

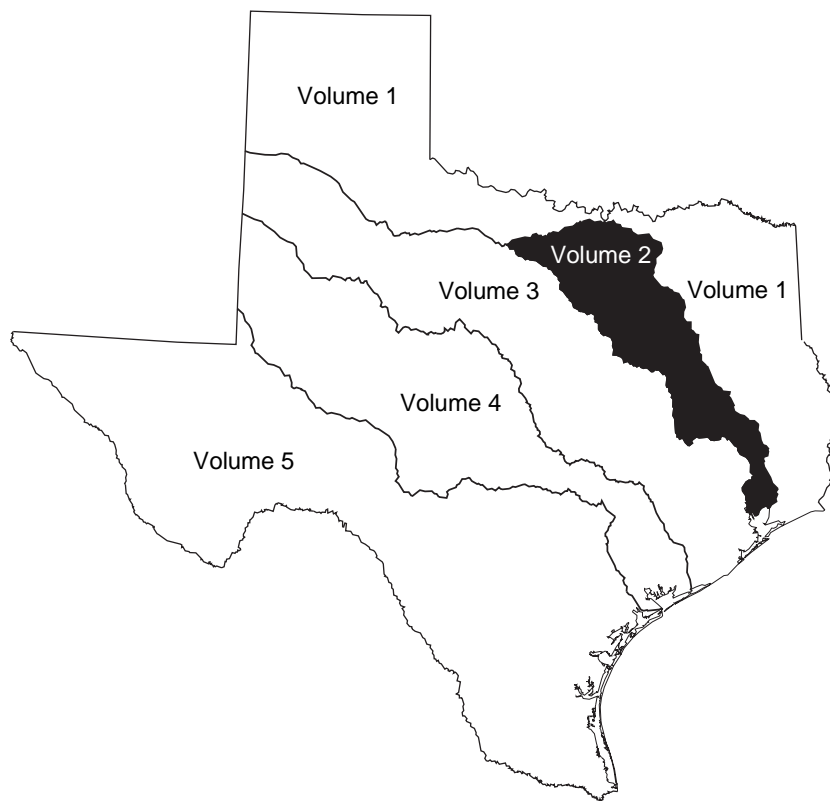
U.S. Department of the Interior  
U.S. Geological Survey

# Water Resources Data Texas Water Year 2001

## Volume 2. Trinity River Basin

By S.C. Gandara

Water-Data Report TX-01-2



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



UNITED STATES DEPARTMENT OF THE INTERIOR

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2002

## 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 6 volumes:

- Volume 1. Arkansas River Basin, Red River Basin, Sabine River Basin, Neches River Basin, and Intervening Coastal Basins
- Volume 2. Trinity River Basin
- Volume 3. San Jacinto River Basin, Brazos River Basin, San Bernard River Basin, and Intervening Coastal Basins
- Volume 4. Colorado River Basin, Lavaca River Basin and Intervening Coastal Basins
- Volume 5. Guadalupe River Basin, Nueces River Basin, Rio Grande Basin, and Intervening Coastal Basins
- Volume 6. 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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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
<b>WESTERN GULF OF MEXICO BASINS</b>		
<b>TRINITY RIVER BASIN</b>		
West Fork Trinity River near Jacksboro (d) -----	08042800	34
Lost Creek:		
Lost Creek Reservoir near Jacksboro (e) -----	08042820	36
Big Sandy Creek:		
Lake Amon G. Carter near Bowie (e) -----	08043700	38
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Farmers Branch at Westworth Village, Fort Worth (e) -----	08045525	52
Lake Weatherford near Weatherford (e) -----	08045800	58
Clear Fork Trinity River near Weatherford (d) -----	08045850	60
Clear Fork Trinity River near Benbrook (d) -----	08047000	62
Mary's Creek at Benbrook (d) -----	08047050	64
Clear Fork Trinity River at Fort Worth (d) -----	08047500	66
West Fork Trinity River at Fort Worth (d) -----	08048000	68
West Fork Trinity River at Beach Street, Fort Worth (d) (t) -----	08048543	70
Village Creek:		
Village Creek at Everman (d) (c) (t) -----	08048970	80
Lake Arlington at Arlington (e) (c) (t) -----	08049200	84
West Fork Trinity River at Grand Prairie (d) (c) (t) -----	08049500	92
Mountain Creek near Venus (d) -----	08049580	104
Walnut Creek near Mansfield (d) -----	08049700	106
Joe Pool Lake near Duncanville (e) -----	08049800	108
Mountain Creek Lake near Grand Prairie (e) -----	08050050	110
Mountain Creek at Grand Prairie (d) -----	08050100	112
Elm Fork Trinity River at Gainesville (d) -----	08050400	114
Isle du Bois Creek:		
Jordan Creek:		
Timber Creek near Collinsville (d) -----	08050800	116
Range Creek near Collinsville (d) -----	08050840	118
Ray Roberts Lake near Pilot Point (e) -----	08051100	120
Clear Creek near Sanger (d) (c) (t) -----	08051500	122
Little Elm Creek near Aubrey (d) -----	08052700	128
Lewisville Lake near Lewisville (e) -----	08052800	130
Elm Fork Trinity River near Lewisville (d) -----	08053000	132
Denton Creek near Justin (d) (c) (t) -----	08053500	134
Elizabeth Creek at State Highway 114 near Roanoke (c) (t) -----	08053800	138
Grapevine Lake near Grapevine (e) (c) (t) (b) -----	08054500	140
Denton Creek near Grapevine (c) (t) -----	08055000	150
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White Rock Creek at Greenville Avenue, Dallas (d) (c) (t) -----	08057200	168
Prairie Creek at U.S. Highway 175, Dallas (d) -----	08057445	174
Trinity River near Wilmer (d) (c) (t) -----	08057448	176
East Fork Trinity River at McKinney (d) -----	08058900	190
Sister Grove Creek near Blue Ridge (d) -----	08059400	192
Lavon Lake near Lavon (e) -----	08060500	194
Rowlett Creek near Sachse (d) -----	08061540	196
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GAGING STATIONS, IN DOWNSTREAM ORDER,  
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

	Station number	Page
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Cedar Creek:		
Muddy Cedar Creek:		
New Terrell City Lake near Terrell (e)-----	08062730	218
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Richland Creek near Irene (c) (t)-----	08063045	222
Navarro Mills Lake near Dawson (e) (c) (t) (b)-----	08063050	224
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Chambers Creek:		
Waxahachie Creek:		
Lake Waxahachie near Waxahachie (e)-----	08063600	236
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Bardwell Lake near Ennis (e) (c) (t) (b)-----	08063700	240
Waxahachie Creek near Bardwell (d) (c) (t)-----	08063800	248
Chambers Creek near Rice (d) (c) (t)-----	08064100	252
Post Oak Creek:		
Halbert Lake near Corsicana (e)-----	08064510	260
Tehuacana Creek near Streetman (d) (c) (t)-----	08064700	264
Trinity River near Oakwood (d)-----	08065000	268
Upper Keechi Creek near Oakwood (d)-----	08065200	270
Big Elkhart Creek:		
Little Elkhart Creek:		
Houston County Lake near Crockett (e)-----	08065330	272
Trinity River near Crockett (d) (c) (t)-----	08065350	274
Bedias Creek near Madisonville (d)-----	08065800	286
Kickapoo Creek near Onalaska (d)-----	08066170	288
Livingston Reservoir near Goodrich (e) (c) (t)-----	08066190	290
Long King Creek at Livingston (d)-----	08066200	300
Trinity River near Goodrich (d)-----	08066250	302
Menard Creek near Rye (d)-----	08066300	304
Trinity River at Romayor (d)-----	08066500	306
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Lake Charlotte near Anahuac (e) (c) (t)-----	08067118	312
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## DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

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The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Texas have been discontinued. Daily stream-flow 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 <sup>2</sup> )	Period of record (water years)
Punta De Agua Creek near Channing (d)	07227448	3,568	1968-73
East Chyenne Creek Tributary near Channing (e)	07227460	0.86	1965-74
Canadian River at Tascosa (d)	07227470	18,536	1969-77
Tecovas Creek Tributary near Bushland (e)	07227480	2.5	1966-74
Dixon Creek near Borger (d)	07227920	134	1974-89
Palo Duro Creek near Canyon (e)	07229700	982	1942-54
White Woman Creek Tributary near Darrouzett (e)	07234150	4.03	1966-74
Tierra Blanca Creek above Buffalo Lake near Umbarger (d)	07295500	1,968	1939-54, 1967-73
Buffalo Lake near Umbarger (e)	07296000	2,075	1938-54
Tierra Blanca Creek below Buffalo Lake near Umbarger (d)	07296100	2,075	1967-73
Prairie Dog Town Fork Red River near Canyon (d)	07297500	3,369	1924-26, 1938-49
Middle Tule Draw near Tulia (e)	07297920	313	1967-74
North Tule Draw at Reservoir near Tulia (d)	07298000	189	1939-40, 1941-73
Rock Creek Tributary near Silverton (d)	07298150	13.7	1966-74
Tule Creek near Silverton (d)	07298200	1,150	1964-86
Prairie Dog Town Fork Red River near Brice (d)	07298500	6,082	1939-44, 1949-51, 1960-63
Mulberry Creek near Brice (d)	07299000	534	1949-51
Prairie Dog Town Fork Red River near Lakeview (d)	07299200	6,792	1963-80
Little Red River near Turkey (d)	07299300	139	1968-81
Prairie Dog Town Fork Red River near Estelline (d)	07299500	7,293	1924-25, 1938-47
Prairie Dog Town Fork Red River below Mountain Creek near Estelline (e)	07299505	7,341	1974-77
Prairie Dog Town Fork Red River above Jonah Creek near Estelline (e)	07299510	7,533	1974-77
Jonah Creek at Weir near Estelline (d)	07299512	65.50	1974-82
Jonah Creek below Weir near Estelline (d)	07299514	66.60	1974-76
Jonah Creek at mouth near Estelline (d)	07299516	76	1974-76
Salt Creek near Estelline (d)	07299530	142	1974-79
Buck Creek near Wellington (e)	07299550	210	1951-64
Red River near Quanah (d)	07299570	8,321	1960-82
North Groesbeck Creek Tributary near Kirkland (d)	07299575	0.16	1966-74
Wanders Creek at Odell (e)	07299750	199	1949-50, 1952-89
Salt Fork Red River near Clarendon (d)	07299850	457	1960-64
Lelia Lake Creek near Hedley (e)	07299900	86	1951-70
Salt Fork Red River near Hedley (e)	07299930	744	1951, 1956-62
Oklahoma Draw Tributary near Hedley (e)	07299940	1.1	1965-74
Sweetwater Creek near Wheeler (e)	07301400	164	1951-64
Doodlebug Creek near Wheeler (e)	07301405	0.19	1967-73
Elm Creek near Shamrock (e)	07303300	N/A	1947-89
Quitaque Creek near Quitaque (d)	07307500	293	1945-59
North Pease River near Childress (d)	07307600	1,434	1973-79
North Pease River near Kirkland (e)	07307660	N/A	1973-79
Roaring Springs near Roaring Springs (e)	07307700	N/A	1937, 1943-95
Cottonwood Creek Tributary near Afton (e)	07307720	0.68	1967-74
Middle Pease River near Paducah (d)	07307750	1,086	1973-79
Middle Pease River near Paducah (d)	07307760	1,123	1980-82



Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Middle Pease River near Kirkland (e)	07307780	1,250	1973-79
Canal Creek near Crowell (e)	07307950	49.0	1968-70, 1978-79
Pease River near Crowell (d)	07308000	3,037	1924-47
Plum Creek near Vernon (e)	07308220	4.99	1967-74
China Creek near Electra (e)	07308400	37	1967-76
North Fork Wichita River near Crowell (d)	07311622	591	1971-76
Middle Fork Wichita River near Truscott (d)	07311648	161	1971-76
South Fork Wichita River near Guthrie (d)	07311780	239	1952-54, 1956-57 1971-76
South Fork Wichita River at Ross Ranch near Benjamin (d)	07311790	499	1971-79
Beaver Creek near Electra (d)	07312200*	652	1960-99
Beaver Creek Tributary near Crowell (e)	07312140	3.43	1966-74
Wolf Creek near Iowa Park (e)	07312300	8.5	1966-74
North Fork Little Wichita River Tributary near Archer City (e)	07314200	0.10	1966-74
Little Wichita River near Henrietta (d)	07315000	1,037	1953-79
Little Wichita River near Ringgold (d)	07315400	1,350	1959-65
Farmers Creek near Saint Jo (e)	07315550	0.82	1966-74
Mineral Creek near Sadler (d)	07316200	26	1968-77
Sandy Creek near Sadler (e)	07316230	24	1968-74
Lake Texoma near Denison (e)	07331500	39,719	1942-93, 2000
Red River at Denison Dam near Denison (d)	07331600	39,720	1924-89
Bois D' Arc Creek near Randolph (d)	07332600	72	1963-85
Cooper Creek near Bonham (e)	07332602	6.21	1966-74
Sanders Creek near Chicota (d)	07335400	175	1968-86
Little Pine Creek near Kanawha (d)	07336750	75.40	1969-80
Pecan Bayou near Clarksville (d)	07336800	100	1962-77
Red River near DeKalb (d)	07336820	47,348	1967-98
McKinney Bayou near Leary (e)	07336940	3.33	1966-73
Barkman Creek near Leary (e)	07336950	31.5	1958-64
Nelson Branch near Leonard (e)	07342450	0.22	1966-74
South Sulphur River near Commerce (d)	07342470	189	1980-91
Cuthand Creek near Bogata (d)	07343300	69	1964-74
Dial Branch near Bagwell (e)	07343350	1.00	1966-74
White Oak Creek near Mt. Vernon (e)	07343480	434	1966, 1969-75
White Oak Creek below Talco (d)	07343800	579	1938-50
Buck Creek near Cookville (e)	07343900	0.78	1966-74
Sulphur River near Darden (d)	07344000	2,774	1924-56
Sulphur River near Texarkana (d)	07344210	3,443	1980-85
Big Cypress Creek near Winnsboro (d)	07344482	27.2	1974-92
Dragoo Creek near Mt. Pleasant (e)	07344490	4.27	1967-74
Williamson Creek near Pittsburg (e)	07344600	7.11	1967-74
Boggy Creek near Daingerfield (d)	07345000	72	1943-77
Ellison Creek Reservoir near Lone Star (e)	07345500	37	1943-62, 1974-89
Cypress Creek Tributary near Jefferson (e)	07346010	0.51	1966-74
Taylor Branch near Smithland (e)	07346072	0.73	1966-74
Big Cypress Creek near Karnack (e)	07346085	2,174	1980-85
Frazier Creek near Linden (d)	07346140	48.0	1965-91
Sabine River near Emory (d)	08017500	888	1952-73
Burnett Branch near Canton (e)	08017700	0.33	1966-74
Grand Saline Creek near Grand Saline (d)	08018200	91.4	1968-73
Burke Creek near Yantis (d)	08018730	33.10	1979-89
Dry Creek near Quitman (e)	08018950	63.6	1968-75
Lake Winnsboro near Winnsboro (d)	08019300	27.1	1962-86
Big Sandy Creek near Hawkins (e)	08019430	196	1980-82
Prairie Creek near Gladewater (d)	08020200	48.90	1968-77

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Sabine River near Longview (d)	08020500	2,947	1904-07, 1924-33
Rabbit Creek at Kilgore (d)	08020700	75.80	1964-77
Grace Creek Tributary at Longview (e)	08020800	5.05	1967-74
Mill Creek near Henderson (d)	08020960	20.30	1979-81
Mill Creek near Longview (d)	08020980	47.90	1979-81
Tiawichi Creek near Longview (d)	08020990	62.70	1978-81
Cherokee Bayou near Elderville (d)	08021000	120	1940-49
Lake Cherokee near Longview (e)	08021500	158	1951-83
Sabine River near Tatum (d)	08022000	3,493	1939-78, 1979-82
“ “ “ “ (e)			
Redmon Branch near Hallesville (e)	08022010	0.46	1966-74
Eight Mile Creek near Tatum (e)	08022050	106	1962-71
Martin Creek near Tatum (d)	08022070	148	1974-96
Martin Creek near Beckville (e)	08022080	192	1962-71
Murvaul Bayou near Gary (d)	08022300	134	1958-83
Socagee Creek near Carthage (d)	08022400	82.60	1962-73
Tenaha Creek near Shelbyville (d)	08023200	97.80	1952-81
Dorsey Branch near Milam (e)	08024290	0.70	1967-74
Patroon Bayou near Milam (e)	08024300	130	1952-54, 1959-63
Sabine River near Milam (d)	08024400	6,508	1924-25, 1939-68
Palo Gaucho Bayou near Hemphill (d)	08024500	123	1952-65
Housen Bayou near Yellowpine (e)	08025250	92.1	1952-54, 1957, 1959-63
Sandy Creek near Yellowpine (e)	08025300	135	1952-54, 1957, 1959-63
Mill Creek near Burkeville (d)	08025307	17.6	1974-79
Little Cow Creek below McGraw Creek near Burkeville (e)	08026500	112	1952-58
Moore Branch near Newton (e)	08028505	3.77	1967-74
Nichols Creek near Buna (e)	08029750	54.4	1959-64
Cypress Creek near Buna (d)	08030000	69.20	1952-83
Adams Bayou Tributary near Deweyville (e)	08030700	12.4	1966-74
Cow Bayou near Mauriceville (d)	08031000	83.30	1952-86
Bethlehem Branch near Van (e)	08031100	1.09	1966-74
Kickapoo Creek near Brownsboro (d)	08031200	232	1962-89
Neches River near Reese (d)	08031500	851	1924-27
Hurricane Creek Tributary near Palestine (e)	08032100	0.39	1966-74
One Arm Creek near Maydelle (e)	08032250	6.01	1967-74
Squirrel Creek near Elkhart (e)	08032300	1.57	1967-74
Neches River near Alto (d)	08032500	1,945	1944-79
Piney Creek Tributary near Pennington (e)	08033250	1.17	1967-74
Piney Creek near Groveton (d)	08033300	79	1962-89
Shawnee Creek Tributary near Huntington (e)	08033450	0.52	1966-74
Greenwood Creek Tributary near Colmesneil (e)	08033480	0.15	1966-74
Bowles Creek near Selman City (e)	08033600	14.5	1968-85
Striker Creek near Summerfield (d)	08033700	146	1941-49
Striker Creek Reservoir near New Salem (e)	08033800	148	1941-49
East Fork Angelina River near Cushing (d)	08033900	158	1964-89
Mud Creek near Jacksonville (d)	08034500	376	1939-79
Mud Creek at Ponta (d)	08035000	475	1924-27
Angelina River near Lufkin (d)	08037000	1,600	1924-34, 1939-79
Bayou Lanana at Nacogdoches (d)	08037050	31.3	1965-86, 1988-93
Gingham Branch near Mt. Enterprise (e)	08037300	0.90	1967-74
Arenoso Creek near San Augustine (d)	08037500	75.30	1938-40
Angelina River near Zavalla (d)	08038500	2,892	1952-65
Ayish Bayou at San Augustine (d)	08039000	15.80	1924-25

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Angelina River at Horger (d)	08039500	3,486	1928-51, 1967-73
Little Sandy Creek Tributary near Jasper (e)	08039900	0.46	1967-74
Drakes Branch near Spurger (e)	08041400	5.03	1967-74
Hillebrandt Bayou near Lovell Lake (d)	08042500	128	1954-84
West Fork Double Bayou near Anahuac (e)	08042550	4.43	1967-74
North Creek SWS No. 28-A near Jermyn (e)	08042650	6.82	1972-80
North Creek near Jacksboro (d)	08042700	21.60	1956-80
Beans Creek at Wizard Wells (e)	08042900	29.60	1993-95
West Fork Trinity River at Bridgeport (d)	08043100	1,113	1984-89
West Fork Trinity River at Bridgeport (d)	08043500	1,147	1908-30
Big Sandy Creek near Bridgeport (d)	08044000	333	1937-95
Garrett Creek near Paradise (e)	08044135	52.5	1992-95
Salt Creek near Paradise (e)	08044140	52.7	1992-95
Walker Creek near Boyd (e)	08044200	2.95	1965-74
West Fork Trinity River at Lake Worth, Fort Worth (d)	08045500	2,069	1924-34
Clear Fork Trinity River near Aledo (d)	08046000	251	1947-75
Marine Creek at Fort Worth (d)	08048500	16.80	1950-58
Sycamore Creek at I.H. 35W, Fort Worth (d)	08048520	17.70	1970-76
Sycamore Creek Trib. above Seminary South, Fort Worth (d)	08048530	0.97	1970-76
Sycamore Creek Trib. at I.H. 35W, Fort Worth (d)	08048540	1.35	1970-76
Dry Branch at Fain Street at Fort Worth (d)	08048600	2.15	1969-76
Big Fossil Creek at Haltom City (d)	08048800*	52.8	1959-73
Little Fossil Creek at I.H. 820, Fort Worth (e)	08048820	5.64	1969-73
Little Fossil Creek at Mesquite Street, Fort Worth (d)	08048850	12.30	1969-76
Deer Creek Tributary near Crowley (e)	08048900	5.86	1967-74
Village Creek at Kennedale (d)	08048980	100	1986-89
Village Creek near Handley (d)	08049000	126	1925-30
Big Bear Creek near Grapevine (d)	08049550	29.6	1967-79
Trigg Branch at DFW Airport near Euless (d)	08049565	1.73	1983-87
Mountain Creek near Cedar Hill (d)	08049600	119	1961-84
Mountain Creek above Duncanville (e)	08049850	224	1986-87
Mountain Creek near Duncanville (e)	08049900	225	1971-90
Mountain Creek near Grand Prairie (d)	08050000	273	1925-33
Elm Fork Trinity River SWS 6-O near Muenster (e)	08050200	0.77	1957-73
Elm Fork Trinity River near Muenster (d)	08050300	46	1957-73
Elm Fork Trinity River near Sanger (d)	08050500	381	1949-85
Isle Du Bois Creek near Pilot Point (d)	08051000	266	1949-85
Elm Fork Trinity River near Pilot Point (d)	08051130	692	1985-92
Elm Fork Trinity River above Aubrey (e)	08051190	684	1981-89
Elm Fork Trinity River near Denton (d)	08052000	1,084	1924-27
Lake Dallas near Lake Dallas (e)	08052500	1,165	1929-57
Little Elm Creek SWS #10 near Gunter (e)	08052630	2.10	1966-72
Little Elm Creek near Celina (d)	08052650	46.70	1966-76
Hickory Creek at Denton (d)	08052780	129	1985-87
Indian Creek at Hebron Parkway at Carrollton (d)	08053010	15.0	1987-90
Furneaux Creek at Josey Lane at Carrollton (d)	08053030	4.10	1987-90
Hutton Branch at Broadway at Carrollton (e)	08053090	9.10	1987-90
Jones Valley Creek Tributary near Forestburg (e)	08053100	1.70	1966-74
Denton Creek near Roanoke (d)	08054000	621	1924-28, 1939-55
Gamble Branch near Argyle (e)	08054200	0.50	1965-74
Denton Creek near Grapevine (d)	08055000	705	1948-91
Joe's Creek at Royal Lane, Dallas (e)	08055580	1.94	1973-78
Joes Creek near Dallas (e)	08055600	7.4	1964-79
Bachman Branch at Dallas (d)	08055700	10	1964-79
Turtle Creek at Dallas (d)	08056500	7.98	1952-80, 1984-91
Coombs Creek at Sylvan Avenue, Dallas (e)	08057020	4.75	1965-78
Cedar Creek at Bonnie View Road, Dallas (e)	08057050	9.42	1965-78

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
White Rock Creek at Keller Springs Road, Dallas (d)	08057100	29.40	1961-79
Spanky Branch at McCallum Lane at Dallas (e)	08057120	6.77	1962-78
Rush Branch at Arapaho Road, Dallas (e)	08057130	1.22	1973-78
Newton Creek at Interstate Highway 635, Dallas (e)	08057135	5.91	1974-78
Cottonwood Creek at Forest Lane, Dallas (e)	08057140	8.50	1962-78
Floyd Branch at Forrest Lane, Dallas (e)	08057160	4.17	1962-78
White Rock Creek at White Rock Lake, Dallas (d)	08057300	100	1963-79
Ash Creek at Highland Road, Dallas (e)	08057320	6.92	1963-78
Forney Creek at Lawnview Avenue, Dallas (e)	08057340	1.84	1963-72
White Rock Creek at Scyene Road, Dallas (d)	08057400	122	1963-79
Trinity River below Dallas (d)	08057410	6,278	1956-98
Elm Creek at Seco Boulevard, Dallas (e)	08057415	1.25	1973-78
Fivemile Creek at Kiest Boulevard, Dallas (e)	08057418	7.65	1974-78
Fivemile Creek at US Highway 77 West, Dallas (e)	08057420	14.30	1965-78
Woody Branch at US Highway 77 West, Dallas (e)	08057425	10.30	1965-78
Fivemile Creek at Lancaster Road, Dallas (e)	08057430	37.90	1965-78
White Branch at Interstate Highway 635, Dallas (e)	08057440	2.53	1974-78
Tenmile Creek at State Highway 342 at Lancaster (d)	08057450	52.80	1970-79
Honey Creek SWS #11 near McKinney (e)	08057500	2.14	1952-73
Honey Creek SWS #12 near McKinney (e)	08058000	1.26	1952-77
Honey Creek near McKinney (d)	08058500	39	1951-73
East Fork Trinity River near McKinney (d)	08059000	190	1949-75
Arls Branch near Westminster (e)	08059200	0.52	1965-74
Sister Grove Creek near Princeton (d)	08059500	113	1949-75
East Fork Trinity River above Pilot Grove near Lavon (d)	08060000	324	1949-53
East Fork Trinity River near Lavon (d)	08061000	773	1954-89
East Fork Trinity River near Rockwall (d)	08061500	840	1924-54
Duck Creek at Buckingham Road, Garland (e)	08061620	8.05	1969-76
Duck Creek near Garland (d)	08061700	31.6	1958-93
South Mesquite Creek at State Highway 352, Mesquite (e)	08061920	13.40	1969-76
South Mesquite Creek at Mercury Road near Mesquite (d)	08061950	23	1969-79
Cedar Creek Reservoir Spillway Outflow near Trinidad (d)	08062650	1,007	1966-82
Cedar Creek near Kemp (d)	08062800	189	1963-87
Bachelor Creek near Terrell (e)	08062850	13.0	1967-74
Kings Creek near Kaufman (d)	08062900	233	1963-87
Lacey Fork near Mabank (d)	08062980	118	1983-84
Cedar Creek near Mabank (d)	08063000	733	1939-66
South Twin Creek near Eustace (d)	08063003	27.40	1983-84
Red Oak Branch near Eustace (e)	08063005	0.90	1966-74
Cedar Creek at Trinidad (d)	08063020	1,011	1965-71
Briar Creek Tributary near Corsicana (e)	08063180	0.72	1966-74
Pin Oak Creek near Hubbard (d)	08063200	17.60	1956-72
Richland Creek near Richland (d)	08063500	734	1939-88
Alvarado Branch near Alvarado (e)	08063550	0.84	1966-74
Kings Branch near Reagor Springs (e)	08063620	0.62	1966-74
Chambers Creek near Corsicana (d)	08064500	963	1939-84
Richland Creek near Fairfield (d)	08064600	1,957	1972-83
Saline Branch Tributary near Bethel (e)	08064630	0.22	1967-74
Catfish Creek near Tennessee Colony (d)	08064800	207	1962-89
Mayes Branch near Latexo (e)	08065320	4.26	1967-74
Trinity River near Midway (d)	08065500	14,450	1939-71
Caney Creek near Madisonville (d)	08065700	112	1963-77
Nelson Creek near Riverside (e)	08065950	86.4	1949, 1965, 1970-74
Harmon Creek near Huntsville (e)	08065975	89.2	1973-81
West Carolina Creek near Oakhurst (e)	08066050	15.2	1949, 1966-73
White Rock Creek near Trinity (e)	08066100	222	1974-85
White Rock Creek near Trinity (e)	08066130	228	1966-74
Tantaboque Creek near Trinity (e)	08066140	61.3	1966-73

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Caney Creek near Groveton (e)	08066145	41.4	1966-73
Brushy Creek near Onalaska (d)	08066150	29.1	1966-70
Rocky Creek near Onalaska (e)	08066180	40.6	1966-73
Livingston Reservoir outflow weir near Goodrich (d)	08066191	16,583	1969-94
Long King Creek near Goodrich (d)	08066210	220	1972-81
Bluff Creek Tributary near Livingston (e)	08066280	0.62	1965-74
Big Creek near Shepherd(e)	08066400	38.80	1966-89
Gaylor Creek near Moss Hill (e)	08066800	32.3	1966-73
Devers Canal near Liberty (d)	08067080	N/A	1972-82
Cedar Bayou at Crosby (d)	08067500*	65.0	1972-91
Goose Creek near McNair (e)	08067520	6.7	1963-65,
Welch 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
Swale No. 8 at Woodlands (e)	08068438	0.55	1975-76, 1980-88
Spring Creek at Spring (d)	08068520	419	1975-95
Spring Creek near Humble (e)	08068600	435	1971-76
Cypress Creek at Sharp Road near Hockley (d)	08068700	80.7	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 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
Buffalo Bayou at Clodine (e)	08072400	84.2	1974-85
Langham Creek at West Little York Road, Addicks (d)	08072760*	25.0	1977-85
Bettina Street Ditch at Houston (e)	08073630	1.37	1979-85
Stony Brook Street Ditch at Houston (e)	08073750	0.50	1967-72
Bering Ditch at Woodway Drive, Houston (e)	08073800	2.77	1965-73
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 Clarblak Street at Houston (e)	08074200	2.56	1965-83
Brickhouse Gully at Costa Rica Street at Houston (d)	08074250*	11.4	1964-81
Lazybrook Street Storm Sewer, 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 McKee Street, Houston (d)	08074610	469	1992-2000
Buffalo Bayou at 69th Street, Houston (e)	08074700	476	1961-86
Brays Bayou at Addicks-Clodine Rd., Houston (e)	08074750	0.87	1974-77
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
Binliff Ditch at Bissonnet Street, Houston (e)	08074850	4.38	1968-82
Willow Waterhole Bayou at Landsdowne Street, Houston (e)	08074900	3.81	1965-72
Hummingbird Street Ditch at Mullins Street, Houston (e)	08074910	0.32	1979-84
Brays Bayou at Scott Street, Houston (e)	08075100	106	1971-81

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Sims Bayou at Carlsbad Street, Houston (e)	08075300	3.81	1964-72
Sims Bayou at MLK Blvd., Houston (e)	08075470	48.4	1978-89
Berry Bayou at Gilpin Street, Houston (e)	08075550	2.87	1965-84
Berry Bayou Tributary at Globe Street, Houston (e)	08075600	1.58	1965-72
Berry Bayou at Forest Oaks Street, Houston (e)	08075650*	10.7	1968-82
Berry Bayou at Galveston Road, Houston (e)	08075700	4.86	1965-72
Huntington Bayou Tributary at Cavalcade Street, Houston (e)	08075750	1.20	1965-72
Huntington Bayou at Falls Street, Houston (e)	08075760	2.75	1964-84
Halls Bayou at Deertrail Street at Houston (e)	08076200	8.69	1965-84
Carpenters Bayou at Cloverleaf (e)	08076900	25.8	1964, 1971-93
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
Clear Creek at Friendswood (d)	08077540	99.6	1994-97
Cowart Creek near Friendswood (e)	08077550	18	1965-74
Clear Creek near Friendswood (e)	08077600	126	1966-94
Armand Bayou near Genoa (e)	08077620	18.2	1968, 1971-73
Highland Bayou at Hitchcock (e)	08077700	15.6	1963-82
Highland Bayou Tributary near Texas City (e)	08077750	1.97	1966-73
Highland Bayou near Texas City (e)	08077780	20.8	1965-88
Flores Bayou near Danbury (e)	08078700	23.3	1967-72
Oyster Creek near Angleton (d)	08079000	171	1945-80
North Fork Double Mountain Fork Brazos River at Lubbock (d)	08079500	5,300	1940-49,
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
Rattlesnake Creek near Post (e)	08079580	2.75	1966-74
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
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
Clear Fork Brazos River at Hawley (d)	08083240	1,416	1968-89

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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
Elm Creek at Abilene (d)	08083430	422	1980-83
Cedar Creek at Abilene (d)	08083470	119	1971-84
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
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 Putnam (e)	08086230	32.0	1963-66
Battle Creek near Moran (d)	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 near Crystal Falls (e)	08087000	5,658	1916-20, 1928-51
Clear Fork Brazos River near 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
Brazos River at Morris Sheppard Dam near Graford (d)	08088600	14,030	1990-94
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
Panther 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
Aquilla Creek at RR bridge near Aquilla (e)	08093530	345	1976-85
Aquilla Creek at Farm Road 2114 near Aquilla (e)	08093540	351	1976-85
Aquilla Creek at Farm Road and 1858 near Ross (e)	08093560	392	1976-85
Aquilla Creek at Farm Road 933 near Ross (e)	08093580	397	1976-85
North Bosque River at Stephenville (d)	08093700	95.90	1958-79

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
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 SWS No. 4 (inflow) near Bruceville (e)	08096800	5.04	1958-75
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 at Burlington (d)	08098300	23	1963-82
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
Eidson 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 Youngsport (d)	08104000	1,240	1924-80
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
N. 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
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 (d)	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	1966-95
Plummers Creek at Mexia (e)	08110350	4.42	1965-73
Navasota River near Groesbeck (d)	08110400	311	1965-79
Navasota River near Bryan (d)	08111000	1,454	1951-94, 1994-97
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



Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Winkleman 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 near Wallis (e)	08112200	44,700	1974-75
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
Sebourne 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 (d)	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
Bull Creek near Ira (d)	08118500	26.30	1948-54, 1959-62
Colorado River below Bull Creek near Ira (e)	08118600	3,524	1975-78
Bluff Creek near Ira (d)	08119000	42.60	1948-65
Bluff Creek at mouth near Ira (e)	08119100	44.1	1975-78
Colorado River near Ira (d)	08119500	3,483	1948-52, 1959-89
Morgan Creek near Westbrook (d)	08121500	273	1954-63
Graze Creek near Westbrook (d)	08122000	21.70	1954-59
Morgan Creek near Colorado City (d)	08122500	313	1947-49
Champlin Creek near Colorado City (d)	08123500	198	1948-59
Sulphur Springs Draw near Wellman (e)	08123620	41.80	1966-74
Beals Creek above Big Spring (d)	08123650	9,319	1959-79
Beals Creek at Big Spring (d)	08123700	9,341	1957-59
Beals Creek near Coahoma (d)	08123720	9,383	1983-88
Coahoma Draw Tributary near Big Spring (e)	08123750	2.38	1966-74
Bull Creek Tributary near Forsan (e)	08123760	0.4	1966-74
Colorado River near Silver (d)	08123900	14,997	1957-70
Bitter Creek near Silver (e)	08123920	4.3	1967-74
Salt Creek Tributary near Hylton (e)	08125450	0.25	1966-74
Oak Creek Reservoir near Blackwell (e)	08125500	238	1953-83
Fish Creek Tributary near Hylton (e)	08126300	0.25	1966-71
Colorado River at Ballinger (d)	08126500	16,413	1907-79
Dry Creek near Christoval (e)	08127100	0.79	1965-73
South Concho Irrigation Co. Canal at Christoval (d)	08127500	N/A	1940-83
Middle Concho River near Tankersley (d)	08128500	2,653	1930-61
Spring Creek above Tankersley (d)	08129300*	424.7	1961-95
Dove Creek Springs near Knickerbocker (d)	08129500*	N/A	1944-58
Dove Creek at Knickerbocker (d)	08130500*	226.43	1961-95
Spring Creek near Tankersley (d)	08131000	699	1930-60
South Concho River above Gardner Dam near San Angelo (e)	08131190	434	1966-74, 2000
South Concho River above Pecan Creek near San Angelo (e)	08131300	470	1963-84
Tom Green Co. WCID No. 1 Canal near San Angelo (d)	08131600	N/A	1963-81
South Concho River at San Angelo (d)	08132500	3,866	1932-53
Quarry Creek near Sterling City (e)	08133300	3.25	1965-73
North Concho River at Sterling City (d)	08133500*	588.0	1939-87

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Broome Creek near Broome (e)	08133800	0.29	1965-73
Nolke Station Creek near San Angelo (e)	08134300	0.59	1965-73
Gravel Pit Creek near San Angelo (e)	08134400	0.19	1965-74
North Concho River at San Angelo (d)	08135000	1,525	1916-31, 1947-90
Concho River near Veribest (e)	08136150	5,610	1970-74, 1998-2000
Puddle Creek near Veribest (e)	08136200	12.0	1966-73
Frog Pond Creek near Eden (e)	08136300	1.96	1967-73
Mukewater Creek SWS No. 10A near Trickham (e)	08136900	15.3	1965-72
Mukewater Creek SWS No. 9 near Trickham (e)	08137000	4.02	1961-72
Mukewater Creek at Trickham (d)	08137500	70	1951-73
Deep Creek SWS No. 3 near Placid (e)	08139000	3.42	1954-60
Deep Creek near Mercury (d)	08139500	43.90	1954-73
Deep Creek SWS No. 8 near Mercury (e)	08140000	5.14	1952-71
Dry Prong Deep Creek near Mercury (d)	08140500	8.31	1951-71
Lake Clyde near Clyde (e)	08140600	36.9	1970-85
Pecan Bayou near Cross Cut (d)	08140700	532	1968-79
Jim Ned Creek near Coleman (d)	08140800	333	1965-80
McCall Branch near Coleman (e)	08141100	2.17	1966-73
Hords Creek near Valera (d)	08141500	54.20	1947-91
Hords Creek at Coleman (d)	08142000	107	1941-70
Brown County WID No. 1 Canal near Brownwood (d)	08142500	N/A	1950-83
Pecan Bayou at Brownwood (d)	08143500	1,660	1917-18, 1924-83
Brown Creek Tributary near Goldthwaite (e)	08143700	2.48	1966-73
Noyes Canal at Menard (d)	08144000	N/A	1924-83
Brady Creek near Eden (d)	08144800	101	1962-85
Brady Creek Tributary near Brady (e)	08145100	4.05	1967-73
Lake Buchanan near Burnet (e)	08148000	31,910	1937-90
Llano River Tributary near London (e)	08150200	0.58	1966-73
Stone Creek Tributary near Art (e)	08150900	0.40	1966-73
Llano River near Castell (d)	08151000	3,747	1924-39
Johnson Creek near Valley Spring (e)	08151300	5.66	1967-73
Sandy Creek near Kingsland (d)	08152000	327	1967-93
Little Flatrock Creek near Marble Falls (e)	08152700	3.20	1966-74
Spring Creek near Fredericksburg (e)	08152800	15.20	1967-73
Pedernales River at Stonewall (d)	08153000	647	1924-34
Cane Branch at Stonewall (e)	08153100	1.37	1965-71
Pedernales River near Spicewood (d)	08154000	1,294	1924-39
Lake Travis near Austin (d)	08154500	38,755	1940-90
Colorado River below Mansfield Dam, Austin (d)	08154510	38,755	1975-90
West Bull Creek at Loop 360 near Austin (e)	08154750	6.77	1976-82
Bull Creek at FM 2222, Austin (e)	08154760	30.4	1975-78
Bee Creek at West Lake Drive near Austin (e)	08154950	3.28	1980-82
Barton Creek near Camp Craft Road near Austin (d)	08155260	109	1982-89
Skunk Hollow Creek below Pond I at Austin (e)	08155400	0.12	1982-84
West Bouldin Creek at Riverside Drive, Austin (e)	08155550	3.12	1976-82
Shoal Creek at Steck Avenue, Austin (e)	08156650	2.79	1975-82
Shoal Creek at Northwest Park at Austin (d)	08156700	6.52	1975-84
Shoal Creek at White Rick Drive, Austin (e)	08156750	12.30	1975-82
Waller Creek at 38th Street, Austin (d)	08157000	2.31	1955-80
Waller Creek at 23rd Street, Austin (d)	08157500	4.13	1955-80
Walnut Creek at Farm-Market 1325 near Austin (e)	08158100	12.60	1975-88
Walnut Creek at Dessau Road, Austin (e)	08158200	26.20	1975-88
Ferguson Branch at Springdale Road, Austin (e)	08158300	1.63	1978-82
Little Walnut Creek at Georgian Drive, Austin (e)	08158380	5.22	1975-88
Little Walnut Creek at IH 35, Austin (e)	08158400	5.57	1975-82
Little Walnut Creek at Manor Road, Austin (e)	08158500	12.1	1975-82
Walnut Creek at Southern Pacific Railroad bridge, Austin (e)	08158640	53.5	1975-86

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Onion Creek at Buda (e)	08158800	166	1961-78,
“ “ “ (d)			1979-83,
			1992-95
Bear Creek at Farm-Market Road 1626 near Manchaca (e)	08158820	24.0	1979-83
Little Bear Creek at Farm-Market Road 1626 near Manchaca (d)	08158825	21.0	1979
Slaughter Creek at FM 2304 near Austin (e)	08158860	23.1	1978-83
Boggy Creek (South) at Circle S Road, Austin (e)	08158880	3.58	1976-88
Fox Branch near Oak Hill (e)	08158900	0.12	1965-73
Williamson Creek at Oak Hill (d)	08158920	6.30	1978-93
Williamson Creek at Jimmy Clay Road, Austin (d)	08158970	27.60	1975-85
Onion Creek below Del Valle (e)	08159100	339	1962-75
Wilbarger Creek near Pflugerville (d)	08159150	4.6	1963-80
Big Sandy Creek near McDade (d)	08159165	38.70	1979-85
Big Sandy Creek near Elgin (d)	08159170	63.80	1979-85
Dogwood Creek near McDade (e)	08159180	0.53	1980-85
Dogwood Creek at Highway 95 near McDade (e)	08159185	5.03	1980-85
Reeds Creek near Bastrop (e)	08159450	5.22	1967-73
Dry Creek at Buescher Lake near Smithville (d)	08160000	1.48	1940-66
Colorado River at La Grange (d)	08160500	40,430	1939-55
Colorado River above Columbus (d)	08160700	41,403	1983-85
Dry Branch Tributary near Altair (e)	08161580	0.68	1966-73
Little Robin Slough near Matagorda (e)	08162530	3.4	1969
Cashs Creek near Blessing (e)	08162650	14.8	1969-77
East Carancahua Creek near Blessing (e)	08162700	81.2	1968,
			1970-83
West Carancahua Creek near Laward (e)	08162800	57.1	1970-76
Navidad River near Speaks (d)	08164350	437	1982-89,
			1995-2000
Navidad River at Morales (d)	08164370	549	1995-2000
Navidad River near Ganado (d)	08164500	826	1939-80
Guadalupe River above Kerrville (e)	08166150	488	1976-79
Turtle Creek Tributary near Kerrville (e)	08166300	0.46	1966-74
Guadalupe River near Comfort (d)	08166500	762	1918-32
Rebecca Creek near Spring Branch (d)	08167600	10.90	1960-79
Blieders Creek at New Braunfels (e)	08168600	16.0	1962-89
Panther Canyon at New Braunfels (e)	08168700	0.73	1962-89
Trough Creek near New Braunfels (e)	08168720	0.48	1966-74
W.P. Dry Comal Creek Tributary near New Braunfels (e)	08168750	0.32	1966-74
Dry Comal Creek at New Braunfels (e)	08168800	N/A	1962-74
Walnut Branch near Seguin (e)	08169750	5.46	1967-74
East Pecan Branch near Gonzales (e)	08169850	0.24	1965-74
San Marcos River at San Marcos (d)	08169950	83.7	1915-21
West Elm Creek near Niederwald (e)	08172100	0.44	1965-74
Plum Creek near Lockhart (d)	08172500	184	1925-30
San Marcos River at Ottine (d)	08173500	1,249	1915-43
Guadalupe River below Cuero (d)	08176000	4,923	1903-07,
			1916-19,
			1921-36
Irish Creek near Cuero (e)	08176200	15.5	1967-74
Three Mile Creek near Cuero (e)	08176600	0.48	1966-74
Coletto Creek Reservoir inflow (Guadalupe diversion) near Schroeder (d)	08176990	357	1980-94
Coletto Creek near Schroeder (d)	08177000	369	1930-34,
			1953-79
Olmos Creek Tributary at FM 1535 at Savano Park (e)	08177600	0.33	1969-81
Olmos Reservoir at San Antonio (e)	08177800	32.4	1968-71,
			1976-89,
			1992-95
San Antonio River at Woodlawn Avenue, San Antonio (e)	08177860	36.4	1989-95
San Antonio River at Dolorosa, San Antonio (d)	08177920	N/A	1980-86

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
San Antonio River at San Antonio (d)	08178000	41.8	1895-1906, 1915-29, 1939-97
Alazan Creek at St. Cloud Street, San Antonio (e)	08178300	3.26	1969-79
San Pedro Creek at Furnish St., San Antonio (d)	08178500*	2.60	1916-29
Harlandale Creek at W. Harding Street, San Antonio (e)	08178555	2.43	1977-81
Panther Springs Creek at FM 2696 near San Antonio (e)	08178600	9.54	1969-77
Lorence Creek at Thousand Oaks Blvd., San Antonio (e)	08178620	4.05	1980-84
West Elm Creek at San Antonio (e)	08178640	2.45	1976-88
East Elm Creek at San Antonio (e)	08178645	2.33	1976-81
Salado Creek Tributary at Bitters Road, San Antonio (e)	08178690	0.26	1969-81
Salado Creek at Rittman Road, San Antonio (e)	08178720	137.1	1968-81
Salado Creek Tributary at Bee Street, San Antonio (e)	08178736	0.45	1970-77
Salado Creek at E. Houston Street, San Antonio (e)	08178740	181	1968-81
Salado Creek at U.S. Highway 87, San Antonio (e)	08178760	186	1968-81
Salado Creek at Southcross Blvd., San Antonio (e)	08178780	188	1968-81
Bandera Creek Tributary near Bandera (e)	08178900	0.27	1966-74
Medina River near Pipe Creek (d)	08179000	474	1923-35, 1953-82
Red Bluff Creek near Pipe Creek (d)	08179100	56.30	1956-81
Medina River Tributary near Pipe Creek (e)	08179200	0.30	1966-74
Medina River at La Coste (d)	08180640	805	1987-2000
Medio Creek at Pearsall Road, San Antonio (e)	08180750	47.9	1987-95
Leon Creek Tributary at FM 1604, San Antonio (e)	08181000	5.57	1968-80
French Creek Tributary near Helotes (e)	08181200	1.08	1966-74
Ranch Creek near Helotes (d)	08181410		1978
Leon Creek Tributary at Kelly Air Force Base (d)	08181450	1.19	1969-79
Calaveras Creek SWS No. 6 (inflow) near Elmendorf (e)	08182400	7.01	1957-77
Calaveras Creek near Elmendorf (d)	08182500	77.20	1954-71
San Antonio River at Calaveras (d)	08183000	1,786	1918-25
Cibolo Creek near Boerne (d)	08183900	68.4	1963-95
Cibolo Creek near Bulverde (d)	08184000	198	1946-66
Cibolo Creek above Bracken (d)	08184500	250	1946-51
Cibolo Creek at Sutherland Springs (d)	08185500	665	1924-29
Ecletto Creek near Runge (d)	08186500	239	1962-89
Escondido Creek SWS No. 1 (inflow) near Kenedy (e)	08187000	3.29	1955-73
Escondido Creek at Kenedy (d)	08187500	72.40	1954-73
Escondido Creek SWS No. 11 (inflow) near Kenedy (e)	08187900	8.45	1959-77
Dry Escondido Creek near Kenedy (d)	08188000	9.43	1954-59
Baugh Creek at Goliad (e)	08188400	3.02	1966-74
Guadalupe-Blanco River Authority Calhoun Canal-Flume No. 2 near Long Mott (d)	08188750	N/A	1972-86
Guadalupe River at State Highway 35 near Tivoli (e)	08188810	10,280	1975-82
Medio Creek near Beeville (d)	08189300	204	1962-77
Olmos Creek Tributary near Skidmore (e)	08189600	0.58	1966-73
Chiltipin Creek at Sinton (d)	08189800	128	1970-91
Nueces River near Uvalde (d)	08191500	1,930	1928-39
Nueces River near Cinonia (d)	08192500	2,150	1915-25
Plant Creek near Tilden (e)	08194550	0.36	1965-74
Nueces River at Simmons (d)	08194600	8,561	1965-77
Frio River at Knippa (d)	08195700	N/A	1953
Dry Frio River at Knippa (d)	08196500	179	1953
East Elm Creek near Sabinal (e)	08198900	10.6	1967-74
Frio River near Frio Town (d)	08199700	1,460	1924-27
Hondo Creek near Hondo (d)	08200500	132	1953-64
Bone Creek near Hondo (e)	08200900	0.19	1965-74
Seco Creek near Utopia (d)	08202000	53.20	1952-61
Seco Creek Reservoir inflow near Utopia (d)	08202450	59.5	1991-98
Seco Creek near D'Hanis (d)	08202500	87.40	1952-64
Parkers Creek Reservoir (d)	08202800	10.0	1991-99

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Leona River Tributary near Uvalde (e)	08203500	1.21	1966-74
Leona River Spring Flow near Uvalde (d)	08204000*	1.21	1939-77
Leona River near Divot (d)	08204500	565	1924-29
Frio River at Calliham (d)	08207000	5,491	1925-26, 1932-81
Rutledge Hollow Creek near Poteet (e)	08207200	9.33	1966-74
Rutledge Hollow at 7th Street, Poteet (d)	08207220	N/A	1979-2000
Atascoas River at U.S. Highway 281, Pleasanton (d)	08207300	N/A	1973-2000
Atascosa River near McCoy (d)	08207500	530	1951-57
Lucas Creek near Pleasanton (e)	08207700	32.80	1966-73
Ramirena Creek near George West (d)	08210300	84.40	1968-72
Lagarto Creek near George West (d)	08210400	155	1972-89
Nueces River below Mathis (d)	08211100	16,726	1966-67
Rincon Bayou Channel near Calallen (d)	08211503	N/A	1996-2000
Pintas Creek Tributary near Banquete (e)	08211550	3.28	1966-74
Hamon Creek near Freer (e)	08211600	0.73	1965-73
San Diego Creek at Alice (d)	08211800	319	1964-89
Lake Alice at Alice (e)	08211850	150	1965-86
San Fernando Creek near Alice (d)	08212000	518	1962-63
North Las Animas Creek Tributary near Freer (e)	08212320	0.07	1969-74
Rio Grande at Vinton Bridge near Anthony (d)	08363840	28,680	1969-74
Northgate Reservoir at El Paso (e)	08365540	6.89	1973-75
Range Reservoir at El Paso (e)	08365545	11.89	1973-75
Franklin Canal at El Paso (d)	08365550	N/A	1969-72
McKelligon Canyon at El Paso (d)	08365600	2.30	1958-77
Government Ditch at El Paso (d)	08365800	6.40	1958-77
Rio Grande at Jaurez, MX (d)	08366000	29,350	1938-56
Riverside Canal near Socorro (d)	08366400	37,830	1969-72
Rio Grande at Island Station near El Paso (d)	08366500	29,743	1938-60
Rio Grande at Tornillo Branch near Fabens (d)	08367000	N/A	1924-38
Tornillo Drain at mouth near Tornillo (d)	08368000	N/A	1969-72
Tornillo Canal near Tornillo (d)	08368300	N/A	1969-72
Hudspeth Feeder Canal near Tornillo (d)	08368900	N/A	1969-72
Rio Grande at County Line Station near El Paso (d)	08369500	30,610	1938-60
Camo Rice Arroyo Tributary near Fort Hancock (e)	08370200	2.35	1966-74
Wild Horse Creek Tributary near Van Horn (e)	08370800	0.74	1966-73
Cibolo Creek near Presidio (d)	08373200	276	1971-77
Rio Grande above Presidio (lower Station) (d)	08373500	N/A	1901-13, 1924-54
Rio Grande at Langtry (d)	08377500	84,795	1900-14, 1920, 1924-60
Rio Grande Tributary near Langtry (e)	08377600	0.32	1966-74
Delaware River Tributary near Orla (e)	08407800	1.6	1966-74
Pecos River near Angeles (d)	08409500	20,540	1914-37
Salt Screwbean Draw near Orla (d)	08411500	464	1939-41, 1944-57
Pecos River near Mentone (d)	08414000	21,650	1922-26, 1969-73
Reeves County WID No. 2 Canal near Mentone (d)	08414500	N/A	1922-25, 1939-57, 1964-90
Ward County WID No. 3 Canal near Barstow (d)	08415000	N/A	1939-57, 1964-90
Pecos River above Barstow (d)	08416500	21,800	1916-21
Ward County Irrigation District No. 1 Canal near Barstow (d)	08418000	N/A	1922-25, 1939-57, 1964-90
Pecos River at Pecos (d)	08420500	22,100	1898-1907, 1914-15, 1922-26, 1939-55

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Madera Canyon near Toyahvale (d)	08424500	53.80	1932-49
Phantom Lake Spring near Toyahvale (d)	08425500*	N/A	1932-34, 1942-66
Giffin Springs at Toyahvale (d)	08427000*	N/A	1932-33
San Solomon Springs at Toyahvale (d)	08427500*	N/A	1932-34, 1941-65
West Sandia Spring at Balmorhea (d)	08429000	N/A	1932-33
East Sandia Spring at Balmorhea (d)	08430000	N/A	1932-33
Toyah Creek near Pecos (d)	08431000	1,024	1940-41, 1944-45
Salt Draw near Pecos (d)	08431500	1,882	1939-41, 1944-45
Limpia Creek below Fort Davis (d)	08431800	227	1962-77
Limpia Creek near Fort Davis (d)	08432000	303	1925-32
Barrilla Draw near Saragosa (d)	08433000	612	1925-26, 1932, 1976-83
Toyah Creek below Toyah Lake near Pecos (d)	08434000	3,709	1939-51
Grandfalls-Big Valley Canal near Barstow (d)	08435000	N/A	1922-26, 1939-57, 1964-76
Pecos River below Barstow (d)	08435500	25,980	1939-41
Toronto Creek near Alpine (d)	08435600	27.90	1971-76
Alpine Creek at Alpine (d)	08435620	18.10	1971-76
Moss Creek near Alpine (d)	08435660	11.30	1971-76
Sunny Glen Canyon near Alpine (d)	08435700	29.70	1968-77
Coyanosa Draw near Fort Stockton (d)	08435800	1,182	1964-77
Pecos County WID No. 2 (Upper Div.) Canal near Grandfalls (d)	08436500	N/A	1922-25, 1939-57, 1964-90
Courtney Creek Tributary near Fort Stockton (e)	08436800	0.44	1966-74
Pecos County WID No. 2 Canal near Imperial (d)	08437500	N/A	1940-57, 1964-90
Lake Leon Tributary near Fort Stockton (e)	08437550	1.59	1966-74
Pecos County WID No. 3 Canal near Imperial (d)	08437600	N/A	1940-57, 1964-90
Monument Draw Tributary at Pyote (e)	08437650	178	1966-74
Ward County WID No. 2 Canal near Grand Falls (d)	08437700	N/A	1939-57, 1964-90
Pecos River near Grand Falls (d)	08438100	27,810	1916-26
Pecos River below Grand Falls (d)	08441500	27,820	1921-26, 1939-56
Three Mile Mesa Creek near Fort Stockton (e)	08444400	1.04	1966-74
Comanche Springs at Fort Stockton (d)	08444500	N/A	1936-64
Pecos River near Sheffield (d)	08447000	31,600	1922-25, 1940-49
Independence Creek near Sheffield (d)	08447020	763	1974-85
Howards Creek Tributary near Ozona (e)	08447200	7.53	1967-73
Pecos River near Shumla (d)	08447400	35,162	1955-60
Pecos River near Comstock (d)	08447500	35,298	1900-54
Goodenough Springs near Comstock (e)	08448500	N/A	1929-60
Sonora Field Creek at Sonora (e)	08448800	2.60	1965-71
Devils River near Juno (d)	08449000	2,730	1925-49, 1964-73
Devils River near Comstock (d)	08449300	3,903	1955-58
Rough Canyon Tributary near Del Rio (e)	08449470	7.90	1967-73
Devils River near Del Rio (d)	08449500	4,185	1900-14, 1924-57
Evans Creek Tributary near Del Rio (e)	08449600	0.39	1966-73
Devils River near mouth, Del Rio (d)	08450500	4,305	1954-60

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water years)
Rio Grande near Del Rio (d)	08452500	123,303	1900-15, 1920, 1924-54
San Felipe Creek near Del Rio (e)	08453000	46.0	1931-60
Zorro Creek near Del Rio (e)	08453100	10.0	1966-74
East Perdido Creek near Brackettville (e)	08454900	3.39	1965-74
Pinto Creek near Del Rio (d)	08455000	249	1929-69, 1971-72
Rio Grande at San Antonio Crossing (d)	08458700	129,226	1952-60
Arroyo San Bartolo at Zapata (e)	08459600	0.61	1966-74
Rio Grande near Zapata (d)	08460500	163,344	1932-53
International Falcon Reservoir near Falcon Heights (d)	08461200	N/A	1953-60
Rio Grande at Roma (d)	08462500	166,464	1900-13, 1923-54
Rio Grande near Rio Grande City (d)	08465500	180,941	1932-54
Rio Grande Tributary near Rio Grande City (e)	08466100	1.20	1966-74
Rio Grande Tributary near Sullivan City (e)	08466200	0.40	1966-74
North Floodway South of McAllen (d)	08468000	N/A	1928-60
South Floodway South of McAllen (d)	08470000	N/A	1929-60
Rio Grande at Hildalgo (d)	08471500	176,100	1928-32, 1935, 1939, 1941-51
Rio Grande near Progreso Bridge (d)	08473300	176,228	1953-60
Rio Grande near San Beniot (d)	08473700	176,304	1953-60
Rio Grande at Matamoros, MX (d)	08474500	182,211	1900-13, 1923-54
Rio Grande near Brownsville (d)	08475000	176,333	1935-50

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS

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The following stations were discontinued as continuous-record surface-water-quality stations prior to the 2000 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 <sup>2</sup> )	Type of record	Period of record (water years)
Canadian River at Tascosa	07227470	19,200	SC, T, Cl	1948-53,
		18,536	SC, T, pH, Cl	1969-77
Canadian River near Canadian	07228000	22,866	SC, T	1974-81
Prairie Dog Town Fork Red River near Wayside	07297910	4,221	SC, T	1969-81
Tule Creek near Silverton	07298200	1,150	SC, T, pH, Cl	1968-69
Prairie Dog Town Fork Red River near Brice	07298500	6,082	SC, pH, Cl, S	1949-51,
			T	1950-51
Mulberry Creek near Brice	07299000	534	SC, pH, Cl, S	1949-51
Prairie Dog Town Fork Red River near Lakeview	07299200	6,792	SC, T	1968-80,
			S	1979-80
Little Red River near Turkey	07299300	139	SC, T	1968-81,
			S	1979-81
Jonah Creek at Weir near Estelline	07299512	65.50	SC	1974-82
Jonah Creek below Weir near Estelline	07299514	66.60	SC	1974-76
Salt Creek near Estelline	07299530	142	SC	1974-79
Prairie Dog Town Fork Red River near Childress	07299540	7,725	SC, T	1968-82,
				1994-97
Salt Fork Red River near Hedley	07299930	868	SC, T, pH, Cl	1956-61
Salt Fork Red River near Wellington	07300000	1,222	SC, T, pH, Cl	1952-54,
			SC, T	1968-91
North Pease River near Childress	07307600	1,434	SC, T	1973-79
Middle Pease River near Paducah	07307750	1,086	SC	1973-79,
			T	1973-79,
			S	1994-97
Middle Pease River near Paducah	07307760	1,128	SC	1980-82,
			T	1980
Pease River near Childress	07307800	2,754	SC, T	1968-82,
				1994-97
Pease River near Crowell	07308000	3,037	SC	1942-43
Pease River near Vernon	07308200	3,488	SC,T	1999
Red River near Burkburnett	07308500	20,570	SC, T	1968-81
North Fork Wichita River near Paducah	07311600	540	SC, T	1968-76
North Fork Wichita River near Crowell	07311622	591	SC	1971-76
Middle Fork Wichita River near Truscott	07311648	161	SC	1970-76
Truscott Brine Lake near Truscott	07311669	26.2	SC, T	1985-90
North Fork Wichita River near Truscott	07311700	937	SC, T	1969-92
South Fork Wichita River near Guthrie	07311780	239	SC	1970-76
South Wichita River below Low-Flow Dam near Guthrie	07311783	223	SC, T	1987-89
South Fork Wichita River at Ross Ranch near Guthrie	07311790	499	SC	1971-79,
			Cl	1988-97,
			S	1978-79
Wichita River near Seymour	07311900	1,874	SC, T	1968-79
Beaver Creek near Electra	07312200	652	SC,T	1969-70
				1996-99
Little Wichita River near Archer City	07314500	481	SC	1953-55,
			T	1953-54
Little Wichita River near Henrietta	07314900	1,037	SC, DO	1999
Little Wichita River near Henrietta	07315000	1,037	SC, T, pH, Cl	1953-56,
			S, T	1959-66,
East Fork Little Wichita River near Henrietta	07315200	178	T	1954
Little Wichita River near Ringgold	07315400	1,350	SC, pH, Cl	1959-62



Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Red River near Gainesville	07316000	30,872	SC, Cl SC, T, pH, Cl	1944-46, 1953-63,
Red River at Denison Dam near Denison	07331600	39,720	SC, T	1967-89, 1944-89, 1945-89
Little Pine Creek near Kanawha	07336750	75.40	T	1980
Red River near De Kalb	07336820	47,348	SC, T	1968-91
South Sulphur River near Cooper	07342500	527	SC, T, pH, Cl	1959-66, 1968-72, 1973-89
Sulphur River near Talco	07343200	1,365	SC, T, pH, Cl	1966-72, 1973-91
White Oak Creek near Talco	07343500	494	SC, T, pH, Cl	1966-72, 1973-91
Sulphur River near Darden	07344000	2,774	SC, T, pH, Cl	1947-50
Big Cypress Creek near Pittsburg	07344500	366	SC, T, pH, Cl	1968-72, 1973-89
Little Cypress Creek near Jefferson	07346070	675	SC, T, pH, Cl	1968-72, 1973-91
Sabine River near Emory	08017500	888	SC, T, pH, Cl	1952-54
Grand Saline Creek near Grand Saline	08018200	91.40	SC, T, pH, Cl	1968-73
Sabine River near Mineola	08018500	1,357	SC, T, pH, Cl	1968-72, 1973-92
Lake Fork Creek near Quitman	08019000	585	SC, T, pH, Cl	1968-72, 1973-89
Big Sandy Creek near Big Sandy	08019500	231	SC, T, S	1985-86
Sabine River near Beckville	08022040	3,589	SC, T	1952-98
Sabine River below Toledo Bend near Burkeville	08026000	7,482	SC, T	1969-86, 1969-75
Sabine River near Bon Wier	08028500	8,229	SC, T, C	1969-84
Sabine River near Ruliff	08030500	9,329	SC	1945, 1947-98
			T	1947-98
			pH, DO	1968-75,
			C	1970-76,
			Cl	1968
Cow Bayou near Mauriceville	08031000	83.30	SC, T, pH, Cl	1952-54, 1954-56
Neches River near Neches	08032000	1,145	SC, T	1974-91
Neches River near Alto	08032500	1,945	SC, T	1950-69
Neches River near Diboll	08033000	2,724	SC, T	1970-81
Neches River near Rockland	08033500	3,636	SC	1941-42, 1946-47
Angelina River near Lufkin	08037000	1,600	SC, T, pH, Cl	1955-78, 1955-
Attoyac Bayou near Chireno	08038000	503	SC, T	1984-99
Sam Rayburn Reservoir near Jasper	08039300	3,449	SC, T	1964-84, 1993-99
Angelina River below Sam Rayburn Dam near Jasper	08039400	3,449	SC, T	1964-79
Angelina River at SH 63 near Ebenezer	08039500	3,435	SC, T	1994-99
Village Creek near Kountze	08041500	860	SC, T	1968-70
Pine Island Bayou near Sour Lake	08041700	336	SC, T, pH, Cl	1968-72, 1973-89
Big Sandy Creek near Bridgeport	08044000	333	SC, T, S	1968-77,
Lake Worth above Fort Worth	08045400	2,064	pH, Cl	
Clear Fork Trinity River at Fort Worth	08047500	518	SC, pH, Cl	1949-52, 1948-62
			T	

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

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Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Village Creek at Everman	08048970	84.5	SC, pH, T, DO	1990
Elm Fork Trinity River SWS # 6-0 near Muenster	08050200	0.77	S	1957-66
Elm Fork Trinity River near Muenster	08050300	46	SC T S	1967-68, 1957-58, 1966-68, 1957-68
Clear Creek near Sanger	08051500	295	SC, T, S	1968-77
Little Elm Creek near Celina	08052650	46.70	SC T, S	1967-75, 1966-75
Little Elm Creek near Aubrey	08052700	75.50	SC T, S	1967-75, 1967-75
Elm Fork Trinity River near Lewisville	08053000	1,673	SC T	1982-86, 1976-86
White Rock Creek at Greenville Avenue, Dallas	08057200	66.4	SC, pH, T, DO	1997-2000
Trinity River below Dallas	08057410	6,278	SC, T S Cl	1968-2000, 1972-75, 1998-2000 1970-81, 1998-99
Lavon Lake near Lavon	08060500	770	SC,T,CL	1969-74, 1975,82, 1995-99
Duck Creek near Garland	08061700	31.6	SC, pH, T, DO	1988-89
East Fork Trinity River above Seagoville	08061970	1,183	SC, T, pH, DO	1987-93
East Fork Trinity River at Seagoville	08061980	1,224	SC, pH, T, DO	1987-96
East Fork Trinity River near Crandall	08062000	1,256	SC, T pH, DO Cl	1968-1981, 1987-2000 1977, 1986-2000 1964-81, 1986-2000
Trinity River at Trinidad	08062700	8,538	SC, T pH, DO Cl S	1967-81 1986-2000 1967-81, 1986-2000 1966-94 1978-94
Cedar Creek near Mabank	08063000	733	SC, T, pH, Cl	1956-57
Pin Oak Creek near Hubbard	08063200	17.60	SC T S	1967-72, 1957-60, 1965-72, 1957-60, 1962-72
Richland Creek near Richland	08063500	734	SC, T, pH, Cl SC, T	1968-69, 1983-89
Chambers Creek near Corsicana	08064500	963	SC, T, pH, Cl	1961-70
Richland Creek near Fairfield	08064600	1,957	SC, T, pH, Cl SC, T S	1956-66, 1972, 1973-83
Trinity River near Oakwood	08065000	12,833	SC, T, pH, Cl SC, T, S	1948-54, 1977-81
Bedias Creek near Madisonville	08065800	321	SC, T S	1985-87, 1986
Long King Creek at Livingston	08066200	141	SC, T, pH, Cl	1963-72
Trinity River near Goodrich	08066250	16,844	SC, T	1970-73
Trinity River near Moss Bluff	08067100	17,738	SC, pH, Cl	1950-65
Old River near Cove	08067200	19.0	SC, pH, Cl T	1950-65, 1965

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Trinity River at Anahuac	08067300	17,912	SC, pH, Cl	1950-65
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
East Fork San Jacinto River near New Caney	08070200	388	SC, T	1984-99
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 Houston	08074000	358	SC, pH, T, DO	1986-2000
			Cl	1969-81
Whiteoak Bayou at Main Street, Houston	08074598	127	SC, T, DO	1992-97
Buffalo Bayou at Main Street, Houston	08074600	469	SC, T, DO	1986-92
Buffalo Bayou at McKee Street, Houston	08074610	469	SC, T, DO	1992-2000
			pH	1998-2000
Sims Bayou at Houston	08075500	63.0	SC, T, DO	1994-97
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
Double Mountain Fork Brazos River near Aspermont	08080500	8,796	SC, T, S	1949-51
			SC, T	1957-95
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
Brazos River at Seymour	08082500	15,538	SC, T	1960-95
Medina River near Somerset	08082800	967	SC, T, Cl	1998-2000
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	1950-5
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

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

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Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Salt Creek near Newcastle	08088200	120	SC, T	1958-60
Brazos River at Morris Sheppard Dam near Graford	08088600	23,596	SC T	1942-91, 1950-55, 1966-91
Brazos River near Dennis	08090800	25,237	SC, T	1971-95
Brazos River at Whitney Dam near Whitney	08092600	27,189	SC, T	1947-97
Aquilla Creek above Aquilla	08093360	255	SC, T	1980-83
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 Hasse	08099500	1,261	SC, T	1980-82, 1990-97
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 Youngsport	08104000	1,240	SC, T	1961-64
Little River near Little River	08104500	5,228	SC, T	1965-73, 1980-82
Little River near Cameron	08106500	7,065	SC, T	1959-97
San Gabriel River near Weir	08105300	563	T	1977-82
San Gabriel River at Lanepport	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 S	1959-81, 1976-81
Brazos River near Richmond	08114000	45,007	S SC T	1966-86, 1942-95, 1951-95
Brazos River near Rosharon	08116650	45,399	SC, T	1969-80
Brazos River at Harris Reservoir near Angleton	08116700	44,000	SC T	1962-77, 1967-77
Brazos River at Brazoria Reservoir near Brazoria	08117200	44,000	SC T	1962-77, 1967-77
San Bernard River near Boling	08117500	727	SC, T	1978-81
Colorado River above Bull Creek near Knapp	08118200	N/A	SC, T, Cl	1950-52
Bull Creek near Ira	08118500	26.30	SC, T, pH, Cl	1950-51
Bluff Creek near Ira	08119000	42.60	SC, T, pH, Cl	1950
Colorado River near Ira	08119500	3,483	SC, T	1950-52, 1959-70, 1975-82, 1951-52
Deep Creek near Dunn	08120500	198	SC, T	1953-54
Morgan Creek near Westbrook	08121500	273	T	1954-55
Graze Creek near Westbrook	08122000	21.70	T	1954-55
Morgan Creek near Colorado City	08122500	313	T	1947-49
Lake Colorado City near Colorado City	08123000	340	T	1954-55
Beals Creek above Big Spring	08123650	9,319	SC, T	1973-78
Beals Creek near Big Spring	08123700	9,341	SC, T	1956-57
Beals Creek near Coahoma	08123720	9,383	SC, T	1983-88
Colorado River near Silver	08123900	14,997	SC, T	1957-68
Colorado River at Robert Lee	08124000	15,307	SC, T, pH, Cl S	1948-51, 1949-51

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Oak Creek near Blackwell	08126000	209	SC, T	1950
Colorado River at Ballinger	08126500	16,413	SC, T	1961-79, S 1978-79
Pecan Bayou at Brownwood	08143500	1,660	SC, T	1948-49
Pecan Bayou near Mullin	08143600	2,073	SC, T	1968-91
San Saba River near San Saba	08145500	N/A	SC, T	1962-65
San Saba River at San Saba	08146000	3,046	SC	1962-69, T 1963-70
Colorado River near San Saba	08147000	37,217	SC, T	1947-92, S 1951-62
Llano River at Llano	08151500	4,197	SC, T	1979-81
Lake Austin at Austin	08154900	38,240	SC, T	1965-80
Barton Creek below Barton Springs at Austin	08155505	125	SC, T,	1965, 1975-83, 1989-91, 1994-97
Waller Creek at 23rd Street at Austin	08157500	4.13	T	1955-60
East Bouldin Creek at South 1st Street, Austin	08157600	2.4	CI	1997-2000
Colorado River at Austin	08158000	39,009	SC, T	1948-91
Colorado River above Columbus	08160700	41,403	SC, T	1983-86
Colorado River at Columbus	08161000	41,640	SC	1967-73, T 1957-59, 1961-68 S 1957-73
Colorado River at Wharton	08162000	42,003	SC	1945-92, T 1946-48,
Lavaca River near Edna	08164000	817	SC, T	1978-81
Navidad River near Speaks	08164350	437	SC, T, pH, CI	1996-97
Navidad River near Ganado	08164500	826	SC, T	1960-80
Guadalupe River near Spring Branch	08167500	1,315	SC	1942-45
Guadalupe River at Sattler	08167800	1,436	T	1984-87
Blanco River at Wimberley	08171000	355	T	1977-78
Plum Creek near Luling	08173000	309	SC, T	1968-86
Sandies Creek near Westhoff	08175000	549	S	1966
			CI	1962-99
Guadalupe River at Victoria	08176500	5,198	SC	1946-81, T 1951-81
Coletto Creek Reservoir (Condenser No. 1) near Fannin	08177360	414	T	1980-94
Coletto Creek Reservoir (outflow) near Victoria	08177410	494	T	1980-94
Olmos Creek at Dresden Drive, San Antonio	08177700	21.2	SC, pH, T, DO	1969-99
			S	1973
San Antonio River at San Antonio	08178000	41.8	SC, T	1991-92, 1996-97
San Antonio River at Mitchell Street, San Antonio	08178050	42.4	SC, pH, T, DO	1992-99
San Antonio River at Loop 410 at San Antonio	08178565	125	SC, pH, T, DO	1987-2000
Medina River near Macdona	08180700	885	SC, pH, T, DO	1998-2000
Medina River at La Coste	08180640	805	SC, pH, T, DO	1987-95
Medio Creek at Pearsall Rd. at San Antonio	08180750	47.9	SC, pH, T, DO	1987-95
Ingram Road Outfall at Leon Creek Tributary at San Antonio	08181410	0.02	SC, pH, T, DO	1994-2000
Leon Creek at Interstate Highway 35 at San Antonio	08181480	219	SC, pH, T, DO	1985-2000
Medina River at San Antonio	08181500	1,317	SC, pH, T, DO	1987-2000
			CI	1965-2000
San Antonio River near Falls City	08183500	2,113	SC, pH, T, DO	1987-96
Cibolo Creek near Falls City	08186000	827	SC, T	1969-91
Escondido Creek SWS #1 near Kenedy	08187000	3.29	S	1955-65
Guadalupe River at Tivoli	08188800	10,128	SC, T	1966-82
Mission River at Refugio	08189500	690	SC, T	1961-81
Nueces River at Cotulla	08194000	5,171	SC	1942

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

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Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Nueces River near Tilden	08194500	8,093	SC, T, S	1950
Frio River at Calliham	08207000	5,491	SC, T	1968-81
Nueces River near Three Rivers	08210000	15,427	SC	1945-47,
			SC, T, pH, Cl, S	1951-52,
			SC, T	1975-81
Nueces River at Bluntzer	08211000	16,772	SC, T	1948-91
Los Olmos Creek near Falfurrias	08212400	480	SC, T	1975-81
Rio Grande at El Paso	08364000	29,267	SC, pH, T, DO	1930-2000
Rio Grande at Fort Quitman	08370500	31,944	SC, T	1975-78.
Rio Grande at Foster Ranch near Langtry	08377200	80,742	SC, T	1975-81
Pecos River below Red Bluff Dam near Orla	08410100	20,720	SC	1937-69,
			T	1953-69
Salt Draw near Orla	08411500	464	SC, T	1943-48
Pecos River near Mentone	08414000	21,650	SC	1939
Pecos River at Pecos	08420500	22,100	SC	1939-41
Toyah Creek near Pecos	08431000	1,024	SC	1940,
				1944
Salt Draw near Pecos	08431500	1,882	SC	1940,
				1944
Toyah Creek below Toyah Lake near Pecos	08434000	3,709	SC	1940-50,
			Cl	1940
Pecos River below Grand Falls	08441500	27,820	SC	1939-42,
				1947-56
Pecos River near Girvin	08446500	29,560	SC	1940-41,
				1947,
				1954-82
			T	1954-59,
				1964-82
Pecos River near Sheffield	08447000	31,600	SC	1940-41,
				1947
Pecos River near Langtry	08447410	35,179	SC, T	1971-76,
				1981-85
Devils River at Pafford Crossing near Comstock	08449400	3,961	SC, T	1978-85
Rio Grande at Laredo	08459000	132,578	SC	1975-86,
			T	1974-76
Rio Grande at Roma	08462500	166,464	SC	1942-43
Rio Grande at Fort Ringgold, Rio Grande City	08464700	174,362	SC, pH, T	1959-2000
Rio Grande near Los Ebanos	08466300	N/A	SC, pH, T	1977-2000
Rio Grande at Mission Pumping Plant	08468000	171,800	SC	1945-50
Rio Grande below Anzalduas Dam	08469200	176,112	SC, pH, T	1967-72,
				1959-2000
Rio Grande at Cameron Co. WID #2 near San Benito	08473800	N/A	SC	1942-43
Rio Grande at Los Fresnos Pumping Plant near Brownsville	08474130	N/A	SC	1945-46
Rio Grande near Brownsville	08475000	176,333	SC	1943-44,
			SC, T	1967-83
			S	1966-83

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# WATER RESOURCES DATA—TEXAS, 2001

## VOLUME 2

### TRINITY RIVER BASIN

#### 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 six 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 50 gaging stations; stage only at 2 gaging stations; stage and contents at 21 lakes and reservoirs; and water quality at 32 gaging stations. Also included are data for 2 partial-record stations comprised of 1 flood-hydrograph and 1 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, and expanding to five volumes beginning with the 1999 water year. 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-01-2." 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, (703) 605-6000.

Additional information, including the current prices, for ordering specific reports may be obtained from the Texas District Chief at the address given on the back of the title page or by telephone (512) 927-3500.



## 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 water year 2001 are:

- Corps of Engineers, U.S. Army.
- International Boundary and Water Commission  
United States and Mexico, U.S. Section.
- National Park Service
- 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 Aquifer Authority; 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 Office of Emergency Management; Harris County Flood Control District; Houston-Galveston Area Council; Lavaca-Navidad River Authority; Lower Colorado River Authority; Lower Neches Valley Authority; North Central Texas Municipal Water Authority; Northeast Texas Municipal Water District; North Texas Municipal Water District; Orange County; Pecos River Commission; Red Bluff Water Power Control District; Red River Authority of Texas; 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; Titus County Fresh Water Supply District No. 1; Trinity River Authority; Upper Colorado 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.

Streamflow across the State averaged above normal during water year 2001.

Conservation storage in 77 selected reservoirs throughout the State, with a combined conservation capacity of 34,481,000 acre-feet, increased from 67 percent at the end of September 2000 to 76 percent at the end of September 2001. Records from these reservoirs indicate that storage increased in 54, decreased in 20, and remained the same in 3.

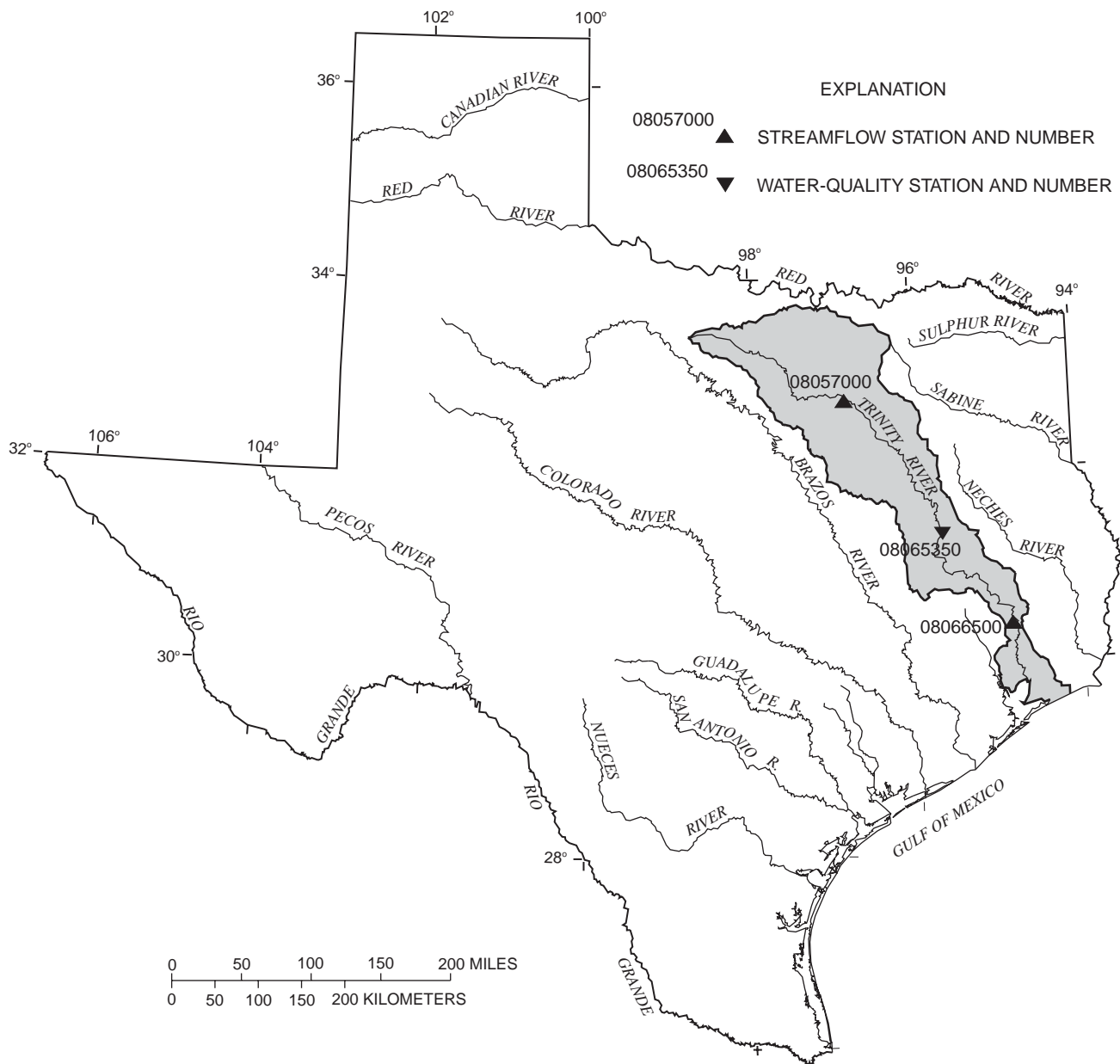
The area for which water resources data are presented in volume 2 includes the Trinity River Basin and Intervening Coastal Basins. The area described in volume 2 and the location of selected streamflow and water-quality stations in the area are shown in figure 1.

### Streamflow

In the area covered in volume 2, streamflow averaged above normal during water year 2001. Streamflow for water year 2001 and for the period of record at two selected stations (fig. 1) for which data are included in volume 2 is presented in table 1.

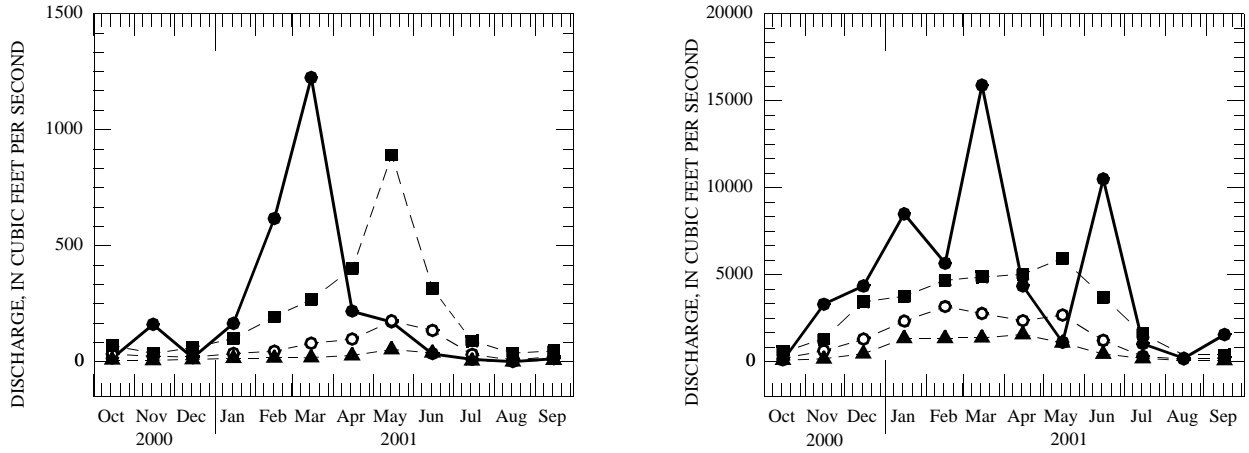
At the four long-term hydrologic index stations in the State, monthly mean streamflow during water year 2001 averaged normal. Monthly mean discharges for water year 2001 and the median of the long-term monthly means for water years 1961–90 for the four long-term hydrologic index stations in the State are shown in figure 2. Streamflow at the hydrologic index station Neches River near Rockland was above normal during November through March, June, and September and normal for the remaining 5 months. The station North Bosque River near Clifton had above normal streamflow during November, January, February and March, below normal streamflow during June and August, and below normal streamflow for the remaining 6 months. The station North Concho River near Carlsbad had above normal streamflow for October and November, below normal streamflow for May, and normal streamflow for the remaining 8 months. Streamflow for the station Guadalupe River near Spring Branch was above normal for November through April and September, and normal for the remaining 4 months of water year 2001.

Conservation storage in 14 selected reservoirs in this area of the State, with a total combined conservation capacity of 6,816,000 acre-feet, increased from 77 percent of capacity



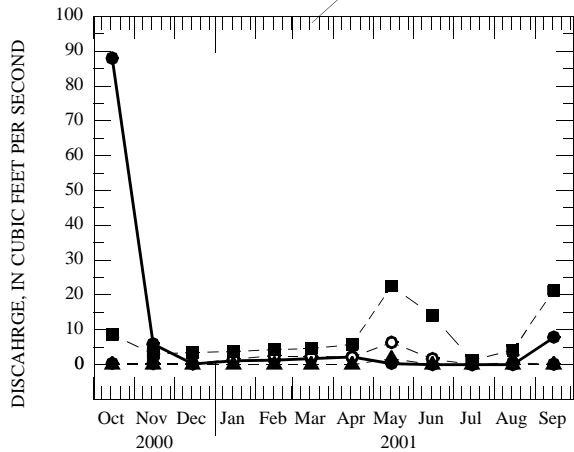
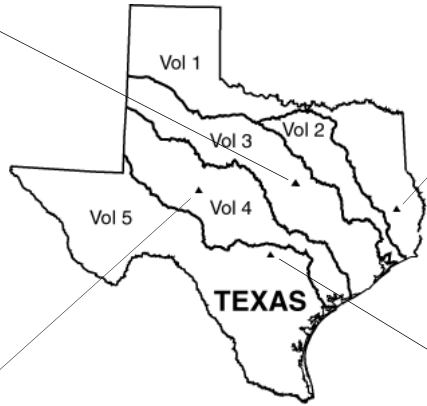
**Figure 1.** Area of Texas covered by volume 2 (shaded) and location of selected streamflow and water-quality stations in volume 2.

# WATER RESOURCES DATA—TEXAS, 2001

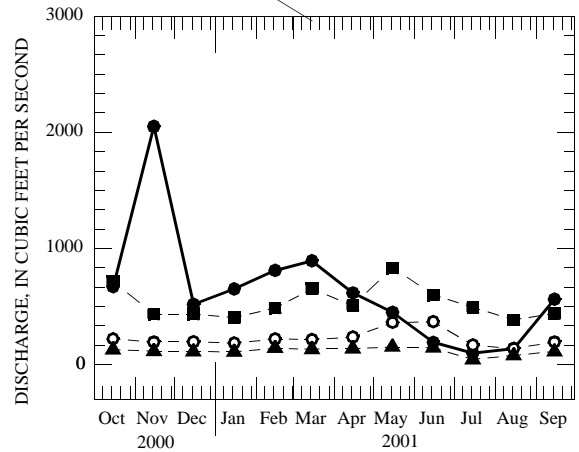


08095000 NORTH BOSQUE RIVER  
NEAR CLIFTON

08033500 NECHES RIVER  
NEAR ROCKLAND



08134000 NORTH CONCHO RIVER  
NEAR CARLSBAD



08167500 GUADALUPE RIVER  
NEAR SPRING BRANCH

### EXPLANATION

- MONTHLY MEAN DISCHARGE FOR 2001 WATER YEAR
- MEDIAN OF MONTHLY MEAN DISCHARGE FOR 1961-90 WATER YEARS
- ▲--- 25 PERCENT QUANTILE
- 75 PERCENT QUANTILE

**Figure 2.** Monthly mean discharges at four long-term hydrologic index stations during 2001 water year and median of the monthly mean discharges for 1961-90 water years.

from the end of September 2000 to 93 percent at the end of September 2001. Records from these reservoirs indicate that storage increased in 12 and decreased in 2.

**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 precip-

itation 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.

Records of discharge-weighted-average concentrations of dissolved solids for water year 2000 are compared with those for water years 1996–2000 for selected long-term daily or continuous-record water-quality stations (fig. 1) in the Trinity River Basin. Results are shown in table 2.

Table 1. Streamflow at two selected stations

Station no. and name	Discharge during 2001 water year (cubic feet per second)			Discharge during period of record (cubic feet per second)		
	Maximum instantaneous	Minimum daily mean	Mean	Maximum instantaneous	Minimum daily mean	Mean
<u>Trinity River Basin</u>						
08057000	Trinity River at Dallas, TX	31,200	363	2,436	111,000	10 1,822 (1931-2001)
08066500	Trinity River at Romayor, TX	76,100	1,010	14,900	122,000	104 7,862 (1924-2001)

Table 2. Comparison of records of discharge-weighted-average concentrations  
of dissolved solids for the 2001 and 1997-2001 water years

Station no. and name	Mean discharge (cubic feet per second)		Discharge-weighted-average concentration of dissolved solids (milligrams per liter)	
	2001	1997-2001	2001	1997-2001
<u>Trinity River Basin</u>				
08065350	Trinity River near Crockett, TX	2,664	5,841	265 250

### 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 streamflow representative of 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. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. 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. Additional information about the NASQAN program can be found at <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation-chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions

and subsequent impacts to the Nation's land and water resources. Data from the network, as well as information about individual sites, are available through the World Wide Web at: <http://nadp.sws.uiuc.edu/>.

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 59 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.

The USGS National Water-Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDL's) and laboratory reporting levels (LRL's). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. The chance of falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as <LRL for samples in which the analyte was either not detected or did not pass identification. Analytes that are detected at concentrations between LT-MDL and LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the "E" remark code.

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 three NAWQA Programs operating in Texas; the Trinity NAWQA, the South Central Texas NAWQA, and the southern portion of the High Plains Ground-Water NAWQA.

Additional information about the NAWQA Programs are available through the world wide web at:

[http://wwwrvares.er.usgs.gov/nawqa/nawqa\\_home.html](http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html)  
<http://tx.usgs.gov/trin>  
<http://tx.usgs.gov/sctx>  
<http://co.water.usgs.gov/nawqa/hpgw>

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 2001 water year that began October 1, 2000, and ended September 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain stage and 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. Geolog-

ical 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.

### **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 streamflow may be complete or partial. Complete records of discharge are those obtained using a stage-recording device through which either instantaneous or daily mean 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 for any time, or period of time. They may be obtained using a stage-recording device, but need not be. Because daily-mean discharges and daily-mean reservoir contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements 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 "Flood-hydrograph partial records,

“Crest-stage partial records,” or “Low-flow partial records.” Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow channel gain and loss studies, may be considered as partial records, but they are presented separately in this report. Instantaneous peak discharges are presented for all but the low-flow partial-record stations.

### Data Collection and Computation

The data obtained at a complete record gaging station on a stream or canal consist of records of stage (that is recorded every 5, 15, 30, or 60 minutes), 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 mean 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 relation between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute lake storage.

Records of stage are obtained with recorders at selected time intervals. Measurements of discharge are made with current meters and indirect procedures 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, TWRI, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves then are constructed. From these curves, rating tables indicating the 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 can be 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. Stage-discharge ratings at gaging stations are described in TWRI, Book 3, Chapter A10.

Instantaneous discharges are computed by applying each individual recorded stage (gage height) to the stage-discharge table. The daily mean discharge is computed as the mean of the instantaneous discharges. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the 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 rating 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 backwater from reservoirs, tributary streams, bays, or other sources. This necessitates the use of the slope method in which the slope (fall) in a reach of the stream is a factor in computing discharge. The slope 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 relation 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 are determined. If the stage-content relation changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relation. 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 relations much as other stream discharges are computed.

For some streamflow 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 stage sensor or recorder fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily mean 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-mean 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 errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://water.usgs.gov/nwis/nwis>]. 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 NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.



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 head-

ings 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 streamflow 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 ft<sup>3</sup>/s; to the nearest tenth between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures for more than 1,000 ft<sup>3</sup>/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 num-

ber 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 samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Records of surface-water quality at some National Water Quality Accounting (NAWQA) Sites include data collected by different government agencies as identified in the water-quality data tables under AGENCY COLLECTING SAMPLE (CODE NUMBER). Values for this code are given below:

- 1028 - U.S. Geological Survey
- 84823 - International Boundary & Water Commission

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. A1, A3, and A4; Book 9, Chap. A1-A9. 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 (NASQAN) (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. Information on the method used to collect the sample at National Stream Quality Accounting Network sites is given in the water-quality data tables under SAMPLING METHOD. Values for this code are given below:

- 10 - Equal Width Increment (EWI)
- 20 - Equal Discharge Increment (EDI)
- 25 - Timed Sampling Interval
- 30 - Single Vertical
- 40 - Multiple Verticals
- 50 - Point Sample
- 60 - Weighted Bottle
- 70 - Grab Sample (DIP)
- 90 - Discharge Integrated, Centroid
- 120 - Velocity Integrated
- 8010 - Other

Detailed information on sampling methods may be found in the following publications: OFR-90-127 "Guidelines for Collection and Analysis of Water-Quality Samples from Streams in Texas", OFR-94-455 "Field Guide for Collecting and Processing Stream-Water Samples for the National Water-Quality Assessment Program", and OFR-94-539 "U.S. Geological Survey protocol for the collection and processing of surface-water samples for the subsequent determination of inorganic constituents in filtered water". Specific questions pertaining to water-quality sample collection may be directed to the District Water-Quality Specialist in Austin, Texas, or the Regional Water-Quality Specialist in Denver, Colorado.

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.

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 readings beginning at 0100 hours and ending at 2400 hours for the day of record.

### 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 (2001) 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.

**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 in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://water.usgs.gov/nwis/nwis>]. 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 NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

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.
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).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.
M	Presence of material verified but not quantified.

### 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 ( $\text{ng/L}$ ). 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 Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495 (217-333-7873).

### Water-Quality Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

### **Blank Samples**

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of

blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Source solution blank – a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank – a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank – a blank solution that is put in the same type of bottle used for an environmental sample, and kept with the set of sample bottles before and after sample collection.

Equipment blank – a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to field blank but normally done in the more controlled conditions of the office).

Sampler blank – a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank – a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank – a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

Filter blank – a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank – a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank – a blank solution that is treated with the sample preservatives used for an environmental sample.

Canister blank – a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank sample.

### **Reference Samples**

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to

ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

### Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this District are:

**Concurrent sample** – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

**Sequential sample** – a type of replicate sample in which the samples collected one after the other, typically over a short time.

**Split sample** – a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

### Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

**Concurrent sample** – a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

**Split sample** – a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

### ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (www). These data may be accessed at <http://tx.usgs.gov>

Some water-quality and ground-water data also are available through the www. In addition, data can be provided in various machine-readable formats on magnetic tape, 3-1/2 inch floppy disk or CD-ROM. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page.)

### DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

**Acid neutralizing capacity (ANC)** is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an “unfiltered” sample (formerly reported as alkalinity).

**Acre-foot (AC-FT, acre-ft)** is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “Annual runoff”)

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

**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.

**Alkalinity** is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a “filtered” sample.

**Annual runoff** is the total quantity of water that is discharged (“runs off”) from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

**Annual 7-day minimum** is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

**Aroclor** is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

**Artificial substrate** is a device that 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 hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

**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. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ). (See also "Biomass")

**Bacteria** are microscopic unicellular organisms, typically spherical, rodlike, 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.

**Base discharge (for peak discharge)** is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

**Base flow** is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

**Bedload** is material in transport that is supported primarily by the streambed. In this report, bedload is considered to con-

sist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler may also contain a component of the suspended load.

**Bedload discharge** (tons per day) is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload" and "Sediment")

**Bed material** is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

**Benthic organisms** are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

**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 mass per unit area or volume of habitat.

**Biomass pigment ratio** is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

**Blue-green algae** (*Cyanophyta*) 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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

**Bottom material** See "Bed material".

**Cells/volume** refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

**Cells volume** (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume ( $\mu\text{m}^3$ ) is determined by obtaining critical cell measurements on cell dimensions (for example,



length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere  $\frac{4}{3} \pi r^3$  cone  $\frac{1}{3} \pi r^2 h$  cylinder  $\pi r^2 h$ .

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159...

From cell volume, total algal biomass expressed as biovolume ( $\mu\text{m}^3/\text{mL}$ ) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

**Cfs-day** (See “Cubic foot per second-day”)

**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 BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also “Biochemical oxygen demand (BOD)”]

***Clostridium perfringens* (*C. perfringens*)** is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also “Bacteria”)

**Coliphages** are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

**Color unit** is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

**Confined aquifer** is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well. (See also “Aquifer”)

**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.

**Continuous-record station** is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

**Control** designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, 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 saltwater.

**Cubic foot per second (CFS, ft<sup>3</sup>/s)** is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-feet” sometimes is used synonymously with “cubic feet per second” but is now obsolete.

**Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft<sup>3</sup>/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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

**Cubic foot per second per square mile [CFSM, (ft<sup>3</sup>/s)/mi<sup>2</sup>]** is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also “Annual runoff”)

**Daily mean suspended-sediment concentration** is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Daily mean suspended-sediment concentration,” “Sediment,” and “Suspended-sediment concentration”)

**Daily-record station** is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

**Data Collection Platform (DCP)** is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

**Data logger** is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

**Datum** is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal

datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

**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. (See also “Phytoplankton”)

**Diel** is of or pertaining to a 24-hour period of time; a regular daily cycle.

**Discharge**, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

**Dissolved** refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

**Dissolved oxygen (DO)** is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

**Dissolved-solids concentration** in water is the quantity of dissolved material in a sample of water. It 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, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO<sub>3</sub>) can be converted to carbonate concentration by multiplying by 0.60.

**Diversity index (H)** (Shannon Index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

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

where  $n_i$  is the number of individuals per taxon,  $n$  is the total number of individuals, and  $s$  is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

**Drainage area** of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

**Drainage basin** is a part of the Earth’s surface that contains a drainage system with a common outlet for its surface runoff. (See “Drainage area”)

**Dry mass** refers to the mass of residue present after drying in an oven at 105 °C, 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. (See also “Ash mass,” “Biomass,” and “Wet mass”)

**Dry weight** refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also “Wet weight”)

**Enterococcus bacteria** are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus fecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants. (See also “Bacteria”)

**EPT Index** is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

**Escherichia coli (E. coli)** are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentra-

tions are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

**Estimated (E) value** of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an ‘E’ code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an ‘E’ code even though the measured value is greater than the MDL. A value reported with an ‘E’ code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

**Euglenoids** (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also “Phytoplankton”)

**Extractable organic halides** (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

**Fecal coliform bacteria** 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 plus or minus 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. (See also “Bacteria”)

**Fecal streptococcal bacteria** are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 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. (See also “Bacteria”)

**Fire algae** (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

**Flow-duration percentiles** are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

**Gage datum** is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is

located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

**Gage height** (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height is often used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

**Gage values** are values that are recorded, transmitted and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

**Gaging station** is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

**Gas chromatography/flame ionization detector** (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

**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. (See also “Phytoplankton”)

**Habitat quality index** is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

**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 (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO<sub>3</sub>).

**High tide** is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

**Hilsenhoff's Biotic Index (HBI)** is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \frac{\sum(n)(a)}{N}$$

where  $n$  is the number of individuals of each taxon,  $a$  is the tolerance value of each taxon, and  $N$  is the total number of organisms in the sample.

**Horizontal datum** (See "Datum")

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

**Hydrologic index stations** referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

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

**Inch** (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

**Instantaneous discharge** is the discharge at a particular instant of time. (See also "Discharge")

**Laboratory Reporting Level (LRL)** is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.]

**Land-surface datum** (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

**Light-attenuation coefficient**, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_o e^{-\lambda L},$$

where  $I_o$  is the source light intensity,  $I$  is the light intensity at length  $L$  (in meters) from the source,  $\lambda$  is the light-attenuation coefficient, and  $e$  is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o}.$$

**Lipid** is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

**Long-Term Method Detection Level (LT-MDL)** is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

**Low tide** is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

**Macrophytes** are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

**Mean concentration of suspended sediment** (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

**Mean discharge** (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

**Mean high or low tide** is the average of all high or low tides, respectively, over a specific period.

**Mean sea level** is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

**Measuring point (MP)** is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

**Membrane filter** is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

**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.

**Method Detection Limit (MDL)** is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

**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 (UG/G,  $\mu\text{g/g}$ )** 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 kilogram (UG/KG,  $\mu\text{g/kg}$ )** is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

**Micrograms per liter (UG/L,  $\mu\text{g/L}$ )** is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

**Microsiemens per centimeter (US/CM,  $\mu\text{S/cm}$ )** is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the

International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

**Milligrams per liter (MG/L, mg/L)** is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent 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.

**Minimum Reporting Level (MRL)** is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

**Miscellaneous site**, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

**Most probable number (MPN)** is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

**Multiple-plate samplers** are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

**Nanograms per liter (NG/L, ng/L)** is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

**National Geodetic Vertical Datum of 1929 (NGVD of 1929)** is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88> (See "North American Vertical Datum of 1988")

**Natural substrate** refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate.")

**Nekton** are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

**Nephelometric turbidity unit (NTU)** is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelo-

metric methods that depend on passing specific light of a specific wavelength through the sample.

**North American Vertical Datum of 1988 (NAVD 1988)** is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

**Open or screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

**Organic carbon (OC)** is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

**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. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

**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<sup>2</sup>), 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.

**Organochlorine compounds** are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

**Parameter Code** is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

**Partial-record station** is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

**Particle size** is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube,

Sedigraph) 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**, as 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/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.

**Peak flow (peak stage)** is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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

**Percent shading** is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

**Periodic-record station** is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

**Periphyton** is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, proto-

zoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

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

**pH** of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed “acidic,” and solutions with a pH greater than 7 are termed “basic.” Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

**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. (See also “Plankton”)

**Picocurie** (PC, pCi) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 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. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

**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.

**Polychlorinated naphthalenes** (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

**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 (carbon method) by the plants.

**Primary productivity (carbon method)** is expressed as milligrams of carbon per area per unit time [ $\text{mg C}/(\text{m}^2/\text{time})$ ] for

periphyton and macrophytes or per volume [ $\text{mg C}/(\text{m}^3/\text{time})$ ] for phytoplankton. Carbon method defines 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. (See also “Primary productivity”)

**Primary productivity (oxygen method)** is expressed as milligrams of oxygen per area per unit time [ $\text{mg O}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg O}/(\text{m}^3/\text{time})$ ] for phytoplankton. Oxygen method defines 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. (See also “Primary productivity”)

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

**Recoverable from bed (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. (See also “Bed material”)

**Recurrence interval**, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most

of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ( $7Q_{10}$ ) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the  $7Q_{10}$  occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the  $7Q_{10}$ .

**Replicate samples** are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

**Return period** (See “Recurrence interval”)

**River mileage** is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

**Runoff** is the quantity of water that is discharged (“runs off”) from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also “Annual runoff”)

**Sea level**, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

**Sediment** is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment 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 and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

**Seven-day 10-year low flow ( $7Q_{10}$ )** is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the  $7Q_{10}$  is 10 years; the chance that the annual 7-day minimum flow will be less than the  $7Q_{10}$  is 10 percent in any given year. (See also “Recurrence interval” and “Annual 7-day minimum”)

**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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

**Specific electrical conductance (conductivity)** is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 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.

**Stable isotope ratio** (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

**Stage** (See “Gage height”)

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

**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.

**Substrate Embeddedness Class** is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

0	< no gravel or larger substrate		
1	> 75%		
2	51-75%	4	5-25%
3	26-50%	5	< 5%



**Surface area of a lake** is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

**Surficial bed material** is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which 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 operationally defined as 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 suspended water-sediment sample that is retained on a 0.45-micrometer 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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

**Suspended sediment** is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also “Sediment”)

**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). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also “Sediment” and “Suspended sediment”)

**Suspended-sediment discharge** (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft<sup>3</sup>/s) x 0.0027. (See also “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

**Suspended-sediment load** is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also “Sediment”)

**Suspended, total** is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

**Suspended solids, total residue at 105 °C concentration** is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

**Synoptic studies** are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

**Taxa richness** is the total number of distinct species or groups and usually decreases with pollution. (See also “Percent Shading”)

**Taxonomy** is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

**Temperature preferences:**

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

**Thermograph** is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions 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 resulting from the mixing of flow proportionally to the duration of the concentration.

**Tons per acre-foot (T/acre-ft)** is the dry mass (tons) of a constituent per unit volume (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, tons/d)** is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

**Total** is the amount of a given constituent in a representative whole-water (unfiltered) 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 at least 95 percent of the constituent in the sample.)

**Total coliform bacteria** are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are char-

acterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 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 plus or minus 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. (See also “Bacteria”)

**Total discharge** is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as “total sediment discharge,” “total chloride discharge,” and so on.

**Total in bottom material** is the amount of a given constituent in a representative sample of bottom material. 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 judge when the results should be reported as “total in bottom material.”

**Total length** (fish) is the straight-line distance from the anterior point of a fish specimen’s snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

**Total load** refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

**Total organism count** is the number of organisms collected and enumerated in any particular sample. (See also “Organism count/volume.”)

**Total recoverable** is the amount of a given constituent in a whole-water sample after a sample 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 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

**Total sediment discharge** is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also “Sediment,” “Suspended sediment,” “Suspended-Sediment Concentration,” “Bedload,” and “Bedload discharge”)

**Total sediment load** or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also “Sediment,” “Suspended-Sediment Load,” and “Total load”)

**Trophic group:**

**Filter feeder** – diet composed of suspended plant and/or animal material.

**Herbivore** – diet composed predominantly of plant material.

**Invertivore** – diet composed predominantly of invertebrates.

**Omnivore** – diet composed of at least 25-percent plant and 25-percent animal material.

**Piscivore** – diet composed predominantly of fish.

**Turbidity** is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the “REMARKS” column of the Annual Data Report.

**Ultraviolet (UV) absorbance (absorption)** at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

**Vertical datum** (See “Datum”)

**Volatile organic compounds (VOCs)** are organic compounds that can be isolated from the water phase of a sample by

purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

**Water table** is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

**Water-table aquifer** is an unconfined aquifer within which is found the water table.

**Water year** in USGS 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, 2001, is called the “2001 water year.”

**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.

**Wet mass** is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

**Wet weight** refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

**WSP** is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

**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, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also “Plankton”)

## 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."

### Book 1. Collection of Water Data by Direct Measurement

#### Section D. Water Quality

- 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 pages.
- 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 pages.

### Book 2. Collection of Environmental Data

#### Section D. Surface Geophysical Methods

- 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 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS-TWRI Book 2, Chapter D2. 1988. 86 pages.

#### Section E. Subsurface Geophysical Methods

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- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Scott Keys: USGS-TWRI Book 2, Chapter E2. 1990. 150 pages.

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- 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 pages.

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- 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 pages.
- 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 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS-TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI Book 3, Chapter A4. 1967. 44 pages.
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- 3-A7. *Stage measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI Book 3, Chapter A7. 1968. 28 pages.
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- 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 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI Book 3, Chapter A10. 1984. 59 pages.
- 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 pages.
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- 3-A13. *Computations of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI Book 3, Chapter A13, 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, N. Yotsukura, G.W. Parker, and L.L. DeLong: USGS-TWRI Book 3, Chapter A18. 1989. 52 pages.

- 3-A19. *Levels of streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI Book 3, Chapter A19. 1990. 27 pages.
- 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 pages.
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- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS–TWRI Book 3, Chapter B1. 1971. 26 pages.
- 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 pages.
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- 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 pages.
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- 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 pages.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, Chapter B8. 2001. 29 pages.

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- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI Book 3, Chapter C1. 1970. 55 pages.
- 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 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI Book 3, Chapter C3. 1972. 66 pages.

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### Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI Book 4, Chapter A1. 1968. 39 pages.

- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI Book 4, Chapter A2. 1968. 15 pages.

### Section B. Surface Water

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- 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 pages.
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- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI Book 5, Chapter C1. 1969. 58 pages.

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- 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 pages.

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#### Section A. National Field Manual for the Collection of Water-Quality Data

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI Book 9, Chapter A1. 1998. 47 pages.
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- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom Material Samples*, by D.B. Radtke: USGS–TWRI Book 9, Chapter A8. 1998. 48 pages.
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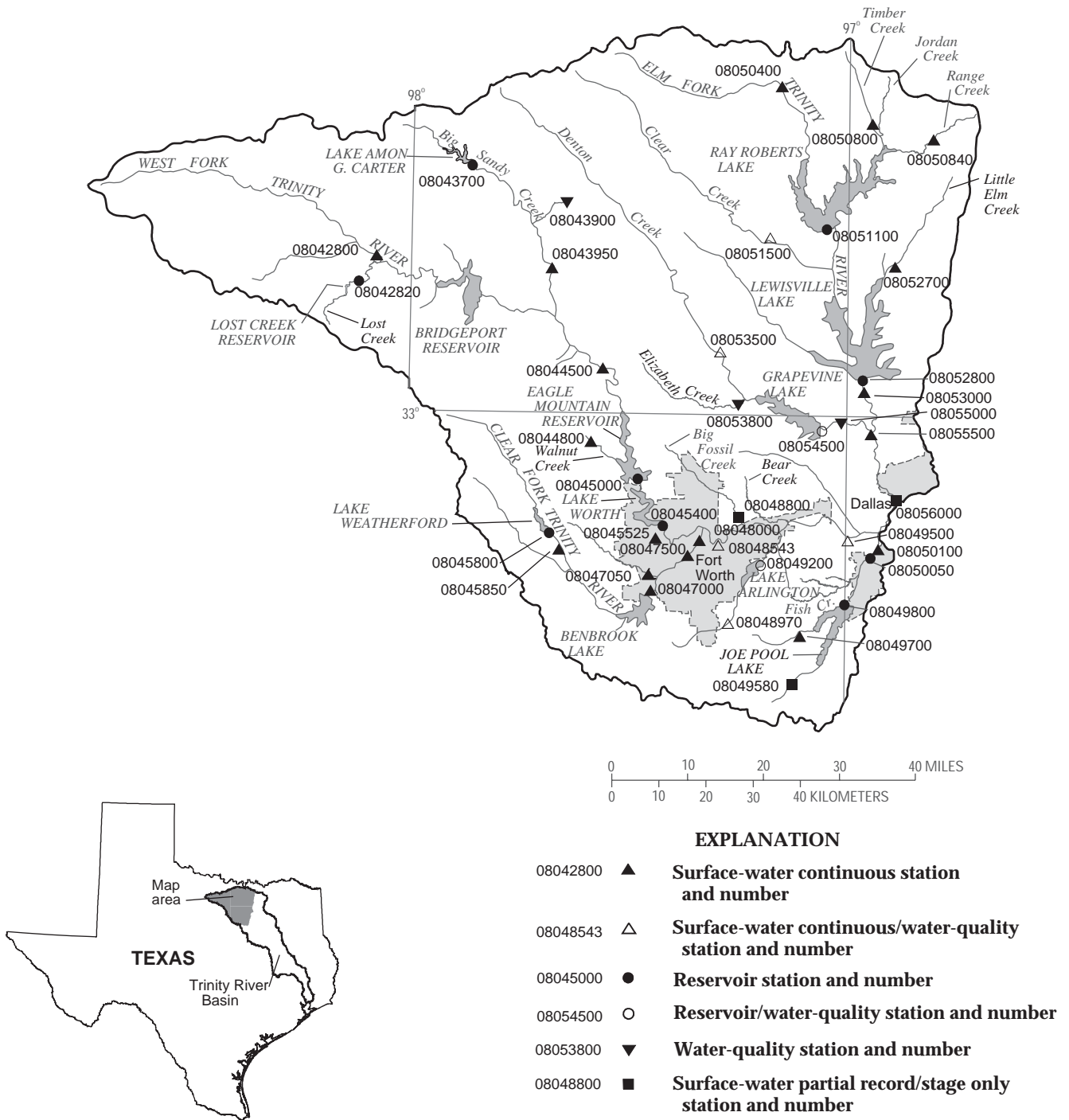


Figure 3.--Map showing location of gaging stations in the first section of the Trinity River Basin

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TRINITY RIVER BASIN

08042800 West Fork Trinity River near Jacksboro, TX

LOCATION.--Lat 33°17'30", long 98°04'49", Jack County, Hydrologic Unit 12030101, on upstream side of bridge on State Highway 59, 4.0 mi downstream from Big Cleveland Creek, 7.0 mi upstream from Carroll Creek, 7.0 mi northeast of Jacksboro and at mile 660.

DRAINAGE AREA.--683 mi<sup>2</sup>.

PERIOD OF RECORD.--Mar. 1956 to current year.  
Water-quality records.--Sediment data: Oct. 1976 to Sept. 1978.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 869.28 ft above sea level (from Texas Department of Transportation). Sept. 1960 to May 1961, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since 1974, at least 10% of contributing drainage area has been affected by discharge from the flood-detention pools of 21 floodwater-retarding structures. These structures control runoff from 70.9 mi<sup>2</sup> in the West Fork Trinity River drainage basin upstream from this station. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--18 years (water years 1956-73), 104 ft<sup>3</sup>/s (75,350 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1956-73).--Maximum discharge, 35,100 ft<sup>3</sup>/s, Apr. 27, 1957, gage height, 32.10 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1941 reached a stage of 30 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	6.7	9.9	22	269	1520	113	4.5	7.5	.95	.00	.00
2	.00	9.2	5.7	15	127	2390	84	5.1	82	.74	.00	.00
3	.00	99	3.7	10	57	1820	60	6.0	262	.64	.00	.00
4	.00	46	2.8	6.9	29	1400	46	8.1	188	.49	.00	.00
5	.00	90	2.6	4.8	17	992	34	22	47	.22	.00	.00
6	.00	275	2.2	3.8	11	310	27	21	19	.06	.00	.00
7	.00	270	3.1	2.8	7.0	150	21	291	11	.01	.00	.00
8	.00	135	3.8	2.2	5.0	133	16	348	8.4	.00	.00	.00
9	.00	184	3.8	1.9	6.9	281	13	108	7.1	.00	.00	.00
10	.00	230	4.1	2.1	5.7	537	10	78	6.0	.00	.00	.00
11	.00	130	4.5	3.8	4.8	564	57	32	5.2	.00	.00	.00
12	.00	52	8.2	3.0	3.7	558	55	18	4.6	.00	.00	.00
13	.00	22	6.7	2.5	3.3	359	31	12	4.2	.00	.00	.00
14	.00	12	5.2	2.2	3.5	126	21	8.0	4.9	.00	.00	.00
15	.00	6.8	5.3	2.1	164	83	49	5.9	5.8	.00	.00	.00
16	.00	4.4	5.4	2.3	3020	54	27	4.4	4.6	.00	.00	.00
17	.00	3.2	6.6	7.6	5060	38	15	3.5	4.1	.00	.00	.00
18	.00	2.8	7.5	5.6	3510	28	10	3.1	3.7	.00	.00	.00
19	.00	2.3	8.7	4.0	2460	23	7.6	2.9	3.7	.00	.00	.00
20	.00	2.3	8.6	3.9	1540	18	6.4	4.6	3.6	.00	.00	.00
21	.00	5.4	9.4	3.6	595	15	6.1	7.2	3.6	.00	.00	.00
22	.00	9.2	10	3.3	199	12	5.9	3.3	3.7	.00	.00	.00
23	.00	9.8	10	3.2	262	11	6.6	2.3	3.7	.00	.00	.00
24	.00	283	11	3.0	707	278	5.7	2.3	3.6	.00	.00	.00
25	.00	825	13	2.7	513	1050	5.1	2.3	3.5	.00	.00	.00
26	.00	1010	62	2.5	276	1590	4.8	2.3	3.5	.00	.00	.00
27	2.4	828	221	2.5	193	1360	4.6	2.3	3.5	.00	.00	.00
28	11	304	194	25	645	924	4.6	11	3.2	.00	.00	.00
29	251	63	101	529	---	419	4.5	15	1.9	.00	.00	.00
30	158	20	50	717	---	199	4.2	6.7	1.2	.00	.00	.00
31	14	---	29	545	---	146	---	4.7	---	.00	.00	---
TOTAL	436.40	4940.1	818.8	1945.3	19693.9	17388	755.1	1045.5	713.8	3.11	0.00	0.00
MEAN	14.1	165	26.4	62.8	703	561	25.2	33.7	23.8	.10	.000	.000
MAX	251	1010	221	717	5060	2390	113	348	262	.95	.00	.00
MIN	.00	2.3	2.2	1.9	3.3	11	4.2	2.3	1.2	.00	.00	.00
AC-FT	866	9800	1620	3860	39060	34490	1500	2070	1420	6.2	.00	.00

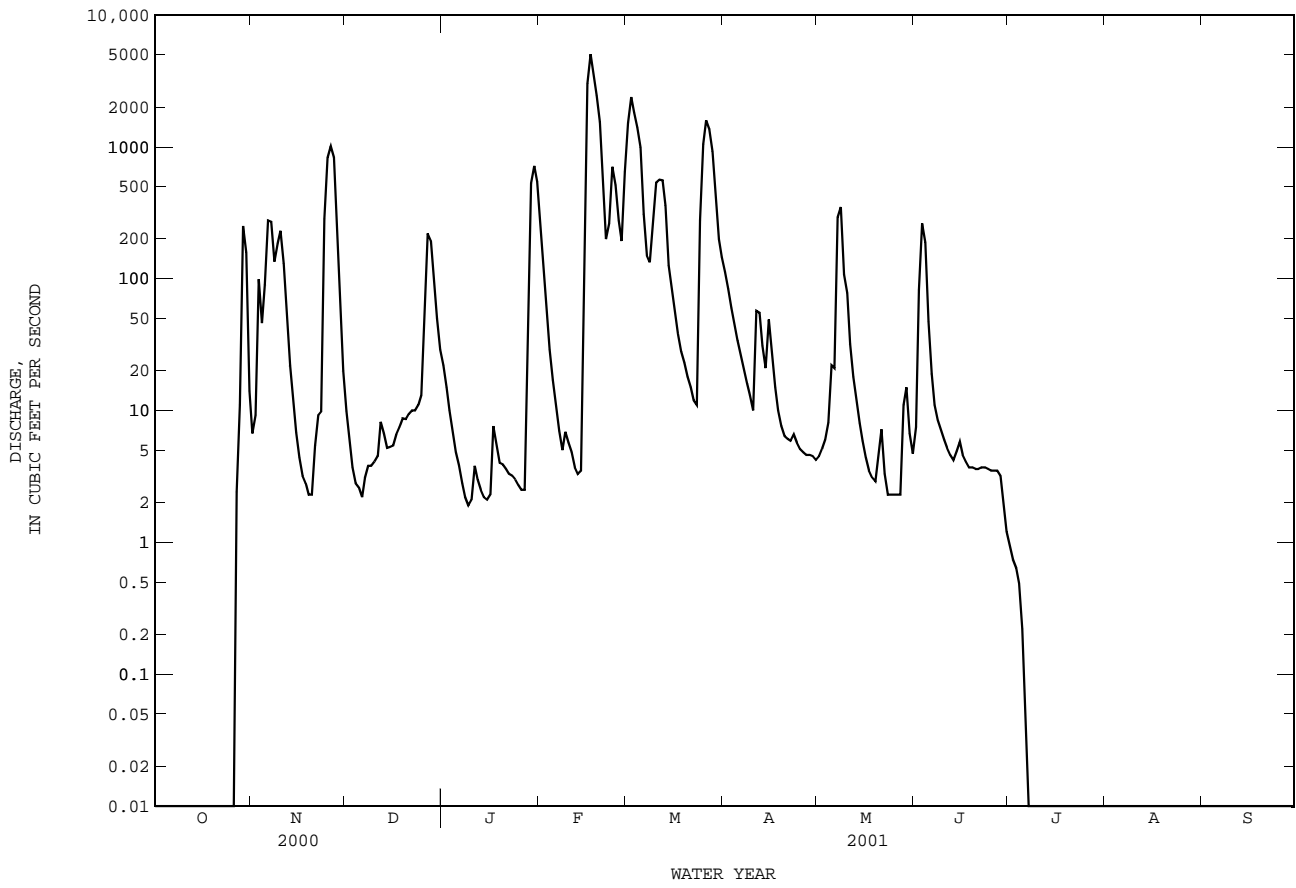
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001z, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	141	43.2	62.1	34.2	107	132	128	363	248	27.3	16.8	44.5																
MAX	2363	219	1025	369	1049	697	2383	3127	1689	251	134	332																
(WY)	1982	1975	1992	1985	1997	1990	1990	1989	1989	1975	1989	1996																
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000																
(WY)	1978	1978	1978	1978	1978	1978	1980	1984	1984	1978	1980	1982																

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1974 - 2001z
ANNUAL TOTAL	8716.79	47740.01	
ANNUAL MEAN	23.8	131	
HIGHEST ANNUAL MEAN			468 1990
LOWEST ANNUAL MEAN			.072 1984
HIGHEST DAILY MEAN	1010 Nov 26	5060 Feb 17	29100 May 17 1989
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Apr 6 1974
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Apr 12 1974
MAXIMUM PEAK FLOW		5380 Feb 17	33300 May 17 1989
MAXIMUM PEAK STAGE		21.69 Feb 17	31.52 May 17 1989
ANNUAL RUNOFF (AC-FT)	17290	94690	81400
10 PERCENT EXCEEDS	20	277	148
50 PERCENT EXCEEDS	.00	4.5	.96
90 PERCENT EXCEEDS	.00	.00	.00

z Period of regulated streamflow.

08042800 West Fork Trinity River near Jacksboro, TX--Continued



TRINITY RIVER BASIN

08042820 Lost Creek Reservoir near Jacksboro, TX

LOCATION.--Lat 33°14'36", long 98°07'11", Jack County, Hydrologic Unit 12030101, located on north streamward side of dam on Lost Creek 3 mi northeast of Jacksboro.

DRAINAGE AREA.--123 mi<sup>2</sup>.

PERIOD OF RECORD.--Mar 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records good. The lake is formed by a zoned earth and rock fill embankment 2,245 ft long. The dam was completed and storage began in early to mid 1990. A 60-inch diameter reinforced concrete tower serves as the principal spillway. The emergency spillway is an earth-cut side-channel spillway. The dam was built by the city of Jacksboro to impound water for municipal and recreational use. There was no known diversion from the lake during the current water year. Conservation pool storage is 11,960 acre-ft. Data regarding the dam is given in the following table:

	Elevation (feet)
Top of dam.....	1028.0
Crest of spillway.....	1009.0
Crest of emergency spillway.....	1016.0
Lowest gated outlet (invert).....	947.0

COOPERATION.--Capacity table was furnished by the Texas Water Development Board.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 13,440 acre-ft, Feb. 16, 2001, elevation, 1,012.95 ft; minimum contents, 8,680 acre-ft, Oct. 20, 2000, elevation, 1,000.56 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,440 acre-ft, Feb. 16, elevation, 1,012.95 ft; minimum contents, 8,680 acre-ft, Oct. 20, elevation, 1,000.56 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

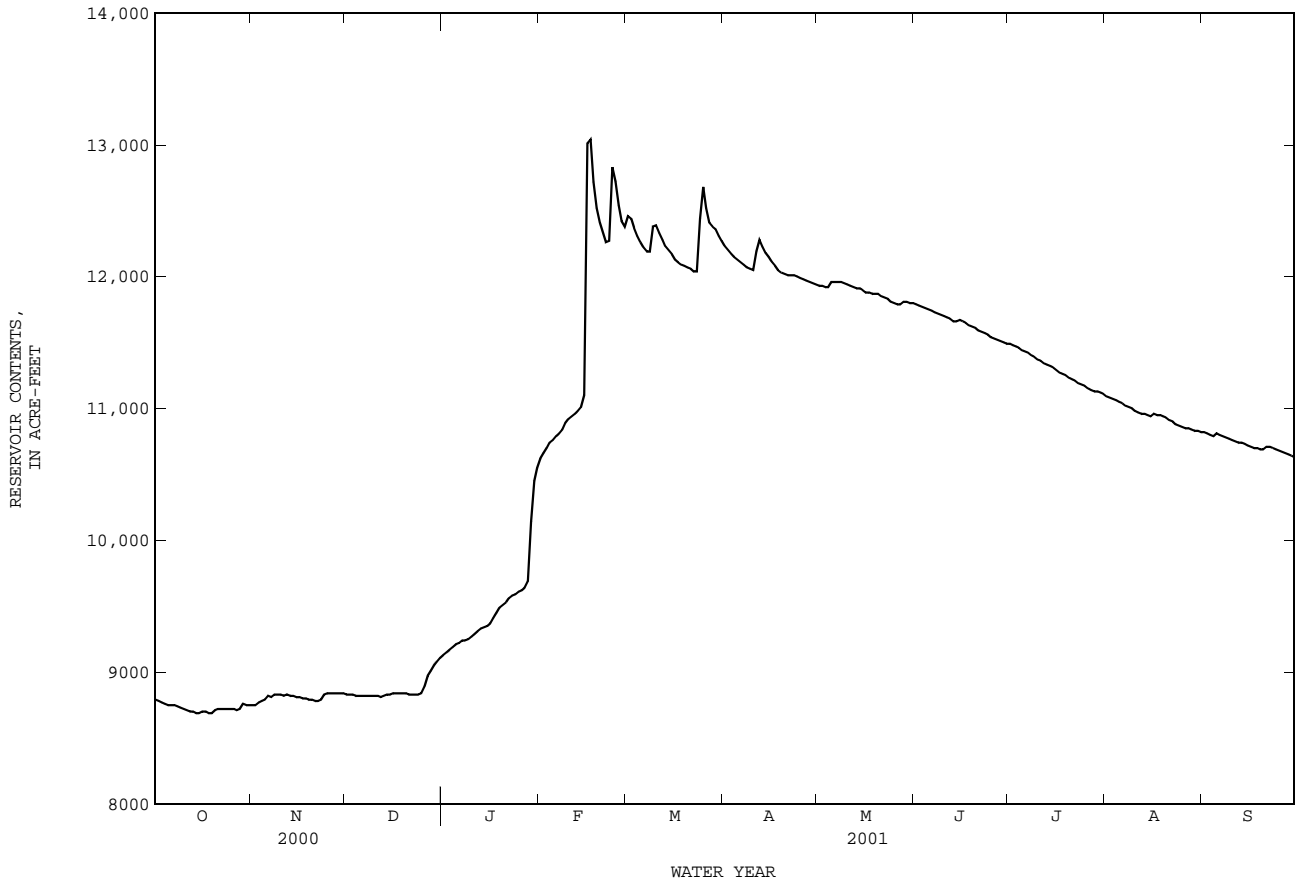
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8790	8750	8830	9130	10620	12460	12230	11930	11790	11490	11090	10820
2	8780	8750	8830	9150	10660	12440	12200	11930	11780	11480	11080	10810
3	8770	8770	8830	9170	10700	12370	12170	11920	11770	11470	11070	10800
4	8760	8780	8820	9190	10740	12310	12150	11920	11760	11460	11060	10790
5	8750	8790	8820	9210	10760	12260	12130	11960	11750	11440	11050	10810
6	8750	8820	8820	9220	10790	12220	12110	11960	11740	11430	11040	10800
7	8750	8810	8820	9240	10810	12190	12090	11960	11730	11420	11020	10790
8	8740	8830	8820	9240	10840	12190	12070	11960	11720	11400	11010	10780
9	8730	8830	8820	9250	10890	12380	12060	11950	11710	11390	11000	10770
10	8720	8830	8820	9270	10920	12390	12050	11940	11700	11370	10980	10760
11	8710	8820	8820	9290	10940	12330	12190	11930	11690	11360	10970	10750
12	8700	8830	8810	9310	10960	12280	12280	11920	11680	11340	10960	10740
13	8700	8820	8820	9330	10980	12230	12230	11910	11660	11330	10960	10740
14	8690	8820	8830	9340	11010	12200	12180	11910	11660	11320	10950	10730
15	8690	8810	8830	9350	11100	12170	12150	11900	11670	11310	10940	10720
16	8700	8810	8840	9370	13010	12130	12110	11880	11660	11290	10960	10710
17	8700	8800	8840	9410	13040	12110	12080	11880	11650	11270	10950	10700
18	8690	8800	8840	9450	12720	12090	12050	11870	11630	11260	10950	10700
19	8690	8790	8840	9490	12520	12080	12030	11870	11620	11250	10940	10690
20	8710	8790	8840	9510	12410	12070	12020	11870	11610	11230	10930	10690
21	8720	8780	8830	9530	12330	12060	12010	11850	11590	11220	10910	10710
22	8720	8780	8830	9560	12260	12040	12010	11840	11580	11210	10900	10710
23	8720	8790	8830	9580	12270	12040	12010	11830	11570	11190	10880	10700
24	8720	8830	8830	9590	12830	12440	12000	11810	11560	11180	10870	10690
25	8720	8840	8840	9610	12720	12680	11990	11800	11540	11170	10860	10680
26	8720	8840	8890	9620	12540	12520	11980	11790	11530	11150	10850	10670
27	8710	8840	8970	9640	12420	12410	11970	11790	11520	11140	10850	10660
28	8720	8840	9010	9690	12380	12380	11960	11810	11510	11130	10840	10650
29	8760	8840	9050	10140	---	12360	11950	11810	11500	11130	10830	10640
30	8750	8840	9080	10450	---	12310	11940	11800	11490	11120	10830	10630
31	8750	---	9110	10550	---	12270	---	11800	---	11110	10820	---
MEAN	8730	8810	8860	9480	11650	12270	12080	11880	11650	11290	10950	10730
MAX	8790	8840	9110	10550	13040	12680	12280	11960	11790	11490	11090	10820
MIN	8690	8750	8810	9130	10620	12040	11940	11790	11490	11110	10820	10630

(+)	1000.75	1001.01	1001.84	1005.95	1010.53	1010.25	1009.48	1009.14	1008.41	1007.43	1006.67	1006.16
(@)	0	+90	+270	+1440	+1830	-110	-330	-140	-310	-380	-290	-190

CAL YR 2000	MAX 10300	MIN 8750	(@) -1190
WTR YR 2001	MAX 13040	MIN 8690	(@) +1880

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

08042820 Lost Creek Reservoir near Jacksboro, TX--Continued



TRINITY RIVER BASIN

08043700 Lake Amon G. Carter near Bowie, TX

LOCATION.--Lat 33°28'08", long 97°51'56", Montague County, Hydrologic Unit 12030101, on Big Sandy Creek, in pumping station 7.1 mi south of Bowie.

DRAINAGE AREA.--100.0 mi<sup>2</sup>.

PERIOD OF RECORD.--Mar. 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemetry at station with voice modem.

REMARKS.--No estimated daily contents. Records good. In 1954 the original lake was formed by an earthfill dam 2,000 ft across Big Sandy Creek for the city of Bowie. In 1985 a new reservoir dam was completed 1 mi below the old dam. The old and new portions of the reservoir are connected by a corrugated metal pipe arch culvert (boat pass breach) with an invert elevation of 908 ft mean sea level. The reservoirs are also connected by 12 in siphon pipe through the old dam. Both reservoirs employ the emergency spillway on the old reservoir to pass flood water above elevation of 927 mean sea level. The principal spillway tower has a 24 ft uncontrolled weir at 920 ft mean sea level. Conservation pool storage is 28,589 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of new dam.....	945.0
Crest of spillway.....	927.0
Conservation pool & uncontrolled weir.....	920.0
Pipe arch culvert (boat pass breach).....	908.0

1  
COOPERATION.--Capacity table was provided by the Texas Water Development Board, and put into effect Mar. 3, 1999.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 38,060 acre-ft, Mar. 1, 2001, elevation, 924.46 ft; minimum contents, 14,180 acre-ft, Oct. 13, 2000, elevation, 910.18 ft.

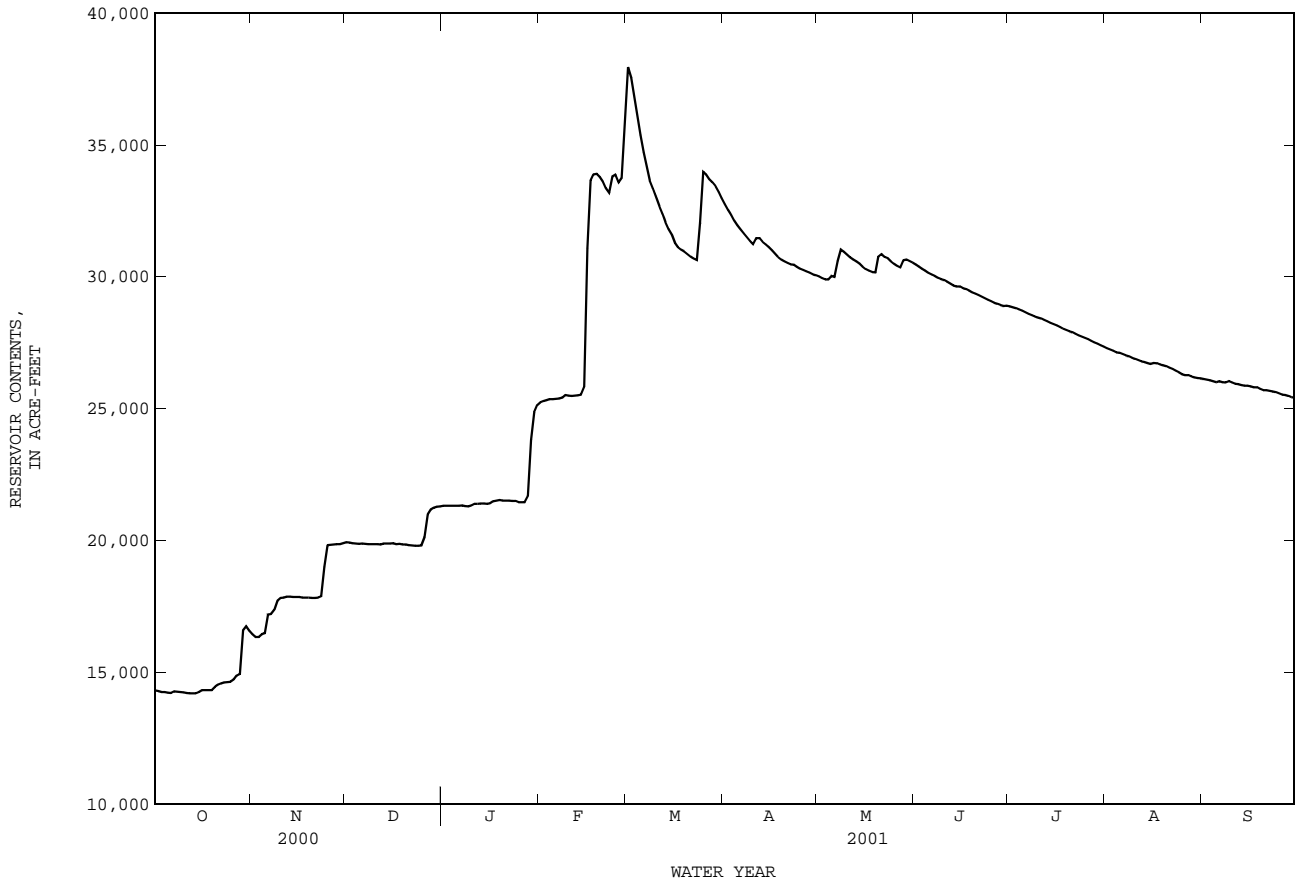
EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,060 acre-ft, Mar. 1, elevation, 924.46 ft; minimum contents, 14,180 acre-ft, Oct. 13, elevation, 910.18 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14310	16440	19930	21310	25230	37950	32750	30010	30450	28880	27280	26120
2	14280	16330	19910	21310	25280	37550	32530	29950	30380	28840	27240	26090
3	14250	16330	19890	21310	25320	36860	32330	29900	30300	28800	27190	26070
4	14240	16440	19880	21310	25350	36100	32130	29890	30220	28750	27130	26040
5	14220	16480	19870	21310	25360	35370	31950	30030	30140	28700	27110	26000
6	14210	17180	19880	21310	25370	34710	31790	29990	30080	28650	27070	26040
7	14270	17210	19870	21320	25380	34140	31630	30590	30030	28590	27020	26000
8	14260	17360	19860	21300	25410	33650	31490	31020	29960	28540	26980	25980
9	14250	17720	19860	21290	25510	33340	31350	30940	29910	28490	26920	26040
10	14230	17810	19860	21320	25490	33010	31230	30830	29870	28450	26880	25990
11	14210	17830	19860	21380	25480	32680	31460	30730	29810	28410	26830	25940
12	14200	17860	19840	21390	25490	32380	31460	30650	29740	28350	26790	25930
13	14200	17860	19880	21400	25500	32070	31330	30570	29670	28300	26760	25890
14	14200	17850	19880	21400	25520	31800	31230	30490	29630	28250	26730	25860
15	14250	17850	19880	21390	25820	31600	31120	30380	29630	28200	26690	25860
16	14320	17850	19890	21410	31070	31280	31000	30290	29570	28150	26730	25840
17	14320	17830	19860	21480	33650	31120	30870	30220	29530	28090	26710	25800
18	14320	17830	19870	21510	33880	31030	30750	30170	29470	28030	26670	25800
19	14320	17830	19840	21530	33900	30950	30650	30160	29400	27980	26640	25740
20	14440	17820	19840	21510	33780	30850	30580	30760	29350	27930	26600	25700
21	14530	17820	19820	21510	33600	30760	30520	30850	29300	27890	26550	25690
22	14570	17830	19810	21500	33350	30680	30470	30750	29240	27830	26490	25670
23	14610	17870	19790	21490	33180	30620	30450	30700	29180	27770	26430	25650
24	14620	18990	19790	21490	33790	32040	30370	30590	29120	27720	26370	25620
25	14630	19820	19800	21440	33860	33980	30300	30490	29070	27670	26300	25570
26	14720	19830	20120	21440	33580	33880	30250	30400	29010	27620	26270	25530
27	14870	19840	20970	21450	33730	33700	30200	30340	28970	27560	26260	25510
28	14930	19850	21160	21670	35950	33580	30150	30630	28920	27500	26220	25470
29	16580	19850	21240	23810	---	33430	30090	30650	28890	27460	26180	25430
30	16740	19890	21270	24870	---	33210	30050	30590	28900	27400	26150	25420
31	16560	---	21290	25130	---	32980	---	30530	---	27340	26140	---
MEAN	14600	17980	20080	21720	29240	33140	31080	30450	29590	28130	26690	25810
MAX	16740	19890	21290	25130	35950	37950	32750	31020	30450	28880	27280	26120
MIN	14200	16330	19790	21290	25230	30620	30050	29890	28890	27340	26140	25420
(+)	912.11	914.81	915.69	917.96	923.47	922.07	920.69	920.91	920.14	919.26	918.56	918.13
(@)	+2230	+3330	+1400	+3840	+10820	-2970	-2930	+480	-1630	-1560	-1200	-720
CAL YR 2000	MAX 21290	MIN 14200	(@) +2450									
WTR YR 2001	MAX 37950	MIN 14200	(@) +11090									

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

08043700 Lake Amon G. Carter near Bowie, TX--Continued



## TRINITY RIVER BASIN

08043900 Lyndon B. Johnson National Grasslands near Alvord, TX  
(National Atmospheric Deposition Program)

## PRECIPITATION WATER-QUALITY RECORDS

LOCATION.--Lat 33°23'30", long 97°38'23", Wise County, Hydrologic Unit 12030101, at State Highway 11, 6 mi northeast of Alvord and 11 mi north of Decatur.

OWNER.--U.S. Geological Survey.

PERIOD OF RECORD.--July 1984 to current year.

INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type rain gage and event recorder, and a National Weather Service 8-in rain gage as backup.

EXTREMES FOR CURRENT YEAR.--Maximum field pH, 6.9, Jan. 16-23; minimum field pH, 4.5, Mar. 27 to Apr. 3, Sept. 11-18.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	CALCIUM ATM DEP WET DIS (MG/L) (82932)	MAG- NESIUM ATM DEP WET DIS (MG/L) (83002)	POTAS- SIUM ATM DEP WET DIS (MG/L) (83120)	SODIUM ATM DEP WET DIS (MG/L) (83138)	NI- TROGEN AMMON. ATM DEP WET DIS AS N (MG/L) (83044)	NI- TROGEN NITRATE ATM DEP WET DIS AS N (MG/L) (83068)	CHLO- RIDE ATM DEP WET DIS (MG/L) (82944)	SULFATE ATM DEP WET DIS AS SO4 (MG/L) (83160)	PHOS- PHORUS ORTHOPHOS- PHATE ATM DEP WET DIS AS P (MG/L) (83108)	CALCIUM ATM DEP WET DIS (MG/M2) (82933)
OCT													
10-17	0910	7	5.2	.218	.019	.013	.138	.163	.16	.24	.83	.001	2.4
OCT													
17-25	0730	20	--	.040	.009	.015	.083	.190	.27	.17	1.42	.001	3.4
OCT													
25-31	1028	18	--	.194	.048	.023	.377	.220	.30	.52	1.57	.001	12.7
OCT 31-													
NOV 07	0946	8	5.1	.113	.163	.192	.033	.070	.11	.06	.78	.001	11.0
NOV													
07-14	1040	15	4.8	.106	.008	.010	.047	.130	.14	.09	.81	.001	3.4
NOV													
21-28	0845	9	4.8	.045	.006	.006	.049	.050	.16	.08	.49	.001	3.0
DEC													
05-12	1355	--	--	.476	.019	.032	.013	1.99	1.35	.08	4.10	.002	.3
DEC 19 2000-													
JAN 02 2001	0930	21	4.6	.351	.031	.258	.047	.109	.27	.14	1.82	.001	22.3
JAN													
09-16	0910	17	6.4	1.46	.132	.850	.047	.570	.40	.09	1.51	.089	21.1
JAN													
16-23	0905	43	6.9	6.46	.450	.840	.188	1.05	.44	.15	3.06	.812	73.2
JAN													
23-30	0900	15	6.1	.634	<.129	.590	.163	.412	.23	.30	1.58	.035	31.2
FEB													
06-13	0905	12	6.1	.778	.049	.056	.301	.257	.17	.41	1.67	<.001	7.4
FEB													
13-20	0905	10	5.0	.091	.010	.014	.055	.150	.11	.08	.85	<.001	8.9
FEB													
20-27	0845	14	4.8	.244	.022	.020	.107	.190	.18	.18	1.52	<.001	13.1
FEB 27-													
MAR 06	0845	19	4.6	.173	<.022	.023	.132	.194	.18	.22	1.82	<.001	5.6
MAR													
06-13	0855	30	--	.688	<.032	.067	.103	<.280	.82	.21	2.22	<.001	8.3
MAR													
13-20	0820	16	5.8	1.48	<.053	.055	.094	<.389	.55	.20	2.58	<.001	2.9
MAR													
20-27	0905	19	4.8	.286	<.022	.027	.076	.590	.56	.10	1.81	<.001	11.1
MAR 27-													
APR 03	0845	20	4.5	.134	<.011	.012	.025	.310	.45	.04	1.41	<.001	1.0
APR													
10-17	0905	12	6.1	.778	.065	.094	.323	.220	.14	.43	1.44	<.001	35.9
APR													
17-24	0905	18	6.4	1.15	.124	.102	.739	.360	.19	1.16	1.51	<.001	36.0
MAY													
01-08	0905	9	5.5	.286	.034	.032	.163	.330	.20	.23	.99	<.001	10.6
MAY													
08-15	0905	--	--	2.27	.150	.165	.570	.440	1.23	.88	2.47	<.002	1.3
MAY													
15-22	0905	23	6.3	1.42	.091	.090	.100	.480	.61	.60	3.21	<.003	11.8
MAY 22-													
JUN 05	0905	10	6.0	.550	.032	.073	.100	.480	.28	.13	1.17	.380	12.2
JUN													
12-19	0830	11	5.9	.566	.046	.049	.284	.300	.18	.34	1.33	<.003	6.5
JUN 26-													
JUL 03	0905	7	5.8	.385	.026	.023	.121	.180	.19	.18	.68	<.003	23.5
JUL													
10-16	0905	27	6.6	2.83	.115	.094	.449	.700	1.05	.66	2.85	.006	12.2
AUG													
14-21	0905	8	5.5	.434	.022	.018	.085	.272	.26	.12	.90	<.003	34.0
AUG													
21-28	0850	10	5.2	.393	.025	.017	.139	.210	.30	.25	.69	.003	4.4
AUG 28-													
SEP 04	0905	10	5.1	.385	.009	.007	.006	.226	.31	.04	.75	.003	12.5
SEP													
04-11	0905	14	5.0	.417	.035	.031	.176	.320	.33	.23	1.42	<.003	2.8
SEP													
11-18	0930	36	4.5	1.96	.081	.043	.076	.420	1.19	.25	4.46	<.003	2.9
SEP													
18-25	0905	11	5.9	.589	.031	.021	.169	.326	.29	.21	1.24	<.003	15.4

## TRINITY RIVER BASIN

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08043900 Lyndon B. Johnson National Grasslands near Alvord, TX--Continued  
(National Atmospheric Deposition Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MAG- NESIUM ATM DEP WET DIS (MG/M2) (83003)	POTAS- SIUM ATM DEP WET DIS (MG/M2) (83121)	SODIUM ATM DEP WET DIS (MG/M2) (83139)	NI- TROGEN AMMON. ATM DEP WET DIS AS N (MG/M2) (83045)	NI- TROGEN NITRATE ATM DEP WET DIS AS N (MG/M2) (83069)	CHLO- RIDE ATM DEP WET DIS (MG/M2) (82945)	SULFATE ATM DEP WET DIS AS SO4 (MG/M2) (83161)	PHOS- PHORUS ORTHO ATM DEP WET DIS AS P (MG/M2) (83109)	HY- DROGEN ION ATM DEP WET DIS (MG/M2) (82975)	VOLUME ATM DEP WET (L) (83177)
OCT 10-17	.2	.1	1.5	1.78	1.8	2.6	9.2	M	.1	.750
OCT 17-25	.8	1.3	7.1	16.8	22.8	14.9	121	.1	2.7	5.780
OCT 25-31	<3.1	1.5	24.7	14.5	19.7	33.9	103	.1	1.4	1.450
OCT 31- NOV 07	15.9	18.7	3.2	7.12	10.8	5.7	76.3	.1	.5	6.600
NOV 07-14	.3	.3	1.5	4.17	4.6	2.9	26.4	M	.4	2.210
NOV 21-28	.4	.4	3.3	3.14	10.7	5.4	33.0	.1	1.0	4.560
DEC 05-12	M	M	M	1.28	.9	2.6	2.6	M	M	.043
DEC 19 2000- JAN 02 2001	2.0	16.4	3.0	7.16	17.1	8.6	116	.1	1.5	4.310
JAN 09-16	1.9	12.3	.7	8.22	5.8	1.3	21.9	1.3	.00	.980
JAN 16-23	5.1	9.5	2.1	11.9	5.0	1.7	34.7	9.2	.00	.800
JAN 23-30	6.3	29.1	8.0	20.2	11.2	14.9	77.7	1.7	M	3.340
FEB 06-13	.5	.5	2.9	2.42	1.6	3.9	15.8	<.001	M	.642
FEB 13-20	1.0	1.1	5.7	14.4	11.2	8.0	83.4	.1	1.1	6.660
FEB 20-27	1.2	1.1	5.7	9.94	9.8	9.6	81.8	<.1	.8	3.640
FEB 27- MAR 06	<.7	.7	4.3	6.41	6.0	7.0	59.0	<.032	.8	2.200
MAR 06-13	<.4	.8	1.2	3.38	9.8	2.5	26.7	<.01	.5	.820
MAR 13-20	.1	.1	.2	.760	1.1	.4	5.0	<.003	.00	.130
MAR 20-27	<.8	1.1	3.0	23.0	21.6	3.8	70.1	<.04	.7	2.630
MAR 27- APR 03	<.1	.1	.2	2.36	3.4	.3	10.7	<.001	.3	.520
APR 10-17	3.0	4.3	14.9	10.2	6.5	20.1	66.5	<.1	M	3.130
APR 17-24	3.9	3.2	23.1	11.5	6.0	36.4	47.1	<.03	M	2.120
MAY 01-08	1.3	1.2	6.0	12.2	7.4	8.4	36.6	<.04	M	2.510
MAY 08-15	.1	.1	.3	.240	.7	.5	1.4	<.003	.00	.040
MAY 15-22	.8	.8	3.8	5.94	5.1	5.0	26.7	<.02	.00	.560
MAY 22- JUN 05	.7	1.6	2.2	10.6	6.3	2.8	26.0	<.1	M	1.500
JUN 12-19	.5	.6	3.3	3.47	2.0	4.0	15.3	<.03	M	.784
JUN 26- JUL 03	1.6	1.4	7.4	10.8	11.6	11.2	41.5	<.2	.1	4.140
JUL 10-16	.5	.4	1.9	3.01	4.5	2.9	12.3	M	.00	.293
AUG 14-21	1.7	1.4	6.7	21.5	20.6	9.7	70.8	.2	.1	.040
AUG 21-28	.3	.2	1.6	2.36	3.4	2.8	7.8	M	.1	.044
AUG 28- SEP 04	.3	.2	.2	7.39	10.2	1.3	24.3	.1	.2	.040
SEP 04-11	.2	.2	1.2	2.18	2.3	1.6	9.7	<.02	.1	.463
SEP 11-18	.1	.1	.1	.610	1.8	.4	6.5	<.003	.1	.100
SEP 18-25	.8	.6	4.4	8.58	7.5	5.5	32.4	<.1	M	1.780

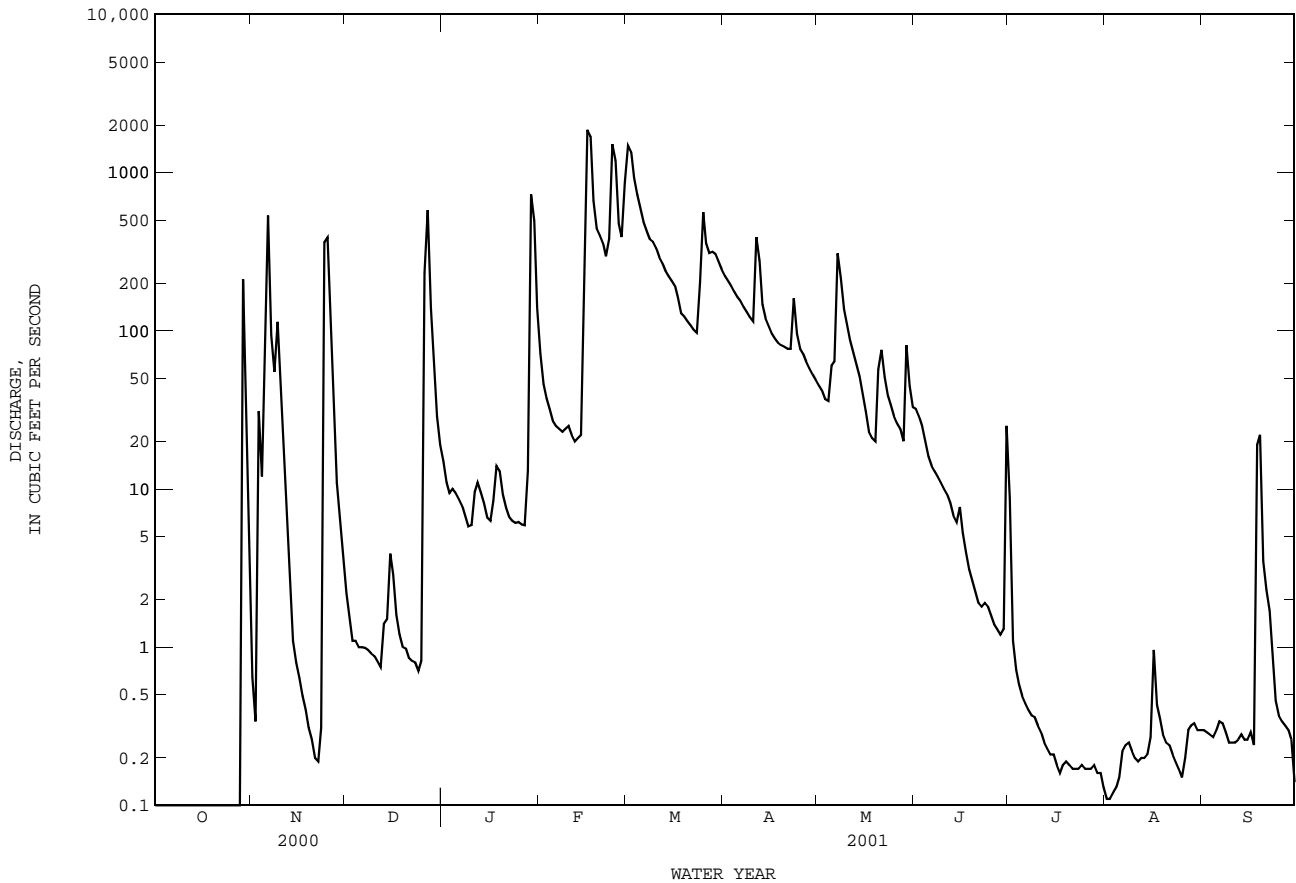




08043950 Big Sandy Creek near Chico, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1956 - 2001z	
ANNUAL TOTAL	3410.16		34197.69		71.7	
ANNUAL MEAN	9.32		93.7		317	
HIGHEST ANNUAL MEAN					1982	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	579	Dec 27	1860	Feb 16	23800	Oct 13 1981
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 20	.00	Oct 1	.00	Oct 5 1955
MAXIMUM PEAK FLOW			2170	Feb 16	g45000	Oct 13 1981
MAXIMUM PEAK STAGE			13.91	Feb 16	g14.78	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	6760		67830		51960	
10 PERCENT EXCEEDS	1.7		294		94	
50 PERCENT EXCEEDS	.00		6.6		6.1	
90 PERCENT EXCEEDS	.00		.16		.00	

e Estimated  
 z Period of regulated streamflow.  
 g At site and datum then in use.



TRINITY RIVER BASIN

08044500 West Fork Trinity River near Boyd, TX

LOCATION.--Lat 33°05'07", long 97°33'30", Wise County, Hydrologic Unit 12030101, on right bank on downstream side of highway embankment, 10 ft right of right abutment of bridge on Farm Road 730, 0.6 mi northeast of Boyd, 3.5 mi downstream from Boggy Creek and at mile 602.

DRAINAGE AREA.--1,725 mi<sup>2</sup>.

