	5.0	2.5	4.0	15.5	13.0	15.0	21.5	19.0	20.0	---	---	---
5	6.0	3.0	4.5	20.5	15.5	18.0	20.5	13.0	16.5	27.0	23.0	25.5
6	7.5	6.0	6.5	21.0	14.0	19.0	16.5	12.5	14.5	26.5	24.0	25.0
7	12.5	7.5	9.5	14.0	9.0	11.0	---	---	---	25.5	23.5	24.5
8	15.5	11.5	13.0	11.0	7.0	9.5	20.5	15.0	17.5	26.5	23.0	25.0
9	17.5	13.5	15.5	10.5	8.0	9.5	22.5	17.0	20.0	27.0	23.5	25.5
10	19.0	16.0	17.5	12.0	7.5	10.0	23.5	19.0	21.0	---	---	---
11	18.5	14.0	15.5	13.5	9.0	11.5	23.5	20.5	22.0	---	---	---
12	14.0	11.5	13.0	16.0	10.5	13.5	22.5	20.5	21.5	---	---	---
13	15.0	11.0	13.0	18.5	14.0	16.0	24.0	20.0	22.0	---	---	---
14	16.5	12.5	14.5	20.0	16.0	18.0	25.0	22.0	23.5	---	---	---
15	15.5	13.5	15.0	21.0	17.5	19.5	22.0	18.0	20.0	---	---	---
16	14.0	11.0	12.5	20.5	17.0	19.0	21.0	17.5	19.5	---	---	---
17	14.0	9.5	12.0	21.5	18.0	19.5	22.5	18.0	20.5	---	---	---
18	15.5	11.0	13.5	20.0	15.5	17.5	26.5	21.0	23.5	---	---	---
19	17.5	14.5	16.0	16.5	13.0	15.0	27.5	24.0	25.5	---	---	---
20	18.5	14.5	16.5	15.5	12.5	14.5	25.5	24.0	25.0	---	---	---
21	20.5	15.0	18.0	17.0	11.0	14.0	27.0	22.5	24.5	---	---	---
22	21.0	17.0	19.5	18.5	14.0	16.0	25.5	21.0	23.5	---	---	---
23	22.0	18.5	20.0	19.0	16.0	17.5	23.0	18.5	21.0	---	---	---
24	19.5	17.0	18.5	19.5	17.5	18.5	24.0	20.0	22.0	---	---	---
25	20.5	18.5	19.5	19.0	14.5	16.0	25.0	20.0	22.5	---	---	---
26	20.5	19.0	19.5	14.5	11.5	12.0	25.0	21.5	23.5	29.0	26.5	27.5
27	20.5	19.0	20.0	12.0	11.0	11.5	25.5	22.0	23.5	29.5	26.0	28.0
28	19.0	13.5	15.5	14.5	10.0	12.0	27.5	23.0	24.5	32.5	27.5	29.0
29	13.5	10.5	11.5	15.5	12.5	14.0	24.0	19.5	21.5	34.0	27.0	30.0
30	---	---	---	20.5	15.5	18.0	22.0	17.5	20.5	32.5	23.5	28.5
31	---	---	---	19.0	15.5	17.5	---	---	---	31.5	24.5	28.0
MONTH	22.0	2.5	13.5	21.5	7.0	15.0	27.5	12.5	21.0	34.0	19.5	26.5

[illegible]

BRAZOS RIVER BASIN

08099100 LEON RIVER NEAR DE LEON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 32°10'25", long 98°31'58", Comanche County, Hydrologic Unit 12070201, on left bank at downstream end of bridge on State Highway 16, 1.5 mi upstream from Flat Creek, 4.4 mi northeast of De Leon, 6 mi downstream from Hog Creek, and 250.1 mi upstream from mouth.

DRAINAGE AREA.--479 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1960 to September 1985 (daily mean discharge). October 1985 to September 1995 (daily discharges greater than 600 ft³/s). October 1995 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,209.93 ft above sea level. Prior to Nov. 22, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow is regulated by Leon Reservoir (capacity 40,200 acre-ft), about 17.5 mi upstream. There are numerous diversions above station for municipal, steam powerplant operation, and other uses. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft³/s Apr. 26, 1990 (gage height, 19.00 ft, from floodmarks), from rating curve extended above 17,600 ft³/s; prior to Apr. 26, 1990, maximum discharge, 7,540 ft³/s June 21, 1968, (gage height, 15.50 ft); no flow for many days must years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 19.3 ft occurred in May 1908 at a point 2,000 ft downstream from present gage site and is the highest since that time, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 31	1615	1,530	10.44	Sept. 15	1900	2,320	12.5/
Aug. 29	0930	1,540	10.48	Sept. 19	2315	711	6.79

BRAZOS RIVER BASIN

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08099100 LEON RIVER NEAR DE LEON, TX
(Flood-hydrograph Partial-record Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1980 to September 1982, October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L)	HARDNESS TOTAL (MG/L AS CaCO3)	HARDNESS NONCARB DISSOLVED AS CaCO3 (MG/L)	
NOV 30...	0945	4.0	1810	7.7	6.0	16	0.80	11.2	95	1.2	560	280	
FEB 01...	1030	3.7	1760	8.1	0.5	13	1.2	14.0	103	--	530	260	
APR 09...	1415	14	1390	8.0	19.5	15	3.1	8.9	103	1.4	360	150	
MAY 15...	1015	1.4	1800	7.8	23.0	20	2.6	4.7	58	1.3	500	240	
JUN 19...	1155	1.4	1350	8.0	29.5	20	--	6.2	86	1.3	370	130	
AUG 29...	0855	1540	183	7.6	22.5	180	220	8.0	97	4.1	55	7	
DATE		CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)
NOV 30...	170	33	180	3	5.5	280	130	370	0.20	15	1070	1	
FEB 01...	160	32	170	3	4.1	270	130	340	0.20	8.7	1010	3	
APR 09...	100	26	140	3	5.1	210	96	260	0.30	7.0	758	12	
MAY 15...	150	31	170	3	5.7	260	130	360	0.40	16	1020	5	
JUN 19...	110	24	120	3	6.8	250	81	240	0.40	12	741	7	
AUG 29...	18	2.5	9.9	0.6	4.6	48	6.8	18	0.10	6.4	97	680	
DATE		RESIDUE VOLATILE, SUSPENDED (MG/L)	RESIDUE FIXED NON FILTERABLE (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	
NOV 30...		<1	--	--	--	<0.010	--	<0.050	<0.015	--	<0.20	0.030	
FEB 01...		1	2	--	--	<0.010	--	<0.050	<0.015	--	<0.20	0.010	
APR 09...		9	3	0.070	--	<0.010	0.070	0.070	<0.015	--	0.40	0.020	
MAY 15...		12	0	0.100	0.100	0.030	0.130	0.130	0.160	0.34	0.50	0.060	
JUN 19...		6	1	--	--	<0.010	--	<0.050	0.040	0.26	0.30	0.010	
AUG 29...		80	600	0.240	0.240	0.020	0.260	0.260	0.040	0.16	0.20	0.090	
DATE		PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	
NOV 30...		0.030	0.09	6.3	--	--	--	--	--	--	--	--	
FEB 01...		<0.010	--	3.5	<1	160	<0.50	<1.0	<5.0	<3.0	<10	49	
APR 09...		<0.010	--	6.6	--	--	--	--	--	--	--	--	
MAY 15...		0.060	0.18	5.5	2	200	<0.50	1.0	<5.0	<3.0	<10	4.0	
JUN 19...		0.030	0.09	5.7	--	--	--	--	--	--	--	--	
AUG 29...		0.080	0.25	22	1	41	<0.50	<1.0	<5.0	<3.0	<10	25	

BRAZOS RIVER BASIN

08099100 LEON RIVER NEAR DE LEON, TX--Continued
(Flood-hydrograph Partial-record Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 30...	--	--	--	--	--	--	--	--	--	--	--
FEB 01...	<10	26	130	<0.1	10	<10	<1	<1.0	1200	<6	5.0
APR 09...	--	--	--	--	--	--	--	--	--	--	--
MAY 15...	<10	26	330	<0.1	<10	<10	<1	<1.0	1100	<6	3.0
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	10	<4	1.0	<0.1	10	<10	<1	2.0	130	7	<3.0

BRAZOS RIVER BASIN

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08099300 SABANA RIVER NEAR DE LEON, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 32°06'50", long 98°36'19", Comanche County, Hydrologic Unit 12070201, on left bank at downstream end of bridge on Farm Road 587, 0.6 mi downstream from Spring Branch, 4.0 mi west of De Leon, 4.2 mi upstream from Turkey Creek, and 12.2 mi upstream from mouth.

DRAINAGE AREA.--264 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1960 to September 1985 (daily mean discharge). October 1985 to September 1995 (daily discharges greater than 250 ft³/s). October 1995 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,209.59 ft above sea level (levels by Texas Department of Transportation). Prior to Nov. 22, 1960, nonrecording gage at present site and datum.

REMARKS.--Records good. Flow may be slightly affected by Nabors Lake 0.4 mi upstream on Spring Branch. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s Apr. 26, 1990 (gage height, 23.65 ft), from floodmark, from rating curve extended above 17,000 ft³/s; prior to Apr. 26, 1990, maximum discharge, 10,400 ft³/s June 5, 1986, (gage height, 21.99 ft); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1890, 24 ft in May 1908, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 31	1400	1,820	14.36	Sept. 15	1430	4,310	19.62
Aug. 29	1530	2,590	17.03				

BRAZOS RIVER BASIN

08099300 SABANA RIVER NEAR DE LEON, TX
(Flood-hydrograph Partial-record Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
NOV 30...	1142	3.3	1270	8.0	8.0	14	1.5	10.9	97	1.6	460	170
FEB 01...	1215	2.6	1320	8.0	2.0	16	1.2	13.3	101	--	470	160
APR 09...	1710	13	1350	8.0	20.0	13	6.0	8.9	103	1.3	380	190
MAY 15...	1305	1.6	1460	7.9	23.0	30	12	4.5	56	1.4	460	170
JUN 19...	1525	1.6	856	8.1	28.0	30	--	8.8	119	3.8	280	80
AUG 29...	1250	2390	310	7.7	23.5	--	910	6.6	82	6.7	89	18

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)
NOV 30...	130	34	100	2	5.0	290	170	140	0.30	18	774	1
FEB 01...	130	35	110	2	3.8	310	200	150	0.30	15	830	2
APR 09...	96	35	130	3	5.0	200	150	220	0.40	5.7	761	15
MAY 15...	120	38	130	3	4.8	290	170	210	0.50	17	868	19
JUN 19...	75	22	66	2	6.3	200	75	110	0.40	13	486	4
AUG 29...	26	5.8	23	1	5.1	71	18	40	0.20	5.7	168	2190

DATE	RESIDUE VOLATILE, SUS- PENDED (MG/L)	RESIDUE FIXED NON FILTER- ABLE (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)
NOV 30...	5	0	0.060	--	<0.010	0.060	0.060	<0.015	--	0.20	<0.010
FEB 01...	1	1	0.330	--	<0.010	0.330	0.330	0.020	0.18	0.20	<0.010
APR 09...	8	7	0.110	--	<0.010	0.110	0.110	0.030	0.37	0.40	<0.010
MAY 15...	14	5	0.130	0.130	0.080	0.210	0.210	0.260	0.34	0.60	0.030
JUN 19...	8	0	--	--	<0.010	--	<0.050	0.020	0.38	0.40	<0.010
AUG 29...	200	1990	0.220	0.220	0.020	0.240	0.240	0.040	0.36	0.40	0.060

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 30...	<0.010	--	3.8	--	--	--	--	--	--	--	--
FEB 01...	<0.010	--	4.0	<1	96	<0.50	<1.0	<5.0	<3.0	<10	58
APR 09...	<0.010	--	5.9	--	--	--	--	--	--	--	--
MAY 15...	0.020	0.06	8.3	2	160	<0.50	<1.0	<5.0	<3.0	<10	3.0
JUN 19...	<0.010	--	9.0	--	--	--	--	--	--	--	--
AUG 29...	0.020	0.06	53	1	61	<0.50	<1.0	7.0	<3.0	<10	43

BRAZOS RIVER BASIN

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08099300 SABANA RIVER NEAR DE LEON, TX--Continued
(Flood-hydrograph Partial-record Station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 30...	--	--	--	--	--	--	--	--	--	--	--
FEB 01...	10	42	150	<0.1	<10	<10	<1	<1.0	1000	<6	<3.0
APR 09...	--	--	--	--	--	--	--	--	--	--	--
MAY 15...	<10	37	240	<0.1	<10	<10	<1	<1.0	1200	<6	4.0
JUN 19...	--	--	--	--	--	--	--	--	--	--	--
AUG 29...	<10	<4	1.0	<0.1	<10	<10	<1	2.0	210	<6	5.0

BRAZOS RIVER BASIN

08099400 PROCTOR LAKE NEAR PROCTOR, TX

LOCATION.--Lat 31°58'07", long 98°29'09", Comanche County, Hydrologic Unit 12070201, in intake structure at Proctor Lake on Leon River, 2.0 mi upstream from U.S. Highways 67 and 377, 3.5 mi west of Proctor, and 228.1 mi upstream from mouth.

DRAINAGE AREA.--1,259 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--January 1963 to current year. Prior to October 1970, published as Proctor Reservoir.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 28, 1963, non-recording gage at same site and datum.

REMARKS.--The lake is formed by a reinforced concrete gated structure and rolled earthfill dam, total length 13,460 ft. The lake was operated as a detention basin from Jan. 30 to July 5, 1963. The gates were closed July 6, 1963, but the lake was operated as a detention basin to elevation 1,156.0 ft 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 basin. The spillway is controlled by eleven 40.0- by 35.0-foot tainter gates. The spillway was designed to discharge 431,800 ft³/s at an elevation of 1,201.0 ft. The lake is operated for flood control and water conservation. Inflow is partly regulated by one major reservoir (see station 08099000). Inflow is also affected at times by discharge from the flood-detention pools of 23 floodwater-retarding structures with a combined detention capacity of 43,690 acre-ft. These structures control runoff from 172 mi² in the Leon River and Rush Creek drainage basins. Borrow is not included in capacity totals. Satellite telemeter at station. Figures given herein represent total contents. 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	429,200
Top of gates.....	1,197.0	370,400
Crest of spillway (top of conservation pool).....	1,162.0	55,590
Lowest gated outlet (invert).....	1,128.0	0

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by the Texas Water Development Board, was put into use beginning Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 383,100 acre-ft May 2, 1990 (elevation, 1,197.63 ft); minimum since first filling of lake, 18,900 acre-ft Oct. 4, 1984 (elevation, 1,149.37 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 71,770 acre-ft Sept. 18 (elevation, 1,165.25 ft); minimum daily, 48,710 acre-ft Aug. 14 (elevation, 1,160.43 ft).

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

1,157.0	35,410	1,172.0	113,100	1,184.0	214,300
1,158.0	38,990	1,175.0	134,900	1,186.0	235,100
1,161.0	51,150	1,178.0	158,900	1,188.0	257,000
1,164.0	62,260	1,181.0	185,400	1,190.0	280,100
1,168.0	87,370				

BRAZOS RIVER BASIN

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08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62250	57750	57430	57300	56710	56220	54980	55420	59480	59720	54060	68910
2	61630	57750	57430	57120	56710	56130	54890	55330	60230	59530	53800	65510
3	60880	57610	57430	56940	56710	56090	54850	55290	60740	59390	53540	65560
4	60370	57660	57430	57030	56580	56090	55200	55200	61910	59120	53200	65210
5	60040	57570	57430	57120	56620	56130	56040	55240	63390	58890	52940	64600
6	59900	57610	57390	56980	56620	56490	56260	55290	64690	58660	52770	63750
7	59810	57610	57300	56890	56670	55950	56530	55240	65230	58380	52510	62950
8	59760	57520	57520	56890	56710	55860	56620	55240	65330	58160	52640	62110
9	59760	57480	57210	56890	56760	55770	56670	55070	64790	57840	52470	61330
10	59720	57790	57070	56980	56940	55640	56670	55200	64110	57610	52860	60500
11	59720	57430	57070	56890	56710	55640	56620	55070	63390	57660	49180	59730
12	59670	57300	57120	56850	56670	55600	56710	54980	62670	57700	49050	59010
13	59620	57300	57120	56850	56620	55550	56670	54760	62250	57570	48880	58580
14	59350	57300	57120	56850	56670	55640	56710	54670	62150	57480	48710	58210
15	59250	57250	57120	56850	56670	55600	56490	54500	62060	57430	52220	62010
16	59070	57210	57120	56800	56530	55550	56350	54280	61910	57160	53330	69330
17	58980	57700	57250	57300	56530	55690	56260	54060	61770	56940	53670	71660
18	58840	57750	57480	56890	56490	55550	56310	53890	61630	56800	53670	71770
19	58700	57750	57160	56760	56490	55330	56310	53670	61440	56580	53670	71560
20	58520	57790	57120	56800	56490	55240	56170	53630	61300	56400	53590	71340
21	58380	57790	57120	56760	56440	55160	56040	53460	61070	56170	53500	70970
22	58160	57790	57120	56760	56400	55020	56350	53240	60930	56000	53330	70490
23	58110	57750	57120	56850	56400	54940	56260	53030	60690	55730	49610	69860
24	57970	57660	57070	56760	56350	55160	56130	52810	60550	55550	49570	69070
25	57840	57610	57070	56710	56350	54980	56130	52560	60320	55290	49520	68180
26	57750	57610	57070	56760	56350	54890	56000	52510	60510	55110	53160	67610
27	57700	57700	57070	56620	56400	55110	55910	52390	60320	55110	53160	66630
28	57570	57520	56980	56670	56350	55070	56090	52260	60130	54890	54240	65710
29	57390	57480	56940	56670	56220	55070	55690	52300	59990	54670	60690	64850
30	57430	57430	57030	56760	---	55240	55470	53590	59850	54500	66810	63950
31	57570	---	57030	56620	---	55020	---	55950	---	54240	68300	---
MAX	62250	57790	57520	57300	56940	56490	56710	55950	65330	59720	68300	71770
MIN	57390	57210	56940	56620	56220	54890	54850	52260	59480	54240	48710	58210
(+)	1161.6	1161.6	1161.5	1162.2	1162.1	1161.9	1162.0	1162.1	1162.1	1160.7	1163.8	1162.9
(@)	-5390	-140	-400	-410	-400	-1200	+450	+480	+3900	-5610	+14060	-4350

CAL YR 1995 MAX 126500 MIN 56220 (@) -3990
WTR YR 1996 MAX 71770 MIN 48710 (@) +990

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre feet.

BRAZOS RIVER BASIN

08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1964 to July 1982, January 1990 to current year.

REVISED RECORDS.--WDR TX-93-2: Phytoplankton.

315814098291201 - PROCTOR LAKE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
JAN										
11...	0910	56900	1.00	586	8.1	6.0	0.61	11.1	92	54
11...	0912	--	10.0	585	8.1	6.0	--	11.1	92	--
11...	0914	--	20.0	586	8.1	6.0	--	11.2	93	--
11...	0916	--	27.0	584	8.1	6.0	--	11.3	94	--
MAY										
01...	0918	55500	1.00	710	8.3	19.0	0.40	7.2	81	K2
01...	0920	--	10.0	710	8.3	18.5	--	7.2	80	--
01...	0922	--	20.0	710	8.3	18.5	--	7.2	80	--
01...	0924	--	27.0	711	8.3	18.5	--	7.1	79	--
AUG										
13...	0918	48900	1.00	692	7.9	28.5	0.52	5.1	68	4
13...	0920	--	10.0	691	7.8	28.5	--	4.7	63	--
13...	0922	--	17.0	694	7.7	28.5	--	3.8	51	--
13...	0924	--	24.0	695	7.5	28.5	--	2.0	27	--

DATE	STREP- TOCOCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)
JAN									
11...	29	190	61	52	15	43	1	6.8	130
11...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
11...	--	190	61	53	15	42	1	7.3	130
MAY									
01...	K2	220	73	59	18	54	2	7.3	150
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	220	70	59	18	55	2	7.4	150
AUG									
13...	2	180	66	44	18	58	2	8.1	120
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	180	63	44	18	59	2	8.2	120

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
JAN									
11...	40	76	0.30	4.2	316	0.060	0.060	0.010	0.070
11...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
11...	40	76	0.30	4.2	318	0.070	0.070	0.010	0.080
MAY									
01...	59	92	0.30	3.3	382	--	--	0.010	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	59	91	0.30	3.3	384	--	--	0.010	--
AUG									
13...	54	110	0.30	4.1	367	--	--	0.010	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	0.010	--
13...	54	100	0.30	4.5	362	--	--	0.010	--

08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

315814098291201 - PROCTOR LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN									
11...	0.070	0.050	0.35	0.40	<0.010	<0.010	--	<10	<10
11...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
11...	0.080	0.050	0.55	0.60	<0.010	<0.010	--	<10	<10
MAY									
01...	<0.050	0.110	0.39	0.50	0.020	0.010	0.03	<3.0	1.0
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	<0.050	0.110	0.39	0.50	0.020	0.010	0.03	<3.0	8.0
AUG									
13...	<0.050	0.020	0.38	0.40	<0.010	0.010	0.03	<3.0	14
13...	--	--	--	--	--	--	--	--	--
13...	<0.050	0.030	0.37	0.40	<0.010	0.010	0.03	<3.0	21
13...	<0.050	0.150	0.45	0.60	0.030	0.030	0.09	<3.0	670

315823098282801 - PROCTOR LAKE SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
11...	0949	1.00	576	8.1	6.0	10.9	91
11...	0951	10.0	576	8.1	6.0	10.9	91
11...	0953	20.0	576	8.1	6.0	11.0	92
11...	0955	28.0	575	8.1	6.0	11.2	93
MAY							
01...	0902	1.00	711	8.3	19.0	7.4	83
01...	0904	10.0	711	8.3	19.0	7.1	80
01...	0906	20.0	710	8.3	18.5	7.1	79
01...	0908	27.0	711	8.2	18.5	6.9	77
AUG							
13...	0901	1.00	690	7.9	28.0	5.1	67
13...	0903	10.0	689	7.9	28.0	5.1	67
13...	0905	20.0	693	7.6	28.0	3.3	44
13...	0907	25.0	694	7.4	28.0	1.5	20

315832098302301 - PROCTOR LAKE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
11...	0926	1.00	607	8.2	6.0	11.6	96
11...	0928	10.0	609	8.2	6.0	11.5	95
11...	0930	17.0	621	8.2	6.0	11.6	96
MAY							
01...	0935	1.00	729	8.3	19.0	7.3	82
01...	0937	10.0	730	8.3	19.0	7.0	79
01...	0939	17.0	729	8.3	19.0	6.8	77
AUG							
13...	0942	1.00	691	8.1	28.0	6.0	79
13...	0944	10.0	690	8.0	28.0	5.6	74
13...	0946	16.0	694	7.4	28.0	1.7	22

BRAZOS RIVER BASIN

08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

315837098314201 - PROCTOR LAKE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
11...	0935	1.00	723	8.2	6.5	11.2	94
11...	0937	6.00	714	8.2	6.5	11.4	96
MAY							
01...	0948	1.00	771	8.4	18.0	7.9	87
01...	0950	6.00	776	8.4	18.0	7.4	82
AUG							
13...	0954	1.00	669	7.9	28.0	5.0	66
13...	0956	6.00	670	7.8	28.0	4.2	55

3159430982/3101 - PROCTOR LAKE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
11...	1041	1.00	578	8.2	6.5	11.5	97
11...	1043	10.0	581	8.2	6.5	11.9	100
MAY							
01...	1044	1.00	719	8.5	19.0	8.7	98
01...	1046	10.0	721	8.5	18.0	7.6	84
AUG							
13...	0850	1.00	689	7.6	27.0	3.1	40
13...	0852	9.00	690	7.5	27.0	2.9	38

315924098285501 - PROCTOR LAKE SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRAN- SPAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)
JAN											
11...	1004	1.00	600	8.3	6.0	0.61	11.7	97	K8	K9	180
11...	1006	10.0	601	8.3	6.0	--	11.7	97	--	--	--
11...	1008	20.0	602	8.3	6.0	--	11.8	98	--	--	200
MAY											
01...	1008	1.00	727	8.4	19.0	0.40	7.6	86	<1	K4	230
01...	1010	10.0	726	8.4	19.0	--	7.4	83	--	--	--
01...	1012	19.0	758	8.4	19.0	--	7.4	83	--	--	240
AUG											
13...	1017	1.00	686	8.2	28.5	0.55	6.4	85	4	3	180
13...	1019	6.00	691	7.8	28.0	--	3.9	52	--	--	--
13...	1021	10.0	692	7.6	28.0	--	3.2	42	--	--	--
13...	1023	18.0	693	7.5	28.0	--	2.4	32	--	--	190

DATE	HARD- NESS NONCARB DISSOLV F.D. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
JAN											
11...	44	48	14	28	0.9	5.2	130	29	44	0.30	7.1
11...	--	--	--	--	--	--	--	--	--	--	--
11...	63	55	14	44	1	7.1	130	41	78	0.30	4.3
MAY											
01...	75	61	18	57	2	7.2	150	61	96	0.30	3.2
01...	--	--	--	--	--	--	--	--	--	--	--
01...	84	64	19	58	2	6.7	150	63	99	0.30	3.1
AUG											
13...	67	43	18	59	2	8.0	120	54	110	0.30	4.1
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	66	45	18	58	2	8.1	120	54	110	0.30	4.3

BRAZOS RIVER BASIN

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08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

315924098285501 - PROCTOR LAKE SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN											
11...	256	<0.010	<0.050	<0.015	--	0.50	<0.010	<0.010	--	<10	<10
11...	--	--	--	--	--	--	--	--	--	--	--
11...	323	0.010	<0.050	<0.015	--	0.40	0.010	<0.010	--	<10	<10
MAY											
01...	394	0.010	<0.050	0.060	0.34	0.40	<0.010	<0.010	--	<3.0	2.0
01...	--	--	--	--	--	--	--	--	--	--	--
01...	406	<0.010	<0.050	0.070	0.33	0.40	0.010	0.010	0.03	<3.0	19
AUG											
13...	365	0.010	<0.050	0.030	0.37	0.40	<0.010	<0.010	--	<3.0	2.0
13...	--	0.010	<0.050	0.020	0.38	0.40	<0.010	<0.010	--	<3.0	2.0
13...	--	--	--	--	--	--	--	--	--	--	--
13...	371	0.010	<0.050	0.110	0.39	0.50	0.030	0.010	0.03	<3.0	46

320040098293501 - PROCTOR LAKE SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)
JAN											
11...	1020	1.00	703	8.5	5.5	0.61	12.2	100	K1	K1	230
11...	1022	9.00	703	8.4	5.5	--	12.4	102	--	--	230
MAY											
01...	1024	1.00	864	8.5	18.5	0.27	8.5	95	K1	<1	270
01...	1026	9.00	874	8.4	18.5	--	7.3	81	--	--	270
AUG											
13...	1040	1.00	690	8.1	28.5	0.24	6.2	83	2	2	180
13...	1042	4.00	690	7.7	27.5	--	3.8	50	--	--	--
13...	1044	8.00	691	7.5	27.5	--	2.5	33	--	--	180

DATE	HARD- NESS NONCARB DISSOLV FID. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
JAN											
11...	77	65	16	54	2	6.6	150	53	97	0.20	5.2
11...	80	65	16	55	2	6.5	150	52	98	0.20	5.2
MAY											
01...	96	74	20	71	2	7.3	170	75	120	0.30	2.7
01...	96	74	20	71	2	6.6	170	76	120	0.30	2.7
AUG											
13...	68	44	16	60	2	8.2	110	53	100	0.30	4.8
13...	--	--	--	--	--	--	--	--	--	--	--
13...	70	45	17	60	2	8.1	110	53	110	0.30	4.9

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN											
11...	388	<0.010	<0.050	<0.015	--	0.30	0.020	<0.010	--	<10	<10
11...	387	<0.010	<0.050	<0.015	--	0.40	0.010	<0.010	--	<10	<10
MAY											
01...	473	<0.010	<0.050	<0.015	--	0.30	0.010	<0.010	--	<3.0	<1.0
01...	473	<0.010	<0.050	<0.015	--	0.30	0.010	0.010	0.03	<3.0	3.0
AUG											
13...	351	0.010	<0.050	0.030	0.57	0.60	0.030	0.030	0.09	<3.0	1.0
13...	--	0.010	<0.050	0.030	0.47	0.50	<0.010	0.020	0.06	<3.0	4.0
13...	366	0.010	<0.050	0.100	0.40	0.50	0.020	0.030	0.09	<3.0	14

08099400 PROCTOR LAKE NEAR PROCTOR, TX

Proctor Lake Site AC (315814098291201)

Phytoplankton Analyses October 1995 to September 1996

Date	1-11-96
Time	0910

TOTAL CELLS/mL	42,885
NUMBER OF SPECIES	16
DEPTH COLLECTED (ft.)	1.0

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
<i>Cocconeis placentula</i> var. <i>placentula</i>	218
<i>Navicula</i> sp.	436
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	1,636
<i>Chlamydomonas</i> sp.	30
<i>Cosmarium</i> sp.	238
<i>Oocystis</i> sp.	89
<i>Pediastrum duplex</i>	89
<i>Scenedesmus bijuga</i>	208
<i>Scenedesmus opoliensis</i>	535
<i>Scenedesmus quadricauda</i>	30
<i>Selenastrum Westii</i>	178
<i>Staurastrum</i> sp.	357
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	37,472
<i>Chroococcus limneticus</i>	1,071
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	268
CRYPTOPHYTA	
<i>Cryptomonas erosa</i>	30

BRAZOS RIVER BASIN

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08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

Proctor Lake Site FC (320040098293501)

Phytoplankton Analyses October 1995 to September 1996

Date	1-11-96
Time	1020
<hr/>	
TOTAL CELLS/mL	29,381
NUMBER OF SPECIES	15
DEPTH COLLECTED (ft.)	1.0
<hr/>	

<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA	
Order Pennales	
<i>Cocconeis placentula</i> var. <i>placentula</i>	268
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	3,836
<i>Chlamydomonas</i> sp.	149
<i>Cosmarium</i> sp.	89
<i>Micractinium pusillum</i> var. <i>elegans</i>	59
<i>Pediastrum duplex</i>	59
<i>Scenedesmus bijuga</i>	119
<i>Scenedesmus opoliensis</i>	89
<i>Selenastrum Westii</i>	89
<i>Staurastrum</i> sp.	535
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	22,602
<i>Chroococcus limneticus</i>	238
EUGLENOPHYTA	
<i>Euglena elastica</i>	119
<i>Euglena elongata</i>	565
<i>Trachelomonas</i> sp.	565

08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

Proctor Lake Site AC (315814098291201)

Phytoplankton Analyses October 1995 to September 1996

Date	5-1-96
Time	918

TOTAL CELLS/mL	11,390
NUMBER OF SPECIES	16
DEPTH COLLECTED (ft.)	0.65

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
<i>Cyclotella ocellata</i>	89
<i>Stephanodiscus astraea</i>	268
Order Pennales	
<i>Synedra ulna</i> var. <i>ulna</i>	149
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	119
<i>Cosmarium</i> sp.	59
<i>Crucigenia crucifera</i>	149
<i>Micractinium pusillum</i> var. <i>elagans</i>	119
<i>Oocystis</i> sp.	59
<i>Scenedesmus bijuga</i>	89
<i>Scenedesmus opoliensis</i>	89
<i>Scenedesmus quadricauda</i>	595
<i>Selenastrum Westii</i>	30
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	4,758
<i>Aphanocapsa elachista</i>	2,379
<i>Aphanothece nidulans</i>	1,487
<i>Merismopedia tenuissima</i>	952

BRAZOS RIVER BASIN

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08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

Proctor Lake Site FC (320040098293501)

Phytoplankton Analyses October 1995 to September 1996

Date	5-1-96
Time	1024

TOTAL CELLS/mL	9,843
NUMBER OF SPECIES	17
DEPTH COLLECTED (ft.)	0.45

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
<i>Cyclotella ocellata</i>	37
<i>Melosira varians</i>	74
<i>Stephanodiscus astraea</i>	37
Order Pennales	
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	102
<i>Navicula halophila</i> var. <i>halophila</i>	102
<i>Synedra ulna</i> var. <i>ulna</i>	34
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	119
<i>Crucigenia crucifera</i>	149
<i>Micractinium pusillum</i> var. <i>elegans</i>	119
<i>Oocystis</i> sp.	59
<i>Scenedesmus bijuga</i>	89
<i>Scenedesmus opoliensis</i>	89
<i>Scenedesmus quadricauda</i>	595
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	4,758
<i>Aphanocapsa elachista</i>	2,379
<i>Merismopedia tenuissima</i>	952
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	149

08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

Proctor Lake Site AC (315814098291201)

Phytoplankton Analyses October 1995 to September 1996

Date	8-13-96
Time	0918

TOTAL CELLS/mL	90,499
NUMBER OF SPECIES	18
DEPTH COLLECTED (ft.)	0.85

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
<i>Cyclotella ocellata</i>	238
Order Pennales	
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	438
<i>Pinnularia parvula</i> var. <i>parvula</i>	34
<i>Tabellaria fenestrata</i> var. <i>fenestrata</i>	34
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	1,606
<i>Chlamydomonas</i> sp.	149
<i>Cosmarium</i> sp.	59
<i>Pediastrum duplex</i>	59
<i>Scenedesmus bijuga</i>	89
<i>Scenedesmus opoliensis</i>	30
<i>Scenedesmus quadricauda</i>	30
CYANOPHYTA	
<i>Aphanizomenon flos-aquae</i>	38,959
<i>Aphanocapsa delicatissima</i>	23,197
<i>Aphanocapsa elachista</i>	5,353
<i>Chroococcus limneticus</i>	476
<i>Merismopedia tenuissima</i>	18,082
CHRYSTOPHYTA	
<i>Mallomonas</i> sp.	30
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	1,636

BRAZOS RIVER BASIN

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08099400 PROCTOR LAKE NEAR PROCTOR, TX--Continued

Proctor Lake Site FC (320040098293501)

Phytoplankton Analyses October 1995 to September 1996

Date	8-13-96
Time	1040

TOTAL CELLS/mL	92,670
NUMBER OF SPECIES	17
DEPTH COLLECTED (ft.)	0.40

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
<i>Cyclotella ocellata</i>	89
Order Pennales	
<i>Cocconeis placentula</i> var. <i>placentula</i>	12
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	649
<i>Gomphonema</i> sp.	12
<i>Navicula</i> sp.	12
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	2,558
<i>Chlamydomonas</i> sp.	297
<i>Cosmarium</i> sp.	30
<i>Pediastrum duplex</i>	89
<i>Scenedesmus bijuga</i>	59
<i>Scenedesmus opoliensis</i>	59
CYANOPHYTA	
<i>Aphanizomenon flos-aquae</i>	43,123
<i>Aphanocapsa delicatissima</i>	14,870
<i>Aphanocapsa elachista</i>	2,974
<i>Chroococcus limneticus</i>	357
<i>Merismopedia tenuissima</i>	26,171
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	1,309

BRAZOS RIVER BASIN

08099500 LEON RIVER NEAR HASSE, TX

LOCATION.--Lat 31°51'28", long 98°27'32", Comanche County, Hydrologic Unit 120/0201, at left bank near upstream end of bridge on U.S. Highways 67 and 377, 500 ft upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 0.3 mi upstream from Walnut Creek, 2.0 mi downstream from Proctor Lake, 2.1 mi northeast of Hasse, and 225.2 mi upstream from mouth.

DRAINAGE AREA.--1,261 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1980 to September 1982, October 1990 to current year.
Surface-water--January 1939 to September 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 11...	1205	30	701	8.1	8.5	28	21	11.3	100	220	65	58
MAY 01...	1230	54	802	8.1	20.0	20	19	7.7	88	240	78	64
AUG 13...	1133	78	701	7.6	27.5	20	4.1	6.0	79	180	45	45
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L)
JAN 11...	17	49	1	6.7	150	51	96	0.30	4.8		374	43
MAY 01...	19	61	2	6.2	160	67	110	0.30	4.1		429	49
AUG 13...	17	58	2	8.1	140	55	110	0.30	4.1		382	56
DATE		RESIDUE VOLA-TILE, SUS-PENDE (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
JAN 11...	/	36	0.110	--	<0.010	0.110	0.110	0.110	0.030	0.47	0.50	0.010
MAY 01...	19	30	0.080	0.080	0.010	0.090	0.090	0.090	0.020	0.38	0.40	0.010
AUG 13...	9	47	0.210	0.210	0.020	0.230	0.230	0.230	0.060	0.44	0.50	0.040
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS P04)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
JAN 11...	<0.010	--	8.5	1	91	<0.50	<1.0	<5.0	<3.0	<10	<3.0	
MAY 01...	0.010	0.03	8.0	1	110	<0.50	<1.0	<5.0	<3.0	<10	4.0	
AUG 13...	0.020	0.06	10	2	100	1.0	2.0	6.0	3.0	<10	4.0	
DATE		LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
JAN 11...	<10	9	44	<0.1	<10	<10	<1	<1.0	420		<6	<3.0
MAY 01...	10	9	8.0	<0.1	10	<10	<1	<1.0	490		<6	<3.0
AUG 13...	<10	7	13	<0.1	10	<10	<1	<1.0	430		<6	10

08100000 LEON RIVER NEAR HAMILTON, TX

LOCATION.--Lat 31°47'19", long 98°07'16", Hamilton County, Hydrologic Unit 12070201, at downstream side of bridge on U.S. Highway 281, 2.2 mi upstream from Mesquite Creek, 3.6 mi downstream from Bear Creek, 5.9 mi north of Hamilton, and 172.9 mi upstream from mouth.

DRAINAGE AREA.--1,891 mi².

PERIOD OF RECORD.--January 1925 to September 1931, September 1960 to current year.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.38 ft above sea level. Jan. 7, 1925, to Sept. 30, 1931, nonrecording gage 1.4 mi downstream at datum 1.87 ft higher. Sept. 1 to Nov. 22, 1960, nonrecording gage at same site and at 5.00-foot higher datum. Nov. 22, 1960 to Sept. 30, 1972, recording gage at same site and at 5.00-foot higher datum.