PERIOD OF RECORD.--Jan. 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 660.57 ft above sea level. Prior to Dec. 14, 1954, water-stage recorder at site 2.2 mi downstream at datum 5.48 ft lower. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Jan. 1947, at least 10% of contributing drainage area has been regulated. In addition, flow from 91.2 mi<sup>2</sup> above station is affected at times by discharge from the flood-detention pools of 36 floodwater-retarding structures in the Big Sandy and Salt Creek drainage basins. No known diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1880, about 25 ft in May 1908, present site and datum, from information by local residents, who also reported a flood of about the same gage height between 1870-80. A flood in Apr. 1942 reached a stage of 20.6 ft, present site and datum, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	15	16	38	195	1770	571	96	54	59	342	90
2	93	10	14	31	99	2400	564	83	48	27	339	16
3	115	9.3	14	26	67	2230	404	77	42	16	339	11
4	156	23	13	25	57	1720	276	77	38	14	339	11
5	157	78	12	24	50	1230	250	165	33	13	337	9.8
6	158	598	12	24	45	901	234	140	32	12	336	33
7	161	400	12	23	43	699	222	174	29	11	335	10
8	162	83	11	21	41	572	207	364	27	11	335	7.3
9	160	112	12	19	42	587	194	233	25	10	333	6.8
10	160	109	12	19	43	534	184	326	23	12	330	6.4
11	161	42	11	22	43	457	396	316	22	93	331	5.9
12	162	24	12	25	38	767	979	307	20	176	338	5.5
13	161	22	13	26	38	646	1060	301	19	246	329	5.3
14	146	16	14	23	40	406	844	295	18	286	327	5.1
15	132	12	17	21	175	323	693	290	20	297	326	5.0
16	137	11	17	20	2810	287	646	165	19	297	343	5.0
17	136	9.6	16	28	4480	254	638	57	17	296	341	5.0
18	123	8.4	15	34	3340	219	633	154	16	297	265	63
19	90	8.4	14	44	1890	201	631	168	15	295	194	252
20	94	7.9	13	34	995	192	522	62	14	293	188	206
21	113	7.9	12	27	651	185	245	91	14	292	185	193
22	97	8.4	11	23	479	178	140	86	14	291	183	183
23	102	9.7	11	21	546	171	268	63	13	290	181	174
24	66	107	11	20	2660	278	341	53	13	299	178	171
25	16	763	12	20	2990	654	277	47	12	319	177	170
26	10	302	65	19	2210	719	257	43	12	320	178	169
27	8.1	79	773	19	1300	512	246	40	90	319	186	168
28	7.7	37	599	23	914	559	239	148	158	317	173	167
29	114	26	163	775	---	531	282	207	22	316	156	165
30	169	20	77	1360	---	437	119	114	16	315	155	164
31	39	---	49	730	---	494	---	74	---	325	162	---
TOTAL	3499.8	2958.6	2053	3564	26281	21113	12562	4816	895	6164	8261	2483.1
MEAN	113	98.6	66.2	115	939	681	419	155	29.8	199	266	82.8
MAX	169	763	773	1360	4480	2400	1060	364	158	325	343	252
MIN	7.7	7.9	11	19	38	171	119	40	12	10	155	5.0
AC-FT	6940	5870	4070	7070	52130	41880	24920	9550	1780	12230	16390	4930

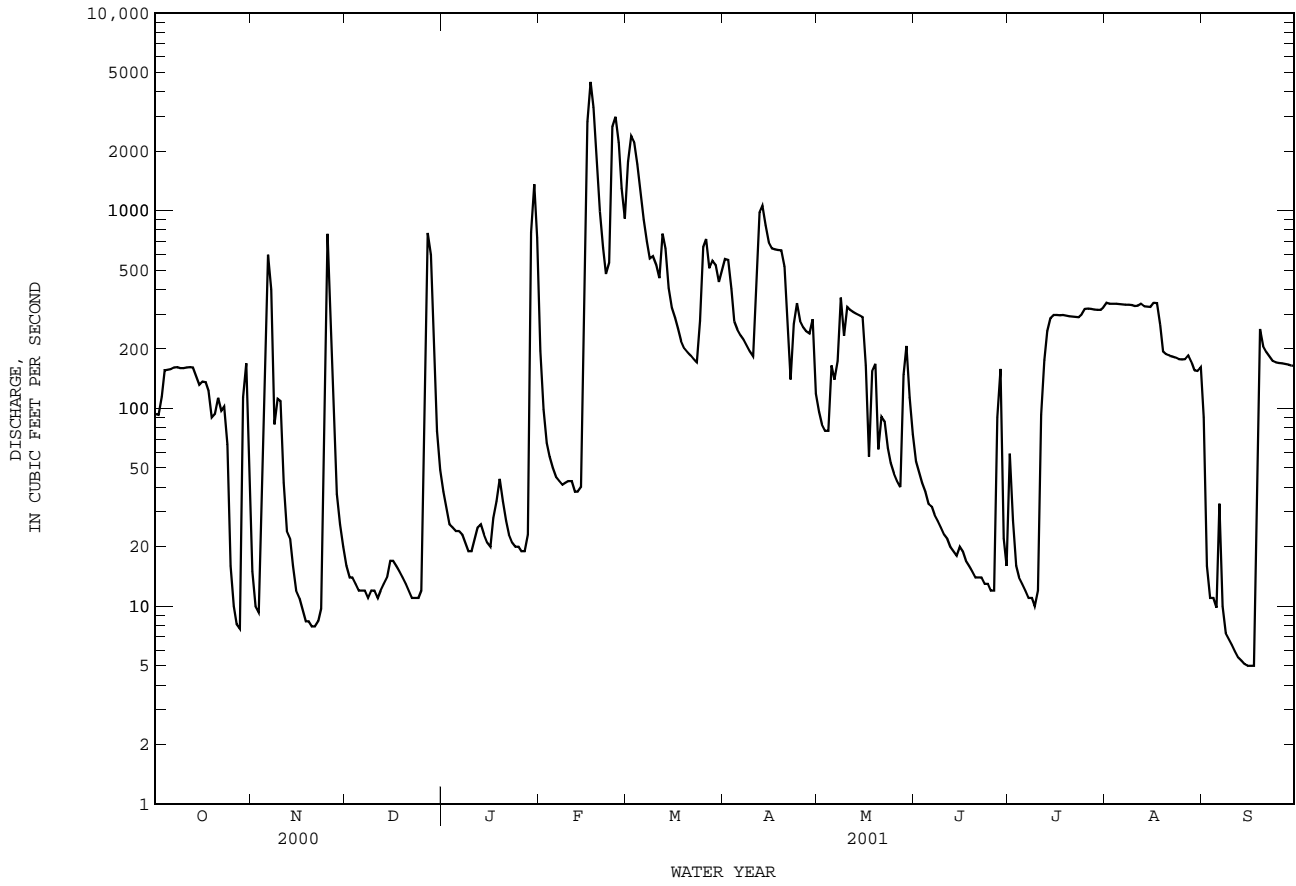
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

MEAN	299	188	177	107	155	234	273	696	458	200	222	179
MAX	4063	1248	3073	929	2003	1728	4339	5908	5439	1330	1157	1643
(WY)	1982	1982	1992	1992	1997	1998	1990	1990	1989	1950	1950	1962
MIN	2.96	4.81	2.21	.75	.10	.26	.59	25.2	2.76	7.11	.025	.23
(WY)	1957	1984	1953	1956	1953	1955	1955	1959	1953	1979	1980	1956

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1947 - 2001

ANNUAL TOTAL	33592.5	94650.5	
ANNUAL MEAN	91.8	259	266
HIGHEST ANNUAL MEAN			1094
LOWEST ANNUAL MEAN			58.6
HIGHEST DAILY MEAN	7510	Apr 2	38800
LOWEST DAILY MEAN	6.7	Jan 26	.00
ANNUAL SEVEN-DAY MINIMUM	6.7	Jan 30	.00
MAXIMUM PEAK FLOW			5240
MAXIMUM PEAK STAGE			18.15
ANNUAL RUNOFF (AC-FT)	66630	187700	193000
10 PERCENT EXCEEDS	156	598	489
50 PERCENT EXCEEDS	26	115	68
90 PERCENT EXCEEDS	9.7	12	4.4

08044500 West Fork Trinity River near Boyd, TX--Continued



## TRINITY RIVER BASIN

08044800 Walnut Creek at Reno, TX

LOCATION.--Lat 32°56'44", long 97°34'58", Parker County, Hydrologic Unit 12030101, on left bank at abandoned bridge abutment, 100 ft upstream from bridge on FM 1542, 3,500 ft upstream from Cottonwood Branch and 2.4 mi west of intersection of FM 1542 and FM 730 in Center Point.

DRAINAGE AREA.--75.6 mi<sup>2</sup>.

PERIOD OF RECORD.--Apr. 1992 to Sept. 1995 (annual maximum), Oct. 1995 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 681.11 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair except those above 3,000 ft<sup>3</sup>, which are poor. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.05	1.8	1.4	10	91	10	14	1.4	8.5	.22	1.0
2	.00	.04	3.4	1.4	7.0	28	11	16	1.4	.92	.22	.56
3	.00	.05	2.4	1.4	5.6	21	11	16	1.3	.52	.20	.37
4	.00	.05	1.9	1.3	4.8	18	11	17	1.2	.44	.20	.32
5	.00	61	2.8	1.2	3.9	13	11	35	.95	.35	.22	.37
6	.00	85	3.2	1.1	3.7	12	11	25	.95	.30	.22	.42
7	.00	7.5	2.4	.99	3.4	11	11	16	1.2	.25	.23	.39
8	.00	2.5	2.3	.96	3.5	24	11	12	1.6	.23	.20	.84
9	.00	6.1	3.6	.89	5.2	42	11	11	1.7	.24	.20	.56
10	.00	1.6	3.1	1.2	4.4	19	11	11	1.8	.25	.24	.38
11	.00	.68	3.6	2.4	2.9	27	18	12	1.8	.24	.60	.30
12	.00	1.1	4.5	1.7	3.4	257	10	12	1.6	.21	.73	.28
13	.00	7.3	4.7	1.4	22	29	10	13	1.5	.21	.40	.29
14	.00	1.2	9.1	1.2	19	18	11	13	2.7	.20	.47	.28
15	.00	.60	2.8	1.0	42	14	11	13	14	.20	.70	.29
16	.00	.43	1.8	1.1	1180	9.9	9.9	12	2.7	.19	.85	.28
17	.00	.45	1.1	3.4	54	9.9	9.9	12	1.6	.23	.74	.25
18	.00	.44	.71	12	28	9.9	9.9	12	1.2	.24	1.2	.35
19	.00	.40	.69	14	21	9.9	11	11	1.0	.22	1.9	.85
20	.00	.41	.89	5.1	17	10	12	11	1.0	.24	.67	.82
21	.00	.48	1.3	2.4	13	10	12	9.1	.95	.23	.43	1.0
22	.01	.59	.90	2.0	10	9.9	12	7.3	.92	.26	.32	.46
23	.02	.71	.91	2.1	1100	9.9	13	6.0	.90	.26	.26	.38
24	.02	31	1.0	1.7	528	66	11	6.0	1.2	.25	.23	.30
25	.01	20	1.5	1.6	34	25	10	4.7	.89	.27	.24	.25
26	.01	3.0	30	1.4	21	11	11	4.7	.94	.22	.95	.26
27	.01	1.1	37	1.5	20	28	11	5.4	.81	.27	1.1	.26
28	.01	.84	8.7	16	42	52	12	24	.83	.25	.50	.27
29	4.1	.58	2.6	267	---	23	13	6.8	1.7	.24	.33	.28
30	.48	.60	1.7	32	---	14	13	2.4	2.5	.22	.42	.29
31	.11	---	1.5	16	---	11	---	1.6	---	.19	1.1	---
TOTAL	4.78	235.80	143.90	398.84	3208.8	933.4	339.7	372.0	54.24	16.84	16.29	12.95
MEAN	.15	7.86	4.64	12.9	115	30.1	11.3	12.0	1.81	.54	.53	.43
MAX	4.1	85	37	267	1180	257	18	35	14	8.5	1.9	1.0
MIN	.00	.04	.69	.89	2.9	9.9	9.9	1.6	.81	.19	.20	.25
AC-FT	9.5	468	285	791	6360	1850	674	738	108	33	32	26

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	3.49	22.8	8.42	7.95	53.8	44.4
MAX	7.64	120	17.9	17.0	178	104
(WY)	1999	1997	1998	1998	1997	1997
MIN	.003	.25	.61	.27	.54	6.76
(WY)	2000	2000	2000	2000	2000	2000

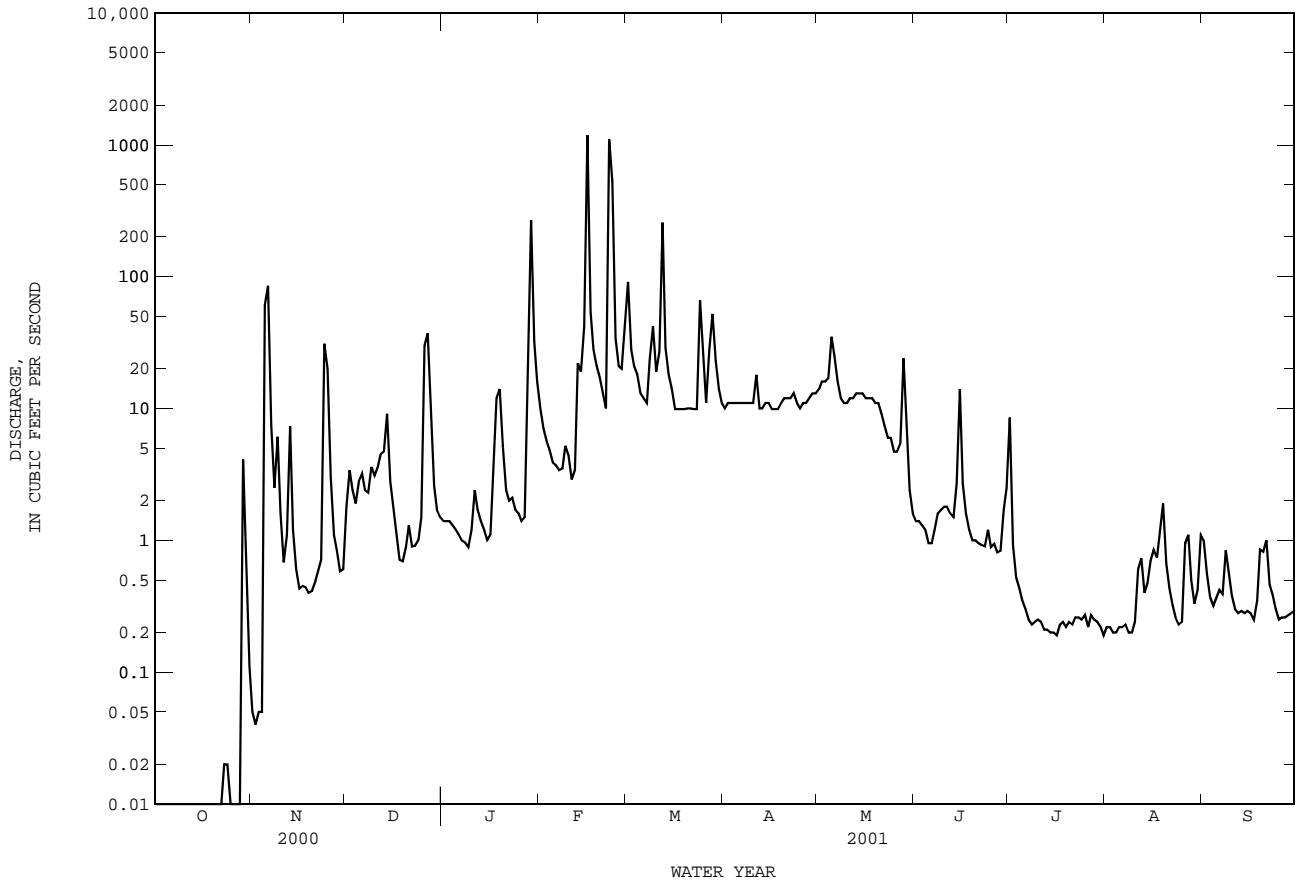
## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1996 - 2001

ANNUAL TOTAL	2701.39	5737.54		
ANNUAL MEAN	7.38	15.7	17.7	
HIGHEST ANNUAL MEAN			53.7	1997
LOWEST ANNUAL MEAN			3.98	1996
HIGHEST DAILY MEAN	694	Jun 3	1180	Feb 16
LOWEST DAILY MEAN	.00	Aug 11	.00	Oct 1
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 11	.00	Oct 1
MAXIMUM PEAK FLOW			12100	Feb 23
MAXIMUM PEAK STAGE			17.30	Feb 23
ANNUAL RUNOFF (AC-FT)	5360	11380	12850	d21.21
10 PERCENT EXCEEDS	6.4	19	23	
50 PERCENT EXCEEDS	.23	1.5	2.7	
90 PERCENT EXCEEDS	.00	.20	.15	

b After channel rectification, which occurred Nov. 1995 to Mar. 1997, peak gage-height, 17.30 ft.

d Prior to channel rectification, which occurred Nov. 1995 to Mar. 1997, peak discharge, 7,760 ft<sup>3</sup>.

08044800 Walnut Creek at Reno, TX--Continued



TRINITY RIVER BASIN

08045000 Eagle Mountain Reservoir above Fort Worth, TX

LOCATION.--Lat 32°52'39", long 97°28'29", Tarrant County, Hydrologic Unit 12030101, at left end of main section of Eagle Mountain Dam on West Fork Trinity River, 11.8 mi northwest of Fort Worth and at mile 583.3.

DRAINAGE AREA.--1,970 mi<sup>2</sup>.

PERIOD OF RECORD.--Feb. 1934 to current year. Prior to Oct. 1950 (end of month values only).

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Oct. 16, 1988, nonrecording gages at several sites within 1.0 mi of present site at present datum. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily contents, which are poor. The reservoir is formed by two sections of rolled earthfill and a concrete spillway separated by high natural ground. Total length of the dam including spillway is 4,800 ft. The dam was completed Oct. 24, 1932, and storage began Feb. 24, 1934. The spillway is a 1,300-foot-wide cut through natural ground located between the two sections of earthfill that make up the dam. The original service spillway, located in the section to the right of the main dam, contains a concrete spillway with four 25-foot bays, three are equipped with vertical lift gates and the fourth is left open. In 1971, a side-channel spillway was constructed. The newest spillway is located 300 ft to the left of the original service spillway and has six 11.25 x 22-foot-wide roller lift gates. The main section of the dam contains the outlet works that consist of two concrete conduits with two 48-inch diameter valves in each conduit. The dam is owned by the Tarrant Regional Water District. The reservoir is used for flood control and for part of the municipal water supply for the city of Fort Worth. Flow from 91.2 mi<sup>2</sup> above station is affected at times by discharge from the flood-detention pools of 36 floodwater-retarding structures with a total combined detention capacity of 24,450 acre-ft in the Big Sandy and Salt Creek drainage basins. Conservation pool storage is 190,300 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	682.0
Crest of spillway.....	676.0
Top of gates (new side-channel spillway).....	659.0
Crest of (old service) spillway.....	649.1
Crest of spillway (new side-channel spillway).....	637.0
Lowest gated outlet (invert).....	599.9

COOPERATION.--Capacity table, No. 4-C, furnished by Tarrant Regional Water District, was put into use Oct. 1, 1988.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 333,500 acre-ft, Apr. 26, 1942, elevation, 659.9 ft; minimum contents observed since first appreciable storage in 1935, 57,690 acre-ft, Nov. 19, 20, 1956, elevation, 629.3 ft.

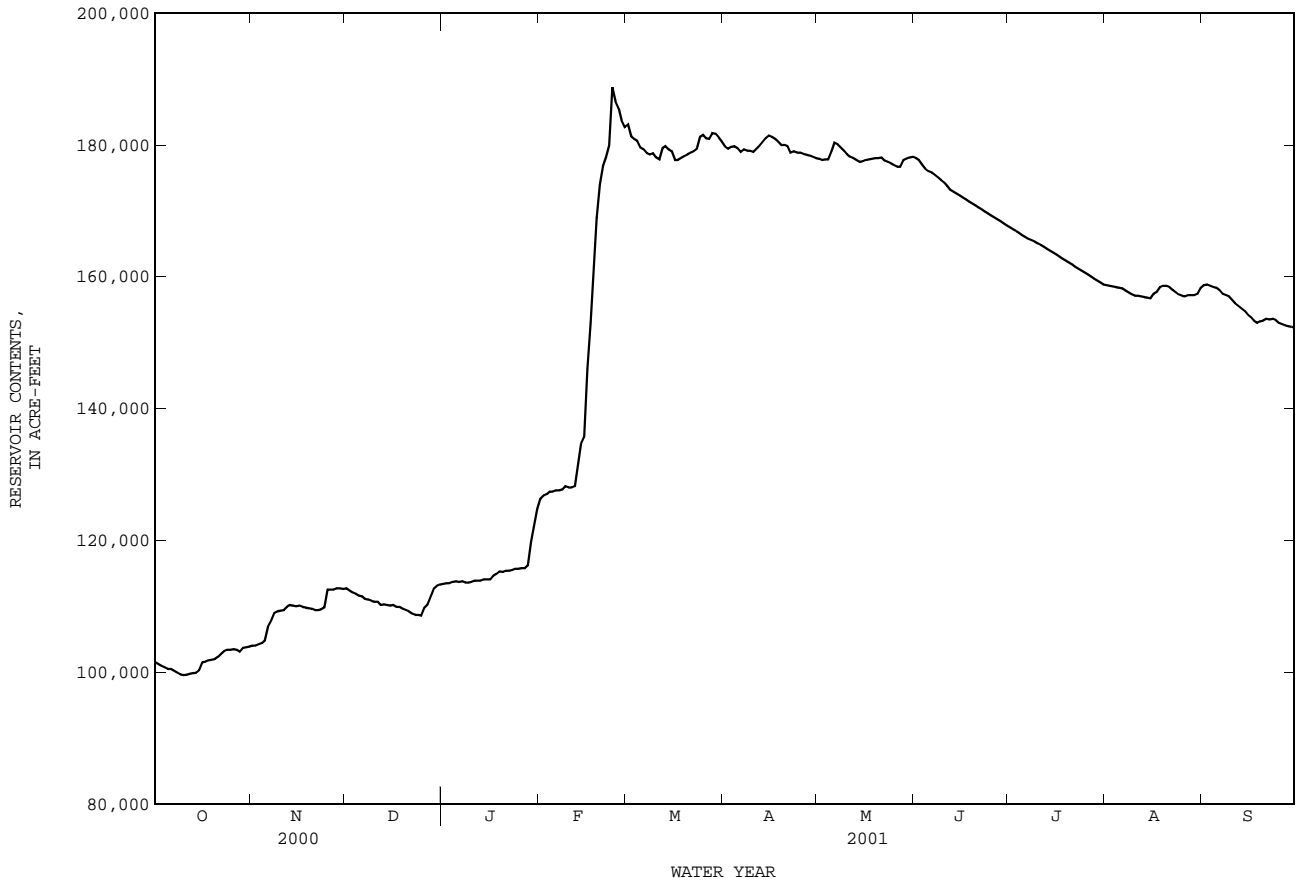
EXTREMES FOR CURRENT YEAR.--Maximum contents, 189,900 acre-ft, Feb. 24, elevation, 650.34 ft; minimum contents, 99,530 acre-ft, Oct. 9, 10, 11, elevation, 638.63 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101500	104000	112700	113400	126300	183100	179800	177900	178000	e167500	158700	158700
2	101200	104000	112400	113500	126800	181300	179400	177700	177700	e167200	158600	158800
3	100900	104200	112100	113500	127000	180900	179700	177800	177000	e166900	158500	158600
4	100700	104400	111900	113700	127400	180600	179800	177800	176400	e166600	158400	158400
5	100500	104800	111600	113800	127400	179600	179500	179000	176000	e166300	158300	158300
6	100500	106900	111500	113700	127600	179300	178900	180300	175800	e166000	158200	158000
7	100200	107800	111100	113800	127600	178700	179300	180100	175500	e165700	157900	157400
8	99910	109000	111000	113600	127700	178500	179100	179600	175100	e165500	157600	157200
9	99670	109200	110800	113600	128200	178700	179100	179100	174700	e165300	157300	157000
10	99540	109300	110700	113700	128000	178100	178900	178500	174300	e165000	157100	156500
11	99620	109400	110700	113900	128000	177800	179400	178200	173800	e164800	157100	156000
12	99760	109900	110200	113900	128200	179500	179900	178000	173200	e164500	157000	155600
13	99850	110200	110300	113900	131200	179800	180400	177700	e172900	e164200	156900	155200
14	99900	110100	110200	114100	134600	179300	181000	177400	e172600	e163900	156800	154800
15	100300	110000	110100	114100	135700	179000	181400	177500	e172300	e163600	156700	154300
16	101500	110100	110200	114100	146000	177700	181200	177700	e172000	e163300	157400	153900
17	101600	109900	109900	114600	152900	177700	180900	177800	e171700	e163000	157700	153300
18	101800	109800	109900	114900	161500	178000	180500	177900	e171400	e162700	158400	153000
19	101900	109700	109600	115300	168900	178300	180000	178000	e171100	e162400	158600	153200
20	102000	109600	109400	115200	174000	178500	180000	178000	e170800	e162100	158600	153300
21	102300	109400	109200	115400	176800	178800	179800	178100	e170500	e161800	158400	153600
22	102800	109400	108900	115400	178100	179000	178800	177600	e170200	e161500	158000	153500
23	103200	109500	108700	115500	179900	179400	179000	177400	e169900	e161200	157700	153600
24	103400	e109800	108700	115700	188700	181200	178800	177200	e169600	e160900	157300	153400
25	103400	e112500	108600	115700	186600	181500	178800	176900	e169300	e160600	157100	153000
26	103500	e112500	109800	115800	185500	181000	178600	176700	e169000	e160300	157000	152800
27	103400	e112500	110300	115800	183700	180900	178500	176700	e168700	e160000	157200	152600
28	103100	112700	111500	116200	182700	181800	178400	177700	e168400	e159700	157200	152500
29	103700	112700	112700	119800	---	181700	178200	177900	e168100	e159400	157200	152400
30	103800	112600	113100	122500	---	181100	178000	178100	e167800	159100	157400	152200
31	103900	---	113300	124700	---	180500	---	178200	---	158800	158300	---
MEAN	101600	109200	110700	115300	149900	179700	179500	178000	172500	163200	157700	155000
MAX	103900	112700	113300	124700	188700	183100	181400	180300	178000	167500	158700	158800
MIN	99540	104000	108600	113400	126300	177700	178000	176700	167800	158800	156700	152200
(+)	639.31	640.59	640.70	642.34	649.57	649.34	649.06	649.08	647.89	646.83	646.77	646.01
(@)	+2300	+8700	+700	+11400	+58000	-2200	-2500	+200	-10400	-9000	-500	-6100
CAL YR 2000	MAX 137900	MIN 99540	(@)	-24000								
WTR YR 2001	MAX 188700	MIN 99540	(@)	+50600								

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

08045000 Eagle Mountain Reservoir above Fort Worth, TX--Continued





TRINITY RIVER BASIN

08045400 Lake Worth above Fort Worth, TX

LOCATION.--Lat 32°47'21", long 97°24'58", Tarrant County, Hydrologic Unit 12030102, on top of Lake Worth Dam on West Fork Trinity River, 240 ft to right of right end of uncontrolled concrete spillway, 2.9 mi upstream from Farmer's Branch, 3.3 mi upstream from bridge on State Highway 183 crossing West Fork Trinity River, 5.3 mi northwest of Tarrant County Courthouse in Fort Worth and at river mile 572.0.

DRAINAGE AREA.--2,064 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1981 to current year.  
Water-quality records.--Chemical data: Jan. 1970 to Sept. 1984.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily contents, which are fair. The lake is formed by a rolled earthfill dam 3,200 ft long, with an uncontrolled concrete spillway 700 ft long near the center of the dam. Deliberate impoundment began in June 1914 and the dam was completed in Oct. 1914. There is a 48-inch diameter pipe controlled by a 36-inch valve, which may be used to make small releases through the dam. The dam is owned by the city of Fort Worth. Conservation pool storage is 38,130 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	606.3
Crest of concrete spillway.....	594.0
Lowest gated outlet (invert).....	584.25

COOPERATION.--Capacity Table 1-C was provided by U.S. Army Corps of Engineers, and put into effect Feb. 1968.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 56,040 acre-ft, May 3, 1990, elevation, 598.70 ft; minimum contents, 24,730 acre-ft, Sept. 9-10, 1985, elevation, 589.95 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 42,370 acre-ft, Feb. 27, elevation, 595.44 ft; minimum contents, 29,010 acre-ft, Oct. 28, elevation, 591.48 ft.

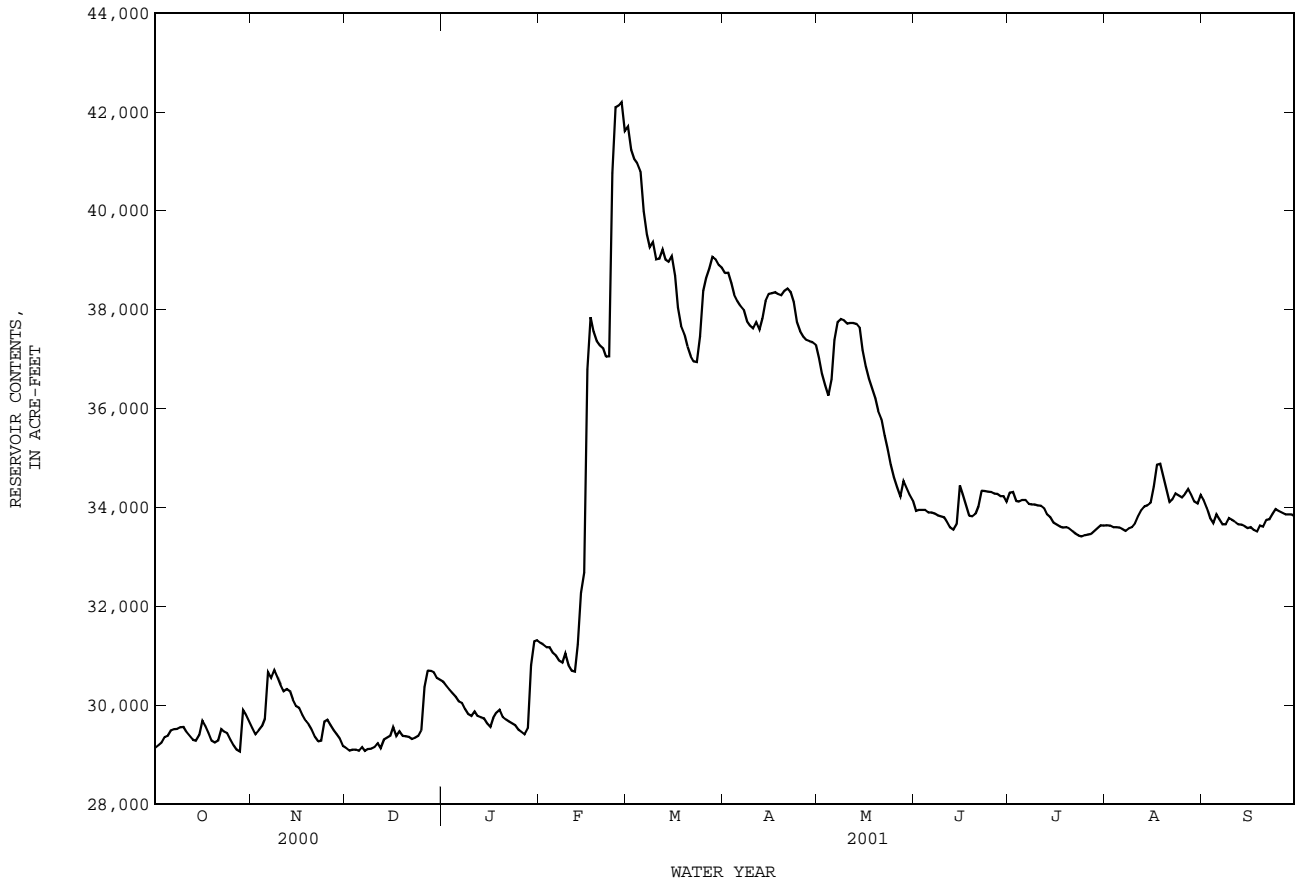
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29140	29540	29130	30470	31260	41700	38740	37010	33930	34300	33640	34150
2	29190	29410	29080	30380	31220	41230	38750	36700	33950	34310	33630	33990
3	29250	29490	29100	30310	31170	41050	38530	36470	33950	34130	33600	33790
4	29350	29570	29100	30240	31170	40960	38300	36260	33950	34120	33600	33680
5	29380	29720	29070	30170	31060	40800	38170	36590	33900	34150	33590	33860
6	29490	30670	29150	30070	31000	39990	38070	37390	33900	34150	33560	33760
7	29510	30550	29070	30040	30900	39520	37990	37750	33880	34070	33520	33660
8	29520	30710	29110	29920	30860	39260	37760	37810	33840	34060	33570	33660
9	29550	30560	29120	29820	31040	39360	37680	37780	33820	34060	33600	33780
10	29560	30410	29150	29780	30810	39020	37620	37720	33800	34040	33670	33750
11	29450	30280	29230	29870	30700	39030	37750	37730	33710	34030	33820	33710
12	29370	30320	29130	29780	30680	39210	37600	37730	33590	33980	33940	33660
13	29300	30280	29300	29750	31230	39010	37820	37710	33550	33860	34020	33650
14	29280	30110	29340	29730	32270	38970	38180	37630	33660	33800	34040	33620
15	29390	29980	29380	29630	32680	39080	38320	37180	34440	33690	34090	33580
16	29690	29940	29550	29560	36790	38690	38330	36850	34260	33650	34420	33600
17	29570	29800	29370	29740	37850	38040	38350	36600	34040	33610	34860	33540
18	29440	29680	29470	29850	37560	37670	38310	36400	33830	33590	34880	33510
19	29280	29610	29380	29910	37370	37510	38290	36200	33820	33600	34650	33630
20	29240	29500	29370	29760	37280	37250	38380	35950	33870	33570	34370	33610
21	29280	29360	29360	29710	37220	37060	38420	35790	34020	33520	34110	33750
22	29510	29270	29310	29670	37050	36950	38360	35450	34340	33470	34170	33760
23	29460	29280	29340	29630	37060	36940	38150	35160	34330	33430	34280	33870
24	29430	29660	29380	29590	40760	37460	37740	34860	34320	33410	34240	33960
25	29300	29700	29490	29500	42090	38380	37560	34600	34310	33440	34200	33920
26	29180	29590	30370	29460	42130	38640	37450	34400	34280	33450	34270	33890
27	29100	29490	30700	29410	42200	38830	37390	34220	34270	33460	34370	33860
28	29060	29410	30690	29530	41610	39070	37360	34540	34230	33520	34260	33860
29	e29900	29320	30660	30810	---	39020	37340	34410	34230	33580	34120	33860
30	e29800	29170	30550	31290	---	38900	37290	34260	34120	33640	34080	33820
31	29660	---	30510	31310	---	38850	---	34140	---	33630	34250	---
MAX	29900	30710	30700	31310	42200	41700	38750	37810	34440	34310	34880	34150
MIN	29060	29170	29070	29410	30680	36940	37290	34140	33550	33410	33520	33510
(+)	591.70	591.54	591.99	592.25	595.24	594.49	594.06	593.13	593.13	592.98	593.17	593.04
(@)	+590	-490	+1340	+800	+10300	-2760	-1560	-3150	-20	-490	+620	-430
CAL YR 2000	MAX 36700	MIN 28630	(@) -440									
WTR YR 2001	MAX 42200	MIN 29060	(@) +4750									

e Estimated

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

08045400 Lake Worth above Fort Worth, TX--Continued



## TRINITY RIVER BASIN

08045525 Farmers Branch at Westworth Village, Fort Worth, TX

LOCATION.--Lat 32°45'52", long 97°25'56", Tarrant County, Hydrologic Unit 12030102, on left bank 0.6 mi northwest of US Hwy 183 on Roaring Springs Road, along north side of Cottonwood tree grove, 1.62 mi upstream of confluence with West Fork Trinity River.

DRAINAGE AREA.--6.09 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1998 to current year (gage height).

GAGE.--Water-stage recorder. Datum of gage is 587.32 ft above sea level. Satellite telemeter at station.

REMARKS.--Records good. No known regulation or diversions.

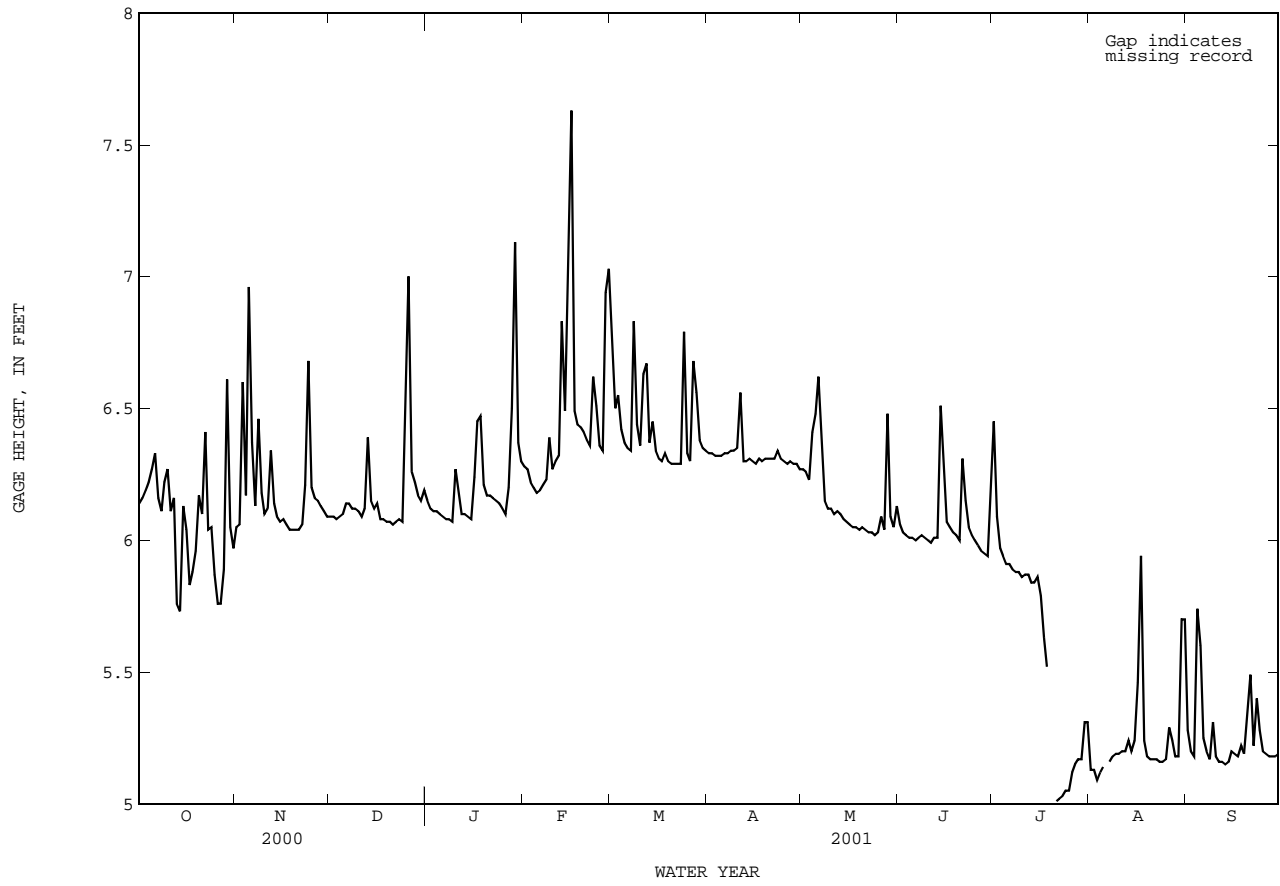
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.70, June 4, 2000, at 0015 hours; minimum gage height, 4.36, June 20, 2000, at 0515 hours.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.04 ft, Feb. 16; minimum gage height, 4.93 ft, July 22.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.14	6.05	6.09	6.15	6.28	6.79	6.33	6.27	6.06	6.45	5.13	5.28
2	6.16	6.06	6.09	6.12	6.27	6.50	6.33	6.26	6.03	6.09	5.13	5.20
3	6.19	6.60	6.08	6.11	6.22	6.55	6.32	6.23	6.02	5.97	5.09	5.18
4	6.22	6.17	6.09	6.11	6.20	6.42	6.32	6.41	6.01	5.94	5.12	5.74
5	6.27	6.96	6.10	6.10	6.18	6.37	6.32	6.48	6.01	5.91	5.14	5.60
6	6.33	6.37	6.14	6.09	6.19	6.35	6.33	6.62	6.00	5.91	---	5.25
7	6.16	6.13	6.14	6.08	6.21	6.34	6.33	6.35	6.01	5.89	5.16	5.20
8	6.11	6.46	6.12	6.08	6.23	6.83	6.34	6.15	6.02	5.88	5.18	5.17
9	6.22	6.18	6.12	6.07	6.39	6.44	6.34	6.12	6.01	5.88	5.19	5.31
10	6.27	6.10	6.11	6.27	6.27	6.36	6.35	6.12	6.00	5.86	5.19	5.18
11	6.11	6.12	6.09	6.18	6.30	6.63	6.56	6.10	5.99	5.87	5.20	5.16
12	6.16	6.34	6.12	6.10	6.32	6.67	6.30	6.11	6.01	5.87	5.20	5.16
13	5.76	6.14	6.39	6.10	6.83	6.37	6.30	6.10	6.01	5.84	5.24	5.15
14	5.73	6.09	6.15	6.09	6.49	6.45	6.31	6.08	6.51	5.84	5.20	5.16
15	6.13	6.07	6.12	6.08	7.10	6.34	6.30	6.07	6.25	5.86	5.24	5.20
16	6.04	6.08	6.14	6.24	7.63	6.31	6.29	6.06	6.07	5.79	5.46	5.19
17	5.83	6.06	6.08	6.45	6.49	6.30	6.31	6.05	6.05	5.63	5.94	5.18
18	5.88	6.04	6.08	6.47	6.44	6.33	6.30	6.05	6.03	5.52	5.24	5.22
19	5.96	6.04	6.07	6.21	6.43	6.30	6.31	6.04	6.02	---	5.18	5.19
20	6.17	6.04	6.07	6.17	6.41	6.29	6.31	6.05	6.00	---	5.17	5.35
21	6.10	6.04	6.06	6.17	6.38	6.29	6.31	6.04	6.31	5.01	5.17	5.49
22	6.41	6.06	6.07	6.16	6.36	6.29	6.31	6.03	6.15	5.02	5.17	5.22
23	6.04	6.21	6.08	6.15	6.62	6.29	6.34	6.03	6.05	5.03	5.16	5.40
24	6.05	6.68	6.07	6.14	6.51	6.79	6.31	6.02	6.02	5.05	5.16	5.28
25	5.87	6.20	6.46	6.12	6.36	6.33	6.30	6.03	6.00	5.05	5.17	5.20
26	5.76	6.16	7.00	6.10	6.34	6.30	6.29	6.09	5.98	5.12	5.29	5.19
27	5.76	6.15	6.26	6.20	6.94	6.68	6.30	6.04	5.96	5.15	5.24	5.18
28	5.89	6.13	6.22	6.50	7.03	6.56	6.29	6.48	5.95	5.17	5.18	5.18
29	6.61	6.11	6.17	7.13	---	6.38	6.29	6.09	5.94	5.17	5.18	5.18
30	6.05	6.09	6.15	6.37	---	6.35	6.27	6.05	6.23	5.31	5.70	5.19
31	5.97	---	6.19	6.30	---	6.34	---	6.13	---	5.31	5.70	---
MEAN	6.08	6.20	6.17	6.21	6.48	6.44	6.32	6.15	6.06	---	---	5.25
MAX	6.61	6.96	7.00	7.13	7.63	6.83	6.56	6.62	6.51	---	---	5.74
MIN	5.73	6.04	6.06	6.07	6.18	6.29	6.27	6.02	5.94	---	---	5.15

08045525 Farmers Branch at Westworth Village, Fort Worth, TX--Continued



TRINITY RIVER BASIN

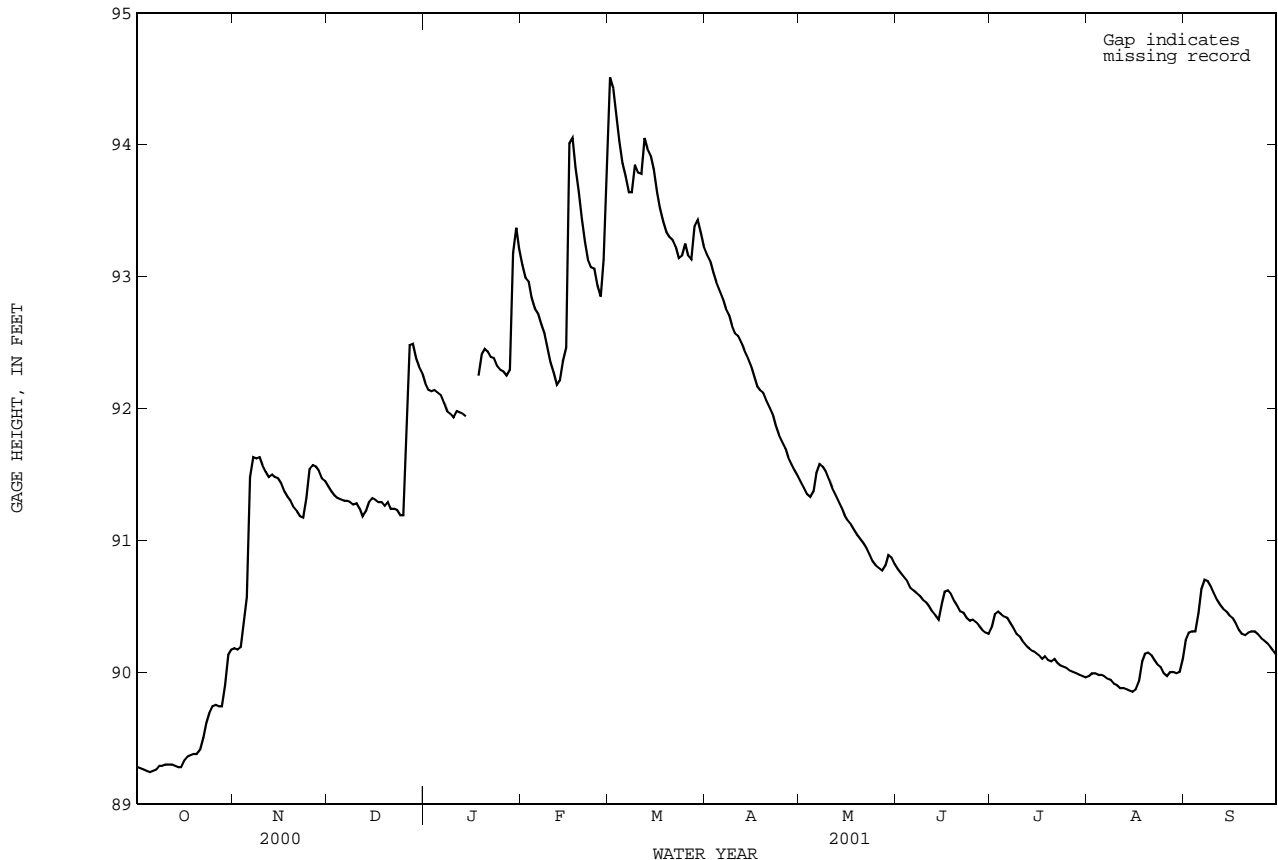
08045525 Farmers Branch at Westworth Village, Fort Worth, TX--Continued

Station Number: 324555097255501 Local Well Name: WELL C1  
 Latitude(NAD27): 324555 Longitude: 0972555

Department of Defense's observation well located 3,100 feet northwest of intersection of Roaring Springs Road and State Highway 183. Depth of well 15.14 feet. Diameter of casing 6 inches. Screened interval from 10.6 to 15.1 feet in alluvium aquifer. Gage datum 500.00 feet.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89.28	90.18	91.41	92.19	93.09	94.51	93.17	91.44	90.78	90.34	89.97	90.24
2	89.27	90.17	91.37	92.14	92.99	94.43	93.12	91.40	90.75	90.44	89.99	90.30
3	89.26	90.19	91.34	92.13	92.96	94.25	93.03	91.35	90.72	90.46	89.99	90.31
4	89.25	90.40	91.32	92.14	92.84	94.03	92.96	91.33	90.69	90.44	89.98	90.31
5	89.24	90.57	91.31	92.12	92.76	93.86	92.90	91.37	90.64	90.42	89.98	90.45
6	89.25	91.48	91.30	92.10	92.72	93.76	92.84	91.51	90.62	90.41	89.97	90.63
7	89.26	91.63	91.30	92.04	92.64	93.64	92.76	91.58	90.60	90.37	89.95	90.70
8	89.29	91.62	91.29	91.98	92.57	93.64	92.71	91.56	90.58	90.33	89.94	90.69
9	89.29	91.63	91.27	91.96	92.46	93.85	92.63	91.52	90.55	90.29	89.91	90.65
10	89.30	91.57	91.28	91.93	92.35	93.79	92.57	91.46	90.53	90.27	89.90	90.60
11	89.30	91.52	91.24	91.98	92.27	93.78	92.55	91.40	90.50	90.23	89.88	90.55
12	89.30	91.48	91.18	91.97	92.18	94.05	92.50	91.35	90.46	90.20	89.88	90.51
13	89.29	91.50	91.22	91.96	92.21	93.97	92.44	91.30	90.43	90.18	89.87	90.48
14	89.28	91.48	91.29	91.94	92.36	93.92	92.39	91.25	90.40	90.16	89.86	90.46
15	89.28	91.47	91.32	---	92.46	93.81	92.33	91.19	90.52	90.15	89.85	90.43
16	89.33	91.43	91.31	---	94.01	93.64	92.25	91.15	90.61	90.13	89.87	90.41
17	89.36	91.37	91.29	---	94.05	93.52	92.17	91.12	90.62	90.10	89.93	90.37
18	89.37	91.33	91.29	92.25	93.83	93.42	92.14	91.08	90.59	90.12	90.08	90.32
19	89.38	91.30	91.26	92.41	93.65	93.34	92.12	91.04	90.54	90.09	90.14	90.29
20	89.38	91.25	91.29	92.45	93.44	93.30	92.06	91.01	90.50	90.08	90.15	90.28
21	89.41	91.22	91.24	92.43	93.26	93.28	92.01	90.98	90.46	90.10	90.13	90.30
22	89.50	91.18	91.24	92.39	93.13	93.23	91.96	90.94	90.45	90.07	90.09	90.31
23	89.61	91.17	91.23	92.38	93.07	93.14	91.87	90.89	90.41	90.05	90.06	90.31
24	89.69	91.32	91.19	92.32	93.06	93.16	91.80	90.84	90.39	90.04	90.04	90.29
25	89.74	91.54	91.19	92.29	92.93	93.25	91.75	90.81	90.40	90.03	89.99	90.26
26	89.75	91.57	91.88	92.28	92.85	93.16	91.70	90.79	90.38	90.01	89.97	90.24
27	89.74	91.56	92.48	92.25	93.13	93.13	91.63	90.77	90.35	90.00	90.00	90.22
28	89.74	91.53	92.49	92.29	93.96	93.38	91.58	90.81	90.32	89.99	90.00	90.19
29	89.90	91.47	92.38	93.18	---	93.43	91.53	90.89	90.30	89.98	89.99	90.16
30	90.13	91.45	92.32	93.37	---	93.33	91.49	90.87	90.29	89.97	90.00	90.13
31	90.17	---	92.27	93.21	---	93.23	---	90.82	---	89.96	90.10	---
MEAN	89.46	91.25	91.48	---	92.97	93.62	92.30	91.16	90.51	90.17	89.98	90.38
MAX	90.17	91.63	92.49	---	94.05	94.51	93.17	91.58	90.78	90.46	90.15	90.70
MIN	89.24	90.17	91.18	---	92.18	93.13	91.49	90.77	90.29	89.96	89.85	90.13



TRINITY RIVER BASIN

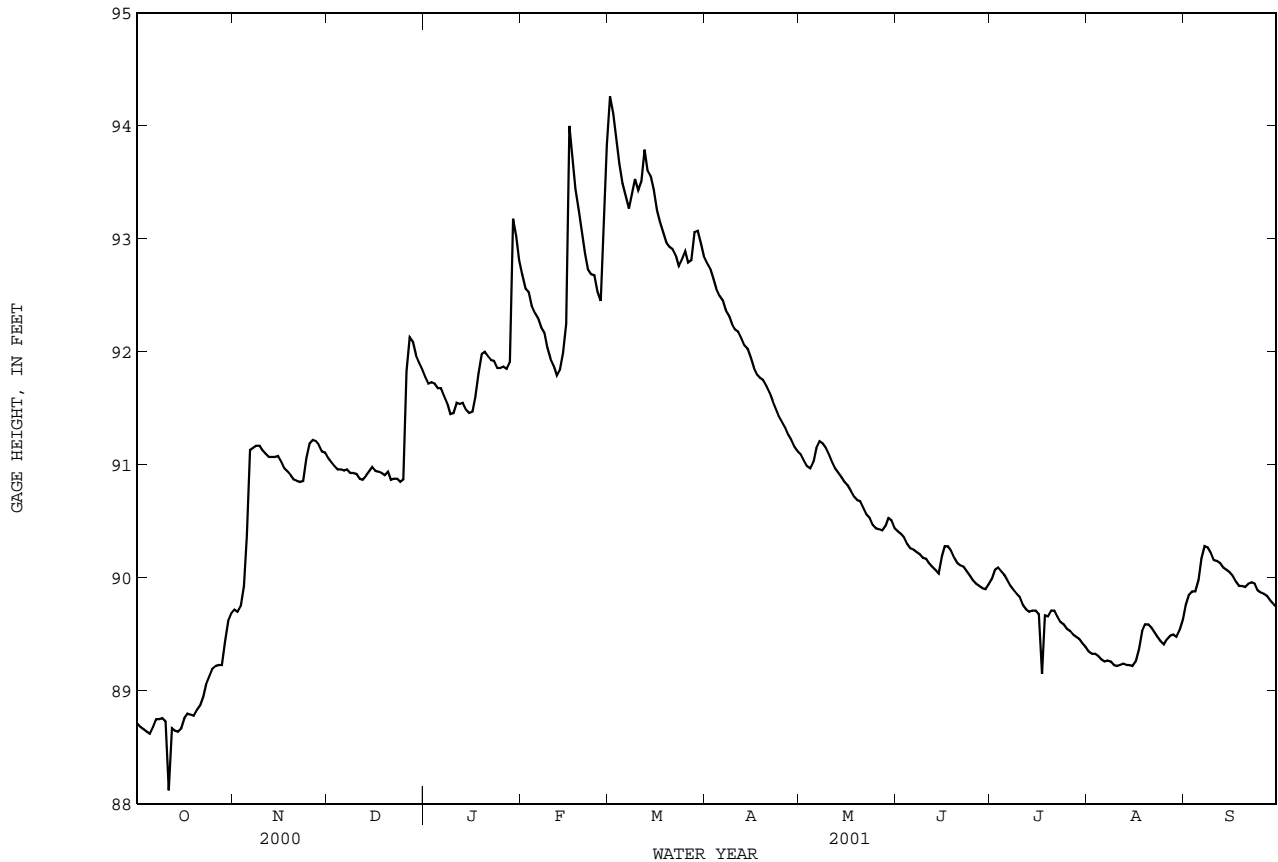
08045525 Farmers Branch at Westworth Village, Fort Worth, TX--Continued

Station Number: 324553097255401 Local Well Name: WELL C2  
 Latitude(NAD27): 324553 Longitude: 0972554

Department of Defense's observation well located 3,100 feet northwest of intersection of Roaring Springs Road and State Highway 183. Depth of well 12.0 feet. Diameter of casing 6 inches. Screened interval from 7.5 to 12.0 feet in alluvium aquifer. Gage datum 500.00 feet.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.71	89.72	91.06	91.78	92.68	94.26	92.79	91.09	90.41	89.99	89.35	89.76
2	88.68	89.70	91.02	91.72	92.56	94.11	92.74	91.04	90.39	90.07	89.33	89.85
3	88.66	89.75	90.99	91.73	92.53	93.90	92.65	90.99	90.36	90.09	89.33	89.88
4	88.64	89.93	90.96	91.72	92.41	93.67	92.56	90.97	90.30	90.06	89.31	89.88
5	88.62	90.37	90.96	91.68	92.35	93.49	92.50	91.03	90.26	90.03	89.28	89.98
6	88.68	91.13	90.95	91.68	92.30	93.38	92.46	91.15	90.25	89.98	89.26	90.17
7	88.75	91.15	90.96	91.61	92.22	93.27	92.37	91.21	90.23	89.93	89.27	90.28
8	88.75	91.17	90.93	91.55	92.17	93.39	92.32	91.19	90.21	89.89	89.26	90.27
9	88.76	91.17	90.93	91.45	92.04	93.53	92.25	91.15	90.18	89.86	89.23	90.22
10	88.73	91.13	90.92	91.46	91.94	93.43	92.20	91.09	90.17	89.83	89.22	90.16
11	88.12	91.10	90.88	91.55	91.88	93.51	92.18	91.03	90.13	89.76	89.23	90.15
12	88.67	91.07	90.87	91.54	91.79	93.79	92.12	90.97	90.10	89.72	89.24	90.13
13	88.65	91.07	90.90	91.55	91.84	93.61	92.06	90.93	90.07	89.70	89.23	90.09
14	88.64	91.07	90.94	91.49	91.99	93.56	92.03	90.89	90.04	89.71	89.23	90.07
15	88.67	91.08	90.98	91.46	92.25	93.43	91.95	90.85	90.19	89.71	89.22	90.05
16	88.76	91.03	90.95	91.47	94.00	93.25	91.86	90.82	90.28	89.68	89.26	90.02
17	88.80	90.97	90.94	91.60	93.69	93.15	91.80	90.77	90.28	89.15	89.37	89.97
18	88.79	90.94	90.93	91.81	93.44	93.06	91.77	90.72	90.24	89.67	89.53	89.93
19	88.78	90.91	90.91	91.98	93.26	92.97	91.75	90.69	90.18	89.66	89.59	89.93
20	88.83	90.87	90.94	92.00	93.06	92.93	91.70	90.68	90.13	89.71	89.59	89.92
21	88.87	90.86	90.87	91.96	92.87	92.91	91.64	90.62	90.11	89.71	89.56	89.95
22	88.95	90.85	90.88	91.93	92.73	92.86	91.57	90.56	90.10	89.66	89.52	89.96
23	89.06	90.86	90.88	91.92	92.69	92.76	91.50	90.53	90.06	89.61	89.48	89.95
24	89.13	91.06	90.85	91.86	92.68	92.82	91.43	90.47	90.02	89.59	89.44	89.89
25	89.20	91.19	90.87	91.86	92.53	92.89	91.38	90.44	89.98	89.55	89.41	89.87
26	89.22	91.22	91.83	91.87	92.45	92.79	91.33	90.43	89.95	89.53	89.46	89.86
27	89.23	91.21	92.13	91.85	93.03	92.81	91.27	90.42	89.93	89.50	89.49	89.84
28	89.23	91.18	92.09	91.91	93.83	93.06	91.22	90.46	89.91	89.48	89.50	89.80
29	89.44	91.12	91.97	93.18	---	93.07	91.16	90.53	89.90	89.46	89.48	89.77
30	89.62	91.11	91.91	93.02	---	92.96	91.12	90.51	89.94	89.42	89.54	89.74
31	89.69	---	91.85	92.81	---	92.85	---	90.44	---	89.39	89.63	---
MEAN	88.88	90.87	91.13	91.84	92.61	93.27	91.92	90.80	90.14	89.71	89.38	89.98
MAX	89.69	91.22	92.13	93.18	94.00	94.26	92.79	91.21	90.41	90.09	89.63	90.28
MIN	88.12	89.70	90.85	91.45	91.79	92.76	91.12	90.42	89.90	89.15	89.22	89.74



TRINITY RIVER BASIN

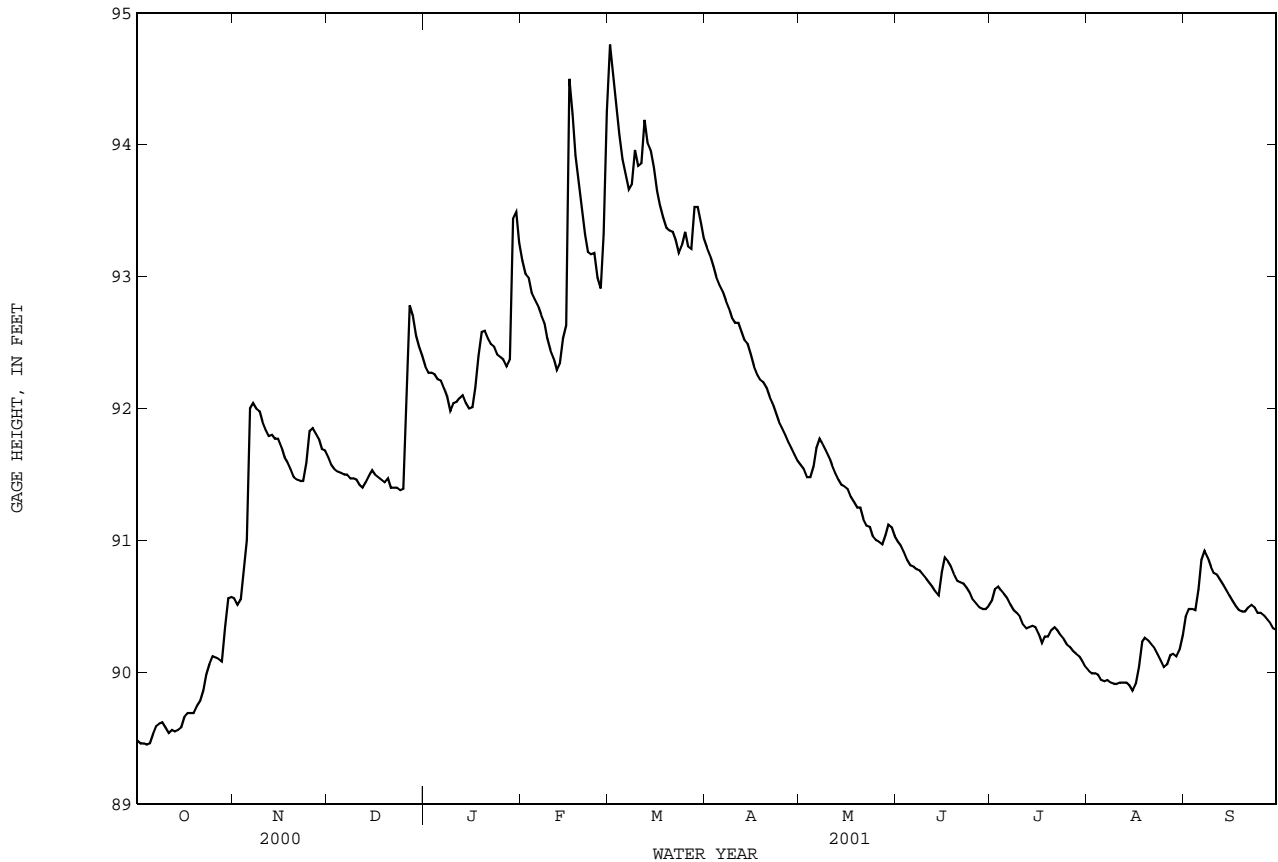
08045525 Farmers Branch at Westworth Village, Fort Worth, TX--Continued

Station Number: 324553097255601 Local Well Name: WELL C3  
 Latitude(NAD27): 324553 Longitude: 0972556

Department of Defense's observation well located 3,100 feet northwest of intersection of Roaring Springs Road and State Highway 183. Depth of well 9.85 feet. Diameter of casing 6 inches. Screened interval from 5.35 to 9.85 feet in alluvium aquifer. Gage datum 500.00 feet.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89.48	90.56	91.63	92.32	93.12	94.76	93.22	91.57	90.99	90.54	90.01	90.42
2	89.46	90.51	91.57	92.27	93.02	94.54	93.16	91.54	90.96	90.63	89.99	90.48
3	89.46	90.55	91.54	92.27	92.99	94.33	93.08	91.48	90.91	90.65	89.99	90.48
4	89.45	90.78	91.52	92.26	92.88	94.08	93.00	91.48	90.85	90.62	89.98	90.47
5	89.46	91.00	91.51	92.22	92.83	93.89	92.94	91.56	90.81	90.59	89.94	90.63
6	89.53	92.00	91.50	92.21	92.78	93.78	92.89	91.70	90.80	90.56	89.93	90.85
7	89.59	92.04	91.50	92.15	92.71	93.66	92.82	91.77	90.78	90.51	89.94	90.92
8	89.61	92.00	91.47	92.09	92.65	93.70	92.76	91.73	90.77	90.47	89.92	90.87
9	89.62	91.98	91.47	91.98	92.53	93.96	92.69	91.68	90.74	90.45	89.91	90.80
10	89.58	91.90	91.46	92.04	92.44	93.84	92.65	91.63	90.71	90.42	89.91	90.75
11	89.54	91.84	91.42	92.05	92.38	93.86	92.65	91.57	90.68	90.36	89.92	90.74
12	89.56	91.79	91.40	92.08	92.29	94.19	92.58	91.51	90.65	90.33	89.92	90.70
13	89.55	91.80	91.44	92.10	92.34	94.02	92.52	91.46	90.61	90.34	89.92	90.66
14	89.56	91.77	91.49	92.04	92.53	93.96	92.49	91.42	90.58	90.35	89.90	90.62
15	89.58	91.77	91.53	92.00	92.63	93.83	92.41	91.41	90.76	90.34	89.86	90.58
16	89.66	91.71	91.50	92.01	94.50	93.65	92.32	91.39	90.87	90.29	89.91	90.54
17	89.69	91.63	91.48	92.16	94.23	93.54	92.26	91.33	90.84	90.22	90.04	90.50
18	89.69	91.59	91.46	92.40	93.92	93.45	92.22	91.29	90.80	90.27	90.23	90.47
19	89.69	91.54	91.44	92.58	93.72	93.37	92.20	91.25	90.74	90.27	90.26	90.46
20	89.74	91.48	91.47	92.59	93.52	93.35	92.16	91.25	90.69	90.32	90.24	90.46
21	89.78	91.46	91.40	92.53	93.32	93.34	92.09	91.16	90.68	90.34	90.21	90.49
22	89.86	91.45	91.40	92.49	93.19	93.28	92.04	91.11	90.67	90.32	90.18	90.51
23	89.98	91.45	91.40	92.47	93.17	93.18	91.97	91.10	90.64	90.28	90.14	90.49
24	90.06	91.59	91.38	92.41	93.18	93.24	91.90	91.03	90.60	90.25	90.09	90.45
25	90.12	91.83	91.39	92.39	92.99	93.34	91.85	91.00	90.55	90.21	90.04	90.45
26	90.11	91.85	92.17	92.37	92.91	93.23	91.80	90.99	90.52	90.19	90.06	90.43
27	90.10	91.81	92.78	92.32	93.32	93.21	91.75	90.97	90.49	90.16	90.13	90.40
28	90.08	91.77	92.70	92.37	94.25	93.53	91.70	91.04	90.48	90.14	90.14	90.37
29	90.34	91.69	92.55	93.44	---	93.53	91.65	91.12	90.48	90.12	90.12	90.33
30	90.56	91.68	92.47	93.49	---	93.41	91.60	91.10	90.50	90.08	90.17	90.32
31	90.57	---	92.40	93.26	---	93.29	---	91.03	---	90.04	90.28	---
MEAN	89.78	91.56	91.67	92.37	93.08	93.69	92.38	91.34	90.70	90.34	90.04	90.55
MAX	90.57	92.04	92.78	93.49	94.50	94.76	93.22	91.77	90.99	90.65	90.28	90.92
MIN	89.45	90.51	91.38	91.98	92.29	93.18	91.60	90.97	90.48	90.04	89.86	90.32



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## TRINITY RIVER BASIN

08045800 Lake Weatherford near Weatherford, TX

LOCATION.--Lat 32°46'21", long 97°40'28", Parker County, Hydrologic Unit 12030102, in pumphouse 168 ft upstream from right end of dam on Clear Fork Trinity River, 2.4 mi downstream from Hays Branch, 3.9 mi upstream from Squaw Creek, and 7.3 mi east of Weatherford.

DRAINAGE AREA.--109 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1976 to May 1980, Aug. 1998 to current year.  
Water-quality records.--Chemical data: Oct. 1978 to Sept. 1979.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily contents, which are poor. The lake is formed by a rolled earthfilled dam 4,055 ft long. The dam was completed and deliberate impoundment began in Mar. 1957. The service spillway is a semi-circular drip inlet with a crest length of 162 ft located 550 ft to the right of the pumphouse. The drop inlet discharges into a 9 x 9 ft concrete conduit that extends 425 ft under the dam. The emergency spillway is an uncontrolled excavated split-level cut channel located at the right end of the dam. The low-flow outlet works consist of an 18 in diameter concrete pipe with a valve control assembly. At end of year, flow from 43.9 mi<sup>2</sup> above this station was partly affected at times by discharge from the flood-detention pools of 22 floodwater retarding structures with a combined detention capacity of 11,000 acre-ft. Records furnished by the city of Weatherford show that 1,030 acre-ft was diverted from the lake for municipal use during the period Oct. to Apr. and 869 acre-ft of sewage effluent was returned to a tributary downstream from station. Conservation pool storage is 18,650 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	914.0
Crest of Spillway.....	903.0
Invert of drop inlet (spillway).....	896.0
Invert of lowest gated outlet pipe.....	857.0

COOPERATION.--The capacity table was furnished by the Texas Water Development Board and designated Table 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 23,560 acre-ft Mar. 27, 1977, elevation 899.65 ft, from floodmark; minimum contents, 12,880 acre-ft, Jan. 9, 10, 1979, elevation, 889.99 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 20,400 acre-ft, Feb. 24, elevation, 897.43 ft; minimum contents, 14,200 acre-ft, Oct. 15, elevation, 891.84 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

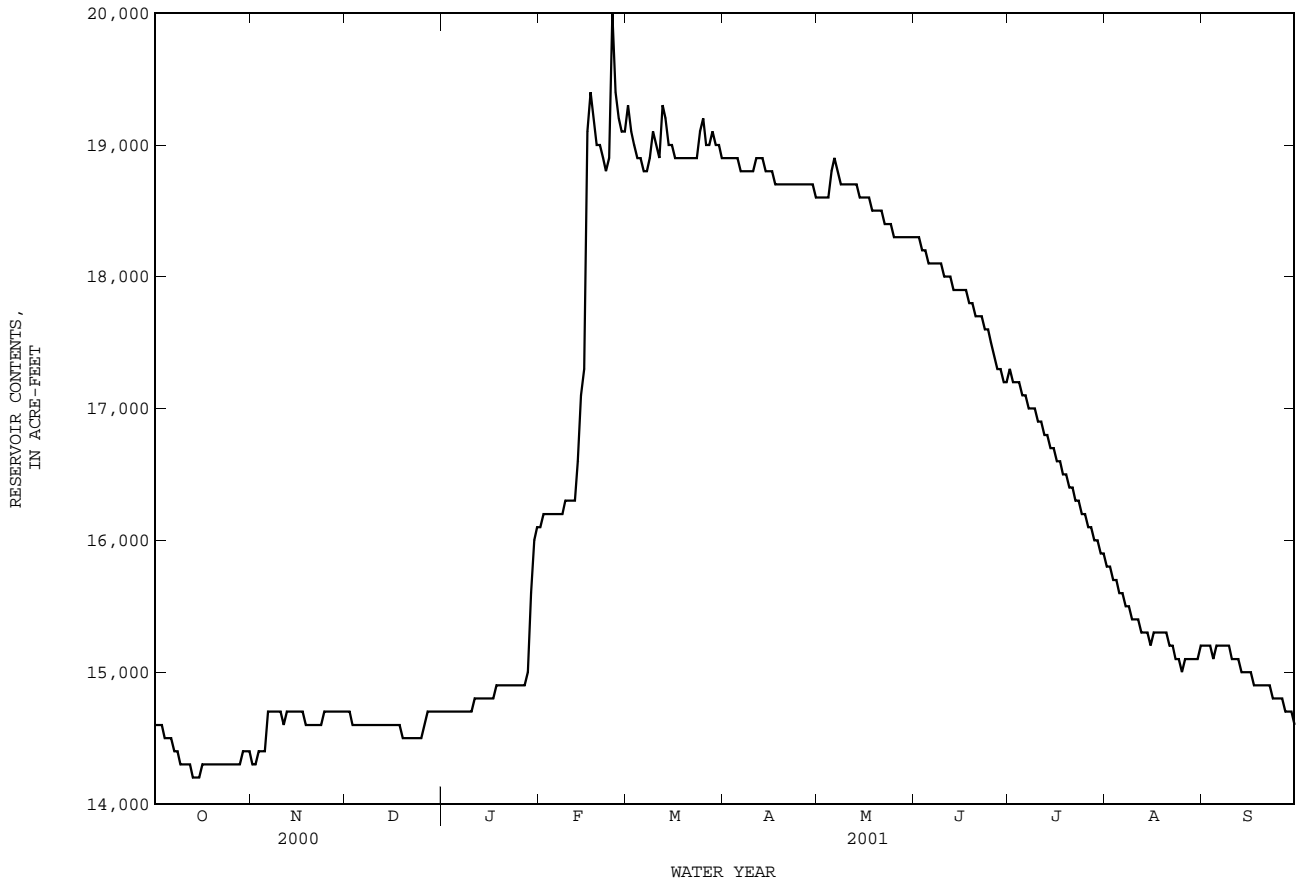
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14600	14300	14700	14700	16100	19300	18900	18600	18300	17300	15800	15200
2	14600	14300	14700	14700	16200	19100	18900	18600	18300	17200	15800	15200
3	14600	14400	14600	14700	16200	19000	18900	18600	18200	17200	15700	15200
4	14500	14400	14600	14700	16200	18900	18900	18600	18200	17200	15700	15100
5	14500	14400	14600	14700	16200	18900	18900	18800	18100	17100	15600	15200
6	14500	14700	14600	14700	16200	18800	18800	18900	18100	17100	15600	15200
7	14400	14700	14600	14700	16200	18800	18800	18800	18100	17000	15500	15200
8	14400	14700	14600	14700	16200	18900	18800	18700	18100	17000	15500	15200
9	14300	14700	14600	14700	16300	19100	18800	18700	18100	17000	15400	15200
10	14300	14700	14600	14700	16300	19000	18800	18700	18000	16900	15400	15100
11	14300	14600	14600	14800	16300	18900	18900	18700	18000	16900	15400	15100
12	14300	14700	14600	14800	16300	19300	18900	e18700	18000	16800	15300	15100
13	14200	14700	14600	14800	16600	19200	18900	e18700	17900	16800	15300	15000
14	14200	14700	14600	14800	17100	19000	18800	e18600	17900	16700	15300	15000
15	14200	14700	14600	14800	17300	19000	18800	e18600	17900	16700	15200	15000
16	14300	14700	14600	14800	19100	e18900	18800	e18600	17900	16600	15300	15000
17	14300	14700	14600	14800	19400	e18900	18700	e18600	17900	16600	15300	14900
18	14300	14600	14600	14900	19200	e18900	18700	e18500	17800	16500	15300	14900
19	14300	14600	14500	14900	19000	e18900	18700	e18500	17800	16500	15300	14900
20	14300	14600	14500	14900	19000	e18900	18700	e18500	17700	16400	15300	14900
21	14300	14600	14500	14900	18900	e18900	18700	e18500	17700	16400	15200	14900
22	14300	14600	14500	14900	18800	18900	18700	18400	17700	16300	15200	14900
23	14300	14600	14500	14900	18900	18900	18700	18400	17600	16300	15100	14800
24	14300	14700	14500	14900	20000	19100	18700	18400	17600	16200	15100	14800
25	14300	14700	14500	14900	19400	19200	18700	18300	17500	16200	15000	14800
26	14300	14700	14600	14900	19200	19000	18700	18300	17400	16100	15100	14800
27	14300	14700	14700	14900	19100	19000	18700	18300	17300	16100	15100	14700
28	14300	14700	14700	15000	19100	19100	18700	18300	17300	16000	15100	14700
29	14400	14700	14700	15600	---	19000	18700	18300	17200	16000	15100	14700
30	14400	14700	14700	16000	---	19000	18600	18300	17200	15900	15100	14600
31	14400	---	14700	16100	---	18900	---	18300	---	15900	15200	---
MEAN	14400	14600	14600	14900	17700	19000	18800	18500	17800	16600	15300	15000
MAX	14600	14700	14700	16100	20000	19300	18900	18900	18300	17300	15800	15200
MIN	14200	14300	14500	14700	16100	18800	18600	18300	17200	15900	15000	14600
(+)	892.00	892.34	892.38	893.67	896.32	896.20	895.94	895.64	894.72	893.46	892.81	892.30
(@)	-200	+300	0	+1400	+3000	-200	-300	-300	-1100	-1300	-700	-600
CAL YR 2000	MAX 18900	MIN 13100	(@) +1000									
WTR YR 2001	MAX 20000	MIN 14200	(@) 0									

e Estimated

(+) Elevation, in feet, at end of month.

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

08045800 Lake Weatherford near Weatherford, TX--Continued



## TRINITY RIVER BASIN

08045850 Clear Fork Trinity River near Weatherford, TX

LOCATION.--Lat 32°44'25", long 97°39'06", Parker County, Hydrologic Unit 12030102, near left end of bridge on weigh station exit road associated with Interstate Highway 20, 150 ft downstream from Squaw Creek, 2.8 mi downstream from Lake Weatherford Dam on the Clear Fork Trinity River, 3.8 mi upstream from South Fork Trinity River and 8.5 mi east of county courthouse in Weatherford.

DRAINAGE AREA.--121 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1980 to Sept. 1985, Oct. 1985 to Sept. 1998 (peaks above base discharge), Oct. 1998 to current year.  
Water-quality records.--Chemical data: Oct. 1980 to Sept. 1982. Biochemical data: Oct. 1980 to Sept. 1982.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 810.00 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in 1980 at least 10% the contributing drainage area has been regulated. No known diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.90	1.0	1.3	22	323	65	4.2	1.5	1.2	.58	.00
2	.62	.85	1.0	1.2	10	225	61	4.5	1.1	1.1	.58	.00
3	.58	2.6	1.1	1.2	5.8	171	60	3.7	1.2	.97	.59	.00
4	.62	1.4	1.1	1.3	4.2	139	59	5.6	1.1	.94	.58	.21
5	.60	35	1.1	1.2	3.5	109	52	37	1.1	.90	.58	.07
6	.57	6.6	1.1	1.3	3.3	95	45	117	1.1	.89	.57	.08
7	.72	1.2	1.1	1.3	3.3	87	45	60	1.2	.86	.58	.00
8	.70	3.1	1.1	1.2	3.2	120	37	32	1.3	.83	.61	.00
9	.70	1.2	1.1	1.3	3.6	224	29	18	1.1	.84	.61	.00
10	.74	1.0	1.2	1.6	3.4	167	26	10	1.1	.83	.75	.00
11	.71	1.1	1.1	1.8	3.1	147	57	7.1	1.1	.82	.90	.00
12	.70	2.4	1.1	1.4	3.1	350	69	7.4	1.0	.80	.79	.00
13	.71	1.4	1.5	1.4	50	275	53	5.9	1.0	.78	.96	.00
14	.74	.97	1.3	1.3	27	185	43	3.2	5.9	.79	.98	.00
15	3.7	1.0	1.2	1.3	38	172	26	2.4	2.4	.80	.79	.00
16	1.6	1.0	1.1	1.3	509	98	20	2.3	1.1	.77	1.2	.00
17	.80	1.0	1.1	2.7	453	89	16	2.0	1.1	.74	11	.00
18	.87	1.0	1.1	3.1	261	87	11	2.2	1.0	.74	.28	.00
19	.82	1.0	1.1	2.1	202	86	9.4	2.0	1.0	.75	.25	.00
20	.88	1.0	1.1	1.5	158	79	12	2.1	1.1	.76	.27	.00
21	.98	1.0	1.1	2.0	133	74	15	14	1.2	.76	.22	.17
22	1.6	1.1	1.1	2.2	101	64	15	2.6	1.1	.59	.23	.00
23	.99	1.1	1.2	2.3	178	53	27	1.6	1.0	.88	.28	.00
24	1.3	5.0	1.1	2.3	583	170	15	1.8	1.0	.64	.24	.00
25	.91	1.3	2.7	2.2	416	188	12	1.4	1.0	.52	.21	.05
26	.81	1.1	18	2.1	257	123	8.3	1.3	.95	.55	5.0	.05
27	.79	1.0	2.5	2.1	239	102	7.2	1.5	.90	.56	.33	.03
28	.92	1.0	3.1	13	232	155	7.5	2.3	.97	.60	.28	.02
29	4.5	.93	2.0	81	---	140	7.1	1.5	.97	.59	.30	.02
30	1.0	1.0	1.4	27	---	101	5.0	1.3	1.4	.60	2.8	.01
31	.88	---	1.4	25	---	81	---	1.5	---	.59	.01	---
TOTAL	32.65	80.25	58.2	192.0	3905.5	4479	914.5	359.4	38.99	23.99	33.15	0.71
MEAN	1.05	2.67	1.88	6.19	139	144	30.5	11.6	1.30	.77	1.07	.024
MAX	4.5	35	18	81	583	350	69	117	5.9	1.2	11	.21
MIN	.57	.85	1.0	1.2	3.1	53	5.0	1.3	.90	.52	.01	.00
AC-FT	65	159	115	381	7750	8880	1810	713	77	48	66	1.4

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001h, BY WATER YEAR (WY)

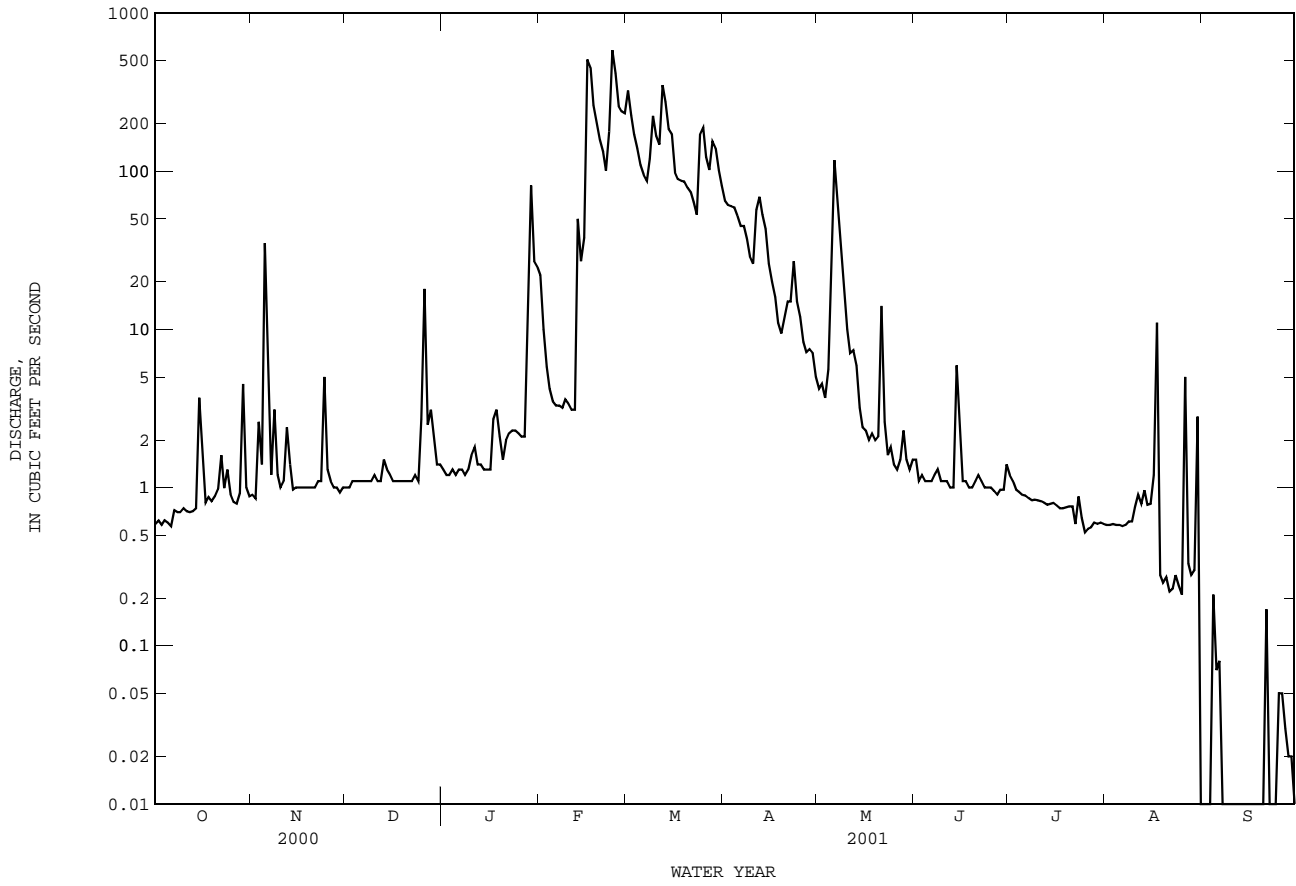
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	31.8	36.2	29.3	14.6	41.2	43.6	42.7	66.2	47.3	9.00	3.93	2.77										
MAX	294	341	384	110	215	144	399	418	509	75.7	12.8	9.57										
(WY)	1982	1982	1992	1992	1997	2001	1990	1989	1989	1982	1997	1994										
MIN	.59	.51	.000	.96	.94	1.00	1.06	.71	.46	.032	.000	.024										
(WY)	2000	1985	1991	2000	2000	2000	2000	1984	1998	1998	1998	2001										

## SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001h	
ANNUAL TOTAL	572.29		10118.34			
ANNUAL MEAN	1.56		27.7		31.3	
HIGHEST ANNUAL MEAN					106	
LOWEST ANNUAL MEAN					.91	
HIGHEST DAILY MEAN	35	Nov 5	583	Feb 24	3180	Apr 27 1990
LOWEST DAILY MEAN	.24	Apr 8	.00	Sep 1	.00	Sep 12 1984
ANNUAL SEVEN-DAY MINIMUM	.38	Apr 4	.00	Sep 7	.00	Dec 26 1987
MAXIMUM PEAK FLOW			795	Feb 16	3810	Apr 27 1990
MAXIMUM PEAK STAGE			12.90	Feb 16	22.07	Apr 27 1990
INSTANTANEOUS LOW FLOW					.00	Sep 12 1984
ANNUAL RUNOFF (AC-FT)	1140		20070		22690	
10 PERCENT EXCEEDS	2.6		91		46	
50 PERCENT EXCEEDS	.87		1.2		2.6	
90 PERCENT EXCEEDS	.56		.26		.19	

h see PERIOD OF RECORD paragraph

08045850 Clear Fork Trinity River near Weatherford, TX--Continued



## TRINITY RIVER BASIN

08047000 Clear Fork Trinity River near Benbrook, TX

LOCATION.--Lat 32°39'54", long 97°26'30", Tarrant County, Hydrologic Unit 12030102, on left bank 1.5 mi downstream from Benbrook Dam, 1.7 mi southeast of Benbrook, 2.9 mi upstream from Marys Creek, and 13.1 mi upstream from mouth.

DRAINAGE AREA.--431 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1947 to current year.

REVISED RECORDS.--WDR TX-89-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 604.22 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since water year 1953, at least 10% of contributing drainage area has been regulated. There is a diversion 1.0 mi upstream for Pecan Valley Golf Course. No flow at times most years.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1948-52) prior to regulation by Benbrook Lake, 105 ft<sup>3</sup>/s (76,070 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1948-52).--Maximum discharge, c82,900 ft<sup>3</sup>/s May 17, 1949 (gage height, 28.72 ft); no flow at times most years. Maximum stage since at least 1922, that of May 17, 1949.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	6.2	4.2	1.8	1.5	22	1260	16	22	66	14	20
2	49	11	3.8	1.5	1.5	162	867	17	22	18	15	20
3	43	9.1	5.4	1.6	1.5	427	436	17	21	17	16	20
4	36	2.6	5.5	1.6	1.7	421	428	25	20	16	16	21
5	32	28	4.9	1.5	1.7	704	423	20	18	16	16	23
6	32	4.4	5.2	1.6	2.0	1360	327	33	17	15	15	20
7	32	1.9	6.0	2.2	2.3	1570	198	29	18	15	15	20
8	32	3.0	5.8	2.3	2.7	1600	197	525	18	16	16	18
9	32	1.8	4.4	2.9	2.9	1620	126	407	18	16	15	21
10	31	1.6	5.1	5.9	1.6	1610	21	25	17	15	14	19
11	33	1.5	4.8	3.9	1.9	1640	22	23	18	15	15	17
12	35	5.1	6.0	2.9	2.2	777	19	23	18	15	16	15
13	35	1.7	9.4	3.3	3.1	708	19	24	17	15	15	15
14	35	1.6	5.6	3.9	1.9	1230	20	24	26	15	28	15
15	46	1.5	4.8	3.9	21	1230	19	24	19	14	66	15
16	22	1.6	4.9	5.0	33	1230	19	24	18	14	67	16
17	1.6	1.5	5.0	4.9	2.3	1230	19	25	17	14	51	16
18	13	1.6	5.1	3.9	2.1	1230	18	26	16	14	15	17
19	35	1.6	4.9	1.6	2.2	1230	17	25	17	14	15	17
20	36	1.5	4.1	1.5	244	1230	19	25	17	14	41	29
21	38	1.8	4.2	1.7	790	1230	18	25	23	14	64	18
22	47	2.4	4.4	1.7	1040	1230	17	25	17	14	66	15
23	22	3.0	4.8	2.0	1030	1230	17	24	17	14	68	15
24	1.8	7.9	3.5	2.0	1020	1230	45	23	17	14	68	13
25	2.1	1.6	18	1.6	1010	1240	66	24	17	14	68	13
26	2.5	1.8	16	2.4	1010	981	66	25	17	15	75	14
27	3.1	1.9	2.2	2.8	678	858	47	25	17	15	68	13
28	3.8	2.2	1.9	4.2	31	855	31	27	16	14	56	13
29	16	3.5	1.9	16	---	850	29	33	16	14	56	11
30	2.2	3.4	1.9	1.7	---	1020	23	51	19	14	58	11
31	3.5	---	2.1	1.5	---	1260	---	23	---	12	29	---
TOTAL	810.6	118.3	165.8	95.3	6942.1	33215	4833	1662	550	508	1157	510
MEAN	26.1	3.94	5.35	3.07	248	1071	161	53.6	18.3	16.4	37.3	17.0
MAX	58	28	18	16	1040	1640	1260	525	26	66	75	29
MIN	1.6	1.5	1.9	1.5	1.5	22	17	16	16	12	14	11
AC-FT	1610	235	329	189	13770	65880	9590	3300	1090	1010	2290	1010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001z, BY WATER YEAR (WY)

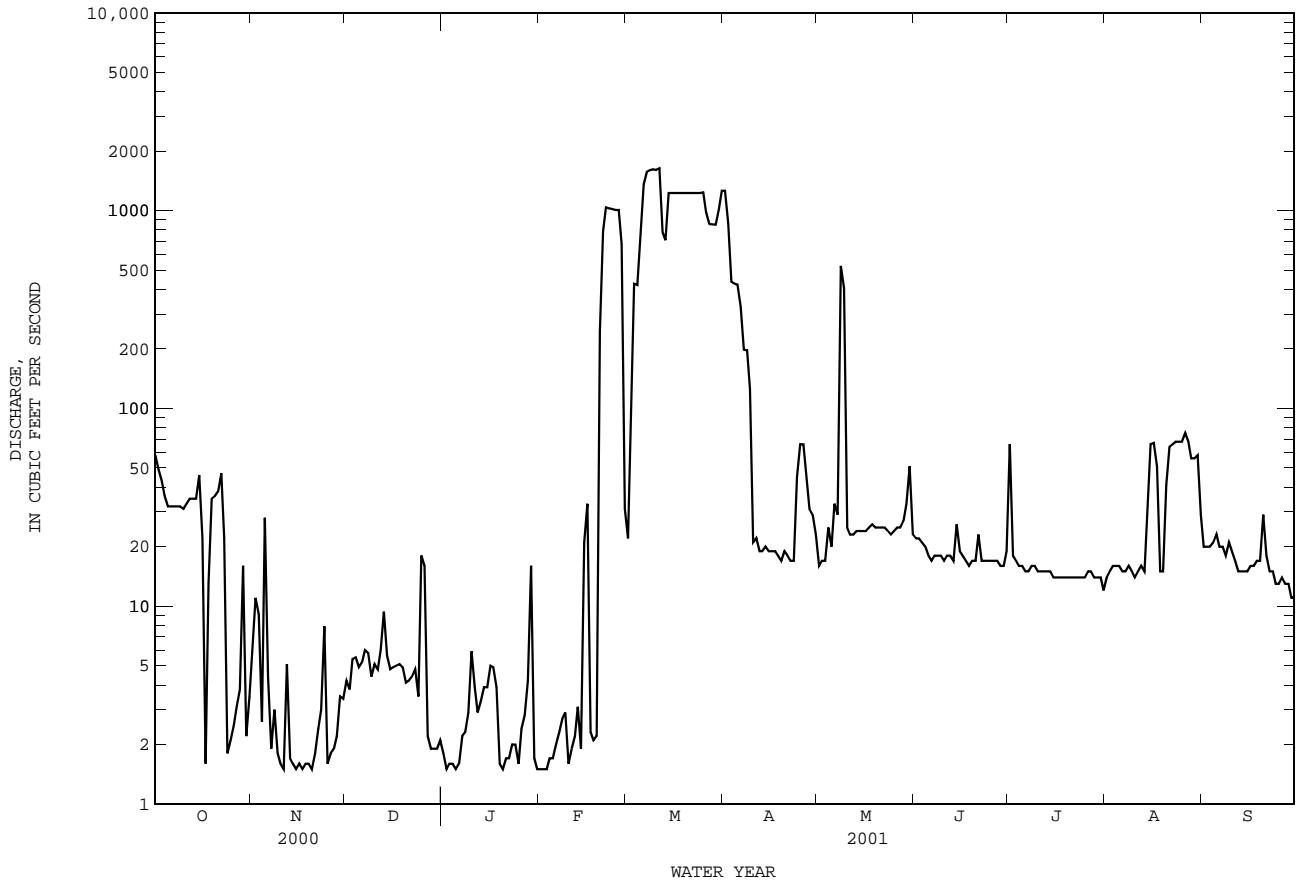
MEAN	23.1	89.8	57.9	80.8	91.2	187	112	219	210	58.1	25.2	18.0
MAX	215	1479	680	1845	792	1734	881	2351	1804	1070	198	164
(WY)	1994	1992	1992	1992	1992	1997	1977	1990	1957	1989	1979	1962
MIN	.000	.053	.042	.000	.000	.13	.10	.000	.000	.029	.000	.000
(WY)	1953	1971	1954	1953	1953	1953	1959	1959	1953	1953	1953	1953

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1953 - 2001z

ANNUAL TOTAL	18390.7	50567.1	
ANNUAL MEAN	50.2	139	97.6
HIGHEST ANNUAL MEAN			514
LOWEST ANNUAL MEAN			.27
HIGHEST DAILY MEAN	1620	Jun 7	1640
LOWEST DAILY MEAN	1.5	Nov 11	1.5
ANNUAL SEVEN-DAY MINIMUM	1.6	Nov 14	1.6
MAXIMUM PEAK FLOW			2030
MAXIMUM PEAK STAGE			7.63
ANNUAL RUNOFF (AC-FT)	36480	100300	70730
10 PERCENT EXCEEDS	63	586	197
50 PERCENT EXCEEDS	6.4	17	6.8
90 PERCENT EXCEEDS	2.0	1.9	.10

c From rating curve extended above 11,000 ft<sup>3</sup>/s on basis of velocity-area studies and slope-area measurement of 82,900 ft<sup>3</sup>/s.  
z Period of regulated streamflow.

08047000 Clear Fork Trinity River near Benbrook, TX--Continued



## TRINITY RIVER BASIN

08047050 Marys Creek at Benbrook, TX

LOCATION.--Lat 32°41'42", long 97°26'49", Tarrant County, Hydrologic Unit 12030102, near left end of upstream side of bridge, 0.75 mi north of IH-20 on Wiscott Road in Benbrook, and 0.25 mi upstream from confluence with Clear Fork Trinity River.

DRAINAGE AREA.--24 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 604.97 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. No known regulation. Low flow is affected at times by diversions from small dams upstream. No flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	3.3	25	32	72	313	63	33	7.4	105	.17	7.4
2	.07	17	18	30	67	204	60	35	6.4	47	.08	1.7
3	.06	62	18	29	61	202	54	30	5.4	36	.07	1.2
4	.29	21	18	33	56	157	51	57	5.5	26	.09	47
5	.04	144	18	25	54	109	47	65	3.4	23	.09	30
6	.03	92	17	23	52	90	49	159	2.7	15	.04	5.8
7	.08	21	15	23	52	84	39	91	2.6	8.7	.03	2.1
8	.03	60	16	20	49	226	34	45	4.0	5.9	.03	1.2
9	.07	32	13	21	59	211	34	32	2.7	4.1	.03	3.8
10	.22	18	12	35	47	116	34	27	1.8	3.0	.03	2.0
11	.81	14	9.9	38	45	163	77	30	1.5	3.0	.04	2.1
12	.46	35	8.5	27	45	221	48	28	1.2	5.6	.03	.24
13	.47	30	27	25	194	96	40	23	.98	3.0	.03	.17
14	.41	19	28	25	129	98	36	22	64	2.3	.03	.15
15	19	17	21	24	257	92	32	21	93	5.6	3.6	.13
16	4.5	18	17	30	1840	70	26	19	20	.71	9.0	.19
17	.65	14	6.6	72	173	68	28	17	12	.20	58	.08
18	.68	12	6.0	85	105	68	28	15	8.5	.39	1.7	.07
19	.73	11	4.4	63	88	64	26	16	6.4	.37	.26	.07
20	.65	11	4.5	46	76	56	27	16	6.2	.19	.10	7.7
21	1.8	9.2	3.6	43	68	50	27	14	36	.19	.09	8.6
22	24	13	3.4	37	62	47	27	13	45	.16	.09	.84
23	1.5	20	3.0	35	295	44	29	13	18	.11	.08	4.2
24	3.9	88	2.7	33	297	256	28	13	12	.33	.08	1.4
25	.68	46	34	32	131	133	26	12	9.8	.26	.08	.46
26	1.9	32	119	31	87	84	26	17	7.1	.11	5.8	.31
27	.47	30	68	35	249	137	27	13	6.5	.08	.63	.26
28	1.8	30	50	72	366	214	30	38	8.3	.06	.08	.20
29	53	35	43	324	---	123	30	8.9	16	.29	.08	.20
30	3.7	28	35	122	---	84	31	6.4	37	.20	35	.28
31	1.1	---	34	86	---	71	---	10	---	.12	70	---
TOTAL	123.19	982.5	698.6	1556	5076	3951	1114	939.3	451.38	296.97	185.46	129.85
MEAN	3.97	32.8	22.5	50.2	181	127	37.1	30.3	15.0	9.58	5.98	4.33
MAX	53	144	119	324	1840	313	77	159	93	105	70	47
MIN	.03	3.3	2.7	20	45	44	26	6.4	.98	.06	.03	.07
AC-FT	244	1950	1390	3090	10070	7840	2210	1860	895	589	368	258

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	1998	1999	2000	2001	2000	2001	2000	1999	2000	1998	2000	2001
MEAN	4.84	15.8	12.1	21.5	66.0	51.2	22.5	42.5	47.4	4.51	1.68	1.71
MAX	6.53	32.8	22.5	50.2	181	127	37.1	87.5	130	9.58	5.98	4.33
(WY)	1999	2001	2001	2001	2001	2001	2001	1999	2000	2001	2001	2001
MIN	3.97	5.69	3.73	2.36	6.80	11.1	14.8	9.71	1.33	.21	.18	.12
(WY)	2001	2000	2000	2000	2000	2000	1999	2000	1998	1998	2000	2000

## SUMMARY STATISTICS

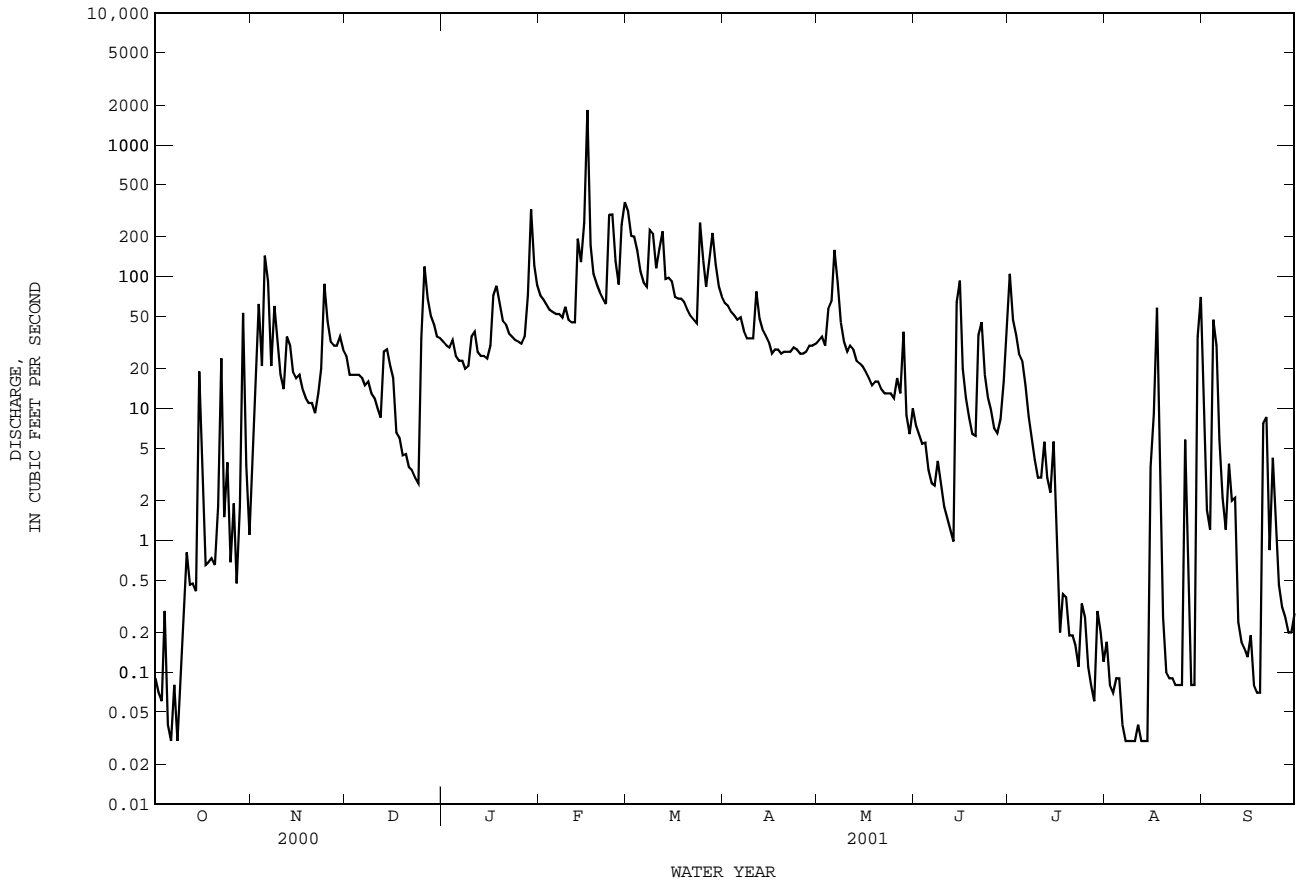
## FOR 2000 CALENDAR YEAR

## FOR 2001 WATER YEAR

## WATER YEARS 1998 - 2001

ANNUAL TOTAL	7179.96	15504.25		
ANNUAL MEAN	19.6	42.5	25.5	
HIGHEST ANNUAL MEAN			42.5	2001
LOWEST ANNUAL MEAN			15.8	2000
HIGHEST DAILY MEAN	2880	Jun 4	2880	Jun 4 2000
LOWEST DAILY MEAN	.02	Sep 13	.00	Aug 21 1998
ANNUAL SEVEN-DAY MINIMUM	.03	Sep 8	.00	Aug 20 1998
MAXIMUM PEAK FLOW			11900	Feb 16 2000
MAXIMUM PEAK STAGE			12.70	Feb 16 2000
ANNUAL RUNOFF (AC-FT)	14240	30750	18450	Jun 4 2000
10 PERCENT EXCEEDS	35	92	49	
50 PERCENT EXCEEDS	2.8	19	3.2	
90 PERCENT EXCEEDS	.07	.12	.08	

08047050 Marys Creek at Benbrook, TX--Continued



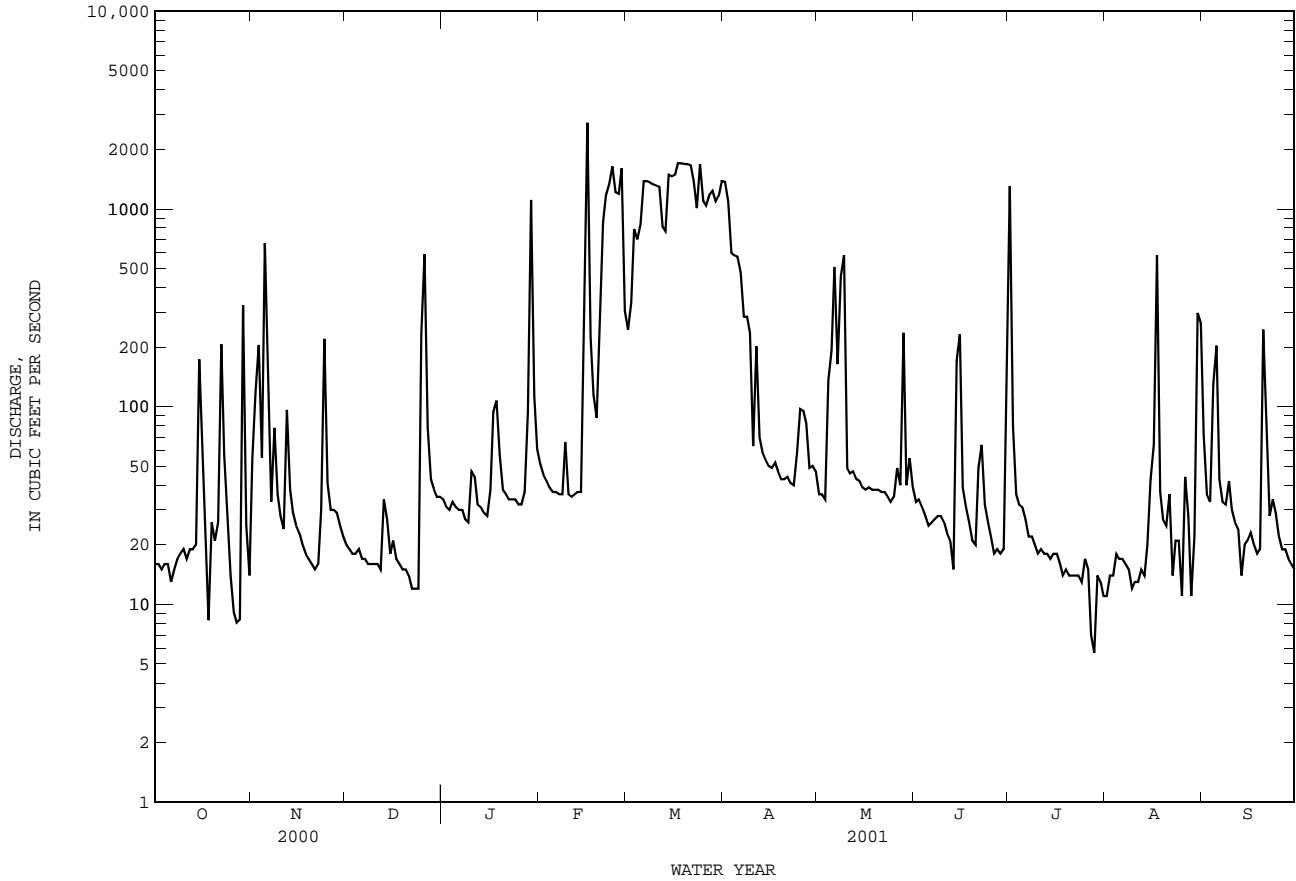




08047500 Clear Fork Trinity River at Fort Worth, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001z	
ANNUAL TOTAL	24922.41		75391.6		136	
ANNUAL MEAN	68.1		207		660	
HIGHEST ANNUAL MEAN					1992	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	3860	Jun 4	2720	Feb 16	11000	Mar 11 1990
LOWEST DAILY MEAN	.34	Aug 9	5.7	Jul 28	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	.87	Aug 6	11	Jul 27	.00	Oct 1 1952
MAXIMUM PEAK FLOW			10300	Feb 16	20900	May 2 1990
MAXIMUM PEAK STAGE			13.75	Feb 16	16.80	May 2 1990
ANNUAL RUNOFF (AC-FT)	49430		149500		98810	
10 PERCENT EXCEEDS	100		846		299	
50 PERCENT EXCEEDS	15		34		16	
90 PERCENT EXCEEDS	5.6		15		1.2	

z Period of regulated streamflow.



## TRINITY RIVER BASIN

08048000 West Fork Trinity River at Fort Worth, TX

LOCATION.--Lat 32°45'39", long 97°19'56", Tarrant County, Hydrologic Unit 12030102, on left bank 125 ft upstream from Texas Electric Service Co. concrete dam, 980 ft downstream from centerline of Paddock Viaduct (North Main Street) at Fort Worth, 2,600 ft downstream from Clear Fork Trinity River and at mile 556.8.

DRAINAGE AREA.--2,615 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1920 to current year. Gage-height records collected in this vicinity since 1910 are contained in reports of the National Weather Service.

Water-quality records.--Chemical data: Oct. 1967 to Sept. 1976. Biochemical data: Oct. 1967 to Sept. 1976.

REVISED RECORDS.--WSP 1392: 1925. WSP 1922: Drainage area.

GAGE.--Water-stage recorder and concrete dam control with angle-iron-crested notch for flow below 50 ft<sup>3</sup>/s. Datum of gage is 519.24 ft above sea level. Prior to Aug. 22, 1954, at site 1,200 ft upstream at same datum. Aug. 22, 1954, to Oct. 15, 1955, at site 2,000 ft upstream at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Oct. 1920, at least 10% of contributing drainage area has been regulated. At times, flow is sustained by releases from the flood-detention pool of Benbrook Lake. The city of Fort Worth diverts water from river upstream from station and from Cedar Creek Reservoir (station 08063010 for municipal and industrial uses and returns wastewater effluent to river downstream from West Fork Trinity River at Beach Street (station 08048543). There are many small diversions upstream from station. Maximum stages have been affected by levee construction, levee breaks and channel rectification. No flow at times many years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1866, that of May 17, 1949.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

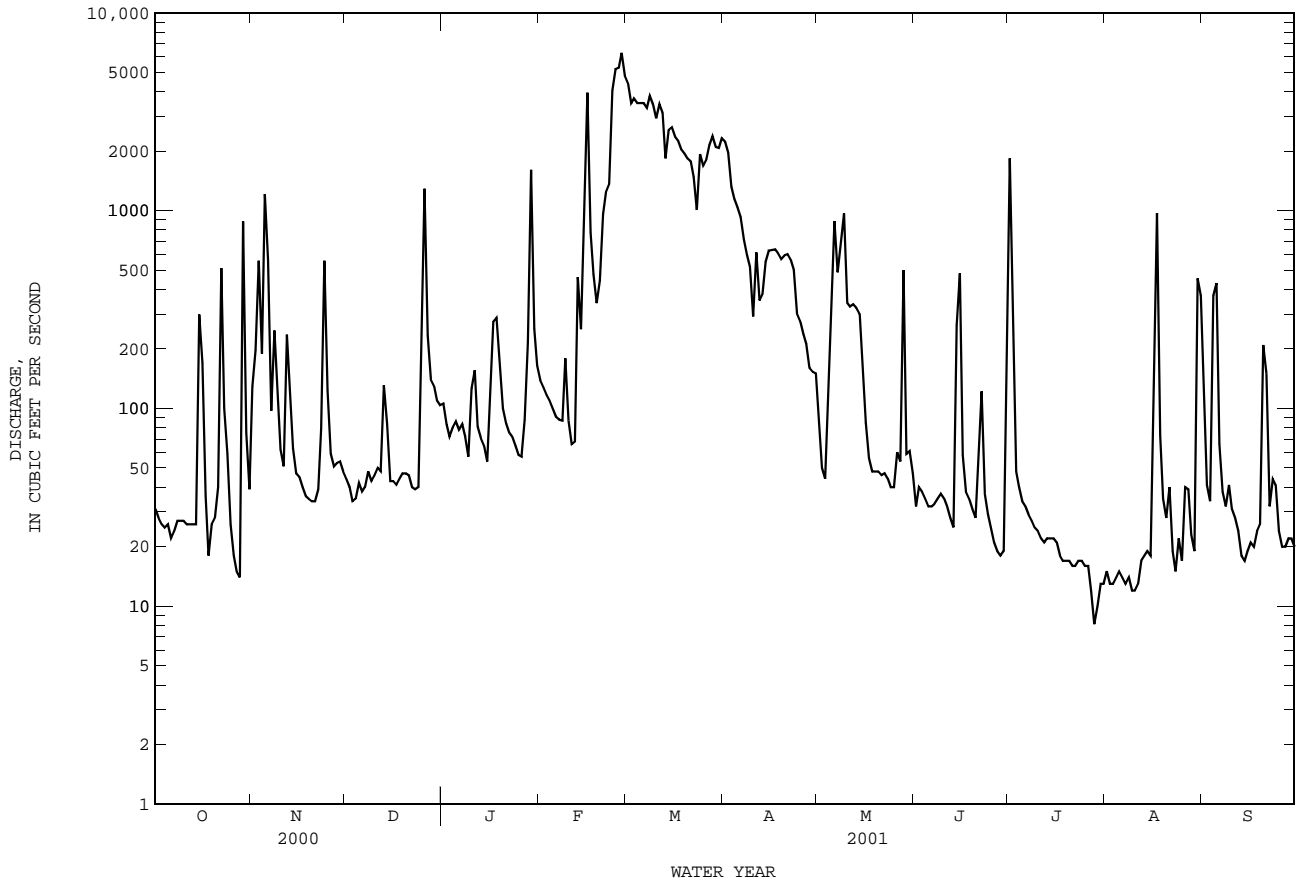
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	129	44	106	139	4420	2240	83	32	1840	15	127
2	28	197	40	83	128	3490	1970	50	40	154	13	41
3	26	559	34	72	117	3690	1320	44	38	48	13	34
4	25	189	35	80	110	3510	1150	140	35	40	14	371
5	26	1210	42	86	100	3500	1040	420	32	34	15	430
6	22	564	38	78	91	3510	928	886	32	32	14	66
7	24	97	40	83	88	3310	715	488	33	29	13	38
8	27	248	48	72	87	3810	595	690	35	27	14	32
9	27	109	43	57	179	3450	519	969	37	25	12	41
10	27	62	46	126	87	2930	292	343	35	24	12	31
11	26	51	50	156	66	3450	615	327	32	22	13	28
12	26	236	48	81	68	3120	351	336	28	21	17	24
13	26	126	131	71	462	1840	377	323	25	22	18	18
14	26	63	84	65	251	2560	551	300	263	22	19	17
15	298	47	43	54	1020	2640	629	168	482	22	18	19
16	170	45	43	110	3950	2370	634	85	58	21	112	21
17	36	40	41	275	776	2270	639	56	38	18	972	20
18	18	36	44	287	477	2050	611	48	35	17	73	24
19	26	35	47	160	341	1950	571	48	31	17	35	26
20	28	34	47	100	445	1840	595	48	28	17	28	209
21	40	34	46	84	962	1780	604	46	58	16	40	150
22	512	39	40	76	1240	1490	569	47	122	16	19	32
23	100	79	39	72	1360	1010	503	44	37	17	15	44
24	59	558	40	65	4050	1930	303	40	29	17	22	41
25	26	123	295	58	5210	1690	277	40	25	16	17	24
26	18	59	1290	57	5290	1800	238	60	21	16	40	20
27	15	51	234	88	6300	2140	212	54	19	12	39	20
28	14	53	140	215	4830	2380	160	501	18	8.1	23	22
29	881	54	130	1610	---	2100	153	59	19	10	19	22
30	75	48	110	253	---	2080	150	61	145	13	454	20
31	39	---	104	165	---	2330	---	47	---	13	371	---
TOTAL	2722	5175	3456	4945	38224	80440	19511	6851	1862	2606.1	2499	2012
MEAN	87.8	172	111	160	1365	2595	650	221	62.1	84.1	80.6	67.1
MAX	881	1210	1290	1610	6300	4420	2240	969	482	1840	972	430
MIN	14	34	34	54	66	1010	150	40	18	8.1	12	17
AC-FT	5400	10260	6850	9810	75820	159600	38700	13590	3690	5170	4960	3990

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2001, BY WATER YEAR (WY)

MEAN	287	284	269	245	393	539	603	1125	774	240	115	150
MAX	4548	3855	6071	3521	4130	3523	5595	12430	10240	3030	1447	2482
(WY)	1982	1982	1992	1992	1997	1998	1942	1990	1989	1941	1950	1962
MIN	.12	3.64	5.02	6.08	5.57	4.72	7.71	15.2	5.73	1.33	.000	.000
(WY)	1940	1956	1935	1930	1940	1940	1930	1959	1954	1956	1956	1930

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1921 - 2001	
ANNUAL TOTAL	42586.1		170303.1			
ANNUAL MEAN	116		467		419	
HIGHEST ANNUAL MEAN					1823	
LOWEST ANNUAL MEAN					15.6	
HIGHEST DAILY MEAN	5380	Jun 4	6300	Feb 27	47300	Apr 25 1922
LOWEST DAILY MEAN	3.5	Aug 9	8.1	Jul 28	.00	Aug 2 1924
ANNUAL SEVEN-DAY MINIMUM	4.4	Aug 6	12	Jul 27	.00	Jul 24 1925
MAXIMUM PEAK FLOW			13100		85000	
MAXIMUM PEAK STAGE			5.63		25.91	
ANNUAL RUNOFF (AC-FT)	84470		337800		303300	
10 PERCENT EXCEEDS	239		1790		1070	
50 PERCENT EXCEEDS	26		59		40	
90 PERCENT EXCEEDS	7.8		18		6.0	

08048000 West Fork Trinity River at Fort Worth, TX--Continued



TRINITY RIVER BASIN

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX

LOCATION.--Lat 32°45'06", long 97°17'21", Tarrant County, Hydrologic Unit 12030102, on downstream side of bridge on Beach Street, 1,700 ft downstream from Sycamore Creek, 0.9 mi downstream from Riverside Drive bridge, 2.6 mi east of the Tarrant County Courthouse and at mile 549.6.

DRAINAGE AREA.--2,685 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 478.70 ft above sea level. Satellite telemeter at station.

REMARKS.--Records fair. Since installation of gage in Oct. 1976, at least 10% of contributing drainage area has been regulated. At times, flow is sustained by releases from the flood-detention pool of Benbrook Lake. There are many diversions upstream from this station for municipal, industrial and other uses.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1866 probably occurred in May 1949 (stage and discharge unknown). Maximum stages have been affected by levee construction, levee breaks, and channel rectification.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	190	55	118	145	5390	2370	85	57	3520	16	331
2	30	186	54	99	124	3900	2120	50	63	356	17	90
3	32	881	49	92	113	4070	1360	40	62	84	26	55
4	31	365	48	85	103	3820	1160	126	58	55	20	491
5	31	1850	52	79	89	3740	1060	796	54	48	18	1090
6	33	1500	51	74	96	3780	958	1420	55	42	18	181
7	37	197	46	70	78	3580	677	630	55	36	18	71
8	38	357	49	e72	76	4410	530	655	63	35	18	51
9	36	209	47	e70	215	4010	456	1110	65	30	16	65
10	38	99	41	126	119	3220	267	397	59	27	15	56
11	37	75	46	195	79	4330	705	339	52	28	16	45
12	37	375	45	88	76	4310	332	338	49	26	19	40
13	37	273	118	76	397	1910	285	325	43	23	22	33
14	37	108	133	76	326	2790	449	312	94	24	23	27
15	294	76	66	63	1760	2840	551	213	815	23	22	23
16	441	67	60	105	7140	2540	564	128	106	23	111	22
17	75	65	52	409	1350	2470	571	93	65	22	2280	22
18	47	58	47	382	713	2180	548	82	56	20	190	87
19	34	55	45	222	435	2080	488	79	45	19	58	105
20	45	54	44	132	387	1960	512	78	39	19	39	e200
21	63	46	46	108	1070	1870	531	77	42	19	34	e300
22	1030	43	39	97	1470	1600	497	80	153	18	34	e200
23	173	78	35	89	1580	1010	466	82	78	18	25	e140
24	142	922	35	82	4150	2320	278	69	52	20	20	e110
25	56	228	300	76	5540	1810	232	63	44	21	21	e90
26	39	111	3070	70	5580	1890	201	76	39	38	26	e60
27	30	83	498	108	7410	2380	182	93	39	22	55	e42
28	27	69	204	204	5950	2810	141	943	54	15	40	e30
29	1890	64	157	2580	---	2290	131	131	42	13	32	e28
30	149	58	128	374	---	2200	133	95	162	13	1040	e27
31	59	---	114	189	---	2460	---	92	---	14	634	---
TOTAL	5080	8742	5774	6610	46571	89970	18755	9097	2660	4671	4923	4112
MEAN	164	291	186	213	1663	2902	625	293	88.7	151	159	137
MAX	1890	1850	3070	2580	7410	5390	2370	1420	815	3520	2280	1090
MIN	27	43	35	63	76	1010	131	40	39	13	15	22
AC-FT	10080	17340	11450	13110	92370	178500	37200	18040	5280	9260	9760	8160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

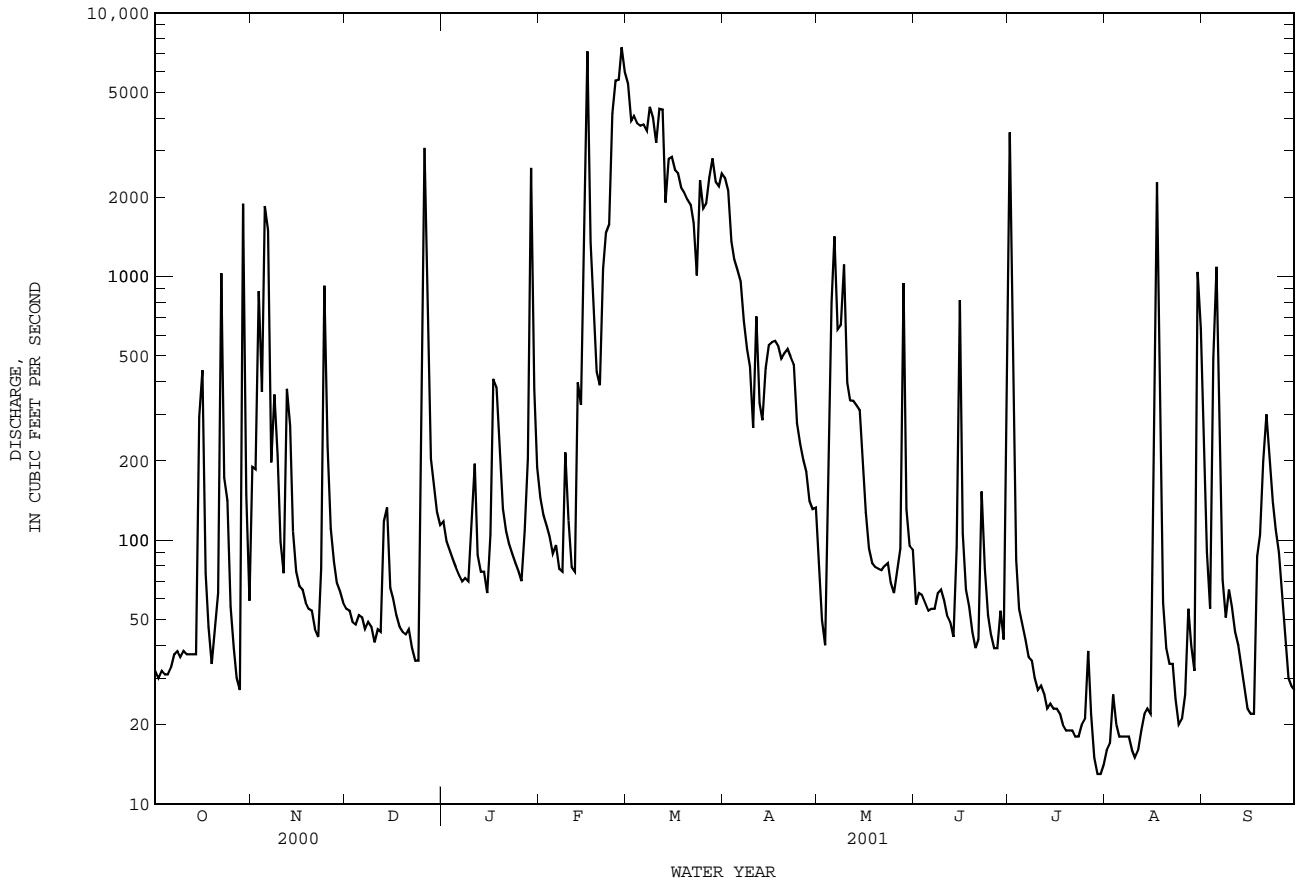
	405	458	454	326	602	983	664	1596	1176	221	101	87.0
MEAN	405	458	454	326	602	983	664	1596	1176	221	101	87.0
MAX	4881	3878	6459	4067	4288	3655	5668	12540	9448	1654	557	216
(WY)	1982	1982	1992	1992	1997	1998	1990	1989	1982	1995	1980	1980
MIN	9.82	23.8	13.7	30.2	33.5	43.9	35.3	20.2	22.4	5.67	9.21	9.27
(WY)	1978	1980	1978	1978	1996	1986	1983	1996	1978	1978	1985	1984

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1977 - 2001

ANNUAL TOTAL	71863	206965										
ANNUAL MEAN	196	567								589		
HIGHEST ANNUAL MEAN										2071		1992
LOWEST ANNUAL MEAN										40.1		1978
HIGHEST DAILY MEAN	8670	Jun 4	7410	Feb 27	35200	May 3	1990					
LOWEST DAILY MEAN	10	May 24	13	Jul 29	.72	Sep 7	1998					
ANNUAL SEVEN-DAY MINIMUM	13	May 12	16	Jul 27	.80	Sep 5	1998					
MAXIMUM PEAK FLOW			16500	Feb 16	46600	May 2	1990					
MAXIMUM PEAK STAGE			21.95	Feb 16	38.02	May 2	1990					
ANNUAL RUNOFF (AC-FT)	142500	410500	426900									
10 PERCENT EXCEEDS	376	2010	1550									
50 PERCENT EXCEEDS	60	84	54									
90 PERCENT EXCEEDS	19	24	15									

e Estimated

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued



## TRINITY RIVER BASIN

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1976 to Sept. 1999.  
 BIOCHEMICAL DATA: Oct. 1976 to Sept. 1999.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1976 to current year.  
 pH: Oct. 1976 to current year.  
 WATER TEMPERATURE: Oct. 1976 to current year.  
 DISSOLVED OXYGEN: Oct. 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since Oct. 1976.

REMARKS.--Records good. Interruption in the record was caused by malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous water years using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request. Dissolved oxygen values bypassing saturation can be attributed to algae blooms in close proximity to the well intake.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,000 microsiemens/cm, Nov. 6, 1978; minimum, 86 microsiemens/cm, July 1, 2001.  
 pH: Maximum, 9.8 units, Aug. 8, Sept. 2, 1980; minimum, 6.6 units, Aug. 15, 1987.  
 WATER TEMPERATURE: Maximum, 38.5°C, Aug. 21, 1993; minimum, 0.0°C, Jan. 31, Feb. 1, 2, 1985.  
 DISSOLVED OXYGEN: Maximum, 22.1 mg/L, Oct. 4, 1983; minimum, 0.0 mg/L, on many days during winter months.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 598 microsiemens/cm, Jan. 9; minimum, 86 microsiemens/cm, July 1.  
 pH: Maximum, 8.7 units, July 5, 6; minimum, 7.4 units, on several days.  
 WATER TEMPERATURE: Maximum, 35.8°C, July 21, Aug. 8; minimum, 3.2°C, Dec. 25.  
 DISSOLVED OXYGEN: Maximum, 13.5 mg/L, Sept. 10; minimum, 1.7 mg/L, July 28.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	581	572	576	309	148	264	432	418	425	445	405	418
2	588	580	583	306	166	270	440	420	428	424	408	414
3	591	581	587	290	204	254	441	424	429	453	413	435
4	589	577	584	293	261	279	439	425	433	473	449	459
5	583	570	577	301	120	249	456	434	439	496	473	483
6	578	568	573	253	206	232	447	436	443	521	483	502
7	569	553	561	297	247	270	454	442	447	527	511	519
8	562	549	553	399	258	294	458	442	449	547	516	525
9	550	541	545	325	278	303	458	443	452	598	523	562
10	544	526	537	330	300	311	466	450	461	595	449	516
11	529	520	525	337	308	320	485	461	476	542	465	516
12	524	512	516	468	186	307	486	476	481	576	542	560
13	516	502	509	386	258	339	513	441	488	586	576	579
14	507	496	502	405	383	392	523	491	502	583	579	580
15	501	188	456	412	391	397	559	523	547	588	583	586
16	435	333	365	440	398	410	549	535	541	595	523	573
17	345	332	339	440	412	421	541	536	539	572	294	471
18	358	335	344	457	422	435	546	538	542	532	331	445
19	373	358	366	461	430	439	546	539	543	506	482	492
20	370	359	364	470	444	455	560	541	548	510	489	501
21	378	352	361	486	452	464	578	540	555	512	496	505
22	360	163	279	522	461	472	563	554	560	507	484	495
23	336	300	323	546	440	478	568	561	564	524	498	505
24	357	323	341	453	146	365	571	564	568	527	503	509
25	369	357	363	463	430	444	570	145	519	527	512	519
26	389	369	378	458	435	446	420	224	288	539	527	530
27	387	376	380	466	443	457	373	303	338	590	529	543
28	392	380	386	454	428	434	417	373	391	552	426	519
29	403	131	257	457	426	438	439	398	412	436	273	348
30	292	270	276	445	420	429	424	399	411	377	352	364
31	307	274	288	---	---	---	465	396	416	427	372	391
MONTH	591	131	439	546	120	369	578	145	472	598	273	496

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

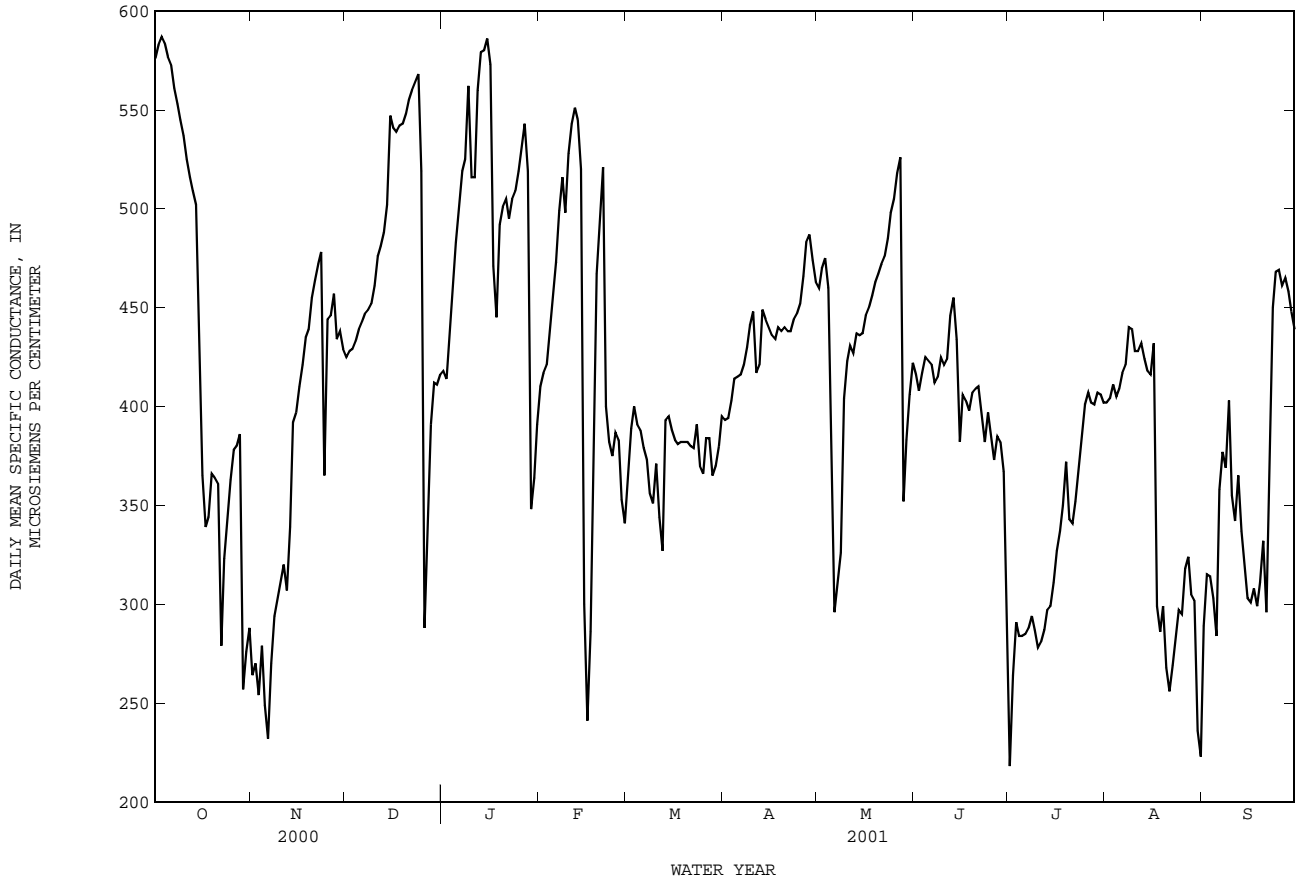
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	425	389	410	379	334	362	396	391	393	---	---	e460
2	468	399	417	397	379	389	397	391	394	---	---	e470
3	447	409	421	419	391	400	413	395	403	491	465	475
4	484	423	436	403	387	391	417	411	414	486	185	460
5	474	440	455	392	386	388	418	414	415	436	210	383
6	490	461	473	393	373	379	422	414	416	415	162	296
7	514	484	499	379	370	373	423	419	421	354	278	310
8	536	506	516	385	297	356	440	422	430	366	307	326
9	570	419	498	370	321	351	446	438	441	424	366	404
10	540	516	528	376	366	371	453	446	448	428	417	423
11	549	540	543	377	276	344	455	277	417	435	427	431
12	558	548	551	381	227	327	432	411	421	436	414	427
13	563	483	545	438	376	393	460	432	449	443	429	437
14	---	---	e520	445	378	395	448	441	444	442	431	436
15	---	---	e300	397	380	388	447	436	440	441	434	437
16	285	192	241	395	379	383	442	426	436	456	440	446
17	316	257	286	389	376	381	450	427	434	461	445	450
18	449	313	400	390	378	382	449	434	440	468	448	456
19	489	447	467	387	379	382	442	433	438	469	455	463
20	513	483	497	387	378	382	449	436	440	477	459	467
21	551	452	521	384	378	380	441	434	438	478	463	472
22	452	385	400	383	376	379	443	434	438	482	468	476
23	395	372	382	402	380	391	452	437	444	496	477	485
24	404	344	375	425	304	370	451	442	447	502	490	498
25	391	384	387	405	303	366	457	448	452	511	499	505
26	388	374	383	389	367	384	479	454	466	560	503	518
27	390	291	353	397	357	384	496	473	483	536	519	526
28	365	302	341	383	347	365	498	469	487	528	143	352
29	---	---	---	---	---	e370	487	461	474	395	368	383
30	---	---	---	---	---	e380	471	455	463	418	393	406
31	---	---	---	399	392	395	---	---	---	428	413	422
MONTH	---	---	434	---	---	377	498	277	438	---	---	435
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	429	397	416	331	86	218	415	379	402	315	225	289
2	425	396	408	285	222	264	416	387	404	321	307	315
3	434	405	417	303	280	291	420	403	411	321	298	314
4	441	415	425	296	277	284	415	392	405	438	175	303
5	434	416	423	293	273	284	419	395	409	333	198	284
6	428	412	421	294	269	285	434	401	417	379	318	358
7	419	405	412	296	277	288	437	402	421	384	369	377
8	439	381	415	300	286	294	456	423	440	382	356	369
9	439	411	425	346	261	287	458	419	439	462	364	403
10	425	414	421	291	264	278	451	401	428	376	338	355
11	438	417	424	295	268	281	441	406	428	393	330	342
12	454	437	446	302	282	287	443	414	432	407	337	365
13	461	448	455	315	282	297	430	414	424	347	321	337
14	463	126	434	313	291	299	433	399	418	383	296	320
15	404	319	382	356	295	311	427	403	416	317	287	303
16	414	391	406	341	314	327	443	415	432	320	280	301
17	415	386	403	351	322	337	432	168	299	326	292	308
18	410	383	398	363	339	350	298	260	286	326	186	299
19	414	401	407	387	359	372	306	295	299	361	221	311
20	415	401	409	391	285	343	302	226	268	442	262	332
21	430	401	410	351	331	341	268	244	256	359	193	296
22	430	373	396	367	346	352	280	256	269	416	359	392
23	391	374	382	388	354	368	299	270	283	467	416	450
24	405	391	397	409	373	384	309	279	297	481	444	468
25	400	371	385	419	389	401	303	284	295	492	434	469
26	382	365	373	438	369	407	396	300	318	477	448	461
27	427	375	385	422	385	402	393	298	324	478	450	465
28	402	374	382	413	388	401	311	298	305	475	437	458
29	386	349	367	421	379	407	308	294	302	474	431	448
30	409	179	300	422	377	406	311	145	236	451	422	439
31	---	---	---	418	374	402	264	172	223	---	---	---
MONTH	463	126	404	438	86	331	458	145	354	492	175	364

e Estimated



TRINITY RIVER BASIN

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued



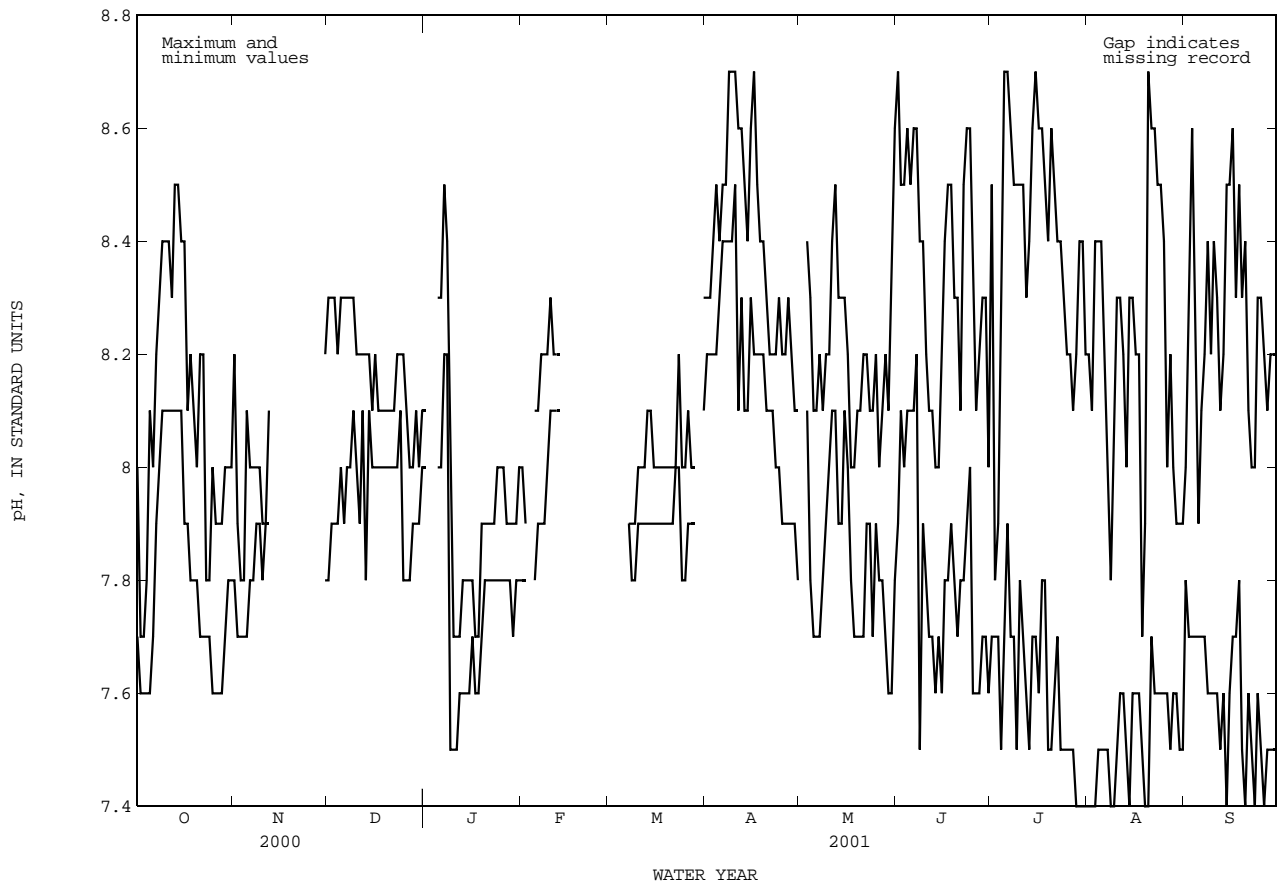
PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.7	8.2	7.8	8.3	7.8	8.1	8.0	8.0	7.8	---	---
2	7.7	7.6	7.9	7.7	8.3	7.9	---	---	7.9	7.8	---	---
3	7.7	7.6	7.8	7.7	8.3	7.9	---	---	---	---	---	---
4	7.8	7.6	7.8	7.7	8.2	7.9	---	---	---	---	---	---
5	8.1	7.6	8.1	7.7	8.3	8.0	8.3	8.0	8.1	7.8	---	---
6	8.0	7.7	8.0	7.8	8.3	7.9	8.3	8.0	8.1	7.9	---	---
7	8.2	7.9	8.0	7.8	8.3	8.0	8.5	8.2	8.2	7.9	7.9	7.9
8	8.3	8.0	8.0	7.9	8.3	8.0	8.4	8.2	8.2	7.9	7.9	7.8
9	8.4	8.1	8.0	7.9	8.3	8.1	8.2	7.5	8.2	8.0	7.9	7.8
10	8.4	8.1	7.9	7.8	8.2	8.0	7.7	7.5	8.3	8.1	8.0	7.9
11	8.4	8.1	7.9	7.9	8.2	7.9	7.7	7.5	8.2	8.1	8.0	7.9
12	8.3	8.1	8.1	7.9	8.2	8.1	7.7	7.6	8.2	8.1	8.0	7.9
13	8.5	8.1	---	---	8.2	7.8	7.8	7.6	8.2	8.1	8.1	7.9
14	8.5	8.1	---	---	8.2	8.1	7.8	7.6	---	---	8.1	7.9
15	8.4	8.1	---	---	8.1	8.0	7.8	7.6	---	---	8.0	7.9
16	8.4	7.9	---	---	8.2	8.0	7.8	7.7	---	---	8.0	7.9
17	8.1	7.9	---	---	8.1	8.0	7.7	7.6	---	---	8.0	7.9
18	8.2	7.8	---	---	8.1	8.0	7.7	7.6	---	---	8.0	7.9
19	8.1	7.8	---	---	8.1	8.0	7.9	7.7	---	---	8.0	7.9
20	8.0	7.8	---	---	8.1	8.0	7.9	7.8	---	---	8.0	7.9
21	8.2	7.7	---	---	8.1	8.0	7.9	7.8	---	---	8.0	7.9
22	8.2	7.7	---	---	8.1	8.0	7.9	7.8	---	---	8.0	8.0
23	7.8	7.7	---	---	8.2	8.0	7.9	7.8	---	---	8.2	8.0
24	7.8	7.7	---	---	8.2	8.1	8.0	7.8	---	---	8.0	7.8
25	8.0	7.6	---	---	8.2	7.8	8.0	7.8	---	---	8.0	7.8
26	7.9	7.6	---	---	8.1	7.8	8.0	7.8	---	---	8.1	7.9
27	7.9	7.6	---	---	8.0	7.8	7.9	7.8	---	---	8.0	7.9
28	7.9	7.6	---	---	8.0	7.9	7.9	7.8	---	---	8.0	7.9
29	8.0	7.7	---	---	8.1	7.9	7.9	7.7	---	---	---	---
30	8.0	7.8	8.2	7.8	8.0	7.9	7.9	7.8	---	---	---	---
31	8.0	7.8	---	---	8.1	8.0	8.0	7.8	---	---	8.3	8.1
MONTH	8.5	7.6	---	---	8.3	7.8	---	---	---	---	---	---

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.3	8.2	---	---	8.7	7.9	8.5	7.7	8.2	7.4	8.0	7.8
2	8.3	8.2	---	---	8.5	8.1	7.8	7.7	8.1	7.4	8.2	7.7
3	8.4	8.2	8.4	8.1	8.5	8.0	7.9	7.7	8.4	7.4	8.6	7.7
4	8.5	8.2	8.3	7.8	8.6	8.1	8.2	7.5	8.4	7.5	8.2	7.7
5	8.4	8.3	8.1	7.7	8.5	8.1	8.7	7.7	8.4	7.5	7.9	7.7
6	8.5	8.4	8.1	7.7	8.6	8.1	8.7	7.9	8.2	7.5	8.1	7.7
7	8.5	8.4	8.2	7.7	8.6	8.2	8.6	7.7	8.0	7.5	8.2	7.7
8	8.7	8.4	8.1	7.8	8.4	7.5	8.5	7.7	7.8	7.4	8.4	7.6
9	8.7	8.4	8.2	7.9	8.4	7.9	8.5	7.5	8.0	7.4	8.2	7.6
10	8.7	8.5	8.2	8.0	8.2	7.8	8.5	7.8	8.3	7.5	8.4	7.6
11	8.6	8.1	8.4	8.1	8.1	7.7	8.5	7.7	8.3	7.6	8.3	7.6
12	8.6	8.3	8.5	8.1	8.1	7.7	8.3	7.6	8.2	7.6	8.1	7.5
13	8.5	8.1	8.3	7.9	8.0	7.6	8.4	7.5	8.0	7.5	8.2	7.6
14	8.4	8.1	8.3	7.9	8.0	7.7	8.6	7.7	8.3	7.4	8.5	7.4
15	8.6	8.3	8.3	8.1	8.2	7.6	8.7	7.7	8.3	7.6	8.5	7.6
16	8.7	8.2	8.2	8.0	8.4	7.8	8.6	7.6	8.2	7.6	8.6	7.7
17	8.5	8.2	8.0	7.8	8.5	7.8	8.6	7.8	8.2	7.6	8.3	7.7
18	8.4	8.2	8.0	7.7	8.5	7.9	8.5	7.8	7.7	7.5	8.5	7.8
19	8.4	8.2	8.1	7.7	8.3	7.8	8.4	7.5	7.9	7.4	8.3	7.5
20	8.3	8.1	8.1	7.7	8.3	7.7	8.6	7.5	8.7	7.4	8.4	7.4
21	8.2	8.1	8.2	7.7	8.1	7.8	8.5	7.6	8.6	7.7	8.1	7.6
22	8.2	8.1	8.2	7.9	8.5	7.8	8.4	7.7	8.6	7.6	8.0	7.5
23	8.2	8.0	8.1	7.9	8.6	7.9	8.4	7.5	8.5	7.6	8.0	7.4
24	8.3	8.0	8.1	7.7	8.6	8.0	8.3	7.5	8.5	7.6	8.3	7.6
25	8.2	7.9	8.2	7.9	8.3	7.6	8.2	7.5	8.4	7.6	8.3	7.5
26	8.2	7.9	8.0	7.8	8.1	7.6	8.2	7.5	8.0	7.6	8.2	7.4
27	8.3	7.9	8.1	7.8	8.2	7.6	8.1	7.5	8.2	7.5	8.1	7.5
28	8.2	7.9	8.2	7.7	8.3	7.7	8.2	7.4	8.0	7.6	8.2	7.5
29	8.1	7.9	8.1	7.6	8.3	7.7	8.4	7.4	7.9	7.6	8.2	7.5
30	8.1	7.8	8.3	7.6	8.0	7.6	8.4	7.4	7.9	7.5	8.2	7.5
31	---	---	8.6	7.8	---	---	8.2	7.4	7.9	7.5	---	---
MONTH	8.7	7.8	---	---	8.7	7.5	8.7	7.4	8.7	7.4	8.6	7.4



## TRINITY RIVER BASIN

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

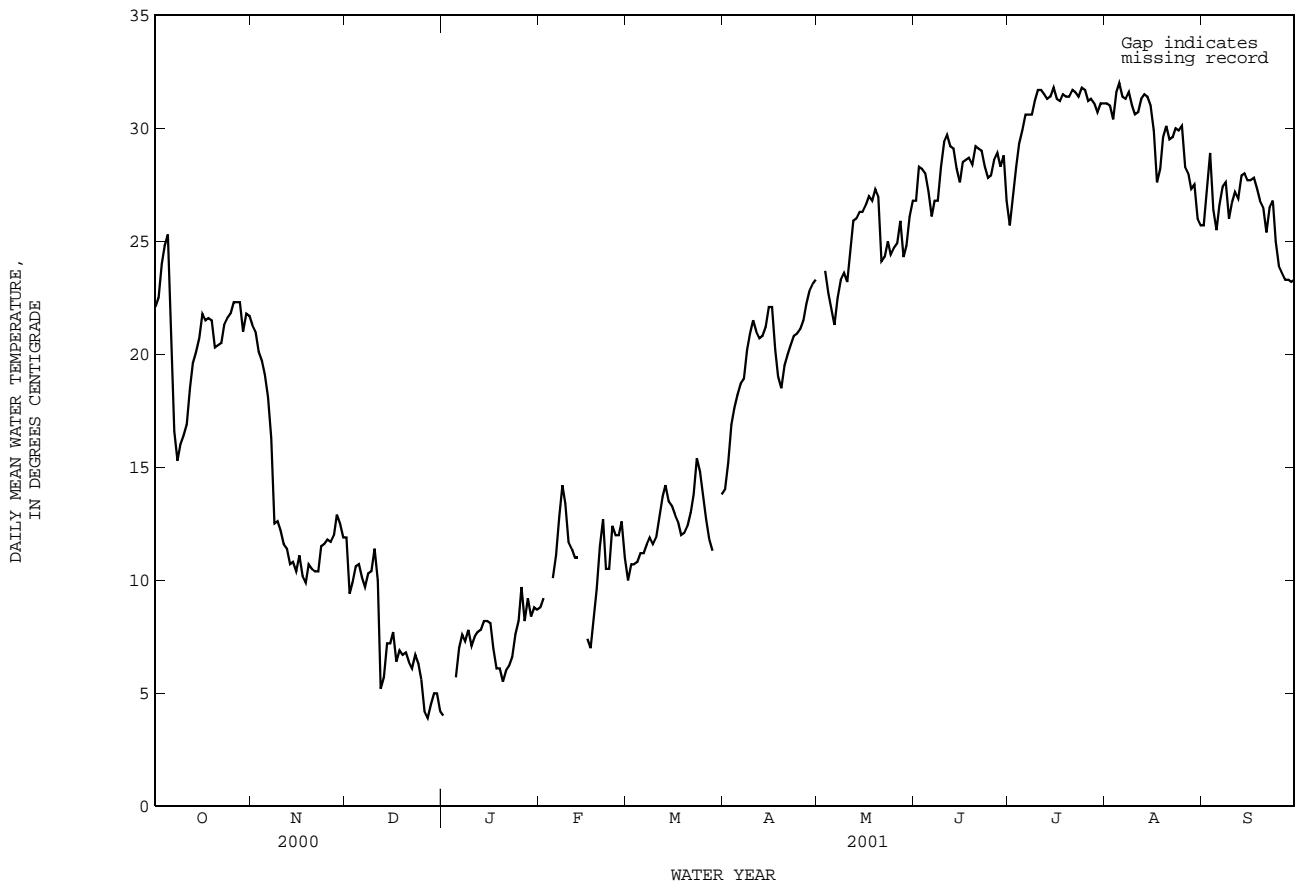
TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.8	20.1	22.1	22.6	20.8	21.3	13.1	10.6	11.9	4.4	3.7	4.0
2	25.8	20.1	22.5	23.0	19.5	21.0	10.6	8.7	9.4	---	---	---
3	27.4	21.4	24.0	20.8	19.4	20.1	11.3	8.6	9.9	---	---	---
4	28.1	22.4	24.8	20.1	19.5	19.7	11.7	9.4	10.6	---	---	---
5	27.9	23.1	25.3	19.6	18.0	19.1	11.2	9.9	10.7	8.0	3.8	5.7
6	25.0	18.1	21.1	18.6	17.2	18.1	10.6	9.0	10.1	9.4	4.8	7.0
7	18.1	15.7	16.6	17.2	14.9	16.3	11.4	7.8	9.7	9.3	6.4	7.6
8	16.9	13.9	15.3	15.0	10.3	12.5	11.5	8.5	10.3	8.9	5.6	7.3
9	18.3	14.4	16.0	14.4	11.3	12.6	11.7	9.1	10.4	12.1	5.3	7.8
10	18.1	15.1	16.4	14.2	10.5	12.2	13.0	9.4	11.4	8.2	6.6	7.1
11	17.9	15.9	16.9	12.2	11.0	11.6	12.5	6.4	10.0	8.1	7.0	7.5
12	20.9	16.6	18.5	12.7	9.9	11.4	6.4	4.5	5.2	8.1	7.4	7.7
13	21.8	17.4	19.6	12.3	9.8	10.7	6.4	4.9	5.7	9.0	7.1	7.8
14	21.5	18.6	20.1	12.6	9.1	10.8	9.0	6.0	7.2	10.1	6.7	8.2
15	22.6	19.2	20.7	10.9	9.6	10.4	8.0	6.6	7.2	9.4	6.5	8.2
16	23.5	20.2	21.8	12.2	10.5	11.1	9.0	6.4	7.7	9.0	7.6	8.1
17	22.0	20.6	21.5	11.2	9.0	10.2	7.8	4.9	6.4	7.6	6.2	7.0
18	23.6	20.4	21.6	10.4	9.5	9.9	8.5	5.4	6.9	7.1	5.2	6.1
19	23.7	19.8	21.5	12.5	9.0	10.7	8.1	5.1	6.7	7.3	4.9	6.1
20	21.1	19.7	20.3	12.0	8.8	10.5	8.5	4.9	6.8	7.5	4.3	5.5
21	21.3	19.6	20.4	12.1	8.4	10.4	7.7	4.8	6.4	7.5	4.9	6.0
22	21.2	19.5	20.5	11.2	9.1	10.4	7.9	4.5	6.1	8.5	4.6	6.2
23	22.4	20.6	21.3	12.2	11.0	11.5	7.4	6.1	6.7	8.3	5.4	6.6
24	22.6	21.0	21.6	12.5	11.1	11.6	6.8	5.9	6.3	9.4	6.2	7.6
25	23.6	20.5	21.8	13.5	10.7	11.8	6.1	3.2	5.6	9.8	6.5	8.2
26	24.2	21.0	22.3	13.5	10.2	11.7	4.7	3.6	4.2	12.1	8.1	9.7
27	24.1	21.5	22.3	13.9	10.1	12.0	4.3	3.8	3.9	9.7	7.6	8.2
28	24.1	21.4	22.3	14.4	11.4	12.9	6.0	3.8	4.5	10.1	8.3	9.2
29	22.2	19.5	21.0	13.6	11.5	12.5	6.8	3.9	5.0	9.3	7.8	8.4
30	23.2	20.8	21.8	13.4	10.1	11.9	6.7	3.7	5.0	10.4	8.0	8.8
31	23.2	20.5	21.7	---	---	---	4.7	3.9	4.2	10.5	7.6	8.7
MONTH	28.1	13.9	20.8	23.0	8.4	13.2	13.1	3.2	7.5	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.9	7.4	8.8	10.6	9.3	10.0	14.4	13.6	14.0	---	---	---
2	11.3	7.8	9.2	11.0	10.3	10.7	16.0	14.1	15.2	---	---	---
3	---	---	---	10.9	10.5	10.7	17.8	15.9	16.9	25.7	22.2	23.7
4	---	---	---	11.3	10.2	10.8	18.3	17.0	17.6	24.1	20.8	22.7
5	12.6	8.3	10.1	11.5	10.7	11.2	18.8	17.7	18.2	23.5	20.9	22.0
6	13.8	9.2	11.1	11.6	10.4	11.2	19.4	18.1	18.7	22.7	19.2	21.3
7	15.0	11.1	12.8	12.4	10.9	11.6	19.3	18.7	18.9	24.0	20.6	22.5
8	15.0	13.5	14.2	12.4	11.7	11.9	21.6	19.3	20.2	25.6	21.6	23.3
9	15.4	10.8	13.4	12.3	11.0	11.6	22.1	20.2	20.9	24.5	22.3	23.6
10	13.6	10.0	11.7	12.4	11.4	11.9	22.5	20.9	21.5	25.4	22.0	23.2
11	12.0	10.9	11.4	13.9	12.2	12.8	22.3	18.7	21.0	26.6	22.9	24.4
12	11.3	10.8	11.0	14.5	13.1	13.7	21.7	19.9	20.7	28.3	24.0	25.9
13	11.5	10.5	11.0	14.9	13.6	14.2	22.4	19.8	20.8	28.3	24.8	26.0
14	---	---	---	14.7	13.0	13.5	22.3	20.1	21.2	28.4	25.1	26.3
15	---	---	---	13.7	13.0	13.3	23.7	21.1	22.1	29.3	24.7	26.3
16	9.3	6.8	7.4	13.3	12.4	12.9	23.6	21.0	22.1	30.3	24.0	26.6
17	7.8	6.3	7.0	13.3	12.2	12.6	21.7	18.4	20.2	30.7	24.3	27.0
18	9.5	7.1	8.2	12.4	11.8	12.0	20.4	18.3	19.0	29.9	24.5	26.8
19	11.4	8.4	9.6	12.4	11.7	12.1	19.1	18.1	18.5	29.4	25.3	27.3
20	13.9	9.9	11.5	12.9	11.7	12.4	20.3	18.6	19.5	29.9	25.1	27.0
21	13.2	11.9	12.7	13.4	12.5	13.0	20.6	19.6	20.0	26.6	22.4	24.1
22	12.2	10.0	10.5	14.3	13.4	13.8	21.4	19.8	20.4	28.5	20.9	24.3
23	10.9	10.1	10.5	16.7	14.2	15.4	22.2	19.9	20.8	28.2	22.1	25.0
24	13.6	10.9	12.4	16.0	13.8	14.8	23.3	19.1	20.9	27.7	21.6	24.4
25	12.5	11.5	12.0	14.1	13.3	13.7	23.8	19.1	21.1	26.8	22.3	24.7
26	12.5	11.5	12.0	13.4	12.2	12.7	24.7	19.7	21.5	28.4	22.3	24.9
27	13.0	12.4	12.6	12.2	11.0	11.8	25.3	20.5	22.2	30.1	22.5	25.9
28	12.6	9.0	11.0	11.8	10.9	11.3	26.4	20.8	22.8	26.3	21.3	24.3
29	---	---	---	---	---	---	26.4	21.1	23.1	27.1	23.7	24.8
30	---	---	---	---	---	---	25.7	21.8	23.3	29.3	23.8	26.1
31	---	---	---	14.3	13.3	13.8	---	---	---	30.7	23.9	26.8
MONTH	---	---	---	---	---	---	26.4	13.6	20.1	---	---	---

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	29.7	24.6	26.8	27.1	23.1	25.7	35.4	28.3	31.1	26.6	25.2	25.7
2	32.4	24.9	28.3	29.6	25.2	27.0	34.5	29.1	31.0	30.3	25.0	27.4
3	31.6	25.0	28.2	32.1	25.2	28.3	33.3	27.3	30.4	32.0	26.7	28.9
4	31.6	24.9	28.0	32.8	26.0	29.3	35.4	28.5	31.6	28.6	24.8	26.4
5	29.6	25.4	27.2	33.4	26.8	29.9	35.6	29.2	32.0	26.6	24.0	25.5
6	27.1	24.9	26.1	33.8	27.7	30.6	34.4	29.0	31.4	29.2	25.1	26.6
7	28.9	25.4	26.8	33.5	27.9	30.6	35.6	28.8	31.3	30.5	25.2	27.4
8	29.0	22.8	26.8	33.9	27.8	30.6	35.8	29.0	31.6	29.4	25.9	27.6
9	31.4	25.5	28.3	34.9	28.3	31.2	35.3	28.4	31.0	27.6	24.7	26.0
10	32.1	26.7	29.4	34.9	28.8	31.7	35.1	26.9	30.6	29.5	24.1	26.7
11	33.0	26.7	29.7	34.7	29.2	31.7	35.1	28.5	30.7	29.1	25.2	27.2
12	32.6	26.3	29.2	35.0	29.1	31.5	35.6	28.5	31.3	29.7	24.0	26.9
13	32.2	26.5	29.1	35.3	28.3	31.3	34.6	29.4	31.5	30.6	25.4	27.9
14	31.5	24.6	28.2	34.4	29.1	31.4	34.5	28.0	31.4	29.7	26.0	28.0
15	29.9	25.9	27.6	35.4	29.3	31.8	34.6	28.6	31.0	29.0	26.4	27.7
16	32.7	25.4	28.5	34.3	29.0	31.3	31.8	28.1	29.9	31.0	25.5	27.7
17	32.0	25.5	28.6	34.6	28.6	31.2	30.5	25.4	27.6	30.7	25.8	27.8
18	32.0	25.5	28.7	35.4	28.8	31.5	30.9	26.4	28.2	30.7	25.4	27.3
19	31.3	25.5	28.4	35.1	28.9	31.4	33.0	26.7	29.6	29.3	25.3	26.8
20	32.4	26.0	29.2	35.6	28.8	31.4	33.2	27.5	30.1	28.5	24.8	26.5
21	32.9	26.8	29.1	35.8	28.8	31.7	32.3	26.9	29.5	27.1	23.7	25.4
22	31.7	27.0	29.0	35.7	29.0	31.6	32.6	26.8	29.6	29.2	24.4	26.5
23	30.9	26.4	28.3	35.4	28.5	31.4	33.6	27.3	30.0	29.6	24.8	26.8
24	30.9	24.8	27.8	35.6	29.4	31.8	33.6	27.3	29.9	26.7	23.5	25.0
25	30.5	23.0	27.9	35.3	29.4	31.7	34.5	27.3	30.1	26.9	21.3	23.9
26	32.1	25.8	28.6	33.9	28.7	31.2	29.7	26.8	28.3	26.4	20.8	23.6
27	31.8	27.0	28.9	34.4	28.8	31.3	29.6	26.7	28.0	26.0	20.4	23.3
28	31.5	25.9	28.3	34.9	29.0	31.1	28.2	26.7	27.3	26.2	20.6	23.3
29	31.7	26.4	28.8	34.7	28.3	30.7	29.5	26.1	27.5	26.1	20.7	23.2
30	28.4	24.8	26.8	35.6	28.0	31.1	27.3	24.4	26.0	26.2	20.8	23.3
31	---	---	---	35.5	28.0	31.1	26.2	25.1	25.7	---	---	---
MONTH	33.0	22.8	28.2	35.8	23.1	30.8	35.8	24.4	29.8	32.0	20.4	26.2



## TRINITY RIVER BASIN

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

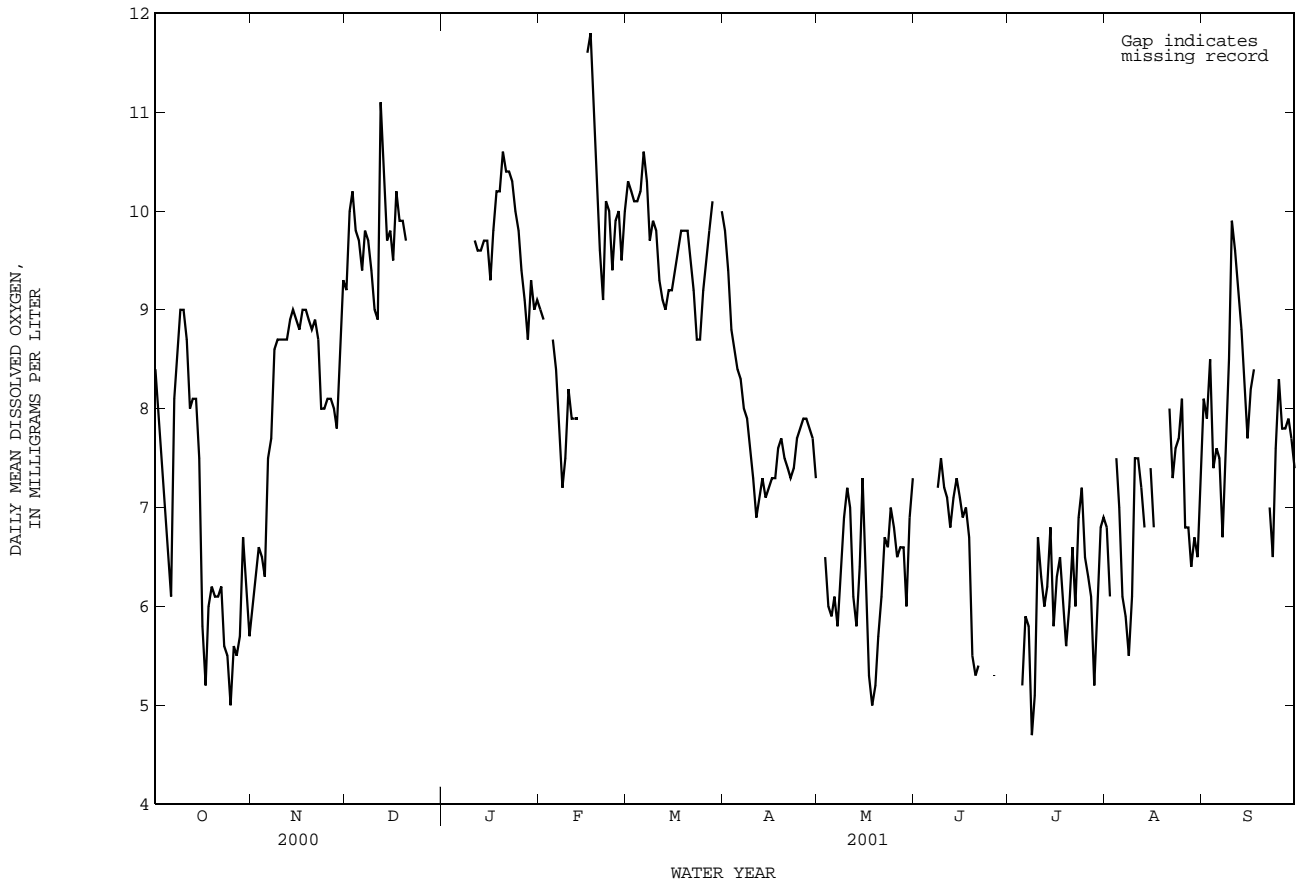
OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.3	7.3	8.4	6.9	5.1	6.0	10.4	8.2	9.2	---	---	---
2	8.8	7.0	7.9	7.1	6.0	6.3	11.2	9.0	10.0	---	---	---
3	8.5	6.4	7.5	7.0	5.9	6.6	11.2	9.2	10.2	---	---	---
4	8.2	5.5	7.1	6.8	6.0	6.5	10.9	9.0	9.8	---	---	---
5	8.0	5.0	6.6	7.5	5.9	6.3	10.7	8.7	9.7	---	---	---
6	8.4	3.7	6.1	7.7	7.3	7.5	10.4	8.5	9.4	---	---	---
7	9.4	7.0	8.1	8.1	7.4	7.7	10.5	9.2	9.8	---	---	---
8	10.1	7.6	8.6	9.1	7.7	8.6	10.4	9.0	9.7	---	---	---
9	10.3	7.8	9.0	9.0	8.4	8.7	10.1	8.7	9.4	---	---	---
10	10.2	7.8	9.0	9.1	8.3	8.7	9.7	8.5	9.0	---	---	---
11	9.8	7.6	8.7	8.9	8.5	8.7	10.7	7.8	8.9	10.1	9.3	9.7
12	8.7	6.4	8.0	9.1	8.3	8.7	11.9	10.5	11.1	10.2	9.2	9.6
13	9.3	6.8	8.1	9.5	8.5	8.9	11.6	9.6	10.4	10.2	9.3	9.6
14	9.1	6.7	8.1	9.3	8.8	9.0	10.0	9.5	9.7	10.3	9.2	9.7
15	8.7	5.7	7.5	9.0	8.8	8.9	10.4	9.3	9.8	10.5	9.2	9.7
16	7.4	2.8	5.8	9.0	8.6	8.8	10.3	8.8	9.5	9.6	8.9	9.3
17	7.1	2.5	5.2	9.2	8.9	9.0	10.6	9.9	10.2	10.4	9.3	9.8
18	7.0	5.3	6.0	9.2	8.7	9.0	10.4	9.6	9.9	10.8	9.5	10.2
19	6.8	5.6	6.2	9.2	8.5	8.9	10.4	9.6	9.9	10.6	9.5	10.2
20	6.7	5.3	6.1	9.3	8.4	8.8	10.3	9.4	9.7	11.0	9.5	10.6
21	7.2	5.2	6.1	9.3	8.3	8.9	---	---	---	10.7	10.1	10.4
22	8.8	5.8	6.2	9.2	8.3	8.7	---	---	---	10.6	10.1	10.4
23	5.9	5.1	5.6	8.7	7.6	8.0	---	---	---	10.6	10.0	10.3
24	6.0	3.8	5.5	8.3	7.5	8.0	---	---	---	10.5	9.7	10.0
25	6.5	2.5	5.0	8.3	7.9	8.1	---	---	---	10.4	9.3	9.8
26	6.2	4.8	5.6	8.3	8.0	8.1	---	---	---	10.1	8.9	9.4
27	6.4	4.7	5.5	8.4	7.7	8.0	---	---	---	9.6	8.7	9.1
28	7.0	4.6	5.7	8.4	7.3	7.8	---	---	---	9.1	8.4	8.7
29	7.0	5.3	6.7	10.1	7.2	8.5	---	---	---	9.7	8.8	9.3
30	6.5	5.6	6.2	10.1	8.7	9.3	---	---	---	9.3	8.6	9.0
31	6.1	5.4	5.7	---	---	---	---	---	---	9.3	8.8	9.1
MONTH	10.3	2.5	6.8	10.1	5.1	8.2	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.3	8.5	9.0	10.9	9.9	10.3	10.1	9.5	9.8	---	---	---
2	9.2	8.4	8.9	10.5	9.6	10.2	9.6	9.1	9.4	---	---	---
3	---	---	---	10.4	9.5	10.1	9.1	8.5	8.8	7.7	5.5	6.5
4	---	---	---	10.5	9.7	10.1	8.9	8.4	8.6	6.8	5.2	6.0
5	9.0	8.4	8.7	10.7	9.8	10.2	8.7	8.1	8.4	6.3	5.2	5.9
6	8.8	7.9	8.4	11.2	8.3	10.6	8.6	7.8	8.3	6.7	5.1	6.1
7	8.4	7.0	7.8	10.6	9.7	10.3	8.4	7.7	8.0	6.7	4.6	5.8
8	7.7	6.9	7.2	9.8	9.3	9.7	8.4	7.4	7.9	7.1	5.3	6.3
9	8.4	6.7	7.5	10.2	9.5	9.9	8.2	7.1	7.6	7.5	6.3	6.9
10	8.8	7.6	8.2	10.0	9.5	9.8	7.8	6.6	7.3	8.0	6.5	7.2
11	8.8	7.1	7.9	9.6	9.0	9.3	7.4	6.5	6.9	7.9	5.7	7.0
12	8.3	7.3	7.9	9.3	8.8	9.1	7.5	6.6	7.1	7.0	4.6	6.1
13	8.4	6.9	7.9	9.1	8.7	9.0	8.5	6.6	7.3	7.0	4.7	5.8
14	---	---	---	9.3	8.8	9.2	8.0	6.5	7.1	8.4	4.7	6.4
15	---	---	---	9.3	9.1	9.2	8.2	6.6	7.2	8.4	6.3	7.3
16	12.1	10.6	11.6	9.6	9.2	9.4	8.5	6.6	7.3	7.4	5.3	6.4
17	12.4	11.2	11.8	9.8	9.3	9.6	8.1	6.6	7.3	6.4	4.3	5.3
18	11.8	10.6	11.1	10.0	9.7	9.8	8.1	7.3	7.6	6.3	3.8	5.0
19	10.9	9.5	10.4	10.0	9.7	9.8	8.2	7.3	7.7	6.7	3.6	5.2
20	10.1	9.1	9.6	10.0	9.4	9.8	8.0	7.2	7.5	7.6	4.4	5.7
21	9.5	8.8	9.1	9.8	9.2	9.5	7.8	7.1	7.4	7.4	4.8	6.1
22	10.5	9.1	10.1	9.5	8.9	9.2	7.8	7.1	7.3	7.8	5.6	6.7
23	10.4	9.3	10.0	9.0	8.4	8.7	8.0	7.0	7.4	7.7	5.4	6.6
24	10.0	8.9	9.4	9.1	8.1	8.7	8.5	7.1	7.7	8.5	5.7	7.0
25	10.3	9.2	9.9	9.4	8.8	9.2	8.8	7.1	7.8	7.9	5.6	6.8
26	10.3	9.2	10.0	9.7	9.4	9.5	9.2	7.0	7.9	8.0	5.2	6.5
27	9.9	9.2	9.5	10.3	9.5	9.8	9.3	6.8	7.9	8.1	5.5	6.6
28	10.9	9.2	10.0	10.3	9.8	10.1	9.4	6.6	7.8	7.4	5.3	6.6
29	---	---	---	---	---	---	9.1	6.6	7.7	7.5	4.9	6.0
30	---	---	---	---	---	---	8.5	6.4	7.3	8.5	5.2	6.9
31	---	---	---	10.2	9.6	10.0	---	---	---	8.7	6.1	7.3
MONTH	---	---	---	---	---	---	10.1	6.4	7.8	---	---	---

08048543 West Fork Trinity River at Beach Street, Fort Worth, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	9.7	4.1	6.8	8.7	7.7	8.1
2	---	---	---	---	---	---	8.8	3.7	6.1	9.1	7.1	7.9
3	---	---	---	---	---	---	---	---	---	12.3	5.7	8.5
4	---	---	---	---	---	---	9.9	4.9	7.5	9.5	5.8	7.4
5	---	---	---	7.8	3.4	5.2	9.0	5.0	7.0	7.9	7.4	7.6
6	---	---	---	8.6	3.5	5.9	7.9	4.4	6.1	8.0	6.8	7.5
7	---	---	---	7.8	3.7	5.8	8.0	4.0	5.9	8.5	5.3	6.7
8	9.7	5.4	7.2	6.4	2.8	4.7	7.9	2.9	5.5	11.2	5.5	7.7
9	9.4	5.4	7.5	8.9	2.0	5.1	8.5	3.5	6.1	10.9	6.6	8.5
10	8.8	5.0	7.2	8.7	4.9	6.7	10.6	4.5	7.5	13.5	6.9	9.9
11	8.9	5.2	7.1	8.6	4.5	6.3	10.4	5.5	7.5	12.6	6.5	9.6
12	8.4	5.4	6.8	7.4	4.2	6.0	10.0	5.0	7.2	12.2	6.7	9.2
13	8.6	5.7	7.1	8.6	3.3	6.2	9.1	5.1	6.8	11.8	6.0	8.8
14	8.9	5.6	7.3	9.3	4.7	6.8	---	---	---	10.0	5.0	8.2
15	7.8	5.6	7.1	7.8	4.1	5.8	9.5	5.2	7.4	9.6	5.7	7.7
16	8.8	5.3	6.9	9.3	2.7	6.3	8.9	4.9	6.8	10.3	6.6	8.2
17	9.1	4.8	7.0	8.8	4.2	6.5	---	---	---	10.4	6.2	8.4
18	8.7	5.1	6.7	8.3	3.9	6.1	---	---	---	---	---	---
19	7.2	3.8	5.5	8.0	3.0	5.6	---	---	---	---	---	---
20	7.1	3.7	5.3	9.1	2.3	6.0	---	---	---	---	---	---
21	7.2	3.4	5.4	8.6	4.3	6.6	10.7	5.7	8.0	---	---	---
22	---	---	---	8.2	3.5	6.0	9.7	5.1	7.3	9.3	5.4	7.0
23	---	---	---	9.8	3.7	6.9	10.3	5.2	7.6	8.2	4.4	6.5
24	---	---	---	9.3	4.9	7.2	10.6	5.3	7.7	10.8	5.3	7.6
25	---	---	---	9.0	4.2	6.5	10.5	6.0	8.1	11.9	5.2	8.3
26	6.7	4.0	5.3	8.5	4.4	6.3	8.1	5.7	6.8	10.4	4.9	7.8
27	---	---	---	8.1	3.9	6.1	9.7	4.6	6.8	10.5	5.4	7.8
28	---	---	---	8.1	1.7	5.2	8.5	4.7	6.4	10.3	5.8	7.9
29	---	---	---	9.7	3.3	6.0	8.7	4.9	6.7	10.0	5.9	7.7
30	---	---	---	10.5	3.7	6.8	7.1	5.1	6.5	9.7	5.5	7.4
31	---	---	---	9.9	3.9	6.9	8.0	6.4	7.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---



TRINITY RIVER BASIN

08048970 Village Creek at Everman, TX

LOCATION.--Lat 32°36'12", long 97°15'53", Tarrant County, Hydrologic Unit 12030102, at center of channel on downstream side of bridge on Rendon Road (Tarrant County Road 1015), 1.4 mi downstream from Deer Creek and 1.8 mi southeast of Everman High School.

DRAINAGE AREA.--84.5 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1989 to current year.

REVISED RECORDS.--WRD-TX-00-2: Maximum discharge for period of record, 11,4000 ft<sup>3</sup>/s at 21.96 ft: Peak discharge WY 2000, 10,600 ft<sup>3</sup>/s.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 589.93 ft above sea level (Tarrant County Public Works Department reference mark). Satellite telemeter at station.

REMARKS.--Records fair. No flow at times. No known regulation or diversions.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since about 1930, 27.37 ft, date uncertain, but may be same date, Mar. 27, 1977, as date of maximum stage at discontinued downstream station, Village Creek at Kennedale (station 08048980). Flood of May 18, 1989, may have equalled, or slightly exceeded, the indicated known maximum stage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	5.9	3.6	12	20	568	18	6.0	7.7	100	.00	151
2	.00	4.7	3.3	9.0	15	165	14	5.7	5.3	98	.00	26
3	.00	41	3.4	7.8	13	101	12	5.4	4.8	14	.00	7.5
4	.00	51	3.4	7.3	11	96	10	11	4.2	6.3	e.00	77
5	.00	26	3.4	7.5	10	51	8.4	260	3.9	4.1	e.00	79
6	.00	67	3.3	6.1	9.4	31	7.5	82	3.8	3.5	e.00	35
7	.00	25	3.1	5.6	9.3	22	6.3	115	4.2	3.1	e.00	8.1
8	.00	52	3.6	5.0	9.0	470	6.3	32	4.1	2.9	.00	4.2
9	.00	26	3.5	4.7	23	377	5.6	16	3.9	2.3	.00	41
10	.00	9.3	3.6	8.5	13	75	6.6	12	3.7	1.8	.00	13
11	.00	6.1	3.8	26	9.7	306	22	9.8	3.4	1.4	.00	5.4
12	.00	65	4.0	10	9.5	440	35	41	3.4	.96	.00	3.3
13	.00	68	4.8	7.5	13	85	23	12	3.2	.43	.00	2.2
14	.00	15	9.4	9.1	13	54	16	8.6	3.2	.26	.00	2.4
15	.00	7.9	4.8	8.0	402	47	13	8.5	14	.17	.00	.63
16	19	5.9	3.9	11	2280	25	10	7.9	4.3	.11	.00	.51
17	6.2	4.9	3.5	66	156	17	9.6	7.3	3.6	.07	139	.26
18	4.7	4.4	2.5	70	79	14	8.7	6.9	2.9	.03	82	.12
19	4.0	3.8	3.1	52	59	12	8.4	6.4	2.0	.02	9.6	.12
20	3.3	3.5	3.0	24	43	11	8.9	6.0	1.8	.01	4.7	.32
21	3.2	3.3	2.9	17	31	9.0	9.1	5.6	37	.00	3.7	.72
22	68	3.3	2.9	13	23	7.8	9.1	5.2	48	.00	2.6	3.8
23	17	4.3	3.2	12	20	7.0	8.6	5.0	5.2	.00	1.2	2.2
24	7.6	54	3.3	11	37	138	8.2	4.8	6.8	.00	e.90	.71
25	6.4	20	37	9.8	25	99	7.1	4.7	9.9	.00	e.30	.15
26	5.5	8.7	683	9.4	15	29	6.8	4.9	8.9	.00	e.05	.10
27	5.2	5.9	132	11	512	50	6.5	5.0	7.8	.00	.00	.14
28	4.9	4.8	51	19	487	328	6.5	50	6.3	.00	.00	.17
29	237	4.2	29	446	---	108	6.2	10	4.9	.00	2.5	.19
30	29	4.0	16	76	---	49	6.2	5.8	17	.00	220	.19
31	8.7	---	12	32	---	27	---	6.8	---	.00	703	---
TOTAL	429.70	604.9	1049.3	1013.3	4346.9	3818.8	323.6	767.3	239.2	239.46	1169.55	465.43
MEAN	13.9	20.2	33.8	32.7	155	123	10.8	24.8	7.97	7.72	37.7	15.5
MAX	237	68	683	446	2280	568	35	260	48	100	703	151
MIN	.00	3.3	2.5	4.7	9.0	7.0	5.6	4.7	1.8	.00	.00	.10
AC-FT	852	1200	2080	2010	8620	7570	642	1520	474	475	2320	923

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	31.9	17.2	45.3	24.4	66.1	58.6	51.1	66.3	48.3	5.14	6.48	4.74
MAX	240	52.1	367	117	165	161	233	339	296	14.3	37.7	15.5
(WY)	1992	1995	1992	1992	1997	1998	1990	1990	2000	1993	2001	2001
MIN	.68	.34	.72	.83	1.32	1.13	2.70	.59	.19	.000	.000	.000
(WY)	1990	2000	1991	1996	1996	1996	1996	1996	1998	1998	1998	2000

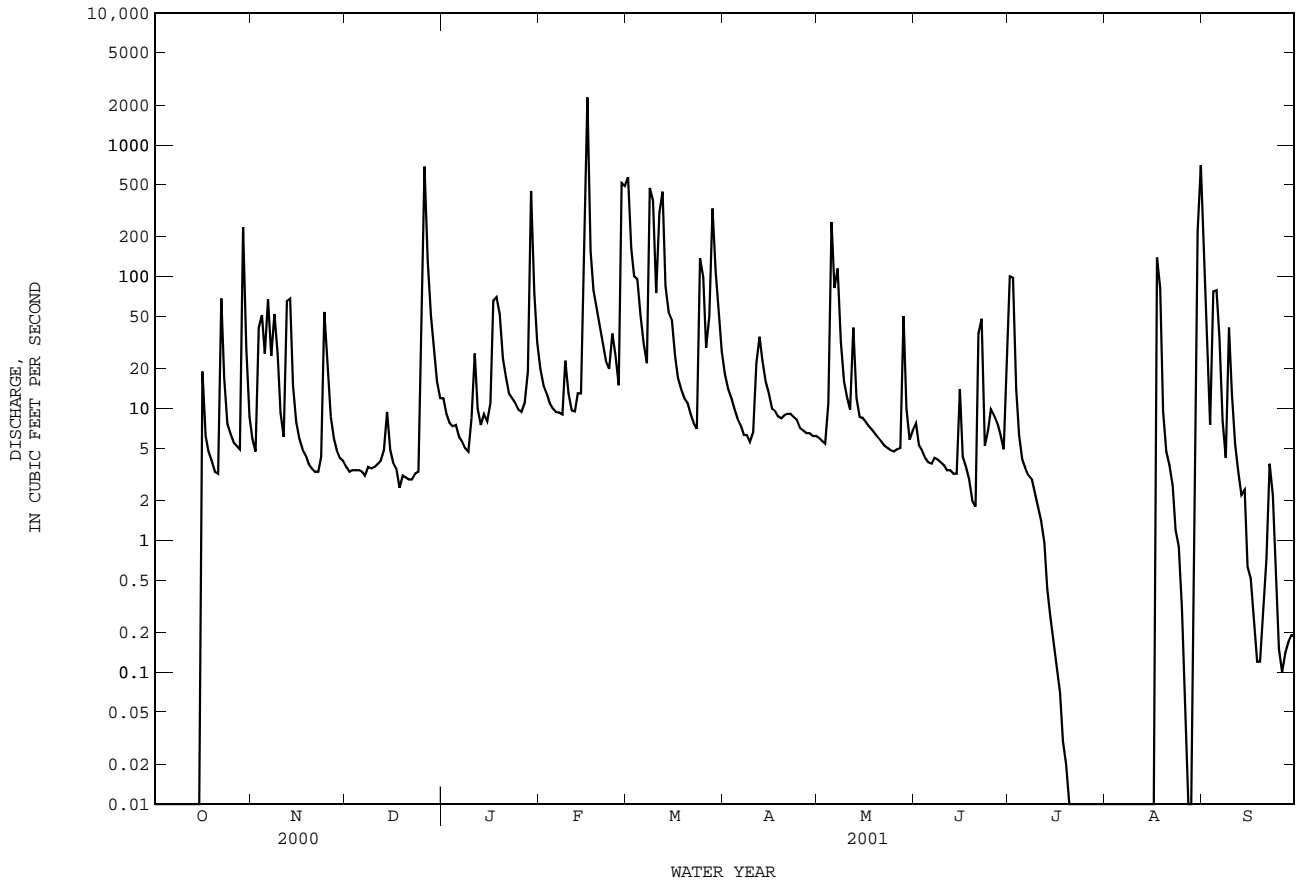
SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1990 - 2001

ANNUAL TOTAL	11701.77	14467.44	
ANNUAL MEAN	32.0	39.6	35.3
HIGHEST ANNUAL MEAN			92.6
LOWEST ANNUAL MEAN			1.37
HIGHEST DAILY MEAN	7330	Jun 4	7330
LOWEST DAILY MEAN	.00	Aug 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 1	.00
MAXIMUM PEAK FLOW		5930	c16000
MAXIMUM PEAK STAGE		16.71	21.96
ANNUAL RUNOFF (AC-FT)	23210	28700	25570
10 PERCENT EXCEEDS	22	75	45
50 PERCENT EXCEEDS	1.3	6.6	3.5
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

c From rating curve extended above 7,700 ft<sup>3</sup>/s on basis of area-velocity study.

08048970 Village Creek at Everman, TX--Continued









TRINITY RIVER BASIN

08049200 Lake Arlington at Arlington, TX

LOCATION.--Lat 32°42'58", long 97°11'32", Tarrant County, Hydrologic Unit 12030102, in pumphouse at right end of Arlington Dam on Village Creek near western boundary of Arlington, 1.5 mi upstream from the Texas and Pacific Railway Co. bridge and 7.0 mi upstream from mouth.

DRAINAGE AREA.--143 mi<sup>2</sup>.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--Mar. 1957 to current year.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Sept. 9, 1957, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily contents, which are poor. The lake is formed by a rolled earthfill dam 6,482 ft long. The service spillway is a 10-foot diameter uncontrolled circular drop inlet. The spillway is an 882-foot-wide cut through natural ground near the right end of dam. The dam was completed and storage began Mar. 31, 1957. The dam was built by the city of Arlington to impound water for municipal and industrial uses. Water is diverted from Cedar Creek Reservoir (station 08063010, conservation pool storage 637,050 acre-ft) into Lake Arlington. Water is pumped from the lake to a generating plant of Texas Electric Service Company. Conservation pool storage is 38,785 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	572.0
Crest of Spillway.....	559.7
Crest of drop inlet (top of conservation pool).....	550.0
Lowest gated outlet (invert).....	505.0

COOPERATION.--Capacity Table No. 3 was provided by the Texas Water Development Board and put into effect Oct. 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 72,500 acre-ft, May 17, 1989, elevation, 562.42 ft; minimum contents since lake first filled in Apr. 1957, 16,210 acre-ft, Aug. 5,11-12, 1998, elevation, 536.51 ft; minimum elevation since lake first filled in Apr. 1957, 534.27 ft, Oct. 17, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 41,100 acre-ft, Mar. 12, elevation, 551.90 ft; minimum contents, 19,500 acre-ft, Oct. 10, elevation, 538.93 ft.

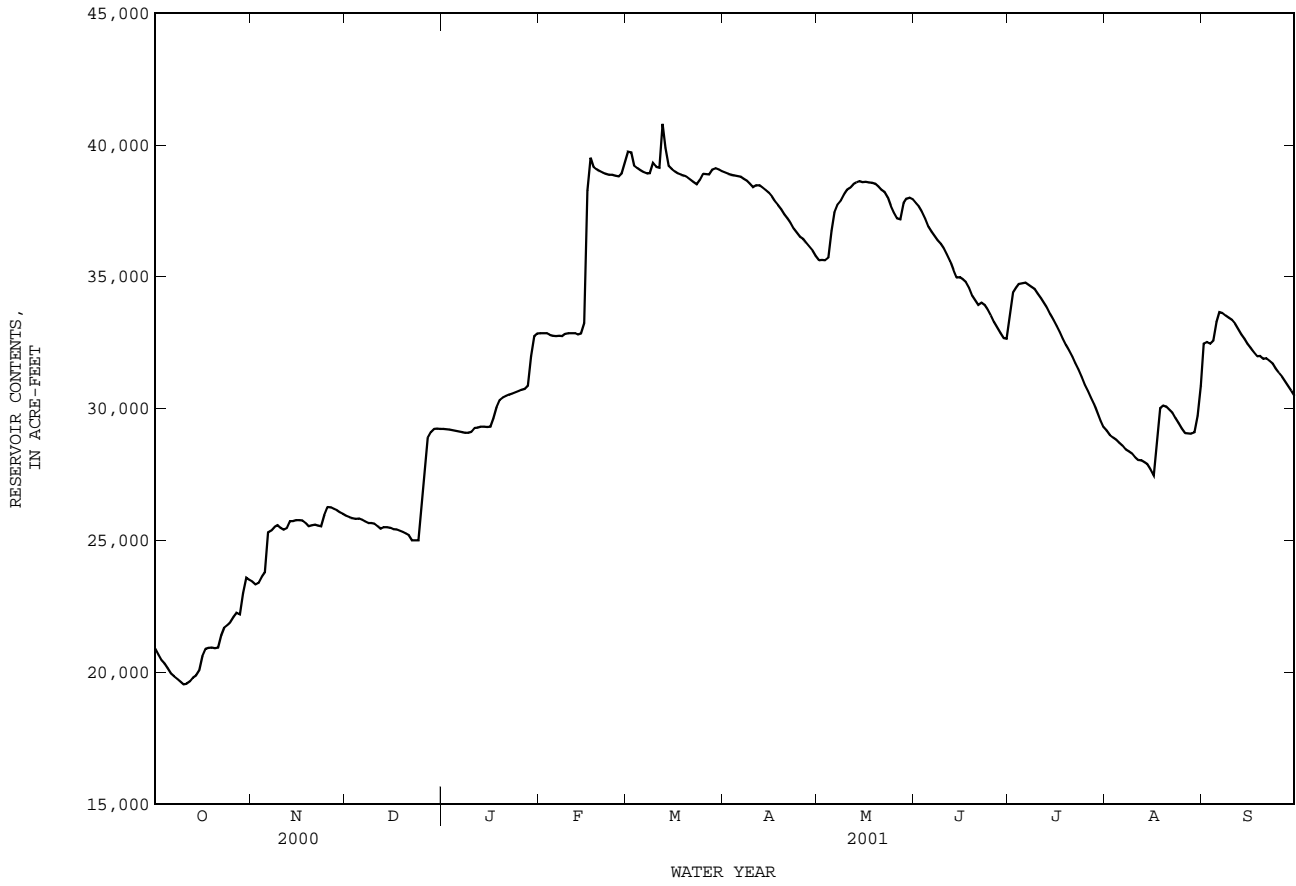
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20900	23430	25920	29220	32860	39740	38950	35630	37780	33520	29170	32450
2	20660	23330	25880	29210	32860	39710	38900	35640	37660	34390	28990	32510
3	20450	23390	25840	29200	32850	39220	38870	35630	37460	34580	28900	32450
4	20320	23620	25810	29180	32800	39120	38840	35720	37200	34720	28810	32580
5	20140	23770	25830	29150	32760	39030	38820	36740	36900	34750	28700	33280
6	19950	25290	25780	29130	32750	38960	38790	37430	36710	34770	28600	33660
7	19840	25370	25720	29100	32760	38910	38710	37740	36550	34690	28450	33620
8	19740	25500	25660	29080	32750	38930	38630	37880	36380	34610	28370	33520
9	19640	25570	25660	29080	32830	39310	38520	38110	36240	34530	28290	33440
10	19540	25470	25630	29120	32860	39170	38390	38290	36060	34350	28160	33370
11	19560	25400	25540	29260	32860	39130	38460	38370	35840	34180	28050	33220
12	19650	25460	25440	29280	32850	40800	38470	38500	35590	33990	28040	33010
13	19780	25730	25500	29310	32810	39880	38390	38570	35260	33810	27960	32810
14	19870	25730	25500	29310	32840	39210	38300	38620	34970	33570	27890	32640
15	20060	25760	25470	29300	33230	39090	38190	38590	34980	33360	27700	32450
16	20610	25770	25430	29310	38260	38990	38040	38600	34910	33130	27470	32300
17	20880	25750	25410	29610	39510	38920	37850	38570	34800	32890	28770	32130
18	20920	25650	25360	30040	39170	38870	37710	38560	34580	32650	30020	31980
19	20930	25540	25310	30320	39070	38830	37550	38530	34280	32410	30110	31990
20	20910	25570	25260	30420	39000	38770	37360	38430	34090	32200	30070	31890
21	20930	25600	25200	30480	38940	38670	37200	38290	33920	31970	29960	31910
22	21410	25560	e25000	30520	38900	38590	37050	38210	34010	31730	29830	31810
23	21680	25540	e25000	30560	38870	38500	36820	38000	33930	31480	29640	31700
24	21780	25960	e25000	30610	38860	38670	36670	37700	33740	31210	29440	31520
25	21900	26260	e26200	30660	38830	38900	36510	37430	33530	30900	29240	31350
26	22100	26250	27670	30710	38810	38890	36430	37220	33280	30660	29070	31210
27	22250	26190	28880	30740	38910	38880	36280	37180	33070	30410	29050	31020
28	22180	26140	29110	30860	39310	39060	36130	37780	32870	30160	29040	30840
29	23000	26060	29220	31980	---	39110	35990	37960	32670	29850	29090	30670
30	23580	25990	29240	32750	---	39060	35780	37990	32650	29540	29720	30480
31	23500	---	29230	32840	---	39000	---	37930	---	29300	30870	---
MEAN	20920	25360	26180	30010	35680	39090	37750	37740	35060	32720	28950	32260
MAX	23580	26260	29240	32840	39510	40800	38950	38620	37780	34770	30870	33660
MIN	19540	23330	25000	29080	32750	38500	35780	35630	32650	29300	27470	30480
(+)	541.46	542.94	544.81	546.82	550.99	550.43	548.41	549.54	546.72	544.85	545.73	545.51
(@)	+2440	+2490	+3240	+3610	+6470	-310	-3220	+2150	-5280	-3350	+1570	-390
CAL YR 2000	MAX 45610	MIN 19540	(@)	0								
WTR YR 2001	MAX 40800	MIN 19540	(@)	+9420								

e Estimated

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

08049200 Lake Arlington at Arlington, TX--Continued



TRINITY RIVER BASIN

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Jan. 1964 to current year.

BIOCHEMICAL DATA: Jan. 1964 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

324304097113601 -- Lk Arlington Site AC

DATE	TIME	RESER- VOIR STORAGE (AC-FT) (00054)	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	HARD- NESS TOTAL (MG/L CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
MAR													
12...	1524	40800	1.00	282	8.0	14.5	.66	9.9	100	106	13	36.1	3.79
12...	1529	--	10.0	282	8.0	14.5	--	9.8	99.1	--	--	--	--
12...	1534	--	20.0	283	8.0	14.0	--	9.7	97.0	--	--	--	--
12...	1540	--	30.0	283	8.0	14.0	--	9.6	96.0	--	--	--	--
12...	1546	--	45.0	292	7.6	12.0	--	5.1	48.8	110	11	37.5	4.07
MAY													
24...	1309	37700	1.00	342	8.1	25.5	1.04	8.4	105	119	17	39.9	4.60
24...	1315	--	10.0	343	8.0	25.5	--	7.8	97.7	--	--	--	--
24...	1322	--	20.0	344	7.8	25.0	--	6.4	79.4	--	--	--	--
24...	1328	--	30.0	347	7.4	24.5	--	4.2	51.6	--	--	--	--
24...	1335	--	42.0	368	6.9	21.0	--	.3	3.4	125	--	42.4	4.53
AUG													
24...	0957	29400	1.00	261	8.4	32.0	.82	7.6	106	88.4	11	28.2	4.37
24...	1002	--	10.0	261	8.3	31.5	--	7.3	101	--	--	--	--
24...	1008	--	20.0	261	8.0	30.5	--	5.7	77.5	--	--	--	--
24...	1014	--	30.0	322	6.8	27.5	--	.2	2.6	--	--	--	--
24...	1021	--	40.0	340	6.8	27.0	--	.5	6.4	114	--	38.1	4.63

324304097113601 -- Lk Arlington Site AC

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L MG/L AS CACO3) (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
MAR													
12...	15.7	.666	23.6	4.11	93	27.6	12.6	.2	3.0	160	.249	.012	.261
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	15.7	.652	22.9	4.00	100	28.3	11.9	.2	5.2	168	.263	.016	.279
MAY													
24...	19.1	.764	25.1	4.17	102	32.3	15.2	.3	1.6	178	.049	.018	.067
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	.057	.019	.076
24...	--	--	--	--	--	--	--	--	--	--	.065	.021	.086
24...	19.0	.741	24.1	4.20	125	27.4	15.2	.3	5.5	196	.082	.021	.103
AUG													
24...	17.2	.798	28.5	4.33	78	25.9	16.8	.3	3.9	147	--	<.006	<.050
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.050
24...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.050
24...	17.6	.716	24.2	4.45	132	13.2	16.5	.3	7.5	187	--	<.006	<.050

TRINITY RIVER BASIN

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

324304097113601 -- Lk Arlington Site AC

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
MAR								
12...	.043	.350	.39	<.060	E.013	--	<9.5262	5.4
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	.332	.392	.72	E.055	.033	.101	20	51.7
MAY								
24...	<.040	--	.40	<.060	<.020	--	<10	E2.3
24...	--	--	--	--	--	--	--	--
24...	E.031	--	.37	<.060	<.020	--	<10	E3.0
24...	.084	.387	.47	<.060	<.020	--	<10	10.0
24...	.148	.361	.51	<.060	<.020	--	240	1120
AUG								
24...	<.040	--	.36	<.060	<.020	--	<10	7.6
24...	--	--	--	--	--	--	--	--
24...	.042	.350	.39	<.060	<.020	--	40	238
24...	1.91	.413	2.3	.210	.208	.638	310	1900
24...	2.22	.337	2.6	.285	.259	.794	350	1890

324320097121101 -- Lk Arlington Site AL

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
MAR							
12...	1558	1.00	283	7.9	14.0	9.5	95.0
12...	1602	10.0	283	7.9	14.0	9.5	95.0
12...	1606	20.0	282	7.9	14.0	9.4	94.0
12...	1610	30.0	283	7.9	14.0	9.4	94.0
12...	1615	36.0	285	7.7	12.5	7.5	72.5
MAY							
24...	1343	1.00	342	8.1	26.0	8.3	105
24...	1346	10.0	343	7.9	25.5	7.3	91.4
24...	1349	20.0	344	7.8	25.0	6.5	80.7
24...	1353	30.0	347	7.3	24.5	3.5	43.0
AUG							
24...	1031	1.00	261	8.3	32.0	7.2	100
24...	1035	10.0	261	8.3	31.5	7.3	101
24...	1038	20.0	262	8.3	32.0	7.4	103
24...	1040	30.0	356	6.7	27.5	.3	3.9

324253097121801 -- Lk Arlington Site BC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
MAR								
12...	1623	1.00	282	7.9	14.0	.61	9.4	94.0
12...	1627	10.0	282	7.9	14.0	--	9.4	94.0
12...	1630	20.0	282	7.9	14.0	--	9.3	93.0
12...	1633	30.0	290	7.6	13.0	--	7.2	70.4
12...	1637	42.0	296	7.6	12.0	--	4.6	44.0
MAY								
24...	1400	1.00	342	8.1	26.0	.84	8.2	104
24...	1403	10.0	342	8.0	25.5	--	7.9	98.9
24...	1407	20.0	342	8.0	25.5	--	7.6	95.2
24...	1410	30.0	344	7.7	25.0	--	5.9	73.2
24...	1414	37.0	360	7.0	22.5	--	.8	9.5
AUG								
24...	1049	1.00	261	8.4	32.0	.76	7.4	103
24...	1051	10.0	260	8.3	31.5	--	7.1	98.1
24...	1053	20.0	263	7.3	30.0	--	2.6	35.0
24...	1056	32.0	272	7.1	29.0	--	.3	4.0

## TRINITY RIVER BASIN

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

324301097123301 -- Lk Arlington Site BL

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED DIS- CENT SATUR- ATION (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (MG/L) (00301)
MAR							
12...	1649	1.00	283	7.9	14.0	9.2	92.0
12...	1652	10.0	283	7.8	13.5	9.1	90.0
12...	1655	20.0	287	7.7	13.0	8.2	80.2
12...	1658	33.0	292	7.6	13.0	6.5	63.6
MAY							
24...	1427	1.00	341	8.2	26.0	8.6	109
24...	1430	10.0	341	8.1	25.5	8.4	105
24...	1434	20.0	343	8.0	25.5	7.4	92.7
24...	1437	28.0	344	7.7	25.0	6.1	75.7
AUG							
24...	1107	1.00	259	8.4	32.0	7.8	109
24...	1111	10.0	259	8.4	32.0	7.7	107
24...	1114	20.0	259	8.3	32.0	7.5	105
24...	1117	28.0	260	8.2	31.5	6.6	91.2

324257097130301 -- Lk Arlington Site CC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED DIS- CENT SATUR- ATION (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (MG/L) (00301)
MAR								
12...	1708	1.00	281	7.9	14.5	.43	9.8	99.1
12...	1710	10.0	283	7.9	14.0	--	9.6	96.0
12...	1713	23.0	284	7.9	14.0	--	9.6	96.0
MAY								
24...	1451	1.00	344	8.0	31.0	.72	7.7	106
24...	1454	10.0	344	8.0	29.5	--	7.9	106
24...	1457	22.0	344	8.0	28.5	--	8.0	106
AUG								
24...	1131	1.00	262	8.2	38.0	.73	6.6	101
24...	1133	10.0	263	8.2	37.5	--	6.6	101
24...	1136	18.0	263	8.2	37.5	--	6.6	101

324228097130301 -- Lk Arlington Site DC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED DIS- CENT SATUR- ATION (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (MG/L) (00301)
MAR								
12...	1721	1.00	282	7.8	14.0	.37	9.0	90.0
12...	1724	10.0	285	7.8	13.5	--	8.5	84.1
12...	1727	22.0	291	7.7	13.0	--	7.4	72.4
MAY								
24...	1509	1.00	343	8.1	28.0	.73	8.0	105
24...	1512	10.0	341	8.1	26.0	--	8.5	107
24...	1516	20.0	343	7.9	25.5	--	7.1	88.9
AUG								
24...	1149	1.00	262	8.0	33.0	.73	6.1	86.5
24...	1151	10.0	261	7.6	31.0	--	4.3	58.9
24...	1153	15.0	261	7.7	31.0	--	4.9	67.2

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

324143097132201 -- Lk Arlington Site EC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM, AD-SORP-TION RATIO (00931)
MAR													
12...	1739	1.00	293	7.7	14.0	8.6	86.0	110	11	37.2	4.04	16.1	.667
12...	1744	10.0	293	7.7	14.0	8.5	85.0	--	--	--	--	--	--
12...	1748	20.0	292	7.7	13.5	7.8	77.2	--	--	--	--	--	--
12...	1753	27.0	298	7.6	13.0	6.8	66.5	112	13	38.0	4.03	16.3	.673
MAY													
24...	1535	1.00	339	8.2	26.0	9.0	114	119	13	40.0	4.59	18.8	.752
24...	1540	10.0	338	8.1	25.0	8.2	102	--	--	--	--	--	--
24...	1545	23.0	338	8.0	25.0	7.9	98.0	119	14	40.0	4.58	18.7	.748
AUG													
24...	1208	1.00	256	8.4	30.0	7.9	106	89.4	13	28.9	4.19	16.7	.768
24...	1213	10.0	255	8.2	29.0	7.2	95.3	--	--	--	--	--	--
24...	1219	21.0	254	7.9	28.5	6.0	78.7	89.7	10	29.3	4.02	15.9	.730

324143097132201 -- Lk Arlington Site EC

DATE	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)
MAR													
12...	23.4	3.80	99	29.2	13.1	.2	5.2	170	.336	.012	.348	.065	.432
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	23.3	4.03	99	29.2	13.0	.3	4.3	170	.306	.013	.319	.165	.378
MAY													
24...	24.8	4.10	106	33.1	16.0	.3	1.6	183	.044	.015	.059	<.040	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	24.7	4.26	105	32.9	15.9	.3	1.8	182	.045	.013	.058	<.040	--
AUG													
24...	27.7	4.26	76	24.9	16.1	.3	4.0	145	--	<.006	E.029	<.040	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	26.6	4.31	80	23.9	15.1	.3	4.0	144	--	<.006	<.050	<.040	--

324143097132201 -- Lk Arlington Site EC

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS- (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
MAR						
12...	.50	E.051	.041	.126	<8.2561	<3.2
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	.54	E.049	.029	.089	<5.0807	3.8
MAY						
24...	.38	<.060	<.020	--	<10	<3.0
24...	--	--	--	--	--	--
24...	.34	<.060	<.020	--	<10	E1.7
AUG						
24...	.34	<.060	<.020	--	<10	<3.0
24...	--	--	--	--	--	--
24...	.36	<.060	<.020	--	<10	E2.5



TRINITY RIVER BASIN

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

324133097130601 -- Lk Arlington Site EL

DATE	TIME	SAM-PLING DEPTH (FEET) (000003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR							
12...	1810	1.00	290	7.9	14.0	9.2	92.0
12...	1812	10.0	291	7.8	14.0	8.9	89.0
12...	1814	20.0	291	7.8	13.5	8.6	85.1
MAY							
24...	1556	1.00	339	8.2	26.0	9.3	118
24...	1558	10.0	337	8.1	25.0	8.6	107
24...	1600	18.0	338	8.0	24.5	7.7	94.7
AUG							
24...	1224	1.00	255	8.4	30.0	8.1	109
24...	1226	14.0	255	8.4	30.0	8.0	108

324041097134601 -- Lk Arlington Site FC

DATE	TIME	SAM-PLING DEPTH (FEET) (000003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (PER-CENT) (00301)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)
MAR													
12...	1825	1.00	229	7.6	14.0	8.0	80.0	88.9	7	30.4	3.15	11.2	.518
12...	1830	10.0	229	7.6	13.5	7.7	76.1	--	--	--	--	--	--
12...	1835	17.0	247	7.7	13.5	7.4	73.2	97.0	13	33.0	3.55	12.6	.557
MAY													
24...	1615	1.00	335	8.4	25.5	9.5	119	117	11	39.4	4.50	18.8	.758
24...	1622	14.0	329	7.8	24.0	6.8	82.8	114	12	38.5	4.36	17.7	.722
AUG													
24...	1248	1.00	250	8.4	29.5	8.6	115	89.0	11	29.2	3.88	15.3	.706
24...	1254	10.0	248	8.1	28.5	6.6	86.6	89.1	11	29.5	3.75	14.8	.684

324041097134601 -- Lk Arlington Site FC

DATE	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS-TOT IT FIELD (MG/L) (39086)	SULFATE SOLVED (MG/L) (00945)	CHLO-RIDE, SOLVED (MG/L) (00940)	FLUO-RIDE, SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA SOLVED (MG/L) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00607)
MAR													
12...	20.8	3.38	82	20.9	7.9	E.2	7.2	135	.346	.014	.360	.068	.448
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	21.3	3.45	84	23.9	9.1	.2	6.8	145	.422	.014	.436	.096	.445
MAY													
24...	25.1	4.47	106	31.6	15.6	.3	1.9	180	.044	.014	.058	<.040	--
24...	24.4	4.17	103	30.0	14.5	.3	2.5	174	.079	.013	.092	.063	.357
AUG													
24...	26.1	4.20	78	23.4	14.5	.3	3.9	141	--	<.006	<.050	<.040	--
24...	25.5	4.21	78	22.2	13.8	.3	3.8	139	--	E.003	E.025	<.040	--

324041097134601 -- Lk Arlington Site FC

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L) (00660)	IRON, DIS-SOLVED (UG/L) (01046)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)
MAR						
12...	.52	.081	.075	.230	20	E1.6
12...	--	--	--	--	--	--
12...	.54	.088	.070	.215	20	E1.6
MAY						
24...	.34	<.060	<.020	--	<10	E3.0
24...	.42	<.060	<.020	--	<10	16.5
AUG						
24...	.34	<.060	<.020	--	<10	<3.0
24...	.34	<.060	<.020	--	<10	<3.0

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TRINITY RIVER BASIN

08049500 West Fork Trinity River at Grand Prairie, TX

LOCATION.--Lat 32°45'46", long 96°59'42", Dallas County, Hydrologic Unit 12030102, on left bank at upstream side of bridge on Belt Line Road, 1.3 mi northeast of Grand Prairie, 3.7 mi upstream from Mountain Creek, and at mile 514.6.

DRAINAGE AREA.--3,065 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1925 to current year.

REVISED RECORDS.--WSP 628: 1925. WSP 1922: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 405.42 ft above sea level. Prior to Dec. 6, 1933, nonrecording gage at bridge on old channel 2,500 ft southeast of present site at datum 7.56 ft higher. Dec. 6, 1933, to May 24, 1956, water-stage recorder at site 440 ft downstream from site of nonrecording gage at datum 7.56 ft higher than present datum. May 25, 1956, to Apr. 18, 1957, nonrecording gage at site 1.5 mi downstream at different datum. Apr. 19 to Aug. 13, 1957, nonrecording gage on bridge at present site and at datum 5.00 ft higher than present datum. Aug. 14, 1957 to Sept. 30, 1982, water-stage recorder at present site and at datum 5.00 ft higher than present datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Apr. 1925, at least 10% of contributing drainage area has been regulated. The city of Fort Worth discharges wastewater effluent into the river upstream from this station. There are many diversions upstream from station for municipal, industrial, and other uses. The river channel at this station was relocated and rectified in 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1900, 30.6 ft in May 1908 (former site and datum), from information by local resident. Flood in Apr. 1922 reached a stage of 29.0 ft (former site and datum), from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	324	311	499	675	8350	2850	325	274	5020	152	1670
2	184	767	286	473	570	6200	2720	249	221	4670	149	611
3	178	1260	282	442	512	4770	2090	214	224	787	156	369
4	180	1660	294	427	480	4550	1650	354	216	429	162	1200
5	178	1290	292	402	446	4050	1470	3020	196	333	163	2670
6	185	5640	290	378	418	4070	1380	3230	186	297	147	1660
7	186	1310	281	367	418	3860	1190	1700	191	272	156	524
8	190	1270	281	353	405	3980	1020	1140	191	250	156	348
9	186	1130	279	385	600	6080	904	1420	212	236	151	339
10	188	620	281	369	609	4330	772	1080	215	228	152	348
11	189	431	280	826	413	4320	1310	723	193	214	154	295
12	192	886	276	533	390	8370	1120	927	181	207	240	264
13	193	1430	452	391	497	4360	670	720	172	200	192	250
14	193	670	680	389	1570	3560	742	665	202	195	171	228
15	236	463	440	360	1920	3580	898	611	1590	189	164	240
16	1180	413	342	424	10500	3200	927	439	601	184	165	258
17	515	367	312	1180	6950	2990	905	341	286	190	2540	217
18	284	329	293	1300	2320	2660	907	294	216	185	2290	434
19	237	309	283	1220	1550	2510	849	271	194	179	436	1350
20	211	300	275	671	1180	2360	833	270	176	173	289	455
21	245	295	267	518	1230	2240	858	265	163	170	246	685
22	1530	278	274	465	1820	2160	863	253	297	167	225	502
23	1120	359	257	432	1890	1540	852	253	335	163	215	308
24	501	1600	248	403	3650	2310	707	240	213	170	196	266
25	374	1660	496	384	5250	3490	525	229	174	164	183	273
26	270	624	6200	370	5410	2400	477	222	170	167	179	240
27	239	456	3490	373	6370	2590	427	252	168	186	200	222
28	218	396	1090	569	8540	4580	382	2480	154	173	242	209
29	3850	360	767	3810	---	3550	328	982	173	160	224	193
30	1370	331	607	2210	---	2900	332	378	408	147	1040	190
31	465	---	519	881	---	2880	---	305	---	157	2520	---
TOTAL	15444	27228	20725	21804	66583	118790	30958	23852	8192	16262	13655	16818
MEAN	498	908	669	703	2378	3832	1032	769	273	525	440	561
MAX	3850	5640	6200	3810	10500	8370	2850	3230	1590	5020	2540	2670
MIN	177	278	248	353	390	1540	328	214	154	147	147	190
AC-FT	30630	54010	41110	43250	132100	235600	61410	47310	16250	32260	27080	33360

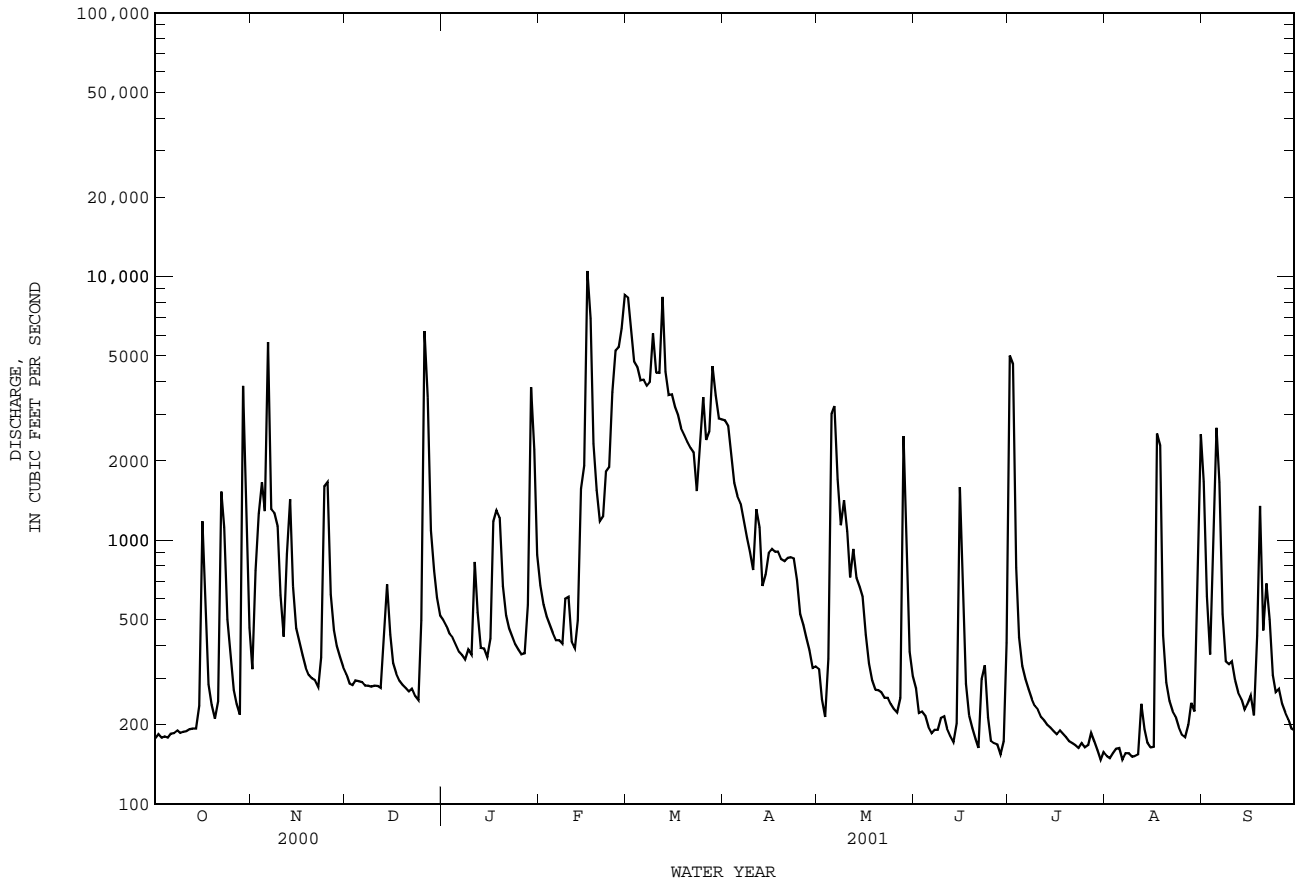
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2001, BY WATER YEAR (WY)

	502	460	490	455	685	846	844	1603	1084	392	248	327
MEAN	502	460	490	455	685	846	844	1603	1084	392	248	327
MAX	5779	4472	8319	4504	4740	4521	7245	14030	11990	3475	1478	3094
(WY)	1982	1982	1992	1992	1997	1945	1942	1990	1989	1941	1950	1962
MIN	13.6	18.9	25.0	21.7	26.8	22.5	42.6	48.5	17.0	21.1	12.1	15.6
(WY)	1940	1940	1940	1930	1930	1940	1936	1937	1925	1939	1925	1931

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1925 - 2001

ANNUAL TOTAL	203819	380311		
ANNUAL MEAN	557	1042	664	
HIGHEST ANNUAL MEAN			2629	1992
LOWEST ANNUAL MEAN			79.3	1956
HIGHEST DAILY MEAN	7150	Jun 5	48900	May 3 1990
LOWEST DAILY MEAN	162	Sep 21	4.5	Sep 7 1925
ANNUAL SEVEN-DAY MINIMUM	167	Sep 17	7.3	Jun 17 1925
MAXIMUM PEAK FLOW			12400	Feb 16
MAXIMUM PEAK STAGE			24.94	Feb 16
ANNUAL RUNOFF (AC-FT)	404300	754300	33.88	May 3 1990
10 PERCENT EXCEEDS	1300	2940	1570	
50 PERCENT EXCEEDS	260	389	183	
90 PERCENT EXCEEDS	186	179	49	

08049500 West Fork Trinity River at Grand Prairie, TX--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Jan. 1964 to current year.  
 BIOCHEMICAL DATA: Jan. 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1966 to Sept. 1992, Aug. 1993 to current year.  
 pH: Oct. 1976 to Sept. 1992, Aug. 1993 to current year.  
 WATER TEMPERATURE: Oct. 1966 to Sept. 1992, Aug. 1993 to current year.  
 DISSOLVED OXYGEN: Oct. 1976 to Sept. 1992, Aug. 1993 to current year.

INSTRUMENTATION.--Water-quality monitor since Nov. 1976.

REMARKS.--Records good. Interruption in the record was caused by malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous water years using the daily records of specific conductance and regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. 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, 1,320 microsiemens/cm, Dec. 12, 1978; minimum, 108 microsiemens/cm, May 1, 1986.  
 pH: Maximum, 8.6 units, on several days during period of record; minimum, 6.6 units, Jan. 6, 1979.  
 WATER TEMPERATURE: Maximum, 35.0°C, Aug. 8, 1982; minimum, 3.0°C, Jan. 9, 1973.  
 DISSOLVED OXYGEN: Maximum, 14.8 mg/L, Dec. 14, 16, 1983; minimum, 0.0 mg/L, on several days during period of record.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 929 microsiemens/cm, June 22; minimum, 112 microsiemens/cm, July 1.  
 pH: Maximum, 8.5 units, June 3, 19; minimum, 7.0 units, Apr. 11.  
 WATER TEMPERATURE: Maximum, 33.6°C, July 22, 23; minimum, 4.4°C, Dec. 26.  
 DISSOLVED OXYGEN: Maximum, 11.5 mg/L, Mar. 19, 20, Apr. 28; minimum, 3.0 mg/L, June 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, (PER-CENT SATUR-ATION) (MG/L) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)		
DATE		SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)
MAR														
06...	1340		4180	428	7.9	11.9	9.0	83.6	<2.0	151	23	49.6	6.67	24.2
22...	1210		2160	463	7.4	14.9	8.8	88.0	<2.0	181	31	62.1	6.23	23.0
MAY														
09...	1010		1530	492	7.8	23.1	7.7	89.8	2.1	157	31	53.1	6.02	35.4
JUL														
16...	1225		203	804	7.6	31.2	5.7	--	2.5	190	47	59.4	10.1	79.9
AUG														
22...	1320		239	666	7.5	30.3	7.9	109	2.6	165	44	52.5	8.33	63.0
SEP														
20...	0950		451	332	7.7	26.0	4.7	58.2	2.8	126	23	42.4	4.96	31.6
MAR														
06...	.855	5.55	128	35.5	27.5	.3	5.4	236	.938	.011	.949	.103	.503	
22...	.745	4.09	149	40.0	24.9	.4	7.3	266	1.66	.059	1.72	.145	.503	
MAY														
09...	1.23	5.65	126	46.0	35.6	.3	4.4	278	3.44	.020	3.46	<.041	--	
JUL														
16...	2.52	12.0	143	64.2	85.5	.5	8.5	456	11.0	.035	11.0	E.022	--	
AUG														
22...	2.13	9.80	121	57.4	61.1	1.7	9.0		11.5	.023	11.5	<.040	--	
SEP														
20...	1.22	5.54	104	36.9	28.4	.3	5.7	227	1.97	.021	1.99	.074	.454	

08049500 West Fork Trinity River at Grand Prairie, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
MAR				
06...	.61	.061	.066	.202
22...	.65	.098	.099	.304
MAY				
09...	.63	.250	.208	.638
JUL				
16...	.87	.580	.585	1.79
AUG				
22...	.89	.716	.678	2.08
SEP				
20...	.53	.161	.148	.454

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	837	800	817	---	---	e400	---	---	e740	---	---	e620
2	868	801	827	---	---	e600	---	---	e780	666	608	634
3	870	788	818	---	---	e610	---	---	e780	665	621	640
4	788	750	765	---	---	e640	---	---	e790	689	662	674
5	822	771	803	---	---	e580	---	---	e800	724	677	698
6	844	811	826	---	---	e400	---	---	e790	731	706	720
7	843	773	816	---	---	e380	---	---	e780	748	713	732
8	858	818	840	---	---	e410	---	---	e780	777	717	747
9	884	821	849	---	---	e550	750	731	745	749	698	722
10	886	801	831	---	---	e550	770	726	752	723	604	678
11	811	773	788	---	---	e540	768	711	747	768	614	700
12	849	799	826	---	---	e600	711	678	703	658	615	640
13	863	827	845	---	---	e650	679	601	655	704	656	673
14	879	853	863	---	---	e700	701	598	648	760	704	729
15	900	767	871	---	---	e600	615	577	592	768	691	727
16	875	487	640	---	---	e580	676	615	646	725	614	694
17	605	492	563	---	---	e620	722	676	709	689	559	623
18	651	605	636	---	---	e700	752	703	734	566	470	510
19	781	649	729	---	---	e740	724	696	711	553	494	518
20	807	758	781	---	---	e760	771	699	735	644	508	581
21	818	796	807	---	---	e780	813	769	800	714	644	676
22	819	704	762	---	---	e800	813	791	800	711	656	682
23	754	705	719	---	---	e810	822	795	810	711	672	692
24	---	---	e550	---	---	e550	814	783	798	735	711	723
25	---	---	e650	---	---	e400	825	304	752	768	735	752
26	---	---	e700	---	---	e450	390	256	310	790	745	768
27	---	---	e720	---	---	e440	399	289	328	790	741	770
28	---	---	e750	---	---	e580	505	399	467	773	628	752
29	---	---	e500	---	---	e710	594	503	548	628	362	466
30	---	---	e250	---	---	e720	---	---	e590	473	356	402
31	---	---	e200	---	---	---	---	---	e610	573	473	529
MONTH	---	---	721	---	---	595	---	---	691	---	---	660

TRINITY RIVER BASIN

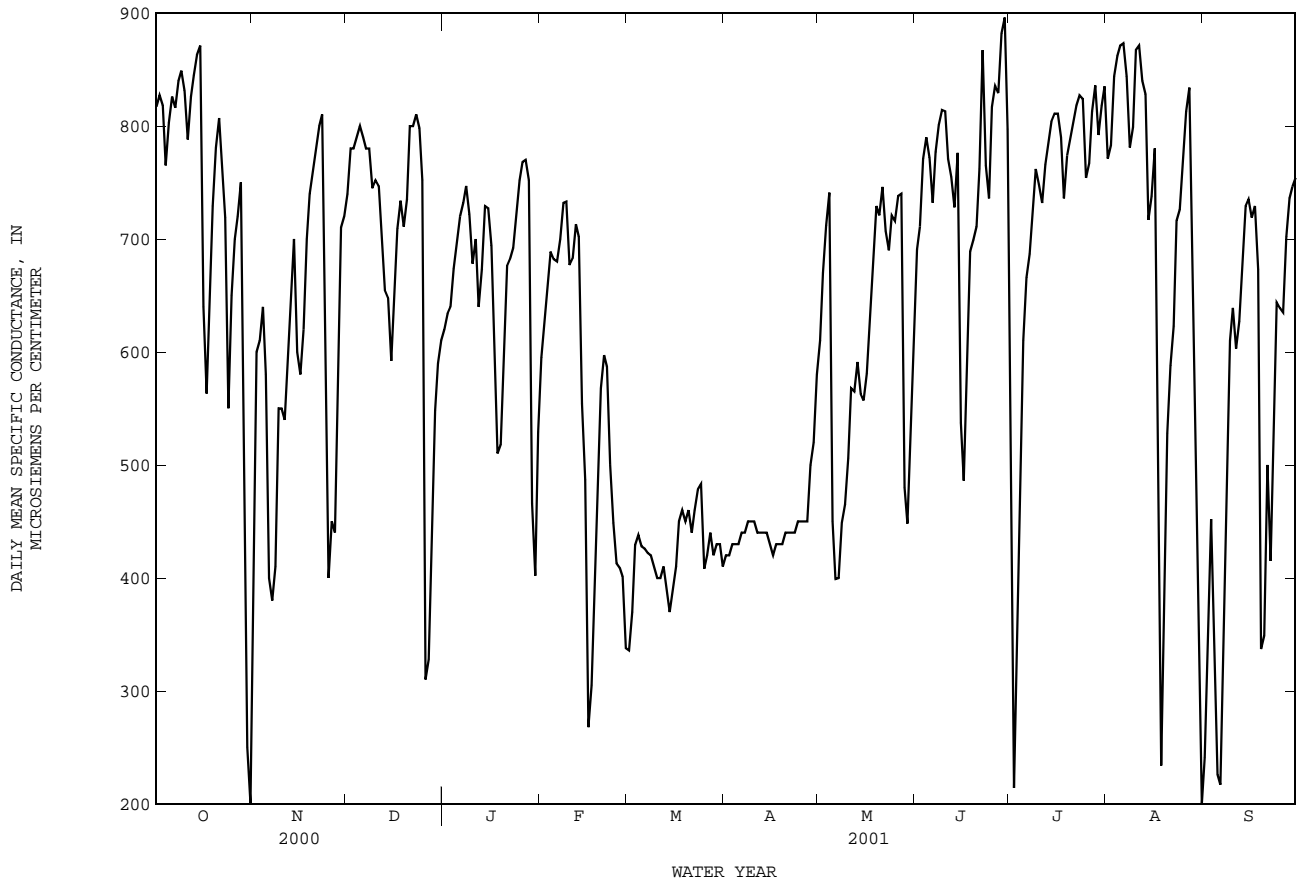
08049500 West Fork Trinity River at Grand Prairie, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	631	555	595	356	318	336	---	---	e420	---	---	e610
2	656	608	630	394	348	370	---	---	e420	---	---	e670
3	689	641	663	449	394	429	---	---	e430	743	667	712
4	718	663	689	449	431	438	---	---	e430	787	280	741
5	718	655	682	434	422	428	---	---	e430	596	280	450
6	691	662	680	432	423	426	---	---	e440	473	328	399
7	716	687	700	428	414	422	---	---	e440	419	372	400
8	771	714	732	---	---	e420	---	---	e450	467	419	449
9	773	689	733	---	---	e410	---	---	e450	511	422	465
10	745	654	677	---	---	e400	---	---	e450	554	453	506
11	722	665	683	---	---	e400	---	---	e440	594	538	568
12	735	689	713	---	---	e410	---	---	e440	611	485	565
13	726	661	702	---	---	e390	---	---	e440	617	549	591
14	722	478	554	---	---	e370	---	---	e440	594	543	563
15	555	404	487	---	---	e390	---	---	e430	573	535	557
16	455	234	268	---	---	e410	---	---	e420	620	558	581
17	386	234	305	---	---	e450	---	---	e430	666	620	643
18	458	386	428	---	---	e460	---	---	e430	707	666	690
19	536	456	505	---	---	e450	---	---	e430	748	695	729
20	594	528	568	---	---	e460	---	---	e440	737	705	721
21	619	576	597	---	---	e440	---	---	e440	769	709	746
22	609	520	587	---	---	e460	---	---	e440	719	680	707
23	520	485	500	501	453	478	---	---	e440	704	676	690
24	510	381	449	521	435	483	---	---	e450	748	699	721
25	426	394	413	447	385	408	---	---	e450	747	692	716
26	416	403	409	---	---	e420	---	---	e450	755	719	738
27	416	368	401	---	---	e440	---	---	e450	754	723	740
28	387	313	338	---	---	e420	---	---	e500	742	355	480
29	---	---	---	---	---	e430	---	---	e520	481	392	448
30	---	---	---	---	---	e430	---	---	e580	558	481	512
31	---	---	---	---	---	e410	---	---	---	661	558	606
MONTH	773	234	560	---	---	422	---	---	447	---	---	604
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	714	661	691	794	112	358	798	736	771	280	221	241
2	733	678	711	257	183	214	816	739	783	425	237	343
3	801	715	771	433	257	354	870	797	844	511	425	452
4	808	768	790	563	433	494	875	845	862	528	115	329
5	792	743	772	635	563	610	895	851	871	412	154	226
6	757	717	732	701	625	666	896	838	873	270	155	217
7	806	753	777	727	631	687	883	795	844	442	267	346
8	828	774	801	759	675	729	806	752	781	577	442	505
9	838	796	814	803	706	762	845	755	799	632	577	610
10	833	764	813	768	720	748	891	818	867	681	593	639
11	795	740	771	771	697	732	891	849	871	615	579	603
12	775	746	755	812	731	766	865	812	840	658	594	627
13	755	710	728	822	752	783	878	694	828	718	629	679
14	807	648	776	845	772	804	781	652	717	759	671	729
15	741	400	537	832	788	811	755	709	738	748	721	735
16	539	443	486	848	785	811	826	729	780	765	649	719
17	642	539	587	824	737	790	810	126	488	775	671	729
18	705	642	689	758	714	736	276	129	234	750	223	673
19	712	670	699	823	734	774	469	270	364	573	282	337
20	736	687	711	---	---	e790	559	469	528	430	295	349
21	822	718	762	832	785	805	624	513	588	610	370	500
22	929	813	867	837	806	818	673	555	623	458	370	415
23	881	689	765	869	792	827	777	644	716	549	451	503
24	772	692	736	867	762	824	759	697	726	684	549	644
25	881	725	817	770	733	754	804	724	764	671	595	639
26	861	803	836	794	741	767	855	774	813	684	594	635
27	860	796	829	854	773	813	870	812	834	753	639	702
28	923	829	882	864	795	836	830	731	781	767	702	736
29	909	875	896	822	767	792	731	680	698	777	708	746
30	886	654	797	877	781	818	697	253	569	775	727	754
31	---	---	---	874	786	835	278	161	200	---	---	---
MONTH	929	400	753	---	---	720	896	126	710	777	115	545

e Estimated

08049500 West Fork Trinity River at Grand Prairie, TX--Continued



PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.3	8.0	7.5	7.3	7.5	7.3	7.4	7.3	7.5	7.4	7.5	7.2
2	8.4	8.0	7.5	7.3	7.7	7.4	7.5	7.4	7.5	7.4	7.5	7.2
3	8.4	8.0	7.6	7.3	7.7	7.6	7.6	7.3	7.5	7.4	7.4	7.2
4	8.3	8.1	7.6	7.4	7.7	7.4	7.5	7.3	7.6	7.4	7.4	7.3
5	8.3	8.1	7.9	7.5	7.6	7.4	7.7	7.4	7.6	7.4	7.4	7.3
6	8.2	8.1	7.9	7.5	7.7	7.5	7.7	7.4	7.7	7.4	---	---
7	8.2	8.1	7.7	7.5	7.7	7.5	7.7	7.5	7.7	7.6	---	---
8	8.2	8.1	7.7	7.5	---	---	7.7	7.4	7.8	7.7	---	---
9	8.2	8.1	7.6	7.5	---	---	7.7	7.4	7.8	7.5	7.7	7.4
10	8.2	8.0	7.7	7.5	---	---	7.6	7.5	7.8	7.6	7.6	7.4
11	8.1	8.0	7.8	7.6	---	---	7.5	7.4	7.7	7.6	7.7	7.5
12	8.2	7.9	7.8	7.4	---	---	7.6	7.5	7.8	7.6	7.7	7.4
13	8.3	8.0	7.7	7.4	---	---	7.6	7.4	7.7	7.4	7.4	7.3
14	8.3	8.0	7.8	7.5	---	---	7.8	7.6	7.6	7.4	7.5	7.3
15	8.2	8.1	7.8	7.4	---	---	7.8	7.5	7.6	7.4	7.5	7.4
16	8.1	7.7	7.8	7.5	7.6	7.3	7.7	7.5	7.7	7.5	7.5	7.4
17	7.9	7.8	7.8	7.5	7.6	7.5	7.7	7.4	7.7	7.4	7.5	7.4
18	8.0	7.9	7.8	7.6	7.5	7.5	7.5	7.3	7.5	7.3	7.5	7.4
19	8.0	7.9	7.7	7.3	7.5	7.4	7.5	7.3	7.4	7.3	7.5	7.4
20	---	---	7.5	7.2	7.5	7.4	7.5	7.4	7.5	7.3	7.5	7.4
21	---	---	7.8	7.3	7.6	7.4	7.5	7.4	7.6	7.4	7.5	7.4
22	---	---	7.8	7.4	---	---	7.5	7.4	7.6	7.4	7.6	7.3
23	---	---	7.7	7.3	---	---	7.4	7.4	7.5	7.3	7.6	7.5
24	7.8	7.4	7.8	7.5	---	---	7.6	7.3	7.5	7.3	7.6	7.4
25	7.5	7.3	7.7	7.5	---	---	7.7	7.5	7.5	7.3	7.5	7.3
26	7.5	7.3	7.6	7.5	---	---	7.6	7.5	7.5	7.4	7.6	7.3
27	7.7	7.3	7.6	7.5	---	---	7.5	7.4	7.6	7.4	7.6	7.5
28	7.7	7.5	7.5	7.4	---	---	7.6	7.4	7.6	7.2	7.6	7.5
29	8.0	7.4	7.4	7.3	---	---	7.6	7.3	---	---	7.6	7.5
30	7.8	7.4	7.5	7.3	7.3	7.2	7.5	7.3	---	---	7.6	7.5
31	7.5	7.3	---	---	7.3	7.3	7.4	7.3	---	---	7.7	7.6
MONTH	---	---	7.9	7.2	---	---	7.8	7.3	7.8	7.2	---	---

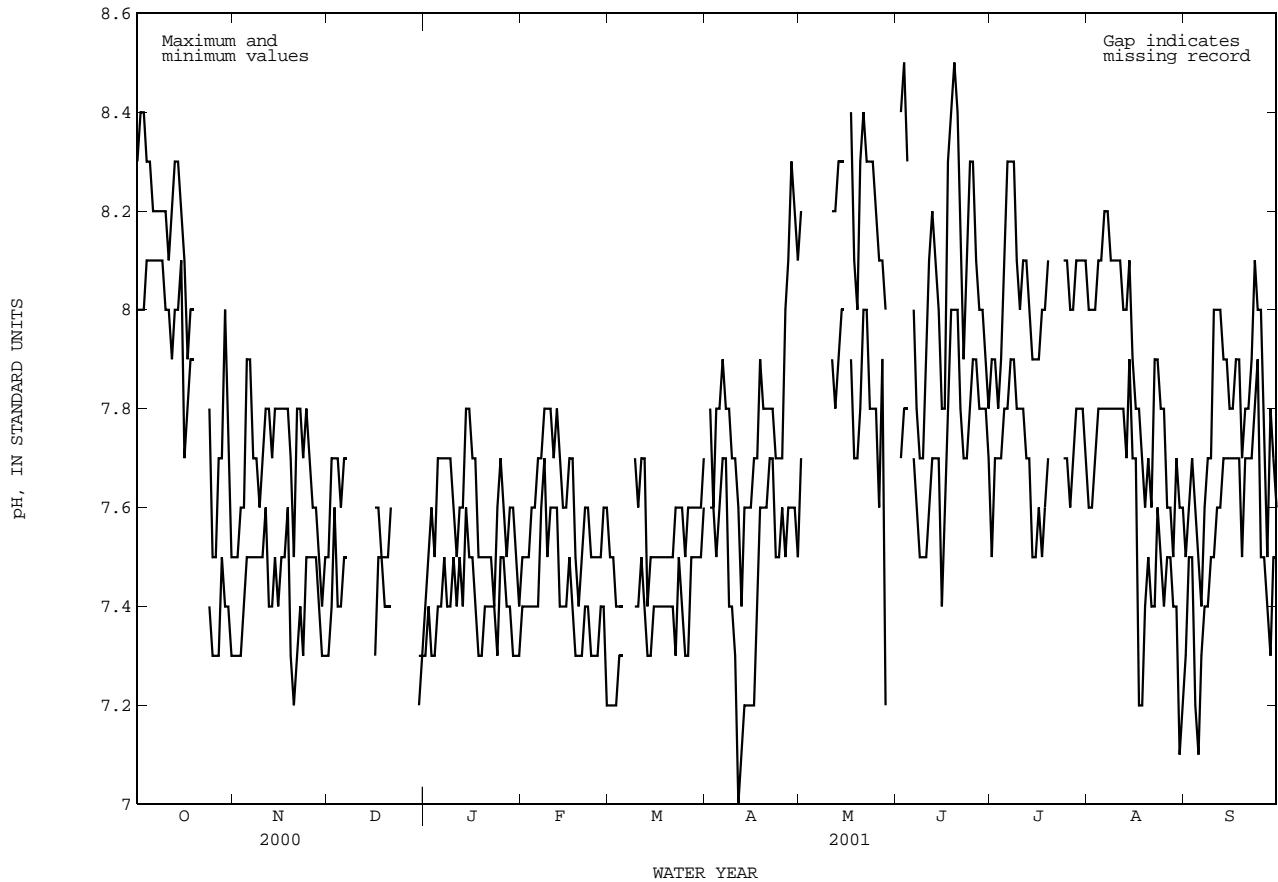


TRINITY RIVER BASIN

08049500 West Fork Trinity River at Grand Prairie, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.2	7.7	---	---	7.9	7.5	8.0	7.6	7.5	7.3
2	7.8	7.6	---	---	8.4	7.7	7.9	7.7	8.0	7.6	7.6	7.5
3	7.6	7.6	---	---	8.5	7.8	7.8	7.7	8.0	7.7	7.7	7.5
4	7.8	7.5	---	---	8.3	7.8	7.9	7.7	8.1	7.8	7.6	7.2
5	7.8	7.6	---	---	---	---	8.1	7.8	8.1	7.8	7.5	7.1
6	7.9	7.7	---	---	8.0	7.7	8.3	7.8	8.2	7.8	7.4	7.3
7	7.8	7.7	---	---	7.8	7.6	8.3	7.9	8.2	7.8	7.6	7.4
8	7.8	7.4	---	---	7.7	7.5	8.3	7.9	8.1	7.8	7.7	7.4
9	7.7	7.4	---	---	7.7	7.5	8.1	7.8	8.1	7.8	7.7	7.5
10	7.7	7.3	---	---	7.9	7.5	8.0	7.8	8.1	7.8	8.0	7.5
11	7.6	7.0	8.2	7.9	8.1	7.6	8.1	7.8	8.1	7.8	8.0	7.6
12	7.4	7.1	8.2	7.8	8.2	7.7	8.1	7.7	8.0	7.8	8.0	7.6
13	7.6	7.2	8.3	7.9	8.1	7.7	8.0	7.7	8.0	7.7	7.9	7.7
14	7.6	7.2	8.3	8.0	8.0	7.7	7.9	7.5	8.1	7.9	7.9	7.7
15	7.6	7.2	8.3	8.0	7.8	7.4	7.9	7.5	7.9	7.7	7.8	7.7
16	7.7	7.2	---	---	7.8	7.6	7.9	7.6	7.8	7.7	7.8	7.7
17	7.7	7.4	8.4	7.9	8.3	7.8	8.0	7.5	7.8	7.2	7.9	7.7
18	7.9	7.6	8.1	7.7	8.4	8.0	8.0	7.6	7.7	7.2	7.9	7.7
19	7.8	7.6	8.0	7.7	8.5	8.0	8.1	7.7	7.6	7.4	7.7	7.5
20	7.8	7.6	8.3	7.8	8.4	8.0	---	---	7.7	7.5	7.8	7.7
21	7.8	7.7	8.4	8.0	8.2	7.8	---	---	7.6	7.4	7.8	7.7
22	7.8	7.7	8.3	8.0	7.9	7.7	---	---	7.9	7.4	7.9	7.7
23	7.7	7.5	8.3	7.8	8.1	7.7	---	---	7.9	7.6	8.1	7.8
24	7.7	7.5	8.3	7.8	8.3	7.8	8.1	7.7	7.8	7.5	8.0	7.9
25	7.7	7.6	8.2	7.8	8.3	7.9	8.1	7.7	7.8	7.4	8.0	7.5
26	8.0	7.5	8.1	7.6	8.1	7.9	8.0	7.6	7.6	7.5	7.7	7.5
27	8.1	7.6	8.1	7.9	8.0	7.8	8.0	7.7	7.6	7.5	7.5	7.4
28	8.3	7.6	8.0	7.2	8.0	7.8	8.1	7.8	7.5	7.4	7.8	7.3
29	8.2	7.6	---	---	7.9	7.8	8.1	7.8	7.7	7.4	7.7	7.5
30	8.1	7.5	---	---	7.8	7.7	8.1	7.8	7.6	7.1	7.6	7.5
31	---	---	---	---	---	---	8.1	7.7	7.6	7.2	---	---
MONTH	---	---	---	---	---	---	---	---	8.2	7.1	8.1	7.1



TRINITY RIVER BASIN

08049500 West Fork Trinity River at Grand Prairie, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.8	23.8	24.7	23.7	23.0	23.3	16.2	14.9	15.7	---	---	---
2	26.2	24.0	25.0	23.8	22.0	23.0	14.9	13.7	14.5	8.8	7.8	8.2
3	27.2	24.8	25.9	22.0	20.7	21.4	14.2	13.4	13.8	9.2	7.6	8.3
4	27.9	25.6	26.6	21.0	20.6	20.8	14.9	13.6	14.2	10.5	8.9	9.6
5	28.1	26.2	27.2	21.0	19.1	20.5	15.3	14.3	14.7	11.4	9.9	10.6
6	27.7	23.6	25.4	20.0	18.4	18.9	15.3	14.2	14.9	12.1	10.7	11.3
7	23.6	20.1	21.6	18.5	17.6	18.2	14.8	13.6	14.2	12.3	11.9	12.1
8	20.1	18.7	19.4	17.6	12.5	15.3	15.0	13.8	14.3	12.3	11.5	12.0
9	19.4	17.8	18.5	14.7	13.6	13.9	15.3	14.1	14.7	12.6	11.3	12.0
10	19.0	18.0	18.5	15.6	13.4	14.6	16.5	14.7	15.6	12.3	9.4	10.8
11	20.4	18.9	19.6	16.0	14.9	15.4	16.6	13.1	15.5	12.2	9.9	11.1
12	22.5	20.3	21.3	16.2	13.6	15.1	13.1	10.6	12.0	10.7	9.5	10.2
13	23.5	21.5	22.5	14.5	11.7	12.8	10.6	9.2	9.8	11.6	10.7	11.0
14	23.9	22.8	23.3	13.4	11.6	12.5	11.3	9.8	10.6	12.3	11.4	11.9
15	24.8	23.2	23.9	14.3	12.8	13.5	10.7	8.7	9.6	12.4	11.4	11.9
16	24.7	22.2	23.3	15.2	14.3	14.9	12.2	10.7	11.5	12.6	10.7	11.9
17	22.6	21.6	22.2	15.2	14.5	14.8	12.0	10.9	11.4	11.6	8.9	10.3
18	23.8	22.3	23.0	14.7	14.2	14.6	12.1	10.9	11.4	8.9	7.9	8.3
19	24.1	22.6	23.3	15.7	14.3	14.9	12.3	11.1	11.7	8.6	7.6	8.0
20	23.5	22.8	23.0	15.7	14.4	14.9	12.3	11.0	11.5	9.1	7.3	8.2
21	23.1	22.4	22.7	15.4	14.2	14.7	12.0	11.1	11.5	10.3	8.4	9.4
22	23.4	21.0	22.1	15.6	14.5	15.1	11.9	10.8	11.2	11.0	9.3	10.2
23	22.3	21.1	21.9	16.3	15.1	15.7	12.2	11.0	11.7	11.8	10.2	11.0
24	23.8	22.1	22.9	15.8	12.6	14.5	12.1	11.5	11.8	12.4	11.4	11.8
25	23.8	22.9	23.5	13.3	12.3	12.8	11.7	5.0	10.5	12.9	11.6	12.2
26	24.4	23.3	23.8	14.6	12.8	13.7	6.7	4.4	4.9	14.1	12.8	13.5
27	24.7	23.8	24.1	15.4	13.6	14.5	5.8	4.6	5.1	13.9	11.9	12.8
28	24.7	24.0	24.3	16.5	14.9	15.5	8.0	5.8	7.0	12.8	11.6	12.3
29	24.1	19.7	21.3	16.5	15.6	16.1	9.2	7.5	8.4	11.6	9.0	9.8
30	22.6	21.1	21.9	15.8	14.9	15.4	---	---	---	10.7	9.0	10.0
31	23.5	22.2	22.8	---	---	---	---	---	---	12.1	10.5	11.2
MONTH	28.1	17.8	22.9	23.8	11.6	16.0	---	---	---	---	---	---

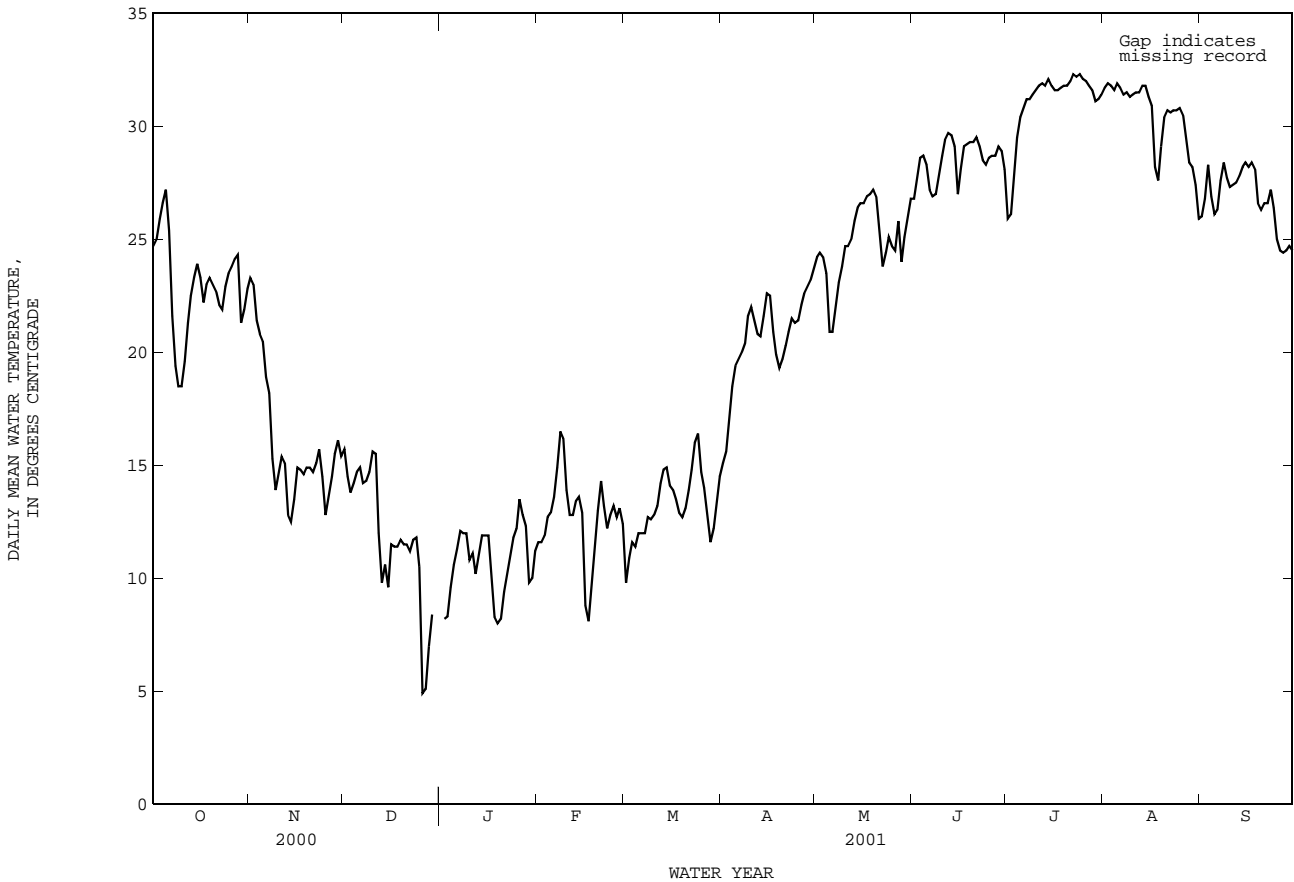
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.3	10.9	11.6	11.0	9.1	9.8	15.5	14.7	15.1	25.4	23.2	24.2
2	12.3	10.7	11.6	11.5	9.9	10.9	16.3	15.2	15.6	25.5	23.5	24.4
3	12.8	10.8	11.9	11.7	11.4	11.6	17.6	16.3	17.1	24.6	23.6	24.2
4	13.5	11.8	12.7	11.8	11.1	11.4	19.4	17.6	18.5	24.2	19.7	23.5
5	13.6	12.0	12.9	12.4	11.7	12.0	19.8	18.9	19.4	21.4	19.5	20.9
6	14.7	12.6	13.6	12.2	11.5	12.0	20.4	19.2	19.7	21.5	19.8	20.9
7	16.0	14.1	14.9	12.6	11.5	12.0	20.2	19.8	20.0	22.9	21.2	22.0
8	17.3	16.0	16.5	13.1	12.3	12.7	21.4	19.6	20.4	24.4	22.0	23.1
9	17.4	15.1	16.2	12.8	12.2	12.6	22.8	20.7	21.6	25.1	23.0	23.8
10	15.1	13.3	13.9	13.2	12.4	12.8	22.4	21.6	22.0	26.1	23.6	24.7
11	13.5	12.5	12.8	13.7	12.8	13.2	22.0	20.3	21.4	25.6	23.9	24.7
12	13.1	12.7	12.8	14.7	13.5	14.2	21.4	20.1	20.8	26.2	23.9	25.0
13	14.3	13.1	13.4	15.1	14.6	14.8	21.5	19.7	20.7	26.8	24.9	25.8
14	14.7	12.7	13.6	15.3	14.3	14.9	22.3	21.0	21.6	27.9	25.3	26.4
15	14.1	11.1	12.9	14.5	13.8	14.1	23.5	21.7	22.6	27.7	25.5	26.6
16	11.8	7.5	8.8	14.1	13.5	13.9	23.4	21.5	22.5	27.8	25.5	26.6
17	9.1	7.4	8.1	13.9	13.2	13.5	22.7	20.4	20.9	28.2	25.7	26.9
18	10.3	9.1	9.7	13.4	12.6	12.9	20.7	18.9	19.9	27.8	25.9	27.0
19	12.2	10.1	11.2	13.0	12.4	12.7	19.9	18.6	19.3	27.8	26.4	27.2
20	14.2	11.8	13.0	13.7	12.6	13.1	20.2	19.1	19.7	27.7	26.1	26.9
21	14.7	13.8	14.3	14.6	13.3	13.9	20.7	19.9	20.3	26.9	23.9	25.4
22	13.8	12.8	13.2	15.5	14.2	14.8	21.5	20.2	20.9	25.3	22.4	23.8
23	12.8	11.8	12.2	16.6	15.4	16.0	22.3	20.9	21.5	26.1	23.0	24.4
24	13.7	12.1	12.8	17.0	15.4	16.4	22.5	20.2	21.3	26.2	24.0	25.1
25	14.1	12.6	13.2	15.5	14.1	14.7	22.5	20.4	21.4	25.5	23.8	24.7
26	12.9	12.5	12.7	14.4	13.4	14.0	23.6	20.5	22.1	25.8	23.4	24.5
27	13.3	12.7	13.1	13.4	11.9	12.8	23.8	21.1	22.6	27.4	24.4	25.8
28	13.2	11.0	12.4	12.0	11.4	11.6	24.0	21.6	22.9	26.7	22.6	24.0
29	---	---	---	12.9	11.6	12.2	24.3	22.0	23.2	26.0	23.7	25.1
30	---	---	---	14.1	12.9	13.4	24.9	22.8	23.7	26.9	24.9	25.9
31	---	---	---	15.1	14.1	14.5	---	---	---	28.1	25.5	26.8
MONTH	17.4	7.4	12.7	17.0	9.1	13.2	24.9	14.7	20.6	28.2	19.5	24.8

TRINITY RIVER BASIN

08049500 West Fork Trinity River at Grand Prairie, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	27.8	25.6	26.8	28.5	23.6	25.9	33.2	30.5	31.7	26.2	25.6	26.0
2	29.3	26.1	27.6	27.0	25.4	26.1	33.0	31.0	31.9	28.2	25.7	26.8
3	29.9	27.6	28.6	29.6	26.9	28.0	32.9	30.6	31.8	29.5	27.2	28.3
4	30.0	27.5	28.7	31.1	28.2	29.5	32.9	30.2	31.6	28.9	24.7	26.9
5	28.9	27.6	28.3	31.6	29.2	30.4	33.2	30.7	31.9	27.3	25.3	26.1
6	27.6	26.9	27.2	32.1	29.5	30.8	33.1	30.5	31.7	27.4	25.4	26.3
7	27.7	26.4	26.9	32.3	30.0	31.2	32.5	30.3	31.4	28.9	26.5	27.6
8	27.9	26.3	27.0	32.4	30.0	31.2	32.8	30.4	31.5	28.9	27.8	28.4
9	29.4	26.5	27.8	32.8	30.2	31.4	32.8	30.2	31.3	28.6	27.2	27.7
10	30.4	27.4	28.7	32.8	30.6	31.6	32.7	30.3	31.4	28.4	26.1	27.3
11	30.7	28.4	29.4	33.0	30.8	31.8	32.9	30.6	31.5	28.4	26.4	27.4
12	30.9	28.7	29.7	33.1	30.9	31.9	32.7	30.4	31.5	28.8	26.3	27.5
13	30.8	28.7	29.6	33.0	30.8	31.8	32.7	31.1	31.8	29.1	26.7	27.8
14	29.9	27.3	29.1	33.2	31.3	32.1	32.8	30.9	31.8	29.3	27.2	28.2
15	28.0	25.7	27.0	32.8	31.0	31.8	32.6	30.3	31.3	28.7	28.1	28.4
16	29.8	26.8	28.1	32.8	30.6	31.6	31.4	30.4	30.9	29.0	27.5	28.2
17	30.6	27.7	29.1	32.8	30.6	31.6	30.6	25.1	28.2	29.3	27.7	28.4
18	30.5	27.9	29.2	32.9	30.8	31.7	28.8	26.0	27.6	29.4	26.0	28.1
19	30.6	28.3	29.3	32.8	30.9	31.8	30.7	27.7	29.1	27.3	25.7	26.6
20	30.3	28.4	29.3	33.0	30.7	31.8	31.7	29.2	30.4	26.7	26.0	26.3
21	30.5	28.8	29.5	33.5	30.8	32.0	31.7	29.7	30.7	27.5	26.0	26.6
22	30.2	28.1	29.1	33.6	31.2	32.3	31.8	29.7	30.6	27.4	25.5	26.6
23	29.3	27.4	28.5	33.6	31.0	32.2	31.9	29.8	30.7	28.3	26.2	27.2
24	29.7	26.9	28.3	33.4	31.3	32.3	31.8	29.8	30.7	27.6	25.4	26.4
25	29.9	27.6	28.6	33.3	31.1	32.1	32.1	29.8	30.8	25.9	24.2	25.0
26	29.4	27.9	28.7	33.3	30.9	32.0	31.1	29.7	30.5	25.5	23.4	24.5
27	29.7	28.2	28.7	32.8	31.0	31.8	29.7	28.9	29.4	25.4	23.4	24.4
28	30.2	28.3	29.1	32.8	30.7	31.6	28.9	28.1	28.4	25.6	23.7	24.5
29	29.8	28.3	28.9	31.9	30.6	31.1	28.7	27.7	28.2	25.6	23.9	24.7
30	28.9	27.1	28.1	32.8	29.9	31.2	28.2	26.0	27.4	25.6	23.6	24.5
31	---	---	---	32.8	30.1	31.4	26.2	25.6	25.9	---	---	---
MONTH	30.9	25.6	28.5	33.6	23.6	31.1	33.2	25.1	30.4	29.5	23.4	26.8



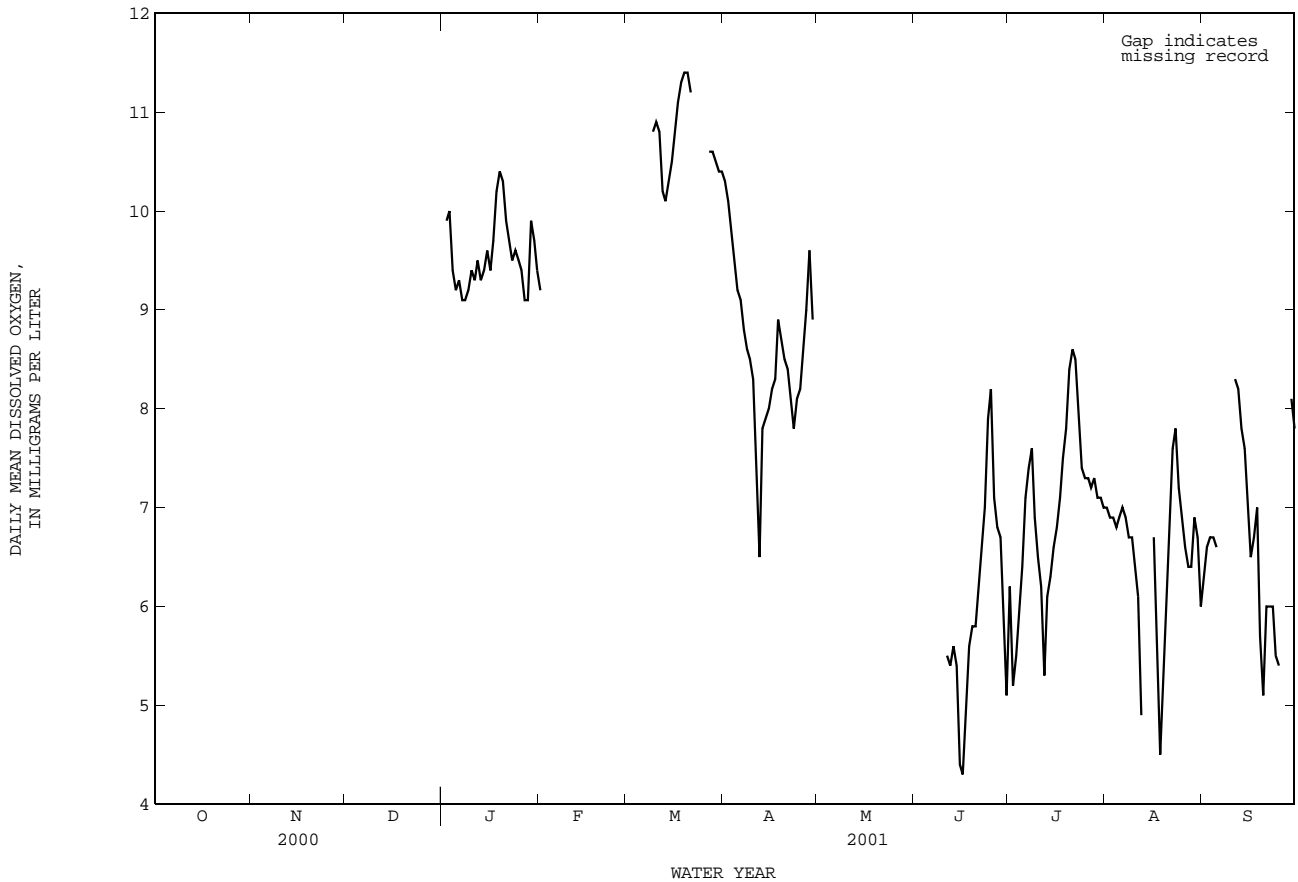


TRINITY RIVER BASIN

08049500 West Fork Trinity River at Grand Prairie, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8.0	4.8	6.2	8.6	5.8	7.0	6.4	6.2	6.3
2	---	---	---	5.5	4.9	5.2	8.4	5.7	6.9	6.7	6.3	6.6
3	---	---	---	5.7	5.1	5.5	8.4	5.7	6.9	7.2	6.4	6.7
4	---	---	---	6.3	5.6	5.9	8.4	5.7	6.8	8.1	5.3	6.7
5	---	---	---	7.4	5.8	6.4	8.6	5.7	6.9	7.2	6.2	6.6
6	---	---	---	8.7	6.1	7.1	8.8	5.6	7.0	---	---	---
7	---	---	---	9.3	6.3	7.4	8.4	5.7	6.9	---	---	---
8	---	---	---	9.4	6.3	7.6	8.2	5.7	6.7	---	---	---
9	---	---	---	8.4	5.7	6.9	8.1	5.6	6.7	---	---	---
10	---	---	---	7.7	5.5	6.5	7.6	5.4	6.4	---	---	---
11	7.4	3.8	5.5	7.4	5.1	6.2	7.3	5.2	6.1	9.9	7.2	8.3
12	7.0	4.1	5.4	7.6	3.3	5.3	6.1	4.1	4.9	9.4	7.2	8.2
13	6.5	4.3	5.6	8.1	4.5	6.1	---	---	---	9.0	6.8	7.8
14	6.2	4.2	5.4	8.4	4.6	6.3	---	---	---	8.8	6.6	7.6
15	7.6	3.0	4.4	8.4	5.1	6.6	---	---	---	8.0	6.3	7.1
16	4.9	3.9	4.3	8.5	5.6	6.8	7.8	5.9	6.7	7.1	6.0	6.5
17	6.2	4.2	5.0	9.0	5.7	7.1	8.0	3.1	5.9	7.7	6.0	6.7
18	6.8	4.3	5.6	9.6	6.1	7.5	5.0	3.6	4.5	8.2	6.2	7.0
19	7.1	4.5	5.8	9.5	6.4	7.8	5.9	5.0	5.5	7.5	4.9	5.7
20	6.9	4.4	5.8	10.9	6.6	8.4	7.1	5.7	6.2	5.7	4.6	5.1
21	8.2	4.4	6.1	10.4	7.2	8.6	8.2	6.0	6.9	6.3	5.7	6.0
22	7.5	5.7	6.5	10.4	7.2	8.5	9.5	6.3	7.6	6.6	5.2	6.0
23	8.5	5.9	7.0	9.8	6.6	8.0	9.5	6.5	7.8	6.5	5.7	6.0
24	9.9	6.6	7.9	9.3	6.0	7.4	8.5	6.1	7.2	5.9	5.1	5.5
25	9.9	6.9	8.2	9.1	6.0	7.3	8.3	5.8	6.9	5.7	5.1	5.4
26	8.4	6.0	7.1	9.3	6.0	7.3	7.2	5.8	6.6	---	---	---
27	8.1	5.7	6.8	8.7	6.1	7.2	7.1	5.9	6.4	---	---	---
28	8.1	5.7	6.7	9.3	6.0	7.3	6.9	6.1	6.4	---	---	---
29	7.1	4.8	5.9	8.4	6.0	7.1	7.9	6.2	6.9	8.9	7.3	8.1
30	6.4	3.8	5.1	8.7	5.8	7.1	7.6	5.9	6.7	8.6	7.2	7.8
31	---	---	---	8.6	5.8	7.0	6.4	5.4	6.0	---	---	---
MONTH	---	---	---	10.9	3.3	7.0	---	---	---	---	---	---



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## TRINITY RIVER BASIN

08049580 Mountain Creek near Venus, TX  
(Flood-hydrograph partial-record station)

LOCATION.--Lat 32°29'27", long 97°07'22", Johnson County, Hydrologic Unit 12030102, on right bank on downstream side of highway embankment near right end of bridge on Farm Road 157, 3.0 mi upstream from Grassy Creek, 3.2 mi upstream from Reece Branch, and 3.9 mi north of Venus.

DRAINAGE AREA.--25.5 mi<sup>2</sup>.

PERIOD OF RECORD.--Nov. 1985 to Sept. 1987, Oct. 1987 to current year (peaks above base discharge).  
Water-quality records.--Chemical data: Dec. 1985 to Sept. 1993.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 580.49 ft above sea level. Satellite telemeter at station.

REMARKS.--Records good. No known regulation or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft<sup>3</sup>/s, May 17, 1989, gage height, 15.04 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 580 ft<sup>3</sup>/s:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 29	0730	775	8.28	Mar. 8	2030	744	8.21
Feb. 16	0630	3,180	11.25	Mar. 11	1800	1,560	9.47
Feb. 27	2145	1,460	9.35	July 1	1400	852	8.43

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## TRINITY RIVER BASIN

08049700 Walnut Creek near Mansfield, TX

LOCATION.--Lat 32°34'51", long 97°06'06", Tarrant County, Hydrologic Unit 12030102, on right bank at downstream side of bridge on county road, 2.6 mi northeast of Mansfield, 3.3 mi downstream from Texas and New Orleans Railroad Co. bridge, and 10.2 mi upstream from mouth.

DRAINAGE AREA.--62.8 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1960 to current year.

Water-quality records.--Chemical data: Dec. 1985 to Sept. 1993. Biochemical data: Dec. 1985 to Sept. 1993.

GAGE.--Water-stage recorder. Datum of gage is 531.08 ft above sea level. Satellite telemeter at station.

REMARKS.--Records poor. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	23	196	.00	.00	172	8.2	1.5	1.6	980	.99	37
2	.13	47	164	.00	.00	33	7.3	1.5	1.5	90	.41	1.9
3	.14	187	157	.00	.00	11	7.2	1.3	1.4	15	.11	.65
4	.15	78	134	.00	.00	11	6.9	.75	1.3	3.9	.00	566
5	.17	170	104	.00	.00	4.3	7.2	576	1.3	2.6	.00	369
6	.25	274	82	.00	.00	2.3	6.8	63	1.4	2.0	.00	10
7	.30	73	83	.00	.00	1.6	7.4	155	1.6	1.8	.00	1.1
8	.33	134	82	.00	.00	263	6.9	25	1.6	1.6	.00	.72
9	.32	57	80	.00	.00	273	6.7	7.2	1.5	1.5	.00	3.2
10	.36	49	79	.00	.00	8.0	6.6	3.7	1.3	1.5	.00	.45
11	.35	77	79	.00	.00	316	110	3.4	1.2	1.4	.00	.09
12	.36	553	80	.00	.00	357	36	126	1.4	.74	.00	.01
13	.38	461	135	.00	.00	9.5	18	3.7	1.2	.27	.00	.00
14	.39	149	e102	.00	.00	5.4	13	2.4	1.6	1.2	.00	.06
15	2.7	141	e72.0	.00	517	4.3	10	2.0	8.2	1.3	.00	.47
16	3.3	149	e42.0	.00	2010	2.9	6.4	1.9	1.7	.62	.00	.28
17	.38	142	e12.0	1.0	18	2.3	4.6	1.6	1.4	1.3	95	.54
18	.16	128	e.27	.62	1.7	2.2	3.9	1.5	1.3	.71	12	.73
19	.16	136	e.27	.04	.88	2.1	3.9	1.5	1.2	.15	1.5	.61
20	.44	117	.00	.00	.52	2.0	4.2	1.4	1.2	.50	1.1	.59
21	3.3	131	.00	.00	.24	2.1	3.5	1.4	1.4	.91	.77	.88
22	193	135	.00	.00	.02	2.3	3.1	1.2	2.2	.92	.77	1.0
23	41	191	.00	.00	.36	2.2	4.2	1.2	1.4	.48	.56	.96
24	1.5	355	.00	.00	1.3	55	2.4	1.1	1.4	.53	.36	1.0
25	.79	185	29	.00	.95	28	2.6	1.1	1.6	.39	.22	1.1
26	.34	155	409	.00	.40	6.9	2.0	1.4	1.7	.00	.04	1.1
27	.51	143	41	.00	234	27	1.8	2.0	1.6	.47	.00	1.3
28	1.1	141	.00	.12	267	257	1.6	135	1.5	1.1	.00	1.4
29	340	139	.00	234	---	29	1.6	6.9	1.5	.81	.00	1.6
30	55	198	.00	.09	---	20	1.5	2.3	18	.34	110	1.7
31	14	---	.00	.00	---	11	---	1.9	---	.82	1510	---
TOTAL	661.44	4918	2162.54	235.87	3052.37	1923.4	305.5	1210.1	67.2	1114.86	1733.83	1005.44
MEAN	21.3	164	69.8	7.61	109	62.0	10.2	39.0	2.24	36.0	55.9	33.5
MAX	340	553	409	234	2010	357	110	576	18	980	1510	566
MIN	.13	23	.00	.00	.00	1.6	1.5	1.1	1.2	.00	.00	.00
AC-FT	1310	9750	4290	468	6050	3820	606	2400	133	2210	3440	1990
CFSM	.34	2.61	1.11	.12	1.74	.99	.16	.62	.04	.57	.89	.53
IN.	.39	2.91	1.28	.14	1.81	1.14	.18	.72	.04	.66	1.03	.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

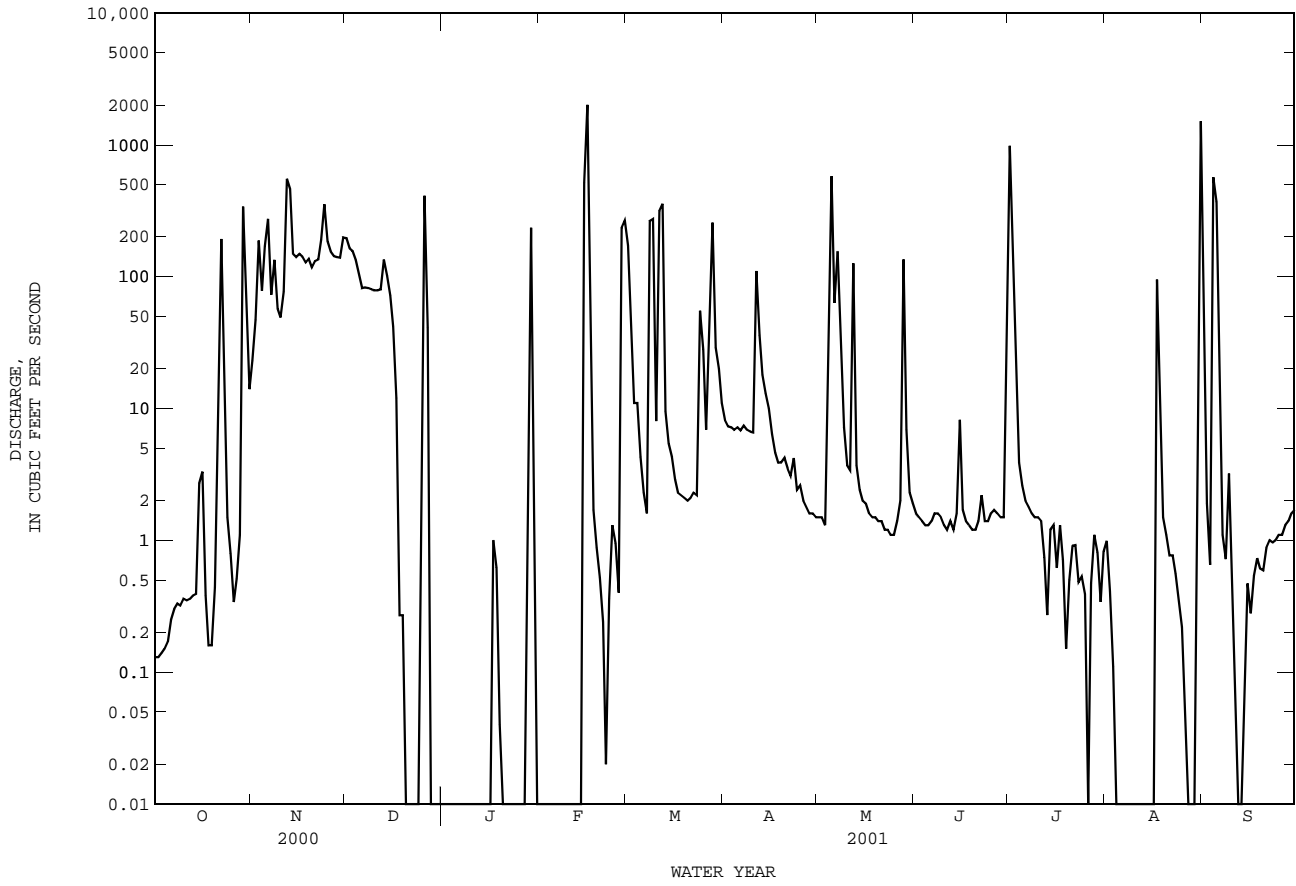
	MEAN	MAX	(WY)	MIN	(WY)
MEAN	17.7	10.3	19.5	8.00	25.1
MAX	272	164	326	64.5	173
(WY)	1992	2001	1992	1992	1997
MIN	.000	.000	.000	.000	.014
(WY)	1964	1961	1964	1981	1981

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1961 - 2001

ANNUAL TOTAL	13080.06	18390.55	
ANNUAL MEAN	35.7	50.4	20.0
HIGHEST ANNUAL MEAN			82.2
LOWEST ANNUAL MEAN			1.34
HIGHEST DAILY MEAN	3510	2010	7900
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		7210	22800
MAXIMUM PEAK STAGE		27.90	33.77
ANNUAL RUNOFF (AC-FT)	25940	36480	14510
ANNUAL RUNOFF (CFSM)	.57	.80	.32
ANNUAL RUNOFF (INCHES)	7.75	10.89	4.33
10 PERCENT EXCEEDS	101	142	14
50 PERCENT EXCEEDS	.80	1.5	.28
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated

08049700 Walnut Creek near Mansfield, TX--Continued



TRINITY RIVER BASIN

08049800 Joe Pool Lake near Duncanville, TX

LOCATION.--Lat 32°38'36", long 97°00'03", Dallas County, Hydrologic Unit 12030102, in control room of outlet works tower located 285 ft upstream from centerline of Joe Pool Dam on Mountain Creek, 0.7 mi downstream from Walnut Creek, 0.7 mi upstream from bridge over Mountain Creek on Camp Wisdom Road, 1.0 mi downstream from John Penn Branch, 5.5 mi west of water towers in downtown Duncanville, 7.1 mi upstream from Mountain Creek Dam on Mountain Creek, and 11.2 mi upstream from mouth.

DRAINAGE AREA.--232 mi<sup>2</sup>.

PERIOD OF RECORD.--Jan. 1986 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Water-quality records.--Chemical data: Jan. 1986 to Sept. 1993. Biochemical data: Jan. 1986 to Sept. 1993.

GAGE.--Water-stage recorder. Datum of gage is sea level (U.S. Army Corps of Engineers benchmark). Satellite telemetry at station.

REMARKS.--No estimated daily contents. Records good. The lake is formed by a rolled earthfill dam 22,360 ft long, including a 50-foot uncontrolled broad-crested concrete spillway. Impoundment of water began Jan. 7, 1986, after closure of the dam was completed in Dec. 1985. The flood-control outlet works consist of a 10.5-foot-diameter conduit that is controlled by two 4.75- by 10.5-foot slide gates. Above an elevation of 541 ft, water will flow over a 50-foot-long uncontrolled broad-crested concrete spillway located 0.5 mi to left of the outlet works tower. The low-flow outlet works consist of four 3- by 5-foot slide gates having invert elevations at 486.0, 495.0, 504.0, and 513.0 ft that open to a wet-well. Discharge from the wet-well to the 10.5-foot-diameter conduit is controlled by a 2- by 4-foot gate with invert at elevation 483.0 ft. A low-flow bypass system consisting of a turbine pump and 10-inch-diameter piping is also available for use if needed. The dam is owned by the U.S. Army Corps of Engineers. The lake was built for water supply, conservation, and flood control. Conservation pool storage is 176,900 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	564.5
Crest of spillway.....	541.0
Top of conservation pool.....	522.0
Lowest gated outlet.....	466.0

COOPERATION.--Capacity Table No. 2 furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 274,600 acre-ft, May 20, 1990, elevation, 533.21 ft; minimum contents after initial filling, 75,910 acre-ft, Jan. 24, 1989, elevation, 507.84 ft.

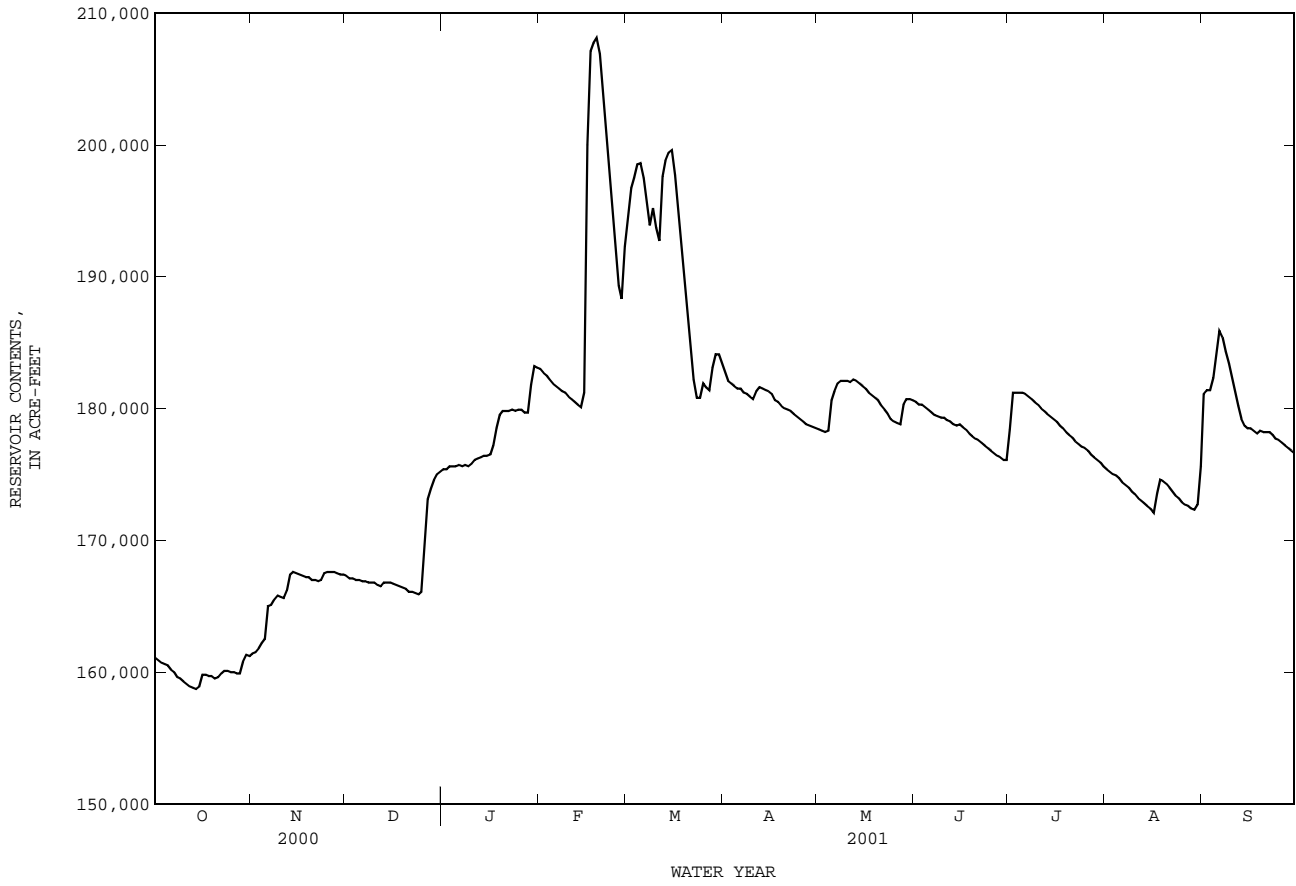
EXTREMES FOR CURRENT YEAR.--Maximum contents, 208,500 acre-ft, Feb. 19, elevation, 526.01 ft; minimum contents, 158,600 acre-ft, Oct. 14, 15, elevation, 519.47 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161100	161400	167300	175400	183000	194500	182800	178400	180500	178400	175400	181100
2	160900	161500	167100	175400	182700	196700	182100	178300	180300	181200	175200	181400
3	160700	161800	167100	175600	182500	197500	181900	178200	180300	181200	175000	181400
4	160600	162200	167000	175600	182200	198500	181700	178300	180100	181200	174900	182300
5	160500	162500	167000	175600	181900	198600	181500	180600	179900	181200	174700	184300
6	160200	165000	166900	175700	181700	197500	181500	181300	179700	181100	174400	185900
7	160000	165100	166900	175600	181500	195600	181200	181900	179500	180900	174200	185400
8	159600	165500	166800	175700	181300	193900	181100	182100	179400	180700	174000	184300
9	159500	165800	166800	175600	181200	195200	180900	182100	179300	180500	173700	183400
10	159300	165700	166800	175800	180900	193700	180700	182100	179300	180300	173500	182400
11	159100	165600	166600	176100	180700	192700	181300	182000	179100	180000	173200	181300
12	158900	166200	166500	176200	180500	197600	181600	182200	179000	179800	173000	180200
13	158800	167400	166800	176300	180300	198800	181500	182100	178800	179600	172800	179200
14	158700	167600	166800	176400	180100	199400	181400	181900	178700	179400	172600	178700
15	158900	167500	166800	176400	181200	199600	181300	181700	178800	179200	172400	178500
16	159800	167400	166700	176500	200000	197700	181100	181500	178600	179000	172100	178500
17	159800	167300	166600	177200	207100	195100	180600	181200	178400	178700	173500	178300
18	159700	167200	166500	178500	207700	192500	180500	181000	178100	178500	174600	178100
19	159700	167200	166400	179500	208100	189800	180200	180800	177900	178200	174500	178300
20	159500	167000	166300	179800	206900	187200	180000	180600	177700	178000	174300	178200
21	159600	167000	166100	179800	204100	184500	179900	180200	177600	177800	174000	178200
22	159900	166900	166100	179800	201000	182200	179800	179900	177400	177500	173700	178200
23	160100	167000	166000	179900	198000	180800	179600	179600	177200	177300	173400	178000
24	160100	167500	165900	179800	195300	180800	179400	179200	177000	177100	173200	177700
25	160000	167600	166100	179900	192200	181900	179200	179000	176800	177000	172900	177600
26	160000	167600	169600	179900	189300	181600	179000	178900	176600	176800	172700	177400
27	159900	167600	173100	179700	188300	181400	178800	178800	176400	176500	172600	177200
28	159900	167500	173900	179700	192300	183100	178700	180300	176300	176300	172400	177000
29	160800	167400	174600	181800	---	184100	178600	180700	176100	176100	172300	176800
30	161300	167400	175000	183200	---	184100	178500	180700	176100	175900	172700	176600
31	161200	---	175200	183100	---	183500	---	180600	---	175600	175600	---
MEAN	159900	166000	168000	177900	189700	191000	180500	180500	178400	178700	173700	179900
MAX	161300	167600	175200	183200	208100	199600	182800	182200	180500	181200	175600	185900
MIN	158700	161400	165900	175400	180100	180800	178500	178200	176100	175600	172100	176600
(+)	519.84	520.71	521.77	522.82	524.01	522.87	522.21	522.49	521.90	521.83	521.82	521.97
(@)	-100	+6200	+7800	+7900	+9200	-8800	-5000	+2100	-4500	-500	0	+1000
CAL YR 2000	MAX 201400	MIN 157200	(@) +16800									
WTR YR 2001	MAX 208100	MIN 158700	(@) +15300									

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

08049800 Joe Pool Lake near Duncanville, TX--Continued



## TRINITY RIVER BASIN

08050050 Mountain Creek Lake near Grand Prairie, TX

LOCATION.--Lat 32°43'55", long 96°56'35", Dallas County, Hydrologic Unit 12030102, at right end of spillway in Mountain Creek Dam on Mountain Creek, 2.5 mi upstream from Texas and Pacific Railway Co. bridge, and 3.7 mi southeast of Grand Prairie.

DRAINAGE AREA.--295 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1960 to current year.

Water-quality records.--Chemical data: Oct. 1969 to Sept. 1985.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Oct. 21, 1960, non-recording gage at powerplant at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records good. The lake is formed by a rolled earthfill dam 5,800 ft long, including a controlled spillway with six 34 by 27 ft tainter gates. The dam was completed in Dec. 1936 and deliberate impoundment began on Mar. 24, 1937. The lake was built and is operated by Dallas Power and Light Co. to supply cooling water for their generating plant. Dry weather conservation pool storage is 20,776 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	467.0
Top of gates.....	458.0
Top of dry weather conservation pool.....	457.0
Top of wet weather conservation pool.....	456.0
Crest of spillway (sill of tainter gates).....	431.0

COOPERATION.--Capacity Table No. 1 was provided by the Dallas Power and Light Co., and was replaced by Capacity Table No. 2, furnished by TXU Electric of Dallas, and put into effect Oct. 1, 2000.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 28,430 acre-ft, Mar. 13, 1995, elevation 458.82 ft; minimum contents, 14,120 acre-ft, Oct. 18, 1972, elevation, 453.25 ft.

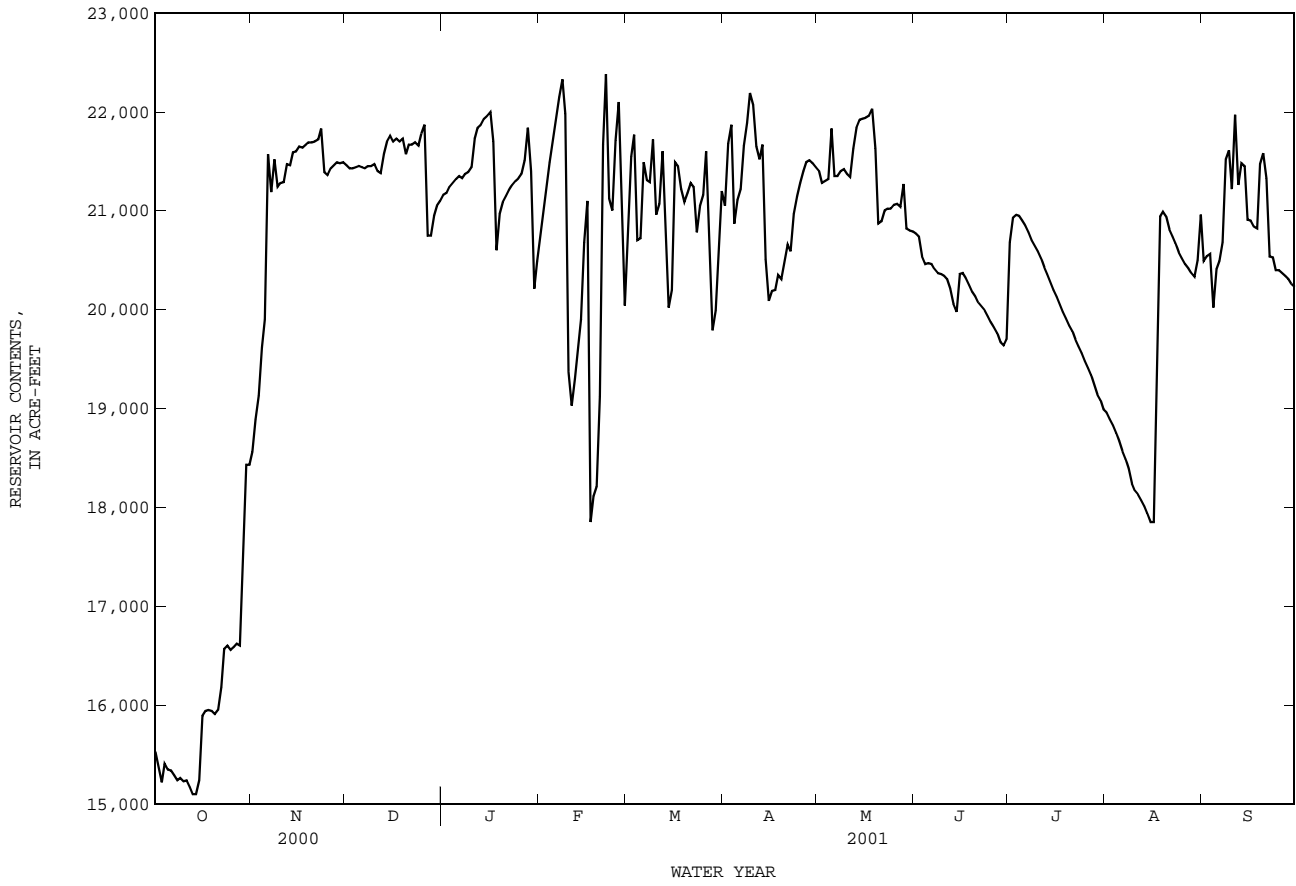
EXTREMES FOR CURRENT YEAR.--Maximum contents, 23,780 acre-ft, Feb. 16, elevation, 458.13 ft; minimum contents, 14,930 acre-ft, Oct. 13, elevation, 454.53 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15530	18560	21460	21160	20750	20690	21050	21400	20770	20680	18960	20490
2	15370	18890	21430	21180	20980	21550	21680	21280	20740	20930	18890	20540
3	15220	19130	21430	21240	21230	21770	21870	21300	20540	20960	18830	20560
4	15410	19620	21440	21280	21490	20700	20870	21320	20460	20950	18750	20020
5	15350	19900	21450	21320	21710	20720	21110	21830	20470	20900	18670	20410
6	15340	21570	21440	21350	21930	21490	21220	21350	20460	20850	18570	20490
7	15290	21190	21430	21330	22150	21310	21660	21350	20410	20780	18490	20680
8	15240	21520	21450	21370	22330	21290	21890	21400	20370	20700	18390	21520
9	15260	21240	21450	21390	21980	21720	22190	21420	20360	20650	18240	21610
10	15230	21280	21470	21440	19370	20960	22070	21370	20340	20590	18170	21220
11	15240	21290	21400	21730	19030	21070	21650	21340	20310	20520	18130	21970
12	15170	21470	21380	21840	19300	21600	21520	21630	20210	20430	18070	21260
13	15100	21460	21570	21870	19600	20710	21670	21840	20060	20360	18010	21480
14	15100	21590	21700	21930	19900	20020	20510	21920	19980	20280	17940	21450
15	15240	21600	21760	21960	20680	20200	20090	21930	20360	20200	17850	20910
16	15890	21650	21700	22000	21100	21490	20190	21940	20370	20130	17850	20900
17	15940	21640	21730	21700	17850	21450	20200	21960	20320	20050	19200	20840
18	15950	21670	21700	20600	18110	21220	20350	22030	20250	19980	20940	20820
19	15940	21690	21730	20970	18210	21090	20310	21630	20180	19910	20990	21470
20	15910	21690	21570	21090	19120	21180	20490	20870	20130	19840	20940	21580
21	15950	21700	21670	21150	21670	21280	20660	20890	20070	19780	20810	21330
22	16180	21720	21670	21210	22380	21240	20590	21000	20030	19700	20740	20540
23	16570	21830	21690	21260	21120	20780	20970	21020	19990	19630	20670	20530
24	16600	21390	21660	21300	21000	21050	21140	21020	19930	19560	20580	20400
25	16560	21360	21780	21330	21710	21160	21280	21060	19870	19480	20520	20400
26	16590	21430	21870	21370	22100	21600	21400	21070	19820	19410	20460	20370
27	16620	21460	20750	21510	21300	20570	21490	21040	19760	19340	20420	20340
28	16600	21490	20750	21840	20040	19790	21510	21270	19670	19240	20370	20310
29	17660	21480	20950	21400	---	19990	21480	20820	19640	19140	20330	20260
30	18430	21490	21050	20210	---	20570	21440	20800	19700	19080	20500	20230
31	18430	---	21100	20490	---	21200	---	20790	---	18990	20960	---
MEAN	15960	21130	21470	21350	20650	21010	21150	21350	20190	20100	19430	20830
MAX	18430	21830	21870	22000	22380	21770	22190	22030	20770	20960	20990	21970
MIN	15100	18560	20750	20210	17850	19790	20090	20790	19640	18990	17850	20020
(+)	456.05	457.26	457.12	456.89	456.70	457.16	457.25	457.00	456.57	456.28	457.07	456.78
(@)	+870	+3060	-390	-610	-450	+1160	+240	-650	-1090	-710	+1970	-730
CAL YR 2000	MAX 24740	MIN 15100	(@) -1460									
WTR YR 2001	MAX 22380	MIN 15100	(@) +2670									

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

08050050 Mountain Creek Lake near Grand Prairie, TX--Continued



## TRINITY RIVER BASIN

08050100 Mountain Creek at Grand Prairie, TX

LOCATION.--Lat 32°44'51", long 96°55'32", Dallas County, Hydrologic Unit 12030102, on roadway embankment at upstream right end of downstream bridge on Jefferson Street, 1,000 ft upstream from bridge on U.S. Highway 80, 1.2 mi upstream from Texas and Pacific Railroad Co. bridge, 1.5 mi downstream from Mountain Creek Lake Dam, and 4.4 mi east of Grand Prairie.

DRAINAGE AREA.--298 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 404.31 ft above sea level. Prior to Dec. 19, 1984, at datum 3.0 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Oct. 1960, at least 10% of contributing drainage area has been regulated. No known diversions.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

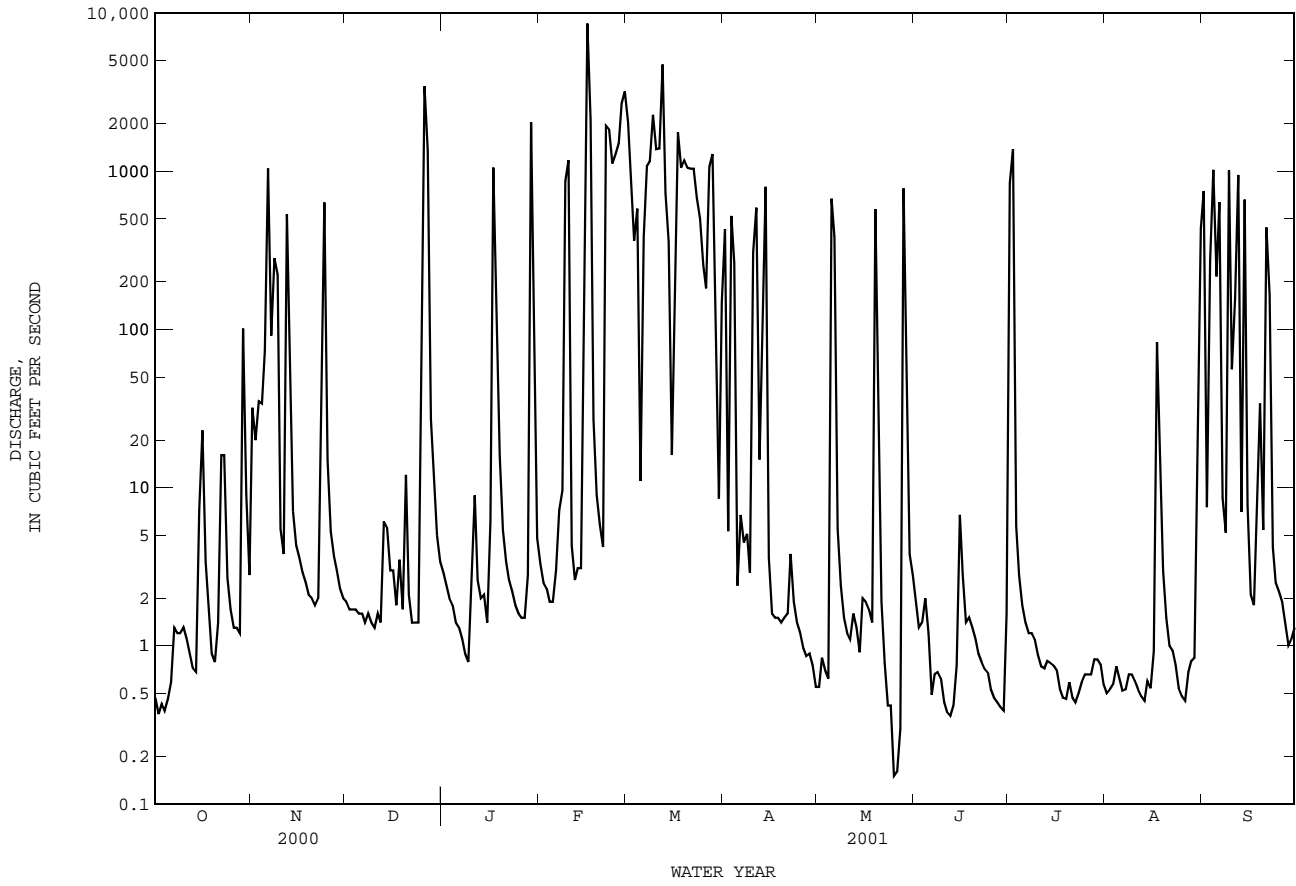
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	32	1.9	2.9	3.3	2050	431	.55	1.9	841	.50	750
2	.37	20	1.7	2.4	2.5	840	5.3	.84	1.3	1380	.53	7.5
3	.43	35	1.7	2.0	2.3	364	521	.70	1.4	5.7	.57	269
4	.39	34	1.7	1.8	1.9	579	262	.62	2.0	2.8	.74	1020
5	.46	73	1.6	1.4	1.9	11	2.4	671	1.2	1.8	.63	216
6	.59	1040	1.6	1.3	3.0	382	6.7	384	.49	1.4	.52	637
7	1.3	91	1.4	1.1	7.2	1070	4.5	5.5	.66	1.2	.53	8.6
8	1.2	282	1.6	.89	9.6	1150	5.1	2.4	.68	1.2	.66	5.2
9	1.2	222	1.4	.79	866	2270	2.9	1.5	.62	1.1	.66	1010
10	1.3	5.5	1.3	2.3	1170	1380	308	1.2	.44	.87	.60	56
11	1.1	3.8	1.6	8.9	4.3	1390	588	1.1	.38	.74	.53	156
12	.88	536	1.4	2.6	2.6	4720	15	1.6	.36	.72	.48	945
13	.72	82	6.1	2.0	3.1	727	82	1.3	.42	.80	.45	7.0
14	.68	7.1	5.6	2.1	3.1	357	796	.91	.75	.78	.60	659
15	7.2	4.3	3.0	1.4	968	16	3.6	2.0	6.7	.75	.54	7.7
16	23	3.6	3.0	6.1	8570	86	1.6	1.9	2.8	.70	.92	2.1
17	3.4	2.9	1.8	1050	2110	1760	1.5	1.7	1.4	.53	83	1.8
18	1.7	2.5	3.5	252	27	1050	1.5	1.4	1.5	.47	18	6.9
19	.89	2.1	1.7	16	9.0	1170	1.4	573	1.3	.46	3.0	34
20	.79	2.0	12	5.4	5.8	1050	1.5	15	1.1	.59	1.5	5.4
21	1.4	1.8	2.1	3.4	4.2	1040	1.6	1.9	.89	.47	1.0	440
22	16	2.0	1.4	2.6	1940	1040	3.8	.78	.79	.44	.93	164
23	16	41	1.4	2.2	1830	680	1.9	.42	.71	.50	.76	4.2
24	2.7	634	1.4	1.8	1120	501	1.4	.42	.67	.59	.54	2.5
25	1.7	15	23	1.6	1280	256	1.2	.15	.53	.66	.48	2.2
26	1.3	5.3	3430	1.5	1500	182	.96	.16	.47	.66	.45	1.9
27	1.3	3.7	1360	1.5	2680	1060	.86	.30	.44	.66	.68	1.4
28	1.2	3.0	27	2.8	3190	1280	.89	776	.41	.82	.80	1.0
29	101	2.3	10	2040	---	122	.75	74	.39	.82	.84	1.1
30	9.1	2.0	5.0	55	---	8.5	.55	3.8	1.6	.76	8.3	1.3
31	2.8	---	3.4	4.8	---	147	---	2.8	---	.57	435	---
TOTAL	202.57	3190.9	4920.3	3480.58	27314.8	28738.5	3054.91	2528.95	34.30	2250.56	564.74	6423.8
MEAN	6.53	106	159	112	976	927	102	81.6	1.14	72.6	18.2	214
MAX	101	1040	3430	2040	8570	4720	796	776	6.7	1380	435	1020
MIN	.37	1.8	1.3	.79	1.9	8.5	.55	.15	.36	.44	.45	1.0
AC-FT	402	6330	9760	6900	54180	57000	6060	5020	68	4460	1120	12740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

MEAN	69.2	68.6	104	101	167	224	208	286	149	32.5	9.12	23.5
MAX	785	1286	1102	1483	976	1104	1170	1941	1028	511	88.6	214
(WY)	1974	1992	1972	1992	2001	1977	1966	1969	1990	1989	1962	2001
MIN	.22	.30	.26	.11	.17	.30	.91	.68	.50	.21	.16	.36
(WY)	1989	1964	1976	1976	1964	1976	1987	1984	1971	1972	1972	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1961 - 2001
ANNUAL TOTAL	38672.62	82704.91	
ANNUAL MEAN	106	227	120
HIGHEST ANNUAL MEAN			506
LOWEST ANNUAL MEAN			4.39
HIGHEST DAILY MEAN	3430	8570	24700
LOWEST DAILY MEAN	.29	.15	.00
ANNUAL SEVEN-DAY MINIMUM	.45	.49	.02
MAXIMUM PEAK FLOW		14200	38100
MAXIMUM PEAK STAGE		23.68	25.12
ANNUAL RUNOFF (AC-FT)	76710	164000	86840
10 PERCENT EXCEEDS	270	851	107
50 PERCENT EXCEEDS	2.0	2.1	1.3
90 PERCENT EXCEEDS	.71	.54	.33

08050100 Mountain Creek at Grand Prairie, TX--Continued





## TRINITY RIVER BASIN

08050400 Elm Fork Trinity River at Gainesville, TX

LOCATION.--Lat 33°37'27", long 97°09'22", Cooke County, Hydrologic Unit 12030103, on downstream right bank at end of bridge on Farm Road 51, 31 ft downstream from centerline of road, 0.6 mi west of Cooke County courthouse in Gainesville, 1.0 mi upstream from Interstate Highway 35, and 1.2 mi downstream from Dozier Creek.

DRAINAGE AREA.--174 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1985 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 700.00 ft above sea level. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. No known regulation or diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Oct. 1981 reached a peak stage of 28.1 ft, from information furnished by an employee of the Gainesville Department of Public Works.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	29	175	230	323	1290	110	27	41	125	.47	.90
2	.00	40	159	218	258	840	104	25	26	72	.43	.88
3	.00	355	130	206	233	696	102	24	15	57	.41	1.0
4	.00	232	100	204	200	596	94	41	9.8	23	.41	4.8
5	.00	649	85	186	167	484	87	275	7.5	7.6	.44	1.5
6	7.2	1270	73	161	153	411	84	89	6.4	4.1	.59	1.2
7	.52	400	63	145	143	361	78	96	5.8	2.9	.36	.85
8	.29	788	55	124	128	346	65	96	5.2	2.4	.75	119
9	.05	597	48	107	150	467	57	44	4.8	2.1	.38	22
10	.27	318	44	100	129	308	54	33	4.4	1.9	.29	3.0
11	.19	235	42	159	112	276	905	28	4.1	1.6	.28	1.7
12	.12	233	40	144	106	260	222	91	3.9	1.4	.29	1.3
13	.06	236	50	129	112	235	125	47	3.6	1.3	.81	1.1
14	.01	170	82	124	127	223	97	30	5.0	1.3	.49	1.1
15	1.2	144	148	107	1130	213	83	23	4.1	1.2	.55	.92
16	.61	125	174	104	4450	199	68	18	3.3	1.2	22	.88
17	.10	99	116	334	1010	191	56	17	3.1	1.1	1.6	1.0
18	.12	81	91	280	757	184	49	24	3.0	.97	1.1	.90
19	.04	67	76	240	583	178	47	17	2.7	.87	.85	.82
20	13	51	67	164	455	172	47	26	2.5	.80	.72	18
21	3.6	40	60	141	393	165	45	21	2.4	.78	.68	3.2
22	7.9	35	49	127	345	159	44	15	2.3	.72	.45	1.6
23	2.7	72	45	120	1560	142	82	12	2.2	.75	.38	1.2
24	2.9	2520	44	120	3230	483	55	10	2.1	.79	.33	1.1
25	4.4	878	55	114	863	208	42	8.6	2.0	.77	.29	.96
26	6.2	490	3000	105	660	137	38	7.9	1.9	.74	.31	.83
27	17	343	1060	98	2420	131	35	7.5	1.9	.71	.61	.78
28	8.3	254	644	367	3000	168	33	80	1.9	.68	.81	.71
29	762	209	458	2600	---	154	30	48	2.3	.65	.85	.69
30	e112	188	339	732	---	132	28	28	120	.98	.87	.64
31	e55	---	270	430	---	121	---	133	---	.61	.91	---
TOTAL	1005.78	11148	7842	8420	23197	9930	2966	1442.0	300.2	317.92	39.71	194.56
MEAN	32.4	372	253	272	828	320	98.9	46.5	10.0	10.3	1.28	6.49
MAX	762	2520	3000	2600	4450	1290	905	275	120	125	22	119
MIN	.00	29	40	98	106	121	28	7.5	1.9	.61	.28	.64
AC-FT	1990	22110	15550	16700	46010	19700	5880	2860	595	631	79	386

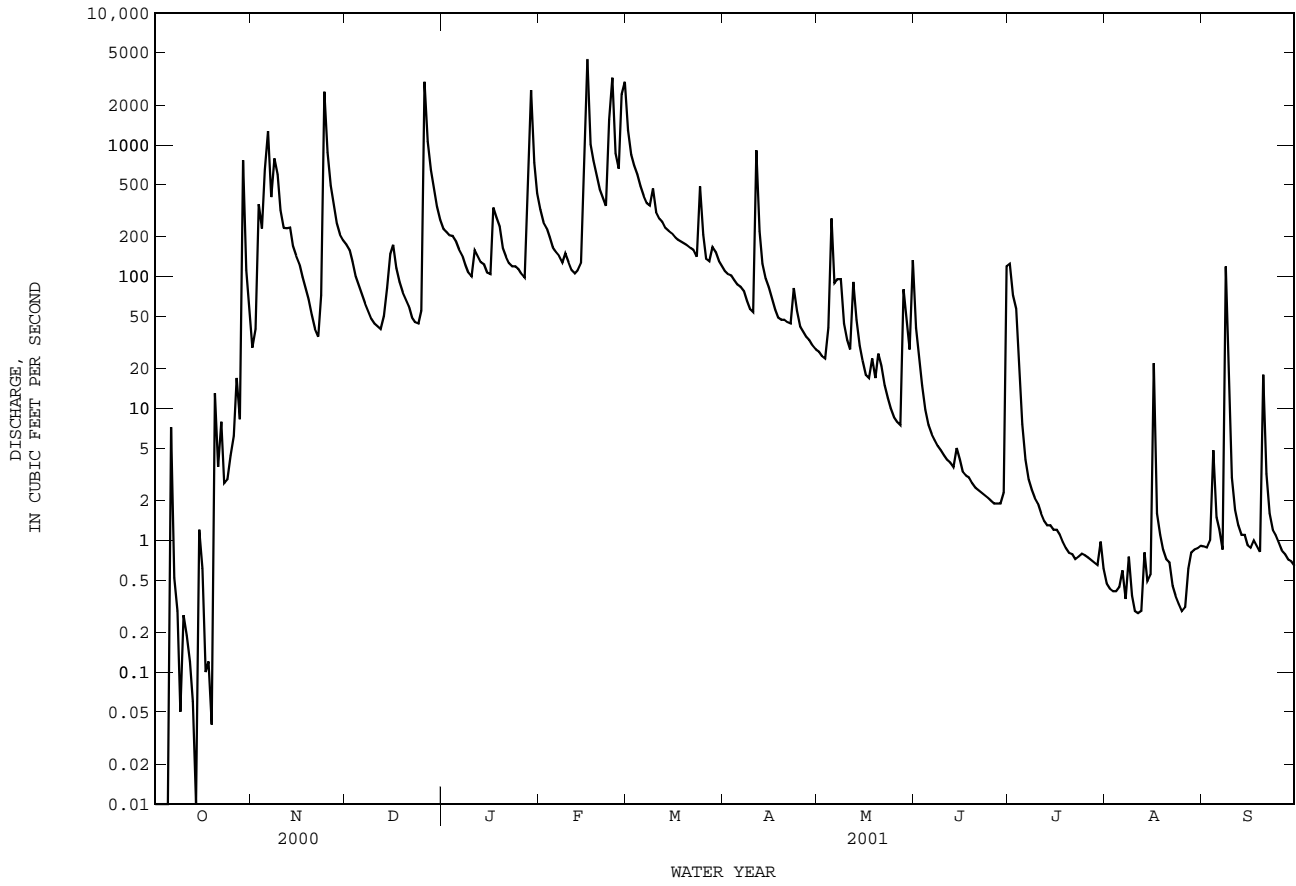
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	55.2	82.9	137	91.2	187	185	147	288	134	15.4	3.81	31.5				
MAX	310	372	743	316	828	565	1063	1359	659	91.1	13.2	123				
(WY)	1994	2001	1992	1992	2001	1990	1990	1990	1989	1987	1996	1996				
MIN	.098	.28	2.25	.46	.52	6.54	2.76	.73	2.61	.61	.000	.031				
(WY)	2000	2000	2000	2000	2000	1986	2000	2000	1996	1998	2000	2000				

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1986 - 2001
ANNUAL TOTAL	21054.88	66803.17	
ANNUAL MEAN	57.5	183	113
HIGHEST ANNUAL MEAN			277
LOWEST ANNUAL MEAN			3.12
HIGHEST DAILY MEAN	3000	4450	12500
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.14	.00
MAXIMUM PEAK FLOW		13300	24000
MAXIMUM PEAK STAGE		19.65	25.33
ANNUAL RUNOFF (AC-FT)	41760	132500	81700
10 PERCENT EXCEEDS	113	404	222
50 PERCENT EXCEEDS	.55	45	10
90 PERCENT EXCEEDS	.00	.61	.65

e Estimated

08050400 Elm Fork Trinity River at Gainesville, TX--Continued



TRINITY RIVER BASIN

08050800 Timber Creek near Collinsville, TX

LOCATION.--Lat 33°33'16", long 96°56'49", Cooke County, Hydrologic Unit 12030103, on left bank 13 ft to the left of bridge on Farm Road 902 and 19 ft downstream from the centerline of the road, 2.1 mi west of Collinsville, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--38.8 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1985 to current year.