REMARKS.--Records good. Since 1960 this station has been regulated by Proctor Lake (station 08099400) 54 miles upstream and by several other smaller reservoirs. There are numerous diversions above station for irrigation, municipal supply, and for industrial uses. Flow is affected at times by discharge from the flood-detention pools of 14 floodwater-retarding structures with a combined detention capacity of 11,610 acre-ft. These structures control runoff from 43.9 mi². Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION 9 years (water years 1926-31, 1961-63) prior to regulation by Proctor Lake 148 ft³/s (107,500 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1926-31, 1961-63).--Maximum discharge, 18,600 ft³/s Sept. 9, 1962 (gage height, 26.93 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1858, 38.4 ft in May 1908 and December 1913; flood in September 1911 reached a stage of 37.0 ft, all at present site and datum, from information by local residents. The flood in October 1959 reached a stage of 34.1 ft, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	66	51	53	45	33	35	24	876	7.2	25	1100
2	414	97	52	53	46	34	30	20	280	4.6	20	841
3	407	94	53	52	48	38	29	14	162	1.7	6.7	662
4	414	65	50	52	48	37	25	9.3	488	.86	6.3	536
5	391	58	48	52	49	35	141	4.2	681	.33	3.9	499
6	228	58	45	50	49	35	390	9.6	207	.42	1.9	557
7	149	57	48	49	50	33	238	18	1260	.31	1.2	537
8	111	52	51	48	51	31	128	27	703	3.8	.99	512
9	95	50	46	49	51	34	97	17	286	2.0	1.5	491
10	84	51	46	49	51	35	78	15	251	1.6	26	469
11	77	49	48	46	47	36	68	12	395	1.2	105	451
12	73	47	50	38	42	36	62	11	396	.95	86	431
13	72	47	52	42	45	30	57	8.7	389	1.8	77	400
14	70	48	52	43	42	27	55	12	374	1.7	66	360
15	83	48	50	42	38	24	47	9.4	169	10	63	326
16	83	46	43	42	34	23	43	2.6	76	18	55	437
17	83	57	49	46	33	24	41	.53	63	24	215	e475
18	79	71	82	46	34	19	41	1.9	52	15	137	e510
19	78	95	72	49	35	20	37	12	44	7.3	76	544
20	76	87	64	52	34	25	31	4.5	35	3.0	62	552
21	72	70	59	50	35	32	33	1.3	24	3.3	56	553
22	72	64	57	48	33	31	36	2.7	17	4.2	48	554
23	72	60	54	49	30	25	39	3.6	13	2.3	44	e530
24	70	56	54	49	26	24	51	1.6	8.0	1.4	58	e520
25	74	56	53	46	26	26	48	1.4	7.0	1.0	86	524
26	71	55	52	51	28	24	41	.52	6.5	.79	60	515
27	68	55	52	58	33	32	33	.08	4.7	1.2	58	505
28	58	52	52	58	36	38	31	.01	2.0	1.2	57	499
29	51	50	52	54	34	46	27	.61	20	1.4	5500	486
30	54	50	52	48	---	48	27	7.9	16	19	4560	471
31	61	---	53	44	---	43	---	843	---	32	1120	---
TOTAL	4277	1811	1642	1508	1153	978	2039	1095.45	7305.2	173.56	12682.49	15847
MEAN	138	60.4	53.0	48.6	39.8	31.5	68.0	35.3	244	5.60	409	528
MAX	487	97	82	58	51	48	390	843	1260	32	5500	1100
MIN	51	46	43	38	26	19	25	.01	2.0	.31	.99	326
AC-FT	8480	3590	3260	2990	2290	1940	4040	2170	14490	344	25160	31430

BRAZOS RIVER BASIN

08100000 LEON RIVER NEAR HAMILTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996#, BY WATER YEAR (WY)

MEAN	84.2	85.3	142	140	187	179	266	505	393	257	166	138
MAX	719	823	2581	1839	2121	1036	1524	4284	1780	1395	1298	961
(WY)	1965	1992	1992	1992	1992	1992	1995	1990	1990	1992	1995	1986
MIN	.044	.041	.040	1.49	1.43	.58	.38	1.16	2.09	.26	3.76	2.41
(WY)	1968	1983	1979	1981	1981	1986	1984	1984	1971	1964	1981	1969

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1964 - 1996#	
ANNUAL TOTAL	193810		50511.70		212	
ANNUAL MEAN	531		138		1219	
HIGHEST ANNUAL MEAN					1992	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	9080	Apr 5	5500	Aug 29	21200	Dec 21 1991
LOWEST DAILY MEAN	19	Jul 30	.01	May 28	.00	Oct 16 1963
ANNUAL SEVEN-DAY MINIMUM	43	Jul 24	1.1	May 23	.00	Oct 16 1963
INSTANTANEOUS PEAK FLOW			8590	Aug 29	32100	Dec 20 1991
INSTANTANEOUS PEAK STAGE			28.22	Aug 29	35.02	Dec 20 1991
ANNUAL RUNOFF (AC-FT)	384400		100200		153600	
10 PERCENT EXCEEDS	1150		433		570	
50 PERCENT EXCEEDS	254		48		17	
90 PERCENT EXCEEDS	52		3.5		.79	

e Estimated

Period of regulated streamflow.

08100500 LEON RIVER AT GATESVILLE, TX

LOCATION.--Lat 31°25'58", long 97°45'42", Coryell County, Hydrologic Unit 12070201, on right bank at upstream side of county road bridge, 800 ft downstream from U.S. Highway 84 bridge in Gatesville, 0.3 mi downstream from Dodds Creek, 5.2 mi upstream from Cottonwood Creek, and 99.0 mi upstream from mouth.

DRAINAGE AREA.--2,342 mi².

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 723.85 ft above sea level. Oct. 1, 1950 to Feb. 8, 1951, nonrecording gage and Feb. 9, 1951 to Jan. 21, 1969, water-stage recorder at site 800 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Some upstream regulation by Proctor Lake (08099400) since July 6, 1963, and other smaller reservoirs. Flow at times is slightly affected by discharge from 18 floodwater-retarding structures with a combined detention capacity of 12,600 acre-ft. These structures control runoff from 47.0 mi² in the northeast tributaries and Pecan Creek drainage basins. There are numerous diversions above station for irrigation, municipal supply, and oil field operation. The city of Hamilton, located about 70 mi upstream from this station, diverts flow from the river for municipal use and returns wastewater effluent to the stream. The city of Gatesville obtains all of their municipal water supply from ground-water wells, but discharges wastewater effluent back to the Leon River downstream from this station. Recording rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--13 years, (water year 1951-1963), 267 ft³/s (193,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1951-1963).--Maximum discharge, 51,200 ft³/s Oct. 4, 1959 (gage height, 34.14 ft), from rating curve extended above 41,000 ft³/s; no flow at times in 1951-52 and 1954-55.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1854, about 35 ft in May 1908, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	548	76	65	79	90	67	76	43	712	18	4.8	6030
2	538	76	65	78	87	71	77	41	860	16	4.8	1900
3	484	80	63	78	85	70	74	40	454	20	5.0	1400
4	452	104	61	80	86	67	69	40	247	21	4.7	2060
5	452	132	63	77	88	70	87	39	448	16	7.3	1160
6	450	100	63	78	89	72	82	48	587	15	13	768
7	402	86	60	75	93	68	227	37	558	13	10	737
8	298	79	64	78	94	65	353	33	1330	12	9.8	733
9	221	77	65	78	92	62	229	32	1180	9.9	9.1	694
10	173	76	64	79	96	62	145	34	454	9.7	7.8	654
11	145	71	61	79	96	62	107	39	272	8.4	8.7	617
12	127	70	67	77	94	64	88	37	306	17	13	533
13	118	69	70	77	96	66	78	33	387	11	13	513
14	106	68	71	75	93	68	70	32	383	7.7	52	493
15	101	67	74	72	90	69	64	30	376	24	54	820
16	95	65	75	71	88	65	61	28	327	23	46	831
17	106	79	74	73	87	62	58	27	159	16	41	581
18	112	82	80	77	86	58	55	28	92	11	40	464
19	112	79	89	77	81	57	52	25	73	8.8	139	469
20	104	83	94	82	77	56	50	23	64	9.8	129	691
21	99	104	97	79	81	53	50	19	56	16	72	1000
22	95	109	85	81	85	54	55	15	49	15	47	881
23	92	92	83	84	82	59	51	20	43	12	38	700
24	86	82	82	85	81	64	51	22	37	11	35	659
25	85	77	78	87	80	63	50	17	32	11	386	637
26	87	74	75	87	74	59	50	15	29	10	309	634
27	90	72	74	86	69	63	56	19	26	8.3	160	636
28	90	69	75	82	67	68	54	19	22	6.5	116	616
29	85	69	76	91	65	69	49	15	20	7.4	230	599
30	83	68	80	99	---	76	43	17	20	7.2	6060	584
31	76	---	79	99	---	74	---	328	---	6.2	9940	---
TOTAL	6112	2435	2272	2500	2472	2003	2611	1195	9603	397.9	18005.0	29094
MEAN	197	81.2	73.3	80.6	85.2	64.6	87.0	38.5	320	12.8	581	970
MAX	548	132	97	99	96	76	353	328	1330	24	9940	6030
MIN	76	65	60	71	65	53	43	15	20	6.2	4.7	464
AC-FT	12120	4830	4510	4960	4900	3970	5180	2370	19050	789	35710	57710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1996#, BY WATER YEAR (WY)

	114	128	241	208	328	311	411	732	549	310	193	179
MEAN	114	128	241	208	328	311	411	732	549	310	193	179
MAX	714	907	4580	2517	3752	1939	2134	4899	2191	1472	1497	970
(WY)	1965	1992	1992	1992	1992	1992	1995	1990	1987	1992	1995	1996
MIN	.42	1.18	.39	1.50	5.02	7.06	.64	4.66	2.22	.17	.041	.000
(WY)	1979	1979	1984	1984	1984	1986	1984	1984	1978	1978	1984	1984

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1964 - 1996#
ANNUAL TOTAL	273241	78699.9	
ANNUAL MEAN	749	215	308
HIGHEST ANNUAL MEAN			1758
LOWEST ANNUAL MEAN			6.22
HIGHEST DAILY MEAN	9360	9940	49100
LOWEST DAILY MEAN	60	4.7	.00
ANNUAL SEVEN-DAY MINIMUM	63	5.7	.00
INSTANTANEOUS PEAK FLOW		10800	68000
INSTANTANEOUS PEAK STAGE		26.94	35.00
ANNUAL RUNOFF (AC-FT)	542000	156100	223500
10 PERCENT EXCEEDS	1460	519	768
50 PERCENT EXCEEDS	511	75	41
90 PERCENT EXCEEDS	76	15	1.9

Period of reported streamflow.

08100600 LEON RIVER AT NORTH FORT HOOD, TX

LOCATION.--Lat 31°23'01", long 97°42'06", Coryell County, on downstream side of State Highway 36, 9.8 mi downstream from City of Gatesville Wastewater Disposal Plant.

DRAINAGE AREA.--2,416 mi.².

PERIOD OF RECORD.-- Chemical and biochemical analyses; December 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
DEC 04...	1054	63	995	8.0	13.0	18	9.1	8.5	83	1.0	370	79
JAN 10...	1300	66	1020	8.2	4.5	18	1.6	13.7	109	1.0	390	94
FEB 21...	0940	60	998	7.7	13.0	8	4.1	9.8	96	1.1	360	90
APR 23...	1103	57	938	7.7	20.0	30	11	6.0	67	1.4	310	86
JUN 11...	1330	377	265	7.3	24.0	50	--	7.2	88	3.3	110	15
AUG 12...	1623	11	683	7.8	29.0	35	4.1	6.5	87	0.6	190	33
DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)
DEC 04...	90	35	63	1	5.6	290	72	100	0.40	11	556	23
JAN 10...	91	40	68	1	4.4	300	83	100	0.60	9.0	580	10
FEB 21...	81	37	70	2	4.8	270	86	110	0.50	2.7	556	25
APR 23...	69	34	70	2	7.1	230	86	110	0.50	8.4	525	22
JUN 11...	32	6.6	8.5	0.4	5.3	92	11	12	0.30	9.0	143	512
AUG 12...	48	17	54	2	8.3	160	41	87	1.1	6.0	367	17
DATE	RESIDUE VOLATILE, SUS- PENDED (MG/L)	RESIDUE FIXED NON FILTER- ABLE (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	
DEC 04...	8	15	0.700	0.700	0.020	0.720	0.720	0.050	0.35	0.40	0.200	
JAN 10...	<1	--	1.08	1.08	0.020	1.10	1.10	0.080	0.22	0.30	0.150	
FEB 21...	7	18	0.600	0.600	0.020	0.620	0.620	0.060	0.24	0.30	0.150	
APR 23...	4	18	0.730	0.730	0.080	0.810	0.810	0.210	0.49	0.70	0.260	
JUN 11...	80	432	0.670	0.670	0.070	0.740	0.740	0.030	0.37	0.40	0.060	
AUG 12...	4	13	1.21	1.21	0.090	1.30	1.30	0.210	0.49	0.70	0.820	
DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	
DEC 04...	0.170	0.52	5.4	2	190	<0.50	<1.0	<5.0	<3.0	<10	<3.0	
JAN 10...	0.150	0.46	2.3	--	--	--	--	--	--	--	--	
FEB 21...	0.150	0.46	--	1	160	<0.50	<1.0	<5.0	<3.0	<10	4.0	
APR 23...	0.260	0.80	7.1	--	--	--	--	--	--	--	--	
JUN 11...	0.080	0.25	15	--	--	--	--	--	--	--	--	
AUG 12...	1.00	3.1	5.9	5	110	<0.50	<1.0	<5.0	<3.0	<10	3.0	

BRAZOS RIVER BASIN

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08100600 LEON RIVER AT NORTH FORT HOOD, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 04...	<10	12	16	<0.1	<10	<10	<1	<1.0	970	<6	<3.0
JAN 10...	--	--	--	--	--	--	--	--	--	--	--
FEB 21...	10	14	20	<0.1	<10	<10	<1	<1.0	970	<6	<3.0
APR 23...	--	--	--	--	--	--	--	--	--	--	--
JUN 11...	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	<10	6	12	0.1	<10	<10	<1	2.0	480	10	<3.0

BRAZOS RIVER BASIN

08101000 COWHOUSE CREEK AT PIDCOKE, TX

LOCATION.--Lat 31°17'05", long 97°53'05", Coryell County, Hydrologic Unit 12070202, on left bank 125 ft downstream from bridge on Farm Road 116, 0.1 mi downstream from Bee House Creek, 0.6 mi northeast of Pidcoke, 4.9 mi upstream from Table Rock Creek, and 34.6 mi upstream from mouth.

DRAINAGE AREA.--455 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 1712: 1955. WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 736.71 ft above sea level.

REMARKS.--Records fair. No known diversion above station. Several observations of water temperatures were made during the year. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 29	1830	8,060	17.52	Sept. 1	0600	5,840	14.92

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	3.1	5.7	6.1	4.3	3.1	4.2	2.1	30	.96	.00	1630
2	4.8	3.0	5.8	6.0	4.6	3.1	4.3	2.0	10	.75	.00	135
3	4.3	2.7	5.8	5.7	4.8	3.1	3.8	2.0	4.7	.75	.00	79
4	4.4	2.7	5.6	5.8	4.9	3.1	3.5	1.8	21	.54	.00	89
5	3.7	2.9	5.6	6.0	5.4	3.3	5.5	1.8	41	.45	.00	55
6	3.5	3.3	5.6	6.0	5.4	3.3	7.8	1.6	14	.32	.00	40
7	4.1	3.3	5.6	6.0	5.6	3.2	22	e1.6	160	.16	.00	30
8	3.9	3.9	5.8	5.7	5.4	3.1	17	e1.8	76	.06	.00	24
9	4.0	4.7	5.9	5.5	5.4	3.1	13	1.8	33	.02	.00	20
10	3.6	4.8	5.8	5.5	5.5	3.1	10	1.6	20	.00	.00	17
11	3.3	4.5	5.8	5.6	5.5	3.1	8.3	1.4	14	.00	.00	15
12	3.3	4.2	5.8	5.2	5.0	3.1	6.8	1.3	12	.00	.00	13
13	3.3	4.3	5.7	5.1	4.7	3.1	5.8	1.0	10	.00	.00	12
14	3.3	4.1	6.0	4.9	4.6	3.1	5.0	.81	8.7	.00	.00	14
15	3.2	4.0	6.0	4.9	4.5	3.1	4.2	.50	7.5	.00	.00	68
16	3.1	4.0	6.0	5.0	4.3	3.1	3.4	.36	6.5	.00	.00	28
17	3.1	5.6	6.9	5.1	4.3	3.1	3.1	.32	5.5	.00	.00	32
18	3.1	8.3	11	6.3	4.2	3.1	3.1	.22	4.8	.00	.00	22
19	3.0	12	19	5.6	3.9	3.1	3.0	.13	4.0	.00	.00	21
20	2.9	16	12	7.2	3.4	3.1	2.7	.08	3.4	.00	.00	20
21	2.8	12	10	7.5	3.3	3.1	2.5	.03	2.7	.00	.00	39
22	2.8	10	8.8	6.8	3.3	3.3	3.6	.01	2.1	.00	.00	30
23	2.8	9.0	7.9	6.4	3.3	3.1	3.5	.00	1.7	.00	.00	21
24	2.5	7.8	7.4	6.0	3.1	3.2	3.3	.00	1.6	.00	.00	16
25	2.5	6.8	6.5	5.8	3.1	3.1	3.0	.00	1.3	.00	.00	13
26	2.5	6.3	6.4	6.0	3.2	3.1	2.8	.00	1.2	.00	.00	12
27	2.5	6.2	6.2	5.5	3.2	3.8	2.5	.00	1.0	.00	.00	13
28	2.4	6.0	5.7	5.0	2.8	4.5	2.4	.00	1.0	.00	.00	14
29	2.3	5.7	5.6	5.0	3.1	4.7	2.3	.00	1.0	.00	3050	17
30	2.5	5.6	6.0	4.9	---	4.7	2.2	.00	1.0	.00	710	14
31	2.7	---	6.5	4.5	---	4.0	---	47	---	.00	330	---
TOTAL	101.7	176.8	218.4	176.6	124.1	103.1	164.6	71.26	500.7	4.01	4090.00	2553
MEAN	3.28	5.89	7.05	5.70	4.28	3.33	5.49	2.30	16.7	.13	132	85.1
MAX	5.5	16	19	7.5	5.6	4.7	22	47	160	.96	3050	1630
MIN	2.3	2.7	5.6	4.5	2.8	3.1	2.2	.00	1.0	.00	.00	12
AC-FT	202	351	433	350	246	204	326	141	993	8.0	8110	5060
CFSM	.01	.01	.02	.01	.01	.01	.01	.01	.04	.00	.29	.19
IN.	.01	.01	.02	.01	.01	.01	.01	.01	.04	.00	.33	.21

BRAZOS RIVER BASIN

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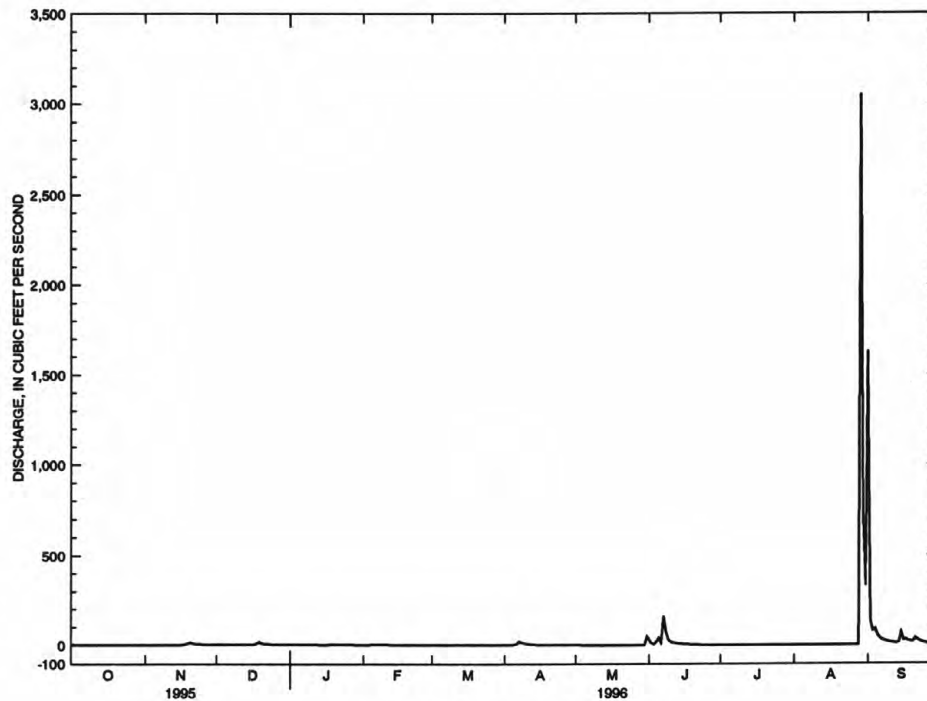
08101000 COWHOUSE CREEK AT PIDCOKE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1996, BY WATER YEAR (WY)

MEAN	83.1	36.0	83.2	73.4	115	102	129	228	111	35.7	20.3	35.4
MAX	1416	425	1894	767	1573	637	1033	2116	702	399	240	433
(WY)	1960	1966	1992	1961	1992	1970	1957	1965	1987	1976	1966	1970
MIN	.000	.000	.000	.000	.000	.010	.000	.76	.073	.000	.000	.000
(WY)	1952	1952	1952	1952	1952	1952	1956	1978	1956	1954	1951	1952

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1951 - 1996	
ANNUAL TOTAL	40747.6		8284.27		87.5	
ANNUAL MEAN	112		22.6		482	
HIGHEST ANNUAL MEAN					1.18	
LOWEST ANNUAL MEAN					1992	
HIGHEST DAILY MEAN	8080		3050		35200	
LOWEST DAILY MEAN	2.3		.00		.00	
ANNUAL SEVEN-DAY MINIMUM	2.5		.00		.00	
INSTANTANEOUS PEAK FLOW	8060		8060		110000	
INSTANTANEOUS PEAK STAGE	17.52		17.52		44.30	
ANNUAL RUNOFF (AC-FT)	80820		16430		63420	
ANNUAL RUNOFF (CFSM)	.25		.050		.19	
ANNUAL RUNOFF (INCHES)	3.33		.68		2.61	
10 PERCENT EXCEEDS	178		15		138	
50 PERCENT EXCEEDS	47		3.7		6.0	
90 PERCENT EXCEEDS	4.1		.00		.00	

e Estimated



08101000 COWHOUSE CREEK AT PIDCOKE, TX
MEAN DAILY DISCHARGE (CFS)

BRAZOS RIVER BASIN

08101000 COWHOUSE CREEK AT PIDCOKE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: December 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)
DEC 04...	1325	5.6	570	8.1	14.5	13	0.70	9.3	94	0.3	250	34
JAN 10...	1530	5.5	559	8.2	7.0	6	0.20	12.5	106	0.2	260	23
FEB 21...	1135	3.3	544	8.0	16.5	6	0.70	10.7	113	1.0	230	20
APR 23...	1220	3.5	515	8.1	22.5	10	1.0	8.7	102	0.9	210	23
JUN 11...	1635	13	308	8.0	29.0	30	--	8.7	117	2.0	130	14
SEP 04...	1345	104	354	7.8	27.0	40	16	7.7	100	0.2	150	31
DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L)
DEC 04...	57	27	27	0.7	2.7	220	36	24	0.30	6.9	315	2
JAN 10...	58	27	24	0.7	1.9	230	41	24	0.50	3.4	321	4
FEB 21...	53	24	24	0.7	2.5	210	44	26	0.40	2.6	305	10
APR 23...	44	24	26	0.8	2.7	190	41	29	0.40	8.4	287	4
JUN 11...	37	10	9.2	0.3	3.7	120	15	9.7	0.30	11	169	6
SEP 04...	47	8.6	8.6	0.3	4.1	120	26	9.6	0.20	15	195	22
DATE	RESIDUE VOLA-TILE, SUS-PENDE (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	
DEC 04...	4	0	0.130	--	<0.010	0.130	0.130	<0.015	--	<0.20	0.010	
JAN 10...	<1	--	0.380	--	<0.010	0.380	0.380	<0.015	--	<0.20	<0.010	
FEB 21...	6	4	--	--	<0.010	--	<0.050	0.020	0.18	0.20	0.010	
APR 23...	2	2	--	--	<0.010	--	<0.050	0.030	0.27	0.30	0.010	
JUN 11...	8	0	0.180	0.180	0.010	0.190	0.190	0.030	0.37	0.40	<0.010	
SEP 04...	5	17	0.490	--	<0.010	0.490	0.490	<0.015	--	0.30	0.040	
DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARTIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	
DEC 04...	<0.010	--	4.1	1	73	<0.50	<1.0	<5.0	<3.0	<10	5.0	
JAN 10...	<0.010	--	3.2	--	--	--	--	--	--	--	--	
FEB 21...	<0.010	--	3.2	<1	56	<0.50	<1.0	<5.0	<3.0	<10	<3.0	
APR 23...	<0.010	--	3.1	--	--	--	--	--	--	--	--	
JUN 11...	<0.010	--	7.3	--	--	--	--	--	--	--	--	
SEP 04...	0.010	0.03	6.9	2	58	<0.50	<1.0	<5.0	<3.0	<10	<3.0	

BRAZOS RIVER BASIN

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08101000 COWHOUSE CREEK AT PIDCOKE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 04...	<10	9	3.0	<0.1	<10	<10	<1	<1.0	830	<6	<3.0
JAN 10...	--	--	--	--	--	--	--	--	--	--	--
FEB 21...	10	11	2.0	<0.1	<10	<10	<1	<1.0	810	<6	<3.0
APR 23...	--	--	--	--	--	--	--	--	--	--	--
JUN 11...	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	<10	<4	1.0	<0.1	<10	<10	<1	<1.0	370	6	12

BRAZOS RIVER BASIN

08102000 BELTON LAKE NEAR BELTON, TX

LOCATION.--Lat 31°06'22", long 97°28'28", Bell County, Hydrologic Unit 12070201, in intake structure at Belton Dam on Leon River, 1.6 mi upstream from bridge on State Highway 317, 3.5 mi north of Belton, 8.9 mi upstream from Nolan Creek, and 16.7 mi upstream from mouth.

DRAINAGE AREA.--3,531 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--March 1954 to current year. Prior to October 1970, published as Belton Reservoir.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 20, 1955, nonrecording gage at present site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam 5,524 ft long, including a 1,300-foot uncontrolled broad-crested spillway in a saddle near left end of dam and a 418-foot-long dike. Deliberate impoundment began Mar. 8, 1954, and the 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 conduit that is controlled by three 7.0- by 22.0-foot broome-type gates. The service outlet consists of a 36- by 36-inch gated outlet that discharges into the flood-control conduit. There are many small diversions upstream for irrigation, municipal supply, and oil field operations. For statement regarding regulation by National Resource Conservation Service floodwater-retarding structures, see station 08100500. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	662.0	2,056,000
Design flood.....	656.9	1,858,000
Crest of spillway.....	631.0	1,079,000
Top of conservation pool.....	594.0	434,500
Service outlet (invert).....	540.0	52,400
Lowest gated outlet (invert).....	483.0	0

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by the Texas Water Development Board, was put into use beginning Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,168,000 acre-ft Mar. 6, 1992 (elevation, 634.36 ft); minimum since initial filling, 113,400 acre-ft Dec. 16, 1956 (elevation, 553.06 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 448,700 acre-ft Oct. 1 (elevation, 595.13 ft); minimum daily, 345,300 acre-ft Aug. 23 (elevation, 586.22 ft).

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

550.0	88,180	606.0	598,600	627.0	986,600
570.0	199,800	611.0	678,100	630.0	1,055,000
591.0	398,600	616.0	765,600	632.0	1,103,000
594.0	434,500	620.0	841,100	634.0	1,152,000
600.0	513,000	624.0	921,500	636.0	1,202,000

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448700	439600	433300	429600	424300	421500	417500	416000	398900	375300	361900	410500
2	448600	439800	433200	428800	424200	421200	417200	415800	398600	374800	361200	418600
3	448100	438900	433200	428200	424000	421000	417200	415600	398500	374300	360500	424900
4	447500	438500	433000	428200	423600	421100	417500	415500	398800	373600	359700	427300
5	446700	438100	433000	428200	423500	421200	418000	415400	397700	373100	359200	430400
6	446100	437800	432700	427900	423500	422100	417900	415800	396700	372300	358600	432200
7	446000	437900	432400	427400	423500	420900	417800	415800	398600	371700	358100	433200
8	446100	437400	432900	427000	423600	420500	417800	415800	398600	371200	357800	434200
9	446200	437000	432000	427000	423600	420300	418100	415600	399200	370600	357200	435100
10	446200	437500	431400	426800	424000	419900	418300	415500	399600	370200	356900	435700
11	446100	436700	431000	426600	423600	419700	418300	415400	399000	369500	349800	436300
12	445800	435900	430800	426500	423500	419500	418800	415100	398600	369400	349400	436900
13	445700	435800	430900	426200	423300	419400	418500	414800	398700	369200	348800	438100
14	445100	435400	430800	426000	423400	419500	418700	414300	399000	368900	348300	438600
15	444600	435300	430900	426000	423300	419500	418100	413900	399400	368500	348000	440300
16	444200	434800	430800	425700	423000	419700	417800	413600	399600	367800	354300	441400
17	443800	436000	431400	425800	422900	419700	417500	413200	399900	367300	353900	442100
18	443600	436000	432000	425800	422800	419400	417500	412600	399900	366800	353400	444500
19	443200	435900	431300	425300	422800	419100	418100	412100	399700	366200	352900	445800
20	442700	435800	431100	425300	422700	418800	417600	411600	399300	365600	352500	447800
21	441900	435700	430900	425000	422700	418500	417200	411100	398800	365000	352300	447100
22	441400	435400	430800	424800	415000	418000	418600	410400	398500	364400	352200	445500
23	441600	435600	430500	425100	422400	418000	418300	409700	398100	364000	345300	443600
24	441100	435100	430300	424800	422100	418500	417900	408900	395600	364100	345500	441600
25	440900	434800	430200	424600	422200	418000	418000	407300	391000	365700	345500	439600
26	440600	434500	430000	424800	422200	417800	417600	405500	388100	365200	352600	439700
27	440500	434700	429900	424600	422400	418200	417000	403900	385600	364700	353300	439200
28	440000	434100	429600	424500	422100	418000	417600	402200	382700	364200	353800	438600
29	439800	433800	429300	424600	421700	417900	416900	401100	379900	363500	363500	438200
30	439500	433500	429200	424800	---	418200	416200	401800	377200	363000	378000	437700
31	439400	---	429200	424200	---	417800	---	400200	---	362500	390500	---
MAX	448700	439800	433300	429600	424300	422100	418800	416000	399900	375300	390500	447800
MIN	439400	433500	429200	424200	415000	417800	416200	400200	377200	362500	345300	410500
(+)	593.79	593.90	593.50	593.10	592.90	592.60	592.50	591.10	589.10	587.80	590.30	593.65
(@)	-9500	-5900	-4300	-5000	-2500	-3900	-1600	-16000	-23000	-14700	+28000	+47200

CAL YR 1995 MAX 531200 MIN 429200 (@) -31300
WTR YR 1996 MAX 448700 MIN 345300 (@) -11200

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre feet.

BRAZOS RIVER BASIN

08102000 BELTON LAKE NEAR BELTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1961 to September 1984, January 1994 to current year.

310640097283701 - BELTON LAKE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
JAN										
10...	1036	427000	1.00	464	8.0	11.0	1.52	9.3	85	K1
10...	1038	--	10.0	464	8.0	10.5	--	9.3	84	--
10...	1040	--	20.0	464	8.0	10.5	--	9.3	84	--
10...	1042	--	30.0	464	8.0	10.5	--	9.3	84	--
10...	1044	--	40.0	464	8.0	10.5	--	9.4	85	--
10...	1046	--	50.0	464	8.0	10.5	--	9.4	85	--
10...	1048	--	60.0	464	8.0	10.5	--	9.3	84	--
10...	1050	--	70.0	464	8.0	10.5	--	9.4	85	--
10...	1052	--	80.0	464	8.0	10.5	--	9.5	86	--
10...	1054	--	90.0	464	8.0	10.5	--	9.3	84	--
10...	1056	--	100	464	8.0	10.5	--	9.2	84	--
10...	1058	--	108	464	8.0	10.5	--	9.1	83	--
APR										
30...	0930	416000	1.00	486	8.4	18.5	3.05	8.5	92	K2
30...	0932	--	10.0	486	8.4	18.0	--	8.5	91	--
30...	0934	--	20.0	486	8.4	18.0	--	8.4	90	--
30...	0936	--	30.0	486	8.3	18.0	--	8.4	90	--
30...	0938	--	40.0	486	8.4	18.0	--	8.4	90	--
30...	0940	--	50.0	486	8.3	18.0	--	8.3	89	--
30...	0942	--	60.0	486	8.1	16.5	--	7.4	77	--
30...	0944	--	70.0	483	8.0	14.5	--	7.5	75	--
30...	0946	--	80.0	483	7.9	14.0	--	7.3	72	--
30...	0948	--	90.0	482	7.8	14.0	--	6.8	67	--
30...	0950	--	100	478	7.8	14.0	--	6.6	65	--
30...	0952	--	108	483	7.8	14.0	--	5.8	57	--
AUG										
12...	1030	349000	1.00	481	8.3	29.0	2.01	7.2	95	K2
12...	1032	--	10.0	481	8.3	29.0	--	7.2	95	--
12...	1034	--	20.0	481	8.3	29.0	--	7.0	92	--
12...	1036	--	30.0	485	8.0	28.5	--	5.2	68	--
12...	1038	--	40.0	498	7.4	25.5	--	0	0	--
12...	1040	--	50.0	504	7.4	23.0	--	0	0	--
12...	1042	--	60.0	507	7.4	21.5	--	0	0	--
12...	1044	--	70.0	509	7.3	20.0	--	0	0	--
12...	1046	--	80.0	512	7.3	19.0	--	0	0	--
12...	1048	--	90.0	513	7.2	19.0	--	0	0	--
12...	1050	--	99.0	514	7.2	18.5	--	0	0	--

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

310640097283701 - BELTON LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	STREP- TOCOCCI FECAL, KF AGAR (COIS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)
JAN									
10...	K3	170	44	46	14	28	0.9	5.2	130
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	170	43	47	13	28	0.9	5.4	130
APR									
30...	<1	180	43	47	14	30	1	5.2	130
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	180	46	49	14	30	1	4.9	130
AUG									
12...	K14	160	33	39	14	31	1	5.6	120
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	180	23	49	14	30	1	5.1	160

BRAZOS RIVER BASIN

08102000 BELTON LAKE NEAR BELTON, TX--Continued

310640097283701 - BELTON LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
JAN									
10...	29	44	0.30	7.7	253	0.250	--	<0.010	0.250
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	29	45	0.30	7.8	253	0.250	--	<0.010	0.250
APR									
30...	34	47	0.30	7.3	265	0.160	--	<0.010	0.160
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	0.200	0.200	0.010	0.210
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	34	45	0.30	8.3	267	0.260	--	<0.010	0.260
AUG									
12...	36	51	0.30	6.9	257	--	--	0.010	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	0.010	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	28	48	0.30	11	281	--	--	0.010	--

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

310640097283701 - BELTON LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN									
10...	0.250	<0.015	--	0.60	<0.010	<0.010	--	<10	<10
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	0.250	<0.015	--	0.30	<0.010	<0.010	--	<10	<10
APR									
30...	0.160	<0.015	--	0.20	<0.010	<0.010	--	<3.0	<1.0
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	0.210	<0.015	--	<0.20	<0.010	<0.010	--	<3.0	<1.0
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	0.260	0.030	0.17	0.20	<0.010	<0.010	--	<3.0	16
AUG									
12...	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<3.0	1.0
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	<3.0	9.0
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	<0.050	0.390	0.31	0.70	0.080	0.070	0.21	160	270

310829097312201 - BELTON LAKE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
JAN										
10...	1230	1.00	463	8.1	11.0	1.37	9.7	89	0.240	<0.010
10...	1232	10.0	464	8.0	10.5	--	9.6	88	--	--
10...	1234	20.0	464	8.0	10.5	--	9.4	86	--	--
10...	1236	30.0	465	8.0	10.0	--	9.4	85	--	--
10...	1238	40.0	465	8.1	10.0	--	9.5	86	--	--
10...	1240	50.0	467	8.1	9.5	--	9.6	85	--	--
10...	1242	61.0	467	8.1	9.5	--	9.7	86	0.240	<0.010
APR										
30...	1217	1.00	488	8.4	19.0	1.20	8.3	91	0.170	<0.010
30...	1219	10.0	488	8.4	19.0	--	8.3	91	--	--
30...	1221	20.0	487	8.4	19.0	--	8.3	91	--	--
30...	1223	30.0	487	8.4	18.5	--	8.1	88	--	--
30...	1225	40.0	489	8.1	17.0	--	7.0	74	--	--
30...	1227	55.0	490	7.9	15.0	--	6.0	60	0.240	<0.010
AUG										
12...	1302	1.00	477	8.4	29.5	1.77	7.4	99	--	0.010
12...	1304	10.0	477	8.3	29.0	--	7.4	98	--	--
12...	1306	20.0	483	8.2	29.0	--	6.4	85	--	--
12...	1308	30.0	490	7.7	28.0	--	3.4	44	--	--
12...	1310	40.0	504	7.4	25.5	--	0	0	--	--
12...	1312	50.0	513	7.3	23.0	--	0	0	--	0.010

BRAZOS RIVER BASIN

08102000 BELTON LAKE NEAR BELTON, TX--Continued

310829097312201 - BELTON LAKE SITE CC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN										
10...	0.240	0.240	<0.015	--	0.20	<0.010	<0.010	--	<10	<10
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	0.240	0.240	0.020	0.48	0.50	<0.010	<0.010	--	<10	<10
APR										
30...	0.170	0.170	0.020	--	<0.20	<0.010	<0.010	--	<3.0	<1.0
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	0.240	0.240	0.030	--	<0.20	<0.010	<0.010	--	<3.0	3.0
AUG										
12...	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<3.0	4.0
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	<0.050	0.440	0.26	0.70	0.020	0.030	0.09	180	130

31092309/332601 - BELTON LAKE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)
JAN												
10...	1250	1.00	464	8.2	10.5	0.95	10.0	91	<1	1	180	41
10...	1252	10.0	465	8.1	10.0	--	9.9	89	--	--	--	--
10...	1254	24.0	471	8.1	8.5	--	9.9	86	--	--	200	58
APR												
30...	1300	1.00	492	8.2	18.5	0.61	7.9	86	<1	<1	180	45
30...	1302	10.0	490	8.2	18.5	--	7.8	85	--	--	--	--
30...	1304	23.0	492	8.1	17.5	--	7.2	77	--	--	180	46
AUG												
12...	1334	1.00	476	8.3	30.0	0.73	7.0	94	<1	K2	150	33
12...	1336	14.0	477	8.1	29.5	--	5.8	77	--	--	150	40

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
JAN												
10...	47	14	29	1	5.3	130	29	45	0.30	7.6	259	0.220
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	55	14	44	1	7.2	140	41	79	0.30	4.3	328	0.260
APR												
30...	49	14	29	0.9	5.3	130	34	46	0.40	7.3	267	0.180
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	49	14	30	1	5.2	130	34	47	0.30	7.5	268	0.160
AUG												
12...	38	14	31	1	5.4	120	36	49	0.30	7.2	253	--
12...	38	14	31	1	5.6	110	36	49	0.30	7.2	249	--

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

310923097332601 - BELTON LAKE SITE DC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN											
10...	<0.010	0.220	0.220	<0.015	--	0.30	<0.010	<0.010	--	<10	<10
10...	--	--	--	--	--	--	--	--	--	--	--
10...	<0.010	0.260	0.260	<0.015	--	0.50	<0.010	<0.010	--	<10	<10
APR											
30...	<0.010	0.180	0.180	0.030	0.17	0.20	<0.010	<0.010	--	<3.0	<1.0
30...	--	--	--	--	--	--	--	--	--	--	--
30...	<0.010	0.160	0.160	0.040	--	<0.20	<0.010	<0.010	--	<3.0	2.0
AUG											
12...	0.010	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<3.0	<1.0
12...	0.010	--	<0.050	0.040	0.26	0.30	<0.010	0.010	0.03	<3.0	2.0