Water-quality records.--Chemical data: Apr. 1993 to Sept. 1993. Biochemical data: Apr. 1993 to Sept. 1993.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 640.00 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records poor. No known regulation or diversions. No flow many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Oct. 1981 reached a peak stage of 15.0 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1.1	10	19	772	3.1	.00	.00	26	.00	.00
2	.00	.00	.44	7.2	13	81	2.3	.01	.00	2.4	.00	.00
3	.00	38	.05	5.4	11	48	2.2	.18	.00	.02	.00	.00
4	.00	45	.00	6.9	7.2	29	1.6	3.1	.00	.00	.00	17
5	.00	26	.00	6.0	4.8	19	1.3	234	.00	.00	.00	18
6	.00	198	.00	4.1	3.7	13	1.3	39	.00	.00	.00	.02
7	.00	30	.00	2.9	3.9	11	.92	29	.00	.00	.00	.00
8	.00	90	.00	2.0	3.4	15	.61	25	.00	.00	.00	.00
9	.00	65	.00	1.5	13	116	.53	3.8	.00	.00	.00	19
10	.00	26	.12	1.4	7.7	36	.40	.06	.00	.00	.00	.85
11	.00	8.3	.00	2.0	3.9	76	105	.15	.00	.00	.00	.00
12	.00	3.4	.00	2.6	3.3	167	27	.00	.00	.00	.00	.00
13	.00	16	.11	1.8	33	45	5.0	.00	.00	.00	.00	.00
14	.00	4.9	8.4	1.6	38	26	2.1	.00	.00	.00	.00	.00
15	.00	.43	43	2.1	145	19	1.4	.00	.00	.00	.00	.00
16	.00	.02	52	2.2	864	10	.38	.00	.00	.00	.00	.00
17	.00	.00	21	104	231	5.5	.02	.00	.00	.00	.00	.00
18	.00	.00	10	74	46	5.3	.00	.00	.00	.00	.00	.00
19	.00	.00	4.3	73	31	4.6	.00	.00	.00	.00	.00	.00
20	.00	.00	2.0	29	22	3.8	.00	.00	.00	.00	.00	.00
21	.00	.00	.91	16	15	3.0	.00	.00	.00	.00	.00	.00
22	53	.00	.31	8.8	11	2.8	.00	.00	.00	.00	.00	.00
23	16	33	.12	7.6	102	2.3	118	.00	.00	.00	.00	.00
24	.00	375	.05	7.2	937	111	5.8	.00	.00	.00	.00	.00
25	.00	137	3.0	6.1	90	51	.23	.00	.00	.00	.00	.00
26	.00	33	329	4.0	40	18	.01	.00	.00	.00	.00	.00
27	.00	17	281	2.8	119	7.0	.00	.00	.00	.00	.00	.00
28	.00	9.7	50	7.5	575	35	.00	4.2	.00	.00	.00	.00
29	156	4.6	29	423	---	42	.00	.12	.00	.00	.00	.00
30	16	2.2	17	106	---	18	.00	.00	186	.00	.00	.00
31	.21	---	10	32	---	7.9	---	.00	---	.00	.00	---
TOTAL	241.21	1162.55	862.91	960.7	3392.9	1800.2	279.20	338.62	186.00	28.42	0.00	54.87
MEAN	7.78	38.8	27.8	31.0	121	58.1	9.31	10.9	6.20	.92	.000	1.83
MAX	156	375	329	423	937	772	118	234	186	26	.00	19
MIN	.00	.00	.00	1.4	3.3	2.3	.00	.00	.00	.00	.00	.00
AC-FT	478	2310	1710	1910	6730	3570	554	672	369	56	.00	109
CFSM	.20	1.00	.72	.80	3.12	1.50	.24	.28	.16	.02	.00	.05
IN.	.23	1.11	.83	.92	3.25	1.73	.27	.32	.18	.03	.00	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	22.0	16.6	39.7	19.7	35.4	37.1	40.2	56.5	28.5	22.1	1.02	6.06
MAX	135	66.3	326	73.1	121	107	259	168	193	293	6.76	32.0
(WY)	1992	1997	1992	1992	2001	1998	1990	1989	1989	1994	1996	1992
MIN	.000	.000	.000	.10	.000	.67	.000	.059	.000	.000	.000	.000
(WY)	1988	1990	1999	2000	1999	1999	1999	1996	1996	1988	1986	1995

SUMMARY STATISTICS

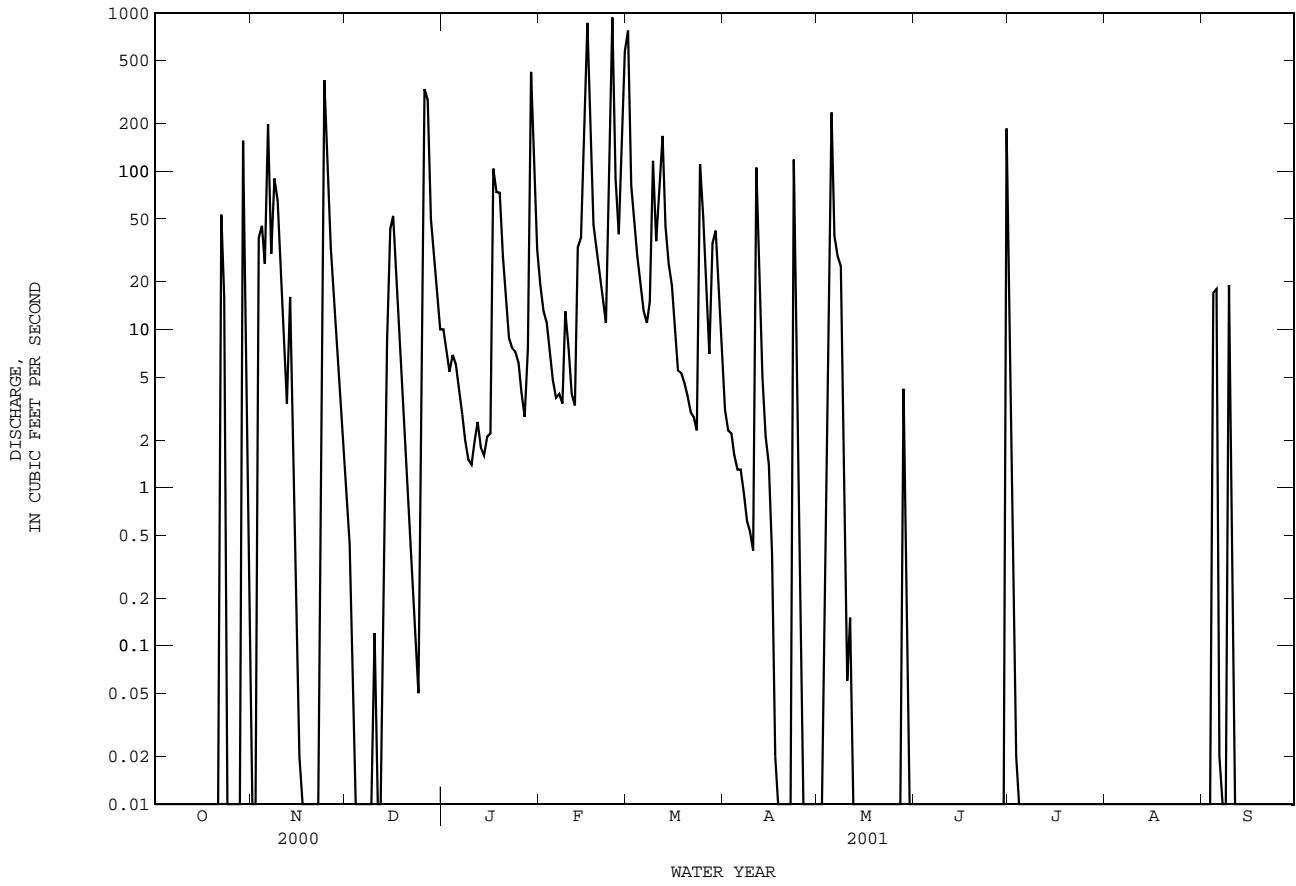
FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1986 - 2001

ANNUAL TOTAL	2788.26	9307.58	
ANNUAL MEAN	7.62	25.5	27.1
HIGHEST ANNUAL MEAN			72.7
LOWEST ANNUAL MEAN			1.77
HIGHEST DAILY MEAN	375	Nov 24	5410
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00
MAXIMUM PEAK FLOW			2110
MAXIMUM PEAK STAGE			13.11
ANNUAL RUNOFF (AC-FT)	5530	18460	19600
ANNUAL RUNOFF (CFSM)	.20	.66	.70
ANNUAL RUNOFF (INCHES)	2.67	8.92	9.48
10 PERCENT EXCEEDS	15	47	26
50 PERCENT EXCEEDS	.00	.00	1.2
90 PERCENT EXCEEDS	.00	.00	.00

08050800 Timber Creek near Collinsville, TX--Continued



TRINITY RIVER BASIN

08050840 Range Creek near Collinsville, TX

LOCATION.--Lat 33°31'34", long 96°48'25", Grayson County, Hydrologic Unit 12030103, on downstream left bank at bridge on Farm Road 902, 1.8 mi upstream from Case Creek, 2.5 mi downstream from Little Elm Creek, 6.5 mi southeast from Post Office in Collinsville.

DRAINAGE AREA.--29.2 mi<sup>2</sup>.

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

Water-quality records.--Chemical data: Oct. 1992 to Sept. 1995. Biochemical data: Oct. 1992 to Sept. 1995.

GAGE.--Water-stage recorder. Datum of gage is 621.08 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records poor. No known regulation or diversion. No flow many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1.3	8.9	.83	409	2.5	2.1	5.4	2.7	.00	.00
2	.00	.00	1.4	8.1	4.7	15	2.0	3.3	1.3	.01	.00	.00
3	.00	.00	2.5	7.3	.93	5.9	2.1	2.8	.80	.00	.00	.00
4	.00	1.1	2.4	6.7	.82	9.1	1.6	2.4	.35	.00	.00	.00
5	.00	201	1.5	6.5	2.1	4.2	1.4	47	.18	.00	.00	1.3
6	.00	695	.46	5.6	1.5	2.2	1.5	17	.07	.00	.00	.42
7	.00	52	.30	4.5	.50	1.5	1.6	51	.02	.00	.00	.00
8	.00	229	.21	3.6	1.0	8.2	1.2	21	.00	.00	.00	.00
9	.00	94	.05	3.6	2.7	139	.87	8.8	.00	.00	.00	13
10	.00	29	.04	4.2	1.8	8.0	.74	4.8	.00	.00	.00	.44
11	.00	15	.03	4.0	.49	231	27	3.4	.00	.00	.00	.01
12	.00	26	.79	4.7	.47	502	7.0	3.6	.00	.00	.00	.00
13	.00	40	.00	4.8	293	20	1.7	3.0	.00	.00	.00	.00
14	.00	19	.20	4.7	86	4.4	1.3	.77	.00	.00	.00	.00
15	.00	16	2.5	5.3	263	6.9	.98	1.2	.00	.00	.00	.01
16	.00	16	2.2	13	1180	2.2	1.0	1.3	.00	.00	.00	.00
17	.00	13	.06	38	34	1.3	.97	.73	.00	.00	.00	.00
18	.00	4.6	.00	53	3.3	1.1	.79	.51	.00	.00	.00	.00
19	.00	3.2	.00	31	1.2	1.1	.58	.63	.00	.00	.00	.00
20	.00	2.1	.00	3.4	2.3	.97	.56	2.3	.00	.00	.00	.00
21	.00	1.8	.00	1.9	1.6	.87	.56	1.5	.00	.00	.00	.00
22	.00	2.5	.00	2.6	1.4	.94	1.5	.01	.00	.00	.00	.00
23	.00	16	.00	1.1	34	.89	61	.00	.00	.00	.00	.00
24	.00	386	.00	1.1	800	922	13	.00	.00	.00	.00	.00
25	.00	89	.99	.80	29	73	5.7	.00	.00	.00	.00	.00
26	.00	19	824	.73	3.6	7.5	4.1	.00	.00	.00	.00	.00
27	.00	9.7	227	.71	123	5.0	3.5	.00	.00	.00	.00	.00
28	.00	5.8	35	.99	441	37	3.0	.38	.00	.00	.00	.00
29	.00	2.9	19	321	---	30	1.6	.00	.00	.00	.00	.00
30	.00	2.0	16	15	---	13	1.5	.00	8.8	.00	.00	.00
31	.00	---	11	2.8	---	5.2	---	195	---	.00	.00	---
TOTAL	0.00	1990.70	1148.93	569.63	3314.24	2468.47	152.85	374.53	16.92	2.71	0.00	15.20
MEAN	.000	66.4	37.1	18.4	118	79.6	5.10	12.1	.56	.087	.000	.51
MAX	.00	695	824	321	1180	922	61	195	8.8	2.7	.00	13
MIN	.00	.00	.00	.71	.47	.87	.56	.00	.00	.00	.00	.00
AC-FT	.00	3950	2280	1130	6570	4900	303	743	34	5.4	.00	30
CFSM	.00	2.27	1.27	.63	4.05	2.73	.17	.41	.02	.00	.00	.02
IN.	.00	2.54	1.46	.73	4.22	3.14	.19	.48	.02	.00	.00	.02

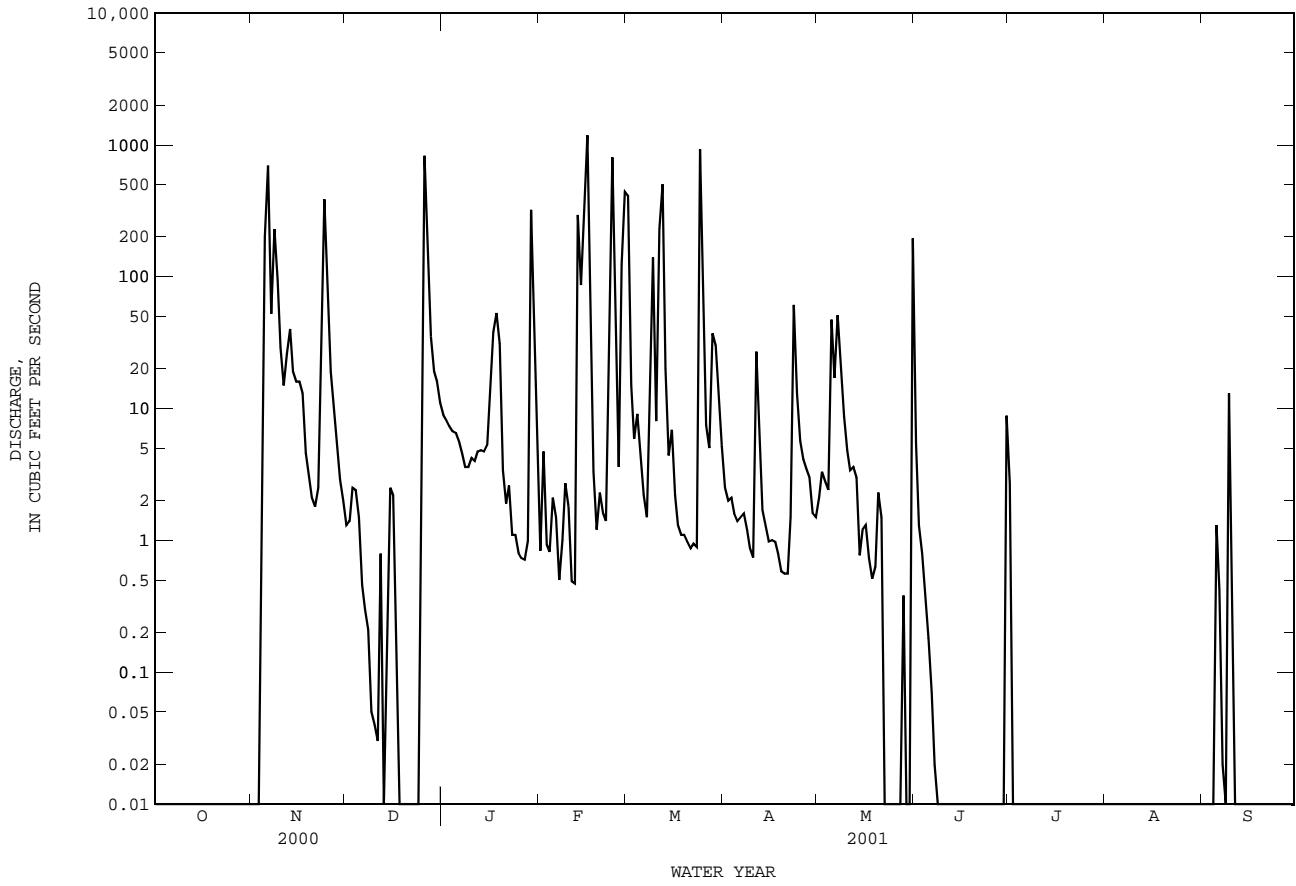
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)
	17.4	43.6	1994	24.7	1997	17.9	108	1998	34.9	1996	34.2	81.6	1997	6.21	2.14
	107	204	1994	66.0	1998	118	118	1998	118	1996	60.5	60.5	1997	4.09	9.54
	.000	.000	1994	.40	1998	.000	.000	1998	.000	1996	.15	.000	1997	.68	1994
	.000	.000	1994	.40	1998	.000	1.25	1998	.000	1996	.15	.000	1997	.00	1994
	.000	.000	1994	.40	1998	.000	1.25	1998	.000	1996	.15	.000	1997	.00	1994

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1993 - 2001

ANNUAL TOTAL	4065.14	10054.18	
ANNUAL MEAN	11.1	27.5	19.0
HIGHEST ANNUAL MEAN			38.3
LOWEST ANNUAL MEAN			1.88
HIGHEST DAILY MEAN	824	1180	2580
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		2550	7640
MAXIMUM PEAK STAGE		19.75	23.32
ANNUAL RUNOFF (AC-FT)	8060	19940	13760
ANNUAL RUNOFF (CFSM)	.38	.94	.65
ANNUAL RUNOFF (INCHES)	5.18	12.81	8.84
10 PERCENT EXCEEDS	11	29	10
50 PERCENT EXCEEDS	.00	.71	.03
90 PERCENT EXCEEDS	.00	.00	.00

08050840 Range Creek near Collinsville, TX--Continued



TRINITY RIVER BASIN

08051100 Ray Roberts Lake near Pilot Point, TX

LOCATION.--Lat 33°21'19", long 97°02'59", Denton County, Hydrologic Unit 12030103, in control room of outlet works tower located 336 ft upstream from centerline of Ray Roberts Dam (and Farm Road 455 which is located on top of dam) on Elm Fork Trinity River, 3.7 mi upstream from Bray Branch, 5.7 mi southwest of Pilot Point, and at river mile 60.0.

DRAINAGE AREA.--692 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1987 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Water-quality records.--Chemical data: Feb. 1989 to Sept. 1998.

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

REMARKS.--No estimated daily contents. Records good. Lake is formed by a rolled earthfill dam 15,250 ft long. There is an uncontrolled, broad-crested spillway excavated in natural ground about 5,000 ft right of right end of dam. A reinforced concrete tower houses the flood-control and low-flow gates and operating equipment. Construction started Sept. 16, 1980, and closure was made in May 1986. The dam was built and is owned by the U.S. Army Corps of Engineers. Deliberate impoundment started June 30, 1987. The lake was built for water supply, flood control, and recreation purposes. Conservation pool storage is 799,750 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	665.0
Spillway crest (uncontrolled).....	645.5
Top of flood-control pool.....	640.5
Top of conservation pool.....	632.5
Invert, lowest gated outlet.....	551.0

COOPERATION.--Capacity tables provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,219,000 acre-ft, May 3, 1990, elevation, 644.48 ft; minimum contents after initial filling, 405,700 acre-ft, Oct 13, 2001, elevation, 615.33 ft.

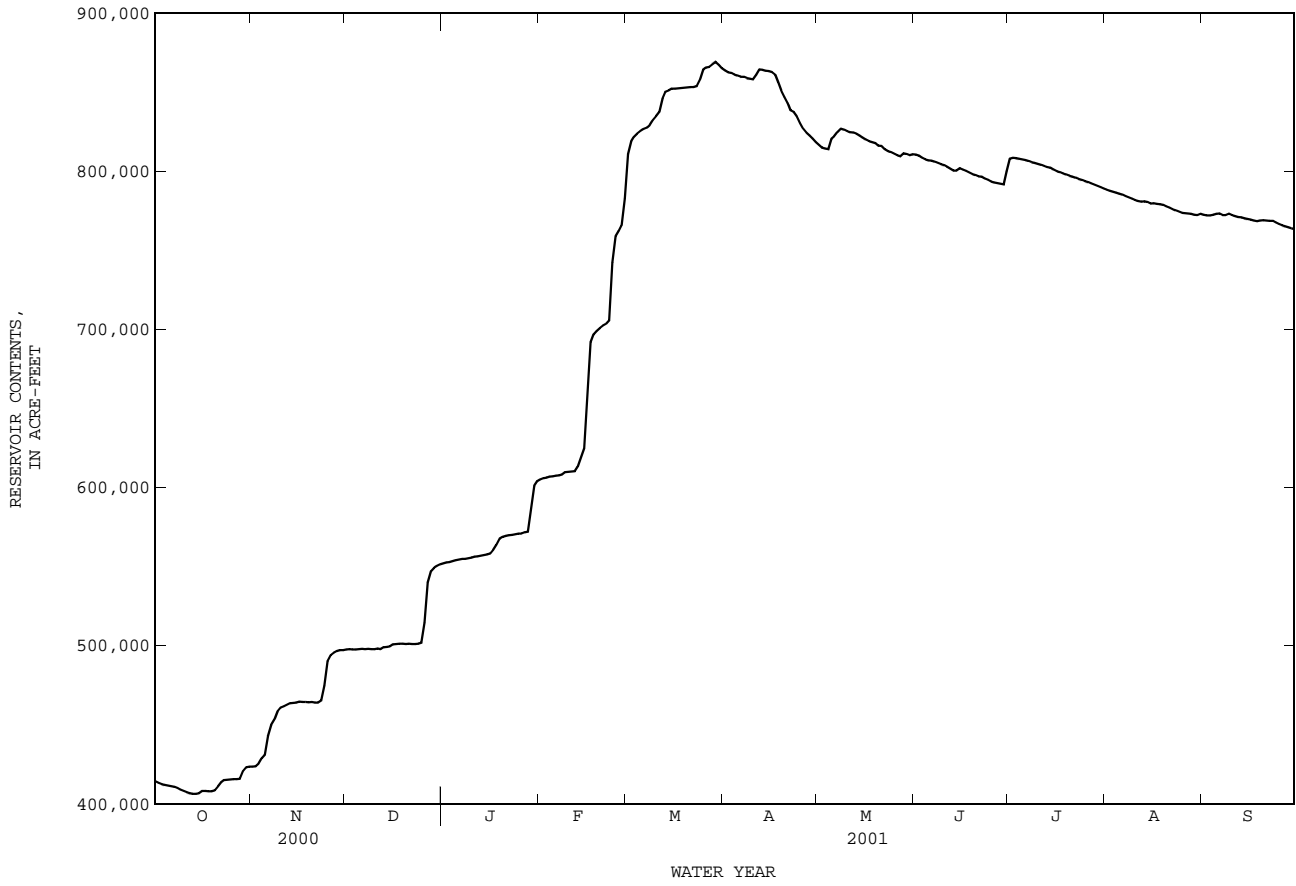
EXTREMES FOR CURRENT YEAR.--Maximum contents, 869,400 acre-ft, Mar. 29, elevation, 634.79 ft; minimum contents, 405,700 acre-ft, Oct. 13, elevation, 615.33 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414200	423600	497700	552200	605200	810800	863800	816600	810500	807800	788300	772500
2	413300	423900	497800	552700	606000	818900	862600	815000	809900	808400	787700	772000
3	412500	425700	497700	553000	606400	821900	862100	814400	808500	808200	787000	772000
4	412000	429000	497700	553600	607000	823900	861200	814000	807500	807900	786400	772400
5	411600	431000	497800	554100	607200	825400	860500	820600	806800	807500	785900	773000
6	411300	443100	498000	554500	607600	826600	859600	822300	806700	807000	785200	773300
7	410900	450000	497800	554900	607700	827500	859700	824900	806100	806400	784300	772200
8	410100	453300	498000	555000	608300	829100	858900	826800	805300	805700	783400	772200
9	409000	458600	497900	555300	609800	832400	858500	826300	804500	805200	782500	773000
10	408200	460900	497900	555700	610000	834700	858000	825300	803800	804600	781700	772300
11	407400	461600	498200	556400	610100	837400	860900	824600	802800	804000	781100	771700
12	406900	462700	497900	556600	610300	845900	864400	824400	801600	803200	780800	771100
13	406500	463600	499000	556900	613200	850100	864100	823600	800300	802600	781000	770800
14	406400	463900	499200	557400	618900	850900	863600	822500	800300	802600	780600	770200
15	406800	464100	499600	557700	624700	852200	863400	821200	801900	801000	779600	769800
16	408200	464600	501000	558300	662900	852100	862700	820000	801000	800000	779700	769500
17	408200	464500	501100	560600	692000	852400	861200	819000	800100	799300	779400	768800
18	408100	464500	501400	563900	696700	852600	856400	818500	799100	798600	779100	768500
19	408000	464300	501400	567600	699000	852800	850900	817800	798200	797900	778700	768900
20	408700	464400	501100	568900	700900	853000	846900	816200	797500	797200	777800	769100
21	411000	464100	501400	569500	702400	853200	843100	816000	796800	796500	776900	768900
22	413700	464100	501100	569900	703400	853300	838400	814000	796500	795900	775900	768700
23	415200	465200	501100	570200	705600	853900	837500	812700	795400	795200	775200	768600
24	415400	474800	501300	570600	742400	857800	834600	812100	794600	794500	774400	767700
25	415600	490100	501900	570900	758800	864200	830300	811100	793600	793800	773700	766600
26	415800	494100	514700	571000	762100	865500	826600	810100	792900	793100	773500	765800
27	415800	495600	540000	571700	765700	866000	824400	809400	792400	792300	773300	765100
28	415900	496600	547000	572100	782700	867600	822700	811400	792100	791500	773000	764500
29	420800	497200	549200	587600	---	868900	820700	811000	791700	790700	772400	764000
30	423300	497300	550500	601000	---	867200	818500	810200	799800	789900	772200	763400
31	423600	---	551500	604000	---	865100	---	810800	---	789000	773000	---
MEAN	412100	462500	507700	564600	661700	846200	849900	817500	800600	799900	779500	769600
MAX	423600	497300	551500	604000	782700	868900	864400	826800	810500	808400	788300	773300
MIN	406400	423600	497700	552200	605200	810800	818500	809400	791700	789000	772200	763400
(+)	616.36	620.29	622.83	625.10	631.91	634.65	633.13	632.87	632.50	632.13	631.57	631.23
(@)	+8400	+73700	+54200	+52500	+178700	+82400	-46600	-7700	-11000	-10800	-16000	-9600
CAL YR 2000	MAX 597000	MIN 406400	(@) -46400									
WTR YR 2001	MAX 868900	MIN 406400	(@) +348200									

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

08051100 Ray Roberts Lake near Pilot Point, TX--Continued



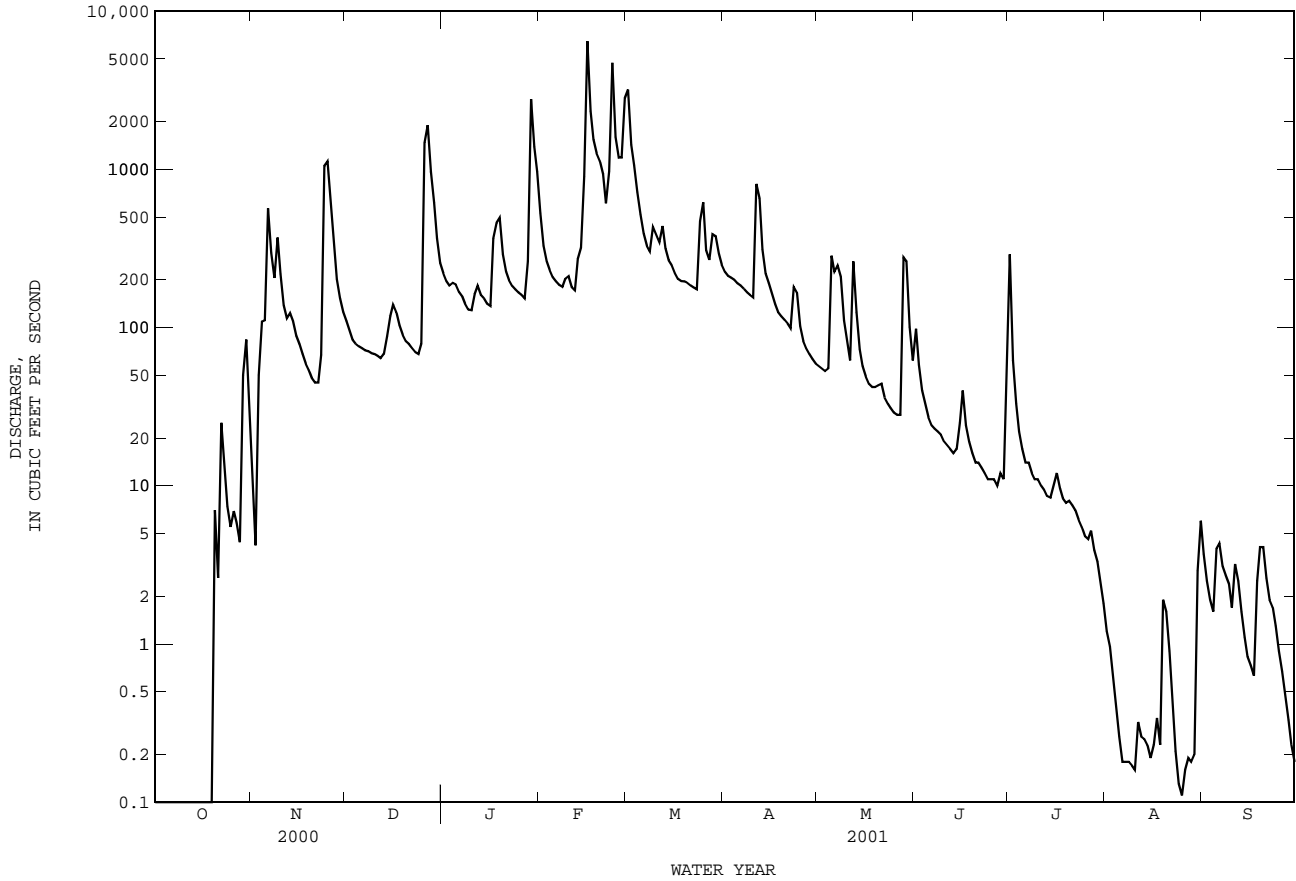




08051500 Clear Creek near Sanger, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1981 - 2001z	
ANNUAL TOTAL	15473.36		81708.73		147	
ANNUAL MEAN	42.3		224		476	
HIGHEST ANNUAL MEAN					1982	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	1900	Dec 27	6460	Feb 16	39700	Oct 13 1981
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 12 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Aug 2 1981
MAXIMUM PEAK FLOW			8800		104000	
MAXIMUM PEAK STAGE			24.07		35.70	
ANNUAL RUNOFF (AC-FT)	30690		162100		106400	
10 PERCENT EXCEEDS	83		463		260	
50 PERCENT EXCEEDS	.00		68		23	
90 PERCENT EXCEEDS	.00		.23		.00	

z Period of regulated streamflow.



TRINITY RIVER BASIN

08051500 Clear Creek near Sanger, TX--Continued  
(National Water-Quality Assessment Program)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Apr. 1959, Jan. 1966, Oct. 1984 to Sept. 1996, Oct. 1997 to current year.  
PESTICIDE DATA: May 1997 to current year.  
SEDIMENT DATA: Feb. 1966 to May 1977, Oct. 1997 to Sept. 1999.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1969 to Aug. 1977.  
WATER TEMPERATURE: May 1968 to Aug. 1977.  
SUSPENDED SEDIMENT DISCHARGE: May 1968 to Aug. 1977.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,920 microsiemens/cm, Oct. 12, 1976; minimum daily, 182 microsiemens/cm, July 29, 1973.  
WATER TEMPERATURE: Maximum daily, 39.0°C, June 8, 1969; minimum daily, 0.0°C, Jan. 9, 1970.  
SEDIMENT CONCENTRATION: Maximum daily mean, 7,370 mg/L, May 12, 1972; minimum, no flow on many days.  
SEDIMENT LOADS: Maximum daily, 79,000 tons May 7, 1969; minimum daily, 0 tons on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (MG/L) (00301)	HARD-NESS TOTAL (MG/L) AS CAC03 (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)	CALCIUM SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	SODIUM, AD-SORP-TION RATIO (00931)
		POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY WAT DIS-TOT IT FIELD (MG/L) AS CAC03 (39086)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) AS N (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)
NOV 16...	0840	80	390	8.4	8.2	10.5	91	180	19	63.6	4.25	9.6	.3
DEC 12...	1120	62	472	8.3	3.4	11.5	87	220	60	78.2	6.50	18.6	.5
JAN 09...	1110	129	456	8.4	4.8	12.4	99	210	37	77.5	5.12	13.8	.4
FEB 13...	1122	292	446	8.4	9.1	10.9	95	190	24	70.1	4.76	15.2	.5
MAR 13...	1030	319	482	8.2	13.6	9.5	94	210	19	74.8	5.18	13.5	.4
APR 10...	1000	155	620	8.1	22.4	7.8	93	250	38	86.8	9.07	22.4	.6
MAY 14...	1430	70	492	8.0	26.6	8.5	108	220	25	77.4	6.14	17.5	.5
JUN 12...	0800	18	613	7.7	26.6	8.0	103	230	43	69.8	13.0	38.8	1
JUL 09...	1730	11	545	7.8	33.0	7.8	112	200	21	60.6	10.7	33.4	1
SEP 07...	1130	3.1	547	5.5	26.0	7.8	100	170	46	56.9	7.75	44.5	1
NOV 16...	3.69	157	30.8	8.4	.3	12.9	249	237	1.97	.024	2.00	<.041	2.6
DEC 12...	3.45	162	47.5	14.0	.2	12.3	321	282	.779	.045	.824	<.041	1.3
JAN 09...	2.71	178	37.1	12.3	.2	9.3	289	273	1.88	.013	1.90	<.041	2.4
FEB 13...	2.45	171	33.8	12.7	.2	7.0	280	255	1.33	.010	1.34	<.041	2.3
MAR 13...	2.39	189	33.5	13.0	.2	10.6	300	270	.838	.008	.846	<.041	1.4
APR 10...	2.24	216	54.6	25.8	.2	7.6	365	340	.392	.007	.399	<.041	.78
MAY 14...	3.20	194	34.9	16.6	.2	9.0	307	283	.288	.011	.299	<.041	.80
JUN 12...	2.58	185	63.7	41.4	.3	10.9	363	352	--	<.006	.056	<.040	.33
JUL 09...	3.48	175	53.3	34.8	.3	12.7	343	314	--	.011	<.050	E.040	--
SEP 07...	2.75	128	52.4	58.4	.3	9.2	320	309	--	E.003	.048	<.040	.45

08051500 Clear Creek near Sanger, TX--Continued  
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80155)	SED. SUSP. SIEVE DIAM. % FINER .062 MM (70331)	IRON, DIS- SOLVED THAN (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
NOV 16...	<.10	.61	.125	.100	.084	.258	32	6.9	99	<10	E3.0	<.010	<.002
DEC 12...	.30	.47	.042	.026	<.018	--	6	1.0	100	10	10.2	--	--
JAN 09...	.38	.52	.061	.015	.028	.086	24	8.4	86	<10	8.1	--	--
FEB 13...	.34	.93	.235	.033	.024	.074	336	265	89	M	22.5	--	--
MAR 13...	.33	.53	.074	.022	E.014	--	117	101	79	M	5.7	<.010	<.002
APR 10...	.33	.38	.027	.006	<.018	--	82	34	63	<10	15.9	<.010	<.002
MAY 14...	.33	.51	.066	.019	E.016	--	97	18	77	<10	5.4	<.010	<.002
JUN 12...	.23	.27	.019	E.006	<.020	--	49	2.4	100	<10	9.5	<.010	<.002
JUL 09...	.27	.42	.027	E.005	<.020	--	79	2.3	99	<10	4.3	<.010	<.002
SEP 07...	.23	.40	.038	.006	<.020	--	35	.29	100	<10	3.2	<.010	<.002

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P,P' DE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)
NOV 16...	<.011	<.015	E.011	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.005	<.027	<.007
DEC 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 13...	E.007	<.015	E.004	<.018	<.003	<.005	E.002	<.005	<.004	<.005	E.005	<.027	<.007
APR 10...	<.011	<.015	E.002	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.002	<.027	<.007
MAY 14...	<.011	<.015	E.014	<.018	<.003	<.005	<.003	<.005	<.004	<.005	.086	<.027	<.007
JUN 12...	<.011	<.015	E.004	<.018	<.003	<.005	<.003	<.005	<.004	<.005	.015	<.027	<.008
JUL 09...	E.003	<.015	E.026	<.018	<.003	<.005	<.003	<.005	<.004	<.005	.020	<.027	<.007
SEP 07...	<.011	<.015	E.004	<.018	<.003	<.005	<.003	<.005	<.004	<.005	<.013	<.027	<.007

DATE	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U (UG/L) (82667)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)
NOV 16...	<.005	.018	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002
DEC 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 13...	<.005	.014	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002
APR 10...	<.005	.014	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002
MAY 14...	E.002	.535	.093	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002
JUN 12...	<.005	.147	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002
JUL 09...	<.005	.269	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002
SEP 07...	<.005	.024	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002

## TRINITY RIVER BASIN

08051500 Clear Creek near Sanger, TX--Continued  
(National Water-Quality Assessment Program)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
NOV 16...	E.008	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
DEC 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 13...	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
APR 10...	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
MAY 14...	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
JUN 12...	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
JUL 09...	E.005	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
SEP 07...	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003

DATE	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL- AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
NOV 16...	<.010	<.007	<.023	<.050	<.006
DEC 12...	--	--	--	--	--
JAN 09...	--	--	--	--	--
FEB 13...	--	--	--	--	--
MAR 13...	<.010	<.007	<.023	<.050	<.006
APR 10...	<.010	<.007	<.023	<.050	<.006
MAY 14...	<.010	<.007	<.023	<.050	<.006
JUN 12...	<.010	<.007	<.023	<.050	<.006
JUL 09...	<.010	<.007	<.023	<.050	<.006
SEP 07...	<.010	<.007	<.023	<.050	<.006

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## TRINITY RIVER BASIN

08052700 Little Elm Creek near Aubrey, TX

LOCATION.--Lat 33°17'00", long 96°53'33", Denton County, Hydrologic Unit 12030103, on left bank at downstream side of bridge on Farm Road 1385, 1.5 mi upstream from Mustang Creek, 5.5 mi east of Aubrey, and 18 mi upstream from Lewisville Dam on the Elm Fork Trinity River.

DRAINAGE AREA.--75.5 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1956 to Sept. 1976, Oct. 1979 to current year.

Water-quality records.--Chemical data: Feb. 1966 to Sept. 1975. Specific conductance: Dec. 1966 to Sept. 1975. Water temperature: Feb. 1966 to Sept. 1975. Sediment data: Feb. 1966 to Sept. 1975.

REVISED RECORDS.--WRD TX-70-1: 1969.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 534.76 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. There are several small diversions above station for irrigation. Since water year 1965, at least 10% of contributing drainage area has been regulated. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--10 years (water years 1956-65), 40.6 ft<sup>3</sup>/s (29,420 ac-ft/yr).

EXTREMES FOR PERIOD OF RECORD PRIOR TO REGULATION (WATER YEARS 1956-65).--Maximum discharge, 7,830 ft<sup>3</sup>/s, Apr. 26, 1957, gage height, 17.34 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since about 1900, 18.2 ft in May 1941, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.2	16	148	64	1450	23	.00	.44	167	.00	.00
2	.00	1.0	14	69	34	467	16	.00	.90	31	.00	.11
3	.00	1.3	12	40	21	336	13	.00	.56	11	.00	.07
4	.00	1.9	11	29	16	236	11	.02	.14	3.3	.00	1.2
5	.00	28	9.4	22	13	173	9.2	5.3	.00	1.4	.00	3.3
6	.00	272	3.5	16	11	130	8.0	109	.00	.64	.00	5.2
7	.00	113	1.7	13	10	96	7.1	148	.00	.24	.00	2.2
8	.00	162	1.5	11	13	62	3.2	83	.00	.04	.00	1.5
9	.00	190	1.3	9.1	15	203	1.7	33	.00	.00	.00	1.7
10	.00	95	1.5	8.3	20	122	1.3	17	.00	.00	.00	7.3
11	.00	54	1.5	9.9	12	390	2.5	11	.00	.00	.00	3.8
12	.00	58	3.7	6.4	10	1290	7.7	8.7	.00	.00	.00	1.4
13	.00	100	3.3	4.9	508	396	5.4	7.7	.00	.00	.00	.56
14	.00	32	10	4.7	994	244	7.0	7.7	.00	.00	.00	.16
15	.00	18	30	4.8	707	210	10	6.8	.00	.00	.00	.27
16	.56	15	30	2.6	2500	126	4.5	6.0	.01	.00	.00	.54
17	.52	12	19	95	815	64	2.1	4.1	.00	.00	.00	.25
18	.26	11	11	208	487	37	1.1	1.9	.00	.00	.00	.11
19	.22	9.4	7.8	217	433	24	.55	1.2	.00	.00	.00	.33
20	.21	6.8	5.0	85	401	17	.52	.10	.00	.00	.00	.97
21	.35	1.7	3.9	45	356	13	.49	.01	.20	.00	.00	1.6
22	.79	.99	2.9	29	237	11	.43	.00	.12	.00	.00	.83
23	.69	5.1	2.1	23	242	9.3	.48	.00	.05	.00	.00	.37
24	.56	475	1.8	18	1450	138	.55	.01	.00	.00	.00	.15
25	.58	422	28	15	550	240	1.4	.00	.00	.00	.00	.14
26	.52	173	1870	12	381	88	.81	.00	.00	.00	.00	.30
27	.60	85	1070	9.8	308	48	.42	.00	.00	.00	.00	.09
28	.55	47	486	9.8	590	187	.22	.55	.00	.00	.00	.08
29	1.3	28	398	451	---	171	.09	1.5	.00	.00	.00	.02
30	1.6	18	273	254	---	77	.02	1.5	74	.00	.00	.02
31	1.2	---	209	121	---	40	---	.96	---	.00	.00	---
TOTAL	10.51	2437.39	4537.9	1991.3	11198	7095.3	139.78	455.05	76.42	214.62	0.00	34.57
MEAN	.34	81.2	146	64.2	400	229	4.66	14.7	2.55	6.92	.000	1.15
MAX	1.6	475	1870	451	2500	1450	23	148	74	167	.00	7.3
MIN	.00	.99	1.3	2.6	10	9.3	.02	.00	.00	.00	.00	.00
AC-FT	21	4830	9000	3950	22210	14070	277	903	152	426	.00	69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001hz, BY WATER YEAR (WY)

	68.5	62.7	62.9	28.2	78.9	64.9	53.5	113	55.9	21.8	2.79	20.7
MEAN	68.5	62.7	62.9	28.2	78.9	64.9	53.5	113	55.9	21.8	2.79	20.7
MAX	641	530	398	208	400	251	281	897	286	540	28.5	148
(WY)	1982	1997	1992	1998	2001	1990	1966	1982	1989	1994	1966	1973
MIN	.000	.000	.000	.009	.066	.052	.12	.000	.000	.000	.000	.000
(WY)	1976	1976	1976	1976	1976	1980	1971	1988	1972	1966	1967	1969

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

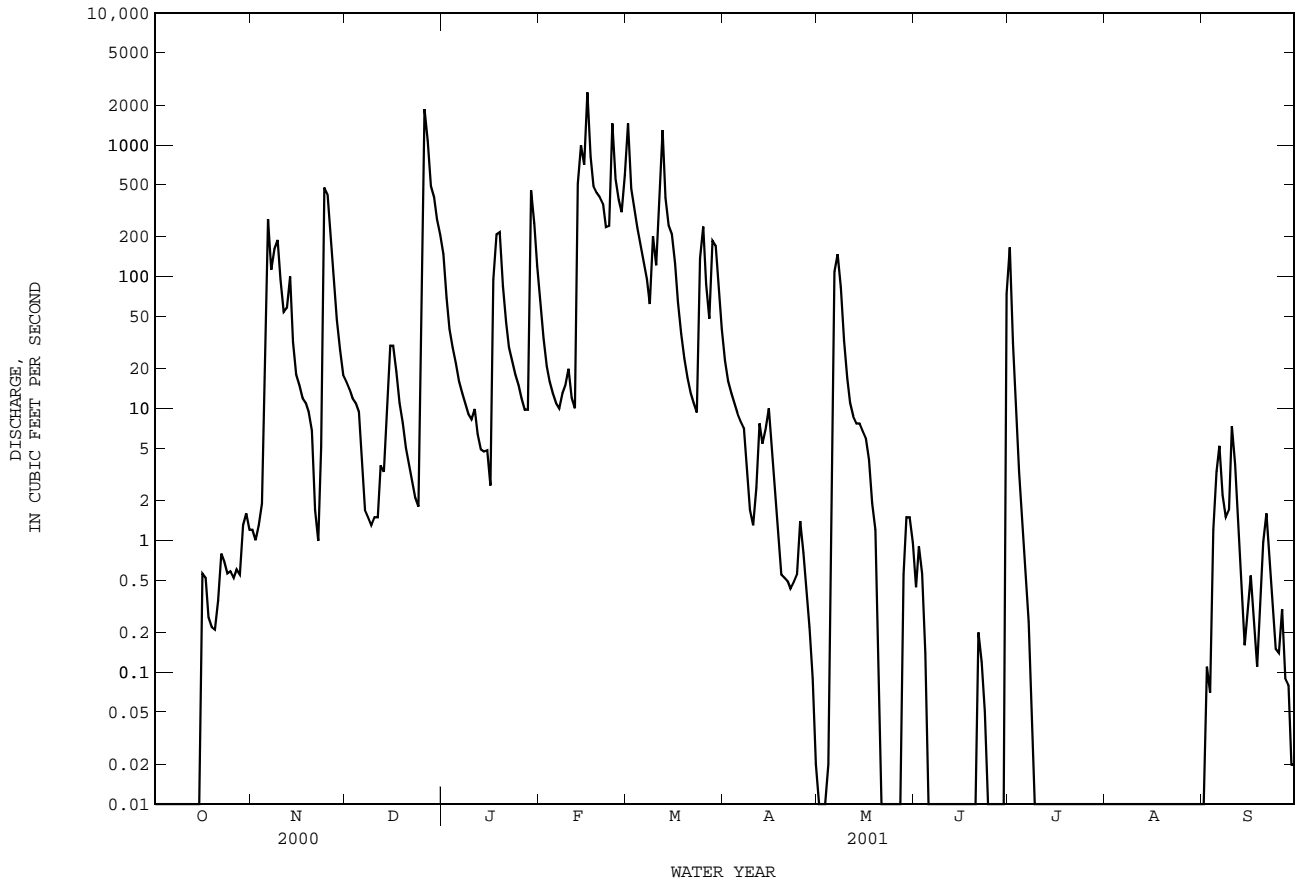
WATER YEARS 1965 - 2001hz

ANNUAL TOTAL	10051.24	28190.84										
ANNUAL MEAN	27.5	77.2	52.7									
HIGHEST ANNUAL MEAN			178									1982
LOWEST ANNUAL MEAN			3.89									1971
HIGHEST DAILY MEAN	1870	Dec 28	2500	Feb 16								1994
LOWEST DAILY MEAN	.00	Feb 28	.00	Oct 1								1965
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 16	.00	Oct 1								1965
MAXIMUM PEAK FLOW			3310	Feb 16								1994
MAXIMUM PEAK STAGE			16.37	Feb 16								1994
ANNUAL RUNOFF (AC-FT)	19940		55920									
10 PERCENT EXCEEDS	42		213									
50 PERCENT EXCEEDS	1.3		1.7									
90 PERCENT EXCEEDS	.00		.00									

h See PERIOD OF RECORD paragraph.

z Period of regulated streamflow.

08052700 Little Elm Creek near Aubrey, TX--Continued





TRINITY RIVER BASIN

08052800 Lewisville Lake near Lewisville, TX

LOCATION.--Lat 33°04'09", long 96°57'51", Denton County, Hydrologic Unit 12030103, in intake structure of Lewisville Dam on Elm Fork Trinity River, 2.0 mi upstream from bridge on State Highway 121, 2.4 mi northeast of Lewisville, 12.0 mi upstream from Denton Creek, and 30.0 mi upstream from mouth.

DRAINAGE AREA.--1,660 mi<sup>2</sup>.

PERIOD OF RECORD.--Nov. 1954 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Prior to Oct. 1970, published as "Garza-Little Elm Reservoir near Lewisville".

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 17, 1955, nonrecording gage at site 4,000 ft upstream at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records fair. The lake is formed by a rolled earthfill dam 32,888 ft long, including a 560-ft uncontrolled off-channel concrete-gravity spillway with ogee weir section. Deliberate impoundment began Nov. 1, 1954, and the dam was completed in Aug. 1955. The controlled low-flow outlet works consist of a 16.0-ft-diameter conduit that is controlled by three 6.5- by 13.0-ft broome-type gates and two 60-in steel pipes with service valves. The dam is owned by the U.S. Army Corps of Engineers. The lake was built for flood control and water conservation. The city of Dallas obtains most of its municipal water supply from this lake. The capacity table is based on a survey made in 1965. Inflow is affected at times by discharge from the flood- detention pools of 118 floodwater-retarding structures with a combined detention capacity of 81,670 acre-ft. These structures control runoff from 298 mi in the Elm Fork Trinity River, Clear, Little Elm, and Hickory Creeks watersheds. An unknown amount of water was diverted for municipal and industrial uses. Conservation pool storage is 640,990 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	560.0
Crest of spillway.....	532.0
Top of conservation pool.....	522.0
Lowest intakes to wet wells (invert).....	481.0
Invert of three broome-type gates.....	448.0

COOPERATION.--Capacity Table No. 1, furnished by the U.S. Army Corps of Engineers, from 1960 survey, and put into effect on Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,181,000 acre-ft, May 4, 1990, elevation, 536.73 ft; minimum since initial filling in 1957, 184,700 acre-ft, Sept. 28, 1980, elevation, 498.65 ft.

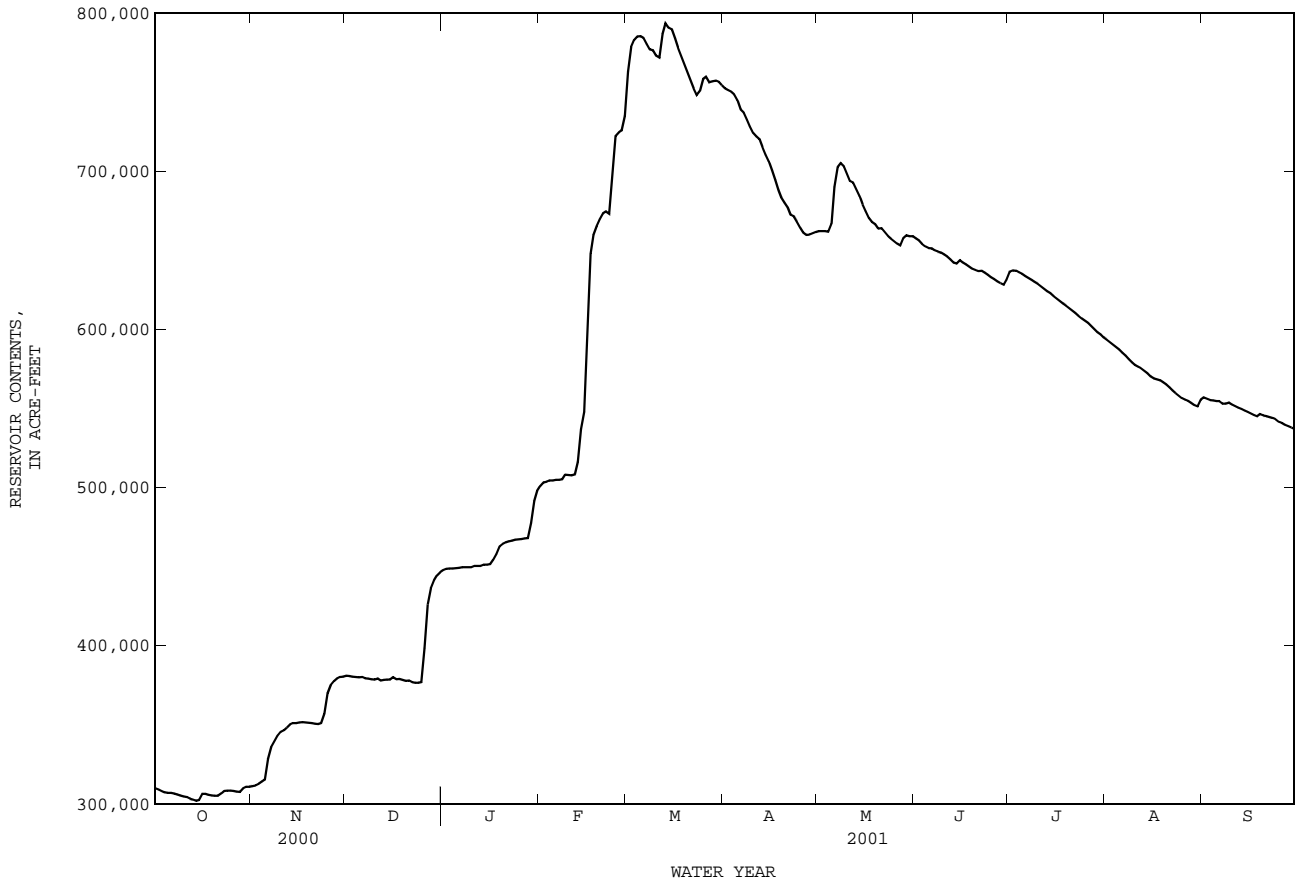
EXTREMES FOR CURRENT YEAR.--Maximum contents, 794,100 acre-ft, Mar. 13, elevation, 526.87 ft; minimum contents, 301,400 acre-ft, Oct. 15, elevation, 507.03 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309900	311200	381000	447900	501100	763000	752400	662200	657400	636400	593600	556900
2	309000	311700	380900	448600	503200	778700	751100	662100	656200	637300	592000	556100
3	308100	312700	380400	448800	503700	783000	750100	662100	654000	637000	590400	555300
4	307500	314100	380200	448800	504600	785100	748600	661800	652400	636100	588700	555000
5	307100	315400	380000	449100	504600	785400	744900	666800	651500	635000	587200	554700
6	307000	328500	380200	449200	504900	784200	739000	690000	651300	633700	585300	554700
7	306600	335900	379400	449700	504900	780300	737000	702500	650000	632400	583400	553100
8	306100	339500	379300	449600	505400	777100	732600	705100	649100	631200	581300	553000
9	305300	343300	378900	449600	508100	776500	728400	703000	648500	630000	579100	553700
10	304800	345500	378600	449700	507900	773000	724200	698100	647400	628700	577500	552500
11	304300	346500	379200	450400	507700	771800	722000	693700	646200	627200	576300	551400
12	303400	348200	378100	450400	508300	786800	720300	692700	644400	625600	575400	550500
13	302700	350400	378400	450400	516100	793500	715300	688500	642300	624200	573800	549700
14	302000	351200	378700	451200	536800	790700	710600	684200	641700	622900	572300	548700
15	302500	351100	378700	451300	547800	789700	706200	679100	643700	621100	570300	547800
16	306500	351600	380000	451700	601300	784000	700500	674600	642300	619500	569100	546900
17	306400	351700	378800	454300	647700	778400	694500	670400	641100	617900	568400	545700
18	305900	351500	379000	457900	659700	773300	688600	667900	639700	616500	567800	544900
19	305400	351400	378500	462800	665100	768200	683400	666300	638300	615000	566700	546400
20	305100	351200	377800	464500	669700	762900	680100	663700	637400	613400	565200	545500
21	305200	350700	378000	465500	673300	757500	677100	663900	636800	611800	563300	545200
22	306600	350500	377100	466000	674400	752400	672400	661500	637000	610300	561400	544600
23	308300	351200	376700	466500	673100	748200	671500	659200	635800	608600	559800	544000
24	308400	357000	376600	467000	700100	750700	668000	657500	634400	607000	558100	543200
25	308400	370000	377100	467300	722300	758300	664400	655900	633100	605500	556500	541500
26	308200	375200	398400	467400	724400	759600	661100	654300	631800	604000	555600	540700
27	307900	377700	426000	467900	725700	756300	659800	653000	630400	602200	554600	539600
28	307700	379200	436300	468100	734700	756800	659900	657900	629100	600300	553400	538800
29	309900	380300	441400	477500	---	757200	660700	659500	628100	598200	552100	537900
30	310800	380400	444400	491600	---	756400	661600	659000	631400	596700	551200	536900
31	310900	---	446400	497900	---	754500	---	659000	---	594900	555500	---
MEAN	306700	347800	389200	459300	590600	770800	702900	672100	642100	618700	570500	547800
MAX	310900	380400	446400	497900	734700	793500	752400	705100	657400	637300	593600	556900
MIN	302000	311200	376600	447900	501100	748200	659800	653000	628100	594900	551200	536900
(+)	507.61	511.48	514.51	516.68	525.05	525.67	522.69	522.60	521.67	520.40	518.96	518.24
(@)	+1000	+69500	+66000	+51500	+236800	+19800	-92900	-2600	-27600	-36500	-39400	-18600
CAL YR 2000	MAX 446400	MIN 302000	(@) +121900									
WTR YR 2001	MAX 793500	MIN 302000	(@) +227000									

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

08052800 Lewisville Lake near Lewisville, TX--Continued

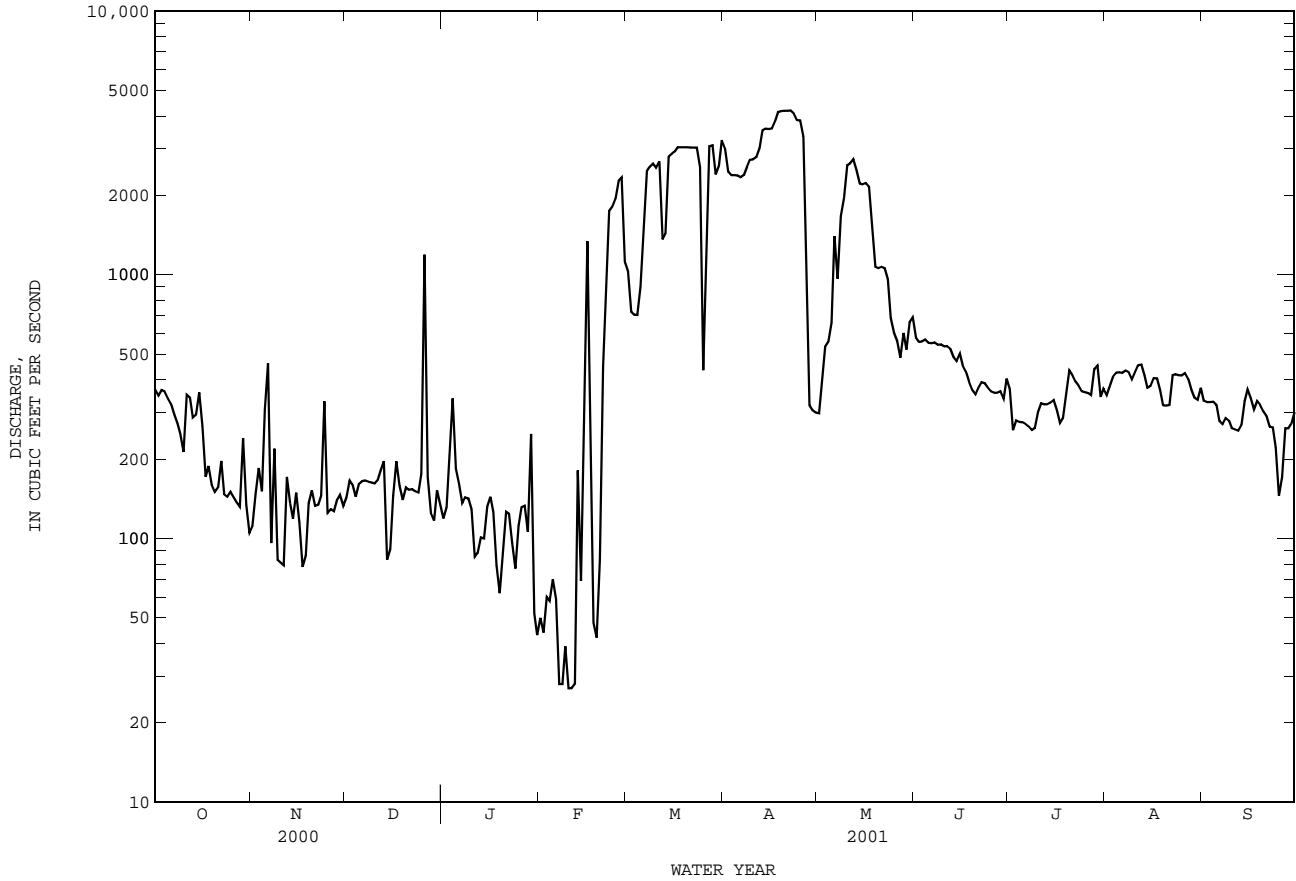




08053000 Elm Fork Trinity River near Lewisville, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001z	
ANNUAL TOTAL	106081		278834		737	
ANNUAL MEAN	290		764		3062	
HIGHEST ANNUAL MEAN					1982	
LOWEST ANNUAL MEAN					94.2	
HIGHEST DAILY MEAN	1190	Dec 26	4200	Apr 22	19000	May 4 1990
LOWEST DAILY MEAN	78	Nov 17	27	Feb 10	.00	Oct 20 1993
ANNUAL SEVEN-DAY MINIMUM	117	Nov 9	34	Feb 6	.29	Nov 3 1983
MAXIMUM PEAK FLOW			4240	Apr 23	19600	May 4 1990
MAXIMUM PEAK STAGE			19.32	Apr 23	30.15	May 4 1990
ANNUAL RUNOFF (AC-FT)	210400		553100		533800	
10 PERCENT EXCEEDS	507		2620		3050	
50 PERCENT EXCEEDS	244		336		223	
90 PERCENT EXCEEDS	137		106		80	

z Period of regulated streamflow.

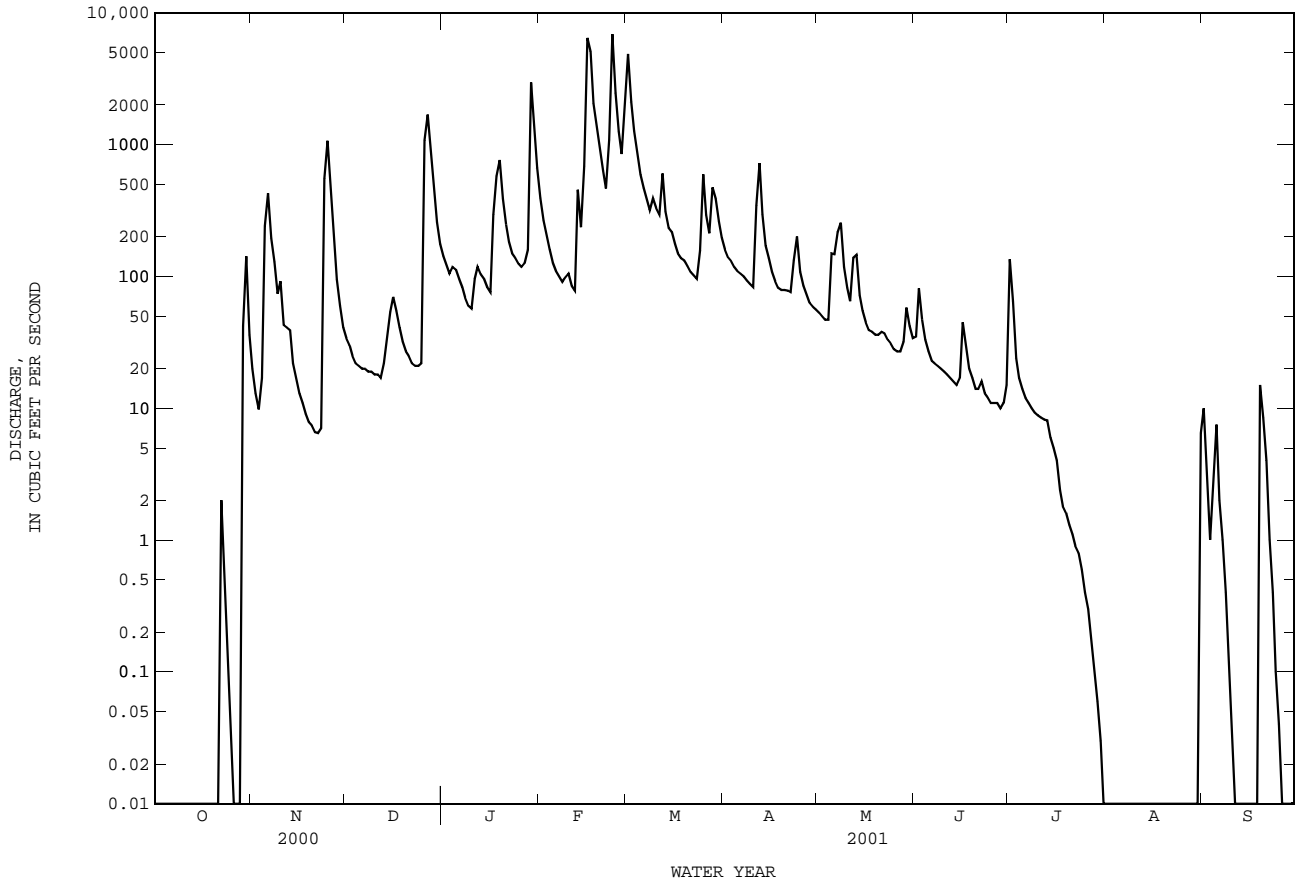




08053500 Denton Creek near Justin, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001z	
ANNUAL TOTAL	11043.22		78028.82		124	
ANNUAL MEAN	30.2		214		577	
HIGHEST ANNUAL MEAN					1982	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	1690	Dec 27	6880	Feb 24	18600	Oct 14 1981
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Aug 6 1965
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Sep 6 1965
MAXIMUM PEAK FLOW			10900	Feb 24	34700	Oct 13 1981
MAXIMUM PEAK STAGE			15.97	Feb 24	18.68	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	21900		154800		90120	
10 PERCENT EXCEEDS	41		434		193	
50 PERCENT EXCEEDS	1.5		33		18	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated  
z Period of regulated streamflow.



TRINITY RIVER BASIN

08053500 Denton Creek near Justin, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1997 to current year.

BIOCHEMICAL DATA: Oct. 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS NONCARB FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)
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FEB 06...	1130	110	527	8.2	8.6	23	11.2	98.3	2.5	229	50	80.0	7.18
APR 05...	1545	109	740	8.1	21.5	19	7.6	87.7	<2.0	322	83	106	13.8
MAY 02...	1215	49	776	7.9	22.0	5.7	6.6	77.5	<2.0	312	81	95.5	17.9

DATE	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) (39086)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)
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FEB 06...	16.8	.483	2.98	178	43.4	24.9	.2	9.4	320	297	35	1.20	.008
APR 05...	29.1	.705	2.62	239	72.2	45.9	.3	9.2	461	425	29	.409	.006
MAY 02...	38.0	.937	2.57	231	93.8	58.2	.3	8.5	497	454	<10	--	E.003

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC TOTAL (MG/L) (00680)	ALUM-INUM, DIS-SOLVED (UG/L) (01106)	ANTI-MONY, DIS-SOLVED (UG/L) (01095)	ARSENIC DIS-SOLVED (UG/L) (01000)	BARIUM, DIS-SOLVED (UG/L) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L) (01010)	CADMIUM DIS-SOLVED (UG/L) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L) (01030)
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FEB 06...	1.21	<.041	.34	<.060	E.013	5.6	<1	.15	E1.3	80.7	<.06	E.02	<.8
APR 05...	.415	<.041	.29	<.060	<.018	5.4	--	--	--	--	--	--	--
MAY 02...	.121	<.041	.25	<.060	<.018	5.1	<1	.12	2.0	120	<.06	<.04	<.8

DATE	COBALT, DIS-SOLVED (UG/L) (01035)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	MERCURY DIS-SOLVED (UG/L) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L) (01060)	NICKEL, DIS-SOLVED (UG/L) (01065)	SELE-NIUM, DIS-SOLVED (UG/L) (01145)	SILVER, DIS-SOLVED (UG/L) (01075)	ZINC, DIS-SOLVED (UG/L) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L) (22703)
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FEB 06...	.35	1.2	M	<.08	9.5	<.23	1.4	1.46	--	<1.0	<1	3.40
APR 05...	--	--	M	--	13.7	--	--	--	--	--	--	--
MAY 02...	.34	2.3	<10	E.04	26.7	.01	2.3	.41	<2.4	<1.0	<1	5.68

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08053800 Elizabeth Creek at State Highway 114 near Roanoke, TX

LOCATION.--Lat 33°01'12", long 97°14'52", Denton County, Hydrologic Unit 12030104, over center of channel at downstream side of bridge on State Highway 114 1.5 mi east of Interstate Highway 35W and 1.9 mi northwest of courthouse in downtown Roanoke.

DRAINAGE AREA.--75 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1997 to current year.

BIOCHEMICAL DATA: Oct. 1997 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
FEB	06...	1615	36	548	8.1	11.5	20	--	11.0	103	<2.0	239	27	88.5
APR	06...	1345	29	510	8.2	22.0	1.8	--	10.5	123	<2.0	224	24	82.2
MAY	02...	1515	8.9	401	7.8	24.0	2.7	--	10.0	122	<2.0	217	12	78.4
JUL	31...	1509	e.07	449	8.1	34.7	--	8.4	11.0	160	<2.0	67.1	--	20.6
DATE	TIME	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
FEB	06...	4.27	19.1	.540	2.12	205	39.5	16.5	.3	7.1	330	314	17	2.36
APR	06...	4.49	19.6	.572	1.93	199	37.1	14.9	.3	4.1	309	289	11	.982
MAY	02...	5.08	27.0	.798	1.60	205	43.8	20.4	.4	4.2	322	306	16	.485
JUL	31...	3.78	69.2	3.68	2.35	146	41.8	25.4	.4	10.6	270	260	<10	--
DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
FEB	06...	.007	2.37	<.041	.27	<.060	<.018	3.1	2	.12	<2.0	84.3	<.06	.04
APR	06...	.010	.992	<.041	.31	<.060	<.018	3.9	--	--	--	--	--	--
MAY	02...	.006	.491	<.041	.19	<.060	<.018	5.1	1	.12	E1.3	89.2	<.06	.06
JUL	31...	<.006	E.041	<.040	.34	<.060	<.020	4.4	3	.11	5.4	38.7	<.06	<.04
DATE	TIME	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
FEB	06...	<.8	.31	1.2	<10	<.08	7.1	<.23	.4	.92	--	<1.0	1	1.32
APR	06...	--	--	--	M	--	4.4	--	--	--	--	--	--	--
MAY	02...	<.8	.21	1.3	M	.11	9.2	<.01	.5	.19	<2.4	<1.0	2	1.01
JUL	31...	<.8	.30	2.7	10	E.05	41.4	<.01	1.1	.82	<2.0	<1.0	1	.52

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TRINITY RIVER BASIN

08054500 Grapevine Lake near Grapevine, TX

LOCATION.--Lat 32°58'21", long 97°03'22", Tarrant County, Hydrologic Unit 12030104, in intake structure of Grapevine Dam on Denton Creek, 2.7 mi northeast of Grapevine, 4.3 mi upstream from bridge on State Highway 121, and 11.7 mi upstream from mouth.

DRAINAGE AREA.--695 mi<sup>2</sup>.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--July 1952 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Prior to Oct. 1970, published as "Grapevine Reservoir".

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 16, 1953, nonrecording gage at site 1,000 ft upstream at present datum. Satellite telemeter at station.

REMARKS.--Records fair, except for estimated daily mean contents, which are poor. The lake is formed by a rolled earthfill dam 12,850 ft long, including a 500-foot uncontrolled off-channel concrete-gravity spillway with an ogee weir section. The dam was completed in Jun. 1952, and deliberate impoundment began July 3, 1952. The controlled outlet works consist of a 13.0-ft-diameter concrete conduit that is controlled by two 6.5- by 13.0-ft broome-type gates and two 30-in steel pipes with service valves. The capacity table, used since Apr. 1972, is based on a survey made in Oct. 1966. The lake was built for flood control, navigation, and water conservation. The dam is owned by the U.S. Army Corps of Engineers. The city of Dallas uses part of this water for their municipal supply. An unknown amount of water is diverted for industrial and municipal uses. Inflow is affected at times by discharge from the flood- detention pools of 87 floodwater-retarding structures with a combined detention capacity of 57,850 acre-ft. These structures control runoff from 217 mi<sup>2</sup> in the Denton Creek watershed. Conservation pool storage is 181,100 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	588.0
Crest of spillway.....	560.0
Top of conservation pool.....	535.0
Lowest intake to wet wells (invert).....	500.5
Invert of two broome-type gates.....	475.0

COOPERATION.--Capacity table furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 471,200 acre-ft, Nov. 1, 1981, elevation, 563.29 ft; minimum since lake first filled in 1957, 94,480 acre-ft, Feb. 26, 1979, elevation, 520.67 ft.

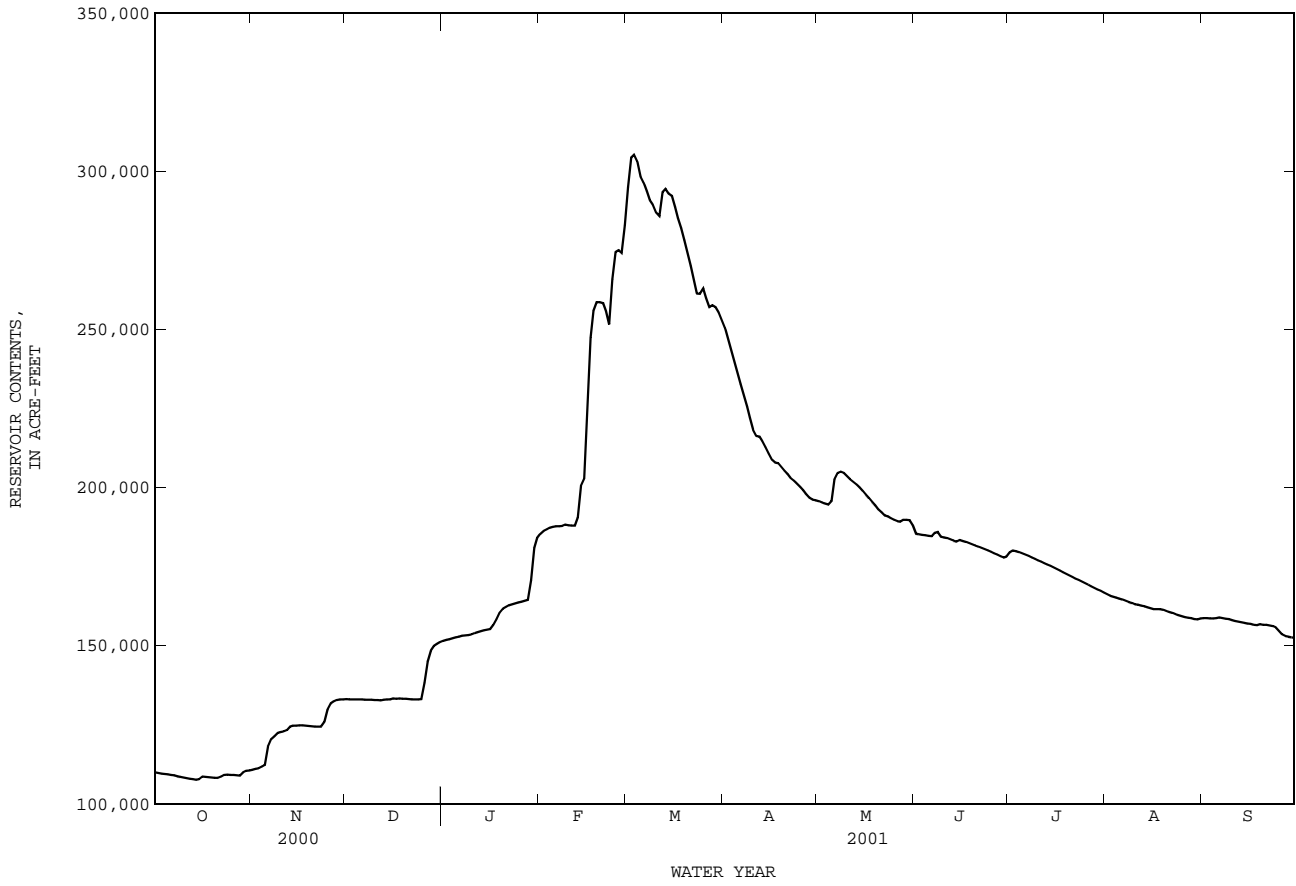
EXTREMES FOR CURRENT YEAR.--Maximum contents, 305,500 acre-ft, Mar. 3, elevation, 549.35 ft; minimum contents, 107,600 acre-ft, Oct. 15, elevation, 523.20 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110000	110800	133200	151600	185400	294900	250500	195700	185500	179500	166300	158800
2	109800	111100	133100	151900	186300	304300	246900	195300	185300	180100	165800	158700
3	109600	111300	133000	152100	186800	305300	243300	195000	185100	179900	165500	158600
4	109500	111800	133000	152400	187300	303100	240000	194700	185000	179600	165200	158600
5	109400	112300	133000	152700	187600	298400	236400	195800	184800	179200	164900	158800
6	109200	118200	133100	152900	187800	296400	232600	202600	184700	178800	164600	159000
7	109100	120500	132900	153200	187800	293600	229200	204600	185700	178400	164200	158700
8	108800	121400	132900	153300	187900	290900	225600	205000	186000	177900	163800	158500
9	108600	122400	132900	153400	188300	289400	222000	204600	184400	177500	163500	158400
10	108400	122700	132800	153600	188100	286900	218200	203600	184200	177000	163100	158100
11	108200	122900	132800	154000	188000	285800	216300	202700	184000	176600	163000	157800
12	108000	123300	132700	154300	188000	293400	216100	201900	183600	176100	162700	157600
13	107900	124400	132900	154600	190500	294400	214700	201000	183200	175600	162500	157400
14	107700	124800	133000	154900	200500	292900	212800	200000	182900	175200	162200	157200
15	107900	124800	133100	155100	202800	292200	210800	199000	183400	174700	161900	157000
16	108700	124900	133400	155300	223600	288700	208800	197800	183100	174200	161600	156900
17	108600	124900	133300	156500	247400	285100	207900	196700	182800	173700	161600	156600
18	108500	124800	133400	158300	255900	282000	207700	195500	182400	173200	161600	156500
19	108400	124700	133300	160500	258600	278100	206500	194400	182000	172700	161400	156800
20	108300	124600	133300	161700	258600	274000	205300	193200	181600	172200	161000	156600
21	108300	124500	133200	162300	258300	270000	204300	192200	181300	171700	160700	156600
22	108700	124400	133100	162800	255800	265900	203100	191200	180900	171200	160400	156400
23	109200	124500	133100	163100	251500	261300	202300	190900	180500	170800	160000	156200
24	109300	125900	133100	163400	265900	261200	201200	190300	180100	170300	159700	155800
25	109200	129800	133200	163700	274400	262900	200200	189800	179700	169800	159400	154700
26	109200	131700	138300	163900	275000	259800	199100	189400	179200	169300	159100	153600
27	109100	132400	145000	164200	e274200	257000	197900	189200	178800	168800	158900	153100
28	109000	132800	148400	164500	e282900	257600	196800	189800	178300	168300	158700	152900
29	110000	133000	149900	170700	---	257000	196200	189800	177900	167800	158400	152700
30	110500	133000	150600	180900	---	255300	196000	189700	178200	167300	158300	152500
31	110600	---	151200	184000	---	253000	---	188100	---	166800	158600	---
MEAN	109000	123300	135800	159200	222300	280300	215000	195800	182500	174000	161900	156700
MAX	110600	133000	151200	184000	282900	305300	250500	205000	186000	180100	166300	159000
MIN	107700	110800	132700	151600	185400	253000	196000	188100	177900	166800	158300	152500
(+)	523.77	527.79	530.68	535.40	547.06	543.88	537.01	535.95	534.60	532.99	531.80	530.87
(@)	+1200	+22400	+18200	+32800	+98900	-29900	-57000	-7900	-9900	-11400	-8200	-6100
CAL YR 2000	MAX 151200	MIN 109400	(@) +20400									
WTR YR 2001	MAX 305300	MIN 107700	(@) +43100									

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

08054500 Grapevine Lake near Grapevine, TX--Continued



TRINITY RIVER BASIN

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1969 to Aug. 1986, Oct. 1997 to current year.

BIOCHEMICAL DATA: Oct. 1969 to Aug. 1986, Oct. 1997 to current year.

PESTICIDE DATA: Sept. 1999 to current year.

REMARKS.--Pesticide samples are composited from discrete samples collected at the surface, middle, and bottom of the reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

325822097030401 -- Grapevine Lk Site AC

DATE	TIME	RESER- VOIR STORAGE (AC-FT) (00054)	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARDS UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP WATER (COL/ 100 ML) (31673)	HARD- NESS TOTAL AS CAC03) (00900)
FEB													
06...	1308	188000	1.00	368	8.4	9.0	1.04	12.2	108	--	<1	e1	115
06...	1311	--	10.0	368	8.4	8.5	--	12.2	107	--	--	--	--
06...	1314	--	20.0	368	8.4	8.5	--	12.2	107	--	--	--	--
06...	1317	--	30.0	368	8.5	8.0	--	12.2	105	--	--	--	--
06...	1320	--	40.0	368	8.4	8.0	--	12.0	104	--	--	--	--
06...	1323	--	50.0	368	8.4	8.0	--	12.1	105	--	--	--	--
06...	1328	--	55.0	369	8.4	8.0	--	12.1	105	--	--	--	123
MAY													
02-02	1150	--	--	--	--	--	--	--	--	--	--	--	--
02...	1200	195000	1.00	338	7.8	18.5	.37	7.3	79.8	e4	<1	--	129
02...	1209	--	10.0	339	7.7	18.5	--	7.4	80.9	--	--	--	--
02...	1219	--	20.0	339	7.7	18.5	--	7.4	80.9	--	--	--	--
02...	1229	--	30.0	339	7.7	18.5	--	7.4	80.9	--	--	--	--
02...	1239	--	40.0	338	7.7	18.5	--	7.3	79.8	--	--	--	--
02...	1249	--	54.0	335	7.4	17.0	--	3.4	36.0	--	--	--	130
JUL													
31-31	1107	--	--	--	--	--	--	--	--	--	--	--	--
31...	1117	167000	1.00	342	8.0	29.0	1.01	6.3	83.4	<1	<1	--	124
31...	1126	--	10.0	343	7.9	28.5	--	6.0	78.8	--	--	--	--
31...	1135	--	20.0	344	7.8	28.5	--	5.3	69.6	--	--	--	--
31...	1144	--	30.0	351	7.5	27.5	--	2.8	36.1	--	--	--	--
31...	1153	--	40.0	373	7.3	25.5	--	.1	1.2	--	--	--	--
31...	1202	--	51.0	375	7.3	25.5	--	.2	2.5	--	--	--	140

325822097030401 -- Grapevine Lk Site AC

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CAC03 (39086)	SULFATE DIS- SOLVED (MG/L) AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	SILICA, DIS- SOLVED (MG/L) AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
FEB													
06...	13	36.8	5.55	25.2	1.03	31.3	4.66	101	39.0	24.2	.3	5.6	205
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	21	39.6	5.84	24.6	.963	29.3	4.74	102	38.9	24.1	.3	5.5	208
MAY													
02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	16	44.2	4.44	15.3	.586	20.0	3.60	112	27.2	16.5	.2	7.6	190
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	16	44.6	4.55	15.5	.591	20.0	3.65	114	26.5	16.1	.2	8.6	192
JUL													
31-31	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	14	40.4	5.63	19.2	.749	24.4	3.93	110	29.7	20.1	.2	4.7	190
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	8	47.4	5.38	17.7	.648	20.9	3.68	132	24.3	18.5	.2	7.4	206





08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

325822097030401 -- Grapevine Lk Site AC

DATE	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD GF, REC (UG/L) (82685)	PRON- AMIDE WATER FLTRD GF, REC (UG/L) (82676)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661)
FEB											
06...	<.010	<.011	<.023	<.004	.217	.045	<.034	<.017	<.005	<.002	<.009
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
02-02	<.010	<.011	<.023	<.004	.128	E.011	<.034	<.017	<.005	<.002	<.009
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
JUL											
31-31	<.010	<.011	<.023	<.004	.120	<.016	<.034	<.017	<.005	<.002	<.009
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--

325751097033001 -- Grapevine Lk Site AR

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
FEB							
06...	1337	1.00	368	8.3	8.5	12.2	107
06...	1340	10.0	368	8.3	8.0	12.1	105
06...	1343	20.0	368	8.3	8.0	12.1	105
06...	1347	30.0	368	8.3	8.0	12.1	105
06...	1351	45.0	368	8.3	8.0	12.2	105
MAY							
02...	1304	1.00	339	7.7	18.5	6.9	75.4
02...	1308	10.0	338	7.7	18.5	6.9	75.4
02...	1312	20.0	338	7.7	18.5	6.9	75.4
02...	1316	30.0	338	7.6	18.0	6.7	72.5
02...	1320	44.0	337	7.6	18.0	6.6	71.4
JUL							
31...	1213	1.00	341	8.0	29.0	6.5	86.1
31...	1217	10.0	342	8.0	28.5	6.1	80.1
31...	1219	20.0	347	7.7	28.0	4.6	59.9
31...	1221	30.0	359	7.4	27.0	1.8	23.0
31...	1223	40.0	372	7.3	26.0	.2	2.5



TRINITY RIVER BASIN

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

325930097053801 -- Grapevine Lk Site BC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT WATER SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT WATER SATUR- ATION) (MG/L) (00301)	E COLI, MTEC MF (COL/ 100 ML) (31633)	COLI- FORM, FECAL, UM-MF WATER (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP WATER (COL/ 100 ML) (31673)	HARD- NESS TOTAL AS CACO3 (MG/L) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
FEB													
06...	1416	1.00	362	8.2	9.5	.55	11.6	104	--	42	31	118	15
06...	1420	10.0	364	8.3	8.5	--	11.8	103	--	--	--	--	--
06...	1424	20.0	367	8.3	8.0	--	11.8	102	--	--	--	--	--
06...	1429	30.0	367	8.2	8.0	--	11.7	101	--	--	--	--	--
06...	1434	40.0	367	8.2	8.0	--	11.6	100	--	--	--	--	--
06...	1438	47.0	368	8.2	8.0	--	11.8	102	--	--	--	124	22
MAY													
02...	1338	1.00	355	8.2	21.0	.34	8.7	100	<1	<1	--	138	16
02...	1343	10.0	355	8.2	21.0	--	8.7	100	--	--	--	--	--
02...	1348	20.0	355	8.2	21.0	--	8.6	98.9	--	--	--	--	--
02...	1353	30.0	355	8.2	20.5	--	8.5	96.7	--	--	--	--	--
02...	1400	47.0	355	8.2	20.5	--	8.4	95.6	--	--	--	140	20
JUL													
31...	1246	1.00	327	8.5	30.5	.99	8.2	111	<1	<1	--	115	15
31...	1250	10.0	330	8.4	30.0	--	7.8	105	--	--	--	--	--
31...	1254	20.0	332	8.1	29.0	--	6.6	87.4	--	--	--	--	--
31...	1259	30.0	365	7.3	27.0	--	.1	1.3	--	--	--	--	--
31...	1304	41.0	376	7.3	26.0	--	.2	2.5	--	--	--	142	8

325930097053801 -- Grapevine Lk Site BC

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 AS SO4) (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
FEB													
06...	38.7	5.20	22.6	.907	28.5	4.40	103	36.0	22.0	.3	6.3	201	.727
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	40.3	5.74	24.5	.957	29.1	4.54	102	38.4	23.6	.3	5.7	208	.696
MAY													
02...	47.3	4.72	15.8	.586	19.5	3.59	122	28.1	17.2	.2	6.3	199	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	48.0	4.79	16.5	.607	19.9	3.55	120	28.1	17.2	.2	6.3	345	.565
JUL													
31...	36.9	5.64	19.3	.782	25.9	3.77	101	30.1	20.4	.2	4.7	181	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	47.8	5.52	18.3	.669	21.4	3.67	134	22.4	18.8	.2	7.8	207	--

325930097053801 -- Grapevine Lk Site BC

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHATE, ORTH, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTH, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
FEB										
06...	.011	.738	<.041	--	.32	<.060	E.010	--	M	<3.2
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	.011	.707	<.041	--	.35	<.060	E.010	--	<10	<3.2
MAY										
02...	E.003	.536	<.041	--	.35	<.060	E.012	--	<10	<3.2
02...	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--
02...	.006	.571	<.041	--	.33	<.060	E.012	--	<10	<3.2
JUL										
31...	<.006	E.027	<.040	--	.32	<.060	<.020	--	<10	E1.9
31...	--	--	--	--	--	--	--	--	--	--
31...	<.006	E.026	<.040	--	.32	<.060	<.020	--	<10	31.7
31...	<.006	E.028	.250	.321	.57	<.060	E.010	--	380	656
31...	<.006	E.029	.595	.330	.93	.065	.071	.218	520	837

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

325933097081401 -- Grapevine Lk Site CC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORG-ANIC DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)
FEB													
06...	1453	1.00	357	8.0	9.0	10.5	93.0	.765	.015	.780	E.028	.38	<.060
06...	1459	12.0	352	8.0	8.5	10.7	93.6	.780	.015	.795	E.022	.39	E.030
MAY													
02...	1422	1.00	372	8.4	22.5	8.6	102	.370	.011	.381	E.030	.43	<.060
02...	1427	10.0	373	8.4	22.5	8.6	102	--	--	--	--	--	--
02...	1432	15.0	372	8.4	22.5	8.7	103	.367	.011	.378	E.032	.42	<.060
JUL													
31...	1320	1.00	329	8.2	30.5	6.9	93.8	--	<.006	E.026	<.040	.31	<.060
31...	1325	10.0	329	8.2	30.5	6.8	92.4	--	<.006	E.029	<.040	.32	<.060

325933097081401 -- Grapevine Lk Site CC

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671) AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L) (00660) AS PO4)	IRON, DIS-SOLVED (UG/L) (01046) AS FE)	MANGA-NESE, DIS-SOLVED (UG/L) (01056) AS MN)
FEB				
06...	E.017	--	<10	<3.2
06...	.018	.055	<10	<3.2
MAY				
02...	<.018	--	<10	<3.2
02...	--	--	--	--
02...	<.018	--	<10	<3.2
JUL				
31...	<.020	--	<10	<3.0
31...	<.020	--	<10	<3.0

330106097094601 -- Grapevine Lk Site DC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORG-ANIC DIS-SOLVED (MG/L) (00607)	NITRO-GEN, AM-MONIA + ORG-ANIC DIS-SOLVED (MG/L) (00623)
FEB													
06...	1516	1.00	344	7.9	10.5	10.0	91.8	.910	.019	.929	E.026	--	.43
06...	1520	12.0	377	7.8	9.0	9.7	85.9	1.27	.017	1.29	.044	.372	.42
MAY													
02...	1451	1.00	439	8.1	24.0	7.6	92.6	.161	.018	.179	.093	.477	.57
02...	1456	12.0	438	8.1	24.0	7.6	92.6	.163	.022	.185	.097	.469	.57
JUL													
31...	1341	1.00	332	8.4	31.5	7.6	105	--	<.006	E.034	<.040	--	.38
31...	1346	9.00	334	8.3	31.5	7.2	99.6	--	<.006	E.026	<.040	--	.37

330106097094601 -- Grapevine Lk Site DC

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00666) AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L) (00671) AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L) (00660) AS PO4)	IRON, DIS-SOLVED (UG/L) (01046) AS FE)	MANGA-NESE, DIS-SOLVED (UG/L) (01056) AS MN)
FEB					
06...	E.044	.032	.098	<10	E2.5
06...	.064	.042	.129	<10	E2.0
MAY					
02...	<.060	<.018	--	<10	E2.5
02...	<.060	<.018	--	<10	3.8
JUL					
31...	<.060	<.020	--	<10	<3.0
31...	<.060	<.020	--	<10	<3.0

## TRINITY RIVER BASIN

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

## 330207097103701 -- Grapevine Lk Site EC

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPAR-ENCY (SECCHI DISK) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP WATER (COL/100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
FEB													
06...	1534	1.00	376	7.8	10.5	.27	9.6	88.1	--	33	58	150	15
06...	1540	11.0	352	7.8	10.0	--	9.6	87.1	--	--	--	136	16
MAY													
02...	1510	1.00	455	8.0	24.0	.12	7.2	87.7	e2	e4	--	183	31
02...	1517	11.0	455	8.0	24.0	--	7.2	87.7	--	--	--	180	28
JUL													
31...	1359	1.00	332	8.4	31.5	.35	7.8	108	<1	e11	--	114	15
31...	1405	8.00	332	8.3	31.5	--	7.6	105	--	--	--	113	14

## 330207097103701 -- Grapevine Lk Site EC

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY WAT TOT IT FIELD CACO3 (39086) (MG/L AS) (00945)	SULFATE DIS-SOLVED (MG/L AS SO4) (00940)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00950)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00955)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
FEB													
06...	53.3	4.09	12.8	.456	15.3	4.04	134	27.3	14.2	.2	9.0	211	1.23
06...	47.7	4.14	14.3	.532	18.0	3.85	120	27.4	15.0	.2	8.3	198	1.03
MAY													
02...	61.8	6.92	20.7	.666	19.4	3.73	152	37.0	24.9	.2	5.1	253	.174
02...	61.0	6.83	20.5	.665	19.4	3.76	152	36.6	25.1	.2	5.1	252	.173
JUL													
31...	36.3	5.74	20.2	.822	26.9	3.93	99	31.0	21.3	.2	5.6	184	--
31...	35.9	5.69	19.9	.813	26.8	3.90	100	31.1	21.8	.3	5.6	184	--

## 330207097103701 -- Grapevine Lk Site EC

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB										
06...	.018	1.25	E.027	--	.42	E.052	.036	.110	M	<3.2
06...	.018	1.05	E.027	--	.36	E.048	.030	.092	M	E2.6
MAY										
02...	.022	.196	.104	.424	.53	<.060	<.018	--	<10	9.0
02...	.018	.191	.114	.463	.58	<.060	<.018	--	<10	9.3
JUL										
31...	<.006	<.050	<.040	--	.34	<.060	<.020	--	<10	<3.0
31...	<.006	E.030	<.040	--	.37	<.060	<.020	--	<10	<3.0

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TRINITY RIVER BASIN

08055000 Denton Creek near Grapevine, TX

LOCATION.--Lat 32°59'13", long 97°00'45", Denton County, Hydrologic Unit 12030104, over center of channel at downstream side of bridge on State Highway 121, 1.3 mi downstream from Bakers Branch, 4.1 mi downstream from Grapevine Dam, 5.0 mi northeast of Grapevine and 6.1 mi upstream from mouth.

DRAINAGE AREA.--705 mi<sup>2</sup>.

PERIOD OF RECORD.--  
 CHEMICAL DATA: Oct. 1997 to current year.  
 BIOCHEMICAL DATA: Oct. 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
FEB 06...	1243	62	378	8.4	8.2	3.4	--	12.3	106	2.6	122	21	39.4
MAY 02...	1255	200	341	8.1	18.5	24	--	8.9	96.1	--	129	15	44.4
JUL 31...	1333	131	367	7.6	26.3	--	7.2	10.9	138	--	133	6	44.5
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
FEB 06...	5.81	25.1	.988	4.48	101	38.7	23.2	.3	5.3	222	207	<10	.727
MAY 02...	4.48	15.0	.574	3.73	114	26.8	16.4	.2	7.2	204	190	17	--
JUL 31...	5.35	18.0	.678	3.66	128	25.5	19.6	.2	6.2	212	200	<10	--
DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
FEB 06...	.007	.734	<.041	--	.43	<.060	E.011	--	5.7	1	.21	E1.5	53.5
MAY 02...	E.003	.735	<.041	--	.39	<.060	.029	.089	4.1	6	.15	E1.7	52.8
JUL 31...	<.006	E.042	.262	.421	.68	E.047	.020	.061	5.7	1	.11	7.1	59.7
DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
FEB 06...	<.06	.04	<.8	.16	1.4	<10	E.07	3.6	<.23	2.3	1.54	--	<1.0
MAY 02...	<.06	.14	E.4	.18	1.7	<10	.15	6.7	<.01	1.4	1.33	<2.4	<1.0
JUL 31...	<.06	<.04	<.8	.37	.5	--	<.08	--	<.01	1.5	<.06	<2.0	<1.0
DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)											
FEB 06...	1	1.13											
MAY 02...	3	1.09											
JUL 31...	<1	.93											

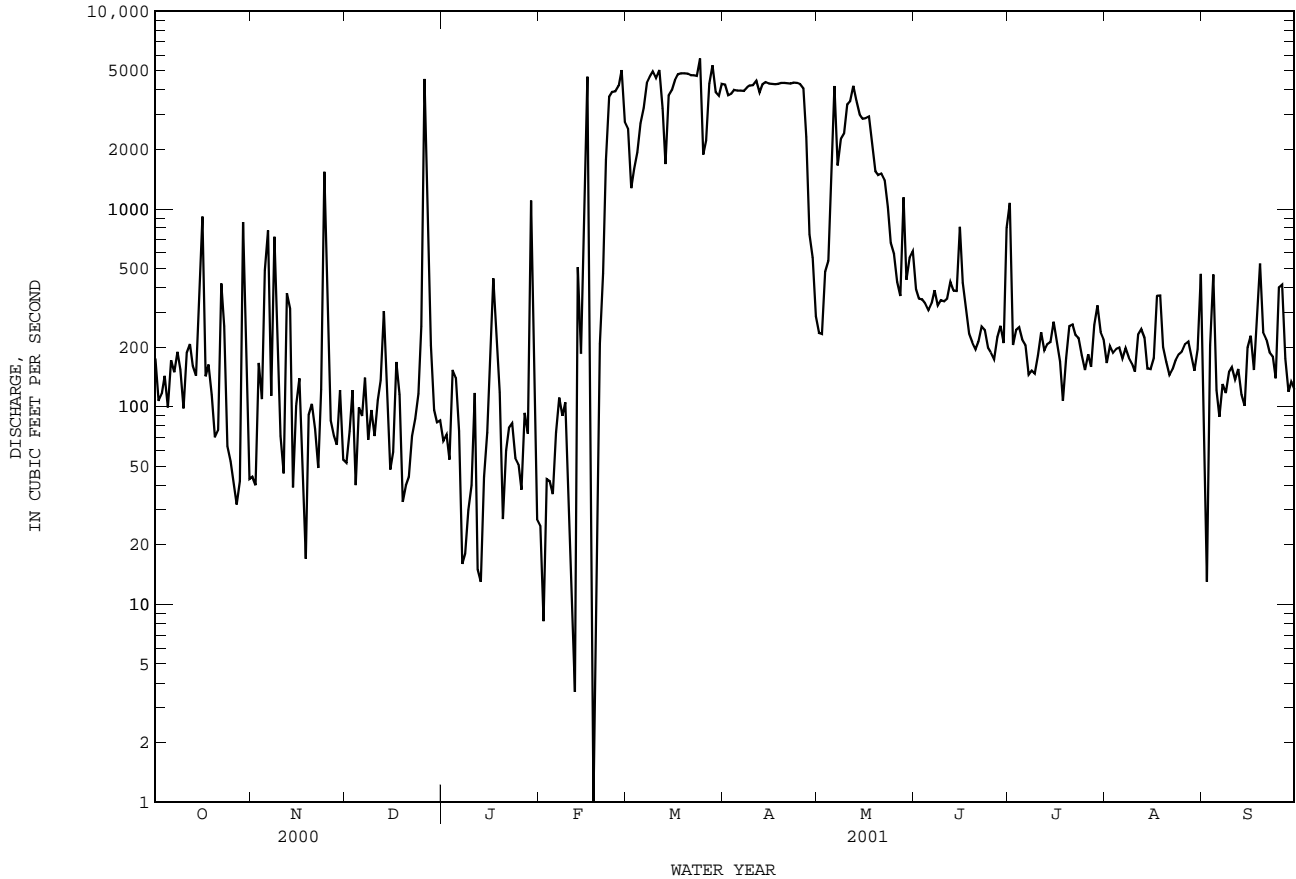
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08055500 Elm Fork Trinity River near Carrollton, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001z	
ANNUAL TOTAL	64717.04		371894.90			
ANNUAL MEAN	177		1019		864	
HIGHEST ANNUAL MEAN					4289	1982
LOWEST ANNUAL MEAN					76.0	1978
HIGHEST DAILY MEAN	4540	Dec 26	5760	Mar 24	25300	May 5 1990
LOWEST DAILY MEAN	.00	May 8	.00	Feb 18	.00	Dec 2 1954
ANNUAL SEVEN-DAY MINIMUM	24	May 3	36	Jan 7	.00	Jan 7 1959
MAXIMUM PEAK FLOW			7140	Mar 24	33000	Sep 21 1964
MAXIMUM PEAK STAGE			8.33	Mar 24	13.48	May 5 1990
ANNUAL RUNOFF (AC-FT)	128400		737700		625900	
10 PERCENT EXCEEDS	276		4220		3840	
50 PERCENT EXCEEDS	126		207		148	
90 PERCENT EXCEEDS	40		47		37	

z Period of regulated streamflow.





## TRINITY RIVER BASIN

08056000 Elm Fork Trinity River at Frasier Dam, Dallas, TX

LOCATION.--Lat 32°50'31", long 96°53'23", Dallas County, Hydrologic Unit 12030103, at right bank of dam, 4.4 mi northeast of city hall in Irving, Texas, 0.7 mi downstream of Spur 482.

DRAINAGE AREA.--2,557 mi<sup>2</sup>.

PERIOD OF RECORD.--Apr. 1999 to current year (elevation).

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily elevations, which are fair. Water elevation is regulated by a concrete weir at gage.

COOPERATION.--Maintained in cooperation with City of Dallas Water Utilities.

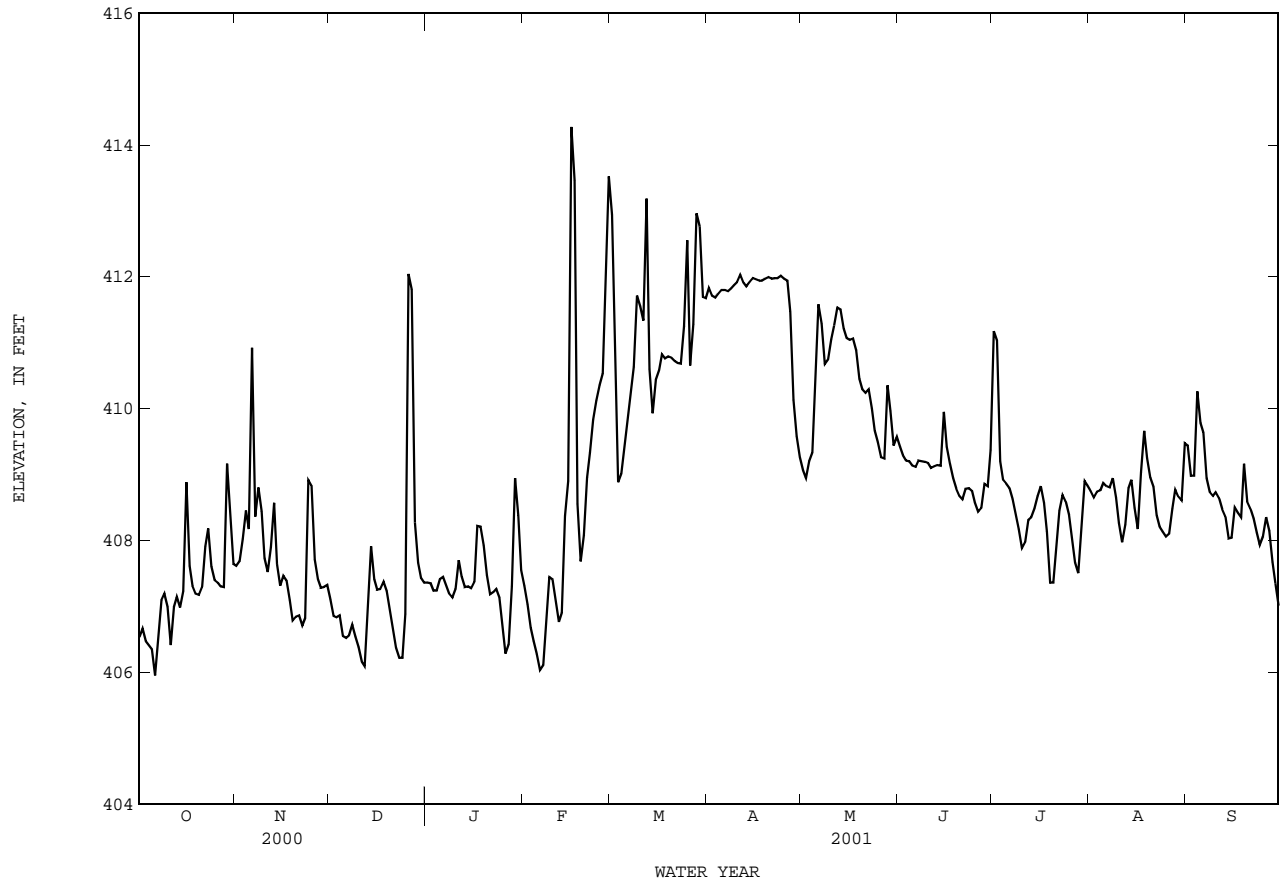
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 415.42 ft, Feb. 16; minimum elevation, 405.81 ft, Oct. 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406.53	407.61	407.10	407.36	407.31	412.94	411.83	409.06	409.42	411.17	408.75	409.44
2	406.66	407.68	406.85	407.35	407.03	410.30	411.71	408.94	409.29	411.03	408.65	408.98
3	406.47	408.02	406.83	407.24	406.67	408.88	411.68	409.20	409.21	409.20	408.74	408.98
4	406.41	408.45	406.86	407.24	406.47	409.01	411.74	409.33	409.20	408.92	408.76	410.26
5	406.35	408.17	406.55	407.41	406.27	409.37	411.80	410.71	409.13	408.86	408.87	409.78
6	405.95	410.92	406.52	407.44	406.03	409.75	411.80	411.58	409.11	408.79	408.82	409.63
7	406.56	e408.36	406.56	407.31	406.10	410.18	411.78	411.29	409.21	408.62	408.80	408.94
8	407.09	408.80	406.72	407.19	406.73	410.63	411.82	410.67	409.20	408.38	408.94	408.73
9	407.19	408.44	406.54	407.13	407.44	411.71	411.87	410.74	409.19	408.17	408.65	408.67
10	406.99	407.73	406.38	407.26	407.41	411.55	411.92	411.05	409.17	407.88	408.26	408.73
11	406.41	407.52	406.16	407.70	407.10	411.33	412.03	411.26	409.10	407.97	407.97	408.64
12	406.99	407.90	406.09	407.45	406.76	413.18	411.91	411.53	409.12	408.31	408.24	408.47
13	407.14	408.57	406.96	407.29	406.90	410.60	411.85	411.50	409.14	408.35	408.79	408.36
14	406.98	407.64	407.91	407.30	408.37	409.93	411.92	411.21	409.13	408.48	408.92	408.03
15	407.23	407.31	407.41	407.27	408.90	410.44	411.98	411.07	409.95	408.67	408.49	408.04
16	408.88	407.46	407.25	407.37	414.27	410.58	411.96	411.04	409.42	408.82	408.17	408.50
17	407.61	407.39	407.26	408.22	413.46	410.82	411.94	411.06	409.16	408.57	409.03	408.42
18	407.31	407.09	407.37	408.21	408.55	410.76	411.94	410.88	408.94	408.13	409.66	408.35
19	407.19	406.78	407.23	407.92	407.68	410.79	411.97	410.45	408.78	407.36	409.25	409.16
20	407.17	406.84	406.95	407.47	408.08	410.77	411.99	410.29	408.67	407.36	408.95	408.59
21	407.29	406.86	406.68	407.18	408.95	410.72	411.97	410.24	408.62	407.93	408.81	408.48
22	407.91	406.71	406.37	407.21	409.33	410.69	411.98	410.29	408.78	408.45	408.38	408.33
23	408.18	406.82	406.22	407.26	409.83	410.68	411.98	410.00	408.79	408.69	408.21	408.11
24	407.60	408.92	406.22	407.13	410.12	411.25	412.01	409.66	408.75	408.59	408.13	407.93
25	407.40	408.83	406.88	406.65	410.35	412.55	411.97	409.48	408.57	408.39	408.06	408.06
26	407.36	407.71	412.04	406.28	410.53	410.65	411.94	409.26	408.43	408.02	408.10	408.35
27	407.30	407.41	411.81	406.42	411.57	411.28	411.47	409.24	408.49	407.66	408.48	408.14
28	407.29	407.28	408.27	407.30	413.52	412.96	410.13	410.35	408.86	407.50	408.77	407.67
29	409.16	407.29	407.66	408.94	---	412.76	409.58	409.96	408.82	408.26	408.66	407.35
30	408.48	407.32	407.43	408.38	---	411.69	409.26	409.44	409.37	408.90	408.60	407.01
31	407.64	---	407.36	407.55	---	411.67	---	409.57	---	408.83	409.47	---
MEAN	407.25	407.79	407.24	407.40	408.63	410.98	411.66	410.33	409.03	408.52	408.66	408.54
MAX	409.16	410.92	412.04	408.94	414.27	413.18	412.03	411.58	409.95	411.17	409.66	410.26
MIN	405.95	406.71	406.09	406.28	406.03	408.88	409.26	408.94	408.43	407.36	407.97	407.01

e Estimated

08056000 Elm Fork Trinity River at Frasier Dam, Dallas, TX--Continued



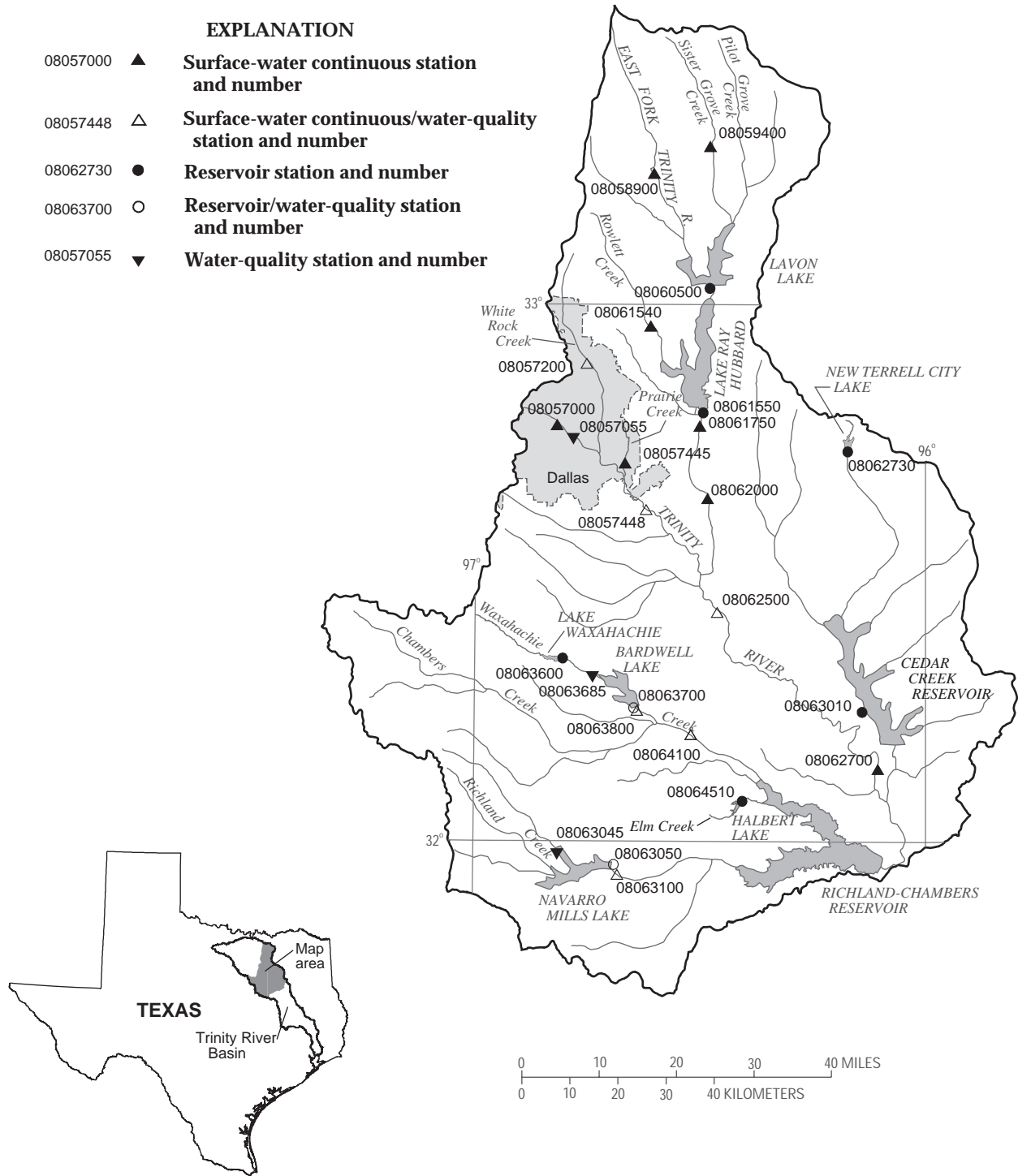


Figure 4.--Map showing location of gaging stations in the second section of the Trinity River Basin

08057000	Trinity River at Dallas, TX . . . . .	158
08057055	Trinity River at Cedar Crest Boulevard, Dallas, TX . . . . .	160
08057200	White Rock Creek at Greenville Avenue, Dallas, TX . . . . .	168
08057445	Prairie Creek at U.S. Highway 175, Dallas, TX . . . . .	174
08057448	Trinity River near Wilmer, TX . . . . .	176
08058900	East Fork Trinity River at McKinney, TX . . . . .	190
08059400	Sister Grove Creek near Blue Ridge, TX . . . . .	192
08060500	Lavon Lake near Lavon, TX . . . . .	194
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08061550	Lake Ray Hubbard near Forney, TX . . . . .	198
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08062000	East Fork Trinity River near Crandall, TX . . . . .	202
08062500	Trinity River near Rosser, TX . . . . .	204
08062700	Trinity River at Trinidad, TX . . . . .	216
08062730	New Terrell City Lake near Terrell, TX . . . . .	218
08063010	Cedar Creek Reservoir near Trinidad, TX . . . . .	220
08063045	Richland Creek near Irene, TX . . . . .	222
08063050	Navarro Mills Lake near Dawson, TX . . . . .	224
08063100	Richland Creek near Dawson, TX . . . . .	232
08063600	Lake Waxahachie near Waxahachie, TX . . . . .	236
08063685	Waxahachie Creek near Waxahachie, TX . . . . .	238
08063700	Bardwell Lake near Ennis, TX . . . . .	240
08063800	Waxahachie Creek near Bardwell, TX . . . . .	248
08064100	Chambers Creek near Rice, TX . . . . .	252
08064510	Halbert Lake near Corsicana, TX . . . . .	260

## TRINITY RIVER BASIN

08057000 Trinity River at Dallas, TX

LOCATION.--Lat 32°46'29", long 96°49'18", Dallas County, Hydrologic Unit 12030105, on right bank (levee) 90 ft downstream from Commerce Street viaduct in Dallas, 5.2 mi downstream from confluence of West and Elm Forks, and at mile 500.3.

DRAINAGE AREA.--6,106 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1898 to Dec. 1899 (gage heights only published in WSP 28 and 37), July 1903 to current year. Daily discharges are not available for all periods prior to 1931.

REVISED RECORDS.--WSP 850: 1903-06 (monthly and annual means). WSP 1732: 1937(M). WSP 1922: Drainage area. WRD TX-73-1: 1972.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 368.02 ft above sea level. Oct. 1, 1898, to Dec. 31, 1899, nonrecording gage at site 2 mi upstream at different datum. July 1, 1903, to July 20, 1930, nonrecording gage at present site and datum. July 21, 1930, to Sept. 30, 1932, nonrecording gage at site 6 mi downstream at datum 3.08 ft lower. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since 1914, flow has been regulated. Twelve major upstream reservoirs regulate flow. The city of Dallas diverts water for municipal use from the Elm Fork, Lake Ray Hubbard (on the East Fork), and from Lake Tawakoni (on the Sabine River), and purchases water from North Texas Municipal Water District (from the East Fork). Wastewater effluent from the City of Dallas is returned to the river downstream from this station. The Trinity River Authority and the city of Fort Worth discharge wastewater effluent into the river upstream from this station. There are many other diversions upstream from this station for municipal, industrial and other uses.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--10 years (water years 1904-13), 1,047 ft<sup>3</sup>/s (758,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1903-13).--Maximum discharge, 184,000 ft<sup>3</sup>/s May 25, 1908 (gage height, 52.6 ft), from rating curve extended above 109,000 ft<sup>3</sup>/s. Maximum stage since at least 1840, that of May 25, 1908.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1866 reached about the same stage as that of May 25, 1908.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	813	470	672	807	16400	6540	816	1030	5900	438	3720
2	367	1070	449	657	682	12700	6010	718	872	10700	418	1200
3	369	1590	442	605	618	8270	5470	749	815	3750	422	823
4	369	3070	449	590	596	7530	5250	854	809	880	423	3420
5	370	2030	445	604	576	6270	4640	4720	764	650	431	3570
6	377	9250	448	587	550	6110	4490	6260	735	591	426	4000
7	375	6890	446	559	553	7130	4370	6700	752	540	421	1040
8	386	3030	441	520	540	8050	4200	3600	752	503	429	622
9	389	3110	432	531	1170	10800	4180	2990	736	487	425	1020
10	374	1040	436	537	2130	11300	4350	3230	749	485	421	905
11	373	644	441	1100	608	9930	5330	3170	713	477	447	570
12	370	1500	435	807	548	15500	5480	3550	691	471	466	1220
13	383	3370	652	586	603	12500	4230	3610	702	465	459	529
14	366	1170	1090	574	2150	7280	4830	3130	800	460	442	848
15	794	612	675	545	3240	7010	4610	2830	2530	469	426	526
16	2920	609	516	629	21000	6580	4380	2660	1700	508	440	600
17	1200	579	477	2270	22900	7340	4300	2560	903	471	2120	549
18	493	491	484	3100	8550	7460	4240	2410	713	452	3860	574
19	427	469	457	2000	3870	7330	4240	2190	632	442	993	2180
20	405	462	440	961	2040	7090	4240	1790	585	437	643	1000
21	443	457	433	670	2300	6900	4250	1540	555	434	558	1050
22	1410	449	433	610	4250	6770	4270	1560	621	431	517	1130
23	2670	710	423	587	5490	6380	4350	1340	707	447	508	591
24	774	3240	416	557	6570	6550	4290	1080	612	450	484	521
25	560	4600	668	534	8600	9760	4070	879	555	436	470	523
26	476	1270	9930	523	9440	6060	3960	790	538	432	500	613
27	441	647	14100	535	11400	5640	3560	744	552	431	494	581
28	415	554	5790	675	16400	9600	1990	3710	582	433	539	478
29	4760	512	1970	4750	---	9980	1150	3620	580	429	530	457
30	4970	495	841	6180	---	7420	948	1230	1160	486	883	446
31	1050	---	707	1530	---	6190	---	1140	---	462	3390	---
TOTAL	29439	54733	45836	35585	138181	263830	128218	76170	24445	34009	23423	35306
MEAN	950	1824	1479	1148	4935	8511	4274	2457	815	1097	756	1177
MAX	4970	9250	14100	6180	22900	16400	6540	6700	2530	10700	3860	4000
MIN	363	449	416	520	540	5640	948	718	538	429	418	446
AC-FT	58390	108600	90920	70580	274100	523300	254300	151100	48490	67460	46460	70030

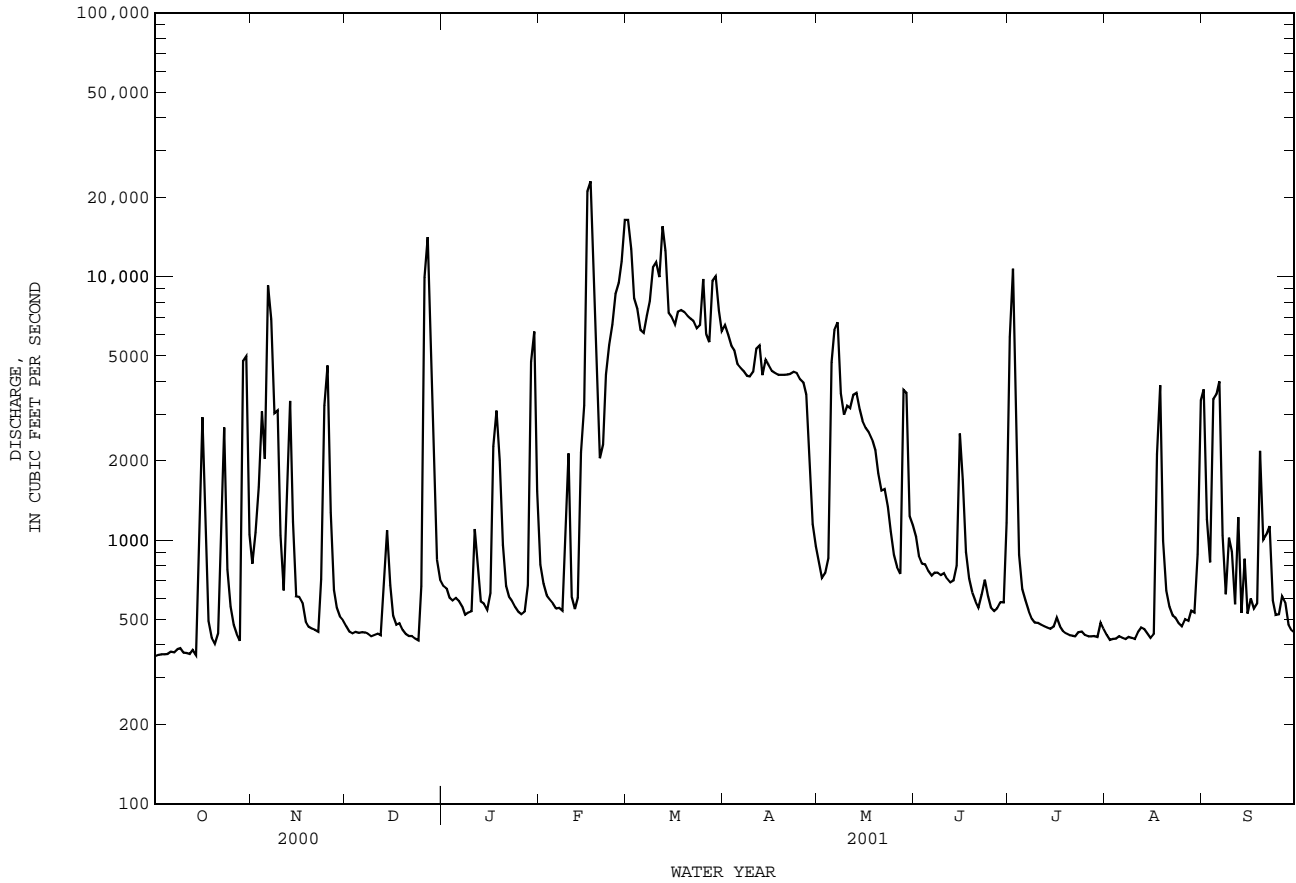
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2001hz, BY WATER YEAR (WY)

MEAN	1184	1328	1481	1342	2041	2384	2534	3857	3007	1241	704	794
MAX	10050	14150	12860	13350	10410	14910	27050	28050	17390	8629	6075	7107
(WY)	1982	1982	1992	1992	1992	1945	1942	1990	1941	1989	1982	1962
MIN	68.2	58.2	53.0	62.4	76.9	68.2	91.5	213	68.0	51.9	50.2	52.4
(WY)	1935	1956	1939	1940	1940	1956	1955	1937	1953	1956	1956	1956

08057000 Trinity River at Dallas, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1931 - 2001hz	
ANNUAL TOTAL	394816		889175		1822	
ANNUAL MEAN	1079		2436		7154	
HIGHEST ANNUAL MEAN					1982	
LOWEST ANNUAL MEAN					115	
HIGHEST DAILY MEAN	14100	Dec 27	22900	Feb 17	103000	Apr 26 1942
LOWEST DAILY MEAN	343	Aug 30	363	Oct 1	10	Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	345	Aug 24	370	Oct 1	26	Apr 12 1935
MAXIMUM PEAK FLOW			31200	Feb 17	111000	Apr 26 1942
MAXIMUM PEAK STAGE			38.65	Feb 17	47.10	May 3 1990
ANNUAL RUNOFF (AC-FT)	783100		1764000		1320000	
10 PERCENT EXCEEDS	2800		6630		5220	
50 PERCENT EXCEEDS	474		752		428	
90 PERCENT EXCEEDS	363		433		113	

h See PERIOD OF RECORD paragraph.  
 z Period of regulated streamflow.



## TRINITY RIVER BASIN

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX

## WATER-QUALITY RECORDS

LOCATION.--Lat 32°45'04", long 96°47'07", Dallas County, Hydrologic Unit 12030105, on right bank at abandoned bridge abutment, 0.2 mi upstream from Cedar Crest Boulevard. Bridge, 1.8 mi southeast of Dallas City Hall, 2.1 mi downstream from Coombs Creek, and 2.7 mi downstream from Commerce Street Bridge (station 08057000).

## PERIOD OF RECORD.--

CHEMICAL DATA: Feb. 1984 to Sept. 1993.  
 BIOCHEMICAL DATA: Feb. 1984 to Sept. 1993.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Feb. 1984 to current year.  
 pH: Feb. 1984 to current year.  
 WATER TEMPERATURES: Feb. 1984 to current year.  
 DISSOLVED OXYGEN: Feb. 1984 to current year.

INSTRUMENTATION.--Water-quality monitor since Feb. 1984.

REMARKS.--Records good. Interruption in the record was caused by malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous water years using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request. Discharge records are available for Trinity River at Dallas (station 08057000), 2.7 mi upstream. There is no appreciable inflow between the two stations.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,030 microsiemens/cm, Feb. 12, 1988; minimum, 93 microsiemens/cm, Oct. 20, 1984.  
 pH: Maximum, 9.0 units, June 27, 2000; minimum, 6.8 units, Sept. 6, 1988, Mar. 17-18, 1998.  
 WATER TEMPERATURE: Maximum, 33.5°C, Aug. 12, 1987; minimum, 4.1°C, Dec. 27, 2000.  
 DISSOLVED OXYGEN: Maximum, 13.7 mg/L, Feb. 8, 1989; minimum, 0.0 mg/L, July 21, 1985.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 973 microsiemens/cm, Dec. 23; minimum, 205 microsiemens/cm, Oct. 15.  
 pH: Maximum, 8.2 units, Feb. 10, July 27; minimum, 7.0 units, Sept. 20, 21, 22.  
 WATER TEMPERATURE: Maximum, 32.8°C, July 21; minimum, 4.1°C, Dec. 27.  
 DISSOLVED OXYGEN: Maximum, 12.1 mg/L, Mar. 27; minimum, 3.6 mg/L, Sept. 9.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	831	790	811	591	423	518	799	755	782	855	848	852
2	821	803	809	615	455	539	801	775	790	855	846	851
3	809	786	794	615	405	483	815	785	802	852	845	848
4	831	809	823	424	380	405	800	778	790	845	842	844
5	815	786	802	470	228	406	822	784	802	844	833	838
6	794	781	787	329	267	299	806	787	794	839	833	836
7	792	762	781	419	309	360	833	786	813	836	831	834
8	819	782	802	459	348	405	872	826	850	840	834	837
9	796	766	772	459	411	429	913	868	896	843	831	837
10	794	759	771	537	459	505	927	893	913	836	820	833
11	809	784	799	631	537	594	948	900	925	830	808	818
12	784	741	767	644	380	528	962	948	956	816	810	812
13	780	768	773	467	445	458	959	943	953	817	810	815
14	789	778	784	540	464	499	944	931	936	820	815	818
15	804	205	695	644	540	602	940	931	938	820	816	818
16	554	325	477	680	644	664	950	937	943	820	790	808
17	556	481	506	706	672	684	958	948	952	802	760	777
18	651	556	615	741	706	727	950	946	948	766	761	765
19	690	651	674	782	741	766	954	946	951	765	761	763
20	738	682	709	791	766	778	952	942	948	771	764	766
21	741	631	723	791	772	782	954	941	947	782	771	779
22	705	459	614	788	758	779	971	954	964	785	776	781
23	484	381	431	770	446	669	973	941	961	782	772	775
24	541	484	517	635	431	515	941	918	928	804	777	790
25	628	532	577	497	438	457	918	842	889	822	799	810
26	634	604	625	553	471	515	876	846	859	843	822	834
27	700	611	667	634	553	609	879	863	870	847	820	836
28	734	690	712	695	632	662	865	840	852	842	711	814
29	729	249	392	730	695	712	842	837	840	711	438	525
30	436	329	378	755	730	744	850	841	846	---	---	e450
31	521	436	492	---	---	---	850	842	848	---	---	e425
MONTH	831	205	674	791	228	570	973	755	887	---	---	780

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	e520	---	---	e400	417	394	402	678	643	663
2	---	---	e560	---	---	e390	409	395	402	695	670	687
3	---	---	e580	---	---	e350	427	405	411	719	641	687
4	---	---	e630	---	---	e380	420	413	417	667	366	642
5	---	---	e640	---	---	e390	417	410	413	594	333	452
6	---	---	e650	---	---	e400	415	409	412	435	329	394
7	---	---	e650	420	400	409	412	405	408	387	310	347
8	---	---	e660	411	396	400	414	400	407	427	387	412
9	---	---	e670	406	385	393	408	397	403	444	424	433
10	---	---	e630	393	386	390	429	398	406	430	398	409
11	---	---	e600	418	367	392	450	388	411	411	402	407
12	---	---	e580	377	332	357	463	418	439	436	391	410
13	---	---	e590	417	346	374	425	408	417	403	392	398
14	---	---	e650	444	414	427	459	411	432	410	397	405
15	---	---	e640	425	413	416	438	417	431	406	392	401
16	---	---	e480	413	399	408	432	411	425	400	390	396
17	---	---	e460	432	394	401	---	---	e420	394	388	391
18	---	---	e410	397	392	394	---	---	e410	411	388	399
19	---	---	e420	396	392	394	---	---	e410	490	410	427
20	---	---	e490	396	390	392	---	---	e400	455	429	440
21	---	---	e530	396	393	395	397	387	392	451	432	440
22	---	---	e550	399	393	395	395	385	391	435	424	430
23	---	---	e540	398	388	393	404	388	396	445	431	435
24	---	---	e510	412	382	397	398	383	392	440	433	437
25	---	---	e480	393	374	383	388	381	386	446	440	444
26	---	---	e430	439	393	417	392	382	388	465	444	452
27	---	---	e420	439	389	420	439	385	411	470	452	462
28	---	---	e410	395	377	386	533	439	486	452	423	430
29	---	---	---	389	372	378	581	533	566	428	418	421
30	---	---	---	406	389	399	643	570	611	543	421	486
31	---	---	---	409	398	404	---	---	---	547	528	537
MONTH	---	---	549	---	---	394	---	---	423	719	310	457

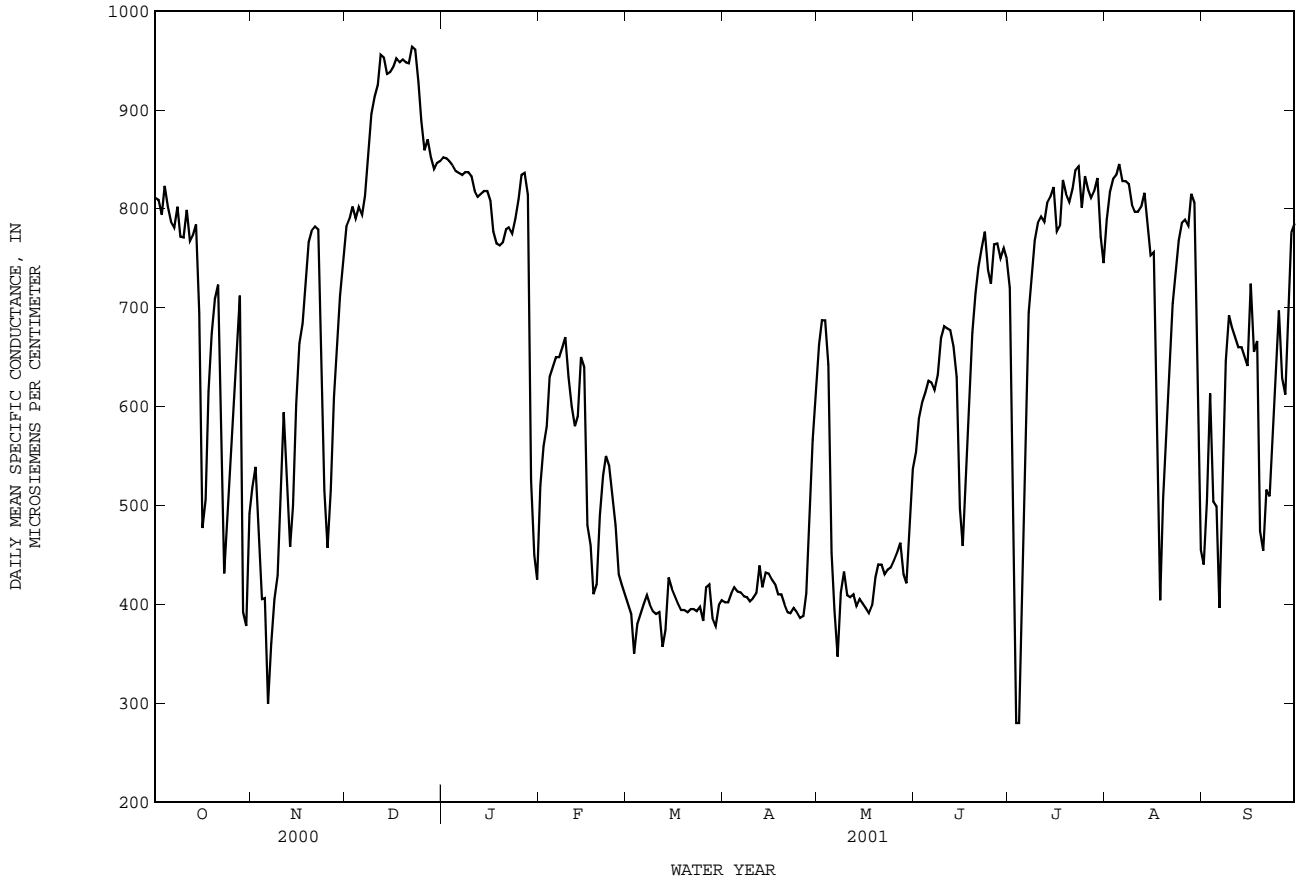
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	573	531	554	---	---	e720	808	759	789	458	353	440
2	604	569	588	---	---	e400	830	805	817	550	452	504
3	624	570	604	---	---	e280	840	826	830	659	550	613
4	629	597	614	---	---	e280	846	827	834	558	453	504
5	641	612	626	---	---	e440	853	841	845	556	438	499
6	644	611	624	---	---	e580	843	820	828	447	336	396
7	625	610	617	711	666	695	836	816	828	578	447	522
8	649	616	632	770	698	735	835	814	825	700	578	646
9	698	649	669	790	749	768	824	793	804	752	574	692
10	694	667	681	811	762	786	811	792	797	---	---	e680
11	689	672	679	806	782	792	823	680	797	---	---	e670
12	690	665	677	800	774	787	843	680	802	---	---	e660
13	671	653	661	819	796	806	846	787	816	---	---	e660
14	670	335	630	820	805	812	796	774	786	---	---	e650
15	562	348	497	826	818	822	778	726	753	769	463	641
16	498	423	459	822	744	777	781	688	756	772	597	724
17	569	497	545	829	753	783	780	299	559	667	626	655
18	628	561	605	836	818	829	529	344	404	726	456	666
19	701	626	675	823	800	815	538	451	506	634	391	474
20	741	686	715	838	797	807	597	535	569	483	422	454
21	771	720	741	826	817	820	677	597	644	576	481	516
22	781	745	760	863	821	839	736	663	704	536	477	509
23	805	746	777	863	808	843	754	714	735	602	515	568
24	774	709	738	812	792	801	795	746	768	645	595	624
25	752	700	724	844	812	833	795	777	786	733	645	697
26	805	736	764	840	810	819	808	753	789	670	605	629
27	787	746	765	821	806	811	811	748	783	639	599	612
28	---	---	e750	833	810	818	827	805	815	757	639	698
29	---	---	e760	837	822	831	823	793	806	793	757	776
30	---	---	e750	828	709	772	795	512	678	794	772	785
31	---	---	---	768	710	745	671	290	455	---	---	---
MONTH	---	---	663	---	---	731	853	290	739	---	---	605

e Estimated



TRINITY RIVER BASIN

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued



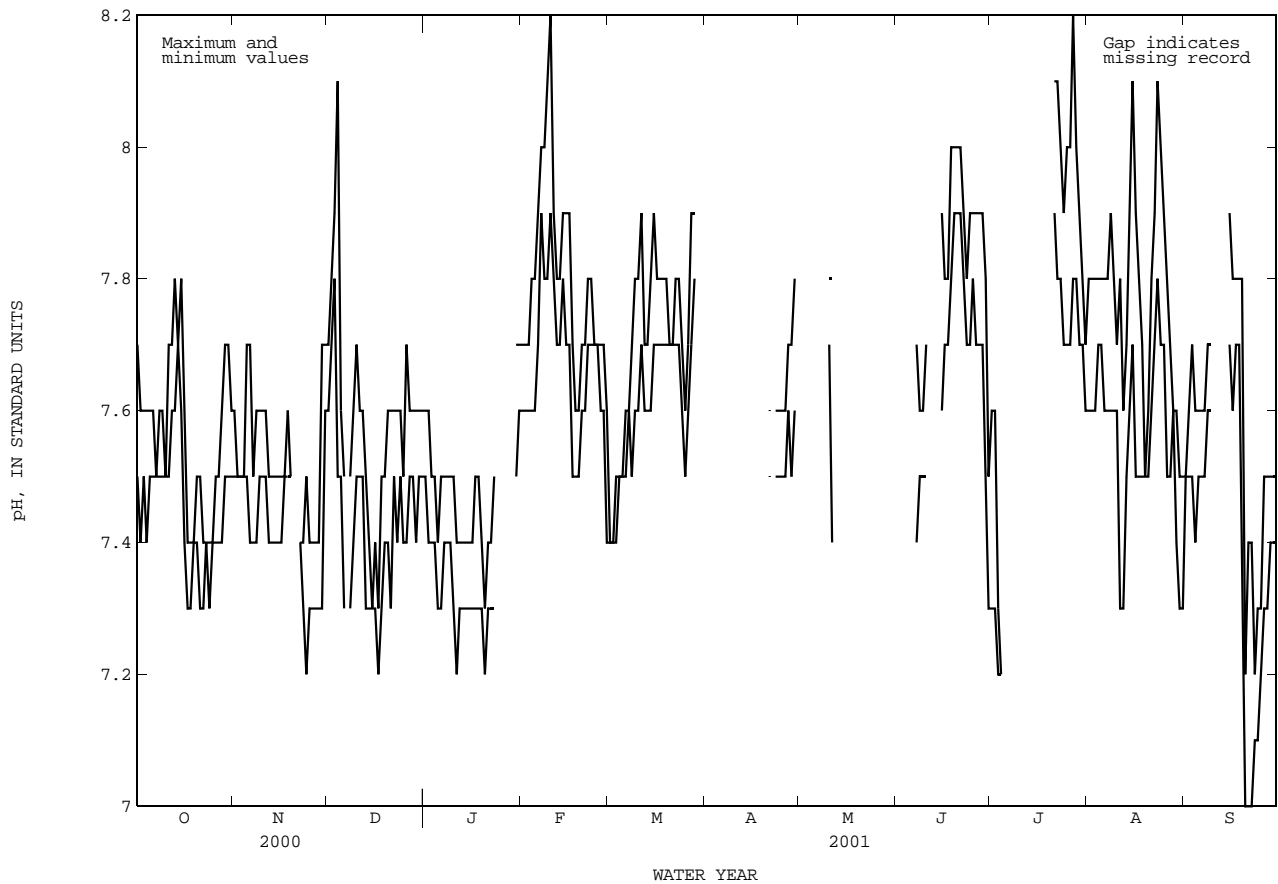
PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.7	7.5	7.6	7.5	7.7	7.6	7.6	7.5	7.7	7.6	7.4	7.4
2	7.6	7.4	7.5	7.5	7.8	7.7	7.6	7.4	7.7	7.6	7.4	7.4
3	7.6	7.5	7.5	7.5	7.9	7.8	7.5	7.4	7.7	7.6	7.5	7.4
4	7.6	7.4	7.5	7.5	8.1	7.5	7.5	7.4	7.8	7.6	7.5	7.5
5	7.6	7.5	7.7	7.5	7.6	7.5	7.4	7.3	7.8	7.6	7.5	7.5
6	7.6	7.5	7.7	7.4	7.5	7.3	7.5	7.3	7.9	7.7	7.6	7.5
7	7.5	7.5	7.5	7.4	---	---	7.5	7.4	8.0	7.9	7.6	7.6
8	7.6	7.5	7.6	7.4	7.5	7.3	7.5	7.4	8.0	7.8	7.7	7.5
9	7.6	7.5	7.6	7.5	7.6	7.4	7.5	7.4	8.1	7.8	7.8	7.6
10	7.5	7.5	7.6	7.5	7.7	7.5	7.5	7.3	8.2	7.9	7.8	7.6
11	7.7	7.5	7.6	7.5	7.6	7.5	7.4	7.2	7.9	7.8	7.9	7.7
12	7.7	7.6	7.5	7.4	7.6	7.5	7.4	7.3	7.8	7.7	7.7	7.6
13	7.8	7.6	7.5	7.4	7.5	7.3	7.4	7.3	7.8	7.7	7.7	7.6
14	7.7	7.7	7.5	7.4	7.4	7.3	7.4	7.3	7.9	7.8	7.8	7.6
15	7.8	7.6	7.5	7.4	7.3	7.3	7.4	7.3	7.9	7.7	7.9	7.7
16	7.6	7.4	7.5	7.4	7.4	7.3	7.4	7.3	7.9	7.7	7.8	7.7
17	7.4	7.3	7.5	7.5	7.3	7.2	7.5	7.3	7.7	7.5	7.8	7.7
18	7.4	7.3	7.6	7.5	7.5	7.3	7.5	7.3	7.6	7.5	7.8	7.7
19	7.4	7.4	7.5	7.5	7.5	7.4	7.4	7.3	7.6	7.5	7.8	7.7
20	7.5	7.4	---	---	7.6	7.4	7.3	7.2	7.7	7.6	7.7	7.7
21	7.5	7.3	---	---	7.6	7.3	7.4	7.3	7.7	7.6	7.7	7.7
22	7.4	7.3	7.4	7.4	7.6	7.5	7.4	7.3	7.8	7.7	7.8	7.7
23	7.4	7.4	7.4	7.3	7.6	7.4	7.5	7.3	7.8	7.7	7.8	7.7
24	7.4	7.3	7.5	7.2	7.6	7.5	---	---	7.7	7.7	7.7	7.6
25	7.4	7.4	7.4	7.3	7.5	7.4	---	---	7.7	7.7	7.6	7.5
26	7.5	7.4	7.4	7.3	7.7	7.4	---	---	7.7	7.6	7.7	7.6
27	7.5	7.4	7.4	7.3	7.6	7.5	---	---	7.7	7.6	7.9	7.7
28	7.6	7.4	7.4	7.3	7.6	7.5	---	---	7.6	7.4	7.9	7.8
29	7.7	7.5	7.7	7.3	7.6	7.4	---	---	---	---	---	---
30	7.7	7.5	7.7	7.6	7.6	7.5	7.7	7.5	---	---	---	---
31	7.6	7.5	---	---	7.6	7.5	7.7	7.6	---	---	---	---
MONTH	7.8	7.3	---	---	---	---	---	---	8.2	7.4	---	---

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	7.6	7.3	7.8	7.6	7.5	7.5
2	---	---	---	---	---	---	7.6	7.3	7.8	7.6	7.6	7.5
3	---	---	---	---	---	---	7.3	7.2	7.8	7.6	7.7	7.5
4	---	---	---	---	---	---	7.2	7.2	7.8	7.7	7.6	7.4
5	---	---	---	---	---	---	---	---	7.8	7.7	7.6	7.5
6	---	---	---	---	---	---	---	---	7.8	7.6	7.6	7.5
7	---	---	---	---	7.7	7.4	---	---	7.8	7.6	7.6	7.5
8	---	---	---	---	7.6	7.5	---	---	7.9	7.6	7.7	7.6
9	---	---	---	---	7.6	7.5	---	---	7.8	7.6	7.7	7.6
10	---	---	7.8	7.7	7.7	7.5	---	---	7.7	7.6	---	---
11	---	---	7.8	7.4	---	---	---	---	7.8	7.3	---	---
12	---	---	---	---	---	---	---	---	7.6	7.3	---	---
13	---	---	---	---	---	---	---	---	7.7	7.5	---	---
14	---	---	---	---	---	---	---	---	7.9	7.6	---	---
15	---	---	---	---	7.9	7.6	---	---	8.1	7.7	7.9	7.7
16	---	---	---	---	7.8	7.7	---	---	7.9	7.5	7.8	7.6
17	---	---	---	---	7.8	7.7	---	---	7.8	7.5	7.8	7.7
18	---	---	---	---	8.0	7.8	---	---	7.7	7.5	7.8	7.7
19	---	---	---	---	8.0	7.9	---	---	7.5	7.5	7.8	7.2
20	---	---	---	---	8.0	7.9	---	---	7.6	7.5	7.2	7.0
21	7.6	7.5	---	---	8.0	7.9	8.1	7.9	7.8	7.6	7.4	7.0
22	---	---	---	---	7.9	7.8	8.1	7.8	7.9	7.7	7.4	7.0
23	7.6	7.5	---	---	7.8	7.7	8.0	7.8	8.1	7.8	7.2	7.1
24	7.6	7.5	---	---	7.9	7.7	7.9	7.7	8.0	7.7	7.3	7.1
25	7.6	7.5	---	---	7.9	7.8	8.0	7.7	7.9	7.7	7.3	7.2
26	7.6	7.5	---	---	7.9	7.7	8.0	7.7	7.8	7.5	7.5	7.3
27	7.7	7.6	---	---	7.9	7.7	8.2	7.8	7.7	7.5	7.5	7.3
28	7.7	7.5	---	---	7.9	7.7	8.0	7.8	7.6	7.6	7.5	7.4
29	7.8	7.6	---	---	7.8	7.5	7.9	7.7	7.6	7.4	7.5	7.4
30	---	---	---	---	7.5	7.3	7.8	7.7	7.5	7.3	7.5	7.4
31	---	---	---	---	---	---	7.7	7.6	7.5	7.3	---	---
MONTH	---	---	---	---	---	---	---	---	8.1	7.3	---	---



## TRINITY RIVER BASIN

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

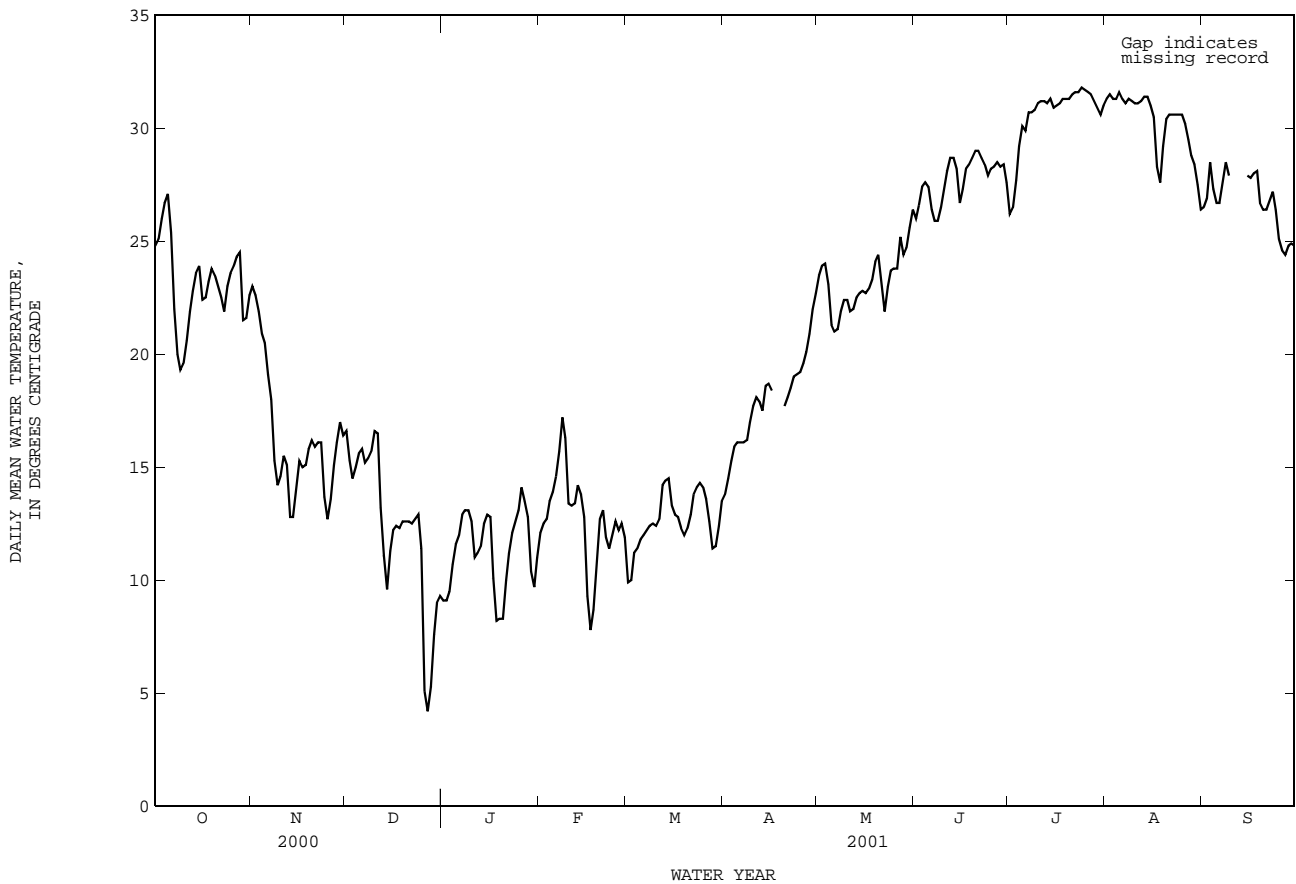
TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.8	24.0	24.8	23.6	22.6	23.0	17.0	15.9	16.6	9.6	8.5	9.1
2	26.3	24.2	25.1	23.1	22.0	22.6	15.9	14.4	15.3	9.6	8.5	9.1
3	27.2	25.2	26.0	23.1	21.2	21.9	15.3	13.9	14.5	10.4	8.7	9.5
4	27.8	25.9	26.7	21.3	20.8	20.9	15.7	14.3	15.0	11.7	9.7	10.7
5	27.9	26.4	27.1	20.9	19.0	20.5	16.3	14.9	15.6	12.2	10.9	11.6
6	27.2	23.7	25.4	19.5	18.6	19.1	16.0	15.4	15.8	12.4	11.6	12.0
7	23.7	20.7	22.0	18.6	17.6	18.0	16.0	14.7	15.2	13.5	12.2	12.9
8	20.7	19.4	20.0	17.6	13.5	15.3	16.1	14.8	15.4	13.8	12.5	13.1
9	20.2	18.5	19.3	14.6	13.9	14.2	16.2	15.2	15.7	13.8	12.6	13.1
10	20.3	19.0	19.6	15.4	14.1	14.6	17.5	15.7	16.6	13.0	11.8	12.6
11	21.6	20.0	20.6	16.0	15.2	15.5	17.4	14.6	16.5	11.9	10.1	11.0
12	23.0	20.8	21.9	16.3	13.0	15.1	14.6	12.1	13.2	11.4	10.7	11.2
13	23.8	21.9	22.8	13.1	12.5	12.8	12.1	10.3	11.1	12.1	10.7	11.5
14	24.4	23.1	23.6	13.5	12.4	12.8	10.8	8.6	9.6	13.3	12.0	12.5
15	25.3	21.6	23.9	14.6	13.5	14.1	12.0	10.8	11.3	13.4	12.4	12.9
16	23.2	21.8	22.4	16.0	14.6	15.3	12.7	11.9	12.2	13.4	11.9	12.8
17	22.8	22.1	22.5	15.5	14.7	15.0	13.3	11.9	12.4	12.1	8.6	10.1
18	23.9	22.6	23.2	15.3	15.0	15.1	13.1	11.9	12.3	8.7	7.9	8.2
19	24.6	23.3	23.8	16.7	15.2	15.8	13.4	12.1	12.6	8.6	7.9	8.3
20	23.7	23.3	23.5	17.1	15.6	16.2	13.5	11.8	12.6	9.0	7.8	8.3
21	23.4	22.2	23.0	16.7	15.4	15.9	13.2	12.2	12.6	10.8	9.0	10.0
22	22.9	22.0	22.5	16.5	15.7	16.1	13.2	12.1	12.5	12.0	10.5	11.2
23	22.7	21.4	21.9	17.1	14.4	16.1	13.3	12.1	12.7	12.6	11.6	12.1
24	23.5	22.5	23.0	15.8	12.3	13.7	13.4	12.4	12.9	13.2	12.2	12.6
25	24.1	23.1	23.6	13.3	12.4	12.7	12.7	6.6	11.4	13.5	12.6	13.1
26	24.2	23.7	23.9	14.3	13.1	13.6	6.6	4.4	5.1	15.0	13.4	14.1
27	24.8	23.8	24.3	15.9	14.3	15.1	4.4	4.1	4.2	14.5	12.6	13.5
28	25.0	24.1	24.5	17.1	15.5	16.1	6.7	4.2	5.3	13.2	12.1	12.8
29	24.4	20.3	21.5	17.4	16.8	17.0	8.5	6.7	7.6	12.1	9.5	10.4
30	22.3	21.1	21.6	16.8	16.1	16.4	9.6	8.5	9.0	10.6	9.1	9.7
31	23.1	22.2	22.6	---	---	---	9.7	8.6	9.3	11.8	10.4	11.0
MONTH	27.9	18.5	23.1	23.6	12.3	16.4	17.5	4.1	12.3	15.0	7.8	11.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.6	11.6	12.1	10.9	9.3	9.9	14.1	13.4	13.8	24.1	22.8	23.5
2	13.1	12.2	12.5	10.9	9.3	10.0	14.9	14.1	14.5	24.7	23.2	23.9
3	13.4	12.1	12.7	11.5	10.9	11.2	15.9	14.9	15.3	24.2	23.8	24.0
4	14.4	12.8	13.5	11.8	11.1	11.4	16.3	15.6	15.9	24.0	21.0	23.1
5	14.8	13.4	13.9	12.3	11.4	11.8	16.3	16.0	16.1	22.0	20.3	21.3
6	15.7	13.8	14.6	12.3	11.8	12.0	16.5	15.8	16.1	21.5	20.6	21.0
7	16.4	15.0	15.7	12.6	11.7	12.2	16.4	15.7	16.1	21.8	20.6	21.1
8	17.7	16.4	17.2	12.6	12.3	12.4	16.8	15.7	16.2	22.2	21.6	21.9
9	17.7	14.6	16.3	13.0	12.0	12.5	17.4	16.8	17.0	23.3	21.7	22.4
10	14.6	12.8	13.4	12.7	12.0	12.4	18.6	17.2	17.7	23.0	22.0	22.4
11	13.5	12.8	13.3	13.2	12.6	12.7	18.7	17.4	18.1	22.3	21.6	21.9
12	13.6	13.0	13.4	15.1	13.2	14.2	18.7	17.5	17.9	22.4	21.5	22.0
13	14.7	13.5	14.2	15.0	13.9	14.4	17.8	17.1	17.5	22.8	22.1	22.5
14	15.0	13.2	13.8	15.0	13.6	14.5	19.2	17.7	18.6	23.2	22.2	22.7
15	14.0	10.3	12.8	13.6	13.0	13.3	19.1	18.3	18.7	23.3	22.4	22.8
16	10.8	8.4	9.3	13.1	12.7	12.9	18.7	18.2	18.4	23.4	22.2	22.7
17	8.4	7.1	7.8	12.9	12.6	12.8	---	---	---	23.6	22.3	22.9
18	9.8	8.1	8.7	12.6	12.0	12.3	---	---	---	23.9	22.6	23.3
19	12.0	9.7	10.5	12.2	11.9	12.0	---	---	---	25.7	23.1	24.1
20	13.5	12.0	12.7	12.7	11.9	12.3	18.0	17.3	17.7	25.5	23.7	24.4
21	13.5	12.3	13.1	13.5	12.5	12.9	18.3	17.9	18.1	24.2	22.3	23.1
22	12.3	11.5	11.9	14.2	13.3	13.8	18.9	18.2	18.5	22.6	21.2	21.9
23	11.7	11.3	11.4	14.4	13.8	14.1	19.4	18.8	19.0	24.2	22.0	23.0
24	12.6	11.5	12.0	14.6	14.1	14.3	19.4	18.7	19.1	24.4	22.9	23.7
25	12.9	12.4	12.6	14.5	13.8	14.1	19.7	18.8	19.2	24.5	22.8	23.8
26	12.4	12.1	12.2	14.0	13.4	13.6	20.1	19.2	19.6	24.7	22.5	23.8
27	12.9	12.2	12.5	13.4	11.8	12.6	20.7	19.6	20.1	26.1	24.2	25.2
28	12.8	10.9	11.9	11.8	11.3	11.4	21.9	20.0	20.9	26.1	22.9	24.4
29	---	---	---	11.9	11.2	11.5	23.0	21.1	22.0	25.3	24.2	24.7
30	---	---	---	13.0	11.9	12.4	23.6	21.6	22.7	26.7	24.9	25.6
31	---	---	---	14.1	13.0	13.5	---	---	---	27.0	25.6	26.4
MONTH	17.7	7.1	12.7	15.1	9.3	12.6	---	---	---	27.0	20.3	23.2