310829097294301 - BELTON LAKE SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
10...	1158	1.00	464	8.1	11.0	9.6	88
10...	1200	10.0	465	8.0	10.5	9.3	85
10...	1202	20.0	465	8.0	10.5	9.3	85
10...	1204	30.0	465	8.0	10.5	9.3	85
10...	1206	40.0	465	8.0	10.5	9.3	85
10...	1208	50.0	464	8.0	10.5	9.4	85
10...	1210	60.0	464	8.0	10.5	9.4	85
10...	1212	70.0	465	8.0	10.5	9.2	84
10...	1214	80.0	465	8.0	10.5	9.2	84
10...	1216	90.0	465	8.0	10.5	9.2	84
10...	1218	97.0	465	8.0	10.5	9.3	85
APR							
30...	1125	1.00	491	8.4	19.0	8.5	93
30...	1127	10.0	489	8.4	19.0	8.5	93
30...	1129	20.0	489	8.4	19.0	8.4	92
30...	1131	30.0	487	8.3	18.5	8.2	89
30...	1133	40.0	487	8.2	18.5	7.9	85
30...	1135	50.0	488	8.0	17.0	7.1	74
30...	1137	60.0	490	7.8	15.5	6.2	63
30...	1139	70.0	492	7.7	15.0	5.8	58
30...	1141	80.0	492	7.7	14.5	5.4	54
30...	1143	94.0	492	7.7	15.0	6.1	61
AUG							
12...	1220	1.00	485	8.4	29.5	7.6	101
12...	1222	10.0	485	8.3	29.0	7.4	98
12...	1224	20.0	485	8.3	29.0	6.8	90
12...	1226	30.0	490	7.7	28.0	2.8	36
12...	1228	40.0	508	7.4	25.5	0	0
12...	1230	50.0	513	7.3	23.0	0	0
12...	1232	60.0	525	7.3	21.5	0	0
12...	1234	70.0	531	7.2	20.0	0	0
12...	1236	80.0	531	7.2	19.0	0	0
12...	1238	87.0	532	7.2	19.5	0	0

BRAZOS RIVER BASIN
08102000 BELTON LAKE NEAR BELTON, TX--Continued

310938097300201 - BELTON LAKE SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
10...	1320	1.00	473	8.0	11.0	9.4	87
10...	1322	10.0	473	8.0	10.5	9.3	85
10...	1324	20.0	477	8.0	10.5	9.1	83
10...	1326	30.0	478	8.0	10.5	9.1	83
10...	1328	40.0	481	8.0	10.0	9.1	82
10...	1330	50.0	480	8.0	10.0	9.3	84
10...	1332	60.0	478	8.0	10.0	9.4	85
10...	1334	70.0	479	8.0	9.5	9.5	85
10...	1336	75.0	480	8.0	9.5	9.6	86
APR							
30...	1328	1.00	496	8.4	19.5	8.8	98
30...	1330	10.0	497	8.4	19.5	8.7	96
30...	1332	20.0	497	8.4	19.0	8.6	94
30...	1334	30.0	500	8.3	19.0	8.3	91
30...	1336	40.0	510	7.8	18.0	6.1	66
30...	1338	50.0	507	7.7	16.0	5.5	57
30...	1340	60.0	513	7.6	15.5	4.7	48
30...	1342	73.0	510	7.7	15.5	4.8	49
AUG							
12...	1414	1.00	491	8.3	30.0	7.1	95
12...	1416	10.0	490	8.3	29.0	7.0	92
12...	1418	20.0	493	8.0	29.0	4.8	63
12...	1420	30.0	500	7.5	28.0	0.8	10
12...	1422	40.0	535	7.3	25.5	0	0
12...	1424	50.0	544	7.2	23.5	0	0
12...	1426	60.0	545	7.1	21.5	0	0
12...	1428	66.0	548	7.1	20.5	0	0

311004097275601 - BELTON LAKE SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
JAN											
10...	1144	1.00	477	8.0	11.0	1.37	9.4	87	0.260	--	<0.010
10...	1146	10.0	477	8.0	10.5	--	9.3	85	--	--	--
10...	1148	20.0	485	8.0	10.0	--	9.2	83	--	--	--
10...	1150	30.0	489	8.0	9.5	--	9.3	83	--	--	--
10...	1152	40.0	499	7.9	9.0	--	9.1	80	--	--	--
10...	1154	50.0	498	8.0	9.0	--	9.1	80	--	--	--
10...	1156	61.0	501	8.0	9.0	--	9.3	82	0.210	0.210	0.010
APR											
30...	1400	1.00	529	8.4	20.0	1.52	8.5	95	0.070	--	<0.010
30...	1402	10.0	533	8.4	20.0	--	8.3	93	--	--	--
30...	1404	20.0	536	8.3	19.5	--	8.1	90	--	--	--
30...	1406	30.0	533	8.3	19.5	--	7.5	83	--	--	--
30...	1408	40.0	533	7.6	16.5	--	4.2	44	--	--	--
30...	1410	50.0	523	7.7	16.5	--	4.2	44	--	--	--
30...	1412	58.0	522	7.7	16.5	--	4.2	44	0.220	--	<0.010
AUG											
12...	1448	1.00	489	8.5	30.0	1.22	8.4	113	--	--	0.010
12...	1450	10.0	489	8.5	29.5	--	8.5	113	--	--	--
12...	1452	20.0	491	8.3	29.5	--	7.4	99	--	--	--
12...	1454	30.0	496	8.0	29.0	--	5.2	69	--	--	--
12...	1456	40.0	542	7.2	26.0	--	0	0	--	--	--
12...	1458	51.0	564	7.1	23.5	--	0	0	--	--	0.010

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

31100409/2/5601 - BELTON LAKE SITE GC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN										
10...	0.260	0.260	<0.015	--	0.30	<0.010	<0.010	--	<10	<10
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	0.220	0.220	0.040	0.36	0.40	<0.010	<0.010	--	<10	<10
APR										
30...	0.070	0.070	0.020	0.28	0.30	<0.010	<0.010	--	<3.0	1.0
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	0.220	0.220	0.020	0.18	0.20	0.010	<0.010	--	<3.0	11
AUG										
12...	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	<3.0	6.0
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	<0.050	1.30	0.30	1.6	0.170	0.220	0.67	140	320

31104209/300/01 - BELTON LAKE SITE HC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
10...	1406	1.00	491	8.1	9.5	9.7	87
10...	1408	10.0	492	8.0	9.5	9.7	87
10...	1410	20.0	507	8.1	8.5	9.7	84
10...	1412	30.0	518	8.1	8.0	9.5	82
10...	1414	35.0	518	8.1	8.0	9.6	83
APR							
30...	1428	1.00	573	8.2	20.0	7.6	85
30...	1430	10.0	575	8.2	20.0	7.6	85
30...	1432	20.0	576	8.2	20.0	7.5	84
30...	1434	30.0	575	8.1	20.0	7.0	78
30...	1436	35.0	576	8.1	19.5	6.5	72
AUG							
12...	1514	1.00	494	8.4	29.5	7.2	96
12...	1516	10.0	494	8.2	29.5	5.5	73
12...	1518	20.0	498	7.9	29.0	4.5	59
12...	1520	27.0	512	7.5	28.5	0.2	3

31125409/291301 - BELTON LAKE SITE IC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOC- CI FECAL, KF AGAR (COLS./ 100 ML)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV F.I.D. AS CAC03 (MG/L)
JAN												
10...	1428	1.00	543	8.2	8.0	0.61	10.9	94	<1	<1	200	48
10...	1430	10.0	544	8.2	8.0	--	10.8	93	--	--	--	--
10...	1432	23.0	583	8.2	7.5	--	10.5	89	--	--	220	51
APR												
30...	1500	1.00	635	8.2	20.5	0.46	7.6	86	K1	K1	230	69
30...	1502	10.0	634	8.2	20.5	--	7.5	85	--	--	--	--
30...	1504	20.0	632	8.2	20.5	--	7.1	80	--	--	--	--
30...	1506	25.0	634	8.1	20.5	--	6.8	77	--	--	230	64
AUG												
12...	1540	1.00	509	8.3	29.5	0.43	6.8	91	K3	K2	150	32
12...	1542	10.0	505	8.2	29.0	--	6.0	79	--	--	--	--
12...	1544	17.0	506	7.9	29.0	--	4.1	54	--	--	150	35

BRAZOS RIVER BASIN

08102000 BELTON LAKE NEAR BELTON, TX--Continued

31125409/291301 - BELTON LAKE SITE IC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
JAN												
10...	54	17	34	1	5.4	160	35	54	0.30	6.4	301	0.150
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	58	18	37	1	5.4	170	38	59	0.30	6.1	323	0.150
APR												
30...	58	20	42	1	5.0	160	51	64	0.40	6.0	342	0.070
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	58	20	42	1	5.2	160	51	66	0.40	6.0	347	0.070
AUG												
12...	36	15	37	1	5.9	120	37	60	0.30	8.5	272	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	37	15	36	1	6.0	120	37	57	0.30	8.5	268	--
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
JAN												
10...	<0.010	0.150	0.150	<0.015	--	0.30	<0.010	<0.010	--	<10	<10	
10...	--	--	--	--	--	--	--	--	--	--	--	
10...	<0.010	0.150	0.150	<0.015	--	0.30	<0.010	<0.010	--	<10	<10	
APR												
30...	<0.010	0.070	0.070	0.060	0.24	0.30	<0.010	<0.010	--	<3.0	10	
30...	--	--	--	--	--	--	--	--	--	--	--	
30...	--	--	--	--	--	--	--	--	--	--	--	
30...	<0.010	0.070	0.070	0.040	0.16	0.20	<0.010	<0.010	--	4.0	1.0	
AUG												
12...	0.010	--	<0.050	0.020	0.28	0.30	<0.010	0.010	0.03	<3.0	1.0	
12...	--	--	--	--	--	--	--	--	--	--	--	
12...	0.010	--	<0.050	0.070	0.33	0.40	<0.010	0.020	0.06	<3.0	15	

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site AC (310640097283701)

Phytoplankton Analyses October 1995 to September 1996

Date	1-10-96
Time	1036

TOTAL CELLS/mL	21,324
NUMBER OF SPECIES	3
DEPTH COLLECTED (ft.)	2.5

<u>Organisms</u>	<u>Cells/mL</u>
CHLOROPHYTA	
<i>Chlamydomonas</i> sp.	268
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	20,818
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	238

08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site DC (310923097332601)

Phytoplankton Analyses October 1995 to September 1996

Date	1-10-96
Time	1250

TOTAL CELLS/mL	15,882
NUMBER OF SPECIES	7
DEPTH COLLECTED (ft.)	1.55

<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA	
Order Pennales	
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	50
<i>Synedra ulna</i> var. <i>amphirhynchus</i>	10
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	59
<i>Chlamydomonas</i> sp.	149
<i>Scenedesmus opoliensis</i>	30
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	15,465
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	119

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site IC (311254097291301)

Phytoplankton Analyses October 1995 to September 1996

Date	1-10-96
Time	1428

TOTAL CELLS/mL	13,531
NUMBER OF SPECIES	8
DEPTH COLLECTED (ft.)	1.0

<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA	
Order Pennales	
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	119
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	208
<i>Chlamydomonas</i> sp.	297
<i>Pediastrum</i> sp.	30
<i>Selenastrum Westii</i>	59
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	12,491
<i>Chroococcus limneticus</i>	238
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	89

BRAZOS RIVER BASIN

08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site AC (310640097283701)

Phytoplankton Analyses October 1995 to September 1996

	Date	4-30-96
	Time	930
<hr/>		
	TOTAL CELLS/mL	6,245
	NUMBER OF SPECIES	5
	DEPTH COLLECTED (ft.)	5.0
<hr/>		
	<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA		
Order Pennales		
<i>Navicula</i> sp.		30
CHLOROPHYTA		
<i>Chlamydomonas</i> sp.		59
CYANOPHYTA		
<i>Aphanocapsa delicatissima</i>		5,948
CHRYSOPHYTA		
<i>Dinobryon sociale</i>		178
EUGLENOPHYTA		
<i>Trachelomonas</i> sp.		30
<hr/>		

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site DC (310923097332601)

Phytoplankton Analyses October 1995 to September 1996

Date	4-30-96
Time	1300

TOTAL CELLS/mL	12,076
NUMBER OF SPECIES	11
DEPTH COLLECTED (ft.)	1.0

<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA	
Order Pennales	
<i>Cymbella prostrata</i> var. <i>auerswaldie</i>	86
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	428
<i>Navicula halophila</i> var. <i>halophila</i>	171
CHLOROPHYTA	
<i>Closterium diana</i>	59
<i>Oocystis</i> sp.	59
<i>Scenedesmus bijuga</i>	30
<i>Scenedesmus quadricauda</i>	30
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	10,112
<i>Merismopedia tenuissima</i>	952
CHRYSOPHYTA	
<i>Dinobryon sociale</i>	119
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	30

08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site IC (311254097291301)

Phytoplankton Analyses October 1995 to September 1996

Date	4-30-96
Time	1500

TOTAL CELLS/mL	5,530
NUMBER OF SPECIES	13
DEPTH COLLECTED (ft.)	0.75

<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA	
Order Centrales	
<i>Cyclotella ocellata</i>	30
<i>Stephanodiscus astraea</i>	59
CHLOROPHYTA	
<i>Cosmarium</i> sp.	59
<i>Oocystis</i> sp.	59
<i>Pediastrum</i> sp.	59
<i>Scenedesmus opoliensis</i>	89
<i>Scenedesmus quadricauda</i>	89
CYANOPHYTA	
<i>Aphanocapsa delicatissima</i>	3,569
<i>Aphanocapsa elachista</i>	595
<i>Chroococcus limneticus</i>	357
<i>Merismopedia tenuissima</i>	476
EUGLENOPHYTA	
<i>Phacus</i> sp.	30
<i>Trachelomonas</i> sp.	59

BRAZOS RIVER BASIN

281

08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site AC (310640097283701)

Phytoplankton Analyses October 1995 to September 1996

Date	8-12-96
Time	1540

TOTAL CELLS/mL	88,684
NUMBER OF SPECIES	11
DEPTH COLLECTED (ft.)	1.20

<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA	
Order Centrales	
<i>Cyclotella ocellata</i>	178
Order Pennales	
<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	416
CHLOROPHYTA	
<i>Ankistrodesmus falcatus</i>	1,933
<i>Chlamydomonas</i> sp.	357
<i>Scenedesmus bijuga</i>	30
<i>Scenedesmus opollensis</i>	59
CYANOPHYTA	
<i>Aphanizomenon flos-aquae</i>	38,067
<i>Aphanocapsa delicatissima</i>	24,387
<i>Aphanocapsa elachista</i>	595
<i>Merismopedia tenuissima</i>	20,818
EUGLENOPHYTA	
<i>Trachelomonas</i> sp.	1,844

08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site DC (310923097332601)

Phytoplankton Analyses October 1995 to September 1996

	Date	8-12-96
	Time	1334
<hr/>		
	TOTAL CELLS/mL	57,102
	NUMBER OF SPECIES	14
	DEPTH COLLECTED (ft.)	1.2
<hr/>		
	<u>Organisms</u>	<u>Cells/mL</u>
BACILLARIOPHYTA		
	Order Pennales	
	<i>Fragilaria crotonensis</i> var. <i>crotonensis</i>	1,279
CHLOROPHYTA		
	<i>Ankistrodesmus falcatus</i>	744
	<i>Chlamydomonas</i> sp.	268
	<i>Cosmarium</i> sp.	59
	<i>Oocystis</i> sp.	59
	<i>Scenedesmus opoliensis</i>	30
CYANOPHYTA		
	<i>Aphanizomenon flos-aquae</i>	11,004
	<i>Aphanocapsa delicatissima</i>	30,335
	<i>Aphanocapsa elachista</i>	595
	<i>Chroococcus limneticus</i>	119
	<i>Merismopedia tenuissima</i>	12,372
EUGLENOPHYTA		
	<i>Phacus</i> sp.	59
	<i>Trachelomonas</i> sp.	149
PYRRHOPHYTA		
	<i>Gymnodinium</i> sp.	3
<hr/>		

BRAZOS RIVER BASIN

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08102000 BELTON LAKE NEAR BELTON, TX--Continued

Belton Lake Site IC (311254097291301)

Phytoplankton Analyses October 1995 to September 1996

Date	8-12-96
Time	1030

TOTAL CELLS/mL	59,956
NUMBER OF SPECIES	8
DEPTH COLLECTED (ft.)	3.3

OrganismsCells/mL

BACILLARIOPHYTA

Order Pennales

Fragilaria crotonensis var. *crotonensis*

892

CHLOROPHYTA

Ankistrodesmus falcatus

149

Chlamydomonas sp.

89

Cosmarium sp.

89

Mougeotia sp.

416

Staurastrum sp.

30

CYANOPHYTA

Aphanizomenon flos-aquae

1,190

Aphanocapsa delicatissima

57,101

BRAZOS RIVER BASIN

08102500 LEON RIVER NEAR BELTON, TX

LOCATION.--Lat 31°04'12", long 97°26'28", Bell County, Hydrologic Unit 12070201, on left bank 1,400 ft upstream from bridge on Farm Road 817, 2,000 ft upstream from concrete dam, 1.0 mi upstream from bridge on Interstate Highway 35 and U.S. Highway 81, 1.6 mi northeast of Belton, 3.2 mi downstream from Belton Dam, 5.2 mi upstream from Nolan Creek, and 13.1 mi upstream from mouth.

DRAINAGE AREA.--3,542 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to current year.

REVISED RECORDS.--WSP 1442: 1925(M), 1935(M), 1936, 1938(M), 1941-42(M), 1944-45(M). WSP 1712: 1937(M).
WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 476.68 ft above sea level. Prior to May 21, 1931, nonrecording gage.

REMARKS.--No estimated daily discharges. Records good. The city of Temple diverts water from the pool at gage and returns wastewater effluent to Little Elm Creek downstream from station. The Brazos River Authority returns waste water effluent to the Leon River downstream from station for their Temple-Belton plant. Flow regulated by Belton Lake (station 08102000) since Mar. 8, 1954. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--30 years (water years 1924-53) prior to regulation by Belton Lake, 659 ft³/s (477,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1924-53).--Maximum discharge, 56,500 ft³/s Apr. 22, 1945 (gage height, 24.41 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1913 reached a stage of 25 ft, and a flood in September 1921 reached a stage of 21 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571	121	105	95	34	18	24	25	642	684	64	90
2	575	112	107	92	29	19	24	20	642	82	61	92
3	582	113	109	95	34	19	21	22	634	74	60	96
4	581	121	107	93	30	15	30	19	645	81	70	92
5	574	114	110	99	30	17	28	13	638	78	62	91
6	517	116	109	93	26	23	29	19	641	79	62	91
7	265	120	94	100	26	19	31	23	649	78	67	92
8	139	112	93	94	23	25	30	24	642	68	73	92
9	145	111	95	91	8.3	22	24	14	642	60	71	89
10	143	110	97	99	29	20	21	16	644	63	72	91
11	144	113	87	93	39	21	20	18	644	60	79	95
12	149	110	92	98	35	21	27	21	399	61	85	95
13	150	110	91	92	19	19	27	18	58	73	87	101
14	147	107	97	94	19	20	23	12	59	66	84	109
15	150	110	100	90	19	19	22	14	59	65	86	105
16	131	110	104	89	19	19	28	6.4	58	70	81	167
17	122	119	96	87	20	23	26	27	57	60	88	362
18	131	122	99	107	18	31	22	85	54	63	81	561
19	115	118	95	108	17	24	15	86	60	61	86	457
20	110	110	92	103	15	23	29	84	50	62	81	1090
21	116	113	97	107	14	27	29	85	49	64	85	1800
22	112	106	92	103	13	24	27	83	55	60	87	1770
23	113	104	98	84	11	25	27	84	60	57	101	1780
24	116	109	98	43	18	28	32	184	941	62	91	1780
25	119	104	94	1.4	16	26	23	453	2040	74	86	1470
26	121	110	100	8.6	18	23	23	568	1220	71	87	867
27	116	104	93	32	15	29	23	650	1040	66	83	698
28	110	109	99	33	17	25	27	650	1170	66	88	692
29	117	105	92	36	23	22	29	643	1070	64	86	690
30	123	108	101	26	---	30	27	749	1070	64	103	690
31	116	---	99	32	---	25	---	646	---	64	93	---
TOTAL	6720	3351	3042	2418.0	634.3	701	768	5361.4	16632	2700	2490	16295
MEAN	217	112	98.1	78.0	21.9	22.6	25.6	173	554	87.1	80.3	543
MAX	582	122	110	108	39	31	32	749	2040	684	103	1800
MIN	110	104	87	1.4	8.3	15	15	6.4	49	57	60	89
AC-FT	13330	6650	6030	4800	1260	1390	1520	10630	32990	5360	4940	32320

BRAZOS RIVER BASIN

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08102500 LEON RIVER NEAR BELTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996#, BY WATER YEAR (WY)

MEAN	348	310	274	470	420	684	702	1055	1128	791	335	190
MAX	3918	3058	1924	5066	2902	6134	5170	4560	6002	6287	3084	1657
(WY)	1960	1960	1961	1992	1961	1992	1992	1990	1957	1957	1992	1986
MIN	2.79	1.07	.67	2.51	2.19	2.56	1.70	.87	.053	.26	1.86	.25
(WY)	1969	1955	1955	1955	1981	1955	1954	1954	1954	1954	1954	1954

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1954 - 1996#	
ANNUAL TOTAL	352085		61112.7			
ANNUAL MEAN	965		167			
HIGHEST ANNUAL MEAN					560	
LOWEST ANNUAL MEAN					3067	
HIGHEST DAILY MEAN	4960	Apr 11	2040	Jun 25	4.71	1992
LOWEST DAILY MEAN	87	Dec 11	1.4	Jan 25	10200	1955
ANNUAL SEVEN-DAY MINIMUM	93	Dec 7	15	Feb 19	.00	Mar 6 1992
INSTANTANEOUS PEAK FLOW			2210	Jun 24	.00	Oct 1 1953
INSTANTANEOUS PEAK STAGE			6.10	Jun 24	56500	Oct 1 1953
ANNUAL RUNOFF (AC-FT)	698400		121200		24.41	Apr 22 1945
10 PERCENT EXCEEDS	2450		581		405400	Apr 22 1945
50 PERCENT EXCEEDS	554		86		2030	
90 PERCENT EXCEEDS	109		19		39	
# Period of regulated streamflow.					4.4	

BRAZOS RIVER BASIN

08102500 LEON RIVER NEAR BELTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: March 1961 to August 1964; January 1994 to current year.
 Water temperature: March 1957 to October 1972; recorded continuously from March 1957 to September 1964.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-A-TURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	
JAN 10...	0945	99	467	7.9	9.5	18	2.4	11.7	104	0.7	170	35	
APR 30...	1010	30	501	8.0	18.5	10	2.1	8.8	95	--	170	23	
AUG 12...	1225	80	523	7.7	20.0	15	1.5	8.7	97	--	170	12	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
JAN 10...	46	13	27		0.9	5.0	130	30	45	0.40	7.5	256	6
APR 30...	47	13	28		0.9	5.2	150	34	46	0.30	7.3	271	5
AUG 12...	47	13	28		0.9	5.3	160	29	47	0.30	9.4	276	7
DATE		RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	
JAN 10...		<1	--	0.280	--	<0.010	0.280	0.280	<0.015	--	0.20	<0.010	
APR 30...		11	0	0.140	--	<0.010	0.140	0.140	0.020	0.28	0.30	<0.010	
AUG 12...		<1	--	0.110	0.110	0.020	0.130	0.130	0.180	0.32	0.50	0.030	
DATE		PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	
JAN 10...		<0.010	--	11	1	76	<0.50	<1.0	<5.0	<3.0	<10	<3.0	
APR 30...		<0.010	--	3.9	1	73	<0.50	<1.0	<5.0	<3.0	<10	<3.0	
AUG 12...		0.030	0.09	4.2	6	80	<0.50	<1.0	<5.0	<3.0	<10	4.0	
DATE		LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	
JAN 10...	20		6	7.0	<0.1	<10	<10	<1	<1.0	400	<6	4.0	
APR 30...	<10		5	4.0	<0.1	<10	<10	<1	<1.0	390	<6	9.0	
AUG 12...	<10		4	43	<0.1	<10	<10	<1	<1.0	430	<6	<3.0	

BRAZOS RIVER BASIN

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08103800 LAMPASAS RIVER NEAR KEMPNER, TX

LOCATION.--Lat 31°04'54", long 98°00'59", Lampasas County, Hydrologic Unit 12070203, on left bank 800 ft upstream from centerline of U.S. Highway 190, 0.6 mi upstream from Mesquite Creek, 0.8 mi west of Kempner, 0.9 mi downstream from Sulphur Creek, and 72.3 mi upstream from mouth.

DRAINAGE AREA.--818 mi².

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

Water-quality records.--Chemical analyses: March to June 1964, October 1980 to September 1982, October 1987 to August 1990. Biochemical analyses: October 1980 to September 1982, October 1987 to August 1990.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 828.38 ft above sea level. Prior to Aug. 4, 1967, at site 800 ft downstream at present datum.

REMARKS.--Records good. Flow is affected at times by discharge from the flood detention pools of 13 floodwater-retarding structures with a combined detention capacity of 38,570 acre-ft. These structures control runoff from 131 mi² in the Sulphur and Bennett Creeks drainage basins. There are many small diversions above station for irrigation and for municipal supply. The city of Lampasas diverts water upstream from this station and returns waste water effluent to Sulphur Creek, upstream from this station. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1871, occurred in September 1873 (stage about 45 ft). Flood of May 13, 1957, reached a stage of 37 ft, and flood of Oct. 4, 1959, reached a stage of 34 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
June 7	1600	4,020	7.77	Aug. 31	2345	8,170	10.25
Aug. 29	1530	7,690	9.95				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	16	20	18	24	28	40	77	12	16	1950
2	15	13	18	17	18	24	28	41	79	12	15	132
3	12	14	19	18	18	24	28	42	85	12	14	57
4	10	17	18	19	25	24	28	42	170	12	12	35
5	11	18	18	20	23	25	33	43	122	13	13	27
6	11	19	17	20	23	24	43	48	100	12	11	22
7	11	21	18	20	22	23	36	53	1020	12	12	18
8	12	19	18	20	23	23	35	50	e297	12	12	13
9	12	19	16	21	20	23	36	49	e105	11	20	12
10	11	21	14	23	20	24	35	49	e64	11	14	11
11	9.9	20	15	23	20	25	35	54	73	18	26	9.9
12	9.9	19	17	24	20	26	31	56	18	16	19	8.9
13	9.6	24	19	20	23	26	31	57	15	14	17	12
14	10	24	20	20	26	27	31	55	16	13	16	14
15	10	22	21	20	26	27	30	56	11	484	15	65
16	11	22	18	20	25	26	30	58	12	125	13	52
17	10	29	20	22	24	28	31	58	11	41	17	15
18	10	37	29	24	24	28	32	60	10	27	21	5.0
19	9.3	25	26	21	24	26	33	62	11	25	14	15
20	10	22	24	22	25	26	31	62	10	21	14	222
21	9.4	19	24	23	26	26	32	61	9.9	16	13	73
22	10	20	22	23	26	26	52	63	9.9	14	14	30
23	10	22	20	24	31	24	49	64	9.9	13	17	25
24	9.9	24	20	22	31	25	37	65	11	14	39	21
25	10	24	18	24	27	26	37	70	12	17	53	17
26	11	25	18	25	27	26	38	71	18	15	34	18
27	11	25	19	24	26	30	37	74	15	16	22	19
28	8.9	24	20	20	25	40	39	79	13	18	20	16
29	9.4	16	18	19	22	31	39	77	12	19	2750	16
30	13	16	18	18	---	30	40	188	12	18	569	17
31	11	---	19	18	---	28	---	90	---	15	742	---
TOTAL	332.3	636	597	654	688	815	1045	1937	2428.7	1078	4584	2947.8
MEAN	10.7	21.2	19.3	21.1	23.7	26.3	34.8	62.5	81.0	34.8	148	98.3
MAX	15	37	29	25	31	40	52	188	1020	484	2750	1950
MIN	8.9	13	14	17	18	23	28	40	9.9	11	11	5.0
AC-FT	659	1260	1180	1300	1360	1620	2070	3840	4820	2140	9090	5850

BRAZOS RIVER BASIN

08103800 LAMPASAS RIVER NEAR KEMPNER, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1996, BY WATER YEAR (WY)

MEAN	88.8	61.5	161	115	222	206	182	306	227	61.4	48.9	65.2
MAX	453	398	3193	1107	3526	1502	1106	2995	1716	365	378	417
(WY)	1986	1987	1992	1992	1992	1970	1977	1965	1987	1976	1966	1970
MIN	6.73	11.0	11.5	10.3	10.9	13.5	8.86	6.57	5.98	5.78	4.18	8.12
(WY)	1964	1990	1964	1984	1984	1984	1984	1984	1984	1964	1963	1984

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1963 - 1996

ANNUAL TOTAL	43195.7		17742.8									
ANNUAL MEAN	118		48.5							145		
HIGHEST ANNUAL MEAN										949		1992
LOWEST ANNUAL MEAN										10.7		1984
HIGHEST DAILY MEAN	2230	Apr 5	2750	Aug 29						42500	Dec 21	1991
LOWEST DAILY MEAN	8.4	Aug 21	5.0	Sep 18						1.4	Jul 17	1971
ANNUAL SEVEN-DAY MINIMUM	9.0	Aug 18	9.8	Oct 18						2.2	Jul 18	1963
INSTANTANEOUS PEAK FLOW			8170	Aug 31						78000	Dec 20	1991
INSTANTANEOUS PEAK STAGE			10.25	Aug 31						35.00	Dec 20	1991
ANNUAL RUNOFF (AC-I T)	85680		35190							105000		
10 PERCENT EXCEEDS	243		58							259		
50 PERCENT EXCEEDS	51		21							31		
90 PERCENT EXCEEDS	11		11							11		

e Estimated

08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TX
(Hydrologic benchmark station)

LOCATION.--Lat 30°54'41", long 98°02'12", Burnet County, Hydrologic Unit 12070203, at upstream side of bridge on Ranch Road 963, 6 mi above confluence with North Fork Rocky Creek, 7 mi west of Briggs, and 12.9 mi above mouth of Rocky Creek.

DRAINAGE AREA.--33.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1963 to current year.

REVISED RECORDS.--WRD IX-74-1: 1972-73(P). WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder, concrete control, and crest-stage gages. Datum of gage is 955.8 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
------	------	-----------------------------------	---------------------	------	------	-----------------------------------	---------------------

No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	40
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.2
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.9
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.91
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.39
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.48
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.56
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.1
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.3
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.98
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.93
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.89
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.87
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.67
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.4	.52
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.4	.46
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	.71
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	2.2
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	36	.70
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	23	.47
31	.00	---	.00	.00	---	.00	---	.00	---	.00	49	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	123.16	69.06
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.97	2.30
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.49	.40
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	244	137
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.07
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1996, BY WATER YEAR (WY)

	MEAN	3.99	3.79	7.69	9.40	16.9	16.5	12.7	22.7	18.9	4.57	2.11	3.58
MAX	34.0	55.3	103	81.9	189	93.1	78.4	118	106	43.9	51.2	69.6	
(WY)	1975	1975	1992	1968	1992	1992	1977	1965	1981	1976	1974	1974	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
(WY)	1968	1968	1971	1971	1971	1971	1971	1978	1967	1963	1963	1965	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1963 - 1996

ANNUAL TOTAL	1603.31	192.22	
ANNUAL MEAN	4.39	.53	
HIGHEST ANNUAL MEAN			10.3
LOWEST ANNUAL MEAN			49.2
HIGHEST DAILY MEAN	57 Apr 5	49 Aug 31	.036
LOWEST DAILY MEAN	.00 Jul 23	.00 Oct 1	1510 Jun 19 1976
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 23	.00 Oct 1	.00 May 1 1963
INSTANTANEOUS PEAK FLOW		541 Aug 31	.00 May 9 1963
INSTANTANEOUS PEAK STAGE		4.16 Aug 31	31200 Jun 19 1976
ANNUAL RUNOFF (AC-FT)	3180	381	22.70 Jun 19 1976
ANNUAL RUNOFF (CFSM)	.13	.016	7470
ANNUAL RUNOFF (INCHES)	1.79	.21	.31
10 PERCENT EXCEEDS	11	.00	4.21
50 PERCENT EXCEEDS	1.9	.00	24
90 PERCENT EXCEEDS	.00	.00	.60
			.00

BRAZOS RIVER BASIN

08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TX--Continued
(Hydrologic benchmark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1961 to January 1964. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: July 1971 to July 1982. Sediment analyses: May to June 1963, February 1968 to current year. Radiochemical analyses: January 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CaCO3)	
AUG 26...	1230	1.8	277	7.4	24.5	6.6	6.4	79	500	540	130	
DATE		HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3)	ALKA-LINITY WAT DIS FIX END FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
AUG 26...	15	32	11	4.2	0.2	2.8	0	136	111	110	20	
DATE		CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
AUG 26...	4.7	0.30	9.4	168	154	0.400	0.400	0.010	0.410	0.410	<0.015	
DATE		NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ANTI-MONY, DIS-SOLVED (UG/L AS SB)
AUG 26...	0.81	0.40	0.40	0.030	<0.010	<0.010	14	0.07	95	43	<0.20	
DATE		BARIIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 26...	31	<0.20	<2.0	<0.30	<0.20	<3.0	<0.20	26	<0.30	4	5.0	
DATE		MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	SIRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	URANIUM NATURAL 2 SIGMA WATER, DISS. (UG/L)	RA-226 2 SIGMA WATER, DISS. (PCI/L)
AUG 26...	<10	<1.0	<1	<1.0	1000	<6	1.2	0.07	0.20	0.0	0.020	

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX

LOCATION.--Lat 31°01'20", long 97°31'57", Bell County, Hydrologic Unit 12070203, in intake structure at Stillhouse Hollow Dam on Lampasas River, 5 mi southwest of Belton, and 16.0 mi upstream from mouth.

DRAINAGE AREA.--1,313 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--September 1966 to current year. Prior to October 1970, published as Stillhouse Hollow Reservoir.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

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

REMARKS.--The lake is formed by a rolled earthfill dam 15,624 ft long, including a 1,650-foot spillway and 5,894-foot 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 spillway is an uncontrolled broad-crested weir 1,650 ft long located near right end of dam. The flood-control outlet consists of a 12.0-foot-diameter conduit controlled by two 5.67- by 12.0-foot slide gates at an invert elevation of 515.0 ft. There are many small diversions upstream for irrigation, municipal supply and for oil field operations. For statement regarding regulation by National Resource Conservation Service floodwater-retarding structures, see station 08103800. Satellite telemeter at station. Figures given herein represent total contents. 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	1,004,000
Crest of spillway.....	666.0	620,700
Top of conservation pool.....	622.0	226,100
Lowest gated outlet (invert).....	515.0	30

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by Texas Water Development Board, was put into use beginning Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 654,000 acre-ft Mar. 4, 1992 (elevation, 667.97 ft); minimum since conservation storage was reached on Apr. 12, 1969, 172,700 acre-ft Aug. 23, 1996 (elevation, 612.8 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 232,900 acre-ft Oct. 2 (elevation, 623.05 ft); minimum daily, 172,700 acre-ft Aug. 23 (elevation, 612.77 ft).

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

612.0	168,700	622.0	226,100	627.0	259,700
615.0	184,600	623.0	232,500	628.0	266,700
618.0	201,600	624.0	239,100	629.0	273,900
620.0	213,500	625.0	245,900	630.0	281,200
621.0	219,700	626.0	252,700		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232800	229500	227700	227100	225900	225100	224100	222800	221700	186300	183500	193000
2	232900	229300	227800	227000	225800	225000	224000	222800	221700	186200	183300	184900
3	232700	229000	227800	226900	225700	224900	224000	222800	221600	186100	183100	185500
4	232600	228900	227700	226800	225700	225000	224000	222800	222200	185900	182900	185600
5	232300	228900	227700	226700	225600	225100	224300	222700	222200	185800	182700	185700
6	232100	228800	227700	226600	225600	225000	224200	223200	222100	185600	182500	185700
7	231900	228800	227500	226600	225700	224800	224200	223100	222800	185500	182300	185700
8	231800	228700	227600	226500	225700	224700	224200	223100	223700	185300	182300	185700
9	231700	228600	227400	226400	225700	224600	224200	223100	224000	185100	182100	185700
10	231600	228600	227200	226400	225800	224400	224100	223100	223200	185100	182400	185600
11	231500	228400	227100	226400	225700	224400	224200	222900	220600	184900	173700	185500
12	231400	228300	227200	226400	225700	224400	224200	222900	218100	185000	173600	185500
13	231400	228200	227200	226400	225700	224400	224100	222800	215800	185000	173400	185800
14	231100	228100	227200	226400	225700	224400	224100	222700	213500	184900	173300	185700
15	231000	228100	227200	226400	225600	224400	223900	222600	211100	184800	181900	185900
16	230800	228000	227200	226400	225500	224700	223700	222400	208800	185100	181800	185900
17	230700	228400	227600	226500	225400	224600	223600	222300	206300	185100	181600	185900
18	230600	228400	227800	226400	225400	224600	223600	222200	203500	185100	181500	187200
19	230500	228400	227600	226200	225400	224400	223600	222000	200700	185000	181400	187900
20	229700	228400	227500	226200	225400	224300	223500	221900	197800	184900	181300	188600
21	230000	228400	227400	226200	225400	224200	223400	221800	194700	184700	181100	189400
22	229900	228400	227400	226200	225400	224200	223700	221600	191800	184500	181300	189500
23	229800	228300	227400	226300	225400	224200	223700	221400	188700	184300	172700	189600
24	229600	228300	227300	226200	225300	224200	223600	221300	186800	184300	172700	189600
25	229500	228200	227200	226200	225300	224100	223500	221100	186800	184500	172900	189700
26	229500	228100	227200	226200	225400	224000	223400	221000	186800	184300	182200	189900
27	229400	228100	227200	226100	225400	224200	223300	220900	186800	184200	182200	189800
28	229300	227900	227100	226100	225200	224200	223300	220800	186600	184100	182200	189600
29	229100	227800	227100	226100	225100	224200	223200	221000	186500	183900	183200	189600
30	229100	227800	227100	226000	---	224200	222900	221700	186400	183700	187400	189500
31	229300	---	227100	225900	---	224200	---	221700	---	183600	188100	---
MAX	232900	229500	227800	227100	225900	225100	224300	223200	224000	186300	188100	193000
MIN	229100	227800	227100	225900	225100	224000	222900	220800	186400	183600	172700	184900
(+)	621.00	620.76	620.65	622.00	621.90	621.70	621.50	621.30	615.30	614.80	615.60	615.90
(@)	-3500	-1500	-700	-1200	-800	-900	-1300	-1200	-35300	-2800	+4500	+1400
CAL YR 1995	MAX	245800	MIN	227100	(@)	-12500						
WTR YR 1996	MAX	232900	MIN	172700	(@)	-43300						

(+) Elevation, in feet, at end of month.

(@) Change in contents, in acre feet.

BRAZOS RIVER BASIN

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1969 to September 1982, January 1988 to current year.

REVISED RECORDS.--WDR-IX-93-2 Phytoplankton.