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	26.8	25.2	26.0	28.1	24.8	26.2	32.5	30.5	31.3	26.7	26.1	26.5
2	27.6	25.4	26.6	27.4	26.0	26.5	32.5	30.9	31.5	27.9	26.3	26.9
3	28.2	26.5	27.4	28.9	27.0	27.7	32.3	30.7	31.3	29.8	27.9	28.5
4	28.2	26.6	27.6	30.1	28.2	29.2	32.5	30.5	31.3	28.5	26.4	27.3
5	28.0	26.8	27.4	31.7	28.7	30.1	32.6	31.0	31.6	27.1	26.1	26.7
6	27.3	25.8	26.4	31.4	27.9	29.9	32.3	30.7	31.3	27.3	26.2	26.7
7	26.5	25.5	25.9	31.6	30.1	30.7	32.3	30.4	31.1	28.5	26.8	27.6
8	26.7	25.4	25.9	31.6	30.1	30.7	32.2	30.6	31.3	28.9	28.1	28.5
9	27.4	25.8	26.5	31.8	30.2	30.8	32.3	30.6	31.2	28.6	27.3	27.9
10	28.1	26.4	27.3	32.0	30.5	31.1	32.1	30.4	31.1	---	---	---
11	29.1	27.1	28.1	32.2	30.5	31.2	32.5	29.7	31.1	---	---	---
12	29.3	28.1	28.7	32.2	30.5	31.2	32.1	29.7	31.2	---	---	---
13	29.3	27.8	28.7	32.2	30.4	31.1	31.9	31.0	31.4	---	---	---
14	28.9	25.5	28.2	32.2	30.7	31.3	32.3	30.8	31.4	---	---	---
15	27.5	25.1	26.7	31.5	30.5	30.9	32.0	30.3	31.0	28.5	27.4	27.9
16	28.5	26.2	27.3	31.7	30.5	31.0	31.0	29.8	30.5	28.3	27.0	27.8
17	29.0	27.2	28.2	32.0	30.5	31.1	30.3	26.1	28.3	28.6	27.5	28.0
18	29.2	27.5	28.4	32.3	30.6	31.3	28.8	26.5	27.6	29.3	26.6	28.1
19	29.4	28.1	28.7	32.2	30.6	31.3	30.1	28.3	29.2	27.8	26.1	26.7
20	30.0	28.3	29.0	32.5	30.4	31.3	31.3	29.7	30.4	26.6	26.2	26.4
21	29.9	28.4	29.0	32.8	30.5	31.5	31.4	30.0	30.6	27.0	26.0	26.4
22	29.6	27.9	28.7	32.7	30.7	31.6	31.4	29.9	30.6	27.1	26.3	26.8
23	28.9	27.8	28.4	32.6	30.9	31.6	31.6	29.8	30.6	28.1	26.6	27.2
24	29.0	26.9	27.9	32.7	31.2	31.8	31.6	29.8	30.6	27.4	25.3	26.4
25	29.2	27.5	28.2	32.7	31.0	31.7	31.6	29.9	30.6	25.9	24.6	25.1
26	29.1	27.6	28.3	32.5	30.8	31.6	31.1	29.3	30.2	25.2	24.1	24.6
27	29.1	27.9	28.5	32.6	30.8	31.5	29.9	29.1	29.5	25.0	23.6	24.4
28	29.4	27.6	28.3	32.2	30.6	31.2	29.1	28.4	28.8	25.7	24.2	24.8
29	29.2	27.9	28.4	31.3	30.3	30.9	28.9	27.9	28.4	26.0	24.3	24.9
30	28.6	25.5	27.6	31.7	29.8	30.6	28.3	26.4	27.5	25.9	23.9	24.8
31	---	---	---	31.9	30.4	31.0	27.5	25.9	26.4	---	---	---
MONTH	30.0	25.1	27.7	32.8	24.8	30.6	32.6	25.9	30.3	---	---	---

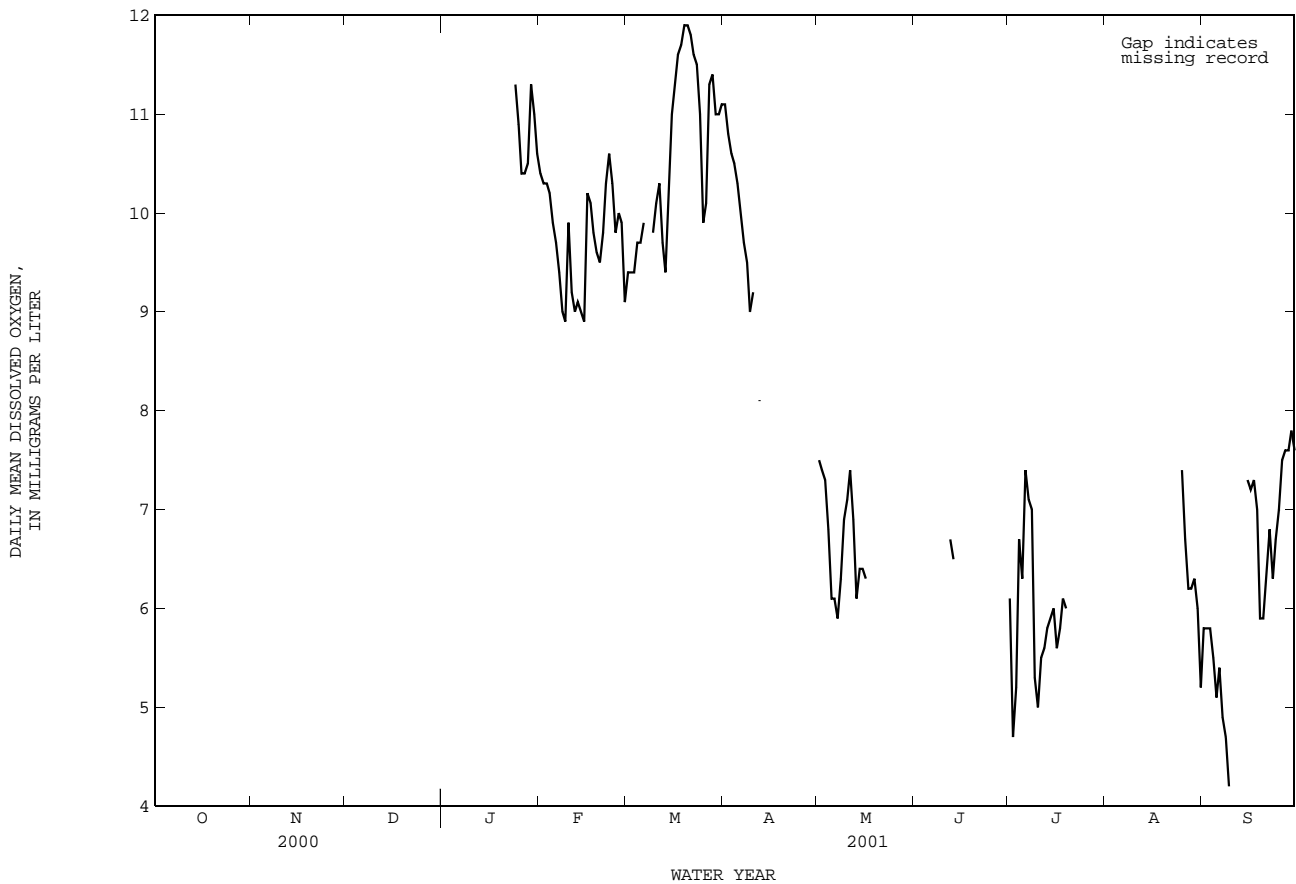




08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

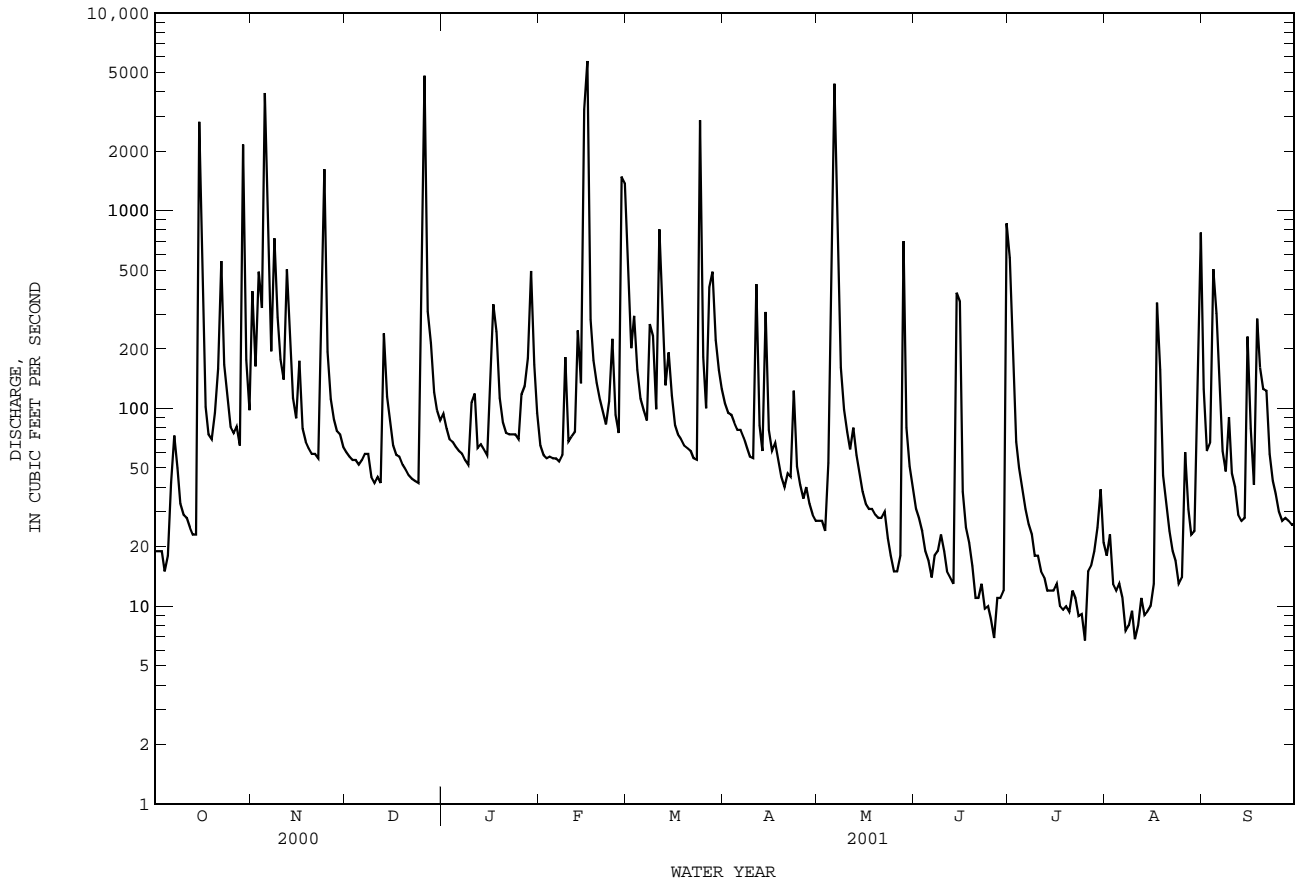
OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.7	5.3	6.1	---	---	---	6.0	5.4	5.8
2	---	---	---	5.3	4.1	4.7	---	---	---	6.0	5.7	5.8
3	---	---	---	6.9	3.8	5.2	---	---	---	6.0	5.6	5.8
4	---	---	---	7.0	6.1	6.7	---	---	---	5.8	5.1	5.5
5	---	---	---	8.1	5.3	6.3	---	---	---	5.6	4.9	5.1
6	---	---	---	8.5	6.4	7.4	---	---	---	5.5	4.9	5.4
7	---	---	---	8.3	6.3	7.1	---	---	---	5.3	4.7	4.9
8	---	---	---	8.0	6.1	7.0	---	---	---	5.2	4.2	4.7
9	---	---	---	7.0	4.6	5.3	---	---	---	4.8	3.6	4.2
10	---	---	---	6.2	4.2	5.0	---	---	---	---	---	---
11	---	---	---	6.5	4.7	5.5	---	---	---	---	---	---
12	7.4	6.1	6.7	6.7	4.8	5.6	---	---	---	---	---	---
13	7.2	5.6	6.5	6.6	5.0	5.8	---	---	---	---	---	---
14	---	---	---	6.9	5.2	5.9	---	---	---	---	---	---
15	---	---	---	6.6	5.3	6.0	---	---	---	7.8	6.7	7.3
16	---	---	---	6.4	4.9	5.6	---	---	---	7.8	6.8	7.2
17	---	---	---	6.6	5.2	5.8	---	---	---	7.8	6.9	7.3
18	---	---	---	7.2	5.5	6.1	---	---	---	7.6	6.1	7.0
19	---	---	---	7.1	5.1	6.0	---	---	---	6.5	5.0	5.9
20	---	---	---	---	---	---	---	---	---	6.2	5.8	5.9
21	---	---	---	---	---	---	---	---	---	6.8	5.9	6.3
22	---	---	---	---	---	---	---	---	---	7.0	6.5	6.8
23	---	---	---	---	---	---	---	---	---	6.8	6.0	6.3
24	---	---	---	---	---	---	---	---	---	7.4	6.2	6.7
25	---	---	---	---	---	---	8.2	6.6	7.4	7.6	6.4	7.0
26	---	---	---	---	---	---	7.4	6.1	6.7	8.2	6.9	7.5
27	---	---	---	---	---	---	7.0	5.6	6.2	8.2	7.2	7.6
28	---	---	---	---	---	---	6.6	5.9	6.2	8.9	6.7	7.6
29	---	---	---	---	---	---	6.9	5.9	6.3	8.2	7.5	7.8
30	---	---	---	---	---	---	6.5	5.4	6.0	8.1	7.3	7.6
31	---	---	---	---	---	---	5.7	4.7	5.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---





08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued





TRINITY RIVER BASIN

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued  
(National Water-Quality Assessment Program)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--  
CHEMICAL DATA: May 1997 to current year.  
PESTICIDE DATA: May 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
12...	0915	26	619	8.0	16.5	8.9	91	220	76	83.2	3.75	33.5	1.0
NOV													
15...	0930	90	618	8.1	9.5	9.8	86	280	77	107	2.73	21.4	.6
DEC													
20...	0910	48	731	8.0	8.4	11.2	96	290	71	109	3.20	26.2	.7
JAN													
10...	0920	48	731	8.0	8.4	11.2	96	210	--	74.3	6.79	62.2	2
FEB													
14...	0920	133	522	8.1	12.9	9.8	94	220	89	74.9	6.80	62.3	2
MAR													
14...	1040	104	642	8.0	15.0	9.4	94	260	68	99.5	2.52	20.0	.5
APR													
10...	1430	52	740	7.9	22.5	7.8	93	300	98	114	3.22	26.0	.7
MAY													
15...	1500	38	597	7.3	24.0	8.9	108	260	80	98.1	2.86	23.2	.6
JUN													
13...	1430	12	552	7.8	28.4	9.4	125	220	77	81.0	3.19	26.5	.8
JUL													
10...	0900	22	532	6.6	29.4	8.2	110	190	60	73.1	2.96	25.9	.8
AUG													
08...	0910	10	538	6.5	29.8	9.9	133	190	67	70.0	3.49	30.8	1.0
SEP													
05...	0900	84	500	6.8	24.7	7.8	96	110	23	41.7	1.40	9.5	.4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT													
12...	5.09	147	75.0	53.6	.6	6.5	383	358	1.71	.012	1.73	E.040	2.3
NOV													
15...	2.79	200	72.6	36.7	.4	9.0	402	385	2.73	.027	2.76	.069	3.3
DEC													
20...	3.66	215	75.9	42.8	.5	7.1	412	409	2.36	.046	2.40	.130	3.2
JAN													
10...	3.25	215	86.2	44.8	.5	7.1	448	426	2.13	.077	2.21	.974	3.8
FEB													
14...	8.38	126	104	59.6	1.0	7.0	490	444	8.98	.036	9.02	.145	10
MAR													
14...	2.79	191	72.8	28.1	.4	7.8	391	359	2.25	.074	2.32	.140	2.9
APR													
10...	3.09	200	88.1	39.5	.5	5.6	440	410	2.17	.144	2.31	E.040	3.1
MAY													
15...	3.25	177	69.7	30.7	.5	7.3	385	351	2.05	.030	2.08	<.041	2.6
JUN													
13...	4.04	138	68.4	37.2	.7	4.9	343	317	1.81	.034	1.84	<.040	2.4
JUL													
10...	4.17	135	65.7	35.6	.6	5.5	337	302	1.63	.040	1.67	E.037	2.2
AUG													
08...	5.09	122	72.7	45.9	.8	5.3	326	316	1.65	.026	1.67	<.040	2.3
SEP													
05...	3.15	87	28.4	14.3	.3	5.7	176	161	.931	.023	.954	E.025	1.6

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued  
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 12...	--	--	.46	.62	.261	.211	.194	.595	19	1.3	100	<10	5.1
NOV 15...	.43	.69	.76	.50	.129	.102	.086	.264	42	10	91	<10	25.6
DEC 20...	.62	.41	.54	.75	.163	.141	.120	.368	43	5.6	73	<10	31.5
JAN 10...	.61	.55	1.5	1.6	.236	.210	.185	.567	4	.52	100	30	43.1
FEB 14...	.84	.91	1.1	.98	1.32	1.48	1.31	4.03	38	14	98	30	26.2
MAR 14...	.47	.38	.52	.61	.121	.074	.064	.196	57	16	76	20	18.6
APR 10...	--	--	.66	.80	.154	.129	.094	.289	57	8.0	71	20	20.8
MAY 15...	--	--	.15	.52	.176	.114	.092	.282	32	3.3	83	M	14.1
JUN 13...	--	--	.46	.51	.230	.182	.105	.322	15	.49	98	M	6.2
JUL 10...	--	--	.40	.51	.210	.181	.156	.478	9	.53	96	M	E2.2
AUG 08...	--	--	.54	.64	.420	.333	.304	.932	15	.41	98	10	5.2
SEP 05...	--	--	.42	.67	.149	.089	.070	.215	31	7.0	100	M	E1.6

DATE	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER, DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
OCT 12...	<.010	<.002	.353	.027	E.070	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.008
NOV 15...	<.010	<.002	.779	E.008	E.030	<.018	<.003	<.005	<.003	.006	<.004	<.005	E.003
DEC 20...	<.010	<.002	.858	E.010	E.043	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.006
JAN 10...	<.010	<.002	.463	E.015	E.055	<.018	<.003	<.005	<.003	E.004	<.004	E.003	E.009
FEB 14...	<.010	<.002	.425	.025	E.035	<.018	<.003	<.005	<.003	<.005	.009	<.005	E.006
MAR 14...	<.010	<.002	.397	.017	E.033	<.018	<.003	<.005	<.003	E.002	<.004	<.005	E.005
APR 10...	<.010	<.002	.213	.027	E.033	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.004
MAY 15...	<.010	<.002	.130	.071	E.037	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.008
JUN 13...	<.010	<.002	.080	.044	E.014	<.018	<.003	<.005	<.003	E.004	<.004	<.005	E.012
JUL 10...	<.010	<.002	.055	.020	E.011	<.018	<.003	<.005	<.003	E.002	<.004	<.005	E.009
AUG 08...	<.010	<.002	.062	.018	E.037	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.004
SEP 05...	<.010	<.002	.056	.022	E.009	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.005

## TRINITY RIVER BASIN

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued  
(National Water-Quality Assessment Program)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)
OCT													
12...	<.027	<.007	.047	.219	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
NOV													
15...	E.012	<.007	.127	.105	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
DEC													
20...	<.027	<.007	.059	.121	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
JAN													
10...	E.007	<.007	.016	.128	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
FEB													
14...	<.027	<.007	.012	.270	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
MAR													
14...	<.027	<.007	.101	.654	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
APR													
10...	<.027	<.007	.061	.361	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
MAY													
15...	<.027	<.007	.125	.298	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
JUN													
13...	<.027	<.007	.058	.222	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
JUL													
10...	<.027	<.007	.124	.172	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
AUG													
08...	<.027	<.007	.094	.239	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
SEP													
05...	E.022	<.007	.295	.124	<.002	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006
DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
OCT													
12...	<.002	<.002	E.009	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.011
NOV													
15...	<.002	<.002	E.008	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.015
DEC													
20...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.007
JAN													
10...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.026
FEB													
14...	<.020	<.002	.044	<.002	<.005	<.010	<.020	<.017	.024	<.021	<.002	<.011	<.125
MAR													
14...	<.010	<.002	.033	<.002	<.005	<.010	<.020	<.017	.010	<.021	<.002	<.011	E.038
APR													
10...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	.029	<.021	<.002	<.011	<.041
MAY													
15...	<.002	<.002	E.011	<.005	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041
JUN													
13...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041
JUL													
10...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041
AUG													
08...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041
SEP													
05...	<.002	<.002	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.013

TRINITY RIVER BASIN

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued  
 (National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
OCT 12...	<.005	<.003	<.010	<.007	<.023	<.050	<.006
NOV 15...	<.005	<.003	<.010	<.007	<.023	<.050	<.006
DEC 20...	<.005	<.003	<.010	<.007	<.023	<.050	<.006
JAN 10...	<.005	<.003	E.043	<.007	<.023	<.050	<.006
FEB 14...	<.005	E.001	<.025	<.007	<.023	<.050	<.006
MAR 14...	<.005	<.003	.042	<.007	<.023	<.050	<.006
APR 10...	<.005	<.003	.018	<.007	<.023	<.050	<.006
MAY 15...	<.005	<.003	.044	<.007	<.023	<.050	<.006
JUN 13...	<.005	<.003	<.010	<.007	<.023	<.050	<.006
JUL 10...	<.005	<.003	<.010	<.007	<.023	<.050	<.006
AUG 08...	<.005	<.003	<.010	<.007	<.023	<.050	<.006
SEP 05...	<.005	<.003	.019	<.007	<.023	<.050	<.006

TRINITY RIVER BASIN

8057445 Prairie Creek at U.S. Highway 175, Dallas, TX

LOCATION.--Lat 32°42'17", long 96°40'11", Dallas County, Hydrologic Unit 12030105, on left bank at downstream side of the downstream access road bridge on U.S. Highway 175, 3.4 mi upstream from mouth, and 9.0 mi southeast of Dallas City Hall.

DRAINAGE AREA.--9.03 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1975 to Sept. 1980, Apr. 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 390.00 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.90	1.4	.81	1.9	85	3.8	.32	.55	173	.14	47
2	.00	.64	2.5	.78	1.6	15	3.2	.38	.51	43	.13	5.1
3	.00	45	2.2	1.4	1.5	52	3.2	.55	.44	2.5	.13	91
4	.00	23	2.4	1.7	1.8	23	3.2	1.4	.39	1.1	.13	90
5	.00	132	2.3	1.8	1.6	7.6	3.1	24	.43	.51	.13	24
6	.00	102	3.3	1.6	1.6	6.4	2.9	11	.45	.32	.13	9.0
7	.00	5.0	2.9	1.6	1.3	3.3	1.9	5.0	.47	.20	.14	3.6
8	.00	6.8	5.0	1.3	1.0	20	1.8	2.5	.37	.14	.16	2.2
9	.00	6.2	6.4	1.1	7.1	23	1.6	.42	.35	.13	.17	2.3
10	.00	3.1	9.0	1.5	2.3	9.7	1.7	.20	.31	.11	.17	2.6
11	.00	2.0	4.7	2.5	2.9	249	24	.14	.26	.10	.21	1.7
12	.00	5.8	1.3	2.5	4.0	149	6.4	.15	.24	.11	.23	1.2
13	.01	3.2	1.6	2.5	4.7	8.7	4.1	.15	.21	.14	.24	1.0
14	.03	3.0	2.3	2.8	3.9	23	3.9	.10	1.7	.15	.23	.84
15	38	2.4	2.0	1.7	64	11	2.1	.09	42	.16	.22	.71
16	60	2.3	1.6	2.4	107	4.4	1.4	.11	5.8	.17	.30	.66
17	2.4	2.3	1.1	1.6	22	3.3	.86	.15	1.2	.16	103	2.1
18	.35	2.0	.98	1.5	13	3.1	1.3	.20	.28	.19	11	4.1
19	.20	1.7	.87	1.5	7.0	2.3	1.1	.19	.31	.19	3.5	13
20	.31	1.6	.91	1.4	5.7	1.5	1.0	.18	.41	.18	.91	2.8
21	.89	1.5	.92	1.7	5.1	1.4	1.1	.14	.45	.15	.37	2.3
22	9.9	1.6	1.4	1.8	4.1	1.4	1.1	.13	.48	.14	.24	1.6
23	7.3	13	2.2	2.0	7.3	1.4	3.4	.18	.42	.13	.22	1.0
24	1.9	16	1.4	2.0	14	64	5.2	.15	.39	.12	.22	.56
25	.83	8.9	1.5	1.7	11	13	1.5	.15	.36	.11	.21	.38
26	.50	3.9	1.2	5.1	4.8	4.5	.57	.18	.40	.12	.25	.30
27	.35	2.6	1.0	2.2	101	7.4	.41	.30	.41	.13	.32	.22
28	.43	2.0	1.6	3.7	85	19	.37	36	.46	.13	.36	.22
29	50	1.5	1.4	26	---	13	.33	6.6	.44	.13	.38	.32
30	9.7	1.5	1.1	5.8	---	6.4	.31	3.8	77	.14	63	.28
31	2.4	---	.81	3.1	---	4.5	---	1.1	---	.14	286	---
TOTAL	185.50	403.44	69.29	89.09	488.2	836.3	86.85	95.96	137.49	224.00	472.84	312.09
MEAN	5.98	13.4	2.24	2.87	17.4	27.0	2.89	3.10	4.58	7.23	15.3	10.4
MAX	60	132	9.0	26	107	249	24	36	77	173	286	91
MIN	.00	.64	.81	.78	1.0	1.4	.31	.09	.21	.10	.13	.22
AC-FT	368	800	137	177	968	1660	172	190	273	444	938	619

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001h, BY WATER YEAR (WY)

	1976	1990	1978	1976	1976	1996	1978	1977	1978	1980	1980	2000
MEAN	11.4	9.30	11.4	6.72	11.6	11.3	11.7	16.2	9.47	3.57	2.23	3.26
MAX	46.3	43.1	40.2	19.8	41.6	27.0	42.2	72.4	51.1	24.9	15.3	10.4
(WY)	1995	1995	1999	1990	1997	2001	1990	1989	2000	1994	2001	2001
MIN	.000	.33	.42	.12	.34	1.28	.66	.64	.32	.000	.000	.003
(WY)	1976	1990	1978	1976	1976	1996	1978	1977	1978	1980	1980	2000

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

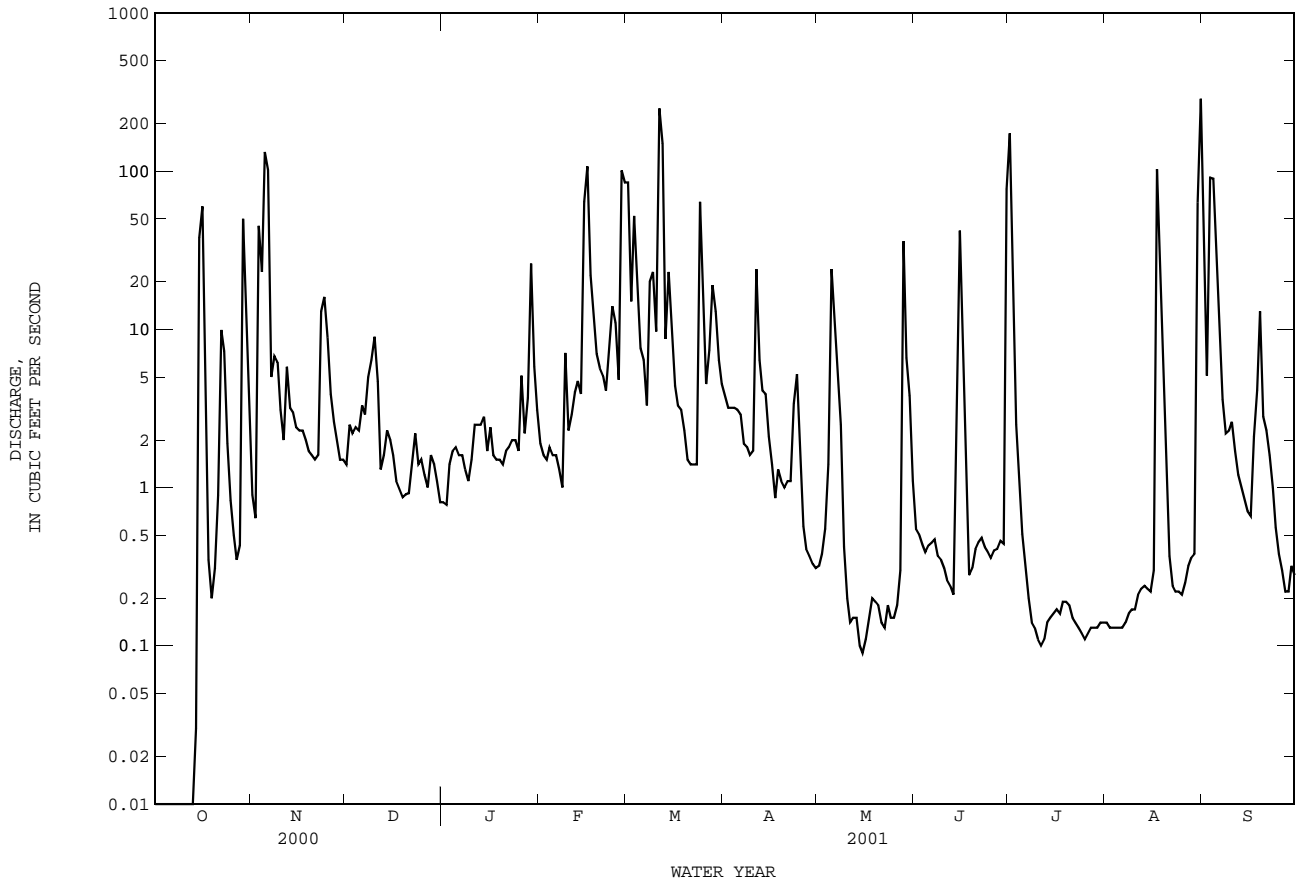
FOR 2001 WATER YEAR

WATER YEARS 1976 - 2001h

ANNUAL TOTAL	3064.18	3401.05	
ANNUAL MEAN	8.37	9.32	9.15
HIGHEST ANNUAL MEAN			17.4
LOWEST ANNUAL MEAN			1.61
HIGHEST DAILY MEAN	499	Jun 11	1150
LOWEST DAILY MEAN	.00	Aug 6	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 6	.00
MAXIMUM PEAK FLOW			1660
MAXIMUM PEAK STAGE			21.26
ANNUAL RUNOFF (AC-FT)	6080	6750	6630
10 PERCENT EXCEEDS	8.9	19	11
50 PERCENT EXCEEDS	.97	1.5	.94
90 PERCENT EXCEEDS	.00	.14	.01

h See PERIOD OF RECORD paragraph.

08057445 Prairie Creek at U.S. Highway 175, Dallas, TX--Continued



## TRINITY RIVER BASIN

08057448 Trinity River near Wilmer, TX

LOCATION.--Lat 32°37'03", long 96°37'19", Dallas County, Hydrologic Unit 12030105, on left bank at downstream side of bridge on Belt Line Road, 2.6 mi downstream from Prairie Creek, 4.4 mi northeast of Wilmer, 5.1 mi upstream from Tenmile Creek, and at mile 504.4.

DRAINAGE AREA.--6,387 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 345.95 ft above sea level. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since installation of gage in Oct. 1998, at least 10% of contributing drainage area has been regulated by eight major upstream reservoirs. Several cities within the Dallas-Fort Worth metroplex divert water for municipal use and return it to the river as wastewater effluents above this station. Low flows are sustained by wastewater effluents.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1866 and 1908 reached about the same stage in Dallas and are probably the highest since, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	1620	1020	1710	2060	16700	8140	1280	1540	5010	819	6210
2	511	2200	932	1630	1710	18700	7930	1130	1270	9150	757	3320
3	534	2500	881	1520	1450	16000	7270	1020	1130	8350	721	1560
4	524	4540	869	1420	1360	12300	7010	1210	1100	2880	699	3870
5	543	3530	861	1410	1280	9720	6260	4180	1060	1470	734	5270
6	543	8070	852	1340	1240	8160	5870	7050	953	1210	735	5650
7	545	10200	855	1290	1170	8130	5770	8790	945	1110	725	3130
8	608	6970	830	1180	1150	8830	5560	7190	1020	971	708	1530
9	610	5510	790	1120	1600	9940	5460	4540	941	921	761	1430
10	619	3000	803	1120	3230	11200	5480	4250	1010	902	709	2180
11	554	1660	802	1920	1870	11800	6290	4170	971	843	721	1230
12	563	2230	819	1990	1260	14200	7540	4330	889	902	938	1730
13	580	5090	1150	1390	1270	16000	6220	4690	891	863	896	1480
14	538	3360	2070	1270	2610	15000	5820	4210	869	867	808	1010
15	578	1630	1740	1220	3570	11200	6270	3830	2830	841	781	1480
16	4160	1330	1230	1280	e22600	9150	5770	3590	3300	923	802	1180
17	3740	1410	1030	2860	e32500	8520	5600	3460	1560	892	2170	1270
18	1460	1080	937	5130	e18200	8900	5480	3380	1050	826	5260	1050
19	904	939	929	3910	e7950	8860	5420	2960	850	778	2820	2960
20	760	890	830	2570	e3950	8700	5440	2860	741	766	1320	2620
21	791	849	822	1760	e2850	8450	5440	2300	683	761	1010	1750
22	1560	805	768	1450	e4350	8270	5450	2280	688	728	860	2440
23	4320	1140	726	1440	6610	8140	5540	2110	908	750	793	1360
24	2260	3740	708	1300	7520	7750	5600	1760	804	815	764	1110
25	1310	6900	869	1230	8740	9720	5320	1380	670	769	724	973
26	1020	4140	e7040	1160	9670	10200	5130	1260	626	755	706	1080
27	913	1800	e12300	1180	10500	7690	4890	1090	637	736	750	1140
28	802	e1420	13400	1320	12500	9150	3540	3250	677	751	780	912
29	3750	e1210	7790	4020	---	10800	1940	5880	687	723	811	800
30	7600	e1120	2800	8220	---	10800	1540	2550	1240	738	1500	779
31	3930	---	1950	4610	---	9120	---	1660	---	892	4440	---
TOTAL	47610	90883	69403	64970	174770	332100	168990	103640	32540	48893	37022	62504
MEAN	1536	3029	2239	2096	6242	10710	5633	3343	1085	1577	1194	2083
MAX	7600	10200	13400	8220	32500	18700	8140	8790	3300	9150	5260	6210
MIN	480	805	708	1120	1150	7690	1540	1020	626	723	699	779
AC-FT	94430	180300	137700	128900	346700	658700	335200	205600	64540	96980	73430	124000

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	1569	2067	2657	1501	2944	4737	2839	2666	2724	1202	830	1201
MAX	2174	3029	4196	2096	6242	10710	5633	3343	5069	1577	1194	2083
(WY)	1999	2001	1999	2001	2001	2001	2001	2001	2000	2001	2001	2001
MIN	997	955	1535	1019	1176	1567	1434	1829	1085	783	581	593
(WY)	2000	2000	2000	2000	1999	2000	2000	2000	2001	2000	2000	2000

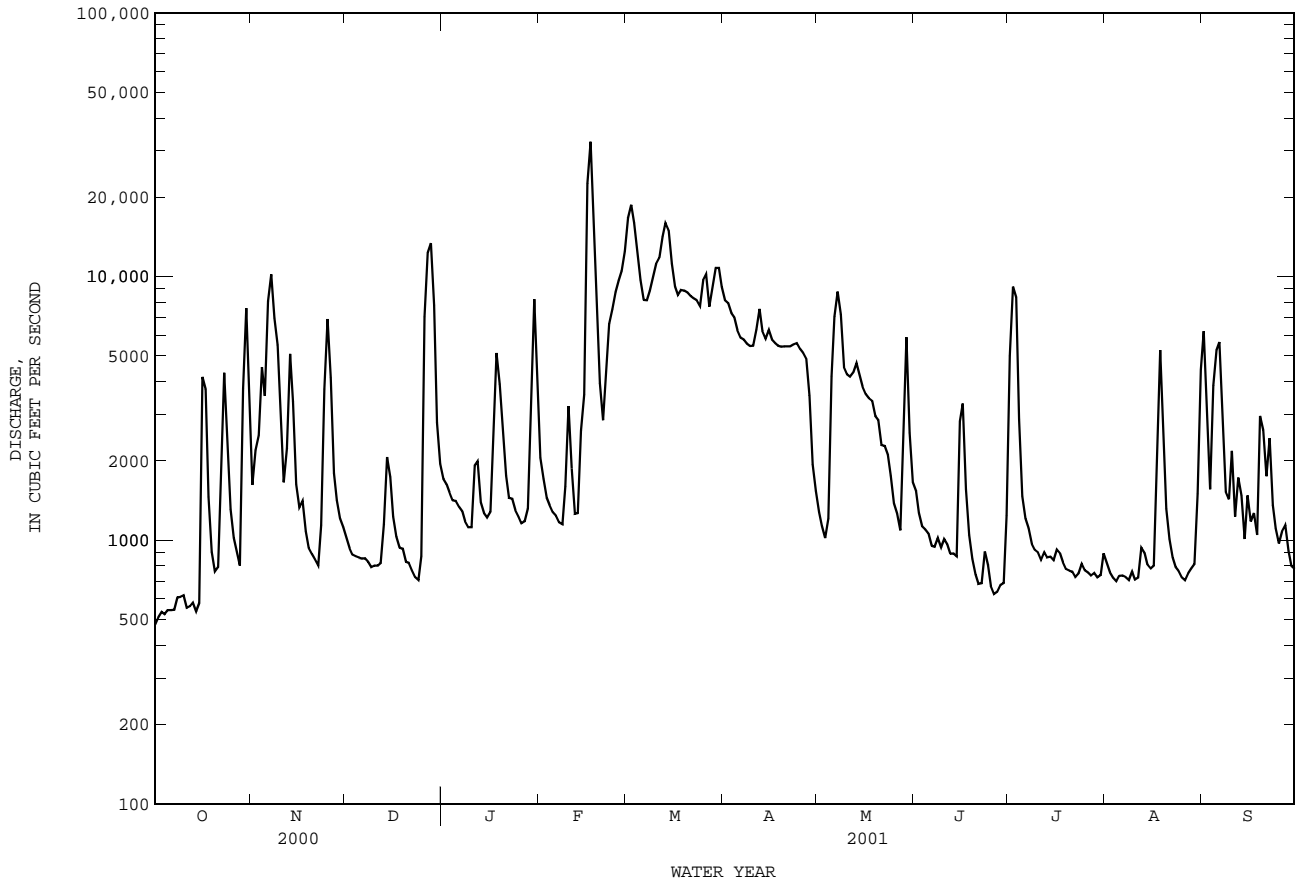
## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	642437	1233325	
ANNUAL MEAN	1755	3379	2240
HIGHEST ANNUAL MEAN			3379
LOWEST ANNUAL MEAN			1480
HIGHEST DAILY MEAN	13400	Dec 28	e32500
LOWEST DAILY MEAN	480	Oct 1	480
ANNUAL SEVEN-DAY MINIMUM	515	Sep 28	526
MAXIMUM PEAK FLOW			unknown
MAXIMUM PEAK STAGE			unknown
ANNUAL RUNOFF (AC-FT)	1274000	2446000	1623000
10 PERCENT EXCEEDS	4320	8480	5770
50 PERCENT EXCEEDS	862	1470	1020
90 PERCENT EXCEEDS	564	736	655

e Estimated

b Maximum discharge for period of record occurred Feb. 17, 2001, discharge unknown.

08057448 Trinity River near Wilmer, TX--Continued





## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 2000 to Sept. 2001.  
 BIOCHEMICAL DATA: Oct. 2000 to Sept. 2001.  
 PESTICIDE DATA: Oct. 2000 to Sept. 2001.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1999 to current year.  
 pH: Oct. 1999 to current year.  
 WATER TEMPERATURE: Oct. 1999 to current year.  
 DISSOLVED OXYGEN: Oct. 1999 to current year.

INSTRUMENTATION.--Water-quality monitor since Oct. 1999.

REMARKS.--Records good. Interruption in the record was caused by malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous water years using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. 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, 842 microsiemens/cm, Aug. 24, 2000; minimum, 199 microsiemens/cm, May 19, 2000.  
 pH: Maximum, 8.5 units, May 19, 2000; minimum, 6.9 units, Jan. 8, 2000.  
 WATER TEMPERATURE: Maximum, 32.1°C, July 24, 25, 2001; minimum, 8.1°C, Jan. 18, 19, 2001.  
 DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Mar. 28, 2001; minimum, 2.9 mg/L, Aug. 12, 2000.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 789 microsiemens/cm, Dec. 23; minimum, 230 microsiemens/cm, Nov. 6.  
 pH: Maximum, 8.4 units, May 26; minimum, 7.0 units, Sept. 13.  
 WATER TEMPERATURE: Maximum, 32.1°C, July 24, 25; minimum, 8.1°C, Jan. 18, 19.  
 DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Mar. 28; minimum, 3.7 mg/L, Sept. 12.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT													
12...	0710	730	7.5	20.8	7.9	88	160	75	52.3	6.36	76.8	3	11.9
NOV													
15...	0700	717	7.7	12.0	9.4	88	170	46	61.7	4.05	32.0	1	5.49
DEC													
20...	0730	732	7.6	12.8	9.5	90	200	71	69.3	6.18	60.9	2	9.63
JAN													
10...	0720	732	7.6	12.8	9.5	90	210	86	74.4	6.81	61.7	2	9.30
FEB													
14...	0720	748	7.6	15.0	8.7	87	210	57	80.0	2.38	19.1	.6	2.96
MAR													
14...	0840	401	7.8	14.8	8.1	81	140	31	50.0	4.21	20.2	.7	4.75
APR													
11...	1030	470	7.8	18.0	8.3	90	140	21	49.8	4.64	26.2	1.0	4.87
MAY													
15...	1030	441	7.3	23.1	8.4	100	140	32	49.2	4.82	28.2	1	5.32
JUN													
13...	1030	662	7.2	28.5	7.3	96	170	58	59.0	6.48	58.6	2	9.18
JUL													
11...	0915	685	6.8	30.3	7.3	99	180	57	59.7	6.64	61.0	2	9.65
AUG													
09...	0800	740	6.6	30.2	8.0	108	160	52	51.7	6.76	77.6	3	11.8
SEP													
07...	1500	414	6.7	27.7	6.3	82	130	41	47.0	3.83	28.1	1	5.67

TRINITY RIVER BASIN

08057448 Trinity River near Wilmer, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CAC03 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT													
12...	82	80.3	76.5	1.2	8.5	459	425	12.6	.030	12.7	.102	14	1.2
NOV													
15...	125	69.2	31.6	.6	7.2	315	309	4.66	.031	4.69	.119	6.7	1.9
DEC													
20...	128	98.8	60.3	1.4	6.9	449	434	8.88	.029	8.91	<.041	10	--
JAN													
10...	128	96.4	61.8	1.1	7.0	454	435	7.53	.063	7.59	1.49	10	1.4
FEB													
14...	153	58.2	27.4	.4	5.1	315	296	1.77	.104	1.88	.095	2.4	.42
MAR													
14...	111	50.1	16.9	.3	6.1	254	225	1.16	.026	1.18	.059	2.1	.86
APR													
11...	122	51.9	23.2	.4	5.6	268	247	1.50	.033	1.53	<.041	2.5	--
MAY													
15...	111	48.7	25.5	.5	4.6	270	247	2.75	.015	2.77	.044	3.6	.82
JUN													
13...	116	76.9	57.1	1.2	5.9	411	384	8.35	.052	8.40	<.040	9.4	--
JUL													
11...	119	79.9	62.4	.9	7.3	433	400	8.67	.029	8.70	E.029	9.8	--
AUG													
09...	105	87.6	77.3	1.2	8.2	477	443	11.9	.034	11.9	.042	13	1.2
SEP													
07...	92	55.9	24.8	.6	7.5	256	242	2.71	.033	2.74	<.040	3.5	--
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHODIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHODIS- SOLVED (MG/L AS PO4) (00660)	SEDIMENT, SUS- PENDEDD (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
OCT													
12...	.97	1.1	1.3	2.06	1.99	1.89	5.78	29	99	20	9.8	<.010	<.002
NOV													
15...	.59	.71	2.0	1.05	.634	.586	1.80	88	99	10	11.3	<.010	<.002
DEC													
20...	--	1.0	1.2	1.48	1.47	1.34	4.11	16	96	10	19.4	<.010	<.002
JAN													
10...	1.1	2.6	2.8	1.54	1.43	1.32	4.06	22	99	30	43.3	<.010	<.002
FEB													
14...	.35	.45	.51	.110	.066	.061	.187	37	90	M	14.7	<.010	<.002
MAR													
14...	.48	.54	.92	.252	.115	.093	.285	117	95	M	4.1	<.010	<.002
APR													
11...	--	.50	.99	.386	.255	.211	.647	104	97	M	5.4	<.010	<.002
MAY													
15...	.45	.50	.87	.515	.393	.369	1.13	69	100	<10	E2.4	<.010	<.002
JUN													
13...	--	.95	.96	1.32	1.25	1.11	3.40	59	100	M	8.3	<.010	<.002
JUL													
11...	--	.86	1.1	1.31	1.26	1.03	3.16	68	96	<10	5.8	<.010	<.002
AUG													
09...	.98	1.0	1.3	2.04	1.96	1.74	5.34	51	97	M	5.5	<.010	<.002
SEP													
07...	--	.55	.77	.534	.413	.365	1.12	116	100	M	5.8	<.010	<.002

## TRINITY RIVER BASIN

08057448 Trinity River near Wilmer, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOFOS WATER, DISS REC (UG/L) (04095)	ALPHA BHC DISS- SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)
	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U (UG/L) (82667)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)
OCT													
12...	.082	E.010	E.072	<.018	<.003	<.005	<.003	<.005	.012	<.005	E.007	<.027	<.007
NOV													
15...	.439	E.008	E.031	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.002	<.027	<.007
DEC													
20...	.338	E.007	E.070	<.018	<.003	<.005	<.003	<.005	<.018	<.005	E.005	<.027	<.007
JAN													
10...	.337	E.010	E.042	<.018	<.003	<.005	<.003	<.005	.009	<.005	E.004	<.027	<.007
FEB													
14...	1.07	E.010	E.050	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.010	.034	<.007
MAR													
14...	.448	.017	E.034	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.006	<.027	<.007
APR													
11...	.221	<.015	E.027	<.018	<.003	<.005	E.002	<.005	<.004	<.005	E.008	<.027	<.007
MAY													
15...	.209	E.010	E.026	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.009	<.027	<.007
JUN													
13...	.085	E.013	E.012	<.018	<.003	<.005	<.003	<.005	.011	<.005	.018	<.027	<.007
JUL													
11...	.068	.018	<.006	<.018	<.003	<.005	<.003	<.005	<.010	<.005	E.007	<.027	<.007
AUG													
09...	.047	E.008	E.033	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.003	<.027	<.007
SEP													
07...	.053	.017	E.015	<.018	<.003	<.005	<.003	<.005	<.004	<.005	E.007	<.027	<.007

08057448 Trinity River near Wilmer, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
OCT 12...	.039	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
NOV 15...	E.014	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.018	<.005	<.003
DEC 20...	.037	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.016	E.009	<.005	<.003
JAN 10...	.029	<.002	<.005	<.010	<.020	<.017	.131	<.021	<.002	<.011	<.041	<.005	<.003
FEB 14...	<.016	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.090	<.005	<.003
MAR 14...	.034	<.002	<.005	<.010	<.020	<.017	.010	<.021	<.002	<.011	E.039	<.005	<.003
APR 11...	.019	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
MAY 15...	.023	<.005	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
JUN 13...	.031	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	E.008	E.003	<.005	<.003
JUL 11...	E.123	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
AUG 09...	.042	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003
SEP 07...	.074	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003

DATE	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
OCT 12...	<.010	<.007	<.023	<.050	<.006
NOV 15...	<.010	<.007	<.023	<.050	<.006
DEC 20...	<.010	<.007	<.023	<.050	<.006
JAN 10...	E.008	<.007	<.023	<.050	<.006
FEB 14...	.137	<.007	<.023	<.050	<.006
MAR 14...	.041	<.007	<.023	<.050	<.006
APR 11...	<.010	<.007	<.353	<.050	<.006
MAY 15...	<.010	<.007	<.023	<.050	<.006
JUN 13...	<.010	<.007	<.023	<.050	<.006
JUL 11...	<.010	<.007	<.023	<.050	<.006
AUG 09...	<.010	<.007	<.023	<.050	<.006
SEP 07...	<.010	<.007	<.023	<.050	<.006

## TRINITY RIVER BASIN

08057448 Trinity River near Wilmer, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

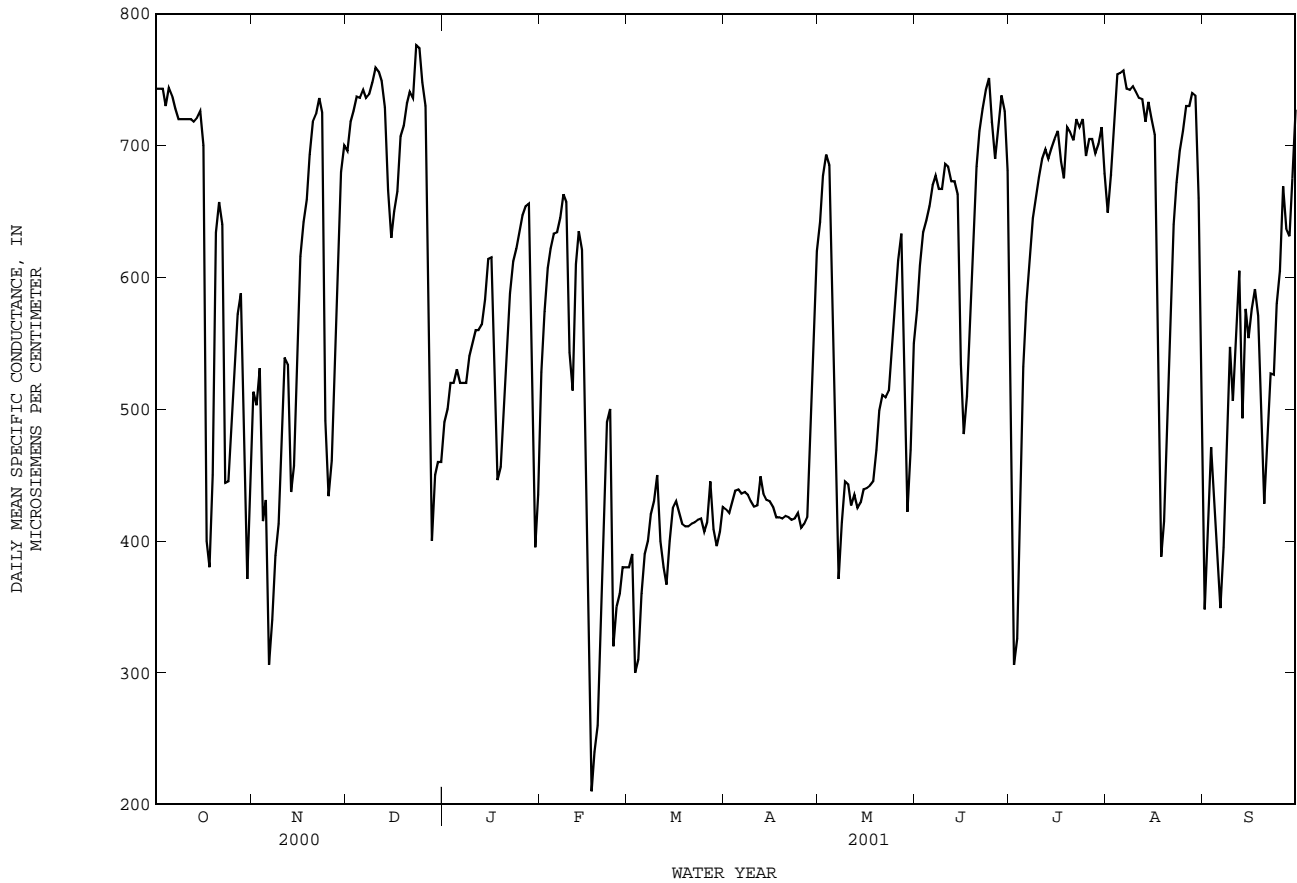
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	747	735	743	551	480	513	704	680	696	---	---	e490
2	754	735	743	579	450	503	725	704	718	---	---	e500
3	755	737	743	572	454	531	732	715	726	---	---	e520
4	738	723	730	456	389	415	745	724	737	---	---	e520
5	753	727	744	450	413	431	742	731	736	---	---	e530
6	746	731	738	421	230	306	751	733	742	---	---	e520
7	732	723	728	370	317	340	744	727	736	---	---	e520
8	---	---	e720	407	370	389	749	726	739	---	---	e520
9	---	---	e720	433	374	413	755	740	748	---	---	e540
10	---	---	e720	513	424	460	766	749	759	---	---	e550
11	---	---	e720	568	513	539	763	750	756	---	---	e560
12	---	---	e720	592	368	534	756	740	749	---	---	e560
13	725	709	718	475	368	437	744	698	729	570	559	564
14	723	719	721	492	429	457	705	607	666	593	567	583
15	735	714	726	580	492	526	643	616	630	659	593	614
16	---	---	e700	636	580	616	657	643	650	623	598	615
17	---	---	e400	646	634	642	678	655	665	598	453	533
18	---	---	e380	680	639	659	721	678	707	482	431	446
19	---	---	e450	705	680	693	722	706	715	481	442	456
20	647	611	634	729	705	718	744	709	732	506	481	492
21	671	642	657	733	713	724	754	729	741	568	506	536
22	672	593	640	745	723	736	755	719	736	594	568	588
23	610	370	444	739	614	725	789	755	776	619	592	612
24	471	407	445	614	395	491	781	766	774	638	610	622
25	507	471	496	465	411	434	767	712	748	653	626	635
26	572	505	541	508	419	461	---	---	e730	650	640	647
27	578	563	572	592	505	543	---	---	e500	663	647	654
28	604	565	588	---	---	e600	---	---	e400	662	647	656
29	649	289	495	---	---	e680	---	---	e450	660	415	545
30	417	345	371	---	---	e700	---	---	e460	425	380	395
31	480	387	430	---	---	---	---	---	e460	485	398	435
MONTH	---	---	619	---	---	541	---	---	681	---	---	547
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	561	485	528	---	---	e380	435	420	424	665	616	642
2	586	561	574	---	---	e390	428	415	421	684	665	677
3	615	586	607	---	---	e300	434	426	430	697	684	693
4	627	612	622	---	---	e310	445	427	438	714	653	685
5	651	621	633	---	---	e360	443	434	439	666	358	536
6	648	621	634	---	---	e390	438	433	436	492	407	441
7	656	629	645	---	---	e400	444	432	437	420	349	371
8	670	653	663	---	---	e420	439	431	435	434	386	414
9	669	620	657	---	---	e430	432	424	430	453	434	445
10	675	497	543	---	---	e450	429	422	426	461	424	443
11	574	487	514	---	---	e400	447	414	427	434	422	427
12	621	574	610	---	---	e380	465	430	449	455	427	435
13	642	621	635	374	361	367	440	429	436	439	415	425
14	655	559	621	423	374	400	458	421	431	441	415	429
15	559	363	489	429	419	425	437	419	430	443	432	439
16	---	---	e360	433	425	430	434	421	426	444	434	440
17	---	---	e210	428	416	422	421	416	418	446	438	442
18	---	---	e240	416	410	413	422	414	418	454	440	445
19	---	---	e260	414	409	411	420	414	417	491	450	469
20	---	---	e350	416	409	411	422	415	419	535	485	499
21	---	---	e410	415	411	413	421	416	418	520	501	511
22	---	---	e490	416	410	414	419	413	416	522	500	509
23	---	---	e500	418	412	416	430	407	417	527	506	514
24	---	---	e320	431	396	417	425	418	421	557	527	548
25	---	---	e350	423	397	407	418	405	410	604	557	584
26	---	---	e360	441	399	414	418	409	413	619	604	613
27	---	---	e380	453	435	445	441	409	418	666	611	633
28	---	---	e380	436	397	409	492	441	470	671	387	548
29	---	---	---	403	391	396	---	---	e550	460	400	422
30	---	---	---	419	397	407	---	---	e620	520	425	469
31	---	---	---	431	419	426	---	---	---	566	520	550
MONTH	---	---	485	---	---	402	---	---	438	714	349	506

08057448 Trinity River near Wilmer, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	588	566	575	607	266	427	667	632	649	393	270	348
2	631	588	609	337	260	306	689	667	678	431	385	400
3	648	621	634	358	309	326	746	689	717	508	431	471
4	656	624	643	488	358	422	760	743	754	532	347	426
5	665	639	654	556	488	532	769	740	755	414	343	384
6	680	656	670	594	556	581	772	743	757	406	329	349
7	683	670	677	626	594	616	757	731	743	439	354	395
8	675	655	667	653	626	645	750	731	742	508	439	479
9	678	655	667	680	643	659	751	735	745	568	508	547
10	695	674	686	686	668	676	751	733	741	601	463	506
11	693	674	684	706	678	690	739	731	736	605	478	550
12	677	669	673	708	689	697	753	685	735	633	492	605
13	680	665	673	697	683	690	743	655	718	503	485	493
14	669	655	663	705	689	698	758	713	733	640	503	576
15	655	406	534	710	696	705	724	717	720	696	466	554
16	551	443	481	715	704	711	719	694	708	625	495	576
17	547	471	510	712	658	688	723	300	605	622	538	591
18	609	547	589	697	658	675	513	322	388	583	548	571
19	655	609	640	721	697	714	469	365	415	591	392	500
20	704	654	684	717	696	710	527	469	506	460	412	428
21	729	698	711	707	697	704	606	520	574	504	438	478
22	744	720	728	730	705	720	665	606	640	554	504	527
23	749	738	742	720	709	714	699	650	672	551	503	526
24	769	733	751	727	702	720	712	686	696	600	551	580
25	745	694	718	702	687	692	721	703	711	627	587	605
26	705	680	690	715	687	705	740	716	730	700	627	669
27	738	705	714	715	687	705	---	---	e730	653	624	637
28	750	715	738	698	688	694	---	---	e740	644	622	631
29	743	715	726	710	689	701	752	721	738	710	644	675
30	719	546	681	731	693	714	744	410	660	731	710	727
31	---	---	---	712	633	679	589	248	431	---	---	---
MONTH	769	406	660	731	260	642	---	---	673	731	270	527

e Estimated



## TRINITY RIVER BASIN

08057448 Trinity River near Wilmer, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.4	7.8	7.7	7.5	7.4	---	---	7.6	7.5	---	---
2	7.6	7.5	7.8	7.7	7.5	7.4	---	---	7.5	7.3	---	---
3	7.6	7.5	7.8	7.8	7.5	7.5	---	---	7.4	7.2	---	---
4	7.6	7.4	---	---	7.5	7.4	---	---	7.3	7.3	---	---
5	7.6	7.5	---	---	7.5	7.4	---	---	7.3	7.2	---	---
6	7.5	7.4	---	---	7.5	7.4	---	---	7.2	7.2	---	---
7	---	---	---	---	7.5	7.4	---	---	7.2	7.1	---	---
8	---	---	7.6	7.4	7.5	7.4	---	---	7.2	7.0	---	---
9	---	---	7.7	7.5	7.5	7.5	---	---	7.5	7.0	---	---
10	---	---	7.6	7.5	7.6	7.5	---	---	7.8	7.5	---	---
11	---	---	7.5	7.5	7.5	7.5	---	---	7.8	7.3	---	---
12	---	---	7.7	7.5	7.6	7.5	---	---	7.3	7.2	---	---
13	---	---	7.8	7.5	7.6	7.5	7.1	7.0	7.3	7.2	7.6	7.4
14	7.5	7.4	7.6	7.4	7.6	7.5	7.1	7.0	7.6	7.1	7.6	7.5
15	7.5	7.4	7.6	7.4	7.6	7.4	7.1	7.0	7.6	7.4	7.7	7.6
16	---	---	7.5	7.4	7.6	7.5	7.2	7.1	---	---	7.7	7.7
17	---	---	7.5	7.4	7.6	7.5	7.9	7.1	---	---	7.7	7.7
18	---	---	7.5	7.4	7.5	7.5	8.1	7.3	---	---	7.8	7.7
19	---	---	7.5	7.4	7.6	7.5	7.8	7.2	---	---	7.8	7.6
20	7.4	7.4	7.4	7.4	7.6	7.5	7.8	7.2	---	---	7.8	7.5
21	7.4	7.4	7.5	7.4	7.6	7.5	7.3	7.1	---	---	7.8	7.7
22	7.5	7.4	7.4	7.4	7.6	7.5	7.3	7.2	---	---	7.8	7.6
23	7.6	7.5	7.5	7.4	7.6	7.4	7.4	7.1	---	---	7.8	7.6
24	7.5	7.5	7.6	7.3	7.5	7.4	7.3	7.1	---	---	7.7	7.5
25	7.5	7.4	7.7	7.4	7.7	7.5	7.3	7.2	---	---	7.6	7.4
26	7.5	7.5	7.6	7.4	---	---	7.3	7.1	---	---	7.6	7.4
27	7.5	7.4	7.5	7.4	---	---	7.2	7.1	---	---	7.7	7.5
28	7.6	7.4	---	---	---	---	7.3	7.1	---	---	7.8	7.4
29	8.0	7.6	---	---	---	---	7.8	7.2	---	---	7.8	7.4
30	7.9	7.7	7.4	7.4	---	---	7.7	7.6	---	---	7.6	7.3
31	7.8	7.7	---	---	---	---	7.7	7.6	---	---	7.6	7.3
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.7	7.4	7.9	7.7	7.4	7.2	7.2	7.1	---	---	7.9	7.7
2	7.7	7.3	7.9	7.8	7.4	7.3	7.2	7.1	---	---	7.9	7.7
3	8.0	7.3	7.9	7.8	7.5	7.3	7.5	7.0	---	---	7.7	7.2
4	8.0	7.4	7.9	7.8	7.7	7.4	7.6	7.4	7.5	7.4	---	---
5	7.7	7.0	7.9	7.5	7.6	7.5	7.5	7.2	7.5	7.4	---	---
6	7.7	7.3	7.6	7.4	7.6	7.4	7.4	7.2	7.6	7.4	---	---
7	7.9	7.2	---	---	7.5	7.4	7.5	7.4	7.5	7.4	---	---
8	7.8	7.2	---	---	7.4	7.3	7.6	7.3	7.5	7.4	---	---
9	7.7	7.3	---	---	7.4	7.3	7.6	7.5	7.5	7.4	7.1	7.0
10	7.7	7.1	---	---	7.4	7.3	7.7	7.5	7.4	7.3	7.1	7.0
11	7.7	7.1	8.1	8.0	7.5	7.3	7.7	7.5	7.5	7.3	7.2	7.0
12	7.6	7.0	8.1	8.0	7.4	7.2	7.7	7.6	7.4	7.3	7.2	7.0
13	7.7	7.2	8.0	7.9	7.5	7.2	7.7	7.6	7.5	7.2	7.6	7.0
14	7.8	7.2	8.1	8.0	7.6	7.4	7.8	7.6	7.5	7.3	7.6	7.4
15	7.7	7.1	8.1	8.0	7.6	7.3	7.9	7.7	7.5	7.4	7.5	7.4
16	7.8	7.2	8.1	8.0	7.3	7.1	7.9	7.7	7.5	7.4	7.5	7.3
17	7.8	7.2	8.1	8.0	7.5	7.3	7.9	7.7	7.4	7.3	7.6	7.4
18	7.8	7.2	8.1	8.1	7.5	7.2	7.9	7.7	---	---	7.5	7.4
19	7.8	7.3	8.1	8.1	7.4	7.2	8.0	7.7	---	---	7.5	7.2
20	7.8	7.3	8.1	8.0	7.4	7.2	8.1	7.8	---	---	7.3	7.2
21	7.8	7.3	8.1	8.0	7.4	7.2	8.0	7.8	7.3	7.2	7.4	7.1
22	7.8	7.2	8.1	8.1	7.5	7.4	8.1	7.9	7.3	7.2	7.2	7.1
23	7.8	7.3	8.2	8.1	7.4	7.4	8.1	7.9	7.3	7.2	7.3	7.2
24	7.8	7.3	8.2	8.1	7.5	7.3	---	---	7.4	7.2	7.3	7.3
25	7.8	7.2	8.2	8.1	7.5	7.3	---	---	7.3	7.2	7.4	7.3
26	7.9	7.3	8.4	8.1	7.5	7.3	---	---	7.3	7.1	7.4	7.3
27	7.9	7.3	8.2	8.1	7.4	7.2	---	---	8.1	7.2	7.4	7.3
28	---	---	8.3	7.8	7.4	7.2	---	---	8.0	7.2	7.4	7.3
29	---	---	7.8	7.8	7.4	7.2	---	---	7.3	7.2	7.3	7.3
30	---	---	8.0	7.8	7.3	7.2	---	---	7.4	7.3	7.3	7.2
31	---	---	8.0	7.2	---	---	---	---	8.0	7.2	---	---
MONTH	---	---	---	---	7.7	7.1	---	---	---	---	---	---





## TRINITY RIVER BASIN

08057448 Trinity River near Wilmer, TX--Continued

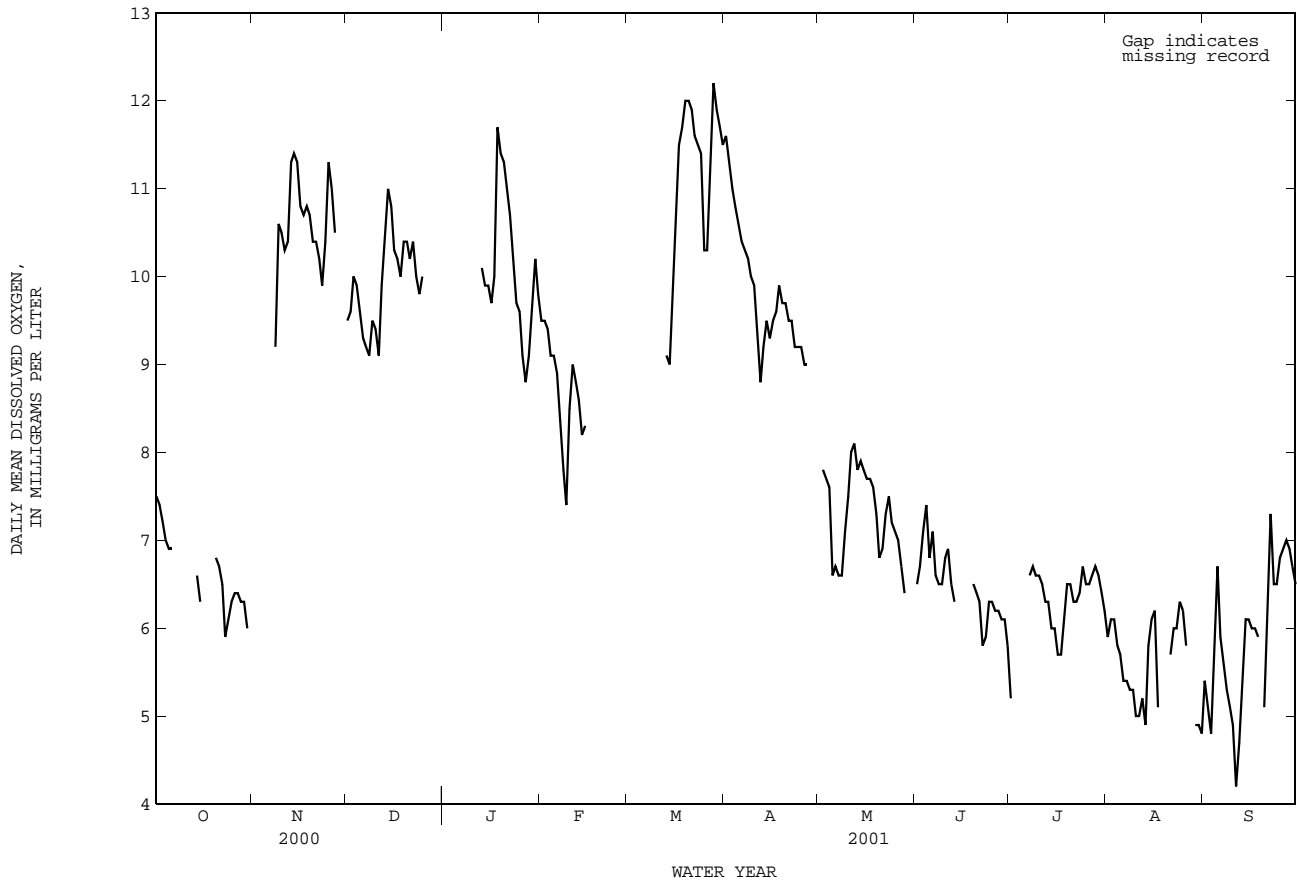
TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
													FEBRUARY
1	12.0	11.2	11.6	---	---	---	---	---	---	23.9	22.7	23.2	
2	12.5	11.9	12.2	---	---	---	15.2	14.4	14.7	24.4	23.2	23.8	
3	12.7	12.0	12.4	---	---	---	15.8	15.2	15.5	24.7	23.7	24.2	
4	13.5	12.7	13.1	---	---	---	16.8	15.8	16.3	24.4	23.5	23.9	
5	13.9	13.2	13.5	---	---	---	17.0	16.8	16.9	23.5	20.8	22.0	
6	14.8	13.6	14.1	---	---	---	17.1	16.7	16.9	21.7	21.2	21.4	
7	16.0	14.7	15.4	---	---	---	17.3	17.1	17.2	21.6	20.8	21.2	
8	17.2	16.0	16.7	---	---	---	17.6	16.6	17.0	22.6	21.6	22.1	
9	17.4	15.6	16.9	---	---	---	18.2	17.4	17.7	23.0	22.2	22.6	
10	15.6	13.2	14.0	---	---	---	18.3	17.9	18.1	23.4	22.8	23.1	
11	13.2	12.7	12.9	---	---	---	18.7	17.9	18.3	22.8	22.3	22.6	
12	13.2	12.7	13.0	---	---	---	18.6	18.2	18.4	22.9	22.1	22.5	
13	14.2	13.1	13.7	15.1	14.4	14.8	18.2	17.8	18.0	23.4	22.2	22.8	
14	15.3	14.2	14.7	15.0	14.6	14.8	19.3	18.0	18.5	23.5	22.6	23.1	
15	14.4	12.2	13.8	14.6	13.7	14.0	19.5	19.1	19.3	23.7	22.9	23.4	
16	---	---	---	13.7	12.9	13.2	19.4	18.8	19.1	23.7	22.9	23.4	
17	---	---	---	13.3	12.7	13.0	19.1	17.9	18.5	23.9	23.1	23.6	
18	---	---	---	12.9	12.2	12.5	18.0	17.0	17.5	24.0	23.4	23.8	
19	---	---	---	12.3	12.0	12.1	18.0	17.7	17.8	24.4	24.0	24.2	
20	---	---	---	12.8	12.0	12.3	18.0	17.6	17.8	25.9	24.3	25.3	
21	---	---	---	13.5	12.5	12.9	18.4	18.0	18.2	24.9	23.0	24.1	
22	---	---	---	14.5	13.4	13.8	19.0	18.3	18.6	23.1	22.1	22.6	
23	---	---	---	14.5	14.2	14.3	19.5	18.9	19.2	23.6	22.1	22.8	
24	---	---	---	14.7	14.2	14.5	19.6	18.9	19.2	24.5	23.3	23.8	
25	---	---	---	14.4	11.9	14.1	19.7	18.8	19.3	24.4	23.4	24.0	
26	---	---	---	14.1	13.4	13.6	20.2	19.2	19.7	24.8	23.4	24.0	
27	---	---	---	13.5	12.4	13.0	20.6	19.5	20.1	25.9	23.6	24.8	
28	---	---	---	12.4	11.5	11.8	---	---	---	25.9	24.1	25.0	
29	---	---	---	11.7	11.3	11.5	---	---	---	25.2	24.5	24.9	
30	---	---	---	12.9	11.7	12.0	---	---	---	26.0	25.2	25.6	
31	---	---	---	14.3	12.9	13.4	---	---	---	27.4	25.8	26.5	
MONTH	---	---	---	---	---	---	---	---	---	27.4	20.8	23.6	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
		JUNE			JULY			AUGUST			SEPTEMBER		
1	27.1	26.1	26.6	27.3	25.4	26.3	31.5	29.9	30.7	26.5	25.0	25.9	
2	27.7	25.9	26.7	26.5	25.2	25.9	31.6	30.3	31.0	27.1	26.1	26.5	
3	28.2	26.9	27.6	27.8	26.5	27.0	31.6	30.1	30.9	28.7	26.9	27.8	
4	28.4	27.3	27.9	29.3	27.7	28.4	31.6	30.0	30.8	28.6	26.7	27.4	
5	28.2	27.3	27.8	29.9	28.9	29.4	31.8	30.2	31.0	27.0	26.0	26.5	
6	27.8	26.9	27.1	30.6	29.3	30.0	31.8	30.2	31.0	26.4	25.8	26.1	
7	26.9	26.3	26.6	30.8	29.7	30.2	31.5	29.9	30.7	27.6	26.4	26.9	
8	27.0	26.1	26.6	31.0	29.7	30.3	31.6	29.9	30.8	28.2	27.3	27.7	
9	27.8	26.4	27.0	30.9	29.7	30.4	31.5	30.0	30.8	28.2	27.4	27.7	
10	28.5	27.0	27.7	31.3	29.9	30.6	31.5	29.8	30.7	27.4	26.4	26.9	
11	29.0	27.7	28.4	31.9	30.0	30.9	31.5	30.0	30.8	27.2	26.5	26.9	
12	29.3	28.2	28.8	31.4	30.0	30.8	31.5	30.2	30.8	27.7	26.6	27.0	
13	29.4	28.5	28.9	31.3	30.0	30.7	31.2	30.3	30.8	27.8	26.4	27.1	
14	29.0	28.3	28.7	31.6	30.1	30.9	31.3	30.2	30.7	28.6	27.2	27.8	
15	28.3	25.6	27.1	31.4	30.2	30.8	31.1	29.8	30.5	28.7	27.6	28.1	
16	27.7	26.8	27.3	31.2	29.8	30.6	30.8	29.8	30.3	28.7	27.5	28.0	
17	29.0	27.5	28.1	31.4	30.0	30.7	30.2	26.3	28.7	28.4	27.9	28.1	
18	28.8	27.6	28.3	31.5	30.1	30.8	27.5	26.2	27.0	28.8	27.8	28.2	
19	29.0	27.8	28.5	31.5	30.2	30.9	29.3	27.4	28.4	28.2	26.4	27.2	
20	29.3	28.1	28.7	31.6	30.0	30.9	30.4	28.9	29.6	26.8	26.5	26.7	
21	29.6	28.3	28.9	31.9	30.2	31.1	30.9	29.9	30.3	26.6	26.1	26.5	
22	29.5	28.1	28.8	31.9	30.3	31.2	30.9	29.8	30.3	27.1	26.2	26.7	
23	28.8	27.8	28.2	31.9	30.2	31.1	30.9	29.7	30.3	27.6	26.6	27.1	
24	28.5	27.2	27.8	32.1	30.5	31.4	31.1	29.5	30.3	27.5	26.2	26.7	
25	28.5	27.0	27.8	32.1	30.6	31.3	31.1	29.6	30.3	26.2	25.0	25.4	
26	28.5	27.4	28.0	31.9	30.4	31.2	30.8	29.8	30.3	25.2	24.1	24.6	
27	28.6	27.5	28.0	31.8	30.4	31.1	---	---	---	24.8	23.9	24.4	
28	29.0	27.5	28.2	31.5	30.3	30.9	---	---	---	25.0	23.9	24.5	
29	28.9	27.8	28.4	31.5	30.1	30.7	28.6	27.9	28.3	25.2	24.1	24.6	
30	28.5	26.7	27.7	31.4	29.9	30.7	28.3	26.0	27.4	25.2	24.0	24.6	
31	---	---	---	31.2	29.8	30.5	27.0	24.9	26.2	---	---	---	
MONTH	29.6	25.6	27.9	32.1	25.2	30.2	---	---	---	28.8	23.9	26.7	





08057448 Trinity River near Wilmer, TX--Continued



## TRINITY RIVER BASIN

08058900 East Fork Trinity River at McKinney, TX

LOCATION.--Lat 33°14'40", long 96°36'30", Collin County, Hydrologic Unit 12030106, at downstream side of highway embankment near left end of main channel bridge on State Highways 5 and 121, 750 ft downstream from Honey Creek, 1.2 mi upstream from Southern Pacific Railway Co. bridge, 1.7 mi upstream from Clemons Creek, 3.3 mi north of McKinney, 26.1 mi upstream from Lavon Dam, and 86.5 mi upstream from mouth.

DRAINAGE AREA.--164 mi<sup>2</sup>.

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

Water-quality records.--Chemical data: Oct. 1980 to Sept. 1982, Oct. 1985 to July 1987, Apr. 1993 to Sept. 1995. Biochemical data: Oct. 1980 to Sept. 1982, Oct. 1985 to July 1987, Apr. 1993 to Sept. 1995.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 528.74 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Oct. 1975, at least 10% of contributing drainage area has been regulated. Small diversions for irrigation above the station are made at times. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1913, about 28 ft in Apr. 1942 (discharge not determined), from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.02	31	367	234	3590	226	66	71	95	.00	.00
2	.00	.01	29	320	187	1030	199	63	59	61	.00	.00
3	.00	.10	26	288	156	750	182	59	53	44	.00	.00
4	.00	.15	24	280	139	580	167	58	47	31	.00	.05
5	.00	14	23	237	126	436	157	97	43	19	.00	.00
6	.00	49	22	202	120	367	151	2020	40	14	.00	.00
7	.00	32	22	178	119	329	141	564	40	12	.00	.00
8	.00	33	21	153	122	317	133	362	39	11	.00	.00
9	.00	60	20	134	149	595	122	249	42	12	.00	.06
10	.00	35	19	129	144	399	117	193	40	11	.00	4.1
11	.00	26	18	145	122	575	160	156	35	10	.00	15
12	.00	27	17	141	120	2300	160	127	32	8.5	.00	8.5
13	.00	35	21	134	1850	809	124	110	29	7.6	.00	5.1
14	.00	31	30	126	3090	559	181	95	27	6.4	.00	2.2
15	.01	25	37	113	1790	495	218	87	64	.10	.00	1.3
16	.00	21	40	107	6420	357	145	82	53	.00	.00	1.2
17	.00	18	35	330	2500	304	119	80	35	.00	.00	.30
18	.00	15	30	438	1180	271	108	78	30	.00	.00	.51
19	.00	13	28	444	1040	241	105	77	22	.00	.00	49
20	.00	10	25	279	920	203	104	76	18	.00	.00	41
21	.00	7.6	23	217	815	182	99	74	15	.00	.00	42
22	.00	5.7	21	188	643	170	97	74	18	.00	.00	31
23	.00	11	21	164	547	157	97	69	17	.00	.00	20
24	.00	383	20	150	1460	664	97	65	13	.00	.00	11
25	.00	277	31	143	933	725	90	63	11	.00	.00	3.9
26	.00	98	4230	132	668	373	86	60	9.5	.00	.00	.54
27	.00	60	3170	121	757	309	81	51	8.3	.00	.00	.04
28	.00	45	1030	128	1280	503	76	74	9.0	.00	.00	.01
29	.00	38	834	665	---	448	71	76	11	.00	.00	.01
30	.03	34	620	517	---	335	68	65	63	.00	.01	.03
31	.03	---	457	319	---	272	---	68	---	.00	.04	---
TOTAL	0.07	1403.58	10975	7289	27631	18645	3881	5438	993.8	342.60	0.05	236.85
MEAN	.002	46.8	354	235	987	601	129	175	33.1	11.1	.002	7.89
MAX	.03	383	4230	665	6420	3590	226	2020	71	95	.04	49
MIN	.00	.01	17	107	119	157	68	51	8.3	.00	.00	.00
AC-FT	.1	2780	21770	14460	54810	36980	7700	10790	1970	680	.1	470

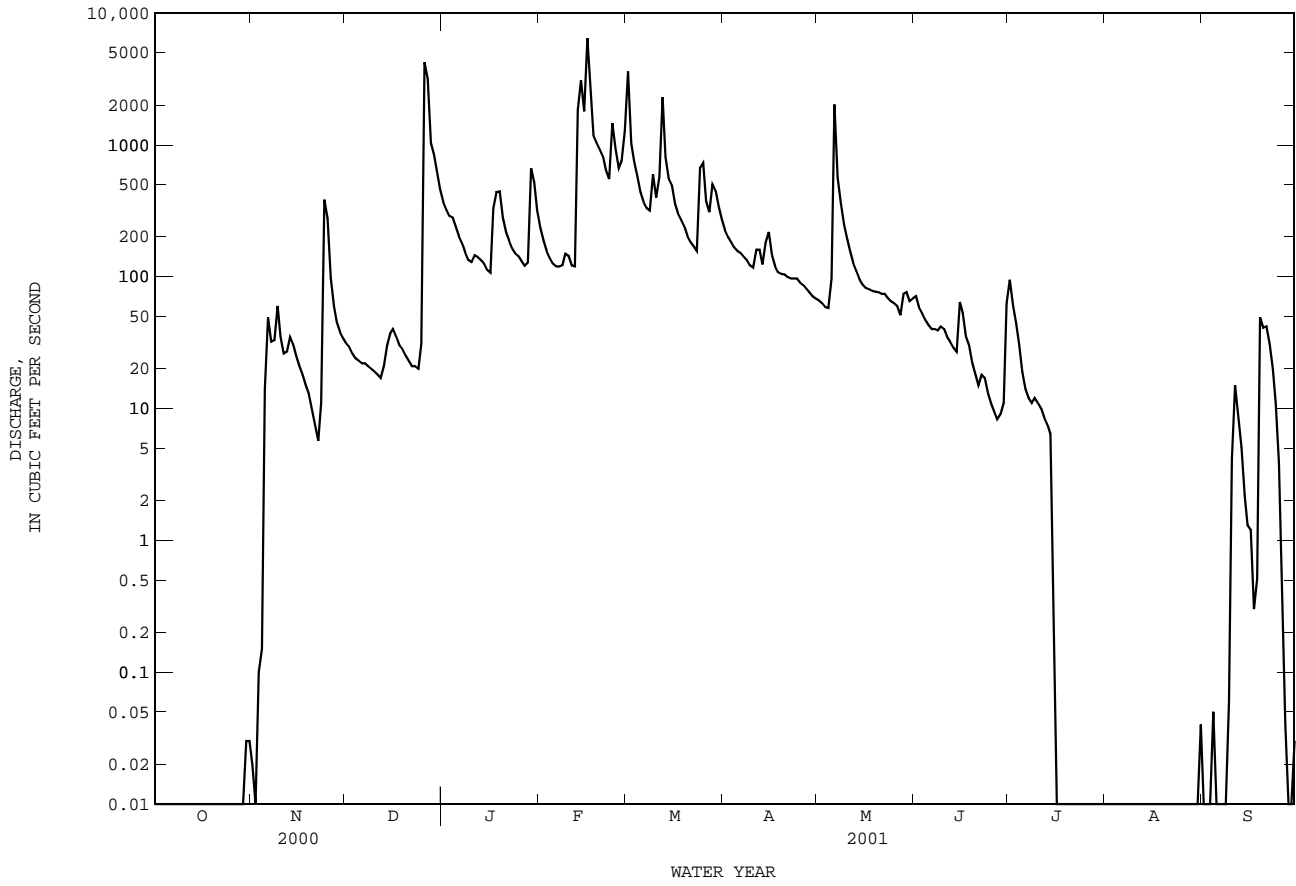
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	85.0	132	155	103	216	230	143	260	131	21.9	3.31	7.20														
MAX	1022	1120	1160	805	987	644	804	1704	737	213	19.0	64.0														
(WY)	1982	1995	1992	1998	2001	1995	1990	1982	1989	1994	1990	1994														
MIN	.000	.000	.000	.000	1.37	2.30	4.08	2.52	.81	.000	.000	.000														
(WY)	1978	1978	1978	1978	1976	1976	1980	1996	1996	1984	1980	1977														

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001
ANNUAL TOTAL	21738.62	76835.95	
ANNUAL MEAN	59.4	211	123
HIGHEST ANNUAL MEAN			373
LOWEST ANNUAL MEAN			4.65
HIGHEST DAILY MEAN	4230 Dec 26	6420 Feb 16	26800 May 13 1982
LOWEST DAILY MEAN	.00 Jul 19	.00 Oct 1	.00 Aug 18 1976
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 19	.00 Oct 1	.00 Aug 18 1976
MAXIMUM PEAK FLOW		8340 Feb 16	61800 May 13 1982
MAXIMUM PEAK STAGE		19.59 Feb 16	22.17 May 13 1982
ANNUAL RUNOFF (AC-FT)	43120	152400	89440
10 PERCENT EXCEEDS	60	509	246
50 PERCENT EXCEEDS	7.6	40	14
90 PERCENT EXCEEDS	.00	.00	.00

08058900 East Fork Trinity River at McKinney, TX--Continued



TRINITY RIVER BASIN

08059400 Sister Grove Creek near Blue Ridge, TX

LOCATION.--Lat 33°17'40", long 96°28'58", Collin County, Hydrologic Unit 12030106, on left bank at upstream side of highway embankment of bridge on Farm Road 545, 3.5 mi upstream from Hatler Branch, 4.8 mi west of Blue Ridge, 7.4 mi upstream from Stiff Creek, 14.7 mi upstream from mouth, and 24.7 mi upstream from Lavon Dam.

DRAINAGE AREA.--83.1 mi<sup>2</sup>.

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

Water-quality records.--Chemical data: Nov. 1985 to June 1987, Oct. 1995 to Sept. 1999. Biochemical data: Nov. 1985 to June 1987, Oct. 1995 to Sept. 1999.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 526.29 ft above sea level. Prior to June 29, 1988, at datum 10.00 ft higher at same site. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in July 1975, at least 10% of contributing drainage area has been affected at times by discharge from the flood-detention pools of 34 floodwater-retarding structures. These structures control runoff from 47.4 mi<sup>2</sup>. Discharge may contain flow released from Lake Texoma and placed into channel 40 miles upstream from site. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 30.7 ft, present datum, probably occurred in July 1913, from information by the Texas Department of Transportation. The probable date is from published records for Sister Grove Creek near Princeton (station 08059500, discontinued) located 9.7 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

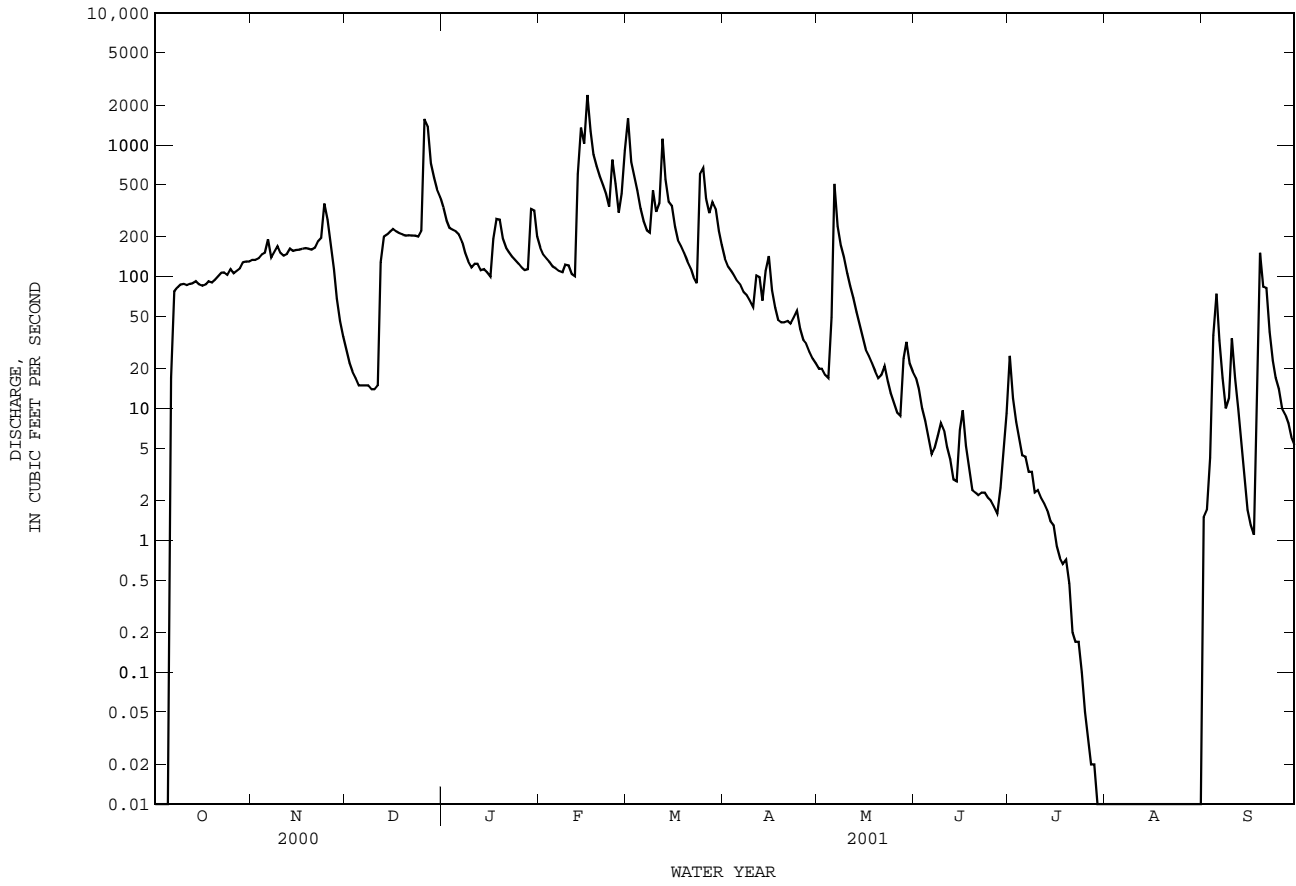
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	134	28	335	166	1590	137	20	17	25	.00	1.5
2	.00	134	22	267	146	741	119	20	14	12	.00	1.7
3	.00	138	19	234	136	582	110	18	10	7.9	.00	4.2
4	.00	147	17	227	129	451	102	17	8.0	6.0	.00	36
5	.00	152	15	221	119	329	92	49	6.0	4.4	.00	74
6	17	192	15	209	115	262	86	503	4.5	4.3	.00	33
7	77	139	15	183	110	224	76	241	5.0	3.3	.00	17
8	83	154	15	152	108	216	72	172	6.2	3.3	.00	10
9	87	170	14	130	123	452	66	139	7.8	2.3	.00	12
10	88	152	14	118	122	310	59	106	6.8	2.4	.00	34
11	86	144	15	125	105	361	102	85	5.1	2.1	.00	17
12	88	148	129	125	101	1110	99	69	4.1	1.9	.00	9.9
13	89	163	201	112	600	547	66	54	2.9	1.7	.00	5.0
14	92	157	208	114	1350	370	111	43	2.8	1.4	.00	2.7
15	87	159	220	108	1020	344	143	35	6.9	1.3	.00	1.7
16	85	160	231	100	2390	239	79	28	9.7	.90	.00	1.3
17	87	163	221	194	1270	190	58	25	5.2	.73	.00	1.1
18	92	165	213	274	843	170	47	22	3.6	.66	.00	22
19	90	163	209	271	686	151	45	19	2.4	.71	.00	152
20	95	160	205	194	573	130	45	17	2.3	.47	.00	84
21	101	166	206	166	493	116	46	18	2.2	.20	.00	82
22	107	186	205	153	427	99	44	21	2.3	.17	.00	38
23	108	197	205	142	340	89	49	16	2.3	.17	.00	23
24	103	359	202	133	771	600	55	13	2.1	.10	.00	17
25	114	271	222	125	507	667	40	11	2.0	.05	.00	14
26	106	171	1570	118	307	387	33	9.3	1.8	.03	.00	10
27	110	114	1390	112	427	303	31	8.8	1.6	.02	.00	9.0
28	115	68	721	114	909	368	27	24	2.5	.02	.00	7.7
29	129	46	560	326	---	328	24	32	5.3	.01	.00	6.1
30	130	35	461	317	---	222	22	22	9.2	.01	.00	5.3
31	130	---	404	202	---	173	---	19	---	.00	.00	---
TOTAL	2496.00	4707	8172	5601	14393	12121	2085	1876.1	161.6	83.55	0.00	732.2
MEAN	80.5	157	264	181	514	391	69.5	60.5	5.39	2.70	.000	24.4
MAX	130	359	1570	335	2390	1590	143	503	17	25	.000	152
MIN	.00	35	14	100	101	89	22	8.8	1.6	.00	.00	1.1
AC-FT	4950	9340	16210	11110	28550	24040	4140	3720	321	166	.00	1450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

MEAN	53.1	63.1	88.6	61.9	117	134	92.3	125	73.8	12.0	5.97	9.00
MAX	451	316	493	193	514	391	477	714	348	54.4	43.3	61.9
(WY)	1982	1995	1992	1998	2001	2001	1990	1982	1989	1982	1998	1996
MIN	.000	.000	.000	1.55	1.81	2.92	3.46	6.99	1.22	.000	.000	.000
(WY)	1978	1978	1978	1976	1976	1976	1980	1988	1980	1978	1978	1978

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1975 - 2001
ANNUAL TOTAL	42079.82	52428.45	
ANNUAL MEAN	115	144	69.5
HIGHEST ANNUAL MEAN			169
LOWEST ANNUAL MEAN			4.22
HIGHEST DAILY MEAN	1570	2390	8560
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		2590	13300
MAXIMUM PEAK STAGE		26.81	32.50
ANNUAL RUNOFF (AC-FT)	83470	104000	50340
10 PERCENT EXCEEDS	208	342	164
50 PERCENT EXCEEDS	108	76	16
90 PERCENT EXCEEDS	.00	.00	.00

08059400 Sister Grove Creek near Blue Ridge, TX--Continued





TRINITY RIVER BASIN

08060500 Lavon Lake near Lavon, TX

LOCATION.--Lat 33°01'54", long 96°28'56", Collin County, Hydrologic Unit 12030106, in right abutment of spillway in dam on East Fork Trinity River, 3,850 ft upstream from St. Louis Southwestern Railway Lines bridge, 4,000 ft upstream from bridge on State Highway 78, 2.9 mi west of Lavon, and 55.9 mi upstream from mouth.

DRAINAGE AREA.--770 mi<sup>2</sup>.

PERIOD OF RECORD.--Sept. 1953 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Prior to Oct. 1970, published as "Lavon Reservoir".

Water-quality records.--Chemical data: Oct. 1969 to Sept. 1974, Oct. 1975 to Sept. 1982, Oct. 1995 to Sept. 1999. Biochemical data: Oct. 1969 to Sept. 1974, Oct. 1975 to Sept. 1982, Oct. 1995 to Sept. 1999.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Jan. 20, 1954, nonrecording gage in the approach channel at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records poor. The lake is formed by a rolled earthfill dam 18,860 ft long, including a 568-foot gated spillway with twelve 40.0- by 28.0-foot tainter gates. The original dam was 9,499 ft long, but conservation capacity was increased to present size in Dec 1975. Deliberate impoundment began Sept. 14, 1953, and the dam was completed in Oct. 1953. Low-flow outlets consist of five 36-inch-diameter controlled sluice gates. Capacity Table No. 9, is based on a sedimentation survey completed in 1970. Lake was designed for flood control and water conservation. Water for municipal supply can be released down to elevation 453.0 ft. Flow is affected at times by discharge from the flood-detention pools of 149 floodwater-retarding structures with a combined detention capacity of 69,170 acre-ft. These structures control runoff from 242 mi<sup>2</sup> in the East Fork Trinity River, Pilot Grove, and Sister Grove Creek drainage basins. The dam is owned by the U.S. Army Corps of Engineers. Conservation pool storage is 456,526 acre-ft. Data regarding dam are given in the following table:

	Elevation (feet)
Top of dam.....	514.0
Design flood.....	509.0
Top of tainter gates.....	503.5
Top of conservation pool.....	492.0
Crest of spillway (sill of tainter gates).....	475.5
Lowest gated outlet (invert).....	453.0

COOPERATION.--Origin of Capacity Table No. 2 unknown; in use since Oct. 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 791,000 acre-ft, May 3, 1990, elevation, 504.93 ft; minimum since lake first filled in 1957, 80,150 acre-ft, Apr. 17, 1976, elevation, 465.96 ft.

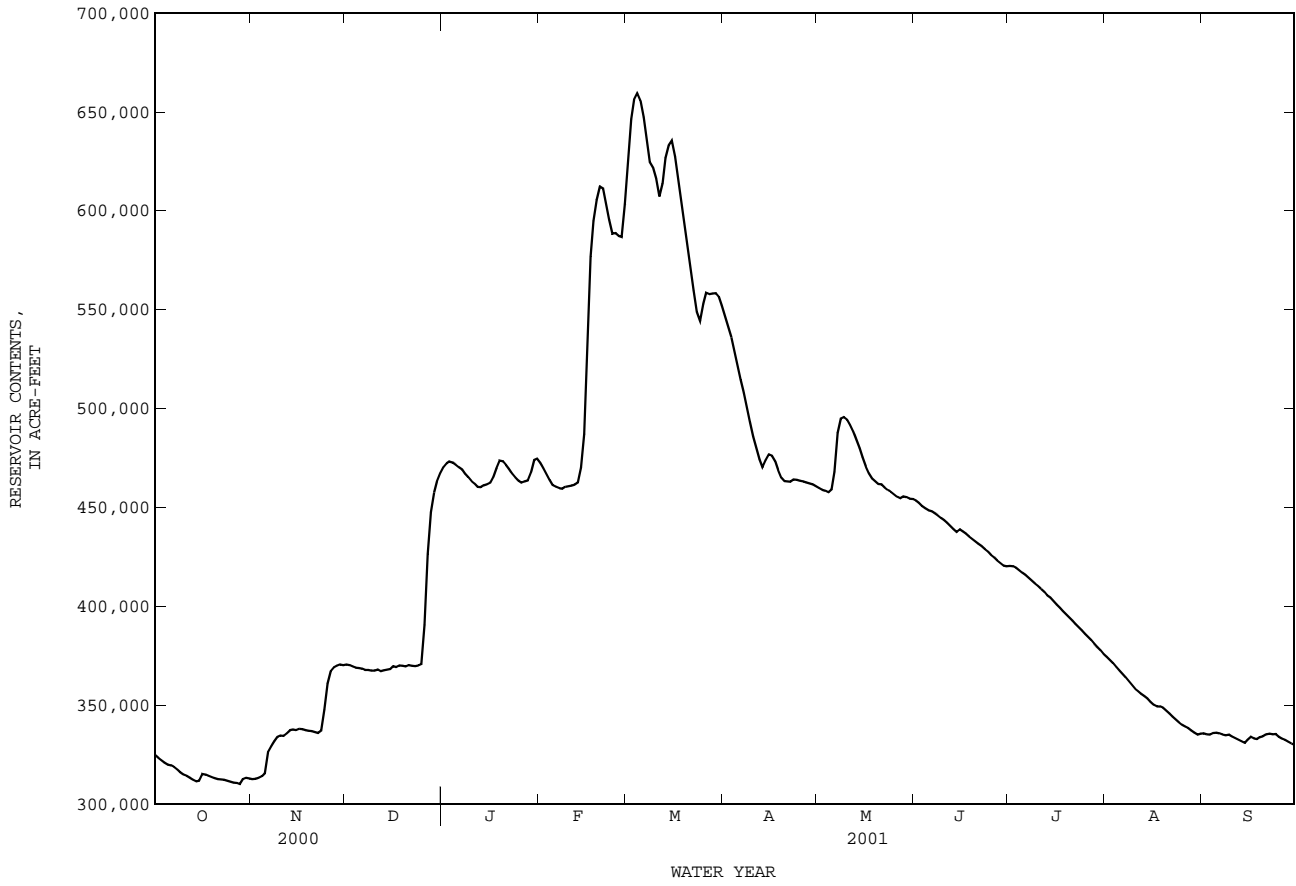
EXTREMES FOR CURRENT YEAR.--Maximum contents, 660,800 acre-ft, Mar. 4, elevation, 500.42 ft; minimum contents, 309,400 acre-ft, Oct. 29, elevation, 484.30 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	324700	312600	370500	470300	472500	626400	546700	459800	453400	420400	374400	335700
2	323200	312700	370200	472200	469800	646300	541300	458900	452300	420200	372800	335300
3	322000	313200	369500	473200	466700	656200	536000	458400	450700	419400	371200	335100
4	320900	314100	368900	472600	464000	659500	529200	457700	449600	418300	369300	335900
5	319800	315500	368700	471600	461200	655700	522000	459000	448500	417000	367600	336000
6	319600	326200	368500	470200	460300	647300	514400	467900	448100	415800	365800	335800
7	318700	329100	367800	469100	459800	635300	507800	487500	447100	414400	364000	335000
8	317500	331700	367800	467000	459400	624700	500300	494800	445900	413000	362100	334700
9	316000	333900	367500	465200	460400	621900	493100	495600	444700	411700	360100	335000
10	314900	334600	367400	463300	460700	616300	485800	494300	443500	410300	358400	334100
11	314200	334500	368000	462000	461000	607200	479900	491800	442300	408800	357100	333300
12	313300	335700	367100	460400	461500	613900	474100	488400	440600	407200	355700	332500
13	312300	337300	367600	460200	462400	626700	470300	484200	439000	405500	354500	331600
14	311500	337600	368000	461200	470100	632900	473800	479800	437600	404400	353400	330800
15	311700	337300	368300	461700	487100	635300	476700	475200	438800	402500	351600	332500
16	315100	338000	369700	462500	533000	627500	476000	470800	437800	400800	350200	333900
17	314900	337900	369300	465300	576800	616400	473400	467200	436700	399100	349400	333200
18	314200	337400	370000	469700	594900	605200	468900	464500	435300	397600	349400	332800
19	313500	337000	369900	473700	605500	593800	465000	463200	434000	396000	348700	333700
20	313000	336800	369500	473300	612200	582200	463300	461900	432700	394300	347200	334300
21	312500	336300	370200	471400	611200	570800	463200	461700	431500	392700	345800	335300
22	312400	335900	369800	469400	603400	559600	462900	460100	430500	391100	344200	335500
23	312200	337000	369700	467000	595400	548700	464100	458800	429000	389500	342800	335300
24	311700	347700	370000	465000	588500	544300	463900	457900	427600	387800	341400	335400
25	311200	360800	370700	463400	588800	552800	463500	456700	426100	386100	340100	334000
26	310800	367100	390600	462500	587300	558500	463100	455400	424700	384500	339100	333000
27	310700	369100	426400	463100	586800	557800	462600	454500	423200	383000	338300	332300
28	310000	369900	447600	463600	603300	558100	462200	455500	421800	381000	337100	331400
29	312500	370500	457500	467700	---	558300	461600	455200	420600	379300	336000	330600
30	313200	370200	463100	473900	---	556300	460700	454400	420200	377700	335100	329700
31	312900	---	467100	474600	---	552000	---	454200	---	375800	335500	---
MEAN	314900	338600	383100	467300	523700	601500	484200	467900	437100	400200	352200	333800
MAX	324700	370500	467100	474600	612200	659500	546700	495600	453400	420400	374400	336000
MIN	310000	312600	367100	460200	459400	544300	460700	454200	420200	375800	335100	329700
(+)	484.50	487.68	492.49	492.83	498.24	496.19	492.19	491.89	490.24	487.98	485.79	485.46
(@)	-11900	+57300	+96900	+7500	+128700	-51300	-91300	-6500	-34000	-44400	-40300	-5800
CAL YR 2000	MAX 467100	MIN 307700	(@) +150300									
WTR YR 2001	MAX 659500	MIN 310000	(@) +4900									

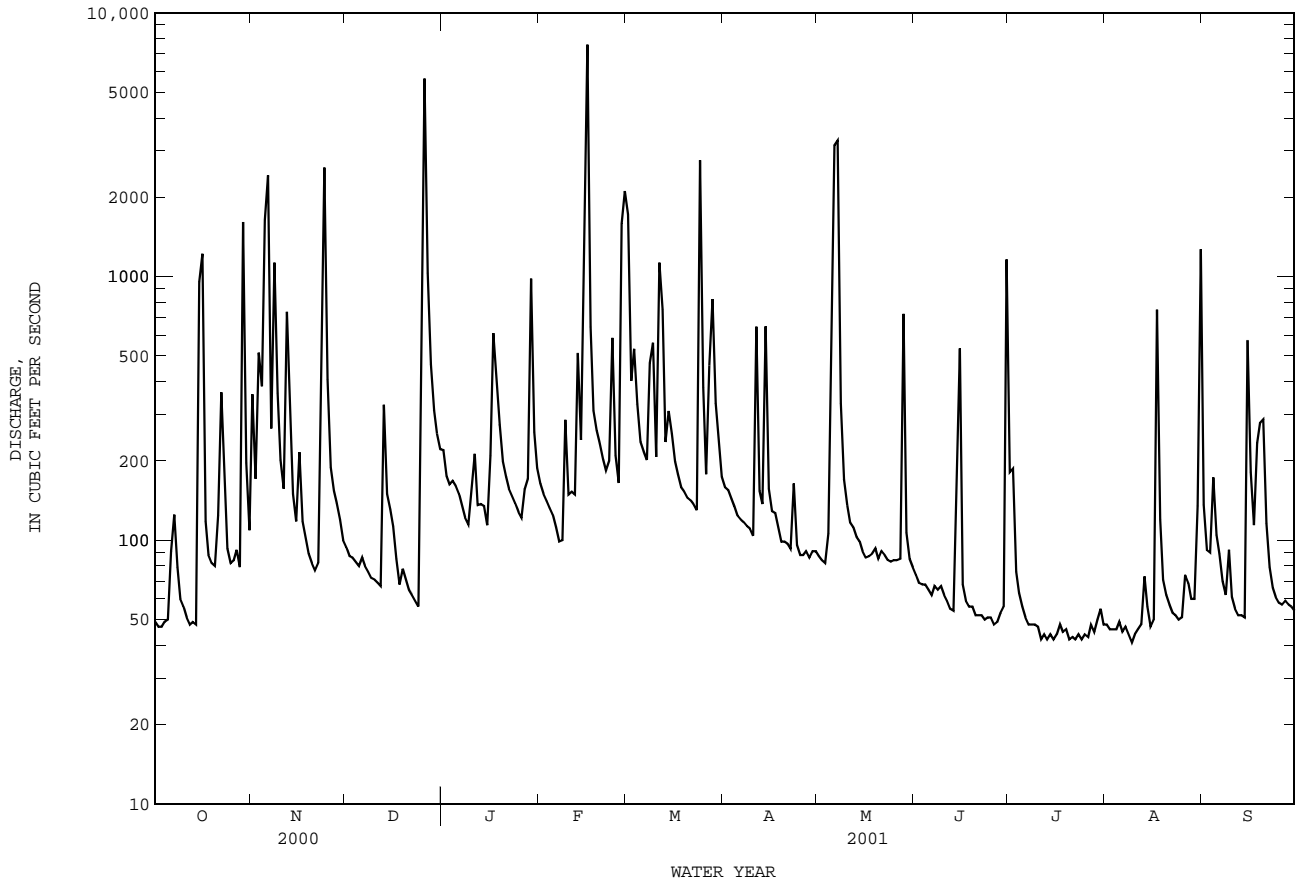
(+) Elevation, in feet, at end of month.  
(@) Change in Contents, in acre-feet.

08060500 Lavon Lake near Lavon, TX--Continued





08061540 Rowlett Creek near Sachse, TX--Continued



TRINITY RIVER BASIN

08061550 Lake Ray Hubbard near Forney, TX

LOCATION.--Lat 32°48'00", long 96°29'45", Kaufman County, Hydrologic Unit 12030106, near right end of spillway on Forney Dam on East Fork Trinity River, 0.5 mi upstream from Duck Creek, 1.8 mi upstream from bridge on U.S. Highway 80, 3.8 mi northwest of Forney, 24.0 mi downstream from Lavon Dam, and 31.8 mi upstream from mouth.

DRAINAGE AREA.--1,071 mi<sup>2</sup>.

PERIOD OF RECORD.--Jan. 1968 to Dec. 1993, Oct. 1996 to current year.  
Water-quality records.--Chemical data: Oct. 1969 to Sept. 1979.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records poor. Missing daily contents Oct. 9-15; below provided capacity table. The lake is formed by a rolled earthfill dam 12,500 ft long, including a 664-foot gated spillway with fourteen 40- by 28-foot tainter gates. Impoundment began in Sept. 1967, but all gates were not closed until Mar. 22, 1978. Low-flow releases are made through three 4.5- by 6.75-ft sluiceways. The lake was built by the city of Dallas for municipal water supply. Conservation pool storage is 490,000 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	450.0
Design flood.....	440.5
Top of conservation pool.....	438.8
Top of tainter gates.....	437.5
Crest of spillway (sill of tainter gates).....	409.5
Lowest gated outlet (invert).....	388.0

COOPERATION.--Capacity table No. 2 was provided by Forrest and Cotton, Consulting Engineers, for the city of Dallas, and put in use on Oct. 1, 1997.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 544,100 acre-ft, May 4, 1990 elevation, 437.81 ft; minimum contents since first appreciable filling, 311,800 acre-ft, Sept. 30, 2000, elevation, 430.26 ft; minimum elevation, 429.72 ft, Oct 15, 2000, contents unknown.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 437,700 acre-ft, Feb. 16, elevation, 436.59 ft; minimum contents, unknown, Oct. 9-15, elevation, below capacity table.

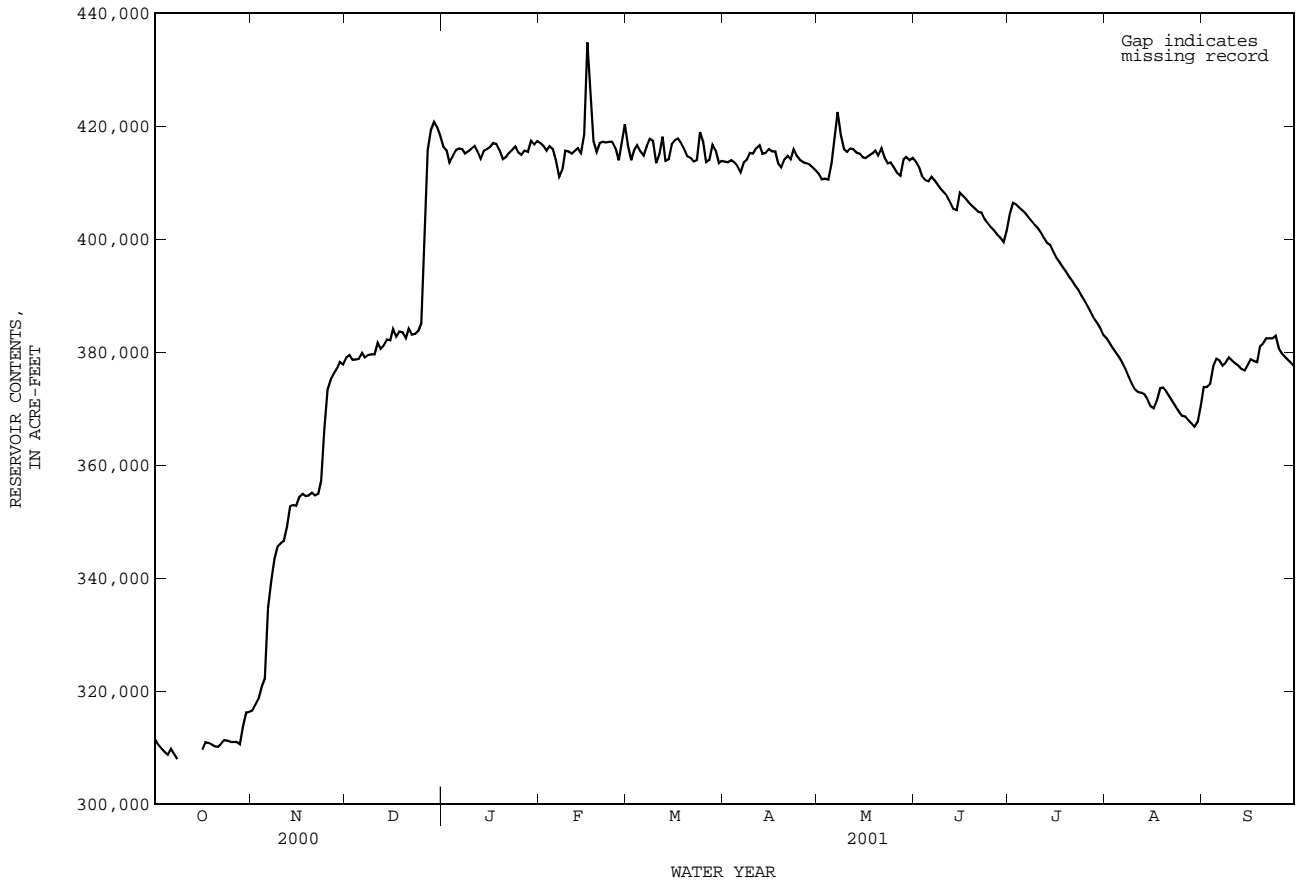
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311400	316500	379000	416300	417000	416500	413700	411500	413700	404400	382400	373800
2	310400	317600	379400	415700	416500	413900	413600	410600	412800	406400	381500	373800
3	309700	318700	378600	413500	415600	415700	413900	410700	411100	406100	380600	374400
4	309200	320900	378700	414600	416400	416600	413600	410500	410400	405600	379800	377500
5	308700	322200	378800	415700	415900	415500	412900	413400	410200	405100	379100	378800
6	309700	334700	379800	416000	413800	414800	411800	417900	411000	404600	378100	378500
7	308800	339500	379000	415900	411000	416500	413600	422500	410400	403800	377000	377600
8	307900	343300	379500	415100	412300	417700	414100	418400	409600	403100	375600	378100
9	---	345600	379600	415500	415600	417400	415200	415900	408800	402500	374400	379000
10	---	346100	379600	416000	415500	413400	415100	415400	408200	401900	373400	378500
11	---	346500	381700	416500	415100	415000	416100	416000	407600	401100	372900	378000
12	---	349000	380600	415500	415600	418100	416600	415900	406500	400100	372800	377600
13	---	352700	381200	414200	416100	413800	415100	415300	405300	399300	372500	377000
14	---	352900	382200	415600	415200	414100	415200	415100	405100	398900	371700	376700
15	---	352800	382100	415900	418500	416800	415900	414500	408200	397700	370400	377600
16	309600	354400	384100	416300	434800	417500	415500	414300	407700	396600	370000	378700
17	310900	354900	382700	417000	425900	417800	415500	414700	407100	395800	371400	378400
18	310800	354500	383600	416800	417300	417000	413400	415100	406400	395000	373600	378200
19	310500	354600	383500	415700	415400	415900	412700	415700	405800	394200	373700	381000
20	310200	355100	382500	414100	417000	414600	414100	414800	405300	393300	373000	381500
21	310100	354600	384200	414500	417200	414300	414700	416000	404800	392500	372100	382400
22	310700	354900	383100	415200	417100	413700	414100	414400	404700	391700	371200	382400
23	311300	357200	383200	415800	417200	413900	415900	413400	403500	391000	370400	382400
24	311200	366400	383800	416400	417200	418900	414700	413500	402700	389900	369500	382800
25	311000	373300	385100	415300	416100	417100	414000	412700	402100	389000	368700	380600
26	311000	375100	401100	414900	413900	413600	413600	411700	401500	388000	368600	379700
27	311000	376200	415800	415600	416900	414000	413400	411200	400800	387000	367900	379100
28	310600	377000	419300	415400	420300	416700	413200	414100	400200	385900	367400	378500
29	313800	378200	420800	417400	---	415700	412700	414500	399500	385100	366700	378000
30	316200	377800	419900	416700	---	413400	412100	413900	401400	384100	367600	377400
31	316300	---	418300	417300	---	413800	---	414300	---	383000	370500	---
MEAN	310900	350800	388100	415700	417000	415600	414200	414400	406400	396200	373000	378600
MAX	316300	378200	420800	417400	434800	418900	416600	422500	413700	406400	382400	382800
MIN	307900	316500	378600	413500	411000	413400	411800	410500	399500	383000	366700	373800
(+)	430.52	433.79	435.72	435.67	435.81	435.51	435.43	435.54	434.94	434.06	433.43	433.78
(@)	+4500	+61500	+40500	-1000	+3000	-6500	-1700	+2200	-12900	-18400	-12500	+6900

CAL YR 2000 MAX 426600 MIN 311800 (@) +24100  
WTR YR 2001 MAX 434800 MIN Unknwn (@) +65600

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

08061550 Lake Ray Hubbard near Forney, TX--Continued



## TRINITY RIVER BASIN

8061750 East Fork Trinity River near Forney, TX

LOCATION.--Lat 32°46'27", long 96°30'12", Kaufman County, Hydrologic Unit 12030106, on right bank 25 ft downstream from bridge on U.S. Highway 80, 0.2 mi downstream from Duck Creek, 1.9 mi downstream from Lake Ray Hubbard Dam, 2.5 mi upstream from Texas and Pacific Railroad Co. bridge, 2.6 mi northwest of Forney, and 30.8 mi upstream from mouth.

DRAINAGE AREA.--1,118 mi<sup>2</sup>, of which 1,071 mi<sup>2</sup> is above Lake Ray Hubbard.

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

Water-quality records.--Chemical data: Nov. 1981 to Jan. 1993. Biochemical data: Nov. 1981 to Jan. 1993. Specific conductance: Oct. 1981 to Jan. 1993. pH: Aug. 1986 to Jan. 1993. Water temperature: Oct. 1981 to Jan. 1993. Dissolved oxygen: Aug. 1986 to Jan. 1993.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 374.86 ft above sea level. Prior to Aug. 26, 1975, recording gage at 3 ft higher datum located at site 126 ft upstream. From Aug. 26, 1975, to May 12, 1977, recording gage at 3 ft higher datum located at site 105 ft downstream. From May 13, 1977, to Sept. 30, 1984, recording gage at 3 ft higher datum at current site. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since installation of gage in Jan. 1973, at least 10% of contributing drainage area has been regulated. Low flow is sustained by wastewater effluent discharge from the city of Garland into Duck Creek, which enters the East Fork Trinity River 0.2 mi upstream from this station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e52	79	100	1700	2640	8000	4430	70	71	265	52	208
2	e54	85	96	933	2910	3070	4620	74	67	130	63	86
3	e56	180	89	1560	2040	1630	5230	70	67	79	58	68
4	63	296	92	1000	2020	5610	5690	69	69	67	55	206
5	62	143	90	1280	1750	6710	5690	265	69	65	55	650
6	61	1640	90	1850	606	7270	5140	1260	74	58	55	112
7	67	284	92	2310	364	7660	4630	6660	66	61	52	83
8	74	516	90	1460	80	8030	4640	4920	66	59	52	73
9	61	265	86	1340	126	8210	5020	1720	67	61	58	92
10	60	128	85	1530	83	8010	5280	1390	67	60	58	81
11	58	100	91	2210	78	8280	5980	2040	67	58	55	68
12	59	403	87	2110	92	7730	5340	2640	67	58	66	64
13	57	431	167	254	860	2530	2810	2290	63	59	56	59
14	57	136	198	90	940	293	1680	1950	67	57	55	58
15	61	106	140	82	1910	2460	1610	1950	310	60	55	64
16	570	121	127	1170	18200	6020	1760	1700	82	59	55	68
17	90	111	100	2700	10200	7600	2180	1260	68	54	326	70
18	63	88	102	2550	5660	7950	1790	781	65	53	224	68
19	63	85	99	2270	577	7950	789	197	63	61	89	233
20	63	83	94	1940	2310	7600	342	69	64	61	64	75
21	72	83	99	1770	6560	7260	84	76	63	59	58	97
22	103	83	93	1630	7180	7270	84	67	63	58	58	68
23	93	217	91	1620	7620	7300	601	63	61	56	57	61
24	69	1090	92	1930	8300	7850	510	65	63	55	56	58
25	61	412	145	1910	7750	6730	76	64	61	55	57	57
26	61	157	2520	797	6040	1300	74	66	61	56	58	55
27	64	130	928	87	6950	2550	72	66	64	55	70	53
28	62	112	1210	93	9350	5920	71	333	61	56	60	52
29	586	104	935	2350	---	5540	72	117	61	58	55	52
30	250	101	1640	2110	---	4830	74	78	419	58	100	54
31	94	---	1730	2030	---	4310	---	73	---	53	339	---
TOTAL	3266	7769	11598	46666	113196	183473	76369	32443	2576	2104	2571	3093
MEAN	105	259	374	1505	4043	5918	2546	1047	85.9	67.9	82.9	103
MAX	586	1640	2520	2700	18200	8280	5980	6660	419	265	339	650
MIN	52	79	85	82	78	293	71	63	61	53	52	52
AC-FT	6480	15410	23000	92560	224500	363900	151500	64350	5110	4170	5100	6130

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)

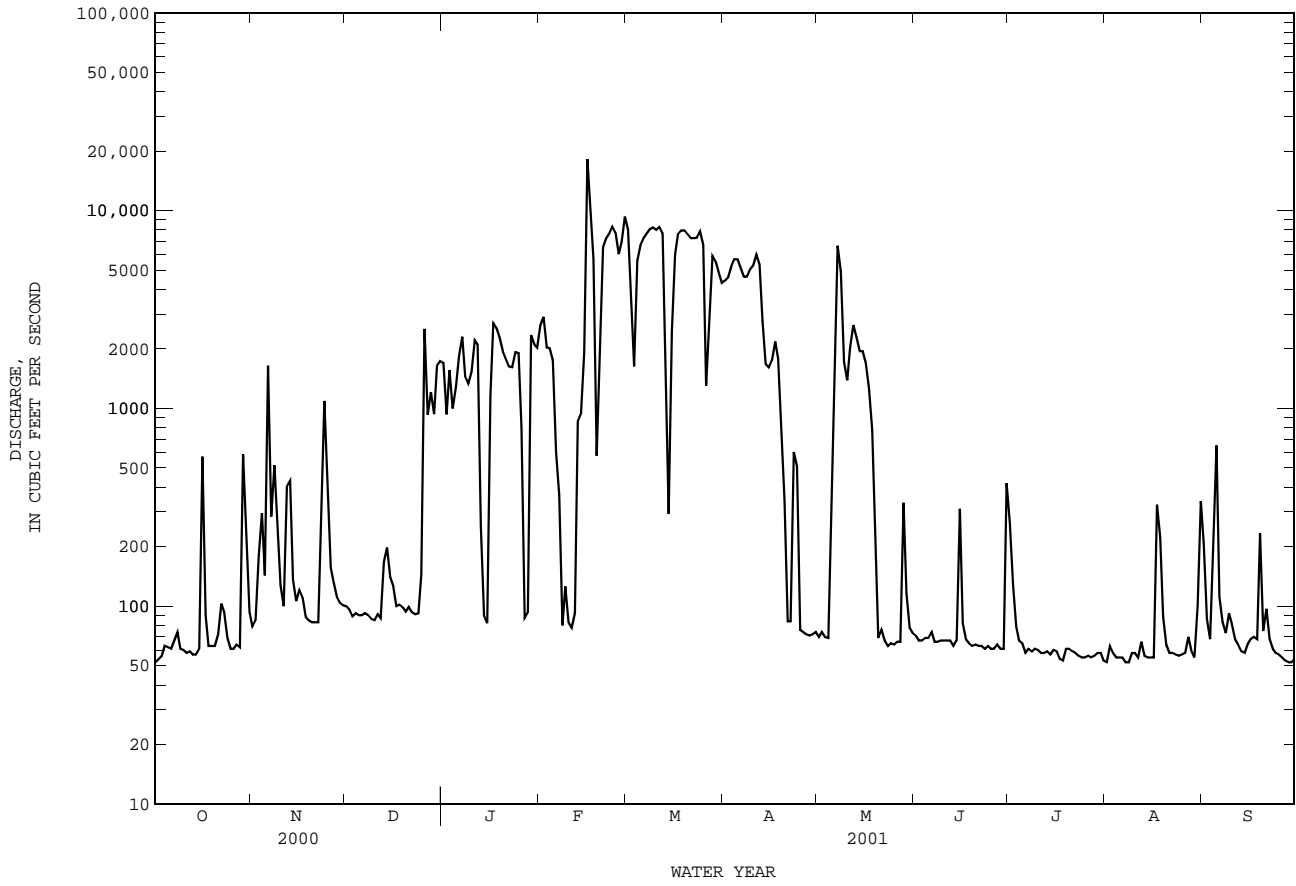
MEAN	375	527	640	639	916	1210	1041	1553	1093	394	127	187
MAX	3975	3076	3276	4826	4043	5918	3335	8008	5436	2207	1246	1583
(WY)	1974	1995	1992	1998	2001	2001	1997	1990	1989	1982	1989	1974
MIN	15.8	26.4	22.3	24.7	33.2	34.5	35.7	42.5	28.2	19.7	23.1	22.6
(WY)	1978	1977	1978	1981	1981	1980	1978	1988	1978	1978	1980	1977

## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1973 - 2001

ANNUAL TOTAL	100397	485124	
ANNUAL MEAN	274	1329	714
HIGHEST ANNUAL MEAN			1941
LOWEST ANNUAL MEAN			37.6
HIGHEST DAILY MEAN	8240	18200	50700
LOWEST DAILY MEAN	42	52	8.0
ANNUAL SEVEN-DAY MINIMUM	47	54	15
MAXIMUM PEAK FLOW		23600	53000
MAXIMUM PEAK STAGE		18.82	22.01
ANNUAL RUNOFF (AC-FT)	199100	962200	517300
10 PERCENT EXCEEDS	520	5570	2310
50 PERCENT EXCEEDS	78	93	63
90 PERCENT EXCEEDS	52	58	27

e Estimated

08061750 East Fork Trinity River near Forney, TX--Continued





## TRINITY RIVER BASIN

08062000 East Fork Trinity River near Crandall, TX

LOCATION.--Lat 32°38'19", long 96°29'06", Kaufman County, Hydrologic Unit 12030106, on right bank 15 ft downstream from downstream eastbound bridge on U.S. Highway 175, 0.7 mi downstream from Mustang Creek, 1.8 mi northwest of Crandall, 4.0 mi upstream from Buffalo Creek, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--1,256 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1949 to current year.

Water-quality records.--Chemical data: Jan. to Apr. 1964, May 1966 to Sept. 1981, June 1986 to Sept. 2000. Biochemical data: Jan. to Apr. 1964, May 1966 to Sept. 1981, June 1986 to Sept. 2000. Pesticide data: Mar. 1977 to July 1981. Sediment data: Apr. to Sept. 1964. Specific conductance: Oct. 1967 to Sept. 1981, May 1986 to Sept. 2000. pH: Mar. to Sept. 1977, May 1986 to Sept. 2000. Water temperature: Oct. 1967 to Sept. 1981, May 1986 to Sept. 2000. Dissolved oxygen: Mar. to Sept. 1977, May 1986 to Sept. 2000.

REVISED RECORDS.--WSP 1922: Drainage area. WDR TX-75-1: 1974.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 338.69 ft above sea level. Prior to Feb. 21, 1983, at datum 5.00 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since Sept. 1953, at least 10% of contributing drainage area has been regulated. The city of Forney discharges wastewater effluent into a tributary below Lake Ray Hubbard and above this station. The North Texas Municipal Water District discharges wastewater effluent into tributaries above this station from their Mesquite and Changler's Landing wastewater treatment plants. Flow is also affected at times by discharge from the flood-detention pools of 20 floodwater-retarding structures. These structures control runoff from a 39.2 mi<sup>2</sup> area above this station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--4 years (water years 1950-53) prior to regulation by Lavon Lake, 652 ft<sup>3</sup>/s (472,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1950-53).--Maximum discharge, 16,400 ft<sup>3</sup>/s May 2, 1953 (gage height, 19.87 ft); no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	155	167	1920	2040	11500	6170	128	105	684	76	1550
2	128	148	155	1050	2340	9460	6170	132	101	537	75	376
3	128	232	148	1620	2350	3690	6270	131	96	134	86	335
4	127	483	146	1230	2000	3710	6780	131	98	108	79	983
5	127	274	143	1110	1950	5670	7140	343	97	96	77	1480
6	125	1860	140	1450	1150	6980	7150	518	92	90	76	314
7	132	1010	140	1860	531	7520	6660	2370	100	85	76	173
8	147	778	138	1900	278	8230	6270	5160	95	87	74	135
9	140	822	136	1350	226	9330	6230	3790	93	85	74	126
10	132	292	131	1290	268	9050	6510	1600	102	87	81	129
11	129	214	133	1830	214	8740	6890	1440	97	84	79	104
12	128	525	133	2050	260	14200	7670	2240	98	83	82	97
13	128	1100	175	1300	375	10900	6870	2360	96	83	87	91
14	125	352	268	241	1640	4220	4740	2030	94	81	80	83
15	126	233	190	195	967	2800	3890	1930	485	81	78	90
16	710	195	182	426	10300	5300	3890	1980	208	84	79	122
17	285	209	159	2300	20700	7690	4230	1460	120	80	386	116
18	153	175	143	3070	11200	9840	4410	1140	99	79	518	127
19	135	162	143	2980	5250	10200	3320	402	101	78	183	279
20	136	155	139	2420	988	10200	2270	131	94	86	103	151
21	137	148	135	1970	2650	9630	1680	104	92	83	87	143
22	190	147	134	1750	5530	9240	1480	96	93	81	80	119
23	203	255	132	1620	6410	9200	1730	94	95	80	78	103
24	159	1620	129	1680	7150	9550	2810	102	122	79	77	93
25	137	1210	168	1950	8080	11100	810	94	90	78	78	90
26	132	435	2550	1440	6970	8050	140	99	90	79	78	88
27	132	297	3720	379	5830	4570	139	91	91	79	89	84
28	137	250	2400	214	9280	6440	145	342	84	78	87	82
29	417	214	1680	1410	---	7930	159	314	81	80	76	82
30	547	192	1370	2470	---	7330	137	129	290	82	933	83
31	211	---	1730	2170	---	6610	---	107	---	79	1410	---
TOTAL	5767	14142	17257	48645	116927	248880	122760	30988	3599	3690	5522	7828
MEAN	186	471	557	1569	4176	8028	4092	1000	120	119	178	261
MAX	710	1860	3720	3070	20700	14200	7670	5160	485	684	1410	1550
MIN	124	147	129	195	214	2800	137	91	81	78	74	82
AC-FT	11440	28050	34230	96490	231900	493700	243500	61460	7140	7320	10950	15530

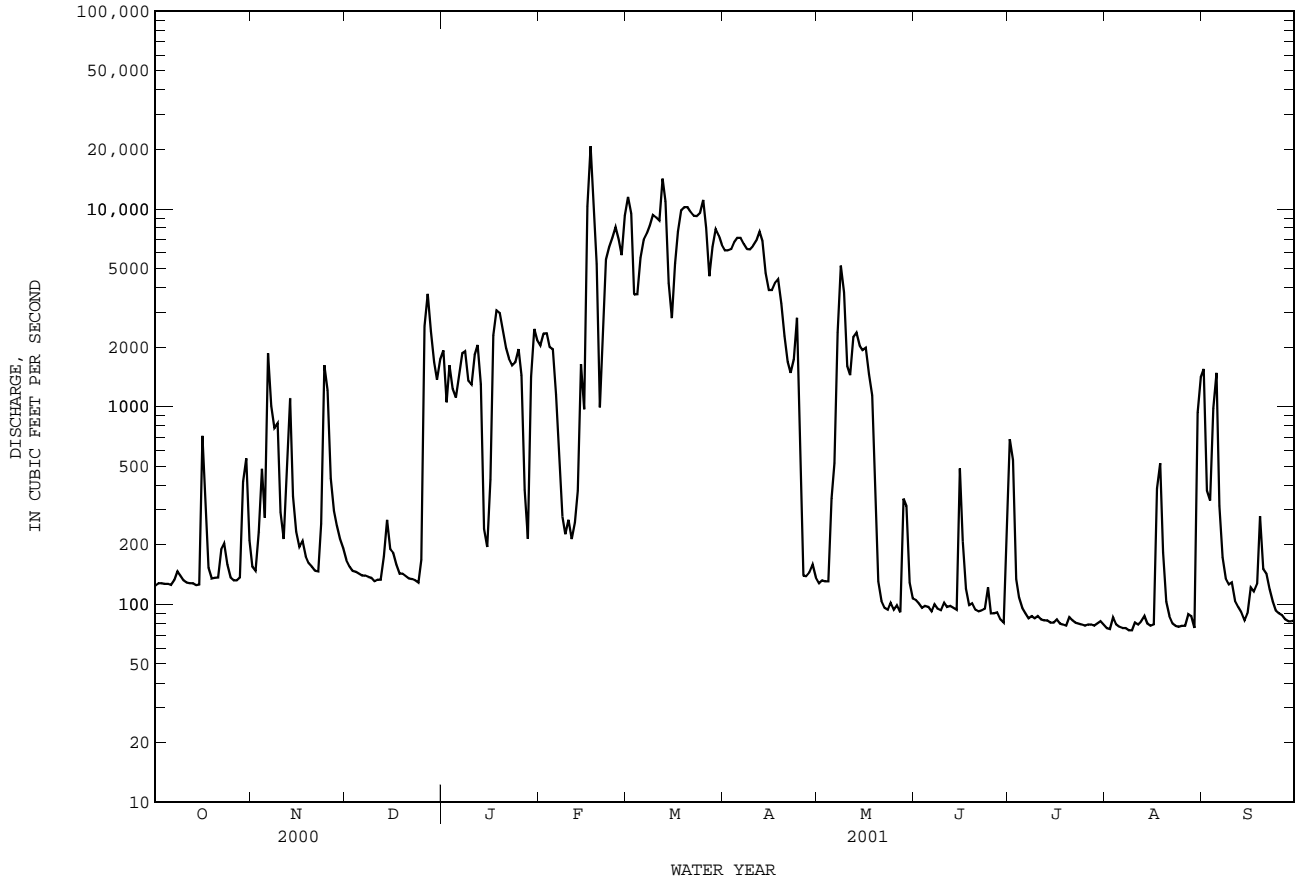
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001z, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)
MEAN	377	481	693	624	860	1053	1077	1705	1044	418	159	202
MAX	4116	3293	4401	5039	4176	8028	4092	9586	5718	2026	1459	1560
(WY)	1974	1995	1972	1998	2001	2001	1957	1957	1989	1982	1989	1974
MIN	1.58	3.78	3.57	7.77	23.1	10.6	7.47	42.1	17.8	3.84	.000	.000
(WY)	1957	1956	1955	1957	1957	1956	1956	1959	1954	1956	1956	1954

08062000 East Fork Trinity River near Crandall, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1954 - 2001z	
ANNUAL TOTAL	131151		626005		724	
ANNUAL MEAN	358		1715		2209	
HIGHEST ANNUAL MEAN					38.4	
LOWEST ANNUAL MEAN					1955	
HIGHEST DAILY MEAN	7200	Jun 17	20700	Feb 17	48800	May 5 1990
LOWEST DAILY MEAN	76	Feb 20	74	Aug 8	.00	Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	78	Feb 15	77	Aug 4	.00	Oct 1 1953
MAXIMUM PEAK FLOW			22800		59900	
MAXIMUM PEAK STAGE			19.73		27.17	
ANNUAL RUNOFF (AC-FT)	260100		1242000		524300	
10 PERCENT EXCEEDS	683		6630		2160	
50 PERCENT EXCEEDS	140		195		98	
90 PERCENT EXCEEDS	87		82		20	

z Period of regulated streamflow.



## TRINITY RIVER BASIN

08062500 Trinity River near Rosser, TX

LOCATION.--Lat 32°25'35", long 96°27'46", Ellis County, Hydrologic Unit 12030105, on right bank at downstream side of right pier of bridge on State Highway 34, 2.5 mi south of Rosser, 8.5 mi downstream from East Fork Trinity River, and at mile 451.4.

DRAINAGE AREA.--8,147 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1924 to Sept. 1925, Oct. 1938 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WRD TX-77-1: 1942(M), drainage area. WDR TX-89-1: 1988. WDR TX-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 297.65 ft above sea level. Oct. 1938 to Sept. 1994 at present site and datum 5.00 ft higher. July 25, 1924, to Sept. 30, 1925, nonrecording gage at abandoned lock and dam No. 7, 1.7 mi upstream from present site at datum 11.94 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Since installation of gage in July 1924, at least 10% of contributing drainage area has been regulated. A levee system, constructed in 1916, extends several miles upstream and downstream from the station. The cities of Fort Worth, Dallas, and several smaller cities divert considerable water for their municipal use, of which about 60 percent is returned as wastewater effluent that sustains low flows at this site. Flow may also be affected at times by discharge from the flood-detention pools of 38 floodwater retarding structures in the drainage basin above this station. These structures control runoff from 76.7 mi<sup>2</sup> above this station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1908 reached a stage of about 38 ft (present site and datum), from information by U.S. Army Corps of Engineers. Discharge believed to have been about the same as that of Apr. 23, 1942.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	561	2240	1180	4060	5220	25900	13000	1650	1860	4720	965	9930
2	576	2150	1040	3520	4370	28600	12300	1480	1660	9540	907	6620
3	613	2520	941	3330	4330	25500	11800	1300	1470	10400	863	2550
4	615	4630	908	3290	3800	21000	11500	1400	1380	5530	851	4110
5	627	4840	908	2830	3600	17300	11500	3090	1380	1960	834	8070
6	626	8430	875	3110	3080	15600	10900	7340	1300	1510	824	7420
7	645	11800	875	3400	2080	15100	10400	9930	1260	1340	858	5300
8	671	10400	870	3540	1790	15700	9760	12400	1300	1210	827	2150
9	732	7810	830	2890	1620	19300	9450	10300	1270	1110	853	1560
10	700	4900	815	2740	2060	19500	9460	6550	1290	1080	872	2410
11	641	2410	817	3740	2870	19600	10100	5850	1260	1050	848	1590
12	637	2050	821	4580	2440	24700	12100	6340	1210	1030	994	1430
13	639	6350	960	3670	1730	27000	11800	7120	1180	1020	1040	2000
14	660	5360	2010	1990	3290	22600	9150	6710	1160	1010	987	1040
15	626	2500	2210	1710	4920	16700	8510	6010	2330	989	933	1650
16	3370	1710	1530	1600	21700	13800	7990	5680	3990	1020	893	1270
17	4970	1690	1210	4770	34800	13900	7770	5230	2300	1070	1250	1460
18	2340	1460	1010	9980	35300	15500	7890	4830	1450	972	5740	1230
19	1340	1150	1010	9640	30000	16400	7400	3940	1200	932	4680	2450
20	1290	1040	914	6680	16300	16400	6550	3470	1060	899	1900	3560
21	1280	986	850	4610	8310	15900	6180	2730	1010	920	1350	1980
22	1740	905	843	3880	9790	15100	6000	2580	1000	865	1150	2510
23	4190	1020	749	3590	12500	14800	6020	2510	1100	861	1030	1810
24	3420	4270	729	3470	13900	14500	6720	2170	1140	915	996	1210
25	1720	8080	775	3550	15800	16700	6140	1810	1020	917	941	1040
26	1240	6900	8050	3300	16900	17500	5920	1600	996	871	910	988
27	1090	2830	17600	2130	16800	12700	5760	1500	1010	874	968	1130
28	968	1900	18000	1720	23200	12800	4910	2480	1030	870	977	1020
29	2130	1600	15300	4810	---	16200	2900	6570	1070	863	1030	775
30	7830	1370	7230	10900	---	16600	2030	4270	1120	810	1480	738
31	6330	---	4380	9990	---	15000	---	2090	---	995	4990	---
TOTAL	54817	115301	96240	133020	302500	557900	251910	140930	41806	58153	43741	81001
MEAN	1768	3843	3105	4291	10800	18000	8397	4546	1394	1876	1411	2700
MAX	7830	11800	18000	10900	35300	28600	13000	12400	3990	10400	5740	9930
MIN	561	905	729	1600	1620	12700	2030	1300	996	810	824	738
AC-FT	108700	228700	190900	263800	600000	1107000	499700	279500	82920	115300	86760	160700

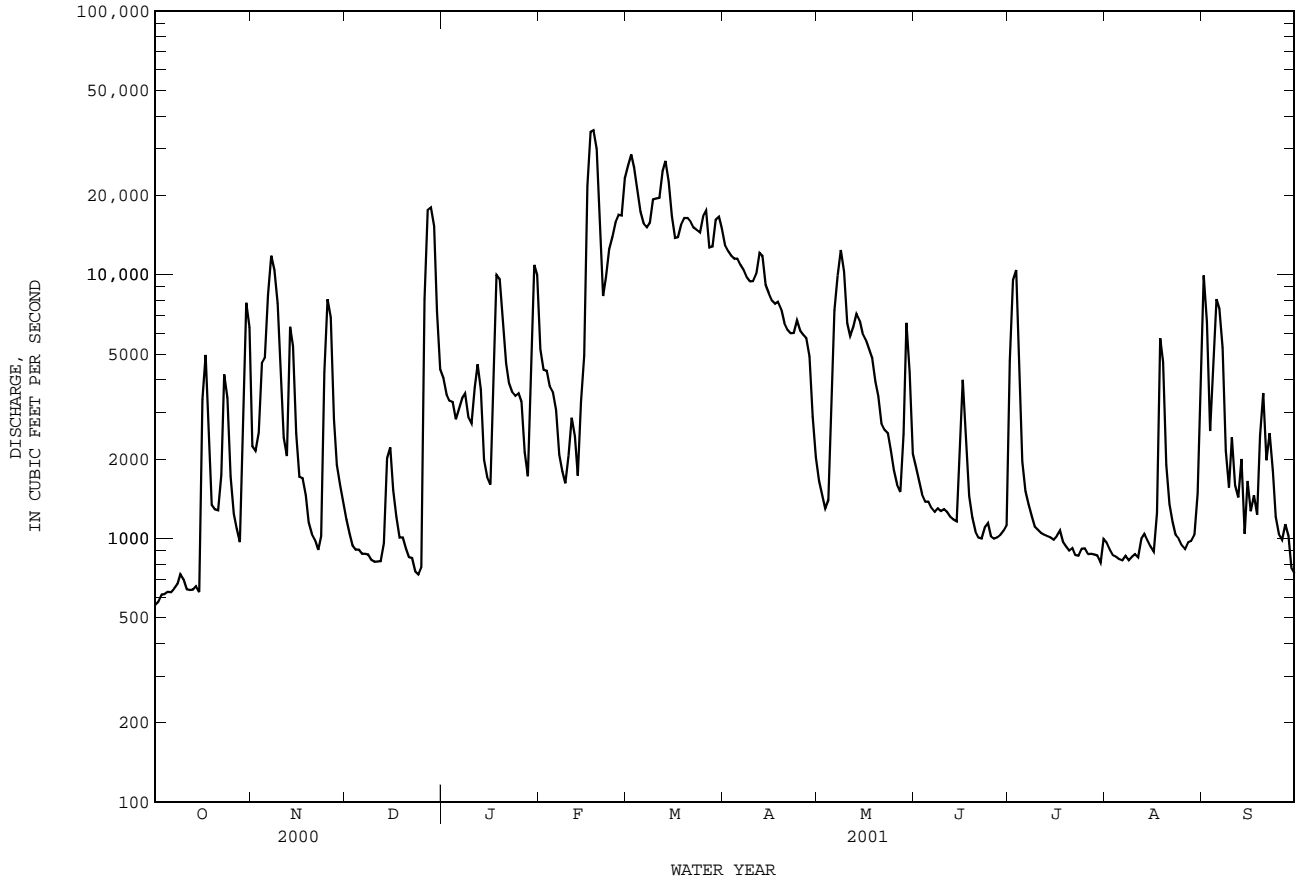
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2001h, BY WATER YEAR (WY)

	1925	1925	1925	1925	1925	1925	1925	1925	1925	1925	1925	1925
MEAN	1855	2362	2821	2261	3427	4032	4501	6508	5185	2007	1101	1192
MAX	11140	16860	22340	17140	14680	20120	38610	40400	24600	10650	6912	8322
(WY)	1982	1982	1992	1992	1992	1945	1942	1990	1941	1989	1982	1962
MIN	32.8	49.5	50.4	61.0	72.7	54.6	213	614	154	62.6	37.1	89.1
(WY)	1925	1925	1925	1925	1925	1925	1956	1964	1925	1925	1925	1925

08062500 Trinity River near Rosser, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1925 - 2001h	
ANNUAL TOTAL	859723		1877319		3102	
ANNUAL MEAN	2349		5143		9702	
HIGHEST ANNUAL MEAN					1992	
LOWEST ANNUAL MEAN					280	
HIGHEST DAILY MEAN	21900	Jun 5	35300	Feb 18	133000	Apr 23 1942
LOWEST DAILY MEAN	519	Aug 24	561	Oct 1	32	Oct 4 1924
ANNUAL SEVEN-DAY MINIMUM	566	Aug 19	609	Oct 1	32	Oct 14 1924
MAXIMUM PEAK FLOW			37400	Feb 17	150000	Apr 23 1942
MAXIMUM PEAK STAGE			35.92	Feb 17	41.55	Apr 22 1942
ANNUAL RUNOFF (AC-FT)	1705000		3724000		2247000	
10 PERCENT EXCEEDS	6200		15000		8680	
50 PERCENT EXCEEDS	1040		2210		932	
90 PERCENT EXCEEDS	607		863		223	

h See PERIOD OF RECORD paragraph.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1954 to current year.  
 BIOCHEMICAL DATA: Jan. 1968 to current year.  
 PESTICIDE DATA: Jan. 1968 to July 1981.  
 SEDIMENT DATA: Oct. 1963 to Sept. 1964, Apr. 1972 to Apr. 1975.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1954 to current year.  
 pH: Mar. 1977 to current year.  
 WATER TEMPERATURE: Oct. 1954 to current year.  
 DISSOLVED OXYGEN: Mar. 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since Mar. 1977.