310129097315901 - STILLHOUSE HOLLOW LAKE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
DEC												
04...	0908	218000	1.00	545	7.9	16.5	2.60	8.2	85	180	29	35
04...	0910	--	10.0	545	7.9	16.5	--	8.2	85	--	--	--
04...	0912	--	20.0	545	7.9	16.5	--	8.1	84	--	--	--
04...	0914	--	30.0	545	7.9	16.0	--	7.7	79	--	--	--
04...	0916	--	40.0	545	7.9	16.0	--	7.7	79	--	--	--
04...	0918	--	50.0	544	7.9	16.0	--	7.6	78	--	--	--
04...	0920	--	60.0	545	7.9	15.5	--	7.6	77	--	--	--
04...	0922	--	70.0	545	7.9	15.5	--	7.6	77	--	--	--
04...	0924	--	80.0	545	7.8	15.5	--	7.3	74	--	--	--
04...	0926	--	90.0	546	7.8	15.5	--	7.2	73	--	--	--
04...	0928	--	100	550	7.8	15.0	--	6.9	69	--	--	--
04...	0930	--	111	553	7.5	15.0	--	5.5	55	180	31	36
MAR												
05...	0920	216000	1.00	557	8.2	13.0	3.00	10.1	98	200	49	43
05...	0922	--	10.0	557	8.2	13.0	--	10.1	98	--	--	--
05...	0924	--	20.0	557	8.2	13.0	--	10.1	98	--	--	--
05...	0926	--	30.0	557	8.1	12.5	--	10.0	96	--	--	--
05...	0928	--	40.0	555	8.0	12.0	--	9.8	93	--	--	--
05...	0930	--	50.0	553	7.9	11.0	--	9.6	89	--	--	--
05...	0932	--	60.0	551	7.9	11.0	--	9.2	85	--	--	--
05...	0934	--	70.0	551	7.8	10.5	--	9.0	82	--	--	--
05...	0936	--	80.0	552	7.8	10.5	--	8.8	81	--	--	--
05...	0938	--	90.0	552	7.7	10.5	--	8.4	77	--	--	--
05...	0940	--	100	552	7.7	10.0	--	8.4	76	--	--	--
05...	0942	--	110	552	7.6	10.0	--	8.3	75	190	37	40
JUN												
17...	0948	197000	1.00	581	8.3	29.0	3.20	6.9	92	180	42	35
17...	0950	--	10.0	580	8.3	28.5	--	7.0	92	--	--	--
17...	0952	--	20.0	580	8.3	27.0	--	7.4	95	--	--	--
17...	0954	--	30.0	584	8.2	26.0	--	6.4	81	--	--	--
17...	0956	--	40.0	589	8.0	24.5	--	4.9	60	--	--	--
17...	0958	--	50.0	596	7.6	18.5	--	2.4	26	--	--	--
17...	1000	--	60.0	591	7.5	16.0	--	2.2	23	--	--	--
17...	1002	--	70.0	589	7.4	15.0	--	1.5	15	--	--	--
17...	1004	--	80.0	587	7.3	14.5	--	1.2	12	--	--	--
17...	1006	--	90.0	587	7.3	14.5	--	0.9	9	--	--	--
17...	1008	--	100	587	7.3	14.5	--	0.8	8	--	--	--
17...	1010	--	110	589	7.3	14.5	--	0.7	7	190	36	41
SEP												
05...	1010	186000	1.00	592	8.5	27.5	2.90	6.4	83	170	38	30
05...	1012	--	10.0	592	8.5	27.5	--	6.3	81	--	--	--
05...	1014	--	20.0	591	8.4	27.0	--	6.1	78	--	--	--
05...	1016	--	30.0	594	8.3	27.0	--	5.0	64	--	--	--
05...	1018	--	35.0	603	7.9	26.5	--	2.3	29	--	--	--
05...	1020	--	40.0	609	7.6	25.5	--	0	0	--	--	--
05...	1022	--	50.0	599	7.6	22.5	--	0	0	--	--	--
05...	1024	--	60.0	598	7.5	19.0	--	0	0	--	--	--
05...	1026	--	70.0	593	7.5	16.5	--	0	0	--	--	--
05...	1028	--	80.0	591	7.4	15.5	--	0	0	--	--	--
05...	1030	--	90.0	589	7.4	15.5	--	0	0	--	--	--
05...	1032	--	104	594	7.4	15.5	--	0	0	200	32	42

BRAZOS RIVER BASIN

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08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

310129097315901 - STILLHOUSE HOLLOW LAKE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC												
04...	22	37	1	3.0	150	21	71	0.30	8.5	287	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	22	38	1	3.0	150	23	71	0.30	8.5	292	--	--
MAR												
05...	23	40	1	3.1	150	20	72	0.30	7.5	301	0.060	0.060
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	0.070	0.070
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	22	40	1	3.1	150	21	71	0.30	8.2	299	0.060	0.060
JUN												
17...	22	43	1	3.3	140	25	80	0.30	5.9	296	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	0.220	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	22	40	1	3.2	160	24	75	0.30	8.5	309	0.260	--
SEP												
05...	22	48	2	3.3	130	25	93	0.30	6.1	304	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	22	40	1	3.2	160	21	74	0.30	10	312	--	--

BRAZOS RIVER BASIN

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

310129097315901 - STILLHOUSE HOLLOW LAKE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
04...	<0.010	--	<0.050	0.040	0.36	0.40	<0.010	<0.010	--	<10	<10
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.060	0.24	0.30	<0.010	<0.010	--	<10	<10
04...	<0.010	--	<0.050	0.110	0.19	0.30	<0.010	<0.010	--	<10	40
MAR											
05...	0.010	0.070	0.070	0.020	0.18	0.20	<0.010	<0.010	--	<10	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0.010	0.080	0.080	0.050	0.15	0.20	<0.010	<0.010	--	10	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0.010	0.070	0.070	0.240	0.36	0.60	0.010	<0.010	--	<10	10
JUN											
17...	<0.010	--	<0.050	0.030	--	<0.20	<0.010	<0.010	--	<3.0	<1.0
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.010	--	<0.050	0.020	--	<0.20	<0.010	<0.010	--	<3.0	1.0
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.010	0.220	0.220	0.030	--	<0.20	<0.010	<0.010	--	<3.0	6.0
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.010	0.260	0.260	0.040	--	<0.20	<0.010	<0.010	--	4.0	120
SEP											
05...	<0.010	--	<0.050	<0.015	--	<0.20	<0.010	<0.010	--	<3.0	1.0
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.010	--	<0.050	<0.015	--	<0.20	<0.010	<0.010	--	<3.0	2.0
05...	<0.010	--	<0.050	0.020	--	<0.20	<0.010	<0.010	--	<3.0	8.0
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.010	--	<0.050	0.320	0.18	0.50	<0.010	0.020	0.06	280	260

BRAZOS RIVER BASIN

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08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

31003309/333001 - STILLHOUSE HOLLOW LAKE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
04...	0956	1.00	547	8.0	16.5	8.6	90
04...	0958	10.0	546	8.0	16.5	8.5	88
04...	1000	20.0	546	8.0	16.5	8.4	87
04...	1002	30.0	545	7.9	16.0	7.9	81
04...	1004	40.0	545	7.9	16.0	7.7	79
04...	1006	50.0	545	7.9	16.0	7.7	79
04...	1008	60.0	545	7.9	15.5	7.8	79
04...	1010	70.0	544	7.9	15.5	7.7	78
04...	1012	80.0	548	7.9	15.5	7.4	75
04...	1014	90.0	550	7.8	15.0	7.2	73
04...	1016	100	550	7.8	15.0	6.7	68
04...	1018	109	552	7.7	15.0	6.5	66
MAR							
05...	1003	1.00	560	8.2	13.0	10.0	97
05...	1005	10.0	558	8.2	13.0	10.0	97
05...	1007	20.0	557	8.2	12.5	10.0	96
05...	1009	30.0	558	8.2	12.5	9.9	95
05...	1011	40.0	559	8.1	12.5	9.8	94
05...	1013	50.0	556	8.0	12.0	9.5	90
05...	1015	60.0	554	7.9	10.5	8.8	81
05...	1017	70.0	552	7.9	10.5	8.7	80
05...	1019	80.0	553	7.8	10.5	8.3	76
05...	1021	90.0	553	7.8	10.5	8.1	74
05...	1023	100	554	7.8	10.0	7.9	72
05...	1025	109	555	7.8	10.0	7.9	72
JUN							
17...	1048	1.00	581	8.3	29.0	7.0	93
17...	1050	10.0	581	8.3	28.0	7.1	93
17...	1052	20.0	580	8.3	27.0	7.3	94
17...	1054	30.0	584	8.2	26.0	6.3	79
17...	1056	40.0	595	7.9	24.5	4.1	50
17...	1058	50.0	599	7.5	19.5	1.7	19
17...	1100	60.0	597	7.4	16.5	0.2	2
17...	1102	70.0	593	7.3	15.0	0.1	1
17...	1104	80.0	590	7.3	15.0	0.4	4
17...	1106	90.0	587	7.3	14.5	0.4	4
17...	1108	104	587	7.3	14.5	0.4	4
SEP							
05...	0930	1.00	591	8.5	27.5	6.6	85
05...	0932	10.0	591	8.5	27.5	6.5	84
05...	0934	20.0	592	8.4	27.0	6.1	78
05...	0936	30.0	598	8.2	27.0	4.7	60
05...	0938	40.0	614	7.6	25.5	0	0
05...	0940	50.0	614	7.5	22.0	0	0
05...	0942	60.0	605	7.5	19.5	0	0
05...	0944	70.0	600	7.4	16.5	0	0
05...	0946	80.0	594	7.4	15.5	0	0
05...	0948	90.0	594	7.4	15.5	0	0
05...	0950	101	595	7.4	15.5	0	0

BRAZOS RIVER BASIN

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

310128097353601 - STILLHOUSE HOLLOW LAKE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CAC03)	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC												
04...	1042	1.00	551	8.0	16.0	1.80	8.5	88	180	31	37	22
04...	1044	10.0	550	8.0	16.0	--	8.5	88	--	--	--	--
04...	1046	20.0	548	8.0	16.0	--	8.2	84	--	--	--	--
04...	1048	30.0	549	8.0	16.0	--	8.2	84	--	--	--	--
04...	1050	40.0	546	7.9	16.0	--	7.8	80	--	--	--	--
04...	1052	50.0	552	7.9	15.5	--	7.6	77	--	--	--	--
04...	1054	60.0	556	7.9	15.5	--	7.3	74	--	--	--	--
04...	1056	70.0	573	7.8	15.5	--	6.5	66	--	--	--	--
04...	1058	80.0	590	7.8	15.0	--	6.1	61	--	--	--	--
04...	1100	86.0	592	7.7	15.0	--	5.9	59	180	24	36	22
MAR												
05...	1044	1.00	571	8.2	13.5	2.10	9.8	96	200	41	41	23
05...	1046	10.0	571	8.2	13.5	--	9.9	97	--	--	--	--
05...	1048	20.0	570	8.2	13.5	--	9.8	96	--	--	--	--
05...	1050	30.0	569	8.2	13.0	--	9.8	95	--	--	--	--
05...	1052	40.0	563	8.2	12.5	--	9.7	93	--	--	--	--
05...	1054	50.0	564	8.0	11.5	--	8.8	83	--	--	--	--
05...	1056	60.0	559	7.8	11.0	--	8.0	74	--	--	--	--
05...	1058	70.0	558	7.8	10.5	--	7.6	70	--	--	--	--
05...	1100	80.0	559	7.7	10.5	--	7.3	67	--	--	--	--
05...	1102	86.0	559	7.8	10.5	--	7.4	68	200	50	44	23
JUN												
17...	1136	1.00	597	8.3	30.5	1.83	6.7	91	180	35	34	22
17...	1138	10.0	591	8.3	28.5	--	7.4	97	--	--	--	--
17...	1140	20.0	598	8.2	26.5	--	6.9	88	--	--	--	--
17...	1142	30.0	601	8.0	26.0	--	5.0	63	--	--	--	--
17...	1144	40.0	613	7.6	24.0	--	1.5	18	--	--	--	--
17...	1146	50.0	606	7.4	19.0	--	0.1	1	--	--	--	--
17...	1148	60.0	599	7.3	16.0	--	0.1	1	--	--	--	--
17...	1150	70.0	595	7.3	15.5	--	0.1	1	--	--	--	--
17...	1152	82.0	593	7.3	15.0	--	0.2	2	200	42	42	22
SEP												
05...	1104	1.00	603	8.5	28.5	1.98	6.6	87	170	45	30	23
05...	1106	10.0	601	8.5	28.0	--	6.6	86	--	--	--	--
05...	1108	20.0	603	8.5	27.5	--	6.3	81	--	--	--	--
05...	1110	30.0	620	8.2	27.0	--	4.4	56	--	--	--	--
05...	1112	40.0	408	7.8	25.5	--	1.6	20	--	--	--	--
05...	1114	50.0	650	7.5	22.5	--	0	0	--	--	--	--
05...	1116	60.0	653	7.4	20.0	--	0	0	--	--	--	--
05...	1118	70.0	627	7.3	17.0	--	0	0	--	--	--	--
05...	1120	78.0	613	7.3	16.5	--	0	0	200	32	44	23

BRAZOS RIVER BASIN

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08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

310128097353601 - STILLHOUSE HOLLOW LAKE CC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC											
04...	39	1	3.1	150	22	77	0.30	8.4	300	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	43	1	3.1	160	23	81	0.30	8.5	311	--	--
MAR											
05...	42	1	3.1	160	20	74	0.30	7.3	305	0.070	0.070
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	0.100	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	42	1	3.1	150	21	71	0.30	8.3	306	0.080	0.080
JUN											
17...	45	1	3.3	140	25	85	0.30	6.2	305	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	0.160	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	40	1	3.2	150	23	76	0.30	9.0	309	0.150	0.150
SEP											
05...	51	2	3.2	120	25	95	0.30	6.4	309	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	0.060	0.060
05...	--	--	--	--	--	--	--	--	--	0.210	0.210
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	42	1	3.4	170	18	77	0.30	11	324	--	--

BRAZOS RIVER BASIN

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

31012809/353601 - STILLHOUSE HOLLOW LAKE CC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
04...	<0.010	--	<0.050	0.020	0.18	0.20	0.010	<0.010	--	<10	<10
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.050	0.15	0.20	0.030	<0.010	--	<10	<10
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.120	0.18	0.30	0.010	<0.010	--	<10	20
MAR											
05...	0.010	0.080	0.080	0.040	0.16	0.20	0.010	<0.010	--	<10	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.010	0.100	0.100	0.040	0.16	0.20	<0.010	<0.010	--	<10	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0.010	0.090	0.090	0.080	0.22	0.30	<0.010	<0.010	--	<10	<10
JUN											
17...	<0.010	--	<0.050	0.020	--	<0.20	<0.010	<0.010	--	<3.0	<1.0
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	0.010	--	<0.050	0.040	--	<0.20	<0.010	<0.010	--	<3.0	5.0
17...	<0.010	0.160	0.160	0.040	--	<0.20	<0.010	<0.010	--	<3.0	13
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	0.010	0.160	0.160	0.120	0.08	0.20	<0.010	<0.010	--	22	190
SEP											
05...	<0.010	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	<3.0	2.0
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0.010	0.070	0.070	0.050	0.25	0.30	<0.010	<0.010	--	<3.0	9.0
05...	0.030	0.240	0.240	0.260	0.24	0.50	<0.010	<0.010	--	13	27
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.010	--	<0.050	0.710	0.19	0.90	<0.010	0.020	0.06	370	340

BRAZOS RIVER BASIN

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08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

310130097371701 - STILLHOUSE HOLLOW LAKE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
04...	1138	1.00	555	8.1	16.5	8.7	91
04...	1140	10.0	555	8.0	16.0	8.6	89
04...	1142	20.0	555	8.0	16.0	8.3	85
04...	1144	30.0	556	8.0	16.0	8.2	84
04...	1146	40.0	556	8.0	15.5	7.9	80
04...	1148	50.0	566	7.9	15.5	7.4	75
04...	1150	60.0	610	7.8	15.0	6.6	67
04...	1152	72.0	644	7.7	15.0	5.6	56
MAR							
05...	1119	1.00	591	8.2	14.0	9.5	94
05...	1121	10.0	592	8.2	14.0	9.5	94
05...	1123	20.0	582	8.2	13.0	9.5	92
05...	1125	30.0	576	8.1	13.0	9.4	91
05...	1127	40.0	570	8.1	12.5	8.9	85
05...	1129	50.0	565	7.9	11.5	8.2	77
05...	1131	60.0	564	7.8	11.0	7.7	71
05...	1133	72.0	564	7.8	11.0	7.5	70
JUN							
17...	1212	1.00	632	8.3	30.5	7.0	96
17...	1214	10.0	608	8.3	28.5	7.4	97
17...	1216	20.0	612	8.2	27.0	6.4	82
17...	1218	30.0	680	7.8	26.0	3.7	47
17...	1220	40.0	683	7.4	23.5	0.1	1
17...	1222	50.0	621	7.3	18.5	0.1	1
17...	1224	60.0	606	7.3	16.0	0.1	1
17...	1226	67.0	605	7.3	16.0	0.2	2
SEP							
05...	1144	1.00	607	8.6	28.5	6.9	91
05...	1146	10.0	605	8.6	28.0	6.8	89
05...	1148	20.0	614	8.5	28.0	6.3	82
05...	1150	30.0	625	8.3	27.5	4.9	63
05...	1152	40.0	370	7.8	25.0	2.0	25
05...	1154	50.0	690	7.4	22.0	0	0
05...	1156	64.0	690	7.2	18.5	0	0

310037097383201 - STILLHOUSE HOLLOW LAKE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
DEC											
04...	1204	1.00	580	8.1	16.0	1.11	8.7	90	190	36	37
04...	1206	10.0	576	8.1	16.0	--	8.5	88	--	--	--
04...	1208	20.0	579	8.0	15.5	--	8.2	84	--	--	--
04...	1210	35.0	665	7.8	15.0	--	6.3	64	200	38	40
MAR											
05...	1140	1.00	672	8.1	14.5	1.10	9.3	93	220	53	45
05...	1142	10.0	673	8.1	14.0	--	9.2	91	--	--	--
05...	1144	20.0	679	8.0	13.5	--	8.6	84	--	--	--
05...	1146	34.0	863	7.7	12.5	--	6.6	63	240	66	52
JUN											
17...	1238	1.00	803	8.3	30.5	1.22	7.5	102	200	57	39
17...	1240	10.0	784	8.2	29.0	--	7.0	93	--	--	--
17...	1242	15.0	826	7.7	27.5	--	2.5	32	--	--	--
17...	1244	20.0	981	7.3	27.0	--	0.1	1	--	--	--
17...	1246	30.0	1100	7.2	27.0	--	0	0	230	74	48
SEP											
05...	1208	1.00	631	8.6	29.0	1.10	7.1	94	170	46	31
05...	1210	10.0	633	8.5	28.0	--	5.9	77	--	--	--
05...	1212	20.0	584	8.1	27.0	--	4.1	52	--	--	--
05...	1214	27.0	447	7.6	26.5	--	2.6	33	130	26	34

BRAZOS RIVER BASIN

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TX--Continued

310037097383201 - STILLHOUSE HOLLOW LAKE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)
DEC											
04...	23	43	1	3.1	150	22	79	0.30	8.3	306	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	24	53	2	3.4	160	23	110	0.30	8.4	359	--
MAR											
05...	25	55	2	3.4	160	21	100	0.30	6.6	354	0.080
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	0.090
05...	27	79	2	3.8	170	22	160	0.30	6.5	456	0.090
JUN											
17...	25	78	2	4.3	140	23	160	0.30	7.3	423	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	27	120	3	5.9	160	18	230	0.30	10	554	--
SEP											
05...	23	55	2	3.6	130	24	100	0.30	6.8	319	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	0.100
05...	11	35	1	4.1	100	13	61	0.20	9.3	231	0.280
DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
04...	--	<0.010	--	<0.050	<0.015	--	0.20	<0.010	<0.010	<10	<10
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	<0.010	--	<0.050	0.070	0.23	0.30	<0.010	<0.010	<10	<10
MAR											
05...	0.080	0.010	0.090	0.090	0.150	0.25	0.40	0.010	<0.010	<10	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	0.090	0.010	0.100	0.100	0.120	0.28	0.40	0.010	<0.010	<10	<10
05...	0.090	0.020	0.110	0.110	0.350	0.25	0.60	0.020	<0.010	<10	20
JUN											
17...	--	<0.010	--	<0.050	0.030	--	<0.20	<0.010	<0.010	4.0	3.0
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	<0.010	--	<0.050	0.030	0.17	0.20	<0.010	<0.010	5.0	22
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	<0.010	--	<0.050	0.270	0.23	0.50	<0.010	<0.010	440	280
SEP											
05...	--	<0.010	--	<0.050	<0.015	--	<0.20	<0.010	<0.010	<3.0	<1.0
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	<0.010	0.100	0.100	0.030	0.17	0.20	<0.010	<0.010	<3.0	3.0
05...	0.280	0.020	0.300	0.300	0.100	0.20	0.30	<0.010	<0.010	6.0	9.0

08104500 LITTLE RIVER NEAR LITTLE RIVER, TX

LOCATION.--Lat 30°57'59", long 97°20'45", Bell County, Hydrologic Unit 12070204, on right bank 25 ft downstream from State Highway 95, 2.4 mi southeast of Little River, 5 mi downstream from confluence of Leon and Lampasas Rivers, and 95.8 mi upstream from mouth.

DRAINAGE AREA.--5,226 mi².

PERIOD OF RECORD.--October 1923 to May 1929, August 1962 to current year.

Water-quality records.--Chemical analyses: October 1964 to September 1982.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.11 ft above sea level. From Oct. 5, 1923 to May 27, 1929, nonrecording gage at railroad bridge 0.5 mi upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Many small diversions upstream 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. Wastewater effluent is returned upstream of station from Fort Hood military installation and by the cities of Killeen, Nolanville, and Harker Heights. Flow is affected at times by discharge from the flood-detention pools of 13 floodwater-retarding structures with a combined detention capacity of 15,430 acre-ft. These structures control runoff from 47.4 mi². Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1924-28), 709 ft³/s (513,700 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1924-28).--Maximum discharge, 28,400 ft³/s Oct. 2, 1927, (gage height 43.3 ft); minimum, 8.9 ft³/s Aug. 12, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1900, 46.8 ft in September 1921, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	684	165	132	122	74	65	67	62	1010	1250	93	567
2	690	169	129	123	75	59	65	56	1010	210	93	173
3	701	137	134	118	76	62	61	53	937	167	83	177
4	674	146	131	124	76	44	62	55	1200	164	89	231
5	671	146	131	119	78	45	71	49	937	157	89	148
6	635	146	130	120	75	53	162	369	866	150	83	131
7	394	145	127	121	73	46	95	203	1180	151	91	131
8	171	143	126	122	77	44	77	85	987	150	105	144
9	167	121	132	119	89	50	73	73	872	146	113	142
10	165	97	127	120	87	48	71	57	864	160	103	134
11	162	98	130	124	107	50	62	55	2120	135	114	129
12	160	98	130	118	112	52	66	57	2220	129	141	124
13	160	98	122	119	107	51	73	62	1350	209	101	139
14	149	96	126	118	110	49	69	55	1320	149	93	328
15	143	95	126	123	113	48	61	44	1320	133	88	188
16	144	104	127	121	96	53	60	45	1320	151	91	218
17	127	178	140	118	84	86	58	33	1320	143	89	366
18	126	280	198	120	77	78	57	91	1540	146	91	701
19	124	158	170	129	66	72	51	123	1550	149	90	1940
20	110	142	130	121	62	60	46	121	1580	134	89	1700
21	112	119	127	118	57	59	62	119	1710	123	87	2210
22	112	138	123	122	56	64	68	117	1720	121	96	1970
23	114	132	124	118	52	62	165	115	1730	114	121	1920
24	118	134	124	91	48	66	79	114	1960	115	170	1900
25	120	129	124	63	56	69	70	523	2520	230	141	1750
26	125	132	120	43	61	69	60	667	1930	242	158	1120
27	124	132	122	49	63	74	54	887	1030	152	131	990
28	124	131	119	70	56	158	58	932	1610	140	124	785
29	135	132	123	71	58	81	68	900	1390	131	259	775
30	142	131	122	73	---	72	66	1780	1390	130	775	770
31	147	---	126	68	---	70	---	933	---	114	353	---
TOTAL	7730	4072	4052	3305	2221	1959	2157	8835	42493	5795	4344	22001
MEAN	249	136	131	107	76.6	63.2	71.9	285	1416	187	140	733
MAX	701	280	198	129	113	158	165	1780	2520	1250	775	2210
MIN	110	95	119	43	48	44	46	33	864	114	83	124
AC-FT	15330	8080	8040	6560	4410	3890	4280	17520	84280	11490	8620	43640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996#, BY WATER YEAR (WY)

	MEAN	440	445	511	861	922	1157	1367	1996	1859	1172	524	417
MAX	2760	2136	2697	7252	6123	10200	9237	6833	7264	6205	3818	2009	
(WY)	1975	1975	1992	1992	1992	1992	1992	1992	1965	1992	1992	1986	
MIN	43.0	57.8	47.7	59.3	60.7	63.2	59.4	150	165	85.2	12.1	41.3	
(WY)	1979	1990	1964	1971	1984	1996	1984	1978	1967	1972	1963	1972	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1962 - 1996#

ANNUAL TOTAL	464911	108964	972	
ANNUAL MEAN	1274	298	5054	1992
HIGHEST ANNUAL MEAN			179	1984
LOWEST ANNUAL MEAN			62000	May 17 1965
HIGHEST DAILY MEAN	5980	Apr 23	8.2	Aug 6 1963
LOWEST DAILY MEAN	95	Nov 15	9.5	Aug 3 1963
ANNUAL SEVEN-DAY MINIMUM	98	Nov 10	79600	May 17 1965
INSTANTANEOUS PEAK FLOW			42.85	May 17 1965
INSTANTANEOUS PEAK STAGE				
ANNUAL RUNOFF (AC-FT)	922200	216100	704300	
10 PERCENT EXCEEDS	2900	952	3090	
50 PERCENT EXCEEDS	699	123	245	
90 PERCENT EXCEEDS	126	58	63	

Period of regulated streamflow.

08104650 LAKE GEORGETOWN NEAR GEORGETOWN, TX

LOCATION.--Lat 30°40'03", long 97°43'38", Williamson County, Hydrologic Unit 12070205, at North San Gabriel Dam, on North Fork San Gabriel River, 2.5 mi upstream from Middle Fork San Gabriel River, 3.7 mi northwest of Georgetown, and 4.4 mi upstream from confluence with South Fork San Gabriel River.

DRAINAGE AREA.--247 mi².

PERIOD OF RECORD.--March 1980 to current year.

Water-quality records.--Chemical and biochemical analyses: October 1980 to August 1989.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to May 13, 1980, nonrecording gage at present site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam, 6,700 ft long, including the spillway. The lake was built for water conservation and flood control. Deliberate impoundment began on Mar. 3, 1980. The spillway is an ungated broad-crested weir 1,000 ft long, located near right end of dam. The spillway for normal flood releases is a gated, 11-foot-diameter conduit, controlled by two 5- by 11 foot slide gates, located near the center of dam. The invert for the floodgate is 720.0 ft. A low-flow outlet, consisting of four 3- by 4-foot gates is located near the center of dam. The inverts of these gates are 735.0, 749.0, 763.0, and 777.0 ft. Satellite telemeter at station. Figures given herein represent total content. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	861.0	246,700
Design flood.....	856.2	221,100
Crest of spillway.....	834.0	130,700
Top of conservation pool.....	791.0	37,010
Lowest gated outlet (invert of 11-foot conduit).....	720.0	24

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by the Texas Water Development Board, was put into use Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 136,900 acre-ft Mar. 4, 1992 (elevation, 835.86 ft); minimum, 466 acre-ft Mar. 4, 1980 (elevation, 724.46 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 32,830 acre-ft Oct. 1 (elevation, 787.64 ft); minimum daily, 15,300 acre-ft Aug. 23 (elevation, 769.55 ft).

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

720.0	24	778.0	22,400	784.0	28,600
740.0	1,900	780.0	24,400	786.0	30,900
760.0	9,240	782.0	26,400	788.0	33,300

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32830	30800	29250	27820	26330	24970	23490	21820	20430	19300	17250	16440
2	32770	30730	29220	27770	26270	24900	23430	21760	20440	19260	17180	15850
3	32700	30650	29180	27700	26220	24870	23390	21710	20410	19210	17090	15870
4	32630	30620	29130	27650	26170	24830	23340	21660	20420	19130	17010	15860
5	32540	30550	29090	27600	26120	24800	23330	21610	20370	19060	16930	15830
6	32460	30500	29040	27530	26080	24740	23290	21590	20330	18990	16850	15800
7	32380	30450	28980	27490	26050	24680	23230	21580	20420	18930	16780	15760
8	32320	30400	28940	27440	26010	24630	23190	21560	20390	18850	16750	15740
9	32250	30350	28880	27380	25980	24560	23150	21450	20360	18780	16660	15720
10	32180	30310	28800	27330	25940	24510	23090	21400	20300	18750	16640	15670
11	32120	30250	28750	27290	25880	24450	23040	21370	20270	18730	15990	15630
12	32050	30170	28720	27240	25840	24410	23000	21320	20220	18630	15930	15590
13	31980	30120	28670	27190	25800	24360	22950	21230	20180	18600	15870	15550
14	31920	30070	28630	27140	25750	24330	22870	21190	20130	18500	15800	15510
15	31830	30030	28600	27110	25700	24290	22800	21150	20070	18460	15630	15480
16	31770	29960	28560	27070	25650	24250	22740	21080	20020	18370	15620	15450
17	31680	29900	28560	27040	25600	24210	22670	21020	19970	18340	15620	15410
18	31630	29900	28520	26970	25550	24150	22610	20950	19920	18230	15610	15390
19	31550	29950	28450	26910	25500	24080	22560	20890	19860	18160	15600	15180
20	31470	29910	28400	26870	25440	24040	22490	20810	19800	18080	15600	15400
21	31390	29850	28340	26820	25400	23970	22430	20750	19740	18010	15930	15750
22	31300	29800	28280	26790	25360	23920	22400	20680	19660	17930	15910	15800
23	31230	29730	28240	26750	25300	23890	22340	20610	19620	17850	15900	15780
24	31150	29680	28190	26710	25250	23840	22280	20540	19550	17790	15360	15790
25	31080	29610	28130	26660	25190	23780	22220	20470	19550	17720	15340	15800
26	31020	29560	28090	26620	25140	23740	22140	20410	19540	17660	15910	15830
27	30950	29480	28040	26570	25110	23730	22090	20420	19500	17600	15870	15820
28	30880	29430	27990	26510	25050	23670	22020	20380	19450	17530	15830	15800
29	30820	29350	27940	26470	25020	23630	21960	20370	19400	17450	15800	15780
30	30750	29300	27900	26420	---	23580	21880	20500	19360	17390	15870	15770
31	30720	---	27860	26380	---	23530	---	20470	---	17320	16140	---
MAX	32830	30800	29250	27820	26330	24970	23490	21820	20440	19300	17250	15830
MIN	30720	29300	27860	26380	25020	23530	21880	20370	19360	17320	15300	15410
(+)	785.9	784.6	784.0	781.9	780.6	779.1	777.4	775.8	774.6	772.1	770.7	773.9
(@)	-2150	-1420	-1440	-1480	-1360	-1490	-1650	-1410	-1110	-2040	-1180	+2630

CAL YR 1995 MAX 38800 MIN 27860 (@) -860
WTR YR 1996 MAX 32830 MIN 15300 (@) -14100

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre feet.

08104700 NORTH FORK SAN GABRIEL RIVER NEAR GEORGETOWN, TX

LOCATION.--Lat 30°39'42", long 97°42'40", Williamson County, Hydrologic Unit 12070205, on left bank 5,000 ft downstream from North Fork dam, 1.5 mi upstream from Middle Fork San Gabriel River, 2.7 mi upstream from Interstate Highway 35, 2.7 mi northwest of Georgetown, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--248 mi².

PERIOD OF RECORD.--June 1968 to current year.

Water-quality records.--Chemical and biochemical analyses: October 1980 to August 1989.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 689.06 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Beginning Mar. 3, 1980, flow largely regulated by Lake Georgetown (station 08104650) located about 1.0 mi upstream from gage. Several measurements of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--11 years (water years 1969-79), 88.1 ft³/s (63,830 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1969-79).--Maximum discharge, 35,000 ft³/s Sept. 17, 1974 (gage height, 26.20 ft); no flow July 23-25, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 39.5 ft in September 1921. Flood in April 1957 reached a stage of 34.5 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	11	11	11	12	12	12	1.9	1.6	1.6	5.7
2	14	14	11	11	11	12	12	7.9	1.8	1.5	1.7	3.0
3	14	13	11	11	9.9	11	12	4.2	1.6	1.6	1.8	2.8
4	14	13	11	11	9.6	11	12	4.2	1.6	2.0	1.8	2.7
5	14	13	12	11	9.6	11	12	4.2	1.4	1.7	1.7	2.8
6	15	13	13	11	9.6	11	12	4.2	1.3	2.1	2.2	2.8
7	14	13	13	11	9.6	11	12	4.2	1.8	2.5	2.2	2.2
8	14	13	12	11	9.8	11	11	4.2	1.6	2.5	2.2	2.4
9	14	13	12	11	9.7	11	11	4.2	1.3	2.6	1.9	2.3
10	14	13	13	11	9.8	11	11	4.1	1.2	2.8	2.1	2.1
11	13	13	12	11	9.7	12	11	4.0	1.2	2.8	2.2	2.0
12	13	13	13	10	9.8	12	11	4.0	1.1	3.1	1.9	2.0
13	14	13	13	9.7	10	12	11	4.1	1.1	4.1	2.3	2.0
14	14	13	13	9.8	11	12	12	4.2	.96	3.9	1.8	2.3
15	13	13	12	10	11	12	11	4.2	.91	3.0	1.7	2.5
16	13	13	11	10	11	12	11	4.2	.79	2.7	1.7	2.4
17	15	14	12	11	11	13	12	4.2	.80	2.5	1.9	3.4
18	13	14	13	11	11	12	12	4.2	.84	2.2	2.1	42
19	13	13	11	11	11	12	11	4.2	.85	1.5	2.1	6.6
20	13	13	12	11	11	12	11	4.2	.85	1.3	1.9	28
21	14	13	12	11	11	12	12	4.2	.86	1.5	1.9	5.8
22	14	14	11	11	11	12	12	4.2	.90	1.5	2.2	4.7
23	14	14	11	11	11	12	12	4.2	.83	1.5	2.3	4.2
24	14	15	11	10	11	12	12	4.0	.88	1.6	2.9	3.7
25	14	15	11	10	12	12	12	4.0	1.1	1.6	2.3	3.8
26	14	14	11	11	12	12	12	3.8	1.4	1.5	2.1	4.2
27	14	14	11	11	12	12	11	4.3	1.8	2.0	1.9	4.4
28	14	13	11	11	12	12	11	4.1	1.7	1.8	1.8	4.2
29	14	12	11	11	12	12	12	4.0	1.8	1.6	2.1	4.2
30	14	12	12	11	---	12	12	6.1	1.6	1.6	2.7	3.9
31	14	---	11	11	---	12	---	3.0	---	1.6	3.3	---
TOTAL	429	401	364	333.5	310.1	365	348	140.8	37.77	65.8	64.3	165.1
MEAN	13.8	13.4	11.7	10.8	10.7	11.8	11.6	4.54	1.26	2.12	2.07	5.50
MAX	15	15	13	11	12	13	12	12	1.9	4.1	3.3	42
MIN	13	12	11	9.7	9.6	11	11	3.0	.79	1.3	1.6	2.0
AC-FT	851	795	722	661	615	724	690	279	75	131	128	327

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996#, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	16.8	21.8	43.4	47.5	77.5	110	69.8	82.4	155	167	8.85	34.7					
MAX	153	171	254	343	485	832	574	323	938	962	27.2	461					
(WY)	1982	1982	1986	1992	1986	1992	1992	1992	1992	1987	1992	1981					
MIN	1.18	1.72	1.97	1.39	4.06	1.30	.44	.71	.60	2.12	1.30	1.37					
(WY)	1983	1986	1984	1986	1990	1980	1980	1980	1980	1996	1982	1982					

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1980 - 1996#
ANNUAL TOTAL	7187.5	3024.37	
ANNUAL MEAN	19.7	8.26	69.5
HIGHEST ANNUAL MEAN			358
LOWEST ANNUAL MEAN			4.00
HIGHEST DAILY MEAN	256	42	4500
LOWEST DAILY MEAN	2.6	.79	.00
ANNUAL SEVEN-DAY MINIMUM	5.4	.84	.01
INSTANTANEOUS PEAK FLOW		712	3500
INSTANTANEOUS PEAK STAGE		7.35	26.20
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (AC-FT)	14260	6000	50330
10 PERCENT EXCEEDS	49	13	134
50 PERCENT EXCEEDS	13	11	6.6
90 PERCENT EXCEEDS	6.3	1.6	2.0

Period of regulated streamflow.

08104900 SOUTH FORK SAN GABRIEL RIVER AT GEORGETOWN, TX

LOCATION.--Lat 30°37'32", long 97°41'27", Williamson County, Hydrologic Unit 12070205, on right bank at downstream side of downstream bridge of two bridges on Interstate Highway 35, 1.1 mi southwest of the courthouse at Georgetown, and 2.4 mi upstream from mouth.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--Water years 1948, 1962-67 (occasional low-flow measurements), December 1967 to current year.

REVISED RECORDS.--WDR IX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 687.72 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1887, about 41 ft Apr. 24, 1957, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 20	0715	4,730	9.18				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.3	.24	.47	.36	1.1	1.7	.62	.74	.46	.30	276
2	1.2	1.4	.25	.43	.50	1.0	1.1	.58	.66	.43	.30	31
3	1.2	1.3	.30	.35	.59	.99	1.0	.57	.58	.38	.32	38
4	1.4	1.2	.40	.28	.64	1.0	1.2	.54	1.2	.33	.32	57
5	1.1	1.1	.34	.29	.64	1.4	1.0	.52	.78	.34	.29	6.6
6	1.1	1.5	.23	.35	.60	1.0	1.4	.55	.62	.34	.29	2.6
7	1.2	1.2	.22	.38	.72	1.0	1.0	.55	1.9	.35	.30	2.0
8	1.2	.96	.29	.46	.71	1.1	.78	.55	2.6	.36	.37	2.1
9	1.2	.78	.28	.37	.69	1.1	1.1	.55	1.0	.39	.33	2.5
10	1.3	.79	.23	.31	.77	1.1	1.1	.55	.87	.38	.31	1.6
11	1.3	.87	.29	.29	.74	1.1	1.0	.54	.71	.43	.42	1.1
12	1.3	.81	.37	.28	.95	1.1	1.0	.47	.58	.46	.50	.94
13	1.3	.86	.34	.23	.91	1.1	.97	.48	.51	.51	.36	.92
14	1.2	.71	.29	.23	.85	1.1	.93	.44	.47	.50	.34	1.1
15	1.2	.51	.22	.26	.88	1.1	.89	.44	.47	.34	.33	1.3
16	1.2	.60	.23	.35	.86	1.0	.88	.42	.46	.27	.33	1.1
17	1.2	2.6	.36	.44	.85	1.1	.82	.42	.44	.26	.42	.85
18	1.1	1.3	.44	.29	.91	1.2	.81	.42	.40	.24	.39	244
19	1.1	1.3	.34	.21	1.0	1.1	.76	.40	.40	.25	.41	464
20	1.1	1.3	.31	.27	.99	1.1	.63	.40	.42	.26	.43	1750
21	1.2	.68	.36	.20	1.1	1.1	.56	.40	.44	.24	.43	781
22	1.2	.35	.35	.36	.99	1.1	.82	.40	.46	.26	2.0	111
23	1.2	.27	.36	.31	.96	1.1	.78	.37	.45	.26	3.4	65
24	1.3	.35	.50	.29	.91	1.0	.77	.35	.43	.26	15	46
25	1.4	.37	.46	.22	.96	1.1	.71	.34	.46	.30	4.2	36
26	1.4	.35	.45	.29	1.0	1.0	.67	.36	1.0	.33	7.4	36
27	1.3	.40	.38	.28	1.0	1.3	.61	.53	.87	.34	5.2	40
28	1.3	.38	.29	.22	.88	1.2	.60	.41	.63	.30	2.7	32
29	1.3	.31	.27	.29	.96	1.1	.63	.38	.53	.26	17	29
30	1.4	.22	.29	.32	---	1.2	.56	3.2	.49	.25	41	22
31	1.4	---	.38	.26	---	1.1	---	.83	---	.28	73	---
TOTAL	38.7	28.07	10.06	9.58	23.92	34.09	26.78	17.58	21.57	10.36	178.39	4082.71
MEAN	1.25	.94	.32	.31	.82	1.10	.89	.57	.72	.33	5.75	136
MAX	1.4	3.3	.50	.47	1.1	1.4	1.7	3.2	2.6	.51	73	1750
MIN	1.1	.22	.22	.20	.36	.99	.56	.34	.40	.24	.29	.85
AC-FT	77	56	20	19	47	68	53	35	43	21	354	8100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

	35.1	20.5	44.2	50.1	75.9	60.2	63.1	95.6	116	24.2	14.1	24.2
MEAN	221	124	489	441	711	367	337	247	851	85.8	131	306
MAX	1974	1975	1992	1968	1992	1992	1977	1975	1981	1976	1974	1981
MIN	.069	.16	.22	.31	.81	1.10	.89	.24	.37	.13	.036	.022
(WY)	1979	1989	1989	1996	1990	1996	1996	1984	1971	1978	1980	1984

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1968 - 1996

ANNUAL TOTAL	10305.96	4481.81	
ANNUAL MEAN	28.2	12.2	
HIGHEST ANNUAL MEAN			49.2
LOWEST ANNUAL MEAN			203
HIGHEST DAILY MEAN	1520	May 30	2.15
LOWEST DAILY MEAN	.22	Nov 30	7830
ANNUAL SEVEN-DAY MINIMUM	.27	Dec 5	.00
INSTANTANEOUS PEAK FLOW			.00
INSTANTANEOUS PEAK STAGE			.00
ANNUAL RUNOFF (AC-FT)	20440	8890	33400
10 PERCENT EXCEEDS	58	1.9	24.60
50 PERCENT EXCEEDS	13	.63	35620
90 PERCENT EXCEEDS	.42	.29	94
			12
			.32

08105100 BERRY CREEK NEAR GEORGETOWN, TX

LOCATION.--Lat 30°41'28", long 97°39'21", Williamson County, Hydrologic Unit 12070205, on right bank at upstream side of upstream service road on Interstate Highway 35, 2.9 mi north of the county courthouse at Georgetown, and 3.6 mi upstream from mouth.

DRAINAGE AREA.--83.1 mi².

PERIOD OF RECORD.--July 1967 to current year.

Water-quality records.--Sediment records: October 1976 to September 1981.

REVISED RECORDS.--WDK TX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 659.97 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversions. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1921 occurred September 1921, 25.0 ft, from information by Texas Department of Transportation and local residents (discharge not determined).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 18	2115	8,290	15.81	Sept. 20	0415	4,310	11.92
Sept. 20	0115	2,290	8.54				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	60
2	.08	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.70
3	.08	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00
4	.08	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00
5	.08	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00
6	.05	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00
7	.01	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00
8	.01	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00
9	.01	.00	.02	.01	.01	.00	.00	.00	.00	.00	.00	.00
10	.01	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.01	.01	.01	.00	.00	.00	.00	.00	.00	.00
18	.00	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	1110
19	.00	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	226
20	.00	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	1000
21	.00	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00	140
22	.00	.05	.01	.01	.01	.00	.00	.00	.00	.00	.00	13
23	.00	.08	.01	.01	.01	.00	.00	.00	.00	.00	.00	5.9
24	.00	.08	.01	.01	.01	.00	.00	.00	.00	.00	.00	4.0
25	.00	.08	.01	.01	.01	.00	.00	.00	.00	.00	.00	2.4
26	.00	.08	.01	.01	.01	.00	.00	.00	.00	.00	.00	1.7
27	.00	.08	.01	.01	.01	.00	.00	.00	.00	.00	.00	.75
28	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00	.59
29	.00	.08	.01	.01	.00	.00	.00	.00	.00	.00	.00	.63
30	.00	.08	.01	.01	---	.00	.00	.00	.00	.00	.00	.66
31	.00	---	.01	.01	---	.00	---	.00	---	.00	.00	---
TOTAL	0.49	0.73	0.88	0.31	0.27	0.00	0.00	0.00	0.00	0.00	0.00	2566.33
MEAN	.016	.024	.028	.010	.009	.000	.000	.000	.000	.000	.000	85.5
MAX	.08	.08	.08	.01	.01	.00	.00	.00	.00	.00	.00	1110
MIN	.00	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	1.0	1.4	1.7	.6	.5	.00	.00	.00	.00	.00	.00	5090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
MEAN	15.4	8.57	22.9	27.4	48.0	32.8	32.4	45.6	51.6	13.0	4.88	10.7																	
MAX	158	74.2	238	264	409	172	168	148	321	45.9	18.3	85.5																	
(WY)	1975	1975	1992	1968	1992	1992	1977	1979	1981	1973	1975	1996																	
MIN	.000	.000	.000	.000	.009	.000	.000	.000	.000	.000	.000	.000																	
(WY)	1979	1989	1989	1990	1996	1996	1996	1996	1996	1978	1978	1978																	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1968 - 1996

ANNUAL TOTAL	4029.10	2569.01	25.9
ANNUAL MEAN	11.0	7.02	106
HIGHEST ANNUAL MEAN			.047
LOWEST ANNUAL MEAN			1984
HIGHEST DAILY MEAN	625	1110	4670
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		8290	15500
INSTANTANEOUS PEAK STAGE		15.81	19.33
ANNUAL RUNOFF (AC-FT)	7990	5100	18790
10 PERCENT EXCEEDS	20	6	47
50 PERCENT EXCEEDS	6.8	.00	4.3
90 PERCENT EXCEEDS	.00	.00	.00

BRAZOS RIVER BASIN

08105600 GRANGER LAKE NEAR GRANGER, TX

LOCATION.--30°41'34", long 97°19'34", Williamson County, Hydrologic Unit 12070205, at Granger Dam on San Gabriel River, 1.5 mi south of Friendship, 2.2 mi upstream from Willis Creek, 7.1 mi east of Granger, and at mile 31.9.

DRAINAGE AREA.--730 mi².

PERIOD OF RECORD.--January 1980 to current year.

Water-quality records.--Chemical and biochemical analyses: October 1980 to August 1989.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Mar. 27, 1980, nonrecording gage at present site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam, 16,320 ft long, including the spillway. The lake was built for water conservation and flood control. Deliberate impoundment began on Jan. 21, 1980. The spillway is an ungated 950-foot long ogee weir, located near right end of dam. The spillway for normal flood releases is a gated 18-foot-diameter conduit, controlled by two 8- by 18-foot slide gates, located near the center of dam. The invert for the floodgate is 457.0 ft. A low-flow outlet consists of three 3- by 4-foot gated openings, with invert elevations of 486.0, 494.0, and 502.0 ft. Figures given herein represent total contents. Satellite telemetry at station. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	555.0	663,300
Designed flood.....	550.3	568,800
Crest of spillway.....	528.0	232,900
Top of conservation pool.....	504.0	54,280
Lowest gated outlet (invert of 18-foot conduit).....	457.0	0

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by the Texas Water Development Board, was put into use beginning Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 268,200 acre-ft Mar. 5, 1992 (elevation, 530.11 ft); minimum, 615 acre-ft Jan. 21, 1980 (elevation, 462.60 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 71,710 acre-ft Sept. 21 (elevation, 507.67 ft); minimum daily, 47,240 acre-ft Aug. 23 (elevation, 502.15 ft).

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

460.0	0	511.0	90,300	526.0	211,500
480.0	3,560	515.0	116,300	528.0	232,900
500.0	39,800	518.0	138,700	529.0	244,200
502.0	46,700	521.0	163,700	530.0	255,700
503.0	50,400	524.0	191,500	531.0	267,600
507.0	68,300				

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65640	65290	66260	66260	66340	66080	65640	64940	63640	62840	59400	59840
2	65680	65290	66390	66080	66300	65990	65640	64890	63730	62710	59360	49300
3	65640	65110	66340	66040	66340	65900	65680	64890	63690	62590	59200	49600
4	65640	65160	66430	65990	66340	65950	65640	64810	64200	62500	58960	49640
5	65550	65200	66480	65900	66340	65990	65770	64760	64160	62340	58810	49640
6	65420	65290	66480	65860	66430	65900	65730	64760	64030	62210	58650	49640
7	65420	65290	66430	65810	66520	65730	65730	64720	64590	62090	58530	49600
8	65370	65290	66430	65860	66570	65640	65730	64680	64590	61920	58490	49570
9	65290	65290	66340	65810	66650	65640	65730	64590	64550	61800	58370	49680
10	65290	65370	66340	65900	66650	65590	65730	64590	64420	61710	58290	49640
11	65290	65290	66390	65900	66650	65590	65730	64460	64420	61630	57640	49600
12	65290	65240	66520	65900	66650	65640	65730	64420	64330	61510	57530	49530
13	65290	65240	66570	65990	66700	65680	65770	64370	64240	61380	57420	49530
14	65160	65240	66610	65990	66700	65680	65640	64290	64160	61260	57310	49570
15	65110	65290	66700	65990	66610	65730	65510	64160	64070	61180	57820	49600
16	65110	65290	66700	66120	66520	65730	65460	64070	63990	61060	57740	49530
17	65020	65810	66790	66260	66520	65770	65420	63900	63900	60890	57630	49450
18	65020	65950	66970	66120	66610	65730	65420	63810	63770	60770	57590	51930
19	65020	66040	66880	66120	66430	65640	65370	63690	63640	60690	57590	59230
20	64890	66120	66830	66120	66430	65590	65290	63560	63520	60530	57510	70570
21	64850	66170	66880	66120	66430	65550	65290	63470	63390	60410	57390	71710
22	64760	66210	66790	66260	66390	65550	65420	63350	63390	60250	57470	69650
23	64720	66210	66700	66300	66340	65550	65290	63180	63260	60040	57240	67390
24	64630	66170	66650	66300	66300	65590	65290	63010	63300	60080	57380	65660
25	64630	66210	66570	66340	66300	65420	65160	62880	63300	60210	57380	64590
26	64680	66300	66520	66340	66300	65460	65070	62800	63220	60160	58060	63620
27	64680	66210	65180	66300	66210	65640	65070	62880	63220	60040	58060	62620
28	64590	66170	66340	66340	66120	65640	65160	62840	63090	59920	57980	61590
29	64550	66170	66300	66340	66120	65680	65110	62750	63010	59760	58060	60560
30	64590	66170	66300	66340	---	65730	64980	63640	62920	59640	58370	59550
31	64760	---	66260	66300	---	65640	---	63690	---	59560	59240	---
MAX	65680	66300	66970	66340	66700	66080	65770	64940	64590	62840	59400	71710
MIN	64550	65110	65180	65810	66120	65420	64980	62750	62920	59560	47240	49300
(+)	503.83	504.15	504.17	504.18	504.14	504.03	503.88	503.58	503.40	502.58	502.50	502.58
(@)	-880	+1410	+90	+40	-180	-480	-660	-1290	-720	-3280	-320	+310
CAL YR 1995	MAX	83550	MIN	55180	(@)	6460						
WTR YR 1996	MAX	71710	MIN	47240	(@)	6090						

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre feet.

08105700 SAN GABRIEL RIVER AT LANEPORT, TX

LOCATION.--Lat 30°41'39", long 97°16'43", Williamson County, Hydrologic Unit 12070205, on right bank at upstream side of county bridge, 0.2 mi north of Laneport, 3.4 mi downstream from Willis Creek, 7.5 mi northwest of Thrall, and 26.2 mi upstream from mouth.

DRAINAGE AREA.--738 mi².

PERIOD OF RECORD.--July 1965 to current year.

Water-quality records.--Chemical and biochemical analyses: July 1972 to August 1989. Continuous daily water temperature records: December 1976 to March 1982.

REVISED RECORDS.--WRD TX-74-1: 1965(M), 1966(P), 1967(M), 1968, 1969(P), 1973(P). WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 412.60 ft above sea level.

REMARKS.--Records good. Flow partly regulated by Granger Lake (station 08105600) since Jan. 21, 1980. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--14 years (water years 1966-79), 289 ft³/s (209,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1966-79).--Maximum discharge, 31,200 ft³/s Oct. 31, 1974 (gage height, 30.80 ft); minimum daily, 0.28 ft³/s Aug. 25-28, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1910, 39.6 ft, occurred September 1921. Other significant flood occurred April 1957, 34.6 ft; and October 1959, 33.8 ft; from floodmarks at present site and datum (discharges not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	5.3	5.4	53	4.1	26	5.0	4.0	3.8	4.9	35	8.8
2	3.3	3.5	5.7	53	4.0	26	5.2	4.2	3.9	4.9	4.5	5.1
3	3.3	3.3	6.1	45	3.9	26	5.2	4.2	4.0	4.9	4.2	5.2
4	3.2	3.3	6.0	29	3.9	26	5.2	4.2	5.5	4.8	2.7	5.3
5	3.2	3.4	6.2	28	4.0	26	5.2	4.2	4.1	4.7	3.2	5.1
6	3.1	3.3	6.2	28	4.2	27	5.4	4.4	3.8	4.8	3.6	5.0
7	3.3	3.7	6.1	20	4.3	24	5.3	4.5	5.8	4.9	3.7	4.9
8	3.4	3.3	6.2	6.5	4.2	6.0	5.2	4.2	4.1	4.9	4.1	4.9
9	3.4	3.1	6.1	6.3	4.3	5.4	5.3	3.7	3.9	5.0	4.3	5.3
10	3.4	3.3	6.8	6.0	4.5	5.0	5.3	3.5	3.9	4.9	4.2	5.5
11	3.3	3.6	6.3	6.1	4.4	5.1	5.1	3.6	4.1	5.1	4.4	5.1
12	3.4	3.9	6.0	6.1	4.5	5.0	5.1	4.1	3.8	4.8	4.4	5.0
13	3.7	3.8	7.0	5.9	4.5	5.0	5.2	4.2	4.1	4.9	4.3	5.2
14	3.6	3.8	6.9	6.0	4.4	4.9	5.2	3.8	4.1	5.0	4.3	5.1
15	3.5	3.8	6.6	6.0	5.7	4.8	5.0	3.7	4.1	5.1	4.3	5.2
16	3.7	3.9	6.2	6.0	27	5.0	5.1	3.7	3.9	5.2	4.1	5.1
17	3.7	6.6	6.3	5.8	28	5.1	5.1	3.9	3.9	5.1	4.2	5.1
18	4.0	5.0	6.4	5.5	29	4.9	5.2	3.7	3.9	5.1	5.0	6.4
19	3.9	4.1	6.2	5.2	29	4.6	4.9	3.8	3.9	4.7	6.1	88
20	3.7	4.0	6.2	5.5	28	e4.8	5.0	3.9	3.7	2.9	4.8	404
21	3.7	4.1	6.2	5.6	28	4.8	5.1	3.9	3.7	3.7	4.4	1350
22	3.9	4.3	25	5.5	27	4.6	5.9	3.7	4.5	4.6	4.9	1620
23	4.0	4.6	54	5.9	28	4.5	5.6	3.7	4.4	4.7	5.9	1580
24	3.8	4.5	53	5.7	26	4.7	4.8	3.8	3.8	4.8	6.7	1280
25	3.8	4.6	53	5.6	26	4.4	4.9	3.7	3.8	5.7	5.8	852
26	4.0	4.7	53	5.6	26	4.1	4.9	3.7	3.8	5.0	6.0	721
27	4.2	4.9	53	5.3	26	2.2	5.0	4.2	5.1	5.0	6.0	715
28	4.0	4.7	53	5.2	26	.82	4.9	3.9	5.0	4.9	5.9	706
29	3.6	4.9	53	5.5	26	4.5	4.6	3.7	4.9	4.8	6.0	701
30	4.1	5.2	53	5.2	---	5.3	3.6	8.5	4.9	4.7	8.8	700
31	4.2	---	54	4.3	---	5.1	---	3.8	---	4.7	5.8	---
TOTAL	112.8	124.5	635.1	392.3	444.9	291.62	152.5	126.1	126.2	149.2	181.6	10814.3
MEAN	3.64	4.15	20.5	12.7	15.3	9.41	5.08	4.07	4.21	4.81	5.86	360
MAX	4.2	6.6	54	53	29	27	5.9	8.5	5.8	5.7	35	1620
MIN	3.1	3.1	5.4	4.3	3.9	.82	3.6	3.5	3.7	2.9	2.7	4.9
AC-FT	224	247	1260	778	882	578	302	250	250	296	360	21450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996#, BY WATER YEAR (WY)

	MEAN	68.0	96.6	183	231	265	359	255	357	462	447	35.2	91.0
MAX	464	378	953	1233	1334	2210	1685	1153	1732	2196	134	922	
(WY)	1982	1982	1986	1987	1992	1992	1992	1992	1981	1992	1992	1981	
MIN	3.21	3.99	3.06	5.25	2.62	3.24	3.53	2.87	4.21	.19	.018	.000	
(WY)	1983	1983	1983	1981	1980	1980	1984	1984	1996	1984	1984	1984	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1980 - 1996#

ANNUAL TOTAL	49061.1	13551.12	
ANNUAL MEAN	134	37.0	
HIGHEST ANNUAL MEAN			237
LOWEST ANNUAL MEAN			1015
HIGHEST DAILY MEAN	1400	1620	21.4
LOWEST DAILY MEAN	2.1	.82	Mar 5 1992
ANNUAL SEVEN-DAY MINIMUM	3.1	3.3	Aug 21 1984
INSTANTANEOUS PEAK FLOW		1660	Aug 21 1984
INSTANTANEOUS PEAK STAGE		10.17	Oct 31 1974
ANNUAL RUNOFF (AC-FT)	97310	26880	30.80
10 PERCENT EXCEEDS	292	27	Oct 31 1974
50 PERCENT EXCEEDS	30	4.9	
90 PERCENT EXCEEDS	3.6	3.7	3.4

e Estimated

Period of regulated streamflow.

08106350 LITTLE RIVER NEAR ROCKDALE, TX

LOCATION.--Lat 30°45'38", long 97°00'49", Milam County, Hydrologic Unit 12070204, on right bank downstream from Alcoa pumping station, 200 ft downstream from mouth of San Gabriel River, and 6.8 mi north of Rockdale.

DRAINAGE AREA.--6,959 mi².

PERIOD OF RECORD.--February 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 299.12 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Daily discharges are not published above 1,000 ft³/s. There are numerous diversions for irrigation and municipal supply above station. For statement regarding regulation by National Resource Conservation Service floodwater-retarding structures in the Little River basin, see station number 08104500. Flow from the San Gabriel river is largely regulated by Granger Lake (station 08105600). Flow in the San Gabriel may be affected at times by discharge from the flood-detention pools of 46 flood water-retarding structures with a combined detention capacity of 46,140 acre-ft. These structures control runoff from 144 mi², in the Brushy Creek drainage basin. The Aluminum Company of America diverts water from Little River to their plant reservoir. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 38.34 ft Dec. 21, 1991 (maximum discharge not determined); minimum daily discharge 13.0 ft³/s May 9, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 23.87 ft Sept. 19, at 1300 hours (maximum discharge not determined); minimum daily discharge, 41 ft³/s May 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	647	167	140	174	116	93	87	54	956	---	67	968
2	654	186	155	172	114	94	94	54	969	---	67	751
3	681	217	146	167	113	104	81	50	934	293	65	315
4	679	153	139	167	112	112	81	48	867	179	62	199
5	661	142	140	175	113	121	80	42	---	155	57	334
6	641	148	136	177	117	121	84	41	912	143	65	270
7	605	171	134	171	116	120	108	149	818	131	64	201
8	453	171	137	171	114	122	151	279	---	118	62	172
9	228	166	144	162	112	106	109	124	---	108	68	165
10	177	165	139	160	111	101	109	80	894	92	78	159
11	167	158	135	159	106	103	98	69	894	85	82	158
12	168	154	135	158	92	97	81	57	---	84	83	149
13	158	156	137	160	96	101	77	55	---	87	99	140
14	160	158	139	157	112	95	92	56	---	115	88	135
15	174	158	156	155	99	80	96	73	---	114	76	319
16	175	158	160	157	80	84	88	64	---	87	70	181
17	165	179	160	155	87	89	87	57	---	83	69	240
18	142	575	163	146	94	84	88	56	---	85	71	---
19	138	835	204	125	96	104	75	46	---	76	74	---
20	157	309	229	131	106	92	56	67	---	74	73	---
21	148	239	183	134	99	95	51	83	---	71	77	---
22	135	217	170	130	97	88	54	84	---	70	80	---
23	130	208	174	133	96	76	85	82	---	69	89	---
24	127	200	193	132	93	77	136	81	---	66	106	---
25	119	194	198	125	89	94	123	83	---	85	250	---
26	125	192	199	108	90	103	73	297	---	100	544	---
27	136	159	190	90	93	106	61	512	---	193	295	---
28	133	160	167	84	93	102	54	699	---	107	214	---
29	123	153	168	103	94	122	57	762	---	87	175	---
30	118	152	170	119	---	129	50	791	---	79	209	---
31	121	---	171	118	---	95	---	---	---	71	905	---
TOTAL	8445	6400	5011	4475	2950	3110	2566	---	---	---	4384	---
MEAN	272	213	162	144	102	100	85.5	---	---	---	141	---
MAX	681	835	229	177	117	129	151	---	---	---	905	---
MIN	118	142	134	84	80	76	50	---	---	---	57	---
AC-FT	16750	12690	9940	8880	5850	6170	5090	---	---	---	8700	---

08106500 LITTLE RIVER AT CAMERON, TX

LOCATION (REVISED).--lat 30°50'06", long 96°56'47", Milam County, Hydrologic Unit 12070204, on right bank at bridge on U.S. Highway 77, 2,020 ft downstream from old McCowan bridge, 0.7 mi upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2 mi southeast of Cameron, and 33.2 mi upstream from mouth.

DRAINAGE AREA.--7,065 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1916 to current year.

REVISED RECORDS.--WSP /18: 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). WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 281.89 ft above sea level (levels by U.S. Army Corps of Engineers). Nov. 2, 1916 to Sept. 30, 1922, nonrecording gage at site 2.2 mi upstream at different datum. Oct. 1, 1922, to Sept. 21, 1926, nonrecording gage at McCowan bridge 1,990 ft upstream at same datum. Apr. 9, 1926 to Oct. 9, 1933, non-recording gage at same location but at 1.58 ft lower datum. Oct. 10, 1933 to Aug. 13, 1992, recording gage at site 2,020 ft upstream at same datum. Aug. 14 to Oct. 21, 1992, non-recording gage at site.

REMARKS.--Records fair. Many small diversions for irrigation and municipal supply affect low flows. Since Mar. 8, 1954, 50 percent of the drainage area has been regulated by Belton Lake (station 08102000) on the Leon River, since Sept. 21, 1966, an additional 19 percent of the drainage area by Stillhouse Hollow Lake (station 08104050) on the Lampasas River, and since Jan. 21, 1980, an additional 10 percent of the drainage area by Granger Lake (station 08105700) on the San Gabriel River. The Aluminum Co. of America diverts water 10.9 mi upstream from the gage for use at their Rockdale plant. The City of Cameron diverts water for municipal use 2.1 mi upstream from gage. Waste water effluent is returned to the river upstream from gage. Flow is slightly affected at times by discharge from the flood-detention pools of 65 floodwater-retarding structures with a combined detention capacity of 68,500 acre-ft. These structures control runoff from 209 mi² in the Nolan, Donahoe, and Brushy Creeks drainage basins. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--36 years (water years 1918-53), prior to regulation by Belton Lake, 1,807 ft³/s (1,309,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1918-53).--Maximum discharge since 1852, 647,000 ft³/s Sept. 10, 1921 (gage height, 53.2 ft, present datum, from floodmark), from rating curve extended above 110,000 ft³/s on basis of slope-area measurement of 647,000 ft³/s.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1852 reached about the same stage as that of Sept. 10, 1921. Flood in December 1913, reached a stage of 49.0 ft. Stages based on information furnished by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	651	121	159	224	129	78	91	54	1200	1270	65	1180
2	660	126	186	226	121	75	96	50	1070	1210	64	915
3	691	185	178	206	123	93	81	55	1180	502	58	462
4	686	112	152	204	124	102	76	55	1020	237	54	257
5	671	83	154	221	124	132	79	47	1160	198	48	353
6	658	78	149	226	129	135	80	41	1120	181	51	360
7	627	167	147	220	127	131	92	49	977	167	54	255
8	503	140	151	217	126	126	204	436	1160	157	54	205
9	261	136	159	203	117	115	145	183	1340	135	61	192
10	157	125	167	196	116	94	122	107	1070	114	69	182
11	134	115	150	193	114	95	124	84	1000	96	88	174
12	137	111	147	195	95	87	86	65	e1850	91	80	172
13	118	113	156	195	84	84	81	56	e2550	92	97	158
14	124	111	150	189	113	90	85	50	e2000	106	104	155
15	133	111	194	186	109	51	108	73	e1500	166	72	356
16	138	104	203	185	73	45	102	79	e1430	112	63	246
17	133	129	201	189	71	70	94	68	e1260	94	53	297
18	97	349	207	183	84	46	93	60	1240	95	60	501
19	83	1050	248	139	87	89	87	60	1370	84	61	7380
20	108	447	318	140	99	80	58	38	1380	75	62	5180
21	103	302	253	149	92	69	46	101	1400	72	58	5540
22	85	259	218	141	89	80	42	102	1510	66	74	5180
23	79	241	213	141	84	40	67	97	1530	64	86	3490
24	68	229	253	149	79	36	127	99	1540	63	170	3100
25	56	220	261	140	69	54	169	96	1670	89	222	2560
26	62	219	263	111	67	88	84	268	2150	99	762	2190
27	77	204	258	91	72	100	64	618	1800	240	425	1730
28	84	206	214	84	78	103	57	812	1090	147	358	1550
29	60	195	216	93	80	89	62	895	1490	102	271	1370
30	55	187	221	125	---	183	60	905	1270	82	199	1360
31	53	---	221	132	---	113	---	1680	---	73	824	---
TOTAL	7552	6175	6167	5293	2875	2773	2762	7383	42327	6279	4767	47050
MEAN	244	206	199	171	99.1	89.5	92.1	238	1411	203	154	1568
MAX	691	1050	318	226	129	183	204	1680	2550	1270	824	7380
MIN	53	78	147	84	67	36	42	38	977	63	48	155
AC-FT	14980	12250	12230	10500	5700	5500	5480	14640	83960	12450	9460	93320

BRAZOS RIVER BASIN

08106500 LITTLE RIVER AT CAMERON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996#, BY WATER YEAR (WY)

MEAN	1256	977	1292	1588	1978	1882	2139	3187	2665	1618	626	615
MAX	10140	5063	8579	9662	13030	14420	10560	12970	11330	9426	5106	3141
(WY)	1960	1975	1992	1992	1992	1992	1992	1965	1957	1992	1992	1974
MIN	17.2	18.4	23.0	34.5	50.2	22.8	16.5	132	15.1	1.58	6.24	4.40
(WY)	1955	1956	1955	1956	1957	1956	1956	1984	1954	1956	1954	1956

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1954 - 1996#	
ANNUAL TOTAL	654442		141403			
ANNUAL MEAN	1793		386			
HIGHEST ANNUAL MEAN					1650	
LOWEST ANNUAL MEAN					7759	1992
HIGHEST DAILY MEAN	14700	Mar 14	7380	Sep 19	174	1956
LOWEST DAILY MEAN	53	Oct 31	36	Mar 24	84200	May 18 1965
ANNUAL SEVEN-DAY MINIMUM	64	Oct 25	50	May 1	.00	Ju1 12 1956
INSTANTANEOUS PEAK FLOW			8520	Sep 19	116000	Apr 5 1957
INSTANTANEOUS PEAK STAGE			17.72	Sep 19	39.56	Apr 5 1957
ANNUAL RUNOFF (AC-FT)	1298000		280500		1196000	
10 PERCENT EXCEEDS	5380		1180		4680	
50 PERCENT EXCEEDS	940		131		470	
90 PERCENT EXCEEDS	144		61		64	

e Estimated

Period of regulated streamflow.

08106500 LITTLE RIVER AT CAMERON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1974 and February 1994 to current year.
 Chemical and biochemical analyses: January 1968 to July 1993. Sediment analyses: February 1978 to July 1993.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1959 to current year.

WATER TEMPERATURES: October 1959 to current year.

INSTRUMENTATION--Since May 1996 specific conductance and temperature are recorded continuously by water quality monitor.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,280 microsiemens Sept. 25, 26, 1963; minimum daily, 154 microsiemens Sept. 13, 1974.

WATER TEMPERATURES: Maximum daily, 33.0°C Aug. 6, 1964, Aug. 1, 1969; minimum daily, 0.0°C Dec. 25, 26, 29, 30, 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 806 microsiemens May 7; minimum, 129 microsiemens Sept. 19.

WATER TEMPERATURE: Maximum, 32.5°C July 8; minimum daily, 4.0°C Jan. 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CaCO3)	HARD-NESS NONCARB DISSOLV FLD. AS CaCO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS Ca)	
		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CaCO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB 20...	1000	89	745	7.8	14.5	9.6	96	260	52	74	
APR 25...	1202	120	668	8.5	22.0	10.6	124	200	29	52	
JUN 12...	1355	2040	511	7.8	22.5	8.0	94	190	42	51	
AUG 14...	1411	96	669	7.8	31.0	7.7	105	190	12	51	
DATE		NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
FEB 20...	17	53	1	5.6	200	55	61	0.40	2.3	405	
APR 25...	17	58	2	5.7	170	55	70	0.40	<0.10	361	
JUN 12...	14	30	1	5.1	140	33	45	0.30	8.4	273	
AUG 14...	15	50	2	6.6	180	48	72	0.40	8.1	363	
DATE		PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERY-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
FEB 20...	0.89	2	74	<0.50	<1.0	<5.0	<3.0	<10	<3.0	<10	
APR 25...	0.09	--	--	--	--	--	--	--	--	--	
JUN 12...	--	--	--	--	--	--	--	--	--	--	
AUG 14...	0.46	5	84	<0.50	1.0	<5.0	<3.0	<10	<3.0	<10	

BRAZOS RIVER BASIN

08106500 LITTLE RIVER AT CAMERON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE		LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB	20...	11	9.0	<0.1	10	<10	1	<1.0	690	<6	<3.0
APR	25...	--	--	--	--	--	--	--	--	--	--
JUN	12...	--	--	--	--	--	--	--	--	--	--
AUG	14...	8	2.0	<0.1	20	<10	<1	<1.0	590	13	18
MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- SIEMENS)	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.	1995	7552	540	298	6080	44	900	34	701	200	
NOV.	1995	6175	599	331	5510	50	834	40	674	220	
DEC.	1995	6167	656	362	6030	56	931	47	776	230	
JAN.	1996	5293	657	363	5190	56	801	47	668	230	
FEB.	1996	2875	567	313	2430	47	365	37	290	210	
MAR.	1996	2773	764	422	3160	68	506	60	447	250	
APR.	1996	2762	699	386	2880	61	452	52	386	240	
MAY	1996	7383	622	344	6850	52	1040	43	854	220	
JUNE	1996	42327	595	329	37600	50	5670	40	4550	220	
JULY	1996	6279	572	316	5360	47	802	37	635	210	
AUG.	1996	4767	561	310	3990	46	595	36	469	210	
SEPT	1996	47050	443	245	31100	35	4460	26	3280	170	
TOTAL		141403	**	**	116000	**	17400	**	13700	**	
WTD.AVG.		386	551	304	**	45	**	36	**	200	

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	488	642	665	612	561	740	730	---	---	---	---	---
2	490	633	653	614	563	744	741	---	---	---	---	---
3	488	679	669	618	560	736	739	---	---	---	---	---
4	480	698	665	617	565	743	770	---	---	---	---	---
5	500	655	657	621	572	766	748	---	---	---	---	---
6	513	656	660	637	558	760	739	---	---	---	---	---
7	517	646	659	640	557	754	737	---	---	---	---	---
8	525	660	664	643	556	765	634	---	---	---	---	---
9	542	650	660	647	557	764	634	---	---	---	---	---
10	561	643	670	646	579	759	651	---	---	---	---	---
11	589	657	683	665	582	768	688	---	---	---	---	---
12	599	650	670	665	596	798	737	---	---	---	---	---
13	607	654	670	673	599	794	748	---	---	---	---	---
14	631	655	680	669	613	774	736	---	---	---	---	---
15	646	657	664	673	611	770	735	---	---	---	---	---
16	645	658	690	672	615	786	764	---	---	---	---	---
17	647	647	685	675	577	770	780	---	---	---	---	---
18	648	637	684	672	570	773	763	---	---	---	---	---
19	648	476	682	680	576	789	711	---	---	---	---	---
20	651	524	675	664	576	763	699	---	---	---	---	---
21	658	601	673	660	580	763	656	---	---	---	---	---
22	664	609	677	659	579	775	654	---	---	---	---	---
23	666	617	675	658	615	783	613	---	---	---	---	---
24	669	663	691	660	621	798	629	---	---	---	---	---
25	675	541	690	662	624	761	670	---	---	---	---	---
26	665	580	594	665	626	762	662	---	---	---	---	---
27	660	596	580	703	643	786	715	---	---	---	---	---
28	676	619	582	702	595	768	694	---	---	---	---	---
29	675	654	604	701	---	768	669	---	---	---	---	---
30	660	655	604	744	---	741	650	---	---	---	---	---
31	675	---	603	738	---	735	---	---	---	---	---	---
MEAN	605	630	657	663	587	766	703	---	---	---	---	---

BRAZOS RIVER BASIN

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08106500 LITTLE RIVER AT CAMERON, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	684	666	675
2	---	---	---	---	---	---	---	---	---	678	656	667
3	---	---	---	---	---	---	---	---	---	699	667	687
4	---	---	---	---	---	---	---	---	---	733	691	719
5	---	---	---	---	---	---	---	---	---	758	733	749
6	---	---	---	---	---	---	---	---	---	781	760	770
7	---	---	---	---	---	---	---	---	---	806	781	795
8	---	---	---	---	---	---	---	---	---	792	618	705
9	---	---	---	---	---	---	---	---	---	706	691	703
10	---	---	---	---	---	---	---	---	---	713	705	708
11	---	---	---	---	---	---	---	---	---	714	700	708
12	---	---	---	---	---	---	---	---	---	701	619	668
13	---	---	---	---	---	---	---	---	---	619	517	568
14	---	---	---	---	---	---	---	---	---	522	512	516
15	---	---	---	---	---	---	---	---	---	561	525	543
16	---	---	---	---	---	---	---	---	---	562	550	556
17	---	---	---	---	---	---	---	---	---	554	539	542
18	---	---	---	---	---	---	---	---	---	575	554	570
19	---	---	---	---	---	---	---	---	---	629	573	609
20	---	---	---	---	---	---	---	---	---	---	---	e600
21	---	---	---	---	---	---	---	---	---	624	596	610
22	---	---	---	---	---	---	---	---	---	600	528	564
23	---	---	---	---	---	---	---	---	---	546	531	537
24	---	---	---	---	---	---	---	---	---	592	546	566
25	---	---	---	---	---	---	---	---	---	615	594	605
26	---	---	---	---	---	---	---	---	---	634	604	617
27	---	---	---	---	---	---	---	---	---	675	594	629
28	---	---	---	---	---	---	---	---	---	642	582	612
29	---	---	---	---	---	---	---	---	---	603	594	597
30	---	---	---	---	---	---	---	---	---	---	---	e600
31	---	---	---	---	---	---	---	---	---	---	---	e620
MONTH	---	---	---	---	---	---	---	---	---	806	512	633

e Estimated

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	e600	542	539	540	---	---	e630	526	281	404
2	---	---	e610	542	538	540	---	---	e621	353	293	323
3	---	---	e610	550	542	544	---	---	e600	377	353	365
4	---	---	e600	558	549	553	648	540	602	383	350	366
5	---	---	e610	570	558	563	540	502	521	375	347	361
6	---	---	e620	576	561	569	533	507	520	540	375	476
7	---	---	e600	580	549	566	578	535	556	547	472	510
8	---	---	e590	572	561	566	604	580	592	472	438	450
9	---	---	e580	581	572	576	620	606	613	523	468	494
10	---	---	e600	595	580	586	649	620	634	538	527	533
11	---	---	e600	606	595	600	652	639	648	526	489	508
12	---	---	e530	606	594	601	653	645	649	565	516	540
13	585	581	582	608	598	602	686	655	670	597	568	582
14	602	582	587	606	599	604	721	672	697	610	597	604
15	612	602	608	608	594	601	698	656	677	628	611	620
16	615	610	613	604	593	597	671	660	666	637	619	628
17	616	611	613	614	603	608	681	665	673	634	591	612
18	616	612	615	617	607	612	678	652	665	656	262	459
19	618	614	616	649	612	636	673	648	660	387	129	261
20	619	615	617	670	644	653	654	649	652	536	321	428
21	621	616	618	682	660	670	661	646	654	421	323	372
22	621	618	619	685	669	676	681	652	666	475	364	420
23	619	609	615	---	---	e680	680	580	646	522	462	492
24	624	617	620	---	---	e670	581	480	532	588	502	545
25	624	619	622	---	---	e650	594	563	579	603	526	564
26	625	546	579	---	---	e630	---	---	e555	636	549	592
27	576	544	552	---	---	e600	523	417	465	634	564	599
28	651	567	590	---	---	e580	537	499	515	572	548	560
29	580	545	559	---	---	e630	548	513	530	571	537	554
30	548	540	544	---	---	e650	554	531	542	556	547	549
31	---	---	---	---	---	e630	565	455	510	---	---	---
MONTH	651	540	597	685	538	606	721	417	605	656	129	492
YEAR	806	129	587									

e Estimated

BRAZOS RIVER BASIN

08106500 LITTLE RIVER AT CAMERON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	21.0	13.0	11.0	12.0	14.0	20.0	---	---	---	---	---
2	28.0	21.0	16.0	9.0	12.0	12.0	20.0	---	---	---	---	---
3	25.0	18.0	18.0	8.0	12.0	14.0	21.0	---	---	---	---	---
4	24.0	16.0	18.0	8.0	13.0	15.0	22.0	---	---	---	---	---
5	24.0	15.0	18.0	9.0	13.0	17.0	18.0	---	---	---	---	---
6	23.0	15.0	17.0	8.0	13.0	19.0	16.0	---	---	---	---	---
7	22.0	17.0	16.0	6.0	12.0	15.0	18.0	---	---	---	---	---
8	22.0	17.0	15.0	4.0	11.0	13.0	19.0	---	---	---	---	---
9	23.0	17.0	12.0	6.0	11.0	11.0	20.0	---	---	---	---	---
10	23.0	19.0	10.0	6.0	12.0	11.0	23.0	---	---	---	---	---
11	23.0	17.0	9.0	9.0	12.0	12.0	24.0	---	---	---	---	---
12	23.0	15.0	11.0	11.0	10.0	15.0	23.0	---	---	---	---	---
13	24.0	16.0	14.0	8.0	9.0	15.0	24.0	---	---	---	---	---
14	23.0	15.0	16.0	11.0	9.0	18.0	24.0	---	---	---	---	---
15	21.0	15.0	19.0	12.0	11.0	18.0	24.0	---	---	---	---	---
16	21.0	15.0	18.0	14.0	11.0	18.0	23.0	---	---	---	---	---
17	21.0	15.0	18.0	15.0	11.0	17.0	22.0	---	---	---	---	---
18	21.0	15.0	17.0	14.0	12.0	16.0	24.0	---	---	---	---	---
19	21.0	15.0	14.0	11.0	14.0	18.0	26.0	---	---	---	---	---
20	21.0	16.0	12.0	10.0	15.0	16.0	26.0	---	---	---	---	---
21	19.0	16.0	11.0	10.0	15.0	17.0	27.0	---	---	---	---	---
22	20.0	17.0	11.0	11.0	15.0	16.0	25.0	---	---	---	---	---
23	21.0	17.0	10.0	14.0	17.0	18.0	24.0	---	---	---	---	---
24	19.0	16.0	10.0	14.0	17.0	19.0	24.0	---	---	---	---	---
25	19.0	15.0	10.0	12.0	15.0	18.0	24.0	---	---	---	---	---
26	20.0	15.0	9.0	14.0	15.0	15.0	26.0	---	---	---	---	---
27	23.0	17.0	10.0	12.0	18.0	14.0	26.0	---	---	---	---	---
28	20.0	15.0	9.0	12.0	15.0	14.0	25.0	---	---	---	---	---
29	20.0	11.0	9.0	11.0	---	16.0	23.0	---	---	---	---	---
30	19.0	11.0	9.0	12.0	---	19.0	24.0	---	---	---	---	---
31	20.0	---	9.0	9.0	---	19.0	---	---	---	---	---	---
MEAN	22.0	16.0	13.2	10.4	12.9	15.8	22.8	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	24.0	21.0	22.5
2	---	---	---	---	---	---	---	---	---	23.5	22.0	22.5
3	---	---	---	---	---	---	---	---	---	25.0	21.5	23.0
4	---	---	---	---	---	---	---	---	---	26.0	23.5	24.5
5	---	---	---	---	---	---	---	---	---	26.0	24.0	25.0
6	---	---	---	---	---	---	---	---	---	25.5	24.5	25.0
7	---	---	---	---	---	---	---	---	---	26.0	24.0	25.0
8	---	---	---	---	---	---	---	---	---	25.5	24.5	25.0
9	---	---	---	---	---	---	---	---	---	27.0	24.5	25.5
10	---	---	---	---	---	---	---	---	---	27.0	24.5	25.5
11	---	---	---	---	---	---	---	---	---	26.5	25.0	25.5
12	---	---	---	---	---	---	---	---	---	26.0	24.0	25.0
13	---	---	---	---	---	---	---	---	---	26.5	25.0	26.0
14	---	---	---	---	---	---	---	---	---	27.0	25.0	26.0
15	---	---	---	---	---	---	---	---	---	27.5	25.0	26.5
16	---	---	---	---	---	---	---	---	---	28.5	25.5	27.0
17	---	---	---	---	---	---	---	---	---	28.5	26.0	27.0
18	---	---	---	---	---	---	---	---	---	28.5	26.0	27.5
19	---	---	---	---	---	---	---	---	---	28.5	26.5	27.5
20	---	---	---	---	---	---	---	---	---	29.0	25.5	27.5
21	---	---	---	---	---	---	---	---	---	30.0	26.5	28.0
22	---	---	---	---	---	---	---	---	---	30.5	27.5	29.0
23	---	---	---	---	---	---	---	---	---	30.0	27.5	29.0
24	---	---	---	---	---	---	---	---	---	30.0	27.5	28.5
25	---	---	---	---	---	---	---	---	---	29.5	27.5	28.5
26	---	---	---	---	---	---	---	---	---	29.5	27.5	28.5
27	---	---	---	---	---	---	---	---	---	29.0	27.5	28.0
28	---	---	---	---	---	---	---	---	---	28.5	26.0	27.5
29	---	---	---	---	---	---	---	---	---	26.0	24.5	25.5
30	---	---	---	---	---	---	---	---	---	26.0	24.0	25.0
31	---	---	---	---	---	---	---	---	---	25.0	22.5	23.5
MONTH	---	---	---	---	---	---	---	---	---	30.5	21.0	26.0