REMARKS.--Records good. Interruptions in the record were caused by malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous water years using the daily records of specific conductance and regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. 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, 2,990 microsiemens/cm, Oct. 13, 1956; minimum, 122 microsiemens/cm, Sept. 30, 1981.  
 pH: Maximum, 9.9 units, July 12, 1982; minimum, 6.7 units, May 19, 20, 1999.  
 WATER TEMPERATURE: Maximum, 36.0°C, July 1, 1955; minimum, 1.0°C, on many days during winter months.  
 DISSOLVED OXYGEN: Maximum, 13.6 mg/L, Feb. 18, 1996 and Jan. 11, 25, 2001; minimum, 0.0 mg/L, on several days during 1979-81.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 774 microsiemens/cm, Feb. 10; minimum, 221 microsiemens/cm, Feb. 16.  
 pH: Maximum, 8.5 units, Dec. 21; minimum, 7.1 units, July 3.  
 WATER TEMPERATURE: Maximum, 32.9°C, July 24, 25; minimum, 3.7°C, Dec. 28.  
 DISSOLVED OXYGEN: Maximum, 13.6 mg/L, Jan. 11, 25; minimum, 2.7 mg/L, Sept. 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEMICAL 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS NONCARB FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	
NOV 29...	1110	1630	590	8.1	15.2	9.2	91.4	<2.0	192	--	69.1	4.68	40.4
FEB 07...	1140	2030	620	8.1	13.0	9.5	91.2	2.5	202	65	72.4	5.26	44.4
MAR 21...	0800	16000	396	8.2	13.0	9.8	93.3	<2.0	143	30	50.8	3.97	21.9
APR 25...	0800	6230	424	7.9	19.0	8.6	93.1	<2.0	150	42	52.3	4.81	27.4
SEP 06...	1200	7360	395	7.6	26.1	5.9	73.2	2.8	124	47	43.9	3.53	25.3
SEP 11...	0945	1620	495	7.8	26.7	6.7	83.5	2.1	143	54	49.5	4.63	39.0

DATE	RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	ALKALINITY, WAT DIS TOT IT FIELD (MG/L) AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLORIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUORIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) AS (70301)	NITROGEN, NITRATE DIS-SOLVED (MG/L) AS N (00618)	NITROGEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITROGEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)
NOV 29...	1.27	6.44	--	77.7	38.9	.7	9.4	--	6.12	.063	6.18	.155	.574
FEB 07...	1.36	6.21	138	76.2	43.7	.8	7.1	366	5.66	.043	5.70	.135	.663
MAR 21...	.798	4.28	113	43.2	20.8	.4	6.0	225	1.17	.023	1.19	.056	.378
APR 25...	.973	4.88	108	49.2	25.3	.4	5.9	247	2.41	.033	2.44	E.028	--
SEP 06...	.989	5.23	77	45.9	23.1	.4	7.5	214	2.56	.035	2.59	.069	.467
SEP 11...	1.42	7.44	89	77.2	32.6	.6	8.1	272	--	--	--	--	--

TRINITY RIVER BASIN

08062500 Trinity River near Rosser, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
NOV 29...	.73	.752	.743	2.28	<.8
FEB 07...	.80	.808	.768	2.35	--
MAR 21...	.43	.115	.102	.313	--
APR 25...	.54	.246	.228	.699	--
SEP 06...	.54	.286	.291	.892	--
11...	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	756	746	750	482	430	453	655	633	645	444	429	435
2	760	751	754	575	482	523	683	655	668	497	431	453
3	763	757	761	580	480	518	704	682	690	531	444	491
4	773	757	763	595	427	510	712	701	705	486	444	469
5	773	755	763	437	411	427	724	712	716	514	485	503
6	757	743	748	433	250	348	730	720	725	500	478	495
7	761	746	755	347	314	326	728	723	726	478	455	470
8	757	747	753	387	347	363	738	727	733	461	454	458
9	748	745	746	412	357	384	731	720	726	496	460	485
10	751	729	740	431	408	416	739	728	736	510	488	501
11	747	727	740	503	431	463	747	736	741	534	491	506
12	727	718	721	543	503	524	752	740	747	510	460	492
13	---	---	e740	554	375	443	747	731	739	476	445	455
14	753	731	747	432	413	421	742	671	725	563	476	535
15	746	736	739	481	432	458	674	592	641	602	563	585
16	739	316	637	539	481	509	623	593	608	627	602	619
17	507	332	466	625	539	592	645	623	635	640	407	536
18	507	467	477	641	625	635	660	645	652	422	389	401
19	---	---	e480	647	636	641	702	658	673	405	379	392
20	---	---	e480	682	647	668	710	698	703	421	403	410
21	---	---	e490	713	682	694	719	703	709	436	421	428
22	---	---	e490	715	706	710	731	719	727	462	436	450
23	---	---	e490	721	712	717	742	720	732	484	462	478
24	---	---	e490	717	407	583	759	722	741	499	478	491
25	515	468	495	511	383	426	773	750	764	479	467	475
26	561	515	538	433	400	412	750	306	511	518	467	483
27	602	561	572	493	433	462	306	293	297	619	518	560
28	644	602	630	550	493	521	326	294	309	666	619	649
29	653	601	642	593	550	583	359	326	342	665	467	596
30	601	314	402	633	593	612	410	359	391	470	397	425
31	430	368	396	---	---	---	437	410	421	410	392	402
MONTH	---	---	626	721	250	511	773	293	641	666	379	488

## TRINITY RIVER BASIN

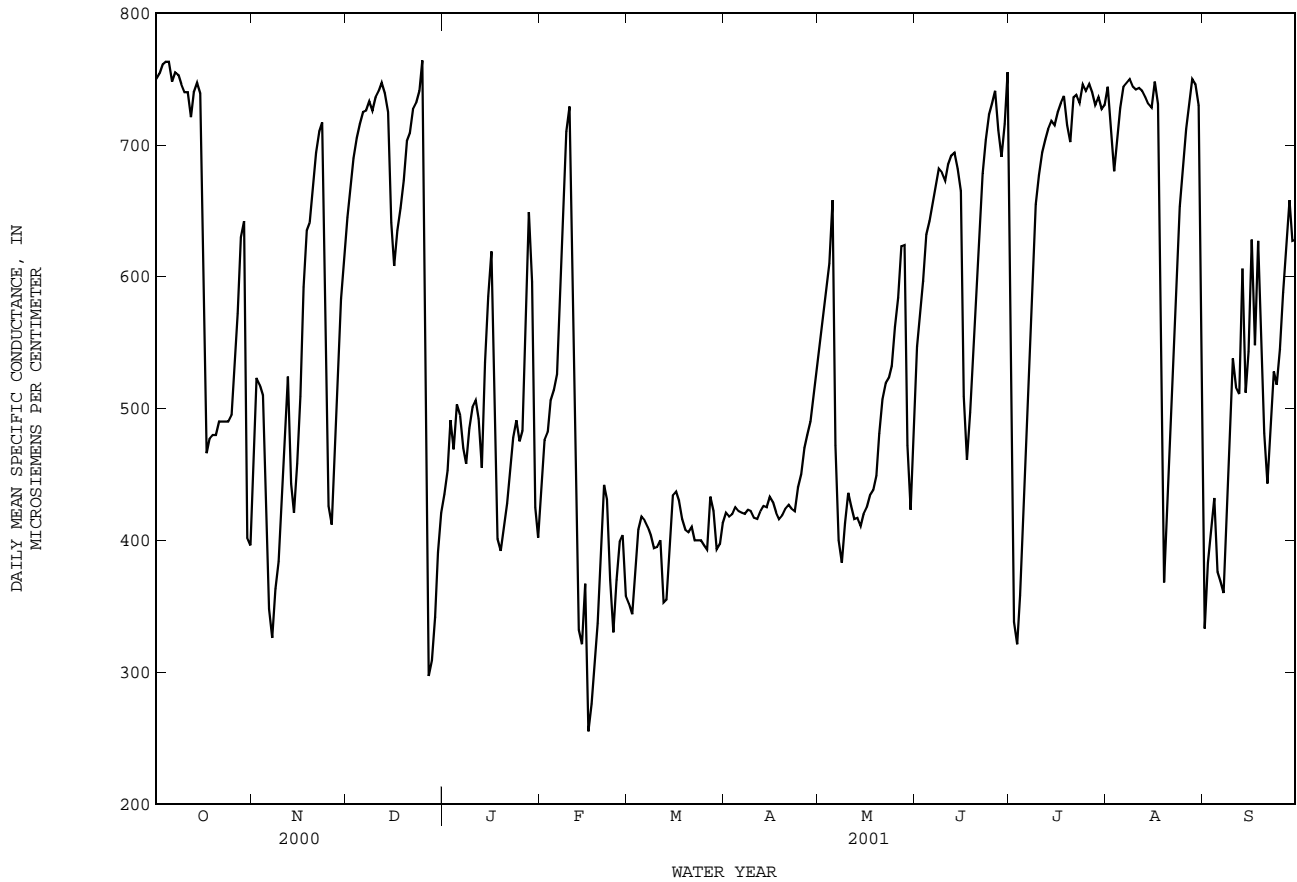
08062500 Trinity River near Rosser, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	469	410	442	362	338	352	426	419	421	---	---	e550
2	479	463	476	353	336	344	428	414	418	---	---	e570
3	487	478	482	395	353	372	424	417	420	---	---	e590
4	512	487	506	420	395	408	430	421	425	---	---	e610
5	518	506	514	422	414	418	426	418	422	683	559	658
6	559	509	526	420	409	415	424	418	421	559	388	472
7	654	529	594	417	407	410	426	415	420	454	360	400
8	700	644	658	410	399	404	425	420	423	402	363	383
9	728	692	710	399	391	394	425	420	422	425	402	413
10	774	646	729	399	393	395	421	414	417	447	425	436
11	646	494	604	403	394	400	425	413	416	441	419	426
12	604	296	452	418	320	353	433	410	422	420	413	416
13	344	307	332	369	333	355	435	420	426	433	406	417
14	345	287	321	419	369	389	427	424	425	416	406	411
15	421	276	367	447	416	434	449	421	433	424	407	420
16	345	221	255	445	432	437	437	421	429	428	417	425
17	294	227	276	434	423	430	427	415	421	441	424	434
18	312	294	305	435	407	416	418	415	416	441	435	438
19	354	312	337	409	405	408	422	415	419	466	438	449
20	434	354	389	408	403	406	430	422	424	520	466	481
21	466	424	442	---	---	e410	430	424	427	523	498	507
22	442	409	431	---	---	e400	426	421	424	529	511	519
23	436	297	370	---	---	e400	424	418	422	531	519	523
24	363	307	330	404	397	400	471	418	440	542	526	532
25	417	326	370	413	383	396	---	---	e450	570	542	562
26	404	393	399	409	385	393	---	---	e470	605	568	584
27	413	388	404	447	409	433	---	---	e480	636	605	623
28	388	346	358	446	392	422	---	---	e490	657	570	624
29	---	---	---	400	389	393	---	---	e510	605	419	472
30	---	---	---	404	390	397	---	---	e530	442	410	423
31	---	---	---	422	404	413	---	---	---	512	441	476
MONTH	774	221	442	---	---	400	---	---	436	---	---	492
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	559	512	547	755	413	603	757	728	744	537	235	333
2	580	559	572	413	283	338	739	670	711	392	356	383
3	613	575	597	332	318	321	695	668	680	427	391	407
4	650	612	632	396	332	358	717	695	706	470	400	432
5	661	629	642	469	396	430	735	717	728	467	327	376
6	666	649	656	551	469	511	749	735	744	394	341	369
7	675	662	668	604	551	575	753	740	747	377	341	360
8	686	675	682	643	604	623	757	740	750	438	377	412
9	687	673	679	669	643	655	752	735	744	501	438	475
10	682	666	673	681	669	677	747	735	742	582	501	538
11	701	675	685	709	678	694	745	738	743	593	482	516
12	702	684	692	709	698	704	747	734	741	572	488	511
13	702	684	694	727	701	712	744	733	736	629	538	606
14	687	664	682	727	711	718	746	685	731	538	508	512
15	679	591	665	721	709	715	753	683	728	615	512	543
16	591	419	509	734	720	725	760	738	748	661	525	628
17	528	446	461	737	725	732	740	715	731	631	504	548
18	523	466	497	741	734	737	716	315	498	635	613	627
19	586	523	553	736	689	715	451	333	368	613	493	575
20	620	586	600	719	690	702	450	399	426	557	431	481
21	654	620	642	741	719	736	512	450	482	465	430	443
22	691	654	678	742	727	738	561	512	532	518	451	484
23	715	690	704	735	727	732	622	561	598	543	518	528
24	730	712	723	753	735	746	671	622	653	534	504	518
25	736	727	731	746	737	741	711	666	685	568	524	545
26	751	727	741	751	736	746	728	705	712	595	568	588
27	732	693	711	---	---	e740	742	726	732	664	591	619
28	703	684	691	739	718	730	758	739	750	684	635	658
29	737	702	716	742	726	736	754	727	746	635	619	627
30	762	737	755	729	725	727	742	663	730	640	619	628
31	---	---	---	735	724	730	663	404	479	---	---	---
MONTH	762	419	649	---	---	656	760	315	672	684	235	509

e Estimated

08062500 Trinity River near Rosser, TX--Continued



PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.9	7.7	7.6	7.5	8.2	8.1	7.6	7.6	7.9	7.6	7.8	7.7
2	7.9	7.8	7.9	7.6	8.2	8.2	7.6	7.6	7.8	7.6	7.8	7.7
3	8.0	7.8	7.9	7.8	8.2	8.1	7.7	7.6	7.8	7.7	7.7	7.7
4	8.0	7.8	8.0	7.9	8.1	8.0	7.7	7.6	7.8	7.7	7.7	7.7
5	8.0	7.8	7.9	7.9	8.1	8.1	7.6	7.6	7.8	7.7	7.8	7.7
6	7.9	7.7	8.2	7.9	8.1	8.0	7.6	7.6	7.9	7.7	7.8	7.7
7	7.9	7.8	8.1	7.8	8.2	8.0	7.6	7.5	7.8	7.7	7.9	7.8
8	8.0	7.8	7.8	7.7	8.2	8.1	7.6	7.6	7.7	7.7	7.9	7.8
9	8.0	7.9	7.8	7.8	8.2	8.1	7.7	7.6	7.7	7.7	7.9	7.8
10	8.0	7.9	7.9	7.8	8.2	8.1	7.7	7.7	7.7	7.6	7.8	7.8
11	8.0	7.9	8.0	7.9	8.4	8.1	7.7	7.7	7.8	7.7	7.9	7.8
12	8.0	7.9	8.0	7.9	8.4	8.1	7.7	7.6	7.8	7.7	7.9	7.8
13	8.0	7.9	7.9	7.9	8.3	8.1	7.7	7.6	7.7	7.7	7.8	7.7
14	8.0	7.8	7.9	7.9	8.2	8.0	7.7	7.6	7.8	7.7	7.8	7.8
15	8.0	7.9	7.9	7.9	8.1	8.0	7.7	7.6	7.8	7.6	7.9	7.8
16	8.2	7.7	8.0	7.9	8.2	8.0	7.7	7.6	7.9	7.6	8.0	7.9
17	8.3	7.9	8.0	7.9	8.3	8.2	7.8	7.7	7.8	7.6	7.9	7.9
18	8.1	7.9	8.1	8.0	8.4	8.1	7.7	7.6	7.7	7.6	8.0	7.9
19	---	---	8.1	8.0	8.3	8.2	7.9	7.7	7.7	7.6	8.0	7.9
20	---	---	8.0	8.0	8.4	8.1	8.0	7.8	7.7	7.6	8.0	8.0
21	---	---	8.1	7.9	8.5	8.2	8.0	7.9	7.7	7.6	---	---
22	---	---	8.1	7.9	8.4	8.2	8.0	8.0	7.8	7.6	---	---
23	---	---	8.0	7.9	8.3	8.2	8.0	7.9	7.8	7.6	---	---
24	---	---	8.0	7.9	8.3	8.1	8.0	7.9	7.8	7.8	8.1	7.8
25	7.7	7.6	8.0	8.0	8.2	8.1	7.9	7.9	7.8	7.7	7.9	7.7
26	7.7	7.6	8.0	8.0	8.4	8.2	8.0	7.9	7.8	7.7	8.1	7.9
27	7.8	7.7	8.0	8.0	8.2	7.3	7.9	7.8	7.8	7.7	8.1	8.0
28	7.8	7.7	8.1	8.0	7.6	7.5	7.8	7.8	7.8	7.7	8.1	8.1
29	7.8	7.6	8.1	8.0	7.6	7.5	7.9	7.7	---	---	8.1	8.0
30	7.7	7.6	8.1	8.1	7.6	7.5	7.8	7.7	---	---	8.2	8.1
31	7.6	7.4	---	---	7.6	7.5	7.9	7.8	---	---	8.3	8.1
MONTH	---	---	8.2	7.5	8.5	7.3	8.0	7.5	7.9	7.6	---	---

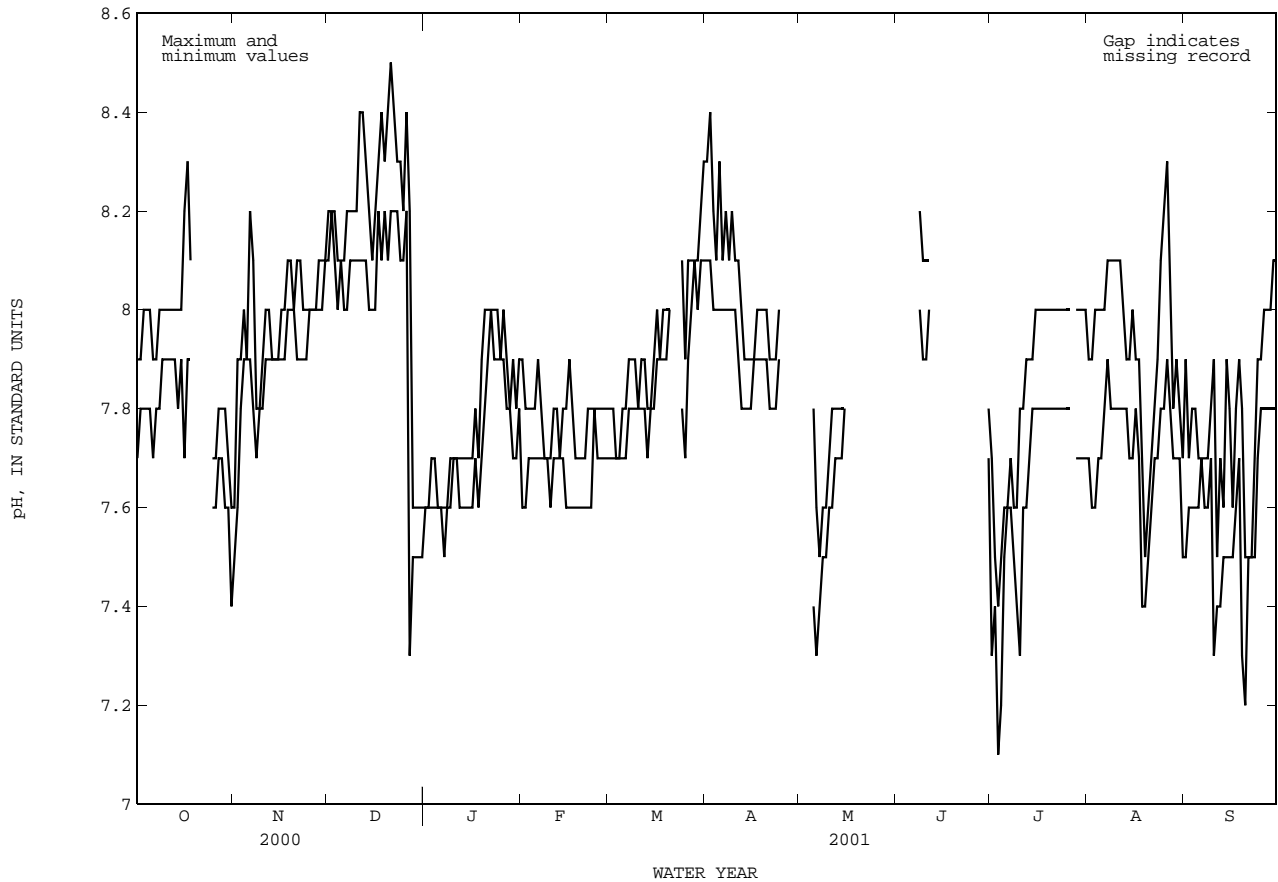


TRINITY RIVER BASIN

08062500 Trinity River near Rosser, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.3	8.1	---	---	---	---	7.7	7.3	7.9	7.7	7.9	7.5
2	8.4	8.1	---	---	---	---	7.5	7.4	7.9	7.6	7.7	7.6
3	8.2	8.0	---	---	---	---	7.4	7.1	8.0	7.6	7.8	7.6
4	8.1	8.0	---	---	---	---	7.5	7.2	8.0	7.7	7.8	7.6
5	8.3	8.0	7.8	7.4	---	---	7.6	7.5	8.0	7.7	7.7	7.6
6	8.1	8.0	7.6	7.3	---	---	7.6	7.6	8.0	7.8	7.7	7.7
7	8.2	8.0	7.5	7.4	---	---	7.7	7.6	8.1	7.9	7.7	7.6
8	8.1	8.0	7.6	7.5	8.2	8.0	7.6	7.5	8.1	7.8	7.7	7.6
9	8.2	8.0	7.6	7.5	8.1	7.9	7.6	7.4	8.1	7.8	7.8	7.7
10	8.1	8.0	7.7	7.6	8.1	7.9	7.8	7.3	8.1	7.8	7.9	7.3
11	8.1	7.9	7.8	7.6	8.1	8.0	7.8	7.6	8.1	7.8	7.5	7.4
12	8.0	7.8	7.8	7.7	---	---	7.9	7.6	8.0	7.8	7.7	7.4
13	7.9	7.8	7.8	7.7	---	---	7.9	7.7	7.9	7.8	7.6	7.5
14	7.9	7.8	7.8	7.7	---	---	7.9	7.8	7.9	7.7	7.9	7.5
15	7.9	7.8	7.8	7.8	---	---	8.0	7.8	8.0	7.7	7.8	7.5
16	7.9	7.9	---	---	---	---	8.0	7.8	7.9	7.8	7.6	7.5
17	8.0	7.9	---	---	---	---	8.0	7.8	7.9	7.7	7.8	7.6
18	8.0	7.9	---	---	---	---	8.0	7.8	7.7	7.4	7.9	7.7
19	8.0	7.9	---	---	---	---	8.0	7.8	7.5	7.4	7.8	7.3
20	8.0	7.9	---	---	---	---	8.0	7.8	7.6	7.5	7.5	7.2
21	7.9	7.8	---	---	---	---	8.0	7.8	7.7	7.6	7.5	7.5
22	7.9	7.8	---	---	---	---	8.0	7.8	7.8	7.7	7.5	7.5
23	7.9	7.8	---	---	---	---	8.0	7.8	7.9	7.7	7.7	7.5
24	8.0	7.9	---	---	---	---	8.0	7.8	8.1	7.8	7.9	7.7
25	---	---	---	---	---	---	8.0	7.8	8.2	7.8	7.9	7.8
26	---	---	---	---	---	---	8.0	7.8	8.3	7.9	8.0	7.8
27	---	---	---	---	---	---	---	---	8.1	7.8	8.0	7.8
28	---	---	---	---	---	---	8.0	7.7	7.8	7.7	8.0	7.8
29	---	---	---	---	---	---	8.0	7.7	7.9	7.7	8.1	7.8
30	---	---	---	---	7.8	7.7	8.0	7.7	7.8	7.7	8.1	7.8
31	---	---	---	---	---	---	8.0	7.7	7.7	7.5	---	---
MONTH	---	---	---	---	---	---	---	---	8.3	7.4	8.1	7.2



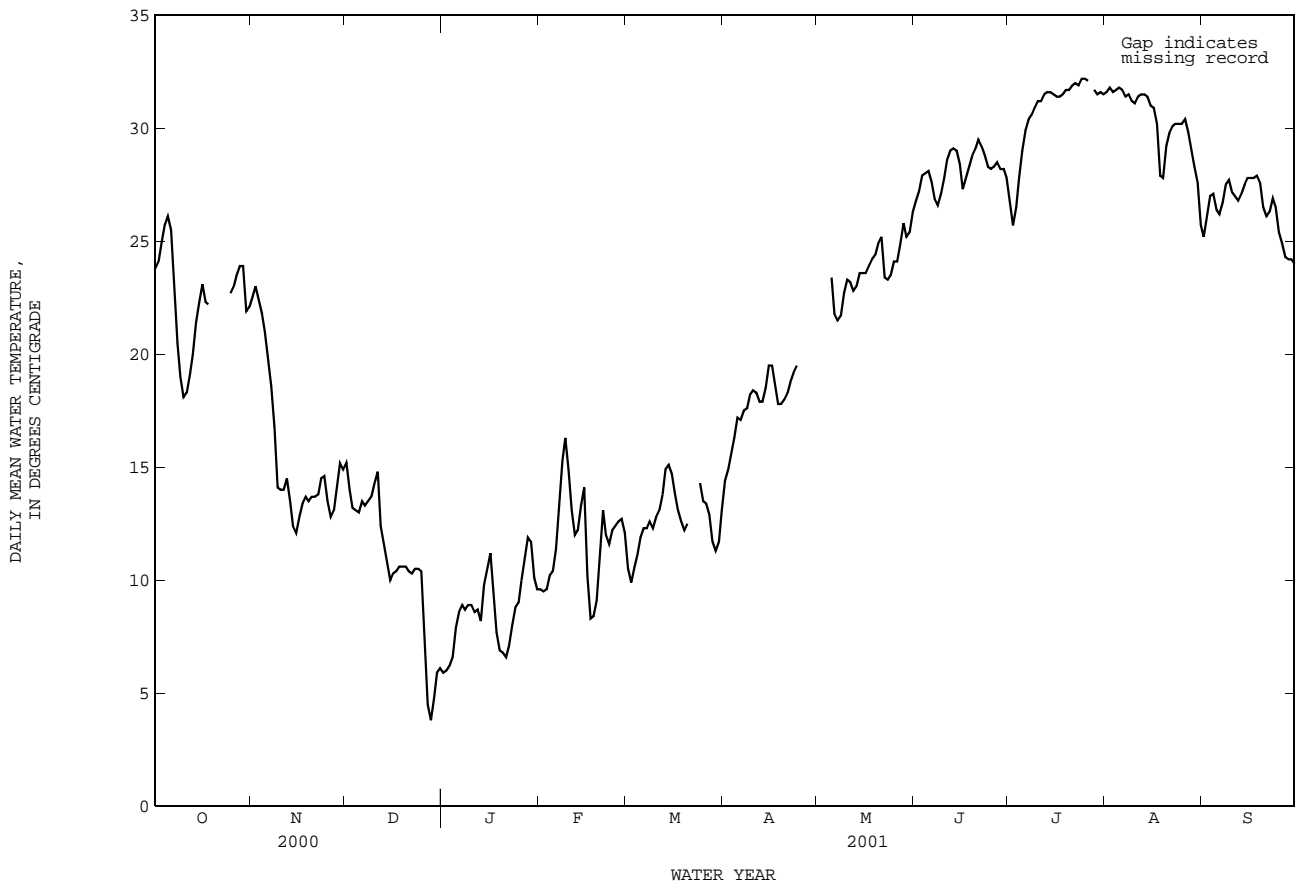


TRINITY RIVER BASIN

08062500 Trinity River near Rosser, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	27.1	26.5	26.8	27.5	26.0	26.8	32.5	30.8	31.6	26.5	24.2	25.2
2	27.9	26.7	27.2	26.3	25.2	25.7	32.5	31.1	31.8	26.8	25.6	26.1
3	28.1	27.7	27.9	27.2	26.0	26.5	32.3	30.9	31.6	27.8	26.4	27.0
4	28.4	27.6	28.0	28.9	27.0	27.8	32.3	30.9	31.7	27.6	26.4	27.1
5	28.5	27.8	28.1	29.6	28.5	29.0	32.5	31.1	31.8	27.4	26.0	26.4
6	28.0	27.0	27.6	30.4	29.5	29.9	32.2	31.1	31.7	26.6	26.0	26.2
7	27.0	26.6	26.9	31.0	29.9	30.4	32.0	30.7	31.4	27.5	26.2	26.7
8	27.0	26.2	26.6	31.3	30.1	30.6	31.9	30.8	31.5	28.0	27.1	27.5
9	27.6	26.6	27.1	31.6	30.2	30.9	31.7	30.5	31.2	27.9	27.4	27.7
10	28.6	27.1	27.8	32.0	30.5	31.2	31.9	30.3	31.1	27.5	26.8	27.2
11	29.2	28.0	28.6	32.0	30.5	31.2	32.0	30.7	31.4	27.3	26.6	27.0
12	29.6	28.5	29.0	32.4	30.6	31.5	32.1	30.9	31.5	27.1	26.6	26.8
13	29.8	28.5	29.1	32.4	30.8	31.6	32.1	31.1	31.5	27.5	26.6	27.1
14	29.5	28.6	29.0	32.4	30.9	31.6	31.9	30.9	31.4	28.0	26.9	27.5
15	28.8	28.0	28.4	32.3	30.9	31.5	31.6	30.4	31.0	28.0	27.6	27.8
16	28.4	26.1	27.3	32.1	30.7	31.4	31.3	30.4	30.9	28.2	27.5	27.8
17	28.2	27.4	27.8	32.1	30.7	31.4	30.8	29.7	30.2	28.1	27.6	27.8
18	28.7	27.8	28.3	32.3	30.8	31.5	30.0	26.5	27.9	28.1	27.6	27.9
19	29.3	28.4	28.8	32.5	31.1	31.7	28.9	26.9	27.8	28.0	26.9	27.6
20	29.7	28.5	29.1	32.5	31.0	31.7	29.8	28.6	29.2	27.0	26.1	26.5
21	30.2	28.8	29.5	32.7	31.1	31.9	30.2	29.5	29.8	26.4	25.8	26.1
22	29.9	28.6	29.2	32.6	31.2	32.0	30.7	29.6	30.1	26.8	25.8	26.3
23	29.3	28.3	28.8	32.6	31.2	31.9	30.9	29.6	30.2	27.3	26.5	26.9
24	28.9	27.9	28.3	32.9	31.5	32.2	30.8	29.6	30.2	27.2	25.8	26.5
25	29.0	27.6	28.2	32.9	31.5	32.2	31.0	29.5	30.2	25.8	25.1	25.4
26	29.1	27.6	28.3	32.7	31.4	32.1	31.0	29.9	30.4	25.3	24.5	24.9
27	29.3	28.0	28.5	---	---	---	30.3	29.4	29.8	24.6	24.1	24.3
28	28.7	27.7	28.2	32.1	31.2	31.7	29.5	28.6	29.1	24.6	23.9	24.2
29	28.9	27.6	28.2	32.2	30.9	31.5	28.7	28.0	28.3	24.8	23.6	24.2
30	28.2	27.4	27.8	32.2	31.0	31.6	28.1	26.4	27.6	24.6	23.4	24.0
31	---	---	---	32.2	30.8	31.5	26.4	25.2	25.7	---	---	---
MONTH	30.2	26.1	28.1	---	---	---	32.5	25.2	30.3	28.2	23.4	26.5



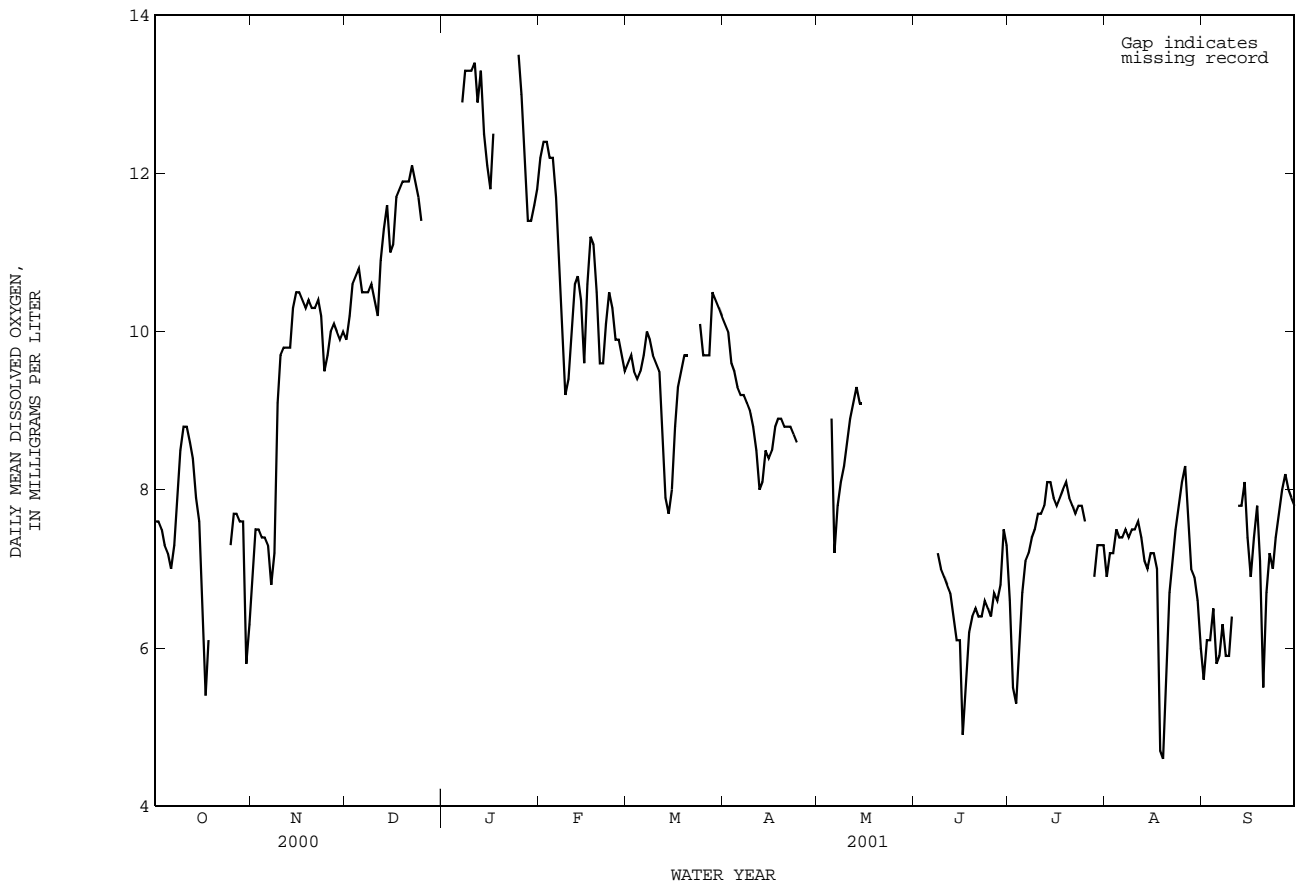


TRINITY RIVER BASIN

08062500 Trinity River near Rosser, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	7.6	5.3	6.6	7.6	6.2	6.9	5.9	4.8	5.6
2	---	---	---	5.8	5.2	5.5	8.0	6.8	7.2	6.4	5.8	6.1
3	---	---	---	5.4	5.2	5.3	8.1	6.5	7.2	6.3	5.9	6.1
4	---	---	---	6.4	5.3	5.9	8.3	6.8	7.5	6.8	5.7	6.5
5	---	---	---	7.0	6.4	6.7	7.9	7.0	7.4	6.3	2.7	5.8
6	---	---	---	7.2	6.9	7.1	7.9	6.9	7.4	6.2	5.7	5.9
7	---	---	---	7.3	7.0	7.2	8.0	7.0	7.5	6.7	5.9	6.3
8	7.6	6.9	7.2	7.7	6.9	7.4	8.0	6.9	7.4	6.5	5.5	5.9
9	7.3	6.8	7.0	7.9	6.8	7.5	8.1	7.0	7.5	6.5	5.5	5.9
10	7.1	6.7	6.9	8.2	7.1	7.7	8.2	6.9	7.5	7.3	5.3	6.4
11	7.1	6.6	6.8	8.1	7.4	7.7	8.2	7.0	7.6	---	---	---
12	6.9	6.5	6.7	8.5	7.2	7.8	7.8	7.1	7.4	8.4	7.0	7.8
13	6.6	6.2	6.4	8.4	7.6	8.1	7.6	6.8	7.1	8.2	7.6	7.8
14	6.3	6.0	6.1	8.5	7.8	8.1	7.5	6.5	7.0	8.7	7.6	8.1
15	6.5	5.2	6.1	8.4	7.4	7.9	7.7	6.9	7.2	8.2	6.4	7.4
16	5.5	3.3	4.9	7.9	7.5	7.8	7.5	6.9	7.2	7.1	6.5	6.9
17	5.9	5.3	5.5	8.4	7.5	7.9	7.3	6.9	7.0	8.0	6.9	7.4
18	6.5	5.8	6.2	8.4	7.6	8.0	6.9	3.8	4.7	8.2	7.4	7.8
19	6.7	6.2	6.4	8.5	7.8	8.1	5.1	4.0	4.6	7.5	5.5	7.1
20	6.7	6.3	6.5	8.4	7.5	7.9	6.5	5.0	5.8	6.2	3.7	5.5
21	6.6	6.1	6.4	8.2	7.6	7.8	7.0	6.5	6.7	7.2	6.1	6.7
22	6.9	6.1	6.4	8.2	7.3	7.7	7.4	6.8	7.1	7.4	6.8	7.2
23	6.9	6.3	6.6	8.2	7.6	7.8	8.1	7.0	7.5	7.2	6.7	7.0
24	6.7	6.3	6.5	8.2	7.4	7.8	8.6	7.2	7.8	7.9	7.1	7.4
25	6.7	6.1	6.4	7.9	7.4	7.6	9.0	7.3	8.1	8.3	7.4	7.7
26	6.9	6.3	6.7	---	---	---	9.1	7.5	8.3	8.5	7.6	8.0
27	6.9	6.3	6.6	---	---	---	8.3	7.2	7.7	8.6	7.9	8.2
28	7.0	6.3	6.8	7.6	6.4	6.9	7.4	6.8	7.0	8.3	7.6	8.0
29	7.9	7.2	7.5	8.0	6.8	7.3	7.3	6.5	6.9	8.3	7.7	7.9
30	7.4	7.1	7.3	8.0	6.7	7.3	6.9	6.0	6.6	8.0	7.7	7.8
31	---	---	---	8.0	6.8	7.3	6.5	5.2	6.0	---	---	---
MONTH	---	---	---	---	---	---	9.1	3.8	7.1	---	---	---



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## TRINITY RIVER BASIN

08062700 Trinity River at Trinidad, TX

LOCATION.--Lat 32°08'05", long 96°06'20", Henderson County, Hydrologic Unit 12030105, on left bank at pumping station of Texas Power and Light Co., near southwest boundary of Trinidad, 0.5 mi downstream from St. Louis Southwestern Railway Lines bridge, 0.9 mi downstream from bridge on State Highway 31, 8.0 mi upstream from Cedar Creek, and at mile 391.2.

DRAINAGE AREA.--8,538 mi<sup>2</sup>, not including 1,007 mi<sup>2</sup> upstream from Cedar Creek Reservoir.

PERIOD OF RECORD.--Oct. 1964 to current year. Records of gage height collected in this vicinity for period Oct. 1913 to Sept. 1915 are contained in reports of U.S. Army Corps of Engineers, and records collected since Oct. 1915 are contained in reports of the National Weather Service.

Water-quality records.--Chemical data: May 1966 to June 1994. Biochemical data: May 1966 to June 1994. Pesticide data: Nov. 1977 to June 1982. Sediment data: Nov. 1977 to June 1994. Specific conductance: Sept. 1967 to Sept. 1981, May 1986 to Sept. 2000. pH: Sept. 1967 to Oct. 1969, May 1986 to Sept. 2000. Water temperature: Sept. 1967 to Sept. 1981, May 1986 to Sept. 2000. Dissolved oxygen: Sept. 1967 to Oct. 1969, May 1986 to Sept. 2000.

REVISED RECORDS.--WDR TX-89-1: 1988. WDR TX-90-1: 1989.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 239.21 ft above sea level. Prior to May 3, 1967, at site 0.9 mi upstream at datum 1.28 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Since installation of gage in Oct. 1964, at least 10% of contributing drainage area has been regulated. The cities of Fort Worth, Dallas, and several smaller cities divert considerable water for their municipal use, of which about 60 percent is returned as wastewater effluent that sustains low flows at this site.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1908, 49.8 ft Apr. 25, 1942, and 48.3 ft date unknown (present site and datum), from records of the National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

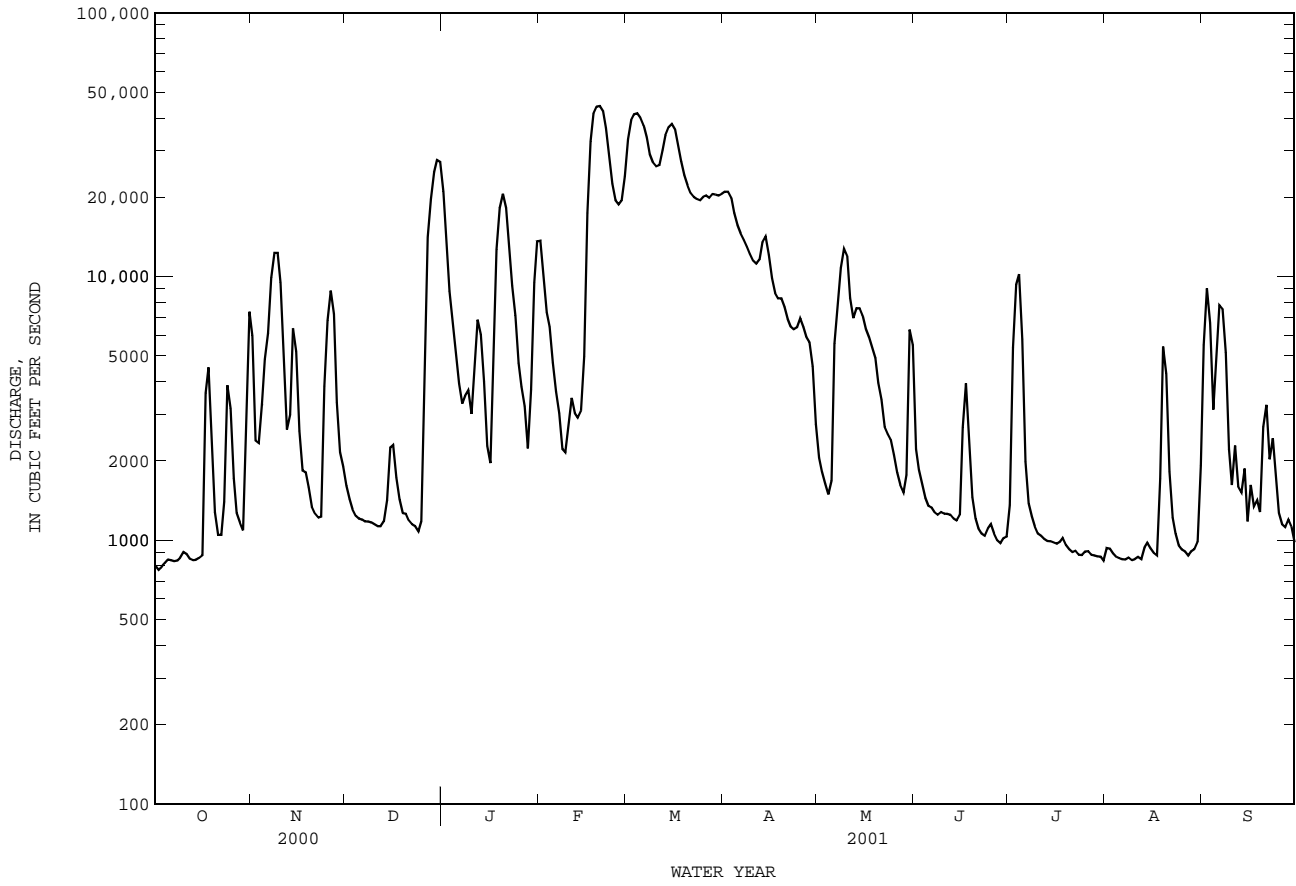
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	803	5970	1610	21000	13700	33200	21000	2060	2220	1360	936	5500
2	774	2390	1430	13400	9730	39300	21000	1820	1850	5380	930	9030
3	793	2340	1310	8830	7310	41300	19900	1640	1640	9340	891	6670
4	820	3290	1240	6680	6450	41700	17400	1490	1450	10200	865	3130
5	845	4870	1210	5090	4720	40100	15700	1680	1350	5790	856	4890
6	841	6110	1200	3940	3670	37500	14600	5560	1330	1990	847	7790
7	835	9890	1180	3300	3030	33600	13800	8010	1280	1380	845	7520
8	839	12300	1180	3530	2220	29100	13000	10800	1250	1230	860	5140
9	861	12300	1170	3700	2160	27100	12200	12800	1280	1130	841	2220
10	903	9480	1150	3020	2780	26200	11500	12000	1260	1060	849	1620
11	886	5390	1130	4770	3470	26500	11200	8300	1260	1040	865	2290
12	851	2630	1130	6870	3030	30200	11600	6970	1250	1010	849	1600
13	842	2990	1180	6040	2920	34400	13500	7600	1210	994	939	1520
14	843	6360	1420	4000	3090	36900	14200	7600	1190	991	979	1870
15	857	5210	2250	2280	4970	38000	12100	7140	1250	982	933	1180
16	878	2600	2300	1960	17400	36200	9870	6350	2680	969	896	1620
17	3620	1840	1730	3980	32700	31800	8650	5900	3930	985	876	1340
18	4520	1810	1430	12700	41500	27400	8280	5380	2310	1020	1710	1420
19	2280	1590	1270	18200	44200	24200	8270	4910	1460	958	5430	1280
20	1280	1340	1260	20600	44400	22200	7680	3960	1210	925	4280	2690
21	1050	1260	1190	18200	42500	20700	6900	3420	1110	903	1820	3260
22	1050	1220	1150	13000	36600	20100	6470	2700	1060	911	1220	2030
23	1400	1230	1130	9220	28900	19700	6310	2530	1040	881	1060	2440
24	3870	3840	1080	7110	22500	19500	6410	2410	1110	879	955	1780
25	3160	6830	1180	4700	19500	20100	6950	2110	1150	906	922	1270
26	1720	8840	5920	3830	18800	20300	6440	1810	1060	909	907	1150
27	1270	7220	14100	3230	19400	19900	5920	1620	1000	882	874	1120
28	1170	3330	19700	2230	24000	20600	5650	1520	976	876	906	1200
29	1090	2160	24900	3720	---	20500	4570	1770	1020	870	926	1130
30	2920	1900	27700	9490	---	20300	2760	6300	1030	866	985	984
31	7360	---	27200	13600	---	20600	---	5500	---	839	1920	---
TOTAL	51231	138530	153030	242220	465650	879200	323830	153660	43216	58456	38972	86684
MEAN	1653	4618	4936	7814	16630	28360	10790	4957	1441	1886	1257	2889
MAX	7360	12300	27700	21000	44400	41700	21000	12800	3930	10200	5430	9030
MIN	774	1220	1080	1960	2160	19500	2760	1490	976	839	841	984
AC-FT	101600	274800	303500	480400	923600	1744000	642300	304800	85720	115900	77300	171900

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

MEAN	2593	3930	4752	3764	5370	6898	5889	9036	6406	2451	1353	1255
MAX	11390	20160	24320	20490	20550	28360	20550	47120	26790	11800	6886	3347
(WY)	1974	1975	1992	1992	1992	2001	1997	1990	1989	1982	1982	1974
MIN	417	403	460	415	424	542	798	693	526	394	394	448
(WY)	1976	1967	1967	1967	1967	1967	1978	1971	1972	1972	1967	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1965 - 2001
ANNUAL TOTAL	1061242	2634679	
ANNUAL MEAN	2900	7218	4469
HIGHEST ANNUAL MEAN			11400
LOWEST ANNUAL MEAN			854
HIGHEST DAILY MEAN	27700	Dec 30	94100
LOWEST DAILY MEAN	774	Oct 2	312
ANNUAL SEVEN-DAY MINIMUM	816	Oct 1	326
MAXIMUM PEAK FLOW		44800	Feb 19
MAXIMUM PEAK STAGE		39.73	Feb 19
ANNUAL RUNOFF (AC-FT)	2105000	5226000	3238000
10 PERCENT EXCEEDS	7030	20600	12400
50 PERCENT EXCEEDS	1240	2600	1300
90 PERCENT EXCEEDS	873	903	518

08062700 Trinity River at Trinidad, TX--Continued





TRINITY RIVER BASIN

08062730 New Terrell City Lake near Terrell, TX

LOCATION.--Lat 32°43'42", long 96°10'24", Kaufman County, Hydrologic Unit 12030107, on intake structure on Muddy Cedar Creek, approximately 1.0 mi northwest of Elmo, and 5.0 mi east of Terrell.

DRAINAGE AREA.--14.33 mi<sup>2</sup>.

PERIOD OF RECORD.--Apr. 1999 to current year.

GAGE.--Water data recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--Records good below 8,594 acre-ft. Records above 8,594 acre-ft and those for estimated daily contents are poor. Interruption in the record was due to malfunction of the instrument. The lake is formed by an earthfill embankment 4,700 ft long. The dam was begun in Feb. 1955 and completed in Nov. of the same year. Deliberate impoundment began when the construction was completed but the lake did not fill until May, 1957. A 40 foot uncontrolled concrete weir spillway and chute are located near the left (east) end of the embankment. The emergency spillway is an earth trench cut through natural ground and is located at the right(west) end of the embankment. The dam was built by the city of Terrell to impound water for municipal use. Conservation pool storage is 8,580 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	514.2
Crest of spillway.....	508.8
Crest of emergency spillway.....	507.0

COOPERATION.--The capacity table was provided by the Texas Water Development Board on Apr. 15, 1999.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 10,960 acre-ft, Feb. 16, 2001, elevation, 506.55 ft; minimum contents, 3,800 acre-ft, Apr. 30, 2000, elevation, 497.29 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 10,960 acre-ft, Feb. 16, elevation, 506.55 ft; minimum contents, 4,000 acre-ft, Nov. 1, elevation, 497.64 ft.

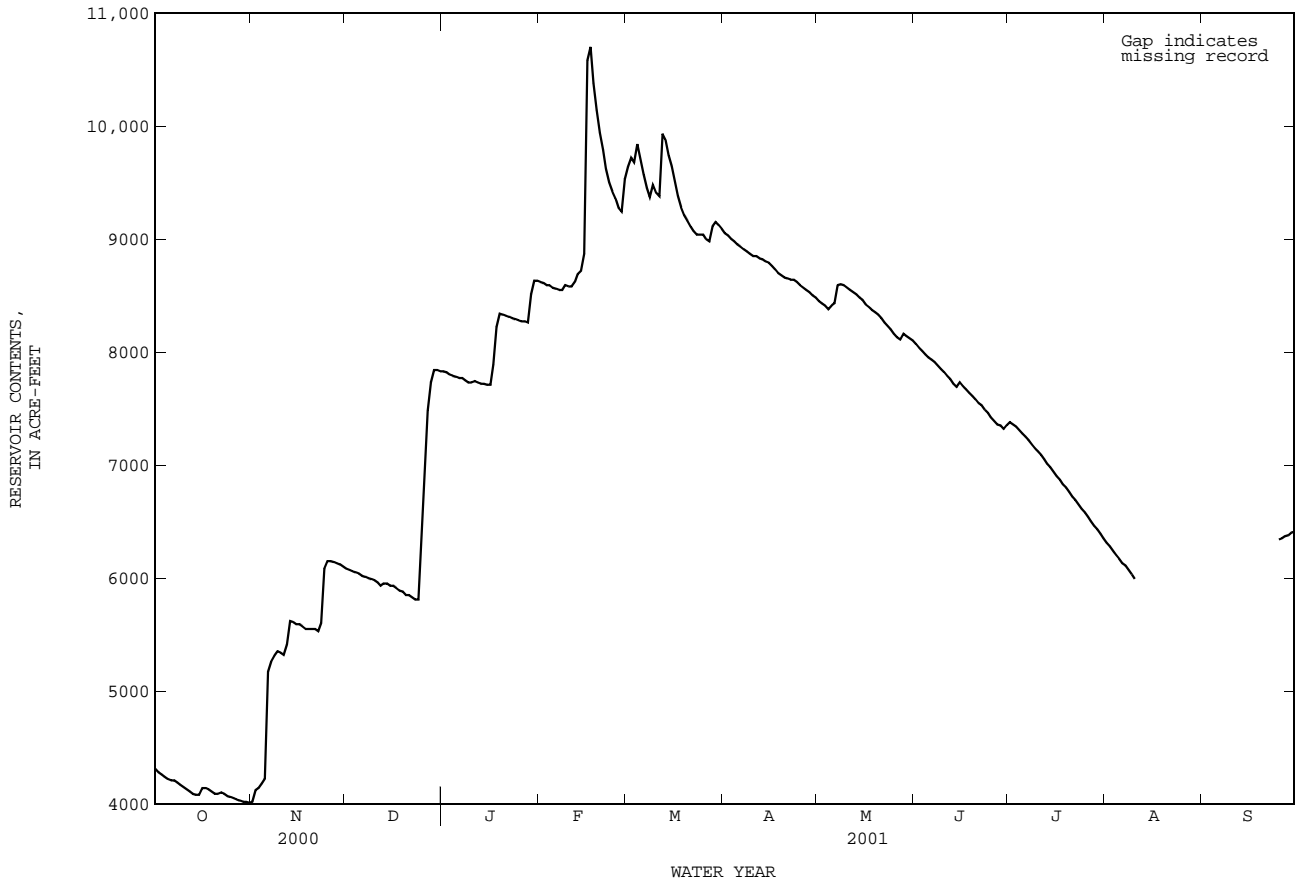
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4310	4020	6080	7830	8620	9640	9050	8450	8070	7380	6310	---
2	4280	4120	6070	7820	8610	9720	9030	8430	8040	7360	6280	---
3	4260	4140	6060	7800	8590	9680	9000	8410	8010	7340	6240	---
4	4240	4180	6050	7790	8590	9840	8980	8380	7980	7310	6200	---
5	4220	4220	6040	7780	8570	9710	8950	8410	7950	7280	6170	---
6	4210	5170	6020	7770	8560	9570	8930	8430	7930	7250	6130	---
7	4210	5260	6010	7770	8550	9450	8910	8590	7910	7220	6110	---
8	4190	5310	6000	7750	8550	9370	8890	8600	7880	7180	6070	---
9	4170	5350	5990	7730	8590	9480	8870	8590	7850	7150	6030	---
10	4150	5340	5980	7730	8580	9410	8850	8570	7820	7120	5990	---
11	4130	5320	5960	7740	8580	9380	8850	8550	7790	7090	---	---
12	4110	5410	5930	7730	8620	9930	8830	8530	7760	7050	---	---
13	4090	5620	5950	7720	8690	9880	8820	8510	7720	7010	---	---
14	4080	5610	5950	7720	8720	9740	8800	8480	7690	6980	---	---
15	4080	5590	5930	7710	8870	9640	8790	8460	7730	6940	---	---
16	4140	5590	5930	7710	10580	9500	8760	8420	7700	6900	---	---
17	4140	5570	5910	7890	10700	9380	8730	8400	7670	6870	---	---
18	4130	5550	5890	8220	10380	9280	8700	8370	7640	6830	---	---
19	4110	5550	5880	8340	10140	9210	8680	8350	7610	6800	---	---
20	4090	5550	5850	8330	9940	9160	8660	8330	7580	6760	---	---
21	4090	5550	5850	8320	9790	9110	8650	8300	7550	6720	---	---
22	4100	5530	5830	8310	9620	9070	8640	8260	7530	6690	---	---
23	4090	5600	5810	8300	9500	9040	8640	8230	7490	6650	---	---
24	4070	6080	e5810	8290	9420	9040	8620	8200	7460	6610	---	---
25	4060	6150	e6400	8280	9360	9040	8590	8160	7420	6580	---	6340
26	4050	6150	6980	8270	9270	9000	8570	8130	7390	6540	---	6350
27	4040	6140	7480	8270	9240	8980	8550	8110	7360	6500	---	6370
28	4030	6130	7730	8260	9530	9110	8530	8160	7350	6460	---	6380
29	4020	6120	7840	8510	---	9150	8500	8140	7320	6430	---	6400
30	4020	6100	7840	8630	---	9120	8480	8120	7350	6390	---	6410
31	4010	---	7830	8630	---	9090	---	8100	---	6350	---	---
MEAN	4130	5400	6290	8030	9170	9380	8760	8360	7680	6890	6150	6380
MAX	4310	6150	7840	8630	10700	9930	9050	8600	8070	7380	6310	6410
MIN	4010	4020	5810	7710	8550	8980	8480	8100	7320	6350	5990	6340
(+)	497.66	500.88	503.10	504.06	505.27	504.75	503.86	503.42	502.51	501.22	Unknwn	501.30
(@)	-310	+2090	+1730	+800	+900	-440	-610	-380	-750	-1000	Unknwn	Unknwn
CAL YR 2000	MAX 7840	MIN 3810	(@) +2800									
WTR YR 2001	MAX 10700	MIN 4010	(@) +2090									

e Estimated

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

08062730 New Terrell City Lake near Terrell, TX--Continued



TRINITY RIVER BASIN

08063010 Cedar Creek Reservoir near Trinidad, TX

LOCATION.--Lat 32°14'35", long 96°08'26", Henderson County, Hydrologic Unit 12030107, inside pumphouse on lower level, 1,000 ft north of spillway, 5.5 mi upstream from Joe B. Hogsett Dam on Cedar Creek, and 8.0 mi northwest of Trinidad.

DRAINAGE AREA.--1,007 mi<sup>2</sup>.

PERIOD OF RECORD.--Jan. 1965 to current year.

Water-quality records.--Chemical data: Oct. 1969 to Sept. 1985. Biochemical data: Oct. 1969 to Sept. 1985.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 15, 1972, at unfinished pumphouse at same site and datum. May 16, 1972 to Sept. 8, 1975, at site 0.25 mi north and upstream from pumphouse at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records poor. The reservoir is formed by a rolled earthfill dam 17,539 ft long. The spillway is located on the right bank 5.5 mi upstream from the dam and discharges into the Trinity River through a cut channel 2.0 mi long. Deliberate impoundment began July 2, 1965, and the dam was completed in Feb. 1966. The spillway is 474 ft long and has eight 40- by 24-ft radial gates and two automatically operated 40- by 8.5-ft hinged gates. Low-flow releases may be made downstream through a 5.0 foot diameter conduit through the dam. The dam is the property of Tarrant Regional Water District and was built for municipal and industrial supply and for recreational purposes. Water is diverted from the reservoir for municipal and industrial uses by lakeside developments and by the cities of Arlington, Fort Worth, Mansfield, Kemp, Trinidad, and Maba. Conservation pool storage is 637,050 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	340.0
Top of radial gates.....	325.0
Top of automatic gates.....	322.5
Top of conservation pool.....	322.0
Crest of spillway (automatic gates).....	314.0
Crest of spillway (radial gates).....	302.0
Lowest gated outlet (invert).....	263.5

COOPERATION.--Records of diversions maintained by the Tarrant Regional Water District. Capacity Table 1-C was provided by Freese and Nichols, Consulting Engineers for the Tarrant Regional Water District. A new capacity table, Table 2-C, provided by the Texas Water Development Board was put into effect Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 722,000 acre-ft, June 4, 1973, elevation, 323.24 ft; minimum contents since first appreciable storage in 1966, 332,900 acre-ft, Mar. 19, 1967, elevation, 309.42 ft using Table 1-C.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 681,200 acre-ft, Feb. 17, elevation, 323.31 ft; minimum contents, 520,900 acre-ft, Oct. 31, Nov. 1, elevation, 318.14 ft.

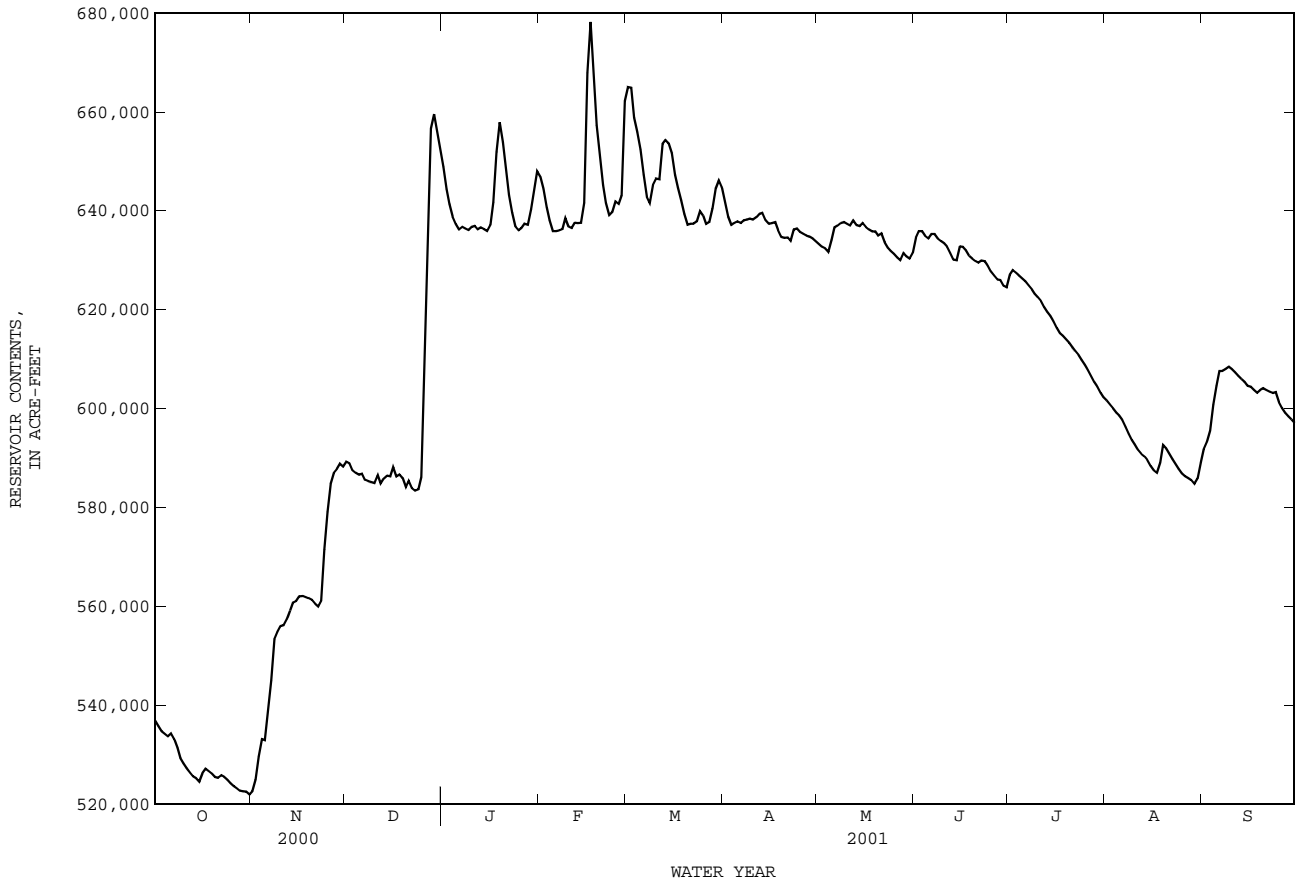
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	536800	522600	589200	648900	646900	665000	641900	633200	634600	627000	601600	591700
2	535700	524900	588900	644400	644400	664900	638800	632700	635900	628000	600800	593200
3	534700	529600	587500	641300	640700	658800	637100	632400	635900	627500	600000	595500
4	534200	533100	587000	638800	638000	655900	637500	631700	634900	626900	599200	600800
5	533700	532900	586600	637300	635900	652400	637800	634100	634400	626300	598600	604600
6	534300	539400	586800	636200	635900	647300	637500	636600	635300	625700	597700	607600
7	533100	545000	585600	636700	636000	642800	638100	637000	635300	624900	596300	607600
8	531400	553300	585300	636400	636300	641600	638200	637500	634400	624100	594900	608000
9	529300	554900	585100	636100	638500	645200	638400	637700	633900	623200	593600	608400
10	528200	556000	584900	636700	636800	646500	638200	637300	633400	622500	592700	608000
11	527200	556200	586500	636900	636500	646400	638700	637000	632800	621700	591600	607300
12	526300	557400	584800	636200	637600	653500	639400	638000	631500	620500	590800	606600
13	525600	559100	585800	636600	637500	654300	639600	637100	630100	619600	590300	606000
14	525200	560700	586400	636300	637600	653600	638100	636900	630000	618700	589600	605400
15	524500	561000	586300	635900	641600	651600	637400	637500	632800	617600	588400	604600
16	526200	562000	588100	637100	667900	647200	637500	636700	632700	616300	587500	604400
17	527100	562100	586200	641700	678200	644600	637700	636200	632000	615200	587000	603800
18	526700	561800	586600	651900	667300	642100	636100	635800	630900	614700	589000	603200
19	526200	561600	585900	657900	657300	639300	634700	635800	630300	614000	592600	603700
20	525500	561300	584100	653900	651600	637200	634500	635000	629800	613300	591900	604100
21	525300	560500	585400	648300	645200	637400	634600	635400	629500	612400	590800	603700
22	525800	559900	583900	643200	641500	637400	633900	633600	629900	611600	589700	603400
23	525500	561000	583400	639600	639100	637800	636200	632500	629800	610800	588800	603100
24	524900	571500	583600	636800	639800	639900	636400	631900	628800	609800	587800	603300
25	524200	579100	586100	636000	641900	639000	635700	631300	627700	608800	586900	601300
26	523600	584800	607500	636500	641400	637300	635300	630600	626900	607700	586300	600100
27	523200	587000	637200	637400	643100	637700	635000	630000	626100	606600	585900	599100
28	522700	587700	656600	637200	662200	640500	634800	631400	626000	605400	585500	598400
29	522600	588800	659500	640300	---	644500	634400	630800	624800	604400	584700	597800
30	522500	588200	656400	644300	---	646200	633800	630300	624500	603200	585800	597100
31	521900	---	652700	648000	---	644800	---	631500	---	602300	589100	---
MEAN	527600	558800	597400	640800	644900	646200	636900	634400	631200	616500	591500	602700
MAX	536800	588800	659500	657900	678200	665000	641900	638000	635900	628000	601600	608400
MIN	521900	522600	583400	635900	635900	637200	633800	630000	624500	602300	584700	591700
(+)	318.17	320.41	322.47	322.33	322.76	322.23	321.89	321.82	321.59	320.87	320.44	320.70
(@)	-15600	+66300	+64500	-4700	+14200	-17400	-11000	-2300	-7000	-22200	-13200	+8000
CAL YR 2000	MAX 659500	MIN 507200	(@) +122500									
WTR YR 2001	MAX 678200	MIN 521900	(@) +59600									

(+) Elevation, in feet, at end of month.

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

08063010 Cedar Creek Reservoir near Trinidad, TX--Continued



TRINITY RIVER BASIN

08063045 Richland Creek near Irene, TX

LOCATION.--Lat 31°58'37", long 96°48'52", Navarro County, Hydrologic Unit 12030108, at bridge on Farm Road 744, 0.3 mi northeast of intersection of Farm Road 744 and 1946, 2.4 mi upstream of Hackberry Creek, and 3.5 mi southeast of Irene.

DRAINAGE AREA.--69 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1998 to current year.

BIOCHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL AS CACO3 (MG/L) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED AS CA (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED AS MG (MG/L) (00925)	
JAN 31...	1600	44	440	8.1	11.5	53	10.7	99.2	2.2	202	16	77.7	2.05
APR 25...	1055	15	428	8.4	16.5	4.1	8.8	89.7	<2.0	197	22	75.5	2.06

DATE	TIME	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED AS SIO2 (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	RESIDUE AT 105 DEG. C, PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
JAN 31...	9.0	.277	1.77	186	22.7	7.6	.3	7.0	271	247	126	1.53	.129	
APR 25...	9.7	.301	1.38	175	25.7	9.7	.3	7.0	273	240	12	.772	.006	

DATE	TIME	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
JAN 31...	1.66	<.041	.22	<.060	<.018	5.7	1	.14	E1.8	50.8	<.06	<.04	<.8	
APR 25...	.778	<.041	.25	<.060	<.018	4.0	5	.10	E1.4	53.3	<.06	E.03	E.6	

DATE	TIME	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
JAN 31...	.24	1.0	<10	E.04	4.5	<.23	.4	.95	--	<1.0	<1	1.27	
APR 25...	.30	1.1	M	.08	11.9	<.01	.5	.85	<2.4	<1.0	2	1.11	

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TRINITY RIVER BASIN

08063050 Navarro Mills Lake near Dawson, TX

LOCATION.--Lat 31°57'27", long 96°41'21", Navarro County, Hydrologic Unit 12030108, in left abutment of spillway of Navarro Mills Dam on Richland Creek, 1.7 mi upstream from bridge on State Highway 31, 3.0 mi upstream from St. Louis Southwestern Railway Lines bridge, 4.2 mi upstream from Post Oak Creek, 4.6 mi north of Dawson, and 63.9 mi upstream from mouth.

DRAINAGE AREA.--320 mi<sup>2</sup>.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--Aug. 1962 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Prior to Oct. 1970, published as "Navarro Mills Reservoir".

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 8, 1962, nonrecording gage in low-water channel at same datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily contents, which are poor. The lake is formed by a rolled earthfill dam 7,570 ft long, including a 240-foot off-channel gated spillway with six 40.0- by 29.0-foot tainter gates. From Aug. 27, 1962, to Mar. 14, 1963, lake was operated as a detention basin only. Deliberate impoundment began Mar. 15, 1963, and dam was completed in Sept. 1963. Low-flow outlet works consist of two 36-inch-diameter gate-controlled conduits. Lake was built for flood control and water conservation. Capacity table prior to Sept. 1976 is based on survey made in Feb. 1956 by U.S. Army Corps of Engineers. Capacity table after Aug. 31, 1976, is based on a sedimentation survey made in Sept. 1972. Flow is affected at times by discharge from the flood-detention pools of 51 floodwater-retarding structures with a combined detention capacity of 26,160 acre-ft. These structures control runoff from 86.9 mi<sup>2</sup> in the Richland Creek drainage basin. The dam is owned by the U.S. Army Corps of Engineers. An unknown amount of water is diverted for municipal and industrial uses. Conservation pool storage is 56,963 acre-ft. Data regarding dam are given in the following table:

	Elevation (feet)
Top of dam.....	457.0
Design flood.....	451.9
Top of gates (top of flood-control storage pool).....	443.0
Top of conservation pool.....	424.5
Crest of spillway.....	414.0
Lowest gated outlet (invert).....	400.0

COOPERATION.--Capacity table furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 183,300 acre-ft, May 18, 1968, elevation, 440.36 ft; minimum since initial filling in May 1965, 32,490 acre-ft, Dec. 28, 1978, elevation, 418.89 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 137,500 acre-ft, Mar. 19, elevation, 436.14 ft; minimum contents, 44,980 acre-ft, Oct. 15, elevation, 421.99 ft.

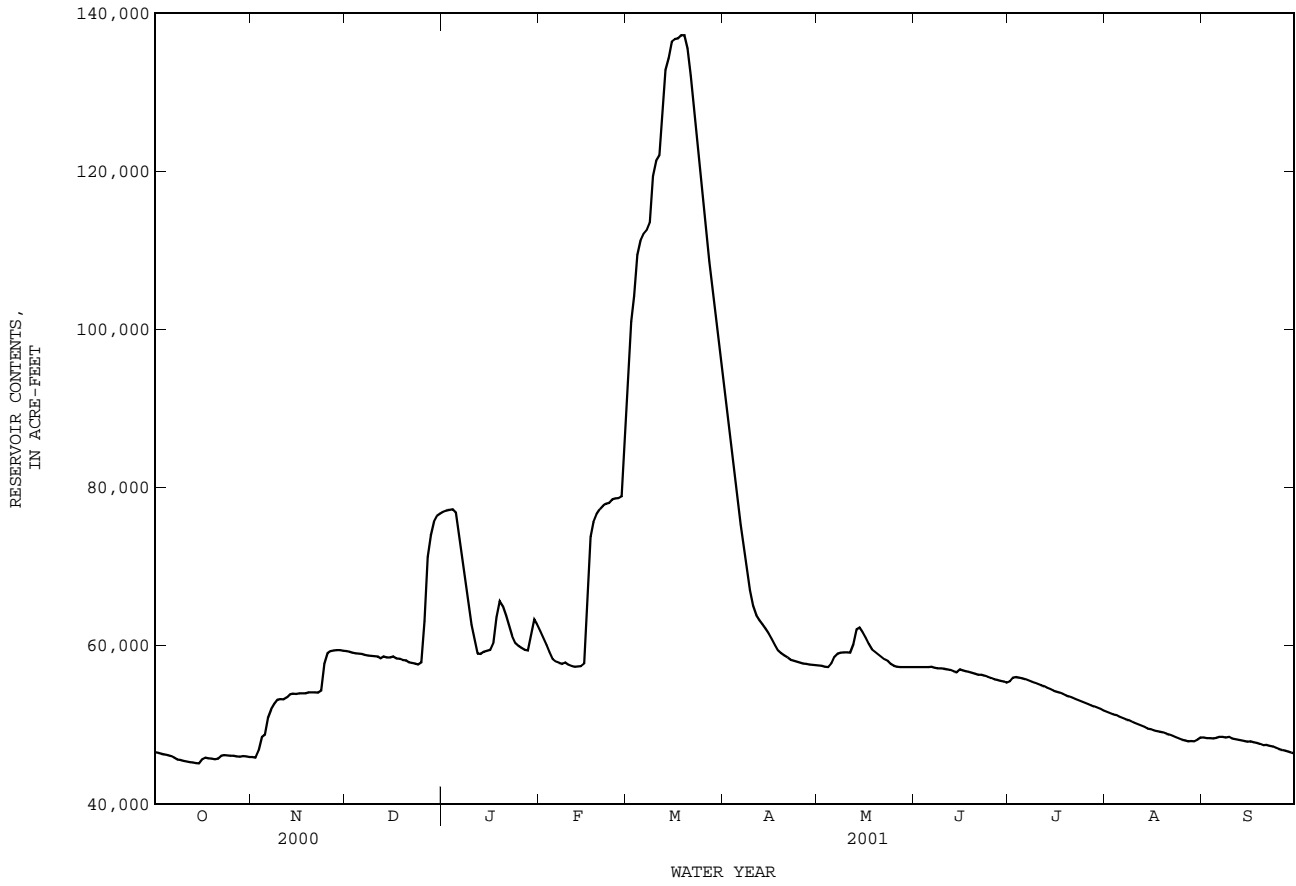
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46540	45940	59330	76950	61890	92760	92320	57500	e57300	55500	51640	48390
2	46450	45870	59240	77080	61010	101000	88820	57450	e57300	55970	51460	48330
3	46340	46770	59130	77190	60110	104200	85420	57350	e57300	56040	51320	48330
4	46250	48430	59060	77280	59200	109400	81980	57320	e57300	55970	51220	48300
5	46190	48720	59010	76860	58330	111200	78620	57810	e57300	55890	51050	48380
6	46040	50920	58970	74200	58010	112100	75330	58610	e57330	55750	50860	48490
7	45840	51980	58860	71300	57840	112600	72490	59000	e57230	55620	50720	48480
8	45630	52640	58770	68350	57700	113500	69710	59110	57150	55450	50590	48390
9	45560	53180	58710	65420	57860	119400	67040	59160	57140	55330	50400	48470
10	45470	53260	58670	62640	57600	121300	65020	59170	57090	55170	50230	48300
11	45380	53240	58660	60790	57410	122000	63880	59120	57030	55010	50050	48210
12	45300	53450	58420	58990	57340	127800	63210	60170	56940	54860	49890	48120
13	45240	53870	58630	58980	57370	132800	62750	62060	56800	54690	49720	48060
14	45160	53960	58540	59260	57440	134300	62170	62300	56670	54520	49550	47970
15	45130	53920	58520	59370	57750	136400	61550	61770	57010	54330	49460	47890
16	45640	54000	58660	59510	64560	136700	60820	61020	56910	54190	49280	47900
17	45840	53970	58390	60320	73780	136800	60070	60240	56800	54050	49210	47810
18	45790	54000	58380	63630	75650	137200	59420	59550	56700	53890	49120	47710
19	45720	54120	58190	65660	76650	137200	59060	59200	56580	53710	49060	47610
20	45670	54100	58140	65000	77260	135500	58780	58930	56450	53570	48910	47450
21	45740	54110	57930	63840	77700	132100	58530	58620	56340	53430	48760	47470
22	46100	54060	57820	62550	77930	128200	58230	58290	56340	53260	48610	47340
23	46170	54320	57750	61240	78080	124300	e58100	58060	56210	53090	48440	47270
24	46150	57700	57640	60360	78500	120500	e58000	57710	56050	52940	48300	47100
25	46090	59050	57880	59990	78620	116500	e57890	57450	55940	52780	48140	46940
26	46080	59320	63150	59720	78670	112500	57770	e57340	55790	52630	48020	46840
27	46030	59400	71220	59490	78890	108600	57710	e57300	55700	52470	47920	46740
28	45970	59440	73980	59430	85530	105700	57630	e57300	55570	52320	47940	46640
29	46070	59460	75720	61400	---	102600	57590	e57300	55470	52180	47910	46510
30	46030	59380	76400	63330	---	99200	57540	e57300	55340	52010	48140	46400
31	45950	---	76690	62730	---	95720	---	e57300	---	51810	48390	---
MEAN	45860	53750	61310	64930	67100	118700	65580	58740	56640	54140	49490	47730
MAX	46540	59460	76690	77280	85530	137200	92320	62300	57330	56040	51640	48490
MIN	45130	45870	57640	58980	57340	92760	57540	57300	55340	51810	47910	46400
(+)	422.20	424.97	428.06	425.61	429.43	430.90	424.61	424.56	424.17	423.46	422.74	422.30
(@)	-630	+13430	+17310	-13960	+22800	+10190	-38180	-240	-1960	-3530	-3420	-1990
CAL YR 2000	MAX	92550	MIN	39290	(@)	+35510						
WTR YR 2001	MAX	137200	MIN	45130	(@)	-180						

e Estimated

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

08063050 Navarro Mills Lake near Dawson, TX--Continued





TRINITY RIVER BASIN

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1969 to Sept. 1982, Oct. 1999 to current year.  
 BIOCHEMICAL DATA: Oct. 1981 to Aug. 1982, Oct. 1999 to current year.  
 PESTICIDE DATA: Aug. 2000 to Sept. 2000.

REMARKS.--Pesticide samples are composited from discrete samples collected at the surface, middle, and bottom of the reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

315730096412601 -- Navarro Mills Lk Site AC

DATE	TIME	RESER- VOIR STORAGE (AC-FT) (00054)	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARDS UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
JAN													
31-31	1505	--	--	--	--	--	--	--	--	--	--	--	--
31...	1514	62700	1.00	281	8.2	9.0	.30	11.0	96.7	--	24	42	112
31...	1519	--	10.0	281	8.2	9.0	--	11.0	96.7	--	--	--	--
31...	1525	--	20.0	281	8.2	9.0	--	11.0	96.7	--	--	--	--
31...	1532	--	27.0	281	8.1	9.0	--	11.0	96.7	--	--	--	112
APR													
25-25	1200	--	--	--	--	--	--	--	--	--	--	--	--
25...	1207	57900	1.00	337	8.2	20.0	.23	8.5	93.8	e3	e7	--	153
25...	1213	--	10.0	337	8.2	20.0	--	8.6	95.0	--	--	--	--
25...	1220	--	20.0	337	8.2	20.0	--	8.6	95.0	--	--	--	--
25...	1226	--	26.0	337	8.2	20.0	--	8.7	96.1	--	--	--	155
JUL													
24-24	1052	--	--	--	--	--	--	--	--	--	--	--	--
24...	1101	56000	1.00	280	7.2	30.0	.90	4.0	53.9	e2	0	--	106
24...	1109	--	10.0	278	7.3	30.0	--	4.4	59.3	--	--	--	--
24...	1118	--	20.0	281	7.2	30.0	--	3.6	48.5	--	--	--	--
24...	1127	--	25.0	281	7.1	30.0	--	3.5	47.2	--	--	--	104

315730096412601 -- Navarro Mills Lk Site AC

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
JAN													
31-31	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	8	40.3	2.70	10.1	.417	15.9	3.74	104	22.7	6.1	.3	7.0	162
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	10	40.5	2.70	10.2	.417	15.9	3.83	102	22.8	6.1	.3	7.0	161
APR													
25-25	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	19	56.6	2.90	9.7	.341	11.8	3.30	134	23.2	6.4	.3	6.3	197
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	21	57.3	2.94	9.8	.343	11.8	3.26	134	23.2	6.3	.3	6.2	198
JUL													
24-24	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	37.2	3.13	12.5	.530	19.8	3.69	133	22.9	7.8	.3	5.2	173
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	36.4	3.11	13.0	.554	20.6	3.81	133	22.7	8.0	.3	5.4	173



TRINITY RIVER BASIN

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

315730096412601 -- Navarro Mills Lk Site AC

DATE	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P'DE DISSOLV (UG/L) (34653)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
JAN													
31-31	<.035	<.027	.040	<.006	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.015
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
25-25	<.035	<.027	.040	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.011	<.015
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
24-24	<.035	<.027	.346	<.006	<.002	<.007	<.003	<.007	<.040	<.002	<.010	<.011	<.015
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--

315730096412601 -- Navarro Mills Lk Site AC

DATE	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JAN											
31-31	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
25-25	<.010	<.011	<.023	<.004	E.002	<.016	<.034	<.017	<.005	<.002	<.009
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24-24	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--

315706096420201 -- Navarro Mills Lk Site AR

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)
JAN							
31...		1541	1.00	281	8.2	9.0	11.0
31...		1544	10.0	281	8.2	9.0	11.0
31...		1546	17.0	281	8.2	9.0	11.0
APR							
25...		1234	1.00	340	8.4	22.5	9.0
25...		1237	10.0	337	8.2	20.0	8.4
25...		1240	18.0	337	8.2	20.5	8.5
JUL							
24...		1138	1.00	264	8.0	30.5	7.9
24...		1141	10.0	280	7.3	29.5	3.0
24...		1144	19.0	299	7.0	29.0	.6

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

315710096431301 -- Navarro Mills Lk Site BC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (PER-CENT) (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF WATER (COLS./100 ML) (31625)	FECAL STREP, KF STRP, WATER (COL/100 ML) (31673)	HARD-NESS TOTAL (MG/L) AS CACO3 (00900)	HARD-NESS NONCARB FLD. AS CACO3 (MG/L) (00904)
JAN													
31...	1605	1.00	290	8.2	9.0	.24	10.9	95.9	--	93	190	116	14
31...	1615	10.0	290	8.2	9.0	--	10.9	95.9	--	--	--	--	--
31...	1625	20.0	289	8.2	9.0	--	10.9	95.9	--	--	--	--	--
31...	1634	25.0	289	8.2	9.0	--	10.9	95.9	--	--	--	115	10
APR													
25...	1300	1.00	337	8.4	21.0	.27	9.4	106	e1	<1	--	154	22
25...	1306	10.0	337	8.3	20.5	--	8.4	93.7	--	--	--	--	--
25...	1311	23.0	341	8.3	20.5	--	8.6	95.9	--	--	--	156	21
JUL													
24...	1206	1.00	263	8.1	31.5	.46	8.4	116	e2	e0	--	99.1	--
24...	1212	10.0	263	7.9	30.0	--	7.4	99.7	--	--	--	--	--
24...	1218	20.0	279	7.3	29.5	--	2.4	32.1	--	--	--	106	--

315710096431301 -- Navarro Mills Lk Site BC

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
JAN													
31...	42.0	2.70	10.3	.415	15.6	3.74	102	23.1	6.2	.3	6.9	163	1.45
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	41.8	2.71	10.3	.417	15.7	3.70	106	23.2	6.2	.3	7.1	165	1.41
APR													
25...	56.7	2.92	9.8	.343	11.9	3.24	132	23.3	6.3	.3	5.8	195	1.79
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	57.6	2.95	10.1	.351	12.0	3.19	135	23.6	6.6	.3	5.7	199	1.78
JUL													
24...	34.5	3.16	13.1	.575	21.6	3.83	134	24.5	8.2	.3	5.1	173	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	1.32
24...	37.5	3.09	12.9	.542	20.1	3.81	131	24.2	7.9	.3	5.6	174	.046

315710096431301 -- Navarro Mills Lk Site BC

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
JAN										
31...	.120	1.57	E.038	--	.39	<.060	.019	.058	M	<3.2
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
31...	.120	1.53	E.032	--	.42	<.060	E.014	--	M	<3.2
APR										
25...	.018	1.81	<.041	--	.37	<.060	E.011	--	50	E2.8
25...	--	--	--	--	--	--	--	--	--	--
25...	.024	1.80	<.040	--	.31	<.060	E.010	--	<10	<3.0
JUL										
24...	<.006	<.050	<.040	--	.24	<.060	<.020	--	<10	<3.0
24...	.021	1.34	<.040	--	.25	<.060	<.020	--	<10	6.9
24...	.016	.062	.081	.249	.33	<.060	<.020	--	<10	29.8

TRINITY RIVER BASIN

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

315642096444401 -- Navarro Mills Lk Site CC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) SATUR-ATION (00301)	E COLI, MTEC MF (COL/100 ML) (31633)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	FECAL STREP, KF STRP (COL/100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
JAN													
31...	1655	1.00	300	8.2	9.5	.18	10.8	96.1	--	e6	31	121	11
31...	1700	10.0	300	8.2	9.5	--	10.8	96.1	--	--	--	--	--
31...	1705	15.0	300	8.2	9.5	--	10.8	96.1	--	--	--	121	12
APR													
25...	1323	1.00	342	8.5	20.0	.29	9.4	104	<1	e2	--	157	19
25...	1327	10.0	342	8.4	20.0	--	8.8	97.2	--	--	--	--	--
25...	1332	15.0	343	8.4	20.0	--	8.4	92.7	--	--	--	160	26
JUL													
24...	1239	1.00	254	8.1	31.5	.50	8.8	122	e8	e0	--	91.8	--
24...	1246	13.0	277	7.5	30.0	--	4.1	55.2	--	--	--	102	--

315642096444401 -- Navarro Mills Lk Site CC

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
JAN													
31...	43.8	2.74	10.6	.419	15.5	3.69	110	23.6	6.4	.3	7.1	172	1.61
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	43.9	2.75	10.5	.417	15.4	3.67	109	23.6	6.3	.3	7.3	172	1.62
APR													
25...	58.0	2.98	10.2	.356	12.2	3.24	138	24.1	6.6	.3	4.9	201	1.69
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	59.0	3.04	10.4	.359	12.2	3.21	134	23.9	6.5	.3	5.0	199	1.68
JUL													
24...	31.6	3.11	13.3	.603	23.0	3.69	136	24.3	8.0	.3	5.0	170	--
24...	35.9	3.09	13.2	.566	21.1	3.82	137	24.2	7.8	.3	5.7	176	--

315642096444401 -- Navarro Mills Lk Site CC

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
JAN										
31...	.142	1.75	E.038	--	.45	<.060	E.016	--	<10	<3.2
31...	--	--	--	--	--	--	--	--	--	--
31...	.142	1.77	.041	.398	.44	<.060	.019	.058	<10	<3.2
APR										
25...	.023	1.71	<.041	--	.31	<.060	<.018	--	<10	<3.2
25...	--	--	--	--	--	--	--	--	--	--
25...	.022	1.71	<.041	--	.32	<.060	E.009	--	M	<3.2
JUL										
24...	<.006	<.050	<.040	--	.25	<.060	<.020	--	<10	<3.0
24...	E.004	E.026	.052	.239	.29	<.060	<.020	--	<10	9.5

315602096470001 -- Navarro Mills Lk Site DC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT) SATUR-ATION (00301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
JAN													
31...	1719	1.00	293	8.3	10.0	10.8	97.3	1.52	.132	1.65	E.024	.43	<.060
31...	1725	6.00	293	8.3	10.0	10.8	97.3	1.53	.133	1.67	E.028	.45	<.060
APR													
25...	1406	1.00	360	8.6	21.0	10.5	118	1.70	.017	1.72	<.041	.29	<.060
25...	1411	5.00	375	8.3	19.5	8.5	92.9	1.75	.016	1.77	<.041	.29	<.060
JUL													
24...	1309	1.00	269	8.1	32.0	7.9	110	--	<.006	<.050	<.040	.24	<.060
24...	1313	4.00	274	7.9	31.5	6.7	92.6	--	--	--	--	--	--

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

315602096470001 -- Navarro Mills Lk Site DC

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
JAN			
31...	E.015	<10	E2.0
31...	E.010	<10	<3.2
APR			
25...	<.018	<10	<3.2
25...	<.018	<10	<3.2
JUL			
24...	<.020	<10	<3.0
24...	--	--	--

315706096463201 -- Navarro Mills Lk Site EC

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PERCENT SATURATION) (MG/L) (00301)	NITROGEN, DIS-SOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)
JAN													
31...	1744	1.00	336	8.3	11.0	10.5	96.8	2.00	.299	2.30	<.041	.49	<.060
31...	1749	5.00	337	8.3	11.0	10.4	95.9	1.97	.277	2.25	<.041	.42	E.033
APR													
25...	1432	1.00	344	8.5	20.5	9.9	110	1.64	.019	1.66	<.041	.34	<.060
25...	1438	4.00	343	8.5	19.5	8.6	94.0	1.65	.021	1.67	<.041	.39	<.060
JUL													
24...	1331	1.00	267	8.1	33.0	7.4	105	--	<.006	<.050	<.040	.25	<.060
24...	1335	3.00	266	8.0	32.0	6.7	93.4	--	--	--	--	--	--

315706096463201 -- Navarro Mills Lk Site EC

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
JAN			
31...	<.018	M	E2.0
31...	<.018	M	<3.2
APR			
25...	<.018	<10	<3.2
25...	<.018	<10	<3.2
JUL			
24...	<.020	<10	<3.0
24...	--	--	--

TRINITY RIVER BASIN

08063100 Richland Creek near Dawson, TX

LOCATION.--Lat 31°56'18", long 96°40'52", Navarro County, Hydrologic Unit 12030108, at downstream side of bridge on State Highway 31, 1.3 mi upstream from St. Louis Southwestern Railway Lines bridge, 1.7 mi downstream from Navarro Mills Dam, 2.5 mi upstream from Post Oak Creek, and 3.6 mi northeast of Dawson.

DRAINAGE AREA.--333 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 367.52 ft above sea level. Nov. 21, 1960, to Sept. 30, 1982, water-stage recorder at same site and at 3.00 ft higher datum. Prior to Nov. 21, 1960, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Since Mar. 15, 1963, at least 10% of contributing drainage area has been regulated. Flow may be slightly affected at times by discharge from the flood-detention pool of one floodwater-retarding structure. This structure controls runoff from a 1.28 mi<sup>2</sup> area below Navarro Mills Lake and above this station.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1961-63).--Maximum discharge, 25,500 ft<sup>3</sup>/s, July 3, 1961, gage height, 25.50 ft, from rating curve extended above 14,000 ft<sup>3</sup>/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since about 1895, about 31 ft June 19, 1929, from information by local residents. Floods in 1946 and 1957 reached a stage of about 26 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.95	18	33	555	337	1860	6.0	1.8	.49	.40	.54
2	.23	1.1	18	33	555	187	1830	5.9	1.8	.45	.45	.54
3	.23	101	18	32	550	169	1790	5.7	1.8	.37	.38	.54
4	.22	17	17	32	546	176	1750	5.5	1.8	.33	.36	.56
5	.31	1.7	18	738	442	103	1720	5.4	1.7	.33	.35	.69
6	.28	103	20	1500	157	96	1620	5.3	1.7	.31	.37	.71
7	.25	1.5	21	1470	156	94	1440	5.1	1.6	.29	.37	.63
8	.26	5.2	20	1440	156	190	1420	5.0	1.4	.28	.37	.62
9	.27	1.3	20	1420	157	268	1300	4.8	1.4	.27	.37	.61
10	.29	.52	21	1400	156	112	895	4.9	1.3	.27	.33	.65
11	.28	.33	22	1370	156	137	575	4.9	1.4	.27	.30	.63
12	.24	.39	23	793	117	332	378	15	1.3	.25	.29	.62
13	.21	.73	26	65	77	130	375	6.4	.86	.26	.28	.66
14	.21	.37	24	59	76	113	374	117	.74	.30	.27	.67
15	.20	.48	25	55	87	114	372	347	1.1	.29	.27	.65
16	.98	.43	25	53	498	103	371	345	.79	.28	.37	.67
17	.37	.28	27	461	130	101	368	343	.71	.27	.63	.66
18	.31	.28	26	763	96	100	246	226	.70	.30	.59	.63
19	.30	.32	26	762	87	609	137	122	.67	.32	.51	.63
20	.37	.25	29	919	86	1420	136	122	.66	.34	.43	.61
21	.60	.24	27	887	85	1820	136	84	.67	.38	.37	.59
22	.98	.26	27	866	85	2110	136	52	.51	.34	.31	.65
23	.85	25	25	771	87	2080	136	52	.35	.38	.56	.70
24	.73	190	24	454	88	2060	96	51	.32	.40	.44	.69
25	.79	3.4	51	251	86	2040	61	36	.32	.38	.38	.66
26	.87	1.1	424	218	85	2010	33	2.0	.29	.40	.34	.73
27	.89	.60	157	163	89	1980	6.5	1.9	.30	.47	.32	.81
28	.87	6.2	66	162	207	1970	6.3	2.5	.31	.68	.41	.83
29	1.0	17	44	225	---	1950	6.1	1.9	.32	.48	.48	.82
30	.98	18	37	371	---	1920	6.1	1.9	.32	.33	.63	.83
31	.98	---	34	558	---	1880	---	1.9	---	.30	.58	---
TOTAL	15.58	498.93	1360	18324	5652	26711	19580.0	1989.0	28.94	10.81	12.51	19.83
MEAN	.50	16.6	43.9	591	202	862	653	64.2	.96	.35	.40	.66
MAX	1.0	190	424	1500	555	2110	1860	347	1.8	.68	.63	.83
MIN	.20	.24	17	32	76	94	6.1	1.9	.29	.25	.27	.54
AC-FT	31	990	2700	36350	11210	52980	38840	3950	57	21	25	39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001z, BY WATER YEAR (WY)

	46.7	145	153	190	199	221	228	269	336	95.9	26.4	19.8
MEAN	46.7	145	153	190	199	221	228	269	336	95.9	26.4	19.8
MAX	400	1366	1050	1288	1090	971	992	980	1356	773	541	269
(WY)	1974	1968	1975	1998	1992	1970	1992	1980	1975	1968	1995	1974
MIN	.000	.000	.000	.058	.066	.22	.023	.019	.000	.000	.068	.005
(WY)	1964	1964	1964	1964	1964	1971	1964	1964	1964	1970	1981	1997

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

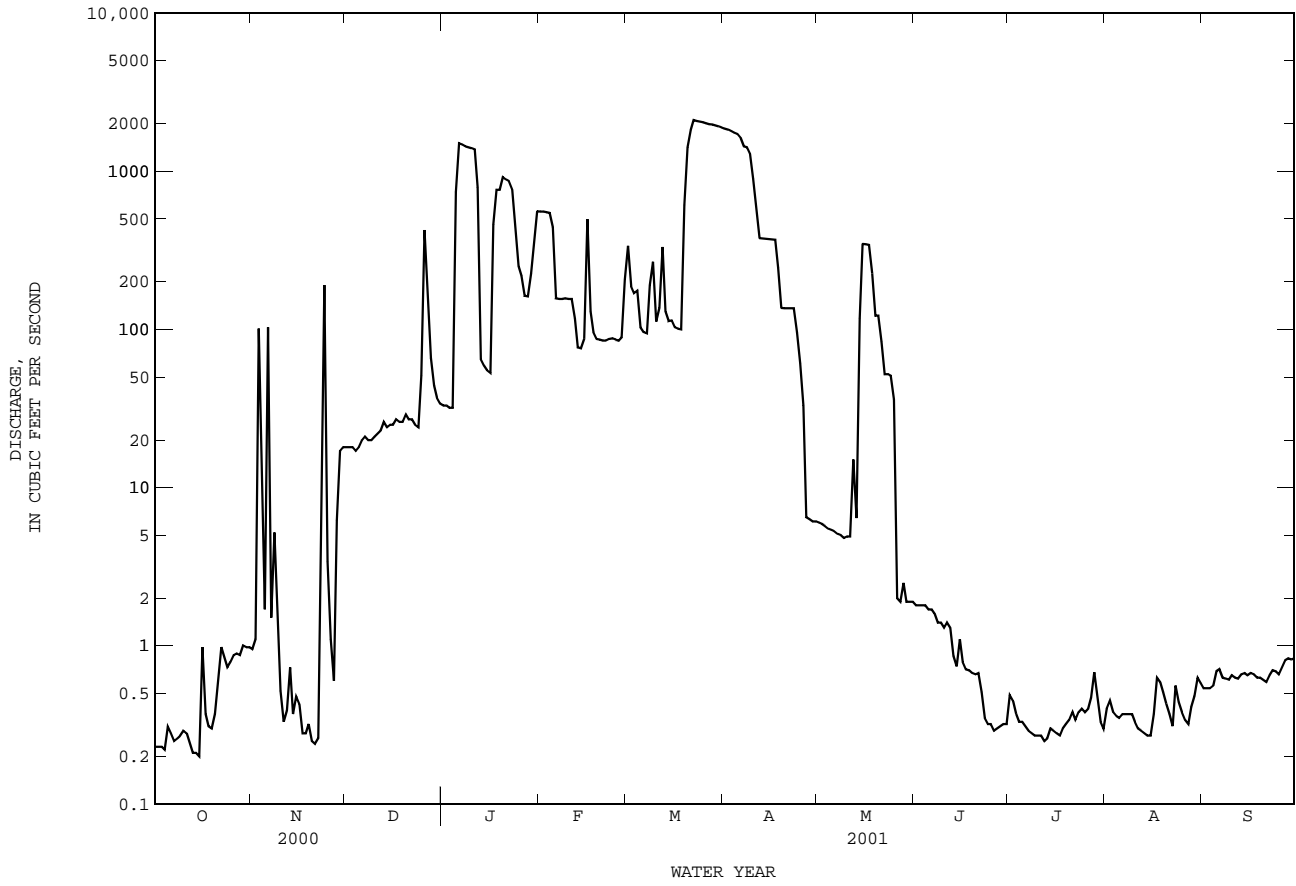
FOR 2001 WATER YEAR

WATER YEARS 1964 - 2001z

ANNUAL TOTAL	31670.66	74202.60	
ANNUAL MEAN	86.5	203	160
HIGHEST ANNUAL MEAN			561
LOWEST ANNUAL MEAN			.20
HIGHEST DAILY MEAN	2150	Jun 11	2620
LOWEST DAILY MEAN	.00	Mar 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 1	.00
MAXIMUM PEAK FLOW			2140
MAXIMUM PEAK STAGE			18.63
ANNUAL RUNOFF (AC-FT)	62820	147200	116200
10 PERCENT EXCEEDS	35	661	674
50 PERCENT EXCEEDS	.34	4.9	1.8
90 PERCENT EXCEEDS	.04	.30	.04

z Period of regulated streamflow.

08063100 Richland Creek near Dawson, TX--Continued





## TRINITY RIVER BASIN

08063100 Richland Creek near Dawson, TX--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1998 to current year.

BIOCHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1998 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
JAN 31...	1730	553	290	8.0	9.5	22	--	11.6	103	2.3	113	9	40.6	
APR 25...	1535	61	370	8.3	22.0	31	--	9.4	107	--	151	14	55.4	
JUL 24...	1145	.39	1100	7.9	30.1	--	17	6.0	80.6	<2.0	288	68	96.8	
DATE	TIME	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
JAN 31...	2.71	10.2	.418	3.85	103	22.5	6.4	.3	6.4	187	161	17	1.27	
APR 25...	3.05	12.3	.437	3.36	137	26.1	8.8	.3	6.0	225	206	30	1.81	
JUL 24...	11.2	115	2.95	2.59	220	164	112	.6	14.6	670	649	22	--	
DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)
JAN 31...	.108	1.38	E.033	.42	<.060	E.013	4.7	2	.21	4.3	42.8	<.06	.04	
APR 25...	.020	1.83	<.041	.40	<.060	E.015	2.1	4	.19	4.0	53.8	<.06	.10	
JUL 24...	<.006	E.034	<.040	.27	<.060	<.020	4.8	<1	.19	3.5	94.3	<.06	<.04	
DATE	TIME	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
JAN 31...	<.8	.15	1.6	M	E.07	1.5	<.23	.5	1.18	<2.4	<1.0	1	.82	
APR 25...	E.6	.20	1.7	M	.09	6.0	<.01	.4	.88	<2.4	<1.0	2	.98	
JUL 24...	<.8	.24	1.6	<10	<.08	40.2	<.01	1.1	<.06	<2.0	<1.0	1	2.79	

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## TRINITY RIVER BASIN

08063600 Lake Waxahachie near Waxahachie, TX

LOCATION.--Lat 32°20'30", long 96°48'18", Ellis County, Hydrologic Unit 12030109, mounted on pump intake structure, approximately 10 mi south of Waxahachie and 22 mi northwest of Ennis.

DRAINAGE AREA.--30.0 mi<sup>2</sup>.

PERIOD OF RECORD.--Apr. 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records good. The lake is formed by a rolled earthfill dam 3,200 ft long. The dam was completed Dec. 1, 1956. A 300 ft wide spillway has been cut through natural ground. The dam was built by the city of Waxahachie to impound water for municipal use. There was no known diversion from the lake during the current water year. Conservation pool storage is 10,799 acre-ft. Data regarding the dam is given in the following table:

	Elevation (feet)
Top of dam.....	543.0
Crest of spillway.....	531.0

COOPERATION.--Capacity table was furnished by the Texas Water Development Board.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 15,380 acre-ft, Apr 3, 1999, elevation, 531.96 ft; minimum contents, 10,620 acre-ft, Mar 21, 2000, elevation, 526.88 ft.

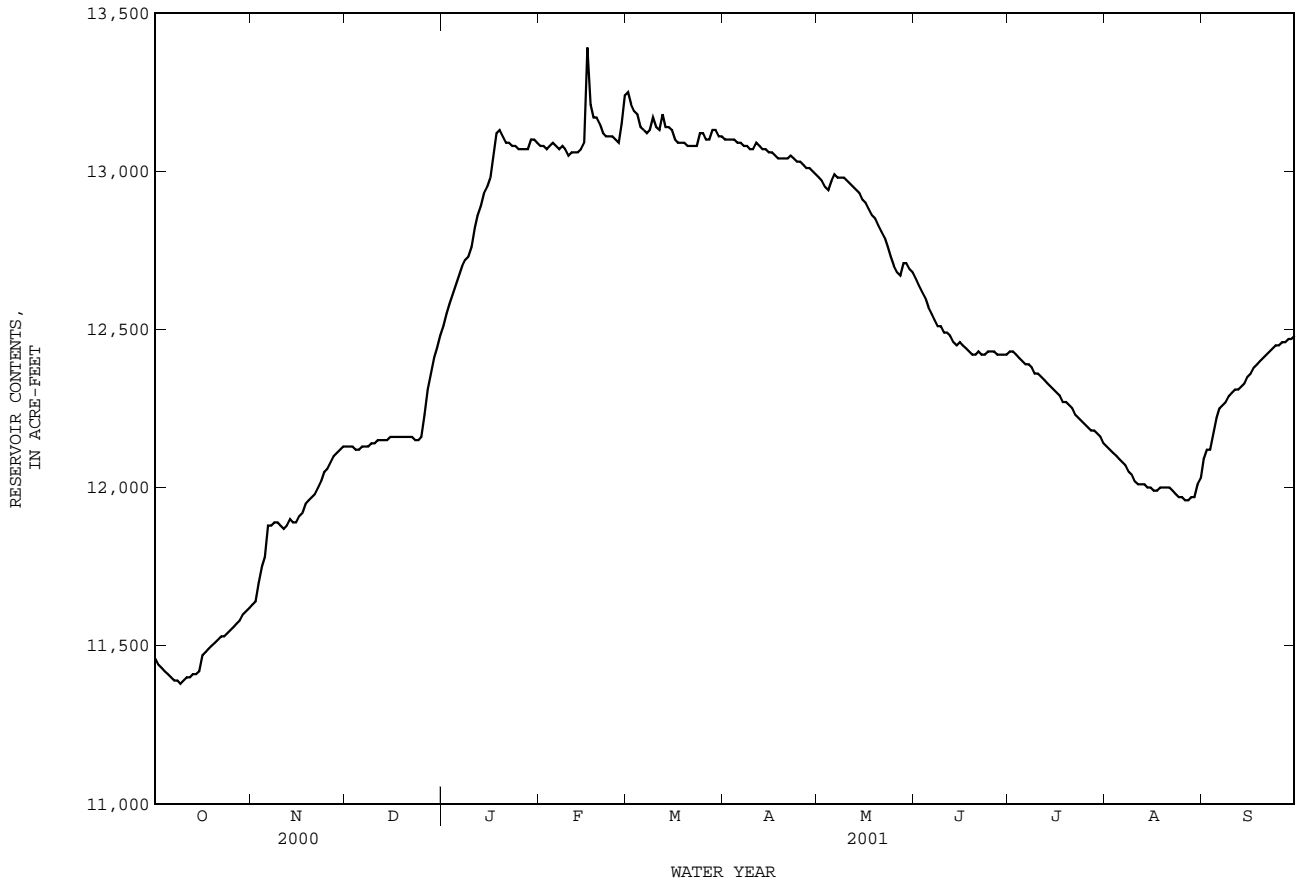
EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,560 acre-ft, Feb. 16, elevation, 531.06 ft; minimum contents, 11,380 acre-ft, Oct. 8, 9, 10, elevation, 528.18 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11460	11630	12130	12510	13080	13250	13100	12980	12660	12430	12130	12090
2	11440	11640	12130	12550	13080	13210	13100	12970	12640	12430	12120	12120
3	11430	11700	12130	12580	13070	13190	13100	12950	12620	12420	12110	12120
4	11420	11750	12120	12610	13080	13180	13100	12940	12600	12410	12100	12170
5	11410	11780	12120	12640	13090	13140	13090	12970	12570	12400	12090	12220
6	11400	11880	12130	12670	13080	13130	13090	12990	12550	12390	12080	12250
7	11390	11880	12130	12700	13070	13120	13080	12980	12530	12390	12070	12260
8	11390	11890	12130	12720	13080	13130	13080	12980	12510	12380	12050	12270
9	11380	11890	12140	12730	13070	13170	13070	12980	12510	12360	12040	12290
10	11390	11880	12140	12760	13050	13140	13070	12970	12490	12360	12020	12300
11	11400	11870	12150	12820	13060	13130	13090	12960	12490	12350	12010	12310
12	11400	11880	12150	12860	13060	13180	13080	12950	12480	12340	12010	12310
13	11410	11900	12150	12890	13060	13140	13070	12940	12460	12330	12010	12320
14	11410	11890	12150	12930	13070	13140	13070	12930	12450	12320	12000	12330
15	11420	11890	12160	12950	13090	13130	13060	12910	12460	12310	12000	12350
16	11470	11910	12160	12980	13390	13100	13060	12900	12450	12300	11990	12360
17	11480	11920	12160	13050	13210	13090	13050	12880	12440	12290	11990	12380
18	11490	11950	12160	13120	13170	13090	13040	12860	12430	12270	12000	12390
19	11500	11960	12160	13130	13170	13090	13040	12850	12420	12270	12000	12400
20	11510	11970	12160	13110	13150	13080	13040	12830	12420	12260	12000	12410
21	11520	11980	12160	13090	13120	13080	13040	12810	12430	12250	12000	12420
22	11530	12000	12160	13090	13110	13080	13050	12790	12420	12230	11990	12430
23	11530	12020	12150	13080	13110	13080	13040	12760	12420	12220	11980	12440
24	11540	12050	12150	13080	13110	13120	13030	12730	12430	12210	11970	12450
25	11550	12060	12160	13070	13100	13120	13030	12700	12430	12200	11970	12450
26	11560	12080	12230	13070	13090	13100	13020	12680	12430	12190	11960	12460
27	11570	12100	12310	13070	13150	13100	13010	12670	12420	12180	11960	12460
28	11580	12110	12360	13070	13240	13130	13010	12710	12420	12180	11970	12470
29	11600	12120	12410	13100	---	13130	13000	12710	12420	12170	11970	12470
30	11610	12130	12440	13100	---	13110	12990	12690	12420	12160	12010	12480
31	11620	---	12480	13090	---	13110	---	12680	---	12140	12030	---
MEAN	11480	11920	12190	12910	13110	13130	13060	12860	12480	12290	12020	12340
MAX	11620	12130	12480	13130	13390	13250	13100	12990	12660	12430	12130	12480
MIN	11380	11630	12120	12510	13050	13080	12990	12670	12420	12140	11960	12090
(+)	528.50	529.26	529.95	530.59	530.74	530.61	530.49	530.18	529.85	529.29	529.07	529.95
(@)	+150	+510	+350	+610	+150	-130	-120	-310	-260	-280	-110	+450
CAL YR 2000	MAX 13380	MIN 10620	(@) +1390									
WTR YR 2001	MAX 13390	MIN 11380	(@) +1010									

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

08063600 Lake Waxahachie near Waxahachie, TX--Continued



08063685 Waxahachie Creek near Waxahachie, TX

LOCATION.--Lat 32°18'27", long 96°44'19", Ellis County, Hydrologic Unit 12030109, on county road bridge, over center of channel at downstream side of bridge, 1.0 mi upstream from normal pool of Bardwell Lake, and 8.4 mi southeast of Waxahachie.

DRAINAGE AREA.-- 111 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1980 to Aug. 1982, Oct. 1985 to June 1987, and Oct. 1998 to current year.

BIOCHEMICAL DATA: Oct. 1980 to Aug. 1982, Oct. 1985 to June 1987, and Oct. 1998 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
JAN 23...	1015	161	535	7.9	7.5	--	--	10.4	87.1	2.0	206	19	78.7	
APR 18...	1430	52	660	8.2	17.5	19	--	8.5	88.1	<2.0	255	24	98.1	
JUL 10...	1430	6.8	844	7.6	27.8	--	35	--	--	2.1	195	33	74.1	
SEP 17...	1110	8.9	890	7.7	24.0	--	--	6.6	80.0	<2.0	178	20	67.3	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
JAN 23...	2.17	25.6	.778	3.76	187	45.6	14.9	.3	6.6	315	299	35	2.13	
APR 18...	2.45	41.0	1.12	3.18	231	68.2	23.6	.4	8.3	413	392	23	1.75	
JUL 10...	2.49	98.8	3.08	6.79	162	142	60.3	.5	7.9	538	510	36	4.54	
SEP 17...	2.35	112	3.64	6.28	157	189	49.8	.5	7.6	602	529	22	--	
DATE		NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM-INUM, DIS-SOLVED (MG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (MG/L AS SB) (01095)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)	BARIUM, DIS-SOLVED (MG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (MG/L AS BE) (01010)
JAN 23...	.013	2.14	E.027	.38	<.060	E.011	--	4.9	2	.16	E1.2	57.5	<.06	
APR 18...	.014	1.77	E.024	.31	<.060	E.013	--	6.0	6	1.21	E1.8	73.0	<.06	
JUL 10...	.016	4.56	E.029	.40	E.050	.044	.135	4.3	4	.28	E2.0	70.7	<.06	
SEP 17...	--	--	--	--	--	--	--	--	--	--	--	--	--	
DATE		CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 23...	.31	<.8	.30	1.8	<10	.14	16.8	<.23	5.7	1.76	--	<1.0	3	
APR 18...	.29	<.8	.57	1.7	M	.11	45.7	<.01	4.5	.73	<2.4	<1.0	8	
JUL 10...	E.03	E.4	1.04	2.8	<10	.10	6.0	<.01	7.0	2.59	<2.0	<1.0	7	
SEP 17...	--	--	--	--	<10	--	14.3	.02	--	--	--	--	--	

08063685 Waxahachie Creek near Waxahachie, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
JAN 23...	1.24
APR 18...	1.40
JUL 10...	.68
SEP 17...	--

TRINITY RIVER BASIN

08063700 Bardwell Lake near Ennis, TX

LOCATION.--Lat 32°15'00", long 96°38'49", Ellis County, Hydrologic Unit 12030109, in intake structure of Bardwell Dam on Waxahachie Creek, 5.0 mi south of Ennis, and 5.6 mi upstream from mouth.

DRAINAGE AREA.--178 mi<sup>2</sup>.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--Nov. 1965 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Prior to Oct. 1970, published as "Bardwell Reservoir".

GAGE.--Water-stage recorder. Datum of gage is sea level (U.S. Army Corps of Engineers benchmark). Prior to Apr. 25, 1966, nonrecording gage on intake structure at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records fair. The lake is formed by a rolled earthfill dam 15,400 ft long, including a 350-foot uncontrolled off-channel concrete-gravity spillway with ogee weir section. Deliberate impoundment began Nov. 20, 1965, and dam was completed Mar. 27, 1966. Controlled low-flow outlet works consists of a 10.0-foot-diameter concrete conduit with two 5.0- by 10.0-foot sluice gates. The dam is owned by the U.S. Army Corps of Engineers. The lake was built for flood control and water conservation. Capacity table is based on a 1999 TWDB survey. Runoff from 81.4 mi above Bardwell Lake is modified by Lake Waxahachie (station 08063600, conservation pool storage 10,799 acre-ft). The city of Waxahachie diverts water from Lake Waxahachie and returns an unknown amount of effluent to Waxahachie Creek. Inflow is affected at times by discharge from flood-detention pools of 23 floodwater-retarding structures with a combined detention capacity of 15,370 acre-ft. These structures control runoff from 52.4 mi<sup>2</sup> in the Chambers Creek watershed. Conservation pool storage is 46,122 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	460.0
Design flood.....	455.9
Crest of spillway (top of flood-control pool).....	439.0
Top of conservation pool.....	421.0
Lowest gated outlet (invert).....	391.0

COOPERATION.--Capacity tables furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 112,100 acre-ft, May 22, 1990, elevation, 434.54 ft; minimum contents since initial filling, 37,500 acre-ft, Dec. 8, 1999, elevation, 417.21 ft, Nov. 10, 1978, based on Oct. 1976 capacity table.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 107,100 acre-ft, Mar. 19, elevation, 434.68 ft; minimum contents, 39,520 acre-ft, Nov. 1, elevation, 418.71 ft.

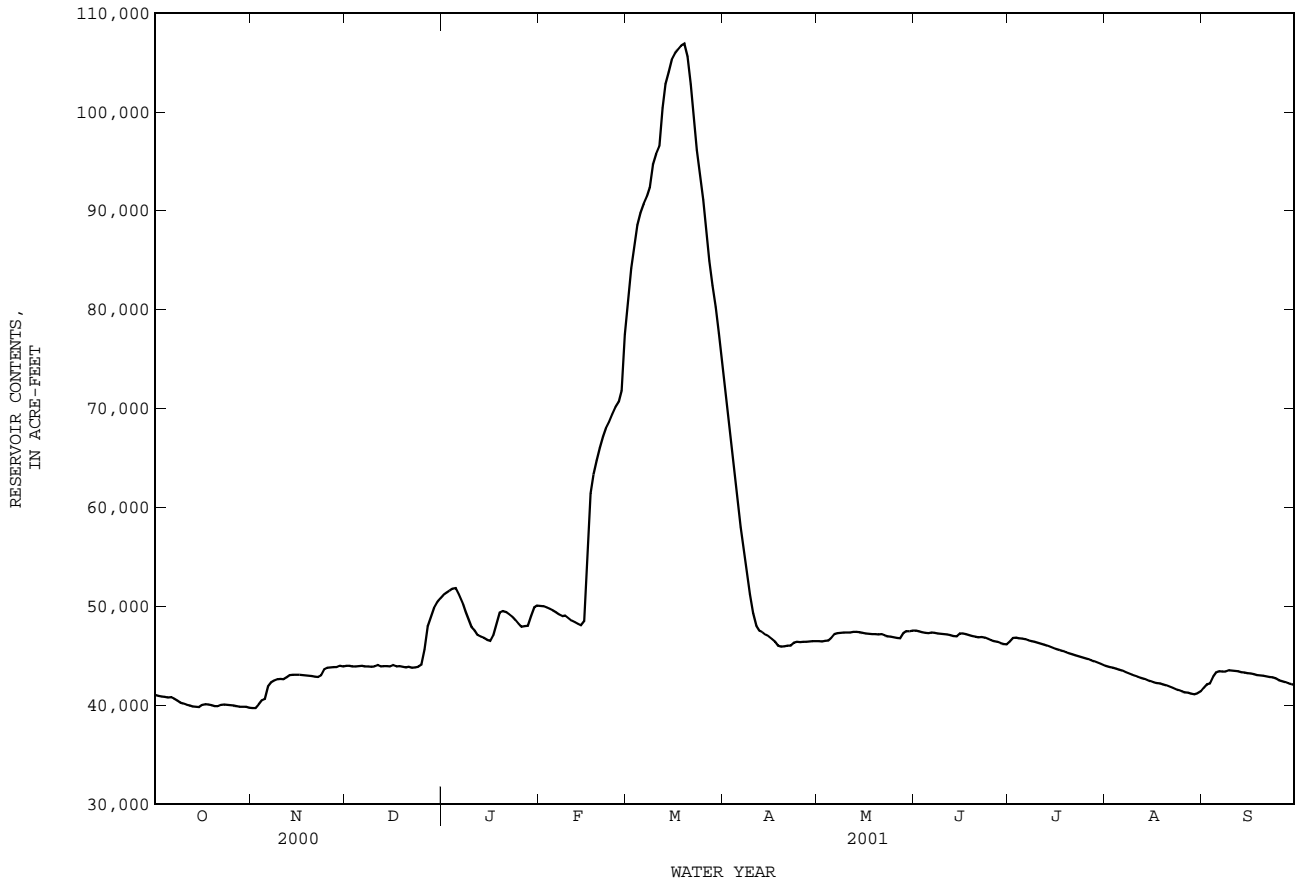
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41020	39710	43970	51120	50040	80730	71890	46470	47530	46430	43950	41730
2	40940	39700	43970	51370	49990	84180	69060	46450	47470	46780	43850	42100
3	40880	40060	43920	51550	49860	86180	66240	46490	47380	46810	43770	42190
4	40820	40480	43920	51770	49750	88530	63470	46520	47310	46760	43670	42860
5	40780	40600	43930	51850	49580	89790	60670	46840	47270	46720	43600	43320
6	40810	41860	43970	51180	49370	90690	57980	47170	47330	46650	43490	43440
7	40650	42280	43900	50440	49170	91450	55700	47270	47310	46540	43320	43390
8	40450	42500	43900	49580	48990	92340	53400	47320	47240	46460	43200	43380
9	40250	42620	43890	48720	49060	94680	51190	47330	47210	46390	43070	43520
10	40140	42640	43900	47880	48790	95750	49300	47330	47180	46310	42960	43490
11	40040	42630	44030	47540	48530	96520	48030	47330	47150	46220	42850	43450
12	39960	42810	43920	47080	48390	100400	47510	47410	47080	46120	42740	43410
13	39880	43050	43930	46910	48230	102800	47370	47400	46990	46010	42650	43340
14	39830	43070	43930	46800	48070	104000	47120	47380	46970	45870	42530	43290
15	39790	43060	43910	46590	48480	105300	46940	47310	47260	45760	42410	43230
16	40030	43080	44050	46500	54840	105900	46680	47250	47250	45670	42300	43210
17	40100	43050	43900	47050	61430	106300	46400	47210	47170	45570	42230	43120
18	40050	42990	43950	48200	63290	106700	46020	47190	47090	45480	42180	43040
19	39980	42970	43880	49350	64730	106900	45910	47190	46990	45340	42100	43000
20	39900	42940	43810	49500	66010	105600	45940	47140	46910	45250	41990	42960
21	39890	42870	43870	49410	67160	102800	46000	47190	46870	45150	41870	42910
22	40020	42850	43790	49220	67990	99380	46000	47040	46890	45040	41730	42850
23	40070	43010	43810	48950	68650	96150	46310	46970	46810	44960	41610	42800
24	40040	43630	43870	48610	69420	93760	46410	46920	46690	44850	41510	42720
25	39980	43790	44060	48210	70140	91130	46380	46850	46570	44740	41380	42530
26	39950	43830	45620	47910	70650	88120	46410	46790	46460	44640	41290	42410
27	39900	43840	47960	48000	71790	84920	46420	46760	46390	44530	41240	42320
28	39830	43860	48890	48010	77500	82440	46450	47280	46280	44420	41170	42210
29	39830	43960	49820	48990	---	80270	46470	47460	46180	44290	41090	42130
30	39830	43910	50350	49870	---	77570	46470	47470	46150	44160	41200	42030
31	39750	---	50770	50050	---	74700	---	47550	---	44040	41400	---
MEAN	40170	42590	44880	48970	57500	93740	51000	47110	46980	45610	42400	42880
MAX	41020	43960	50770	51850	77500	106900	71890	47550	47530	46810	43950	43520
MIN	39750	39700	43790	46500	48070	74700	45910	46450	46150	44040	41090	41730
(+)	418.79	420.17	422.18	421.99	428.68	428.05	421.00	421.30	420.90	420.21	419.34	419.55
(@)	-1320	+4160	+6860	-720	+27450	-2800	-28230	+1080	-1400	-2110	-2640	+630

CAL YR 2000 MAX 73800 MIN 37640 (@) +12700  
WTR YR 2001 MAX 106900 MIN 39700 (@) +960

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

08063700 Bardwell Lake near Ennis, TX--Continued





## TRINITY RIVER BASIN

08063700 Bardwell Lake near Ennis, TX--Continued

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1998 to current year.

BIOCHEMICAL DATA: Oct. 1998 to current year.

PESTICIDE DATA: July 1999 to current year.

REMARKS.--Pesticide samples are composited from discrete samples collected at the surface, middle, and bottom of the reservoir.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

## 321506096382601 -- Bardwell Lk Site AC

DATE	TIME	RESER- VOIR STORAGE (AC-FT) (00054)	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	HARD- NESS TOTAL AS CACO3) (00900)
JAN													
23...	1241	49000	1.00	349	8.0	6.0	.61	11.6	94.8	--	28	150	115
23...	1246	--	10.0	349	8.0	6.0	--	11.6	94.8	--	--	--	--
23...	1251	--	20.0	349	8.0	6.0	--	11.6	94.8	--	--	--	--
23...	1256	--	30.0	351	8.0	6.0	--	11.4	93.1	--	--	--	--
23...	1301	--	38.0	351	8.0	6.0	--	11.6	94.8	--	--	--	117
APR													
18...	1154	46000	1.00	372	8.2	19.5	.46	8.1	88.6	<1	3	--	146
18...	1158	--	10.0	371	8.2	19.0	--	7.8	84.4	--	--	--	--
18...	1203	--	20.0	372	8.1	19.0	--	7.5	81.2	--	--	--	--
18...	1207	--	30.0	373	8.0	19.0	--	7.0	75.8	--	--	--	--
18...	1212	--	37.0	380	7.3	15.0	--	1.1	10.9	--	--	--	153
JUL													
10-10	1100	--	--	--	--	--	--	--	--	--	--	--	--
10...	1109	46300	1.00	299	8.1	29.5	1.01	8.1	108	7	<1	--	95.6
10...	1118	--	10.0	299	8.1	29.0	--	7.8	103	--	--	--	--
10...	1127	--	20.0	306	7.6	28.5	--	5.8	76.1	--	--	--	--
10...	1136	--	30.0	336	7.0	27.0	--	.3	3.8	--	--	--	--
10...	1146	--	36.0	338	6.9	27.0	--	.4	5.1	--	--	--	117

## 321506096382601 -- Bardwell Lk Site AC

DATE	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L) SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L) AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	SILICA, DIS- SOLVED (MG/L) AS SIO2) (00955)
JAN													
23...	8.8	42.2	2.31	23.0	.933	29.3	4.62	--	110	36.7	12.3	.4	5.0
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	7.2	43.1	2.34	23.6	.947	29.4	4.61	--	110	36.8	12.8	.3	6.1
APR													
18...	10	54.6	2.31	16.9	.608	19.6	3.75	136	--	31.1	10.5	.3	2.4
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	10	57.0	2.49	17.0	.598	19.0	3.81	142	--	29.6	10.2	.3	8.3
JUL													
10-10	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	12	34.1	2.53	21.5	.958	31.8	3.96	84	--	34.5	12.6	.3	4.3
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	10	42.4	2.58	20.7	.836	27.1	3.88	106	--	30.2	12.2	.3	6.5



TRINITY RIVER BASIN

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

321506096382601 -- Bardwell Lk Site AC

DATE	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT GF, REC (UG/L) (82667)	PEB- ULATE WATER GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
JAN													
23...	<.004	<.035	<.027	.026	<.006	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
18...	<.004	<.035	<.027	.079	<.006	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
10-10	<.004	<.035	<.027	.041	<.006	<.002	<.007	<.003	<.007	--	<.002	<.010	<.011
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

321506096382601 -- Bardwell Lk Site AC

DATE	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JAN												
23...	E.003	<.010	<.011	<.023	<.004	.046	E.011	<.034	<.017	<.005	<.002	<.009
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
18...	E.008	<.010	<.011	<.023	<.004	.071	E.035	<.034	<.017	<.005	<.002	<.009
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
10-10	E.008	<.010	<.011	<.023	<.004	.045	.018	<.034	<.017	<.005	<.002	<.009
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--

321704096393501 -- Bardwell Lk Site BC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
JAN													
23...	1319	1.00	345	8.1	6.5	.58	12.0	99.3	--	22	52	116	6.7
23...	1324	10.0	345	8.1	6.0	--	11.8	96.4	--	--	--	--	--
23...	1329	22.0	348	8.0	6.0	--	11.6	94.8	--	--	--	115	5.1
APR													
18...	1230	1.00	375	8.1	19.0	.37	7.7	83.3	2	<1	--	150	12
18...	1235	10.0	375	8.1	18.5	--	7.5	80.3	--	--	--	--	--
18...	1241	22.0	375	8.0	18.5	--	7.1	76.1	--	--	--	150	11
JUL													
10...	1208	1.00	292	8.1	31.5	.53	7.2	99.5	2	<1	--	88.4	10
10...	1215	10.0	293	8.0	30.0	--	7.4	99.7	--	--	--	--	--
10...	1221	21.0	334	7.0	27.0	--	.3	3.8	--	--	--	114	7

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

321704096393501 -- Bardwell Lk Site BC

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
JAN													
23...	42.4	2.35	23.1	.934	29.2	4.79	--	110	36.1	12.2	.3	5.0	195
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	42.2	2.37	22.7	.920	29.0	4.60	--	110	36.3	12.4	.4	5.0	195
APR													
18...	56.2	2.37	17.0	.603	19.2	4.06	138	--	31.5	10.8	.3	2.6	211
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	56.0	2.38	16.5	.588	18.9	3.75	138	--	31.4	10.6	.3	2.8	210
JUL													
10...	31.3	2.48	22.4	1.03	34.2	4.00	78	--	35.7	13.7	.3	4.8	162
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	41.5	2.57	20.8	.849	27.6	3.81	108	--	31.7	12.4	.3	6.0	185

321704096393501 -- Bardwell Lk Site BC

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	
JAN											
23...		.651	.033	.684	<.041	--	.47	<.060	<.018	<10	<3.2
23...		--	--	--	--	--	--	--	--	--	--
23...		.699	.040	.739	E.029	--	.47	<.060	<.018	<10	E2.0
APR											
18...		.680	.029	.709	.063	.324	.39	<.060	<.018	M	<3.2
18...		--	--	--	--	--	--	--	--	--	--
18...		.696	.028	.724	.094	.329	.42	<.060	<.018	<10	<3.2
JUL											
10...		--	<.006	<.050	<.040	--	.26	<.060	<.020	<10	5.4
10...		--	<.006	<.050	<.040	--	.25	<.060	<.020	<10	58.9
10...		--	<.006	<.050	.176	.285	.46	<.060	<.020	560	712

321758096412901 -- Bardwell Lk Site DC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	E COLI, MTEC MF (COL/ 100 ML) (31633)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	FECAL STREP, KF STRP WATER (COL/ 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
JAN													
23...	1407	1.00	378	8.2	7.5	.37	12.3	104	--	24	44	132	10
23...	1412	6.00	366	8.2	7.0	--	12.3	103	--	--	--	126	8.3
APR													
18...	1336	1.00	398	8.4	19.0	.27	9.2	99.6	2	<1	--	160	14
18...	1342	6.00	398	8.3	18.5	--	9.6	103	--	--	--	160	14
JUL													
10...	1253	1.00	294	8.1	32.0	.38	7.5	105	2	<1	--	87.9	12
10...	1300	5.00	292	8.0	31.5	--	6.8	94.0	--	--	--	86.7	11

321758096412901 -- Bardwell Lk Site DC

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA- LINITY WAT DIS FIX END FIELD CACO3 (MG/L) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
JAN													
23...	49.2	2.30	22.0	.833	25.8	4.37	--	120	36.5	12.7	.3	5.0	210
23...	46.7	2.31	22.2	.862	26.8	4.56	--	120	35.8	12.1	.3	5.0	204
APR													
18...	60.0	2.47	19.7	.677	20.6	3.91	146	--	33.7	11.9	.3	2.7	225
18...	60.2	2.46	18.9	.651	19.9	4.00	147	--	34.6	12.1	.3	2.9	226
JUL													
10...	31.1	2.49	23.5	1.09	35.4	4.07	76	--	36.3	13.8	.3	5.1	162
10...	30.7	2.46	23.1	1.08	35.4	4.04	76	--	36.3	13.8	.3	5.0	161

TRINITY RIVER BASIN

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

321758096412901 -- Bardwell Lk Site DC

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JAN									
23...	.925	.049	.974	<.041	.41	<.060	<.018	<10	<3.2
23...	.861	.050	.911	<.041	.41	<.060	<.018	<10	<3.2
APR									
18...	.650	.020	.670	<.041	.33	<.060	<.018	<10	<3.2
18...	.666	.021	.687	<.041	.33	<.060	<.018	<10	<3.2
JUL									
10...	--	<.006	E.024	<.040	.29	<.060	<.020	<10	<3.0
10...	--	<.006	<.050	<.040	.28	<.060	<.020	<10	<3.0

321830096404001 -- Bardwell Lk Site CC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (MG/L) (00301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)
JAN													
23...	1346	1.00	340	8.1	7.5	.55	12.2	103	.911	.109	1.02	<.041	.45
23...	1350	4.00	339	8.2	7.5	--	12.2	103	--	--	--	--	--
APR													
18...	1257	1.00	372	8.3	18.5	.26	8.8	94.3	.655	.027	.682	E.031	.37
18...	1307	4.00	373	8.2	18.5	--	8.5	91.1	--	--	--	--	--
JUL													
10...	1233	1.00	290	8.2	31.5	.35	7.4	102	--	<.006	<.050	<.040	E.06
10...	1238	4.00	297	8.0	30.5	--	6.8	92.4	--	--	--	--	--

321830096404001 -- Bardwell Lk Site CC

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JAN				
23...	<.060	<.018	<10	E1.8
23...	--	--	--	--
APR				
18...	<.060	E.016	M	<3.2
18...	--	--	--	--
JUL				
10...	E.032	<.020	<10	<3.0
10...	--	--	--	--

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TRINITY RIVER BASIN

08063800 Waxahachie Creek near Bardwell, TX

LOCATION.--Lat 32°14'36", long 96°38'24", Ellis County, Hydrologic Unit 12030109, on left bank at downstream side of highway embankment near left end of bridge on county road, 0.8 mi downstream from Bardwell Dam, 3.6 mi southeast of Bardwell, 3.8 mi downstream from bridge on State Highway 34, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--178 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 360.18 ft above sea level (U.S. Army Corps of Engineers benchmark). Prior to Oct. 2, 1998, datum was 370.18 ft above sea level. Satellite telemeter at station.

REMARKS.--Records fair. Since Nov. 1965, at least 10% of contributing drainage area has been regulated by. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--2 years (water years 1964-65), 32.8 ft<sup>3</sup>/s (23,720 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1964-65).--Maximum discharge 2,960 ft<sup>3</sup>/s Feb. 9, 1965 (gage height, 17.55 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1944, about 23 ft in 1944 and 1945, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.03	.23	.55	162	e.50	1430	.38	.03	.16	.00	.16
2	.00	.04	.20	.52	162	e.70	1410	.36	.03	.13	.00	.25
3	.00	.37	.20	.48	162	e.60	1390	.34	.03	.04	.00	.07
4	.00	.44	.19	.46	160	.56	1380	.35	.03	.03	.00	.17
5	.00	.44	.19	210	158	.36	1360	.47	.03	.01	.00	.13
6	.00	.47	.30	425	159	.28	1240	.45	.03	.01	.00	.08
7	.00	.40	.44	418	159	.25	1060	.36	.04	.00	.00	.04
8	.00	.39	.44	411	159	.68	1050	.33	.04	.00	.00	.03
9	.00	.38	.44	405	159	.67	984	.32	.04	.00	.00	.07
10	.00	.37	.44	403	158	.37	746	.30	.03	.00	.00	.04
11	.00	.36	.44	400	158	.34	496	.29	.03	.00	.00	.02
12	.00	.38	.42	248	158	e.40	241	.27	.03	.00	.00	.01
13	.00	.37	.55	150	158	e.50	146	.26	.03	.00	.00	.00
14	.00	.31	.54	150	158	.63	146	.26	.05	.00	.00	.00
15	.00	.30	.53	150	162	.54	144	.25	.15	.00	.00	.00
16	.09	.30	.49	54	e162	.37	144	.23	.06	.00	.00	.00
17	.00	.30	.43	68	e162	.27	145	.23	.03	.00	.00	.00
18	.00	.30	.41	145	e50	.24	82	.57	.03	.00	.00	.00
19	.00	.30	.38	193	.35	321	.35	.20	.03	.00	.00	.00
20	.00	.29	.38	279	.25	1010	.30	.07	.03	.00	.00	.00
21	.07	.28	.30	284	.25	1460	.27	.04	.04	.00	.00	.00
22	.28	.27	.26	288	.19	1580	.27	.04	.04	.00	.00	.00
23	.13	.35	.26	286	.18	1550	.32	.04	.02	.00	.00	.00
24	.01	.46	.25	286	.20	1540	.26	.03	.01	.00	.00	.00
25	.01	.37	.67	283	.19	1530	.21	.03	.01	.00	.00	.00
26	.02	.30	e.70	164	.17	1520	.17	.03	.01	.00	.00	.00
27	.02	.27	e.80	82	e.20	1500	.17	.03	.01	.00	.00	.00
28	.02	.25	.92	82	e.40	1500	.62	.25	.01	.00	.00	.00
29	.04	.32	.74	84	---	1500	.43	.18	.01	.00	.00	.00
30	.02	.26	.61	128	---	1470	.39	.07	.03	.00	.11	.00
31	.03	---	.57	163	---	1450	---	.03	---	.00	.06	---
TOTAL	0.74	9.67	13.72	6241.01	2768.38	17939.26	13597.76	7.06	0.99	0.38	0.17	1.07
MEAN	.024	.32	.44	201	98.9	579	453	.23	.033	.012	.005	.036
MAX	.28	.47	.92	425	162	1580	1430	.57	.15	.16	.11	.25
MIN	.00	.03	.19	.46	.17	.24	.17	.03	.01	.00	.00	.00
AC-FT	1.5	19	27	12380	5490	35580	26970	14	2.0	.8	.3	2.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001z, BY WATER YEAR (WY)

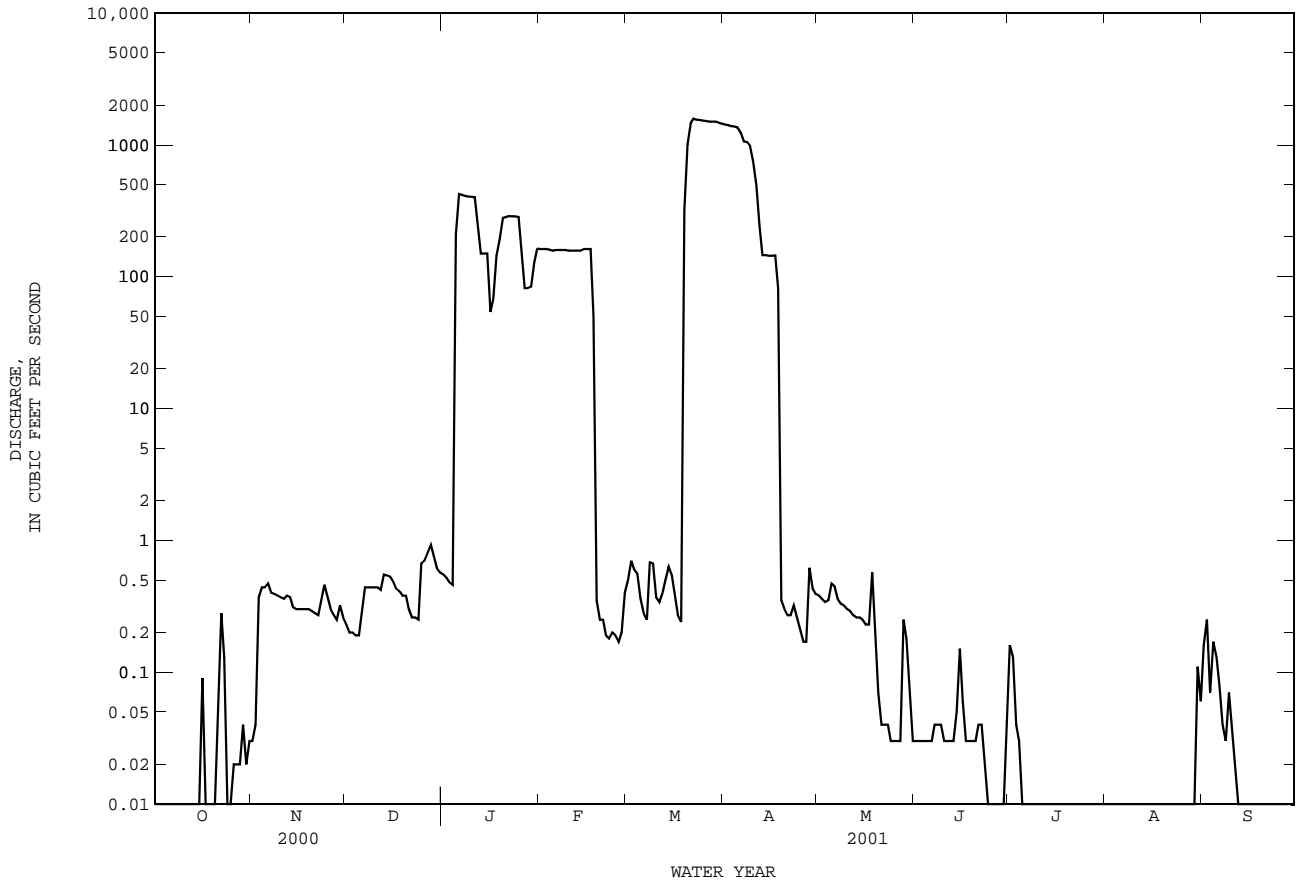
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	20.5	79.3	90.9	129	113	172	132	163	194	26.4	4.65	6.13																										
MAX	299	723	603	921	605	710	590	827	773	370	71.8	178																										
(WY)	1974	1992	1999	1998	1992	1997	1977	1973	1989	1981	1973	1976																										
MIN	.000	.014	.018	.022	.022	.024	.11	.11	.001	.000	.000	.000																										
(WY)	1967	1970	1990	1967	1967	1967	1996	1996	1996	1966	1966	1966																										

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1966 - 2001z
ANNUAL TOTAL	25138.08	40580.21	
ANNUAL MEAN	68.7	111	
HIGHEST ANNUAL MEAN			93.9
LOWEST ANNUAL MEAN			318
HIGHEST DAILY MEAN	1340	Jun 17	1880
LOWEST DAILY MEAN	.00	Aug 14	.063
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 19	.00
MAXIMUM PEAK FLOW			1600
MAXIMUM PEAK STAGE			24.56
ANNUAL RUNOFF (AC-FT)	49860	80490	28.13
10 PERCENT EXCEEDS	86	260	318
50 PERCENT EXCEEDS	.08	.25	1.1
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated  
z Period of regulated streamflow.

08063800 Waxahachie Creek near Bardwell, TX--Continued





TRINITY RIVER BASIN

08063800 Waxahachie Creek near Bardwell, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1998 to current year.

BIOCHEMICAL DATA: Oct. 1980 to Sept. 1982, Oct. 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, (PER-CENT SATUR-ATION) (00301)	OXYGEN BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)
JAN 23...	1230	283	352	8.0	6.0	--	--	12.3	99.8	2.0	115	5	41.9
APR 18...	1215	144	370	8.5	19.0	20	--	9.2	98.2	--	149	10	55.6
JUL 10...	1035	e.02	568	7.3	27.3	--	10	--	--	2.0	181	--	64.9
DATE	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) (39086)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDEED (MG/L) (00530)	NITRO-GEN, DIS-SOLVED (MG/L) (00618)
JAN 23...	2.38	22.9	.933	4.60	109	36.5	12.3	.4	5.8	208	196	16	.706
APR 18...	2.35	17.4	.620	3.80	139	31.3	10.6	.3	2.2	224	210	16	.692
JUL 10...	4.67	46.1	1.49	3.68	196	37.4	31.1	.3	9.2	339		15	.059
DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L) (00660)	CARBON, ORGANIC TOTAL (MG/L) (00680)	ALUM-INUM, DIS-SOLVED (MG/L) (01106)	ANTI-MONY, DIS-SOLVED (MG/L) (01095)	ARSENIC DIS-SOLVED (MG/L) (01000)	BARIIUM, DIS-SOLVED (MG/L) (01005)
JAN 23...	.042	.748	E.039	--	.44	<.060	<.018	--	5.6	6	.26	2.9	55.6
APR 18...	.028	.720	.126	.352	.48	<.060	<.018	--	5.7	9	.34	2.5	63.2
JUL 10...	.007	.066	.182	.544	.73	.077	.066	.202	11	4	.10	9.9	63.4
DATE	BERYL-LIUM, DIS-SOLVED (UG/L) (01010)	CADMIUM, DIS-SOLVED (UG/L) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L) (01030)	COBALT, DIS-SOLVED (UG/L) (01035)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGA-NESE, DIS-SOLVED (UG/L) (01056)	MERCURY (UG/L) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L) (01060)	NICKEL, DIS-SOLVED (UG/L) (01065)	SELE-NIUM, DIS-SOLVED (UG/L) (01145)	SILVER, DIS-SOLVED (UG/L) (01075)
JAN 23...	<.06	.14	<.8	.16	2.2	20	.73	1.6	<.23	3.0	4.04	--	<1.0
APR 18...	<.06	.04	<.8	.20	1.6	<10	.14	.7	<.01	3.2	1.05	<2.4	<1.0
JUL 10...	<.06	<.04	.9	.41	.7	10	E.05	--	<.01	.7	1.32	<2.0	<1.0
DATE	ZINC, DIS-SOLVED (UG/L) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L) (22703)											
JAN 23...	3	.79											
APR 18...	2	.91											
JUL 10...	2	.30											

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TRINITY RIVER BASIN

08064100 Chambers Creek near Rice, TX

LOCATION.--Lat 32°11'54", long 96°31'12", Navarro County, Hydrologic Unit 12030109, on downstream side of highway embankment 20 ft to left of left end of bridge on Farm Road 1126, 3.6 mi downstream from Oak Branch, 3.9 mi upstream from Cummins Creek, 4.2 mi upstream from bridge on Interstate Highway 45, 5.0 miles downstream from Waxahachie Creek, and 3.4 mi southwest of Rice.

DRAINAGE AREA.--807 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 340.00 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair, except those for daily discharges less than 5.0 ft<sup>3</sup>/s, which are poor. Since installation of gage in Oct. 1984, at least 10% of contributing drainage area has been regulated. Flood releases from Bardwell Lake will sustain flows at this site from time to time. In addition, flow is affected at times by discharge from the flood-detention pools of numerous floodwater-retarding structures in the drainage basin above this station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood information for the next downstream station, Chambers Creek near Corsicana, (08064500 indicates that the maximum stage since at least 1870 occurred in Aug. 1887, and that other significant floods occurred in Dec. 1913, May 1944, and May 1958. Stages for these floods are unknown, but over the years a levee system has been developed along the main channel to limit cropland flooding.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	55	369	618	6270	2250	92	68	21	.21	.22
2	.00	.00	49	286	514	5700	2090	89	58	560	.19	.20
3	.00	.00	45	224	458	4000	2010	87	51	543	.18	.21
4	.00	.00	43	193	417	3780	1960	83	49	197	.17	.50
5	.00	.00	41	257	386	2040	1900	126	45	103	.17	134
6	.00	425	41	636	366	1150	1820	525	42	64	.18	339
7	.00	1190	39	619	350	843	1530	295	40	47	.18	194
8	.00	298	38	597	342	823	1480	335	39	37	.15	83
9	.00	305	38	572	343	3440	1430	228	39	32	.11	52
10	.00	151	38	565	341	2370	1170	163	39	28	.10	49
11	.00	98	37	900	319	1050	867	131	39	23	.09	78
12	.00	82	37	808	346	4650	777	125	37	17	.09	46
13	.00	152	38	439	350	5290	496	206	35	12	.10	34
14	.00	130	41	400	365	1930	418	138	33	8.3	.10	26
15	.00	103	40	370	464	1560	393	109	36	5.9	.09	18
16	.00	78	45	282	1460	954	373	95	37	3.9	.09	16
17	.00	65	49	418	2150	677	346	85	35	2.5	.09	14
18	.00	59	46	2070	2180	558	304	77	33	1.7	.11	8.9
19	.00	56	43	2140	1920	666	154	72	29	1.3	.19	6.3
20	.00	53	41	1250	1530	1390	145	68	27	.99	.19	4.1
21	.00	49	42	822	1100	1930	141	65	26	.78	.14	3.1
22	.00	45	44	681	793	2130	137	61	25	.64	.13	2.2
23	.00	44	41	606	622	2090	136	57	27	.52	.12	2.2
24	.00	366	41	560	552	2180	143	54	27	.44	.12	1.6
25	.00	199	45	544	488	3160	130	52	26	.38	.11	1.1
26	.00	106	2080	439	393	2810	118	50	24	.33	.10	.74
27	.00	75	4480	271	617	2220	110	53	21	.30	.10	.52
28	.00	64	2010	264	6640	2910	104	295	17	.27	.10	.48
29	.00	75	1580	1290	---	3560	100	268	15	.27	.10	.42
30	.00	70	955	1800	---	2740	96	93	14	.26	.14	.37
31	.00	---	535	937	---	2530	---	71	---	.23	.21	---
TOTAL	0.00	4338.00	12697	21609	26424	77401	23128	4248	1033	1713.01	4.15	1116.16
MEAN	.000	.145	.410	.697	.944	2497	.771	.137	34.4	55.3	.13	37.2
MAX	.00	1190	4480	2140	6640	6270	2250	525	68	560	.21	339
MIN	.00	.00	.37	.193	.319	.558	.96	.50	.14	.23	.09	.20
AC-FT	.00	8600	25180	42860	52410	153500	45870	8430	2050	3400	8.2	2210

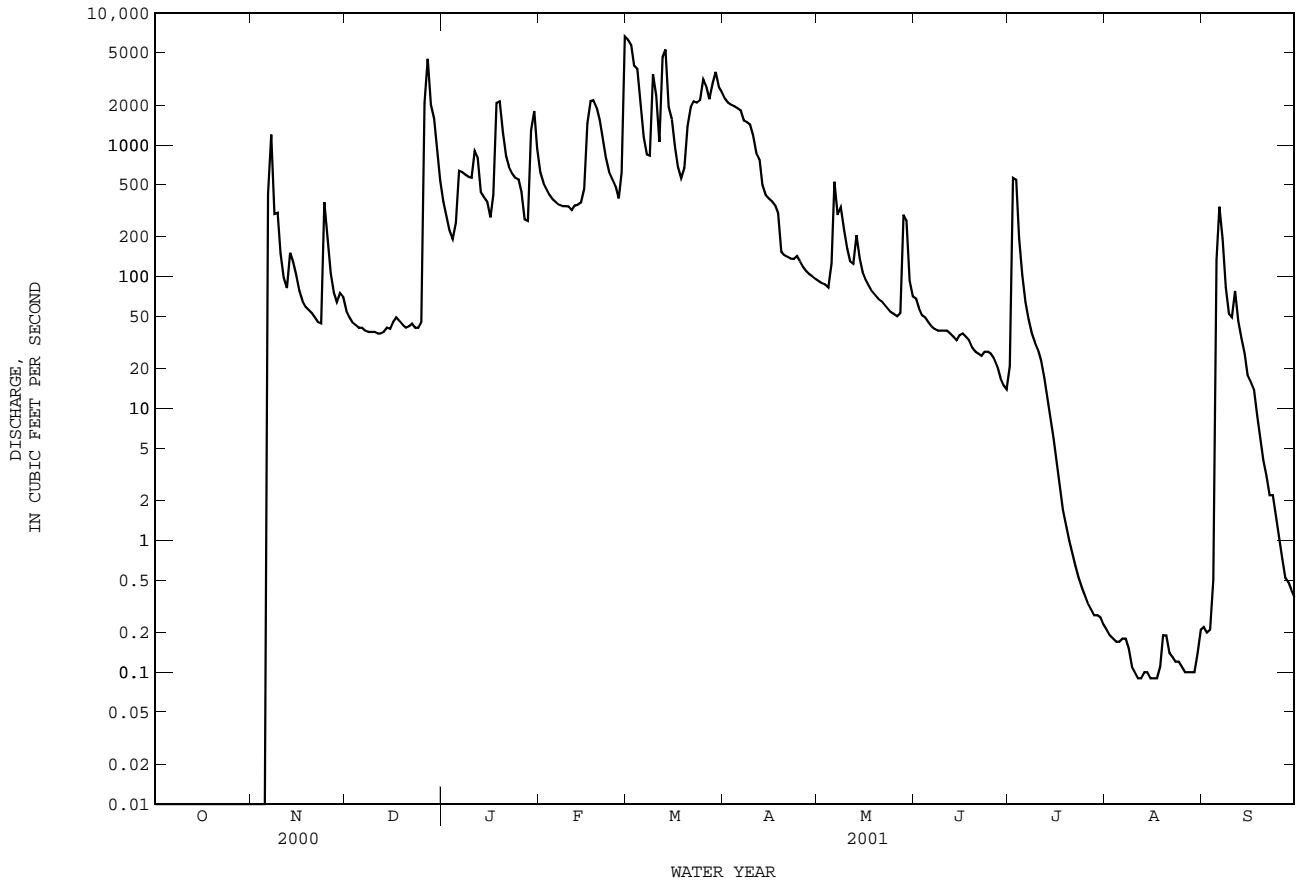
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	318	374	884	585	808	859	548	724	657	47.7	33.7	26.0						
MAX	1499	2002	3579	2393	2450	2497	2218	2932	2560	194	185	149						
(WY)	1986	1999	1992	1998	1997	2001	1995	1989	1986	1989	1995	1991						
MIN	.000	.000	1.45	4.66	5.16	6.35	12.2	1.34	.051	.081	.000	.000						
(WY)	1989	2000	1989	1996	1996	1996	1996	1996	1996	1988	1988	1985						

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1984 - 2001
ANNUAL TOTAL	91847.22	173711.32	
ANNUAL MEAN	251	476	
HIGHEST ANNUAL MEAN			487
LOWEST ANNUAL MEAN			1263
HIGHEST DAILY MEAN	7310 Jun 6	6640 Feb 28	12.9 1996
LOWEST DAILY MEAN	.00 Aug 8	.00 Oct 1	22700 Dec 21 1991
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 8	.00 Oct 1	.00 Aug 6 1985
MAXIMUM PEAK FLOW		8330 Feb 28	.00 Aug 6 1985
MAXIMUM PEAK STAGE		28.66 Feb 28	Jun 6 1986
ANNUAL RUNOFF (AC-FT)	182200	344600	b43400 Dec 21 1991
10 PERCENT EXCEEDS	785	1810	32.57
50 PERCENT EXCEEDS	8.4	59	352900
90 PERCENT EXCEEDS	.00	.05	1220
			43
			.07

b From rating curve extended above 15,000 ft<sup>3</sup>/s on basis of velocity-area study.

08064100 Chambers Creek near Rice, TX--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1983 to current year.  
 BIOCHEMICAL DATA: Oct. 1983 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1983 to Dec. 1993 (local observer), Jan. 1994 to current year.  
 WATER TEMPERATURE: Oct. 1983 to Dec. 1993 (local observer), Jan. 1994 to current year.

INSTRUMENTATION.--Water-quality monitor since Jan. 1994.