BRAZOS RIVER BASIN

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08106500 LITTLE RIVER AT CAMERON, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	DAILY INSTANTANEOUS VALUES											
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.5	23.0	24.0	24.0	23.0	23.5	---	---	e31.0	26.5	24.5	25.5
2	24.5	23.0	23.5	24.5	23.0	23.5	---	---	e31.0	27.0	25.0	26.0
3	23.5	22.0	23.0	26.5	23.5	25.0	---	---	e31.0	28.0	26.0	26.5
4	24.5	23.5	24.0	29.0	25.5	27.0	32.0	29.5	31.0	28.5	26.0	27.5
5	25.0	22.5	24.0	30.0	27.0	28.5	32.0	29.5	31.0	28.5	27.0	28.0
6	25.5	23.0	24.0	31.5	28.0	29.5	32.0	29.5	30.5	29.0	27.0	28.0
7	25.0	24.0	24.5	32.0	28.5	30.0	31.5	30.0	31.0	29.0	27.5	28.5
8	24.0	23.0	23.5	32.5	29.5	30.5	32.0	29.5	31.0	30.0	28.0	28.5
9	23.5	22.0	23.0	32.0	29.5	31.0	32.5	29.5	31.0	30.0	28.5	29.5
10	24.0	23.0	23.5	32.0	29.5	30.5	31.5	29.5	30.5	30.0	27.5	28.5
11	24.5	23.0	23.5	31.5	29.5	30.5	31.5	29.5	30.5	29.5	27.0	28.0
12	24.0	21.0	23.0	32.0	29.5	30.5	32.0	29.5	30.5	28.5	26.5	27.5
13	21.5	20.5	21.0	31.5	29.5	30.5	31.5	29.0	30.5	28.0	26.5	27.0
14	23.5	21.0	22.0	32.0	29.0	30.5	31.5	29.0	30.5	28.5	26.0	27.5
15	23.5	22.0	22.5	31.0	30.0	30.5	31.5	29.0	30.5	28.0	26.5	27.5
16	24.0	22.0	23.0	31.5	29.0	30.5	31.0	29.5	30.0	29.0	27.0	28.0
17	24.0	22.0	23.0	31.5	29.0	30.5	31.0	29.0	30.0	28.5	26.5	27.5
18	24.0	22.0	23.0	31.5	29.0	30.5	31.0	29.0	30.0	28.5	23.0	25.5
19	23.5	22.5	23.0	31.5	29.0	30.5	30.0	28.5	29.5	23.5	21.5	22.5
20	24.0	22.5	23.0	32.0	29.0	30.5	31.0	27.5	29.0	24.5	23.0	23.5
21	23.5	22.5	23.0	32.0	29.5	30.5	30.5	28.5	29.5	24.5	23.5	24.0
22	23.0	21.5	22.5	32.5	29.5	31.0	30.0	28.5	29.0	24.0	23.5	24.0
23	22.5	21.5	22.0	32.5	29.5	31.0	29.0	27.5	28.0	24.5	24.0	24.0
24	22.5	21.0	22.0	32.0	30.0	31.0	29.0	26.5	27.5	24.5	24.0	24.5
25	22.5	21.5	22.0	31.5	29.0	30.5	28.5	27.5	28.0	24.5	24.0	24.5
26	23.0	20.5	21.5	32.0	29.5	31.0	27.5	26.0	26.5	24.5	24.0	24.0
27	22.0	20.5	21.5	32.0	29.5	30.5	27.0	26.0	26.5	24.0	22.5	23.0
28	25.5	22.0	23.5	32.0	29.5	31.0	28.0	26.0	27.0	22.5	21.0	21.5
29	24.5	23.0	23.5	32.0	29.5	30.5	27.0	26.5	26.5	22.0	20.5	21.0
30	24.5	22.5	23.5	32.0	29.5	30.5	26.5	26.0	26.5	22.0	20.5	21.5
31	---	---	---	32.0	29.5	31.0	26.5	25.5	26.0	---	---	---
MONTH	25.5	20.5	23.0	32.5	23.0	30.0	32.5	25.5	29.5	30.0	20.5	26.0
YEAR	32.5	20.5	27.0									

e Estimated

BRAZOS RIVER MAIN STEM

08108700 BRAZOS RIVER AT STATE HIGHWAY 21 NR BRYAN, TX

LOCATION.--Lat 30°37'36", long 96°32'38", Brazos-Burleson County line, Hydrologic Unit 12070101, on right bank, 8 ft downstream from bridge on State Highway 21, 2.1 mi upstream from Little Brazos River, 10.5 mi west of Bryan.

DRAINAGE AREA.--39,049 mi², approximately, of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--July 1993 to current year. August 1899 to December 1902, February 1918 to July 1993, published as Brazos River Nr. Bryan (08109000) 4.8 mi downstream. Monthly figures only for some periods, published in WSP 1312. Prior to September 1925, published as "near College Station".

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 188.65 ft above sea level. Aug. 1, 1899 to Dec. 31, 1902, and Feb. 23, 1918 to Sept. 17, 1925, nonrecording gage at site 12.3 mi downstream at different datum. Sept. 11, 1925 to Oct. 24, 1932 nonrecording a gage at site 4.2 mi downstream at different datum. Oct. 25, 1932 to Sept. 30, 1993, recording gage at site 4.8 mi downstream at different datum. Since Oct. 1, 1993, recording gage at present site and datum.

REMARKS.--Records good. Flow is partly regulated by six upstream reservoirs with a combined capacity of 4,828,600 acre-ft, of which 3,482,690 acre-ft is for flood control. Many small diversions above station for irrigation, municipal, industrial, and oil field operation. Flow is affected at times by discharge from the flood-detention pools of 145 floodwater-retarding structures with a combined detention capacity of 152,800 acre-ft. These structures control runoff from 450 mi². Since 1941, at least 10 percent of drainage area is regulated by upstream reservoirs. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--24 years (water years 1900-1902, 1919-25, 1927-40), 5,652 ft³/s (4,095,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--(WATER YEARS, 1900-1902, 1919-25, 1927-40) Maximum stage since at least 1854, 63 ft Sept. 12 1921, present site and datum (discharge not determined).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 5, 1913, reached a stage of 61 ft, present site and datum, from information by Texas and New Orleans Railroad Co. at their bridge 200 ft upstream. Flood in 1854 reached about the same stage as flood of Dec. 5, 1913.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2180	1020	1190	1180	722	955	895	556	1320	1420	511	4860
2	2070	1270	1340	1090	733	669	873	516	1210	1490	456	5260
3	2030	1080	1190	876	975	541	736	436	1060	1310	468	3730
4	2020	1030	1050	775	1290	674	597	392	1200	911	417	2410
5	1630	1240	862	993	1330	596	528	369	1110	858	518	1840
6	1470	1210	755	1190	1140	763	593	364	1110	1060	424	1570
7	1480	1460	848	1190	963	655	762	420	1220	1120	330	1900
8	1470	1250	1080	1090	1230	548	1260	799	1140	1200	244	1980
9	1260	1220	883	1460	1050	559	1110	e1050	1740	967	391	1920
10	1190	1220	744	1490	906	875	881	e800	1290	643	426	1900
11	1310	1210	858	1410	734	1130	758	e625	1150	483	499	1700
12	1150	1050	1100	1110	610	1100	760	e425	1060	722	478	1550
13	1160	1140	1250	1030	560	901	649	e350	1410	1070	505	1390
14	1350	1210	1110	959	572	702	552	292	1730	982	438	1330
15	1270	1100	1080	922	530	716	477	261	1400	1060	417	1300
16	1230	1090	1100	946	737	729	457	242	1330	964	466	1390
17	1190	1140	1170	884	791	648	473	227	1330	865	386	1130
18	1030	1410	1220	929	765	743	483	222	1320	585	319	890
19	1070	1440	1010	1170	643	751	542	202	1280	623	245	2980
20	1150	1880	891	983	779	663	503	191	1280	1030	215	15200
21	1190	1380	1040	1200	776	615	455	189	1270	857	209	14900
22	1300	1040	1200	1310	660	676	500	169	1340	759	191	12700
23	1280	926	1010	1250	678	648	772	173	1510	626	193	9840
24	1110	1130	1100	1070	665	752	732	190	1550	637	332	7650
25	922	1040	1030	997	843	804	621	186	1580	823	733	7170
26	849	978	910	909	806	698	881	183	1630	828	1050	6440
27	1050	839	889	786	702	694	763	264	1910	569	1110	7900
28	1120	953	788	884	554	751	587	910	1620	711	878	6380
29	1210	892	743	847	671	1050	528	950	1300	778	698	4290
30	1380	987	769	855	---	1220	463	986	1520	598	696	3810
31	1160	---	875	872	---	1110	---	959	---	496	2750	---
TOTAL	41281	34835	31085	32657	23415	23936	20191	13898	40920	27045	16993	137310
MEAN	1332	1161	1003	1053	807	772	673	448	1364	872	548	4577
MAX	2180	1880	1340	1490	1330	1220	1260	1050	1910	1490	2750	15200
MIN	849	839	743	775	530	541	455	169	1060	483	191	890
AC-FT	81880	69100	61660	64780	46440	47480	40050	27570	81160	53640	33710	272400

BRAZOS RIVER MAIN STEM

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08108700 BRAZOS RIVER AT STATE HIGHWAY 21 NR BRYAN, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1996#, BY WATER YEAR (WY)

MEAN	1839	1668	3365	2813	1948	3938	4574	7788	5245	1342	3447	2148
MAX	2692	2513	7642	6056	3149	8798	12060	14180	9623	2089	11420	4577
(WY)	1995	1995	1995	1995	1994	1995	1995	1995	1995	1995	1995	1996
MIN	1332	1161	1003	1053	807	772	673	448	1364	872	548	841
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1996	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1993 - 1996#	
ANNUAL TOTAL	2192991		443566			
ANNUAL MEAN	6008		1212			
HIGHEST ANNUAL MEAN					3450	
LOWEST ANNUAL MEAN					6799	
HIGHEST DAILY MEAN	34900	Mar 15	15200	Sep 20	34900	Mar 15 1995
LOWEST DAILY MEAN	743	Dec 29	169	May 22	169	May 22 1996
ANNUAL SEVEN-DAY MINIMUM	858	Dec 25	183	May 20	183	May 20 1996
INSTANTANEOUS PEAK FLOW			16300	Sep 20	38500	Mar 15 1995
INSTANTANEOUS PEAK STAGE			20.21	Sep 20	29.65	Mar 15 1995
ANNUAL RUNOFF (AC-FT)	4350000		879800		2499000	
10 PERCENT EXCEEDS	16300		1560		9030	
50 PERCENT EXCEEDS	2810		957		1300	
90 PERCENT EXCEEDS	1080		437		614	

e Estimated

Period of regulated streamflow.

BRAZOS RIVER BASIN

08109700 MIDDLE YEGUA CREEK NEAR DIME BOX, TX

LOCATION.--Lat 30°20'21", long 96°54'16", Lee County, Hydrologic Unit 12070102, on right bank 25 ft upstream from centerline of State Highway 21, 4.5 mi upstream from West Yegua Creek, 5.0 mi southwest of Dime Box, and 17.5 mi upstream from mouth.

DRAINAGE AREA.--236 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 295.40 ft above sea level (furnished by Texas Department of Transportation). June 30 to July 21, 1970, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1851, 16 ft in December 1913, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 19	0200	1,350	10.62				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	19	11	12	11	14	14	11	9.7	5.1	6.6	274
2	.34	32	11	12	11	15	13	11	8.8	5.5	6.4	101
3		36	11	12	11	16	13	12	7.1	5.3	5.9	52
4	33	28	9.5	12	12	15	13	12	8.2	5.5	5.1	18
5	19	22	10	11	12	14	13	12	8.1	3.7	3.5	13
6	7.5	17	11	11	12	14	25	12	8.6	1.9	1.0	13
7	1.8	16	11	11	13	14	29	12	10	5.6	.87	11
8	.73	15	11	11	13	14	22	12	9.3	5.8	2.3	9.6
9	.46	14	13	11	13	13	16	12	9.9	5.2	4.2	8.8
10	.31	14	13	11	13	13	14	12	10	5.6	8.2	8.3
11	.25	13	13	11	13	14	14	11	8.6	6.4	9.7	6.6
12	.29	13	13	11	12	14	13	11	7.7	6.2	9.0	5.4
13	.40	12	13	12	12	14	13	11	6.9	6.3	9.3	3.2
14	.43	12	14	12	11	14	13	12	6.1	6.6	9.1	2.3
15	.60	13	14	12	11	14	13	11	5.8	4.0	8.8	4.3
16	.61	13	14	12	11	14	12	11	5.3	2.5	7.6	4.1
17	.61	16	15	12	10	32	11	10	3.0	3.7	7.4	3.0
18	.68	112	20	12	10	32	11	7.0	4.0	2.5	8.2	72
19	.49	142	47	12	10	21	11	3.9	5.4	4.3	8.6	810
20	.22	122	23	12	11	15	11	3.7	3.7	5.3	8.5	216
21	.09	47	16	11	12	12	11	3.7	2.6	5.1	7.4	70
22	.09	27	14	12	12	12	10	3.2	.58	5.4	4.5	47
23	.20	18	14	13	12	12	11	3.0	.81	5.9	6.4	48
24	.34	14	12	13	12	12	12	4.7	.49	6.2	9.4	21
25	.85	13	11	13	12	13	12	9.3	6.4	6.7	11	8.9
26	1.8	12	11	13	13	13	11	9.1	9.2	6.3	11	6.8
27	3.9	12	11	12	12	16	11	9.3	9.8	6.2	11	12
28	7.0	12	11	11	12	21	10	10	10	6.8	11	4.1
29	8.3	12	11	11	12	21	11	9.9	7.1	6.8	12	1.0
30	8.0	11	12	11	---	17	11	10	6.2	6.3	17	.28
31	9.2	---	12	11	---	15	---	9.8	---	7.4	28	---
TOTAL	139.71	859	432.5	363	341	490	404	291.6	199.38	166.1	258.97	1854.68
MEAN	4.51	28.6	14.0	11.7	11.8	15.8	13.5	9.41	6.65	5.36	8.35	61.8
MAX	33	142	47	13	13	32	29	12	10	7.4	28	810
MIN	.09	11	9.5	11	10	12	10	3.0	.49	1.9	.87	.28
AC-FT	277	1700	858	720	676	972	801	578	395	329	514	3680

BRAZOS RIVER BASIN

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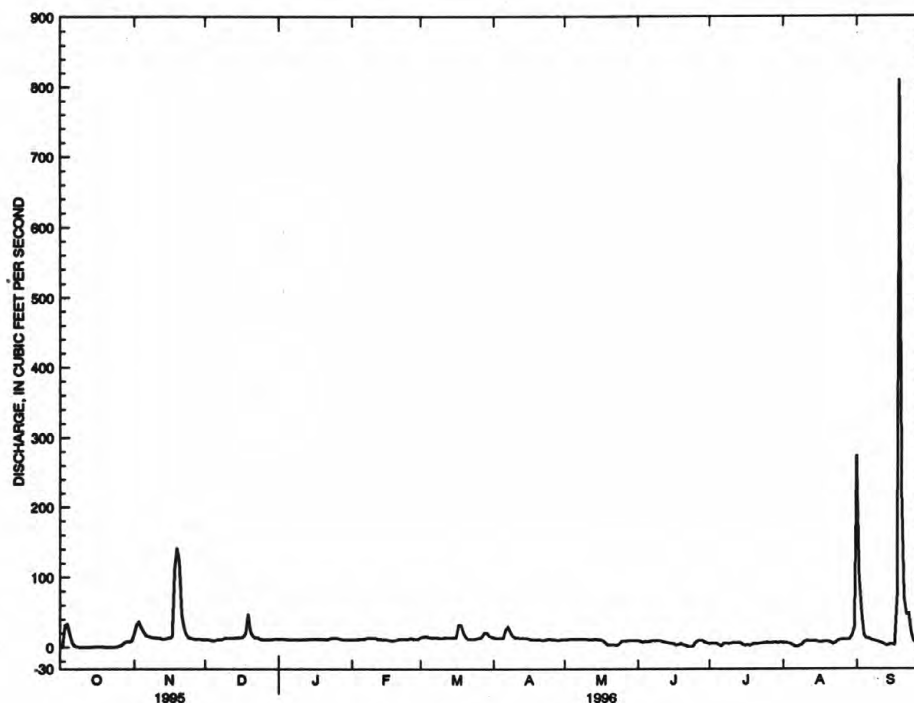
08109700 MIDDLE YEGUA CREEK NEAR DIME BOX, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

MEAN	29.1	41.5	84.9	69.0	91.2	61.8	60.1	123	106	6.72	2.02	17.6
MAX	385	415	694	481	891	280	355	662	1052	67.7	18.2	368
(WY)	1995	1975	1992	1991	1992	1970	1969	1975	1987	1975	1974	1974
MIN	.000	.000	.000	.006	.007	.65	.72	.000	.000	.000	.000	.000
(WY)	1964	1964	1964	1964	1964	1971	1971	1984	1984	1963	1962	1963

SUMMARY STATISTICS

	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1962 - 1996
ANNUAL TOTAL	24653.13	5799.94	
ANNUAL MEAN	67.5	15.8	
HIGHEST ANNUAL MEAN			57.5
LOWEST ANNUAL MEAN			256
HIGHEST DAILY MEAN	1880 Jun 2	810 Sep 19	.55 Dec 22 1991
LOWEST DAILY MEAN	.00 Sep 7	.09 Oct 21	.00 Aug 1 1962
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 7	.30 Oct 18	.00 Aug 1 1962
INSTANTANEOUS PEAK FLOW		1350 Sep 19	12500 Dec 22 1991
INSTANTANEOUS PEAK STAGE		10.62 Sep 19	15.39 Dec 22 1991
ANNUAL RUNOFF (AC-FT)	48900	11500	41690
10 PERCENT EXCEEDS	105	18	88
50 PERCENT EXCEEDS	18	11	5.2
90 PERCENT EXCEEDS	.42	3.0	.00



08109700 MIDDLE YEGUA CREEK NEAR DIME BOX, TX
MEAN DAILY DISCHARGE (CFS)

08109800 EAST YEGUA CREEK NEAR DIME BOX, TX

LOCATION.--Lat 30°24'26", long 96°49'02", Burleson County, Hydrologic Unit 12070102, on left bank 49 ft upstream from centerline of State Highway 21, 0.8 mi downstream from Buffalo Creek, 3.5 mi north of Dime Box, and 12.2 mi upstream from mouth.

DRAINAGE AREA.--244 mi².

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

Water-quality records.--Chemical and biochemical analyses: November 1980 to August 1987.
Sediment analyses: June 1966 to September 1975.

REVISED RECORDS.--WDR 1X-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 284.00 ft State Department of Highways and Public Transportation datum. Nov. 6 to Dec. 10, 1970, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Diversions above station for irrigation. Two observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1886, 17 ft in 1899 and 1957, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
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No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	35	19	23	17	18	22	16	15	12	12	86
2	19	67	19	22	17	19	20	15	51	11	12	168
3	24	59	22	21	18	19	19	16	76	12	11	87
4	28	33	21	20	16	19	20	15	31	11	11	24
5	22	27	21	19	16	18	23	14	48	12	11	20
6	20	22	21	19	16	19	31	14	29	12	11	18
7	19	22	21	18	19	18	32	14	23	12	10	17
8	18	21	21	18	27	17	29	14	28	12	10	17
9	18	21	21	19	22	16	25	14	26	11	10	17
10	19	22	22	21	21	16	24	14	19	12	9.8	15
11	19	21	22	20	20	16	23	13	17	12	10	14
12	19	20	23	19	18	17	22	20	16	11	11	14
13	19	20	22	20	17	16	21	19	15	12	11	14
14	19	21	22	19	19	17	19	17	15	12	10	14
15	18	21	22	19	21	18	17	16	14	12	9.2	15
16	19	21	24	19	19	19	15	15	14	13	11	14
17	19	28	34	18	18	27	16	15	14	13	9.4	14
18	19	83	66	19	18	27	16	14	14	12	11	15
19	19	110	36	18	19	21	16	14	15	12	11	26
20	19	46	30	18	19	18	16	14	15	12	12	25
21	19	30	24	18	21	18	15	13	15	12	11	40
22	18	27	22	18	22	18	15	13	15	11	11	19
23	19	25	20	19	21	18	15	13	14	11	13	17
24	19	25	19	20	21	18	15	12	15	11	17	16
25	19	24	22	18	18	18	15	13	15	28	27	18
26	23	23	22	18	17	18	15	13	17	18	33	20
27	24	21	21	18	17	24	15	14	21	12	18	17
28	21	21	21	18	18	33	15	15	17	12	16	16
29	19	19	21	18	18	31	17	15	14	13	17	16
30	20	18	23	19	---	27	18	14	13	13	18	15
31	21	---	22	19	---	25	---	14	---	12	17	---
TOTAL	617	953	746	592	550	623	581	452	651	391	411.4	828
MEAN	19.9	31.8	24.1	19.1	19.0	20.1	19.4	14.6	21.7	12.6	13.3	27.6
MAX	28	110	66	23	27	33	32	20	76	28	33	168
MIN	18	18	19	18	16	16	15	12	13	11	9.2	14
AC-FT	1220	1890	1480	1170	1090	1240	1150	897	1290	776	816	1640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1996, BY WATER YEAR (WY)

	35.3	40.2	79.8	74.6	105	77.2	78.4	126	116	17.7	7.87	23.6
MEAN	35.3	40.2	79.8	74.6	105	77.2	78.4	126	116	17.7	7.87	23.6
MAX	503	347	651	418	934	276	364	656	813	221	67.1	506
(WY)	1995	1975	1992	1991	1992	1992	1976	1975	1987	1968	1974	1974
MIN	.000	.023	.77	2.55	3.65	3.89	1.00	2.98	.91	.001	.000	.000
(WY)	1964	1964	1964	1990	1990	1972	1972	1984	1971	1967	1962	1963

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1962 - 1996

ANNUAL TOTAL	31555	7395.4	64.8
ANNUAL MEAN	86.5	20.2	245
HIGHEST ANNUAL MEAN			3.93
LOWEST ANNUAL MEAN			9490
HIGHEST DAILY MEAN	1790	Jan 14	May 24 1975
LOWEST DAILY MEAN	17	Aug 29	Aug 1 1962
ANNUAL SEVEN-DAY MINIMUM	17	Sep 6	Aug 1 1962
INSTANTANEOUS PEAK FLOW			14000
INSTANTANEOUS PEAK STAGE			13.91
ANNUAL RUNOFF (AC-FT)	62590	14670	46930
10 PERCENT EXCEEDS	106	27	77
50 PERCENT EXCEEDS	32	18	9.8
90 PERCENT EXCEEDS	19	12	.20

08109900 SOMERVILLE LAKE NEAR SOMERVILLE, TX

LOCATION.--Lat 30°19'20", long 96°31'32", Burleson County, Hydrologic Unit 12070102, in intake structure of Somerville Dam on Yegua Creek, at the southwest edge of the city limits of Somerville, and 20.0 mi upstream from mouth.

DRAINAGE AREA.--1,007 mi².

PERIOD OF RECORD.--February 1966 to current year. Prior to October 1970, published as Somerville Reservoir.

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

REMARKS.--The lake is formed by a rolled earthfill dam 20,210 ft long, with a 4,715-foot-long dike and a 1,250-foot long uncontrolled spillway. Deliberate impoundment began Jan. 3, 1967, and the dam was completed Oct. 27, 1967. The spillway is an uncontrolled ogee weir 1,250 ft wide located near right end of dam. The low-flow outlet consists of one 10.0-foot-diameter conduit that is controlled by two 5.0- by 10.0-foot tractor-type gates. The lake was designed for flood control and water conservation. Satellite telemeter at station. Figures given herein represent total contents. 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	-
Crest of spillway.....	258.0	502,500
Top of conservation pool.....	238.0	155,100
Lowest gated outlet (invert of 10-foot conduit).....	206.0	0

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey. A new capacity table, provided by Texas Water Development Board, was put into use Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 547,600 acre-ft Mar. 6, 1992 (elevation, 259.60 ft); minimum, 88,800 acre-ft Oct. 5, 1984 (elevation, 230.70 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 185,550 acre-ft Dec. 19 (elevation, 240.51 ft); minimum daily, 101,100 acre-ft Aug. 23 (elevation, 232.59 ft).

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

230.0	79,600	246.0	263,800	256.0	455,200
236.0	133,600	248.0	296,600	258.0	502,500
237.0	144,000	250.0	331,900	259.0	527,500
240.0	179,000	252.0	370,000	260.0	552,600
243.0	218,900	254.0	411,100		

RESERVOIR STORAGE (ACRE-Feet), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156500	159900	162100	165500	161700	162400	161900	163300	135800	114400	107900	114600
2	157700	160800	161900	163800	161500	162300	161800	163000	134800	114200	108600	113600
3	157800	161300	161700	162400	161500	162300	161900	162900	134200	114100	107200	115700
4	158100	161800	161500	161900	161500	162400	161900	162800	133900	113900	106800	116100
5	158100	162200	161300	161700	161500	162800	162600	162400	133100	113700	106200	116300
6	157700	162600	160900	161300	161600	162800	162600	162300	132300	113400	105900	116400
7	157600	162500	160800	160900	161800	162200	162800	161800	131900	113300	105800	116500
8	157500	162500	160900	161000	161900	162300	162800	161500	131000	113000	105700	116800
9	157400	162500	160700	161000	162300	161800	162800	161300	130100	112500	105600	116800
10	157400	162900	160600	161100	162300	161700	162800	160700	129200	111600	105500	116800
11	157300	162600	160600	161100	162300	161600	162900	160200	128400	110800	101800	116700
12	157100	162400	160800	161300	162300	161800	163100	159800	127700	110200	101700	116600
13	157300	162300	161000	161300	162400	161700	163100	159400	126900	110100	101400	116500
14	156800	162300	161000	161400	162400	161900	163100	159300	126100	109900	101200	116400
15	156700	162300	161800	161400	162200	161900	162600	159200	125200	109700	104900	116500
16	156500	162200	161900	161600	161900	162100	162400	159200	124800	109500	104800	116300
17	156200	163100	171600	162100	162100	162200	162400	158100	124700	108800	104600	116100
18	156200	163700	181300	161700	162300	162200	162400	157000	124600	108700	104800	118700
19	156200	164600	185500	161400	162100	162100	162500	156000	124400	109000	104700	126300
20	156000	165200	185300	161500	162300	161700	162400	154700	123000	108800	104500	137200
21	155600	165200	183500	161600	162300	161800	162300	153300	120800	108800	104100	146300
22	155500	165100	181500	161700	162300	161700	163700	151400	118700	109000	104000	148900
23	155300	164800	179300	161800	162300	161600	163300	149200	117100	107700	101100	149800
24	155200	164500	177400	161800	162300	161800	163000	147300	115200	107700	101900	150100
25	155000	164100	175300	161700	162300	161500	162500	145100	114400	108700	102500	150500
26	155200	164100	173200	161700	162500	161500	162400	143100	115000	108700	106400	151100
27	155000	158400	171200	161700	162200	161800	162200	141700	115000	108500	106200	151100
28	154800	163000	169400	161700	162100	161700	162300	139800	114800	108600	106600	151000
29	154800	162500	168400	161800	162400	161800	164300	138200	114700	108100	107400	150900
30	154800	162300	167300	161900	---	162200	163800	137300	114600	108200	109700	150900
31	156000	---	166100	161700	---	162100	---	136600	---	107600	111600	---
MAX	158100	165200	185500	165500	162500	162800	164300	163300	135800	114400	111600	151100
MIN	154800	158400	160600	160900	161500	161800	136600	114400	107600	101100	101100	113600
(+)	237.6	238.3	238.5	238.1	238.2	238.2	238.3	236.3	234.1	233.3	233.7	237.6
(@)	-500	+6300	+3800	-4400	+700	-300	+1700	-27200	-22000	-7000	+4000	+39000

CAL YR 1995 MAX 271700 MIN 154400 (@) -103500
WTR YR 1996 MAX 185500 MIN 101100 (@) -5600

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre-feet.

08110100 DAVIDSON CREEK NEAR LYONS, TX

LOCATION.--Lat 30°25'10", long 96°32'24", Burleson County, Hydrologic Unit 12070102, on left bank 83 ft downstream from Farm Road 60, 1.2 mi downstream from Berry Creek, 2.8 mi northeast of Lyons, and 10.7 mi upstream from mouth.

DRAINAGE AREA.--195 mi².

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

Water-quality records.--Sediment records: June 1966 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 220.26 ft above sea level.

REMARKS.--Records poor. The city of Caldwell discharges wastewater effluent into creek above station. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1947 reached a stage of 17 ft, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 21	1145	1,810	14.77				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.8	1.7	4.3	2.1	1.7	4.7	2.3	.17	.54	.00	7.2
2	2.1	5.4	1.4	3.5	2.2	1.6	3.4	2.1	.23	.28	.00	3.4
3	62	18	1.7	3.1	2.3	1.6	2.8	1.9	.21	.16	.00	28
4	16	18	1.5	3.4	2.2	1.6	2.5	1.7	.21	.10	.00	44
5	7.4	8.2	1.5	3.7	2.3	1.4	2.6	1.4	e.25	.07	.00	4.1
6	4.8	4.7	1.1	3.4	2.3	1.5	3.4	1.1	e.35	.03	.00	3.3
7	3.8	3.3	1.4	3.0	2.3	1.7	4.7	1.0	.31	.00	.00	1.0
8	2.8	2.2	1.3	2.6	2.3	1.6	6.3	.74	.34	.00	.00	.44
9	2.5	1.3	1.6	2.5	2.4	1.3	5.5	.68	.41	.00	.00	2.5
10	2.1	.94	1.8	2.6	2.5	1.6	4.8	.61	1.5	.00	.00	.29
11	1.9	.97	3.3	2.8	2.8	1.8	3.7	.54	.95	.00	.00	.12
12	1.6	1.0	2.7	2.4	2.9	1.7	2.9	.47	.71	.00	.00	.06
13	1.3	.79	2.0	2.3	3.0	1.8	2.6	.45	.42	.00	.00	.04
14	1.1	.60	2.5	2.4	2.7	1.5	2.4	.44	.30	.00	.00	.00
15	.98	.62	2.8	2.4	2.4	1.4	1.7	.38	.23	.00	.00	.03
16	.92	.70	2.7	2.6	2.3	1.4	1.3	.32	.17	.00	.00	.01
17	.92	.83	169	2.6	1.9	1.5	1.1	.32	.13	.00	.00	.00
18	.68	2.1	802	2.3	1.9	2.2	1.1	.32	.08	.00	.00	.02
19	.89	8.2	463	2.3	1.9	3.2	1.1	.29	.04	.00	.00	21
20	.78	17	80	2.2	2.0	2.9	1.2	.28	.00	.00	.00	60
21	.58	10	33	2.4	1.8	3.4	1.3	.23	.00	.00	.00	1260
22	.46	5.5	18	2.7	1.6	2.8	10	.19	.00	.00	.00	197
23	.67	3.8	12	2.6	1.6	2.1	3.6	.16	.00	.00	.00	29
24	.82	3.5	9.3	2.4	2.4	1.8	1.2	.15	17	.00	.00	13
25	.74	3.1	7.1	1.9	2.1	2.1	1.0	.14	14	.00	.00	6.3
26	.91	2.5	6.1	2.7	1.7	1.4	.82	.15	23	.00	.03	43
27	1.1	2.0	5.3	2.5	1.6	2.4	.82	.22	17	.00	.55	10
28	1.2	1.6	4.7	2.6	1.4	2.7	.82	.22	8.3	.00	8.9	4.5
29	1.1	1.3	4.4	3.1	1.6	9.1	73	.17	2.5	.00	38	2.4
30	1.3	2.4	5.0	2.5	---	9.0	8.5	.17	.96	.00	96	1.1
31	1.4	---	4.8	2.1	---	6.7	---	.17	---	.00	22	---
TOTAL	127.55	134.35	1654.7	83.9	62.5	78.5	160.86	19.31	89.77	1.18	165.48	1741.81
MEAN	4.11	4.48	53.4	2.71	2.16	2.53	5.36	.62	2.99	.038	5.34	58.1
MAX	62	18	802	4.3	3.0	9.1	73	2.3	23	.54	96	1260
MIN	.46	.60	1.1	1.9	1.4	1.3	.82	.14	.00	.00	.00	.00
AC-FT	253	266	3280	166	124	156	319	38	178	2.3	328	3450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1996, BY WATER YEAR (WY)

	53.8	37.5	85.0	91.2	121	79.4	111	131	122	7.84	4.90	22.3
MEAN	53.8	37.5	85.0	91.2	121	79.4	111	131	122	7.84	4.90	22.3
MAX	886	350	646	687	948	357	692	451	841	61.5	42.5	428
(WY)	1995	1975	1992	1991	1992	1979	1977	1992	1968	1968	1995	1974
MIN	.000	.000	.000	.19	1.20	.44	.23	.62	.060	.000	.000	.000
(WY)	1964	1968	1968	1971	1967	1971	1972	1996	1971	1964	1964	1963

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1963 - 1996

ANNUAL TOTAL	23668.65	4319.91	71.8
ANNUAL MEAN	64.8	11.8	237
HIGHEST ANNUAL MEAN			1.42
LOWEST ANNUAL MEAN			18000
HIGHEST DAILY MEAN	2050	1260	.00
LOWEST DAILY MEAN	.46	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.70	.00	.00
INSTANTANEOUS PEAK FLOW		1810	26400
INSTANTANEOUS PEAK STAGE		14.77	19.33
ANNUAL RUNOFF (AC-FT)	46950	8570	52000
10 PERCENT EXCEEDS	86	8.6	74
50 PERCENT EXCEEDS	9.3	1.6	2.5
90 PERCENT EXCEEDS	1.3	.00	.00

e Estimated

08110325 NAVASOTA RIVER ABOVE GROESBECK, TX

LOCATION.--Lat 31°34'27", long 96°31'14", Limestone County, Hydrologic Unit 12070103, in city of Groesbeck at water supply pumping plant, 1.2 mi downstream from Springfield Lake, 3.7 mi north of Groesbeck, and 161.4 mi upstream from mouth.

DRAINAGE AREA.--239 mi².

PERIOD OF RECORD.--July 1975 to May 1978 (periodic gage-height and low-flow measurements only), June 1978 to current year.

Water-quality records.--Chemical analyses: November 1967 to June 1989.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 396.65 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow is partly regulated by Lake Mexia 7.4 mi upstream (capacity, 9,400 acre-ft) and by Springfield Lake 1.2 mi upstream (approximate capacity, 3,100 acre-ft). There are several diversions above station for irrigation, municipal supply, and oil field operation (total amount is unknown). The city of Groesbeck diverts water from pool at gage for municipal use, and returns washwater and wastewater effluent into river downstream from gage. Raingage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1910, 26 ft in 1910 and 1944, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.03	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.04
15	.00	.00	.08	.01	.00	.00	.00	.00	.00	.03	.00	.00
16	.00	.00	.22	.01	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.45	.02	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.56	.03	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.36	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.17	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.13	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.19	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.09	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.10	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	3.32	0.26	0.00	0.00	0.00	0.00	0.00	0.03	0.48	0.04
MEAN	.000	.000	.11	.008	.000	.000	.000	.000	.000	.001	.015	.001
MAX	.00	.00	.56	.11	.00	.00	.00	.00	.00	.03	.22	.04
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	6.6	.5	.00	.00	.00	.00	.00	.06	1.0	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

MEAN	37.1	40.0	189	83.2	233	171	71.4	315	111	4.39	37.1	.71
MAX	347	450	1154	518	909	1109	541	1384	554	51.4	570	5.24
(WY)	1982	1986	1992	1991	1986	1990	1979	1979	1981	1981	1995	1979
MIN	.000	.000	.075	.008	.000	.000	.000	.000	.000	.001	.000	.000
(WY)	1993	1996	1990	1996	1996	1996	1996	1996	1996	1996	1994	1993

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1978 - 1996

ANNUAL TOTAL	47114.74	4.13	108	1992
ANNUAL MEAN	129	.011	270	1996
HIGHEST ANNUAL MEAN			.011	1996
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	7450	Aug 2	17300	May 11 1979
LOWEST DAILY MEAN	.00	Jun 27	.00	Jun 14 1978
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 22	.00	Jun 14 1978
INSTANTANEOUS PEAK FLOW			27200	May 11 1979
INSTANTANEOUS PEAK STAGE			15.06	May 11 1979
ANNUAL RUNOFF (AC-FT)	93450	8.2	78250	
10 PERCENT EXCEEDS	78	.00	95	
50 PERCENT EXCEEDS	1.2	.00	1.1	
90 PERCENT EXCEEDS	.00	.00	.00	

08110430 BIG CREEK NEAR FREESTONE, TX

LOCATION.--Lat 31°30'24", long 96°19'28", limestone County, Hydrologic Unit 12070103, 12 ft to left and 25 ft downstream from left end of bridge on State Highway 164, 5.1 mi southwest of Freestone, and 8.2 mi upstream from mouth.

DRAINAGE AREA.--97.2 mi².

PERIOD OF RECORD.--July 1975 to June 1978 (periodic gage-height and low-flow measurements only), July 1978 to current year.

REVISED RECORDS.--WDR TX-92-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 362.94 ft above sea level. Apr. 25, 1985, to Aug. 17, 1987, at site 62 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. One observation of water temperature was made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1950, 19 ft in April 1957, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
------	------	-----------------------------------	---------------------	------	------	-----------------------------------	---------------------

No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.00	.00	5.7	6.6	5.0	5.6	.86	.00	.00	.00	.00
2	.12	.00	.00	5.7	7.0	5.1	4.9	.62	.00	.00	.00	.00
3	.10	.00	.00	6.4	7.0	4.9	4.1	.86	.00	.00	.00	.04
4	.07	.00	.00	6.6	6.7	4.7	3.8	.90	.00	.00	.00	.13
5	.05	.00	.00	6.3	7.2	4.6	5.9	.63	.00	.00	.00	.00
6	.04	.00	.00	5.9	7.4	4.2	17	1.9	.00	.00	.00	.00
7	12	.00	.00	5.4	7.5	4.3	13	69	.00	.00	.00	.00
8	.10	.00	.00	5.1	7.9	5.8	8.2	47	.00	.00	.00	.01
9	.07	.00	.00	5.0	8.4	5.7	6.2	11	.00	.00	.00	.01
10	.05	.00	2.6	4.9	7.8	5.5	5.1	5.5	.00	.00	21	.00
11	.04	.00	5.5	5.0	7.4	5.0	4.3	3.5	.00	.00	2.7	.00
12	.03	.00	4.1	5.0	7.0	4.5	4.2	2.1	.00	.00	.02	.00
13	.03	.00	3.4	5.4	6.3	4.3	4.4	1.3	.00	.00	.00	.00
14	.02	.00	2.5	5.8	5.8	3.8	4.5	.94	.00	.00	.00	.00
15	.02	.00	3.3	5.7	5.7	5.4	4.1	.55	.00	.00	.00	.00
16	.01	.00	3.8	5.6	5.5	5.7	3.8	.36	.00	.00	.00	.00
17	.00	.00	5.0	6.3	5.4	5.8	3.6	.20	.00	.00	.00	.00
18	.00	.00	6.6	7.0	5.4	5.9	3.1	.12	.00	.00	.00	1.1
19	.00	.00	8.2	8.9	5.2	6.6	2.9	.09	.00	.00	.00	2.9
20	.00	.00	6.7	8.2	4.6	7.0	2.4	.05	.00	.00	.00	1.0
21	.00	.00	5.2	8.1	4.6	7.1	2.3	.04	.00	.00	.00	6.6
22	.00	.00	4.7	7.6	5.3	7.0	4.0	.04	.00	.00	.00	3.6
23	.00	.00	4.4	7.2	5.1	6.1	15	.04	.00	.00	.00	1.4
24	.00	.00	4.3	7.5	4.7	5.5	22	.03	.00	.00	.00	.88
25	.00	.00	4.0	8.1	4.8	6.0	32	.01	.00	.00	.00	.48
26	.00	.00	3.8	7.6	4.7	8.5	43	.00	.00	.00	.00	.15
27	.00	.00	3.6	7.1	4.1	8.7	51	.00	.00	.00	.00	.16
28	.00	.00	3.3	7.0	5.1	9.7	56	.00	.00	.00	.00	.50
29	.00	.00	3.6	6.6	5.4	9.1	53	.00	.00	.00	2.3	2.0
30	.00	.00	4.5	6.2	---	7.1	11	.00	.00	.00	.57	.92
31	.00	---	4.7	6.1	---	6.1	---	.00	---	.00	.01	---
TOTAL	12.91	0.00	97.80	199.0	175.6	184.7	400.4	147.64	0.00	0.00	26.60	21.88
MEAN	.42	.000	3.15	6.42	6.06	5.96	13.3	4.76	.000	.000	.86	.73
MAX	12	.00	8.2	8.9	8.4	9.7	56	69	.00	.00	21	6.6
MIN	.00	.00	.00	4.9	4.1	3.8	2.3	.00	.00	.00	.00	.00
AC-FT	26	.00	194	395	348	366	794	293	.00	.00	53	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

	MEAN	24.8	28.9	92.0	54.9	90.8	73.1	39.1	101	42.4	5.73	2.85	3.91
MAX	205	150	609	262	274	209	192	335	159	62.0	18.5	33.4	
(WY)	1985	1986	1992	1991	1992	1990	1979	1990	1989	1981	1995	1991	
MIN	.000	.000	.056	.20	3.36	4.50	3.31	.26	.000	.000	.000	.000	
(WY)	1990	1996	1981	1981	1981	1986	1984	1984	1996	1996	1984	1984	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1978 - 1996

ANNUAL TOTAL	13398.71	1266.53	
ANNUAL MEAN	36.7	3.46	
HIGHEST ANNUAL MEAN			46.6
LOWEST ANNUAL MEAN			138
HIGHEST DAILY MEAN	1550	Jan 13	8390
LOWEST DAILY MEAN	.00	Sep 3	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 3	.00
INSTANTANEOUS PEAK FLOW			17500
INSTANTANEOUS PEAK STAGE			16.33
ANNUAL RUNOFF (AC-FT)	26580	2510	33740
10 PERCENT EXCEEDS	59	7.1	77
50 PERCENT EXCEEDS	4.1	.10	3.1
90 PERCENT EXCEEDS	.00	.00	.00

BRAZOS RIVER BASIN

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08110470 LAKE LIMESTONE NEAR MARQUEZ, TX

LOCATION.--Lat 31°19'30", long 96°19'08", Leon County, Hydrologic Unit 12070103, in left end bypass pier of Sterling C. Robertson Dam on the Navasota River, 7.5 mi northwest of Marquez, and 124 mi upstream from mouth.

DRAINAGE AREA.--675 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--November 1978 to current year.

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

REMARKS.--The lake is formed by a rolled earthfill dam 11,395 ft long, including the spillway. The lake was built for water conservation. Deliberate impoundment began on Oct. 16, 1978. The spillway is an uncontrolled broad-crested weir 3,000 ft long located near left end of dam. The spillway for normal flood releases is a gated concrete gravity structure with an ogee weir section and stilling basin located near center of dam. It is controlled by five 40- by 28-foot tainter gates. There are two 4- by 8-foot slide gates located in each of the two center piers of the spillway that discharge into the stilling basin. These gates can also be opened during extreme floods. A low-flow outlet, consisting of a 10-inch-diameter cast iron pipe, is located in the left end of pier. In addition, there are two 36-inch (outside diameter) steel cylinder pipes located in the right end pier for water supply releases. The lowest invert for low flow and water supply releases is at elevation 325.50 ft. The city of Mexia releases various amounts of wastewater effluent into stream above lake. Satellite telemeter at station. Figures given herein represent

total contents. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam.....	380.0	539,800
Design flood.....	370.0	325,000
Crest of spillway.....	369.6	318,100
Top of gates.....	365.0	244,200
Top of conservation pool.....	363.0	215,800
Concrete gated spillway.....	337.0	20,100
Lowest gated outlet (invert).....	322.0	19.0

COOPERATION.--Records of daily lake elevations are obtained in cooperation with the Brazos River Authority. A new capacity table, provided by the Texas Water Development Board, was put into use beginning Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 245,000 acre-ft Dec. 21, 1991 (elevation, 364.38 ft); minimum, 10,740 acre-ft Nov. 30, 1978, (elevation, 332.63 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 199,200 acre-ft Oct. 3, at 0800 hours (elevation, 362.36 ft); minimum daily contents, 145,100 acre-ft Sept. 30, at 2000 hours (elevation, 356.97 ft).

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

332.0	7,890	348.0	70,420	360.0	178,200
336.0	17,140	352.0	99,640	364.0	229,700
340.0	30,180	356.0	135,400	365.0	244,200
344.0	47,370				

BRAZOS RIVER BASIN

08110470 LAKE LIMESTONE NEAR MARQUEZ, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197600	190300	190300	190300	190300	187900	184300	181400	178000	167500	155600	149100
2	197900	190300	190300	190300	190300	187500	183800	181400	177800	167000	155000	149100
3	197600	190300	190300	190300	190300	187200	183800	181300	177200	166600	154400	e149300
4	196600	190300	190300	190300	190100	187100	184100	181300	177000	166200	153900	149500
5	196200	190300	190300	190300	190100	187500	185500	181000	176400	165800	153300	149400
6	195200	190300	190300	190300	190100	189800	184300	182300	176000	165400	153200	149200
7	194200	190300	190300	190300	190100	187700	184100	182900	176400	165000	152800	149100
8	193200	190300	190300	190300	190300	186700	184100	183100	176000	164500	152700	149000
9	193200	190300	190300	190300	190300	186400	184200	183000	175000	164100	152500	148900
10	192900	190300	190300	190300	190300	185800	183500	183200	174500	163300	152600	148700
11	192700	190300	190300	190300	190300	185500	183200	183400	174400	163400	152300	148300
12	192200	190300	190300	190300	190300	185400	184400	183000	174100	163000	152100	148000
13	193200	190300	190300	190300	190000	185300	183600	182800	173700	162700	151700	147900
14	191500	190300	190300	190000	189900	185600	184900	182400	173400	162300	151300	147400
15	190300	190300	190300	189900	190000	185800	183400	182200	173000	162300	150800	147500
16	190300	190300	190300	189000	189500	185900	182900	181800	172600	161900	150300	147400
17	190300	190300	190300	190300	189300	185800	182400	181400	172300	161400	150100	147100
18	190300	190300	190300	190300	189400	185600	182500	181100	171900	160600	149700	147700
19	191500	190300	190300	190300	189400	185500	182800	181000	171300	160000	149700	147200
20	190300	190300	190300	190300	189300	184900	182900	180700	170900	159500	149400	147300
21	190300	190300	190300	190300	189200	184700	182400	180600	170600	159100	149100	147000
22	190300	190300	190300	190300	188900	184000	184200	180000	170100	158700	149600	146700
23	190300	190300	190300	190300	189400	184100	183200	179400	169700	158400	149100	146500
24	190300	190300	190300	190300	188800	184900	182300	179100	169300	158600	148800	146500
25	190300	190300	190300	190300	188700	184800	182900	178400	169100	158600	148600	146100
26	190300	190300	190300	190300	188700	184400	182600	178000	169300	158100	148500	146600
27	190300	190300	190300	190300	189400	185000	181600	177900	169000	157800	148400	146400
28	190300	190300	190300	190300	188900	184800	182900	177800	168800	157300	148600	145700
29	190300	190300	190300	190300	188100	184700	182500	177100	168300	156800	149000	145400
30	190300	190300	190300	190300	---	185300	181600	178700	168000	156200	149200	145100
31	190300	---	190300	190300	---	184700	---	178100	---	155900	149200	---
MAX	197900	190300	190300	190300	190300	189800	185500	183400	178000	167500	155600	149500
MIN	190300	190300	190300	190300	188100	184100	181600	177100	168000	155900	148400	145100
(+)	361.70	361.39	361.33	361.07	360.82	360.54	360.28	359.99	359.11	358.01	357.37	356.97
(@)	-7300	0	0	0	-2200	-3400	-3400	-3500	-10100	-12100	-6700	-4100

CAL YR 1995 MAX 232900 MIN 190300 (@)-37600
WTR YR 1996 MAX 190300 MIN 145100 (@)-71000

e Estimated

(+) Elevation, in feet, at end of month.

(@) Change in contents, in acre-feet.

BRAZOS RIVER BASIN

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08110470 LAKE LIMESTONE NEAR MARQUEZ, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1980 to current year.

311937096194601 - LAKE LIMESTONE SITE AR

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
05...	0945	1.00	249	7.4	15.0	8.3	83
05...	0947	10.0	249	7.4	15.0	8.3	83
05...	0949	20.0	249	7.3	15.0	8.1	81
05...	0951	30.0	249	7.3	15.0	7.8	78
05...	0953	37.0	249	7.2	15.0	7.3	73
MAR							
06...	1022	1.00	249	7.2	14.0	9.0	89
06...	1024	10.0	249	7.1	13.5	8.7	85
06...	1026	20.0	250	7.1	13.5	8.7	85
06...	1028	30.0	250	7.1	13.5	8.5	83
06...	1030	37.0	249	7.1	13.5	8.6	84
JUN							
18...	1026	1.00	284	8.2	27.5	7.7	99
18...	1028	10.0	285	7.4	27.0	5.3	68
18...	1030	20.0	285	7.1	26.5	3.0	38
18...	1032	34.0	288	6.9	26.0	0.2	3
SEP							
04...	1102	1.00	304	7.9	28.0	5.9	76
04...	1104	10.0	304	7.5	27.0	3.8	48
04...	1106	20.0	305	7.5	27.0	3.5	44
04...	1108	30.0	303	7.4	27.0	3.2	40

311941096191401 - LAKE LIMESTONE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRAN- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
DEC												
05...	1006	190000	1.00	249	7.6	15.5	1.00	8.4	85	78	13	24
05...	1008	--	10.0	249	7.5	15.5	--	8.3	84	--	--	--
05...	1010	--	20.0	249	7.4	15.0	--	8.1	81	--	--	--
05...	1012	--	30.0	251	7.1	15.0	--	6.4	64	--	--	--
05...	1014	--	42.0	252	7.1	15.0	--	6.1	61	73	7	22
MAR												
06...	1034	190000	1.00	250	7.3	14.0	0.50	9.1	90	82	19	25
06...	1036	--	10.0	249	7.2	14.0	--	9.0	89	--	--	--
06...	1038	--	20.0	249	7.2	13.5	--	8.7	85	--	--	--
06...	1040	--	30.0	250	7.1	13.0	--	8.4	81	--	--	--
06...	1042	--	43.0	251	7.0	13.0	--	7.2	70	82	18	25
JUN												
18...	1040	172000	1.00	281	8.5	28.0	1.80	8.8	114	82	18	25
18...	1042	--	10.0	284	7.6	27.0	--	6.0	77	--	--	--
18...	1044	--	20.0	285	7.2	26.5	--	3.6	46	--	--	--
18...	1046	--	30.0	285	7.0	25.5	--	1.0	12	--	--	--
18...	1048	--	39.0	291	7.0	25.5	--	0.2	2	85	20	26
SEP												
04...	1130	150000	1.00	303	8.1	27.5	1.22	6.0	77	88	16	27
04...	1132	--	7.00	304	7.8	27.0	--	5.1	64	--	--	--
04...	1134	--	10.0	303	7.7	27.0	--	4.8	61	--	--	--
04...	1136	--	20.0	303	7.5	27.0	--	3.9	50	--	--	--
04...	1138	--	30.0	307	7.2	27.0	--	1.4	18	--	--	--
04...	1140	--	37.0	308	7.2	27.0	--	0.9	12	88	20	27

BRAZOS RIVER BASIN

08110470 LAKE LIMESTONE NEAR MARQUEZ, TX--Continued

311941096191401 - LAKE LIMESTONE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINTY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC												
05...	4.5	16	0.8	4.8	66	16	23	0.20	7.1	135	0.040	0.040
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	0.040	0.040
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	4.4	16	0.8	4.8	66	16	23	0.20	8.2	135	0.050	0.050
MAR												
06...	4.7	17	0.8	4.6	62	17	24	0.20	5.1	135	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--
06...	4.8	17	0.8	4.7	64	17	24	0.20	5.8	137	0.040	0.040
JUN												
18...	4.7	18	0.9	4.8	64	21	27	0.20	1.1	140	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	0.120	--
18...	--	--	--	--	--	--	--	--	--	--	0.260	--
18...	4.9	18	0.8	4.9	66	20	27	0.20	3.7	146	0.280	--
SEP												
04...	5.1	20	0.9	5.4	72	21	30	0.20	5.7	158	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	0.060	--
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	5.1	20	0.9	5.4	69	21	31	0.20	6.6	159	0.170	--
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
DEC												
05...	0.020	0.060	0.060	<0.015	--	0.40	0.020	<0.010	--	<10	<10	
05...	--	--	--	--	--	--	--	--	--	--	--	
05...	0.020	0.060	0.060	0.030	0.37	0.40	0.010	<0.010	--	<10	10	
05...	--	--	--	--	--	--	--	--	--	--	--	
05...	0.020	0.070	0.070	0.180	0.52	0.70	0.030	<0.010	--	<10	170	
MAR												
06...	0.010	--	<0.050	0.100	0.40	0.50	<0.010	<0.010	--	<10	<10	
06...	--	--	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	--	--	
06...	0.020	0.060	0.060	0.170	0.23	0.40	0.010	<0.010	--	<10	70	
JUN												
18...	<0.010	--	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	<3	4	
18...	--	--	--	--	--	--	--	--	--	--	--	
18...	<0.010	0.120	0.120	0.030	0.37	0.40	<0.010	<0.010	--	<3	30	
18...	<0.010	0.260	0.260	0.040	0.26	0.30	0.020	<0.010	--	5	170	
18...	<0.010	0.280	0.280	0.050	0.25	0.30	<0.010	0.010	0.03	19	310	
SEP												
04...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<3	7	
04...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<3	3	
04...	--	--	--	--	--	--	--	--	--	--	--	
04...	<0.010	0.060	0.060	0.020	0.38	0.40	<0.010	<0.010	--	<3	32	
04...	--	--	--	--	--	--	--	--	--	--	--	
04...	<0.010	0.170	0.170	0.050	0.35	0.40	<0.010	0.010	0.03	9	400	

BRAZOS RIVER BASIN

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08110470 LAKE LIMESTONE NEAR MARQUEZ, TX--Continued

312458096205101 - LAKE LIMESTONE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC												
05...	1038	1.00	249	7.7	15.5	0.70	8.7	88	73	8	22	4.4
05...	1040	10.0	249	7.7	15.5	--	8.7	88	--	--	--	--
05...	1042	20.0	249	7.7	15.5	--	8.6	87	--	--	--	--
05...	1044	26.0	249	7.6	15.5	--	8.3	84	76	10	23	4.5
MAR												
06...	1058	1.00	254	7.4	15.0	0.30	9.0	91	79	16	24	4.6
06...	1100	10.0	252	7.3	14.5	--	8.9	89	--	--	--	--
06...	1102	15.0	252	7.3	14.5	--	8.8	88	--	--	--	--
06...	1104	20.0	254	7.1	14.5	--	8.1	81	--	--	--	--
06...	1106	26.0	254	7.1	14.0	--	6.5	64	82	18	25	4.7
JUN												
18...	1118	1.00	291	8.6	29.5	1.80	8.2	109	85	18	26	4.8
18...	1120	10.0	292	8.1	29.0	--	6.3	83	--	--	--	--
18...	1122	15.0	304	7.2	28.5	--	3.0	39	--	--	--	--
18...	1124	23.0	309	6.9	28.0	--	0.2	3	88	16	27	5.0
SEP												
04...	1201	1.00	306	8.7	28.0	0.76	7.7	100	88	13	27	5.1
04...	1203	10.0	316	7.7	27.0	--	4.0	51	--	--	--	--
04...	1205	20.0	315	7.7	27.0	--	4.2	53	91	16	28	5.2

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC											
05...	16	0.8	4.8	65	16	23	0.20	7.0	132	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	16	0.8	4.9	66	16	23	0.20	7.0	134	--	--
MAR											
06...	18	0.9	4.7	63	17	25	0.20	5.4	137	0.060	0.060
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	18	0.9	4.6	64	17	24	0.20	6.8	139	0.080	0.080
JUN											
18...	19	0.9	5.2	66	21	28	0.20	1.7	146	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	20	0.9	5.2	72	21	30	0.20	4.0	156	--	--
SEP											
04...	21	1	5.2	75	21	31	0.20	6.2	162	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	21	1	5.4	75	20	33	0.20	6.8	165	--	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
05...	<0.010	--	<0.050	<0.015	--	0.50	0.020	<0.010	--	<10	<10
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.010	--	<0.050	<0.015	--	0.40	0.030	<0.010	--	<10	50
MAR											
06...	0.010	0.070	0.070	0.140	0.36	0.50	0.010	0.020	0.06	<10	10
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	0.010	0.090	0.090	0.100	0.20	0.30	<0.010	<0.010	--	<10	110
JUN											
18...	<0.010	--	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	<3	4
18...	<0.010	--	<0.050	0.040	0.26	0.30	<0.010	<0.010	--	<3	12
18...	0.010	--	<0.050	0.050	0.35	0.40	<0.010	0.010	0.03	<3	75
18...	<0.010	--	<0.050	0.020	0.28	0.30	0.020	<0.010	--	<3	440
SEP											
04...	<0.010	--	<0.050	<0.015	--	0.40	<0.010	<0.010	--	<3	1
04...	--	--	--	--	--	--	--	--	--	--	--
04...	<0.010	--	<0.050	0.030	0.37	0.40	<0.010	0.020	0.06	5	17

BRAZOS RIVER BASIN

08110470 LAKE LIMESTONE NEAR MARQUEZ, TX--Continued

312625096205901 - LAKE LIMESTONE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
05...	1100	1.00	250	7.9	16.5	8.8	91
05...	1102	10.0	250	7.8	16.0	8.6	88
05...	1104	15.0	251	7.6	16.0	8.2	84
MAR							
06...	1120	1.00	259	7.4	15.5	9.0	92
06...	1122	14.0	257	7.4	15.5	8.8	90
JUN							
18...	1136	1.00	295	8.5	30.5	7.5	102
18...	1138	10.0	300	8.0	30.0	5.4	73
18...	1140	14.0	305	7.5	29.5	3.5	47
SEP							
04...	1226	1.00	306	8.8	28.5	7.6	99
04...	1228	10.0	310	8.2	27.0	5.0	63

312622096224201 - LAKE LIMESTONE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DEC							
05...	1118	1.00	254	8.0	16.0	9.0	92
05...	1120	10.0	253	8.0	16.0	9.0	92
05...	1122	18.0	255	7.9	16.0	8.8	90
MAR							
06...	1132	1.00	281	7.5	16.5	8.7	91
06...	1134	10.0	280	7.5	16.0	8.7	90
06...	1136	20.0	290	7.4	16.0	8.5	88
JUN							
18...	1152	1.00	325	8.6	30.5	7.9	107
18...	1154	10.0	351	8.0	29.0	5.6	74
18...	1156	18.0	354	7.8	29.0	4.8	63
SEP							
04...	1245	1.00	340	8.9	29.0	8.1	106
04...	1247	13.0	363	7.8	26.5	3.9	49

312726096240001 - LAKE LIMESTONE SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRAN- SPAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC												
05...	1134	1.00	257	9.0	16.5	0.40	8.9	92	74	5	23	4.1
05...	1136	11.0	257	7.4	16.0	--	7.1	73	78	9	24	4.3
MAR												
06...	1146	1.00	296	7.5	16.5	0.30	8.7	91	98	26	31	5.1
06...	1148	10.0	300	7.3	16.0	--	8.0	83	99	25	31	5.2
JUN												
18...	1212	1.00	374	8.6	31.0	0.46	8.0	110	100	23	33	5.4
18...	1214	4.00	372	8.3	30.5	--	6.8	92	--	--	--	--
18...	1216	9.00	379	7.5	30.0	--	3.0	40	110	27	33	5.6
SEP												
04...	1304	1.00	342	8.0	22.5	0.24	5.3	62	91	18	28	5.0
04...	1306	3.00	337	7.6	27.0	--	3.0	38	--	--	--	--
04...	1308	7.00	276	7.3	26.5	--	1.2	15	78	15	24	4.3

BRAZOS RIVER BASIN

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08110470 LAKE LIMESTONE NEAR MARQUEZ, TX--Continued

312726096240001 - LAKE LIMESTONE SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC											
05...	16	0.8	4.9	69	17	24	0.20	7.5	138	--	--
05...	16	0.8	4.9	68	17	24	0.20	7.3	139	--	--
MAR											
06...	21	0.9	4.9	72	18	31	0.20	6.2	161	0.050	0.050
06...	21	0.9	4.8	74	18	32	0.20	6.5	163	0.060	0.060
JUN											
18...	28	1	5.8	82	25	46	0.30	4.4	197	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	27	1	5.5	79	25	43	0.20	4.9	191	--	--
SEP											
04...	27	1	5.1	72	26	38	0.20	8.8	182	--	--
04...	--	--	--	--	--	--	--	--	--	0.050	0.050
04...	20	1	4.9	62	21	28	0.20	9.6	150	0.090	0.090
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DEC											
05...	0.010	--	<0.050	0.060	0.44	0.50	0.030	0.020	0.06	<10	20
05...	<0.010	--	<0.050	<0.015	--	0.50	0.020	<0.010	--	<10	<10
MAR											
06...	0.020	0.070	0.070	0.190	0.31	0.50	0.020	0.020	0.06	<10	<10
06...	0.020	0.080	0.080	0.220	0.38	0.60	0.030	0.020	0.06	<10	20
JUN											
18...	<0.010	--	<0.050	0.020	0.48	0.50	<0.010	0.010	0.03	<3	3
18...	<0.010	--	<0.050	0.040	0.36	0.40	<0.010	0.020	0.06	<3	11
18...	--	--	--	--	--	--	--	--	--	<3	88
SEP											
04...	0.010	--	<0.050	0.030	0.47	0.50	0.040	0.040	0.12	62	35
04...	0.020	0.070	0.070	0.090	0.51	0.60	0.040	<0.010	--	140	31
04...	0.030	0.120	0.120	0.230	0.47	0.70	0.030	0.040	0.12	29	90

BRAZOS RIVER BASIN

08110500 NAVASOTA RIVER NEAR EASTERLY, TX

LOCATION.--Lat 31°10'12", long 96°17'51", Leon-Robertson County line, Hydrologic Unit 12070103, at left downstream end of bridge on U.S. Highway 79, 1.0 mi upstream from Missouri Pacific Railroad Co. bridge, 7 mi northeast of Easterly, and 105.7 mi upstream from mouth.

DRAINAGE AREA.--968 mi².

PERIOD OF RECORD.--March 1924 to current year.

Water-quality records.--Chemical analyses: December 1941 to September 1947, February 1966 to August 1985.
Sediment records: October 1968 to September 1973.

REVISED RECORDS.--WSP 898: 1924, 1926-27, 1928(M), 1929-30, 1931(M). WSP 1512: 1932(M), 1936. WDR TX-76-2: Drainage area. WDR TX-78-2: 1974(M), 1977.

GAGE.--Water-stage recorder. Datum of gage is 271.46 ft above sea level. Prior to June 11, 1932, nonrecording gage at railroad bridge 1.0 mi downstream at 19.86-foot higher datum. June 11, 1932 to Sept. 30, 1978, water-stage recorder 46 ft upstream at 5.00-foot higher datum.

REMARKS.--No estimated daily discharges. Records good. Flow is largely regulated by Lake Mexia (capacity, 9,400 acre-ft) and Lake Limestone (station 08110470). There are numerous diversions above station for irrigation, municipal supply, and oil field operation. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--36 years (water years 1925-60), 406 ft³/s (5.70 in/yr), 294,100 acre-ft/yr.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1925-60).--Maximum discharge, 60,300 ft³/s May 2, 1944 (gage height, 27.13 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1845, 29 ft in June 1899, from information by local residents (discharge, 90,000 ft³/s), from rating curve extended above 60,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	5.4	9.7	16	16	8.6	12	16	65	69	68	61
2	19	6.8	10	15	16	8.7	11	16	65	68	68	29
3	21	6.5	10	15	16	8.6	11	17	65	68	67	18
4	14	10	9.7	14	16	8.6	11	16	66	68	67	19
5	11	9.9	9.6	14	15	9.4	11	17	65	69	67	15
6	9.3	9.9	9.7	13	16	9.8	13	16	65	69	67	13
7	8.7	10	9.9	13	17	9.3	14	16	65	69	67	11
8	9.2	10	11	14	17	11	14	21	64	69	67	10
9	9.3	9.7	13	14	17	11	14	56	64	69	67	9.1
10	9.4	9.5	15	14	16	9.2	14	29	65	69	70	8.6
11	9.4	8.8	13	14	15	8.9	12	22	65	69	80	8.1
12	9.3	9.6	11	14	15	9.2	12	22	64	69	69	7.9
13	8.8	9.4	11	14	15	9.6	13	17	66	69	67	9.6
14	8.6	9.0	10	14	15	9.8	13	15	67	69	67	15
15	8.0	9.3	11	14	15	10	12	14	68	70	66	10
16	8.1	9.2	11	14	14	10	11	13	67	70	66	8.6
17	8.5	11	15	14	14	11	10	12	67	69	66	8.1
18	6.5	13	25	15	15	11	13	12	67	69	66	8.4
19	4.7	13	40	15	15	11	15	12	67	69	65	10
20	4.5	12	25	17	15	10	15	12	66	69	66	9.2
21	4.0	12	17	15	15	9.5	17	33	67	68	65	21
22	4.2	11	15	14	12	9.6	17	76	67	68	68	23
23	3.7	11	14	15	9.7	9.9	21	76	68	68	71	14
24	3.2	11	13	15	9.2	9.7	20	76	68	67	67	11
25	3.4	11	13	15	10	10	17	76	68	70	66	9.9
26	3.5	10	13	16	9.7	11	15	77	69	70	67	9.7
27	3.5	10	13	15	9.2	17	15	77	70	69	69	17
28	3.5	9.6	13	15	9.0	23	15	77	68	68	67	13
29	3.2	9.4	13	14	8.7	23	15	72	69	68	70	10
30	3.3	9.6	14	14	---	18	16	68	69	68	115	9.2
31	3.7	---	15	14	---	14	---	67	---	67	118	---
TOTAL	243.5	296.6	432.6	449	402.5	349.4	419	1146	1996	2130	2196	426.4
MEAN	7.85	9.89	14.0	14.5	13.9	11.3	14.0	37.0	66.5	68.7	70.8	14.2
MAX	21	13	40	17	17	23	21	77	70	70	118	61
MIN	3.2	5.4	9.6	13	8.7	8.6	10	12	64	67	65	7.9
AC-FT	483	588	858	891	798	693	831	2270	3960	4220	4360	846

BRAZOS RIVER BASIN

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08110500 NAVASOTA RIVER NEAR EASTERLY, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1996#, BY WATER YEAR (WY)

MEAN	201	290	656	512	689	606	610	947	499	68.8	70.8	118
MAX	2427	4059	5244	2974	3322	2386	3761	5195	2794	474	1032	1614
(WY)	1974	1975	1992	1961	1992	1993	1966	1965	1973	1961	1995	1974
MIN	1.20	1.73	4.63	9.52	13.9	11.3	8.36	6.88	1.88	.37	.81	1.20
(WY)	1964	1964	1964	1964	1996	1996	1972	1972	1971	1964	1963	1972

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1961 - 1996#	
ANNUAL TOTAL	159275.0		10487.0			
ANNUAL MEAN	436		28.7		438	
HIGHEST ANNUAL MEAN					1172	
LOWEST ANNUAL MEAN					15.4	
HIGHEST DAILY MEAN	13200	Jan 14	118	Aug 31	57400	Dec 22 1991
LOWEST DAILY MEAN	3.2	Oct 24	3.2	Oct 24	.19	Aug 11 1980
ANNUAL SEVEN-DAY MINIMUM	3.4	Oct 24	3.4	Oct 24	.26	Jul 12 1964
INSTANTANEOUS PEAK FLOW			174	Aug 30	61800	Dec 22 1991
INSTANTANEOUS PEAK STAGE			6.38	Aug 30	27.22	Dec 22 1991
ANNUAL RUNOFF (AC-FT)	315900		20800		317200	
10 PERCENT EXCEEDS	872		69		917	
50 PERCENT EXCEEDS	29		15		27	
90 PERCENT EXCEEDS	9.4		9.0		2.7	

Period of regulated streamflow.

LOCATION.--Lat 30°52'10", long 96°11'32", Brazos-Madison County line, Hydrologic Unit 12070103, on right bank at upstream side of bridge on U.S. Highway 190, 2.5 mi upstream from Shepard Creek, 17 mi northeast of Bryan, and 68.4 mi upstream from mouth.

DRAINAGE AREA.--1,454 mi².

PERIOD OF RECORD.--January 1951 to September 1994, (continuous-record station); October 1994 to current year (flood hydrograph partial-record station).
Water-quality records.--Chemical and biochemical analyses: October 1958 to September 1981. Sediment records: October 1973 to September 1981.

REVISID RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 224.64 ft above sea.

REMARKS.--No estimated daily discharges. Records fair. Beginning Oct. 1, 1994, only daily discharges greater than 750 ft³/s are published. Flow partially regulated by Lake Mexia since June 1961, and now largely regulated by Lake Limestone (station 08110470) since October 1978. There are numerous diversions above station for irrigation, municipal, and oil field operations. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--27 years (water years 1952-78), 557 ft³/s (403,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEAR 1952-78).--Maximum discharge, 38,200 ft³/s Apr. 29, 1966, (gage height, 16.57 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since about 1840, that of Dec. 23, 1991; next highest stage was about 19.5 ft in June 1899, from information by local residents.

EXTREMES FOR PERIOD OF RECORD.--Maximim gage height, 19.97 ft Dec. 23, 1991, 66,600 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 9.73 ft Dec. 18, at 2400 hours, 11,900 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

[illegible]

08111500 BRAZOS RIVER NEAR HEMPSTEAD, TX

LOCATION.--Lat 30°07'44", long 96°11'15", Washington-Waller County line, Hydrologic Unit 12070101, at downstream side of bridge on U.S. Highway 290, 6,000 ft upstream from Texas and New Orleans Railroad Co. bridge, 6.5 mi northwest of Hempstead, 10.5 mi upstream from Caney Creek, and at mile 193.8.

DRAINAGE AREA.--43,880 mi², approximately, of which 9,566 mi² probably is non-contributing.

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.

REVISED RECORDS.--WSP 1512: 1941. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 107.90 ft above sea level. Prior to Nov. 1, 1940, nonrecording gage at railroad bridge 6,000 ft downstream at datum 4.20 ft higher. Nov. 1, 1940 to Sept. 30, 1963, nonrecording gage at site 1,500 ft downstream at datum 10.00 ft higher. Oct. 1, 1964 to July 31, 1974, water-stage recorder 1,500 ft downstream at datum 10.00 ft higher. Aug. 1, 1974 to Dec. 31, 1988, water-stage recorder at present site at datum 10.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. There are many diversions above station for irrigation, municipal and industrial uses, and for oil field operations. At times, flow is affected by reservoirs on the Brazos River above Waco (see station 08096500) and by reservoirs on the Lampasas and Little Rivers above Cameron. For statement regarding regulation by National Resource Conversation Service floodwater-retarding structures, see station 08110200. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1899, 66.1 ft Dec. 8, 1913, at site 1,500 ft downstream at present datum, from information by Texas and New Orleans Railroad Co., obtained at bridge 6,000 ft downstream. Flood of July 4, 1899, reached a stage of 63.6 ft, at site 1,500 ft downstream at present datum, from information by Texas and New Orleans Railroad Co.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2710	1580	1140	1480	851	685	1310	2100	1420	1810	696	2790
2	2700	1550	1220	1580	874	706	1250	1500	1440	1900	612	4210
3	2910	1630	1510	1810	778	936	1060	1110	1830	1750	574	5280
4	2980	1950	1630	1710	756	805	986	918	1760	1740	554	5120
5	2830	1720	1490	1420	976	673	909	797	1640	1500	523	4060
6	2590	1560	1310	1120	1320	712	827	712	1720	1080	510	3100
7	2130	1610	1110	1190	1400	688	830	657	1590	952	504	2540
8	1900	1530	957	1400	1200	746	919	627	1650	1100	549	2280
9	1880	1730	950	1320	1040	749	955	617	1760	1190	454	2520
10	1740	1500	1160	1260	1250	668	1360	807	1660	1260	450	2580
11	1470	1430	1090	1600	1090	641	1260	1090	1670	1150	510	2450
12	1420	1400	924	1710	905	811	1040	1090	1800	974	507	2350
13	1460	1360	940	1520	771	1140	903	938	1670	832	727	2160
14	1280	1210	1200	1230	682	1150	882	806	1590	767	854	1950
15	1300	1260	1380	1110	630	996	801	660	2110	1030	761	1740
16	1500	1350	1320	1020	606	814	707	528	2330	1030	636	1650
17	1420	1300	1660	990	585	751	632	460	2030	1080	534	1640
18	1360	1340	6730	974	669	776	590	419	1730	994	568	1720
19	1290	1470	8710	931	774	719	580	484	1620	886	553	5260
20	1120	1780	6510	983	763	745	577	706	1580	706	486	4420
21	1120	1920	5480	1200	691	778	589	717	1560	660	421	14800
22	1210	2250	4970	1070	734	764	618	774	1980	962	368	18500
23	1260	1800	4630	1300	773	706	628	884	2250	887	343	14600
24	1400	1400	3980	1430	705	724	809	1010	2440	788	341	11400
25	1370	1260	3160	1330	686	699	1080	1120	2650	801	416	9110
26	1210	1380	2720	1130	700	758	1040	1150	2780	1060	691	8050
27	1040	1300	2310	1030	802	843	904	1170	2520	1170	975	7390
28	954	1200	2080	932	818	874	941	1210	2360	1170	1320	7300
29	1060	1100	1950	838	752	833	1070	1260	2390	872	1800	7830
30	1190	1160	1640	885	---	881	2200	1640	2030	749	2080	6300
31	1330	---	1500	862	---	1100	---	1600	---	808	3620	---
TOTAL	51134	45030	77361	38365	24581	24871	28257	29561	57560	33658	23937	165100
MEAN	1649	1501	2496	1238	848	802	942	954	1919	1086	772	5503
MAX	2980	2250	8710	1810	1400	1150	2200	2100	2780	1900	3620	18500
MIN	954	1100	924	838	585	641	577	419	1420	660	341	1640
AC-FT	101400	89320	153400	76100	48760	49330	56050	58630	114200	66760	47480	327500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, BY WATER YEAR (WY)

	MEAN	4594	4669	6042	6883	7846	7513	8640	14400	11070	4811	2450	2925
MAX	24830	29490	41590	55990	54750	50450	42860	69860	51960	19000	11510	18030	
(WY)	1960	1975	1941	1992	1992	1992	1945	1957	1957	1940	1995	1974	
MIN	181	318	299	386	572	426	922	954	1027	1086	726	454	
(WY)	1953	1989	1955	1940	1971	1954	1954	1996	1956	1996	1963	1954	

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1939 - 1996

ANNUAL TOTAL	2885665	599415		
ANNUAL MEAN	7906	1638		
HIGHEST ANNUAL MEAN			6813	
LOWEST ANNUAL MEAN			1216	1992
HIGHEST DAILY MEAN	37300	Mar 16	18500	Sep 22
LOWEST DAILY MEAN	924	Dec 12	341	Aug 24
ANNUAL SEVEN-DAY MINIMUM	1020	Dec 7	418	Aug 19
INSTANTANEOUS PEAK FLOW			20600	Sep 21
INSTANTANEOUS PEAK STAGE			26.65	Sep 21
ANNUAL RUNOFF (AC-I)	5724000	1189000	4936000	
10 PERCENT EXCEEDS	19300	2580	17600	
50 PERCENT EXCEEDS	4800	1160	2490	
90 PERCENT EXCEEDS	1350	635	688	

08114000 BRAZOS RIVER AT RICHMOND, TX

LOCATION.--Lat 29°34'56", long 95°45'27", Fort Bend County, Hydrologic Unit 12070104, on right bank at upstream side of downstream bridge on U.S. Highway 90 in Richmond, 850 ft downstream from Texas and New Orleans Railroad Co. bridge, and at mile 92.0.