REMARKS.--Records good. 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 a regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. New regression equations were developed based on data from water years 1991 to 2000. The standard error of estimate for dissolved solids is 14%, chloride is 35%, sulfate is 24% and for hardness is 13%. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request. National water-quality assessment program data are included in this record.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,510 microsiemens/cm, Nov. 21, 1988; minimum, 100 microsiemens/cm, Nov. 11, 13, 14, 1998.  
 WATER TEMPERATURE: Maximum daily, 38.0°C, Aug. 16, 1987; minimum daily, 0.0°C, Feb. 7, 1989.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,940 microsiemens/cm, Sept. 5; minimum, 224 microsiemens/cm, Sept. 5.  
 WATER TEMPERATURE: Maximum, 33.6°C, July 31; minimum, 2.2°C, Jan. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, (PER-CENT SATUR-ATION) (MG/L) (00310)	OXYGEN BIO-CHEM-ICAL, 5 DAY AS (MG/L) (00310)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)
NOV 29...	0730	63	505	8.0	11.3	71	--	8.7	79	<2.0	180	--	65.9
FEB 07...	0740	352	423	8.3	10.7	27	--	9.9	90	2.6	160	19	60.3
APR 03...	1400	2000	392	8.1	14.8	42	--	10.0	99	<2.0	160	15	58.3
MAY 02...	0745	89	690	8.0	23.3	33	--	6.0	71	2.1	240	63	87.7
JUL 25...	1050	.38	880	7.5	29.3	--	36	2.8	37	2.6	260	80	92.2
SEP 10...	1245	43	438	7.9	26.1	--	--	5.6	69	<2.0	160	60	58.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) (39086)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, DIS-SOLVED (MG/L) (00618)
NOV 29...	3.59	29.9	1.0	4.13	--	60.0	21.7	.5	9.3	315		120	1.33
FEB 07...	2.78	22.3	.8	3.79	144	43.3	13.9	.4	5.0	294	242	47	1.01
APR 03...	2.56	17.6	.6	3.62	141	35.7	11.0	.3	5.9	240	224	64	.920
MAY 02...	5.20	43.1	1	2.77	178	106	36.8	.4	6.0	433	397	60	--
JUL 25...	6.60	75.7	2	5.26	180	141	75.4	.5	9.8	543		43	--
SEP 10...	3.09	22.7	.8	4.18	98	81.6	14.6	.4	11.3	292	254	158	--

08064100 Chambers Creek near Rice, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, TOTAL ORGANIC (MG/L AS C) (00680)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BIARIUM, DIS- SOLVED (UG/L AS BA) (01005)
NOV 29...	.015	1.34	<.041	--	.45	E.043	.029	.089	8.8	<1	.24	5.5	57.4
FEB 07...	.024	1.03	<.041	--	.39	<.060	<.018	--	5.9	<1	.21	2.1	53.0
APR 03...	.027	.947	.065	.49	.56	<.060	E.013	--	4.9	--	--	--	--
MAY 02...	E.004	.361	<.041	--	.29	<.060	<.018	--	4.1	2	.18	E2.0	72.8
JUL 25...	<.006	<.050	<.040	--	.36	<.060	<.020	--	8.3	<1	.25	3.5	94.5
SEP 10...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
NOV 29...	<.06	E.03	<.8	.39	2.4	<10	E.04	10.1	<.23	2.2	2.21	E1.7	<1.0
FEB 07...	<.06	E.03	<.8	.25	1.9	<10	<.08	2.9	<.23	2.5	1.75	--	<1.0
APR 03...	--	--	--	--	--	<10	--	E1.8	--	--	--	--	--
MAY 02...	<.06	E.02	<.8	.37	2.1	<10	E.07	9.1	<.01	2.6	.76	<2.4	<1.0
JUL 25...	<.06	E.03	<.8	.46	3.2	<10	<.08	--	<.01	7.5	1.74	<2.0	<1.0
SEP 10...	--	--	--	--	--	M	--	12.3	--	--	--	--	--

DATE	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
NOV 29...	3	1.57
FEB 07...	2	1.26
APR 03...	--	--
MAY 02...	3	2.37
JUL 25...	3	1.69
SEP 10...	--	--

## TRINITY RIVER BASIN

08064100 Chambers Creek near Rice, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

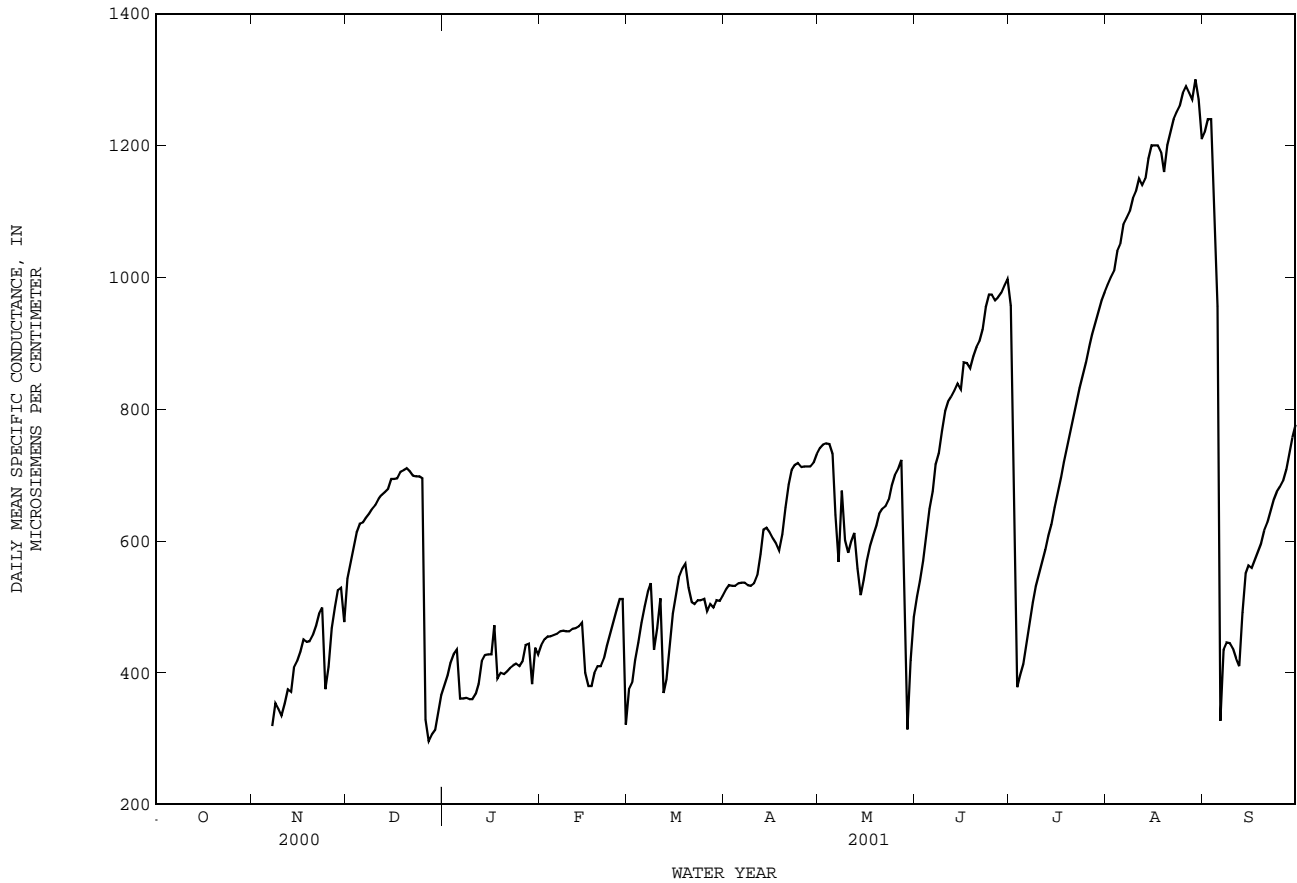
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	563	507	543	387	377	381
2	---	---	---	---	---	---	573	562	566	403	387	396
3	---	---	---	---	---	---	604	573	588	421	403	415
4	---	---	---	---	---	---	620	604	613	435	421	428
5	---	---	---	---	---	---	629	620	626	492	362	435
6	---	---	---	---	---	---	632	626	628	363	359	361
7	---	---	---	348	293	319	639	632	635	363	360	361
8	---	---	---	360	332	354	645	639	641	364	359	362
9	---	---	---	384	332	345	655	645	649	362	358	360
10	---	---	---	347	321	335	659	654	655	362	359	360
11	---	---	---	362	347	353	666	659	664	372	361	368
12	---	---	---	384	362	375	674	666	670	413	372	383
13	---	---	---	391	336	371	677	671	674	419	413	418
14	---	---	---	447	390	408	686	676	679	435	419	427
15	---	---	---	447	403	418	698	686	694	435	420	428
16	---	---	---	445	419	432	697	691	694	486	414	428
17	---	---	---	453	445	451	698	690	695	504	363	472
18	---	---	---	450	445	447	712	698	705	416	357	391
19	---	---	---	453	445	448	714	700	707	404	395	400
20	---	---	---	464	453	457	722	699	710	401	396	398
21	---	---	---	481	464	471	709	699	706	406	400	402
22	---	---	---	498	481	490	704	695	699	409	405	407
23	---	---	---	502	492	499	703	695	698	414	409	411
24	---	---	---	492	282	375	707	693	698	417	411	414
25	---	---	---	442	353	409	709	661	695	413	408	410
26	---	---	---	481	442	468	703	226	329	441	408	417
27	---	---	---	517	481	500	332	245	296	443	441	442
28	---	---	---	531	517	525	318	288	306	445	442	444
29	---	---	---	537	478	529	339	291	313	443	328	383
30	---	---	---	507	445	477	351	334	339	466	378	438
31	---	---	---	---	---	---	379	351	366	436	420	428
MONTH	---	---	---	---	---	---	722	226	596	504	328	405
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	447	436	442	386	361	375	529	521	526	744	737	741
2	453	447	451	397	379	385	537	529	533	749	744	746
3	457	452	455	435	397	419	535	530	532	750	746	748
4	458	452	455	458	426	446	533	530	532	749	744	747
5	459	454	457	491	458	476	539	533	536	747	705	732
6	462	457	459	512	491	501	538	536	537	705	598	639
7	464	461	463	533	512	523	539	534	537	647	538	568
8	466	463	464	546	456	536	535	532	533	688	642	676
9	466	460	463	457	410	435	533	531	532	642	580	601
10	465	462	463	496	452	468	544	533	536	590	576	582
11	471	464	467	525	496	513	558	544	548	606	590	599
12	471	464	468	526	279	369	610	558	580	618	606	612
13	471	469	470	420	356	390	622	610	617	609	517	558
14	479	471	476	473	420	444	622	618	620	526	513	518
15	---	---	e400	507	473	490	620	605	613	557	526	540
16	---	---	e380	537	507	520	606	603	604	582	557	570
17	---	---	e380	552	537	545	603	592	596	602	582	592
18	---	---	e400	564	552	557	592	584	586	617	602	608
19	---	---	e410	575	536	565	631	587	610	631	616	623
20	---	---	e410	536	515	529	671	631	651	647	631	641
21	430	412	422	515	499	507	699	671	686	650	646	649
22	450	430	441	511	498	504	714	699	707	657	650	653
23	466	450	458	515	507	510	719	713	715	672	657	663
24	484	466	476	515	495	510	720	714	718	689	672	684
25	503	484	495	531	490	512	715	707	712	707	689	700
26	521	503	512	502	485	493	716	709	713	719	702	709
27	536	320	512	506	501	504	716	712	713	730	717	723
28	361	300	321	511	489	499	715	711	713	730	263	529
29	---	---	---	521	501	510	725	715	719	371	261	314
30	---	---	---	513	505	509	737	724	732	463	371	419
31	---	---	---	521	513	517	---	---	---	500	463	485
MONTH	---	---	445	575	279	486	737	521	616	750	261	618

08064100 Chambers Creek near Rice, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	537	500	516	1000	920	957	1000	979	989	1260	1200	1220
2	544	533	539	970	335	713	1020	990	1000	1300	1210	1240
3	597	538	570	399	363	378	1040	1000	1010	1300	1010	1240
4	633	597	608	407	377	396	1070	1010	1040	1150	1040	1100
5	671	624	649	427	405	413	1070	1030	1050	1940	224	956
6	700	658	675	462	427	445	1110	1050	1080	734	236	327
7	725	700	716	489	462	475	1120	1070	1090	585	380	435
8	756	723	733	522	489	507	1130	1080	1100	457	435	446
9	785	756	767	541	522	531	1160	1090	1120	451	439	445
10	809	785	797	567	541	550	1160	1100	1130	450	423	437
11	824	801	811	578	565	568	1160	1120	1150	429	404	422
12	825	814	819	594	578	587	1160	1130	1140	451	395	410
13	846	820	828	620	585	607	1190	1130	1150	524	451	491
14	846	791	839	641	612	625	1210	1150	1180	569	524	551
15	866	812	830	660	641	651	1240	1170	1200	569	558	563
16	884	863	871	685	660	674	1230	1180	1200	564	556	559
17	885	861	870	711	685	696	1230	1190	1200	582	564	572
18	869	856	862	732	711	720	1260	1060	1190	586	582	585
19	891	863	880	753	732	743	1200	1140	1160	600	586	596
20	909	878	894	777	753	768	1220	1170	1200	626	598	616
21	914	896	903	801	777	791	1270	1190	1220	632	623	628
22	936	904	921	822	799	811	1270	1200	1240	656	632	645
23	969	934	955	845	818	832	1290	1210	1250	668	656	663
24	986	959	974	867	836	851	1300	1230	1260	683	664	674
25	983	964	974	885	858	871	1310	1240	1280	693	674	682
26	972	958	965	908	878	894	1310	1270	1290	700	682	691
27	980	963	970	927	902	913	1300	1250	1280	718	700	708
28	983	971	977	943	919	930	1300	1260	1270	745	718	733
29	995	980	988	962	935	948	1360	1260	1300	766	745	757
30	1000	991	997	980	950	965	1320	1190	1270	782	766	776
31	---	---	---	1000	964	977	1250	1140	1210	---	---	---
MONTH	1000	500	823	1000	335	703	1360	979	1170	1940	224	672

e Estimated





## TRINITY RIVER BASIN

08064100 Chambers Creek near Rice, TX--Continued

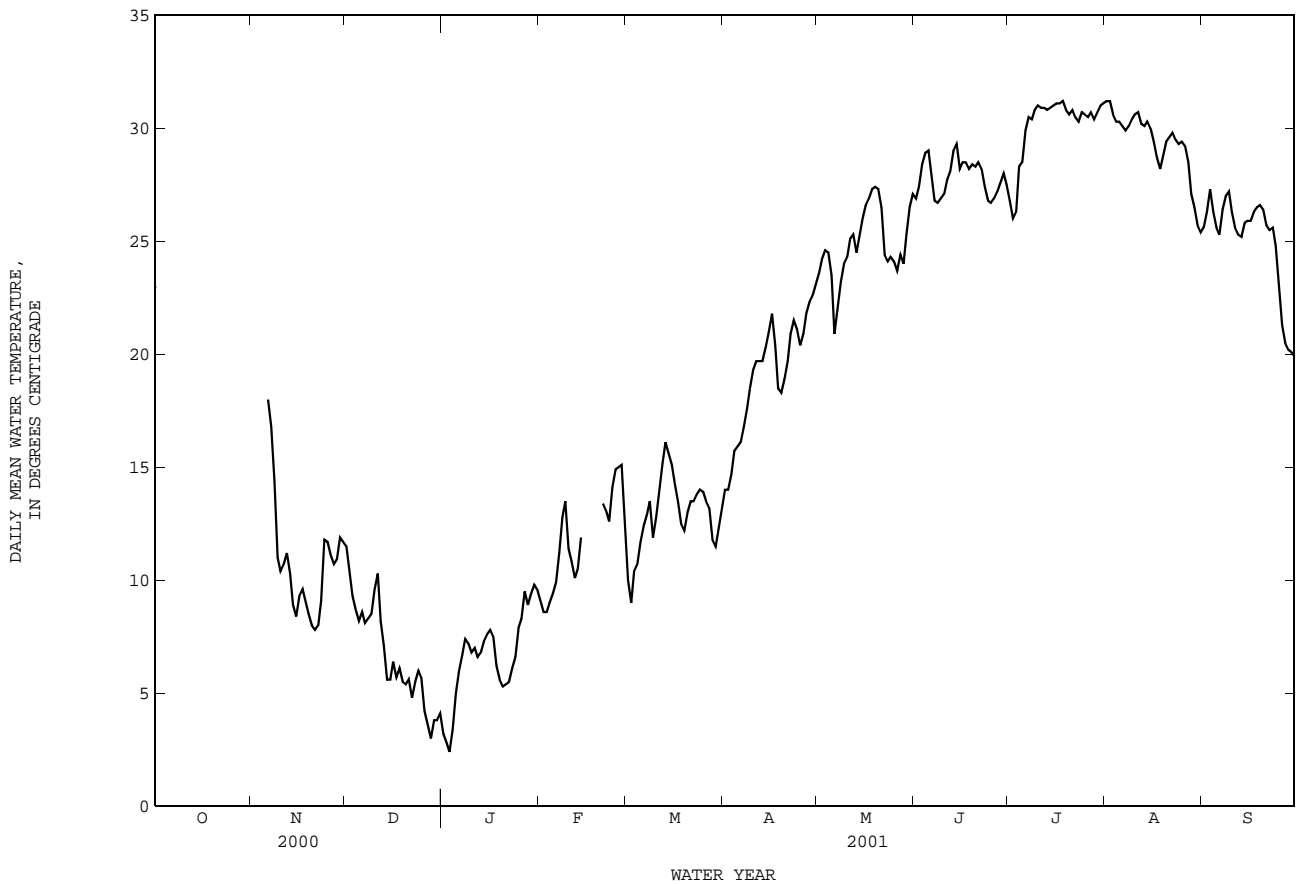
TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	11.8	11.2	11.5	3.4	2.9	3.2
2	---	---	---	---	---	---	11.2	9.9	10.4	3.0	2.4	2.8
3	---	---	---	---	---	---	9.9	8.7	9.3	2.7	2.2	2.4
4	---	---	---	---	---	---	8.9	8.3	8.7	4.4	2.3	3.4
5	---	---	---	---	---	---	8.5	7.8	8.2	6.6	4.0	5.0
6	---	---	---	18.5	17.8	18.0	9.0	8.2	8.6	6.7	5.4	6.0
7	---	---	---	18.1	15.6	16.8	8.5	7.4	8.1	7.6	6.0	6.7
8	---	---	---	15.6	12.3	14.4	8.8	7.9	8.3	7.8	7.2	7.4
9	---	---	---	12.3	10.1	11.0	9.2	7.8	8.5	7.6	6.7	7.2
10	---	---	---	11.0	9.8	10.4	10.5	8.8	9.6	7.1	6.6	6.8
11	---	---	---	11.2	10.5	10.7	10.8	9.1	10.3	7.5	6.3	7.0
12	---	---	---	11.3	11.1	11.2	9.1	7.5	8.2	7.3	6.0	6.6
13	---	---	---	11.1	9.4	10.3	7.5	6.4	7.1	7.1	6.7	6.8
14	---	---	---	9.4	8.4	8.9	6.4	5.3	5.6	7.7	6.9	7.3
15	---	---	---	8.9	8.1	8.4	6.1	5.2	5.6	7.9	7.2	7.6
16	---	---	---	9.5	8.9	9.3	6.9	6.1	6.4	8.3	7.6	7.8
17	---	---	---	9.9	9.3	9.6	6.1	5.3	5.7	8.3	6.5	7.5
18	---	---	---	9.3	8.6	9.0	6.7	5.5	6.1	6.6	5.8	6.2
19	---	---	---	8.9	8.1	8.5	6.2	4.8	5.5	6.0	5.4	5.6
20	---	---	---	8.4	7.6	8.0	6.3	4.6	5.4	6.0	4.7	5.3
21	---	---	---	8.1	7.4	7.8	6.0	5.1	5.6	5.6	5.1	5.4
22	---	---	---	8.4	7.6	8.0	5.3	4.2	4.8	5.8	5.2	5.5
23	---	---	---	9.7	8.4	9.1	6.2	4.9	5.5	6.4	5.6	6.1
24	---	---	---	12.4	9.7	11.8	6.1	5.9	6.0	7.2	6.1	6.6
25	---	---	---	12.1	11.4	11.7	5.9	5.4	5.7	8.4	7.2	7.9
26	---	---	---	11.4	11.0	11.1	5.5	3.7	4.2	9.8	7.4	8.3
27	---	---	---	11.0	10.5	10.7	3.9	3.3	3.6	9.8	9.0	9.5
28	---	---	---	11.6	10.1	10.9	4.0	2.5	3.0	9.4	8.6	8.9
29	---	---	---	12.4	11.4	11.9	4.5	3.4	3.8	10.4	8.9	9.4
30	---	---	---	12.2	11.4	11.7	4.6	3.2	3.8	10.7	9.1	9.8
31	---	---	---	---	---	---	4.8	3.4	4.1	10.4	9.0	9.6
MONTH	---	---	---	---	---	---	11.8	2.5	6.7	10.7	2.2	6.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.8	8.7	9.1	11.3	9.0	10.0	14.7	13.6	14.0	24.2	22.9	23.6
2	8.9	8.4	8.6	9.6	8.6	9.0	14.2	13.6	14.0	25.1	23.4	24.2
3	8.9	8.3	8.6	10.8	9.6	10.4	15.1	14.2	14.7	25.3	23.9	24.6
4	9.5	8.4	9.0	11.6	10.2	10.7	16.1	14.9	15.7	24.8	24.1	24.5
5	9.9	9.0	9.4	13.0	10.9	11.7	16.3	15.3	15.9	24.2	22.8	23.5
6	10.9	9.1	9.9	13.1	11.6	12.4	16.9	15.2	16.1	22.8	19.8	20.9
7	12.1	10.4	11.2	14.1	12.0	12.9	17.4	15.6	16.8	22.9	21.2	22.1
8	13.7	12.0	12.8	14.7	12.1	13.5	18.4	17.0	17.6	24.4	22.1	23.2
9	13.9	12.7	13.5	12.4	11.4	11.9	19.1	17.1	18.5	25.4	22.2	24.0
10	12.7	11.0	11.4	14.3	12.1	12.8	20.1	18.4	19.3	25.6	23.0	24.3
11	11.1	10.5	10.8	14.8	13.4	14.0	20.2	19.1	19.7	26.1	24.3	25.1
12	10.5	10.0	10.1	16.6	14.5	15.2	20.2	19.4	19.7	26.1	24.6	25.3
13	11.0	10.1	10.5	16.6	15.7	16.1	19.7	19.6	19.7	25.8	23.7	24.5
14	12.8	11.0	11.9	16.4	15.4	15.6	20.9	19.7	20.3	26.8	24.1	25.3
15	---	---	---	15.6	14.6	15.1	21.8	20.1	21.0	26.9	24.8	26.0
16	---	---	---	15.6	13.4	14.2	22.2	21.2	21.8	27.3	25.6	26.6
17	---	---	---	14.9	12.8	13.5	22.0	19.3	20.4	27.3	26.6	26.9
18	---	---	---	13.2	11.9	12.5	19.3	17.9	18.5	28.2	26.6	27.3
19	---	---	---	12.9	11.9	12.2	19.1	17.5	18.3	27.9	26.8	27.4
20	---	---	---	13.5	12.4	13.0	19.3	18.6	18.9	28.0	26.5	27.3
21	14.0	12.7	13.4	14.0	13.2	13.5	20.7	19.0	19.7	28.0	25.1	26.5
22	13.9	12.7	13.1	14.1	13.2	13.5	21.8	20.3	20.9	25.1	23.5	24.4
23	13.3	12.1	12.6	14.2	13.4	13.8	21.9	21.0	21.5	25.0	22.9	24.1
24	15.3	12.8	14.1	14.4	13.6	14.0	21.7	20.4	21.1	24.9	23.5	24.3
25	15.4	14.6	14.9	14.2	13.7	13.9	21.4	19.1	20.4	24.6	23.5	24.1
26	15.5	14.3	15.0	13.9	13.3	13.5	22.0	19.6	20.9	24.1	23.3	23.7
27	15.8	14.3	15.1	13.6	12.7	13.2	22.5	20.9	21.8	25.2	23.5	24.4
28	14.3	11.3	12.8	12.7	11.3	11.8	22.9	21.7	22.3	25.2	22.4	24.0
29	---	---	---	12.1	11.1	11.5	23.1	22.1	22.6	26.1	23.4	25.3
30	---	---	---	12.8	12.0	12.3	23.8	22.3	23.1	27.1	26.0	26.5
31	---	---	---	14.1	12.7	13.1	---	---	---	27.9	26.5	27.1
MONTH	---	---	---	16.6	8.6	12.9	23.8	13.6	19.2	28.2	19.8	24.9

08064100 Chambers Creek near Rice, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	27.5	26.0	26.9	27.7	25.8	26.8	33.4	29.4	31.2	26.1	25.1	25.6
2	28.5	26.1	27.4	26.9	24.9	26.0	33.2	29.7	31.2	27.9	25.1	26.3
3	29.1	27.6	28.4	26.7	25.8	26.3	32.9	28.9	30.6	29.0	26.0	27.3
4	29.6	28.1	28.9	29.3	26.7	28.3	32.5	28.4	30.3	27.0	25.8	26.3
5	29.5	28.6	29.0	29.9	27.3	28.5	32.4	28.5	30.3	26.2	25.0	25.6
6	28.6	27.0	27.8	30.8	29.0	29.9	32.8	28.2	30.1	26.0	24.9	25.3
7	27.1	26.5	26.8	31.4	29.6	30.5	32.3	28.2	29.9	27.1	25.5	26.4
8	27.4	26.2	26.7	31.2	29.4	30.4	32.5	28.4	30.1	27.9	26.3	27.0
9	27.7	26.1	26.9	31.8	29.9	30.8	33.2	28.6	30.4	27.8	26.8	27.2
10	28.1	26.1	27.1	31.9	29.9	31.0	33.0	28.7	30.6	26.8	25.7	26.3
11	28.7	26.6	27.7	31.8	29.9	30.9	33.1	28.9	30.7	26.1	24.9	25.6
12	29.1	27.2	28.1	31.9	30.0	30.9	31.5	29.0	30.2	25.8	24.6	25.3
13	29.9	28.1	29.0	31.7	29.9	30.8	31.7	28.9	30.1	25.8	24.4	25.2
14	29.8	28.8	29.3	32.1	30.0	30.9	32.4	28.7	30.3	26.4	25.2	25.8
15	29.0	27.1	28.2	32.1	30.2	31.0	32.4	28.0	30.0	26.4	25.5	25.9
16	29.5	27.4	28.5	32.3	30.1	31.1	30.2	28.6	29.4	26.5	25.3	25.9
17	29.4	27.4	28.5	32.4	30.0	31.1	29.4	28.0	28.7	26.8	25.7	26.3
18	29.1	27.2	28.2	32.4	30.1	31.2	30.1	27.6	28.2	27.0	25.8	26.5
19	29.2	27.5	28.4	32.1	29.8	30.8	31.4	27.0	28.8	27.3	26.1	26.6
20	29.3	27.4	28.3	32.2	29.3	30.6	31.4	27.5	29.4	26.9	26.0	26.4
21	29.7	27.6	28.5	32.3	29.3	30.8	32.0	27.9	29.6	26.1	25.4	25.7
22	29.2	27.3	28.2	31.9	29.1	30.5	31.9	28.1	29.8	26.2	24.8	25.5
23	28.2	26.5	27.4	31.8	29.0	30.3	31.5	27.9	29.5	26.2	25.0	25.6
24	27.6	26.0	26.8	31.9	29.5	30.7	31.5	27.6	29.3	25.7	23.8	24.8
25	27.6	25.8	26.7	31.9	29.4	30.6	31.5	27.8	29.4	23.8	22.1	22.9
26	27.7	26.0	26.9	31.8	29.2	30.5	30.6	28.2	29.2	22.2	20.4	21.3
27	28.1	26.5	27.2	32.5	29.3	30.7	29.9	27.5	28.5	21.5	19.4	20.5
28	28.6	26.8	27.6	32.2	29.1	30.4	28.1	26.4	27.1	21.3	19.1	20.2
29	29.0	27.3	28.0	32.5	29.1	30.7	27.7	25.6	26.5	21.2	19.0	20.1
30	28.3	27.0	27.5	33.2	29.3	31.0	26.6	25.2	25.7	21.0	18.9	19.9
31	---	---	---	33.6	29.3	31.1	25.8	25.0	25.4	---	---	---
MONTH	29.9	25.8	27.8	33.6	24.9	30.2	33.4	25.0	29.4	29.0	18.9	25.0



TRINITY RIVER BASIN

08064510 Halbert Lake near Corsicana, TX

LOCATION.--Lat 32°04'36", long 96°24'20", Navarro County, Hydrologic Unit 12030109, on fishing pier approximately 1,000 ft upstream of dam on left bank, 4 mi southeast of Corsicana.

DRAINAGE AREA.--12.0 mi<sup>2</sup>.

PERIOD OF RECORD.--Apr. 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily contents, which are poor. The lake is formed by a rolled earthfill dam 2,780 ft long. The dam was completed and storage began in 1921. An uncontrolled concrete chute spillway 175 ft long is located to the left (west) embankment. The dam was built by the city of Corsicana to impound water for municipal use. There was no known diversion from the lake during the current water year. Conservation pool storage is 6,033 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	375.0
Crest of spillway (top of conservation pool).....	368.0

COOPERATION.--Capacity table furnished by Texas Water Development Board survey Nov. 1999.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,430 acre-ft, Mar. 12, 2001, elevation, 366.93 ft; minimum contents, 2,670 acre-ft, Feb. 17, 18, 2000, elevation, 361.17 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,430 acre-ft, Mar. 12, elevation, 366.93 ft; minimum contents, 2,990 acre-ft, Oct. 15, 16, elevation, 361.97 ft.

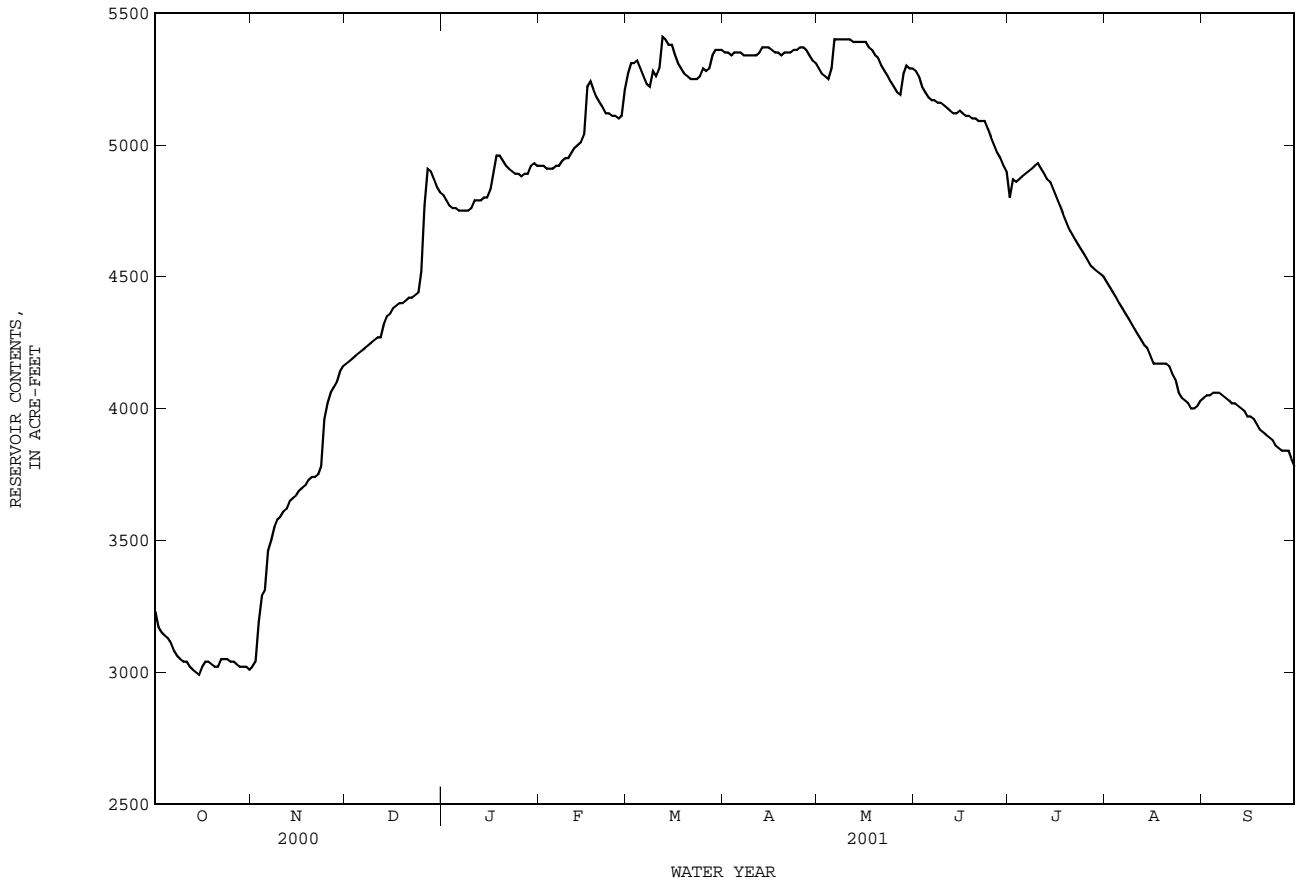
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3230	3020	4170	4810	4920	5270	5350	5290	5280	e4800	e4480	4040
2	3170	3040	4180	4790	4920	5310	5350	5270	5260	e4870	e4460	4050
3	3150	3190	4190	4770	4910	5310	5340	5260	5220	e4860	e4440	4050
4	3140	3290	4200	4760	4910	5320	5350	5250	5200	e4870	e4420	4060
5	3130	3310	4210	4760	4910	5290	5350	5290	5180	e4880	e4400	4060
6	3110	3460	4220	4750	4920	5260	5350	5400	5170	e4890	e4380	4060
7	3080	3500	4230	4750	4920	5230	5340	5400	5170	e4900	e4360	4050
8	3060	3550	4240	4750	4940	5220	5340	5400	5160	e4910	e4340	4040
9	3050	3580	4250	4750	4950	5280	5340	5400	5160	e4920	e4320	4030
10	3040	3590	4260	4760	4950	5260	5340	5400	5150	e4930	e4300	4020
11	3040	3610	4270	4790	4970	5290	5340	5400	5140	e4910	e4280	4020
12	3020	3620	4270	4790	4990	5410	5350	5390	5130	e4890	e4260	4010
13	3010	3650	4320	4790	5000	5400	5370	5390	5120	e4870	e4240	4000
14	3000	3660	4350	4800	5010	5380	5370	5390	5120	e4860	e4230	3990
15	2990	3670	4360	4800	5040	5380	5370	5390	5130	e4830	e4200	3970
16	3020	3690	4380	4830	5220	5340	5360	5390	5120	e4800	4170	3970
17	3040	3700	4390	4890	5240	5310	5350	5370	5110	e4770	4170	3960
18	3040	3710	4400	4960	5210	5290	5350	5360	5110	e4740	4170	3940
19	3030	3730	4400	4960	5180	5270	5340	5340	5100	e4710	4170	3920
20	3020	3740	4410	4940	5160	5260	5350	5330	5100	e4680	4170	3910
21	3020	3740	4420	4920	5140	5250	5350	5300	5090	e4660	4160	3900
22	3050	3750	4420	4910	5120	5250	5350	5280	5090	e4640	4130	3890
23	3050	3780	4430	4900	5120	5250	5360	5260	5090	e4620	4110	3880
24	3050	3960	4440	4890	5110	5260	5360	5240	e5060	e4600	4060	3860
25	3040	4020	4520	4890	5110	5290	5370	5220	e5030	e4580	4040	3850
26	3040	4060	4770	4880	5100	5280	5370	5200	e5000	e4560	4030	3840
27	3030	4080	4910	4890	5110	5290	5360	5190	e4970	e4540	4020	3840
28	3020	4100	4900	4890	5210	5340	5340	5270	e4950	e4530	4000	3840
29	3020	4140	4870	4920	---	5360	5320	5300	e4920	e4520	4000	3810
30	3020	4160	4840	4930	---	5360	5310	5290	e4900	e4510	4010	3780
31	3010	---	4820	4920	---	5360	---	5290	---	e4500	4030	---
MEAN	3060	3670	4420	4840	5050	5300	5350	5320	5110	4750	4210	3950
MAX	3230	4160	4910	4960	5240	5410	5370	5400	5280	4930	4480	4060
MIN	2990	3020	4170	4750	4910	5220	5310	5190	4900	4500	4000	3780
(+)	362.02	364.52	365.81	366.00	366.54	366.80	366.72	366.67	365.95	365.18	364.25	363.74
(@)	-220	+1150	+660	+100	+290	+150	-50	-20	-390	-400	-470	-250
CAL YR 2000	MAX 4910	MIN 2670	(@) +1900									
WTR YR 2001	MAX 5410	MIN 2990	(@) +550									

e Estimated

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

08064510 Halbert Lake near Corsicana, TX--Continued



**EXPLANATION**

- 08066250 ▲ Surface-water continuous station and number
- 08064700 △ Surface-water continuous/water-quality station and number
- 08066190 ○ Reservoir/water-quality station and number
- 08067000 ■ Surface-water partial record/stage only station and number
- 08067118 □ Surface-water partial record/stage only/water-quality station and number

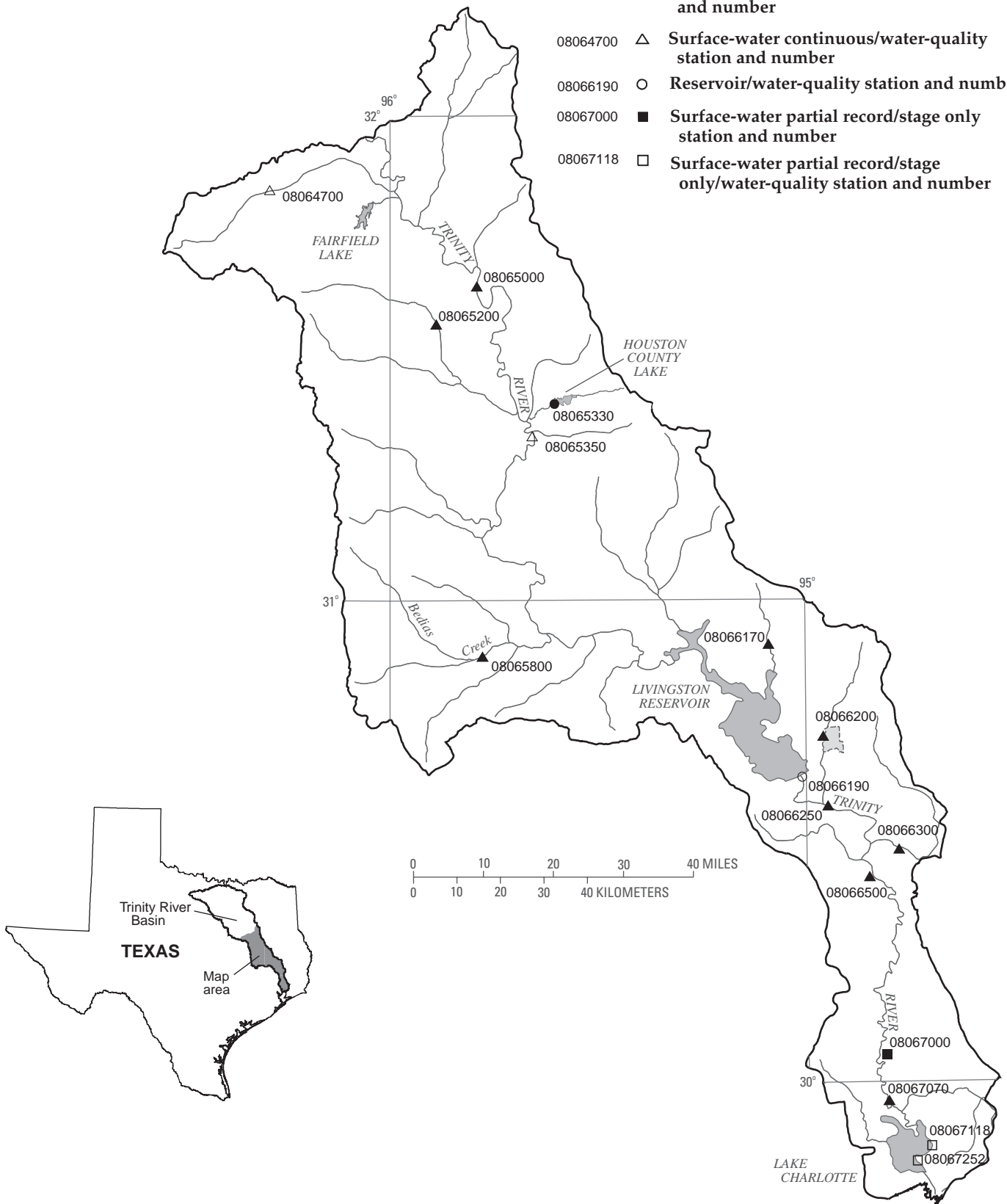


Figure 5.--Map showing location of gaging stations in the third section of the Trinity River Basin

08064700	Tehuacana Creek near Streetman, TX . . . . .	264
08065000	Trinity River near Oakwood, TX . . . . .	268
08065200	Upper Keechi Creek near Oakwood, TX . . . . .	270
08065330	Houston County Lake near Corckett, TX . . . . .	272
08065350	Trinity River near Crockett, TX . . . . .	274
08065800	Bedias Creek near Madisonville, TX . . . . .	286
08066170	Kickapoo Creek near Onalaska, TX . . . . .	288
08066190	Livingston Reservoir near Goodrich, TX . . . . .	290
08066200	Long King Creek at Livingston, TX . . . . .	300
08066250	Trinity River near Goodrich, TX . . . . .	302
08066300	Menard Creek near Rye, TX . . . . .	304
08066500	Trinity River at Romayor, TX . . . . .	306
08067000	Trinity River at Liberty, TX . . . . .	308
08067070	CWA Canal near Dayton, TX . . . . .	310
08067118	Lake Charlotte near Anahuac, TX . . . . .	312
08067252	Trinity River at Wallisville, TX . . . . .	318

TRINITY RIVER BASIN

08064700 Tehuacana Creek near Streetman, TX

LOCATION.--Lat 31°50'54", long 96°17'23", Freestone County, Hydrologic Unit 12030201, on downstream side at left end of bridge on U.S. Hwy 75, 2.8 mi southeast of Streetman, 3.1 mi downstream from Burlington Northern and Santa Fe Railroad Co. bridge, 3.8 mi upstream from Caney Creek, and 25 mi upstream from mouth.

DRAINAGE AREA.--142 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 287.58 ft above sea level. From Dec. 14, 1993 to Aug. 14, 2001, at site 0.2 mi upstream at datum 7.45 ft lower. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversions. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Sept. 1932 reached a stage of about 24 ft at site and datum 0.2 mi downstream from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.67	5.7	177	5.4	514	28	2.7	11	.93	.36	.33
2	.00	1.0	3.5	163	1.9	933	20	2.6	5.3	57	.34	.49
3	.00	473	2.0	123	.45	171	15	2.5	4.1	5.6	.31	.77
4	.00	1960	1.7	81	.13	645	13	2.4	3.7	1.8	.31	44
5	.00	122	1.6	70	.07	56	11	13	3.0	1.1	.25	48
6	.00	2060	1.6	63	.00	16	10	792	2.6	.78	.21	4.0
7	.00	384	1.5	61	.00	4.6	9.8	134	2.6	.65	.19	2.3
8	.00	593	1.4	59	.00	82	10	36	2.6	.65	.17	.94
9	.00	238	1.4	57	.07	2010	14	15	3.3	.75	.15	.59
10	.00	51	1.3	66	.02	233	12	55	2.5	.75	.14	.43
11	.00	20	1.3	1010	.00	40	9.7	22	2.1	.71	.12	.35
12	.00	27	1.2	284	.00	1190	8.5	79	1.8	.71	.11	.29
13	.00	307	1.6	168	.04	413	7.7	62	1.6	.69	.10	.26
14	.00	74	8.8	131	.48	193	7.1	15	1.4	.58	.10	.24
15	.00	23	9.6	104	5.1	113	6.7	7.8	106	.56	.10	.25
16	.01	8.5	4.5	111	5520	55	6.3	5.2	59	.54	.10	.46
17	.03	5.7	2.8	1470	7530	32	7.7	3.2	7.9	.54	.12	.63
18	.01	4.6	2.0	4120	180	47	6.6	2.5	2.6	.51	.13	.34
19	.00	27	1.6	1310	81	27	5.6	2.3	1.5	.49	.13	.31
20	.00	37	1.5	163	39	18	5.1	2.3	1.0	.47	.12	.33
21	.01	11	1.5	55	17	11	4.8	2.1	1.3	.48	.11	.31
22	.14	5.4	1.4	27	6.8	8.1	4.6	1.9	1.8	.47	.10	.27
23	.17	28	1.3	13	3.2	6.6	4.4	1.8	.74	.47	.09	.25
24	.17	3490	1.2	10	2.8	36	4.0	1.7	.52	.46	.08	.22
25	.16	941	332	5.5	2.7	48	3.7	1.6	.43	.45	.07	.20
26	.14	95	6320	3.0	2.6	13	3.4	59	.49	.43	.12	.18
27	.13	32	4110	3.5	2.4	39	3.2	17	.56	.40	.21	.16
28	.12	16	983	3.6	868	1230	3.1	495	.64	.40	.19	.15
29	.37	9.5	370	747	---	209	2.9	294	.80	.40	.20	.13
30	.42	7.1	236	305	---	74	2.8	51	.90	.39	.42	.12
31	.45	---	187	32	---	42	---	22	---	.38	.41	---
TOTAL	2.33	11051.47	12600.0	10995.6	14269.16	8509.3	250.7	2203.6	233.78	80.54	5.56	107.30
MEAN	.075	368	406	355	510	274	8.36	71.1	7.79	2.60	.18	3.58
MAX	.45	3490	6320	4120	7530	2010	28	792	106	57	.42	48
MIN	.00	.67	1.2	3.0	.00	4.6	2.8	1.6	.43	.38	.07	.12
AC-FT	4.6	21920	24990	21810	28300	16880	497	4370	464	160	11	213
CFSM	.00	2.59	2.86	2.50	3.59	1.93	.06	.50	.05	.02	.00	.03
IN.	.00	2.90	3.30	2.88	3.74	2.23	.07	.58	.06	.02	.00	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

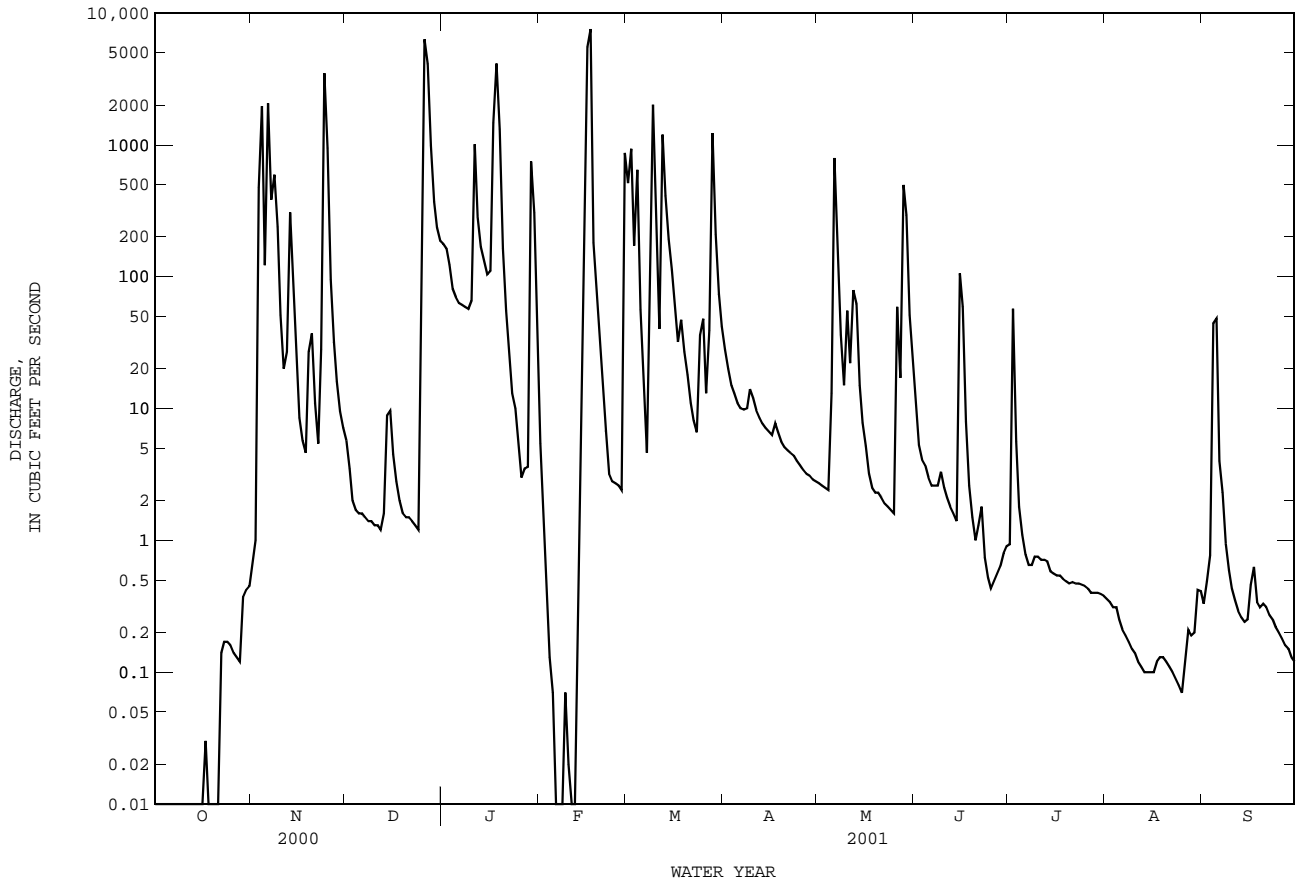
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
MEAN	55.5	65.5	140	84.7	165	125	98.8	225	71.6	3.73	14.6	27.7		
MAX	379	399	1013	381	930	1048	762	2927	388	35.1	234	547		
(WY)	1974	1999	1992	1998	1986	1990	1997	1989	1981	1976	1983	1974		
MIN	.000	.000	.000	.12	.45	.25	.000	.020	.040	.000	.000	.000		
(WY)	1981	1981	2000	1971	1996	1996	1971	1971	1996	1978	1969	1980		

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1968 - 2001

ANNUAL TOTAL	35715.97	60309.34	
ANNUAL MEAN	97.6	165	88.0
HIGHEST ANNUAL MEAN			274
LOWEST ANNUAL MEAN			3.52
HIGHEST DAILY MEAN	6320 Dec 26	7530 Feb 17	42000 May 4 1989
LOWEST DAILY MEAN	.00 Aug 16	.00 Oct 1	.00 Sep 30 1968
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 16	.00 Oct 1	.00 Sep 30 1968
MAXIMUM PEAK FLOW		22000 Feb 17	985700 May 17 1989
MAXIMUM PEAK STAGE		34.99 Feb 17	34.99 Feb 17 2001
ANNUAL RUNOFF (AC-FT)	70840	119600	63740
ANNUAL RUNOFF (CFSM)	.69	1.16	.62
ANNUAL RUNOFF (INCHES)	9.36	15.80	8.42
10 PERCENT EXCEEDS	54	219	59
50 PERCENT EXCEEDS	.54	2.6	1.7
90 PERCENT EXCEEDS	.00	.10	.00

g At site and datum then in use.

08064700 Tehuacana Creek near Streetman, TX--Continued





TRINITY RIVER BASIN

08064700 Tehuacana Creek near Streetman, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Feb. 1968 to Sept. 1985, Oct. 1990 to current year.

BIOCHEMICAL DATA: Oct. 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	
NOV 29...	0900	9.9	304	7.4	13.0	34	--	8.2	77.6	<2.0	105	--	27.5	
FEB 07...	0930	e.02	558	7.5	11.9	20	--	9.5	88.9	2.7	165	50	43.0	
APR 04...	1145	13	904	7.4	21.5	8.4	--	8.4	95.1	<2.0	272	106	71.0	
MAY 02...	0930	2.6	1420	7.5	23.4	5.0	--	6.8	81.0	<2.0	380	136	95.1	
SEP 06...	0900	2.7	182	7.2	25.2	--	54	5.5	67.1	<2.0	51.9	--	13.1	
17...	0900	.68	600	7.3	25.7	--	--	4.7	57.9	<2.0	162	86	38.8	
DATE		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
NOV 29...	8.76	19.0	.806	4.55	--	46.6	14.8	.2	8.2	190	--	36	.269	
FEB 07...	13.9	46.8	1.59	3.94	115	72.9	53.0	.2	9.8	337	313	11	--	
APR 04...	22.9	92.2	2.43	4.12	165	136	122	.3	9.4	604	558	17	--	
MAY 02...	34.6	144	3.21	4.91	245	214	172	.4	12.1	906	824	15	--	
SEP 06...	4.65	12.3	.740	5.10	E35	22.8	9.6	.2	8.6	124	--	112	.392	
17...	15.8	54.0	1.85	5.64	77	98.6	56.6	.3	9.0	396	325	23	--	
DATE		NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ALUM-INUM, DIS-SOLVED (MG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (MG/L AS SB) (01095)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)	BARIUM, DIS-SOLVED (MG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (MG/L AS BE) (01010)
NOV 29...	.006	.275	<.041	.54	E.041	.035	.107	9.7	2	.11	<2.0	41.3	<.06	
FEB 07...	<.006	.087	<.041	.53	<.060	E.013	--	8.5	2	.11	<2.0	65.8	<.06	
APR 04...	E.003	<.047	<.041	.46	E.031	<.018	--	7.3	--	--	--	--	--	
MAY 02...	<.006	<.047	<.041	.36	<.060	<.018	--	4.1	1	.12	E1.1	127	<.06	
SEP 06...	.022	.414	<.040	.70	.077	.061	.187	12	6	.14	E1.1	29.0	E.03	
17...	E.003	E.023	<.040	.45	<.060	<.020	--	7.7	--	--	--	--	--	
DATE		CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 29...	<.04	<.8	.47	1.9	40	<.08	65.2	<.23	.4	2.00	E1.4	<1.0	2	
FEB 07...	E.02	<.8	.83	2.6	80	E.05	188	<.23	.3	2.62	<2.4	<1.0	3	
APR 04...	--	--	--	--	10	--	203	--	--	--	--	--	--	
MAY 02...	E.03	<.8	1.01	2.4	<10	E.07	574	<.01	.7	2.90	<2.4	<1.0	3	
SEP 06...	<.04	<.8	.22	2.6	50	.15	33.8	<.01	<.2	2.59	<2.0	<1.0	2	
17...	--	--	--	--	M	--	393	--	--	--	--	--	--	

## TRINITY RIVER BASIN

267

08064700 Tehuacana Creek near Streetman, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

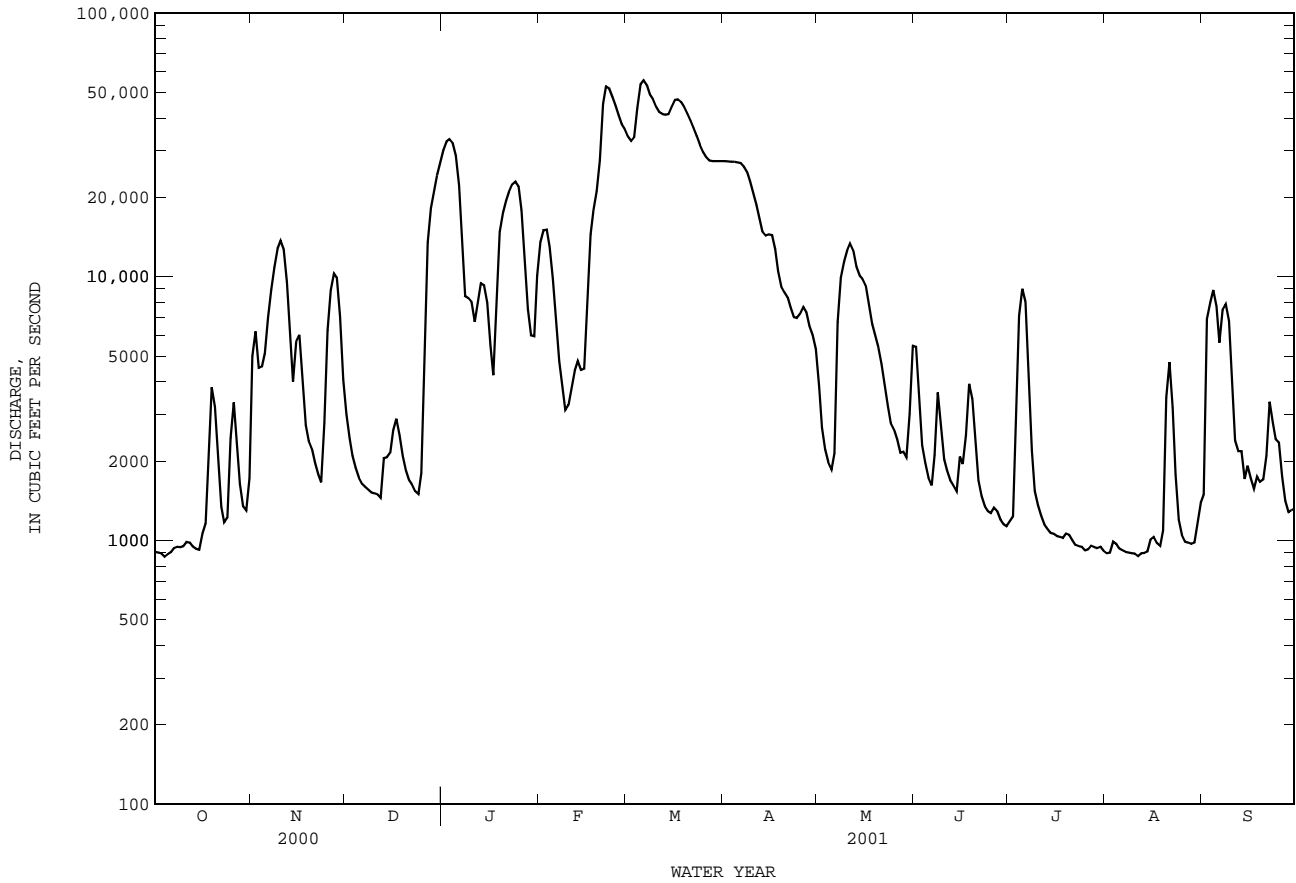
DATE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
NOV 29...	.61
FEB 07...	1.56
APR 04...	--
MAY 02...	4.15
SEP 06...	.13
17...	--



08065000 Trinity River near Oakwood, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1925 - 2001	
ANNUAL TOTAL	1179455		3556998		5262	
ANNUAL MEAN	3223		9745		15240	
HIGHEST ANNUAL MEAN					1992	
LOWEST ANNUAL MEAN					1925	
HIGHEST DAILY MEAN	27000	Dec 31	55600	Mar 6	153000	Apr 29 1942
LOWEST DAILY MEAN	754	Sep 2	867	Oct 4	28	Nov 1 1924
ANNUAL SEVEN-DAY MINIMUM	787	Aug 29	893	Aug 7	38	Aug 19 1925
MAXIMUM PEAK FLOW			56800		153000	
MAXIMUM PEAK STAGE			45.30		51.64	
ANNUAL RUNOFF (AC-FT)	2339000		7055000		3812000	
10 PERCENT EXCEEDS	8650		29900		14900	
50 PERCENT EXCEEDS	1430		3640		1500	
90 PERCENT EXCEEDS	867		967		305	

e Estimated



TRINITY RIVER BASIN

08065200 Upper Keechi Creek near Oakwood, TX

LOCATION.--Lat 31°34'11", long 95°53'17", Leon County, Hydrologic Unit 12030201, at right bank at downstream side of bridge on U.S. Highway 79, 1.9 mi upstream from Missouri Pacific Railroad Co. bridge, 2 mi southwest of Oakwood, 11 mi upstream from Buffalo Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--150 mi<sup>2</sup>.

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

Water-quality records.--Chemical data: June 1962 to Apr. 1964, Nov. 1967 to Sept. 1975.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 240.11 ft above sea level. Satellite telemeter at station.

REMARKS.--Records fair. No known regulation or diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, about 21 ft in 1932, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	6.2	65	87	72	530	86	15	15	16	.69	28
2	.00	8.2	43	66	50	800	67	15	13	18	.57	236
3	.00	98	36	54	42	796	60	14	12	113	.47	129
4	.00	578	32	48	38	740	55	14	11	73	.40	27
5	.00	1200	30	45	35	725	50	17	9.9	19	.36	24
6	.00	778	30	42	35	441	46	91	11	12	.30	26
7	.00	1100	30	40	34	160	40	123	43	9.0	.28	23
8	.00	876	29	36	35	135	37	43	199	7.8	.26	24
9	.00	434	28	33	43	430	34	26	217	7.3	.21	17
10	.00	515	28	41	60	846	32	25	103	6.8	.20	16
11	.00	189	28	192	61	532	31	31	39	6.2	.15	20
12	.00	78	26	243	68	235	32	25	26	5.7	.13	11
13	.00	214	161	242	90	278	30	36	20	5.2	.10	7.7
14	.00	209	281	106	82	410	29	25	17	4.8	.10	6.4
15	.00	106	275	74	73	287	28	19	112	4.0	.09	5.8
16	.07	49	158	68	231	257	27	15	221	3.6	.20	6.2
17	.17	53	84	195	819	166	23	14	297	3.1	1.2	5.8
18	.00	79	54	408	653	89	21	13	229	3.2	.58	6.7
19	.00	111	41	1080	268	74	20	13	37	2.7	.47	5.9
20	.00	164	35	682	115	66	19	12	23	2.4	.44	5.0
21	.01	101	32	367	85	59	20	12	18	2.3	.28	4.5
22	.06	45	29	145	71	53	20	12	16	1.9	.31	4.4
23	.12	38	28	96	61	50	20	11	15	1.8	.34	4.6
24	.17	292	26	75	59	50	19	11	14	1.5	.33	5.1
25	.26	396	100	63	54	81	19	10	12	1.3	.46	4.5
26	.60	652	357	57	50	99	18	10	10	1.1	.61	3.9
27	1.2	224	1520	52	63	61	16	11	9.5	.99	.77	3.1
28	1.4	75	1310	49	320	140	16	17	9.2	.94	1.2	2.7
29	1.6	219	628	89	---	245	16	55	8.9	.89	1.9	2.3
30	1.6	138	281	164	---	325	15	77	9.5	.90	10	2.0
31	1.7	---	122	140	---	149	---	25	---	.80	16	---
TOTAL	8.96	9025.4	5927	5079	3667	9309	946	837	1777.0	337.22	39.40	667.6
MEAN	.29	301	191	164	131	300	31.5	27.0	59.2	10.9	1.27	22.3
MAX	1.7	1200	1520	1080	819	846	86	123	297	113	16	236
MIN	.00	6.2	26	33	34	50	15	10	8.9	.80	.09	2.0
AC-FT	18	17900	11760	10070	7270	18460	1880	1660	3520	669	78	1320
CFSM	.00	2.01	1.27	1.09	.87	2.00	.21	.18	.39	.07	.01	.15
IN.	.00	2.24	1.47	1.26	.91	2.31	.23	.21	.44	.08	.01	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
	43.8	371	1974	.000	1964
	55.6	513	1975	.000	1964
	108	878	1992	.36	1964
	109	614	1999	4.03	1964
	123	425	1997	8.28	1964
	127	461	1973	8.79	1996
	115	574	1966	8.41	1971
	139	1413	1965	1.82	1972
	67.0	517	1976	.48	1963
	12.5	128	1981	.000	1964
	5.51	54.5	1979	.000	1963
	14.3	246	1974	.000	1963

SUMMARY STATISTICS

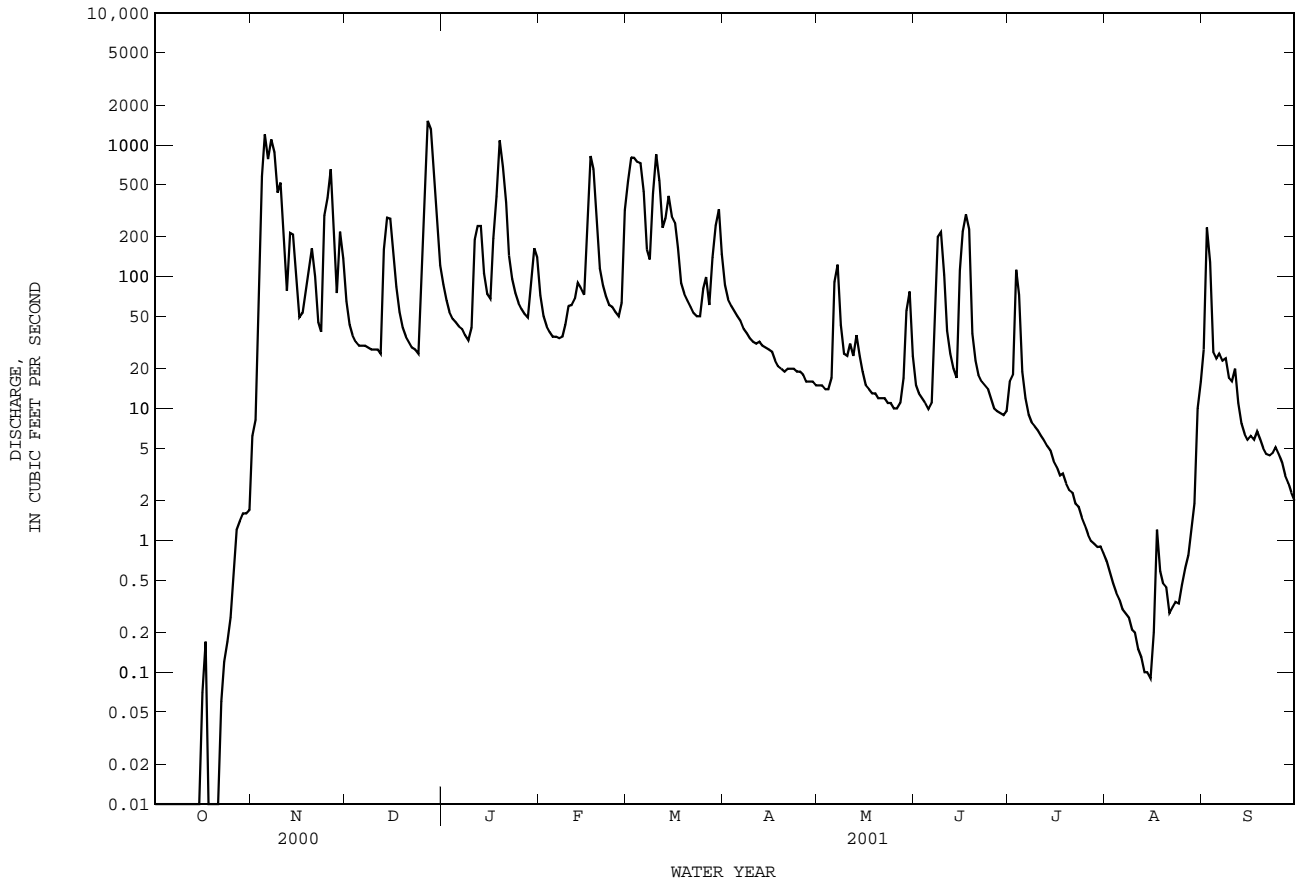
FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1962 - 2001

ANNUAL TOTAL	33794.68	37620.58	
ANNUAL MEAN	92.3	103	76.8
HIGHEST ANNUAL MEAN			168
LOWEST ANNUAL MEAN			4.52
HIGHEST DAILY MEAN	4080	May 5	11500
LOWEST DAILY MEAN	.00	Jul 27	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 27	.00
MAXIMUM PEAK FLOW			2380
MAXIMUM PEAK STAGE			13.43
ANNUAL RUNOFF (AC-FT)	67030	74620	55640
ANNUAL RUNOFF (CFSM)	.62	.69	.51
ANNUAL RUNOFF (INCHES)	8.38	9.33	6.96
10 PERCENT EXCEEDS	165	279	131
50 PERCENT EXCEEDS	10	28	11
90 PERCENT EXCEEDS	.00	.29	.07

08065200 Upper Keechi Creek near Oakwood, TX--Continued



TRINITY RIVER BASIN

08065330 Houston County Lake near Crockett, TX

LOCATION.--Lat 31°24'24", long 95°36'06", Houston County, Hydrologic Unit 12030201, at Houston County Water Control and Improvement District No. 1 pump station, on Little Elkhart Creek, 10 miles northwest of Crockett.

DRAINAGE AREA.--49 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records good. The lake is formed by a rolled earthfill dam 1,250 ft long, including a 500-ft uncontrolled spillway. Deliberate impoundment began in Nov. 1966. The uncontrolled spillway is an excavated channel cut through natural ground and located at the right end of the dam. The low-flow outlet consists of an 18-inch concrete pressure pipe through the dam with valve on the upstream side. Water is used for municipal and industrial purposes in the area. There are no known diversions. The dam is owned by the Houston County WC&ID No. 1. In 2000, levels were used to determine elevations from sea level datum. The reference elevation was found to differ from the TWDB published value by -0.60 ft. Conservation pool storage is 17,665 acre-ft. Data regarding the dam and lake use the datum from TWDB Report 126 and are given in the following table:

	Elevation (feet)
Top of dam.....	277.0
Crest of uncontrolled spillway.....	265.0
Top of conservation pool.....	259.5
Lowest gated outlet.....	234.0

COOPERATION.--The capacity table, furnished by the Texas Water Development Board, dated Mar. 11, 1999, is from a Jan. 1999 survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 23,450 acre-ft, June 8, 2001, gage height, 264.87 ft; minimum contents, 15,540 acre-ft, Oct. 15, 2000, gage height, 258.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 23,450 acre-ft, June 8, elevation, 264.87 ft; minimum contents, 15,540 acre-ft, Oct. 15, elevation, 258.21 ft.

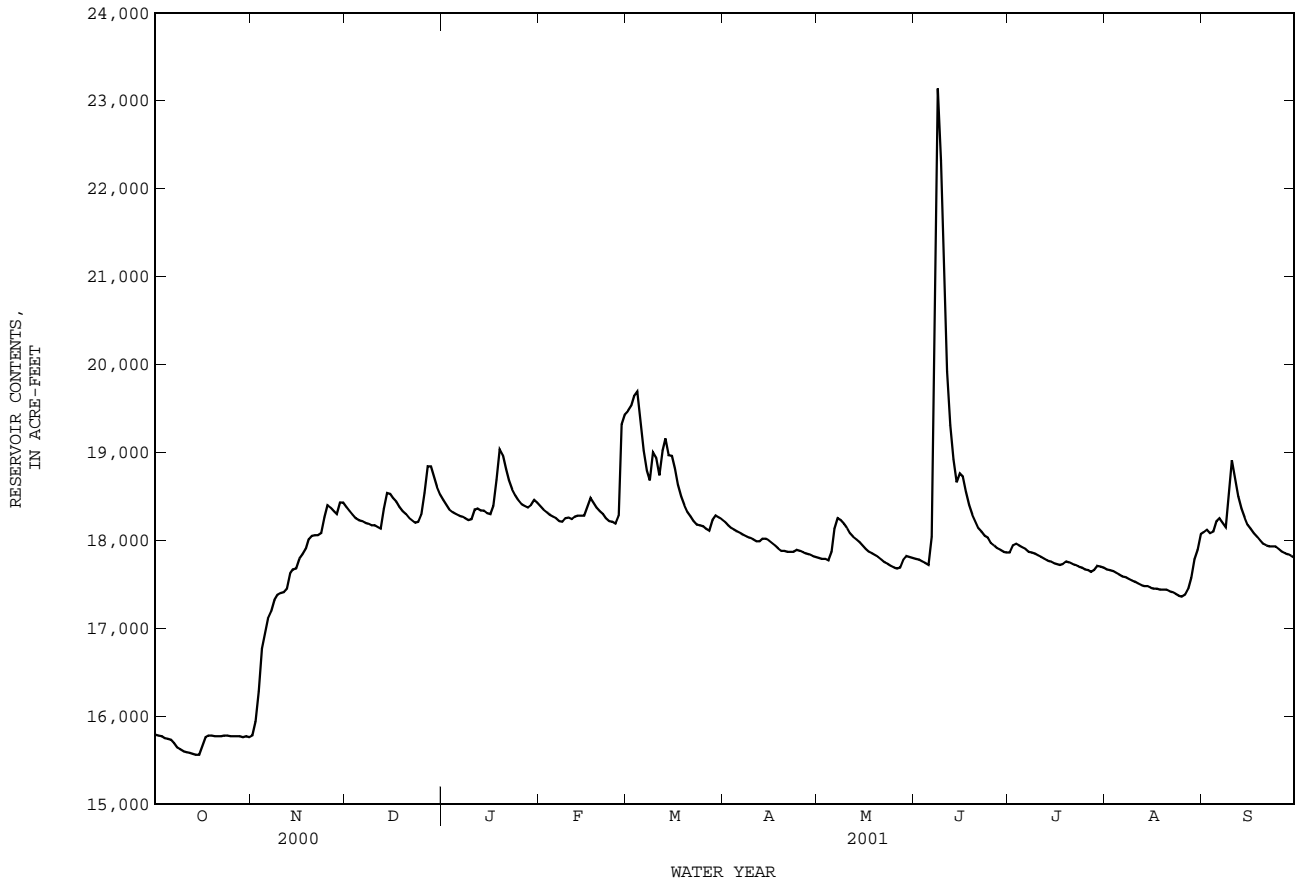
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15790	15780	18380	18460	18390	19470	18210	17800	17790	17860	17670	18090
2	15780	15940	18330	18400	18350	19530	18170	17790	17780	17940	17660	18120
3	15770	16280	18290	18350	18320	19640	18140	17790	17760	17960	17650	18080
4	15750	16770	18250	18320	18290	19690	18120	17770	17740	17940	17630	18100
5	15740	16930	18230	18300	18270	19340	18100	17870	17720	17920	17610	18220
6	15730	17110	18220	18280	18250	19020	18080	18130	18040	17900	17590	18250
7	15690	17190	18200	18270	18220	18790	18060	18250	19840	17870	17580	18200
8	15640	17320	18190	18250	18210	18680	18040	18230	23140	17860	17560	18150
9	15620	17380	18170	18230	18250	19000	18030	18190	22320	17850	17540	18520
10	15600	17400	18170	18240	18260	18940	18010	18140	20870	17830	17530	18910
11	15590	17410	18150	18350	18240	18740	17990	18080	19920	17810	17510	18700
12	15580	17450	18130	18360	18270	19020	17990	18040	19310	17790	17490	18500
13	15570	17620	18360	18340	18280	19160	18020	18010	18920	17770	17480	18360
14	15560	17670	18540	18340	18280	18970	18020	17980	18660	17760	17480	18260
15	15560	17680	18530	18310	18280	18960	18000	17940	18760	17740	17460	18180
16	15660	17790	18480	18300	18380	18810	17970	17900	18730	17730	17450	18130
17	15760	17840	18440	18390	18480	18630	17940	17870	18550	17720	17450	18080
18	15780	17900	18380	18690	18430	18500	17910	17850	18400	17730	17440	18040
19	15780	18010	18330	19040	18370	18400	17880	17830	18290	17760	17440	18000
20	15770	18050	18300	18970	18330	18320	17880	17810	18210	17750	17440	17960
21	15770	18060	18260	18810	18300	18270	17870	17780	18140	17730	17420	17940
22	15770	18060	18230	18680	18250	18220	17870	17750	18100	17720	17410	17930
23	15780	18080	18200	18580	18220	18180	17870	17730	18050	17700	17390	17930
24	15780	18260	18210	18510	18210	18170	17890	17710	18030	17690	17370	17930
25	15770	18400	18290	18450	18190	18160	17880	17690	17970	17670	17360	17900
26	15770	18370	18540	18410	18280	18130	17860	17680	17940	17660	17380	17870
27	15770	18330	18840	18390	19320	18110	17850	17690	17910	17640	17450	17850
28	15770	18300	18840	18370	19430	18230	17840	17780	17890	17660	17570	17840
29	15760	18430	18720	18400	---	18280	17820	17820	17870	17710	17780	17820
30	15770	18430	18610	18460	---	18260	17810	17810	17860	17700	17890	17800
31	15760	---	18520	18430	---	18240	---	17800	---	17690	18070	---
MAX	15790	18430	18840	19040	19430	19690	18210	18250	23140	17960	18070	18910
MIN	15560	15780	18130	18230	18190	18110	17810	17680	17720	17640	17360	17800
(+)	258.40	260.64	260.72	260.64	261.49	260.48	260.12	260.11	260.16	260.02	260.34	260.12
(@)	-40	+2670	+90	-90	+1000	-1190	-430	-10	+60	-170	+380	-270

CAL YR 2000 MAX 19640 MIN 15560 (@) +440  
WTR YR 2001 MAX 23140 MIN 15560 (@) +2000

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

08065330 Houston County Lake near Crockett, TX--Continued





## TRINITY RIVER BASIN

08065350 Trinity River near Crockett, TX

LOCATION.--Lat 31°20'18", long 95°39'22", Houston-Leon County line, Hydrologic Unit 12030201, on left bank at an abandoned bridge abutment near left end of an abandoned lock and dam, 1,000 ft upstream from State Highway 7, 6.9 mi downstream from Upper Keechi Creek, 11.9 mi west of Crockett, and at mile 265.4.

DRAINAGE AREA.--13,911 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 141.15 ft above sea level. Prior to Oct. 13, 1983, water-stage recorder at site 1,000 ft downstream at datum 4.56 ft lower. Satellite telemeter at station.

REMARKS.--Records fair. Since installation of gage in water year 1964, at least 10% of contributing drainage area has been regulated. There are many diversions above station for irrigation, municipal, and industrial uses.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, 56.1 ft Apr. 30 or May 1, 1942, at former site and datum, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	892	2340	e7200	24700	12100	38700	25100	5330	5770	1460	1080	1880
2	852	5370	e3700	25600	14500	37000	25000	4000	4900	1760	1050	3950
3	843	5810	e2650	26300	15400	36400	24700	3030	3350	2120	1060	7320
4	822	6110	e2200	26600	14800	36900	24500	2550	2490	4930	1120	8630
5	810	5430	e2000	26400	12500	37900	24400	2400	2190	8450	1100	10700
6	847	6510	e1900	25300	9250	40800	24300	3370	2620	10000	1060	7910
7	861	8770	e1790	21200	6140	46900	24100	4460	9970	7850	1040	6580
8	904	11300	e1800	13600	4260	53800	23700	9180	28700	4000	1030	7870
9	931	13700	e1750	9330	3380	58400	22900	11600	25400	2290	1020	8870
10	939	15000	e1700	9200	2860	57100	21800	12800	15500	1740	1010	7590
11	965	15100	e1670	9250	3160	52000	20400	13700	7560	e1500	999	4280
12	1010	13400	e1620	8400	3800	49500	18800	13900	4450	e1450	984	2560
13	1010	10400	e3000	9860	4660	46900	17000	12800	3330	e1400	1010	2490
14	974	6000	e4820	10900	4560	43800	15800	11300	2580	e1350	1010	2230
15	961	4830	3540	10500	4260	42200	15400	10600	3630	e1300	1020	1850
16	1070	6460	3770	8640	6220	41600	15500	10300	4720	1280	1110	2070
17	1290	6090	4280	6990	12900	41800	14900	9270	3580	1260	1150	1800
18	1260	3830	4290	9980	16500	42900	13100	7560	4090	1230	1110	1810
19	2500	3020	3730	17900	18900	43500	11000	6440	4930	1210	1090	1840
20	3650	2730	2930	20400	21400	43200	9860	5810	4200	1230	1480	1960
21	2760	2300	2530	21300	24400	41900	9410	5360	3090	1210	4140	2030
22	1730	2130	2310	21900	28600	39700	8840	4520	2210	1180	4480	2860
23	1290	1890	2190	22000	34000	36900	8040	3890	1920	1150	3340	3460
24	1170	2940	2110	22100	38600	33300	7510	3390	1790	1140	2030	2970
25	1290	5450	2400	22000	41300	29900	7570	3100	1660	1130	1530	2880
26	2700	8260	4670	20900	42100	28100	7840	2940	1590	1110	e1300	2580
27	e3140	10300	12800	17300	43300	26700	8130	2700	1630	1110	e1200	2010
28	2040	11600	18800	11600	41300	26100	7480	2560	1570	1130	1190	1760
29	1440	13000	21500	7820	---	25900	6700	2600	1490	1120	1260	1640
30	1250	e10600	23400	6910	---	25500	6190	2710	1440	1120	1350	1670
31	1210	---	23900	7980	---	25300	---	4170	---	1120	2010	---
TOTAL	43411	220670	176950	502860	485150	1230600	469970	198340	162350	70330	45363	118050
MEAN	1400	7356	5708	16220	17330	39700	15670	6398	5412	2269	1463	3935
MAX	3650	15100	23900	26600	43300	58400	25100	13900	28700	10000	4480	10700
MIN	810	1890	1620	6910	2860	25300	6190	2400	1440	1110	984	1640
AC-FT	86110	437700	351000	997400	962300	2441000	932200	393400	322000	139500	89980	234200

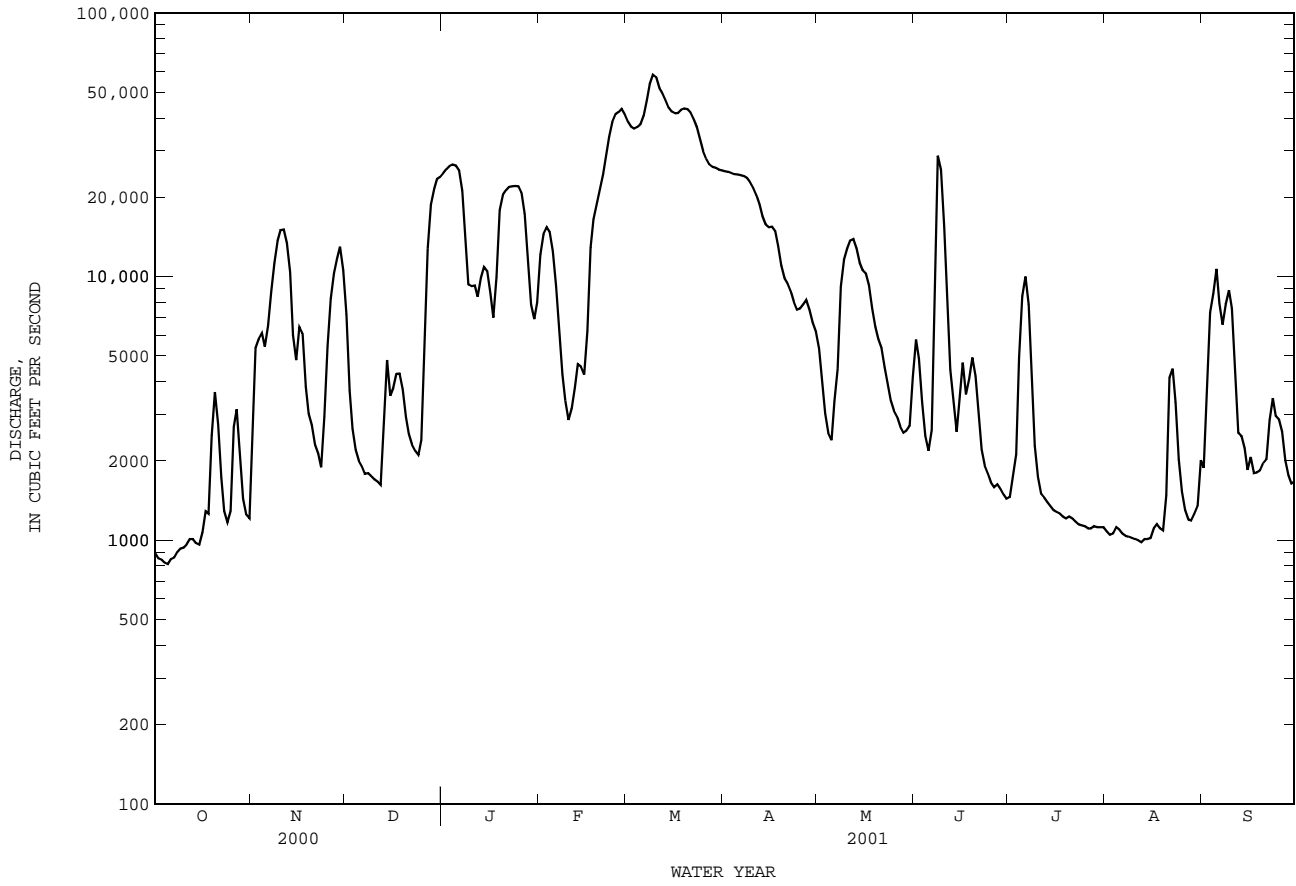
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

MEAN	3159	5674	7433	6624	8139	10540	8820	12970	9477	3324	1802	1810
MAX	16840	26110	35440	33620	30490	39700	25960	62100	29570	15030	7188	6932
(WY)	1974	1975	1992	1992	1992	2001	1977	1990	1989	1989	1982	1974
MIN	548	619	719	514	670	730	931	939	822	374	413	513
(WY)	1979	1967	1967	1964	1967	1967	1972	1971	1971	1964	1967	1972

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL TOTAL		1281855		3724044								
ANNUAL MEAN		3502		10200								
HIGHEST ANNUAL MEAN										6759		
LOWEST ANNUAL MEAN										16810		1992
HIGHEST DAILY MEAN										1352		1971
LOWEST DAILY MEAN										109000		May 10 1990
ANNUAL SEVEN-DAY MINIMUM										278		Aug 12 1964
MAXIMUM PEAK FLOW										293		Aug 10 1964
MAXIMUM PEAK STAGE										59300		May 10 1990
ANNUAL RUNOFF (AC-FT)										44.71		Mar 9
10 PERCENT EXCEEDS										48.54		May 10 1990
50 PERCENT EXCEEDS										2543000		
90 PERCENT EXCEEDS										7387000		
										4896000		
										26500		18900
										4460		2380
										1120		740

e Estimated

08065350 Trinity River near Crockett, TX--Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Feb. 1964 to current year.  
 BIOCHEMICAL DATA: Feb. 1968 to current year.  
 PESTICIDE DATA: Nov. 1971 to July 1981.  
 SEDIMENT DATA: Nov. 1972 to Sept. 1977.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Feb. 1964 to current year.  
 pH: Mar. 1975 to current year.  
 WATER TEMPERATURE: Feb. 1964 to Sept. 1971, Mar. 1975 to current year.  
 DISSOLVED OXYGEN: Mar. 1975 to current year.  
 SUSPENDED-SEDIMENT DISCHARGE: July 1972 to Sept. 1977.

INSTRUMENTATION.--Water-quality monitor since Mar. 1975.

REMARKS.--Records fair, except periods when interruption in the record that was caused by fouling of the instrument probes, which are poor. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and a regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. New regression equations were developed based on data from water years 1992 to 2001. The standard error, of estimate for dissolved solids is 5%, chloride is 17%, sulfate is 10% and for hardness is 7%. Regression equations developed for this station may be obtained from the U.S. 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, 2,370 microsiemens/cm, Sept. 22, 1964; minimum, 89 microsiemens/cm, June 8, 2001.  
 pH: Maximum, 9.6 units, Aug. 11-12, 1981; minimum, 5.9 units, Aug. 12, 1977.  
 WATER TEMPERATURE: Maximum, 37.0°C, July 4, 1970, Sept. 4, 1978; minimum, 1.0°C, Jan. 17, 1978, Nov. 24, 1984.  
 DISSOLVED OXYGEN: Maximum, 19.3 mg/L, Feb. 10, 1981; minimum, 0.0 mg/L, Apr. 20, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 810 microsiemens/cm, Oct. 5; minimum, 89 microsiemens/cm, June 8.  
 pH: Maximum, 8.4 units, Dec. 28; minimum, 6.0 units, June 8.  
 WATER TEMPERATURE: Maximum, 33.8°C, July 23; minimum, 3.4°C, Jan. 4.  
 DISSOLVED OXYGEN: Maximum, 12.9 mg/L, Jan. 3; minimum, 4.5 mg/L, July 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, SOLVED (MG/L) (00300)	OXYGEN, DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	HARD-NESS TOTAL (MG/L) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)		
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM, AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 29...	0950	13500	306	8.0	14.5	770	8.8	85	1.0	98	27	33.7	3.33	
FEB 28...	1310	39900	340	--	15.7	--	--	--	--	--	--	--	--	
FEB 28...	1450	40800	330	7.9	15.0	760	7.0	70	2.2	120	30	43.6	3.44	
APR 30...	1435	6160	437	7.8	22.5	765	8.0	92	1.9	150	20	50.5	4.91	
JUN 13...	1715	3120	422	8.1	30.0	760	7.7	102	2.3	120	41	38.7	5.64	
AUG 08...	0825	1030	750	7.6	31.5	770	7.1	96	1.3	180	66	61.0	6.57	
SEP 05...	1435	11000	265	8.0	27.0	765	6.8	85	1.6	100	19	35.7	2.97	
NOV 29...	18.0	.8	5.06	71	39.3	18.2	.3	8.2	175	1.35	.028	1.38	E.040	
FEB 28...	--	--	--	--	--	--	--	--	--	--	--	--	--	
FEB 28...	16.3	.6	4.23	93	33.0	17.0	.3	7.1	184	.764	.012	.776	<.041	
APR 30...	28.6	1	5.08	126	47.5	26.5	.4	7.0	256	2.02	.013	2.03	<.041	
JUN 13...	31.1	1	5.22	79	50.6	35.9	.4	11.8	238	2.43	.016	2.45	<.040	
AUG 08...	70.2	2	10.4	113	84.3	75.8	1.0	8.4	422	7.75	.024	7.77	E.030	
SEP 05...	15.2	.7	4.57	82	23.7	17.0	.3	7.0	156	--	E.035	E1.18	<.040	

TRINITY RIVER BASIN

08065350 Trinity River near Crockett, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
NOV 29...	.49	.208	.186	.570
FEB 28...	--	--	--	--
28...	.40	.069	.068	.209
APR 30...	.49	.197	.164	.503
JUN 13...	.54	.184	.157	.481
AUG 08...	.67	.870	.835	2.56
SEP 05...	E.44	E.212	E.159	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR OCTOBER 2000 TO SEPTEMBER 2001

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. 2000	43411	601	343	40170	59	6960	67	7830	150
NOV. 2000	220670	256	146	87190	16	9700	27	16190	88
DEC. 2000	176950	194	111	52820	11	5350	20	9730	69
JAN. 2001	502860	302	172	234200	17	23490	32	43110	110
FEB. 2001	485150	318	182	237800	19	24690	34	43900	110
MAR. 2001	1230600	259	148	491300	15	48870	27	90390	94
APR. 2001	469970	294	168	213100	19	24060	31	39630	100
MAY 2001	198340	424	242	129500	30	15960	45	24290	140
JUNE 2001	162350	302	173	75720	20	8830	32	14120	100
JULY 2001	70330	501	286	54320	42	7910	55	10370	150
AUG. 2001	45363	565	322	39460	56	6890	63	7700	140
SEPT 2001	118050	394	225	71730	27	8600	42	13410	130
TOTAL	3724044.00	**	**	1727300	**	191300	**	320700	**
WTD.AVG.	10200	301	172	**	19	**	32	**	100

## TRINITY RIVER BASIN

08065350 Trinity River near Crockett, TX--Continued

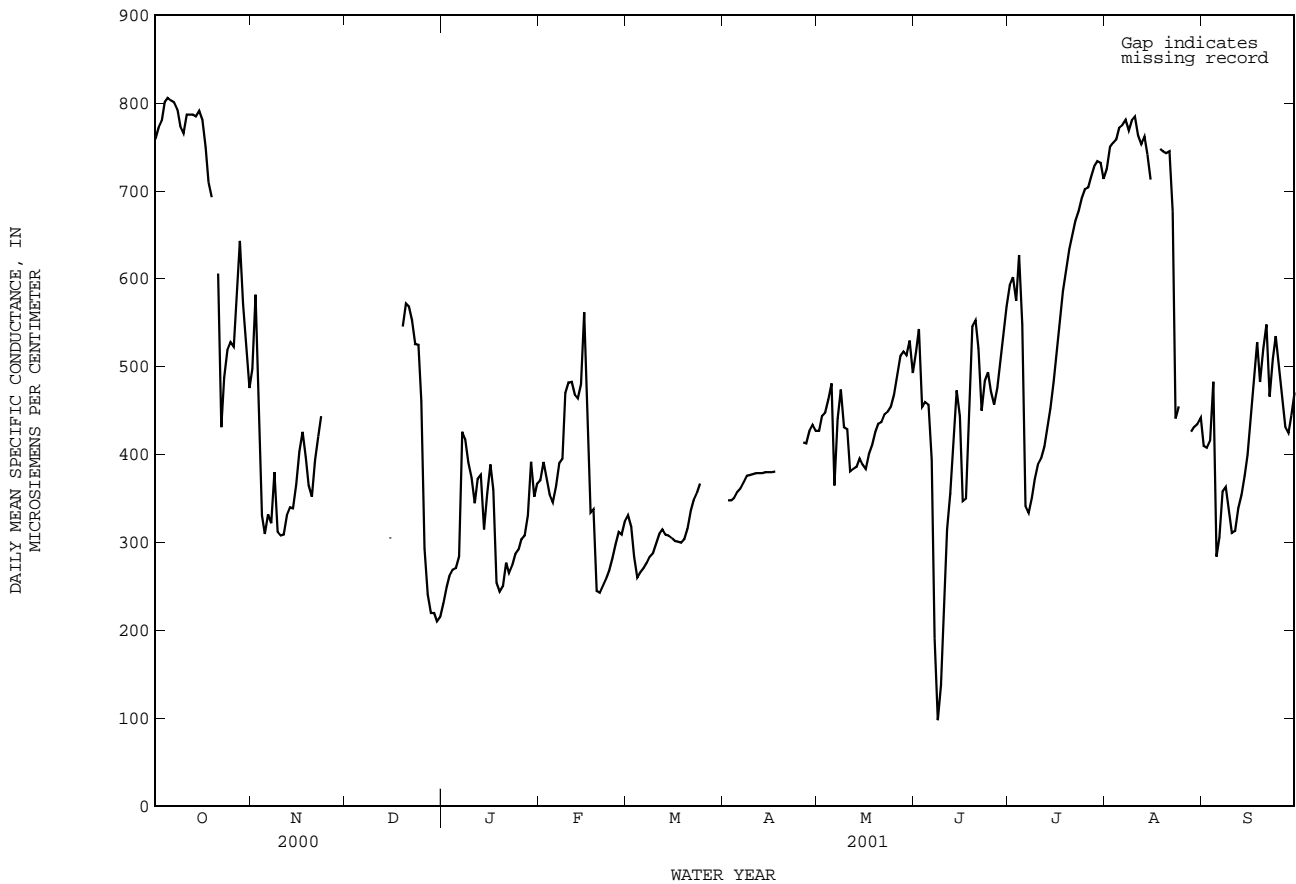
SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	764	750	759	521	481	498	---	---	---	241	221	231
2	778	762	772	635	521	582	---	---	---	256	240	249
3	791	772	780	600	368	430	---	---	---	266	256	262
4	809	788	801	368	316	331	---	---	---	271	266	269
5	810	800	806	327	292	310	---	---	---	273	269	271
6	806	799	803	376	305	332	---	---	---	296	273	284
7	804	799	801	353	300	322	---	---	---	625	288	426
8	803	774	793	426	314	380	---	---	---	447	407	418
9	782	759	774	343	295	312	---	---	---	429	373	391
10	778	757	766	343	292	308	---	---	---	393	349	374
11	791	778	787	320	301	309	---	---	---	358	340	345
12	791	782	787	343	320	331	---	---	---	379	358	372
13	793	780	787	346	326	340	---	---	---	398	347	377
14	790	776	785	358	322	339	---	240	---	347	306	315
15	795	788	791	370	357	366	376	244	305	380	320	356
16	793	765	781	474	368	404	---	---	---	405	372	389
17	767	732	750	484	382	426	---	---	---	405	308	360
18	738	672	710	404	387	397	---	---	---	308	213	254
19	717	642	693	387	353	365	561	539	546	262	215	244
20	---	---	---	373	340	352	577	561	572	290	229	250
21	715	405	606	410	373	394	579	555	569	290	266	277
22	455	396	431	432	410	421	558	542	553	266	264	265
23	514	455	488	460	432	444	542	519	526	281	266	274
24	524	514	519	---	---	---	529	521	525	290	281	287
25	542	521	528	---	---	---	530	312	461	296	290	292
26	542	510	523	---	---	---	347	238	293	309	296	304
27	643	518	585	---	---	---	273	218	241	311	305	308
28	662	609	643	---	---	---	250	194	220	373	308	331
29	609	539	571	---	---	---	228	211	220	399	373	392
30	539	486	520	---	---	---	223	205	210	382	328	352
31	486	471	476	---	---	---	221	210	215	415	337	367
MONTH	---	---	---	---	---	---	---	---	---	625	213	319
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	426	339	371	333	329	331	---	---	---	429	424	427
2	404	367	392	332	300	318	349	347	348	448	443	444
3	380	361	372	300	269	284	349	347	348	453	446	448
4	361	349	355	269	257	260	355	349	351	475	453	463
5	355	341	346	271	258	266	360	355	358	487	452	481
6	377	354	364	273	269	271	365	359	362	452	278	365
7	397	377	390	281	272	277	373	365	369	499	406	441
8	406	392	395	285	281	284	378	373	376	580	322	474
9	486	406	470	292	284	288	378	377	377	511	335	431
10	489	477	482	304	292	299	379	378	378	477	410	429
11	490	478	483	315	304	310	379	378	379	410	365	381
12	490	446	468	317	314	315	380	378	379	389	371	384
13	507	413	464	315	307	309	380	378	379	390	383	386
14	558	412	480	309	307	308	380	378	380	399	390	396
15	568	551	562	307	301	305	381	379	380	400	376	389
16	551	348	452	304	300	302	382	379	380	398	374	384
17	380	305	334	303	300	301	382	381	381	406	397	401
18	430	257	338	301	300	300	---	---	---	424	397	411
19	257	238	245	308	301	304	---	---	---	435	420	426
20	245	241	243	326	308	316	---	---	---	437	432	435
21	254	245	251	344	326	336	---	---	---	439	436	437
22	262	254	258	353	344	348	---	---	---	449	439	446
23	274	262	268	361	352	356	---	---	---	454	446	449
24	290	274	282	372	361	367	---	---	---	459	453	454
25	306	290	298	---	---	---	---	---	---	479	459	468
26	317	306	312	---	---	---	415	412	414	504	479	490
27	318	295	309	---	---	---	421	409	413	518	503	512
28	334	312	324	---	---	---	449	408	427	522	513	517
29	---	---	---	---	---	---	436	432	434	520	510	513
30	---	---	---	---	---	---	432	425	427	576	515	530
31	---	---	---	---	---	---	---	---	---	544	431	493
MONTH	568	238	368	---	---	---	---	---	---	580	278	442

08065350 Trinity River near Crockett, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	603	415	517	602	581	593	739	712	725	436	399	410
2	606	472	543	610	580	602	757	739	750	542	247	408
3	472	445	454	604	494	575	758	751	755	560	278	416
4	466	452	460	688	494	627	767	754	759	578	409	483
5	461	454	457	650	370	548	774	767	772	409	248	284
6	455	252	394	370	327	342	776	771	775	351	247	306
7	252	102	191	339	331	334	786	774	781	386	324	358
8	117	89	98	362	339	351	774	765	769	400	322	363
9	176	117	138	381	362	372	788	771	781	400	300	335
10	283	176	222	393	381	389	788	769	785	321	290	311
11	340	283	315	401	392	396	796	749	763	329	287	313
12	375	340	356	419	400	409	760	747	753	344	329	339
13	439	375	409	442	419	430	767	753	762	365	344	354
14	501	439	473	466	442	453	764	715	742	387	365	376
15	501	405	444	501	466	483	723	708	713	419	387	400
16	467	279	347	541	501	520	---	723	---	466	419	447
17	417	288	350	571	541	556	---	---	---	515	464	490
18	536	417	467	597	571	586	750	745	748	543	504	528
19	552	536	546	624	597	611	747	743	745	504	479	483
20	556	550	553	647	623	634	753	737	743	543	491	520
21	551	459	521	656	647	651	754	718	745	559	497	548
22	472	436	450	672	656	666	727	520	677	497	449	466
23	492	472	484	683	672	677	520	412	441	550	468	509
24	497	492	494	702	683	692	474	428	455	557	479	535
25	492	458	472	706	698	702	453	---	---	516	477	502
26	461	454	457	708	700	704	---	---	---	493	426	468
27	491	461	476	723	708	716	---	---	---	436	426	432
28	523	491	508	732	720	728	431	418	426	434	421	425
29	559	523	539	737	730	734	443	420	432	461	429	445
30	581	559	569	736	727	732	448	426	435	479	461	471
31	---	---	---	727	707	714	456	422	442	---	---	---
MONTH	606	89	423	737	327	565	---	---	---	578	247	424



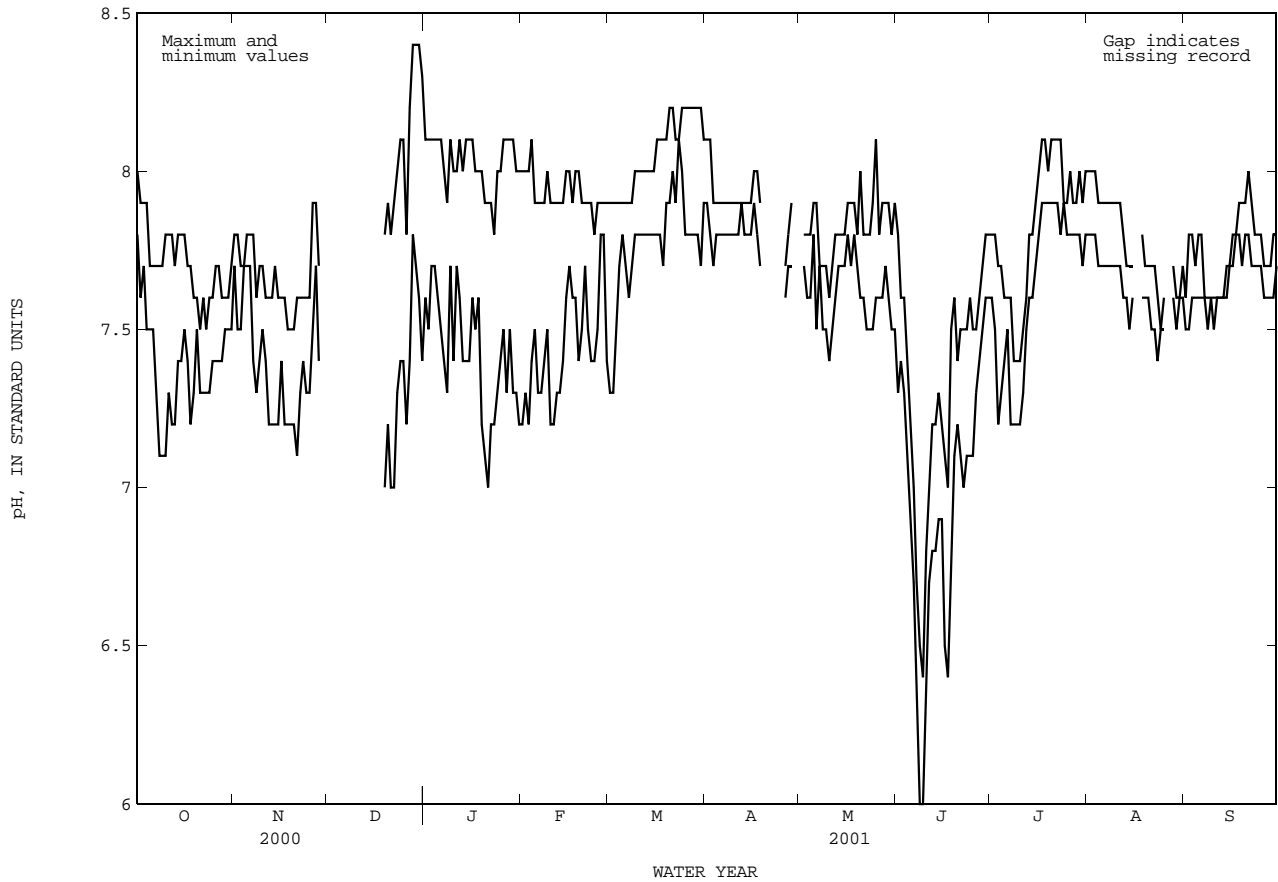
## TRINITY RIVER BASIN

08065350 Trinity River near Crockett, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	7.8	7.8	7.7	---	---	8.1	7.6	8.0	7.2	7.9	7.3
2	7.9	7.6	7.8	7.5	---	---	8.1	7.5	8.0	7.3	7.9	7.3
3	7.9	7.7	7.7	7.5	---	---	8.1	7.7	8.0	7.2	7.9	7.5
4	7.9	7.5	7.7	7.7	---	---	8.1	7.7	8.1	7.4	7.9	7.7
5	7.7	7.5	7.8	7.7	---	---	8.1	7.6	7.9	7.5	7.9	7.8
6	7.7	7.5	7.8	7.7	---	---	8.1	7.5	7.9	7.3	7.9	7.7
7	7.7	7.3	7.8	7.4	---	---	8.0	7.4	7.9	7.3	7.9	7.6
8	7.7	7.1	7.6	7.3	---	---	7.9	7.3	7.9	7.4	7.9	7.7
9	7.7	7.1	7.7	7.4	---	---	8.1	7.7	8.0	7.5	8.0	7.8
10	7.8	7.1	7.7	7.5	---	---	8.0	7.4	7.9	7.2	8.0	7.8
11	7.8	7.3	7.6	7.4	---	---	8.0	7.7	7.9	7.2	8.0	7.8
12	7.8	7.2	7.6	7.2	---	---	8.1	7.6	7.9	7.3	8.0	7.8
13	7.7	7.2	7.6	7.2	---	---	8.0	7.4	7.9	7.3	8.0	7.8
14	7.8	7.4	7.7	7.2	---	---	8.1	7.4	7.9	7.4	8.0	7.8
15	7.8	7.4	7.6	7.2	---	---	8.1	7.4	8.0	7.6	8.0	7.8
16	7.8	7.5	7.6	7.4	---	---	8.1	7.6	8.0	7.7	8.1	7.8
17	7.7	7.4	7.6	7.2	---	---	8.0	7.5	7.9	7.6	8.1	7.8
18	7.7	7.2	7.5	7.2	---	---	8.0	7.6	8.0	7.6	8.1	7.7
19	7.6	7.3	7.5	7.2	7.8	7.0	8.0	7.2	8.0	7.4	8.1	7.9
20	7.6	7.5	7.5	7.2	7.9	7.2	7.9	7.1	7.9	7.5	8.2	7.9
21	7.5	7.3	7.6	7.1	7.8	7.0	7.9	7.0	7.9	7.7	8.2	8.0
22	7.6	7.3	7.6	7.3	7.9	7.0	7.9	7.2	7.9	7.5	8.1	7.9
23	7.5	7.3	7.6	7.4	8.0	7.3	7.8	7.2	7.9	7.4	8.1	8.1
24	7.6	7.3	7.6	7.3	8.1	7.4	8.0	7.3	7.8	7.4	8.2	8.0
25	7.6	7.4	7.6	7.3	8.1	7.4	8.0	7.4	7.9	7.5	8.2	7.8
26	7.7	7.4	7.9	7.5	7.8	7.2	8.1	7.5	7.9	7.8	8.2	7.8
27	7.7	7.4	7.9	7.7	8.2	7.4	8.1	7.3	7.9	7.8	8.2	7.8
28	7.6	7.4	7.7	7.4	8.4	7.8	8.1	7.5	7.9	7.4	8.2	7.8
29	7.6	7.5	---	---	8.4	7.7	8.1	7.3	---	---	8.2	7.8
30	7.6	7.5	---	---	8.4	7.6	8.0	7.3	---	---	8.2	7.7
31	7.7	7.5	---	---	8.3	7.4	8.0	7.2	---	---	8.1	7.9
MONTH	8.0	7.1	---	---	---	---	8.1	7.0	8.1	7.2	8.2	7.3
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.9	---	---	7.8	7.3	7.8	7.6	8.0	7.8	7.6	7.5
2	8.1	7.8	7.8	7.7	7.6	7.4	7.8	7.5	8.0	7.8	7.8	7.5
3	7.9	7.7	7.8	7.6	7.6	7.3	7.7	7.2	8.0	7.8	7.8	7.6
4	7.9	7.8	7.8	7.6	7.4	7.1	7.7	7.3	7.9	7.7	7.7	7.6
5	7.9	7.8	7.9	7.8	7.2	6.9	7.6	7.4	7.9	7.7	7.8	7.6
6	7.9	7.8	7.9	7.5	7.0	6.7	7.6	7.5	7.9	7.7	7.8	7.6
7	7.9	7.8	7.7	7.7	6.7	6.4	7.6	7.2	7.9	7.7	7.6	7.6
8	7.9	7.8	7.7	7.5	6.5	6.0	7.4	7.2	7.9	7.7	7.6	7.5
9	7.9	7.8	7.7	7.5	6.4	6.0	7.4	7.2	7.9	7.7	7.6	7.6
10	7.9	7.8	7.6	7.4	6.8	6.4	7.4	7.2	7.9	7.7	7.6	7.5
11	7.9	7.8	7.7	7.5	7.0	6.7	7.5	7.3	7.9	7.7	7.6	7.6
12	7.9	7.9	7.8	7.6	7.2	6.8	7.6	7.5	7.8	7.6	7.6	7.6
13	7.9	7.8	7.8	7.7	7.2	6.8	7.8	7.6	7.7	7.6	7.6	7.6
14	7.9	7.8	7.8	7.7	7.3	6.9	7.8	7.6	7.7	7.5	7.7	7.6
15	7.9	7.8	7.8	7.7	7.2	6.9	7.9	7.7	7.7	7.6	7.7	7.7
16	8.0	7.9	7.9	7.8	7.1	6.5	8.0	7.8	---	---	7.8	7.7
17	8.0	7.8	7.9	7.7	7.0	6.4	8.1	7.9	---	---	7.8	7.8
18	7.9	7.7	7.9	7.8	7.5	6.7	8.1	7.9	7.8	7.6	7.9	7.8
19	---	---	7.8	7.7	7.6	7.1	8.0	7.9	7.7	7.6	7.9	7.7
20	---	---	8.0	7.6	7.4	7.2	8.1	7.9	7.7	7.6	7.9	7.8
21	---	---	7.8	7.6	7.5	7.1	8.1	7.9	7.7	7.5	8.0	7.8
22	---	---	7.8	7.5	7.5	7.0	8.1	7.9	7.7	7.5	7.9	7.7
23	---	---	7.8	7.5	7.5	7.1	8.1	7.8	7.6	7.4	7.8	7.7
24	---	---	7.9	7.5	7.6	7.1	7.9	7.9	7.5	7.5	7.8	7.7
25	---	---	8.1	7.6	7.5	7.1	7.9	7.8	7.6	7.5	7.8	7.7
26	7.7	7.6	7.8	7.6	7.5	7.3	8.0	7.8	---	---	7.7	7.6
27	7.8	7.7	7.9	7.6	7.6	7.4	7.9	7.8	---	---	7.7	7.6
28	7.9	7.7	7.9	7.7	7.7	7.5	7.9	7.8	7.7	7.6	7.7	7.6
29	---	---	7.9	7.6	7.8	7.6	8.0	7.8	7.6	7.5	7.8	7.6
30	---	---	7.8	7.5	7.8	7.6	7.9	7.7	7.6	7.6	7.8	7.7
31	---	---	7.9	7.5	---	---	8.0	7.8	7.7	7.6	---	---
MONTH	---	---	---	---	7.8	6.0	8.1	7.2	---	---	8.0	7.5

08065350 Trinity River near Crockett, TX--Continued



TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	24.0	22.6	23.4	23.7	23.2	23.4	---	---	---	5.5	4.8	5.2
2	24.5	23.4	23.8	23.8	23.2	23.5	---	---	---	4.8	4.0	4.4
3	25.1	24.0	24.5	23.5	21.8	22.4	---	---	---	4.0	3.6	3.7
4	25.6	24.6	25.0	21.8	21.2	21.4	---	---	---	4.0	3.4	3.7
5	26.0	25.1	25.6	21.2	20.9	21.0	---	---	---	5.1	4.0	4.6
6	26.2	24.6	25.5	21.2	20.5	20.8	---	---	---	6.2	5.1	5.6
7	24.6	22.1	23.5	20.5	19.5	19.9	---	---	---	7.2	6.2	6.6
8	22.1	19.7	20.9	19.5	17.6	18.9	---	---	---	7.7	7.2	7.4
9	19.7	18.6	19.1	17.6	16.8	17.0	---	---	---	8.2	7.5	7.8
10	18.8	18.1	18.4	16.8	15.7	16.1	---	---	---	8.3	8.1	8.2
11	19.2	18.2	18.6	15.7	14.7	15.1	---	---	---	8.1	7.9	7.9
12	19.7	18.5	19.0	14.7	14.0	14.4	---	---	---	7.9	7.9	7.9
13	20.3	18.8	19.6	14.0	12.7	13.3	---	---	---	7.9	7.8	7.8
14	20.7	19.5	20.1	12.7	12.2	12.4	7.4	---	---	8.0	7.5	7.8
15	21.4	20.3	20.8	12.2	11.7	11.8	7.8	7.1	7.4	8.5	7.9	8.2
16	21.5	21.2	21.4	12.1	11.6	11.7	---	7.8	---	8.7	8.4	8.6
17	22.3	21.1	21.7	12.2	11.8	12.0	---	---	---	8.7	8.0	8.4
18	22.6	21.5	21.9	11.8	10.8	11.4	---	---	---	8.0	7.1	7.5
19	22.2	21.5	21.9	10.9	10.2	10.6	8.5	---	---	7.6	6.9	7.2
20	22.5	21.8	22.1	10.7	9.9	10.3	8.6	7.7	8.1	7.3	6.6	6.9
21	23.0	22.5	22.7	10.8	10.1	10.5	8.7	8.1	8.3	7.1	6.4	6.7
22	22.8	22.3	22.5	10.6	10.0	10.4	8.3	7.7	8.0	6.4	6.0	6.2
23	23.0	22.4	22.7	11.6	10.6	11.0	8.1	7.7	7.9	6.2	5.9	6.1
24	23.4	22.3	22.8	13.0	11.6	12.5	8.2	8.1	8.1	6.9	6.2	6.5
25	23.4	22.5	22.9	13.9	13.0	13.4	8.1	7.8	7.9	7.7	6.9	7.2
26	23.2	22.7	22.9	13.6	12.8	13.3	7.8	6.9	7.5	8.3	7.6	7.9
27	23.1	22.6	22.9	13.3	12.8	13.1	6.9	5.9	6.5	8.9	8.2	8.5
28	23.6	23.0	23.2	13.7	13.2	13.4	5.9	5.6	5.7	9.9	8.9	9.2
29	23.5	22.8	23.2	14.7	13.7	14.2	5.8	5.5	5.6	10.8	9.9	10.4
30	24.0	22.9	23.4	---	---	---	5.7	5.2	5.4	11.2	10.4	10.8
31	24.0	23.1	23.5	---	---	---	5.6	5.4	5.5	11.1	10.4	10.8
MONTH	26.2	18.1	22.2	---	---	---	---	---	---	11.2	3.4	7.3



## TRINITY RIVER BASIN

08065350 Trinity River near Crockett, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.9	10.0	10.4	15.3	13.8	14.6	14.0	12.6	13.1	---	---	---
2	10.1	9.8	10.0	13.8	12.1	12.9	15.5	14.0	14.6	23.5	---	---
3	9.8	9.4	9.6	12.1	11.4	11.7	16.8	15.5	16.1	24.1	22.9	23.4
4	9.8	9.3	9.5	11.5	11.2	11.4	18.1	16.8	17.4	24.2	23.4	23.8
5	9.7	9.1	9.4	12.1	11.5	11.9	19.0	18.1	18.5	24.1	23.3	23.7
6	10.4	9.4	9.9	12.7	12.0	12.4	19.9	19.0	19.4	23.9	22.0	23.0
7	11.4	10.3	10.7	13.6	12.4	12.9	20.2	19.7	20.0	24.4	22.8	23.6
8	12.8	11.4	12.0	13.6	13.2	13.4	20.7	20.1	20.3	24.3	22.6	23.7
9	13.6	12.8	13.3	14.2	13.1	13.6	21.0	20.5	20.7	23.8	22.6	23.2
10	13.0	12.2	12.6	14.3	13.6	14.0	21.0	20.6	20.8	23.5	22.6	23.1
11	12.6	11.9	12.3	14.5	14.1	14.3	20.9	20.2	20.5	23.4	22.8	23.1
12	11.9	11.5	11.7	15.7	14.5	15.1	20.2	19.7	19.9	23.9	23.2	23.5
13	12.0	11.5	11.6	16.4	15.6	16.0	20.1	19.7	19.9	24.5	23.7	24.1
14	13.5	11.6	12.4	16.3	16.0	16.2	20.1	19.7	19.9	24.7	24.0	24.4
15	14.4	13.5	14.0	16.1	15.7	15.9	20.1	19.8	19.9	25.1	24.4	24.8
16	14.4	13.2	14.0	15.7	15.1	15.5	20.3	19.7	20.0	24.9	24.4	24.7
17	13.2	12.3	12.7	15.1	14.2	14.8	20.2	19.9	20.0	25.2	24.5	24.9
18	12.3	11.2	12.0	14.2	13.4	13.8	---	---	---	26.1	25.0	25.5
19	11.2	10.6	10.8	13.4	12.8	13.1	---	---	---	26.3	25.7	26.0
20	11.8	10.6	11.1	12.9	12.4	12.7	---	---	---	26.5	25.8	26.1
21	13.2	11.8	12.5	13.5	12.7	13.0	---	---	---	26.4	25.5	26.0
22	13.5	13.2	13.4	14.5	13.3	14.0	---	---	---	25.7	24.9	25.3
23	13.3	13.0	13.2	15.8	14.4	15.1	---	---	---	25.4	24.4	25.0
24	14.3	13.1	13.7	16.5	15.8	16.2	---	---	---	25.8	24.7	25.2
25	14.9	14.2	14.5	16.7	16.3	16.5	---	---	---	25.8	24.6	25.2
26	15.3	14.9	15.1	16.4	15.5	15.9	20.7	---	---	25.4	24.8	25.0
27	15.7	15.1	15.4	15.5	14.2	14.8	20.9	20.0	20.4	25.8	24.4	25.0
28	15.8	15.3	15.7	14.2	12.9	13.5	21.4	20.3	20.9	26.3	25.0	25.7
29	---	---	---	12.9	12.1	12.4	21.8	20.8	21.3	27.1	25.8	26.3
30	---	---	---	12.1	11.9	12.0	22.2	21.3	21.8	27.2	26.3	26.7
31	---	---	---	12.6	11.9	12.2	---	---	---	27.3	26.3	26.8
MONTH	15.8	9.1	12.3	16.7	11.2	13.9	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	27.5	26.2	26.8	29.3	28.2	28.7	33.0	31.5	32.2	26.1	25.4	25.7
2	27.6	26.9	27.2	29.0	27.4	28.2	32.9	32.0	32.4	27.1	25.8	26.3
3	28.2	27.1	27.6	29.4	27.8	28.5	33.0	31.6	32.2	27.7	25.5	26.6
4	28.6	27.6	28.0	29.9	28.2	29.1	32.6	31.5	32.1	27.8	26.9	27.2
5	28.2	27.6	27.9	29.4	28.6	29.0	32.7	31.5	32.1	26.9	25.4	26.0
6	27.6	24.5	26.4	28.9	28.0	28.5	32.7	31.5	32.1	27.0	25.7	26.4
7	24.5	23.1	23.8	29.5	28.6	29.0	32.3	31.2	31.8	27.2	26.6	26.9
8	23.9	23.1	23.3	30.4	29.2	29.7	32.3	31.2	31.7	27.9	27.1	27.5
9	25.2	23.9	24.4	31.2	29.7	30.4	32.2	31.2	31.6	27.9	26.4	26.9
10	26.3	24.9	25.4	31.9	30.2	31.0	32.2	31.1	31.6	26.8	26.2	26.5
11	27.5	26.1	26.8	32.4	30.6	31.5	32.3	31.4	31.7	27.5	26.5	26.9
12	28.3	27.2	27.7	32.6	30.9	31.8	32.6	31.5	31.9	27.8	26.7	27.2
13	29.1	27.8	28.4	32.7	31.0	31.9	32.2	31.5	31.9	28.0	26.9	27.4
14	29.7	28.3	28.9	32.6	31.2	31.9	32.5	31.5	31.9	28.5	27.3	27.9
15	29.3	26.9	27.8	32.6	31.2	31.9	32.2	31.2	31.7	28.8	27.9	28.3
16	28.0	26.1	27.1	32.9	31.4	32.1	---	31.2	---	28.6	27.8	28.1
17	29.0	27.1	27.9	32.9	31.3	32.2	---	---	---	28.7	27.6	28.1
18	29.5	28.2	28.8	33.1	31.5	32.3	31.9	30.8	31.3	28.8	27.5	28.1
19	29.6	28.7	29.2	33.2	31.5	32.3	31.2	30.3	30.8	29.0	27.8	28.4
20	30.0	29.0	29.4	33.1	31.6	32.4	31.2	29.8	30.5	29.3	28.2	28.6
21	30.1	28.9	29.4	33.5	31.7	32.6	30.9	30.2	30.5	28.8	28.0	28.3
22	30.2	28.7	29.4	33.6	31.9	32.8	30.5	29.6	30.1	28.5	27.4	27.9
23	30.0	28.6	29.3	33.8	32.2	33.0	30.0	28.9	29.5	28.0	27.4	27.7
24	29.9	28.1	29.0	33.4	32.3	33.0	30.3	29.1	29.6	27.4	26.0	26.8
25	29.7	28.0	28.9	33.6	32.3	33.0	30.8	29.2	30.0	26.0	25.0	25.5
26	29.9	28.1	29.0	33.7	32.4	33.0	---	---	---	25.3	24.4	24.8
27	30.2	28.4	29.3	32.9	32.1	32.5	---	---	---	24.9	23.6	24.2
28	30.5	28.7	29.6	32.1	31.4	31.8	29.2	28.2	28.8	24.6	23.2	23.9
29	30.6	28.8	29.7	32.2	30.9	31.5	28.2	27.3	27.8	24.4	22.9	23.6
30	30.0	28.9	29.4	32.2	31.0	31.6	27.3	26.5	26.8	24.1	22.6	23.3
31	---	---	---	32.6	31.2	31.9	26.5	25.7	26.1	---	---	---
MONTH	30.6	23.1	27.9	33.8	27.4	31.3	---	---	---	29.3	22.6	26.7



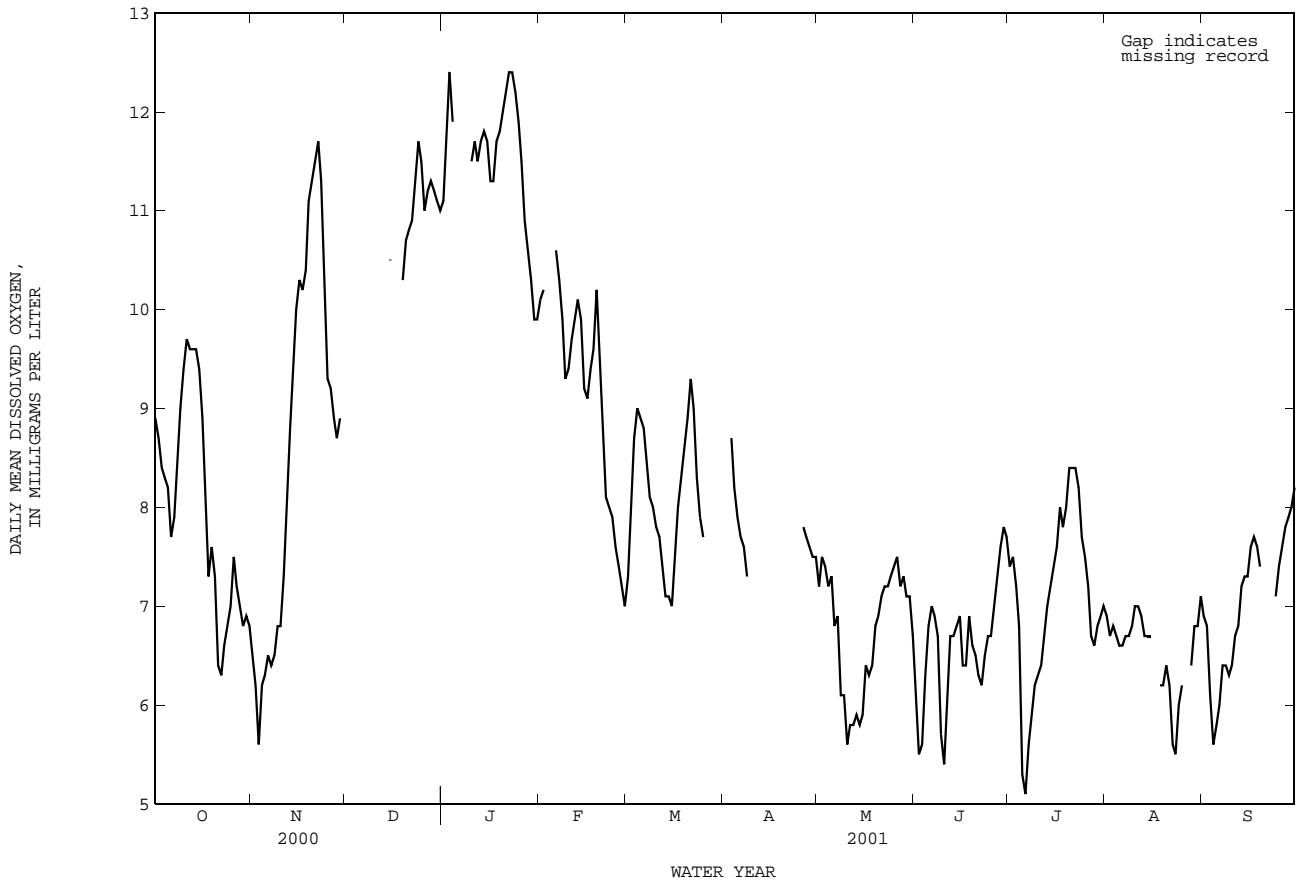
## TRINITY RIVER BASIN

08065350 Trinity River near Crockett, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	10.4	9.6	10.1	7.7	7.1	7.3	---	---	---	7.4	7.0	7.2
2	10.6	9.9	10.2	8.4	7.4	8.0	9.1	---	---	7.7	7.1	7.5
3	---	---	---	9.2	8.3	8.7	8.9	8.4	8.7	7.7	7.2	7.4
4	---	---	---	9.4	8.6	9.0	8.4	7.9	8.2	7.4	7.0	7.2
5	10.7	---	---	9.2	8.7	8.9	8.1	7.4	7.9	7.4	7.1	7.3
6	10.8	10.2	10.6	9.2	8.3	8.8	7.9	7.4	7.7	7.4	6.6	6.8
7	10.6	9.9	10.3	8.8	8.1	8.4	7.8	7.4	7.6	7.1	6.7	6.9
8	10.2	9.6	9.9	8.5	7.9	8.1	7.7	6.9	7.3	7.0	5.5	6.1
9	9.7	8.9	9.3	8.2	7.8	8.0	---	---	---	6.3	5.5	6.1
10	9.7	9.0	9.4	8.0	7.6	7.8	---	---	---	5.9	5.4	5.6
11	10.0	9.4	9.7	8.0	7.6	7.7	---	---	---	5.9	5.5	5.8
12	10.3	9.7	9.9	7.8	7.2	7.4	---	---	---	6.1	5.5	5.8
13	10.5	9.8	10.1	7.7	6.9	7.1	---	---	---	6.2	5.6	5.9
14	10.3	9.2	9.9	7.3	6.9	7.1	---	---	---	6.2	5.1	5.8
15	9.5	8.7	9.2	7.4	6.9	7.0	---	---	---	6.3	5.2	5.9
16	9.5	8.9	9.1	7.8	6.9	7.5	---	---	---	6.7	6.0	6.4
17	9.7	9.1	9.4	8.4	7.6	8.0	---	---	---	6.4	5.9	6.3
18	10.4	9.1	9.6	8.5	8.1	8.3	---	---	---	6.9	5.7	6.4
19	11.2	9.7	10.2	8.9	8.4	8.6	---	---	---	7.1	6.4	6.8
20	10.0	9.1	9.6	9.5	8.7	8.9	---	---	---	7.1	6.6	6.9
21	9.5	8.3	8.8	9.5	8.9	9.3	---	---	---	7.3	6.9	7.1
22	8.3	7.8	8.1	9.6	8.6	9.0	---	---	---	7.3	7.0	7.2
23	8.2	7.8	8.0	8.8	7.8	8.3	---	---	---	7.4	7.1	7.2
24	8.1	7.7	7.9	8.2	7.6	7.9	---	---	---	7.5	7.2	7.3
25	7.9	7.3	7.6	8.0	7.5	7.7	---	---	---	7.7	7.1	7.4
26	7.6	7.2	7.4	---	---	---	8.0	7.7	7.8	7.8	7.2	7.5
27	7.5	6.9	7.2	---	---	---	7.9	7.5	7.7	7.5	6.8	7.2
28	7.3	6.8	7.0	---	---	---	7.8	7.4	7.6	7.7	7.1	7.3
29	---	---	---	---	---	---	7.7	7.4	7.5	7.5	6.7	7.1
30	---	---	---	---	---	---	7.6	7.3	7.5	7.4	6.8	7.1
31	---	---	---	---	---	---	---	---	---	7.0	6.2	6.7
MONTH	---	---	---	---	---	---	---	---	---	7.8	5.1	6.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.4	5.8	6.1	7.8	7.0	7.4	7.7	6.1	6.9	7.1	6.6	6.9
2	6.0	4.9	5.5	8.0	7.0	7.5	7.4	6.3	6.7	7.2	6.5	6.8
3	5.9	5.5	5.6	7.8	6.6	7.2	7.4	6.2	6.8	6.6	5.7	6.1
4	6.7	5.8	6.3	7.4	6.2	6.8	7.3	6.2	6.7	5.8	5.2	5.6
5	6.9	6.6	6.8	6.3	4.6	5.3	7.3	6.1	6.6	6.0	5.5	5.8
6	7.4	6.8	7.0	5.5	4.5	5.1	7.2	6.1	6.6	6.2	5.8	6.0
7	7.3	6.5	6.9	6.1	4.8	5.6	7.4	6.1	6.7	6.8	5.9	6.4
8	7.1	6.1	6.7	6.3	5.7	5.9	7.4	6.2	6.7	6.8	6.1	6.4
9	6.1	5.4	5.7	6.3	6.0	6.2	7.6	6.2	6.8	6.5	5.9	6.3
10	5.7	5.3	5.4	6.6	6.1	6.3	7.7	6.5	7.0	6.5	6.2	6.4
11	6.6	5.3	6.0	6.7	6.1	6.4	7.7	6.4	7.0	6.9	6.4	6.7
12	6.9	6.4	6.7	7.0	6.3	6.7	7.6	6.0	6.9	7.2	6.5	6.8
13	7.1	6.4	6.7	7.5	6.6	7.0	7.3	6.4	6.7	7.3	7.0	7.2
14	7.1	6.5	6.8	8.0	6.7	7.2	7.2	5.7	6.7	7.5	7.2	7.3
15	7.2	6.6	6.9	8.1	6.8	7.4	7.3	6.2	6.7	7.5	7.1	7.3
16	6.9	6.1	6.4	8.4	7.0	7.6	---	---	---	7.8	7.3	7.6
17	6.9	6.1	6.4	9.2	7.1	8.0	---	---	---	8.0	7.5	7.7
18	7.4	6.5	6.9	8.5	7.2	7.8	6.7	5.6	6.2	8.0	7.2	7.6
19	6.9	6.3	6.6	9.1	7.1	8.0	6.8	5.6	6.2	7.8	7.1	7.4
20	6.7	6.2	6.5	9.2	7.8	8.4	6.8	6.1	6.4	---	---	---
21	6.5	5.9	6.3	9.3	7.3	8.4	6.6	5.6	6.2	---	---	---
22	6.6	5.8	6.2	9.3	7.4	8.4	5.8	5.2	5.6	---	---	---
23	6.9	6.2	6.5	9.2	7.4	8.2	5.7	5.2	5.5	---	---	---
24	7.0	6.4	6.7	8.3	7.1	7.7	6.2	5.7	6.0	7.3	6.8	7.1
25	6.9	6.2	6.7	8.3	6.7	7.5	6.4	5.8	6.2	7.7	7.2	7.4
26	7.2	6.7	7.0	7.9	6.6	7.2	---	---	---	7.8	7.3	7.6
27	7.9	6.9	7.3	7.4	6.2	6.7	---	---	---	7.9	7.7	7.8
28	8.3	7.0	7.6	7.1	6.1	6.6	7.1	5.9	6.4	8.1	7.7	7.9
29	8.5	7.2	7.8	7.5	6.3	6.8	6.9	6.6	6.8	8.4	7.7	8.0
30	8.2	7.1	7.7	7.7	6.3	6.9	7.2	6.4	6.8	8.5	7.9	8.2
31	---	---	---	7.7	6.5	7.0	7.7	6.6	7.1	---	---	---
MONTH	8.5	4.9	6.6	9.3	4.5	7.1	---	---	---	---	---	---

08065350 Trinity River near Crockett, TX--Continued



## TRINITY RIVER BASIN

08065800 Bedias Creek near Madisonville, TX

LOCATION.--Lat 30°53'03", long 95°46'39", Madison-Walker County line, Hydrologic Unit 12030202, on right bank at downstream side of bridge on U.S. Highways 75 and 190, 0.5 mi upstream from Interstate Highway 45, 1.5 mi downstream from Caney Creek, and 9.5 mi southeast of Madisonville.

DRAINAGE AREA.--321 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1967 to current year.

Water-quality records.--Chemical data: July 1962 to Apr. 1964, Jan. 1968 to Sept. 1974, Oct. 1984 to Sept. 1987. Biochemical data: Sept. 1970 to Sept. 1974, Apr. 1985 to June 1988, Apr. 1993 to Sept. 1995. Pesticide data: Apr. 1985 to Apr. 1988. Suspended sediment data: Oct. 1984 to Sept. 1986. Specific conductance: Oct. 1984 to Sept. 1987. Water temperature: Oct. 1984 to Sept. 1987.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 150.00 ft above sea level. Satellite telemeter at station.

REMARKS.--Records fair. No known regulation or diversions. Flow may be slightly affected at times by discharge from the flood-detention pools of three floodwater-retarding structures. These structures control runoff from 2.71 mi<sup>2</sup> in the upper Caney Creek and Town Branch drainage basins. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1910, 34 ft in May 1922 (discharge unknown), from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	5.9	57	93	231	1310	234	9.7	4.9	8.2	1.5	365
2	.27	58	41	69	79	937	124	9.3	4.2	41	1.3	308
3	.23	2090	32	57	55	4090	85	8.8	3.2	45	1.1	501
4	.20	13200	26	49	44	5910	66	8.4	2.5	273	1.1	203
5	.22	6150	22	43	38	4340	56	14	2.0	240	1.1	469
6	.83	4170	19	39	33	1930	49	62	233	59	.89	783
7	1.9	3450	17	36	31	398	42	81	694	26	.90	873
8	3.0	2540	17	32	29	160	36	334	12800	15	.96	677
9	4.1	1110	15	28	28	1150	32	332	12400	10	.87	288
10	2.0	550	15	33	28	3420	28	71	5190	7.4	.93	766
11	1.7	130	14	427	28	2290	26	71	2580	5.7	.89	2420
12	1.1	69	12	827	26	721	24	55	739	4.5	.85	1540
13	.77	412	229	997	27	682	22	28	130	3.7	.82	193
14	.59	656	1010	301	30	863	23	61	67	3.1	.76	55
15	.44	453	2840	184	34	1180	21	54	94	2.7	.68	36
16	.67	233	1160	137	39	1960	19	23	546	2.4	.67	26
17	29	554	350	191	310	1660	17	13	965	2.3	.72	20
18	45	605	163	1050	718	325	16	8.8	741	2.0	.73	17
19	25	971	80	3400	333	116	15	6.7	90	1.9	.71	14
20	10	1910	54	4970	84	80	14	5.3	43	1.7	.70	12
21	4.8	1550	42	2320	57	63	13	18	30	1.5	.64	10
22	2.4	323	34	514	47	54	12	9.0	23	1.4	.57	9.0
23	1.7	91	28	149	40	47	11	12	19	1.2	.50	8.4
24	1.3	787	456	96	35	42	11	8.7	22	1.1	.54	10
25	1.3	1040	e3500	73	32	39	11	4.9	15	1.6	.59	13
26	1.3	1140	e6200	60	66	36	11	5.4	12	1.7	.70	14
27	1.2	389	e8000	52	283	42	9.9	4.9	10	1.9	11	9.7
28	1.1	97	e5500	48	1270	824	9.7	15	8.6	1.9	90	7.7
29	.98	61	e3000	134	---	2840	9.9	13	7.6	1.9	329	6.2
30	1.0	50	488	316	---	3350	9.9	6.8	7.8	1.7	374	5.4
31	.96	---	154	610	---	1080	---	4.8	---	1.7	452	---
TOTAL	145.38	44844.9	33575	17335	4055	41939	1057.4	1358.5	37483.8	772.2	1277.72	9659.4
MEAN	4.69	1495	1083	559	145	1353	35.2	43.8	1249	24.9	41.2	322
MAX	45	13200	8000	4970	1270	5910	234	334	12800	273	452	2420
MIN	.20	5.9	12	28	26	36	9.7	4.8	2.0	1.1	.50	5.4
AC-FT	288	88950	66600	34380	8040	83190	2100	2690	74350	1530	2530	19160
CFSM	.01	4.66	3.37	1.74	.45	4.21	.11	.14	3.89	.08	.13	1.00
IN.	.02	5.20	3.89	2.01	.47	4.86	.12	.16	4.34	.09	.15	1.12

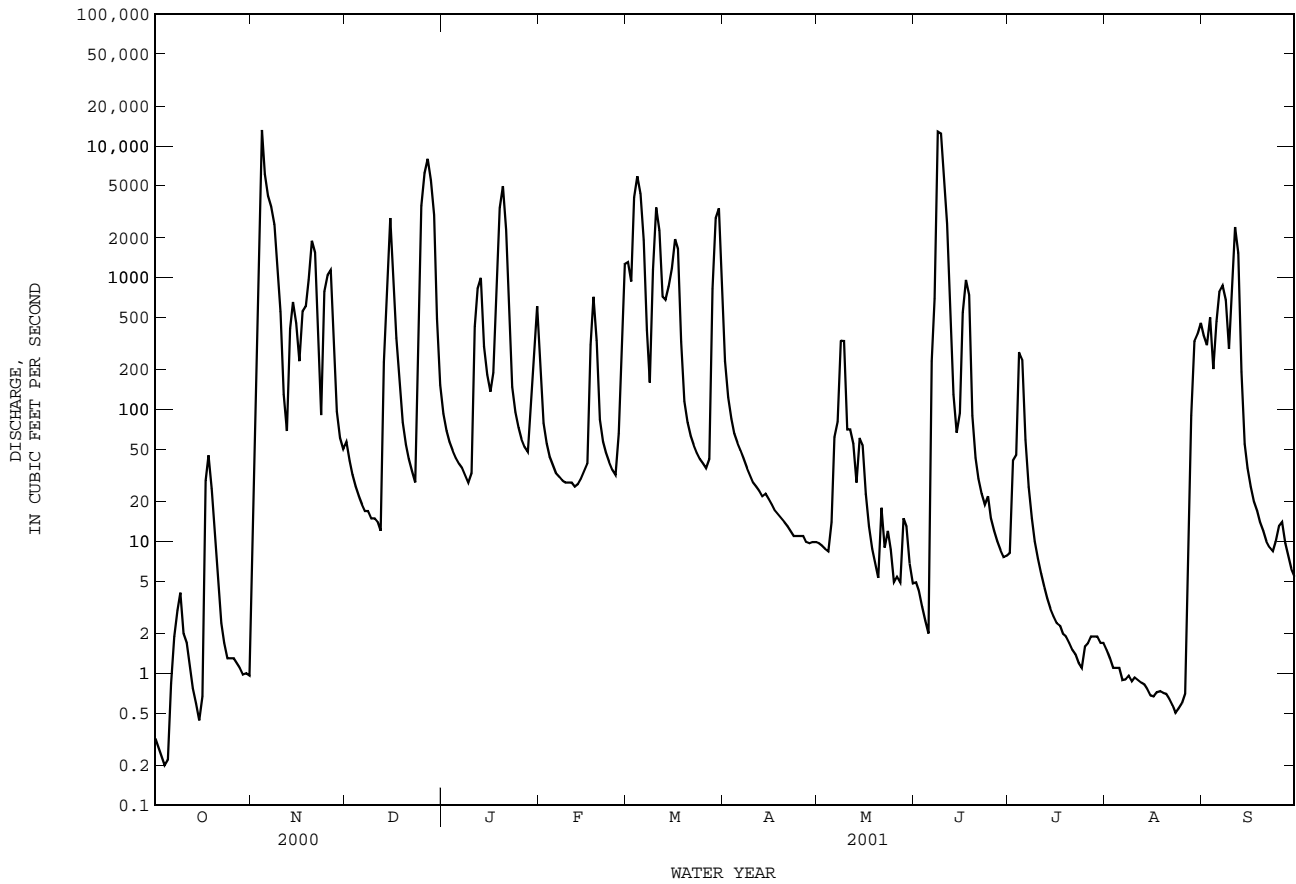
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	204	179	247	320	301	293	234	300	275	21.7	26.0	93.2
MEAN	204	179	247	320	301	293	234	300	275	21.7	26.0	93.2
MAX	3021	1495	1083	2015	1580	1353	1333	1046	1745	260	266	1551
(WY)	1985	2001	2001	1991	1992	2001	1969	1969	1968	1979	1995	1974
MIN	.000	.025	.22	1.99	3.84	3.13	2.30	2.65	.43	.013	.000	.000
(WY)	1979	1989	1968	1971	2000	1971	1981	1998	1998	1977	1969	1969

08065800 Bedia Creek near Madisonville, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1968 - 2001	
ANNUAL TOTAL	90234.19	193503.30	207	
ANNUAL MEAN	247	530	530	2001
HIGHEST ANNUAL MEAN			32.6	2000
LOWEST ANNUAL MEAN			23000	Jan 10 1991
HIGHEST DAILY MEAN	13200 Nov 4	13200 Nov 4	.00	Aug 31 1968
LOWEST DAILY MEAN	.00 Aug 11	.20 Oct 4	.00	Aug 31 1968
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 11	.57 Oct 1	.00	Aug 31 1968
MAXIMUM PEAK FLOW		19000 Jun 8	33800	Sep 14 1974
MAXIMUM PEAK STAGE		21.45 Jun 8	25.07	Sep 14 1974
INSTANTANEOUS LOW FLOW			.00	Aug 14 2000
ANNUAL RUNOFF (AC-FT)	179000	383800	150200	
ANNUAL RUNOFF (CFSM)	.77	1.65	.65	
ANNUAL RUNOFF (INCHES)	10.46	22.42	8.77	
10 PERCENT EXCEEDS	466	1170	414	
50 PERCENT EXCEEDS	2.5	34	8.8	
90 PERCENT EXCEEDS	.01	1.1	.07	

e Estimated



TRINITY RIVER BASIN

08066170 Kickapoo Creek near Onalaska, TX

LOCATION.--Lat 30°54'25", long 95°05'18", Polk County, Hydrologic Unit 12030202, on right bank 114 ft upstream from old bridge site, 1.2 mi downstream from Magnolia Creek, 6.2 mi upstream from Rocky Creek, 7.3 mi northeast of Onalaska, and 15.9 mi upstream from mouth.

DRAINAGE AREA.--57.0 mi<sup>2</sup>.

PERIOD OF RECORD.--Dec. 1965 to current year.

Water-quality records.--Chemical data: Dec. 1963 to Sept. 1974. Biochemical data: Oct. 1969 to Sept. 1974.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 139.85 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. No known regulation or diversions. Low flow is sustained by wastewater effluent that enters the creek upstream from this station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.75	24	29	41	44	19	3.6	4.0	4.1	2.0	17
2	.99	.77	17	24	33	988	15	3.1	3.5	5.1	2.0	9.1
3	.98	424	13	21	28	606	14	3.0	3.1	4.2	1.9	3.4
4	.96	1020	11	19	25	270	13	2.9	2.9	3.7	1.9	4.6
5	.99	95	9.3	18	23	74	13	4.2	2.9	3.4	1.7	4.8
6	2.3	785	9.3	17	22	45	11	4.2	105	3.2	1.9	2.8
7	2.1	42	10	16	21	35	9.3	7.8	1050	3.0	1.9	2.2
8	1.5	55	8.9	14	21	336	8.3	11	1940	2.8	1.9	2.0
9	1.2	23	7.9	13	21	965	7.4	7.1	1030	2.9	1.8	100
10	1.1	10	7.5	31	21	59	7.1	5.0	314	2.8	1.8	71
11	1.0	6.4	7.0	243	28	32	6.4	4.0	66	2.8	1.8	19
12	1.2	5.0	6.1	65	84	213	14	3.5	32	2.7	1.8	7.2
13	.96	10	286	41	45	47	18	3.2	21	2.7	1.7	4.6
14	.86	6.5	112	49	35	759	10	3.0	14	2.6	1.9	3.3
15	.85	3.9	52	38	30	543	7.9	2.8	1130	2.6	1.6	2.5
16	29	17	54	155	567	48	6.4	2.8	106	2.7	1.6	2.2
17	19	16	27	383	124	28	5.3	2.7	36	2.7	3.2	1.9
18	2.9	200	19	1220	47	24	4.8	2.8	19	2.6	2.1	1.6
19	1.5	296	15	972	35	20	4.5	2.9	14	2.6	1.7	1.7
20	1.1	33	12	147	31	17	4.6	2.8	11	2.5	1.5	1.6
21	1.0	15	10	70	30	16	4.4	2.8	7.7	2.5	1.3	1.3
22	.95	9.3	8.8	48	31	16	4.2	2.7	7.1	2.4	1.3	1.3
23	.92	7.0	8.0	37	27	14	4.4	2.6	6.7	2.5	1.2	1.5
24	.88	1040	614	30	25	14	5.5	2.5	3.9	2.5	1.2	1.8
25	.83	128	904	25	23	13	4.5	2.6	4.3	2.4	1.2	1.9
26	.78	42	302	22	22	13	4.0	2.6	5.3	2.4	1.2	1.9
27	.75	26	765	29	50	13	3.7	2.6	3.9	2.5	2.0	1.7
28	.78	19	174	35	33	234	3.7	3.1	4.0	2.7	2.8	1.6
29	.83	64	76	1240	---	74	3.7	3.3	4.0	2.1	3.2	1.5
30	.84	44	46	171	---	52	3.5	2.9	4.4	2.1	19	1.4
31	.78	---	34	64	---	27	---	4.1	---	2.1	6.9	---
TOTAL	80.93	4443.62	3649.8	5286	1523	5639	240.6	114.2	5955.7	87.9	79.0	278.4
MEAN	2.61	148	118	171	54.4	182	8.02	3.68	199	2.84	2.55	9.28
MAX	29	1040	904	1240	567	988	19	11	1940	5.1	19	100
MIN	.75	.75	6.1	13	21	13	3.5	2.5	2.9	2.1	1.2	1.3
AC-FT	161	8810	7240	10480	3020	11180	477	227	11810	174	157	552
CFSM	.05	2.60	2.07	2.99	.95	3.19	.14	.06	3.48	.05	.04	.16
IN.	.05	2.90	2.38	3.45	.99	3.68	.16	.07	3.89	.06	.05	.18

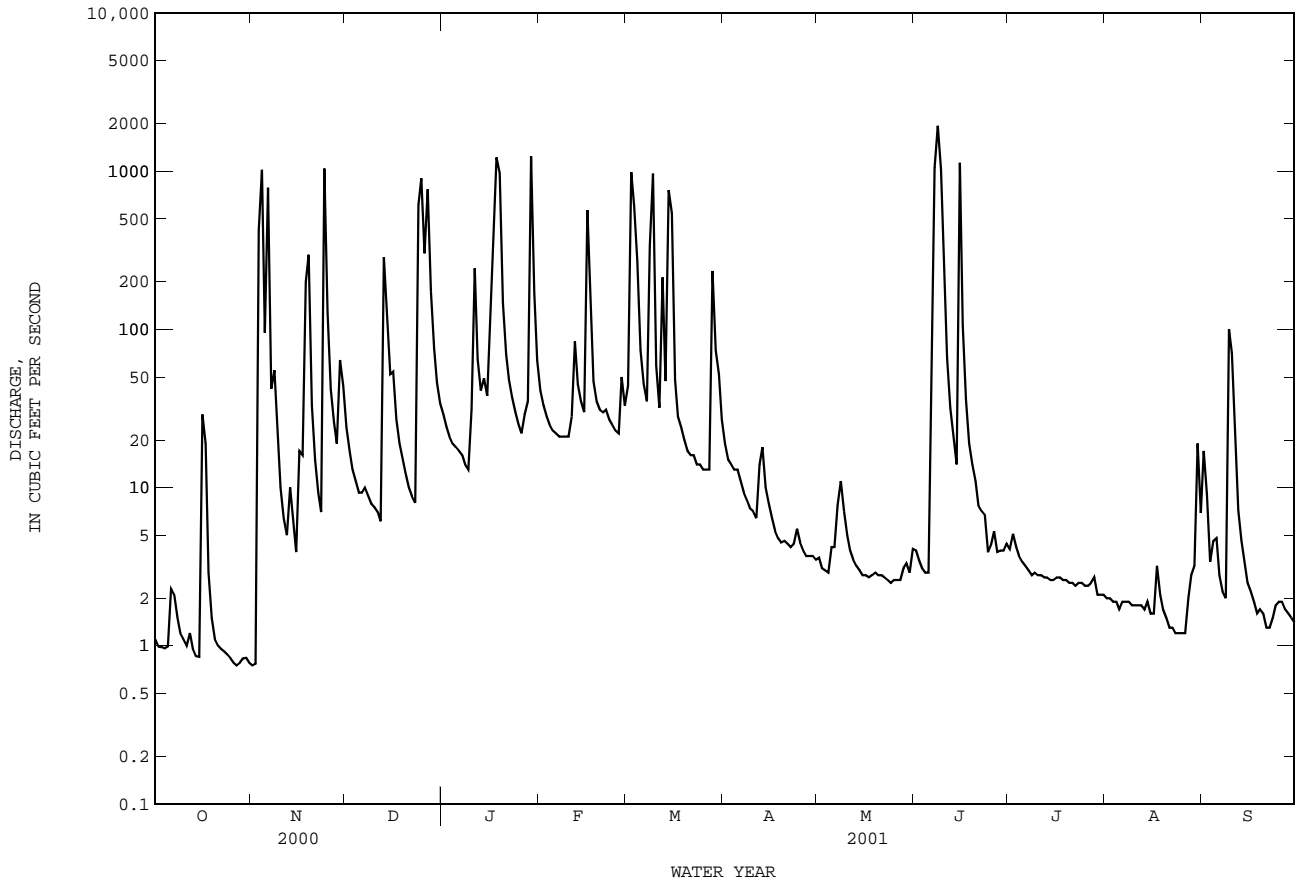
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	MEAN	70.5	40.2	54.4	80.0	73.3	66.6	54.1	57.9	57.0	10.8	6.69	11.5
MAX	1891	416	177	320	288	236	270	202	365	100	51.4	107	
(WY)	1995	1999	1966	1974	1992	1990	1979	1982	1973	1989	1975	1973	
MIN	.31	.82	1.67	1.17	1.00	.76	1.13	.86	.31	.083	.25	.37	
(WY)	1988	1991	2000	2000	2000	1971	1971	1988	1971	1971	2000	1989	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1966 - 2001

ANNUAL TOTAL	8621.94	27378.15	
ANNUAL MEAN	23.6	75.0	48.4
HIGHEST ANNUAL MEAN			223
LOWEST ANNUAL MEAN			1.53
HIGHEST DAILY MEAN	1040	Nov 24	38800
LOWEST DAILY MEAN	.09	Aug 19	.02
ANNUAL SEVEN-DAY MINIMUM	.11	Aug 15	.02
MAXIMUM PEAK FLOW			4390
MAXIMUM PEAK STAGE			15.33
ANNUAL RUNOFF (AC-FT)	17100	54300	35040
ANNUAL RUNOFF (CFSM)	.41	1.32	.85
ANNUAL RUNOFF (INCHES)	5.63	17.87	11.53
10 PERCENT EXCEEDS	18	126	60
50 PERCENT EXCEEDS	1.0	7.1	3.4
90 PERCENT EXCEEDS	.23	1.5	.50

08066170 Kickapoo Creek near Onalaska, TX--Continued





TRINITY RIVER BASIN

08066190 Livingston Reservoir near Goodrich, TX

LOCATION.--Lat 30°38'00", long 95°00'36", Polk-San Jacinto County line, Hydrologic Unit 12030202, at left end of gated spillway at Livingston Dam on Trinity River, 4.4 mi northwest of Goodrich, 7.0 mi southwest of Livingston, 11.7 mi upstream from Long King Creek, and at mile 129.2.

DRAINAGE AREA.--16,583 mi<sup>2</sup>.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--Sept. 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Trinity River Authority). Prior to Feb. 26, 1969, temporary nonrecording gages at site about 200 ft upstream and at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records good. The reservoir is formed by an earthfill dam 14,400 ft long. The dam was completed Sept. 29, 1968, and deliberate impoundment began June 26, 1969. The reservoir is operated for industrial water supply in the Houston metropolitan area. The dam is owned by the city of Houston and the Trinity River Authority. The spillway has twelve 40 x 35 ft tainter gates located near the left end of dam. Low-flow releases may be made through multi-gated inlet tower. There are five gated openings at various elevations located in the tower, and all discharge into a 10-foot-diameter concrete conduit through the dam. Flow is affected at times by discharge from the flood-detention pools of 255 floodwater-retarding structures. These structures control runoff from 617 mi<sup>2</sup> in the Richland, Chambers, Tehuacana, and Bedias Creeks drainage basins. Conservation pool storage is 1,750,000 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	145.0
Design flood.....	135.0
Top of tainter gates.....	134.0
Top of conservation pool.....	131.1
Crest of spillway (sill of tainter gates).....	99.0
Lowest gated outlet (invert).....	58.0

COOPERATION.--The capacity table, furnished by the Trinity River Authority, is based on a survey by the Bureau of Reclamation dated Dec. 1991.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,081,000 acre-ft, Oct. 17, 1994, elevation, 134.39 ft; minimum since conservation pool capacity was reached on Nov. 2, 1971, 1,345,000 acre-ft, Oct. 25, 1988, elevation, 125.22 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,920,000 acre-ft, June 9, elevation, 133.07 ft; minimum contents, 1,587,000 acre-ft, Oct. 14, elevation, 129.08 ft.

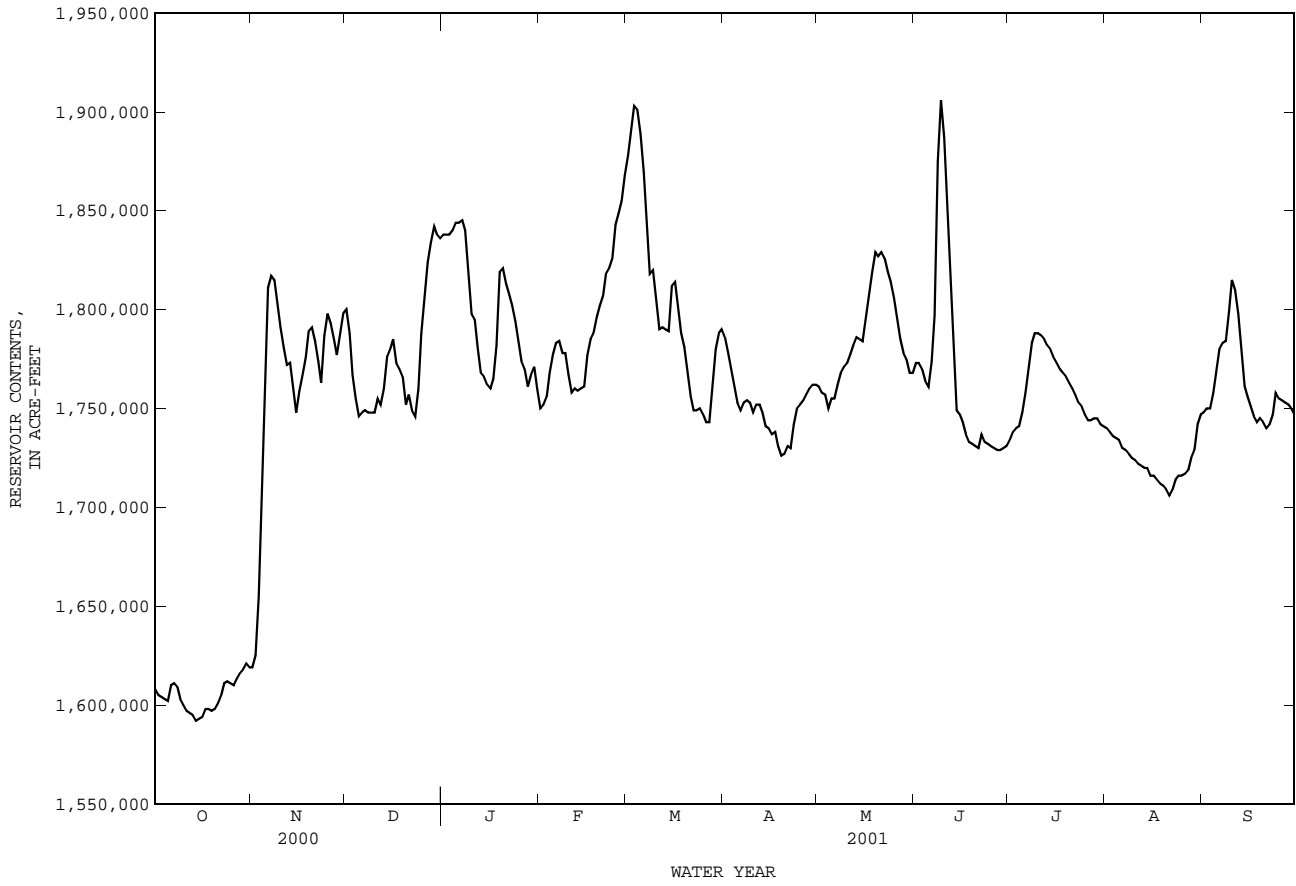
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1608000	1619000	1800000	1838000	1750000	1878000	1786000	1761000	1773000	1734000	1740000	1748000
2	1605000	1625000	1788000	1838000	1752000	1891000	1778000	1758000	1773000	1738000	1738000	1750000
3	1604000	1655000	1767000	1838000	1756000	1903000	1769000	1757000	1770000	1740000	1736000	1750000
4	1603000	1723000	1755000	1840000	1768000	1901000	1761000	1750000	1764000	1741000	1735000	1758000
5	1602000	1774000	1746000	1844000	1777000	1889000	1753000	1755000	1761000	1748000	1734000	1770000
6	1610000	1811000	1748000	1844000	1783000	1870000	1749000	1755000	1774000	1758000	1730000	1780000
7	1611000	1817000	1749000	1845000	1784000	1843000	1753000	1762000	1797000	1771000	1729000	1783000
8	1609000	1815000	1748000	1840000	1778000	1818000	1754000	1768000	1875000	1783000	1727000	1784000
9	1603000	1802000	1748000	1821000	1778000	1820000	1753000	1771000	1906000	1788000	1725000	1799000
10	1600000	1791000	1748000	1798000	1767000	1804000	1748000	1773000	1887000	1788000	1724000	1815000
11	1597000	1781000	1755000	1795000	1758000	1790000	1752000	1777000	1858000	1787000	1722000	1810000
12	1596000	1772000	1752000	1781000	1760000	1791000	1752000	1782000	1822000	1785000	1721000	1798000
13	1595000	1773000	1760000	1768000	1759000	1790000	1748000	1786000	1783000	1782000	1720000	1779000
14	1592000	1762000	1776000	1766000	1760000	1789000	1741000	1785000	1749000	1780000	1720000	1761000
15	1593000	1748000	1780000	1762000	1761000	1812000	1740000	1784000	1747000	1776000	1716000	1756000
16	1594000	1759000	1785000	1760000	1777000	1814000	1737000	1796000	1743000	1773000	1716000	1751000
17	1598000	1767000	1773000	1765000	1785000	1802000	1738000	1807000	1737000	1770000	1714000	1746000
18	1598000	1776000	1770000	1782000	1788000	1788000	1731000	1819000	1733000	1768000	1712000	1743000
19	1597000	1789000	1766000	1819000	1796000	1781000	1726000	1829000	1732000	1766000	1711000	1745000
20	1598000	1791000	1752000	1821000	1802000	1768000	1727000	1827000	1731000	1763000	1709000	1743000
21	1601000	1784000	1757000	1813000	1807000	1756000	1731000	1829000	1730000	1760000	1706000	1740000
22	1605000	1774000	1749000	1808000	1818000	1749000	1730000	1826000	1737000	1757000	1709000	1742000
23	1611000	1763000	1746000	1802000	1821000	1749000	1742000	1819000	1733000	1753000	1714000	1747000
24	1612000	1787000	1760000	1794000	1826000	1750000	1750000	1814000	1732000	1751000	1716000	1758000
25	1611000	1798000	1788000	1784000	1843000	1747000	1752000	1806000	1731000	1747000	1716000	1755000
26	1610000	1793000	1807000	1774000	1849000	1743000	1754000	1796000	1730000	1744000	1717000	1754000
27	1613000	1785000	1824000	1770000	1855000	1743000	1757000	1785000	1729000	1744000	1719000	1753000
28	1616000	1777000	1834000	1761000	1868000	1763000	1760000	1778000	1729000	1745000	1725000	1752000
29	1618000	1788000	1842000	1767000	---	1780000	1762000	1775000	1730000	1745000	1729000	1750000
30	1621000	1798000	1838000	1771000	---	1788000	1762000	1768000	1731000	1742000	1742000	1747000
31	1619000	---	1836000	1760000	---	1790000	---	1768000	---	1741000	1747000	---
MAX	1621000	1817000	1842000	1845000	1868000	1903000	1786000	1829000	1906000	1788000	1747000	1815000
MIN	1592000	1619000	1746000	1760000	1750000	1743000	1726000	1750000	1729000	1734000	1706000	1740000
(+)	129.49	131.67	132.10	131.21	132.48	131.57	131.24	131.31	130.87	130.99	131.06	131.06
(@)	+9000	+179000	+38000	-76000	+108000	-78000	-28000	+6000	-37000	+10000	+6000	0

CAL YR 1999 MAX 1842000 MIN 1592000 (@) +81000  
WTR YR 2000 MAX 1906000 MIN 1592000 (@) +137000

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

08066190 Livingston Reservoir near Goodrich, TX--Continued



TRINITY RIVER BASIN

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Oct. 1969 to current year.

BIOCHEMICAL DATA: Oct. 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

303807095011101 -- Livingston Res Site AC

DATE	TIME	RESER- VOIR STORAGE (AC-FT) (00054)	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	OXYGEN, DIS- SOLVED TOTAL (MG/L AS CACO3) (00900) (00904)	HARD- NESS NONCARB DISSOLV TOTAL (MG/L AS CACO3) (00915) (00925)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915) (00925)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) (00930)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	
FEB													
21...	1350	1810000	1.00	290	7.8	13.0	10.1	94.9	92.2	26	31.5	3.29	16.8
21...	1352	--	10.0	290	7.8	13.0	10.1	94.9	--	--	--	--	--
21...	1354	--	20.0	290	7.7	12.5	10.1	93.8	--	--	--	--	--
21...	1356	--	30.0	290	7.7	12.0	10.1	92.8	--	--	--	--	--
21...	1358	--	40.0	290	7.7	12.0	10.1	92.8	--	--	--	--	--
21...	1400	--	50.0	290	7.7	12.0	10.1	92.8	--	--	--	--	--
21...	1402	--	60.0	290	7.7	11.5	10.1	91.7	--	--	--	--	--
21...	1404	--	75.0	290	7.6	11.5	10.1	91.7	92.6	23	31.7	3.28	16.8
AUG													
02...	1120	1740000	1.00	280	8.4	30.0	5.6	73.9	95.0	15	32.7	3.24	16.7
02...	1122	--	10.0	280	8.3	30.0	5.2	68.6	--	--	--	--	--
02...	1124	--	20.0	280	8.2	30.0	4.6	60.7	--	--	--	--	--
02...	1126	--	30.0	280	7.4	29.0	1.4	18.2	--	--	--	--	--
02...	1128	--	40.0	290	7.3	27.5	.6	7.6	--	--	--	--	--
02...	1130	--	50.0	295	7.3	26.5	.6	7.4	--	--	--	--	--
02...	1132	--	60.0	305	7.3	26.0	.5	6.1	--	--	--	--	--
02...	1134	--	70.0	330	7.2	25.0	.3	3.6	107	5	37.2	3.47	17.8

303807095011101 -- Livingston Res Site AC

DATE	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ALKA- LINITY WAT DIS FIX END FIELD (MG/L AS CACO3) (39036)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
FEB													
21...	.763	27.3	4.39	--	66	31.6	17.6	.2	7.8	157	.879	.020	.899
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	.897	.020	.917
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	.758	27.0	4.57	--	70	31.6	17.6	.2	7.8	160	.885	.023	.908
AUG													
02...	.747	26.6	4.27	80	--	27.3	16.7	.3	4.2	154	--	<.006	E.025
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	.037	.010	.047
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	<.006	E.025
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	.750	25.7	4.24	102	--	23.2	18.0	.3	9.2	178	--	<.006	E.024

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

303807095011101 -- Livingston Res Site AC

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
FEB								
21...	.068	.431	.50	.128	.098	.300	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	.079	.338	.42	.134	.098	.300	20	E2.6
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	.087	.385	.47	.130	.098	.300	--	--
AUG								
02...	E.027	--	.32	.068	.057	.175	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	.047	.387	.43	.148	.124	.380	40	91.4
02...	--	--	--	--	--	--	--	--
02...	.514	.390	.90	.560	.390	1.20	880	666
02...	--	--	--	--	--	--	--	--
02...	1.16	.499	1.7	1.10	.628	1.93	--	--

303821095005001 -- Livingston Res Site AL

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
FEB							
21...	1435	1.00	290	7.8	12.5	10.2	94.8
21...	1437	10.0	290	7.7	12.0	10.2	93.7
21...	1439	20.0	290	7.7	12.0	10.2	93.7
21...	1441	30.0	290	7.7	12.0	10.2	93.7
21...	1443	40.0	290	7.6	11.5	10.0	90.8
21...	1445	48.0	290	7.6	11.5	10.0	90.8
AUG							
02...	1207	1.00	280	8.2	30.0	5.0	66.0
02...	1209	10.0	280	8.2	29.5	4.9	64.1
02...	1211	20.0	280	7.9	29.5	3.1	40.6
02...	1213	30.0	280	7.4	29.0	.8	10.4
02...	1215	40.0	290	7.3	27.5	.3	3.8
02...	1217	51.0	295	7.3	26.5	.3	3.7

303935095055401 -- Livingston Res Site BC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
FEB							
21...	1315	1.00	290	8.2	14.0	10.4	99.9
21...	1317	10.0	295	7.8	13.0	10.1	94.9
21...	1319	20.0	295	7.8	13.0	10.0	93.9
21...	1321	30.0	295	7.7	12.5	9.9	92.0
21...	1323	40.0	295	7.7	12.5	9.9	92.0
21...	1325	50.0	295	7.7	12.0	10.0	91.9
21...	1327	57.0	295	7.7	12.0	10.0	91.9
AUG							
02...	1035	1.00	280	8.7	30.5	6.7	89.2
02...	1037	10.0	280	8.7	30.5	6.5	86.5
02...	1039	20.0	280	8.5	30.0	5.8	76.6
02...	1041	30.0	280	8.3	30.0	5.1	67.3
02...	1043	40.0	290	7.4	29.0	1.3	16.9
02...	1045	50.0	315	7.3	26.5	.3	3.7

TRINITY RIVER BASIN

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

304144095073001 -- Livingston Res Site CC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)
FEB							
21...	1240	1.00	290	8.0	13.5	10.1	95.8
21...	1242	10.0	295	7.9	13.0	10.1	94.8
21...	1244	20.0	295	7.8	13.0	10.0	93.8
21...	1246	30.0	295	7.7	12.5	9.9	91.8
21...	1248	40.0	295	7.7	12.0	9.9	90.8
21...	1250	53.4	300	7.7	12.0	10.0	91.7
AUG							
02...	1010	1.00	285	8.5	30.5	5.4	71.9
02...	1012	10.0	285	8.5	30.5	5.4	71.9
02...	1014	20.0	285	8.4	30.0	5.0	66.0
02...	1016	30.0	285	8.4	30.0	4.7	62.0
02...	1018	40.0	295	7.5	29.0	.5	6.5
02...	1020	52.0	305	7.3	27.0	.4	5.0

304521095075501 -- Livingston Res Site DC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	NITRO-GEN, NITRATE (MG/L) (00618)	NITRO-GEN, DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 (MG/L) (00631)	NITRO-GEN, AMMONIA (MG/L) (00608)	NITRO-GEN, ORGANIC (MG/L) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) (00623)
FEB													
21...	1150	1.00	300	8.1	14.5	10.1	98.1	.970	.017	.987	.042	.364	.41
21...	1152	10.0	305	7.8	13.5	9.9	94.1	--	--	--	--	--	--
21...	1154	20.0	315	7.8	13.5	9.9	94.1	--	--	--	--	--	--
21...	1156	30.0	315	7.7	13.0	9.8	92.1	--	--	--	--	--	--
21...	1158	40.0	335	7.7	12.5	9.8	91.1	--	--	--	--	--	--
21...	1200	52.5	305	7.6	12.0	9.6	88.2	.937	.017	.954	.099	.355	.45
AUG													
02...	0918	1.00	285	8.7	30.5	6.1	81.2	--	.008	E.037	E.028	--	.40
02...	0920	10.0	285	8.7	30.5	5.8	77.2	--	--	--	--	--	--
02...	0922	20.0	290	8.6	30.5	5.4	71.9	--	--	--	--	--	--
02...	0924	30.0	290	8.6	30.0	5.0	66.0	--	--	--	--	--	--
02...	0926	40.0	305	7.7	29.5	.7	9.2	--	--	--	--	--	--
02...	0928	49.0	305	7.4	28.0	.4	5.1	--	.008	E.036	E.030	--	.42

304521095075501 -- Livingston Res Site DC

DATE	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L) AS PO4 (00660)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
FEB					
21...	.109	.094	.288	20	<3.2
21...	--	--	--	--	--
21...	--	--	--	--	--
21...	--	--	--	--	--
21...	.104	.090	.276	20	4.2
AUG					
02...	.079	.057	.175	<10	<3.0
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	.081	.058	.178	<10	E2.8

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

304453095064901 -- Livingston Res Site DL

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-CENT SATUR-ATION (00300)
FEB							
21...	1134	1.00	300	7.9	14.0	9.6	92.1
21...	1136	10.0	300	7.9	13.5	9.3	88.2
21...	1138	21.0	300	7.8	13.5	9.0	85.4
AUG							
02...	0905	1.00	280	8.7	30.5	5.3	70.6
02...	0907	10.0	280	8.7	30.5	5.3	70.6
02...	0909	19.0	285	8.6	30.5	4.9	65.2

304659095052001 -- Livingston Res Site EC

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)	NITRO-GEN, DIS-SOLVED (MG/L)	NITRO-GEN, DIS-SOLVED (MG/L)	NITRO-GEN, DIS-SOLVED (MG/L)	NITRO-GEN, DIS-SOLVED (MG/L)	NITRO-GEN, DIS-SOLVED (MG/L)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L)
FEB												
21...	1054	1.00	310	7.9	14.5	9.6	93.2	1.07	.017	1.08	E.034	-- .40
21...	1056	10.0	345	7.8	14.0	9.6	92.2	--	--	--	--	--
21...	1058	20.0	380	7.6	14.0	9.5	91.3	--	--	--	--	--
21...	1100	32.0	380	7.7	13.5	9.4	89.3	1.38	.017	1.39	.073	.350 .42
AUG												
02...	0830	1.00	290	8.9	31.0	6.6	88.6	--	<.006	E.024	E.029	-- .44
02...	0832	10.0	290	8.9	31.0	6.3	84.6	--	--	--	--	--
02...	0834	26.0	295	8.6	30.5	4.8	63.9	--	.016	E.040	E.032	-- .43

304659095052001 -- Livingston Res Site EC

DATE	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)
FEB					
21...	.114	.097	.297	10	<3.2
21...	--	--	--	--	--
21...	--	--	--	--	--
21...	.148	.123	.377	10	5.8
AUG					
02...	.082	.059	.181	<10	<3.0
02...	--	--	--	--	--
02...	.097	.074	.227	<10	E1.8

304843095104001 -- Livingston Res Site FC

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-CENT SATUR-ATION (00300)
AUG							
02...	1311	1.00	325	8.8	31.0	5.0	67.1
02...	1313	10.0	325	8.8	31.0	4.8	64.5
02...	1315	20.0	325	8.8	30.5	3.9	51.9
02...	1317	30.0	325	8.7	30.5	3.7	49.3
02...	1319	40.0	325	8.7	30.5	3.6	47.9
02...	1321	51.0	330	8.7	30.5	3.7	49.3

TRINITY RIVER BASIN

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

305411095144901 -- Livingston Res Site GC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
FEB													
22...	1050	1.00	250	7.8	12.0	9.8	89.6	85.2	22	29.0	3.12	13.0	.611
22...	1052	10.0	250	7.8	12.0	9.8	89.6	--	--	--	--	--	--
22...	1054	20.0	250	7.8	12.0	9.8	89.6	--	--	--	--	--	--
22...	1056	30.0	250	7.8	12.0	9.8	89.6	--	--	--	--	--	--
22...	1058	42.0	250	7.8	12.0	9.8	89.6	85.5	8.5	29.1	3.09	12.4	.585
AUG													
02...	1357	1.00	345	9.1	32.0	7.2	98.3	112	12	38.3	4.05	24.6	1.01
02...	1359	10.0	345	9.0	31.5	6.8	92.1	--	--	--	--	--	--
02...	1401	20.0	350	8.8	31.0	4.8	64.5	--	--	--	--	--	--
02...	1403	30.0	350	8.7	30.5	4.2	55.9	--	--	--	--	--	--
02...	1405	36.0	355	8.4	30.5	3.4	45.3	115	19	39.1	4.12	25.4	1.03

305411095144901 -- Livingston Res Site GC

DATE	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ALKA-LINITY WAT DIS FIX END FIELD (MG/L AS CACO3) (39036)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
FEB													
22...	23.8	4.05	--	63	24.7	15.0	.2	6.5	135	.408	.010	.418	E.038
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	.411	.009	.420	E.038
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	23.0	4.15	--	77	23.3	12.6	.2	6.4	139	--	<.006	.402	E.038
AUG													
02...	31.1	4.85	100	--	38.5	25.3	.4	7.8	204	--	<.006	E.026	E.029
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	E.005	.066	E.036
02...	--	--	--	--	--	--	--	--	--	.072	.006	.078	.042
02...	31.4	4.78	96	--	38.0	28.0	.4	8.0	206	.081	.007	.088	.046

305411095144901 -- Livingston Res Site GC

DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB							
22...	--	.42	.101	.071	.218	--	--
22...	--	--	--	--	--	--	--
22...	--	.41	.098	.068	.209	40	E2.1
22...	--	--	--	--	--	--	--
22...	--	.45	.104	.067	.205	--	--
AUG							
02...	--	.36	.123	.107	.328	--	--
02...	--	--	--	--	--	--	--
02...	--	.43	.141	.117	.359	<10	7.1
02...	.453	.49	.152	.123	.377	<10	22.8
02...	.352	.40	.130	.119	.365	--	--

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

305447095161401 -- Livingston Res Site HC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
FEB													
22...	1130	1.00	255	7.2	14.0	9.5	91.0	.353	.007	.360	.066	.393	.46
22...	1132	10.0	260	7.3	13.5	9.6	91.0	--	--	--	--	--	--
22...	1134	20.0	260	7.5	12.5	9.6	88.9	--	--	--	--	--	--
22...	1136	30.0	260	7.7	12.5	9.7	89.9	--	--	--	--	--	--
22...	1138	39.0	270	7.7	12.5	9.7	89.9	.432	.011	.443	.043	.434	.48
AUG													
02...	1436	1.00	320	9.0	31.5	8.2	111	--	<.006	E.030	E.033	--	.47
02...	1438	10.0	315	9.0	31.0	7.5	101	--	--	--	--	--	--
02...	1440	20.0	310	8.2	30.5	3.8	50.6	--	--	--	--	--	--
02...	1442	30.0	305	7.6	30.0	2.4	31.7	--	--	--	--	--	--
02...	1444	37.0	300	7.6	30.0	2.5	33.0	.059	.020	.079	E.039	--	.53

305447095161401 -- Livingston Res Site HC

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
FEB					
22...		.087	.042	.129	80
22...		--	--	--	--
22...		--	--	--	--
22...		--	--	--	--
22...		.092	.066	.202	40
AUG					
02...		.079	.055	.169	<10
02...		--	--	--	--
02...		--	--	--	--
02...		--	--	--	--
02...		.064	.045	.138	M

305135095193601 -- Livingston Res Site IC

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
FEB							
22...	0855	1.00	245	7.8	12.0	9.9	90.7
22...	0857	10.0	245	7.8	12.0	9.9	90.7
22...	0859	20.0	245	7.8	12.0	10.1	92.5
22...	0901	30.0	245	7.8	12.0	10.1	92.5
22...	0903	41.0	240	7.7	11.5	10.0	90.6
AUG							
03...	0920	1.00	410	8.2	31.5	6.2	84.0
03...	0922	10.0	405	8.2	31.5	6.2	84.0
03...	0924	20.0	395	7.6	31.0	3.1	41.6
03...	0926	30.0	390	7.5	31.0	2.0	26.9
03...	0928	39.0	385	7.4	31.0	1.0	13.4



TRINITY RIVER BASIN

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

305135095235401 -- Livingston Res Site JC

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
FEB													
22...	0934	1.00	245	7.8	12.0	9.8	89.6	86.3	14	29.6	2.99	11.4	.535
22...	0938	10.0	245	7.8	12.0	9.8	89.6	--	--	--	--	--	--
22...	0940	20.0	245	7.8	12.0	9.8	89.6	--	--	--	--	--	--
22...	0942	30.0	245	7.8	12.0	9.8	89.6	--	--	--	--	--	--
22...	0944	45.0	245	7.8	12.0	9.9	90.6	85.2	14	29.2	2.96	11.3	.531
AUG													
03...	0830	1.00	490	8.4	32.0	8.4	115	151	54	51.7	5.36	36.0	1.28
03...	0832	10.0	490	8.4	32.0	8.3	113	--	--	--	--	--	--
03...	0834	20.0	490	8.4	31.5	8.3	112	--	--	--	--	--	--
03...	0836	30.0	450	7.7	31.5	4.1	55.5	--	--	--	--	--	--
03...	0838	38.0	405	7.6	31.0	2.7	36.3	125	7	43.2	4.25	30.0	1.17

305135095235401 -- Livingston Res Site JC

DATE	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	ALKA-LINITY WAT DIS FIX END FIELD (MG/L AS CACO3) (39036)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS SIO2) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
FEB													
22...	21.4	4.09	--	72	20.9	10.9	.2	6.0	131	.318	.007	.325	E.030
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	.311	.008	.319	E.030
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	21.3	4.24	--	71	20.9	10.9	.2	6.1	130	.314	.007	.321	E.031
AUG													
03...	33.2	5.33	97	--	58.1	39.8	.5	8.9	271	1.58	.067	1.65	.053
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	1.57	.068	1.63	.066
03...	--	--	--	--	--	--	--	--	--	1.28	.029	1.31	.085
03...	33.1	5.28	118	--	42.3	31.1	.4	10.7	241	.585	.021	.606	.175

305135095235401 -- Livingston Res Site JC

DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB							
22...	--	.43	.071	.059	.181	--	--
22...	--	--	--	--	--	--	--
22...	--	.45	.092	.060	.184	30	4.5
22...	--	--	--	--	--	--	--
22...	--	.43	.087	.060	.184	--	--
AUG							
03...	.363	.42	.078	.063	.193	--	--
03...	--	--	--	--	--	--	--
03...	.452	.52	.087	.065	.199	<10	E2.0
03...	.420	.51	.111	.094	.288	<10	12.8
03...	.460	.64	.125	.105	.322	--	--

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TRINITY RIVER BASIN

08066200 Long King Creek at Livingston, TX

LOCATION.--Lat 30°42'58", long 94°57'31", Polk County, Hydrologic Unit 12030202, on right bank at upstream side of bridge on U.S. Highway 190, 2.0 mi west of Livingston, 2.0 mi upstream from Choates Creek, and 14.8 mi upstream from mouth.

DRAINAGE AREA.--141 mi<sup>2</sup>.

PERIOD OF RECORD.--Jan. 1963 to current year.

Water-quality records.--Chemical data: Jan. 1963 to Sept. 1972. Specific conductance: Jan. 1963 to Sept. 1972. Water temperature: Jan. 1963 to Sept. 1972.

GAGE.--Water-stage recorder. Datum of gage is 100.12 ft above sea level. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. No known regulation or diversions.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1870, about 41 ft in May 1929.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	2.1	103	62	100	34	91	17	158	20	2.3	e62
2	.77	2.6	61	52	72	782	70	16	30	27	2.2	52
3	.84	237	44	45	59	2320	64	15	14	24	2.0	29
4	.96	1030	35	42	52	1390	60	14	9.9	15	1.8	22
5	1.1	489	30	40	46	551	55	28	12	13	1.8	64
6	1.7	1740	29	38	43	351	49	30	1720	10	2.0	47
7	2.8	429	29	36	42	277	44	49	2600	8.7	2.2	46
8	2.4	382	28	33	40	429	40	33	4400	7.9	2.6	23
9	1.9	272	25	29	41	3360	37	23	1840	7.2	2.3	30
10	1.6	68	23	52	39	878	35	20	630	6.7	1.8	67
11	1.3	37	21	749	39	478	33	21	330	6.1	1.6	29
12	1.1	27	19	235	82	1730	34	17	172	5.3	1.5	15
13	1.0	24	114	115	72	854	38	15	82	4.9	1.4	9.7
14	1.1	22	322	98	59	954	35	15	45	4.5	1.6	7.7
15	1.0	17	374	82	55	2040	32	13	1110	4.7	2.0	6.3
16	1.1	260	289	340	205	396	28	12	531	4.4	1.5	5.5
17	4.5	201	113	844	303	177	28	11	101	4.1	1.3	7.0
18	5.0	376	65	2200	90	119	24	10	53	5.4	5.4	4.9
19	2.3	1130	52	2520	60	94	23	9.6	37	7.9	2.2	4.6
20	1.5	236	41	450	50	78	23	9.3	30	4.2	1.6	4.3
21	1.3	85	36	185	46	68	23	9.4	25	4.1	1.2	6.9
22	1.7	54	30	124	43	62	21	8.3	27	3.6	.97	45
23	4.2	42	27	96	38	57	21	7.3	21	3.1	.86	59
24	2.7	1560	281	79	36	54	22	7.0	18	3.3	.83	27
25	1.9	773	1690	66	35	51	21	8.4	15	2.7	.78	18
26	1.6	149	948	59	32	48	19	7.0	14	2.4	.76	11
27	1.6	76	692	59	31	59	18	7.4	13	3.0	27	8.1
28	1.6	52	440	65	35	571	18	13	16	6.7	130	6.3
29	1.6	243	189	967	---	345	17	18	14	7.3	38	5.2
30	2.1	306	108	724	---	193	17	12	15	5.9	e56	4.6
31	2.2	---	77	180	---	125	---	211	---	3.0	e93	---
TOTAL	57.22	10321.7	6335	10666	1845	18925	1040	686.7	14082.9	236.1	390.50	727.1
MEAN	1.85	344	204	344	65.9	610	34.7	22.2	469	7.62	12.6	24.2
MAX	5.0	1740	1690	2520	303	3360	91	211	4400	27	130	67
MIN	.75	2.1	19	29	31	34	17	7.0	9.9	2.4	.76	4.3
AC-FT	113	20470	12570	21160	3660	37540	2060	1360	27930	468	775	1440
CFSM	.01	2.44	1.45	2.44	.47	4.33	.25	.16	3.33	.05	.09	.17
IN.	.02	2.72	1.67	2.81	.49	4.99	.27	.18	3.72	.06	.10	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

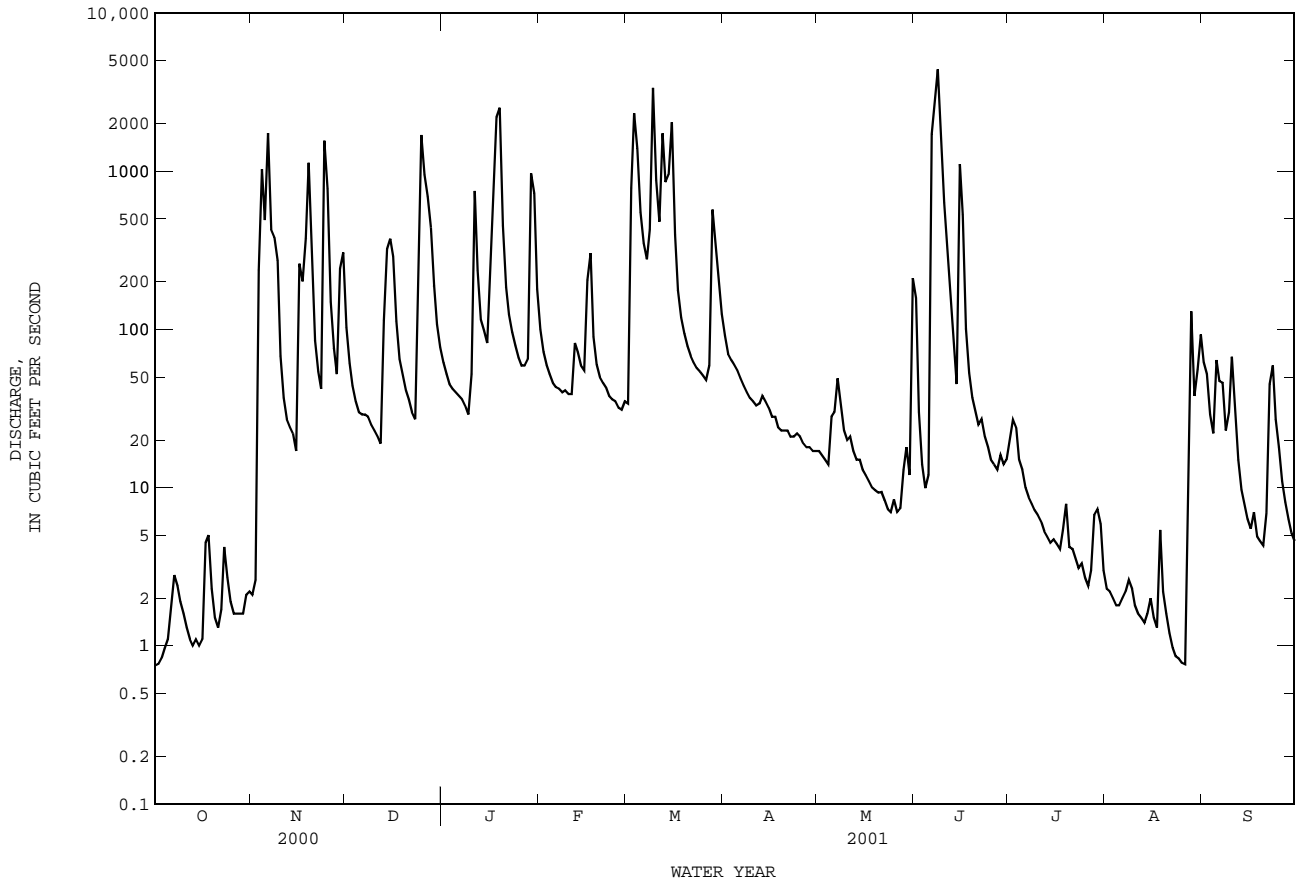
	MEAN	MAX	(WY)	MIN	(WY)
1963	68.1	1342	1966	.18	1966
1964	98.9	920	1989	.92	1989
1965	157	626	1995	2.83	1971
1966	197	1026	1998	2.79	1971
1967	176	629	1992	5.53	1971
1968	163	640	1990	3.75	1971
1969	135	844	1979	4.06	1971
1970	131	662	1969	2.58	1963
1971	148	869	1989	.72	1971
1972	34.0	493	1989	.000	1971
1973	16.7	191	1983	.000	1971
1974	30.4	288	1996	.15	1967

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1963 - 2001
ANNUAL TOTAL	26311.26	65313.22	
ANNUAL MEAN	71.9	179	114
HIGHEST ANNUAL MEAN			318
LOWEST ANNUAL MEAN			12.3
HIGHEST DAILY MEAN	1740	4400	30100
LOWEST DAILY MEAN	.21	.75	.00
ANNUAL SEVEN-DAY MINIMUM	.29	1.0	.00
MAXIMUM PEAK FLOW		5430	50900
MAXIMUM PEAK STAGE		14.39	30.49
ANNUAL RUNOFF (AC-FT)	52190	129500	82690
ANNUAL RUNOFF (CFSM)	.51	1.27	.81
ANNUAL RUNOFF (INCHES)	6.94	17.23	11.00
10 PERCENT EXCEEDS	226	433	155
50 PERCENT EXCEEDS	5.7	30	13
90 PERCENT EXCEEDS	.83	1.9	1.0

e Estimated

08066200 Long King Creek at Livingston, TX--Continued



TRINITY RIVER BASIN

08066250 Trinity River near Goodrich, TX

LOCATION.--Lat 30°34'19", long 94°56'55", Polk-San Jacinto County line, Hydrologic Unit 12030202, on left bank at downstream bridge on U.S. Highway 59, 0.2 mi downstream from Long King Creek, 3.0 mi southeast of Goodrich, 11.9 mile downstream from Livingston Dam, and at mile 117.3.

DRAINAGE AREA.--16,844 mi<sup>2</sup>.

PERIOD OF RECORD.--Dec. 1965 to current year.

Water-quality records.--Chemical data: Mar. 1966 to Sept. 1973. Specific conductance: Oct. 1969 to Sept. 1973. Water temperature: Oct. 1969 to Sept. 1973.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft above sea level. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Dec. 1965, at least 10% of contributing drainage area has been regulated. Livingston Reservoir and twenty-one additional upstream reservoirs now regulate flow. Streamflow is affected at times by discharge from the flood-detention pools of 252 floodwater-retarding structures.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1929, 52.0 ft in May 1942, from information by Texas Department of Transportation and by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	980	19000	24200	13800	39600	33400	6560	4690	1660	1430	5300
2	1010	962	17700	24200	11100	45400	32400	6230	4280	1720	1460	5310
3	988	952	12800	24200	10800	57500	32800	5120	4870	1640	1440	5290
4	992	4180	9190	24200	10800	60800	31400	4790	6020	1500	1260	5510
5	992	17800	6570	24900	10800	60700	29200	3920	6090	1630	1230	6770
6	991	22100	3530	26500	10800	60600	25800	3940	9150	2120	1230	8740
7	999	23500	3060	27100	10800	60500	25300	3980	15300	2120	1220	10200
8	1010	22900	2320	27200	10900	59500	25200	6610	31200	2210	1230	10300
9	995	21800	2200	26300	10800	60700	25200	9010	68000	2200	1230	11100
10	995	19800	2170	22200	9760	59700	25000	10500	78700	2140	1220	14300
11	995	19600	2150	21200	7340	58600	23500	10900	73300	2150	1210	15600
12	992	19500	2150	20900	6090	59300	23300	11400	60500	2160	1210	15600
13	988	18500	2530	17400	6070	59500	22600	11900	42400	2150	1050	14900
14	990	15900	7300	14700	6050	59300	20400	12500	25200	2150	685	10700
15	990	12400	9900	14500	6040	61500	18000	9540	15500	2150	1090	4470
16	990	7170	10200	14700	6590	60200	17200	3410	16000	2140	1130	3860
17	990	7060	9870	15500	8940	59200	16000	3810	11700	2140	1130	3470
18	984	7770	8130	17400	10800	58600	14700	3690	8050	2140	1130	2330
19	983	11300	6960	28200	12800	55200	13600	3750	5690	2180	1130	2010
20	980	11000	5830	32500	16600	52800	10900	7880	5570	2120	1130	1920
21	984	10500	5710	31900	18100	50000	8980	6970	4830	2100	1120	1430
22	999	10300	4130	31000	19000	46900	8720	6110	3790	2090	1100	1360
23	1010	8820	2420	27800	21900	44800	8030	5840	3050	2100	1010	1460
24	992	12600	2590	27500	25800	44500	6870	6670	1770	2100	1020	1750
25	984	16300	11100	27400	27700	44200	5750	7290	1680	2090	1010	2270
26	979	15100	18400	27000	31900	41300	6560	7370	1650	1930	995	2280
27	977	14700	21100	24700	35800	36800	6640	7330	1660	1600	1010	2280
28	978	14600	22400	24400	37900	34400	6540	6010	1710	1390	1120	2270
29	980	14900	23300	23500	---	34200	6510	5730	1690	1400	1120	2270
30	978	18000	24300	22000	---	33800	6500	5620	1640	1410	1220	2260
31	981	---	24300	19400	---	33600	---	4610	---	1400	4800	---
TOTAL	30746	400994	303310	734600	415780	1593700	537000	208990	515680	60030	39370	177310
MEAN	992	13370	9784	23700	14850	51410	17900	6742	17190	1936	1270	5910
MAX	1050	23500	24300	32500	37900	61500	33400	12500	78700	2210	4800	15600
MIN	977	952	2150	14500	6040	33600	5750	3410	1640	1390	685	1360
AC-FT	60980	795400	601600	1457000	824700	3161000	1065000	414500	1023000	119100	78090	351700

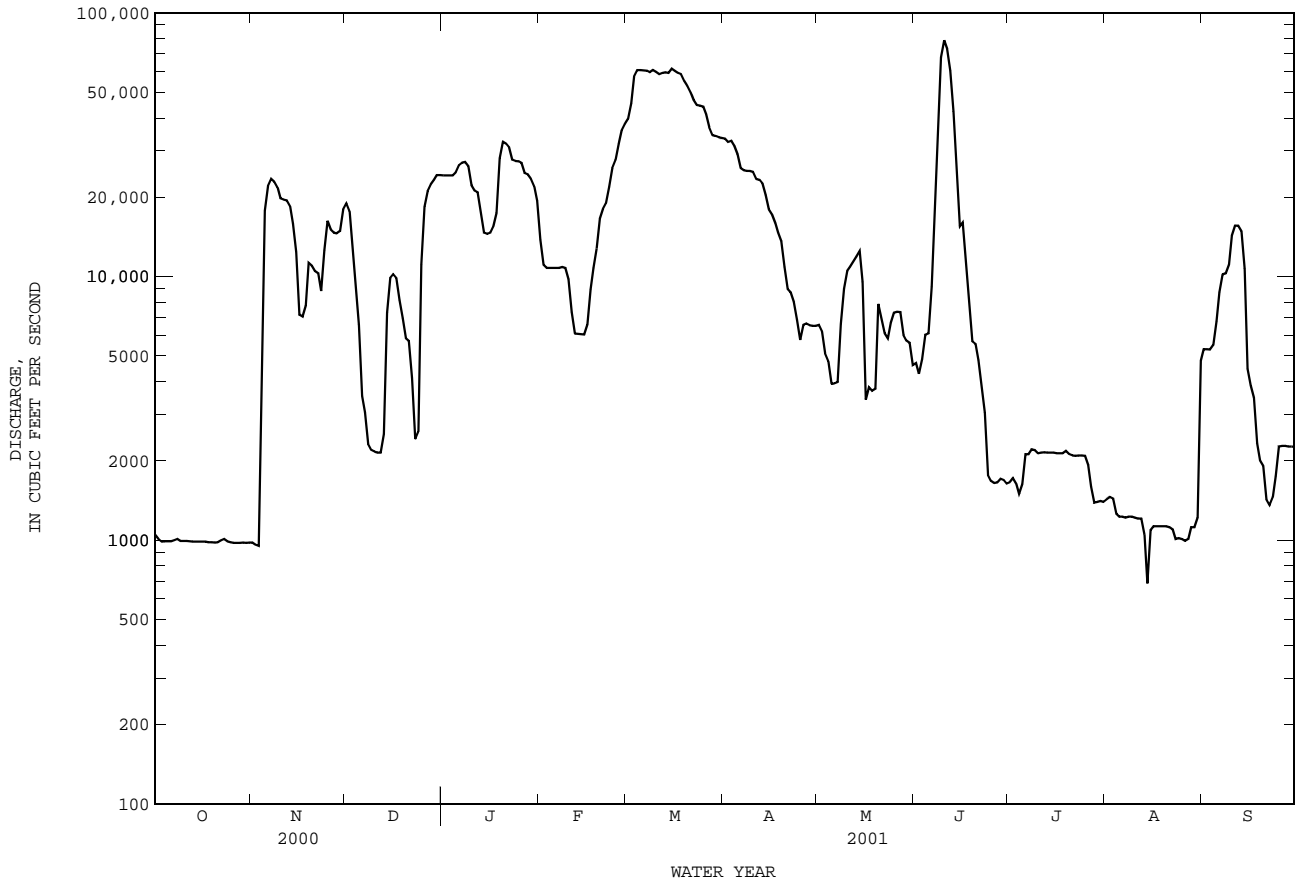
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	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	1997	1998	1999	2000	2001			
MEAN	3476	6695	8852	9658	10020	12900	11310	14490	12290	4459	2194	2165																											
MAX	25630	30260	30270	45550	38660	51410	30750	57850	32120	24310	6819	15230																											
(WY)	1974	1975	1992	1992	1992	2001	1977	1990	1973	1989	1982	1974																											
MIN	283	449	317	321	472	724	1262	1294	907	1043	355	455																											
(WY)	1973	1971	1971	1971	1971	1981	1971	1971	1972	1971	1972	1971																											

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1966 - 2001
ANNUAL TOTAL	1705620	5017510	
ANNUAL MEAN	4660	13750	8150
HIGHEST ANNUAL MEAN			18310
LOWEST ANNUAL MEAN			746
HIGHEST DAILY MEAN	24300	Dec 30	78700 Jun 10
LOWEST DAILY MEAN	868	Apr 28	685 Aug 14
ANNUAL SEVEN-DAY MINIMUM	920	Jan 1	973 Oct 28
MAXIMUM PEAK FLOW			79600 Jun 10
MAXIMUM PEAK STAGE			41.41 Jun 10
ANNUAL RUNOFF (AC-FT)	3383000	9952000	5904000
10 PERCENT EXCEEDS	13000	34000	23600
50 PERCENT EXCEEDS	2000	7060	2760
90 PERCENT EXCEEDS	984	1010	775

08066250 Trinity River near Goodrich, TX--Continued



TRINITY RIVER BASIN

08066300 Menard Creek near Rye, TX

LOCATION.--Lat 30°28'52", long 94°46'46", Liberty County, Hydrologic Unit 12030202, on left bank 20 ft downstream from bridge on State Highway 146, 2.3 mi northwest of Rye, and about 6.0 mi upstream from mouth.

DRAINAGE AREA.--152 mi<sup>2</sup>.

PERIOD OF RECORD.--Dec. 1965 to current year.

Water-quality records.--Chemical data: Aug. 1950 to Aug. 1994.

REVISED RECORD.--WRD-TX-99-2: Maximum discharge 14,200 ft<sup>3</sup>/s on Apr. 5, 1999.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 62.32 ft above sea level. Sept. 1974 to Aug. 1976, wire-weight gage read twice daily. Satellite telemeter at station.

REMARKS.--Records poor. Since installation of gage in water year 1966, at least 10% contributing drainage area has been regulated. No known diversions.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1929 reached a stage of about 39.4 ft, from information by the Texas Department of Transportation. Flood in Sept. 1961 reached a stage of about 34.0 ft, from information by local resident. Flood of May 1929 may have been equalled or exceeded by other floods during the period 1929-65.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	e75	54	349	45	241	26	21	37	21	55
2	12	11	e67	52	198	93	155	25	20	36	20	56
3	11	12	e63	50	e114	208	118	24	25	49	e19	65
4	13	e165	e59	47	e93	339	99	24	29	177	e18	70
5	11	e543	e56	45	e78	489	90	27	30	79	e19	105
6	11	e436	e55	44	73	442	82	27	299	54	21	85
7	12	e889	e54	44	69	205	74	31	273	45	21	48
8	13	e523	e54	43	65	121	66	36	777	39	e20	39
9	12	e295	e55	42	63	161	59	40	1840	36	e18	39
10	12	e240	e54	41	61	174	55	36	1330	32	e17	59
11	12	e135	e54	e90	60	250	52	30	733	30	e17	50
12	12	e89	e54	e393	58	394	50	29	510	28	e17	46
13	12	e80	e53	e282	56	344	49	26	199	27	e16	40
14	11	e77	e53	e149	56	380	48	27	114	26	e16	34
15	12	e76	e54	e123	57	762	45	25	266	25	16	31
16	11	e73	64	e95	56	543	43	24	317	25	15	29
17	12	e177	59	e110	55	621	40	22	383	24	14	27
18	11	e190	67	e152	54	527	37	21	668	23	14	27
19	11	e256	60	e315	52	211	37	20	280	22	14	26
20	11	e609	55	370	50	141	36	20	109	22	14	26
21	11	e343	52	718	48	114	35	e19	80	21	14	26
22	12	e137	51	598	46	98	34	e19	71	20	13	38
23	20	e99	50	241	45	87	33	e18	63	20	13	44
24	15	e89	50	150	45	80	33	e18	58	20	13	80
25	13	e741	53	120	43	74	33	e17	53	e19	13	55
26	12	e643	65	e107	42	69	32	e17	47	e19	14	46
27	12	e249	e103	e96	41	75	30	e18	44	e18	20	39
28	12	e119	e96	e93	41	229	29	e18	42	e19	46	33
29	12	e97	e89	134	---	293	28	e19	39	21	91	30
30	12	e80	73	175	---	376	27	e19	39	21	49	29
31	12	---	63	241	---	382	---	20	---	21	44	---
TOTAL	377	7484	1910	5214	2068	8327	1790	742	8759	1055	677	1377
MEAN	12.2	249	61.6	168	73.9	269	59.7	23.9	292	34.0	21.8	45.9
MAX	20	889	103	718	349	762	241	40	1840	177	91	105
MIN	11	11	50	41	41	45	27	17	20	18	13	26
AC-FT	748	14840	3790	10340	4100	16520	3550	1470	17370	2090	1340	2730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

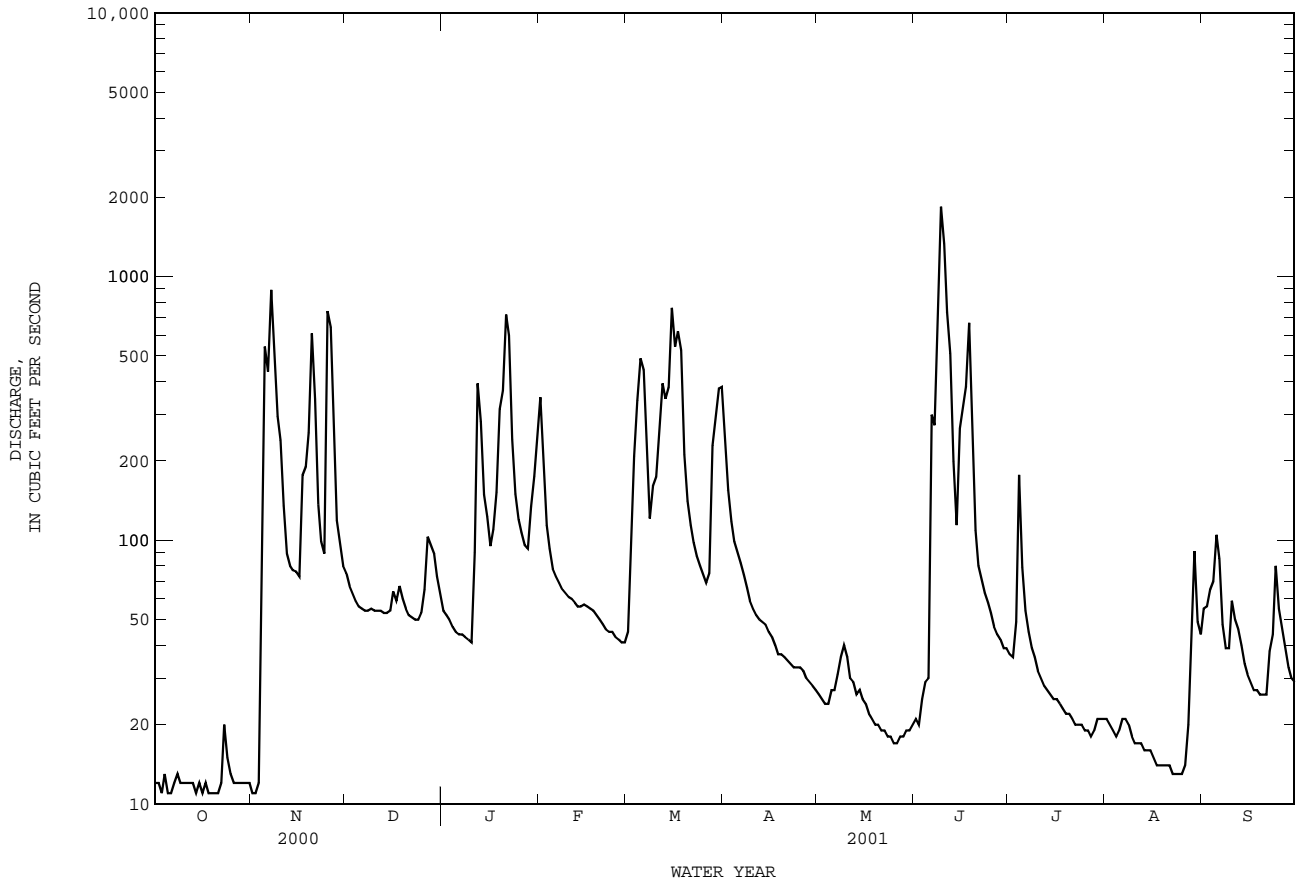
MEAN	76.7	95.6	155	212	218	187	179	180	148	62.3	44.1	49.3
MAX	1092	595	457	777	727	528	977	757	788	464	354	192
(WY)	1995	1999	1975	1974	1992	1997	1979	1983	1986	1989	1983	1983
MIN	3.42	3.55	8.05	14.6	14.0	13.5	9.77	21.8	8.72	4.52	5.47	4.43
(WY)	1968	1968	1968	1971	1971	1971	1971	1996	1971	1971	1967	1967

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1966 - 2001

ANNUAL TOTAL	18248.6	39780	
ANNUAL MEAN	49.9	109	135
HIGHEST ANNUAL MEAN			279
LOWEST ANNUAL MEAN			14.7
HIGHEST DAILY MEAN	889	Nov 7	1840
LOWEST DAILY MEAN	9.6	Aug 21	11
ANNUAL SEVEN-DAY MINIMUM	9.8	Aug 17	11
MAXIMUM PEAK FLOW			1890
MAXIMUM PEAK STAGE		20.23	Jun 9
ANNUAL RUNOFF (AC-FT)	36200	78900	97660
10 PERCENT EXCEEDS	86	294	280
50 PERCENT EXCEEDS	26	48	48
90 PERCENT EXCEEDS	11	14	14

e Estimated

08066300 Menard Creek near Rye, TX--Continued





## TRINITY RIVER BASIN

08066500 Trinity River at Romayor, TX

LOCATION.--Lat 30°25'30", long 94°51'02", Liberty County, Hydrologic Unit 12030202, near right bank at downstream side of bridge on State Highway 787, 1.9 mi south of Romayor, 1.9 mi downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.7 mi downstream from Big Creek, and at mile 94.3.

DRAINAGE AREA.--17,186 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1924 to current year. Monthly discharge only for some periods, published in WSP 1312.

Water-quality records.--Chemical data: Oct. 1941 to Nov. 1949, Feb. 1950 to Sept. 1951, Oct. 1953 to Sept. 1995. Biochemical data: Feb. 1968 to Sept. 1995. Pesticide data: Feb. 1968 to July 1981, Aug. 1983 to Sept. 1995. Sediment data: Mar. 1959 to Sept. 1995. Suspended sediment data: Oct. 1954 to Sept. 1955, Oct. 1968 to Sept. 1971. Specific conductance: Oct. 1941 to Sept. 1942, Jan. 1944 to Sept. 1951, Oct. 1953 to Sept. 1994. Water temperature: Oct. 1941 to Sept. 1950, Oct. 1953 to Sept. 1994.

REVISED RECORDS.--WSP 1392: 1932, 1935. WSP 1922: Drainage area. WDR TX-81-1: 1980 (M, m).

GAGE.--Water-stage recorder. Datum of gage is 25.92 ft above sea level. Prior to Oct. 1, 1943, nonrecording gage at datum 63.57 ft higher at railroad bridge 1.9 mi upstream. Oct. 1, 1943, to Dec. 31, 1988, water-stage recorder and nonrecording gage (Sept. 15, 1975, to June 16, 1977) at present site and at datum 10.00 ft higher than current datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Since installation of gage in water year 1924, at least 10% of contributing drainage area has been regulated. There are no known large diversions between Livingston Reservoir and this station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	1030	20500	26800	17000	40700	37100	7480	5490	2090	1790	5690
2	1150	1060	20000	26800	12600	44800	36300	7570	5210	2170	1800	5780
3	1070	1010	15100	26800	11500	54100	36000	6430	5210	2130	1790	5840
4	1060	1660	10500	26800	11400	59800	35200	5860	6660	2220	1680	5950
5	1060	13500	7270	27100	11300	61300	33600	4680	6940	2050	1590	6880
6	1020	22100	4330	28600	11300	61500	30500	4730	8740	2400	1590	9010
7	1030	26000	3040	29500	11300	61500	29300	4640	15200	2510	1610	10900
8	1050	25500	2510	29600	11300	61000	29100	6550	27800	2500	1630	11400
9	1040	24900	2180	29300	11300	61100	29100	9310	58100	2560	1620	11900
10	1040	21900	2120	25900	10800	61500	29000	11300	72300	2450	1540	15200
11	1040	21400	2080	23500	8470	60400	27700	12100	74600	2420	1530	17600
12	1040	21200	2040	23600	6710	60700	27200	12400	68000	2440	1530	17800
13	1030	20500	2070	20700	6470	61400	26800	13000	54300	2430	1530	17600
14	1030	18100	4890	16500	6440	61200	24500	13800	36200	2430	1210	14200
15	1030	14700	9330	15700	6410	62900	21400	12800	21600	2420	1290	7380
16	1040	8350	10100	15700	6620	62900	20000	5590	20300	2420	1520	5190
17	1050	7060	10000	16600	8310	61700	18900	4600	15300	2410	1560	4910
18	1040	7330	8750	17800	11000	61100	17400	4580	11000	2390	1570	3780
19	1030	10700	7440	27800	12500	58900	15700	4400	7200	2440	1590	3300
20	1080	11700	5850	34800	16700	56400	13400	6870	6310	2390	1610	3120
21	1070	10900	5550	34900	19600	53800	10600	9230	5910	2370	1600	2840
22	1100	10700	4580	34200	20300	50900	9920	7030	4500	2340	1600	2610
23	1210	9380	2850	31300	22800	48400	9620	6780	3960	2340	1550	2550
24	1100	12500	2210	30300	28200	47300	8130	6750	2430	2370	1530	2670
25	1040	18500	7210	30200	29700	47000	7320	7960	2100	2360	1570	3250
26	1020	17400	17500	30000	33500	44800	7000	8240	2050	2340	1550	3310
27	1020	16700	22300	28100	37100	41700	7720	8240	2030	2060	1590	3280
28	1020	16100	24500	27300	39500	38600	7560	7360	2100	1860	1770	3260
29	1020	15700	25400	27000	---	38200	7530	6600	2080	1790	1880	3260
30	1020	18300	26800	25200	---	37700	7490	6530	2070	1790	1800	3250
31	1020	---	26800	23000	---	37400	---	5770	---	1790	3930	---
TOTAL	32740	425880	315800	811400	440130	1660700	621090	239180	555690	70680	51950	213710
MEAN	1056	14200	10190	26170	15720	53570	20700	7715	18520	2280	1676	7124
MAX	1210	26000	26800	34900	39500	62900	37100	13800	74600	2560	3930	17800
MIN	1020	1010	2040	15700	6410	37400	7000	4400	2030	1790	1210	2550
AC-FT	64940	844700	626400	1609000	873000	3294000	1232000	474400	1102000	140200	103000	423900

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2001, BY WATER YEAR (WY)

	MEAN	3319	5585	7894	9568	9975	11920	10850	15220	11600	4463	1885	2100
MAX	25380	31160	43240	51740	44510	53570	65710	62000	45120	28480	10140	14850	
(WY)	1974	1999	1941	1992	1992	2001	1945	1957	1957	1941	1957	1974	
MIN	181	274	351	347	450	528	415	1285	455	201	128	165	
(WY)	1957	1956	1971	1971	1971	1925	1925	1937	1925	1956	1956	1956	

## SUMMARY STATISTICS

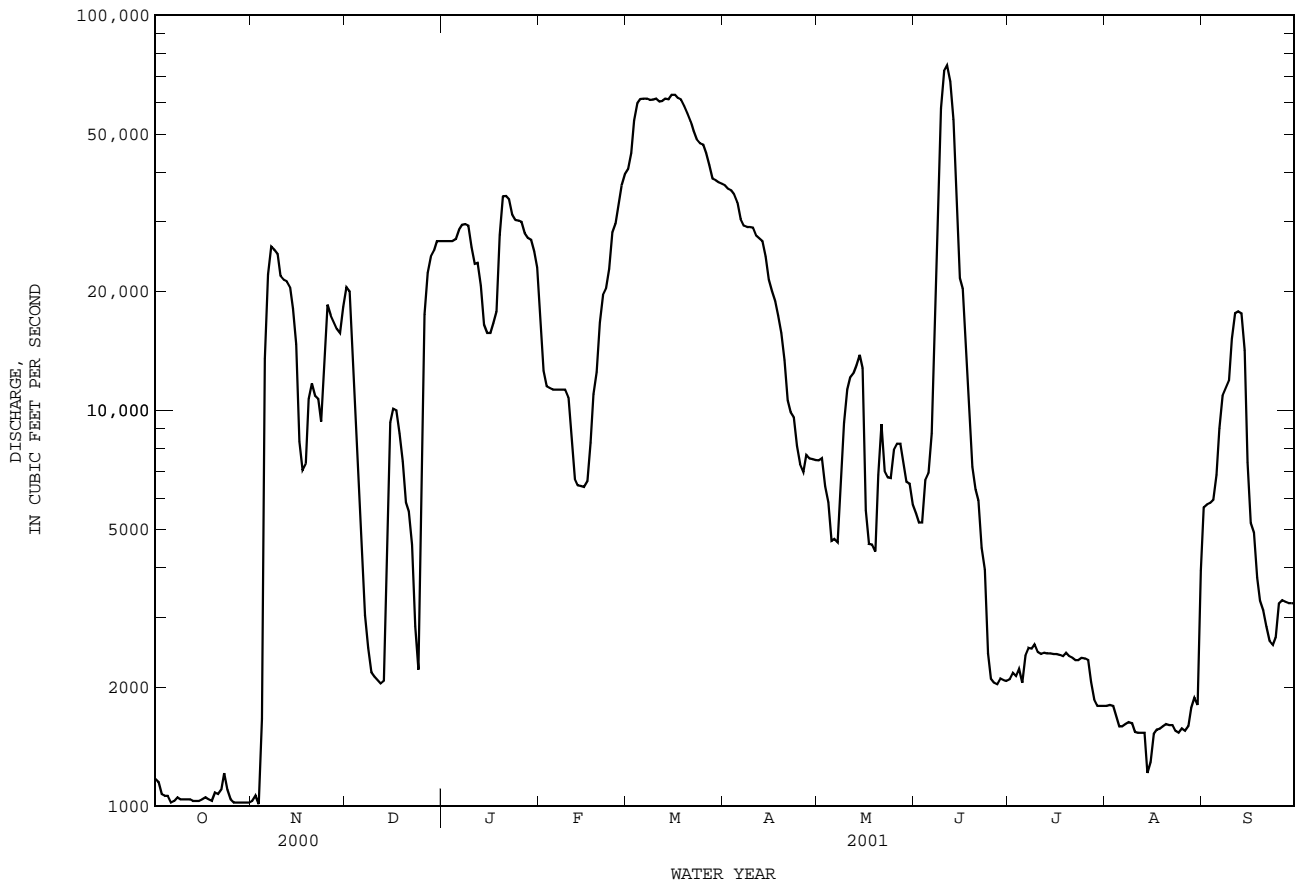
FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1924 - 2001

ANNUAL TOTAL	1763620	5438950		
ANNUAL MEAN	4819	14900	7862	
HIGHEST ANNUAL MEAN			20630	1992
LOWEST ANNUAL MEAN			730	1971
HIGHEST DAILY MEAN	26800	Dec 30	74600	Jun 11
LOWEST DAILY MEAN	1010	Nov 3	1010	Nov 3
ANNUAL SEVEN-DAY MINIMUM	1020	Oct 26	1020	Oct 26
MAXIMUM PEAK FLOW			76100	Jun 11
MAXIMUM PEAK STAGE			38.63	Jun 11
ANNUAL RUNOFF (AC-FT)	3498000	10790000	5696000	
10 PERCENT EXCEEDS	12800	37500	22500	
50 PERCENT EXCEEDS	2040	7560	2700	
90 PERCENT EXCEEDS	1060	1430	560	

08066500 Trinity River at Romayor, TX--Continued



## TRINITY RIVER BASIN

08067000 Trinity River at Liberty, TX  
(Partial-redcord station)

LOCATION.--Lat 30°03'27", long 94°49'05", Liberty County, Hydrologic Unit 12030203, at downstream side of downstream bridge on U.S. Highway 90 in Liberty, 450 ft downstream from Texas and New Orleans Railroad Co. bridge, and at mile 40.3.

DRAINAGE AREA.--17,468 mi<sup>2</sup>.

PERIOD OF RECORD.--Oct. 1938 to Sept. 1940 (gage heights, discharge measurements, and some records of daily discharge), Oct. 1940 to current year (daily mean discharges above 10,000 ft<sup>3</sup>/s). Gage-height records collected in this vicinity since 1903 are contained in reports of the National Weather Service.

Water-quality records.--Chemical data: Oct. 1970 to Sept. 1972. Biochemical data: Oct. 1970 to Sept. 1972. Pesticide data: May 1971 to Sept. 1972.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2.22 ft below sea level; unadjusted for land-surface subsidence. Prior to Mar. 13, 1973, nonrecording gage at site at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Discharges for current year were computed using stage discharge relation. During years with predominantly low releases from Livingston Reservoir, discharges are estimated using records for Trinity River near Romayor (station 08066500), intervening area computation, and discharge measurements. Since installation of gage in water year 1941, at least 10% of contributing drainage area has been regulated. Many diversions above station for municipal supplies, industrial uses, and irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 135,000 ft<sup>3</sup>/s, Oct. 12, 1994, gage height, 31.00 ft; minimum not determined (affected by tides); minimum gage height observed, 2.32 ft, Nov. 24, 1970. Maximum gage height since at least 1903, 31.00 ft, Oct. 21, 1994 (at 0500 hours).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 8-11, 1922, reached a stage of 28.6 ft, present datum, from observations by the National Weather Service at nonrecording gage on railroad bridge upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62,000 ft<sup>3</sup>/s, Mar. 18, gage height, 28.65 ft; minimum discharge not determined (affected by tides); minimum gage height, 4.59 ft, Aug. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	18100	25600	24200	35400	38400	---	---	---	---	---
2	---	---	19900	25700	19100	37900	37600	---	---	---	---	---
3	---	---	18700	25800	14600	41200	36900	---	---	---	---	---
4	---	---	14400	25900	12700	44600	36300	---	---	---	---	---
5	---	---	10500	25900	11900	47600	35400	---	---	---	---	---
6	---	11400	---	26400	11300	51100	34000	---	---	---	---	---
7	---	19200	---	27300	11000	54400	32100	---	---	---	---	---
8	---	23600	---	28000	10800	56600	31100	---	15600	---	---	---
9	---	23700	---	28400	10600	58200	30500	---	30400	---	---	---
10	---	23000	---	28200	10500	59000	30100	---	39800	---	---	10000
11	---	21100	---	27000	---	59500	29600	---	45400	---	---	12700
12	---	20500	---	26100	---	59900	28700	---	51700	---	---	14700
13	---	20500	---	25200	---	60000	28100	10500	55500	---	---	15300
14	---	19400	---	22700	---	60700	27300	11100	54600	---	---	14800
15	---	16900	---	19100	---	61300	25600	11800	46700	---	---	11500
16	---	13500	---	17800	---	62000	23600	10100	36400	---	---	---
17	---	---	---	18500	---	61700	22100	---	30300	---	---	---
18	---	---	---	19000	---	62100	19900	---	24800	---	---	---
19	---	---	---	21200	---	60800	17600	---	18600	---	---	---
20	---	10600	---	27900	11200	61100	15600	---	13100	---	---	---
21	---	11000	---	31100	15000	59400	12800	---	10200	---	---	---
22	---	10200	---	31800	17800	57400	10200	---	---	---	---	---
23	---	---	---	31800	19400	55400	---	---	---	---	---	---
24	---	10000	---	30900	22800	52400	---	---	---	---	---	---
25	---	15000	---	30400	25900	49900	---	---	---	---	---	---
26	---	18600	---	30100	27800	47900	---	---	---	---	---	---
27	---	17400	15500	29800	30600	46200	---	---	---	---	---	---
28	---	16500	21100	28600	33200	44900	---	---	---	---	---	---
29	---	15800	23300	28200	---	42500	---	---	---	---	---	---
30	---	15700	24400	27500	---	40700	---	---	---	---	---	---
31	---	---	25300	26300	---	39400	---	---	---	---	---	---

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TRINITY RIVER BASIN

08067070 CWA Canal near Dayton, TX

LOCATION.--Lat 29°57'40", long 94°48'36", Liberty County, Hydrologic Unit 12030203, at flume on left bank of Coastal Water Authority canal, 1,000 ft west of the Trinity River, 2.0 mi east of Farm Road 1409, and 7.4 mi southeast of Dayton.

PERIOD OF RECORD.--Apr. 1981 to current year. Prior to Oct. 1990, published as "CIWA Canal near Dayton".

GAGE.--Water-stage recorder. Mean sea level of gage not determined. Satellite telemeter at station.

REMARKS.--Records good. There are no known diversions between pumping plant and the gage. Water is pumped from the Trinity River for industrial and municipal use in the area.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	824	706	684	607	652	629	654	369	741	803	732	669
2	821	742	632	607	645	629	690	679	729	808	762	708
3	821	743	626	618	637	651	706	636	670	717	810	720
4	821	741	654	687	629	683	748	612	666	749	805	719
5	720	740	661	706	625	683	703	659	636	768	781	715
6	674	687	645	632	623	683	659	674	631	773	778	724
7	674	701	507	641	620	675	608	615	683	774	774	730
8	674	656	510	671	622	632	608	638	698	774	774	738
9	674	730	576	683	625	529	699	605	574	823	774	740
10	781	733	722	645	623	610	754	637	621	841	775	741
11	813	733	805	578	620	674	721	646	684	840	807	750
12	821	716	730	630	611	674	673	688	786	895	820	832
13	812	683	675	630	617	654	622	683	792	881	819	800
14	824	709	662	646	662	663	621	685	828	869	818	723
15	821	705	640	675	706	649	669	340	826	784	819	731
16	792	699	659	564	706	683	583	687	749	812	818	709
17	613	654	664	592	671	671	523	668	773	828	819	774
18	709	560	697	664	667	610	665	719	785	827	877	791
19	749	553	705	664	680	582	562	714	775	826	899	785
20	746	621	702	672	689	590	592	713	824	827	893	775
21	740	723	661	674	e600	664	720	705	838	828	902	743
22	728	723	645	657	618	664	686	691	827	827	857	746
23	708	685	643	642	633	664	623	687	813	830	860	737
24	646	657	636	661	680	664	620	684	801	778	863	737
25	707	671	662	682	647	664	614	632	788	811	811	706
26	729	679	696	668	605	664	609	695	812	814	838	755
27	763	679	625	634	606	657	608	684	830	775	826	733
28	756	676	668	631	630	461	611	673	851	739	756	754
29	755	675	685	631	---	570	655	660	863	734	668	774
30	734	682	628	662	---	601	691	682	817	734	664	772
31	691	---	652	670	---	644	---	736	---	733	666	---
TOTAL	23141	20662	20357	20024	17949	19771	19497	20196	22711	24822	24865	22331
MEAN	746	689	657	646	641	638	650	651	757	801	802	744
MAX	824	743	805	706	706	683	754	736	863	895	902	832
MIN	613	553	507	564	600	461	523	340	574	717	664	669
AC-FT	45900	40980	40380	39720	35600	39220	38670	40060	45050	49230	49320	44290

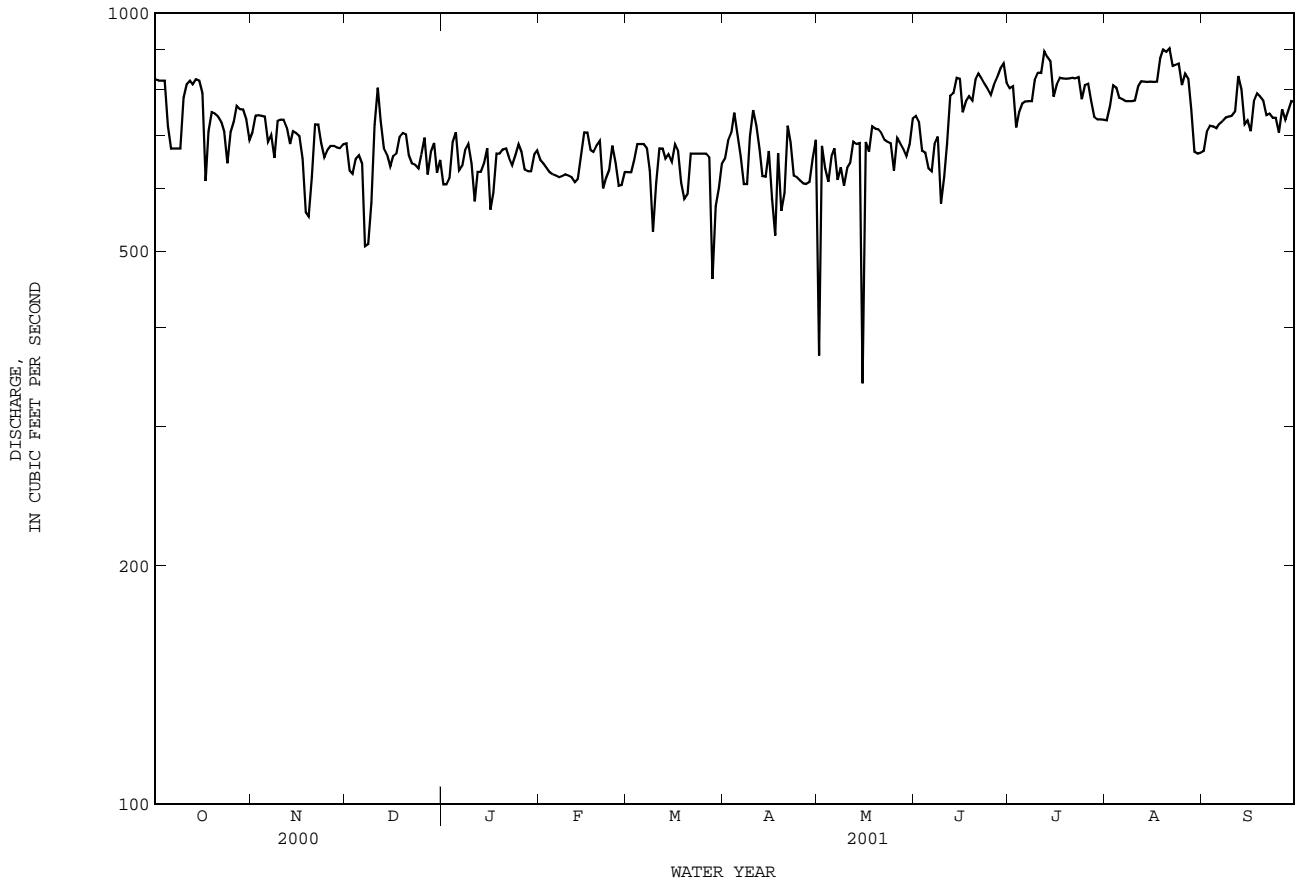
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	487	466	449	448	455	471	502	525	557	576	553	524	524	524	524	524	524	524	524	524	524	524
MAX	757	734	718	710	716	720	741	831	973	888	875	814	814	814	814	814	814	814	814	814	814	814
(WY)	2000	2000	2000	1999	1999	2000	2000	1998	1998	1998	1999	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	226	236	219	233	226	235	275	273	303	293	237	251	251	251	251	251	251	251	251	251	251	251
(WY)	1985	1985	1983	1983	1983	1985	1982	1986	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983	1983

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1981 - 2001
ANNUAL TOTAL	271962	256326	
ANNUAL MEAN	743	702	506
HIGHEST ANNUAL MEAN			764
LOWEST ANNUAL MEAN			259
HIGHEST DAILY MEAN	919	Sep 7	1080
LOWEST DAILY MEAN	507	Dec 7	52
ANNUAL SEVEN-DAY MINIMUM	597	Dec 3	167
MAXIMUM PEAK FLOW		974	Jun 27
MAXIMUM PEAK STAGE		2.92	Jun 27
ANNUAL RUNOFF (AC-FT)	539400		366700
10 PERCENT EXCEEDS	839	821	759
50 PERCENT EXCEEDS	735	686	487
90 PERCENT EXCEEDS	657	613	253

e Estimated

08067070 CWA Canal near Dayton, TX--Continued



## TRINITY RIVER BASIN

08067118 Lake Charlotte near Anahuac, TX

LOCATION.--Lat 29°52'02", long 94°42'53", Chambers County, Hydrologic Unit 12030203, on east side of Lake Charlotte, which is connected to the Trinity River by a small channel, 1.0 mi west of State Highway 563, 1.9 mi north of Interstate Highway 10, and 2.7 mi northeast of Wallisville.

DRAINAGE AREA.--55 mi<sup>2</sup>.

## WATER-STAGE RECORDS

PERIOD OF RECORD.--Dec. 1991 to current year (gage height).

GAGE.--Water-stage recorder. Datum of gage is 5.81 ft below sea level. Satellite telemeter at station.

REMARKS.--Records good. Lake Charlotte is a shallow natural lake within the Trinity River delta. Dec. 1991 to Nov. 9, 1992, the lowest stilling well intake was at gage height of 7.3 ft. Thereafter it was at gage height of 6.7 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.9 ft, Oct. 22, 1994, at 1345 hours.

EXTREMES FOR CURRENT YEAR.--Maximum gage-height, 13.17 ft, June 15.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.60	7.71	10.53	10.88	11.57	11.57	12.29	7.94	7.49	7.00	<6.84	8.20
2	7.58	7.85	10.63	11.08	11.46	11.73	12.18	8.06	7.18	6.90	<6.84	8.05
3	7.58	7.89	10.68	11.22	11.21	11.90	12.15	8.18	7.18	6.93	<6.84	7.95
4	7.59	7.98	10.70	11.32	10.80	12.10	12.08	8.17	7.40	6.93	6.87	7.81
5	7.60	8.05	10.42	11.36	10.35	12.35	12.02	8.16	7.72	6.90	7.03	7.61
6	7.61	8.71	9.80	11.39	9.95	12.55	12.00	8.13	8.51	6.88	7.10	7.60
7	7.49	9.26	9.12	11.45	9.68	12.65	11.99	7.92	8.73	6.85	7.14	7.75
8	7.20	10.09	8.50	11.49	9.53	12.72	11.90	7.63	9.50	<6.84	7.23	8.11
9	6.91	10.61	7.97	11.52	9.47	12.80	11.84	7.38	10.48	<6.84	7.22	8.50
10	7.00	10.78	7.51	11.57	9.23	12.80	11.76	7.54	11.33	<6.84	7.10	8.62
11	7.11	10.89	7.18	11.70	9.01	12.82	11.75	7.87	11.75	<6.84	6.92	8.66
12	7.09	11.01	6.86	11.66	8.80	12.86	11.70	8.20	12.17	<6.84	<6.84	8.88
13	7.05	11.14	6.85	11.58	8.47	12.86	11.62	8.42	12.63	<6.84	<6.84	9.21
14	7.09	11.04	6.85	11.56	8.08	12.86	11.54	8.57	12.91	<6.84	<6.84	9.55
15	7.15	10.97	6.86	11.42	7.77	12.96	11.51	8.73	13.13	<6.84	<6.84	9.76
16	7.21	10.99	7.43	11.33	7.65	12.94	11.42	8.93	12.88	<6.84	<6.84	9.51
17	7.35	10.52	7.70	11.32	7.22	12.88	11.29	8.79	12.48	<6.84	<6.84	8.90
18	7.47	9.89	7.88	11.20	7.10	12.88	11.13	8.30	12.06	6.88	<6.84	8.36
19	7.49	9.54	7.92	11.12	7.58	12.90	11.00	7.86	11.70	6.86	<6.84	8.05
20	7.50	9.41	7.66	11.10	8.01	12.88	10.88	7.49	11.27	6.84	6.85	7.65
21	7.50	9.43	7.53	11.28	8.46	12.86	10.62	7.53	10.64	<6.84	6.87	7.32
22	7.55	9.42	7.08	11.47	9.01	12.84	---	7.60	9.94	<6.84	6.97	7.23
23	7.77	9.35	7.07	11.62	9.56	12.80	---	7.41	9.25	<6.84	7.03	7.33
24	8.31	9.48	7.02	11.71	10.21	12.78	---	7.49	8.67	6.89	7.07	7.36
25	8.60	9.49	6.85	11.73	10.68	12.69	9.00	7.42	8.14	7.05	7.06	7.03
26	8.51	9.76	7.09	11.74	10.91	12.66	8.55	7.42	7.72	7.09	7.07	6.96
27	8.28	10.15	7.84	11.73	11.17	12.63	8.22	7.58	7.28	7.14	7.10	7.05
28	8.00	10.36	8.54	11.73	11.42	12.78	8.00	7.74	6.98	7.08	7.13	7.00
29	7.83	10.46	9.33	11.75	---	12.67	7.92	7.77	7.03	6.95	7.35	6.99
30	7.76	10.48	10.03	11.71	---	12.54	7.91	7.68	7.12	6.86	7.75	6.90
31	7.68	---	10.53	11.66	---	12.39	---	7.67	---	6.84	8.28	---
MAX	8.60	11.14	10.70	11.75	11.57	12.96	12.29	8.93	13.13	7.14	8.28	9.76

< Actual value is known to be less than the value shown

08067118 Lake Charlotte near Anahuac, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL DATA: Dec. 1991 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1994 to current year.

WATER TEMPERATURE: Dec. 1991 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1995.

REMARKS.--Temperature record good and specific conductance record fair. Interruption in the record was due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 4,560 microsiemens/cm, Nov. 17, 1997; minimum recorded, 46 microsiemens/cm, Oct. 20, 1994.

WATER TEMPERATURES: Maximum recorded, 40.5°C, July 13, 2001; minimum recorded, 4.1°C, Nov. 17, 1998.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 644 microsiemens/cm, June 4; minimum, 248 microsiemens/cm, Mar. 29, 30.

WATER TEMPERATURE: Maximum, 40.5°C, July 13; minimum, 4.7°C, Jan. 3.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	544	522	532	536	483	499	373	356	369	---	---	---
2	550	532	539	519	491	500	398	361	373	---	---	---
3	541	517	535	500	429	485	405	392	398	---	---	---
4	547	532	541	495	326	410	409	398	405	---	---	---
5	546	532	540	414	340	375	400	377	393	---	---	---
6	539	517	529	448	338	416	404	385	395	---	---	---
7	544	531	539	468	393	426	404	383	395	---	---	---
8	558	528	541	438	392	417	398	381	388	---	---	---
9	556	549	552	418	404	408	402	386	397	---	---	---
10	557	533	546	408	402	404	408	383	396	---	---	---
11	585	527	543	419	404	413	412	392	401	---	---	---
12	564	532	553	440	412	417	---	---	---	---	---	---
13	580	539	561	424	413	417	---	---	---	---	---	---
14	570	525	543	428	423	426	---	---	---	---	---	---
15	542	509	527	429	422	427	---	---	---	---	---	---
16	526	504	518	429	416	420	---	---	---	---	---	---
17	526	499	511	418	412	414	---	---	---	---	---	---
18	530	511	523	414	391	398	---	---	---	---	---	---
19	529	511	520	398	386	393	---	---	---	---	---	---
20	523	513	519	398	394	396	---	---	---	---	---	---
21	529	522	525	407	397	402	---	---	---	---	---	---
22	532	482	514	408	390	404	---	---	---	---	---	---
23	519	504	511	409	383	403	---	---	---	---	---	---
24	522	502	515	397	382	386	---	---	---	---	---	---
25	518	437	495	390	387	388	---	---	---	---	---	---
26	503	468	482	389	385	387	---	---	---	324	316	321
27	528	465	494	390	377	385	---	---	---	321	312	315
28	530	480	501	386	370	378	---	---	---	316	310	312
29	541	465	507	377	358	365	---	---	---	312	299	304
30	527	471	496	366	354	359	---	---	---	306	302	304
31	552	484	503	---	---	---	---	---	---	311	303	306
MONTH	585	437	524	536	326	411	---	---	---	---	---	---



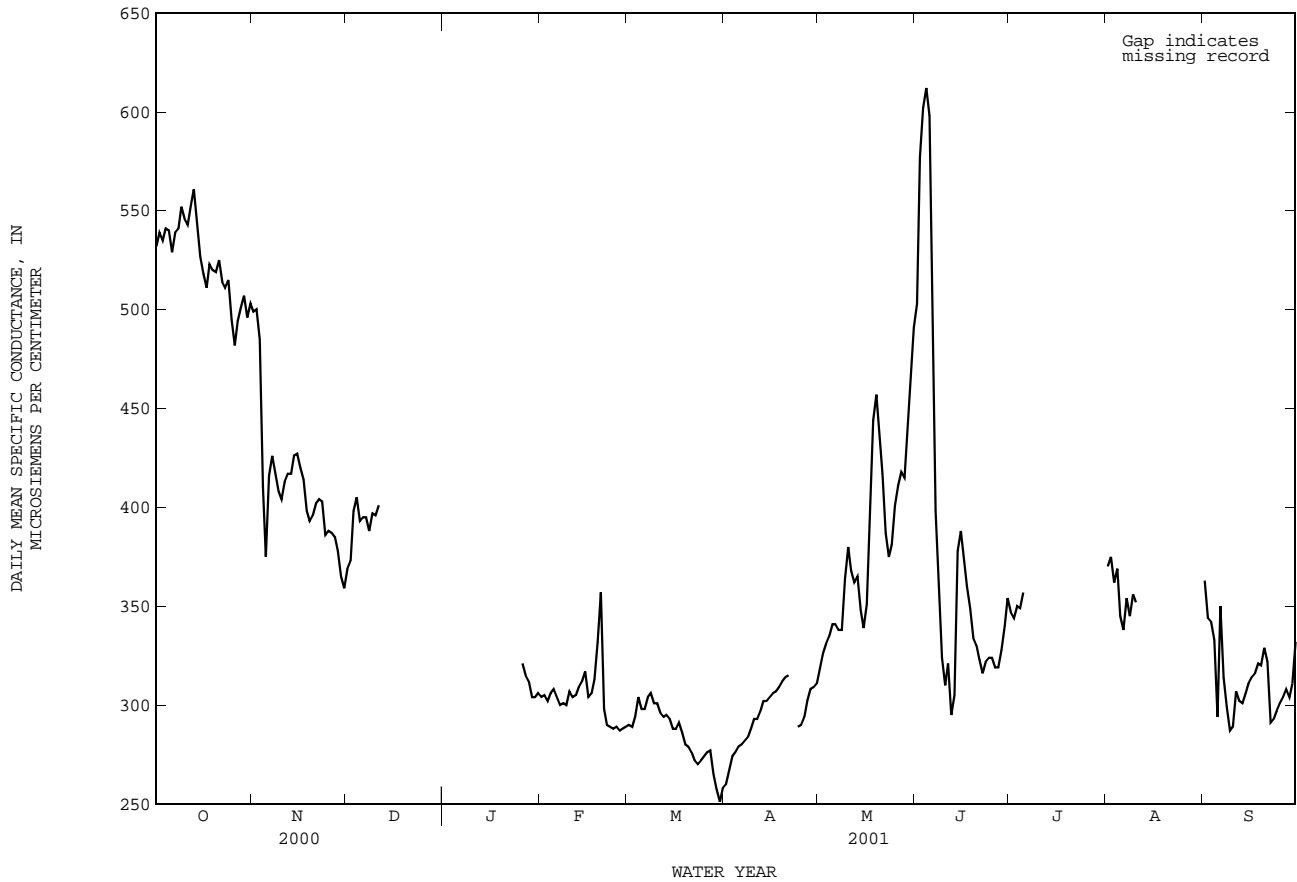
## TRINITY RIVER BASIN

08067118 Lake Charlotte near Anahuac, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	311	302	304	292	288	290	264	257	260	333	311	319
2	307	301	305	292	288	289	274	256	267	353	314	326
3	307	299	302	307	290	294	275	273	274	356	320	331
4	310	303	306	309	296	304	279	275	276	353	324	335
5	310	306	308	301	295	298	280	277	279	356	327	341
6	308	299	304	301	297	298	281	278	280	359	328	341
7	303	298	300	307	301	304	284	280	282	359	326	338
8	304	299	301	307	301	306	286	282	284	370	321	338
9	302	297	300	304	298	301	291	285	288	375	345	364
10	315	301	307	307	298	301	295	290	293	407	364	380
11	310	301	304	300	294	296	296	290	293	399	355	368
12	306	303	305	299	293	294	299	294	297	386	354	362
13	322	305	309	297	293	295	304	298	302	399	343	365
14	324	303	312	296	288	293	304	300	302	394	332	348
15	325	308	317	291	286	288	306	301	304	349	330	339
16	315	296	304	292	284	288	309	304	306	370	345	351
17	325	297	306	294	288	291	311	306	307	426	369	389
18	320	306	313	293	281	286	311	308	309	454	426	444
19	375	309	332	285	275	280	314	309	312	461	448	457
20	377	326	357	285	272	279	316	312	314	458	416	437
21	327	286	298	283	269	276	320	306	315	443	404	417
22	298	283	290	278	269	272	---	---	---	405	367	387
23	296	285	289	271	268	270	---	---	---	386	362	375
24	293	285	288	273	270	272	290	287	289	394	374	381
25	292	287	289	275	273	274	293	287	290	411	393	401
26	288	286	287	278	275	276	299	284	294	415	404	411
27	290	286	288	279	270	277	310	291	302	432	410	418
28	291	286	289	270	260	265	314	303	308	428	410	415
29	---	---	---	263	248	257	322	302	309	463	422	438
30	---	---	---	257	248	251	324	307	311	483	449	464
31	---	---	---	263	253	258	---	---	---	501	483	491
MONTH	377	283	304	309	248	285	---	---	---	501	311	383
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	533	487	503	355	339	347	385	359	370	408	317	363
2	602	533	577	351	340	344	386	357	375	359	305	344
3	633	579	602	357	342	350	380	345	362	359	321	342
4	644	584	612	356	340	349	382	352	369	347	315	333
5	607	584	598	362	352	357	368	333	345	340	253	294
6	588	414	517	---	---	---	344	330	338	365	327	350
7	414	391	398	---	---	---	361	342	354	343	284	314
8	401	339	363	---	---	---	358	337	345	316	280	299
9	341	289	324	---	---	---	362	346	356	307	274	287
10	325	294	310	---	---	---	358	345	352	307	276	289
11	333	309	321	---	---	---	---	---	---	310	303	307
12	321	271	295	---	---	---	---	---	---	307	299	302
13	353	274	305	---	---	---	---	---	---	306	295	301
14	389	353	378	---	---	---	---	---	---	313	301	306
15	398	380	388	---	---	---	---	---	---	318	307	311
16	384	365	374	---	---	---	---	---	---	319	311	314
17	373	350	360	---	---	---	---	---	---	318	313	316
18	358	340	349	---	---	---	---	---	---	324	318	321
19	341	329	334	---	---	---	---	---	---	327	314	320
20	336	320	330	---	---	---	---	---	---	333	321	329
21	333	314	323	---	---	---	---	---	---	334	289	322
22	320	314	316	---	---	---	---	---	---	304	280	291
23	326	317	322	---	---	---	---	---	---	304	287	293
24	327	322	324	---	---	---	---	---	---	301	294	297
25	328	321	324	---	---	---	---	---	---	311	295	301
26	334	315	319	---	---	---	---	---	---	317	289	304
27	332	313	319	---	---	---	---	---	---	320	291	308
28	349	319	328	---	---	---	---	---	---	313	290	304
29	373	320	340	---	---	---	---	---	---	319	304	311
30	372	339	354	---	---	---	---	---	---	352	317	332
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	644	271	384	---	---	---	---	---	---	408	253	314

08067118 Lake Charlotte near Anahuac, TX--Continued



TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.1	20.9	23.1	25.2	23.2	24.3	16.4	15.4	15.8	7.6	6.3	6.7
2	28.0	24.6	26.1	25.2	23.8	24.4	16.1	13.2	14.4	6.3	5.4	5.9
3	28.9	25.6	27.1	24.3	23.9	24.1	13.2	12.2	12.6	5.6	4.7	5.1
4	29.0	25.8	27.4	24.4	23.5	23.9	12.4	11.7	12.1	5.8	4.8	5.3
5	30.0	26.6	28.2	23.9	23.3	23.7	12.3	11.3	11.9	7.2	5.8	6.3
6	29.0	25.4	27.7	23.5	21.7	22.7	12.2	11.1	11.8	9.3	7.2	8.0
7	25.4	17.6	21.3	22.4	20.3	20.9	12.5	10.9	11.5	9.8	9.3	9.5
8	17.6	12.7	14.6	20.5	17.7	19.6	13.3	10.5	11.9	9.6	8.7	9.1
9	12.7	11.5	11.9	17.8	16.6	17.2	13.8	11.4	12.6	9.4	9.0	9.1
10	16.2	11.3	13.5	17.5	16.3	16.9	16.9	12.8	14.9	9.1	8.1	8.6
11	18.9	14.5	16.5	17.2	16.5	16.7	18.8	14.7	17.0	8.8	8.1	8.5
12	21.2	15.9	18.4	17.7	15.9	16.3	---	---	---	8.8	8.6	8.7
13	23.5	17.4	20.3	17.7	15.8	16.8	---	---	---	8.8	8.4	8.6
14	23.0	19.6	21.5	15.8	14.4	14.9	---	---	---	9.2	8.8	9.0
15	26.1	22.0	23.6	14.6	14.2	14.5	---	---	---	9.7	9.1	9.4
16	27.6	23.5	25.4	15.9	14.5	15.0	---	---	---	9.8	9.7	9.7
17	27.3	23.3	25.2	15.9	14.1	15.0	---	---	---	10.1	9.7	9.9
18	26.3	23.6	24.8	14.1	11.7	12.9	---	---	---	10.0	8.8	9.5
19	27.1	21.5	24.2	11.8	10.9	11.4	10.3	8.9	9.9	9.1	8.5	8.8
20	25.2	22.6	24.1	12.2	10.5	11.4	10.3	8.9	9.7	8.9	7.5	8.0
21	24.4	22.8	23.3	12.5	11.1	11.7	10.6	9.9	10.2	8.2	7.8	8.1
22	24.8	22.7	23.7	12.4	11.5	11.9	10.5	8.5	9.6	8.2	7.8	8.0
23	25.0	23.6	24.2	14.8	12.2	12.9	---	---	---	8.4	8.0	8.1
24	24.7	23.3	23.9	16.1	14.8	15.4	---	---	---	8.5	8.3	8.4
25	24.2	23.1	23.7	16.4	14.5	15.2	11.2	---	---	8.6	8.2	8.4
26	24.9	22.8	23.7	16.3	14.8	15.5	11.7	9.9	10.7	10.1	8.5	9.1
27	25.1	22.6	23.9	16.2	14.8	15.4	11.6	9.0	10.3	10.2	9.8	10.1
28	25.3	22.7	24.1	16.6	15.5	16.0	9.0	7.4	8.2	11.1	9.9	10.7
29	26.0	22.6	24.2	16.9	15.9	16.3	9.7	8.5	8.9	13.5	11.0	12.8
30	26.2	23.4	24.7	16.5	15.7	15.9	8.9	7.8	8.3	12.8	11.3	12.1
31	25.3	23.2	24.4	---	---	---	8.5	7.6	7.9	12.7	12.0	12.4
MONTH	30.0	11.3	22.9	25.2	10.5	17.0	---	---	---	13.5	4.7	8.8

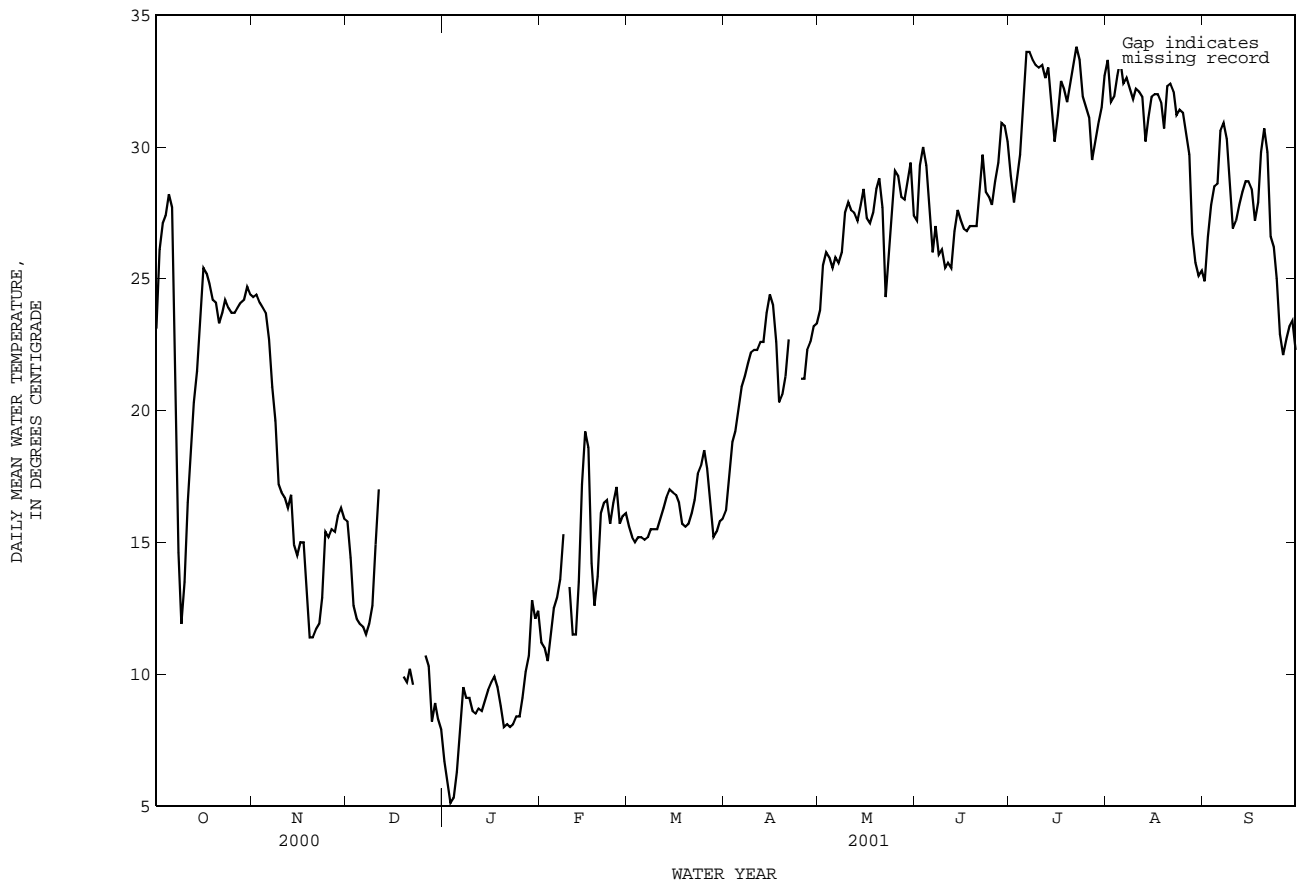
## TRINITY RIVER BASIN

08067118 Lake Charlotte near Anahuac, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.0	10.9	11.2	16.4	15.1	15.6	16.6	15.8	16.2	25.3	22.4	23.8
2	11.3	10.5	11.0	15.6	15.0	15.2	18.4	16.4	17.4	27.8	23.7	25.5
3	11.2	9.9	10.5	15.2	14.9	15.0	19.5	18.4	18.8	26.7	24.9	26.0
4	12.7	10.8	11.5	15.9	14.4	15.2	20.1	18.8	19.2	26.6	25.0	25.8
5	13.2	11.9	12.5	16.1	14.4	15.2	21.4	18.7	20.0	26.3	24.6	25.4
6	14.0	12.1	12.9	15.7	14.7	15.1	21.5	20.0	20.9	27.7	24.2	25.8
7	14.6	13.3	13.6	15.8	14.7	15.2	22.0	20.3	21.3	27.5	23.8	25.6
8	16.8	13.6	15.3	15.7	15.2	15.5	22.4	20.9	21.8	28.7	23.5	26.0
9	---	---	---	16.0	15.1	15.5	22.7	21.6	22.2	30.2	25.0	27.5
10	14.8	12.5	13.3	16.0	15.0	15.5	22.6	21.8	22.3	30.3	25.6	27.9
11	12.5	11.1	11.5	16.3	15.7	15.9	22.6	21.6	22.3	29.6	26.1	27.6
12	12.0	11.0	11.5	16.8	16.1	16.3	23.2	21.9	22.6	29.0	26.1	27.5
13	15.6	12.0	13.5	17.4	16.3	16.7	23.2	22.2	22.6	28.2	26.1	27.2
14	18.7	15.6	17.2	17.3	16.7	17.0	25.1	21.9	23.7	30.3	26.0	27.8
15	20.3	18.4	19.2	17.6	16.2	16.9	25.5	23.4	24.4	29.8	27.1	28.4
16	20.2	15.6	18.6	17.6	15.9	16.8	25.2	23.0	24.0	28.4	26.2	27.3
17	15.9	12.4	14.2	17.1	16.2	16.5	23.4	21.2	22.6	28.5	25.9	27.1
18	15.1	10.4	12.6	16.2	15.3	15.7	21.2	19.8	20.3	29.6	25.9	27.5
19	15.2	12.2	13.7	16.0	15.1	15.6	21.1	20.1	20.6	30.4	26.9	28.4
20	18.1	14.5	16.1	16.3	15.0	15.7	22.6	20.3	21.3	31.5	26.9	28.8
21	17.7	15.1	16.5	17.6	15.4	16.1	23.9	21.8	22.7	29.3	25.4	27.7
22	17.0	15.9	16.6	17.7	15.8	16.6	---	---	---	26.5	21.8	24.3
23	16.0	15.3	15.7	18.7	16.7	17.6	---	---	---	29.6	22.1	25.8
24	17.5	15.0	16.5	18.9	17.4	17.9	23.0	---	---	31.0	24.0	27.3
25	17.7	15.3	17.1	19.1	17.9	18.5	22.3	19.7	21.2	32.0	26.4	29.1
26	16.1	15.1	15.7	18.8	17.2	17.8	22.6	19.6	21.2	31.2	27.3	28.9
27	17.4	14.6	16.0	17.2	15.4	16.4	23.5	20.7	22.3	30.3	26.3	28.1
28	17.0	15.6	16.1	15.4	14.9	15.2	24.1	21.0	22.6	29.7	26.5	28.0
29	---	---	---	15.9	14.9	15.4	24.3	22.0	23.2	30.7	27.0	28.7
30	---	---	---	16.2	15.4	15.8	24.0	22.4	23.3	31.2	27.5	29.4
31	---	---	---	16.2	15.7	15.9	---	---	---	29.7	25.8	27.4
MONTH	---	---	---	19.1	14.4	16.1	---	---	---	32.0	21.8	27.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	30.0	24.7	27.2	30.5	27.4	28.9	37.3	28.9	33.3	25.8	24.5	24.9
2	32.7	26.1	29.3	30.7	25.6	27.9	35.8	27.8	31.7	27.9	25.7	26.6
3	32.0	28.0	30.0	31.9	26.1	28.9	36.2	27.7	31.9	29.2	26.5	27.8
4	31.4	27.4	29.3	33.0	26.9	29.7	36.4	29.3	32.7	29.7	27.4	28.5
5	29.6	25.9	27.6	35.6	28.2	31.7	36.6	29.4	33.3	31.3	26.2	28.6
6	27.3	24.8	26.0	38.4	29.6	33.6	34.1	29.8	32.4	32.9	28.5	30.6
7	27.9	26.3	27.0	36.5	30.5	33.6	36.1	28.9	32.6	32.8	29.5	30.9
8	27.5	24.9	25.9	37.2	30.1	33.3	34.0	30.6	32.2	32.0	28.7	30.3
9	26.9	25.4	26.1	37.5	29.4	33.1	34.8	29.6	31.8	30.3	27.4	28.5
10	25.8	25.0	25.4	37.8	28.9	33.0	35.0	29.8	32.2	28.2	25.9	26.9
11	25.8	25.4	25.6	39.1	28.9	33.1	35.7	29.4	32.1	28.5	25.8	27.2
12	25.8	25.2	25.4	37.3	28.6	32.6	35.0	29.2	31.9	29.2	26.5	27.8
13	28.4	25.2	26.8	40.5	28.5	33.0	31.5	28.8	30.2	29.4	27.5	28.3
14	28.5	26.8	27.6	38.8	27.0	31.5	37.8	26.6	31.1	29.2	28.2	28.7
15	28.3	26.8	27.2	34.4	25.6	30.2	37.8	27.4	31.9	29.0	28.5	28.7
16	27.1	26.8	26.9	34.6	27.6	31.2	37.6	28.2	32.0	29.3	27.8	28.4
17	27.1	26.7	26.8	36.9	28.6	32.5	37.5	28.2	32.0	27.9	26.3	27.2
18	27.4	26.8	27.0	34.6	30.2	32.2	36.1	28.1	31.7	29.7	26.2	27.9
19	27.4	26.9	27.0	34.5	28.1	31.7	33.0	28.4	30.7	32.2	28.0	29.8
20	27.2	26.8	27.0	34.9	30.0	32.4	36.3	29.0	32.3	33.9	29.3	30.7
21	30.5	27.0	28.4	37.6	29.1	33.1	35.5	29.6	32.4	33.4	27.2	29.8
22	30.7	28.7	29.7	38.1	29.9	33.8	35.1	29.4	32.1	29.3	24.9	26.6
23	29.4	26.9	28.3	35.5	30.7	33.3	32.7	29.4	31.2	26.7	25.8	26.2
24	29.0	26.2	28.1	33.5	29.6	31.9	34.4	28.8	31.4	26.0	23.4	25.0
25	28.7	26.4	27.8	33.6	29.8	31.5	33.6	29.1	31.3	25.6	20.1	22.9
26	32.0	26.4	28.7	33.0	29.3	31.1	32.3	29.0	30.5	25.0	18.8	22.1
27	32.4	26.0	29.4	31.5	28.5	29.5	32.2	28.4	29.7	25.8	19.7	22.7
28	34.2	28.3	30.9	33.2	27.6	30.2	28.4	26.1	26.7	26.1	20.3	23.2
29	32.9	29.0	30.8	32.3	29.2	30.9	26.1	25.3	25.6	26.2	20.5	23.4
30	32.6	28.1	30.2	35.0	28.4	31.5	25.7	24.5	25.1	25.3	19.4	22.3
31	---	---	---	36.1	29.1	32.7	25.6	25.0	25.3	---	---	---
MONTH	34.2	24.7	27.8	40.5	25.6	31.7	37.8	24.5	31.0	33.9	18.8	27.1

08067118 Lake Charlotte near Anahuac, TX--Continued



## TRINITY RIVER BASIN

08067252 Trinity River at Wallisville, TX

LOCATION.--Lat 29°50'10", long 94°44'57", Chambers County, Hydrologic Unit 12030203, in the center of the Trinity River Dam at the U.S. Army Corps of Engineers river lock which is located 3.0 miles west along Interstate Highway 10 from the Interstate overpass over Farm Road 563, 2.0 miles below Wallisville and 3.9 river miles from mouth.

DRAINAGE AREA.--17,796 mi<sup>2</sup>.

## WATER-STAGE RECORDS

PERIOD OF RECORD.--Oct. 1994 to current year.

GAGE.--Water-stage recorders. Datum of gage is sea level. Prior to Mar. 1999 at site 2.3 mi upstream. Satellite telemeter at station.

REMARKS.--Records good. Pressure transducers are installed to record river elevation on the upstream and downstream side of the dam. Mostly tidal.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 7.70 ft, Oct. 22, 1994; minimum elevation, -1.64 ft, Nov. 2 and 3, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum elevation (upstream), 4.89 ft, Nov. 6; minimum elevation, -1.05 ft, Dec. 12. Maximum elevation (downstream), 4.18 ft, Mar. 15; minimum elevation, -1.34 ft, Oct. 8.

## ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.86	1.78	2.15	1.87	2.45	1.71	1.97	1.85	2.76	2.49	2.85	2.48
2	1.84	1.80	2.16	2.10	1.76	1.51	2.10	1.92	2.69	2.30	3.10	2.60
3	1.86	1.65	2.18	2.12	1.76	1.56	2.21	2.00	2.38	2.07	3.37	2.70
4	1.86	1.81	2.27	2.14	2.01	1.64	2.33	2.18	2.29	1.81	3.32	3.07
5	1.88	1.77	3.19	2.24	1.85	1.55	2.37	2.18	1.93	1.42	3.51	3.12
6	1.93	1.65	4.89	1.64	1.83	.85	2.44	2.21	1.78	1.34	3.68	3.43
7	1.80	1.25	2.04	1.39	1.25	.48	2.54	2.31	1.84	1.31	3.84	3.67
8	1.46	.29	3.10	1.86	1.29	.44	2.54	2.22	2.02	1.36	4.10	3.74
9	1.27	1.03	2.02	1.53	1.25	.01	2.58	2.36	2.03	1.08	4.10	3.70
10	1.43	1.25	2.48	1.70	1.31	.10	3.17	2.47	1.08	.80	4.21	3.95
11	1.43	1.36	2.72	1.95	1.36	.18	3.31	2.61	1.38	.99	4.27	4.06
12	1.41	1.29	3.14	2.17	.62	-1.05	2.72	2.41	1.55	1.17	4.22	4.03
13	1.34	1.28	3.14	1.89	1.53	.35	2.82	2.56	1.29	.75	4.12	3.96
14	1.40	1.06	2.01	1.58	1.21	-.38	2.95	2.46	1.11	.54	4.22	3.97
15	1.45	1.38	2.59	1.94	1.34	.46	2.64	2.27	1.26	.44	4.30	4.12
16	1.55	1.42	3.03	1.96	1.84	.37	2.84	2.26	1.27	-.09	4.16	4.01
17	1.74	1.52	2.10	1.29	.39	.21	2.92	2.40	.23	-.46	4.16	3.96
18	1.78	1.73	1.97	1.38	1.13	.39	2.45	2.15	1.32	.02	4.22	3.97
19	1.77	1.72	2.11	1.38	.42	-.02	2.25	1.94	1.80	.76	4.18	3.98
20	1.77	1.67	2.00	1.39	1.13	.00	2.29	1.98	1.82	.96	4.12	3.97
21	1.80	1.58	1.82	1.39	1.01	-.07	2.51	2.26	1.74	1.19	4.09	3.83
22	2.02	1.78	1.68	1.30	1.05	-.18	2.72	2.42	1.83	1.37	4.09	3.86
23	3.23	1.99	2.36	1.33	1.22	.26	2.77	2.56	2.58	1.79	3.99	3.82
24	3.40	3.00	2.78	1.28	1.17	.07	2.85	2.67	3.44	2.57	3.94	3.64
25	3.00	2.47	1.55	1.08	1.33	.14	2.89	2.64	2.67	2.03	3.83	3.63
26	2.75	2.47	1.86	1.40	1.87	.89	2.93	2.69	2.47	2.25	3.75	3.54
27	2.52	2.09	2.03	1.43	1.52	.98	2.89	2.66	2.82	2.34	3.86	3.55
28	2.18	1.60	2.16	1.62	1.29	1.05	3.06	2.76	2.79	2.52	4.25	3.84
29	2.11	1.76	2.23	1.56	1.42	1.20	3.18	2.63	---	---	4.15	3.86
30	2.03	1.85	2.07	1.65	1.67	1.37	3.07	2.73	---	---	3.86	3.62
31	1.97	1.64	---	---	1.90	1.67	2.87	2.54	---	---	3.68	3.47
MONTH	3.40	.29	4.89	1.08	2.45	-1.05	3.31	1.85	3.44	-.46	4.30	2.48

TRINITY RIVER BASIN

08067252 Trinity River at Wallisville, TX--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.54	3.28	2.18	.91	.96	.39	1.45	.23	.96	-.09	2.16	.85
2	3.56	3.23	2.29	1.51	1.28	.29	1.67	.03	1.17	-.40	2.55	1.02
3	3.57	3.22	2.23	1.55	1.77	.53	1.59	.31	1.72	.15	1.80	.88
4	3.43	3.08	2.31	1.68	2.47	.84	1.57	.17	1.81	.45	1.58	1.04
5	3.38	3.14	2.25	1.92	4.07	.96	1.49	.22	1.88	.69	1.67	.88
6	3.60	3.31	2.62	1.46	4.12	1.64	1.30	.27	1.81	.57	1.70	1.20
7	3.74	3.16	1.90	.84	2.21	1.34	1.55	.08	1.94	.78	2.03	1.64
8	3.45	3.18	1.54	.57	2.58	1.59	1.32	.27	1.73	1.13	2.40	1.63
9	3.49	3.01	1.66	.35	3.55	2.31	1.22	.15	1.72	1.26	2.82	1.31
10	3.59	3.01	2.12	.67	3.50	3.00	1.00	.08	1.57	1.01	1.83	1.21
11	3.66	3.24	2.18	1.13	3.52	3.11	.88	.11	1.38	.59	1.85	1.18
12	3.34	2.92	2.00	1.04	3.68	3.22	1.08	.17	1.19	.29	2.12	1.18
13	3.09	2.70	1.93	.96	4.06	3.16	.73	.23	1.11	-.10	2.46	1.39
14	3.30	2.48	1.81	.98	4.33	3.99	.55	-.02	.78	-.19	2.78	1.83
15	3.17	2.64	2.06	1.18	4.35	4.08	.84	-.01	1.02	-.19	2.70	1.97
16	2.88	2.37	2.10	1.52	4.19	3.87	1.11	-.03	.68	.14	2.35	1.69
17	2.71	2.14	1.90	1.35	3.87	3.43	1.55	.10	.86	.66	2.00	1.37
18	3.47	2.07	1.75	1.23	3.47	3.13	1.53	.33	1.09	.78	2.39	1.22
19	3.04	2.43	1.44	.78	3.19	2.63	1.62	.03	1.15	1.03	2.24	1.17
20	3.17	2.68	1.80	.78	2.71	2.18	1.33	.13	1.17	1.06	1.74	.42
21	2.72	2.35	1.95	1.03	2.36	1.91	1.40	-.06	1.26	1.13	1.64	.33
22	2.89	2.35	1.03	.41	1.91	1.34	1.25	.01	1.31	1.24	1.72	.63
23	2.57	2.01	1.63	.28	1.60	.96	1.75	-.01	1.38	1.30	2.29	.79
24	2.01	1.07	1.63	.84	1.48	.73	1.76	.59	1.41	1.30	1.92	.01
25	1.55	.85	1.24	.29	1.66	.47	1.76	.78	1.38	1.27	1.47	.03
26	1.90	.84	1.80	.34	1.71	.47	1.56	.67	1.42	1.29	1.61	.38
27	1.81	.80	1.83	.58	1.43	.26	2.12	.43	1.42	1.33	1.68	.51
28	1.94	.63	2.05	.86	1.43	.69	1.59	.45	1.55	1.30	1.51	.46
29	1.91	.67	1.56	.69	1.63	.78	1.50	.37	2.07	1.52	1.53	.54
30	2.10	.84	1.79	1.07	1.78	.41	1.41	.21	2.52	2.07	1.51	.30
31	---	---	1.53	.81	---	---	1.28	.07	2.80	1.08	---	---
MONTH	3.74	.63	2.62	.28	4.35	.26	2.12	-.06	2.80	-.40	2.82	.01
YEAR	4.89	-1.05										
DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.58	.44	2.30	1.01	2.26	1.37	1.72	1.42	2.50	2.20	2.56	2.14
2	1.69	.56	2.21	.48	1.62	1.15	1.79	1.54	2.48	2.00	2.83	1.93
3	1.76	.41	1.88	.68	1.53	1.15	1.95	1.63	2.12	1.81	3.15	2.51
4	1.89	.56	2.06	.41	1.79	1.41	2.00	1.57	2.07	1.53	3.12	2.88
5	1.91	.58	1.92	.74	1.67	1.39	2.12	1.57	1.74	1.22	3.32	2.86
6	1.85	-.58	2.33	1.39	1.69	.73	2.18	1.83	1.57	1.14	3.53	3.01
7	.44	-1.15	1.79	.98	1.17	.37	2.31	1.95	1.70	1.11	3.69	3.46
8	-.36	-1.34	2.85	1.52	1.23	.37	2.29	1.95	1.89	1.17	3.92	3.57
9	1.20	-1.15	1.58	1.08	1.20	-.05	2.33	1.98	1.87	.88	3.96	3.67
10	1.59	.18	2.16	1.25	1.26	.04	2.98	2.18	.92	.63	3.98	3.49
11	1.35	.45	2.48	1.58	1.32	.13	3.11	2.40	1.21	.85	4.10	3.76
12	1.23	.43	2.83	1.75	.58	-1.11	2.48	2.16	1.42	1.03	4.05	3.79
13	1.40	.48	2.83	1.42	1.49	.30	2.62	2.27	1.17	.63	3.97	3.71
14	1.62	.25	1.70	1.08	1.16	-.47	2.74	2.21	1.01	.43	4.11	3.72
15	1.54	.32	2.37	1.56	1.26	.36	2.38	1.97	1.17	.35	4.18	3.99
16	1.65	.03	2.82	1.50	1.75	.22	2.64	1.94	1.18	-.21	4.07	3.78
17	1.93	.02	1.83	1.03	.22	.05	2.70	2.15	.13	-.57	4.03	3.58
18	1.32	-.20	1.82	1.11	.97	.22	2.27	1.83	1.21	-.10	4.09	3.74
19	1.36	-.03	1.95	1.15	.27	-.18	2.00	1.67	1.69	.63	4.06	3.89
20	1.28	-.08	1.83	1.18	1.02	-.15	2.03	1.46	1.70	.82	3.95	3.79
21	1.30	.25	1.63	1.10	.92	-.17	2.31	2.02	1.61	1.02	3.93	3.66
22	2.01	.47	1.51	1.12	.97	-.28	2.47	2.03	1.66	1.20	3.90	3.47
23	1.84	.66	2.22	1.15	1.14	.16	2.55	2.24	2.43	1.50	3.85	3.69
24	2.02	1.05	2.65	1.06	1.10	-.02	2.61	2.32	3.30	2.31	3.82	3.54
25	1.92	.91	1.30	.76	1.26	.07	2.66	2.48	2.44	1.74	3.70	3.51
26	1.91	.93	1.68	1.05	1.80	.79	2.77	2.49	2.21	1.91	3.65	3.38
27	1.70	.60	1.88	1.04	1.42	.73	2.69	2.39	2.57	1.91	3.74	3.47
28	1.80	.17	2.00	1.26	1.08	.60	2.80	2.49	2.54	2.04	4.15	3.74
29	1.92	.78	2.06	1.25	1.11	.81	2.99	2.50	---	---	4.04	3.78
30	1.83	.37	1.92	1.34	1.38	.98	2.83	2.38	---	---	3.78	3.50
31	1.80	.45	---	---	1.68	1.32	2.63	2.32	---	---	3.54	3.36
MONTH	2.02	-1.34	2.85	.41	2.26	-1.11	3.11	1.42	3.30	-.57	4.18	1.93



08067252 Trinity River at Wallisville, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1995 to current year.  
 WATER TEMPERATURE: Oct. 1995 to current year.

INSTRUMENTATION:--Water-quality monitor since July 1995. A second water-quality monitor was installed on downstream side of dam Mar. 19, 1999.

REMARKS.--Records good, except for downstream conductance, which are poor. Interruption in the record was caused by communication malfunctions between instrumentation. Gage was relocated to permanent location after dam and lock were completed on Mar. 18, 1999, from temporary location 2.3 miles upstream. Water-quality monitors are installed to record data on the upstream and downstream sides of the dam.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (UPSTREAM): Maximum, 21,300 microsiemens/cm, Oct. 9, 1999; minimum, 109 microsiemens/cm, Apr. 5-6, 1999.  
 WATER TEMPERATURE (UPSTREAM): Maximum, 34.9°C, July 22, 2001; minimum, 6.4°C, Jan. 3, 2001.  
 SPECIFIC CONDUCTANCE (DOWNSTREAM): Maximum 34,500 microsiemens/cm, Dec. 3, 1999; minimum, 125 microsiemens/cm, Apr. 6, 1999.  
 WATER TEMPERATURE (DOWNSTREAM): Maximum, 34.4°C, Aug. 10, 1999; minimum, 9.3°C, Jan. 31, 2000.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE (UPSTREAM): Maximum, 4,630 microsiemens/cm, Nov. 1; minimum, 241 microsiemens/cm, Sept. 3.  
 WATER TEMPERATURE (UPSTREAM): Maximum, 34.9°C, July 22; minimum, 6.4°C, Jan. 3.  
 SPECIFIC CONDUCTANCE (DOWNSTREAM): Maximum, 29,100 microsiemens/cm, Oct. 22; minimum, 238 microsiemens/cm, Sept. 3.  
 WATER TEMPERATURE (DOWNSTREAM): Maximum, 34.0°C, July 22; minimum, 9.9°C, Dec. 26.

SPECIFIC CONDUCTANCE (UPSTREAM) (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	687	669	680	4630	314	2410	422	413	417	388	383	384
2	676	656	663	1480	677	1010	428	422	424	386	384	385
3	801	657	698	1460	680	958	431	427	429	389	385	386
4	815	652	719	1080	755	916	431	425	428	390	384	388
5	964	640	762	1200	544	753	426	406	418	389	383	386
6	910	536	641	1930	384	693	406	394	400	388	385	387
7	558	488	528	437	399	428	394	389	391	387	386	387
8	504	451	474	438	415	423	393	390	391	386	382	383
9	486	449	459	438	420	430	397	388	392	382	376	380
10	1170	478	662	438	432	436	396	388	392	376	368	373
11	660	538	577	432	430	431	395	382	388	368	359	364
12	674	566	598	434	430	433	397	383	386	359	352	356
13	893	628	669	432	429	430	400	388	394	352	345	348
14	1210	707	800	434	430	431	396	387	392	349	341	345
15	1370	743	888	436	433	434	404	395	400	342	340	340
16	1320	716	989	436	432	434	415	404	409	345	342	343
17	1200	582	727	432	420	425	413	405	407	343	326	336
18	961	639	761	420	409	414	407	394	398	326	311	318
19	1040	755	876	411	375	398	407	397	404	312	306	307
20	794	690	716	390	373	378	402	395	398	312	286	299
21	842	744	799	393	378	384	406	400	402	291	280	284
22	1180	819	945	397	380	388	409	403	405	304	282	291
23	1110	727	950	413	397	406	410	408	409	321	302	311
24	727	480	550	415	412	413	409	406	407	321	308	313
25	491	427	464	413	337	376	411	408	409	314	308	311
26	430	336	391	345	314	328	413	406	409	318	314	315
27	340	253	285	379	345	362	407	356	378	317	311	314
28	286	260	270	392	379	386	396	362	378	312	307	309
29	355	271	310	399	391	394	396	386	391	309	306	308
30	304	291	297	413	399	406	391	387	390	313	309	311
31	516	293	350	---	---	---	390	387	388	311	298	306
MONTH	1370	253	629	4630	314	550	431	356	401	390	280	341



## TRINITY RIVER BASIN

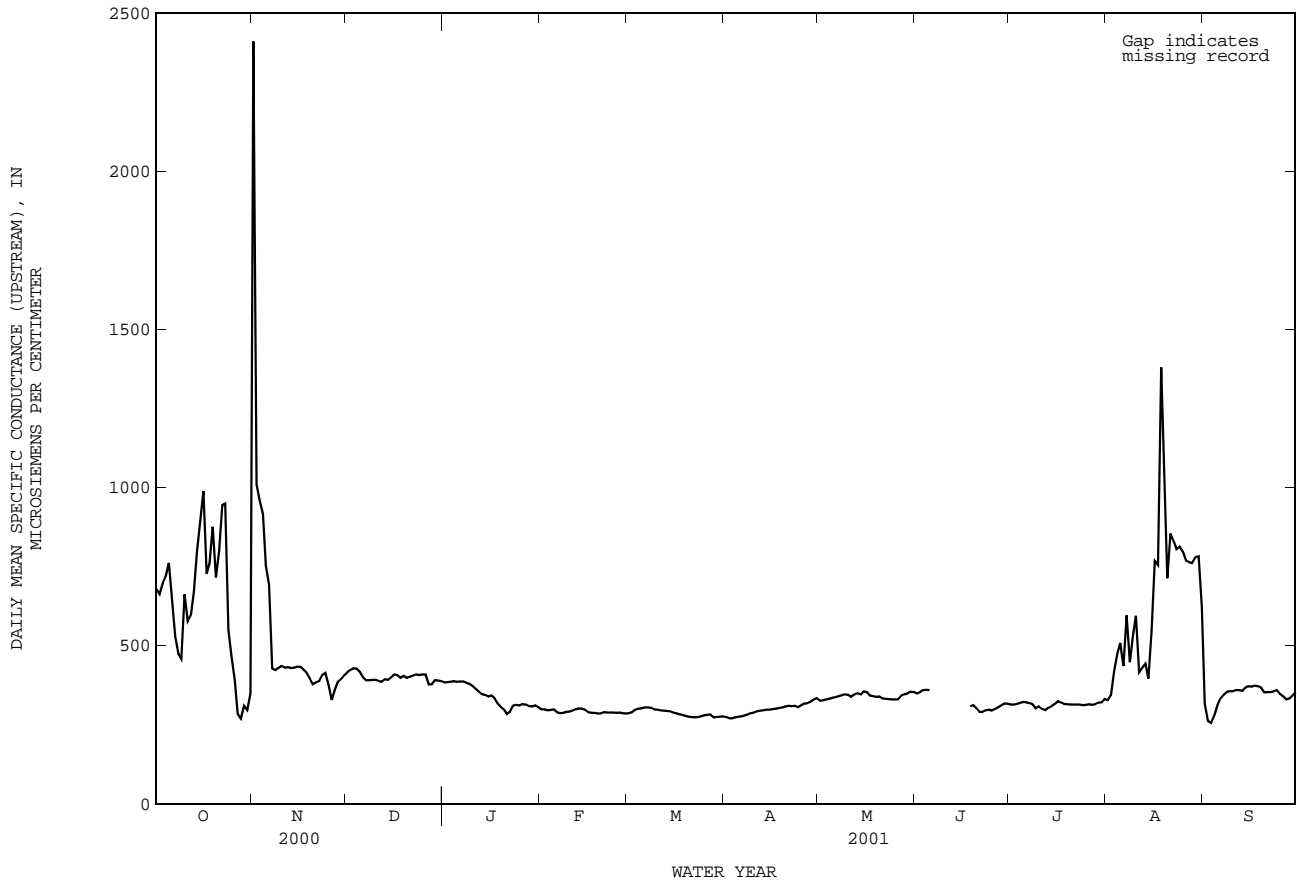
08067252 Trinity River at Wallisville, TX--Continued

SPECIFIC CONDUCTANCE (UPSTREAM) (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	301	297	299	290	283	287	277	273	275	331	322	326
2	301	296	299	293	290	290	274	266	271	329	326	327
3	296	295	296	300	293	297	272	270	271	332	328	330
4	299	296	297	303	299	301	275	272	274	335	331	333
5	300	297	299	303	301	302	277	275	276	338	334	336
6	297	287	290	305	303	305	278	276	277	341	334	338
7	289	285	287	305	304	305	281	278	280	343	340	341
8	290	286	288	305	301	304	284	281	283	346	341	344
9	292	289	291	301	299	299	289	284	287	350	344	347
10	294	291	292	299	297	298	291	288	289	347	342	345
11	297	293	295	297	296	296	294	290	293	345	336	339
12	302	297	299	296	294	295	298	294	295	354	338	346
13	303	301	302	295	294	294	297	294	296	354	342	350
14	302	299	301	294	290	293	301	296	298	354	336	346
15	300	295	298	290	288	289	305	297	298	360	353	356
16	295	288	290	289	286	287	302	297	300	360	349	354
17	289	288	288	286	283	284	303	300	301	349	339	343
18	289	286	288	284	280	282	310	301	303	343	338	341
19	287	284	286	281	277	279	310	303	305	342	337	339
20	288	283	286	278	275	276	310	306	308	342	333	340
21	291	288	290	277	274	275	310	309	310	338	331	334
22	290	289	289	276	273	274	313	308	309	337	329	333
23	289	289	289	276	274	275	312	309	310	334	330	332
24	289	287	289	278	276	277	310	304	305	331	329	330
25	289	288	288	281	278	280	315	307	311	334	328	331
26	290	288	289	283	281	282	318	315	317	339	322	330
27	289	287	287	284	277	283	319	317	318	345	339	343
28	288	283	286	277	272	274	326	319	322	350	344	347
29	---	---	---	276	274	275	334	326	329	351	346	349
30	---	---	---	276	275	276	336	330	335	360	351	355
31	---	---	---	277	276	277	---	---	---	360	351	354
MONTH	303	283	292	305	272	287	336	266	298	360	322	341

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	351	347	349	317	310	314	331	325	327	347	296	317
2	359	348	353	322	308	314	386	325	344	296	245	263
3	365	357	360	331	308	316	585	331	421	268	241	256
4	364	358	361	321	314	319	787	334	475	289	268	279
5	362	356	360	327	319	322	781	338	509	327	289	312
6	---	---	---	325	316	321	718	337	436	343	327	333
7	---	---	---	322	315	318	1090	339	596	349	342	345
8	---	---	---	319	310	314	919	346	448	358	349	354
9	---	---	---	311	298	302	1830	345	534	359	355	357
10	---	---	---	315	298	308	2230	347	595	359	352	356
11	---	---	---	311	296	300	553	370	415	363	358	360
12	---	---	---	299	293	296	503	366	430	362	356	360
13	---	---	---	308	299	303	498	407	443	362	355	358
14	---	---	---	312	304	308	437	372	396	373	362	369
15	---	---	---	321	311	315	800	410	547	374	370	372
16	---	---	---	331	318	324	903	581	769	373	370	371
17	---	---	---	324	313	320	904	692	755	375	372	374
18	315	306	308	320	313	316	2560	621	1380	374	370	372
19	315	309	312	317	313	315	1800	620	1010	371	358	368
20	311	296	302	316	312	314	851	660	713	363	345	353
21	296	288	291	317	312	314	912	803	855	359	347	354
22	294	290	291	315	311	314	906	776	831	361	347	354
23	298	294	296	325	311	314	865	770	805	362	353	356
24	301	294	298	325	310	312	846	787	813	364	351	360
25	298	294	295	316	310	313	824	768	797	353	343	348
26	305	296	300	320	310	315	798	744	769	351	326	341
27	309	303	305	315	307	313	783	747	764	337	326	330
28	315	307	311	319	312	315	784	751	762	340	331	334
29	320	314	317	321	319	320	817	766	780	346	339	343
30	321	314	317	326	318	321	877	720	783	359	346	353
31	---	---	---	372	322	332	721	347	622	---	---	---
MONTH	---	---	---	372	293	314	2560	325	649	375	241	343

08067252 Trinity River at Wallisville, TX--Continued

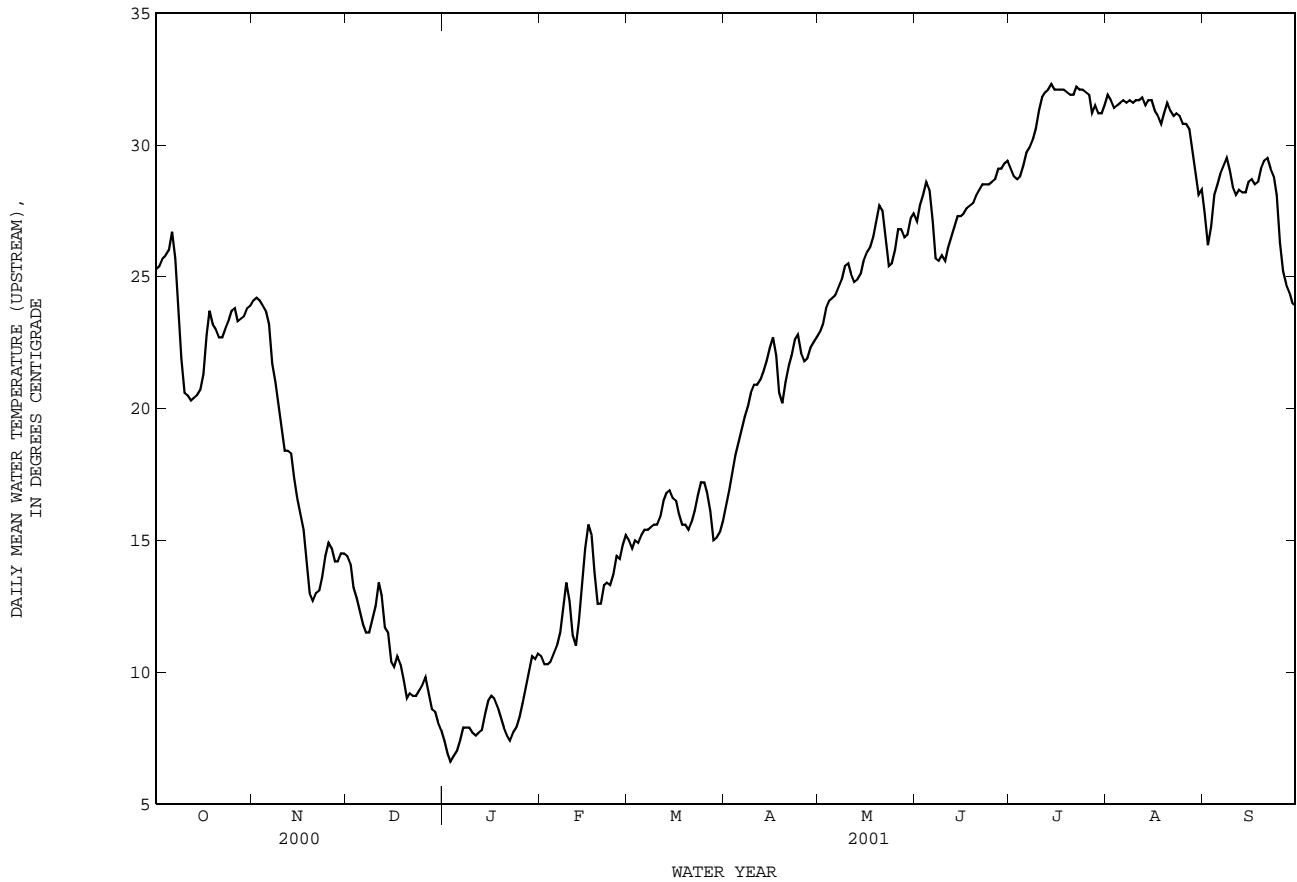


TEMPERATURE (UPSTREAM), WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	25.5	25.0	25.3	24.3	23.9	24.1	14.5	14.2	14.4	7.6	7.1	7.4
2	25.7	25.2	25.4	24.5	23.9	24.2	14.5	13.6	14.1	7.1	6.6	6.9
3	25.9	25.5	25.7	24.3	24.0	24.1	13.6	13.0	13.2	6.7	6.4	6.6
4	26.0	25.6	25.8	24.0	23.9	23.9	13.0	12.5	12.8	7.0	6.5	6.8
5	26.2	25.9	26.0	23.9	23.6	23.7	12.5	12.0	12.3	7.3	6.7	7.0
6	27.4	26.2	26.7	23.9	21.9	23.2	12.0	11.6	11.8	7.7	7.1	7.4
7	26.7	24.5	25.7	21.9	21.4	21.7	11.7	11.4	11.5	8.0	7.7	7.9
8	24.5	23.0	23.7	21.4	20.5	21.0	11.9	11.2	11.5	8.0	7.7	7.9
9	23.0	21.0	21.9	20.5	19.5	20.0	12.3	11.6	12.0	8.2	7.7	7.9
10	21.0	20.3	20.6	19.5	18.8	19.2	12.9	12.3	12.5	7.9	7.5	7.7
11	20.8	20.2	20.5	18.8	18.2	18.4	13.9	12.9	13.4	7.8	7.5	7.6
12	20.6	20.1	20.3	18.7	18.2	18.4	13.4	12.0	12.9	7.7	7.6	7.7
13	20.5	20.2	20.4	18.6	17.8	18.3	12.0	11.5	11.7	8.1	7.6	7.8
14	20.7	20.3	20.5	17.8	17.0	17.4	11.9	11.0	11.5	8.7	8.1	8.4
15	21.0	20.5	20.7	17.0	16.2	16.6	11.0	9.9	10.4	9.1	8.7	8.9
16	21.8	20.9	21.3	16.2	15.9	16.0	10.6	9.9	10.2	9.1	9.0	9.1
17	24.2	21.7	22.8	15.9	14.8	15.4	10.9	10.5	10.6	9.1	8.9	9.0
18	24.1	23.5	23.7	14.8	13.4	14.2	10.5	10.0	10.3	8.9	8.4	8.7
19	23.5	22.9	23.2	13.4	12.5	13.0	10.0	9.4	9.7	8.4	8.1	8.3
20	23.2	22.8	23.0	13.0	12.3	12.7	9.4	8.8	9.0	8.1	7.8	7.9
21	22.8	22.6	22.7	13.3	12.9	13.0	9.4	9.0	9.2	7.8	7.4	7.6
22	22.9	22.6	22.7	13.3	12.9	13.1	9.2	8.9	9.1	7.7	7.1	7.4
23	23.4	22.8	23.0	14.1	13.2	13.6	9.2	9.0	9.1	7.9	7.5	7.7
24	23.8	23.0	23.3	14.7	14.1	14.4	9.4	9.1	9.3	8.2	7.8	7.9
25	24.3	23.3	23.7	15.2	14.6	14.9	9.6	9.3	9.5	8.6	8.0	8.3
26	24.1	23.7	23.8	15.0	14.3	14.7	10.1	9.5	9.8	9.0	8.5	8.8
27	23.7	22.9	23.3	14.4	14.0	14.2	10.0	8.6	9.2	9.8	9.0	9.4
28	23.6	23.1	23.4	14.4	13.9	14.2	8.8	8.4	8.6	10.5	9.7	10.0
29	23.8	23.2	23.5	14.7	14.3	14.5	8.6	8.2	8.5	10.8	10.5	10.6
30	24.1	23.6	23.8	14.6	14.4	14.5	8.3	7.9	8.1	10.7	10.2	10.5
31	24.3	23.7	23.9	---	---	---	8.0	7.6	7.8	11.0	10.5	10.7
MONTH	27.4	20.1	23.2	24.5	12.3	17.6	14.5	7.6	10.8	11.0	6.4	8.3



08067252 Trinity River at Wallisville, TX--Continued



SPECIFIC CONDUCTANCE (DOWNSTREAM) (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21300	16000	19400	28300	10100	20300	413	403	408	---	---	---
2	22600	16600	19500	28100	20800	23800	415	410	412	---	---	---
3	22400	18300	19800	24500	20100	22700	422	413	415	---	---	---
4	22500	17600	20100	26100	18900	22300	422	412	415	---	---	---
5	23400	18700	21000	22100	18800	21000	412	---	---	---	---	---
6	21600	4410	17400	22400	426	8130	---	---	---	---	---	---
7	16000	690	8240	458	438	453	---	---	---	---	---	---
8	7760	501	3330	458	430	441	384	380	383	---	---	---
9	20400	1810	7550	443	427	434	---	---	---	---	---	---
10	22100	18400	20500	445	441	443	390	382	385	---	---	---
11	23500	20200	21500	441	438	440	391	376	382	---	---	---
12	22300	17900	20600	444	440	442	383	378	380	---	---	---
13	21000	18000	20000	442	439	440	---	---	---	---	---	---
14	22200	18100	20600	443	441	442	397	372	384	---	---	---
15	23700	18800	21000	444	441	443	394	385	390	---	---	---
16	25200	18400	21800	445	440	443	392	387	389	---	---	---
17	24100	20100	22300	440	427	433	389	378	381	---	---	---
18	22600	18800	21200	427	416	421	379	364	369	---	---	---
19	24000	18000	21200	418	384	406	376	367	373	---	---	---
20	22500	17700	20600	398	381	386	---	---	---	---	---	---
21	23200	17900	20500	401	383	391	---	---	---	---	---	---
22	29100	19500	23600	404	383	394	---	---	---	---	---	---
23	28100	24500	26000	417	404	411	---	---	---	---	---	---
24	27600	2990	10200	418	414	416	---	---	---	---	---	---
25	4050	1370	2480	415	339	379	---	---	---	---	---	---
26	14000	1960	3560	346	311	327	382	378	380	---	---	---
27	4080	1440	2670	380	346	362	---	---	---	---	---	---
28	6430	1420	2840	393	379	387	---	---	---	---	---	---
29	26200	4650	14000	396	383	391	---	---	---	---	---	---
30	22700	4020	11400	403	390	396	---	---	---	---	---	---
31	23300	4310	12200	---	---	---	---	---	---	---	---	---
MONTH	29100	501	16000	28300	311	4270	---	---	---	---	---	---

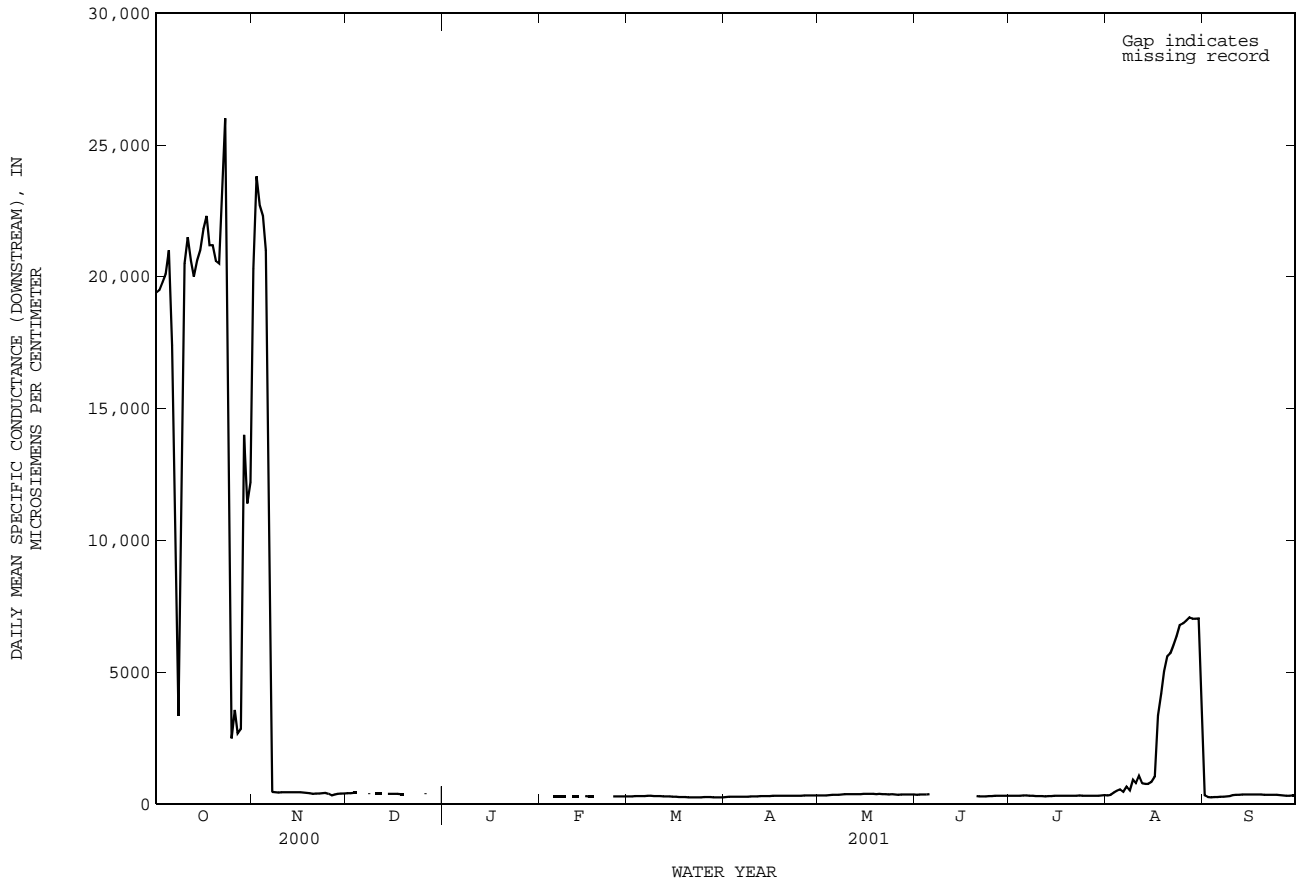
## TRINITY RIVER BASIN

08067252 Trinity River at Wallisville, TX--Continued

SPECIFIC CONDUCTANCE (DOWNSTREAM) (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	294	287	291	267	265	266	331	317	326
2	---	---	---	296	291	293	280	265	271	327	321	324
3	---	---	---	301	292	297	282	279	281	333	323	328
4	---	---	---	302	297	301	279	274	276	338	329	333
5	293	289	291	304	300	301	274	273	273	351	337	344
6	290	280	284	308	302	304	276	273	274	352	348	350
7	284	279	282	308	304	306	276	273	274	361	347	351
8	287	283	285	307	303	306	280	275	278	367	360	364
9	299	286	290	306	299	302	286	280	284	374	367	371
10	---	---	---	302	297	300	292	286	291	381	369	373
11	302	300	301	299	292	296	293	291	292	378	369	373
12	304	300	302	296	290	293	303	292	295	381	374	378
13	304	302	303	294	289	291	304	301	303	380	374	377
14	302	---	---	290	280	285	306	303	305	381	374	377
15	297	291	294	282	274	278	309	301	303	392	376	386
16	291	283	287	276	270	274	308	305	306	391	380	386
17	284	282	283	271	265	269	312	305	306	392	381	385
18	284	282	283	267	261	264	310	304	307	384	377	381
19	---	---	---	262	255	258	310	307	308	383	376	378
20	---	---	---	255	253	254	315	310	312	380	377	379
21	---	---	---	254	251	252	315	312	313	386	376	378
22	---	---	---	253	248	250	317	311	313	386	366	372
23	---	---	---	251	248	250	316	313	314	370	362	365
24	285	281	282	252	251	252	317	310	313	372	359	367
25	284	282	283	266	252	260	320	313	316	365	352	358
26	283	281	282	267	262	265	324	316	320	361	349	354
27	287	281	285	265	255	262	326	322	325	367	358	363
28	289	284	287	256	251	253	326	322	324	365	359	362
29	---	---	---	255	249	252	328	322	325	363	358	360
30	---	---	---	254	251	252	329	323	324	359	355	357
31	---	---	---	265	250	254	---	---	---	358	353	355
MONTH	---	---	---	308	248	276	329	265	300	392	317	363
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	356	348	352	314	307	311	333	322	325	373	299	325
2	360	351	357	312	307	309	388	325	346	299	242	261
3	364	359	362	312	303	307	581	329	430	261	238	251
4	369	361	366	318	309	312	796	332	504	268	260	264
5	372	357	368	322	317	320	885	337	551	271	261	267
6	---	---	---	321	312	318	776	339	463	275	268	271
7	---	---	---	314	307	311	1130	340	646	277	273	274
8	---	---	---	312	302	306	1060	349	501	294	277	284
9	---	---	---	303	290	295	2100	360	918	320	292	301
10	---	---	---	305	294	302	2410	398	787	356	320	333
11	---	---	---	303	292	295	2070	508	1080	347	338	344
12	---	---	---	295	286	291	998	657	789	361	332	352
13	---	---	---	304	294	300	824	708	759	364	347	359
14	---	---	---	306	300	303	784	707	756	368	361	364
15	---	---	---	310	305	307	1690	653	836	369	363	366
16	---	---	---	319	308	314	2180	816	1030	378	358	364
17	---	---	---	322	311	317	3710	2180	3360	364	359	361
18	---	---	---	318	308	312	4430	3710	4180	362	357	360
19	---	---	---	316	308	312	5470	4320	5040	358	354	355
20	298	292	296	315	311	313	5780	5370	5600	356	353	354
21	292	284	286	318	312	315	5940	5450	5730	354	348	352
22	292	286	288	320	314	317	6220	5830	6040	356	344	349
23	295	291	293	330	310	318	6610	6120	6360	359	344	347
24	301	295	299	327	311	315	6920	6610	6780	350	340	344
25	303	298	301	316	312	313	7050	6580	6840	341	331	335
26	311	301	306	324	307	312	7130	6650	6950	336	311	325
27	315	309	311	310	302	308	7180	7030	7070	317	308	312
28	316	312	314	321	308	312	7030	7030	7030	319	299	313
29	319	316	317	320	312	317	7030	7030	7030	324	319	320
30	320	313	317	325	315	319	7230	6930	7040	327	321	323
31	---	---	---	380	319	333	7230	373	3810	---	---	---
MONTH	---	---	---	380	286	311	7230	322	3210	378	238	324

08067252 Trinity River at Wallisville, TX--Continued



TEMPERATURE (DOWNSTREAM), WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	24.6	22.9	23.4	25.4	24.7	25.0	15.1	14.7	14.9	---	---	---
2	25.4	23.6	24.4	25.7	24.5	25.0	15.0	14.1	14.6	---	---	---
3	26.4	24.4	25.2	25.7	24.9	25.1	14.1	13.5	13.8	---	---	---
4	26.7	25.1	25.8	25.1	24.4	24.7	13.5	13.1	13.3	---	---	---
5	27.0	26.2	26.5	24.8	24.4	24.6	---	---	---	---	---	---
6	27.9	26.7	27.4	24.6	22.1	23.7	---	---	---	---	---	---
7	27.5	25.0	26.2	22.1	21.6	21.9	---	---	---	---	---	---
8	25.0	22.8	23.7	21.6	20.6	21.2	12.2	11.8	12.0	---	---	---
9	23.2	14.5	20.6	20.6	19.6	20.1	---	---	---	---	---	---
10	14.9	14.3	14.6	19.6	19.0	19.4	13.4	12.8	13.1	---	---	---
11	15.2	14.3	14.6	19.0	18.5	18.6	14.3	13.4	13.9	---	---	---
12	16.3	14.7	15.5	18.9	18.4	18.6	14.1	12.7	13.5	---	---	---
13	17.8	16.0	16.8	18.8	18.0	18.5	---	---	---	---	---	---
14	19.0	16.6	17.8	18.0	17.3	17.6	---	---	---	---	---	---
15	21.4	18.1	19.7	17.3	16.6	16.9	11.6	10.6	11.1	---	---	---
16	22.8	20.7	21.7	16.6	16.2	16.3	11.1	10.5	10.8	---	---	---
17	24.0	22.5	23.5	16.2	15.2	15.7	11.4	11.0	11.2	---	---	---
18	25.2	23.7	24.2	15.2	13.8	14.5	11.1	10.6	10.8	---	---	---
19	24.9	23.6	24.2	13.8	12.8	13.4	10.6	10.2	10.3	---	---	---
20	24.8	23.9	24.2	13.4	12.7	---	---	---	---	---	---	---
21	24.8	23.4	24.1	13.7	13.3	13.5	---	---	---	---	---	---
22	24.1	23.1	23.6	13.8	13.3	13.5	---	---	---	---	---	---
23	24.2	23.2	23.8	14.4	13.6	14.0	---	---	---	---	---	---
24	24.3	23.3	23.7	15.0	14.4	14.7	---	---	---	---	---	---
25	24.4	23.5	23.9	15.5	14.9	15.2	---	---	---	---	---	---
26	24.4	23.9	24.1	15.3	14.8	15.1	10.5	9.9	10.1	---	---	---
27	23.9	23.3	23.6	14.8	14.4	14.6	---	---	---	---	---	---
28	24.5	23.6	23.8	14.9	14.3	14.6	---	---	---	---	---	---
29	25.5	24.1	24.7	15.1	14.7	14.9	---	---	---	---	---	---
30	25.4	24.3	24.7	15.0	14.8	14.9	---	---	---	---	---	---
31	25.7	24.5	24.9	---	---	---	---	---	---	---	---	---
MONTH	27.9	14.3	22.7	25.7	12.7	---	---	---	---	---	---	---

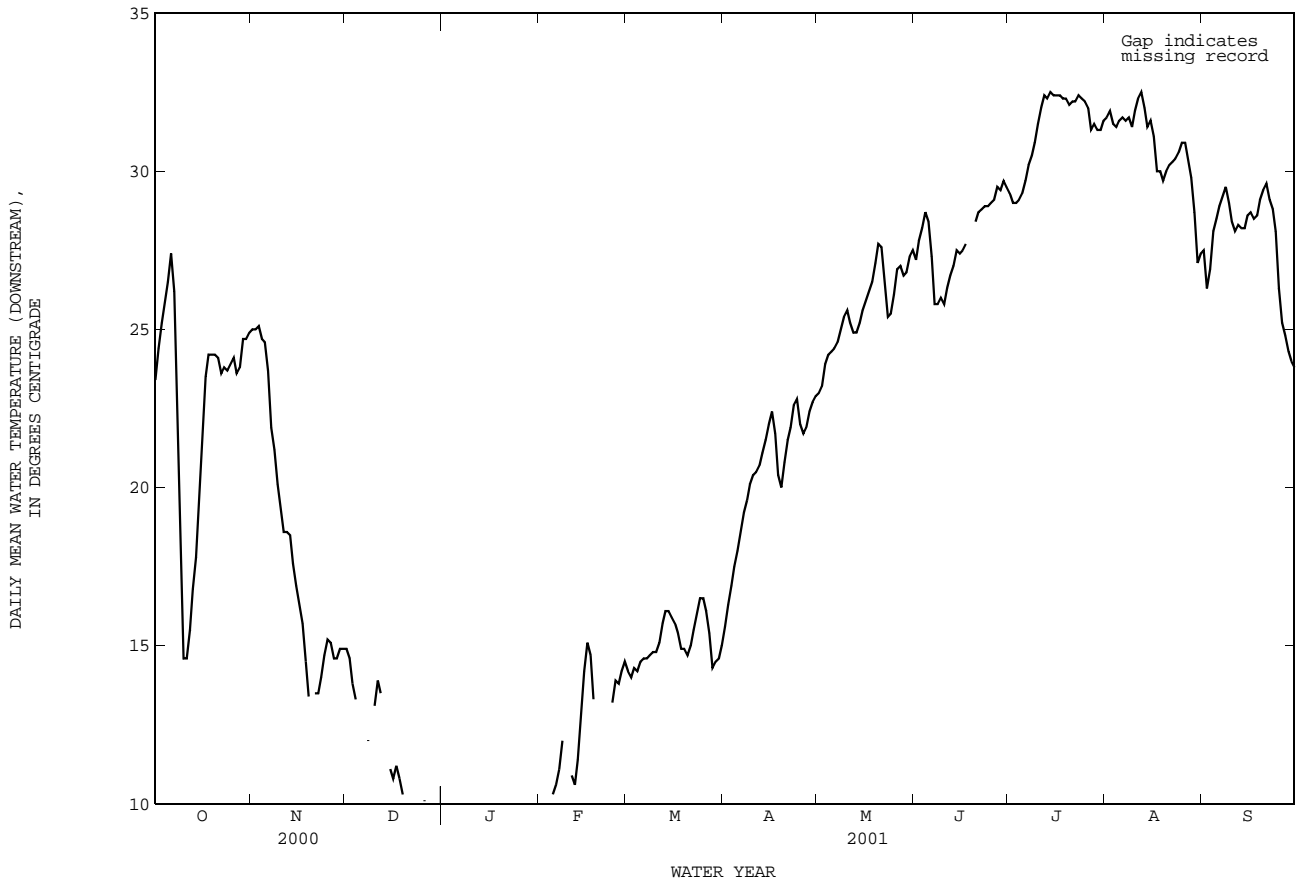
## TRINITY RIVER BASIN

08067252 Trinity River at Wallisville, TX--Continued

TEMPERATURE (DOWNSTREAM), WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	14.3	14.1	14.2	16.1	15.1	15.6	23.4	22.7	23.0
2	---	---	---	14.2	13.9	14.0	16.6	15.9	16.3	23.7	22.7	23.2
3	---	---	---	14.3	14.1	14.3	17.2	16.6	16.9	24.4	23.4	23.9
4	---	---	---	14.4	13.9	14.2	17.8	17.2	17.5	24.3	24.0	24.2
5	10.7	10.1	10.3	14.8	14.1	14.5	18.4	17.7	18.0	24.5	24.1	24.3
6	10.9	10.4	10.6	14.7	14.4	14.6	19.0	18.2	18.6	24.6	24.1	24.4
7	11.5	10.6	11.1	15.0	14.3	14.6	19.5	19.0	19.2	24.9	24.4	24.6
8	12.6	11.4	12.0	14.9	14.6	14.7	20.0	19.4	19.6	25.3	24.6	25.0
9	---	---	---	15.1	14.5	14.8	20.5	19.8	20.1	25.8	25.2	25.4
10	---	---	---	15.2	14.5	14.8	20.6	20.2	20.4	25.9	25.1	25.6
11	11.6	10.5	10.9	15.2	15.0	15.1	20.6	20.4	20.5	25.7	24.9	25.2
12	10.9	10.5	10.6	16.2	15.2	15.7	20.9	20.5	20.7	25.2	24.5	24.9
13	11.9	10.9	11.4	16.6	15.6	16.1	21.6	20.7	21.1	25.3	24.6	24.9
14	13.5	12.2	12.9	16.6	15.8	16.1	21.8	21.2	21.5	25.4	25.0	25.2
15	14.9	13.5	14.2	16.3	15.4	15.9	22.4	21.6	22.0	26.1	25.1	25.6
16	15.5	14.7	15.1	16.1	15.4	15.7	22.7	22.3	22.4	26.3	25.6	25.9
17	15.2	14.2	14.7	15.9	15.1	15.4	22.4	21.1	21.7	26.5	25.8	26.2
18	14.2	12.8	13.3	15.2	14.6	14.9	21.1	20.0	20.4	26.8	26.2	26.5
19	---	---	---	15.1	14.6	14.9	20.5	19.5	20.0	27.4	26.8	27.1
20	---	---	---	15.0	14.4	14.7	21.5	20.3	20.8	28.1	27.3	27.7
21	---	---	---	15.4	14.5	15.0	21.9	21.1	21.5	28.1	27.3	27.6
22	---	---	---	15.9	15.0	15.5	22.2	21.8	21.9	27.3	25.8	26.5
23	---	---	---	16.5	15.6	16.0	23.0	22.2	22.6	25.8	25.1	25.4
24	13.7	12.8	13.2	16.8	16.2	16.5	22.9	22.6	22.8	25.8	25.2	25.5
25	14.1	13.7	13.9	16.6	16.3	16.5	22.6	21.7	22.0	26.7	25.6	26.1
26	13.9	13.7	13.8	16.4	15.9	16.1	22.0	21.4	21.7	27.2	26.7	26.9
27	14.6	13.9	14.2	16.0	14.5	15.4	22.3	21.7	21.9	27.3	26.7	27.0
28	14.6	14.3	14.5	14.5	14.1	14.3	22.8	22.1	22.4	27.0	26.4	26.7
29	---	---	---	14.6	14.3	14.5	23.0	22.3	22.7	27.2	26.4	26.8
30	---	---	---	14.9	14.4	14.6	23.2	22.6	22.9	27.7	26.9	27.3
31	---	---	---	15.3	14.7	15.0	---	---	---	27.7	27.3	27.5
MONTH	---	---	---	16.8	13.9	15.1	23.2	15.1	20.5	28.1	22.7	25.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.6	26.9	27.2	29.8	29.1	29.3	32.3	31.3	31.7	28.5	26.8	27.5
2	28.1	27.5	27.8	29.6	28.8	29.0	32.4	31.6	31.9	26.8	26.0	26.3
3	28.5	28.0	28.2	30.0	28.6	29.0	32.0	31.1	31.5	27.6	26.3	26.9
4	29.2	28.4	28.7	29.9	28.8	29.1	31.9	31.0	31.4	28.5	27.6	28.1
5	28.9	27.8	28.4	30.2	29.1	29.3	32.1	31.2	31.6	28.7	28.3	28.5
6	27.8	26.4	27.3	30.5	29.1	29.7	32.3	31.3	31.7	29.4	28.6	28.9
7	26.4	25.6	25.8	30.9	29.6	30.2	32.3	31.3	31.6	29.6	28.8	29.2
8	26.3	25.4	25.8	31.4	30.0	30.5	31.9	31.4	31.7	29.8	29.2	29.5
9	26.1	25.6	26.0	32.0	30.2	30.9	32.1	30.8	31.4	29.5	28.7	29.0
10	26.0	25.6	25.8	32.2	30.9	31.5	33.1	30.8	31.9	28.7	28.2	28.4
11	26.7	26.0	26.3	32.5	31.4	32.0	33.5	31.1	32.3	28.3	28.0	28.1
12	27.0	26.4	26.7	33.4	31.7	32.4	33.5	31.7	32.5	28.7	28.0	28.3
13	27.4	26.6	27.0	32.8	31.7	32.3	32.6	31.5	32.0	28.5	27.9	28.2
14	27.8	27.2	27.5	33.0	32.0	32.5	32.1	31.1	31.4	28.6	27.9	28.2
15	27.7	27.2	27.4	32.5	32.2	32.4	32.0	30.3	31.6	29.0	28.3	28.6
16	27.8	27.2	27.5	32.8	32.0	32.4	32.0	29.6	31.1	28.9	28.5	28.7
17	28.0	27.5	27.7	33.0	31.9	32.4	30.6	29.4	30.0	28.7	28.3	28.5
18	---	27.7	---	32.6	32.0	32.3	30.4	29.5	30.0	28.9	28.3	28.6
19	28.3	---	---	33.0	31.9	32.3	30.1	29.4	29.7	29.4	28.9	29.1
20	28.8	28.0	28.4	32.4	31.9	32.1	30.8	29.6	30.0	29.7	29.2	29.4
21	28.9	28.5	28.7	33.4	31.9	32.2	31.6	29.6	30.2	30.2	29.1	29.6
22	29.1	28.6	28.8	34.0	31.7	32.2	31.7	29.8	30.3	29.5	28.8	29.1
23	29.1	28.6	28.9	33.6	32.0	32.4	30.9	30.0	30.4	29.0	28.5	28.8
24	29.2	28.6	28.9	32.9	32.0	32.3	30.8	30.3	30.6	28.9	26.8	28.1
25	29.2	28.7	29.0	32.7	31.9	32.2	32.1	30.4	30.9	26.9	25.4	26.3
26	29.6	28.8	29.1	32.4	31.7	32.0	31.4	30.4	30.9	26.2	24.7	25.2
27	29.9	29.0	29.5	31.7	31.0	31.3	30.5	30.0	30.3	25.2	24.4	24.8
28	30.3	29.1	29.4	32.3	31.1	31.5	30.1	29.4	29.8	25.0	23.9	24.3
29	30.1	29.2	29.7	31.8	31.0	31.3	29.9	28.2	28.7	24.5	23.7	24.0
30	30.1	29.2	29.5	32.3	30.7	31.3	28.2	26.4	27.1	24.1	23.6	23.8
31	---	---	---	32.5	31.1	31.6	28.8	26.3	27.4	---	---	---
MONTH	---	---	---	34.0	28.6	31.4	33.5	26.3	30.8	30.2	23.6	27.7

08067252 Trinity River at Wallisville, TX--Continued





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The U.S. Geological Survey collects limited streamflow data at sites other than continuous stream-gaging stations 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. 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."

#### 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 inspection 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 2001

Station name and number	Location	Period of record	Water Year 2001 maximum			Period of record maximum			
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	
Trinity River Basin									
Big Fossil Creek Haltom City, TX 08048800	Lat 32°48'26", long 97°14'54", Tarrant County, at center of channel at downstream side of downstream bridge on State Highway 183, 2.0 mi upstream from Little Fossil Creek, 3.5 mi upstream from mouth, and 6.0 mi northeast of Tarrant County Courthouse in Fort Worth. Drainage area is 52.8 mi <sup>2</sup> .	1960-73 † 1974-84 † 1985-2001	07-20-01	11.71	--a/	09-07-62	26.90	27,000	

† Operated as a continuous-record station.

† Operated as an unpublished stage-only station.

a/ Gage Height only, discharge measurement not available.

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