DRAINAGE AREA.--45,007 mi², approximately, of which 9,566 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1903 to June 1906, October 1922 to current year. Published as "at Rosenberg" October 1922 to September 1931. 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.

REVISED RECORDS.--WSP 1392: 1933. WSP 1632: 1958. WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 27.94 ft above sea level. Prior to Oct. 1, 1922, various types of nonrecording gages at railroad bridge 925 ft upstream at different datums. Oct. 1, 1922 to Sept. 30, 1931, nonrecording chain gage at Rosenberg 7.6 mi upstream at datum about 17 ft higher; Oct. 1, 1931 to Sept. 30, 1975, water-stage recorder present site at datum 13.00 ft higher; Oct. 1, 1975 to Dec. 31, 1988, water-stage recorder at present site and at datum 10.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Considerable water is diverted above station for irrigation and for municipal supply. For statement regarding regulation by upstream reservoirs and by National Resource Conservation Service floodwater-retarding structures, see station 08110200. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--20 years (water years 1904-05, 1923-40) 7,209 ft³/s (5,223,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1904-05, 1923-40).--Maximum discharge, 123,000 ft³/s June 6, 1929 (gage height, 53.6 ft, from floodmark), present site and datum; minimum daily, 35 ft³/s Aug. 23, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1852, 61.2 ft Dec. 10, 1913, present datum, from floodmarks on right bank 1,000 ft 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, 56.7 ft; June 13, 1885, 57.7 ft; July 1899, 58.6 ft; May 2, 1915, 56.3 ft; and May 9, 1922, 53.9 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3710	1270	1390	2400	1360	1070	e809	981	1250	2450	908	3550
2	3280	1460	1380	2220	1360	1030	e777	1850	1440	2230	864	4500
3	2990	1830	1420	2150	1340	928	1100	1990	1410	1940	748	4080
4	2930	1850	1420	2180	1350	797	1180	1580	1340	2010	725	5050
5	3000	1830	1580	2370	1320	851	1070	1190	1530	1880	671	5370
6	2940	1970	1700	2370	1270	881	1000	905	1700	1900	578	4930
7	2850	1900	1690	2110	1360	757	876	791	1540	1680	625	4210
8	2750	1790	1510	1840	1700	821	740	667	1620	1370	586	3550
9	2260	1730	1360	1760	1840	785	731	528	1590	1100	551	3020
10	2080	1750	1340	1930	1740	802	706	511	1540	1120	685	2810
11	2000	1790	1310	1940	1540	830	809	508	1560	1220	736	2890
12	1880	1720	1370	1860	1630	936	1030	623	1530	1330	699	2860
13	1650	1650	1260	2080	1590	916	1220	759	1500	1330	736	2680
14	1580	1570	950	2230	1410	915	1090	929	1620	1130	782	2530
15	1590	1540	857	2100	1270	1160	891	e841	1590	1030	815	2450
16	1360	1440	1040	1840	1160	1370	788	e674	1540	807	940	2320
17	1380	1360	2350	1650	1090	1320	635	e515	1820	872	981	2120
18	1580	1680	2970	1470	902	1070	566	e425	2050	990	907	2000
19	1580	1860	5320	1400	853	932	546	e347	1890	1010	823	2350
20	1450	1820	10100	1430	929	937	509	e277	1680	1080	622	5640
21	1460	1790	8070	1490	947	842	486	276	1700	927	668	12100
22	1390	2030	6410	1400	945	677	473	371	1740	798	785	19400
23	1220	2130	5700	1490	970	654	519	642	1730	676	671	23300
24	1260	2380	5260	1490	869	701	614	654	2190	769	674	17300
25	1320	2150	4920	1540	903	746	572	721	2520	1020	661	13500
26	1280	1880	4290	1730	893	e809	509	830	2720	862	800	10800
27	1380	1610	3710	1810	844	e828	805	962	2760	737	859	8840
28	1270	1550	3330	1720	1010	e935	1000	1020	2860	877	792	7880
29	1170	1590	2990	1590	1040	e1010	978	993	2880	1160	1030	7190
30	1110	1460	2800	1490	---	e947	956	987	2550	1270	1750	7310
31	1170	---	2680	1390	---	e847	---	1030	---	1120	2630	---
TOTAL	58870	52380	92477	56470	35435	28104	23985	25377	55390	38695	26302	196530
MEAN	1899	1746	2983	1822	1222	907	799	819	1846	1248	848	6551
MAX	3710	2380	10100	2400	1840	1370	1220	1990	2880	2450	2630	23300
MIN	1110	1270	857	1390	844	654	473	276	1250	676	551	2000
AC-FT	116800	103900	183400	112000	70290	55740	47570	50340	109900	76750	52170	389800

BRAZOS RIVER MAIN STEM

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08114000 BRAZOS RIVER AT RICHMOND, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1996#, BY WATER YEAR (WY)

MEAN	5077	5450	6915	7907	8706	8433	9153	15460	12160	4932	2619	3288
MAX	28760	32360	52860	60500	54410	54050	41900	77200	58350	17100	11800	19850
(WY)	1958	1975	1941	1992	1992	1992	1945	1957	1957	1968	1995	1974
MIN	203	366	480	543	702	445	799	819	786	717	550	414
(WY)	1953	1989	1955	1952	1971	1954	1996	1996	1956	1956	1963	1954

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR		WATER YEARS 1941 - 1996#	
ANNUAL TOTAL	3196067		690015			
ANNUAL MEAN	8756		1885		7500	
HIGHEST ANNUAL MEAN					26620	
LOWEST ANNUAL MEAN					1403	
HIGHEST DAILY MEAN	39400	Mar 17	23300	Sep 23	118000	May 5 1957
LOWEST DAILY MEAN	857	Dec 15	276	May 21	55	Jul 5 1956
ANNUAL SEVEN-DAY MINIMUM	1160	Dec 10	408	May 17	93	Jul 4 1956
INSTANTANEOUS PEAK FLOW			24700	Sep 23	119000	May 5 1957
INSTANTANEOUS PEAK STAGE			26.85	Sep 23	50.30	Oct 21 1994
ANNUAL RUNOFF (AC-FT)	6339000		1369000		5433000	
10 PERCENT EXCEEDS	20500		2950		18800	
50 PERCENT EXCEEDS	5510		1370		2880	
90 PERCENT EXCEEDS	1560		677		775	

e Estimated

Period of regulated streamflow.

BRAZOS RIVER MAIN STEM

08114000 BRAZOS RIVER AT RICHMOND, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1941 to current year. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: October 1967 to May 1982. Sediment analyses: April 1957 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to September 1995.

WATER TEMPERATURE: November 1950 to September 1995.

SUSPENDED-SEDIMENT DISCHARGE: January 1966 to September 1986.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,600 microsiemens Sept. 4, 1978; minimum daily, 152 microsiemens Oct. 19, 1994.

WATER TEMPERATURE: Maximum daily, 33.0°C Aug. 5, 1951; minimum daily, 1.0°C Jan. 8, 1970 and Dec. 23-24, 1989.

SEDIMENT CONCENTRATION: Maximum daily mean, 13,500 mg/L Apr. 4, 1979; minimum daily mean, 8 mg/L Nov. 29, 1967, Sept. 20, and Oct. 6, 7, 1980.

SEDIMENT LOAD: Maximum daily, 1,860,000 tons Apr. 4, 1979; minimum daily, 9.8 tons Oct. 11, 1983.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CAC03)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	
MAR 06...	0836	897	940	8.0	19.5	8.2	90	250	33	70	
APR 18...	0912	572	902	8.0	21.0	7.8	88	220	37	61	
MAY 31...	0835	1010	640	8.0	29.0	6.6	86	180	50	49	
JUN 28...	0930	2840	570	8.0	30.0	6.4	85	170	46	43	
JUL 30...	0900	1280	1020	8.0	30.0	6.5	86	220	67	55	
SEP 04...	0815	5050	315	7.3	27.0	7.6	96	93	8	30	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAR 06...	18	94	3	4.9	220	78	120	0.30	3.8	520	
APR 18...	17	99	3	4.9	180	86	120	0.40	2.5	502	
MAY 31...	13	53	2	6.5	130	73	72	0.30	11	354	
JUN 28...	14	42	1	5.1	120	49	67	0.30	8.3	302	
JUL 30...	20	110	3	5.5	150	97	160	0.40	11	551	
SEP 04...	4.3	21	0.9	4.8	85	20	23	0.20	13	171	
DATE		NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
MAR 06...	--	--	<0.010	--	<0.050	<0.015	--	0.30	0.020	<0.010	
APR 18...	--	--	<0.010	--	<0.050	0.040	0.26	0.30	<0.010	0.010	
MAY 31...	0.060	--	<0.010	0.060	0.060	0.030	0.37	0.40	0.060	0.040	
JUN 28...	0.120	0.120	0.020	0.140	0.140	0.020	0.28	0.30	0.040	0.040	
JUL 30...	0.120	--	<0.010	0.120	0.120	0.030	0.17	0.20	0.040	0.040	
SEP 04...	0.630	0.630	0.110	0.740	0.740	<0.015	--	0.40	0.120	0.150	

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

[illegible]

LOCATION.--Lat 29°28'35", long 95°48'45", Fort Bend County, Hydrologic Unit 12070104, near center of stream at downstream side of bridge on State Highway 36, 1.5 mi downstream from Coon Creek, 5.5 mi north of Needville, and 10.5 mi upstream from Fairchild Creek, and 33.0 mi upstream from mouth.

PERIOD OF RECORD.--May 1947 to June 1950, March 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 59.39 ft above sea level. Prior to June 30, 1950, and May 29, 1959 to Mar. 29, 1960, nonrecording gage at datum 10.00 ft higher. March 1952 to May 28, 1959, and Mar. 30, 1960 to Sept. 30, 1967, water-stage recorder at datum 10.00 ft higher.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1913, 24.4 ft in August 1945 before channel rectification, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	1800	2,270	21.93				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	e9.3	1.5	e35	1.2	33	1.6	1.4	1.7	7.2	2.2	60
2	e2.6	e48	1.6	e10	1.2	7.2	1.5	1.5	1.8	5.1	e2.0	26
3	e11	e171	1.6	e4.1	1.3	4.1	1.5	1.6	7.2	3.7	e1.9	11
4	e8.9	e93	1.5	e4.0	1.4	2.7	1.7	1.5	10	2.7	e1.8	6.3
5	e4.6	e25	1.5	e5.6	1.5	2.0	1.7	1.5	6.1	2.2	e1.7	9.6
6	e6.3	e11	1.4	e21	1.4	1.7	1.6	1.6	3.8	1.9	e1.8	4.7
7	e5.5	e4.8	e1.4	e12	1.6	1.3	1.6	1.5	3.6	2.2	e1.9	33
8	e2.0	1.8	e1.4	e6.3	1.4	1.2	1.5	1.5	2.8	1.7	e1.8	89
9	1.2	1.7	e1.4	e4.0	1.3	1.1	1.6	1.6	1.7	2.1	e3.0	67
10	1.4	1.8	e1.4	e3.4	1.1	1.2	1.4	1.6	1.3	2.2	e2.6	82
11	1.3	1.8	e1.4	e3.5	1.1	.96	1.5	1.7	1.3	2.3	e3.0	36
12	1.3	1.7	e1.4	e1.8	.96	1.5	1.6	1.9	1.1	2.2	e1.8	18
13	1.5	1.8	e1.3	e1.2	1.3	1.3	1.6	2.0	1.1	1.9	e2.5	8.3
14	1.4	1.8	e1.4	e1.2	1.1	1.3	1.5	2.0	1.1	1.7	e6.8	5.0
15	1.5	1.3	e1.4	e1.5	1.1	1.3	1.4	1.8	1.1	1.5	e5.6	2.6
16	1.6	1.4	1.3	e1.6	1.0	1.3	1.4	1.8	13	1.1	e4.8	3.3
17	1.7	e7.2	1250	e1.6	1.0	1.3	1.4	1.3	3.5	.71	e3.2	2.4
18	e2.7	e20	1090	e1.9	1.1	1.4	1.4	1.2	3.3	.48	e1.8	6.9
19	1.7	e17	255	e1.3	1.3	1.3	1.4	1.6	2.6	1.0	e3.0	43
20	1.6	e14	77	e1.1	1.1	1.2	1.4	1.4	3.2	1.8	e3.1	168
21	1.6	e11	36	e1.1	1.2	1.3	1.5	1.6	45	2.3	1.5	85
22	1.6	e11	56	e1.2	1.1	1.3	1.7	1.5	23	2.3	4.0	46
23	1.7	e4.8	20	e1.7	1.1	1.4	2.6	1.5	24	2.2	29	24
24	1.7	2.6	e9.0	1.2	1.1	1.5	1.8	1.5	59	1.8	59	14
25	1.7	2.5	e6.0	1.1	1.1	1.6	2.6	1.5	107	3.8	115	46
26	1.7	2.0	e5.0	1.2	1.2	1.4	1.7	1.7	135	4.9	45	72
27	1.7	1.9	e4.0	1.1	1.2	1.6	1.4	1.5	36	5.3	32	157
28	1.7	1.7	e3.0	1.2	25	1.5	1.4	1.7	58	6.7	15	225
29	1.7	1.6	e2.2	1.2	49	1.5	1.7	1.7	53	5.8	7.0	78
30	e4.2	1.5	e80	1.3	---	1.7	1.5	1.6	13	3.9	139	32
31	e11	---	e120	1.1	---	1.6	---	1.5	---	3.4	198	---
TOTAL	90.99	476.0	3036.1	135.5	106.46	84.76	48.2	49.3	624.3	88.09	700.8	1461.1
MEAN	2.94	15.9	97.9	4.37	3.67	2.73	1.61	1.59	20.8	2.84	22.6	48.7
MAX	11	171	1250	35	49	33	2.6	2.0	135	7.2	198	225
MIN	.89	1.3	1.3	1.1	.96	.96	1.4	1.2	1.1	.48	1.5	2.4
AC-FT	180	944	6020	269	211	168	96	98	1240	175	1390	290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1996h, BY WATER YEAR (WY)

MEAN	45.3	34.5	40.5	37.1	45.5	20.2	34.9	41.8	49.6	15.1	25.2	41.8
MAX	258	298	194	186	223	130	218	224	467	166	284	399
(WY)	1995	1986	1987	1974	1959	1957	1973	1982	1960	1961	1983	1979
MIN	.000	.000	.000	.000	.039	.000	.000	.33	.023	.019	.000	.000
(WY)	1948	1956	1949	1957	1962	1954	1954	1963	1948	1956	1948	1948

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1947 - 1996h
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ANNUAL TOTAL	13540.54		6901.60				
ANNUAL MEAN	37.1		18.9			35.9	
HIGHEST ANNUAL MEAN						91.1	1973
LOWEST ANNUAL MEAN						3.18	1947
HIGHEST DAILY MEAN	1430	Jan 13	1250	Dec 17	7080		Jun 26 1960
LOWEST DAILY MEAN		Sep 29		Jul 18		.00	Jun 13 1947
ANNUAL SEVEN-DAY MINIMUM	.74	Sep 3	1.1	Feb 11		.00	Jun 13 1947
INSTANTANEOUS PEAK FLOW	.98		2270	Dec 17	10400		Jun 26 1960
INSTANTANEOUS PEAK STAGE			21.93	Dec 17	24.23		Oct 18 1994
ANNUAL RUNOFF (AC-FT)	26860		13690		25980		
10 PERCENT EXCEEDS	73		36		49		
50 PERCENT EXCEEDS	4.6		1.7		1.6		
90 PERCENT EXCEEDS	1.4		1.2		.00		

h See PERIOD OF RECORD paragraph.

08116650 BRAZOS RIVER NEAR ROSHARON, TX

LOCATION.--Lat 29°20'58", long 95°34'56". Fort Bend-Brazoria County line, Hydrologic Unit 12070104, on right bank at downstream side of bridge on Farm Road 1462, 2.0 mi downstream from Big Creek, 2.1 mi upstream from Cow Creek, and 7.3 mi west of Rosharon and at mile 56.7.

DRAINAGE AREA.--45,339 mi², approximately, of which 9,566 mi² probably is noncontributing.

PERIOD OF RECORD.--April 1967 to September 1980, Apr. 25 1984 to current year.

Water-quality records.--Chemical and biochemical analyses: October 1967 to September 1980.

Specific Conductance: October 1967 to September 1980. Water Temperature: October 1967 to September 1980.

Sediment analyses: October 1974 to September 1980.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

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

REMARKS.--Records good except those of estimated daily discharge, which are fair. Water is diverted above station for irrigation, industrial, and municipal supply and materially affect low flows. For regulation by upstream reservoirs and by National Resource Conservation Service floodwater-retarding structures, see Brazos River at Washington (station 08110200). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since at least 1884, 56.4 ft about Dec. 11, 1913, from information by the Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3700	1440	1410	2480	1280	1140	486	777	143	2160	788	3590
2	3440	2040	1370	2220	1260	1160	413	855	318	1900	644	3820
3	3410	4180	1380	2060	1250	1050	505	1590	592	1660	582	4110
4	3170	3070	1400	1990	1170	939	742	1580	619	1440	498	3800
5	3040	2260	1410	2080	1160	849	744	1150	627	1440	459	4930
6	3060	2100	1520	2290	1220	893	707	819	919	1330	331	5180
7	2850	2120	1580	2180	1200	887	739	530	949	1300	254	4480
8	2810	1990	1450	1910	1210	797	675	463	809	1090	281	3770
9	2630	1890	1350	1700	1500	812	548	291	835	786	262	3250
10	2350	1860	1220	1660	1610	809	468	175	809	569	253	2800
11	2310	1870	1190	1780	1520	793	412	155	765	559	366	2650
12	2160	1870	1170	1830	1370	647	481	408	767	630	568	2630
13	2140	1780	1250	1700	1430	719	665	472	645	709	615	2520
14	1960	1720	1260	1870	1390	721	786	488	621	704	606	2380
15	1800	1640	1160	1960	1250	739	698	672	694	571	847	2280
16	1760	1600	1120	1830	1120	958	546	492	690	563	704	2230
17	1680	1530	4770	1650	1020	1090	476	326	667	402	712	2130
18	1620	1790	15100	1590	946	1000	369	158	921	e425	741	1970
19	1810	1950	13900	1490	813	777	315	82	1140	e450	694	2420
20	1750	2300	13900	1310	806	689	297	59	984	e475	709	4080
21	1650	2110	12500	1370	918	696	278	46	1010	e500	494	11000
22	1630	1930	8840	1390	829	628	255	36	1230	e390	639	16000
23	1570	2000	6970	1270	860	500	282	38	1320	283	1160	23700
24	1430	2100	5940	1340	964	484	332	102	1680	193	1010	22400
25	1470	2200	5370	1420	893	499	387	78	2880	265	1100	e16900
26	1460	1980	4820	1520	921	527	415	85	3690	580	1190	e13000
27	1470	1770	4090	1620	921	606	334	164	3130	625	1080	e10300
28	1500	1570	3440	1580	886	644	468	218	2720	432	977	8910
29	1400	1510	3060	1500	995	660	701	172	2720	529	815	7800
30	1360	1530	2770	1400	---	713	800	135	2510	822	1330	7000
31	1310	---	2640	1300	---	659	---	116	---	890	3870	---
TOTAL	65700	59700	129350	53290	32712	24085	15324	12732	37404	24672	24579	202030
MEAN	2119	1990	4173	1719	1128	777	511	411	1247	796	793	6734
MAX	3700	4180	15100	2480	1610	1160	800	1590	3690	2160	3870	23700
MIN	1310	1440	1120	1270	806	484	255	36	143	193	253	1970
AC-FT	130300	118400	256600	105700	64880	47770	30400	25250	74190	48940	48750	400700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1996h, BY WATER YEAR (WY)

	MEAN	4825	5597	7650	10410	10380	11010	10440	13680	13350	4661	2733	3235
MAX	24240	33580	23360	70560	60530	60170	32050	39370	41010	18200	11370	19370	
(WY)	1974	1975	1992	1992	1992	1992	1977	1990	1987	1968	1995	1974	
MIN	369	290	866	1119	596	498	511	312	367	246	596	504	
(WY)	1989	1989	1989	1971	1971	1971	1996	1978	1971	1971	1985	1988	

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1967 - 1996h
ANNUAL TOTAL	3572190	681578	
ANNUAL MEAN	9787	1862	8389
HIGHEST ANNUAL MEAN			29050
LOWEST ANNUAL MEAN			1634
HIGHEST DAILY MEAN	41600	Mar 17	83900
LOWEST DAILY MEAN	1120	Dec 16	36
ANNUAL SEVEN-DAY MINIMUM	1200	Dec 10	63
INSTANTANEOUS PEAK FLOW			25000
INSTANTANEOUS PEAK STAGE			28.28
ANNUAL RUNOFF (AC-FT)	7085000	1352000	6078000
10 PERCENT EXCEEDS	23300	3420	21200
50 PERCENT EXCEEDS	6640	1190	3320
90 PERCENT EXCEEDS	1700	368	694

e Estimated

h See PERIOD OF RECORD paragraph.

LOCATION.--Lat 29°18'48", long 95°53'37", Wharton-Fort Bend County line, Hydrologic Unit 12090401, on left bank at downstream side of bridge on Farm Road 442, 2.5 mi downstream from Snake Creek, and 4.5 mi northeast of Boling.

PERIOD OF RECORDS.--May 1954 to current year.

Water-quality records.--Chemical and biochemical analyses: February 1978 to September 1986.

REVISED RECORDS.--WSP 1712: 1958. WSP 1922: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 30.81 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Part of low flow is drainage from areas irrigated with diversions from the Colorado River. There are numerous diversions above station for irrigation and for other uses. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1900, 43.5 ft in 1913 (probably December). Flood in September 1938 reached a stage of 43.3 ft, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	2100	5,720	24.11	Sept. 24	2200	4,410	20.92
June 26	1800	3,190	17.67				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	33	29	e136	18	116	12	125	11	534	341	1900
2	59	114	26	e125	17	112	11	110	8.6	341	307	1660
3	69	409	23	121	17	67	11	91	11	223	268	1490
4	84	235	22	98	16	43	10	71	34	e193	252	1130
5	109	169	19	78	15	30	9.0	55	292	e180	198	824
6	117	129	18	70	15	25	23	47	532	e174	153	702
7	134	97	17	76	16	22	50	47	465	e168	129	543
8	140	77	16	62	16	20	62	34	268	e162	127	491
9	129	61	16	49	17	18	36	30	144	e159	122	404
10	112	48	15	39	17	17	35	34	99	e156	96	312
11	113	35	14	34	17	15	32	34	70	e151	79	309
12	124	25	14	30	16	14	26	40	53	e149	67	318
13	133	19	14	28	15	14	22	81	37	e147	130	296
14	130	19	14	26	15	16	21	134	27	e146	159	244
15	146	18	14	26	14	15	22	117	26	144	131	202
16	164	17	14	26	14	15	24	97	34	132	121	220
17	168	20	1870	24	13	14	24	95	35	136	114	373
18	164	125	5360	24	13	13	30	83	35	136	109	507
19	157	419	4840	23	13	12	40	69	37	137	111	478
20	132	704	2950	21	13	12	40	53	48	170	107	684
21	108	771	1700	21	12	11	54	41	54	172	95	2320
22	89	661	e1690	20	13	11	73	33	71	168	88	3440
23	76	446	e1660	19	12	10	71	28	231	162	93	3590
24	64	263	e1300	20	12	10	76	24	1410	166	117	4280
25	50	175	e917	21	12	11	104	23	2220	192	784	4330
26	39	120	e608	20	11	12	103	23	3010	252	697	3860
27	39	83	e420	19	11	12	94	22	2900	362	568	2550
28	28	60	e307	18	10	12	97	20	2290	427	446	2300
29	22	45	e220	17	44	12	118	18	1460	467	427	1660
30	27	34	e157	18	---	12	133	18	855	413	491	937
31	25	---	e146	18	---	12	---	17	---	369	1800	---
TOTAL	3012	5431	24430	1327	444	735	1463.0	1714	16767.6	6888	8727	42354
MEAN	97.2	181	788	42.8	15.3	23.7	48.8	55.3	559	222	282	1412
MAX	168	771	5360	136	44	116	133	134	3010	534	1800	4330
MIN	22	17	14	17	10	10	9.0	17	8.6	132	67	202
AC-FT	5970	10770	48460	2630	881	1460	2900	3400	33260	13660	17310	84010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1996, BY WATER YEAR (WY)

MEAN	570	468	445	564	685	360	459	663	870	336	209	600
MAX	4048	4069	2497	2316	4303	2142	3348	2840	5083	1417	710	3794
(WY)	1995	1986	1992	1979	1992	1957	1973	1972	1993	1961	1983	1979
MIN	3.27	5.23	6.19	6.57	15.2	5.97	15.2	22.8	10.4	10.7	26.8	35.2
(WY)	1957	1956	1990	1957	1967	1956	1963	1956	1956	1956	1956	1956

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	WATER YEARS 1954 - 1996
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ANNUAL TOTAL	155098		113292.6				
ANNUAL MEAN	425		310			521	
HIGHEST ANNUAL MEAN						1357	1992
LOWEST ANNUAL MEAN						37.9	1956
HIGHEST DAILY MEAN	5360	Dec 18	5360	Dec 18	21000		Jun 28 1960
LOWEST DAILY MEAN	14	Dec 11	8.6	Jun 2	1.7		Dec 7 1988
ANNUAL SEVEN-DAY MINIMUM	14	Dec 10	11	Mar 19	2.2		Dec 1 1988
INSTANTANEOUS PEAK FLOW			5720	Dec 18	21200		Jun 28 1960
INSTANTANEOUS PEAK STAGE			24.11	Dec 18	42.41		Jun 28 1960
ANNUAL RUNOFF (AC+T)	307600		224700		377800		
10 PERCENT EXCEEDS	1090		698		1260		
50 PERCENT EXCEEDS	156		71		121		
90 PERCENT EXCEEDS	44		14		17		

e Estimated

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 U.S. 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 station during water year 1996

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Brazos River Basin						
08084100	Deadman Creek near Nugent, Tex.	Lat 32°40'36", long 99°37'00", Jones County, at low-water crossing on county road, 3.2 mi east of Nugent, and 4.4 mi upstream from Clear Fork Brazos River.	163	1967-96	10-03-95	46.4
					11-30-95	19.0
					02-01-96	18.8
					04-03-96	16.0
					05-20-96	18.2
					07-30-96	13.9
08104290	Salado Creek above Salado, Tex.	Lat 30°56'42", long 97°32'30", Bell County, 0.2 mi upstream from I.H. 35, at Salado.	134	1984-88, 1990-96	01-12-96	5.07
					02-22-96	3.99
					03-22-96	4.38
					05-08-96	1.36
					07-19-96	0.21
					08-13-96	0.14
08104310	Salado Creek below Salado Springs, at Salado, Tex.	Lat 30°57'07", long 97°31'26", Bell County, on right bank downstream from low-water crossing in the Mill Creek Country Club and subdivision at Salado.	136	1984-87†, 1988, 1990-96	01-22-96	11.3
					02-22-96	9.34
					03-22-96	9.11
					05-08-96	5.72
					07-19-96	4.96
					08-13-96	4.77
08104795	North Fork San Gabriel River upstream from State Highway 418 at Georgetown, Tex.	Lat 30°38'44", long 97°40'49", Williamson County, 0.2 mi upstream from State Highway 418 at Georgetown.	271	1984-88, 1990-96	01-11-96	13.4
					02-22-96	12.1
					03-21-96	14.4
					05-09-96	4.01
					07-18-96	2.18
					08-16-96	2.01
08104950	South Fork San Gabriel River upstream from State Highway 418 at Georgetown, Tex.	Lat 30°38'38", long 97°40'50", Williamson County, 0.2 mi upstream from State Highway 418 at Georgetown.	136	1984-88, 1990-96	01-04-96	0.88
					02-22-96	1.22
					03-21-96	1.01
					05-09-96	0
					07-18-96	0.62
					08-16-96	0
08105000	San Gabriel River at Georgetown, Tex.	Lat 30°39'14", long 97°39'18", Williamson County, on left bank 100 ft downstream from Missouri-Kansas Railroad bridge, 1.2 mi below confluence of North and South Forks, about 1.5 mi northeast of Williamson County Courthouse in Georgetown.	399	1924-25†, 1934-73†, 1984-87†, 1988, 1990-96	01-10-96	11.9
					02-22-96	21.3
					03-21-96	23.7
					05-09-96	9.56
					07-18-96	4.62
					08-16-96	2.06
08105095	Berry Creek upstream from I.H. 35 near Georgetown, Tex.	Lat 30°42'11", long 97°39'58", Williamson County, about 1.4 mi upstream from I.H. 35 near Georgetown.	71.4	1984-88, 1990-96	01-11-96	0
					02-22-96	0
					03-22-96	0
					05-09-96	0
					07-18-96	0
					08-16-96	0
08105160	Dry Berry Creek near Georgetown, Tex.	Lat 30°41'28", long 97°38'14", Williamson County, at downstream side of county road, 0.4 mi upstream from mouth, and 4.0 mi northeast of Georgetown.	33.1	1986-88, 1990-96	01-10-96	0.03
					02-22-96	0
					03-21-96	0
					05-09-96	0
					07-18-96	0
					08-16-96	0
08105200	Berry Creek at State Highway 971 near Georgetown, Tex.	Lat 30°40'33", long 97°38'52", Williamson County, at downstream side of State Highway 971 bridge and 4.7 mi northeast of Georgetown.	117	1964-73, 1984-87†, 1988, 1990-96	01-11-96	0.45
					02-22-96	0.29
					03-21-96	0.10
					05-09-96	0
					07-18-96	0
					08-16-96	0

See footnotes at end of table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at low-flow partial-record station during water year 1996--Continued

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Dis-charge (ft ³ /s)
Brazos River Basin--Continued						
08105300	San Gabriel River near Weir, Tex.	Lat 30°38'45", long 97°35'06", Williamson County, on left bank at downstream side of State Highway 29 bridge, 0.5 mi upstream from Manske Branch, 4.7 mi east of Georgetown, and 54.8 mi upstream from mouth.	563	1976-90† 1991-96	01-11-96	23.8
					02-22-96	22.3
					03-21-96	16.1
					05-09-96	7.12
					07-18-96	2.76
					08-16-96	1.36

† Operated as a continuous-record station.

Crest-stage 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), the data are generally collected for use in stage-frequency studies of 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 1996

Station name	Location	Period of record	Water Year 1996 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
San Jacinto River Basin								
Goose Creek at Baytown, Tex. 08067525	Lat 29°46'14", long 94°59'58", Harris County, at bridge on Baker Road in Baytown, 1.1 mi upstream from West Fork Goose Creek, and 2.0 mi upstream from East Fork Goose Creek. Drainage area is 15.8 mi ² .	1984-96	06-25-96	*17.19	--	10-17-94	*22.04	--
Willow Creek near Tomball, Tex. 08068325	Lat 30°06'19", long 95°32'47", Harris County, at bridge on Kuykendahl Road, 0.6 mi upstream from Cannon Gully, and 4.0 mi east of Tomball. Drainage area is 41.0 mi ² .	1984-96	09-24-96	24.97	701	10-18-94	31.81	4,070
Cypress Creek at Sharp Road near Hockley, Tex. 08068700	Lat 29°55'15", long 95°50'24", Harris County, at bridge on Sharp Road and 7.4 mi south of Hockley. Drainage area is 80.7 mi ² .	1976-78, 1979-96	09-19-96	*60.47	--	10-18-94	*69.86	--
Buffalo Bayou near Fulshear, Tex. 08072350	Lat 29°43'22", long 95°46'01", Harris County, at proposed location of Peek Road bridge, about 200 ft downstream from Little Prong Bayou, 4,300 ft upstream from Mason Road, 8.3 mi east-northeast of Fulshear. Drainage area is 81.7 mi ² .	1986-96	08-30-96	11.49	--	02-21-94	115.84	--
South Mayde Creek near Addicks, Tex. 08072700	Lat 29°48'03", long 95°41'33", Harris County, at bridge on Groeschke Road, 3.2 mi west of Addicks, and 4.6 mi upstream from Langham Creek. Drainage area is 32.3 mi ² .	1974-96	12-18-95	*105.50	--	08-31-81	108.76	4,080
Langham Creek near Addicks, Tex. 08072800	Lat 29°50'08", long 95°37'32", Harris County, at bridge on Clay Road, 3.6 mi north of Addicks, and 4.4 mi upstream from mouth. Drainage area is 48.9 mi ² .	1974-96	12-18-95	*99.38	--	08-31-81	102.25	3,360
Whiteoak Bayou at Alabonson Road at Houston, Tex. 08074020	Lat 29°52'14", long 95°28'49", Harris County, at bridge on Alabonson Road, in northwest of Houston, 1.0 mi upstream from Vogel Creek, and 2.5 mi upstream from Cole Creek. Drainage area is 34.5 mi ² .	1984-96	12-18-95	*39.44	1,690	03-04-92	49.58	8,610
Little Whiteoak Bayou at Trimble Street at Houston, Tex. 08074540	Lat 29°47'33", long 95°22'06", Harris County, at bridge on Trimble Street, Houston. Drainage area is 18.0 mi ² .	1979-96	06-23-96	*33.91	--	03-04-92	43.17	--
Brays Bayou at Alief, Tex. 08074760	Lat 29°42'39", long 95°35'13", Harris County, at bridge on High Star Street in Alief. Drainage area is 14.1 mi ² .	1977-96	12-17-95	12.51	--	03-04-92	21.16	--
Keegans Bayou at Keegan Road near Houston, Tex. 08074780	Lat 29°39'55", long 95°35'42", Harris County, at bridge on Keegan Road and about 16 mi southwest of Houston. Drainage area is 8.63 mi ² .	1965-71, 1975-96	12-17-95	*76.43	--	04-14-66	83.55	--
Brays Bayou at Gessner Drive, Houston, Tex. 08074810	Lat 29°40'21", long 95°31'41", Harris County, at bridge on Gessner Drive in southwest Houston and 0.10 mi below mouth of Keegans Bayou. Drainage area is 53.2 mi ² .	1977-96	12-17-95	*57.19	7,280	03-04-92	65.42	16,900
Greens Bayou at Cutten Road near Houston, Tex. 08075780	Lat 29°56'56", long 95°31'10", Harris County, at bridge on Cutten Road and about 16.5 mi northwest of Houston. Drainage area is 8.65 mi ² .	1965-96	12-18-95	*110.71	297	02-21-69 10-25-84	*118.04 *116.85	508 2,110
Carpenters Bayou at IH-10 near Channelview, Tex. 08076902	Lat 29°46'18", long 95°08'56", Harris County, at bridge on eastbound access road to IH-10, at western boundary of Channelview, 4.4 mi upstream from mouth. Drainage area is 25.9 mi ² .	1991-96	12-17-95	*9.89	--	10-17-94	*17.53	--

See footnotes at end of table.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum stage and (or) discharge during water year 1996--Continued

Station name	Location	Period of record	Water Year 1996 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis-charge (ft ³ /s)	Date	Gage height (ft)	Dis-charge (ft ³ /s)
Clear Creek Basin								
Beamer Street Ditch at Houston, Tex. 08077505	Lat 29°35'30", long 95°13'19", Harris County, at bridge on Hughes Road in southeast Houston. Drainage area is 5.19 mi ² .	1984-96	12-17-95	*27.89	--	10-18-94	31.48	--
Turkey Creek near Friendswood, Tex. 08077520	Lat 29°35'02", long 95°11'13", Harris County, at bridge on Dixie Farm Road in southern on Dixie Farm Road Harris County, 2.4 mi upstream from Clear Creek, and 3.9 mi north-northeast of Friendswood. Drain- area is 6.78 mi ² .	1985-96	12-17-95	*23.17	--	10-18-94	*27.97	--
Horsepen Bayou at Bay Area Blvd., Houston, Tex. 08077630	Lat 29°35'00", long 95°06'12", Harris County, at up- stream bridge on Bay Area Blvd., in southeast Houston, and 2.0 mi upstream from Armand Bayou. Drainage area is 17.8 mi ² .	1985-96	11-02-95	*6.78	--	08-01-89	*12.35	--

* Elevation, in feet.

r Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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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 1996

Station no.	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
Brazos River Basin						
Catclaw Creek at Abilene, Tex. 08083420	Clear Fork Brazos River	Lat 32°28'31", long 99°44'56", Taylor County, in Sear Park 320 ft downstream from bridge on Ambler Street in Abilene, and 1.8 mi upstream from mouth.	13.0	1971-79†, 1993-96	10-03-95	2.03
					11-30-95	0
					02-01-96	0
					04-03-96	0
					05-20-96	0
					07-17-96	0
	09-26-96	2.41				
Cedar Creek at I-20 at Abilene, Tex. 08083480	Clear Fork Brazos River	Lat 32°29'58", long 99°42'57", Taylor County, on Cedar Creek bridge on I-I-20 Service Road.	136	1993-96	10-03-95	6.88
					11-30-95	0.30
					02-01-96	0.10
					04-03-96	0.19
					05-20-96	0
Leon River at North Ft. Hood, Tex. 08100600	--	Lat 31°23'01", long 97°42'06", Coryell County, on downstream side of State Highway 36, 9.8 mi downstream from City of Gatesville Sewage Disposal Plant.	2,416	1990-96	12-04-95	63.0
					01-10-96	65.5
					04-23-96	57.1
					06-11-96	377
					08-12-96	11.0
Lampasas River nr Belton, Tex. 08104100	--	Lat 31°00'06", long 97°29'32", Bell County, on upstream I-35 service road.	1,321	1963-89†, 1996	04-30-96	4.38

† Operated as a continuous-record station.

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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